

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

TRUMARK HOMES WOOD BRIDGE V LOT 203 HIGHLAND MEADOWS 1067 SW FIORD RD LEE SUMMIT MO

> SCALE 1/4" = 1-0

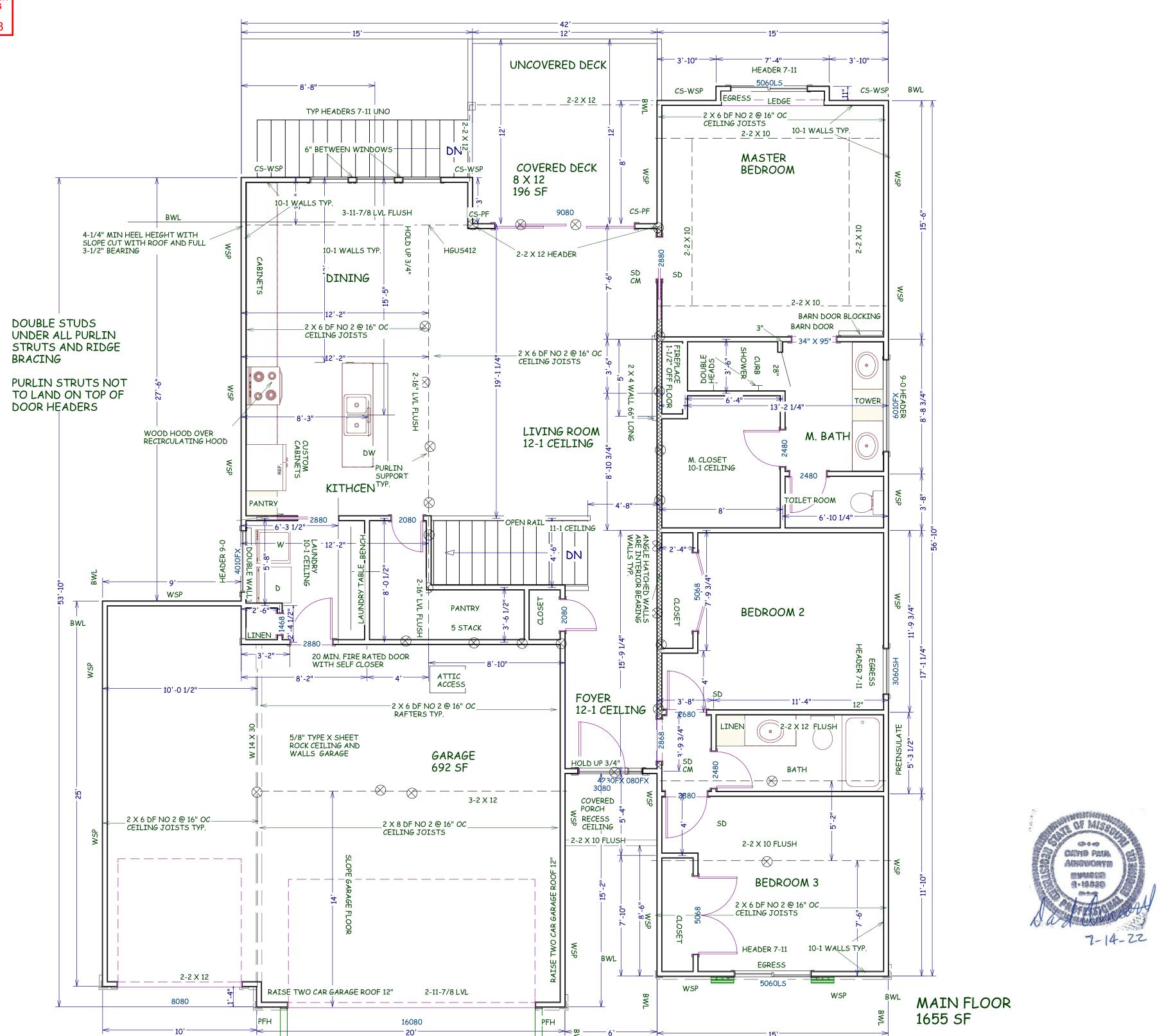
DATE 7-11-22

PLAN NO.

3870

SHEET NO.

2 OF 5



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VAULT INSULATION DETAIL 1. DWELLING / GARAGE OPENINGS BETWEEN GARAGE AND SLEEPING 2 X 10 VAULT RAFTER PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS SHALL BE 1" AIR SPACE WITH FOAM AIR EQUIPPED WITH SOLID WOOD OR STELL DOORS NOT LESS THAN 1-3/8" ENERGY CONSERVATION CODE THICK OR 20 MINUTE RATED DOORS, WITH SELF CLOSING DEVICES 2 X 2 NAILED TO BOTTOM OF REQUIRED FOR GARAGE / DWELLING SEPERATION DOORS R302.5.1 THE FOLLOWING VALUES ARE NEEDED. RAFTERS 12" O.C. WITH 12 D 2. WHOLE HOUSE MECHANICAL VENTILATION SYSTEM IS REQUIRED FOR ANY DWELLING IN COMPLIANCE WITH IRC M 1505 $\,$ R-15 IN WALLS 3. CARBON MONOXIDE DETECTORS REQUIRED IRC R 315 R-49 IN ATTICS R-38 HTGH DENSTTY 4. STEEL COLUMNS SHALL BE MINIMUM SCHEDULE 40 R407.3 INSULATION R-38 IN VAULTS R-30 REDUCTION FOR VAULTS IS ONLY FOR 500 SF 5. DECK SHALL BE BUILT PER TABLES 507.2, 507.2.1, 507.3, 507.6, INTERCONNECTED HARD WIRED SMOKE 507.5.1(1)&(2), 507.5, AND 507.6 DETECTORS SHALL BE INSTALLED IN EACH BEDROOM AND OUTSIDE OF EACH BEDROOM 6. STUDS SHALL BE CONTINUOUS BETWEEN FLOOR, CEILING AND OR R-19 IN FLOORS OVER UNCONDITIONED SPACES ROOF DIAPHRAGMS R602.3 ALL PLUMBING IF EXISITING SHALL BE CAPPED AND AIR TESTED PRIOR TO ROUGH-IN 7. ADDED REQUIREMENTS FOR WINDOW FALL PROTECTION R312.2 R-10 IN CRAWL SPACE WALLS INSPECTION FOR LEAK VERIFICATION 8. NEW PROVISIONS FOR ATTACHMENT OF RAFTERS, TRUSSES AND BASEMENT WALLS R-13 CAVITY OR R-10 CONTINOUS ROOF BEAMS R802.3.1. R802.11 9. INSULATION REQUIRED FOR ALL BASEMENT WALLS (INCLUDING SLABS SHALL BE R-10 FOR A DEPTH OF 2 FOOT UNFINISHED BASEMENTS) N1102.1 A WINDOW U FACTOR OF .35 OR BETTER 10. EXTERIOR WINDOWS/DOORS SHALL HAVE U-FACTOR 0.35 AND ICE & WATER SHEILD REQUIRED ON ALL GLAZING SHALL HAVE SOLAR HEIGHT GAIN FACTOR OF 0.40 N1102.1 DUCTWORK NEEDS TO HAVE AN R-8 VALUE 11. HOUSE LEAKAGE AND DUCT LEAKAGE PERFORMANCE STANDARDS EFFECTIVE JANUARY 1, 2014. A SAMPLE TESTING PROGRAM WILL BE ROOF IS DESIGNED FOR 25 IMPLEMENTED OCTOBER 1, 2012 KCBRC N1102,4,1,2 N1103,2,2 P.S.F. SNOW LOAD MIN. COMP. SHINGLES OVER 12. LIGHTING FIXTURES PENETRATING THE THERMAL ENVELOPE (E.G. RIDGE BOARDS AND HIPS ARE TO BE 2 CAN LIGHTS IN ATTIC) SHALL BE IC-RATED, LEAKAGE-RATED AND SEALED TO THE GYPSUM WALLBOARD N1102.4.4 X MATERIAL, AND NOT LESS THAN THE END CUT OF RAFTER RAFTERS AND CEILING 7/16" APA 2 X 6 DF NO. 2 JOISTS CONNECTIONS IN 13.PROGRAMMABLE THERMOSTAT REQUIRED N1103.1.1 RATED ROOF AT 16" OC ACCORDANCE IRC 802.3 SHEATHING PROVIDE RAFTER TIES PER SECTION 802.3 14. AIR HANDLERS SHALL BE RATED FOR MAXIMUM 2 % AIR LEAKAGE DRIP EDGE AND GUTER AND 802.3.1 WHEN UNABLE TO CONNECT RAFTERS TO CEILING JOISTS 1 X 8 FASCIA OVER 2 X 6 15. BUILDING CAVITIES USED AS RETURN AIR PLENUMS SHALL BE 2 X 6 DF NO. 2 SEALED TO PREVENT LEAKAGE ACROSS THE THERMAL ENVELOPE KCBRC SUBFASCIA AT 16" OC SOFFIT 1/2 GYP. BOARD 16. CERTAIN HOT WATER PIPES SHALL BE INSULATED N1103.4 WITH GARAGE SHALL HAVE 5/8 TYPE X **VENTS** 17. ALL EXHAUST FANS SHALL TERMINATE TO THE BUILDING EXTERIOR SHEET ROCK CEILING AND WALLS 7/16 APA RATED SIDING OVER 18. MAKEUP AIR SYSTEM REQUIRED FOR KITHCHEN EXHAUST HOODS 2 - 2 X 10 DF NO 2 WATER RESISTIVE HOUSE WRAP IN THAT EXCEED 400 CFM M1503.4 HEADERS TYP. U.N.O. COMPLIANCE WITH SECTION 703.2 WALLS OVER 10-2 TO 18-0 OF THE IRC 19. BUILDING CAVITIES IN A THERMAL ENVELOPE WALL (INCLUDING THE WALL BETWEEN THE HOUSE AND GARAGE) SHALL NOT BE USED AS STUDS SHALL BE 2 X 6 DF 2 X 4 DF NO. 2 NO 2 @ 16" O.C. TYP. AT 16" OC 3/4" T & *G* SUB FLOOR 1/2 " ANCHOR BOLTS AT 5-0 OC MIN., AND BE ALL STUDS GO FROM FLOOR TO GLUED AND NAILED LOCATED WITHIN 12" FROM THE ENDS OF EACH CEILING OR RAFTER DIAFRAM TYP. 20. AN AIR HANDLING SYSTEM SHALL NOT SERVE BOTH THE LIVING PLATE SECTION. SHALL EXTEND A MINIMUM OF SPACE AND THE GARAGE M1601.6 2 X 10 DF NO 2 @ 7" INTO CONCRETE SUPPLEMENTAL 16" OC TYP. 21. A CONCRETE- ENCASED GROUNDING ELECTRODE ('UFER' GROUND) REINFORCEMNT AT 2 X4 TREATED PLATE OVER CONNECTION SHALL BE PROVIDED TO THE ELECTRICAL SERVICE E3608.1 MIN. CONCRETE STRENGTH CORNERS OF OPENINGS SILL SEALER 2,500 PSI BASEMENT FLOOR SLABS UNDISTURBED GRADE
3,000 PSI FOR FOOTINGS, FOUNDATION WALLS, AND OTHER VERTICAL AND STEP DOWNS 22. COMPLIANCE WITH THE REQUIRMENT AND SHOW CONNECTION AS NEEDED FOR ROOF BEAM, TRUS, RAFTER, AND GIRDER CONNECTION FOR REQUIRE 1 # 4 BAR 48" LONG AT 45 DEGREE UPLIFT PER IRC 802.11. ALL RAFTERS BE IN COMPLIANCE WITH IRC 502.11 DAMPPROOF WALLS BELOW GRADE 3,500 PSI FOR CARPORT AND GARAGE FLOOR SLABS ON UNDISTURBED GRADE, ANGLE AT CORNERS, WITHIN 6" OF THE EDGE AMENDED RAYMORE CODE SPRAY ON TAR WITHIN CODE R-406.1 AND STRUCTURAL FLOOR SLABS FILL ALL VIODS & HONEYCOMB AREAS OF INSIDE CORNERS BEFORE DAMPPROOFING 4" CONCRETE SLAB WITH NO SPREAD FOOTING 7.5" CONCRETE WALL WITH NO 4 BARS HORT. EVERY 18" OF WALL 4 BARS AT 2-0 OC EACH WAY, MIN 8" DEEP X 16" HEIGHT WITH # 4 BAR WITHIN 6" OF TOP AND BOTTOM OF WALL, OVER 6 ML VAPOR BARRIOR WIDE WITH TWO NO USE LSTA24 RIDGE STRAPS HORT. REBAR SHALL BE INSTALLED ON SOIL SIDE OF VERTICAL OVER CRUSHED ROCK 4 REBAR ON ALL VAULTS AT RIDGE REINFORCEMENT OR COLLAR TIES VERTICAL REBAR SHALL BE WITHIN 8" OF THE TOP OF THE WALL, AND POSITIONED 2" FROM THE INSIDE FACE OF WALL GRADE 40 TYP. VERTICAL REBAR SPACING INTERIOR DRAIN TILE MIN. 1-1/2" WALL HEIGHT IN FEET MIN. DRAIN TO DAYLIGHT, OR SUMP 6-0 OR LESS #4 @ 24" O.C. RADON VENTING OF SLAB 8-0 # 4 @ 16" O.C. PUMP IN ACCORDANCE TO R-405 ALL CONCRETE EXPOSED TO WEATHER GARAGE SLABS 10-0 # 4 @ 8" O.C. FOOTINGS WALLS AND FLATWORK 10-0 WALL 9.5" #4 @ 12" O.C. 8 X 16 FOOTING WITH TWO NO 4 MUST HAVE 6% AIR ENTRAINMENT BARS HORIZONTAL 3" FROM THE BOTTOM, ALL FOOTINGS TO 4" DRAIN TILE IN WITH MIN 6" TYP VAULT WITH STRAPS EXCEED MIN. FROST DEPTH OF 36" ASSUMED SOIL CRUSHED ROCK OVER PIPE, DRAIN TO PRESSURE DAYLIGHT, OR SUMP PUMP IN MIN. STAIR HEADROOM 6-8 2000 P.S.F. PIER PADS ACCORDANCE TO R-405 ALL STAIRS TYP. U.N.O. 3-0 X 3-0 X 12" PEIR PADS MIN. STUDS OVER 10-0 SHALL HAVE MAX. RISE 7-3/4" TYPICAL WALL SECTION WITH # 4 REBAR, 6 EACH WAY BLOCKING ALONG WALL MAX MIN. RUN 10" OF 6-0 O.C. WINDOW EGRESS WINDOW SAFETY GLAZING PER 308 REQUIREMENTS OVERHEAD GARAGE DOORS SAFETY GLAZING REQUIRED ALONG WALKING SURFACES AND BEDROOM WINDOW EGRESS MINIMUM FOR A DOUBLE HUNG MUST MEET DASMA 115 MPH STAIRS LOCATED WITHIN 36 INCHES HORIZONTALLY OF THE STEPS. WINDOW IS 34 INCH CLEAR WIDTH MIN. AND 24 INCH CLEAR OR IRC 2018 REQUIRMENTS SAFETY GLAZING REQUIRED IF EXPOSED SINGLE PANEL IS IN HEIGHT MIN. WITH A CLEAR OPENABLE AREA OF 5.7 SQUARE FEET EXCESS OF 9 SQUARE FEET OR THE BOTTOM EDGE OF THE GLAZING LADDER IS LESS THAN 18 INCHES ABOVE THE FINISHED FLOOR. A CASEMENT OR SLIDER WINDOW MINIMUMS ARE 20 INCH CLEAR **|**← 3'-0"→ WIDTH MINIMUM AND 41 INCH CLEAR HEIGHT MINIMUM. WITH A SAFETY GLAZING REQUIRD WHERE THE NEAREST EXPOSED EDGE OF MINIMUM 5.7 SQUARE FOOT OF OPENABLE AREA. EGRESS WINDOW WELL AS NEEDED THE GLAZING IS WITHIN 24 INCHES OF EITHER VERTICAL EDGE OF OPENING OF EGRESS WINDOW NOT MORE THAN 42" PER SECTION 308 MIN 3-0 X 3-0 THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM FROM THE FLOOR WITH LADDER EXPOSED EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE A WALKING SURFACE, SAFETY OR TEMPERED GLAZING IS REQUIRED. WINDOWS ARE TO HAVE FALL

PROTECTION PER IRC 312.2

PURLLIN PURLIN SUPPORT TYP.

> PURLIN PLAN 1/8" = 1-0



ANCE TIONAL CODE A DE CCORD **LTERNA** 018 ESI OCA MVM

MEADOW RK HC...
BRIDGE
33 HIGHL
W FIORE TRUMAK WOOD E

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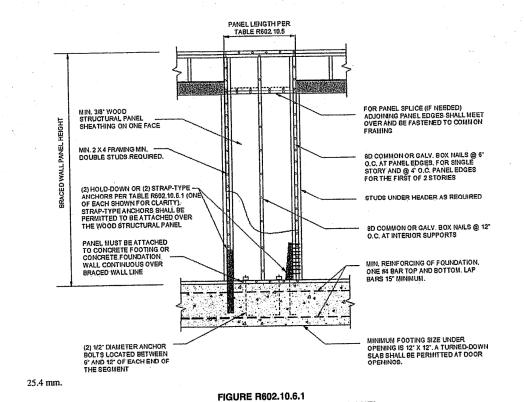
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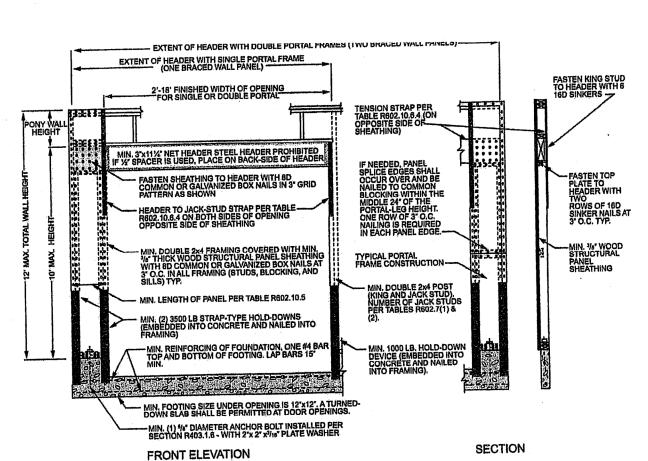
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ALL POINT LOADS SHALL HAVE A MINIMUM OF 2 STUDS UNLESS NOTED OTHERWISE

		TACING REQUIR	ABLE R602.10.3(1) EMENTS BASED C	N WIND SPEED			
EXPOSURE CA SD-FOOT MEAN 10-FOOT WALL 2 BRACED WA	I ROOF HEIGHT . HEIGHT		MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE'				
Ultimate Design Wind Speed (mph)	Story Location	Braced Wall Line Spacing* (feet)	Method LIB ^b	Method GB	Methods DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP, ABW, PFH, PFC, CS-SFB	Methods CS-WSP, CS-G, CS-PF	
		10	3.5	3.5	2.0	2.0	
	À .	20	6.5	6,5	3.5	3.5	
		30	9,5	9.5	5.5	4.5	
		40	12.5	12.5	7.0	6.0	
			50	15.0	15.0	9.0	7.5
	60	18.0	18.0	10.5	9.0		
	. A	10	7.0	7.0	4.0	3.5	
		20	12.5	12.5	7.5	6.5	
		30	18.0	18.0	10.5	9.0	
≤ 115		40	23.5	23.5	13.5	11.5	
		50	29.0	29.0	16.5	14.0	
			60	34.5	34.5	20.0	17.0
		10	NP	10.0	6.0	5.0	
		20	NP	18.5	11.0	9.0	
		30	NP	27.0	15.5	13.0	
		40	NP	35.0	20.0	17.0	
		50	NP	43.0	24.5	21.0	
	(22)	60	NP	51.0	29.0	25.0	



METHOD ABW-ALTERNATE BRACED WALL PANEL



4 mm, 1 foot = 304.8 mm.

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

			TABLE R602.10 BRACING METHO				
T			I	CONNECTION CRITERIA*			
м	ETHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Spacing		
-	LIB	1 × 4 wood or approved metal straps			Wood: per stud and top and bottom plates		
	Let-in-bracing	at 45° to 60° angles for maximum 16" stud spacing		Metal strap: per manufacturer	Metal: per manufacturer		
	DWB Diagonal wood boards	3/4" (1" nominal) for maximum 24" stud spacing		2-8d $(2^{1}/_{2}" \text{ long} \times 0.113" \text{ dia.})$ nails or 2 - $1^{3}/_{4}" \text{ long staples}$	Per stud		
	WSP Wood			Exterior sheathing per Table R602.3(3)	6" edges 12" field		
	structural panel (See Section R604)	³ / ₈ "		Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener		
ethods	BV-WSP [®] Wood structural panels with stone or masonry veneer (See Section R602.10.6.5)	7/ ₁₆ "	See Figure R602.10.6.5	8d common $(2^{1}/_{2}^{"} \times 0.131)$ nails	4" at panel edges 12" at intermediate supports 4" at braced wall panel end posts		
Intermittent Bracing Methods	SFB Structural fiberboard sheathing	1/2" or 25/32" for maximum 16" stud spacing		$1^{1}J_{2}^{"}$ long \times 0.12" dia. (for $^{1}J_{2}^{"}$ thick sheathing) $1^{3}J_{4}^{"}$ long \times 0.12" dia. (for $^{25}J_{32}^{"}$ thick sheathing) galvanized roofing nails	3" edges 6" field		
mitten				Nails or screws per Table R602.3(1) for exterior locations	For all braced wall panel locations: 7" edges (including top		
Infer	GB Gypsum board	1/2"		Nails or screws per Table R702.3.5 for interior locations	and bottom plates) 7"		
	PBS Particleboard sheathing (See Section R605)	³ / ₈ " or ¹ / ₂ " for maximum 16" stud spacing		For ³ / ₈ ", 6d common (2" long × 0.113" dia.) nails For ¹ / ₂ ", 8d common (2 ¹ / ₂ " long × 0.131" dia.) nails	3" edges 6" field		
	PCP Portland cement plaster	See Section R703.7 for maximum 16" stud spacing		1 ¹ / ₂ " long, 11 gage, ⁷ / ₁₆ " dia. head nails or ⁷ / ₈ " long, 16 gage staples	6" o.c. on all framing members		
	HPS Hardboard panel siding	7/16" for maximum 16" stud spacing		0.092" dia., 0.225" dia. head nails with length to accommodate 1 ½" penetration into studs	4" edges 8" field		
	ABW Alternate braced wall	3/8"		See Section R602.10.6.1	See Section R602.10.6.1		

		TABLE R602,10.5 ENGTH OF BRACED WALL PANELS MINIMUM LENGTH* (Inches)					CONTRIBUTING LENGTH	
METHOD (See Table R602.10.4)			,		(Inches)			
			9 feet	10 feet	11 feet	12 feet		
DWD WOD CED DE	SS, PCP, HPS, BV-WSP	8 feet 48	48	48	53	58	Actual ^b	
		48	48	48	53	58	Double sided = Actual Single sided = 0.5 × Actual	
	GB	55	62	69	NP	NP	Actual ⁶	
	LIB	33	-02	- 05				
ABW	SDC A, B and C, ultimate design wind speed < 140 mph	28	32	34	38	42	48	
	SDC D ₀ , D ₁ and D ₂ , ultimate design wind speed < 140 mph	32	32	34	NP	NP		
	CS-G	24	27	30	33	36	Actual ^b	
	Adjacent clear opening height (inches)							
	≤ 64	24	27	30	33	36		
	68	26	27	30	33	36	_	
	72	27	27	30	33	36	1	
	76	30	29	30	33	36]	
	80	32	30	30	33	36		
	84	35	32	32	33	36	Actual ^b	
	88	38	35	33	33	36		
	92	43	37	35	35	36		
	96	48	41	38	36	36		
CS-WSP, CS-SFB	100		44	40	38	38		
	104		49	43	40	39		
	108		54	46	43	41		
	112			50	45	43		
	116			55	48	45		
	120		<u> </u>	60	52	48	_	
	124	<u> </u>			56	51	-	
	128				61	54 58	4	
	132				66	62	4	
	136			<u> </u>		66	4	
	140					72		
	144		_B	rtal header	height	12	 	
	ETHOD	8 feet	9 feet	10 feet	11 feet	12 feet	-	
(See Ta	ble R602,10.4)	16	16	16	Note c	Note c	48	
PFH	Supporting roof only		24	24	Note c	Note c		
	Supporting one story and roof	24	27	30	Note d	Note d		
	PFG SDC A, B and C	16	18	20	Note e	Note e		
CS-PF	SDC D ₀ , D ₁ and D ₂	16	18	20	Note e	Note e		
= Not Permittedinear interpolation shall	foot = 304.8 mm, 1 mile per hour = be permitted. ere it is greater than or equal to the n	0.447 m/s.	ngth.	us mall balai	nt shall be ne	mitted to be	e increased to 12 feet with pony	

BRACE WALL DETAILS WIND SPEED 115 MPH WIND EXPOSURE A

SEISMIC DESIGN CAEGORY A

	TABLE R602.10.4—continued BRACING METHODS							
Г				CONNECTION CRITERIA				
'	METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Specing			
g Methods	PFH Portal frame with hold-downs	³/s"		See Section R602.10.6.2	See Section R602.10.6.2			
Intermittent Bracing Methods	PFG Portal frame at garage	7/ ₁₆ "		See Section R602.10.6.3	See Section R602.10.6.3			
	CS-WSP	3/8"		Exterior sheathing per Table R602.3(3)	6" edges 12" field			
	Continuously sheathed wood structural panel			Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener			
Continuous Sheathing Methods	CS-G ^{b,c} Continuously sheathed wood structural panel adjacent to garage openings	3/8"		See Method CS-WSP	See Method CS-WSP			
nuous Sh	CS-PF Continuously sheathed portal frame	7/16"		See Section R602.10.6.4	See Section R602.10.6.4			
Conti	CS-SFB ^d Continuously sheathed structural fiberboard	1/2" or ²⁵ /32" for maximum 16" stud spacing		$1\frac{1}{2}$ " long × 0.12" dia. (for $\frac{1}{2}$ " thick sheathing) $1\frac{3}{4}$ " long × 0.12" dia. (for $\frac{25}{12}$ " thick sheathing) galvanized roofing nails	3" edges 6" field			

For St. 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 47.8 N/m², 1 mile per hour = 0.447 m/s.

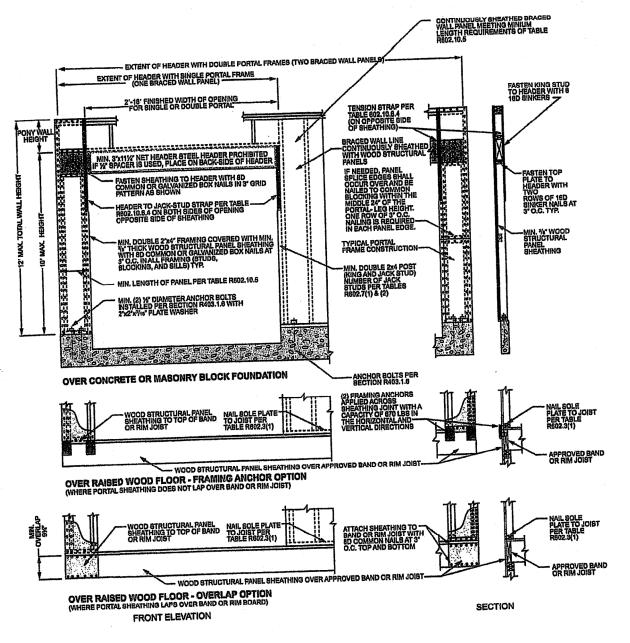
a. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, D_p, D₁ and D₂.

b. Applies to panels next to garage door opening where supporting gable end wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories D_p, D₁ and D₂ roof covering dead load shall not exceed 3 psf.

c. Garage openings adjacent to a Method CS-O 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-G panel.

d. Method CS-SFB does not apply in Seismic Design Categories D₀, D₁ and D₂.

e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D₀ through D₂ only.



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R802.10.6.4
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION



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

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