

BUILD IN ACCORDANCE WITH  
2018 INTERNATIONAL  
RESIDENTIAL CODE AND  
LOCAL CODES.

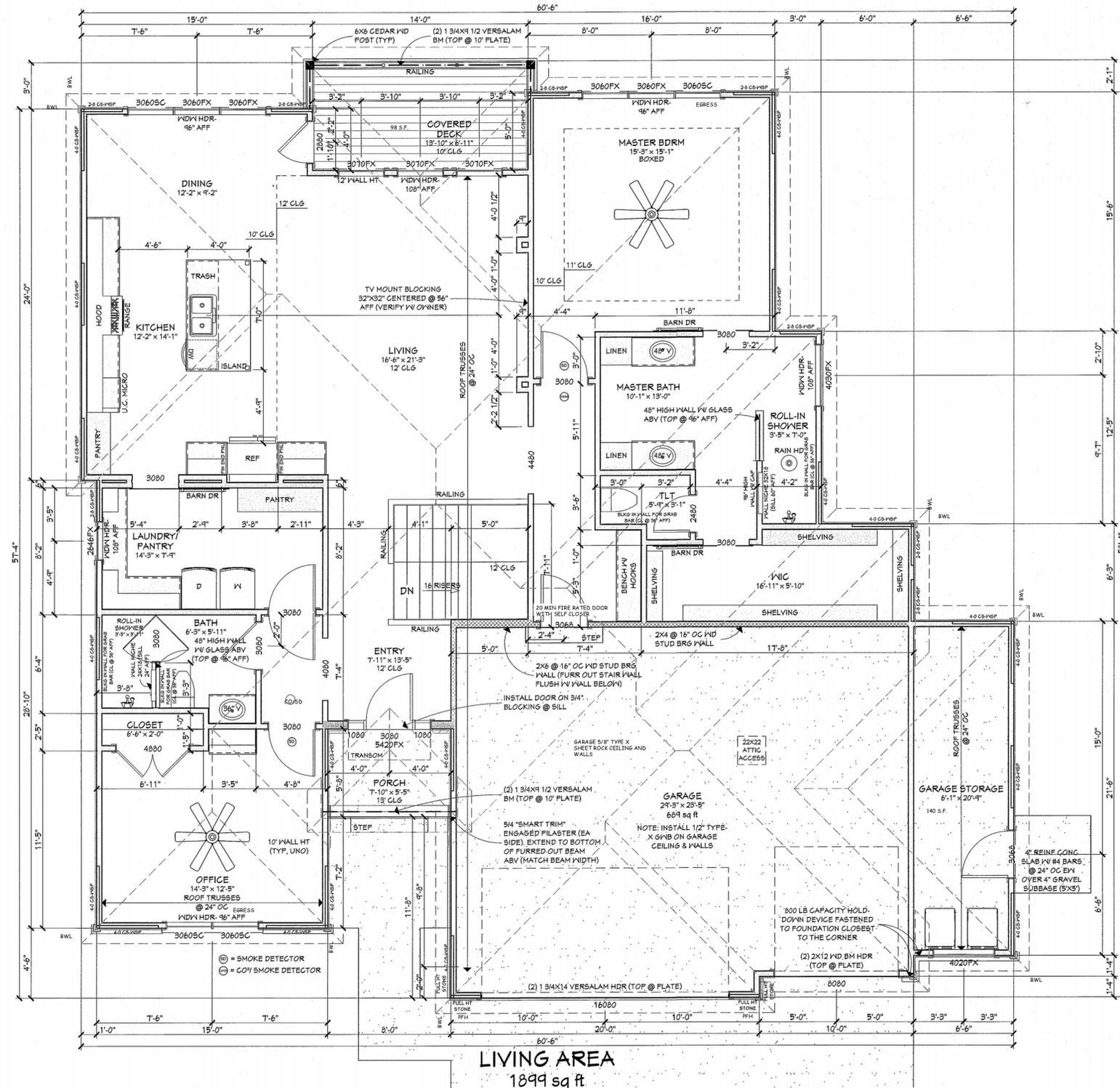


U:\My Documents\Booley Gene\24040 BOSLEY SUBMITTAL layout 11/22/24 165132

**PLAN SERVICES**  
715 SE 4th St.  
Topeka, KS 66607  
P: 785.357.0321  
F: 785.233.4755

These drawings have been prepared by John Roe, to meet top design practices and standards. Although great care has been taken in the design of this structure, the builder is solely responsible to review plans, details and all dimensions in order to insure the drawings are free of errors, omissions, defects and are in code compliance. Consultation with an engineer may be required. Any form of direct reproduction of this drawing is prohibited. All rights reserved.

RELEASE FOR CONSTRUCTION  
AS NOTED FOR PLAN REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
11/26/2024



**LIVING AREA**  
1899 sq ft

**FIRST FLOOR PLAN**  
SCALE: 1/4" = 1'-0"

- GENERAL NOTES:**
1. CEILINGS SHALL BE 10'-1 1/8" UNO.
  2. ROOF TRUSSES (CANTILEVER TYPE) SHALL BE @ 24" OC & DESIGNED BY TRUSS MFR (SEE ROOF PLAN FOR SLOPE).
  3. ROOF OVERHANGS SHALL BE 12" @ GABLES & 12" @ EAVES, UNO.

A New Home For:  
**Trumark Homes**  
Lot 169 Woodside Ridge Reserve- Bosley Residence  
2117 NW O'Brien Rd  
LEE SUMMIT MO

DRAWN  
**J. L. ROE**  
DATE  
11/4/24  
JOB NO.  
242040  
REVISIONS  
11/5/24  
11/12/24

SCALE  
1/4" = 1-0

DATE  
11-20-24

PLAN NO.  
4341

SHEET NO.  
1 OF 5

SHEET  
**1**  
OF 4

Review and Approval  
Structural Only

David Mezger Engineering LLC  
212 NE Circle Dr.  
Kansas City, MO 64116



NOTE: J.L. ROE IS NOT A REGISTERED ARCHITECT

BUILD IN ACCORDANCE WITH  
2018 INTERNATIONAL  
RESIDENTIAL CODE AND  
LOCAL CODES.

**McCray Lumber**  
Serving the Professional Builder

U:\My Documents\Bosley\_Genral\24240\_BOSLEY SUBMITTAL layout - 11/22/24 1:51:57

**PLAN SERVICES**  
715 SE 4th St.  
Topeka, KS 66607  
P: 785.357.0321  
F: 785.233.4755

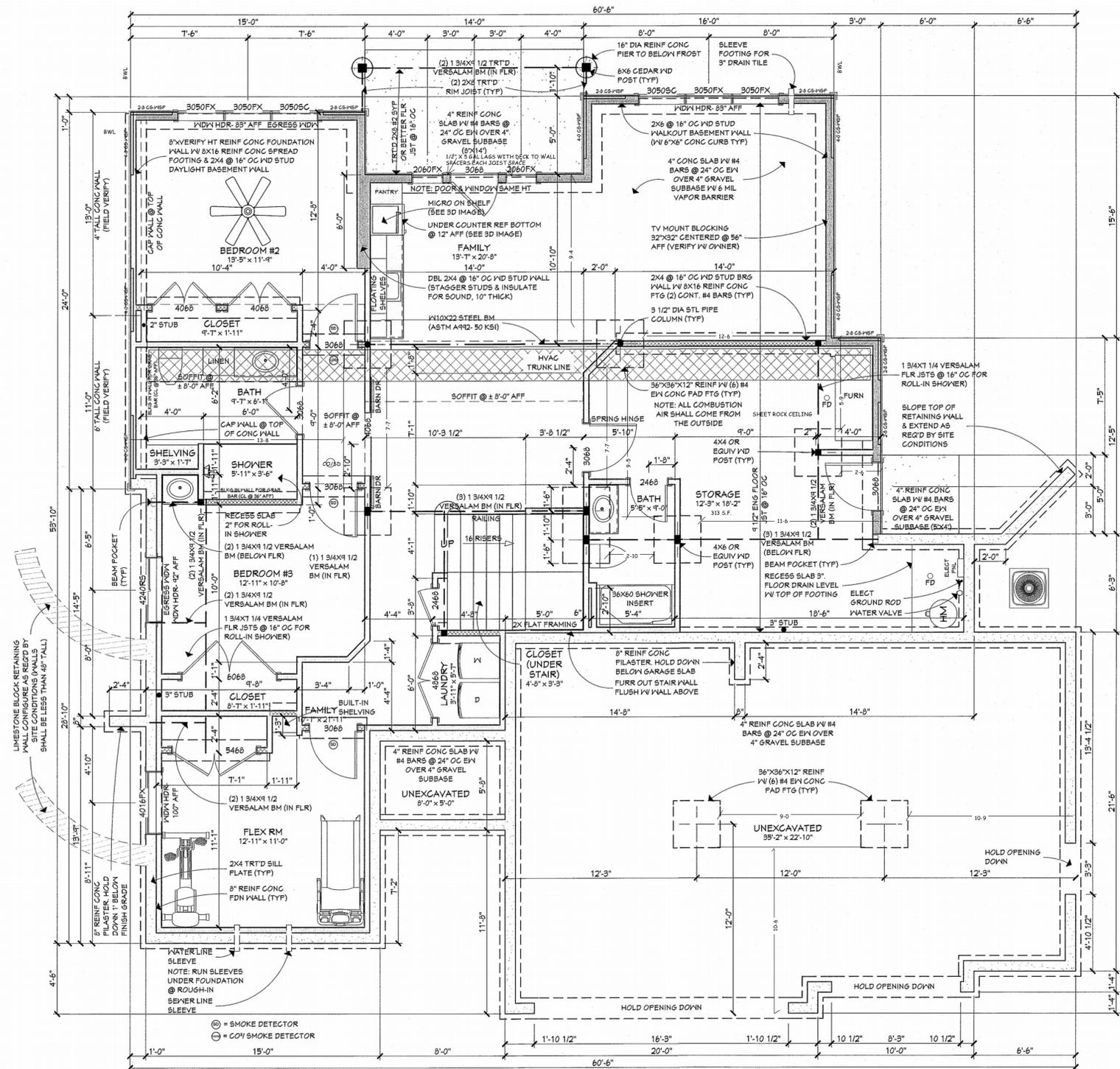
These drawings have been prepared by John Roe, to meet top design practices and standards. Although great care has been taken in the design of this structure, the builder is solely responsible to review plans, details and all dimensions in order to insure the drawings are free of errors, omissions, defects and are in code compliance. Consultation with an engineer may be required. Any form of direct reproduction of this drawing is prohibited. All rights reserved.

A New Home For:  
**Trumark Homes**  
Lot 169 Woodside Ridge Reserve- Bosley Residence  
2117 NW O'Brien Rd  
LEE SUMMIT MO

DRAWN  
**J. L. ROE**  
DATE  
11/4/24  
JOB NO.  
242040  
REVISIONS  
11/5/24  
11/12/24

SHEET  
**2**  
OF 4

NOT FOR CONSTRUCTION  
FOR PLAN REVIEW  
ONLY  
LEE SUMMIT, MISSOURI  
11/26/2024



**LIVING AREA**  
1,322 sq ft

**FOUNDATION PLAN**  
SCALE: 1/4" = 1'-0"

GENERAL NOTES:  
1. FOUNDATION WALLS SHALL BE 9'-0" UNO.

Review and Approval  
Structural Only

David Mezger Engineering LLC  
212 NE Circle Dr.  
Kansas City, MO 64116



SCALE 1/4" = 1-0	PLAN NO. 4341
DATE 11-20-24	SHEET NO. 2 OF 5

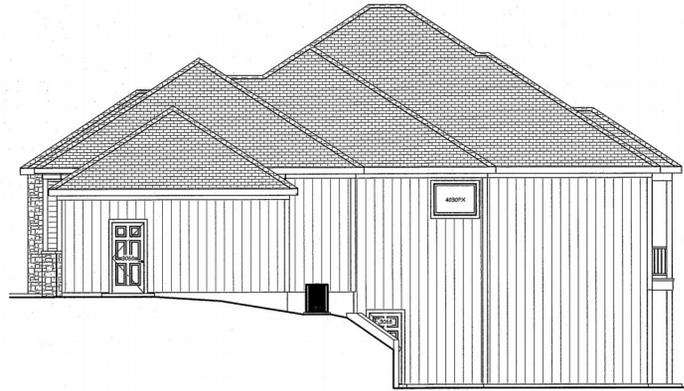
BUILD IN ACCORDANCE WITH  
2018 INTERNATIONAL  
RESIDENTIAL CODE AND  
LOCAL CODES.

**McCray Lumber**  
Serving the Professional Builder

U:\M\J\Documental\Bosley\_Gene\242040\_BOSLEY\_SUBMITTAL\_layout\_11/12/2024\_16:51:39

**PLAN SERVICES**  
715 SE 4th St.  
Topeka, KS 66607  
P: 785.357.0321  
F: 785.233.4755

These drawings have been prepared by John Roe, to meet top design practices and standards. Although great care has been taken in the design of this structure, the builder is solely responsible to review plans, details and all dimensions in order to insure the drawings are free of errors, omissions, defects and are in code compliance. Consultation with an engineer may be required. Any form of direct reproduction of this drawing is prohibited. All rights reserved.



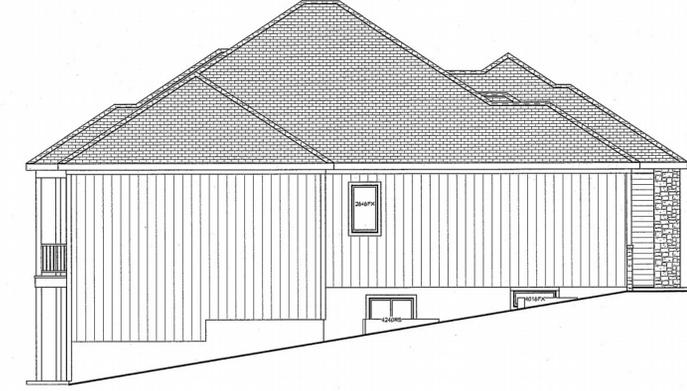
**RIGHT SIDE ELEVATION**  
SCALE: 1/8"=1'-0"

NOTE:  
SIDING ON BACK & SIDES SHALL BE LP SMART SIDING-SHEET SIDING W/ 8" GROOVES



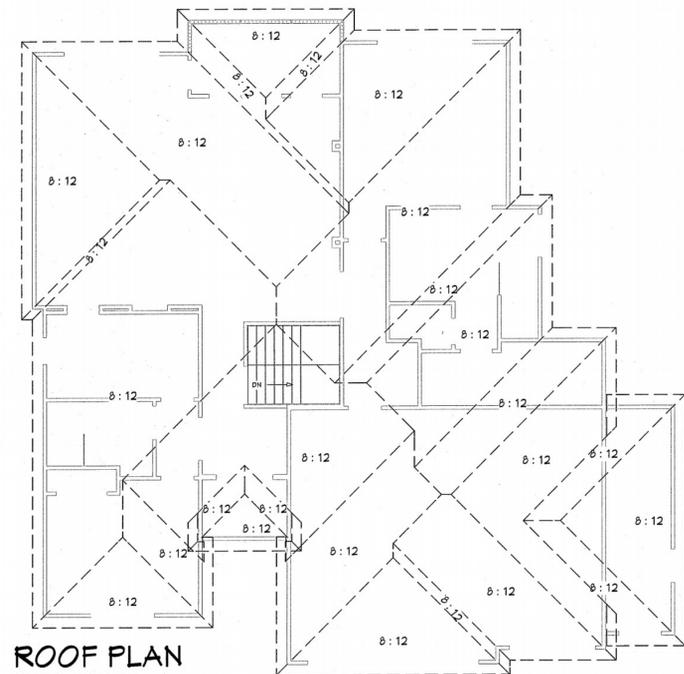
**REAR ELEVATION**  
SCALE: 1/8"=1'-0"

NOTE:  
SIDING ON BACK & SIDES SHALL BE LP SMART SIDING-SHEET SIDING W/ 8" GROOVES



**LEFT SIDE ELEVATION**  
SCALE: 1/8"=1'-0"

NOTE:  
SIDING ON BACK & SIDES SHALL BE LP SMART SIDING-SHEET SIDING W/ 8" GROOVES



**ROOF PLAN**  
SCALE: 1/8"=1'-0"



**FRONT ELEVATION**  
SCALE: 1/4"=1'-0"

NOTE:  
SIDING SHALL BE LP SMART SIDING-NICKEL GAP LAP SIDING- ON THE FRONT & RETURNS  
THIN STONE VENEER- ON THE FRONT & RETURNS AS SHOWN ON THE PLAN

GARAGE DOORS SHALL BE "LONG BEAD BOARD STYLE"

Review and Approval  
Structural Only

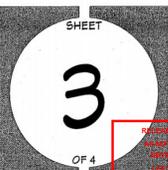
David Mezger Engineering LLC  
212 NE Circle Dr.  
Kansas City, MO 64116



SCALE 1/4" = 1-0	PLAN NO. 4341
DATE 11-20-24	SHEET NO. 3 OF 5

A New Home For:  
**Trumark Homes**  
Lot 169 Woodside Ridge Reserve- Bosley Residence  
2117 NW O'Brien Rd  
LEE SUMMIT MO

DRAWN  
J. L. ROE  
DATE  
11/4/24  
JOB NO.  
242040  
REVISIONS  
11/5/24  
11/12/24



FOR CONSTRUCTION  
FOR PLAN REVIEW  
FOR PERMITS  
NOV 26 2024  
11/26/2024

**TABLE R602.10.3(1)**  
BRACING REQUIREMENTS BASED ON WIND SPEED

Ultimate Design Wind Speed (mph)	Story Location	MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE*			
		Method LFB <sup>b</sup>	Method GB	Methods DWB, WSP, SFB, PFC, PFB, CS-WSP, CS-SFB, PFC, CS-SFB <sup>c</sup>	Methods CS-WSP, CS-SFB <sup>c</sup>
≤ 115	10	3.5	3.5	2.0	2.0
	15	4.5	4.5	2.5	2.5
	20	5.5	5.5	3.0	3.0
	30	7.5	7.5	4.0	4.0
	40	12.5	12.5	6.0	6.0
	50	15.0	15.0	7.0	7.0
120	10	4.0	4.0	2.5	2.5
	15	5.0	5.0	3.0	3.0
	20	6.0	6.0	3.5	3.5
	30	8.0	8.0	4.5	4.5
	40	12.0	12.0	6.5	6.5
	50	15.0	15.0	7.5	7.5
130	10	4.5	4.5	3.0	3.0
	15	5.5	5.5	3.5	3.5
	20	6.5	6.5	4.0	4.0
	30	9.0	9.0	5.0	5.0
	40	13.5	13.5	7.0	7.0
	50	16.5	16.5	8.0	8.0
140	10	5.0	5.0	3.5	3.5
	15	6.0	6.0	4.0	4.0
	20	7.0	7.0	4.5	4.5
	30	9.5	9.5	5.5	5.5
	40	14.0	14.0	7.5	7.5
	50	17.0	17.0	8.5	8.5
150	10	5.5	5.5	4.0	4.0
	15	6.5	6.5	4.5	4.5
	20	7.5	7.5	5.0	5.0
	30	10.0	10.0	6.0	6.0
	40	14.5	14.5	8.0	8.0
	50	17.5	17.5	9.0	9.0

**TABLE R602.10.4**  
CONNECTION CRITERIA\*

METHOD, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Spacing
LFB Let-in bracing	1 x 4 wood or approved metal straps at 45° to 60° angles for maximum 16" stud spacing		Wood: 2-8d common nails 3-8d (2 1/2" long x 0.113" dia.) nails Metal strap per manufacturer	Wood: per stud and top and bottom plates Metal: per manufacturer
PWB Diagonal wood boards	1/2" (1" nominal) for maximum 24" stud spacing		2-8d (2 1/2" long x 0.113" dia.) nails or 2 - 1/2" long staples	Per stud
WSP Wood structural panel (See Section R602.4)	1/2"		Exterior sheathing per Table R602.3(1) or R602.3(2)	6" edges 12" field
WV-WSP Wood structural panels with stone or masonry veneer (See Section R602.10.6.5)	1/2"	See Figure R602.10.6.5	8d common (2 1/2" x 0.131) nails	4" at panel edges 12" at intermediate supports 4" at braced wall panel end posts
SFB Structural fiberboard sheathing	1/2" or 3/4" for maximum 16" stud spacing		1/2" long x 0.131" dia. (for 1/2" thick sheathing) 1/4" long x 0.12" dia. (for 3/4" thick sheathing) galvanized roofing nails	3" edges 6" field
GB Gypsum board	1/2"		Nails or screws per Table R602.3(1) for exterior locations	For all braced wall panel locations: 7" edges (including top and bottom plates) 7" field
PFB Particulateboard sheathing (See Section R602.4)	1/2" or 3/4" for maximum 16" stud spacing		For 1/2" design (2" long x 0.113" dia.) nails For 3/4" design (2 1/2" long x 0.131" dia.) nails	3" edges 6" field
PFC Portland cement plaster	See Section R702.7 for maximum 16" stud spacing		1/2" long, 11 gage, 1/4" dia. head nails or 1/4" long, 16 gage staples	6" o.c. on all framing members
HPS Hardboard siding	1/2" for maximum 16" stud spacing		0.092" dia., 0.225" dia. head nails with length to accommodate 1/4" penetration into studs	4" edges 8" field
ABW Alternate braced wall	1/2"		See Section R602.10.6.1	See Section R602.10.6.1

**TABLE R602.10.4—continued**  
BRACING METHODS

METHOD, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Spacing
PFH Portal frame with hold-downs	1/2"		See Section R602.10.6.2	See Section R602.10.6.2
PFV Portal frame at garage	1/2"		See Section R602.10.6.3	See Section R602.10.6.3
CS-WSP Continuously sheathed wood structural panel	1/2"		Exterior sheathing per Table R602.3(1) or R602.3(2) Interior sheathing per Table R602.3(1) or R602.3(2)	6" edges 12" field Varies by fastener
CS-SFB Continuously sheathed wood structural panel adjacent to garage openings	1/2"		See Method CS-WSP	See Method CS-WSP
CS-PF Continuously sheathed portal frame	1/2"		See Section R602.10.6.4	See Section R602.10.6.4
CS-SFBF Continuously sheathed structural fiberboard	1/2" or 3/4" for maximum 16" stud spacing		1/2" long x 0.12" dia. (for 1/2" thick sheathing) 1/4" long x 0.12" dia. (for 3/4" thick sheathing) galvanized roofing nails	3" edges 6" field

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 47.880 N/m², 1 mile per hour = 0.447 m/s.  
 a. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, D, and D<sub>s</sub>.  
 b. Angles to permit neat to garage door opening when supporting gable end wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories D<sub>s</sub> and D<sub>s</sub>, roof overhang dead load shall not exceed 3 psf.  
 c. Garage openings adjacent to a Method CS-PF panel shall be provided with a header in accordance with Table R602.7(1). A full-height clear opening shall not be permitted adjacent to a Method CS-PF panel.  
 d. Method CS-SFB does not apply in Seismic Design Categories D, D<sub>s</sub>, and D<sub>s</sub>.  
 e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D<sub>s</sub> through D<sub>s</sub> only.

**TABLE R602.10.5**  
MINIMUM LENGTH OF BRACED WALL PANELS

METHOD (See Table R602.10.4)	WALL HEIGHT (inches)					CONTRIBUTING LENGTH (inches)	
	8 feet	9 feet	10 feet	11 feet	12 feet		
DWB, WSP, SFB, PFB, PFC, PFB, WV-WSP	48	48	48	53	58	Actual <sup>a</sup>	
LFB	48	48	48	53	58	Double sided = Actual Single sided = 0.5 x Actual	
ABW	28	32	34	38	42	48	
CS-G	24	27	30	33	36	Actual <sup>a</sup>	
CS-WSP, CS-SFB	Adjacent clear opening height (inches)						Actual <sup>a</sup>
	≤ 64	24	27	30	33	36	
	68	26	27	30	33	36	
	72	27	27	30	33	36	
	76	30	29	30	33	36	
	80	32	30	30	33	36	
	84	33	32	32	33	36	
	88	38	35	35	33	36	
	92	43	37	35	33	36	
	96	48	41	38	36	36	
	100	—	44	40	38	38	
	104	—	49	43	40	39	
	108	—	54	46	43	41	
	112	—	59	45	43	41	
116	—	55	48	45	43		
120	—	60	52	48	46		
124	—	—	56	51	—		
128	—	—	61	54	—		
132	—	—	66	58	—		
136	—	—	—	62	—		
140	—	—	—	66	—		
144	—	—	—	72	—		
METHOD (See Table R602.10.4)	Supporting roof only	16	16	16	Note c	Note c	
	Supporting one story and roof	24	24	24	Note c	Note c	
	PFH	24	27	30	Note d	1.5 x Actual <sup>b</sup>	
	PFC	16	18	20	Note e	1.5 x Actual <sup>b</sup>	
	CS-PF	16	18	20	Note e	Actual <sup>b</sup>	

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s.  
 NP = Not Permitted.  
 a. Linear interpolation shall be permitted.  
 b. Use the actual length when it is greater than or equal to the minimum length.  
 c. Maximum header height for PFH is 10 feet in accordance with Figure R602.10.6.2, but wall height shall be permitted to be increased to 12 feet with pony wall.  
 d. Maximum header height for PFC is 10 feet in accordance with Figure R602.10.6.3, but wall height shall be permitted to be increased to 12 feet with pony wall.  
 e. Maximum header height for CS-PF is 10 feet in accordance with Figure R602.10.6.4, but wall height shall be permitted to be increased to 12 feet with pony wall.

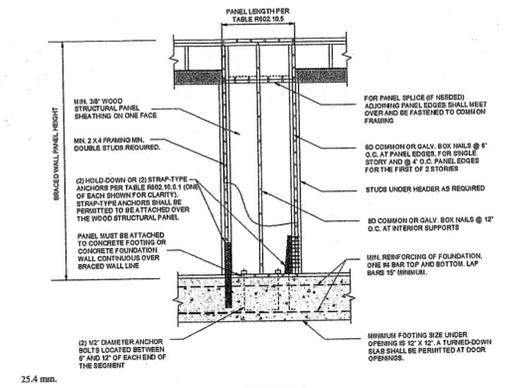


FIGURE R602.10.6.1  
METHOD ABW—ALTERNATE BRACED WALL PANEL

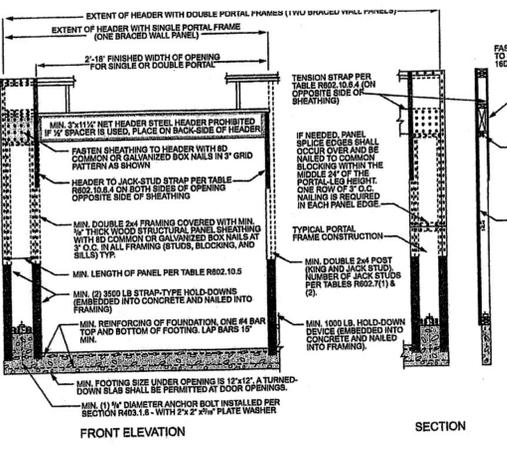


FIGURE R602.10.6.2  
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

**BRACE WALL DETAILS**  
WIND SPEED 115 MPH  
WIND EXPOSURE A  
SEISMIC DESIGN CATEGORY A

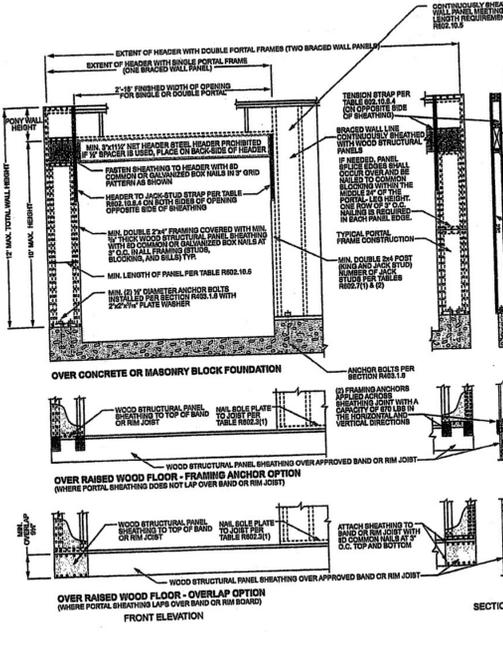
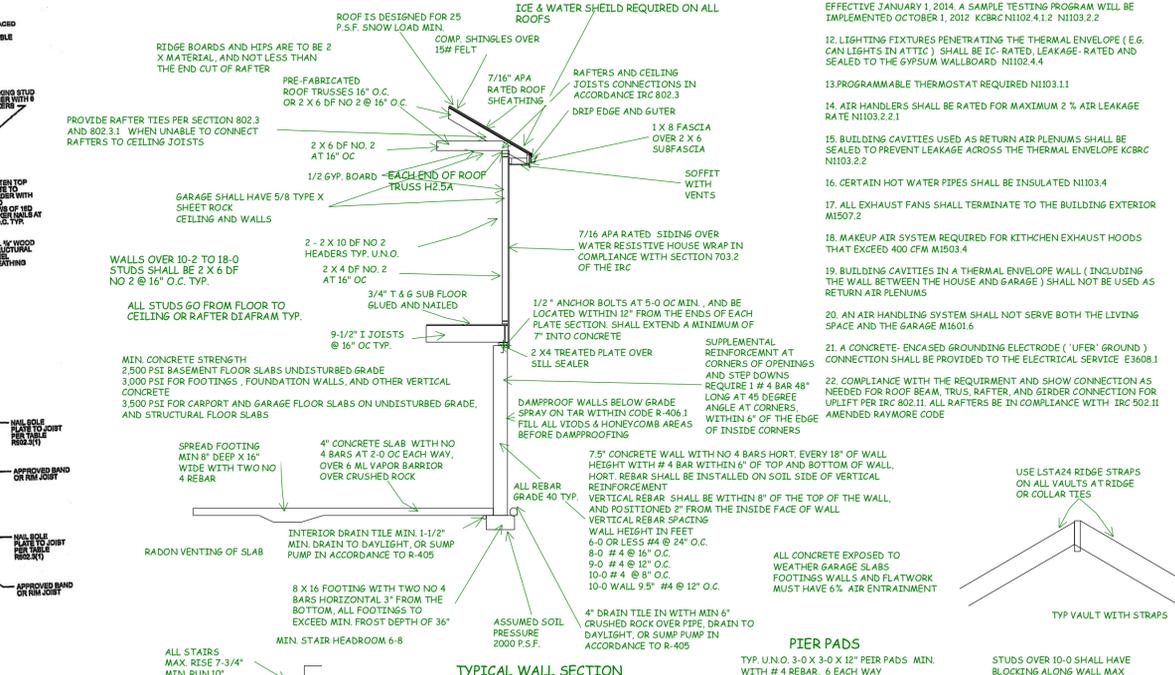
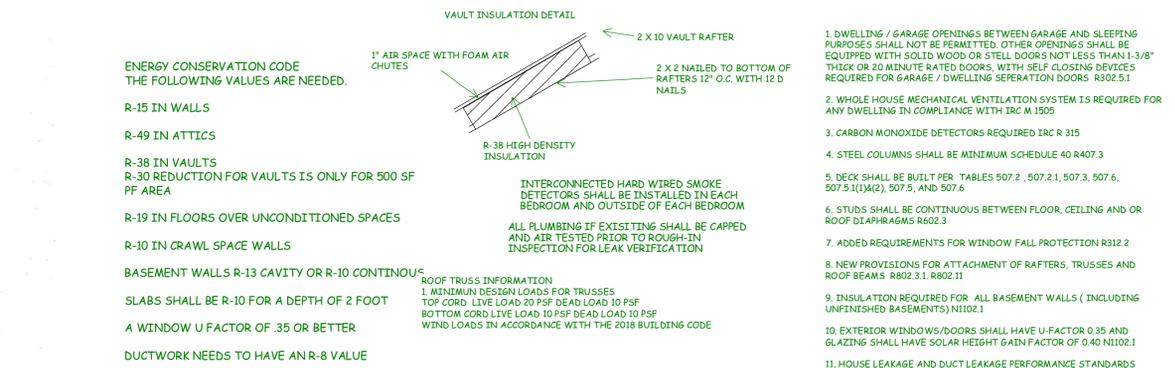


FIGURE R602.10.6.4  
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION



Review and Approval  
Structural Only

David Mezger Engineering LLC  
212 NE Circle Dr.  
Kansas City, MO 64116

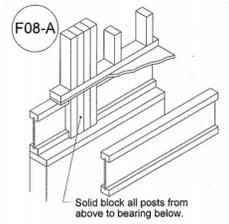
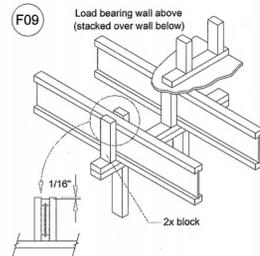
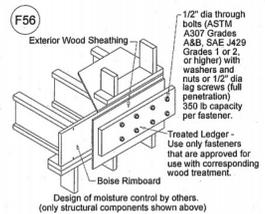


SCALE 1/4" = 1-0	PLAN NO. 4341
DATE 11-20-24	SHEET NO. 4 OF 5

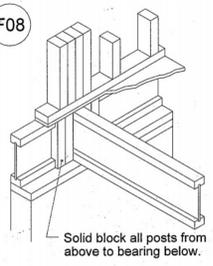
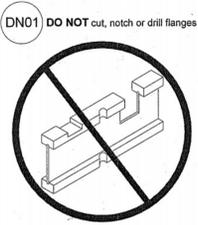
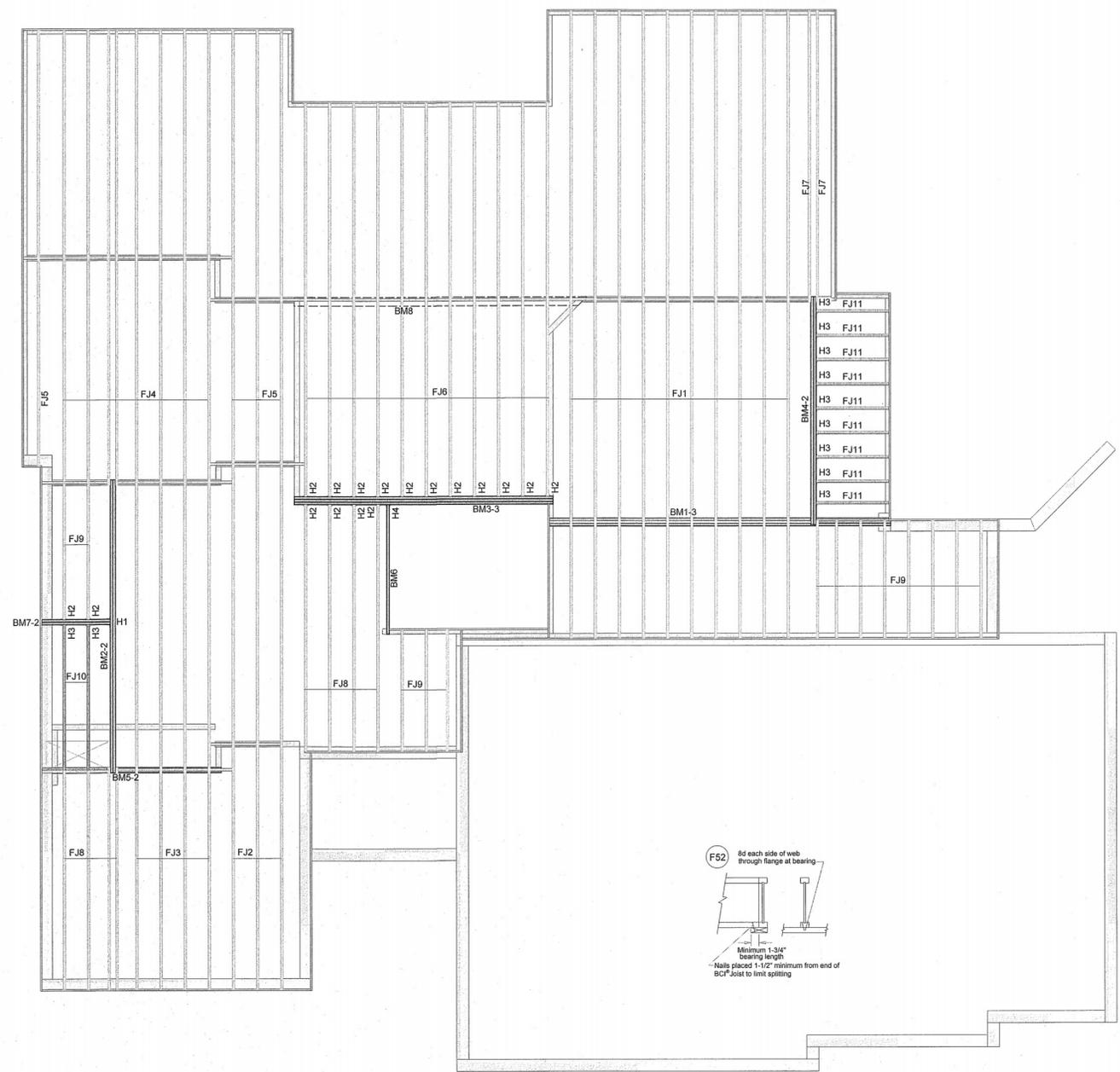
# Trumark Homes LLC Bosley Residence

## Recommended 1st Floor Placement Plan

Joist Spacing 16" O.C



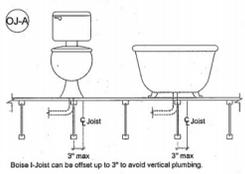
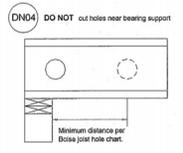
BUILD IN ACCORDANCE WITH  
2018 INTERNATIONAL  
RESIDENTIAL CODE AND  
LOCAL CODES.



Products				
PlotID	Net Qty	Product	Length	Plies
FJ1	10	9-1/2" BCI@ 4500s-1.8	36' 0"	1
FJ2	3	9-1/2" BCI@ 4500s-1.8	30' 0"	1
FJ3	4	9-1/2" BCI@ 4500s-1.8	28' 0"	1
FJ4	8	9-1/2" BCI@ 4500s-1.8	26' 0"	1
FJ5	4	9-1/2" BCI@ 4500s-1.8	24' 0"	1
FJ6	11	9-1/2" BCI@ 4500s-1.8	22' 0"	1
FJ7	2	9-1/2" BCI@ 4500s-1.8	16' 0"	1
FJ8	8	9-1/2" BCI@ 4500s-1.8	14' 0"	1
FJ9	13	9-1/2" BCI@ 4500s-1.8	8' 0"	1
FJ10	2	1-3/4" x 7-1/4" VERSA-LAM® LVL 2.1E 3100 SP	8' 0"	1
FJ11	9	1-3/4" x 7-1/4" VERSA-LAM® LVL 2.1E 3100 SP	6' 0"	1
BM1-3	3	1-3/4" x 9-1/2" VERSA-LAM® LVL 2.1E 3100 SP	20' 0"	3
BM2-2	2	1-3/4" x 9-1/2" VERSA-LAM® LVL 2.1E 3100 SP	18' 0"	2
BM3-3	3	1-3/4" x 9-1/2" VERSA-LAM® LVL 2.1E 3100 SP	16' 0"	3
BM4-2	2	1-3/4" x 9-1/2" VERSA-LAM® LVL 2.1E 3100 SP	14' 0"	2
BM5-2	2	1-3/4" x 9-1/2" VERSA-LAM® LVL 2.1E 3100 SP	10' 0"	2
BM6	1	1-3/4" x 9-1/2" VERSA-LAM® LVL 2.1E 3100 SP	8' 0"	1
BM7-2	2	1-3/4" x 9-1/2" VERSA-LAM® LVL 2.1E 3100 SP	4' 0"	2
Ca1	21	1-1/8" x 9-1/2" BC RIM BOARD OSB	12' 0"	1
Bk1	40	9-1/2" BCI@ 4500s-1.8	2' 0"	1
Bk2	2	1-3/4" x 7-1/4" VERSA-LAM® LVL 2.1E 3100 SP	2' 0"	1

Accessories				
PlotID	Net Qty	Product	Length	Plies
	60	3/4" 4x8 OSB		1

Connector Summary				
PlotID	Qty	Manuf	Product	Skew
H1	1	Simpson	HHUS410	-
H2	17	Simpson	IUS1.81/9.5	-
H3	11	Simpson	HU7	-
H4	1	Simpson	HU9	-



See Boise Specifier Guide For Filler Block Detail And Table In Regard To Double Joist Installation

Review and Approval  
Structural Only  
  
David Mezger Engineering LLC  
212 NE Circle Dr.  
Kansas City, MO 64116



Trumark Homes LLC  
Bosley Residence  
McCRAY LUMBER  
Edwardsville, Keith Tally, 9134221300

Scale: 1/4" = 1'-0"  
DWG: BC FRAMER  
File: 24000166  
By: Keith Tally  
Date: 11/14/2024  
Sheet 1 of 1

SCALE 1/4" = 1-0	PLAN NO. 4341
DATE 11-20-24	SHEET NO. 5 OF 5

DESIGN LOAD  
Live Load 40 PSF  
Dead Load 15 PSF  
Total Load 55 PSF



**USER NOTES**  
This design is provided as a courtesy to the builder and does NOT guarantee a complete structural review of the project. Neither Lateral nor Seismic Analysis has been considered. All bearing locations and product usages shall be verified by the builder and engineer of record. This design shall be reviewed, verified, and approved by the builder, engineer of record, and local building department prior to ordering materials.

**NOTE:**  
ALL MEASUREMENTS TO BE VERIFIED IN THE FIELD.

