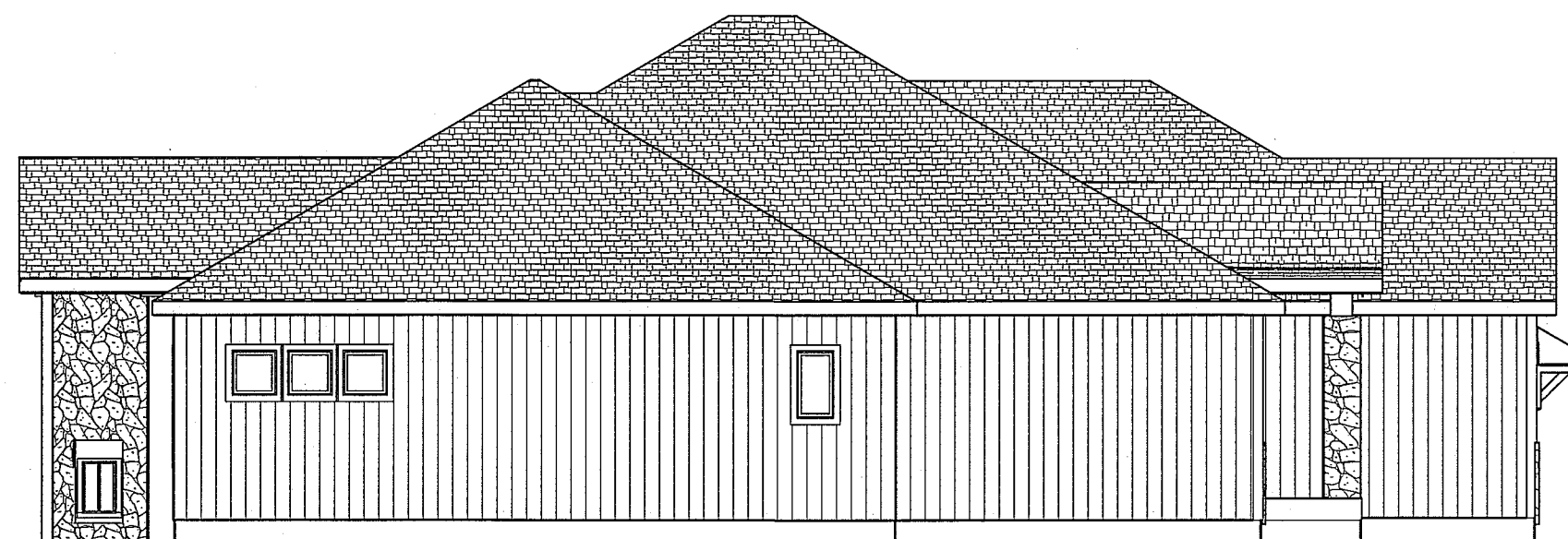




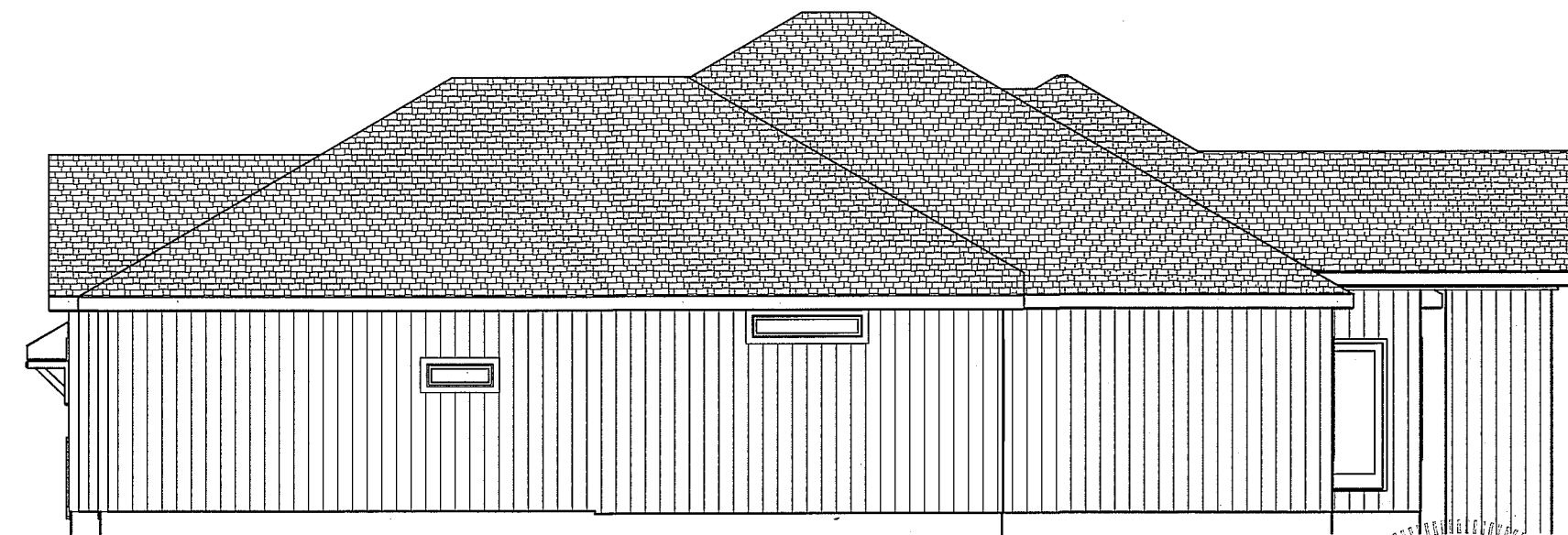
FRONT EL.
STUCCO
FINISH



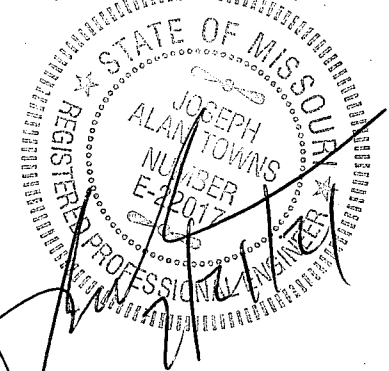
REAR EL.
1/8 = 1-0



LEFT EL.
1/8 = 1-0



RIGHT EL.
1/8 = 1-0



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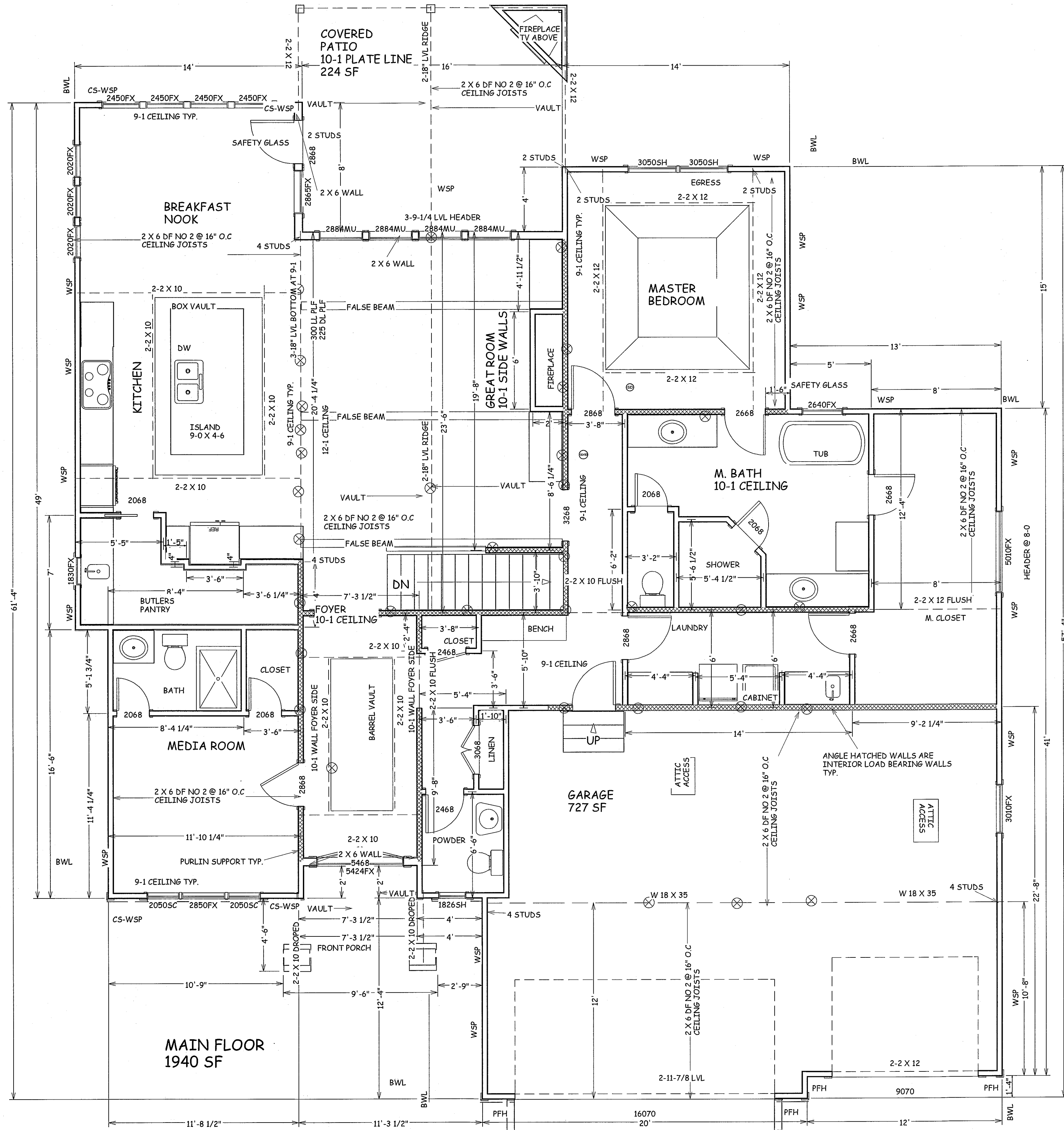
NICK ZVACEL CONSTRUCTION
LOT 112 MONTICELLO
4717 NE FREEHOLD DR
LEE SUMMIT MO

SCALE
1/4" = 1-0

DATE
7-20-21

PLAN NO.
3530

SHEET NO.
1 OF 6



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NICK ZVACEL CONSTRUCTION
LOT 112 MONTICELLO
4717 NE FREEHOLD DR
LEE SUMMIT MO

SCALE
1/4" = 1-0

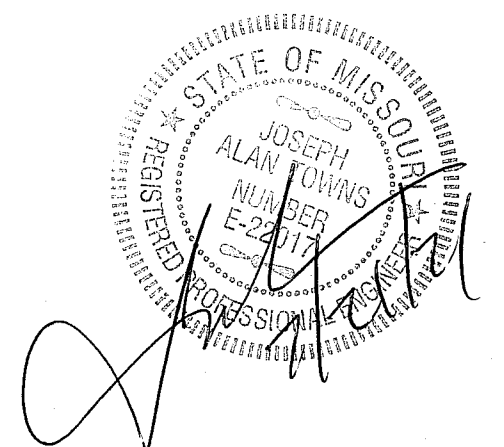
DATE
7-20-21

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ENERGY CONSERVATION CODE
THE FOLLOWING VALUES ARE NEEDED.

R-15 IN WALLS

R-49 IN ATTICS

R-38 IN VAULTS

R-30 REDUCTION FOR VAULTS IS ONLY FOR 500 SF
PF AREA

R-19 IN FLOORS OVER UNCONDITIONED SPACES

R-10 IN CRAWL SPACE WALLS

BASEMENT WALLS R-13 CAVITY OR R-10 CONTINUOUS

SLABS SHALL BE R-10 FOR A DEPTH OF 2 FOOT

A WINDOW U FACTOR OF .35 OR BETTER

DUCTWORK NEEDS TO HAVE AN R-8 VALUE

VAULT INSULATION DETAIL

1" AIR SPACE WITH FOAM AIR
CHUTES

R-38 HIGH DENSITY
INSULATION

2 X 10 VAULT RAFTER

2 X 2 NAILED TO BOTTOM OF
RAFTERS 12" O.C. WITH 12 D
NAILS

INTERCONNECTED HARD WIRED SMOKE
DETECTORS SHALL BE INSTALLED IN EACH
BEDROOM AND OUTSIDE OF EACH BEDROOM

ALL PLUMBING IF EXISTING SHALL BE CAPPED
AND AIR TESTED PRIOR TO ROUGH-IN
INSPECTION FOR LEAK VERIFICATION

1. DWELLING / GARAGE OPENINGS BETWEEN GARAGE AND SLEEPING
PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS SHALL BE
EQUIPPED WITH SOLID WOOD OR STEEL DOORS NOT LESS THAN 1-3/8"
THICK OR 20 MINUTE RATED DOORS, WITH SELF CLOSING DEVICES
REQUIRED FOR GARAGE / DWELLING SEPERATION DOORS R302.5.1

2. WHOLE HOUSE MECHANICAL VENTILATION SYSTEM IS REQUIRED FOR
ANY DWELLING IN COMPLIANCE WITH IRC M 1505

3. CARBON MONOXIDE DETECTORS REQUIRED IRC R 315

4. STEEL COLUMNS SHALL BE MINIMUM SCHEDULE 40 R407.3

5. DECK SHALL BE BUILT PER TABLES 507.2, 507.2.1, 507.3, 507.6,
507.5.1(1)&(2), 507.5, AND 507.6

6. STUDS SHALL BE CONTINUOUS BETWEEN FLOOR, CEILING AND OR
ROOF DIAPHRAGMS R602.3

7. ADDED REQUIREMENTS FOR WINDOW FALL PROTECTION R312.2

8. NEW PROVISIONS FOR ATTACHMENT OF RAFTERS, TRUSSES AND
ROOF BEAMS R802.3.1, R802.11

9. INSULATION REQUIRED FOR ALL BASEMENT WALLS (INCLUDING
UNFINISHED BASEMENTS) N1102.1

10. EXTERIOR WINDOWS/DOORS SHALL HAVE U-FACTOR 0.35 AND
GLAZING SHALL HAVE SOLAR HEIGHT GAIN FACTOR OF 0.40 N1102.1

11. HOUSE LEAKAGE AND DUCT LEAKAGE PERFORMANCE STANDARDS
EFFECTIVE JANUARY 1, 2014. A SAMPLE TESTING PROGRAM WILL BE
IMPLEMENTED OCTOBER 1, 2012 KCBRC N1102.4.1.2 N1103.2.2

12. LIGHTING FIXTURES PENETRATING THE THERMAL ENVELOPE (E.G.
CAN LIGHTS IN ATTIC) SHALL BE IC- RATED, LEAKAGE- RATED AND
SEALED TO THE GYPSUM WALLBOARD N1102.4.4

13. PROGRAMMABLE THERMOSTAT REQUIRED N1103.1.1

14. AIR HANDLERS SHALL BE RATED FOR MAXIMUM 2 % AIR LEAKAGE
RATE N1103.2.2.1

15. BUILDING CAVITIES USED AS RETURN AIR PLENUMS SHALL BE
SEALED TO PREVENT LEAKAGE ACROSS THE THERMAL ENVELOPE KCBRC
N1103.2.2

16. CERTAIN HOT WATER PIPES SHALL BE INSULATED N1103.4

17. ALL EXHAUST FANS SHALL TERMINATE TO THE BUILDING EXTERIOR
M1507.2

18. MAKEUP AIR SYSTEM REQUIRED FOR KITCHEN EXHAUST HOODS
THAT EXCEED 400 CFM M1503.4

19. BUILDING CAVITIES IN A THERMAL ENVELOPE WALL (INCLUDING
THE WALL BETWEEN THE HOUSE AND GARAGE) SHALL NOT BE USED AS
RETURN AIR PLENUMS

20. AN AIR HANDLING SYSTEM SHALL NOT SERVE BOTH THE LIVING
SPACE AND THE GARAGE M1601.6

21. A CONCRETE- ENCASED GROUNDING ELECTRODE ('UFER' GROUND)
CONNECTION SHALL BE PROVIDED TO THE ELECTRICAL SERVICE E3608.1

22. COMPLIANCE WITH THE REQUIREMENT AND SHOW CONNECTION AS
NEEDED FOR ROOF BEAM, TRUS, RAFTER, AND GIRDER CONNECTION FOR
UPLIFT PER IRC 802.11. ALL RAFTERS BE IN COMPLIANCE WITH IRC 502.11
AMENDED RAYMORE CODE

FOUNDATION WALL

MIN 2 PCS 48" NO 4 REBAR

CONTINUOUS FOOTING
THROUGH SOLID JUMP

FOOTING JUMP TYP.

BUILD IN ACCORDANCE WITH
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LOCAL CODES.

NICK ZVACEL CONSTRUCTION
LOT 112 MONTICELLO
4717 NE FREEHOLD DR
LEE SUMMIT MO

SCALE

1/4" = 1'-0

DATE

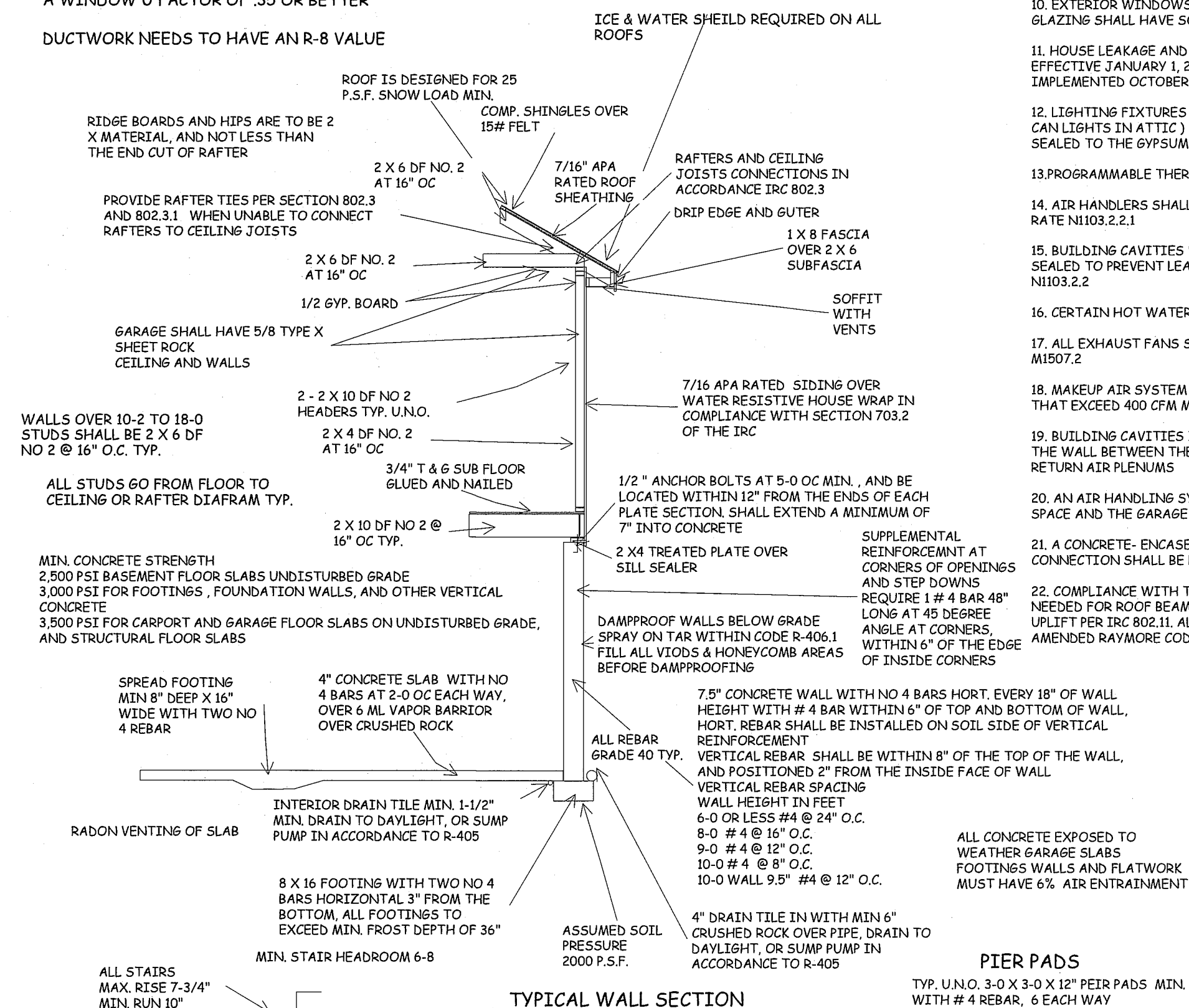
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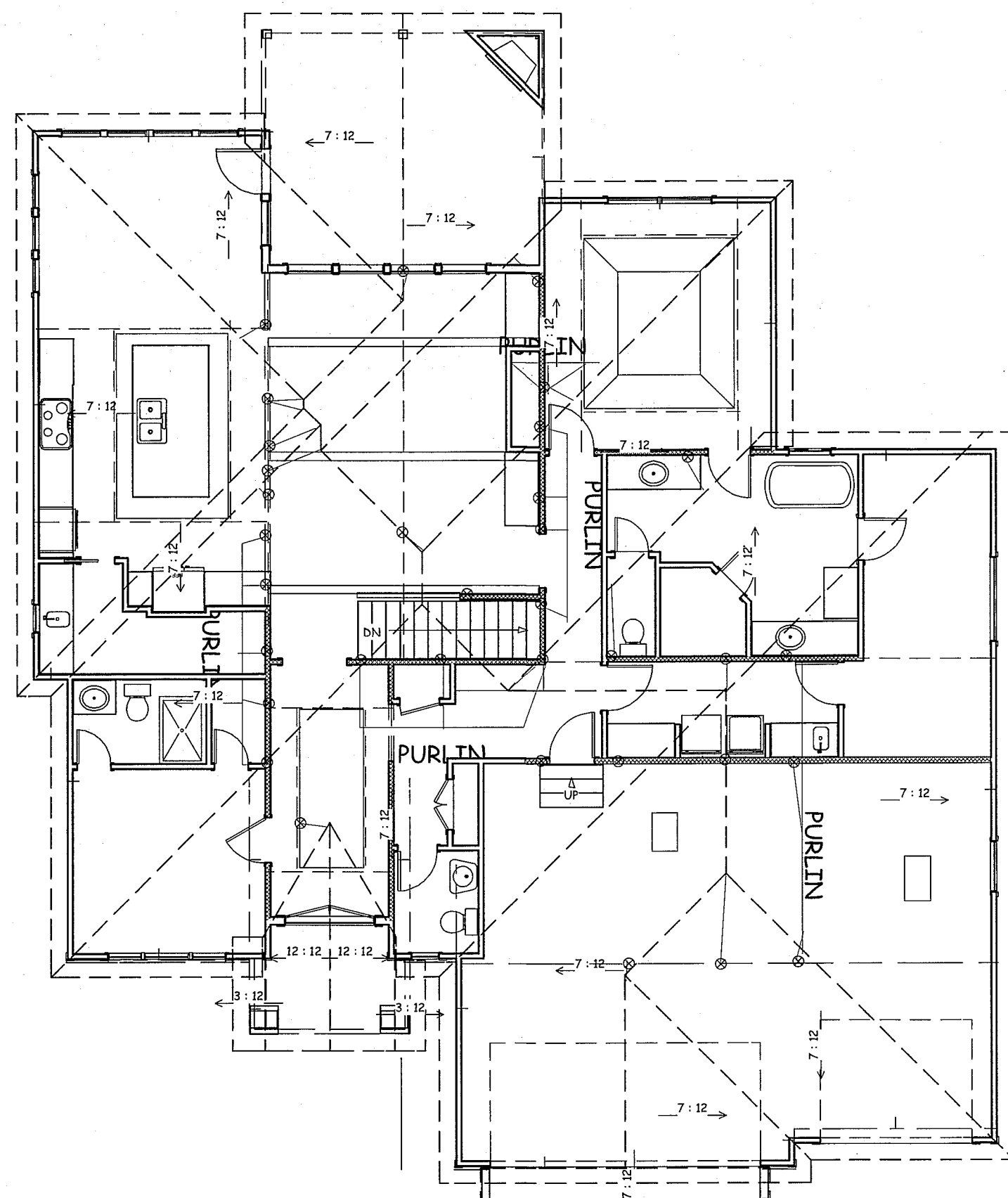
PLAN NO.

3530

SHEET NO.

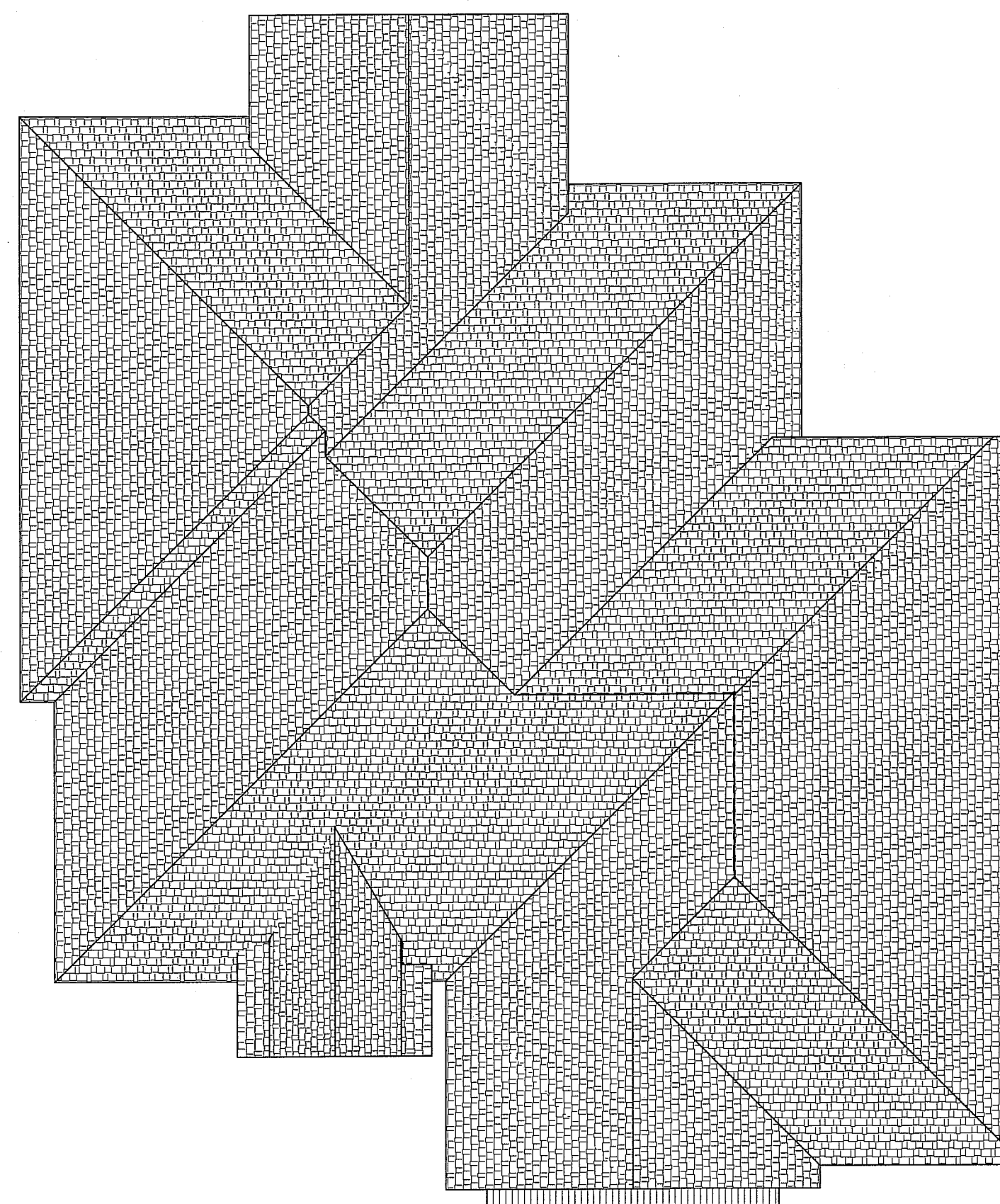
4 OF 6





PURLIN PLAN

1/8" = 1'-0"



ROOF PLAN
1/8" = 1'-0"
ROOF PITCHES 7/12

MAX. RAFTER SPAN 14'-4"

ALL RAFTERS 2 X 6 DF NO 2 @ 16" O.C UNLESS NOTED OTHERWISE
ALL HIPS 2 X 8 DF NO 2 UNLESS NOTED OTHERWISE

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SCALE
1/4" = 1'-0"

DATE
7-20-21

PLAN NO.
3530

SHEET NO.
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EXPOSURE CATEGORY B 10-FOOT MEAN ROOF HEIGHT 10-FOOT WALL HEIGHT 2 BRACED WALL LINES		MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE ^a				
Ultimate Design Wind Speed (mph)	Story Location	Braced Wall Line Spacing (feet)	Method LIB ^b	Method GB	Methods DWB, WSP, SFB, PFB, FCF, HPS, BV-WSP, ABW, PFG, PCF, CS-SFB	Methods CS-WSP, CS-G, CS-PF
≤ 115		10	3.5	3.5	2.0	2.0
		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
		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
		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 ^c	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
		60	NP	51.0	29.0	25.0

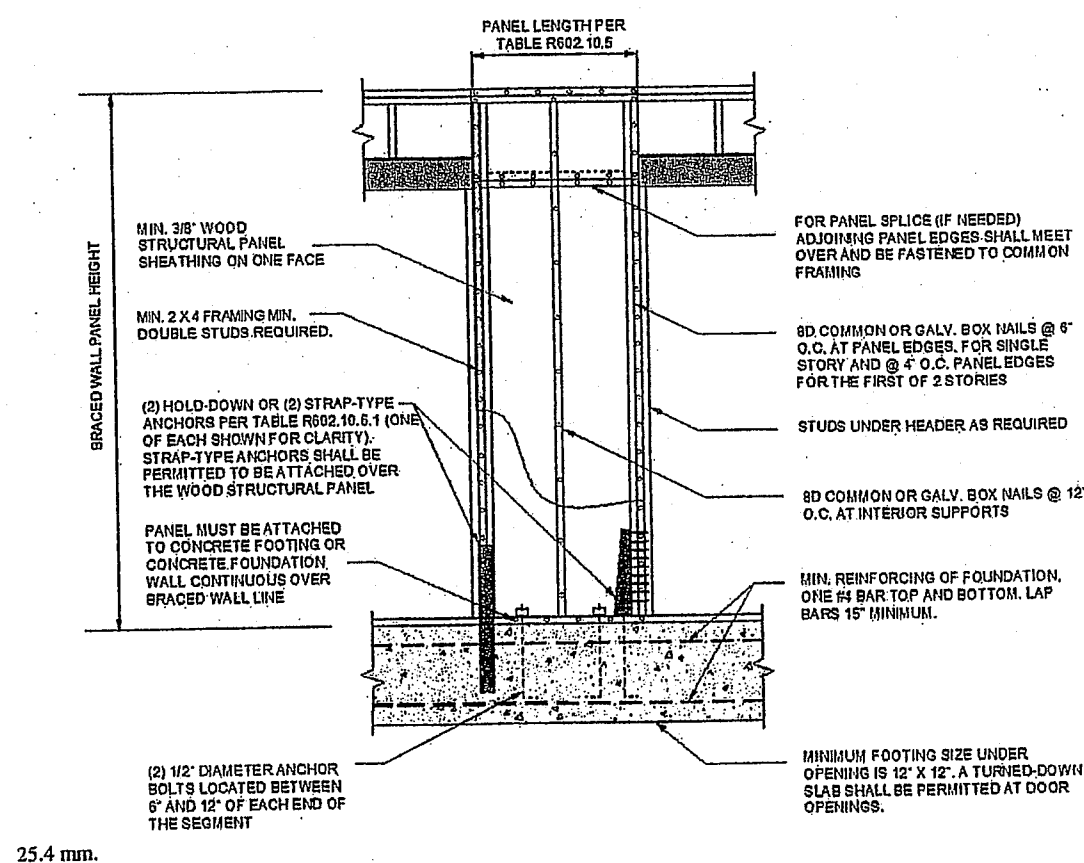


FIGURE R602.10.6.1
METHOD ABW—ALTERNATE BRACED WALL PANEL

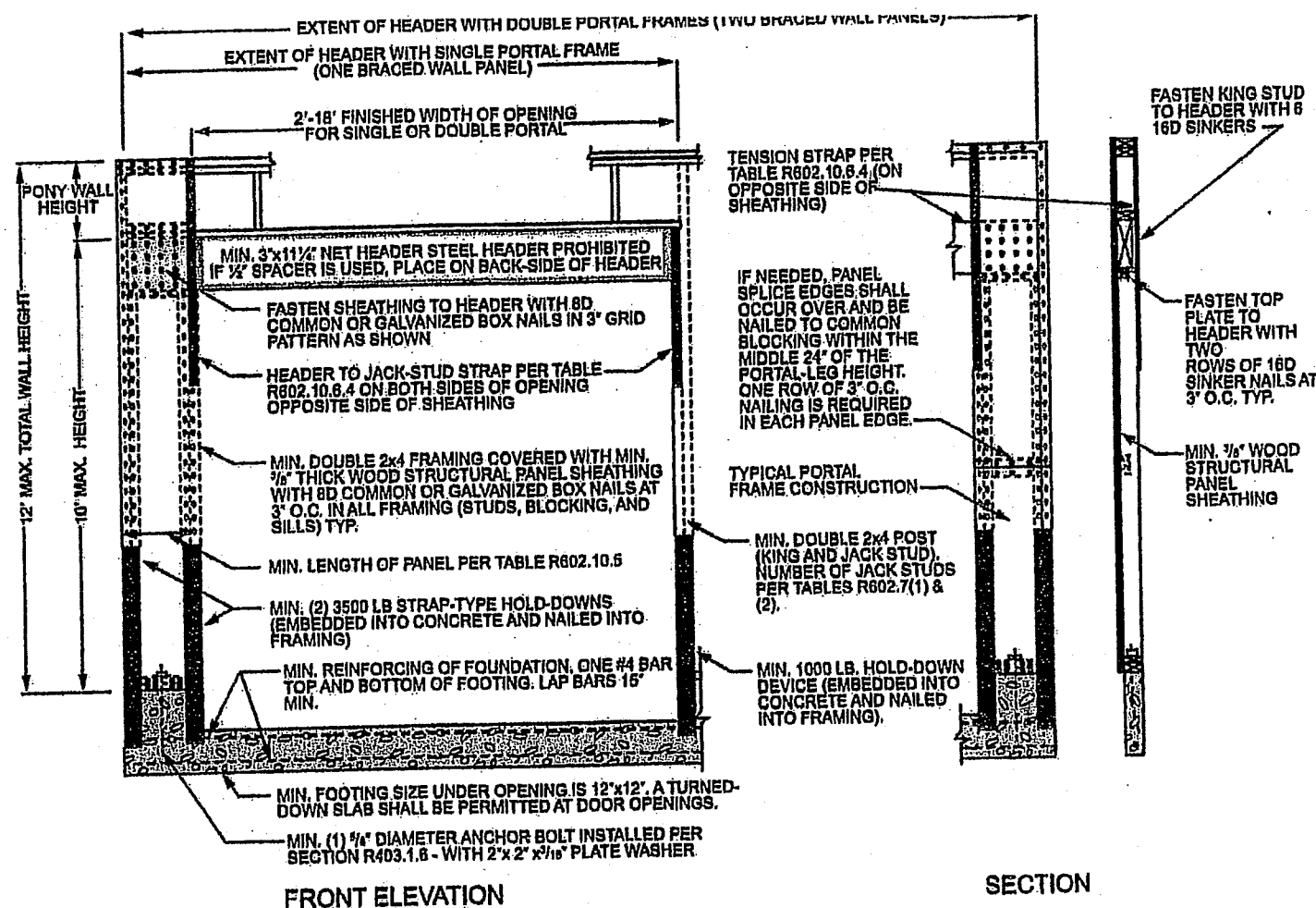


FIGURE R602.10.6.2
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

TABLE R602.10.4 BRACING METHODS					
METHODS, MATERIAL		MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA ^a	
				Fasteners	Spacing
Intermittent Bracing Methods	LIB Let-in-bracing	1 × 4 wood or approved metal straps at 45° to 60° angles for maximum 16" stud spacing		Wood: 2-8d common nails or 3-8d (2 1/2" long × 0.113" dia.) nails Metal strap: per manufacturer	Wood: per stud and top and bottom plates Metal: per manufacturer
	DWB Diagonal wood boards	3/4" (1" nominal) for maximum 24" stud spacing		2-8d (2 1/2" long × 0.113" dia.) nails or 2 - 1 3/4" long staples	Per stud
	WSP Wood structural panel (See Section R604)	3/8"		Exterior sheathing per Table R602.3(3) Interior sheathing per Table R602.3(1) or R602.3(2)	6" edges 12" field Varies by fastener
	BV-WSP ^b 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" × 0.131) nails	4" at panel edges 12" at intermediate supports 4" at braced wall panel end posts
	SEB Structural fiberboard sheathing	1/2" or 2 5/8" for maximum 16" stud spacing		1 1/2" long × 0.12" dia. (for 1/2" thick sheathing) 1 3/4" long × 0.12" dia. (for 2 5/8" 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 Nails or screws per Table R702.3.5 for interior locations	For all braced wall panel locations: 7" edges (including top and bottom plates) 7" field
	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
	FCP 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 1/2" 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 1/2" 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

METHOD (See Table R602.10.4)	MINIMUM LENGTH ^a (Inches)					CONTRIBUTING LENGTH (Inches)
	8 feet	9 feet	10 feet	11 feet	12 feet	
DWB, WSP, SFB, PFB, FCF, HPS, BV-WSP	48	48	48	53	58	Actual ^b
GB	48	48	48	53	58	Double sided = Actual Single sided = 0.5 x Actual
LIB	55	62	69	NP	NP	Actual ^b
ABW	SDC A, B and C, ultimate design wind speed < 140 mph	28	32	34	38	42
	SDC D ₀ , D ₁ and D ₂ , ultimate design wind speed < 140 mph	32	32	34	NP	NP
CS-G	Adjacent clear opening height (Inches)	24	27	30	33	36
	≤ 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	35	32	32	33	36
	88	38	35	33	33	36
	92	43	37	35	35	36
	96	48	41	38	36	36
	100	—	44	40	38	38
	104	—	49	43	40	39
	108	—	54	46	43	41
	112	—	—	50	45	43
	116	—	—	55	48	45
	120	—	—	60	52	48
	124	—	—	—	56	51
	128	—	—	—	61	54
	132	—	—	—	66	58
	136	—	—	—	—	62
	140	—	—	—	—	66
	144	—	—	—	—	72
CS-WSP, CS-SFB	Portal header height	8 feet	9 feet	10 feet	11 feet	12 feet
	Supporting roof only	16	16	16	Note c	Note c
	Supporting one story and roof	24	24	24	Note c	Note c
PFG		24	27	30	Note d	Note d
CS-PF	SDC A, B and C	16	18	20	Note e	Note e
	SDC D ₀ , D ₁ and D ₂	16	18	20	Note e	Note e

For S₁: 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 where it is greater than or equal to the minimum length.
c. Maximum header height for PFG 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 PFG 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.

TABLE R602.10.4—continued BRACING METHODS					
METHODS, MATERIAL		MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA ^a	
				Fasteners	Spacing
Intermittent Bracing Methods	PFH Portal frame with hold-downs	3/8"		See Section R602.10.6.2	See Section R602.10.6.2
	PFG Portal frame at garage	7/16"		See Section R602.10.6.3	See Section R602.10.6.3
Continuous Sheathing Methods	CS-WSP Continuously sheathed wood structural panel	3/8"		Exterior sheathing per Table R602.3(3) Interior sheathing per Table R602.3(1) or R602.3(2)	6" edges 12" field Varies by fastener
	CS-G ² Continuously sheathed wood structural panel adjacent to garage openings	3/8"		See Method CS-WSP	See Method CS-WSP
	CS-FF Continuously sheathed portal frame	7/16"		See Section R602.10.6.4	See Section R602.10.6.4
	CS-SFB ^d Continuously sheathed structural fiberboard	1/2" or 5/16" for maximum 16" stud spacing		1 1/2" long x 0.12" dia. (for 1/2" thick sheathing) 1 1/2" long x 0.12" dia. (for 5/16" thick sheathing) galvanized roofing nails	3" edges 6" field

For S₁: 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, D₀, 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 D₀, D₁, and D₂, roof covering dead load shall not exceed 3 psf.
c. Garage openings adjacent to a Method CS-G 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.

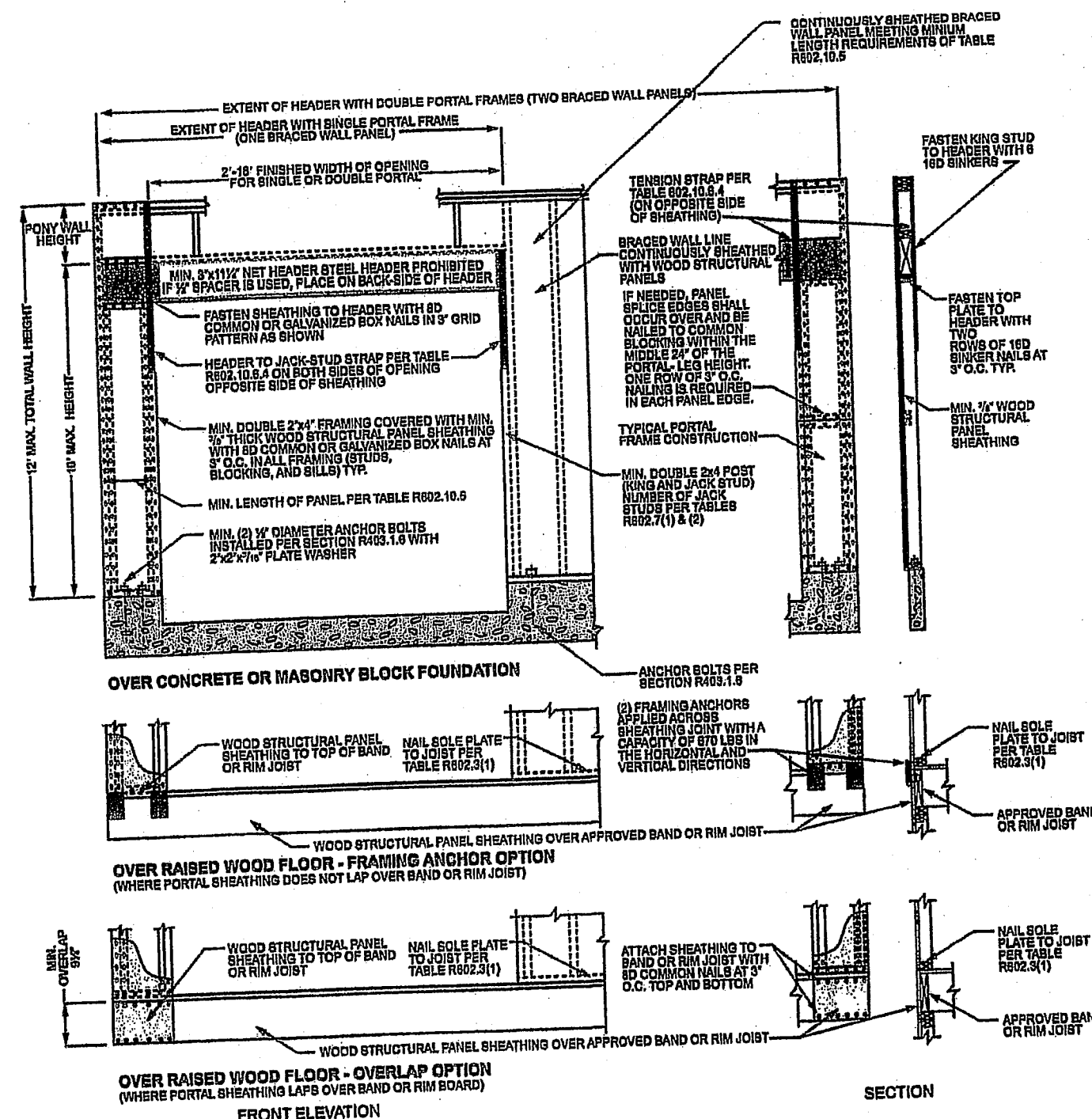
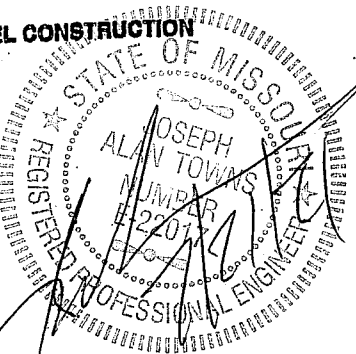


FIGURE R602.10.6.4
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION



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SHEET NO.

6 OF 6

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

4 mm, 1 foot = 304.8 mm.