



RE: P210577 - Floor -

**Site Information:**

Project Customer: Starr Homes Project Name: Milligan Residence  
Lot/Block: 3A/4A Subdivision: Tiffany Woods  
Model: Milligan Residence  
Address: 512 NE Promised View Dr.  
City: Lees Summit State: MO

MiTek USA, Inc.

16023 Swingley Ridge Rd  
Chesterfield, MO 63017  
314-434-1200

**General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):**

Design Code: IRC2018/TPI2014

Wind Code: ASCE 7-16 Wind Speed: 115 mph

Roof Load: 60.0 psf

Design Program: MiTek 20/20 8.6

Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16

Floor Load: N/A psf

Mean Roof Height (feet): 35

Exposure Category: C

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I58527938	F01	5/24/23	35	I58527972	F35	5/24/23
2	I58527939	F02	5/24/23	36	I58527973	F36	5/24/23
3	I58527940	F03	5/24/23	37	I58527974	F37	5/24/23
4	I58527941	F04	5/24/23	38	I58527975	F38	5/24/23
5	I58527942	F05	5/24/23	39	I58527976	F39	5/24/23
6	I58527943	F06	5/24/23	40	I58527977	F40	5/24/23
7	I58527944	F07	5/24/23	41	I58527978	F41	5/24/23
8	I58527945	F08	5/24/23	42	I58527979	F42	5/24/23
9	I58527946	F09	5/24/23	43	I58527980	F43	5/24/23
10	I58527947	F10	5/24/23	44	I58527981	F43A	5/24/23
11	I58527948	F11	5/24/23	45	I58527982	F44	5/24/23
12	I58527949	F12	5/24/23	46	I58527983	F45	5/24/23
13	I58527950	F13	5/24/23	47	I58527984	F46	5/24/23
14	I58527951	F14	5/24/23	48	I58527985	F47	5/24/23
15	I58527952	F15	5/24/23	49	I58527986	F48	5/24/23
16	I58527953	F16	5/24/23	50	I58527987	F49	5/24/23
17	I58527954	F17	5/24/23	51	I58527988	F50	5/24/23
18	I58527955	F18	5/24/23	52	I58527989	F51	5/24/23
19	I58527956	F19	5/24/23	53	I58527990	F52	5/24/23
20	I58527957	F20	5/24/23	54	I58527991	F53	5/24/23
21	I58527958	F21	5/24/23	55	I58527992	F54	5/24/23
22	I58527959	F22	5/24/23	56	I58527993	F55	5/24/23
23	I58527960	F23	5/24/23	57	I58527994	F56	5/24/23
24	I58527961	F24	5/24/23	58	I58527995	F57	5/24/23
25	I58527962	F25	5/24/23	59	I58527996	F58	5/24/23
26	I58527963	F26	5/24/23	60	I58527997	F59	5/24/23
27	I58527964	F27	5/24/23	61	I58527998	F60	5/24/23
28	I58527965	F28	5/24/23	62	I58527999	F61	5/24/23
29	I58527966	F29	5/24/23	63	I58528000	F62	5/24/23
30	I58527967	F30	5/24/23	64	I58528001	F63	5/24/23
31	I58527968	F31	5/24/23	65	I58528002	F64	5/24/23
32	I58527969	F32	5/24/23	66	I58528003	F65	5/24/23
33	I58527970	F33	5/24/23	67	I58528004	F66	5/24/23
34	I58527971	F34	5/24/23	68	I58528005	F67	5/24/23

The truss drawing(s) referenced above have been prepared by  
MiTek USA, Inc. under my direct supervision based on the parameters  
provided by Premier Building Supply (Springhill, KS)20300 W 207th Street.

Truss Design Engineer's Name: Nathan Fox

My license renewal date for the state of Missouri is December 31, 2024.

**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.



May 24, 2023



RE: P210577 - Floor -

MiTek USA, Inc.  
16023 Swingley Ridge Rd  
Chesterfield, MO 63017  
314-434-1200

No.	Seal#	Truss Name	Date
69	I58528006	F68	5/24/23
70	I58528007	F69	5/24/23
71	I58528008	F70	5/24/23
72	I58528009	F71	5/24/23
73	I58528010	F72	5/24/23
74	I58528011	F73	5/24/23
75	I58528012	F74	5/24/23
76	I58528013	F75	5/24/23
77	I58528014	F76	5/24/23
78	I58528015	F77	5/24/23
79	I58528016	F78	5/24/23
80	I58528017	F79	5/24/23
81	I58528018	F80	5/24/23
82	I58528019	F81	5/24/23
83	I58528020	F82	5/24/23
84	I58528021	F83	5/24/23
85	I58528022	F84	5/24/23
86	I58528023	F85	5/24/23
87	I58528024	F86	5/24/23
88	I58528025	F87	5/24/23
89	I58528026	F88	5/24/23
90	I58528027	F89	5/24/23
91	I58528028	F90	5/24/23
92	I58528029	F91	5/24/23
93	I58528030	F92	5/24/23
94	I58528031	F93	5/24/23
95	I58528032	F94	5/24/23
96	I58528033	F95	5/24/23
97	I58528034	F96	5/24/23
98	I58528035	F97	5/24/23

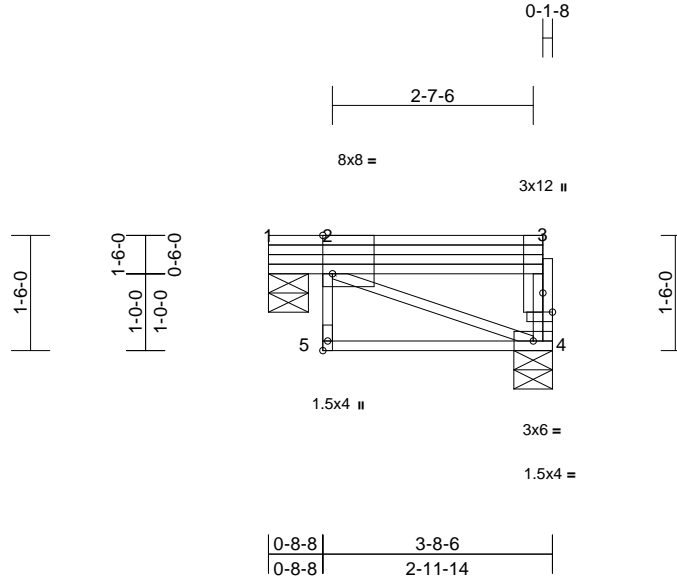
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F01	Floor	1	1	I58527938
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:16

Page: 1

ID:xfaeJN2lyTqF7SKMM51al7zlRBV-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCdoi7J4zJC?f



Scale = 1:30

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,0-3-0], [5:Edge,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.09	Vert(LL)	0.00	5	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.09	Vert(CT)	-0.02	4-5	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 34 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 3-8-6 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 1=0-6-4, 4=0-6-0  
 Max Grav 1=217 (LC 1), 4=225 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 2-5=0/19, 3-4=-206/0, 1-2=0/0, 2-3=0/0  
 BOT CHORD 4-5=0/0  
 WEBS 2-4=0/0

#### NOTES

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Scale = 1:32.2

**WARNING – Velly design parameters are listed below and included with the key reference to AISC M14-15 16f, 17f, 18f, 19f, 20f, 21f, 22f, 23f, 24f, 25f, 26f, 27f, 28f, 29f, 30f, 31f, 32f, 33f, 34f, 35f, 36f, 37f, 38f, 39f, 40f, 41f, 42f, 43f, 44f, 45f, 46f, 47f, 48f, 49f, 50f, 51f, 52f, 53f, 54f, 55f, 56f, 57f, 58f, 59f, 60f, 61f, 62f, 63f, 64f, 65f, 66f, 67f, 68f, 69f, 70f, 71f, 72f, 73f, 74f, 75f, 76f, 77f, 78f, 79f, 80f, 81f, 82f, 83f, 84f, 85f, 86f, 87f, 88f, 89f, 90f, 91f, 92f, 93f, 94f, 95f, 96f, 97f, 98f, 99f, 100f, 101f, 102f, 103f, 104f, 105f, 106f, 107f, 108f, 109f, 110f, 111f, 112f, 113f, 114f, 115f, 116f, 117f, 118f, 119f, 120f, 121f, 122f, 123f, 124f, 125f, 126f, 127f, 128f, 129f, 130f, 131f, 132f, 133f, 134f, 135f, 136f, 137f, 138f, 139f, 140f, 141f, 142f, 143f, 144f, 145f, 146f, 147f, 148f, 149f, 150f, 151f, 152f, 153f, 154f, 155f, 156f, 157f, 158f, 159f, 160f, 161f, 162f, 163f, 164f, 165f, 166f, 167f, 168f, 169f, 170f, 171f, 172f, 173f, 174f, 175f, 176f, 177f, 178f, 179f, 180f, 181f, 182f, 183f, 184f, 185f, 186f, 187f, 188f, 189f, 190f, 191f, 192f, 193f, 194f, 195f, 196f, 197f, 198f, 199f, 200f, 201f, 202f, 203f, 204f, 205f, 206f, 207f, 208f, 209f, 210f, 211f, 212f, 213f, 214f, 215f, 216f, 217f, 218f, 219f, 220f, 221f, 222f, 223f, 224f, 225f, 226f, 227f, 228f, 229f, 230f, 231f, 232f, 233f, 234f, 235f, 236f, 237f, 238f, 239f, 240f, 241f, 242f, 243f, 244f, 245f, 246f, 247f, 248f, 249f, 250f, 251f, 252f, 253f, 254f, 255f, 256f, 257f, 258f, 259f, 260f, 261f, 262f, 263f, 264f, 265f, 266f, 267f, 268f, 269f, 270f, 271f, 272f, 273f, 274f, 275f, 276f, 277f, 278f, 279f, 280f, 281f, 282f, 283f, 284f, 285f, 286f, 287f, 288f, 289f, 290f, 291f, 292f, 293f, 294f, 295f, 296f, 297f, 298f, 299f, 300f, 301f, 302f, 303f, 304f, 305f, 306f, 307f, 308f, 309f, 310f, 311f, 312f, 313f, 314f, 315f, 316f, 317f, 318f, 319f, 320f, 321f, 322f, 323f, 324f, 325f, 326f, 327f, 328f, 329f, 330f, 331f, 332f, 333f, 334f, 335f, 336f, 337f, 338f, 339f, 340f, 341f, 342f, 343f, 344f, 345f, 346f, 347f, 348f, 349f, 350f, 351f, 352f, 353f, 354f, 355f, 356f, 357f, 358f, 359f, 360f, 361f, 362f, 363f, 364f, 365f, 366f, 367f, 368f, 369f, 370f, 371f, 372f, 373f, 374f, 375f, 376f, 377f, 378f, 379f, 380f, 381f, 382f, 383f, 384f, 385f, 386f, 387f, 388f, 389f, 390f, 391f, 392f, 393f, 394f, 395f, 396f, 397f, 398f, 399f, 400f, 401f, 402f, 403f, 404f, 405f, 406f, 407f, 408f, 409f, 410f, 411f, 412f, 413f, 414f, 415f, 416f, 417f, 418f, 419f, 420f, 421f, 422f, 423f, 424f, 425f, 426f, 427f, 428f, 429f, 430f, 431f, 432f, 433f, 434f, 435f, 436f, 437f, 438f, 439f, 440f, 441f, 442f, 443f, 444f, 445f, 446f, 447f, 448f, 449f, 450f, 451f, 452f, 453f, 454f, 455f, 456f, 457f, 458f, 459f, 460f, 461f, 462f, 463f, 464f, 465f, 466f, 467f, 468f, 469f, 470f, 471f, 472f, 473f, 474f, 475f, 476f, 477f, 478f, 479f, 480f, 481f, 482f, 483f, 484f, 485f, 486f, 487f, 488f, 489f, 490f, 491f, 492f, 493f, 494f, 495f, 496f, 497f, 498f, 499f, 500f, 501f, 502f, 503f, 504f, 505f, 506f, 507f, 508f, 509f, 510f, 511f, 512f, 513f, 514f, 515f, 516f, 517f, 518f, 519f, 520f, 521f, 522f, 523f, 524f, 525f, 526f, 527f, 528f, 529f, 530f, 531f, 532f, 533f, 534f, 535f, 536f, 537f, 538f, 539f, 540f, 541f, 542f, 543f, 544f, 545f, 546f, 547f, 548f, 549f, 550f, 551f, 552f, 553f, 554f, 555f, 556f, 557f, 558f, 559f, 560f, 561f, 562f, 563f, 564f, 565f, 566f, 567f, 568f, 569f, 570f, 571f, 572f, 573f, 574f, 575f, 576f, 577f, 578f, 579f, 580f, 581f, 582f, 583f, 584f, 585f, 586f, 587f, 588f, 589f, 590f, 591f, 592f, 593f, 594f, 595f, 596f, 597f, 598f, 599f, 600f, 601f, 602f, 603f, 604f, 605f, 606f, 607f, 608f, 609f, 610f, 611f, 612f, 613f, 614f, 615f, 616f, 617f, 618f, 619f, 620f, 621f, 622f, 623f, 624f, 625f, 626f, 627f, 628f, 629f, 630f, 631f, 632f, 633f, 634f, 635f, 636f, 637f, 638f, 639f, 640f, 641f, 642f, 643f, 644f, 645f, 646f, 647f, 648f, 649f, 650f, 651f, 652f, 653f, 654f, 655f, 656f, 657f, 658f, 659f, 660f, 661f, 662f, 663f, 664f, 665f, 666f, 667f, 668f, 669f, 670f, 671f, 672f, 673f, 674f, 675f, 676f, 677f, 678f, 679f, 680f, 681f, 682f, 683f, 684f, 685f, 686f, 687f, 688f, 689f, 690f, 691f, 692f, 693f, 694f, 695f, 696f, 697f, 698f, 699f, 700f, 701f, 702f, 703f, 704f, 705f, 706f, 707f,**

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

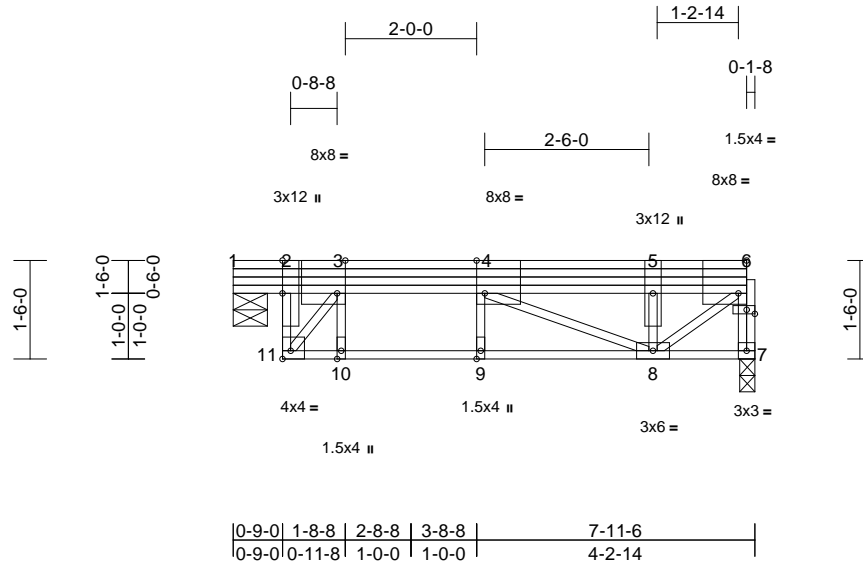
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F03	Floor	1	1	Job Reference (optional)
					I58527940

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:19

Page: 1

ID:QHusd1wLhnEPb65zNRnh?czlR95-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?i



Scale = 1:35.1

Plate Offsets (X, Y): [2:0-6-0,Edge], [3:0-1-8,Edge], [4:0-1-8,Edge], [6:0-1-8,Edge], [6:0-1-8,0-0-12], [11:Edge,0-1-8]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.25	Vert(LL)	-0.02	8-9	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.09	Vert(CT)	-0.03	8-9	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 73 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 1=0-6-4, 7=0-2-12  
 Max Grav 1=485 (LC 1), 7=495 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 2-11=0/992, 6-7=-490/0, 1-2=0/0, 2-3=0/0,  
 3-4=-667/0, 4-5=-534/0, 5-6=-534/0

BOT CHORD 10-11=0/666, 9-10=0/667, 8-9=0/665,  
 7-8=0/0

WEBS 3-10=0/39, 4-9=0/28, 3-11=-1200/0,  
 4-8=-188/0, 5-8=-350/0, 6-8=0/695

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

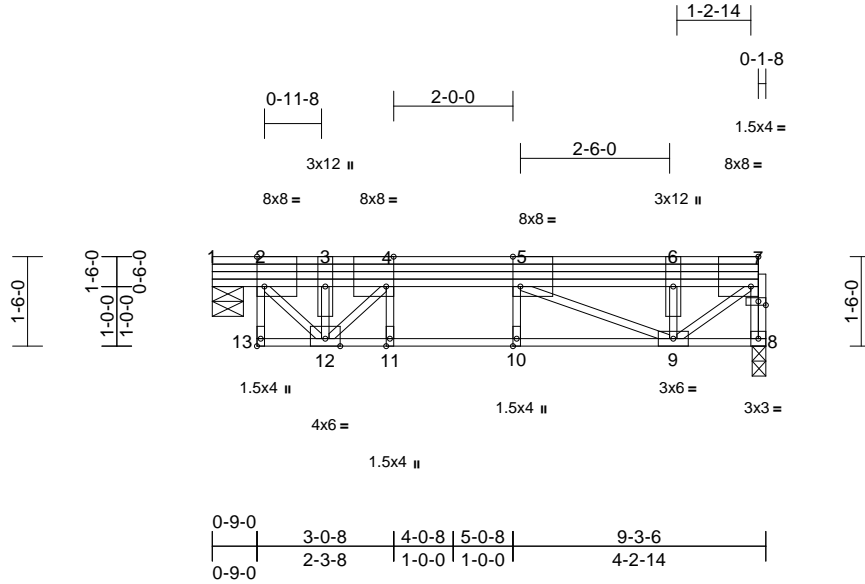
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F04	Floor	1	1	Job Reference (optional)
					I58527941

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:19

Page: 1

ID:c020xo2F5AdrQpR4WEUGxwzIR8w-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:38.6

Plate Offsets (X, Y): [2:0-1-8,Edge], [4:0-1-8,Edge], [5:0-1-8,Edge], [7:0-1-8,Edge], [7:0-1-8,0-0-12], [13:Edge,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	-0.02	10-11	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.12	Vert(CT)	-0.03	10-11	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 87 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 1=0-6-4, 8=0-2-12  
 Max Grav 1=569 (LC 1), 8=579 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension  
 TOP CHORD 2-13=0/10, 7-8=-574/0, 1-2=0/0, 2-3=-691/0,  
 3-4=-691/0, 4-5=-1022/0, 5-6=-628/0,  
 6-7=-628/0  
 BOT CHORD 12-13=0/0, 11-12=0/1020, 10-11=0/1022,  
 9-10=0/1019, 8-9=0/0  
 WEBS 4-11=0/32, 5-10=0/34, 4-12=-535/0,  
 3-12=-375/0, 2-12=0/1026, 5-9=-436/0,  
 6-9=-320/0, 7-9=0/817

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



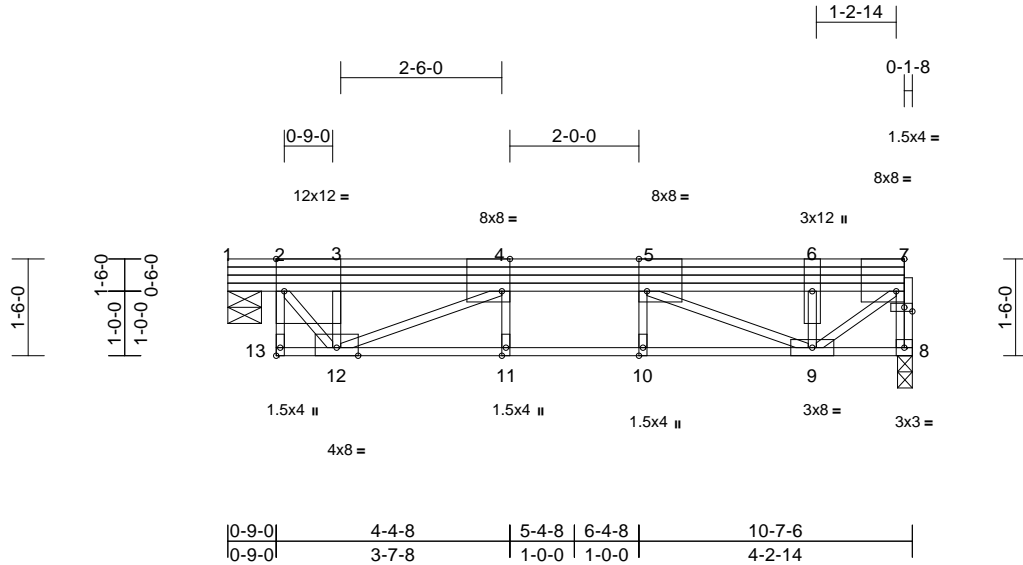
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F05	Floor	1	1	Job Reference (optional)
					I58527942

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:19

Page: 1

ID:4s8pijGXsiulaapXa0pVgjzIR8e-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWCDoi7J4zJC?f



Scale = 1:35.7

Plate Offsets (X, Y): [2:0-1-8,Edge], [4:0-1-8,Edge], [5:0-1-8,Edge], [7:0-1-8,Edge], [7:0-1-8,0-0-12], [13:Edge,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.22	Vert(LL)	-0.03	10-11	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.15	Vert(CT)	-0.04	10-11	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 98 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 1=0-6-4, 8=0-2-12  
 Max Grav 1=654 (LC 1), 8=664 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension  
 TOP CHORD 2-13=-1/0, 7-8=-659/0, 1-2=0/0, 2-3=-805/0,  
 3-4=-805/0, 4-5=-1350/0, 5-6=-727/0,  
 6-7=-727/0  
 BOT CHORD 12-13=0/0, 11-12=0/1347, 10-11=0/1350,  
 9-10=0/1347, 8-9=0/0  
 WEBS 4-11=0/35, 5-10=0/36, 4-12=-616/0,  
 3-12=-807/0, 2-12=0/1357, 5-9=-685/0,  
 6-9=-314/0, 7-9=0/945

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

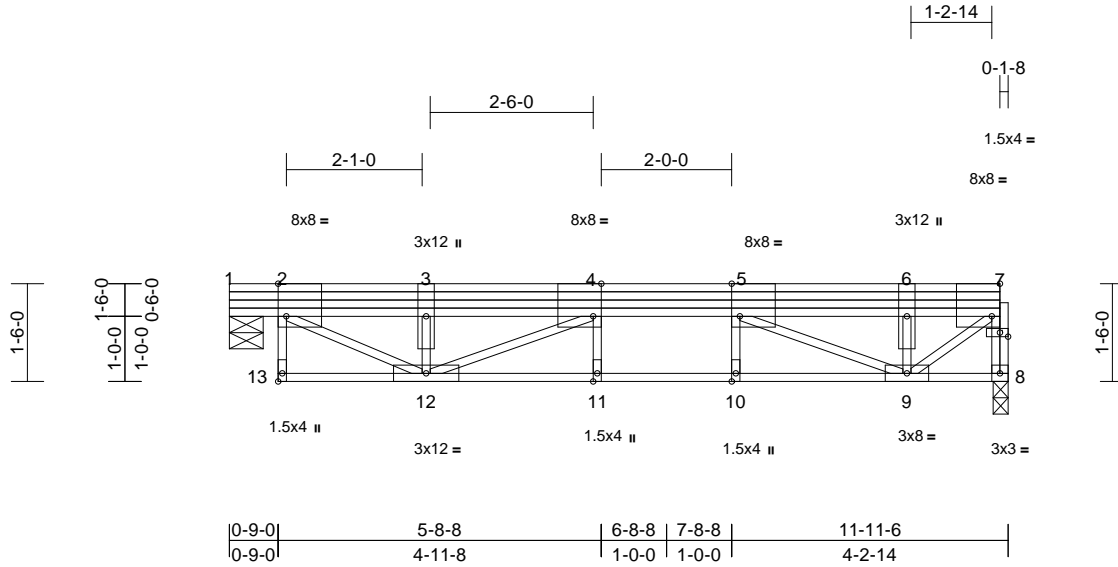
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F06	Floor	1	1	Job Reference (optional)
					I58527943

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:19

Page: 1

ID:JsieArarkh9chZpX5UHbjCzlR8E-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f



Scale = 1:35.3

Plate Offsets (X, Y): [2:0-1-8,Edge], [4:0-1-8,Edge], [5:0-1-8,Edge], [7:0-1-8,Edge], [7:0-1-8,0-0-12], [13:Edge,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.26	Vert(LL)	-0.05	11-12	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.19	Vert(CT)	-0.07	11-12	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 110 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 1=0-6-4, 8=0-2-12  
 Max Grav 1=738 (LC 1), 8=748 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension  
 TOP CHORD 2-13=0/13, 7-8=-743/0, 1-2=0/0, 2-3=-1490/0,  
 3-4=-1490/0, 4-5=-1692/0, 5-6=-822/0,  
 6-7=-822/0  
 BOT CHORD 12-13=0/0, 11-12=0/1690, 10-11=0/1692,  
 9-10=0/1689, 8-9=0/0  
 WEBS 4-11=0/31, 5-10=0/40, 4-12=-407/0,  
 3-12=-670/0, 2-12=0/1692, 5-9=-957/0,  
 6-9=-294/0, 7-9=0/1070

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

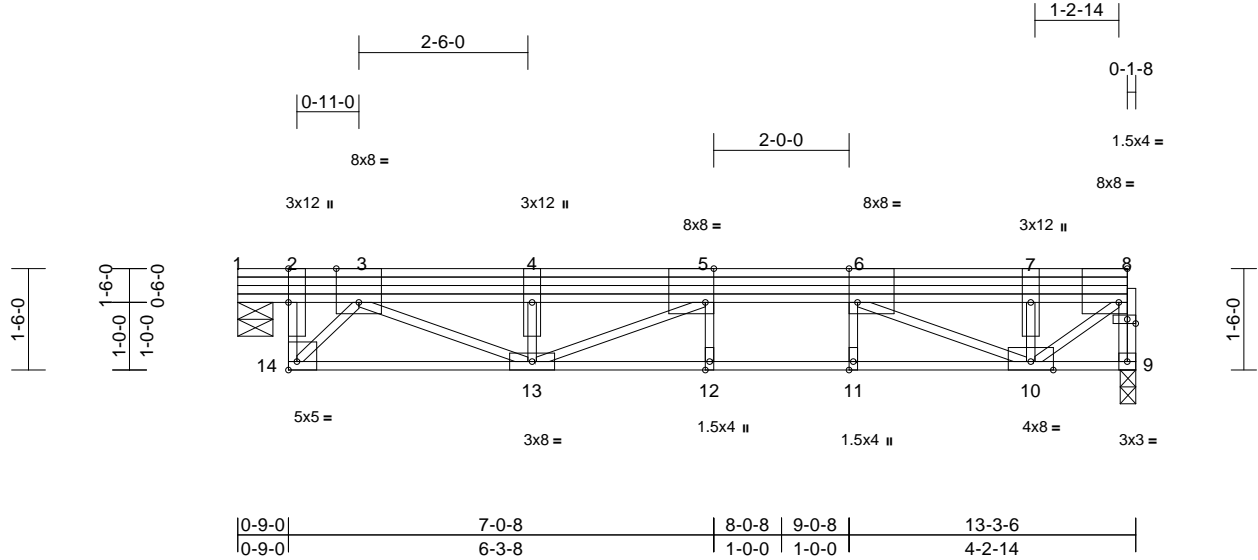


Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F07	Floor	1	1	I58527944
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:19  
ID:21eY50A4KR7ENSAfeQ6nOKzIR4u-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:34.1

Plate Offsets (X, Y): [2:0-6-0,Edge], [3:0-4-0,Edge], [5:0-1-8,Edge], [6:0-1-8,Edge], [8:0-1-8,Edge], [8:0-1-8,0-0-12], [14:Edge,0-1-8]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.33	Vert(LL)	-0.06	12-13	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.22	Vert(CT)	-0.10	12-13	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 122 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 1=0-6-4, 9=0-2-12  
Max Grav 1=823 (LC 1), 9=833 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 2-14=0/1271, 8-9=827/0, 1-2=0/0, 2-3=0/0,  
3-4=-2059/0, 4-5=-2059/0, 5-6=-2041/0,  
6-7=-917/0, 7-8=-917/0

BOT CHORD 13-14=0/1083, 12-13=0/2040, 11-12=0/2041,  
10-11=0/2038, 9-10=0/0

WEBS 5-12=0/23, 6-11=0/48, 5-13=-282/173,  
4-13=-437/0, 3-13=0/1080, 3-14=-1654/0,  
6-10=-1238/0, 7-10=-274/2, 8-10=0/1193

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

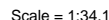
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:20 Page: 1  
ID:fninCdfJUIFR1Uoul1?QoozIHV -RfC?PsB70Hg3NSaPanL8w3ulTXbGKWrcDoI7J4zJC?f



<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	60.0	Plate Grip DOL	1.00	TC	0.32	Vert(LL)	-0.09	12-13	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.28	Vert(CT)	-0.15	13-14	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 134 lb	FT = 20%F, 11%E

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

Max Grav 1=907 (LC 1), 9=917 (LC 1)

TOP CHORD 2-14=0/981, 8-9=-910/0, 1-2=0/0, 2-3=0/0,  
3-4=-2690/0, 4-5=-2690/0, 5-6=-2388/0,  
6-7=-1012/0, 7-8=-1012/0

WEBS 5-12=-4/12, 6-11=0/55, 6-10=-1515/0,  
7-10=-257/36, 8-10=0/1317, 5-13=-120/472,  
4-13=-474/0. 3-13=0/911, 3-14=-2094/0

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION. Do not erect truss backwards.

STATE OF MISSOURI  
NATHANIEL  
FOX  
REGISTERED PROFESSIONAL ENGINEER  
PE-2022042259

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

**WARNING – Velly design parameters are listed below and included with the key reference to AISC M14-15 16f, 17f, 18f, 19f, 20f, 21f, 22f, 23f, 24f, 25f, 26f, 27f, 28f, 29f, 30f, 31f, 32f, 33f, 34f, 35f, 36f, 37f, 38f, 39f, 40f, 41f, 42f, 43f, 44f, 45f, 46f, 47f, 48f, 49f, 50f, 51f, 52f, 53f, 54f, 55f, 56f, 57f, 58f, 59f, 60f, 61f, 62f, 63f, 64f, 65f, 66f, 67f, 68f, 69f, 70f, 71f, 72f, 73f, 74f, 75f, 76f, 77f, 78f, 79f, 80f, 81f, 82f, 83f, 84f, 85f, 86f, 87f, 88f, 89f, 90f, 91f, 92f, 93f, 94f, 95f, 96f, 97f, 98f, 99f, 100f, 101f, 102f, 103f, 104f, 105f, 106f, 107f, 108f, 109f, 110f, 111f, 112f, 113f, 114f, 115f, 116f, 117f, 118f, 119f, 120f, 121f, 122f, 123f, 124f, 125f, 126f, 127f, 128f, 129f, 130f, 131f, 132f, 133f, 134f, 135f, 136f, 137f, 138f, 139f, 140f, 141f, 142f, 143f, 144f, 145f, 146f, 147f, 148f, 149f, 150f, 151f, 152f, 153f, 154f, 155f, 156f, 157f, 158f, 159f, 160f, 161f, 162f, 163f, 164f, 165f, 166f, 167f, 168f, 169f, 170f, 171f, 172f, 173f, 174f, 175f, 176f, 177f, 178f, 179f, 180f, 181f, 182f, 183f, 184f, 185f, 186f, 187f, 188f, 189f, 190f, 191f, 192f, 193f, 194f, 195f, 196f, 197f, 198f, 199f, 200f, 201f, 202f, 203f, 204f, 205f, 206f, 207f, 208f, 209f, 210f, 211f, 212f, 213f, 214f, 215f, 216f, 217f, 218f, 219f, 220f, 221f, 222f, 223f, 224f, 225f, 226f, 227f, 228f, 229f, 230f, 231f, 232f, 233f, 234f, 235f, 236f, 237f, 238f, 239f, 240f, 241f, 242f, 243f, 244f, 245f, 246f, 247f, 248f, 249f, 250f, 251f, 252f, 253f, 254f, 255f, 256f, 257f, 258f, 259f, 260f, 261f, 262f, 263f, 264f, 265f, 266f, 267f, 268f, 269f, 270f, 271f, 272f, 273f, 274f, 275f, 276f, 277f, 278f, 279f, 280f, 281f, 282f, 283f, 284f, 285f, 286f, 287f, 288f, 289f, 290f, 291f, 292f, 293f, 294f, 295f, 296f, 297f, 298f, 299f, 300f, 301f, 302f, 303f, 304f, 305f, 306f, 307f, 308f, 309f, 310f, 311f, 312f, 313f, 314f, 315f, 316f, 317f, 318f, 319f, 320f, 321f, 322f, 323f, 324f, 325f, 326f, 327f, 328f, 329f, 330f, 331f, 332f, 333f, 334f, 335f, 336f, 337f, 338f, 339f, 340f, 341f, 342f, 343f, 344f, 345f, 346f, 347f, 348f, 349f, 350f, 351f, 352f, 353f, 354f, 355f, 356f, 357f, 358f, 359f, 360f, 361f, 362f, 363f, 364f, 365f, 366f, 367f, 368f, 369f, 370f, 371f, 372f, 373f, 374f, 375f, 376f, 377f, 378f, 379f, 380f, 381f, 382f, 383f, 384f, 385f, 386f, 387f, 388f, 389f, 390f, 391f, 392f, 393f, 394f, 395f, 396f, 397f, 398f, 399f, 400f, 401f, 402f, 403f, 404f, 405f, 406f, 407f, 408f, 409f, 410f, 411f, 412f, 413f, 414f, 415f, 416f, 417f, 418f, 419f, 420f, 421f, 422f, 423f, 424f, 425f, 426f, 427f, 428f, 429f, 430f, 431f, 432f, 433f, 434f, 435f, 436f, 437f, 438f, 439f, 440f, 441f, 442f, 443f, 444f, 445f, 446f, 447f, 448f, 449f, 450f, 451f, 452f, 453f, 454f, 455f, 456f, 457f, 458f, 459f, 460f, 461f, 462f, 463f, 464f, 465f, 466f, 467f, 468f, 469f, 470f, 471f, 472f, 473f, 474f, 475f, 476f, 477f, 478f, 479f, 480f, 481f, 482f, 483f, 484f, 485f, 486f, 487f, 488f, 489f, 490f, 491f, 492f, 493f, 494f, 495f, 496f, 497f, 498f, 499f, 500f, 501f, 502f, 503f, 504f, 505f, 506f, 507f, 508f, 509f, 510f, 511f, 512f, 513f, 514f, 515f, 516f, 517f, 518f, 519f, 520f, 521f, 522f, 523f, 524f, 525f, 526f, 527f, 528f, 529f, 530f, 531f, 532f, 533f, 534f, 535f, 536f, 537f, 538f, 539f, 540f, 541f, 542f, 543f, 544f, 545f, 546f, 547f, 548f, 549f, 550f, 551f, 552f, 553f, 554f, 555f, 556f, 557f, 558f, 559f, 560f, 561f, 562f, 563f, 564f, 565f, 566f, 567f, 568f, 569f, 570f, 571f, 572f, 573f, 574f, 575f, 576f, 577f, 578f, 579f, 580f, 581f, 582f, 583f, 584f, 585f, 586f, 587f, 588f, 589f, 590f, 591f, 592f, 593f, 594f, 595f, 596f, 597f, 598f, 599f, 600f, 601f, 602f, 603f, 604f, 605f, 606f, 607f, 608f, 609f, 610f, 611f, 612f, 613f, 614f, 615f, 616f, 617f, 618f, 619f, 620f, 621f, 622f, 623f, 624f, 625f, 626f, 627f, 628f, 629f, 630f, 631f, 632f, 633f, 634f, 635f, 636f, 637f, 638f, 639f, 640f, 641f, 642f, 643f, 644f, 645f, 646f, 647f, 648f, 649f, 650f, 651f, 652f, 653f, 654f, 655f, 656f, 657f, 658f, 659f, 660f, 661f, 662f, 663f, 664f, 665f, 666f, 667f, 668f, 669f, 670f, 671f, 672f, 673f, 674f, 675f, 676f, 677f, 678f, 679f, 680f, 681f, 682f, 683f, 684f, 685f, 686f, 687f, 688f, 689f, 690f, 691f, 692f, 693f, 694f, 695f, 696f, 697f, 698f, 699f, 700f, 701f, 702f, 703f, 704f, 705f, 706f, 707f,**



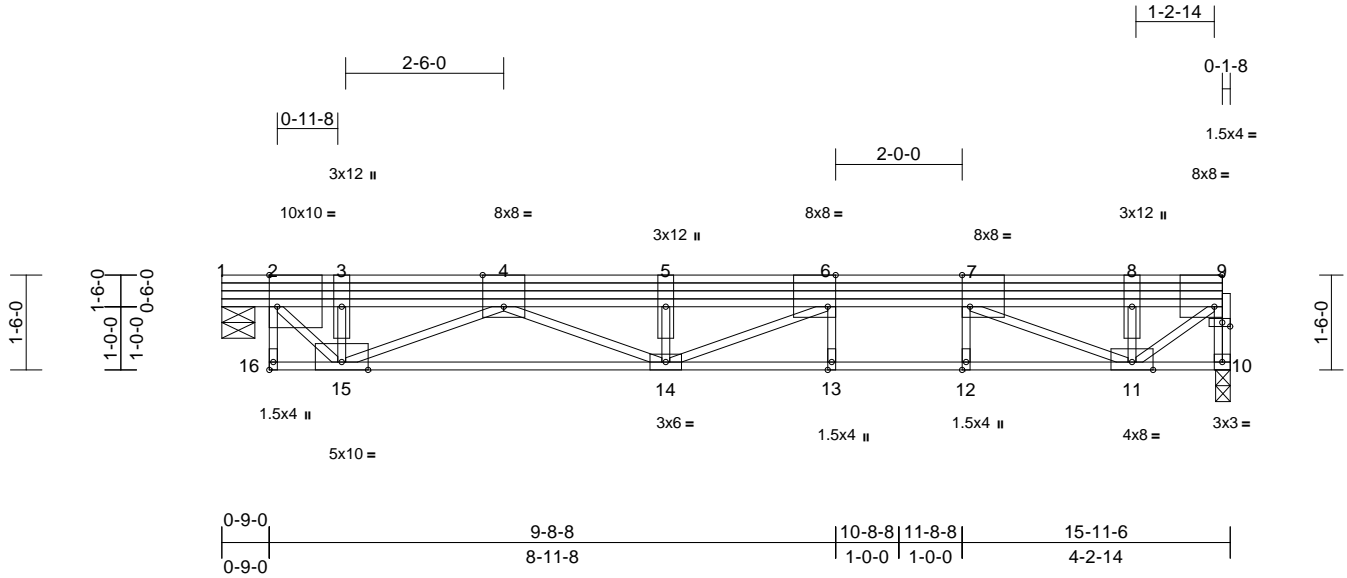
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F09	Floor	1	1	Job Reference (optional)
					I58527946

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:20  
ID:yP8sEqyNqgH1vAeVi3R2mszlHUc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:36.4

Plate Offsets (X, Y): [2:0-1-8,Edge], [4:0-4-0,Edge], [6:0-1-8,Edge], [7:0-1-8,Edge], [9:0-1-8,Edge], [9:0-1-8,0-0-12], [16:Edge,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.35	Vert(LL)	-0.11	13-14	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.31	Vert(CT)	-0.18	13-14	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 147 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 1=0-6-4, 10=0-2-12  
Max Grav 1=992 (LC 1), 10=1002 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 2-16=-16/0, 9-10=-995/0, 1-2=0/0,  
2-3=-1481/0, 3-4=-1481/0, 4-5=-3330/0,  
5-6=-3330/0, 6-7=-2735/0, 7-8=-1107/0,  
8-9=-1107/0

BOT CHORD 15-16=0/0, 14-15=0/2548, 13-14=0/2735,  
12-13=0/2735, 11-12=0/2730, 10-11=0/0

WEBS 6-13=-6/13, 7-12=0/59, 6-14=0/782,  
5-14=-588/0, 4-14=0/863, 4-15=-1176/0,  
3-15=-1069/0, 2-15=0/2198, 7-11=-1793/0,  
8-11=-239/72, 9-11=0/1441

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 10.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

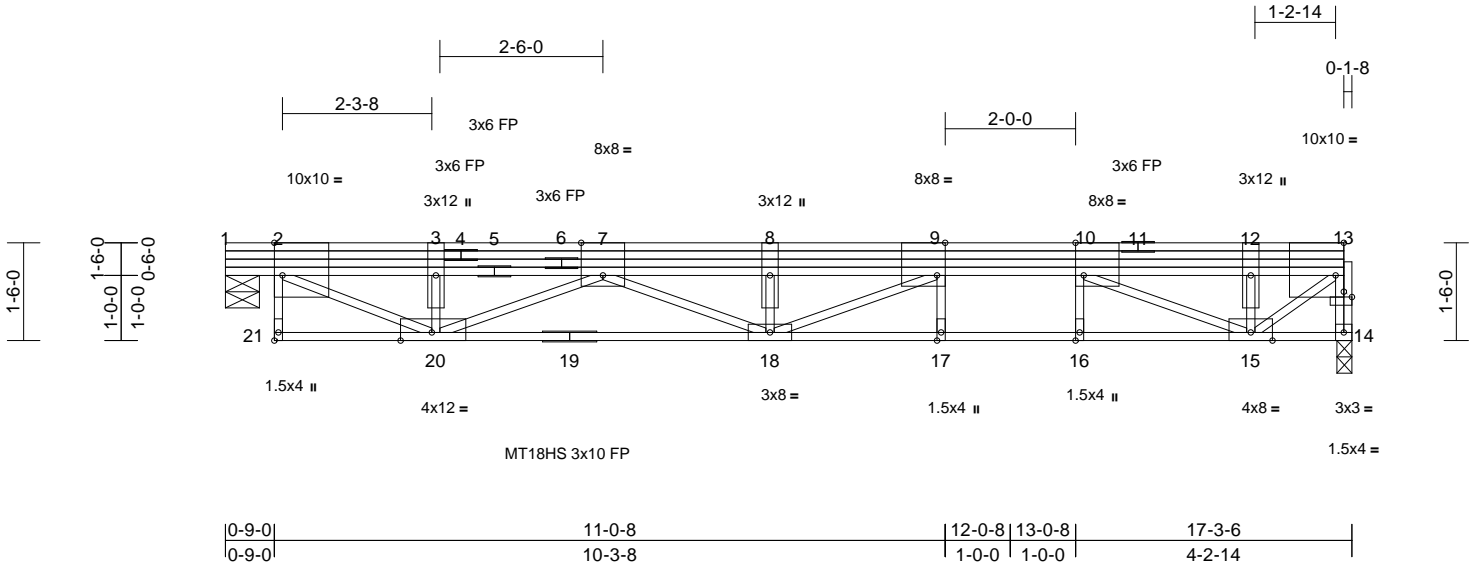
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F10	Floor	1	1	158527947
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:20

Page: 1

ID:qRwoe0CYu7w3wPkXQ\_J\_7HzIHUHRfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCD0i7J4zJC?f



Scale = 1:35.3

Plate Offsets (X, Y): [2:0-1-8,Edge], [7:0-4-0,Edge], [9:0-1-8,Edge], [10:0-1-8,Edge], [13:0-1-8,Edge], [13:0-1-8,0-1-0], [20:0-5-12,Edge], [21:Edge,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.39	Vert(LL)	-0.15	17-18	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.38	Vert(CT)	-0.25	18-20	>827	720	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.01	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
											Weight: 159 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 1=0-6-4, 14=0-2-12  
 Max Grav 1=1076 (LC 1), 14=1086 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 2-21=0/9, 13-14=-1079/0, 1-2=0/0,  
 2-3=-2497/0, 3-7=-2497/0, 7-8=-3965/0,  
 8-9=-3965/0, 9-10=-3081/0, 10-12=-1202/0,  
 12-13=-1202/0

BOT CHORD 20-21=0/0, 18-20=0/3298, 17-18=0/3082,  
 16-17=0/3081, 15-16=0/3076, 14-15=0/0

WEBS 9-17=-12/9, 10-16=0/64, 9-18=0/1088,  
 8-18=-662/0, 7-18=0/735, 7-20=-883/0,  
 3-20=-800/0, 2-20=0/2782, 10-15=-2070/0,  
 12-15=-222/107, 13-15=0/1564

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 14.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

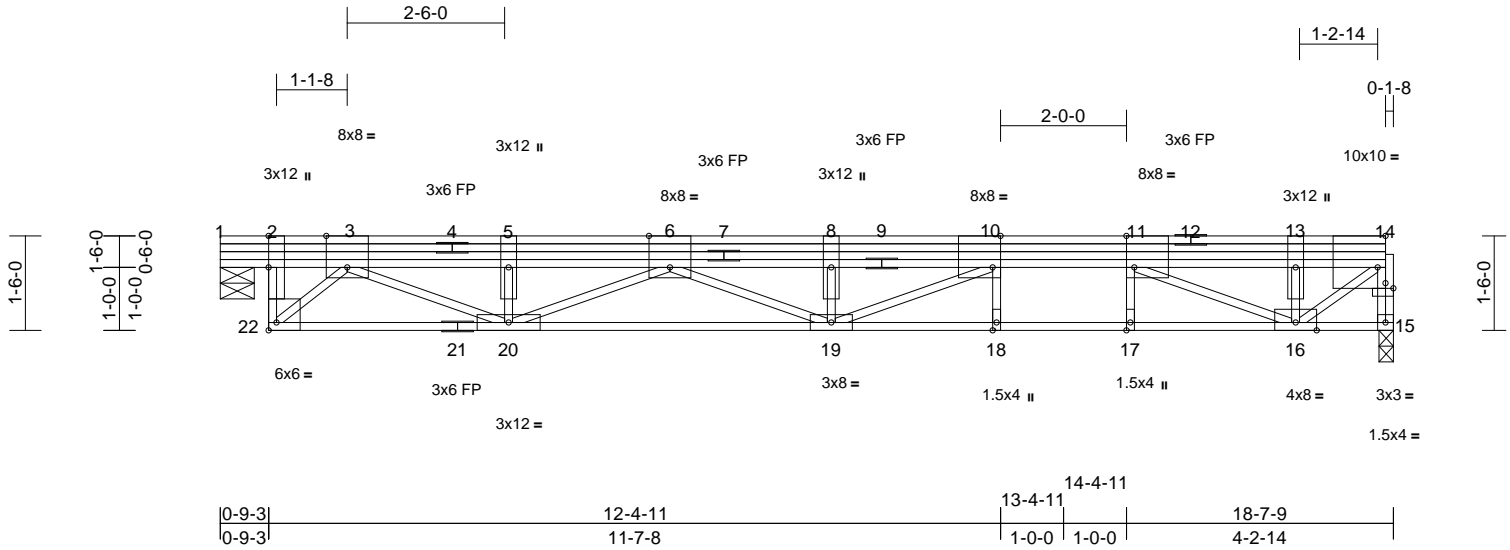
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F11	Floor	1	1	158527948
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:21

Page: 1

ID:fsoVTtUzTBpoBx?yHJDNY8zHTw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:36.6

Plate Offsets (X, Y): [2:0-6-0,Edge], [3:0-4-0,Edge], [6:0-4-0,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge], [14:0-1-8,Edge], [14:0-1-8,0-1-0], [22:Edge,0-1-8]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.45	Vert(LL)	-0.19	18-19	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.45	Vert(CT)	-0.31	19-20	>722	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.02	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 171 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 1=0-6-7, 15=0-2-12  
 Max Grav 1=1161 (LC 1), 15=1172 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension  
 TOP CHORD 2-22=0/1746, 14-15=-1164/0, 1-2=0/0,  
 2-3=0/0, 3-5=-3388/0, 5-6=-3388/0,  
 6-8=-4602/0, 8-10=-4602/0, 10-11=-3433/0,  
 11-13=-1299/0, 13-14=-1299/0  
 BOT CHORD 20-22=0/1789, 19-20=0/4081, 18-19=0/3434,  
 17-18=0/3433, 16-17=0/3428, 15-16=0/0  
 WEBS 10-18=-16/8, 11-17=0/69, 10-19=0/1394,  
 8-19=-728/0, 6-19=0/575, 6-20=-763/0,  
 5-20=-368/0, 3-20=0/1768, 3-22=-2487/0,  
 11-16=-2352/0, 13-16=-205/144,  
 14-16=0/1690

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

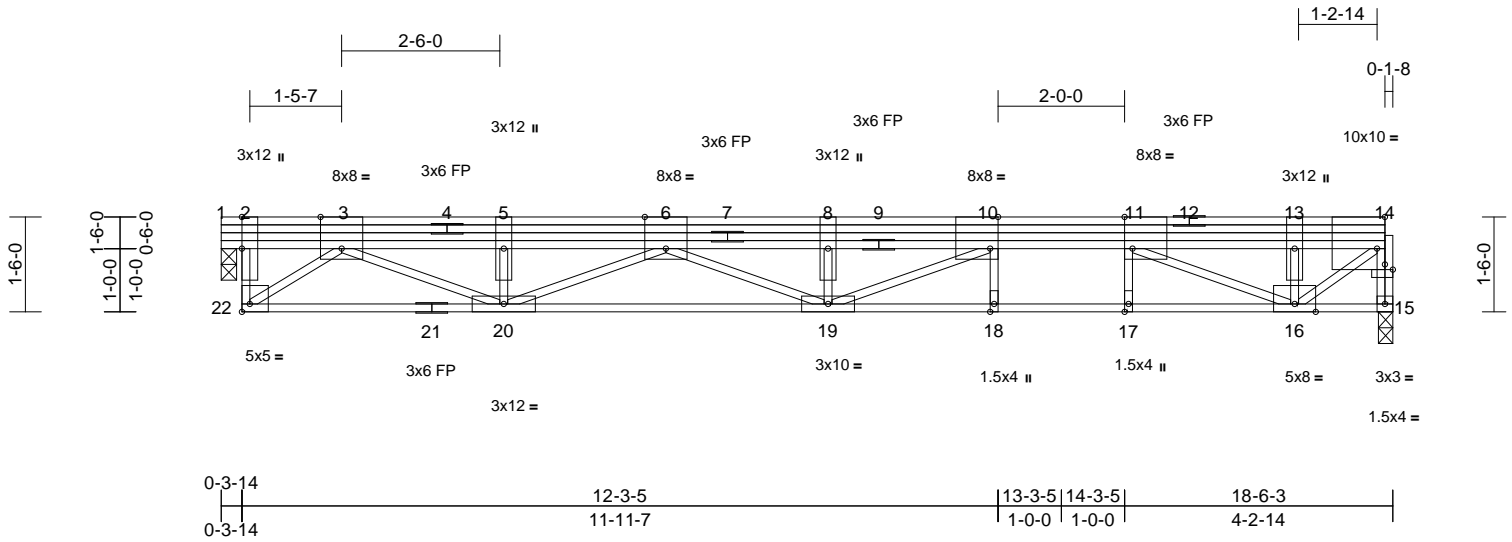
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F12	Floor	10	1	I58527949
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:21

Page: 1

ID:ddWwJz3ujfOulwLOQABVxzIH?U-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:36.4

Plate Offsets (X, Y): [2:0-6-0,Edge], [3:0-4-0,Edge], [6:0-4-0,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge], [14:0-1-8,Edge], [14:0-1-8,0-1-0], [22:Edge,0-1-8]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.33	Vert(LL)	-0.16	18-19	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.43	Vert(CT)	-0.26	19-20	>835	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.02	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 172 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 1=0-2-14, 15=0-2-12  
 Max Grav 1=1160 (LC 1), 15=1165 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 2-22=0/1277, 14-15=-1158/0, 1-2=0/0,  
 2-3=0/0, 3-5=-3297/0, 5-6=-3297/0,  
 6-8=-4520/0, 8-10=-4520/0, 10-11=-3338/0,  
 11-13=-1325/0, 13-14=-1325/0  
 BOT CHORD 20-22=0/1638, 19-20=0/3925, 18-19=0/3338,  
 17-18=0/3338, 16-17=0/3333, 15-16=0/0  
 WEBS 10-18=-5/12, 11-17=0/58, 10-19=0/1404,  
 8-19=-766/0, 6-19=0/655, 6-20=-692/0,  
 5-20=-420/0, 3-20=0/1834, 3-22=-2064/0,  
 11-16=-2219/0, 13-16=-240/66,  
 14-16=0/1723

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15, 1.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



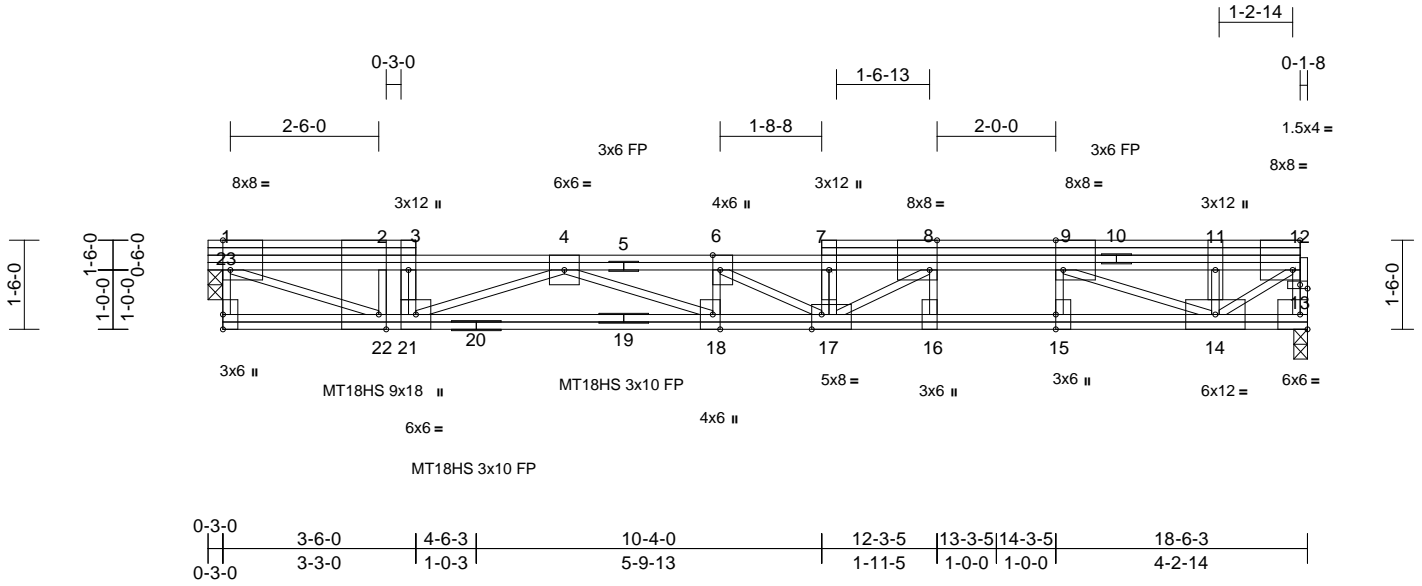
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F13	Floor	5	1	Job Reference (optional)
					I58527950

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:21

Page: 1

ID:qSyLIsFQ5J2j66F8VxwDL5zIGyf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:38.8									
Plate Offsets (X, Y): [1:0-1-8,Edge], [6:0-3-0,Edge], [8:0-1-8,Edge], [9:0-1-8,Edge], [12:0-1-8,Edge], [12:0-1-8,0-0-12], [15:0-3-0,Edge], [17:0-2-0,Edge], [18:0-3-0,Edge], [22:0-3-0,Edge]									
<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in (loc)	l/defl	L/d
TCLL	60.0	Plate Grip DOL	1.00	TC	0.16	Vert(LL)	-0.16 18-21	>999	720
TCDL	25.0	Lumber DOL	1.00	BC	0.29	Vert(CT)	-0.25 18-21	>861	720
BCLL	0.0	Rep Stress Incr	YES	WB	0.79	Horz(CT)	0.00 13	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
					Weight: 180 lb FT = 20%F, 11%E				

**LUMBER**  
TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 1=0-2-14, 13=0-2-12  
Max Grav 1=1145 (LC 1), 13=1145 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-23=-18/0, 12-13=-1135/0, 1-2=-2572/0, 2-3=-2572/0, 3-4=-2536/0, 4-6=-5109/0, 6-7=-4544/0, 7-8=-4496/0, 8-9=-3449/0, 9-11=-1381/0, 11-12=-1381/0  
BOT CHORD 22-23=0/0, 21-22=0/2572, 18-21=0/4421, 17-18=0/5109, 16-17=0/3455, 15-16=0/3449, 14-15=0/3438, 13-14=0/0  
WEBS 3-21=0/433, 7-17=-341/0, 8-16=-105/0, 9-15=0/127, 1-22=0/2799, 2-22=-727/0, 4-21=-2047/0, 4-18=0/778, 6-18=-231/0, 6-17=-687/0, 8-17=0/1342, 9-14=-2253/0, 11-14=-163/28, 12-14=0/1758

- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
  - CAUTION, Do not erect truss backwards.
- LOAD CASE(S)** Standard

- NOTES**
- Unbalanced floor live loads have been considered for this design.
  - All plates are MT20 plates unless otherwise indicated.
  - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 1, 13.
  - This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**  
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



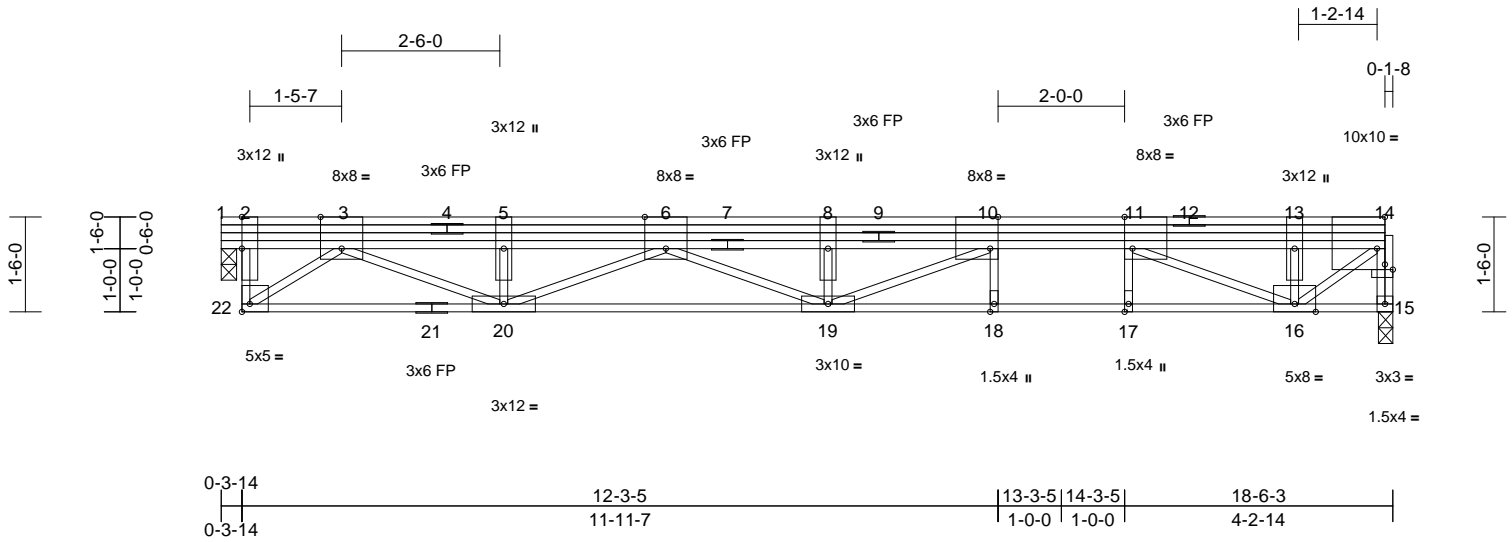
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F14	Floor	1	1	I58527951
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:21

Page: 1

ID:TdP?soG\_00uF?3YzlEazEOzlGXW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:36.4

Plate Offsets (X, Y): [2:0-6-0,Edge], [3:0-4-0,Edge], [6:0-4-0,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge], [14:0-1-8,Edge], [14:0-1-8,0-1-0], [22:Edge,0-1-8]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.33	Vert(LL)	-0.16	18-19	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.43	Vert(CT)	-0.26	19-20	>835	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.02	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 172 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 1=0-2-14, 15=0-2-12  
 Max Grav 1=1160 (LC 1), 15=1165 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension  
 TOP CHORD 2-22=0/1277, 14-15=-1158/0, 1-2=0/0,  
 2-3=0/0, 3-5=-3297/0, 5-6=-3297/0,  
 6-8=-4520/0, 8-10=-4520/0, 10-11=-3338/0,  
 11-13=-1325/0, 13-14=-1325/0  
 BOT CHORD 20-22=0/1638, 19-20=0/3925, 18-19=0/3338,  
 17-18=0/3338, 16-17=0/3333, 15-16=0/0  
 WEBS 10-18=-5/12, 11-17=0/58, 10-19=0/1404,  
 8-19=-766/0, 6-19=0/655, 6-20=-692/0,  
 5-20=-420/0, 3-20=0/1834, 3-22=-2064/0,  
 11-16=-2219/0, 13-16=-240/66,  
 14-16=0/1723

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15, 1.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

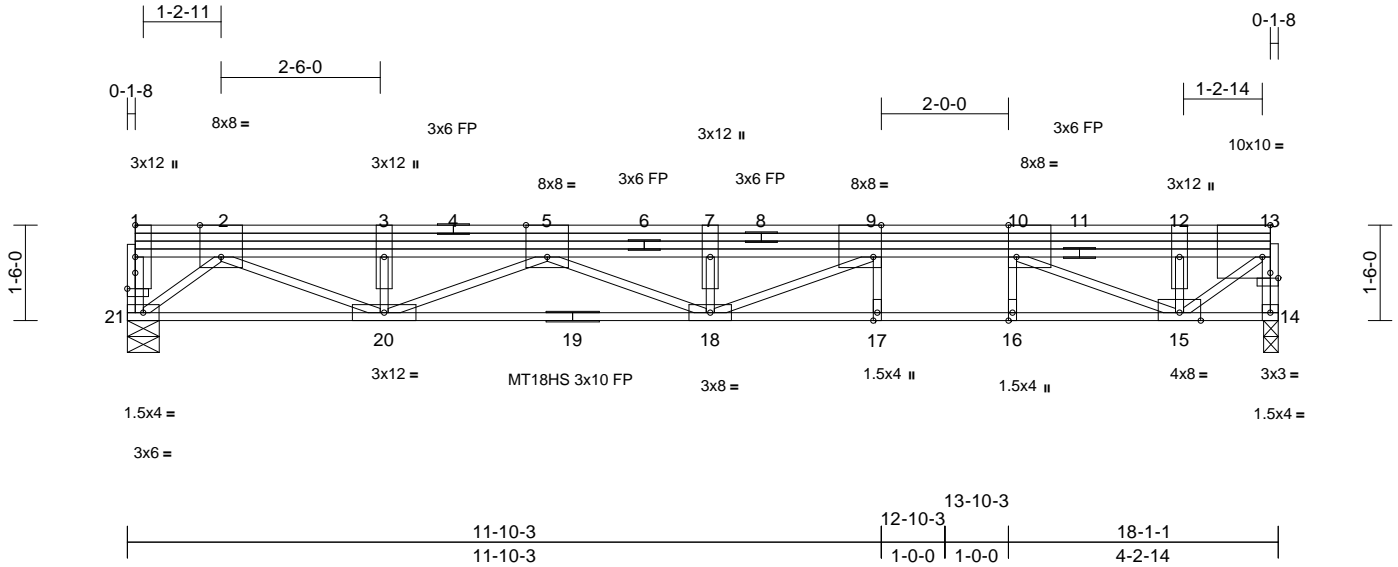
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F15	Floor	1	1	Job Reference (optional)
					I58527952

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:22

Page: 1

ID:ZKH0z0VzpgQXKmK7?XRYO8zIH6f-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:36.2

Plate Offsets (X, Y): [1:0-1-8,0-3-0], [2:0-4-0,Edge], [5:0-4-0,Edge], [9:0-1-8,Edge], [10:0-1-8,Edge], [13:0-1-8,Edge], [13:0-1-8,0-1-0]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	60.0	Plate Grip DOL	1.00	TC	0.17	Vert(LL)	-0.14	17-18	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.40	Vert(CT)	-0.23	18-20	>918	720	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.05	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
											Weight: 169 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 14=0-2-12, 21=0-6-0  
 Max Grav 14=1130 (LC 1), 21=1130 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum  
 Tension  
 TOP CHORD 1-21=-64/0, 13-14=-1123/0, 1-2=0/0,  
 2-3=-2887/0, 3-5=-2887/0, 5-7=-4259/0,  
 7-9=-4259/0, 9-10=-3196/0, 10-12=-1283/0,  
 12-13=-1283/0  
 BOT CHORD 20-21=0/1225, 18-20=0/3617, 17-18=0/3196,  
 16-17=0/3196, 15-16=0/3192, 14-15=0/0  
 WEBS 9-18=0/1277, 7-18=-734/0, 5-18=0/707,  
 5-20=-805/0, 3-20=-377/0, 2-20=0/1837,  
 2-21=-1611/0, 10-15=-2109/0,  
 12-15=-245/55, 13-15=0/1669, 9-17=-4/13,  
 10-16=0/57

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 14.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



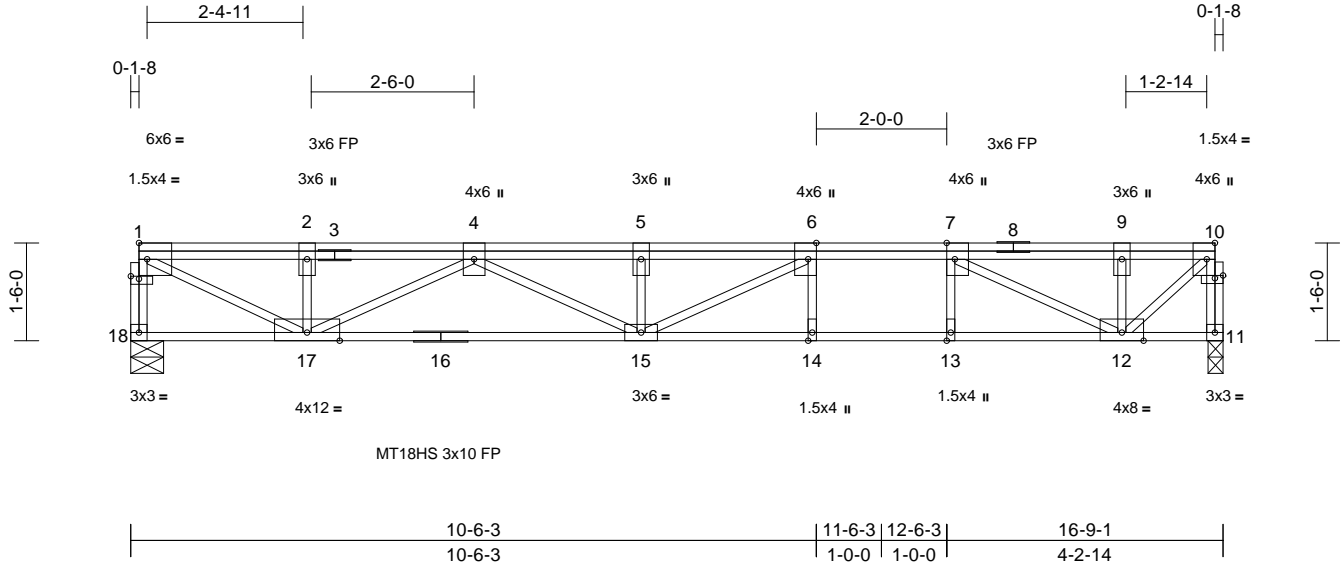
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F16	Floor	1	1	I58527953
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:22  
ID:h55kGHsnluCGwNdmqzacTzIH6B-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:35.3

Plate Offsets (X, Y): [1:0-1-8,0-0-8], [6:0-3-0,Edge], [7:0-3-0,Edge], [10:0-3-0,Edge], [10:0-1-8,0-0-8]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.37	Vert(LL)	-0.17	14-15	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.49	Vert(CT)	-0.27	14-15	>730	720	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.57	Horz(CT)	0.04	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
											Weight: 112 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 11=0-2-12, 18=0-6-0  
Max Grav 11=1045 (LC 1), 18=1045 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension  
TOP CHORD 1-18=-1034/0, 10-11=-1026/0, 1-2=-1798/0,  
2-4=-1797/0, 4-5=-3398/0, 5-6=-3398/0,  
6-7=-2772/0, 7-9=-999/0, 9-10=-1000/0  
BOT CHORD 17-18=0/0, 15-17=0/2803, 14-15=0/2772,  
13-14=0/2772, 12-13=0/2772, 11-12=0/0  
WEBS 6-14=-93/0, 7-13=0/149, 6-15=0/840,  
5-15=-545/0, 4-15=0/668, 4-17=-1130/0,  
2-17=-328/0, 1-17=0/2008, 7-12=-1983/0,  
9-12=-189/191, 10-12=0/1347

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 11.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



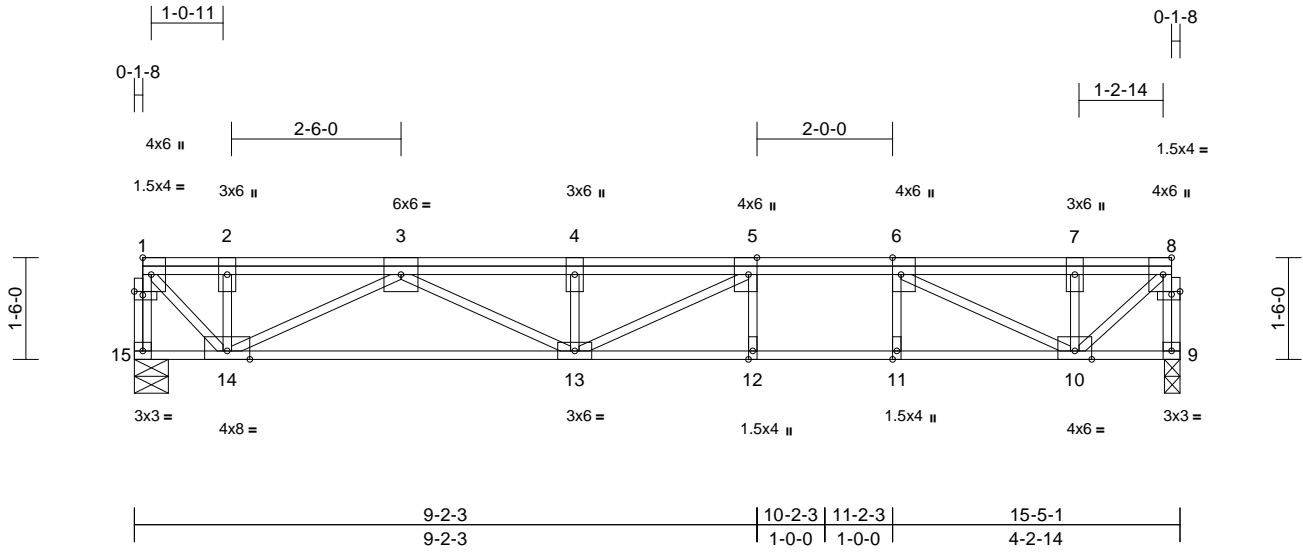
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
P210577 - Floor	F17	Floor	1	1	I58527954

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:22  
ID:Dj6emNT9zGVAw3RVhKtJe?zIH5P-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:34

Plate Offsets (X, Y): [1:0-1-8,0-0-10], [5:0-3-0,Edge], [6:0-3-0,Edge], [8:0-3-0,Edge], [8:0-1-8,0-0-8]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.31	Vert(LL)	-0.13	12-13	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.41	Vert(CT)	-0.21	12-13	>887	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 104 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 9=0-2-12, 15=0-6-0  
Max Grav 9=961 (LC 1), 15=961 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-15=-969/0, 8-9=-945/0, 1-2=-899/0,  
2-3=-899/0, 3-4=-2816/0, 4-5=-2816/0,  
5-6=-2445/0, 6-7=-925/0, 7-8=-926/0  
BOT CHORD 14-15=0/0, 13-14=0/2084, 12-13=0/2445,  
11-12=0/2445, 10-11=0/2445, 9-10=0/0  
WEBS 5-12=-72/0, 6-11=0/128, 5-13=-100/566,  
4-13=-498/0, 3-13=0/822, 3-14=-1332/0,  
2-14=-265/0, 1-14=0/1293, 6-10=-1700/0,  
7-10=-212/144, 8-10=0/1248

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

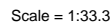
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:23 Page: 1  
ID:11aAHUcag8?TMvMpOr577XzIH5D-RfC?PsB70Ha3NSaPqnL8w3uITXbGKWrCDoi7J4zJC?f



<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	60.0	Plate Grip DOL	1.00	TC	0.25	Vert(LL)	-0.10	11-12	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.34	Vert(CT)	-0.15	11-12	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 94 lb	FT = 20%F, 11%E

TOP CHORD	2x4 SP 2400F 2.0E(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

Max Grav 8=876 (LC 1), 13=869 (LC 1)

TOP CHORD 1-13=-122/0, 7-8=-863/0, 1-2=-6/0,  
2-3=-2239/0, 3-4=-2239/0, 4-5=-2119/0,  
5-6=-852/0, 6-7=-853/0

WEBS 4-11=-56/5, 5-10=0/109, 4-12=-231/300,  
3-12=-446/0, 2-12=0/981, 2-13=-1539/0,  
5-9=-1417/0, 6-9=-237/96, 7-9=0/1149

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their other ends or restrained by other means.

A circular professional engineer seal for the State of Missouri. The outer ring contains the text "STATE OF MISSOURI" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The center of the seal contains the name "NATHANIEL FOX" and the license number "PE-2022042259". A red signature, "Nathaniel Fox", is written across the seal.

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

**WARNING:** Velly design parameters are listed below and included with the key reference to AISC M14-15 (16), 3/15/2020 by ONE USE. Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for the building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



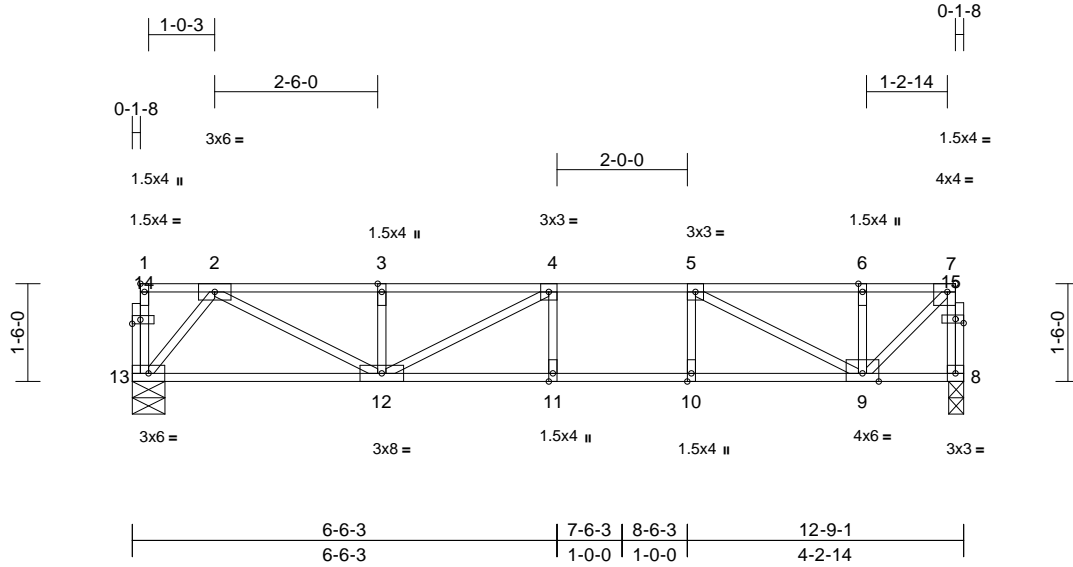
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F19	Floor	1	1	Job Reference (optional)
					I58527956

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:23

Page: 1

ID: \_X750wmq4xedQvsJf4pA9HzlH50-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:35.3

Plate Offsets (X, Y): [1:Edge,0-0-12], [7:0-1-8,Edge], [14:0-1-8,0-0-12], [15:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.41	Vert(LL)	-0.14	11-12	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.49	Vert(CT)	-0.20	11-12	>769	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.02	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 69 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 8=0-2-12, 13=0-6-0  
 Max Grav 8=785 (LC 1), 13=785 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-13=-27/0, 7-8=-764/0, 1-2=-1/0,  
 2-3=-1584/0, 3-4=-1584/0, 4-5=-1726/0,  
 5-6=-737/0, 6-7=-737/0  
 BOT CHORD 12-13=0/618, 11-12=0/1726, 10-11=0/1726,  
 9-10=0/1726, 8-9=0/35  
 WEBS 4-11=-129/26, 5-10=0/191, 4-12=-383/18,  
 3-12=-374/0, 2-12=0/1096, 2-13=-966/0,  
 5-9=-1116/0, 6-9=-262/11, 7-9=0/997

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

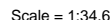
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:23 Page: 1  
ID:eqrDx1wMFd9wslmcMb1 epzIH4q-RfC?PsB70Hq3NSaPanL8w3uITXbGKWrCDoi7J4zJC?f



<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	60.0	Plate Grip DOL	1.00	TC	0.23	Vert(LL)	-0.09	10-11	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.33	Vert(CT)	-0.12	10-11	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 63 lb	FT = 20%F, 11%E

TOP CHORD	2x4 SP 2400F 2.0E(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

## Max Grav 7=700 (LC 1), 12=700 (LC 1)

(lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-12=-691/0, 6-7=-689/0, 1-2=-1027/0,  
2-3=-1027/0, 3-4=-1412/0, 4-5=-670/0,  
5-6=-670/0

BOT CHORD 11-12=0/31, 10-11=0/1412, 9-10=0/1412,  
8-9=0/1412, 7-8=0/31

WEBS 3-10=-69/65, 4-9=-5/131, 3-11=-537/0,  
2-11=-356/0, 1-11=0/1159, 4-8=-838/0,  
5-8=-279/0, 6-8=0/906

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

STATE OF MISSOURI  
NATHANIEL FOX  
PROFESSIONAL ENGINEER  
NUMBER PE-2022042259

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

**WARNING:** - verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MMF/473 Rev. 3/19/2020 BEFORE USE.

Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



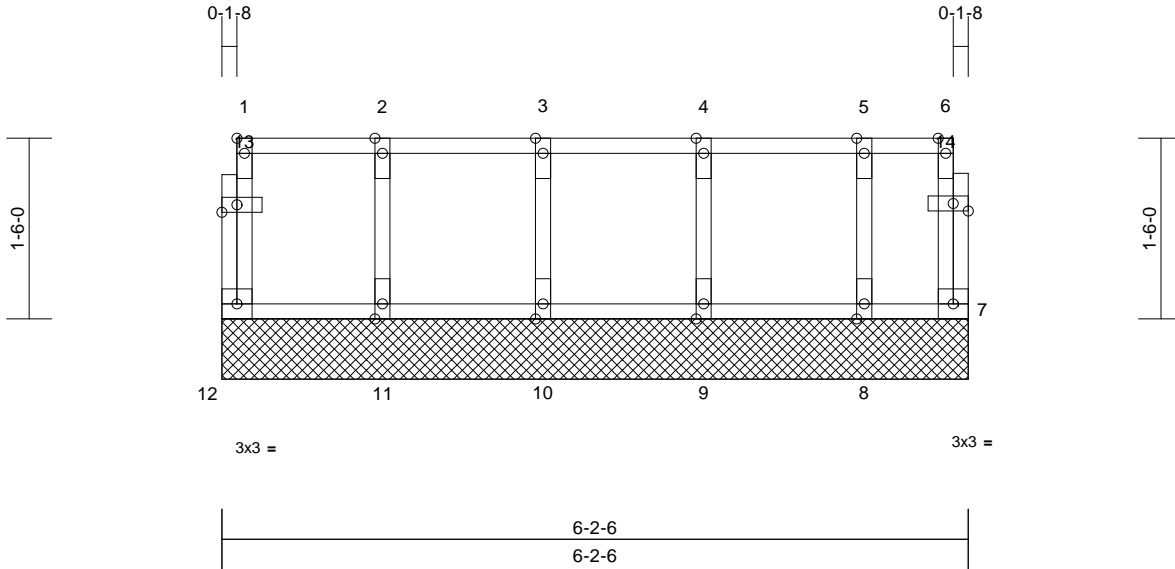
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F21	Floor Supported Gable	1	1	I58527958
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:23  
ID:mK7YGT4WBdo4wkG6dqm1gYzIH4d-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:19.1

Plate Offsets (X, Y): [1:Edge,0-0-12], [13:0-1-8,0-0-12], [14:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 32 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

**REACTIONS** (size) 7=6-2-6, 8=6-2-6, 9=6-2-6,  
10=6-2-6, 11=6-2-6, 12=6-2-6  
Max Grav 7=34 (LC 1), 8=132 (LC 1), 9=176  
(LC 1), 10=167 (LC 1), 11=170 (LC  
1), 12=61 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-12=-55/0, 6-7=-26/0, 1-2=-6/0, 2-3=-6/0,  
3-4=-6/0, 4-5=-6/0, 5-6=-6/0

BOT CHORD 11-12=0/6, 10-11=0/6, 9-10=0/6, 8-9=0/6,  
7-8=0/6

WEBS 2-11=-151/0, 3-10=-150/0, 4-9=-157/0,  
5-8=-122/0

#### NOTES

- 1) All plates are 1.5x4 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely  
braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) This truss is designed in accordance with the 2018  
International Residential Code sections R502.11.1 and  
R802.10.2 and referenced standard ANSI/TPI 1.
- 6) Recommend 2x6 strongbacks, on edge, spaced at  
10-00-00 oc and fastened to each truss with 3-10d  
(0.131" X 3") nails. Strongbacks to be attached to walls  
at their outer ends or restrained by other means.

**LOAD CASE(S)** Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

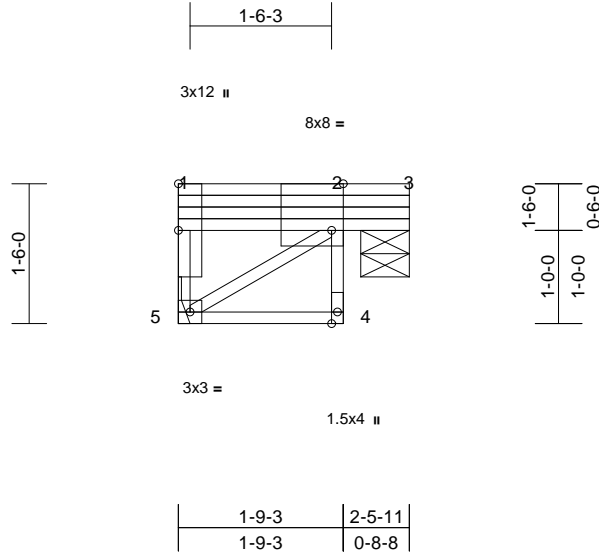
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F22	Floor	1	1	I58527959
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:23

Page: 1

ID:gPsLcVuITd6zG9bUGSqLwJzIHTO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:24.7

Plate Offsets (X, Y): [2:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.04	Vert(LL)	0.00	4	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	0.00	4-5	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 23 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
2-5-11 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 3=0-6-4, 5= Mechanical  
Max Grav 3=144 (LC 1), 5=151 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-5=-140/0, 2-4=0/11, 1-2=0/0, 2-3=0/0  
BOT CHORD 4-5=0/0  
WEBS 2-5=0/0

#### NOTES

- 1) Refer to girder(s) for truss to truss connections.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

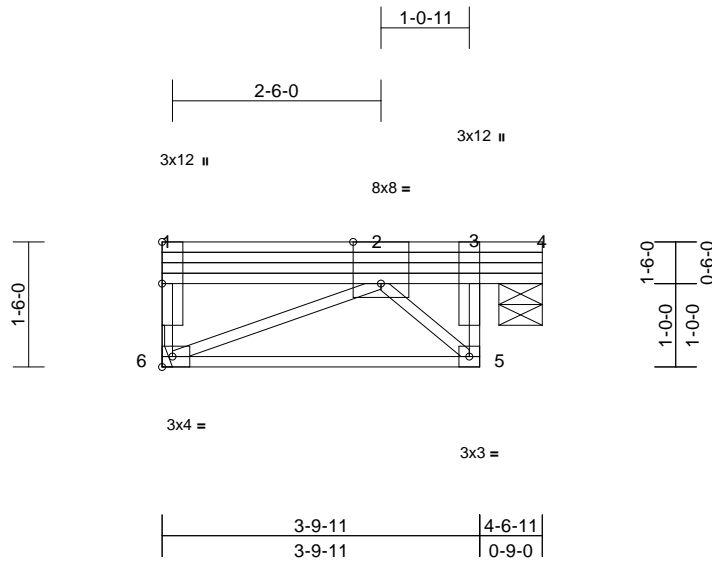
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F23	Floor	1	1	I58527960
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:24

Page: 1

ID:jCu?MWxstRKQdTkjnhK1vzEGdD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:27.6

Plate Offsets (X, Y): [2:0-4-0,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	0.00	5	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.10	Vert(CT)	-0.03	5-6	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 41 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
4-6-11 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 4=0-6-4, 6= Mechanical  
Max Grav 4=275 (LC 1), 6=284 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-6=-140/0, 3-5=0/282, 1-2=0/0, 2-3=0/0,  
3-4=0/0

BOT CHORD 5-6=0/253

WEBS 2-6=-280/0, 2-5=-361/0

#### NOTES

- 1) Refer to girder(s) for truss to truss connections.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24,2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

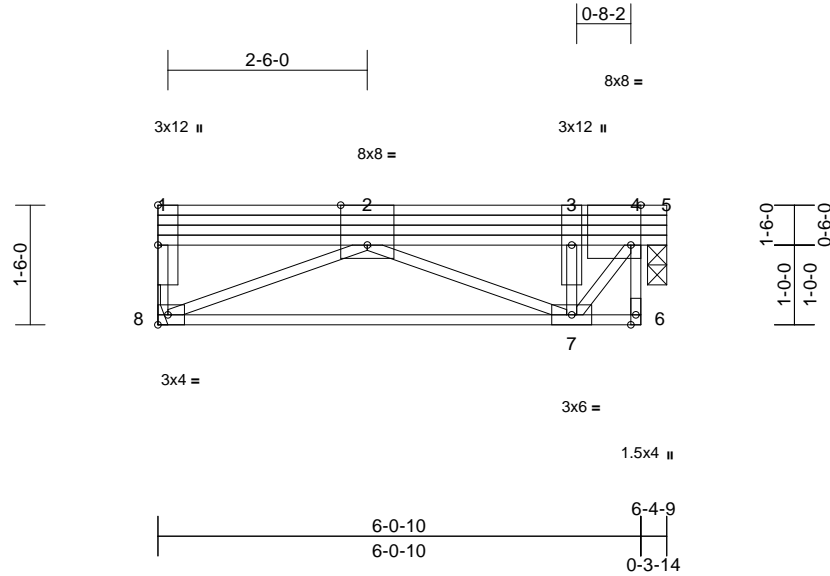
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F24	Floor	1	1	I58527961
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:24

Page: 1

ID:kev9bi61vMinGXei7Sdo\_OzIHRq-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:28.9

Plate Offsets (X, Y): [2:0-4-0,Edge], [4:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.07	Vert(LL)	0.00	7-8	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.15	Vert(CT)	-0.06	7-8	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 60 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 5=0-2-14, 8= Mechanical  
 Max Grav 5=395 (LC 1), 8=400 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-8=-144/0, 4-6=-38/0, 1-2=0/0, 2-3=-357/0,  
 3-4=-357/0, 4-5=0/0  
 BOT CHORD 7-8=0/493, 6-7=0/0  
 WEBS 2-8=-543/0, 2-7=-150/0, 3-7=-373/0,  
 4-7=0/636

#### NOTES

- 1) Refer to girder(s) for truss to truss connections.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



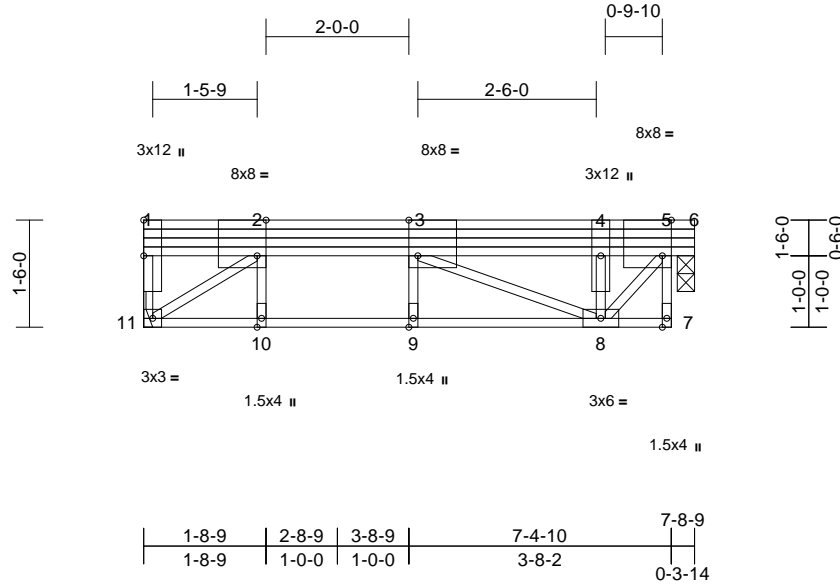
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F25	Floor	1	1	I58527962
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:24

Page: 1

ID:6VO1c5cpjSKB8ajYOVrt?YzIHPU-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWRCDoi7J4zJC?f



Scale = 1:32.3

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge], [5:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	-0.01	8-9	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.09	Vert(CT)	-0.02	8-9	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 72 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 6=0-2-14, 11= Mechanical  
Max Grav 6=479 (LC 1), 11=484 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-11=-38/92, 5-7=-2/0, 1-2=0/0, 2-3=-645/0,  
3-4=-487/0, 4-5=-487/0, 5-6=0/0

BOT CHORD 10-11=0/643, 9-10=0/645, 8-9=0/643,  
7-8=0/0

WEBS 2-10=0/38, 3-9=0/28, 2-11=-815/0,  
3-8=-214/0, 4-8=-517/0, 5-8=0/793

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



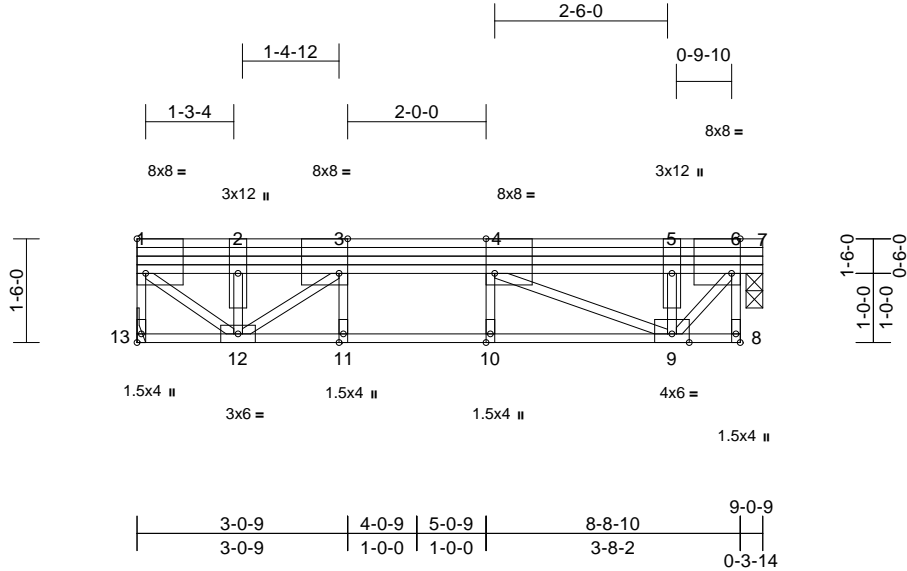
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F26	Floor	1	1	
Job Reference (optional)					I58527963

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:24  
ID:3nCm0T3iDdZ09ATo\_PWFP3ziHO?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:33.3

Plate Offsets (X, Y): [1:Edge,0-6-0], [3:0-1-8,Edge], [4:0-1-8,Edge], [6:0-1-8,Edge], [8:Edge,0-0-12], [13:Edge,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.10	Vert(LL)	-0.02	10	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.11	Vert(CT)	-0.02	9-10	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.26	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 85 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 7=0-2-14, 13= Mechanical  
Max Grav 7=564 (LC 1), 13=569 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-13=-560/0, 6-8=-1/0, 1-2=-545/0,  
2-3=-545/0, 3-4=-977/0, 4-5=-575/0,  
5-6=-575/0, 6-7=0/0

BOT CHORD 12-13=0/0, 11-12=0/975, 10-11=0/977,  
9-10=0/975, 8-9=0/0

WEBS 3-11=0/31, 4-10=0/33, 3-12=-567/0,  
2-12=-154/42, 1-12=0/715, 4-9=-446/0,  
5-9=-519/0, 6-9=0/937

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

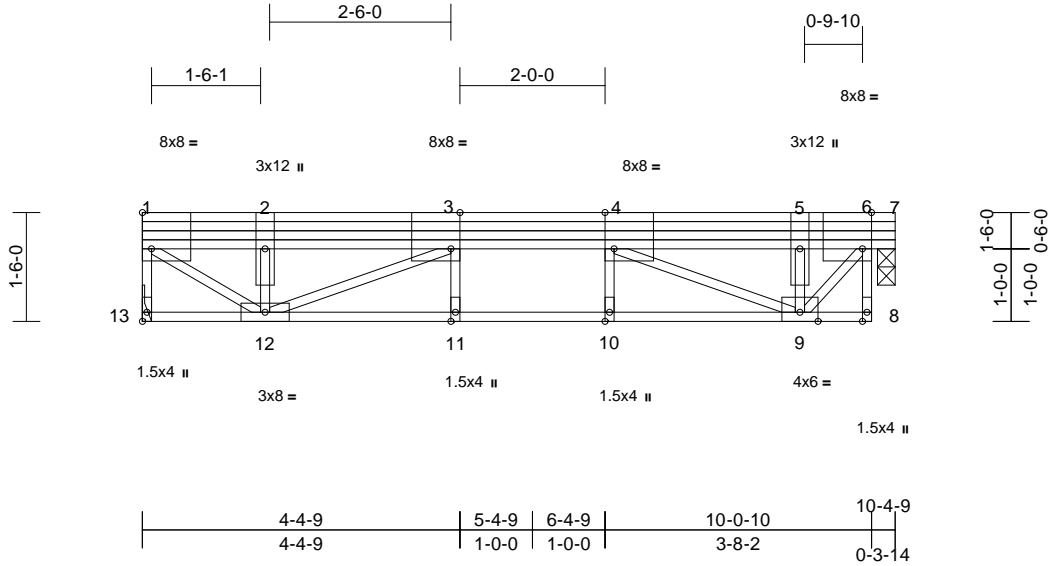
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F27	Floor	1	1	Job Reference (optional)
					I58527964

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:24

Page: 1

ID:YbwidthJyHYP00rbWXtP4nzIHMO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i



Scale = 1:31.8

Plate Offsets (X, Y): [1:Edge,0-6-0], [3:0-1-8,Edge], [4:0-1-8,Edge], [6:0-1-8,Edge], [13:Edge,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.11	Vert(LL)	-0.02	10-11	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.14	Vert(CT)	-0.04	10-11	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 97 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 7=0-2-14, 13= Mechanical  
Max Grav 7=648 (LC 1), 13=653 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-13=-646/0, 6-8=-1/0, 1-2=-789/0,  
2-3=-789/0, 3-4=-1303/0, 4-5=-665/0,  
5-6=-665/0, 6-7=0/0  
BOT CHORD 12-13=0/0, 11-12=0/1300, 10-11=0/1303,  
9-10=0/1300, 8-9=0/0  
WEBS 3-11=0/34, 4-10=0/36, 3-12=-588/0,  
2-12=-329/0, 1-12=0/976, 4-9=-702/0,  
5-9=-524/0, 6-9=0/1082

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

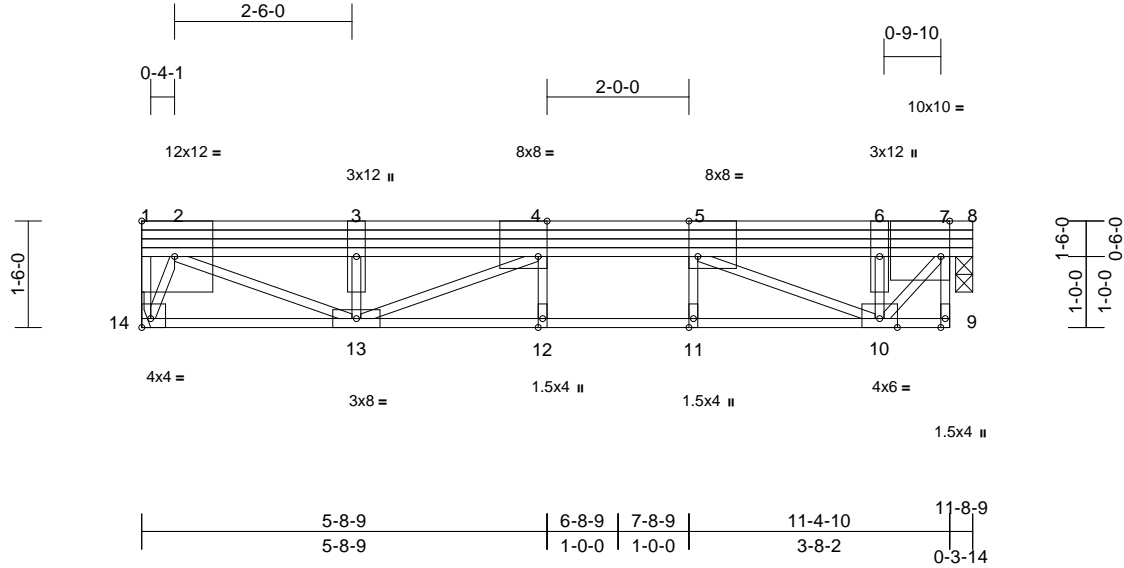
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F28	Floor	1	1	Job Reference (optional)
					I58527965

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:25

Page: 1

ID:rDNngvcNJfZ?uihCwal13rzlHM0-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:32.5

Plate Offsets (X, Y): [4:0-1-8,Edge], [5:0-1-8,Edge], [7:0-1-8,Edge], [14:Edge,0-1-8]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.12	Vert(LL)	-0.04	12	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.18	Vert(CT)	-0.06	12-13	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 109 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 8=0-2-14, 14= Mechanical  
Max Grav 8=733 (LC 1), 14=738 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-14=0/106, 7-9=-1/0, 1-2=0/0, 2-3=-1381/0, 3-4=-1381/0, 4-5=-1644/0, 5-6=-751/0, 6-7=-751/0, 7-8=0/0

BOT CHORD 13-14=0/321, 12-13=0/1642, 11-12=0/1644, 10-11=0/1641, 9-10=0/0

WEBS 4-12=0/28, 5-11=0/42, 4-13=-436/0, 3-13=-362/0, 2-13=0/1173, 2-14=-888/0, 5-10=-982/0, 6-10=-521/0, 7-10=0/1223

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

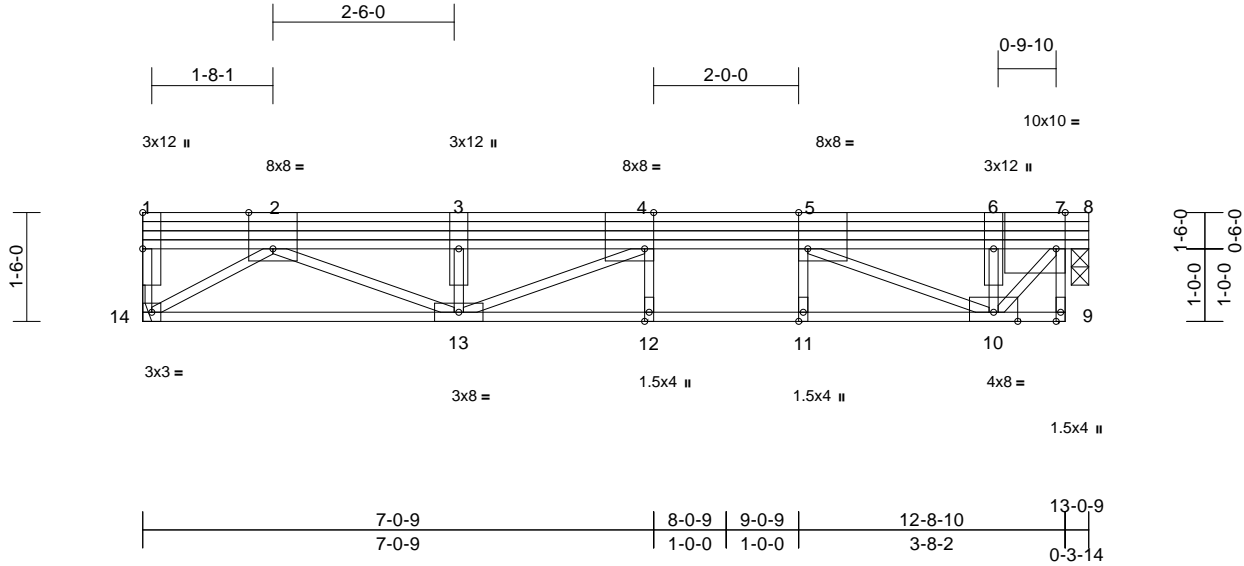
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F29	Floor	1	1	Job Reference (optional)
					I58527966

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:25

Page: 1

ID:1b4NYTxxjF51F?qbZSobBlzIHLa-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i



Scale = 1:31.8

Plate Offsets (X, Y): [2:0-4-0,Edge], [4:0-1-8,Edge], [5:0-1-8,Edge], [7:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.16	Vert(LL)	-0.06	12-13	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.23	Vert(CT)	-0.09	12-13	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 121 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 8=0-2-14, 14= Mechanical  
 Max Grav 8=817 (LC 1), 14=822 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-14=-104/0, 7-9=0/1, 1-2=0/0, 2-3=-2012/0,  
 3-4=-2012/0, 4-5=-1982/0, 5-6=-839/0,  
 6-7=-839/0, 7-8=0/0

BOT CHORD 13-14=0/1030, 12-13=0/1981, 11-12=0/1982,  
 10-11=0/1978, 9-10=0/0

WEBS 4-12=0/18, 5-11=0/49, 4-13=-263/188,  
 3-13=-433/0, 2-13=0/1084, 2-14=-1243/0,  
 5-10=-1259/0, 6-10=-520/0, 7-10=0/1365

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

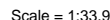
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:25 Page: 1  
ID:Kx?00t1K3P 1b4sxTQQEzDzIHLT-RfC?PsB70Hq3NSaPanL8w3uITXbGKWrCdoi7J4zJC?f



<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	60.0	Plate Grip DOL	1.00	TC	0.23	Vert(LL)	-0.09	13-14	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.28	Vert(CT)	-0.14	13-14	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 141 lb	FT = 20%F, 11%E

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)
<b>BRACING</b>	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
<b>REACTIONS</b> (size) 9=0-2-14, 16=0-6-0	
	Max Grav 9=943 (LC 1), 16=948 (LC 1)
<b>FORCES</b> (lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-16=-961/0, 8-10=0/3, 1-2=-942/0, 2-3=-942/0, 3-4=-2943/0, 4-5=-2943/0, 5-6=-2485/0, 6-7=-968/0, 7-8=-968/0, 8-9=0/0
BOT CHORD	15-16=0/0, 14-15=0/2096, 13-14=0/2485, 12-13=0/2485, 11-12=0/2481, 10-11=0/0
WEBS	5-13=-3/14, 6-12=0/57, 5-14=-31/637, 4-14=-556/0, 3-14=0/933, 3-15=-1272/0, 2-15=-375/0, 1-15=0/1354, 6-11=-1671/0, 7-11=-517/0, 8-11=0/1576

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION. Do not erect truss backwards.

STATE OF MISSOURI  
NATHANIEL  
FOX  
REGISTERED PROFESSIONAL ENGINEER  
PE-2022042259

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

**WARNING – Velly design parameters are listed below and included with the key reference to AISC M14-15 16f, 17f, 18f, 19f, 20f, 21f, 22f, 23f, 24f, 25f, 26f, 27f, 28f, 29f, 30f, 31f, 32f, 33f, 34f, 35f, 36f, 37f, 38f, 39f, 40f, 41f, 42f, 43f, 44f, 45f, 46f, 47f, 48f, 49f, 50f, 51f, 52f, 53f, 54f, 55f, 56f, 57f, 58f, 59f, 60f, 61f, 62f, 63f, 64f, 65f, 66f, 67f, 68f, 69f, 70f, 71f, 72f, 73f, 74f, 75f, 76f, 77f, 78f, 79f, 80f, 81f, 82f, 83f, 84f, 85f, 86f, 87f, 88f, 89f, 90f, 91f, 92f, 93f, 94f, 95f, 96f, 97f, 98f, 99f, 100f, 101f, 102f, 103f, 104f, 105f, 106f, 107f, 108f, 109f, 110f, 111f, 112f, 113f, 114f, 115f, 116f, 117f, 118f, 119f, 120f, 121f, 122f, 123f, 124f, 125f, 126f, 127f, 128f, 129f, 130f, 131f, 132f, 133f, 134f, 135f, 136f, 137f, 138f, 139f, 140f, 141f, 142f, 143f, 144f, 145f, 146f, 147f, 148f, 149f, 150f, 151f, 152f, 153f, 154f, 155f, 156f, 157f, 158f, 159f, 160f, 161f, 162f, 163f, 164f, 165f, 166f, 167f, 168f, 169f, 170f, 171f, 172f, 173f, 174f, 175f, 176f, 177f, 178f, 179f, 180f, 181f, 182f, 183f, 184f, 185f, 186f, 187f, 188f, 189f, 190f, 191f, 192f, 193f, 194f, 195f, 196f, 197f, 198f, 199f, 200f, 201f, 202f, 203f, 204f, 205f, 206f, 207f, 208f, 209f, 210f, 211f, 212f, 213f, 214f, 215f, 216f, 217f, 218f, 219f, 220f, 221f, 222f, 223f, 224f, 225f, 226f, 227f, 228f, 229f, 230f, 231f, 232f, 233f, 234f, 235f, 236f, 237f, 238f, 239f, 240f, 241f, 242f, 243f, 244f, 245f, 246f, 247f, 248f, 249f, 250f, 251f, 252f, 253f, 254f, 255f, 256f, 257f, 258f, 259f, 260f, 261f, 262f, 263f, 264f, 265f, 266f, 267f, 268f, 269f, 270f, 271f, 272f, 273f, 274f, 275f, 276f, 277f, 278f, 279f, 280f, 281f, 282f, 283f, 284f, 285f, 286f, 287f, 288f, 289f, 290f, 291f, 292f, 293f, 294f, 295f, 296f, 297f, 298f, 299f, 300f, 301f, 302f, 303f, 304f, 305f, 306f, 307f, 308f, 309f, 310f, 311f, 312f, 313f, 314f, 315f, 316f, 317f, 318f, 319f, 320f, 321f, 322f, 323f, 324f, 325f, 326f, 327f, 328f, 329f, 330f, 331f, 332f, 333f, 334f, 335f, 336f, 337f, 338f, 339f, 340f, 341f, 342f, 343f, 344f, 345f, 346f, 347f, 348f, 349f, 350f, 351f, 352f, 353f, 354f, 355f, 356f, 357f, 358f, 359f, 360f, 361f, 362f, 363f, 364f, 365f, 366f, 367f, 368f, 369f, 370f, 371f, 372f, 373f, 374f, 375f, 376f, 377f, 378f, 379f, 380f, 381f, 382f, 383f, 384f, 385f, 386f, 387f, 388f, 389f, 390f, 391f, 392f, 393f, 394f, 395f, 396f, 397f, 398f, 399f, 400f, 401f, 402f, 403f, 404f, 405f, 406f, 407f, 408f, 409f, 410f, 411f, 412f, 413f, 414f, 415f, 416f, 417f, 418f, 419f, 420f, 421f, 422f, 423f, 424f, 425f, 426f, 427f, 428f, 429f, 430f, 431f, 432f, 433f, 434f, 435f, 436f, 437f, 438f, 439f, 440f, 441f, 442f, 443f, 444f, 445f, 446f, 447f, 448f, 449f, 450f, 451f, 452f, 453f, 454f, 455f, 456f, 457f, 458f, 459f, 460f, 461f, 462f, 463f, 464f, 465f, 466f, 467f, 468f, 469f, 470f, 471f, 472f, 473f, 474f, 475f, 476f, 477f, 478f, 479f, 480f, 481f, 482f, 483f, 484f, 485f, 486f, 487f, 488f, 489f, 490f, 491f, 492f, 493f, 494f, 495f, 496f, 497f, 498f, 499f, 500f, 501f, 502f, 503f, 504f, 505f, 506f, 507f, 508f, 509f, 510f, 511f, 512f, 513f, 514f, 515f, 516f, 517f, 518f, 519f, 520f, 521f, 522f, 523f, 524f, 525f, 526f, 527f, 528f, 529f, 530f, 531f, 532f, 533f, 534f, 535f, 536f, 537f, 538f, 539f, 540f, 541f, 542f, 543f, 544f, 545f, 546f, 547f, 548f, 549f, 550f, 551f, 552f, 553f, 554f, 555f, 556f, 557f, 558f, 559f, 560f, 561f, 562f, 563f, 564f, 565f, 566f, 567f, 568f, 569f, 570f, 571f, 572f, 573f, 574f, 575f, 576f, 577f, 578f, 579f, 580f, 581f, 582f, 583f, 584f, 585f, 586f, 587f, 588f, 589f, 590f, 591f, 592f, 593f, 594f, 595f, 596f, 597f, 598f, 599f, 600f, 601f, 602f, 603f, 604f, 605f, 606f, 607f, 608f, 609f, 610f, 611f, 612f, 613f, 614f, 615f, 616f, 617f, 618f, 619f, 620f, 621f, 622f, 623f, 624f, 625f, 626f, 627f, 628f, 629f, 630f, 631f, 632f, 633f, 634f, 635f, 636f, 637f, 638f, 639f, 640f, 641f, 642f, 643f, 644f, 645f, 646f, 647f, 648f, 649f, 650f, 651f, 652f, 653f, 654f, 655f, 656f, 657f, 658f, 659f, 660f, 661f, 662f, 663f, 664f, 665f, 666f, 667f, 668f, 669f, 670f, 671f, 672f, 673f, 674f, 675f, 676f, 677f, 678f, 679f, 680f, 681f, 682f, 683f, 684f, 685f, 686f, 687f, 688f, 689f, 690f, 691f, 692f, 693f, 694f, 695f, 696f, 697f, 698f, 699f, 700f, 701f, 702f, 703f, 704f, 705f, 706f, 707f,**



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



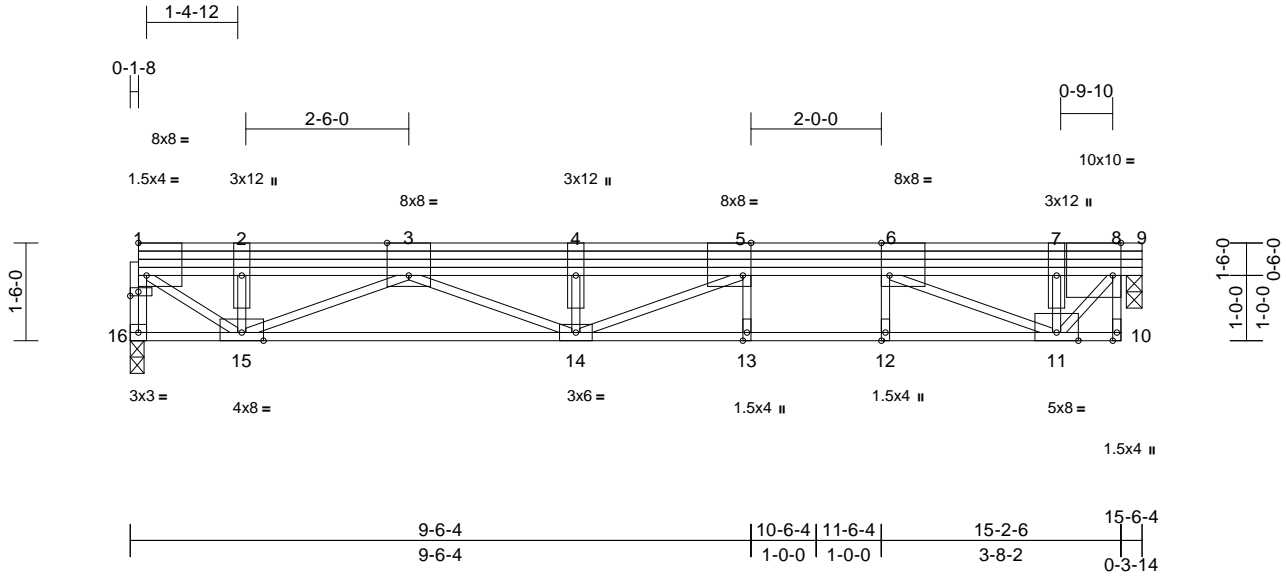
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F31	Floor	1	1	I58527968
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:25

Page: 1

ID:LVzs4\_w6bRbVGaiXvyJz31zIHPU-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrcDoi7J4zJC?f



Scale = 1:35.3

Plate Offsets (X, Y): [1:Edge,0-6-0], [1:0-1-8,0-0-12], [3:0-4-0,Edge], [5:0-1-8,Edge], [6:0-1-8,Edge], [8:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.25	Vert(LL)	-0.10	13-14	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.30	Vert(CT)	-0.16	13-14	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 145 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 9=0-2-14, 16=0-2-8  
 Max Grav 9=970 (LC 1), 16=975 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension  
 TOP CHORD 1-16=-978/0, 8-10=0/3, 1-2=-1238/0,  
 2-3=-1238/0, 3-4=-3147/0, 4-5=-3147/0,  
 5-6=-2596/0, 6-7=-996/0, 7-8=-996/0, 8-9=0/0  
 BOT CHORD 15-16=0/0, 14-15=0/2345, 13-14=0/2596,  
 12-13=0/2596, 11-12=0/2592, 10-11=0/0  
 WEBS 5-13=-5/13, 6-12=0/59, 5-14=0/735,  
 4-14=-577/0, 3-14=0/884, 3-15=-1219/0,  
 2-15=-356/0, 1-15=0/1547, 6-11=-1762/0,  
 7-11=-517/0, 8-11=0/1622

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 16, 9.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

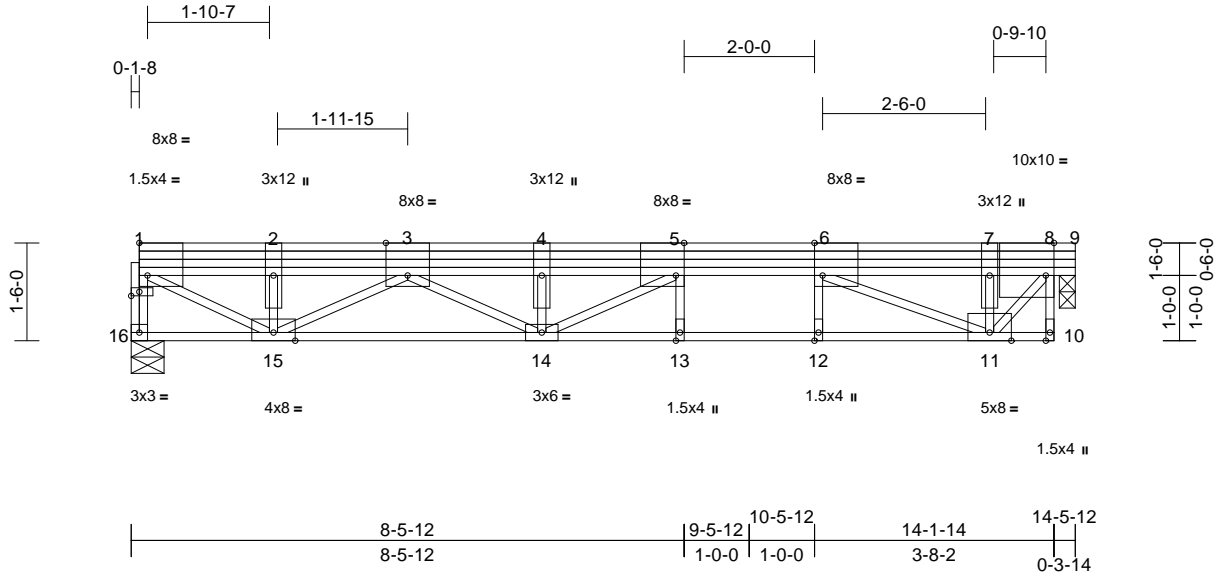
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F32	Floor	1	1	
Job Reference (optional)					I58527969

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:26

Page: 1

ID:LmUHeo7nagk5oBWpP17yFczlHPD-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:35.3

Plate Offsets (X, Y): [1:Edge,0-6-0], [1:0-1-8,0-0-12], [3:0-4-0,Edge], [5:0-1-8,Edge], [6:0-1-8,Edge], [8:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.21	Vert(LL)	-0.08	13-14	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.26	Vert(CT)	-0.12	13-14	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 136 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 9=0-2-14, 16=0-6-0  
 Max Grav 9=904 (LC 1), 16=909 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension  
 TOP CHORD 1-16=-901/0, 8-10=0/2, 1-2=-1345/0,  
 2-3=-1345/0, 3-4=-2703/0, 4-5=-2703/0,  
 5-6=-2318/0, 6-7=-931/0, 7-8=-931/0, 8-9=0/0  
 BOT CHORD 15-16=0/0, 14-15=0/2127, 13-14=0/2318,  
 12-13=0/2318, 11-12=0/2314, 10-11=0/0  
 WEBS 5-13=-4/13, 6-12=0/54, 5-14=-36/572,  
 4-14=-520/0, 3-14=0/664, 3-15=-903/0,  
 2-15=-278/0, 1-15=0/1553, 6-11=-1528/0,  
 7-11=-522/0, 8-11=0/1515

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

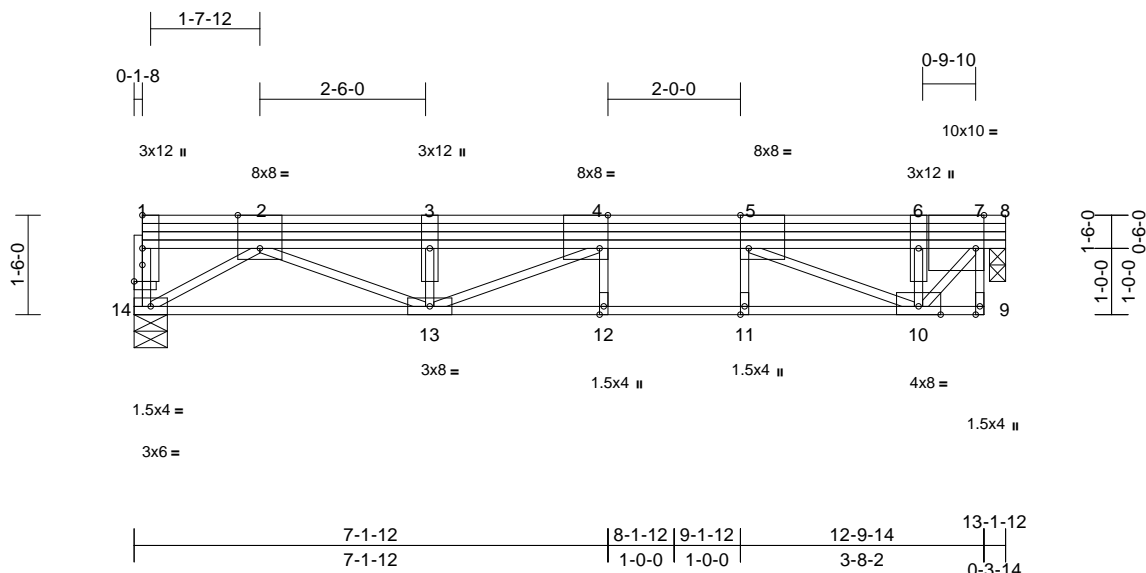
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



Scale = 1:34.8

Plate Offsets (X, Y): [1:0-1-8,0-3-0], [2:0-4-0,Edge], [4:0-1-8,Edge], [5:0-1-8,Edge], [7:0-1-8,Edge]

<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	60.0	Plate Grip DOL	1.00	TC	0.16	Vert(LL)	-0.06	12-13	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.23	Vert(CT)	-0.09	12-13	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 122 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)

## BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 8=0-2-14, 14=0-6-0  
Max Grav 8=820 (LC 1), 14=825 (LC 1)

## FORCES

	Tension
TOP CHORD	1-14=-108/0, 7-9=0/2, 1-2=0/0, 2-3=-2031/0, 3-4=-1992/0, 4-5=-1992/0, 5-6=-841/0, 6-7=-841/0, 7-8=0/0
BOT CHORD	13-14=0/1050, 12-13=0/592, 11-12=0/1992, 10-11=0/1989, 9-10=0/0
WEBS	4-12=0/18, 5-11=0/50, 4-13=-258/198, 3-13=-437/0, 2-13=0/1084, 2-14=-1258/0, 5-10=-1267/0, 6-10=-520/0, 7-10=0/1369

## NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION. Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023



**WARNING – Velly design parameters are listed below and included with the key reference to AISC M14-15 16f, 17f, 18f, 19f, 20f, 21f, 22f, 23f, 24f, 25f, 26f, 27f, 28f, 29f, 30f, 31f, 32f, 33f, 34f, 35f, 36f, 37f, 38f, 39f, 40f, 41f, 42f, 43f, 44f, 45f, 46f, 47f, 48f, 49f, 50f, 51f, 52f, 53f, 54f, 55f, 56f, 57f, 58f, 59f, 60f, 61f, 62f, 63f, 64f, 65f, 66f, 67f, 68f, 69f, 70f, 71f, 72f, 73f, 74f, 75f, 76f, 77f, 78f, 79f, 80f, 81f, 82f, 83f, 84f, 85f, 86f, 87f, 88f, 89f, 90f, 91f, 92f, 93f, 94f, 95f, 96f, 97f, 98f, 99f, 100f, 101f, 102f, 103f, 104f, 105f, 106f, 107f, 108f, 109f, 110f, 111f, 112f, 113f, 114f, 115f, 116f, 117f, 118f, 119f, 120f, 121f, 122f, 123f, 124f, 125f, 126f, 127f, 128f, 129f, 130f, 131f, 132f, 133f, 134f, 135f, 136f, 137f, 138f, 139f, 140f, 141f, 142f, 143f, 144f, 145f, 146f, 147f, 148f, 149f, 150f, 151f, 152f, 153f, 154f, 155f, 156f, 157f, 158f, 159f, 160f, 161f, 162f, 163f, 164f, 165f, 166f, 167f, 168f, 169f, 170f, 171f, 172f, 173f, 174f, 175f, 176f, 177f, 178f, 179f, 180f, 181f, 182f, 183f, 184f, 185f, 186f, 187f, 188f, 189f, 190f, 191f, 192f, 193f, 194f, 195f, 196f, 197f, 198f, 199f, 200f, 201f, 202f, 203f, 204f, 205f, 206f, 207f, 208f, 209f, 210f, 211f, 212f, 213f, 214f, 215f, 216f, 217f, 218f, 219f, 220f, 221f, 222f, 223f, 224f, 225f, 226f, 227f, 228f, 229f, 230f, 231f, 232f, 233f, 234f, 235f, 236f, 237f, 238f, 239f, 240f, 241f, 242f, 243f, 244f, 245f, 246f, 247f, 248f, 249f, 250f, 251f, 252f, 253f, 254f, 255f, 256f, 257f, 258f, 259f, 260f, 261f, 262f, 263f, 264f, 265f, 266f, 267f, 268f, 269f, 270f, 271f, 272f, 273f, 274f, 275f, 276f, 277f, 278f, 279f, 280f, 281f, 282f, 283f, 284f, 285f, 286f, 287f, 288f, 289f, 290f, 291f, 292f, 293f, 294f, 295f, 296f, 297f, 298f, 299f, 300f, 301f, 302f, 303f, 304f, 305f, 306f, 307f, 308f, 309f, 310f, 311f, 312f, 313f, 314f, 315f, 316f, 317f, 318f, 319f, 320f, 321f, 322f, 323f, 324f, 325f, 326f, 327f, 328f, 329f, 330f, 331f, 332f, 333f, 334f, 335f, 336f, 337f, 338f, 339f, 340f, 341f, 342f, 343f, 344f, 345f, 346f, 347f, 348f, 349f, 350f, 351f, 352f, 353f, 354f, 355f, 356f, 357f, 358f, 359f, 360f, 361f, 362f, 363f, 364f, 365f, 366f, 367f, 368f, 369f, 370f, 371f, 372f, 373f, 374f, 375f, 376f, 377f, 378f, 379f, 380f, 381f, 382f, 383f, 384f, 385f, 386f, 387f, 388f, 389f, 390f, 391f, 392f, 393f, 394f, 395f, 396f, 397f, 398f, 399f, 400f, 401f, 402f, 403f, 404f, 405f, 406f, 407f, 408f, 409f, 410f, 411f, 412f, 413f, 414f, 415f, 416f, 417f, 418f, 419f, 420f, 421f, 422f, 423f, 424f, 425f, 426f, 427f, 428f, 429f, 430f, 431f, 432f, 433f, 434f, 435f, 436f, 437f, 438f, 439f, 440f, 441f, 442f, 443f, 444f, 445f, 446f, 447f, 448f, 449f, 450f, 451f, 452f, 453f, 454f, 455f, 456f, 457f, 458f, 459f, 460f, 461f, 462f, 463f, 464f, 465f, 466f, 467f, 468f, 469f, 470f, 471f, 472f, 473f, 474f, 475f, 476f, 477f, 478f, 479f, 480f, 481f, 482f, 483f, 484f, 485f, 486f, 487f, 488f, 489f, 490f, 491f, 492f, 493f, 494f, 495f, 496f, 497f, 498f, 499f, 500f, 501f, 502f, 503f, 504f, 505f, 506f, 507f, 508f, 509f, 510f, 511f, 512f, 513f, 514f, 515f, 516f, 517f, 518f, 519f, 520f, 521f, 522f, 523f, 524f, 525f, 526f, 527f, 528f, 529f, 530f, 531f, 532f, 533f, 534f, 535f, 536f, 537f, 538f, 539f, 540f, 541f, 542f, 543f, 544f, 545f, 546f, 547f, 548f, 549f, 550f, 551f, 552f, 553f, 554f, 555f, 556f, 557f, 558f, 559f, 560f, 561f, 562f, 563f, 564f, 565f, 566f, 567f, 568f, 569f, 570f, 571f, 572f, 573f, 574f, 575f, 576f, 577f, 578f, 579f, 580f, 581f, 582f, 583f, 584f, 585f, 586f, 587f, 588f, 589f, 590f, 591f, 592f, 593f, 594f, 595f, 596f, 597f, 598f, 599f, 600f, 601f, 602f, 603f, 604f, 605f, 606f, 607f, 608f, 609f, 610f, 611f, 612f, 613f, 614f, 615f, 616f, 617f, 618f, 619f, 620f, 621f, 622f, 623f, 624f, 625f, 626f, 627f, 628f, 629f, 630f, 631f, 632f, 633f, 634f, 635f, 636f, 637f, 638f, 639f, 640f, 641f, 642f, 643f, 644f, 645f, 646f, 647f, 648f, 649f, 650f, 651f, 652f, 653f, 654f, 655f, 656f, 657f, 658f, 659f, 660f, 661f, 662f, 663f, 664f, 665f, 666f, 667f, 668f, 669f, 670f, 671f, 672f, 673f, 674f, 675f, 676f, 677f, 678f, 679f, 680f, 681f, 682f, 683f, 684f, 685f, 686f, 687f, 688f, 689f, 690f, 691f, 692f, 693f, 694f, 695f, 696f, 697f, 698f, 699f, 700f, 701f, 702f, 703f, 704f, 705f, 706f, 707f,**



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F34	Floor	1	1	Job Reference (optional)

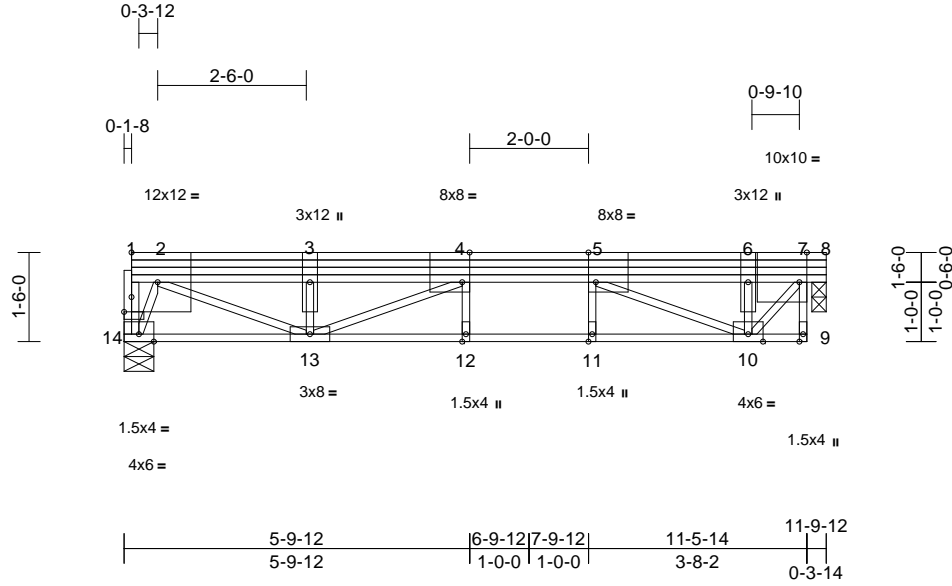
I58527971

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:26

Page: 1

ID:verJyfc6mik2GDwdHNgWYAzlHLF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:38.8

Plate Offsets (X, Y): [1:0-1-8,0-3-0], [4:0-1-8,Edge], [5:0-1-8,Edge], [7:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.13	Vert(LL)	-0.04	12	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.18	Vert(CT)	-0.06	12-13	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 111 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 8=0-2-14, 14=0-6-0  
 Max Grav 8=735 (LC 1), 14=740 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension  
 TOP CHORD 1-14=0/109, 7-9=-1/0, 1-2=0/0, 2-3=-1399/0,  
 3-4=-1399/0, 4-5=-1654/0, 5-6=-754/0,  
 6-7=-754/0, 7-8=0/0  
 BOT CHORD 13-14=0/351, 12-13=0/1652, 11-12=0/1654,  
 10-11=0/1651, 9-10=0/0  
 WEBS 4-12=0/28, 5-11=0/43, 4-13=-431/0,  
 3-13=-359/0, 2-13=0/1160, 2-14=-904/0,  
 5-10=-990/0, 6-10=-521/0, 7-10=0/1227

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 8.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

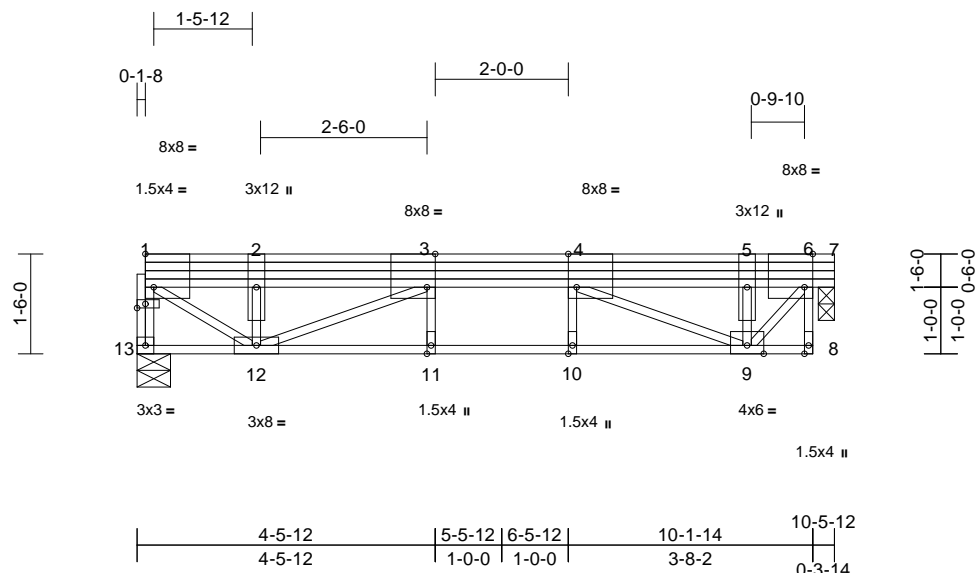
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



Scale = 1:34.6

Plate Offsets (X, Y): [1:Edge,0-6-0], [1:0-1-8,0-0-12], [3:0-1-8,Edge], [4:0-1-8,Edge], [6:0-1-8,Edge]

<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	60.0	Plate Grip DOL	1.00	TC	0.11	Vert(LL)	-0.02	10-11	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.14	Vert(CT)	-0.04	10-11	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 98 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)

## BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 7=0-2-14, 13=0-6-0  
Max Grav 7=651 (LC 1), 13=656 (LC 1)

## FORCES

Tension

TOP CHORD 1-13=-648/0, 6-8=-1/0, 1-2=-806/0,  
2-3=-806/0, 3-4=-1313/0, 4-5=-667/0,  
5-6=-667/0, 6-7=0/0

BOT CHORD 12-13=0/0, 11-12=0/1311, 10-11=0/1313,  
9-10=0/1310, 8-9=0/0

WEBS 3-11=0/34, 4-10=0/36, 3-12=-584/0,  
2-12=-330/0, 1-12=0/990, 4-9=-710/0,  
5-9=-524/0. 6-9=0/1086

## NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION. Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023



**WARNING – Velly design parameters are listed below and included with the key reference to AISC M14-15 167, § 9.5.2020 by ONE USE.**  
Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for the building design component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



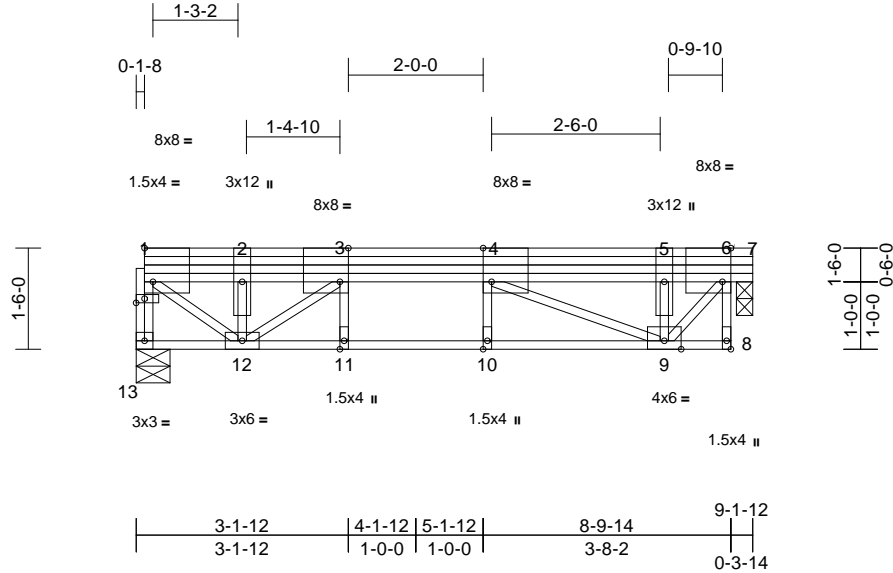
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F36	Floor	1	1	Job Reference (optional)
					I58527973

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:27  
ID:ZyZrTILdxOFLi4rw\_uuK1izlHL3-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWwCDoi7J4zJC?7f

Page: 1



Scale = 1:34.2

Plate Offsets (X, Y): [1:Edge,0-6-0], [1:0-1-8,0-0-12], [3:0-1-8,Edge], [4:0-1-8,Edge], [6:0-1-8,Edge], [8:Edge,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.10	Vert(LL)	-0.02	10	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.11	Vert(CT)	-0.02	9-10	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 87 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 7=0-2-14, 13=0-6-0  
Max Grav 7=566 (LC 1), 13=571 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-13=-562/0, 6-8=-1/0, 1-2=-564/0,  
2-3=-564/0, 3-4=-987/0, 4-5=-578/0,  
5-6=-578/0, 6-7=0/0

BOT CHORD 12-13=0/0, 11-12=0/985, 10-11=0/987,  
9-10=0/985, 8-9=0/0

WEBS 3-11=0/31, 4-10=0/33, 3-12=-560/0,  
2-12=-157/42, 1-12=0/729, 4-9=-453/0,  
5-9=-519/0, 6-9=0/941

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F37	Floor	1	1	Job Reference (optional)

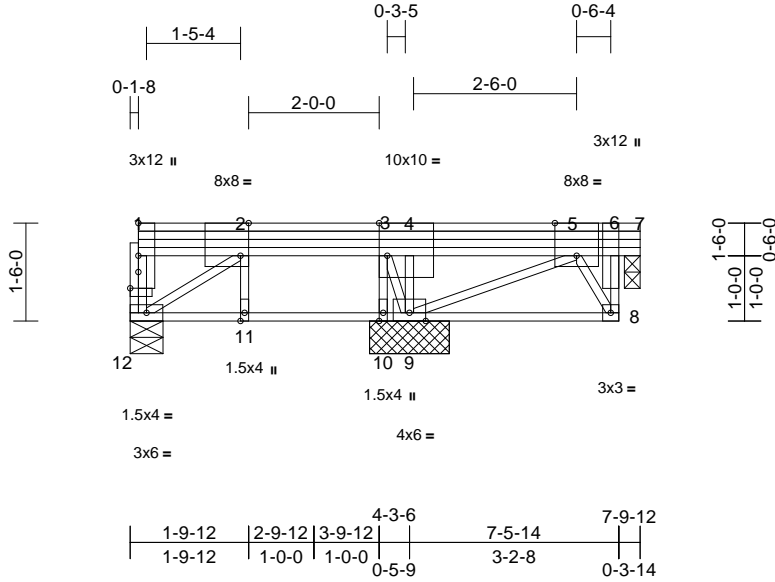
I58527974

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:27

Page: 1

ID:hjNBm0iStc15Jh8hIBRNF1zIHkb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i



Scale = 1:35.3

Plate Offsets (X, Y): [1:0-1-8,0-3-0], [2:0-1-8,Edge], [3:0-1-8,Edge], [5:0-4-0,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	0.00	11	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.05	Vert(CT)	-0.01	8-9	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 74 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 7=0-2-14, 9=1-2-11, 10=1-2-11,  
 12=0-6-0  
 Max Grav 7=217 (LC 5), 9=397 (LC 12),  
 10=123 (LC 3), 12=265 (LC 3)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-12=-128/0, 6-8=0/228, 1-2=0/0, 2-3=-171/0,  
 3-4=-108/0, 4-5=-108/0, 5-6=0/0, 6-7=0/0  
 BOT CHORD 11-12=0/170, 10-11=0/171, 9-10=0/174,  
 8-9=0/114  
 WEBS 2-11=0/27, 3-10=-121/0, 4-9=-192/27,  
 2-12=-213/0, 3-9=-225/0, 5-9=-103/69,  
 5-8=-240/0

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

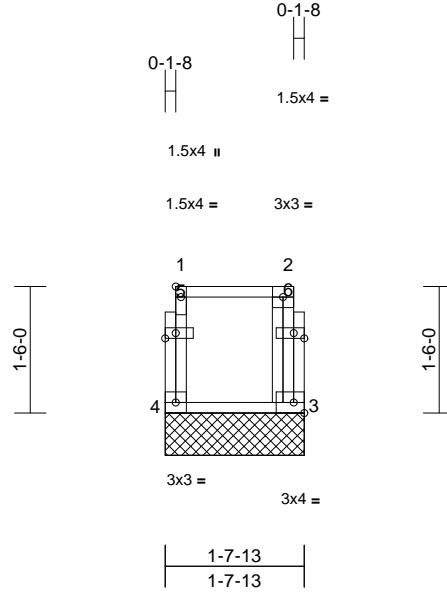
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F38	Floor Supported Gable	1	1	I58527975
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:27

Page: 1

ID:VtkS13nDTS0E1cbr5SYnUizIHKV-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCD0i7J4zJC?f



Scale = 1:27.3

Plate Offsets (X, Y): [1:Edge,0-0-12], [5:0-1-8,0-0-12], [6:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	25.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 13 lb FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 1-7-13 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 3=1-7-13, 4=1-7-13  
 Max Grav 3=85 (LC 1), 4=78 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-4=-68/0, 2-3=-77/0, 1-2=-13/0  
 BOT CHORD 3-4=0/13

#### NOTES

- N/A
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely  
braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss is designed in accordance with the 2018  
International Residential Code sections R502.11.1 and  
R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at  
10-00-00 oc and fastened to each truss with 3-10d  
(0.131" X 3") nails. Strongbacks to be attached to walls  
at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

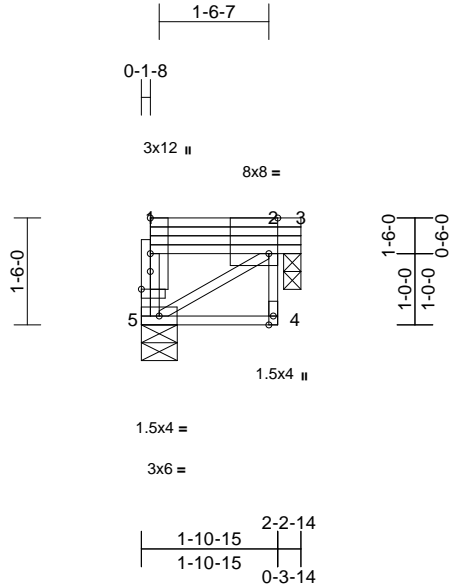
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F39	Floor	1	1	Job Reference (optional)
					I58527976

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:27

Page: 1

ID: iMSPitNdv1\_aRkindF45lzlGXN-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:32.3

Plate Offsets (X, Y): [1:0-1-8,0-3-0], [2:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.01	Vert(LL)	0.00	4	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	0.00	4-5	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 2-2-14 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 3=0-2-14, 5=0-6-0

Max Grav 3=129 (LC 1), 5=133 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-5=-122/0, 2-4=0/12, 1-2=0/0, 2-3=0/0

BOT CHORD 4-5=0/0

WEBS 2-5=0/0

#### NOTES

- 1) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 3.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

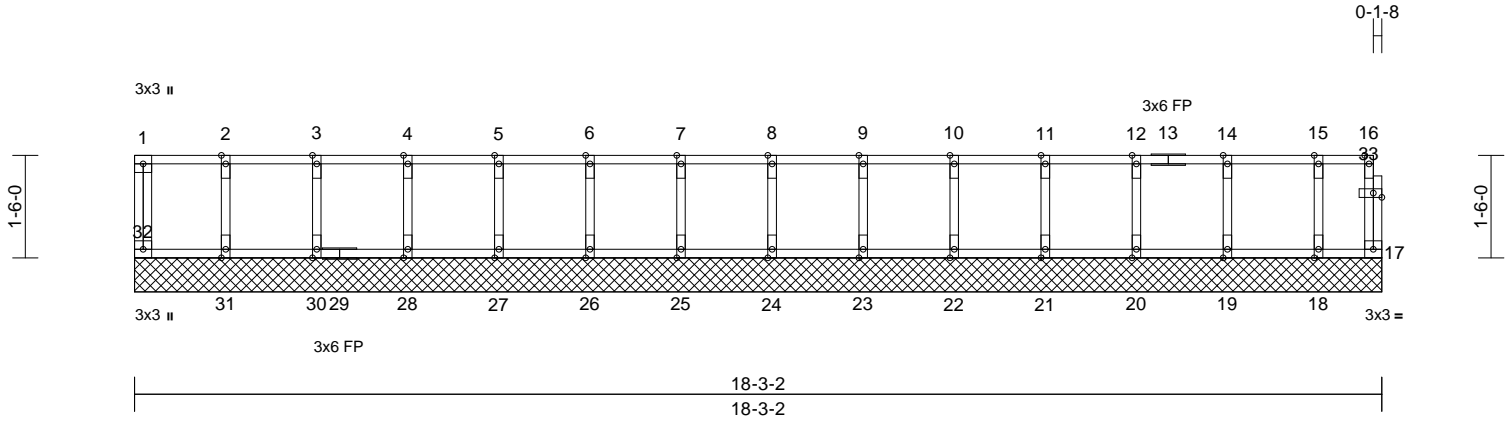
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F40	Floor Supported Gable	1	1	158527977
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:27

Page: 1

ID:IVCIuC5CPRN9?fhGYTHk4GzIH3J-RfC?PsB70Hq3NSgPqnL8w3uTXbGKWrCDoi7J4zJC?i



Scale = 1:33.7

Plate Offsets (X, Y): [33:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	25.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	17	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							
										Weight: 85 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 17=18-3-2, 18=18-3-2, 19=18-3-2, 20=18-3-2, 21=18-3-2, 22=18-3-2, 23=18-3-2, 24=18-3-2, 25=18-3-2, 26=18-3-2, 27=18-3-2, 28=18-3-2, 30=18-3-2, 31=18-3-2, 32=18-3-2  
 Max Grav 17=38 (LC 1), 18=136 (LC 1), 19=176 (LC 1), 20=167 (LC 1), 21=169 (LC 1), 22=169 (LC 1), 23=169 (LC 1), 24=169 (LC 1), 25=169 (LC 1), 26=169 (LC 1), 27=169 (LC 1), 28=169 (LC 1), 30=169 (LC 1), 31=169 (LC 1), 32=68 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-32=-61/0, 16-17=-30/0, 1-2=-6/0, 2-3=-6/0, 3-4=-6/0, 4-5=-6/0, 5-6=-6/0, 6-7=-6/0, 7-8=-6/0, 8-9=-6/0, 9-10=-6/0, 10-11=-6/0, 11-12=-6/0, 12-14=-6/0, 14-15=-6/0, 15-16=-6/0  
 BOT CHORD 31-32=0/6, 30-31=0/6, 28-30=0/6, 27-28=0/6, 26-27=0/6, 25-26=0/6, 24-25=0/6, 23-24=0/6, 22-23=0/6, 21-22=0/6, 20-21=0/6, 19-20=0/6, 18-19=0/6, 17-18=0/6  
 WEBS 2-31=-151/0, 3-30=-152/0, 4-28=-151/0, 5-27=-151/0, 6-26=-151/0, 7-25=-151/0, 8-24=-151/0, 9-23=-151/0, 10-22=-151/0, 11-21=-151/0, 12-20=-150/0, 14-19=-157/0, 15-18=-125/0

#### NOTES

- 1) All plates are 1.5x4 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

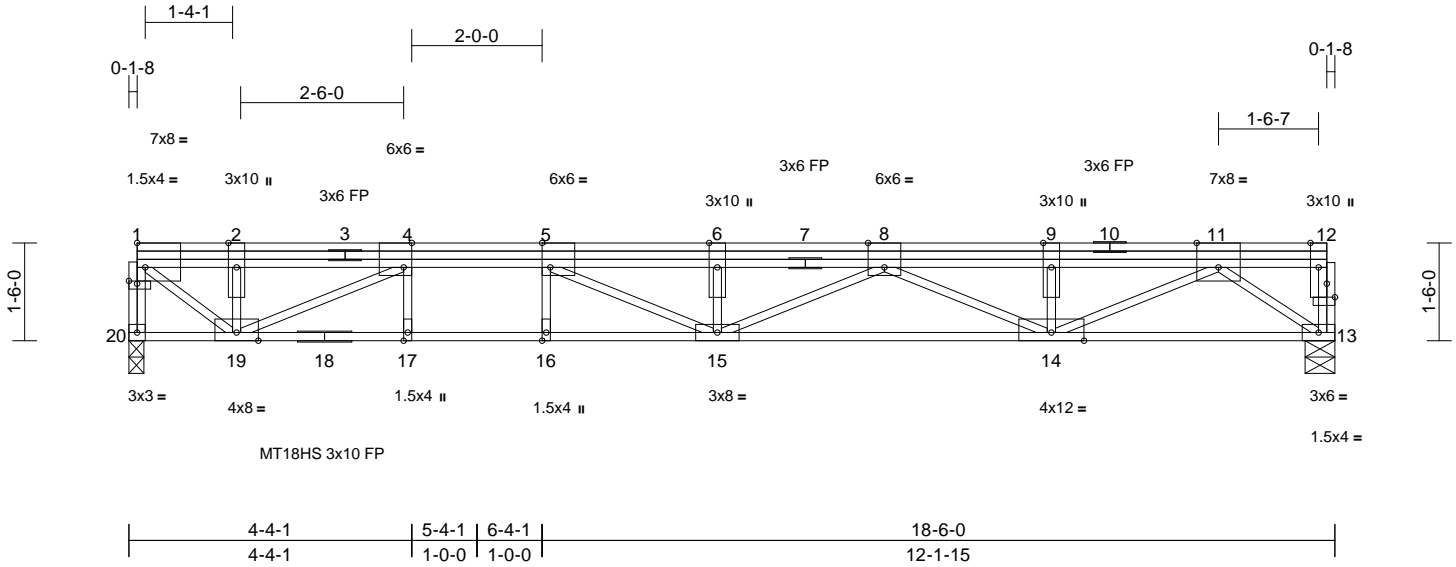
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F41	Floor	17	1	158527978
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:28

Page: 1

ID:rfH2Ww6udEzE4Z6PS6nQT\_zlH2?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i



Scale = 1:35.3

Plate Offsets (X, Y): [1:Edge,0-4-8], [1:0-1-8,0-0-8], [4:0-1-8,Edge], [5:0-1-8,Edge], [8:0-3-0,Edge], [11:0-4-0,Edge], [12:0-1-8,0-2-8]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.25	Vert(LL)	-0.17	15-16	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.42	Vert(CT)	-0.27	15-16	>824	720	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.06	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 148 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 13=0-5-8, 20=0-2-12  
 Max Grav 13=1156 (LC 1), 20=1156 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension  
 TOP CHORD 1-20=-1146/0, 12-13=-86/0, 1-2=-1273/0,  
 2-4=-1273/0, 4-5=-3320/0, 5-6=-4325/0,  
 6-8=-4325/0, 8-9=-3040/0, 9-11=-3040/0,  
 11-12=0/0  
 BOT CHORD 19-20=0/0, 17-19=0/3320, 16-17=0/3320,  
 15-16=0/3320, 14-15=0/3813, 13-14=0/1414  
 WEBS 4-17=0/78, 5-16=-25/7, 4-19=-2267/0,  
 2-19=-209/173, 1-19=0/1646, 5-15=0/1240,  
 6-15=-672/0, 8-15=0/569, 8-14=-860/0,  
 9-14=-355/0, 11-14=0/1813, 11-13=-1760/0

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 20.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Feb 9 2023 Print: 8.630 S Feb 9 2023 MiTek Industries, Inc. Wed May 24 12:28:31 Page: 1  
ID: qRptBrQeCQZw19M9noislzIH0J-63FGes4yNEmh4cEqDrZlqTt5lzojXsvXj57hAqzDSO



<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	60.0	Plate Grip DOL	1.00	TC	0.25	Vert(LL)	-0.16	14-15	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.44	Vert(CT)	-0.27	13-14	>812	720	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.06	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 131 lb	FT = 20%F, 11%E

TOP CHORD	2x4 SP 2400F 2.0E(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

BOT CHORD 17-18=0/2347, 16-17=0/2347, 15-16=0/3345,  
14-15=0/3345, 13-14=0/3996, 12-13=0/2024

WEBS 4-16=-681/0, 2-18=-2546/0, 2-16=0/1300,  
9-13=-379/0, 7-14=-747/0, 6-14=0/1258,  
8-14=0/304, 8-13=-576/0, 10-13=0/1619,  
10-12=-2242/0

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 18.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

**WARNING - Velly design parameters are READ-ONLY on this and INCLUDED WITHIN KEY EXCERPT AGE MP-1493 Rev. 3/19/2020 per ONE USE.**

Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



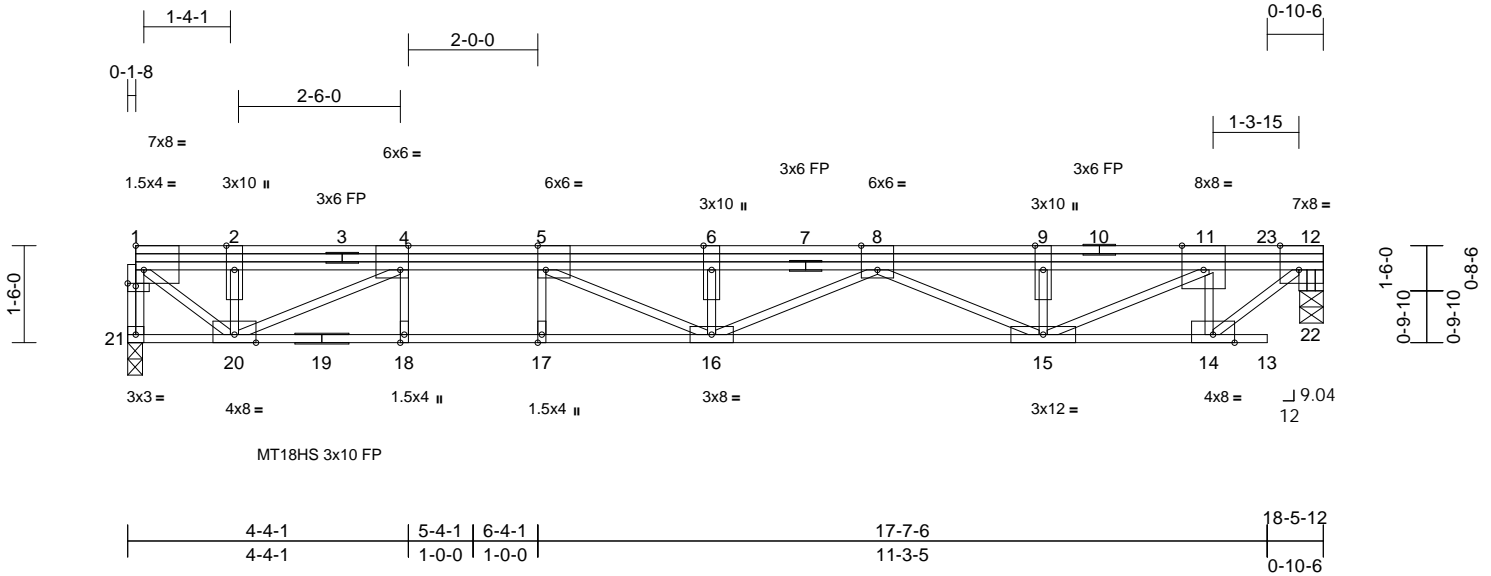
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F43	Floor	14	1	I58527980
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:28

Page: 1

ID:M52gS9\_oCros0QZcyjKen9zIGko-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:35.6

Plate Offsets (X, Y): [1:Edge,0-4-8], [1:0-1-8,0-0-8], [4:0-1-8,Edge], [5:0-1-8,Edge], [8:0-3-0,Edge], [11:0-4-0,Edge], [12:0-3-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.25	Vert(LL)	-0.17	16-17	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.42	Vert(CT)	-0.26	15-16	>832	720	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.03	22	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 146 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 21=0-2-12, 22=0-4-6  
 Max Grav 21=1150 (LC 1), 22=1142 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-21=-1141/0, 1-2=-1267/0, 2-4=-1267/0, 4-5=-3298/0, 5-6=-4288/0, 6-8=-4288/0, 8-9=-2973/0, 9-11=-2973/0, 11-12=-1339/0, 12-22=-1142/0  
 BOT CHORD 20-21=0/0, 18-20=0/3298, 17-18=0/3298, 16-17=0/3298, 15-16=0/3763, 14-15=0/1383, 13-14=0/0  
 WEBS 4-18=0/78, 5-17=-26/5, 4-20=-2249/0, 2-20=-211/169, 1-20=0/1638, 5-16=0/1220, 6-16=-667/0, 8-16=0/584, 8-15=-878/0, 9-15=-353/0, 11-15=0/1777, 11-14=-1037/0, 12-14=0/1709

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 21.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

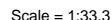
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:29 Page: 1  
ID:lv9RIZhtQ 5 wQ5YjKah5zIH3r-RfC?PsB70Hq3NSaPanL8w3uITXbGKWCrDai7J4zJC?f



<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	60.0	Plate Grip DOL	1.00	TC	0.18	Vert(LL)	-0.06	10-11	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.24	Vert(CT)	-0.07	10-11	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 59 lb	FT = 20%F, 11%E

TOP CHORD	2x4 SP 2400F 2.0E(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

Max Grav 7=653 (LC 1). 12=653 (LC 1)

TOP CHORD 1-12=-647/0, 6-7=-647/0, 1-2=-669/0,  
2-3=-669/0, 3-4=-1236/0, 4-5=-665/0,  
5-6=-665/0

WEBS 3-10=-32/93, 4-9=-32/93, 3-11=-662/0,  
2-11=-296/0, 1-11=0/877, 4-8=-665/0,  
5-8=-296/0, 6-8=0/875

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 12, 7.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

STATE OF MISSOURI  
NATHANIEL  
FOX  
PROFESSIONAL ENGINEER  
NUMBER  
PE-2022042259

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

**WARNING:** Velly design parameters are listed below and included with the key reference to AISC M14-15 (16), 3/15/2020 by ONE USE. Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for the building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F44	Floor	4	1	Job Reference (optional)

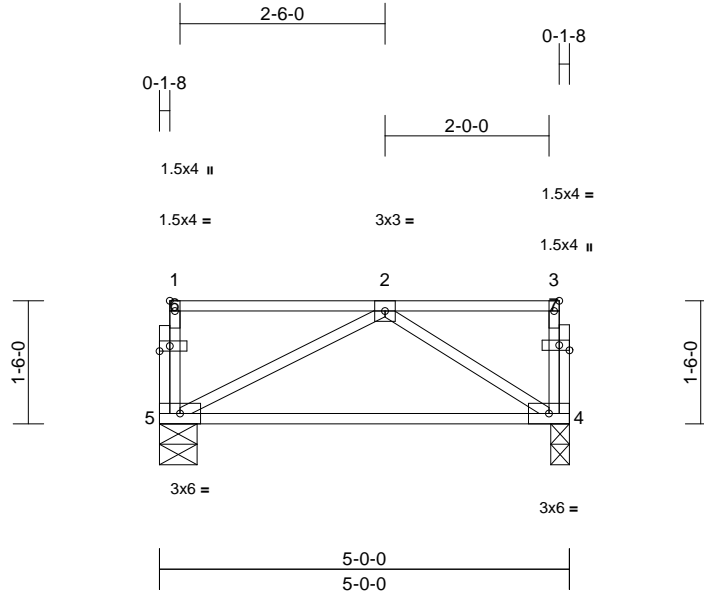
I58527982

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:29

Page: 1

ID:am0E5LMxnhpAHXXT9hQ5PzIH4G-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:28.1

Plate Offsets (X, Y): [1:Edge,0-0-12], [6:0-1-8,0-0-12], [7:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	25.0	Lumber DOL	1.00	BC	0.16	Vert(CT)	-0.08	4-5	>735	720	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	4	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							
										Weight: 29 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 5-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 4=0-2-12, 5=0-5-8  
 Max Grav 4=294 (LC 1), 5=294 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-5=-116/0, 3-4=-80/0, 1-2=-5/0, 2-3=-4/0  
 BOT CHORD 4-5=0/285  
 WEBS 2-5=-316/0, 2-4=-335/0

#### NOTES

- 1) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

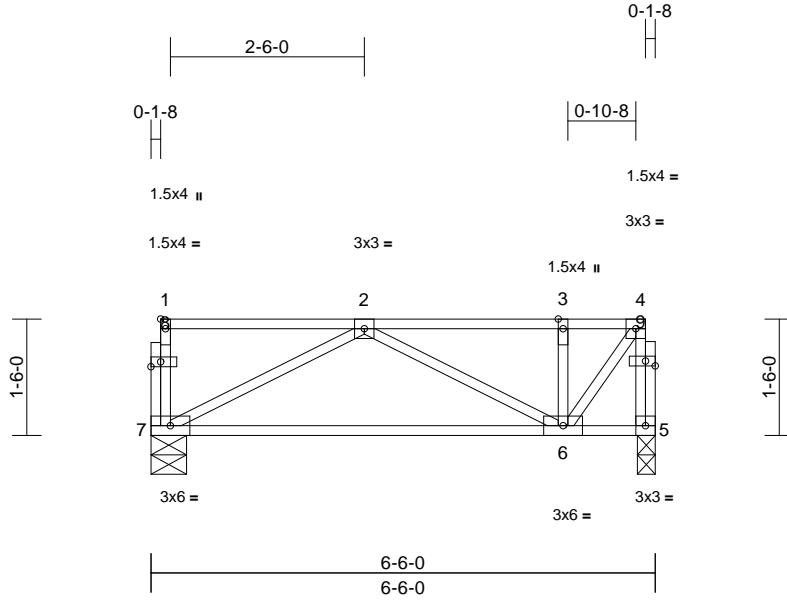
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F45	Floor	5	1	I58527983
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:29

Page: 1

ID:xGt\_GgqPbgcHMG?1FrtaBdzIH3f-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCdoi7J4zJC?f



Scale = 1:29.7

Plate Offsets (X, Y): [1:Edge,0-0-12], [8:0-1-8,0-0-12], [9:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	0.00	6-7	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.15	Vert(CT)	-0.06	6-7	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 38 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 5=0-2-12, 7=0-5-8  
 Max Grav 5=389 (LC 1), 7=389 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-7=-114/0, 4-5=-415/0, 1-2=-5/0, 2-3=-308/0,  
 3-4=-308/0

BOT CHORD 6-7=0/477, 5-6=0/19  
 WEBS 2-7=-532/0, 2-6=-191/0, 3-6=-226/0,  
 4-6=0/492

#### NOTES

- 1) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

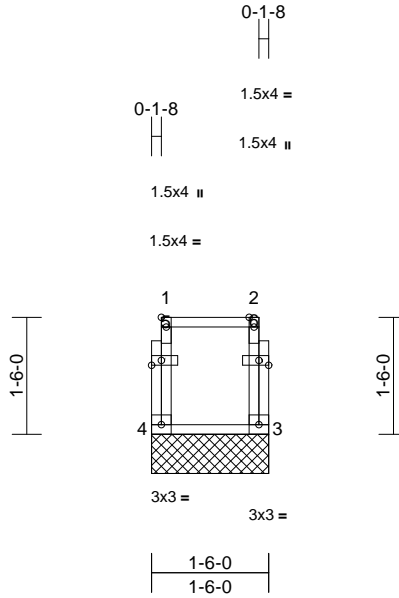
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F46	Floor Supported Gable	2	1	I58527984
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:29

Page: 1

ID:qNjxlp4y2V4o1LtVj3p4izlGij-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?i



Scale = 1:29.5

Plate Offsets (X, Y): [1:Edge,0-0-12], [5:0-1-8,0-0-12], [6:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	25.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 11 lb FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 1-6-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 3=1-6-0, 4=1-6-0  
 Max Grav 3=72 (LC 1), 4=72 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-4=-64/0, 2-3=-64/0, 1-2=-10/0  
 BOT CHORD 3-4=0/10

#### NOTES

- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely  
braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss is designed in accordance with the 2018  
International Residential Code sections R502.11.1 and  
R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at  
10-00-00 oc and fastened to each truss with 3-10d  
(0.131" X 3") nails. Strongbacks to be attached to walls  
at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

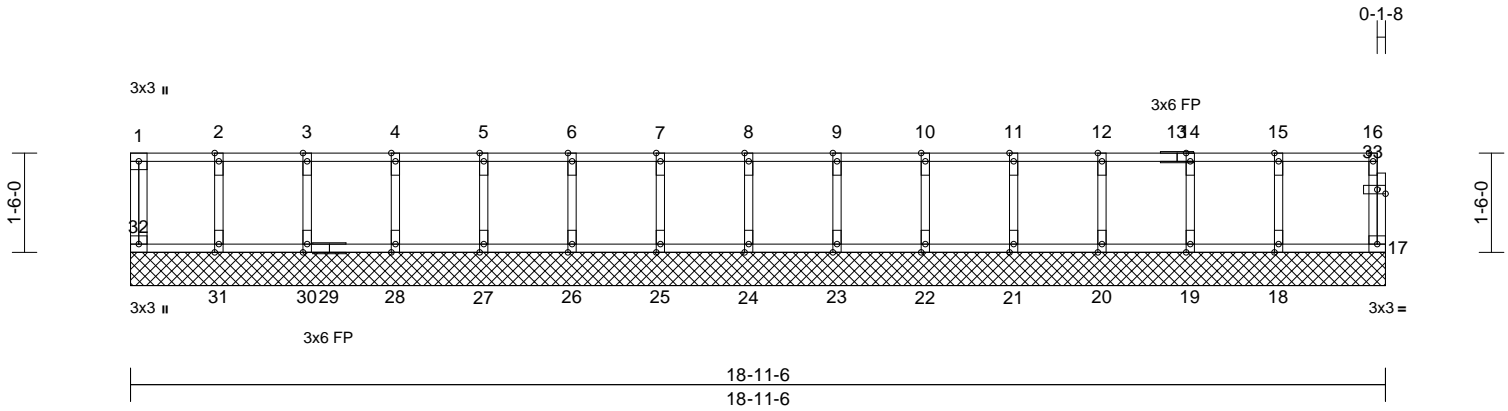
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F47	Floor Supported Gable	1	1	I58527985
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:29

Page: 1

ID:n1MxwF2?TuunaylW6CvGMizlGjQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:34.8

Plate Offsets (X, Y): [33:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	999	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	17	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R						Weight: 87 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### WEBS

2-31=-146/0, 3-30=-153/0, 4-28=-151/0,  
 5-27=-151/0, 6-26=-151/0, 7-25=-151/0,  
 8-24=-151/0, 9-23=-151/0, 10-22=-151/0,  
 11-21=-151/0, 12-20=-152/0, 14-19=-147/0,  
 15-18=-167/0

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

#### NOTES

- 1) All plates are 1.5x4 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely  
 braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) This truss is designed in accordance with the 2018  
 International Residential Code sections R502.11.1 and  
 R802.10.2 and referenced standard ANSI/TPI 1.
- 6) Recommend 2x6 strongbacks, on edge, spaced at  
 10-00-00 oc and fastened to each truss with 3-10d  
 (0.131" X 3") nails. Strongbacks to be attached to walls  
 at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

REACTIONS (size) 17=18-11-6, 18=18-11-6,  
 19=18-11-6, 20=18-11-6,  
 21=18-11-6, 22=18-11-6,  
 23=18-11-6, 24=18-11-6,  
 25=18-11-6, 26=18-11-6,  
 27=18-11-6, 28=18-11-6,  
 30=18-11-6, 31=18-11-6,  
 32=18-11-6  
 Max Grav 17=83 (LC 1), 18=187 (LC 1),  
 19=164 (LC 1), 20=170 (LC 1),  
 21=169 (LC 1), 22=169 (LC 1),  
 23=169 (LC 1), 24=169 (LC 1),  
 25=169 (LC 1), 26=169 (LC 1),  
 27=169 (LC 1), 28=168 (LC 1),  
 30=171 (LC 1), 31=159 (LC 1),  
 32=76 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-32=-65/0, 16-17=-74/0, 1-2=-12/0,  
 2-3=-12/0, 3-4=-12/0, 4-5=-12/0, 5-6=-12/0,  
 6-7=-12/0, 7-8=-12/0, 8-9=-12/0, 9-10=-12/0,  
 10-11=-12/0, 11-12=-12/0, 12-14=-12/0,  
 14-15=-12/0, 15-16=-12/0  
 BOT CHORD 31-32=0/12, 30-31=0/12, 28-30=0/12,  
 27-28=0/12, 26-27=0/12, 25-26=0/12,  
 24-25=0/12, 23-24=0/12, 22-23=0/12,  
 21-22=0/12, 20-21=0/12, 19-20=0/12,  
 18-19=0/12, 17-18=0/12



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

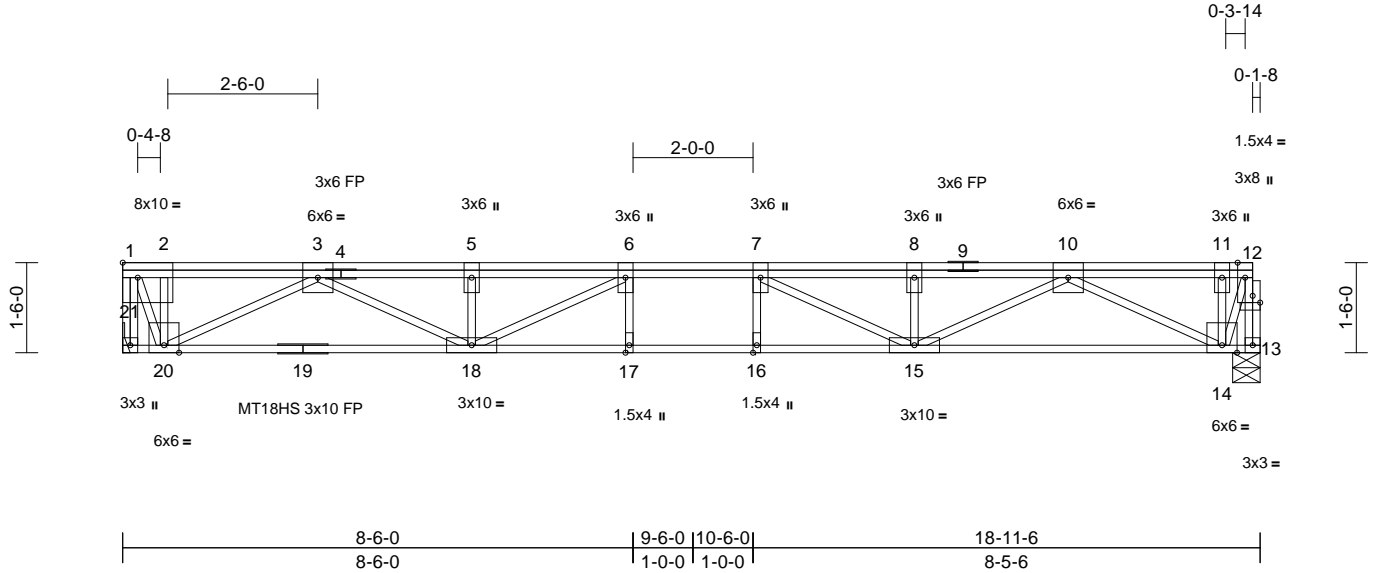


Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F48	Floor	14	1	I58527986
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:30  
ID:c\_lUukki2P4Hwj9TygRe9kzIGiX-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:38.4

Plate Offsets (X, Y): [1:Edge,0-3-0], [12:0-1-8,0-1-6]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.16	Vert(LL)	-0.16	16-17	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.42	Vert(CT)	-0.26	16-17	>867	720	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.06	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
											Weight: 129 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 13=0-5-8, 21= Mechanical  
Max Grav 13=1184 (LC 1), 21=1184 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum  
Tension  
TOP CHORD 1-21=-1228/0, 12-13=-1234/0, 1-2=-562/0,  
2-3=-562/0, 3-5=-3622/0, 5-6=-3622/0,  
6-7=-4163/0, 7-8=-3602/0, 8-10=-3602/0,  
10-11=-518/0, 11-12=-513/0  
BOT CHORD 20-21=0/0, 18-20=0/2351, 17-18=0/4163,  
16-17=0/4163, 15-16=0/4163, 14-15=0/2320,  
13-14=0/0  
WEBS 6-17=-18/62, 7-16=-17/64, 6-18=-903/0,  
5-18=-396/0, 3-18=0/1428, 3-20=-2010/0,  
2-20=-306/0, 1-20=0/1426, 7-15=-919/0,  
8-15=-394/0, 10-15=0/1441, 10-14=-2024/0,  
11-14=-291/0, 12-14=0/1405

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



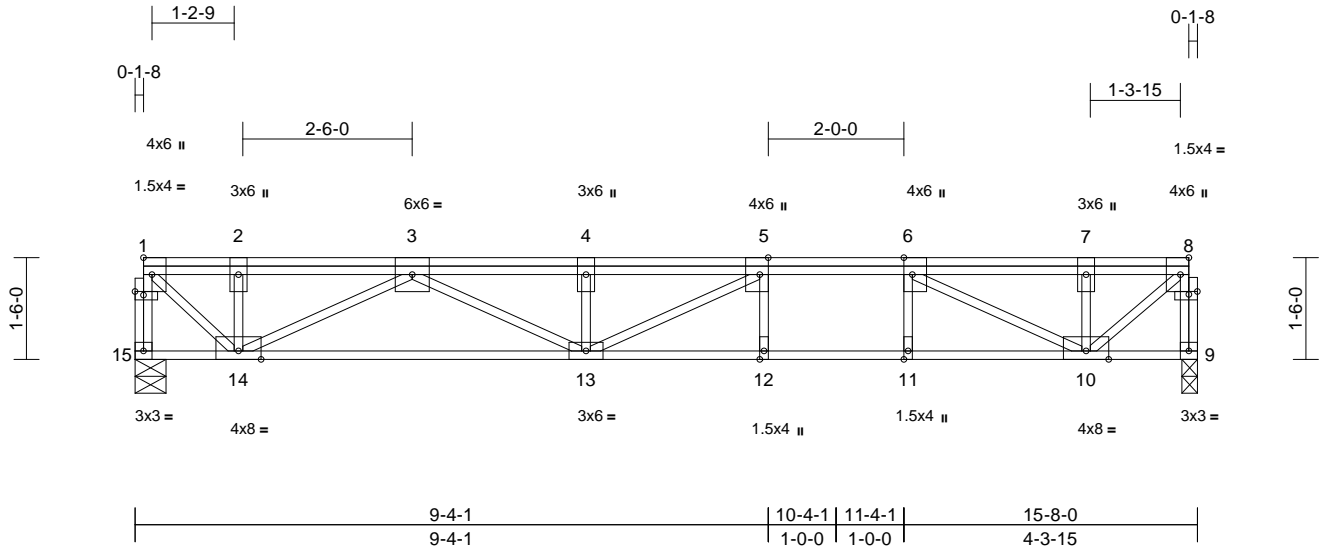
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F49	Floor	21	1	Job Reference (optional)
					I58527987

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:30  
ID:Lb66?4nenXIVblQCzB8Z1BzIGso-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC7f

Page: 1



Scale = 1:34

Plate Offsets (X, Y): [1:0-1-8,0-0-10], [5:0-3-0,Edge], [6:0-3-0,Edge], [8:0-3-0,Edge], [8:0-1-8,0-0-8]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.32	Vert(LL)	-0.14	12-13	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.42	Vert(CT)	-0.21	12-13	>870	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.03	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 105 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 9=0-2-12, 15=0-5-8  
Max Grav 9=976 (LC 1), 15=976 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-15=-981/0, 8-9=-960/0, 1-2=-1009/0,  
2-3=-1008/0, 3-4=-2911/0, 4-5=-2911/0,  
5-6=-2527/0, 6-7=-995/0, 7-8=-996/0  
BOT CHORD 14-15=0/0, 13-14=0/2186, 12-13=0/2527,  
11-12=0/2527, 10-11=0/2527, 9-10=0/0  
WEBS 5-13=-98/585, 4-13=-501/0, 3-13=0/815,  
3-14=-1323/0, 2-14=-268/0, 1-14=0/1369,  
6-10=-1712/0, 7-10=-216/141, 8-10=0/1308,  
5-12=-74/0, 6-11=0/129

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:30 Page: 1  
ID:dLxckom41WnDcn8pR1SZ6fzIGhC-RfC?PsB70Ha3NSaPqnL8w3uITXbGKWrCDoi7J4zJC?i



<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	60.0	Plate Grip DOL	1.00	TC	0.76	Vert(LL)	-0.18	16-17	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.44	Vert(CT)	-0.29	16-17	>782	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.04	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 152 lb	FT = 20%F, 11%E

TOP CHORD	2x4 SP 2400F 2.0E(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)

- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) **CAUTION. Do not erect truss backwards.**

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

Max Grav 13=1178 (LC 1), 22=1182 (LC 1)

Tension

TOP CHORD

20-21=0/1139, 1-21=0/1219, 12-13=-1168/0,  
1-2=-95/0, 2-5=-3295/0, 5-6=-3295/0,  
6-7=-4486/0, 7-8=-4486/0, 8-9=-3406/0,  
9-11=-1289/0, 11-12=-1289/0

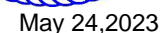
BOT CHORD

18-20=0/1700, 17-18=0/4012, 16-17=0/3406,  
15-16=0/3406, 14-15=0/3406, 13-14=0/0

WEBS

8-16=-26/6, 9-15=0/80, 8-17=0/1319,  
7-17=-688/0, 6-17=0/528, 6-18=-797/0,  
5-18=-366/0, 2-18=0/1778, 2-20=-1954/0,  
9-14=-2344/0, 11-14=-204/184,  
12-14=0/1671, 1-22=-1220/0

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Bearing at joint(s) 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 13.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



**WARNING -** verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MM1/473 (rev. 3/19/2020) BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



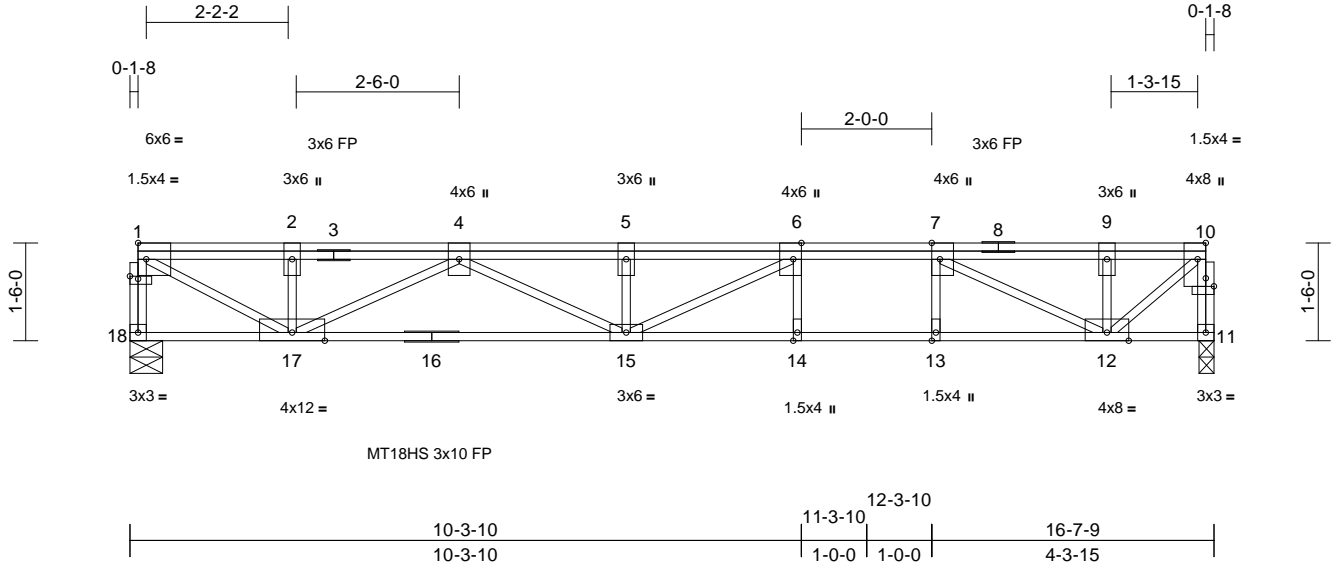
Page: 1

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F52	Floor	1	1	I58527990
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:31  
ID:7X?F034VuN8GVTajQAJSOPzEGAM-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:35.3

Plate Offsets (X, Y): [1:0-1-8,0-0-8], [6:0-3-0,Edge], [7:0-3-0,Edge], [10:0-3-0,Edge], [10:0-1-8,0-1-8]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.36	Vert(LL)	-0.17	14-15	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.48	Vert(CT)	-0.26	14-15	>755	720	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.04	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 111 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 11=0-2-12, 18=0-6-0  
Max Grav 11=1037 (LC 1), 18=1037 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-18=-1028/0, 10-11=-1019/0, 1-2=-1660/0,  
2-4=-1659/0, 4-5=-3335/0, 5-6=-3335/0,  
6-7=-2766/0, 7-9=-1053/0, 9-10=-1054/0  
BOT CHORD 17-18=0/0, 15-17=0/2708, 14-15=0/2766,  
13-14=0/2766, 12-13=0/2766, 11-12=0/0  
WEBS 6-14=-89/0, 7-13=0/144, 6-15=-2/783,  
5-15=-535/0, 4-15=0/704, 4-17=-1179/0,  
2-17=-314/0, 1-17=0/1889, 7-12=-1916/0,  
9-12=-200/175, 10-12=0/1383

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 11.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

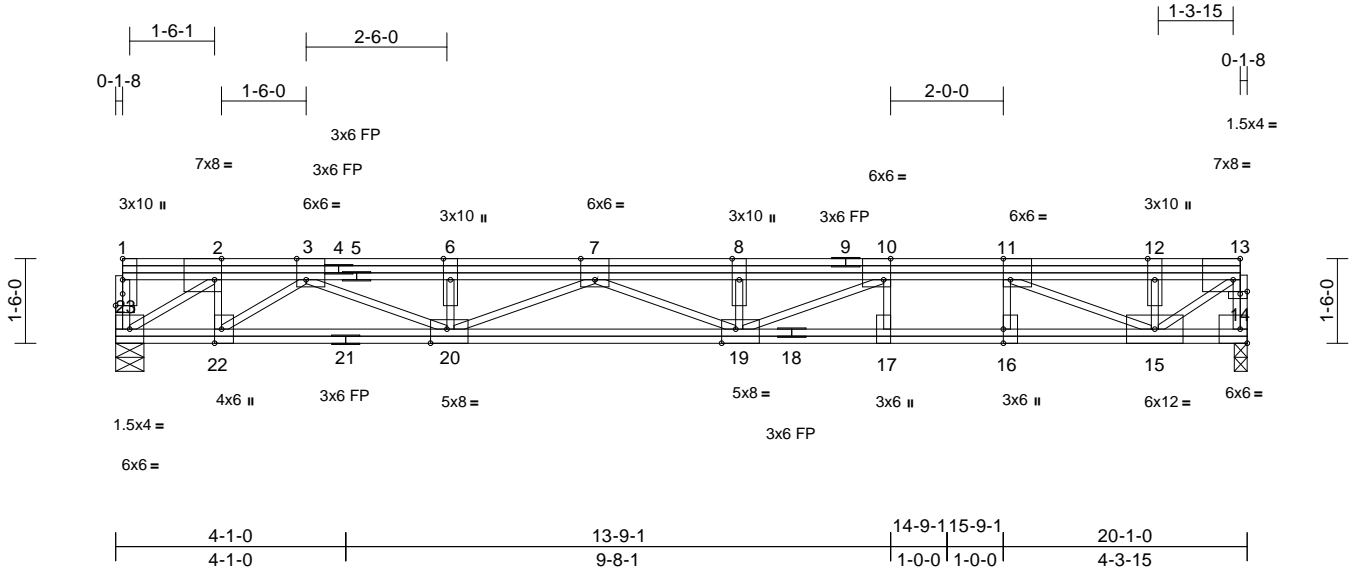
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F53	Floor	1	1	I58527991
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:31

Page: 1

ID:JfAPJqDPIWIK9WqZ\_01LjzEGAB-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f



Scale = 1:40.9

[1:0-1-8,0-2-8], [2:0-1-8,Edge], [3:0-2-0,Edge], [7:0-3-0,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge], [13:0-1-8,Edge], [13:0-1-8,0-0-8], [16:0-3-0,Edge], [19:0-3-0,Edge],  
Plate Offsets (X, Y): [20:0-3-8,Edge], [22:0-3-0,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.24	Vert(LL)	-0.17	17-19	>999	480	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.34	Vert(CT)	-0.27	17-19	>883	480		
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.03	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 189 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 14=0-2-12, 23=0-6-0  
Max Grav 14=1252 (LC 1), 23=1259 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-23=-89/0, 13-14=-1231/0, 1-2=0/5, 2-3=-1592/0, 3-6=-4291/0, 6-7=-4291/0, 7-8=-5225/0, 8-10=-5225/0, 10-11=-3928/0, 11-12=-1446/0, 12-13=-1446/0  
BOT CHORD 22-23=0/1597, 20-22=0/2830, 19-20=0/4989, 17-19=0/3928, 16-17=0/3928, 15-16=0/3928, 14-15=0/0  
WEBS 10-17=-188/0, 11-16=0/237, 10-19=0/1549, 8-19=-588/0, 7-19=0/307, 7-20=-770/0, 6-20=-304/0, 3-20=0/1613, 3-22=-1545/0, 2-22=0/843, 2-23=-1906/0, 11-15=-2724/0, 12-15=-195/165, 13-15=0/1837

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 14.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

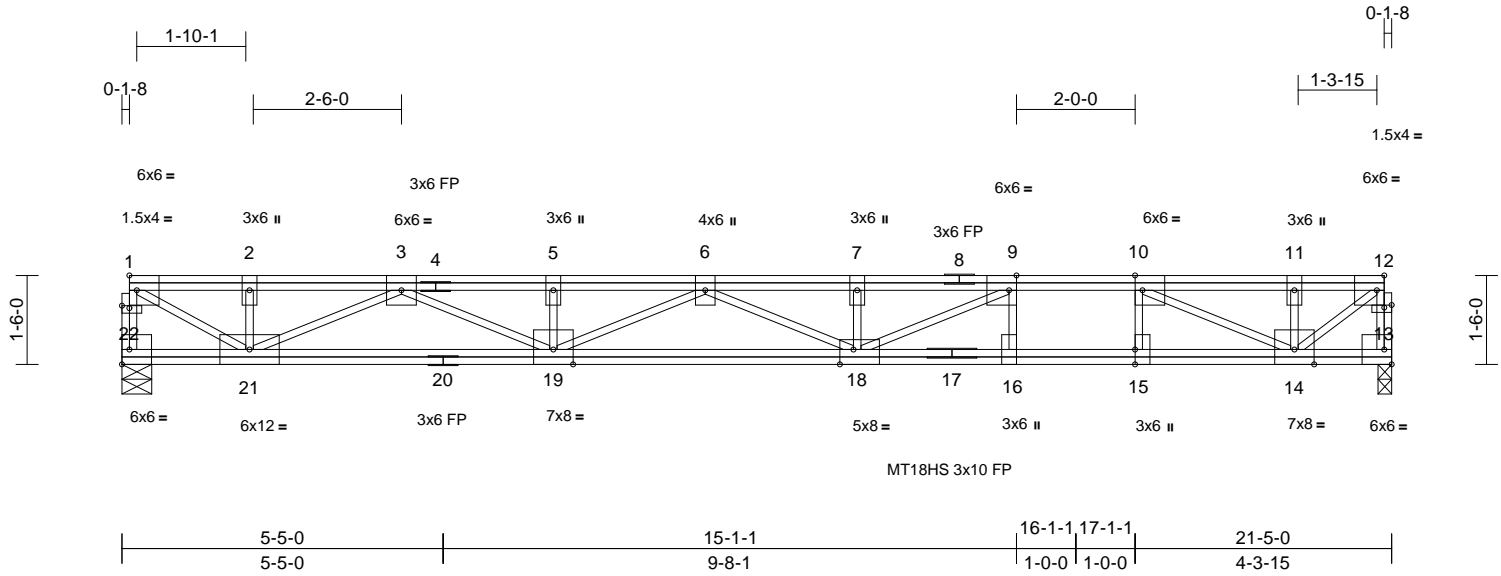


Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F54	Floor	1	1	I58527992
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:31  
ID:10W1XZBevq3ZNCt9cjRFR5zEG7e-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:38.9									
Plate Offsets (X, Y): [1:0-1-8,0-0-8], [9:0-1-8,Edge], [10:0-1-8,Edge], [12:0-1-8,Edge], [12:0-1-8,0-0-8], [15:0-3-0,Edge], [18:0-2-12,Edge]									
<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in (loc)	l/defl	L/d
TCLL	60.0	Plate Grip DOL	1.00	TC	0.40	Vert(LL)	-0.26 16-18	>967	480
TCDL	25.0	Lumber DOL	1.00	BC	0.57	Vert(CT)	-0.42 16-18	>612	480
BCLL	0.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.05 13	n/a	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
Weight: 171 lb FT = 20%F, 11%E									

**LUMBER**  
TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.  
**LOAD CASE(S)** Standard

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 13=0-2-12, 22=0-6-0  
Max Grav 13=1341 (LC 1), 22=1341 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-22=-1334/0, 12-13=-1275/0, 1-2=-2018/0, 2-3=-2017/0, 3-5=-5090/0, 5-6=-5090/0, 6-7=-5653/0, 7-9=-5653/0, 9-10=-4155/0, 10-11=-1415/0, 11-12=-1416/0  
BOT CHORD 21-22=0/0, 19-21=0/3848, 18-19=0/5620, 16-18=0/4155, 15-16=0/4155, 14-15=0/4155, 13-14=0/0  
WEBS 9-16=-500/0, 10-15=0/564, 9-18=0/1778, 7-18=-516/0, 6-18=-30/198, 6-19=-589/0, 5-19=-297/0, 3-19=0/1382, 3-21=-2037/0, 2-21=-265/0, 1-21=0/2356, 10-14=-3035/0, 11-14=-175/178, 12-14=0/1822

**NOTES**  
1) Unbalanced floor live loads have been considered for this design.  
2) All plates are MT20 plates unless otherwise indicated.  
3) All plates are 3x6 MT20 unless otherwise indicated.  
4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 13.  
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

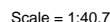


May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**  
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:32 Page: 1  
ID:Haa8hu6xnUme61sydQJJ3KzEG6R-RfC?PsB70Hq3NSaPanL8w3uITXbGKWKRdCoi7J4zJC?f



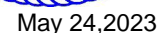
<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	60.0	Plate Grip DOL	1.00	TC	0.37	Vert(LL)	-0.32	19-20	>832	480	MT18HS	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.64	Vert(CT)	-0.54	19-20	>500	480	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.72	Horz(CT)	0.10	15	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 182 lb	FT = 20%F, 11%E

5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

**LOAD CASE(S)** Standard

## NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 15.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

**WARNING -** verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MMF-7473 (rev. 3/19/2020) BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



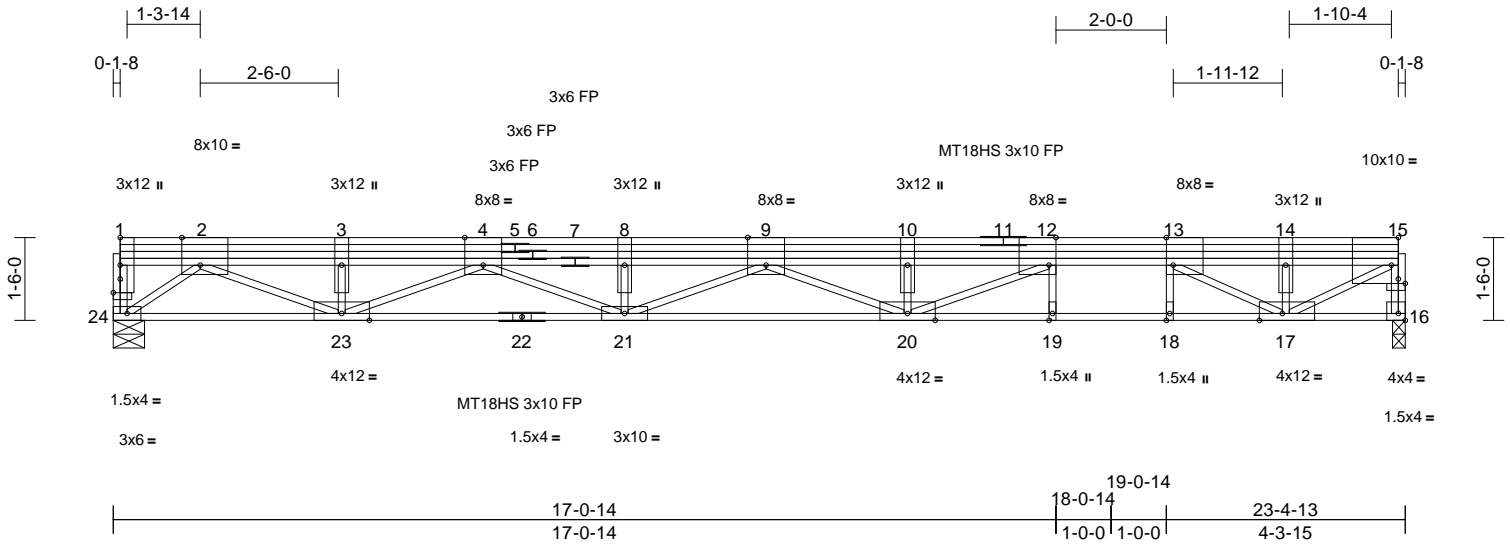
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F56	Floor	1	1	I58527994
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:32

Page: 1

ID:5DsGinMtET\_g1nTcV3lvq4zlGa\_-RFC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



Scale = 1:41.7

Plate Offsets (X, Y): [1:0-1-8,0-3-0], [2:0-4-0,Edge], [4:0-4-0,Edge], [9:0-4-0,Edge], [12:0-1-8,Edge], [13:0-1-8,Edge], [15:0-1-8,Edge], [15:0-1-8,0-1-0], [16:Edge,0-1-8], [17:0-5-0,Edge]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	60.0	Plate Grip DOL	1.00	TC	0.27	Vert(LL)	-0.35	20-21	>803	480	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.68	Vert(CT)	-0.58	20-21	>482	480	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.74	Horz(CT)	0.11	16	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
Weight: 218 lb FT = 20%F, 11%E												

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 16=0-2-12, 24=0-6-12  
 Max Grav 16=1466 (LC 1), 24=1466 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-24=-81/0, 15-16=-1452/0, 1-2=0/0, 2-3=-4069/0, 3-4=-4069/0, 4-8=-6798/0, 8-9=-6798/0, 9-10=-6787/0, 10-12=-6787/0, 12-13=-4680/0, 13-14=-2199/0, 14-15=-2199/0  
 BOT CHORD 23-24=0/1709, 21-23=0/5360, 20-21=0/6583, 19-20=0/4681, 18-19=0/4680, 17-18=0/4676, 16-17=0/0  
 WEBS 12-20=0/2401, 10-20=-1013/0, 9-20=0/318, 9-21=-5/281, 8-21=-697/0, 4-21=0/1585, 4-23=-1422/0, 3-23=-445/0, 2-23=0/2608, 2-24=-2187/0, 12-19=-15/8, 13-18=0/69, 13-17=-2872/0, 14-17=-76/370, 15-17=0/2544

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) The Fabrication Tolerance at joint 22 = 11%
- 4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 16.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

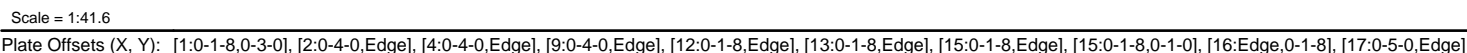
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

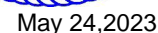
Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:32 Page: 1  
ID:mvwVtwZDWMtdWU10fbTSwezEG4Z-RfC?PsB70Hg3NSqPnL8w3uTXbGKWrcDoi7J4zJC?f



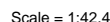
<b>LUMBER</b>		6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
TOP CHORD	2x4 SP 2400F 2.0E(flat)	
BOT CHORD	2x4 SP 2400F 2.0E(flat)	
WEBS	2x4 SP No.2(flat)	
OTHERS	2x4 SP No.2(flat)	
		<b>LOAD CASE(S)</b> Standard

## NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) The Fabrication Tolerance at joint 22 = 11%
- 4) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 16.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:33 Page: 1  
ID:QmiiXf73hVa51YYsMFIeOLzEG3r-RfC?PsB70Hq3NSaPanL8w3uITXbGKWrcDoi7J4zJC?f



[1:Edge,0-4-8], [1:0-1-8,0-0-8], [2:0-1-8,Edge], [4:0-3-0,Edge], [8:0-3-0,Edge], [11:0-1-8,Edge], [12:0-1-8,Edge], [14:0-3-0,Edge], [17:0-3-0,Edge], [19:0-2-8,Edge], [23:0-4-12,Edge], [24:0-1-8,Edge]

**LUMBER**  
TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 15= Mechanical, 25=0-6-0  
Max Grav 15=1496 (LC 1), 25=1496 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-25=-1471/0, 14-15=-1457/0, 1-2=-2961/0,  
2-3=-5113/0, 3-4=-5113/0, 4-7=-7285/0,  
7-8=-7285/0, 8-9=-6796/0, 9-11=-6796/0,  
11-12=-4506/0, 12-13=-1805/0,  
13-14=-1805/0

BOT CHORD 24-25=0/0, 23-24=0/2961, 21-23=0/6461,  
19-21=0/7229, 18-19=0/4506, 17-18=0/4506,  
16-17=0/4506, 15-16=0/0

WEBS 11-18=-281/0, 12-17=0/407, 11-19=0/2579,  
9-19=-694/0, 8-19=-521/0, 8-21=-69/105,  
7-21=-346/0, 4-21=0/908, 4-23=-1486/0,  
3-23=-316/0, 12-16=-3282/0, 13-16=0/562,  
14-16=0/2220, 2-23=0/2371, 2-24=-1290/0,  
1-24=0/3240

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) **CAUTION. Do not erect truss backwards.**

6) CAUTION: Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH-7473 (REV. 3/19/2020) BEFORE USE.**

Design valid for use only with MiTEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personnel injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Code**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



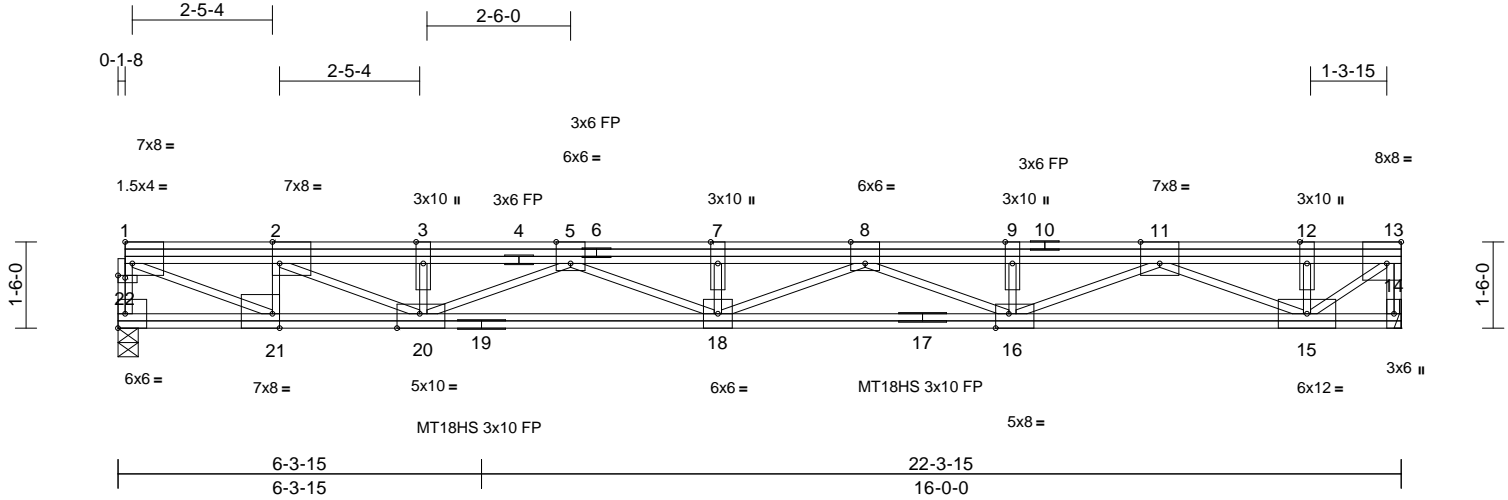
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F59	Floor	1	1	I58527997
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:33

Page: 1

ID:wzILL\_UKQjyBWYnqu4t\_oTzIFvC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKwRCDoi7J4zJC?f



Scale = 1:40.1

Plate Offsets (X, Y): [1:Edge,0-4-8], [1:0-1-8,0-0-8], [2:0-1-8,Edge], [5:0-3-0,Edge], [8:0-3-0,Edge], [11:0-4-0,Edge], [13:0-3-0,Edge], [16:0-2-12,Edge], [20:0-4-12,Edge], [21:0-1-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	60.0	Plate Grip DOL	1.00	TC	0.11	Vert(LL)	-0.21	16-18	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.37	Vert(CT)	-0.34	16-18	>783	720	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	0.84	Horz(CT)	0.05	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
Weight: 211 lb FT = 20%F, 11%E												

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 14= Mechanical, 22=0-4-4  
 Max Grav 14=1398 (LC 1), 22=1398 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension  
 TOP CHORD 1-22=-1375/0, 13-14=-1401/0, 1-2=-2704/0,  
 2-3=-4654/0, 3-5=-4654/0, 5-7=-6440/0,  
 7-8=-6440/0, 8-9=-5445/0, 9-11=-5445/0,  
 11-12=-1743/0, 12-13=-1743/0  
 BOT CHORD 21-22=0/0, 20-21=0/2704, 18-20=0/5818,  
 16-18=0/6209, 15-16=0/3846, 14-15=0/0  
 WEBS 3-20=-310/0, 5-20=-1283/0, 5-18=0/685,  
 7-18=-326/0, 8-18=0/254, 8-16=-842/0,  
 9-16=-324/0, 11-16=0/1763, 11-15=-2318/0,  
 12-15=-330/0, 13-15=0/2215, 2-20=0/2149,  
 2-21=-1198/0, 1-21=0/2968

#### NOTES

- All plates are MT20 plates unless otherwise indicated.
- Refer to girder(s) for truss connections.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

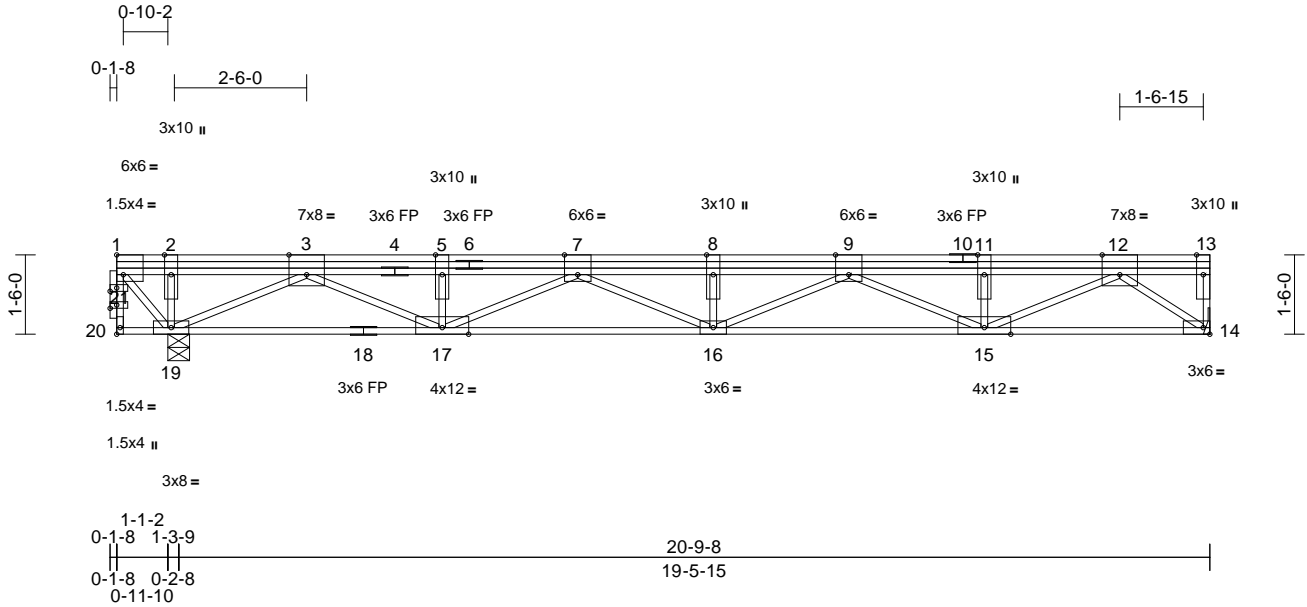


Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F60	Floor	1	1	Job Reference (optional)
					I58527998

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:33  
ID:O410H4h1C7Vh\_F9yTWAGbLzIFwF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i

Page: 1



Scale = 1:43.6

Plate Offsets (X, Y): [1:Edge,0-4-8], [1:0-1-8,0-0-12], [3:0-4-0,Edge], [7:0-3-0,Edge], [9:0-3-0,Edge], [12:0-4-0,Edge], [20:Edge,0-0-12], [21:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.14	Vert(LL)	-0.18	16-17	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.51	Vert(CT)	-0.28	16-17	>826	720		
BCLL	0.0	Rep Stress Incr	NO	WB	0.55	Horz(CT)	0.07	14	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 166 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:  
6-0-0 oc bracing: 19-20.

REACTIONS (size) 14= Mechanical, 19=0-4-15  
Max Grav 14=1219 (LC 4), 19=2425 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-20=-28/0, 13-14=-84/0, 1-2=0/739,  
2-3=0/739, 3-5=-3559/0, 5-7=-3559/0,  
7-8=-4729/0, 8-9=-4729/0, 9-11=-3239/0,  
11-12=-3239/0, 12-13=0/0  
BOT CHORD 19-20=-1/0, 17-19=0/1858, 16-17=0/4299,  
15-16=0/4151, 14-15=0/1482  
WEBS 2-19=-595/0, 1-19=-1161/0, 3-19=-2249/0,  
3-17=0/1961, 5-17=-402/0, 7-17=-916/0,  
7-16=0/546, 8-16=-424/0, 9-16=0/643,  
9-15=-1015/0, 11-15=-352/0, 12-15=0/1958,  
12-14=-1854/0

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1000 lb down at 0-1-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 14-20=-13, 1-13=-113  
Concentrated Loads (lb)  
Vert: 1=-1000 (F)



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



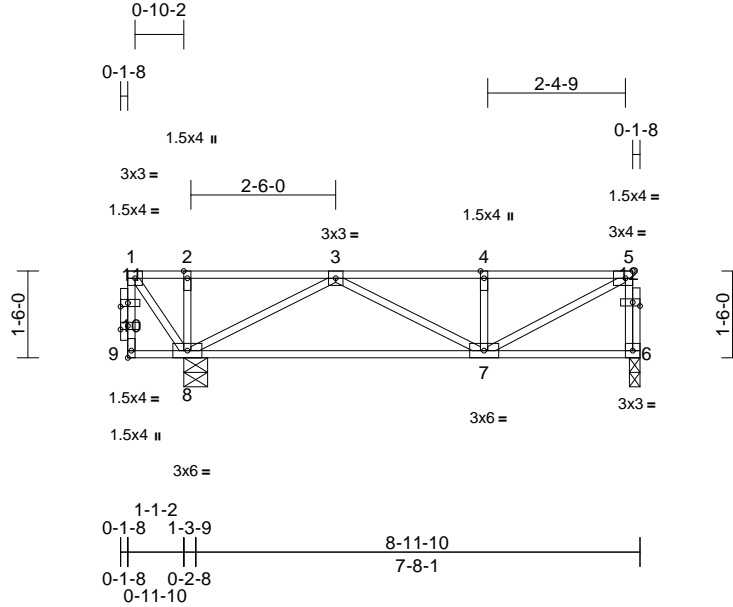
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F61	Floor	1	1	Job Reference (optional)
					I58527999

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:34  
ID:ZOKuuPCCdrTMB65G76SuzvzIFwt-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:39.8

Plate Offsets (X, Y): [5:0-1-8,Edge], [9:Edge,0-0-12], [10:0-1-8,0-0-12], [11:0-1-8,0-0-12], [12:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.24	Vert(LL)	-0.01	7-8	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.13	Vert(CT)	-0.04	7-8	>999	720		
BCLL	0.0	Rep Stress Incr	NO	WB	0.19	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 51 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 6=0-2-3, 8=0-4-15  
Max Grav 6=431 (LC 4), 8=1743 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-9=-29/0, 5-6=-422/0, 1-2=0/704, 2-3=0/704, 3-4=-580/0, 4-5=-580/0  
BOT CHORD 8-9=0/0, 7-8=-275/452, 6-7=0/19  
WEBS 2-8=-260/0, 1-8=-1224/0, 3-8=-927/0, 3-7=0/324, 4-7=-321/0, 5-7=0/640

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1000 lb down at 0-2-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 6-9=-13, 1-5=-113  
Concentrated Loads (lb)  
Vert: 1=-1000 (F)



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F62	Floor	1	1	Job Reference (optional)

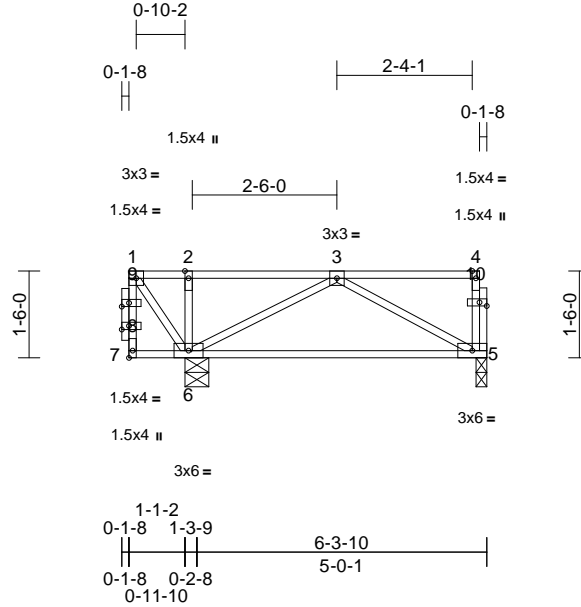
I58528000

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:34

Page: 1

ID:GmtqrCv9HTRmIQGfj40G?rziFxF-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrcDoi7J4zJC?f



Scale = 1:39.8

Plate Offsets (X, Y): [7:Edge,0-0-12], [8:0-1-8,0-0-12], [9:0-1-8,0-0-12], [10:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.26	Vert(LL)	0.00	5-6	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.13	Vert(CT)	-0.05	5-6	>999	720		
BCLL	0.0	Rep Stress Incr	NO	WB	0.17	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 37 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 5=0-2-3, 6=0-4-15  
 Max Uplift 5=-89 (LC 3)  
 Max Grav 5=236 (LC 4), 6=1645 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-7=-35/0, 4-5=-106/0, 1-2=0/699, 2-3=0/699, 3-4=-5/0  
 BOT CHORD 6-7=0/0, 5-6=-260/192  
 WEBS 2-6=-247/0, 1-6=-1216/0, 3-6=-726/0, 3-5=-214/300

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1000 lb down at 0-2-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (lb/ft)  
 Vert: 5-7=-13, 1-4=-113  
 Concentrated Loads (lb)  
 Vert: 1=-1000 (F)



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F63	Floor	1	1	Job Reference (optional)

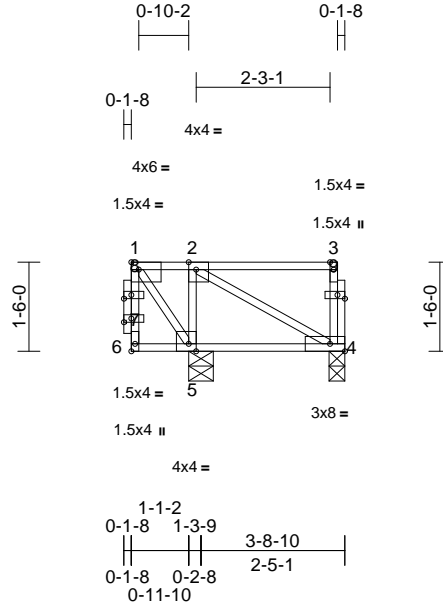
I58528001

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:34

Page: 1

ID:fatYlq5EIMVqx5SGQunyeOzEFX0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f



Scale = 1:38.8

Plate Offsets (X, Y): [1:Edge,0-1-8], [2:0-1-8,Edge], [5:0-1-8,Edge], [6:Edge,0-0-12], [7:0-1-8,0-0-12], [8:0-1-8,0-0-12], [9:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.31	Vert(LL)	0.00	4-5	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.07	Vert(CT)	0.00	4-5	>999	720		
BCLL	0.0	Rep Stress Incr	NO	WB	0.34	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 25 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-8-10 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (size) 4=0-3-3, 5=0-4-15  
 Max Uplift 4=-563 (LC 3)  
 Max Grav 4=-80 (LC 4), 5=2395 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-6=-17/0, 3-4=-109/0, 1-2=0/1057, 2-3=-5/0  
 BOT CHORD 5-6=0/0, 4-5=-1057/0  
 WEBS 2-5=-877/0, 1-5=-1838/0, 2-4=0/1214

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 563 lb uplift at joint 4.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.
- 6) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1500 lb down at 0-2-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
- 7) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

#### LOAD CASE(S) Standard

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00,  
 Plate Increase=1.00  
 Uniform Loads (lb/ft)  
 Vert: 4-6=-13, 1-3=-113  
 Concentrated Loads (lb)  
 Vert: 1=-1500 (F)



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

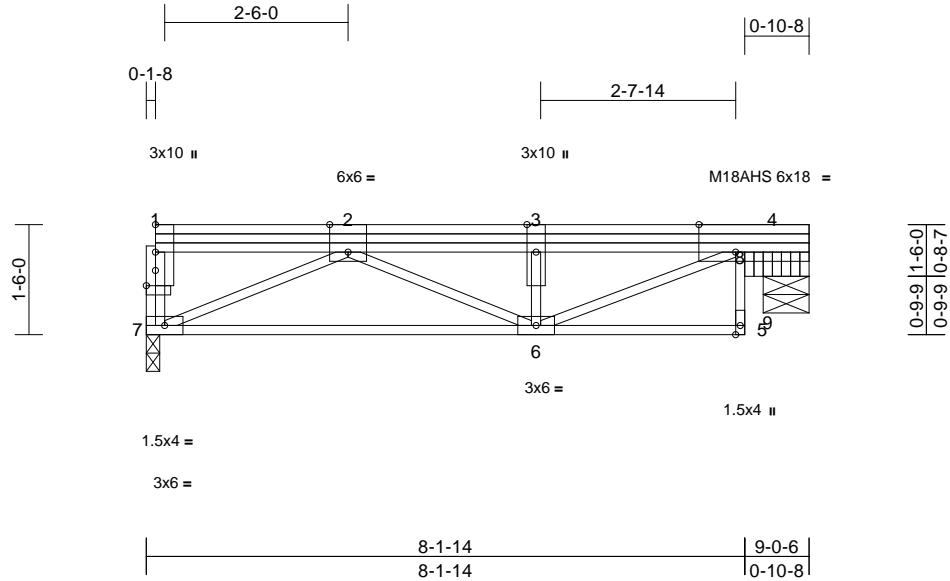
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F64	Floor	1	1	I58528002
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:34

Page: 1

ID:11rQy7oVPiJ2j14whhM97xzIFxO-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?i



Scale = 1:31.4

Plate Offsets (X, Y): [1:0-1-8,0-2-8], [2:0-3-0,Edge], [4:0-6-0,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	-0.01	6-7	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.18	Vert(CT)	-0.08	6-7	>999	720	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 74 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 7=0-2-3, 9=0-7-8  
 Max Grav 7=528 (LC 1), 9=531 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-7=-140/0, 5-8=0/8, 4-8=-44/0, 1-2=0/0,  
 2-3=-876/0, 3-4=-876/0

BOT CHORD 6-7=0/754, 5-6=0/45

WEBS 2-7=-835/0, 2-6=0/136, 3-6=-313/0,  
 4-6=0/892, 4-9=-512/0

#### NOTES

- 1) All plates are MT20 plates unless otherwise indicated.
- 2) Bearing at joint(s) 9 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 7.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

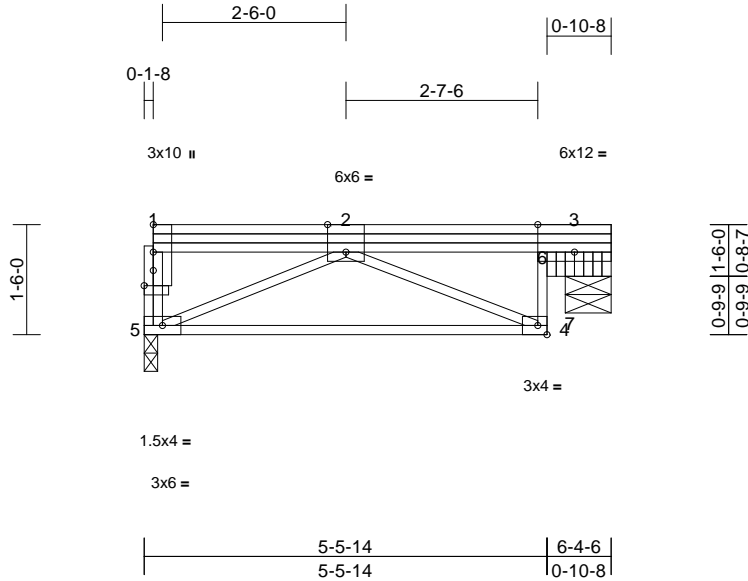
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F65	Floor	1	1	I58528003
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:35

Page: 1

ID:JriDluTZIPvt\_tWkcWNpXFzIFxp-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrcDoi7J4zJC?f



Scale = 1:31.4

Plate Offsets (X, Y): [1:0-1-8,0-2-8], [2:0-3-0,Edge], [3:0-6-0,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.29	Vert(LL)	0.00	4	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.20	Vert(CT)	-0.12	4-5	>557	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 52 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 5=0-2-3, 7=0-7-8  
 Max Grav 5=359 (LC 1), 7=362 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-5=-128/0, 4-6=0/201, 3-6=0/183, 1-2=0/0,  
 2-3=-57/0  
 BOT CHORD 4-5=0/411  
 WEBS 2-5=-455/0, 2-4=-391/0, 3-7=-358/0

#### NOTES

- Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



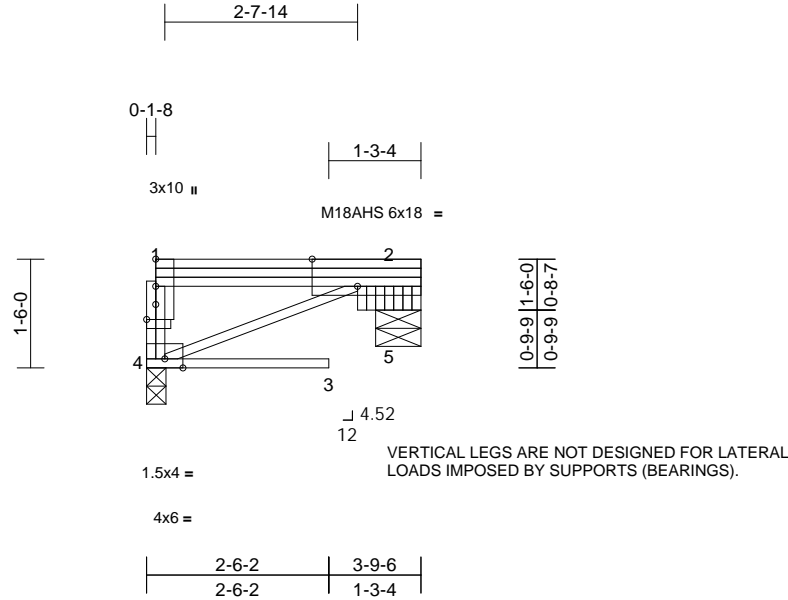
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F66	Floor	1	1	I58528004
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:35

Page: 1

ID: yW\_LdPp7f4Sq0xYgKcSTQzEFdr-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrdCoi7J4zJC?f



Scale = 1:31.8

Plate Offsets (X, Y): [1:0-1-8,0-2-8], [2:0-7-8,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.07	Vert(LL)	0.00	4	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.12	Vert(CT)	-0.06	3	>678	720	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 31 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-9-6 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4=0-3-3, 5=0-7-8  
 Max Grav 4=202 (LC 1), 5=194 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-4=-182/0, 1-2=-28/0, 2-5=-194/0  
 BOT CHORD 3-4=0/0  
 WEBS 2-4=0/31

#### NOTES

- All plates are MT20 plates unless otherwise indicated.
- Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



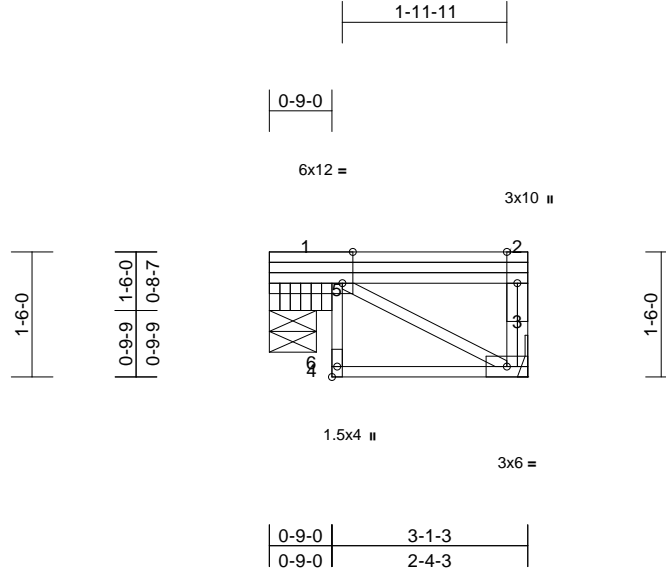
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F67	Floor	1	1	I58528005
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:35  
ID:UKipBmNUBSRoZu3EnvEUL3zIFzE-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f

Page: 1



Scale = 1:27.6

Plate Offsets (X, Y): [1:0-1-8,Edge], [4:Edge,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	0.00	4	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.03	Vert(CT)	0.00	3-4	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 28 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
3-1-3 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 3= Mechanical, 6=0-6-12  
Max Grav 3=156 (LC 1), 6=160 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 4-5=0/14, 1-5=-2/0, 2-3=-133/0, 1-2=0/0  
BOT CHORD 3-4=0/18  
WEBS 1-3=-20/0, 1-6=-154/0

#### NOTES

- 1) Refer to girder(s) for truss to truss connections.
- 2) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

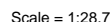
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Page: 1

16023 Swingley Ridge Rd  
Chesterfield, MO 63017

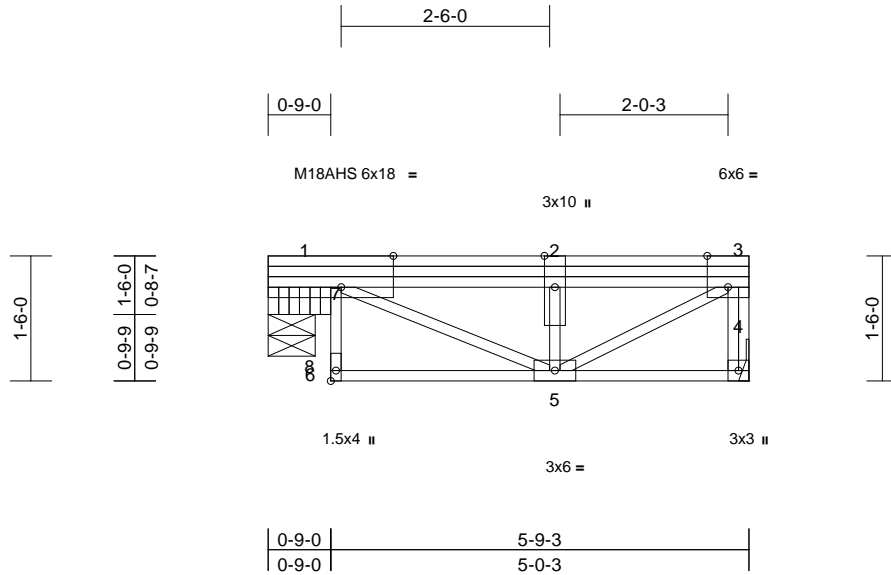
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F69	Floor	1	1	I58528007
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:35

Page: 1

ID:7mfMfhYqw9IGpklSJ58D7zIG3S-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCdoi7J4zJC?f



Scale = 1:27.6

Plate Offsets (X, Y): [1:0-7-8,Edge], [3:0-3-0,Edge], [6:Edge,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	60.0	Plate Grip DOL	1.00	TC	0.13	Vert(LL)	0.00	5	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.03	Vert(CT)	-0.01	5-6	>999	720	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 49 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD	2x4 SP 2400F 2.0E(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 5-9-3 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size)	4= Mechanical, 8=0-6-12
Max Grav	4=325 (LC 1), 8=329 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	6-7=0/15, 1-7=-14/0, 3-4=-314/0, 1-2=-366/0, 2-3=-366/0
BOT CHORD	5-6=0/30, 4-5=0/0
WEBS	1-5=0/364, 2-5=-310/0, 3-5=0/421, 1-8=-317/0

#### NOTES

- 1) All plates are MT20 plates unless otherwise indicated.
- 2) Refer to girder(s) for truss to truss connections.
- 3) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

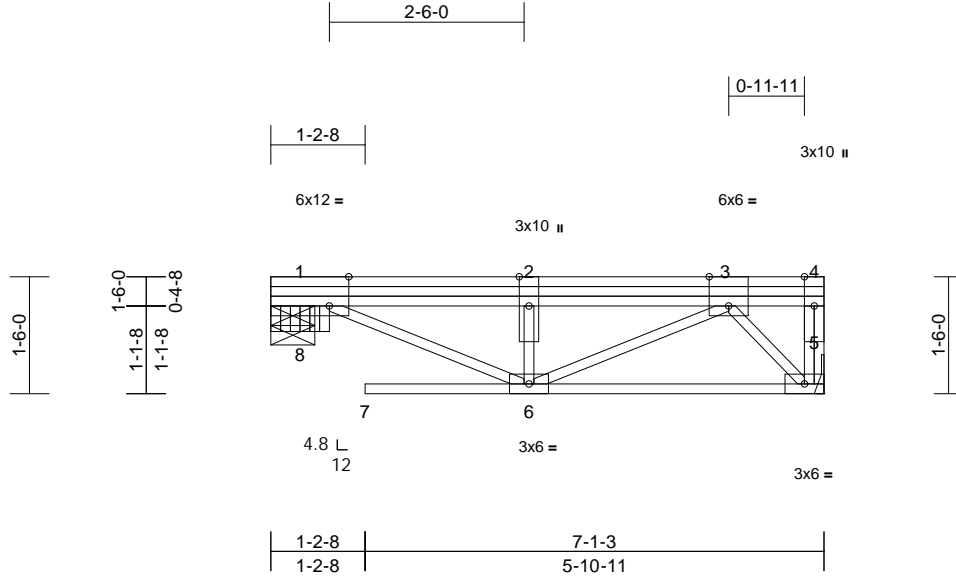
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F70	Floor	1	1	I58528008
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:36

Page: 1

ID:0jJaoc\_M\_jNxbWXjCxl7pDzlG4B-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:29.6

Plate Offsets (X, Y): [1:0-3-0,Edge], [3:0-3-0,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.04	Vert(LL)	-0.01	7	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.10	Vert(CT)	-0.06	7	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 58 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 1=0-6-12, 5= Mechanical  
 Max Grav 1=407 (LC 1), 5=417 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 4-5=-34/0, 1-2=-600/0, 2-3=-600/0, 3-4=0/0,  
 1-8=0/0

BOT CHORD 6-7=0/0, 5-6=0/334

WEBS 1-6=0/652, 2-6=-327/0, 3-6=0/297,  
 3-5=-496/0

#### NOTES

- 1) Refer to girder(s) for truss to truss connections.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



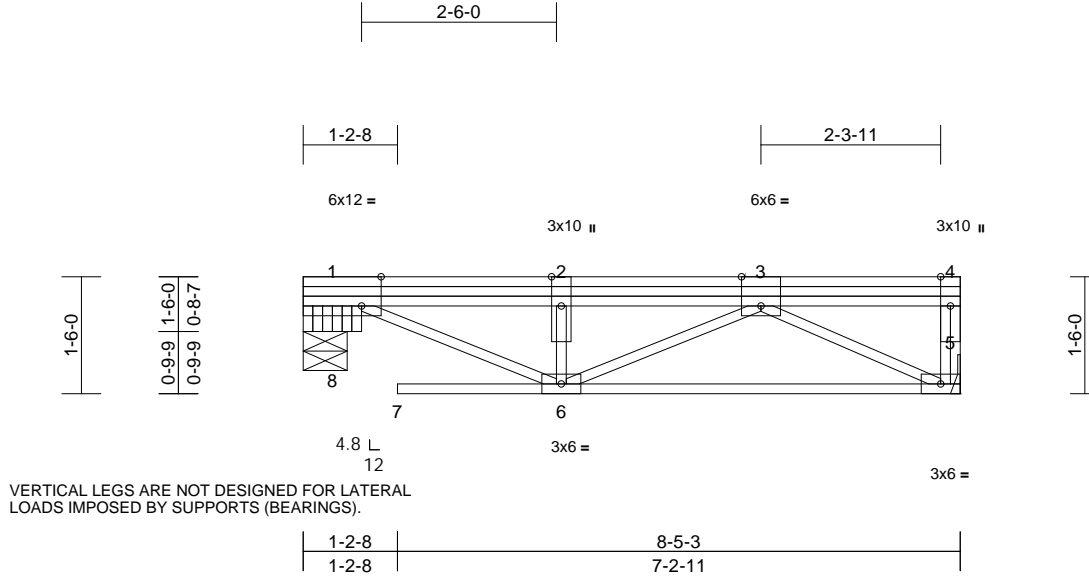
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F71	Floor	1	1	I58528009
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 E Feb 9 2023 Print: 8.630 E Feb 9 2023 MiTek Industries, Inc. Wed May 24 12:27:30  
ID:AUrcGJ5xP\_2Ro8tVtPQmpczlG5L-SxxSQwJRDtd0wwj16x\_dBmNOZMSHQCFDoMsS\_zDSOz

Page: 1



VERTICAL LEGS ARE NOT DESIGNED FOR LATERAL LOADS IMPOSED BY SUPPORTS (BEARINGS).

Scale = 1:29.6

Plate Offsets (X, Y): [1:0-3-0,Edge], [3:0-3-0,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.04	Vert(LL)	-0.01	7	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.16	Vert(CT)	-0.06	5-6	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.24	Horz(CT)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 67 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 5=502/ Mechanical, 8=492/0-6-12

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 1-2=-796/0, 2-3=-796/0, 1-8=-492/0  
BOT CHORD 5-6=0/672  
WEBS 1-6=0/866, 2-6=-333/0, 3-5=-755/0

#### NOTES

- 1) Refer to girder(s) for truss to truss connections.
- 2) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



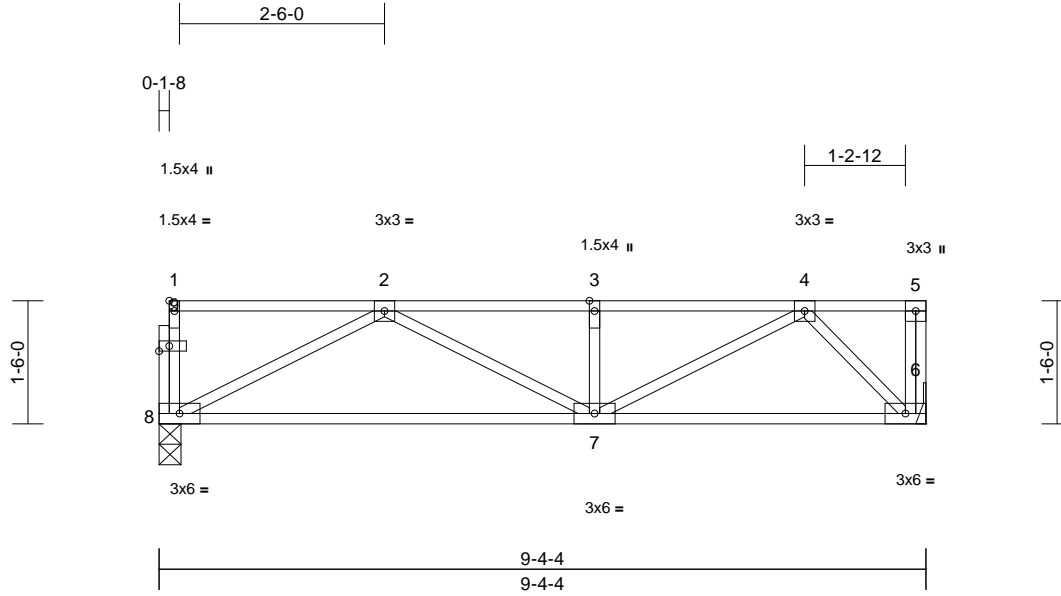
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F72	Floor	1	1	I58528010
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:36

Page: 1

ID: \_c?1q86FBZLTmg?PmHyAuCzEFhK-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:28.1									
Plate Offsets (X, Y): [1:Edge,0-0-12], [9:0-1-8,0-0-12]									
<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl
TCLL	60.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	-0.02	7-8	>999
TCDL	25.0	Lumber DOL	1.00	BC	0.18	Vert(CT)	-0.07	7-8	>999
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	6	n/a
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S					
							<b>PLATES</b>		
							MT20		
							<b>GRIP</b>		
							244/190		
							Weight: 52 lb		
							FT = 20%F, 11%E		

**LUMBER**  
TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 6= Mechanical, 8=0-3-3  
Max Grav 6=577 (LC 1), 8=570 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-8=-116/0, 5-6=-40/0, 1-2=-5/0, 2-3=-1001/0, 3-4=-1001/0, 4-5=0/0  
BOT CHORD 7-8=0/817, 6-7=0/511  
WEBS 2-8=-916/0, 2-7=0/208, 3-7=-286/0, 4-7=0/555, 4-6=-728/0

- NOTES**
- 1) Refer to girder(s) for truss to truss connections.
  - 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
  - 4) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

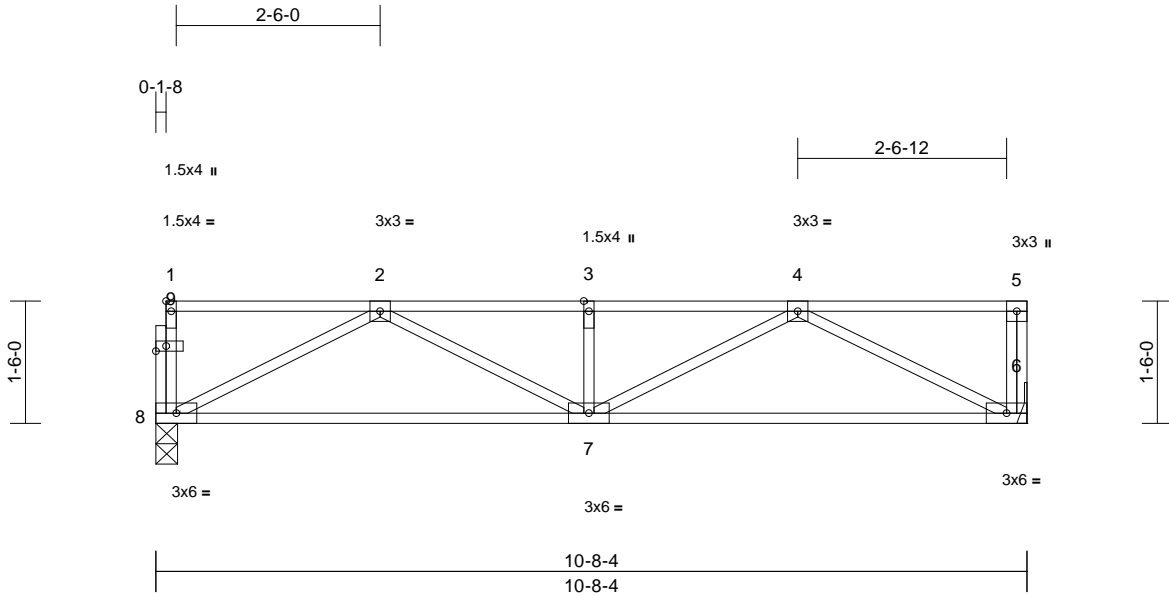
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F73	Floor	1	1	I58528011
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:36

Page: 1

ID:9SemZ52UbjbJ2lXGQ0rmexzEFhQ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i



Scale = 1:28.3

Plate Offsets (X, Y): [1:Edge,0-0-12], [9:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.20	Vert(LL)	-0.03	7	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.20	Vert(CT)	-0.08	6-7	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 57 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6'-0" oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10'-0" oc  
 bracing.

REACTIONS (size) 6= Mechanical, 8=0-3-3  
 Max Grav 6=661 (LC 1), 8=654 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-8=-115/0, 5-6=-122/0, 1-2=-5/0,  
 2-3=-1318/0, 3-4=-1318/0, 4-5=0/0

BOT CHORD 7-8=0/982, 6-7=0/1000

WEBS 2-8=-1103/0, 2-7=0/381, 3-7=-266/0,  
 4-7=0/361, 4-6=-1124/0

#### NOTES

- 1) Refer to girder(s) for truss to truss connections.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10'-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

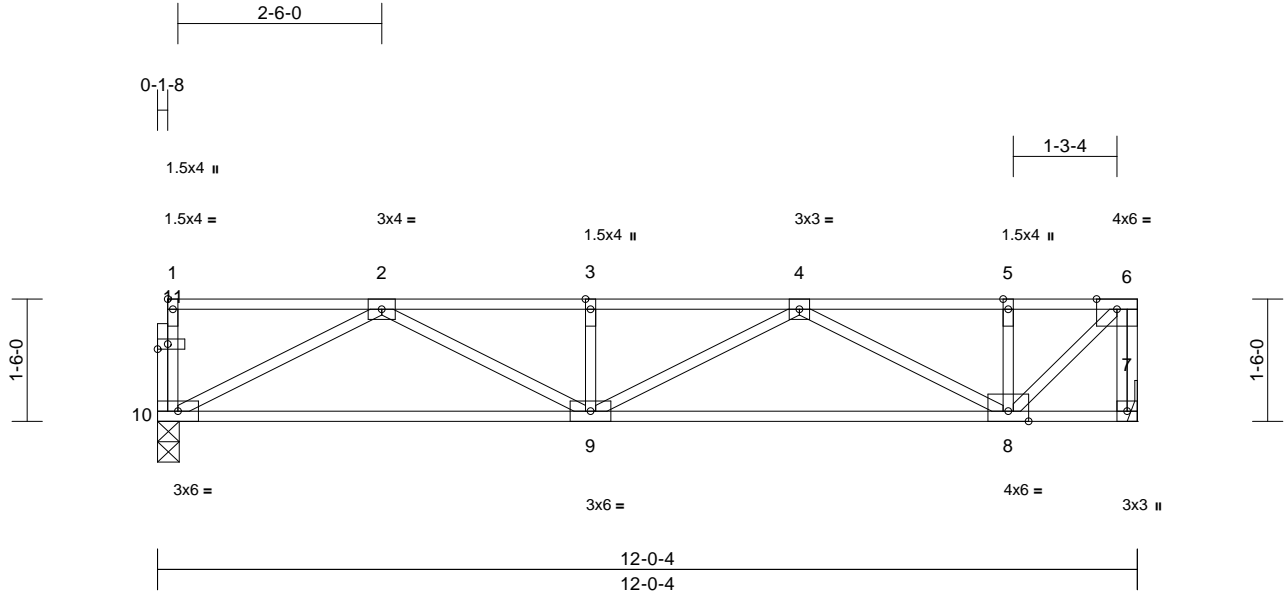
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F74	Floor	1	1	I58528012
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:36

Page: 1

ID:pVrtWO\_LmBz1x\_fldTFbxuzEFhV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:28.3

Plate Offsets (X, Y): [1:Edge,0-0-12], [11:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	-0.04	8-9	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.22	Vert(CT)	-0.09	9-10	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 66 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 7= Mechanical, 10=0-3-3  
 Max Grav 7=746 (LC 1), 10=738 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-10=-116/0, 6-7=-748/0, 1-2=-5/0,  
 2-3=-1635/0, 3-4=-1635/0, 4-5=-740/0,  
 5-6=-740/0

BOT CHORD 9-10=0/1140, 8-9=0/1468, 7-8=0/0

WEBS 2-10=-1281/0, 2-9=0/562, 3-9=-277/0,  
 4-9=0/190, 4-8=-826/0, 5-8=-255/0,  
 6-8=0/1018

#### NOTES

- 1) Refer to girder(s) for truss to truss connections.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



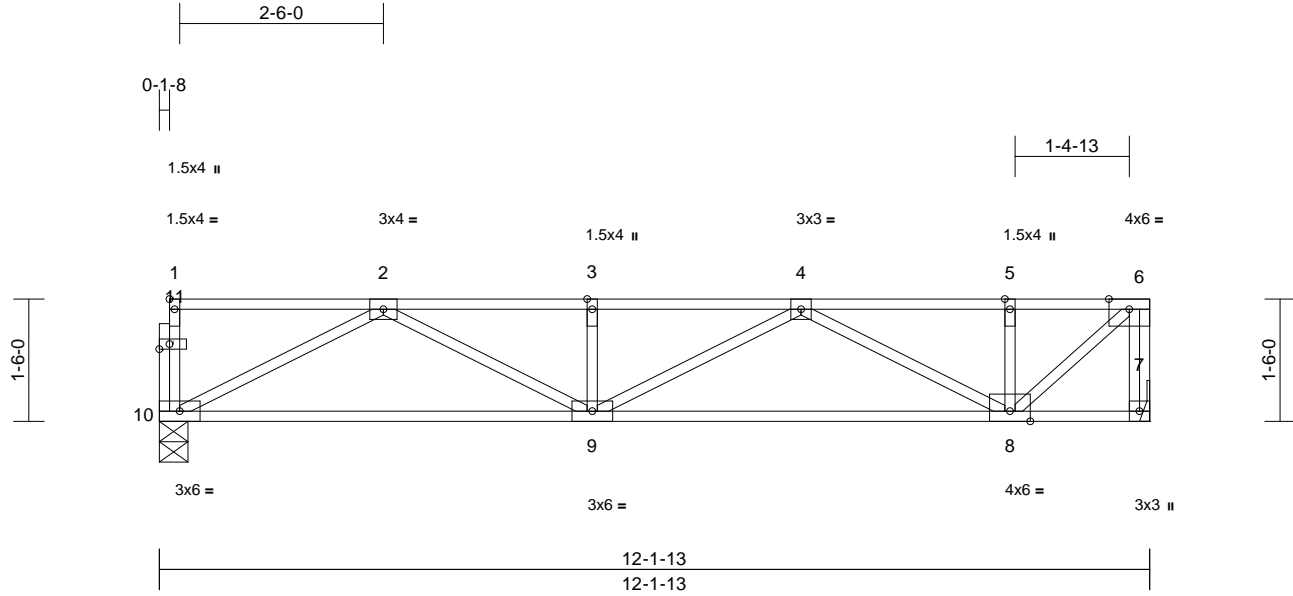
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F75	Floor	1	1	I58528013
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:37  
ID:4YXXb\_pa?11kPeEb3haStgzIG9Z-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:28.3

Plate Offsets (X, Y): [1:Edge,0-0-12], [11:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.20	Vert(LL)	-0.04	8-9	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.22	Vert(CT)	-0.09	9-10	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 66 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 7= Mechanical, 10=0-4-4  
Max Grav 7=754 (LC 1), 10=747 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-10=-116/0, 6-7=-754/0, 1-2=-5/0,  
2-3=-1666/0, 3-4=-1666/0, 4-5=-803/0,  
5-6=-803/0

BOT CHORD 9-10=0/1156, 8-9=0/1514, 7-8=0/0

WEBS 2-10=-1299/0, 2-9=0/579, 3-9=-277/0,  
4-9=0/173, 4-8=-807/0, 5-8=-261/0,  
6-8=0/1062

#### NOTES

- 1) Refer to girder(s) for truss to truss connections.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



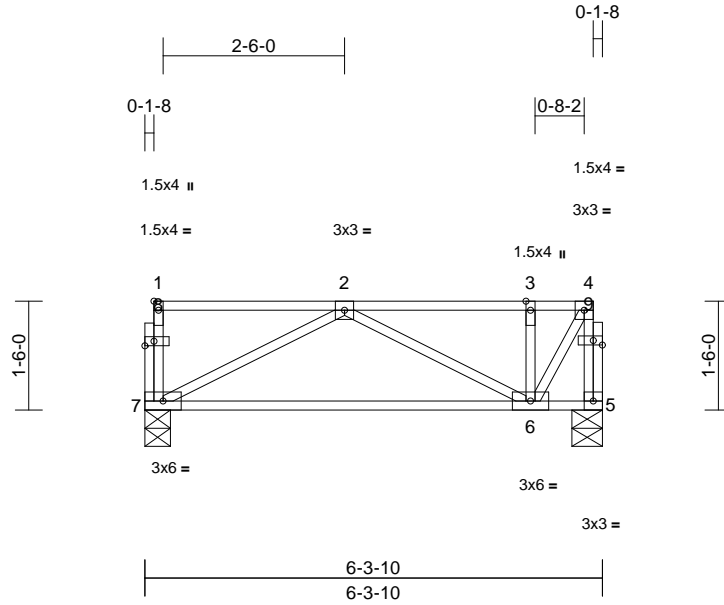
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F76	Floor	1	1	I58528014
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:37  
ID:v9ryjPU0bQVj2L5DQp4ukmziGA?-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:31.7

Plate Offsets (X, Y): [1:Edge,0-0-12], [8:0-1-8,0-0-12], [9:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	0.00	6-7	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.15	Vert(CT)	-0.06	6-7	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 38 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 5=0-5-0, 7=0-4-4  
Max Grav 5=376 (LC 1), 7=376 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-7=-114/0, 4-5=-413/0, 1-2=-5/0, 2-3=-262/0,  
3-4=-262/0

BOT CHORD 6-7=0/453, 5-6=0/19  
WEBS 2-7=-506/0, 2-6=-217/0, 3-6=-225/0,  
4-6=0/482

#### NOTES

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

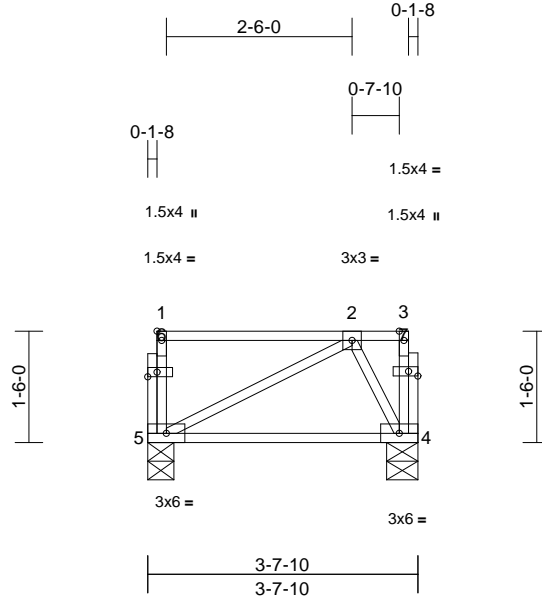
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F77	Floor	1	1	Job Reference (optional)

I58528015

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:37  
ID:0ObRu2RVXB?HakoSB0yawzIGA3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:31

Plate Offsets (X, Y): [1:Edge,0-0-12], [6:0-1-8,0-0-12], [7:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	60.0	Plate Grip DOL	1.00	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.07	Vert(CT)	-0.02	4-5	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 24 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 3-7-10 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4=0-5-0, 5=0-4-4  
Max Grav 4=207 (LC 1), 5=207 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-5=-117/0, 3-4=0/64, 1-2=-5/0, 2-3=0/3  
BOT CHORD 4-5=0/135  
WEBS 2-5=-146/0, 2-4=-284/0

#### NOTES

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



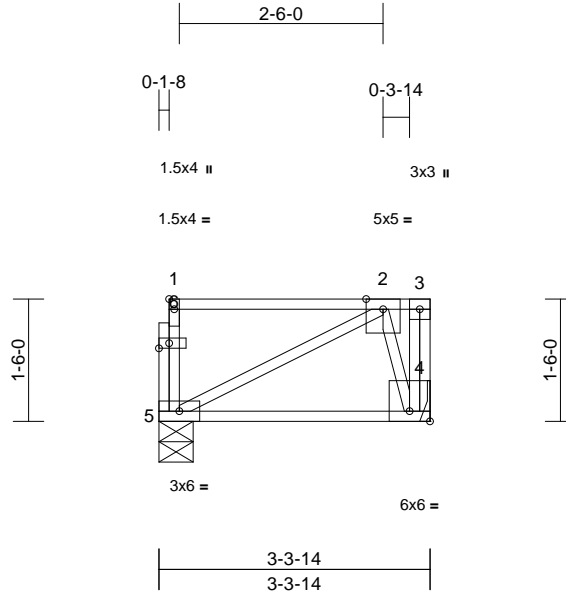
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F78	Floor	1	1	Job Reference (optional)
					I58528016

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:37

Page: 1

ID:lemx9KS4HDWZYi3rj8iyVSzIGLf-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i



Scale = 1:28.3

Plate Offsets (X, Y): [1:Edge,0-0-12], [4:Edge,0-1-8], [6:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.06	Vert(CT)	-0.01	4-5	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 23 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 3-3-14 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 4= Mechanical, 5=0-5-0  
 Max Grav 4=195 (LC 1), 5=188 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-5=-116/0, 3-4=0/144, 1-2=-5/0, 2-3=0/0  
 BOT CHORD 4-5=0/104  
 WEBS 2-5=-112/0, 2-4=-335/0

#### NOTES

- 1) Refer to girder(s) for truss to truss connections.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



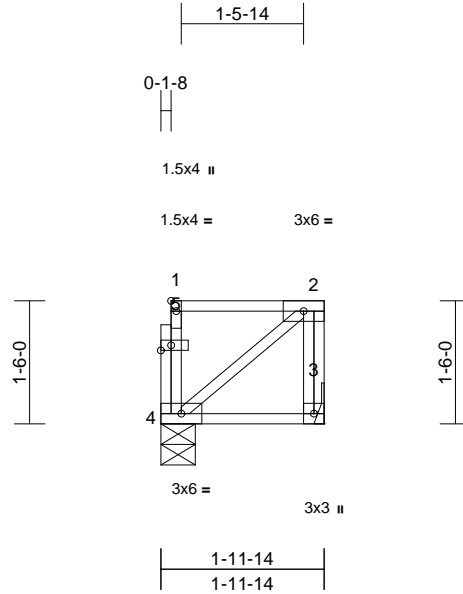
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F79	Floor	1	1	I58528017
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:37  
ID:dbQAlFubLnEPTzpSmMw5YzIGMO-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i

Page: 1



Scale = 1:28.1

Plate Offsets (X, Y): [1:Edge,0-0-12], [5:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	0.00	3-4	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 16 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
1-11-14 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 3= Mechanical, 4=0-5-0  
Max Grav 3=110 (LC 1), 4=103 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-4=-95/0, 2-3=-99/0, 1-2=-4/0  
BOT CHORD 3-4=0/0  
WEBS 2-4=0/6

#### NOTES

- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

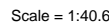
ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:38 Page: 1  
ID:82EfErrebLmR5GPHQjpmcPzIGNk-RfC?PsB70Hq3NSqPqnL8w3uITXbGKWrCDoi7J4zJC?f



[1:Edge,0-4-8], [1:0-1-8,0-0-8], [3:0-4-0,Edge], [6:0-1-8,Edge], [7:0-2-9,Edge], [10:0-4-0,Edge], [12:0-1-8,Edge], [12:0-1-8,0-0-8], [14:0-4-8,Edge], [15:0-3-0,Edge],

Plate Offsets (X, Y): [17:0-3-0,Edge], [20:0-3-8,Edge], [21:0-5-8,Edge]

**LUMBER**  
TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 13=0-5-8, 22=0-2-12  
Max Grav 13=1420 (LC 1), 22=1420 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-1407/0, 12-13=-1404/0, 1-2=-2498/0, 2-3=-2498/0, 3-4=-5913/0, 4-6=-5913/0, 6-9=-6531/0, 9-10=-5972/0, 10-11=-2658/0, 11-12=-2658/0

BOT CHORD 21-22=0/0, 20-21=0/4477, 18-20=0/6531, 17-18=0/6531, 15-17=0/6527, 14-15=0/4598, 13-14=0/0

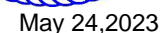
WEBS 6-20=-1103/0, 4-20=-394/0, 3-20=0/1583, 3-21=-2181/0, 2-21=-316/0, 1-21=0/2810, 7-15=-1051/0, 9-15=-384/0, 10-15=0/1515, 10-14=-2138/0, 11-14=-316/0, 12-14=0/2946  
6-18=-56/92, 7-17=-53/99

## NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 22.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

## LOAD CASE(S) Standard



**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH-747.5 (REV. 3/19/2020) BEFORE USE.**

Design valid for use only with MiTEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Code**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



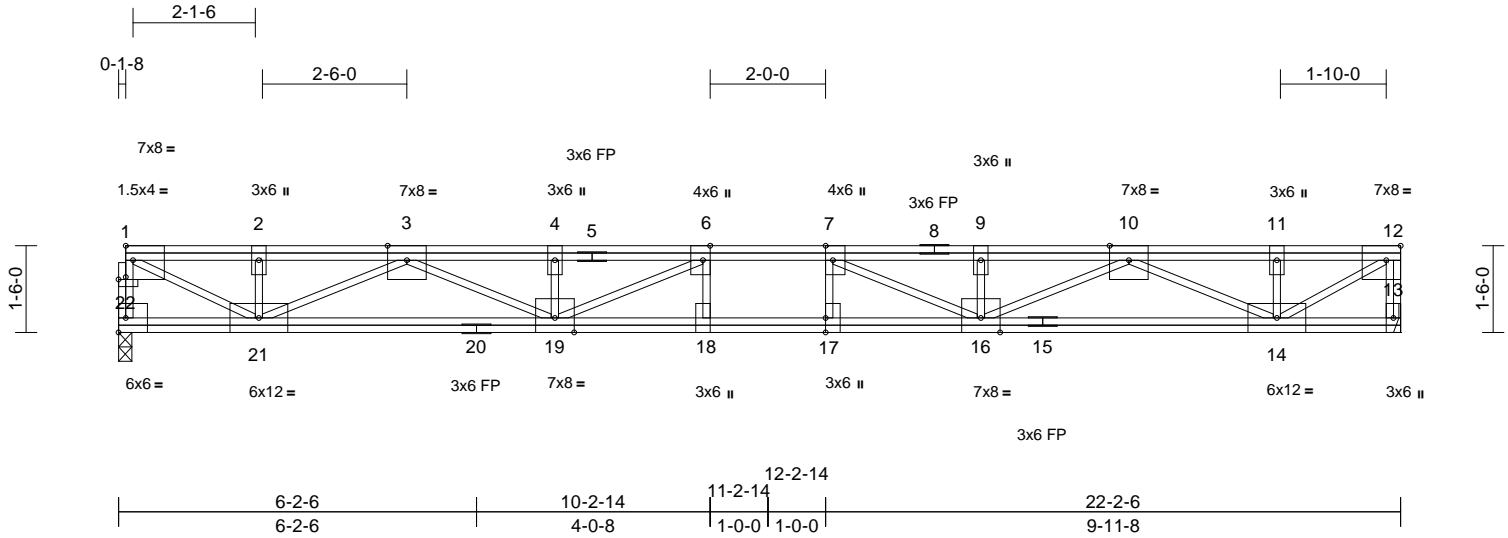
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F81	Floor	11	1	I58528019
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:38

Page: 1

ID:pBSTOu4dl1nIDzT3qjIMKzIGRI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:39.9												
Plate Offsets (X, Y): [1:Edge,0-3-0], [1:0-1-8,0-0-8], [6:0-3-0,Edge], [7:0-3-0,Edge], [12:0-3-0,Edge], [17:0-3-0,Edge]												
<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	60.0	Plate Grip DOL	1.00	TC	0.16	Vert(LL)	-0.22	17-18	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.34	Vert(CT)	-0.35	17-18	>748	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.75	Horz(CT)	0.05	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 177 lb	FT = 20%F, 11%E

**LUMBER**  
TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 13= Mechanical, 22=0-2-12  
Max Grav 13=1390 (LC 1), 22=1390 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-22=-1377/0, 12-13=-1383/0, 1-2=-2340/0, 2-3=-2339/0, 3-4=-5483/0, 4-6=-5483/0, 6-7=-6029/0, 7-9=-5370/0, 9-10=-5370/0, 10-11=-2088/0, 11-12=-2088/0  
BOT CHORD 21-22=0/0, 19-21=0/4203, 18-19=0/6029, 17-18=0/6029, 16-17=0/6029, 14-16=0/4024, 13-14=0/0  
WEBS 6-18=-126/151, 7-17=-106/170, 6-19=-1022/0, 4-19=-357/0, 3-19=0/1425, 3-21=-2073/0, 2-21=-289/0, 1-21=0/2651, 7-16=-1111/0, 9-16=-349/0, 10-16=0/1497, 10-14=-2155/0, 11-14=-291/0, 12-14=0/2456

- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.  
7) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are 3x6 MT20 unless otherwise indicated.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 22.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

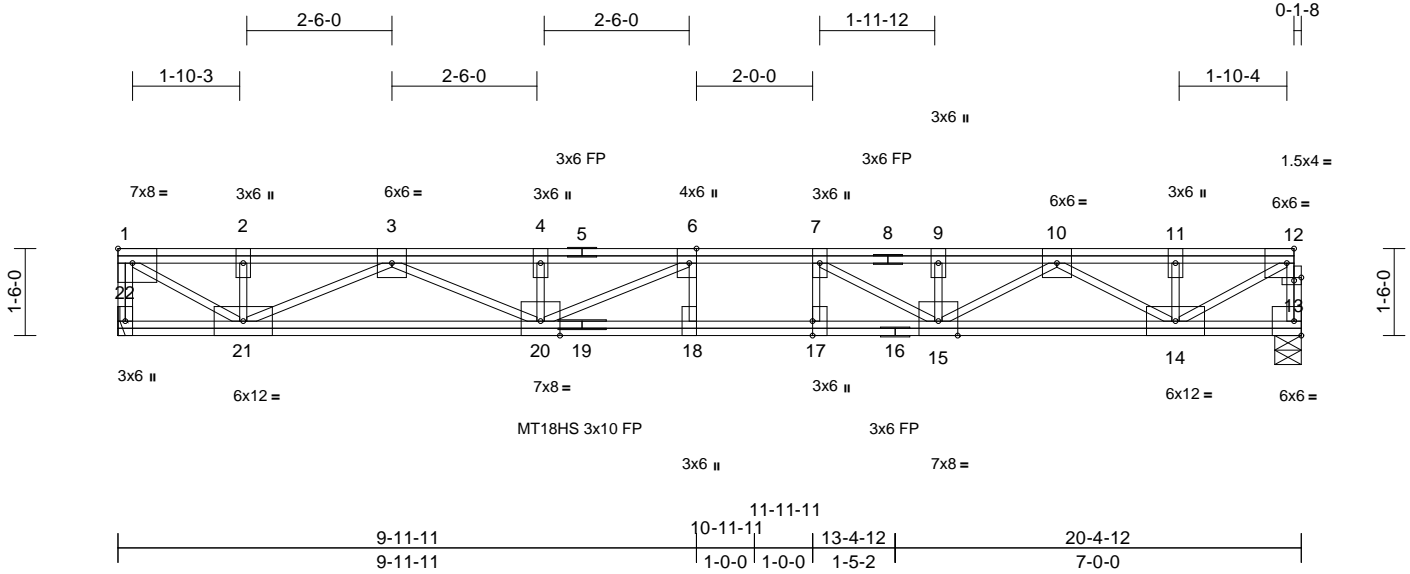
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F82	Floor	8	1	I58528020
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:38

Page: 1

ID:G1NiIA3x4USigJYJ8DbzczlGSc-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:39.7

Plate Offsets (X, Y): [1:Edge,0-3-0], [6:0-3-0,Edge], [12:0-1-8,Edge], [12:0-1-8,0-0-10], [17:0-3-0,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.16	Vert(LL)	-0.17	18-20	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.32	Vert(CT)	-0.26	18-20	>915	720	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.63	Horz(CT)	0.04	13	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 164 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 13=0-5-8, 22= Mechanical  
 Max Grav 13=1276 (LC 1), 22=1276 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-22=-1267/0, 12-13=-1263/0, 1-2=-1914/0, 2-3=-1914/0, 3-4=-4747/0, 4-6=-4747/0, 6-7=-5049/0, 7-9=-4337/0, 9-10=-4337/0, 10-11=-1899/0, 11-12=-1900/0  
 BOT CHORD 21-22=0/0, 20-21=0/3618, 18-20=0/5049, 17-18=0/5049, 15-17=0/5049, 14-15=0/3313, 13-14=0/0  
 WEBS 6-20=-760/124, 4-20=-366/0, 3-20=0/1255, 3-21=-1896/0, 2-21=-292/0, 1-21=0/2247, 7-15=-1110/0, 9-15=-267/39, 10-15=0/1200, 10-14=-1658/0, 11-14=-234/0, 12-14=0/2213, 6-18=-152/92, 7-17=-58/215

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 3x6 MT20 unless otherwise indicated.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



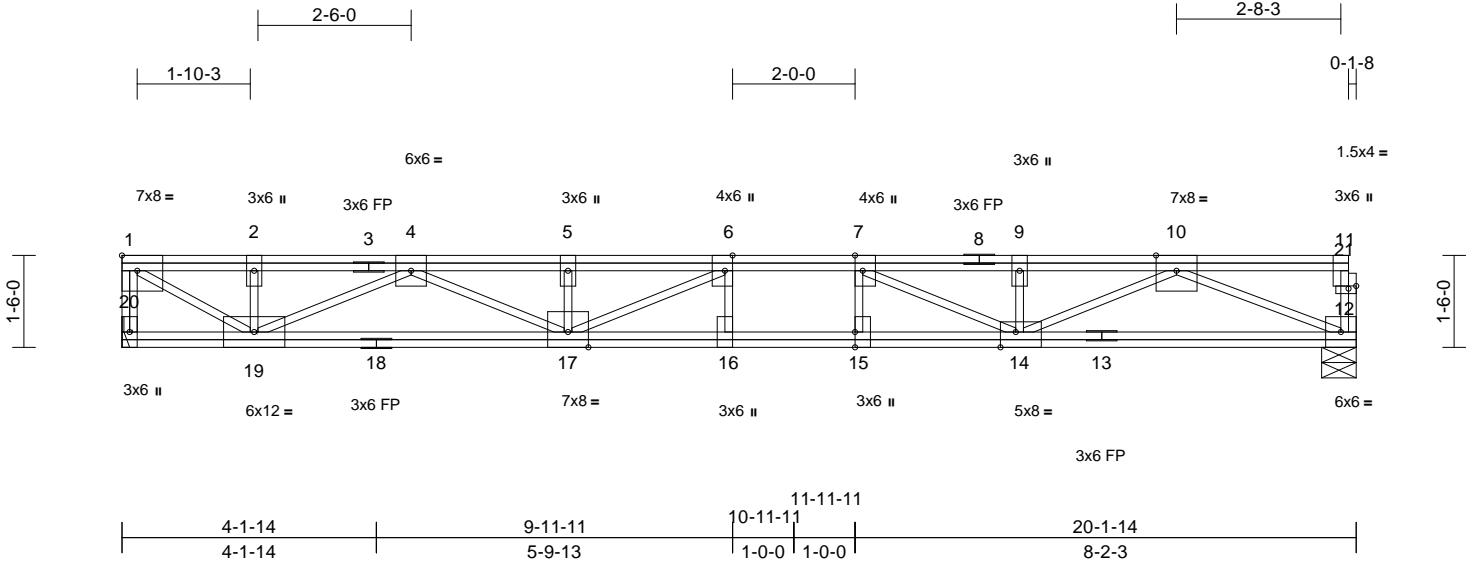
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F83	Floor	1	1	158528021
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:39  
ID:9X5o1jvn8VpYcJ3quyUYxtzIGSp-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?i

Page: 1



Scale = 1:37.6

Plate Offsets (X, Y): [1:Edge,0-3-0], [6:0-3-0,Edge], [7:0-3-0,Edge], [14:0-3-0,Edge], [15:0-3-0,Edge], [21:0-1-8,0-0-8]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.16	Vert(LL)	-0.17	16-17	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.33	Vert(CT)	-0.26	16-17	>906	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.03	12	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 160 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 12=0-6-12, 20= Mechanical  
Max Grav 12=1257 (LC 1), 20=1257 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-20=-1247/0, 11-12=-134/0, 1-2=-1883/0,  
2-4=-1883/0, 4-5=-4641/0, 5-6=-4641/0,  
6-7=-4885/0, 7-9=-3887/0, 9-10=-3887/0,  
10-11=0/0

BOT CHORD 19-20=0/0, 17-19=0/3548, 16-17=0/4885,  
15-16=0/4885, 14-15=0/4885, 12-14=0/2491

WEBS 6-16=-164/84, 7-15=-25/216, 6-17=-717/175,  
5-17=-372/0, 4-17=0/1215, 4-19=-1853/0,  
2-19=-293/0, 1-19=0/2210, 7-14=-1304/0,  
9-14=-316/0, 10-14=0/1556, 10-12=-2690/0

#### NOTES

- Unbalanced floor live loads have been considered for this design.
- All plates are 3x6 MT20 unless otherwise indicated.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:39 Page: 1  
ID:0i4LnAc61pq56Te0wCXhQbzIGTC-RfC?PsB70Ha3NSaPqnL8w3ulTXhGKWrCDoi7J4zJC?i

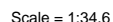


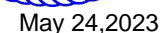
Plate Offsets (X, Y): [1:Edge,0-3-0], [6:0-3-0,Edge], [7:0-3-0,Edge], [13:0-2-12,Edge], [15:0-3-0,Edge], [21:0-1-8,0-0-8]

## LUMBER

## BRACING

## NOTES

- LOAD CASE(S) Standard



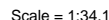
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITER REFERENCE PAGE MH-747.5 (REV. 3/19/2020) BEFORE USE.**

Design valid for use only with MiTEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Code**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:39 Page: 1  
ID:1U0AfLIC2uDT5znda8XXzzlGTY-RfC?PsB70Hq3NSqPanL8w3uITxbGKWRCDoi7J4zJC?f



Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.20	Vert(LL)	-0.13	15-16	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.34	Vert(CT)	-0.20	15-16	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.62	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 140 lb	FT = 20%F, 11%E

TOP CHORD	2x4 SP 2400F 2.0E(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**FORCES** (lb) - Maximum Compression/Maximum Tension

BOT CHORD 18-19=0/0, 16-18=0/2946, 15-16=0/3463,  
14-15=0/3463. 12-14=0/3463. 11-12=0/0

WEBS 6-15=-240/0, 7-14=0/296, 6-16=-248/531,  
5-16=-404/0, 4-16=0/873, 4-18=-1485/0,  
2-18=-294/0, 1-18=0/1892, 7-12=-1660/0,  
9-12=-313/19, 10-12=0/2180

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x6 MT20 unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION. Do not erect truss backwards.

A circular professional engineer seal for the State of Missouri. The outer ring contains the text "STATE OF MISSOURI" at the top and "PROFESSIONAL ENGINEER" at the bottom, separated by two stars. The inner circle contains the name "NATHANIEL FOX" at the top, the word "ENGINEER" in the middle, and the license number "PE-2022042259" at the bottom. A red ink signature, "Nathaniel Fox", is written across the center of the seal.

 **WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

**WARNING – Velly design parameters are listed below and included with the key reference to AISC M14-15 167, § 9.5.2020 by ONE USE.**  
Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for the building design component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



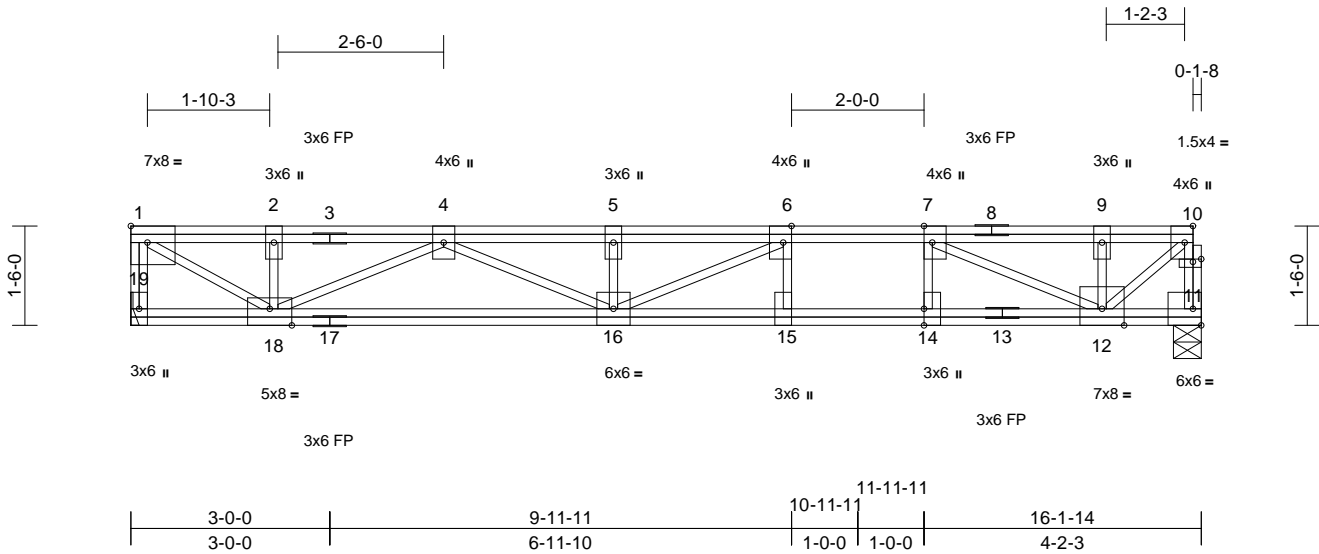
16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
P210577 - Floor	F86	Floor	1	1	I58528024

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:39  
ID:ktly7R2FshtdbP7ADYiuZvzIGTw-RfC?PsB70Hq3NSgPqnL8w3uITxbGKwvRCDoi7J4zJC?f

Page: 1



Scale = 1:34.8

Plate Offsets (X, Y): [1:Edge,0-3-0], [6:0-3-0,Edge], [7:0-3-0,Edge], [10:0-3-0,Edge], [10:0-1-8,0-0-8], [14:0-3-0,Edge], [18:0-4-0,Edge]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.23	Vert(LL)	-0.11	15-16	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.34	Vert(CT)	-0.18	15-16	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.02	11	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S								
											Weight: 130 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
bracing.

REACTIONS (size) 11=0-5-0, 19= Mechanical  
Max Grav 11=1007 (LC 1), 19=1007 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-19=-995/0, 10-11=-967/0, 1-2=-1473/0,  
2-4=-1473/0, 4-5=-3265/0, 5-6=-3265/0,  
6-7=-2737/0, 7-9=-980/0, 9-10=-981/0

BOT CHORD 18-19=0/0, 16-18=0/2638, 15-16=0/2737,  
14-15=0/2737, 12-14=0/2737, 11-12=0/0

WEBS 6-15=-281/0, 7-14=0/339, 6-16=-24/731,  
5-16=-422/0, 4-16=0/698, 4-18=-1296/0,  
2-18=-294/0, 1-18=0/1729, 7-12=-1946/0,  
9-12=-216/78, 10-12=0/1316

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x6 MT20 unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:40 Page: 1  
ID:MHKvgsI73oQoFvScSZHpLzIGVb-RfC?PsB70Ha3NSaPanL8w3uITxbGKWrCDoi7J4zJC?f



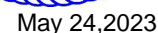
Plate Offsets (X, Y): [1:Edge,0-3-0], [5:0-3-0,Edge], [6:0-1-8,Edge], [9:0-3-0,Edge], [14:0-1-8,0-0-8]

LUMBER

## BRACING

## NOTES

- LOAD CASE(S) Standard



**WARNING:** Velly design parameters are listed below and included with the key reference to AISC M14-15 167, § 9.5.2020 by ONE USE. Design valid for use only with MITEK® connectors. This design is based only upon parameters shown, and is for the building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:40 Page: 1  
ID: jzccz9lcc7tVp6XII24 EpzlGVn-RfC?PsB70Hg3NSaPqnL8w3u1TXbGKWRcD0j7J4zJC?f



Plate Offsets (X, Y): [5:0-1-8.Edge], [6:0-3-0.Edge], [8:Edge,0-1-8], [14:0-1-8,0-0-8]

LUMBER

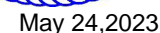
## BRACING

WEBS 5-10=-111/0, 6-9=0/203, 5-11=0/1110,  
4-11=-560/0, 3-11=0/376, 3-12=-845/0,  
2-12=-310/0, 1-12=0/1378. 6-8=-1806/0

## NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 4) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 5) **CAUTION. Do not erect truss backwards.**

LOAD CASE(S) Standard



**WARNING – Velly design parameters are listed below and included with the key reference to AISC M14-15 16f, 3f, 9f, 10f, 11f, 12f, 13f, 14f, 15f, 16f, 17f, 18f, 19f, 20f, 21f, 22f, 23f, 24f, 25f, 26f, 27f, 28f, 29f, 30f, 31f, 32f, 33f, 34f, 35f, 36f, 37f, 38f, 39f, 40f, 41f, 42f, 43f, 44f, 45f, 46f, 47f, 48f, 49f, 50f, 51f, 52f, 53f, 54f, 55f, 56f, 57f, 58f, 59f, 60f, 61f, 62f, 63f, 64f, 65f, 66f, 67f, 68f, 69f, 70f, 71f, 72f, 73f, 74f, 75f, 76f, 77f, 78f, 79f, 80f, 81f, 82f, 83f, 84f, 85f, 86f, 87f, 88f, 89f, 90f, 91f, 92f, 93f, 94f, 95f, 96f, 97f, 98f, 99f, 100f, 101f, 102f, 103f, 104f, 105f, 106f, 107f, 108f, 109f, 110f, 111f, 112f, 113f, 114f, 115f, 116f, 117f, 118f, 119f, 120f, 121f, 122f, 123f, 124f, 125f, 126f, 127f, 128f, 129f, 130f, 131f, 132f, 133f, 134f, 135f, 136f, 137f, 138f, 139f, 140f, 141f, 142f, 143f, 144f, 145f, 146f, 147f, 148f, 149f, 150f, 151f, 152f, 153f, 154f, 155f, 156f, 157f, 158f, 159f, 160f, 161f, 162f, 163f, 164f, 165f, 166f, 167f, 168f, 169f, 170f, 171f, 172f, 173f, 174f, 175f, 176f, 177f, 178f, 179f, 180f, 181f, 182f, 183f, 184f, 185f, 186f, 187f, 188f, 189f, 190f, 191f, 192f, 193f, 194f, 195f, 196f, 197f, 198f, 199f, 200f, 201f, 202f, 203f, 204f, 205f, 206f, 207f, 208f, 209f, 210f, 211f, 212f, 213f, 214f, 215f, 216f, 217f, 218f, 219f, 220f, 221f, 222f, 223f, 224f, 225f, 226f, 227f, 228f, 229f, 230f, 231f, 232f, 233f, 234f, 235f, 236f, 237f, 238f, 239f, 240f, 241f, 242f, 243f, 244f, 245f, 246f, 247f, 248f, 249f, 250f, 251f, 252f, 253f, 254f, 255f, 256f, 257f, 258f, 259f, 260f, 261f, 262f, 263f, 264f, 265f, 266f, 267f, 268f, 269f, 270f, 271f, 272f, 273f, 274f, 275f, 276f, 277f, 278f, 279f, 280f, 281f, 282f, 283f, 284f, 285f, 286f, 287f, 288f, 289f, 290f, 291f, 292f, 293f, 294f, 295f, 296f, 297f, 298f, 299f, 300f, 301f, 302f, 303f, 304f, 305f, 306f, 307f, 308f, 309f, 310f, 311f, 312f, 313f, 314f, 315f, 316f, 317f, 318f, 319f, 320f, 321f, 322f, 323f, 324f, 325f, 326f, 327f, 328f, 329f, 330f, 331f, 332f, 333f, 334f, 335f, 336f, 337f, 338f, 339f, 340f, 341f, 342f, 343f, 344f, 345f, 346f, 347f, 348f, 349f, 350f, 351f, 352f, 353f, 354f, 355f, 356f, 357f, 358f, 359f, 360f, 361f, 362f, 363f, 364f, 365f, 366f, 367f, 368f, 369f, 370f, 371f, 372f, 373f, 374f, 375f, 376f, 377f, 378f, 379f, 380f, 381f, 382f, 383f, 384f, 385f, 386f, 387f, 388f, 389f, 390f, 391f, 392f, 393f, 394f, 395f, 396f, 397f, 398f, 399f, 400f, 401f, 402f, 403f, 404f, 405f, 406f, 407f, 408f, 409f, 410f, 411f, 412f, 413f, 414f, 415f, 416f, 417f, 418f, 419f, 420f, 421f, 422f, 423f, 424f, 425f, 426f, 427f, 428f, 429f, 430f, 431f, 432f, 433f, 434f, 435f, 436f, 437f, 438f, 439f, 440f, 441f, 442f, 443f, 444f, 445f, 446f, 447f, 448f, 449f, 450f, 451f, 452f, 453f, 454f, 455f, 456f, 457f, 458f, 459f, 460f, 461f, 462f, 463f, 464f, 465f, 466f, 467f, 468f, 469f, 470f, 471f, 472f, 473f, 474f, 475f, 476f, 477f, 478f, 479f, 480f, 481f, 482f, 483f, 484f, 485f, 486f, 487f, 488f, 489f, 490f, 491f, 492f, 493f, 494f, 495f, 496f, 497f, 498f, 499f, 500f, 501f, 502f, 503f, 504f, 505f, 506f, 507f, 508f, 509f, 510f, 511f, 512f, 513f, 514f, 515f, 516f, 517f, 518f, 519f, 520f, 521f, 522f, 523f, 524f, 525f, 526f, 527f, 528f, 529f, 530f, 531f, 532f, 533f, 534f, 535f, 536f, 537f, 538f, 539f, 540f, 541f, 542f, 543f, 544f, 545f, 546f, 547f, 548f, 549f, 550f, 551f, 552f, 553f, 554f, 555f, 556f, 557f, 558f, 559f, 560f, 561f, 562f, 563f, 564f, 565f, 566f, 567f, 568f, 569f, 570f, 571f, 572f, 573f, 574f, 575f, 576f, 577f, 578f, 579f, 580f, 581f, 582f, 583f, 584f, 585f, 586f, 587f, 588f, 589f, 590f, 591f, 592f, 593f, 594f, 595f, 596f, 597f, 598f, 599f, 600f, 601f, 602f, 603f, 604f, 605f, 606f, 607f, 608f, 609f, 610f, 611f, 612f, 613f, 614f, 615f, 616f, 617f, 618f, 619f, 620f, 621f, 622f, 623f, 624f, 625f, 626f, 627f, 628f, 629f, 630f, 631f, 632f, 633f, 634f, 635f, 636f, 637f, 638f, 639f, 640f, 641f, 642f, 643f, 644f, 645f, 646f, 647f, 648f, 649f, 650f, 651f, 652f, 653f, 654f, 655f, 656f, 657f, 658f, 659f, 660f, 661f, 662f, 663f, 664f, 665f, 666f, 667f, 668f, 669f, 670f, 671f, 672f, 673f, 674f, 675f, 676f, 677f, 678f, 679f, 680f, 681f, 682f, 683f, 684f, 685f, 686f, 687f, 688f, 689f, 690f, 691f, 692f, 693f, 694f, 695f, 696f, 697f, 698f, 699f, 700f**

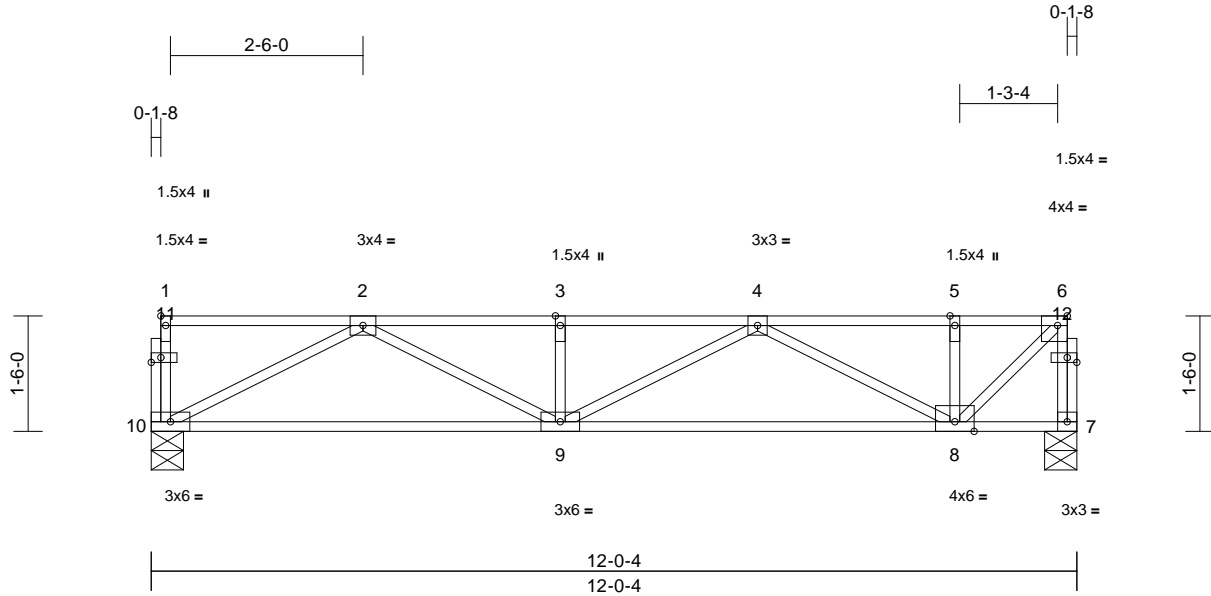


Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F89	Floor	1	1	Job Reference (optional)
					I58528027

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:40  
ID:FWW9NbOJ7bc3fL9riGlmV0zlGW3-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:29.9

Plate Offsets (X, Y): [1:Edge,0-0-12], [6:0-1-8,Edge], [11:0-1-8,0-0-12], [12:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	-0.04	8-9	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.22	Vert(CT)	-0.09	9-10	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.02	7	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 65 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
6'-0" oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10'-0" oc  
bracing.

REACTIONS (size) 7=0-5-0, 10=0-5-0  
Max Grav 7=738 (LC 1), 10=738 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-10=-116/0, 6-7=-742/0, 1-2=-5/0,  
2-3=-1635/0, 3-4=-1635/0, 4-5=-740/0,  
5-6=-740/0

BOT CHORD 9-10=0/1140, 8-9=0/1468, 7-8=0/34

WEBS 2-10=-1281/0, 2-9=0/562, 3-9=-277/0,  
4-9=0/190, 4-8=-826/0, 5-8=-252/0,  
6-8=0/991

#### NOTES

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10'-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601  
**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**



16023 Swingley Ridge Rd  
Chesterfield, MO 63017



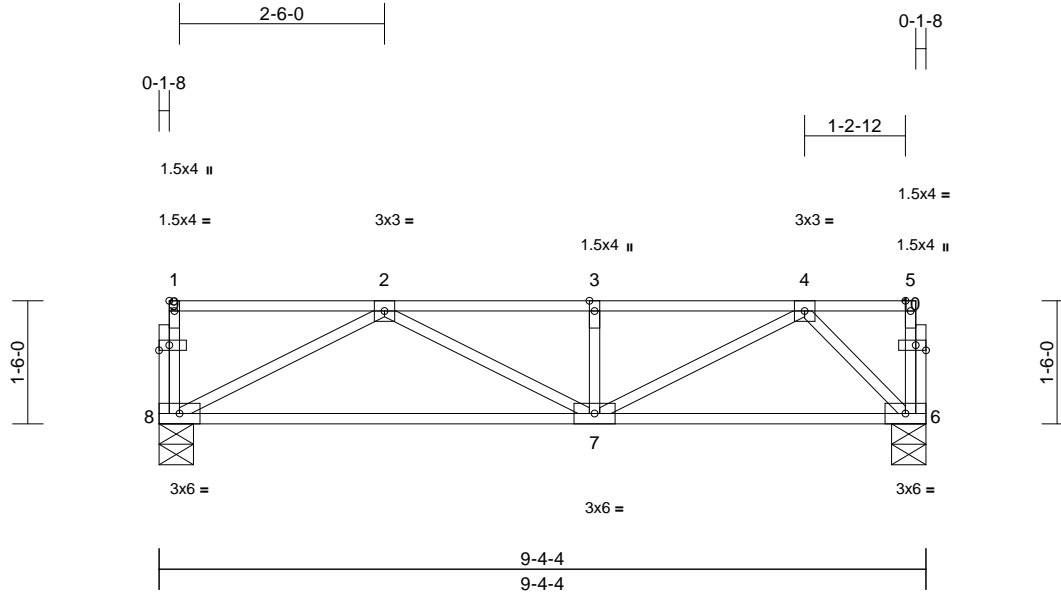
Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
P210577 - Floor	F90	Floor	1	1	I58528028

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:41

Page: 1

ID:qxrlaMRqgEUouQG08C3uNzIGW6-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWRCDoi7J4zJC?f



Scale = 1:28.1

Plate Offsets (X, Y): [1:Edge,0-0-12], [9:0-1-8,0-0-12], [10:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	-0.02	7-8	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.18	Vert(CT)	-0.07	7-8	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.18	Horz(CT)	0.01	6	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 51 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD	2x4 SP 2400F 2.0E(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size)	6=0-5-0, 8=0-5-0
Max Grav	6=570 (LC 1), 8=570 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-8=-116/0, 5-6=-35/0, 1-2=-5/0, 2-3=-1001/0, 3-4=-1001/0, 4-5=-2/0
BOT CHORD	7-8=0/817, 6-7=0/511
WEBS	2-8=-916/0, 2-7=0/209, 3-7=-286/0, 4-7=0/556, 4-6=-725/0

#### NOTES

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

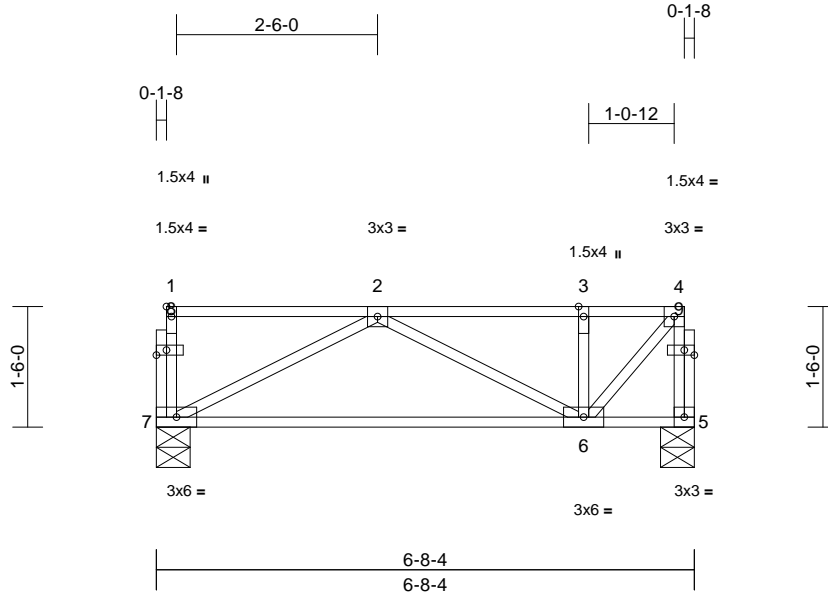
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F91	Floor	1	1	Job Reference (optional)
					I58528029

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:41

Page: 1

ID:Uz28isII?7cBh7YJEbcuBKzIGWB-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



Scale = 1:28.6

Plate Offsets (X, Y): [1:Edge,0-0-12], [8:0-1-8,0-0-12], [9:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	0.00	6-7	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.15	Vert(CT)	-0.06	6-7	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							Weight: 39 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 5=0-5-0, 7=0-5-0  
 Max Grav 5=401 (LC 1), 7=401 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-7=-114/0, 4-5=-420/0, 1-2=-5/0, 2-3=-353/0,  
 3-4=-353/0

BOT CHORD 6-7=0/499, 5-6=0/19  
 WEBS 2-7=-557/0, 2-6=-166/0, 3-6=-231/0,  
 4-6=0/510

#### NOTES

- 1) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 2) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



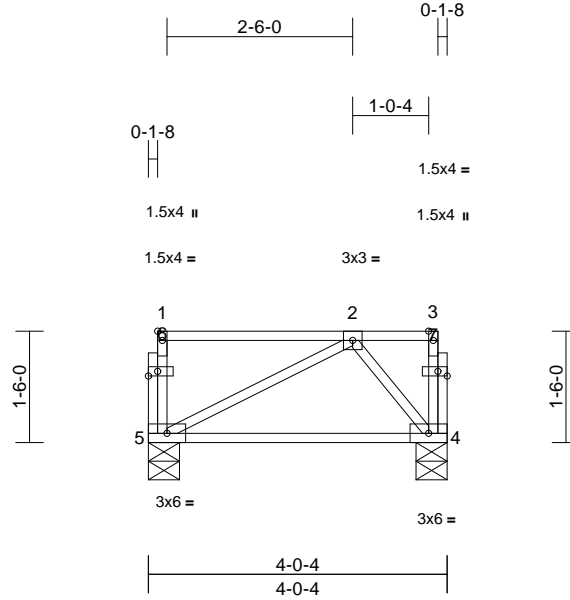
16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F92	Floor	1	1	I58528030
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:41  
ID:fpgsRpDXQHr2zC49tKVUx3zIGWH-RIC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f

Page: 1



Scale = 1:31

Plate Offsets (X, Y): [1:Edge,0-0-12], [6:0-1-8,0-0-12], [7:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.18	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	25.0	Lumber DOL	1.00	BC	0.09	Vert(CT)	-0.03	4-5	>999	720	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	4	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-P							
Weight: 25 lb FT = 20%F, 11%E											

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
BOT CHORD 2x4 SP 2400F 2.0E(flat)  
WEBS 2x4 SP No.2(flat)  
OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 4-0-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4=0-5-0, 5=0-5-0  
Max Grav 4=232 (LC 1), 5=232 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-5=-119/0, 3-4=0/2, 1-2=-5/0, 2-3=0/0  
BOT CHORD 4-5=0/174  
WEBS 2-5=-190/0, 2-4=-271/0

#### NOTES

- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

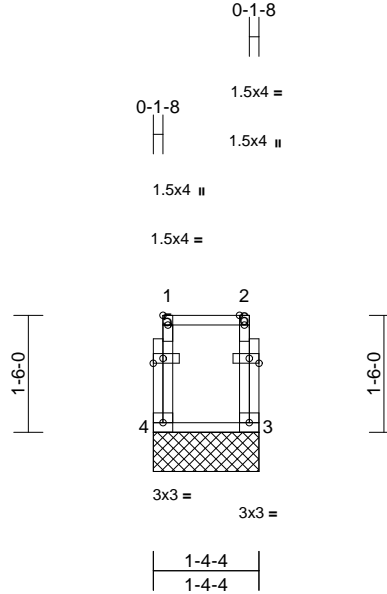
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F93	Floor Supported Gable	1	1	I58528031
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:41

Page: 1

ID:MfAxG\_W94TXH0Hf?U8SubqzIGXB-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrcDoi7J4zJC?f



Scale = 1:29.5

Plate Offsets (X, Y): [1:Edge,0-0-12], [5:0-1-8,0-0-12], [6:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	25.0	Lumber DOL	1.00	BC	0.00	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 11 lb FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 1-4-4 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 3=1-4-4, 4=1-4-4  
 Max Grav 3=63 (LC 1), 4=63 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-4=-56/0, 2-3=-56/0, 1-2=-8/0  
 BOT CHORD 3-4=0/8

#### NOTES

- 1) N/A
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017

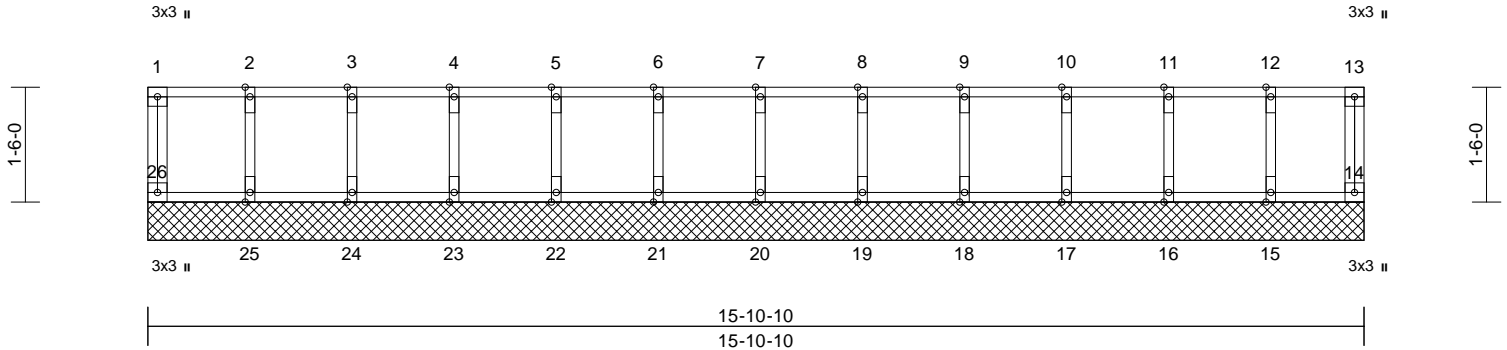
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F94	Floor Supported Gable	1	1	158528032
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:41

Page: 1

ID:QNCm7vPiDiAVGlypKY\_TRzIGqi-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrCDoi7J4zJC?f



Scale = 1:30.1

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.04	Vert(LL)	n/a	-	n/a	999	MT20
TCDL	25.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	14	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							
Weight: 75 lb FT = 20%F, 11%E											

#### LUMBER

TOP CHORD	2x4 SP 2400F 2.0E(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)

#### BRACING

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

#### REACTIONS

(size)	14=15-10-10, 15=15-10-10, 16=15-10-10, 17=15-10-10, 18=15-10-10, 19=15-10-10, 20=15-10-10, 21=15-10-10, 22=15-10-10, 23=15-10-10, 24=15-10-10, 25=15-10-10, 26=15-10-10
Max Grav	14=65 (LC 1), 15=156 (LC 1), 16=172 (LC 1), 17=168 (LC 1), 18=169 (LC 1), 19=169 (LC 1), 20=169 (LC 1), 21=169 (LC 1), 22=169 (LC 1), 23=169 (LC 1), 24=170 (LC 1), 25=166 (LC 1), 26=71 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-26=-63/0, 13-14=-56/0, 1-2=-8/0, 2-3=-8/0, 3-4=-8/0, 4-5=-8/0, 5-6=-8/0, 6-7=-8/0, 7-8=-8/0, 8-9=-8/0, 9-10=-8/0, 10-11=-8/0, 11-12=-8/0, 12-13=-8/0
BOT CHORD	25-26=0/8, 24-25=0/8, 23-24=0/8, 22-23=0/8, 21-22=0/8, 20-21=0/8, 19-20=0/8, 18-19=0/8, 17-18=0/8, 16-17=0/8, 15-16=0/8, 14-15=0/8
WEBS	2-25=-149/0, 3-24=-152/0, 4-23=-151/0, 5-22=-151/0, 6-21=-151/0, 7-20=-151/0, 8-19=-151/0, 9-18=-151/0, 10-17=-150/0, 11-16=-154/0, 12-15=-141/0

#### NOTES

- All plates are 1.5x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.

- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

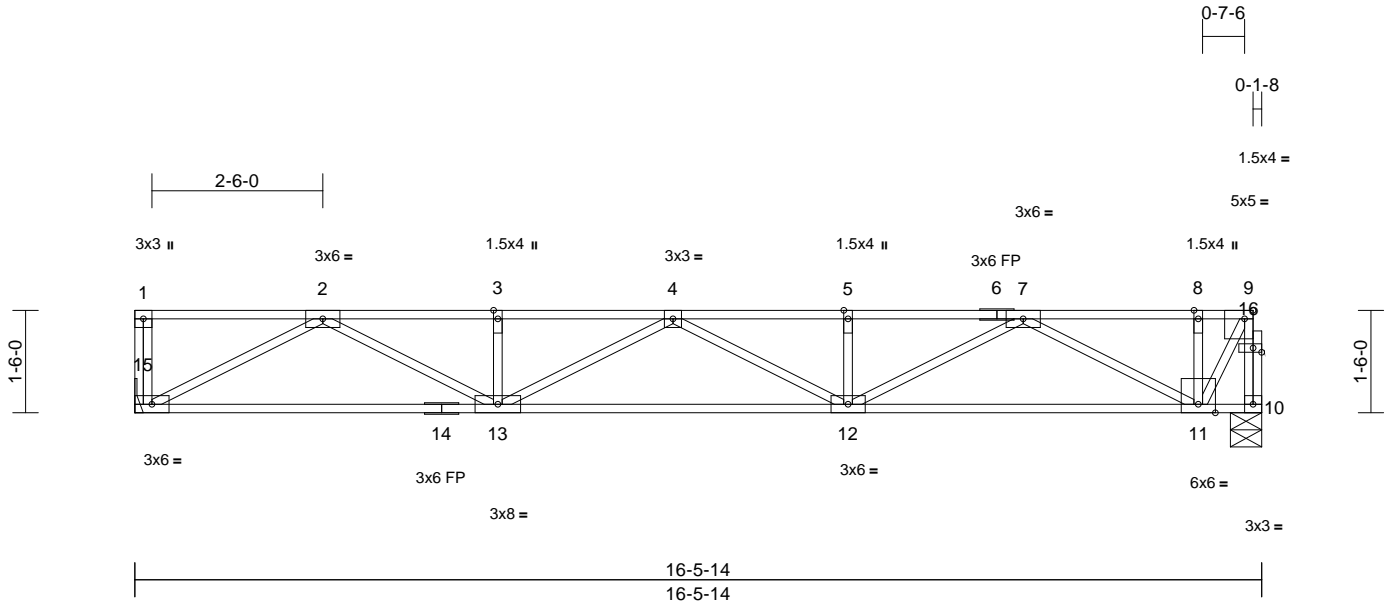
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F95	Floor	11	1	I58528033
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:42

Page: 1

ID:ySApUNbkSdBDbou1lirI6pzIGqS-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?i



Scale = 1:33.7

Plate Offsets (X, Y): [9:0-1-8,Edge], [16:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	60.0	Plate Grip DOL	1.00	TC	0.23	Vert(LL)	-0.11	12-13	>999	720	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.36	Vert(CT)	-0.19	12-13	>999	720		
BCLL	0.0	Rep Stress Incr	YES	WB	0.38	Horz(CT)	0.04	10	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-S							Weight: 89 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or  
 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc  
 bracing.

REACTIONS (size) 10=0-5-8, 15= Mechanical  
 Max Grav 10=1021 (LC 1), 15=1028 (LC 1)

FORCES (lb) - Maximum Compression/Maximum  
 Tension

TOP CHORD 1-15=-120/0, 9-10=-1048/0, 1-2=0/0,  
 2-3=-2699/0, 3-4=-2699/0, 4-5=-2869/0,  
 5-7=-2869/0, 7-8=-624/0, 8-9=-624/0  
 BOT CHORD 13-15=0/1680, 12-13=0/3059, 11-12=0/2024,  
 10-11=0/48  
 WEBS 2-15=-1897/0, 2-13=0/1156, 3-13=-277/0,  
 4-13=-409/0, 4-12=-215/0, 5-12=-286/0,  
 7-12=0/959, 7-11=-1588/0, 8-11=-249/0,  
 9-11=0/1217

#### NOTES

- 1) Refer to girder(s) for truss to truss connections.
- 2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component

Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



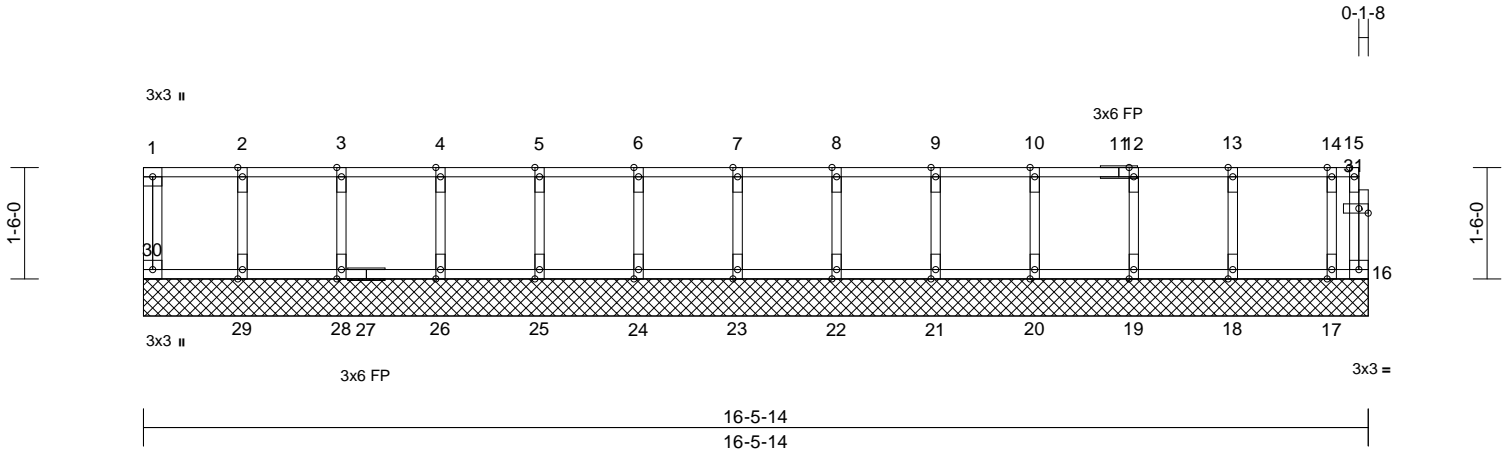
Job	Truss	Truss Type	Qty	Ply	
P210577 - Floor	F96	Floor Supported Gable	1	1	158528034
Job Reference (optional)					

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Tue May 23 16:25:42

Page: 1

ID:UX8srromhYCyWF66h37VmBzIGqC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCD0i7J4zJC?f



Scale = 1:31

Plate Offsets (X, Y): [31:0-1-8,0-0-12]

Loading	(psf)	Spacing	1-4-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	60.0	Plate Grip DOL	1.00	TC	0.04	Vert(LL)	n/a	-	n/a	999	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999	
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	16	n/a	n/a	
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							
										Weight: 78 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP 2400F 2.0E(flat)  
 WEBS 2x4 SP No.2(flat)  
 OTHERS 2x4 SP No.2(flat)

#### BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (size) 16=16-5-14, 17=16-5-14, 18=16-5-14, 19=16-5-14, 20=16-5-14, 21=16-5-14, 22=16-5-14, 23=16-5-14, 24=16-5-14, 25=16-5-14, 26=16-5-14, 28=16-5-14, 29=16-5-14, 30=16-5-14  
 Max Grav 16=6 (LC 1), 17=111 (LC 1), 18=177 (LC 1), 19=167 (LC 1), 20=169 (LC 1), 21=169 (LC 1), 22=169 (LC 1), 23=169 (LC 1), 24=169 (LC 1), 25=169 (LC 1), 26=169 (LC 1), 28=169 (LC 1), 29=169 (LC 1), 30=68 (LC 1)

#### FORCES

(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-30=-61/0, 15-16=0/6, 1-2=-6/0, 2-3=-6/0, 3-4=-6/0, 4-5=-6/0, 5-6=-6/0, 6-7=-6/0, 7-8=-6/0, 8-9=-6/0, 9-10=-6/0, 10-12=-6/0, 12-13=-6/0, 13-14=-6/0, 14-15=-6/0  
 BOT CHORD 29-30=0/6, 28-29=0/6, 26-28=0/6, 25-26=0/6, 24-25=0/6, 23-24=0/6, 22-23=0/6, 21-22=0/6, 20-21=0/6, 19-20=0/6, 18-19=0/6, 17-18=0/6, 16-17=0/6  
 WEBS 2-29=-151/0, 3-28=-152/0, 4-26=-151/0, 5-25=-151/0, 6-24=-151/0, 7-23=-151/0, 8-22=-151/0, 9-21=-151/0, 10-20=-152/0, 12-19=-149/0, 13-18=-158/0, 14-17=-110/0

#### NOTES

- 1) All plates are 1.5x4 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



May 24, 2023

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

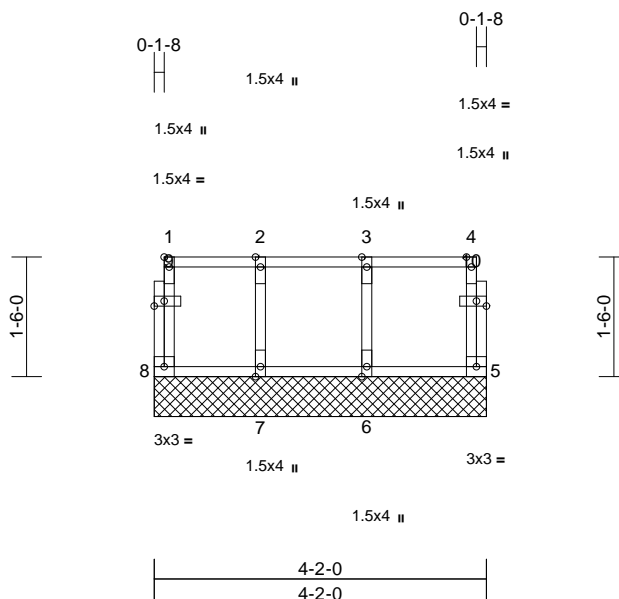
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see

**ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component**

**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
 Chesterfield, MO 63017



Scale = 1:28.9

Plate Offsets (X, Y): [1:Edge,0-0-12], [9:0-1-8,0-0-12], [10:0-1-8,0-0-12]

<b>Loading</b>	(psf)	<b>Spacing</b>	1-4-0	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL	60.0	Plate Grip DOL	1.00	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	25.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2018/TPI2014	Matrix-R							Weight: 23 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD	2x4 SP 2400F 2.0E(flat)
BOT CHORD	2x4 SP 2400F 2.0E(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.2(flat)

## BRACING

TOP CHORD	Structural wood sheathing directly applied or 4-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

## REACTIONS

(size)	5=4-2-0, 6=4-2-0, 7=4-2-0, 8=4-2-0
Max Grav	5=75 (LC 1), 6=180 (LC 1), 7=159 (LC 1), 8=68 (LC 1)

## FORCES

(Ib) - Maximum Compression/Maximum Tension

TOP CHORD 1-8=-59/0, 4-5=-67/0, 1-2=-10/0, 2-3=-10/0,  
3-4=-10/0

BOT CHORD 7-8=0/10, 6-7=0/10, 5-6=0/10  
WEBS 2-7=-145/0, 3-6=-160/0

## NOTES

- 1) All plates are 1.5x4 MT20 unless otherwise indicated.
- 2) Gable requires continuous bottom chord bearing.
- 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- 4) Gable studs spaced at 1-4-0 oc.
- 5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



May 24, 2023



Design valid for use only with MiTEK® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personnel injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Code**

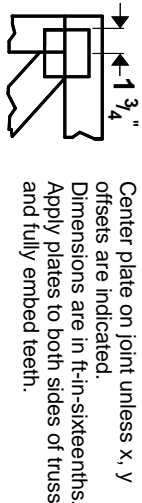
**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



16023 Swingley Ridge Rd  
Chesterfield, MO 63017

# Symbols

## PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.

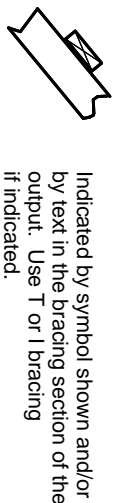
For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

## PLATE SIZE

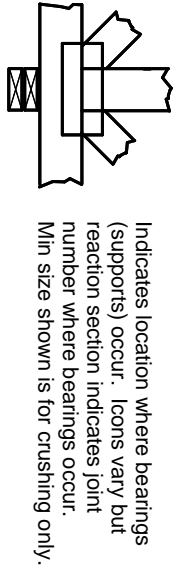
4 X 4

The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



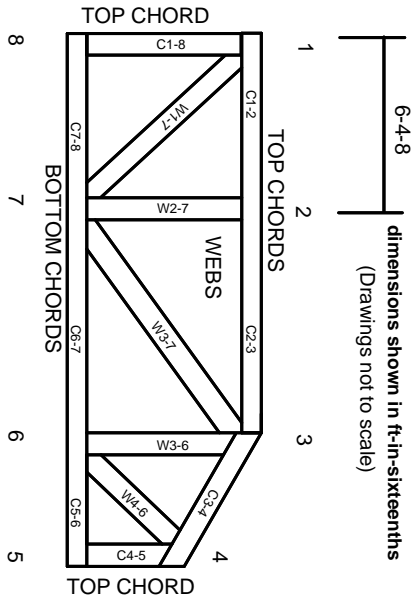
## BEARING



Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**Industry Standards:**  
ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

## PRODUCT CODE APPROVALS

ICC-ES Reports:  
ESR-1311, ESR-1352, ESR1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TP1 1 section 6.3 These truss designs rely on lumber values established by others.

© 2012 MITek® All Rights Reserved



Mitek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

# General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.