

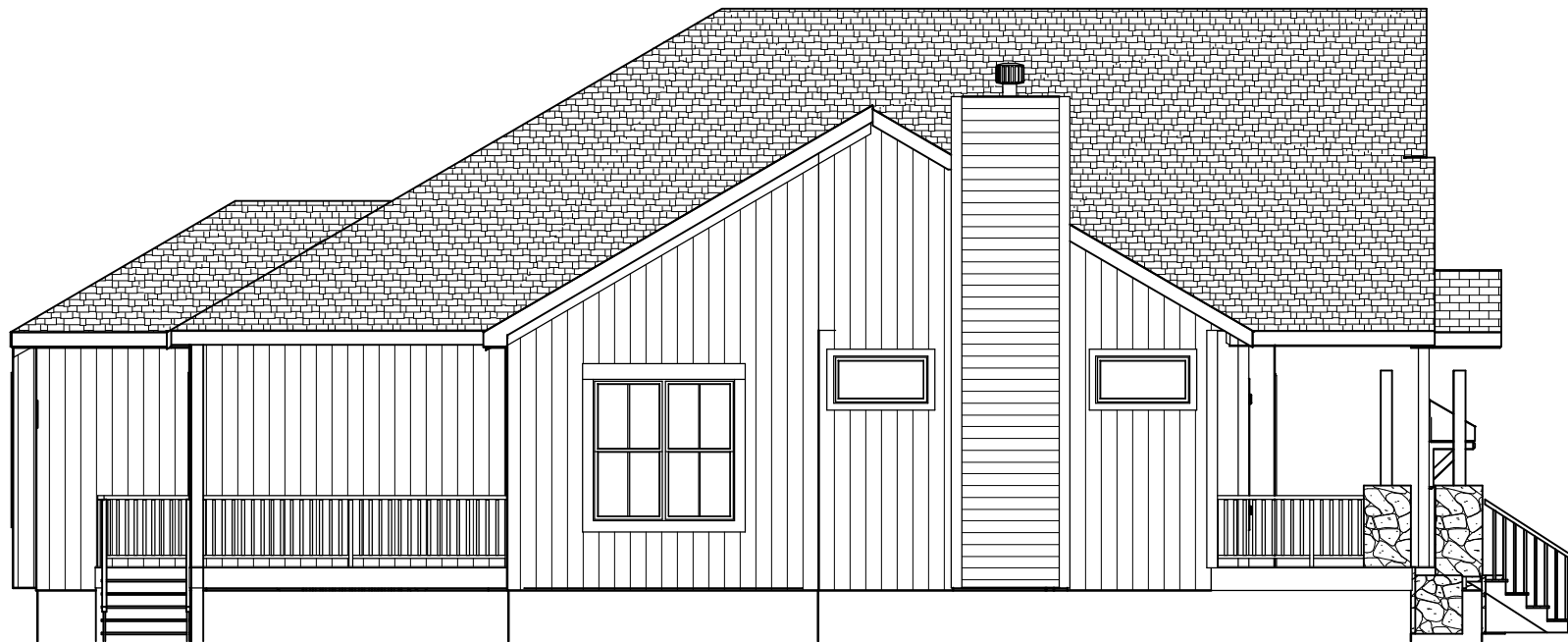
ROOF PLAN  
1/8" = 1'-0"  
ROOF PITCHES 7/12

RAFTERS 2 X 6 DF NO 2 @ 16" OC TYP.  
HIPS AND RIDGES 2 X 8 DF NO 2



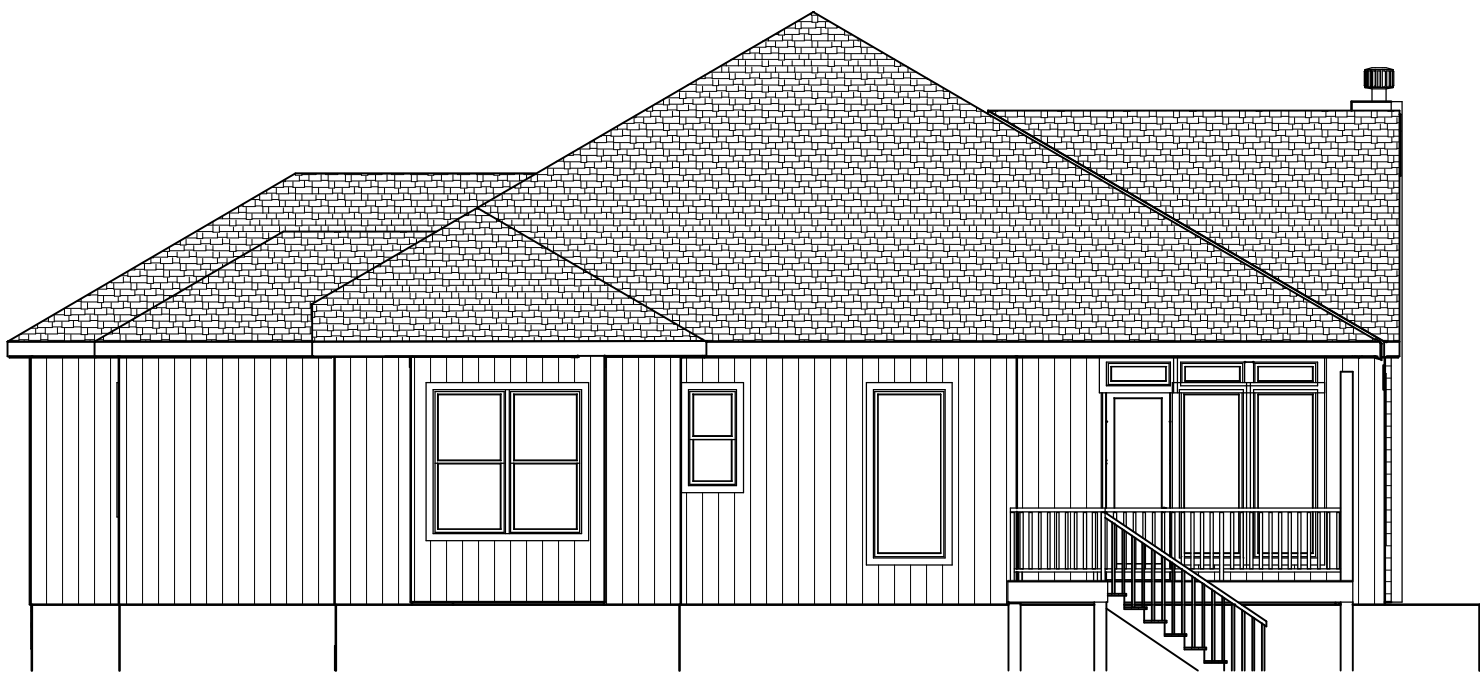
FRONT EL.  
STUCCO AND STONE

TYPICAL WALL HEIGHTS 10'-1"

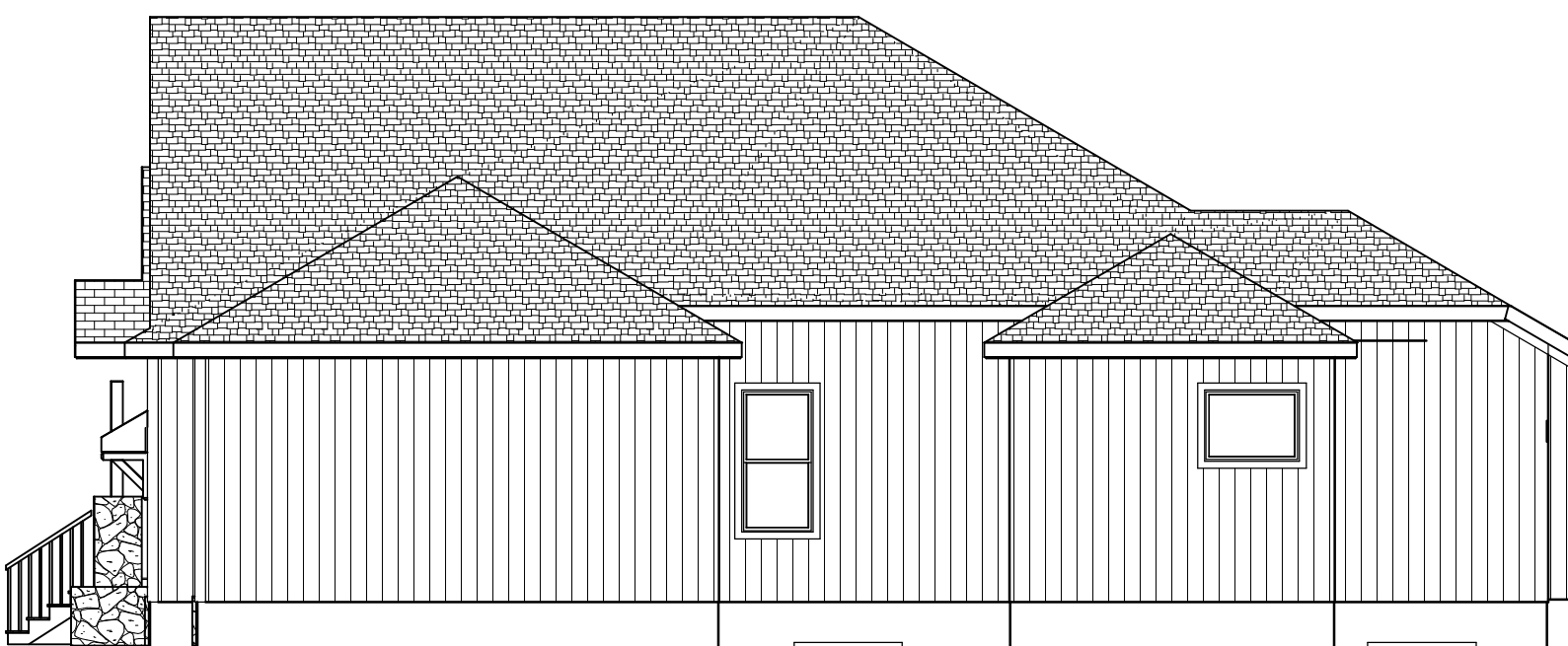


LAP SIDING IF ON CORNER  
LOT

LEFT EL.  
1/8" = 1'-0"



REAR EL.  
1/8" = 1'-0"



RIGHT EL.  
1/8" = 1'-0"

RELEASE FOR  
CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
09/08/2020



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

TRUMARK HOMES  
BROOKSIDE III  
LOT 93 MONTICELLO  
4700 NE SARATOGA  
LEE SUMMIT MO

SCALE  
1/4" = 1'-0"

DATE  
9-2-20

PLAN NO.  
3207

SHEET NO.  
1 OF 4



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

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

ICE & WATER SHIELD REQUIRED ON ALL  
ROOFS

ROOF IS DESIGNED FOR 25  
P.S.F. SNOW LOAD MIN.  
COMP. SHINGLES OVER  
15# FELT  
7/16" APA  
RATED ROOF  
SHEATHING  
RAFTERS AND CEILING  
JOISTS CONNECTIONS IN  
ACCORDANCE IRC 802.3  
Drip Edge and GUTTER  
1 X 8 FASCIA  
OVER 2 X 4  
SUBFASCIA  
SOFFIT  
WITH  
VENTS

WALLS OVER 10-2 TO 18-0  
STUDS SHALL BE 2 X 6 DF  
NO 2 @ 16" O.C. TYP.

ALL STUDS GO FROM FLOOR TO  
CEILING OR RAFTER DIAFRAM TYP.

MIN. CONCRETE STRENGTH  
2,500 PSI BASEMENT FLOOR SLABS UNDISTURBED GRADE  
3,000 PSI FOR FOOTINGS, FOUNDATION WALLS, AND OTHER VERTICAL  
CONCRETE  
3,500 PSI FOR CARPORT AND GARAGE FLOOR SLABS ON UNDISTURBED GRADE,  
AND STRUCTURAL FLOOR SLABS

SPREAD FOOTING  
MIN 6" DEEP X 16"  
WIDE WITH TWO NO 4  
REBAR  
4" CONCRETE SLAB WITH NO  
4 BARS AT 2-0 OC EACH WAY,  
OVER 6 ML VAPOR BARRIER  
OVER CRUSHED ROCK  
INTERIOR DRAIN TILE MIN. 1-1/2"  
MIN. DRAIN TO DAYLIGHT, OR SUMP  
PUMP IN ACCORDANCE TO R-405

8 X 16 FOOTING WITH TWO NO 4  
BARS HORIZONTAL 3" FROM THE  
BOTTOM. ALL FOOTINGS TO  
EXCEED MIN. FROST DEPTH OF 36"  
MIN. STAIR HEADROOM 6-8

ALL STAIRS  
MAX. RISE 7-3/4"  
MIN. RUN 10"

WINDOW SAFETY GLAZING PER 308

SAFETY GLAZING REQUIRED ALONG WALKING SURFACES AND  
STAIRS LOCATED WITHIN 36 INCHES HORIZONTALLY OF THE STEPS.  
SAFETY GLAZING REQUIRED IF EXPOSED SINGLE PANEL IS IN  
EXCESS OF 9 SQUARE FEET OR THE BOTTOM EDGE OF THE GLAZING  
IS LESS THAN 18 INCHES ABOVE THE FINISHED FLOOR.

SAFETY GLAZING REQUIRED WHERE THE NEAREST EXPOSED EDGE OF  
THE GLAZING IS WITHIN 24 INCHES OF EITHER VERTICAL EDGE OF  
THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM  
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

TYPICAL WALL SECTION

WINDOW EGRESS  
REQUIREMENTS

BEDROOM WINDOW EGRESS MINIMUM FOR A DOUBLE HUNG  
WINDOW IS 34 INCH CLEAR WIDTH MIN. AND 24 INCH CLEAR  
HEIGHT MIN. WITH A CLEAR OPENABLE AREA OF 5.7 SQUARE FEET  
MIN.  
A CASEMENT OR SLIDER WINDOW MINIMUMS ARE 20 INCH CLEAR  
WIDTH MINIMUM AND 41 INCH CLEAR HEIGHT MINIMUM. WITH A  
MINIMUM 5.7 SQUARE FOOT OF OPENABLE AREA.  
OPENING OF EGRESS WINDOW NOT MORE THAN 42"  
FROM THE FLOOR

PIER PADS

TYP. U.N.O. 3-0 X 3-0 X 12" PIER PADS MIN.  
WITH # 4 REBAR, 6 EACH WAY

USE LSTA24 RIDGE STRAPS  
ON ALL VAULTS AT RIDGE  
OR COLLAR TIES

TYP VAULT WITH STRAPS

ALL CONCRETE EXPOSED TO  
WEATHER GARAGE SLABS  
FOOTINGS WALLS AND FLATWORK  
MUST HAVE 6% AIR ENTRAINMENT

LADDER  
3'-0"

EGRESS WINDOW WELL AS NEEDED  
PER SECTION 308 MIN 3-0 X 3-0  
WITH LADDER

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

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 GYPSPUM 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

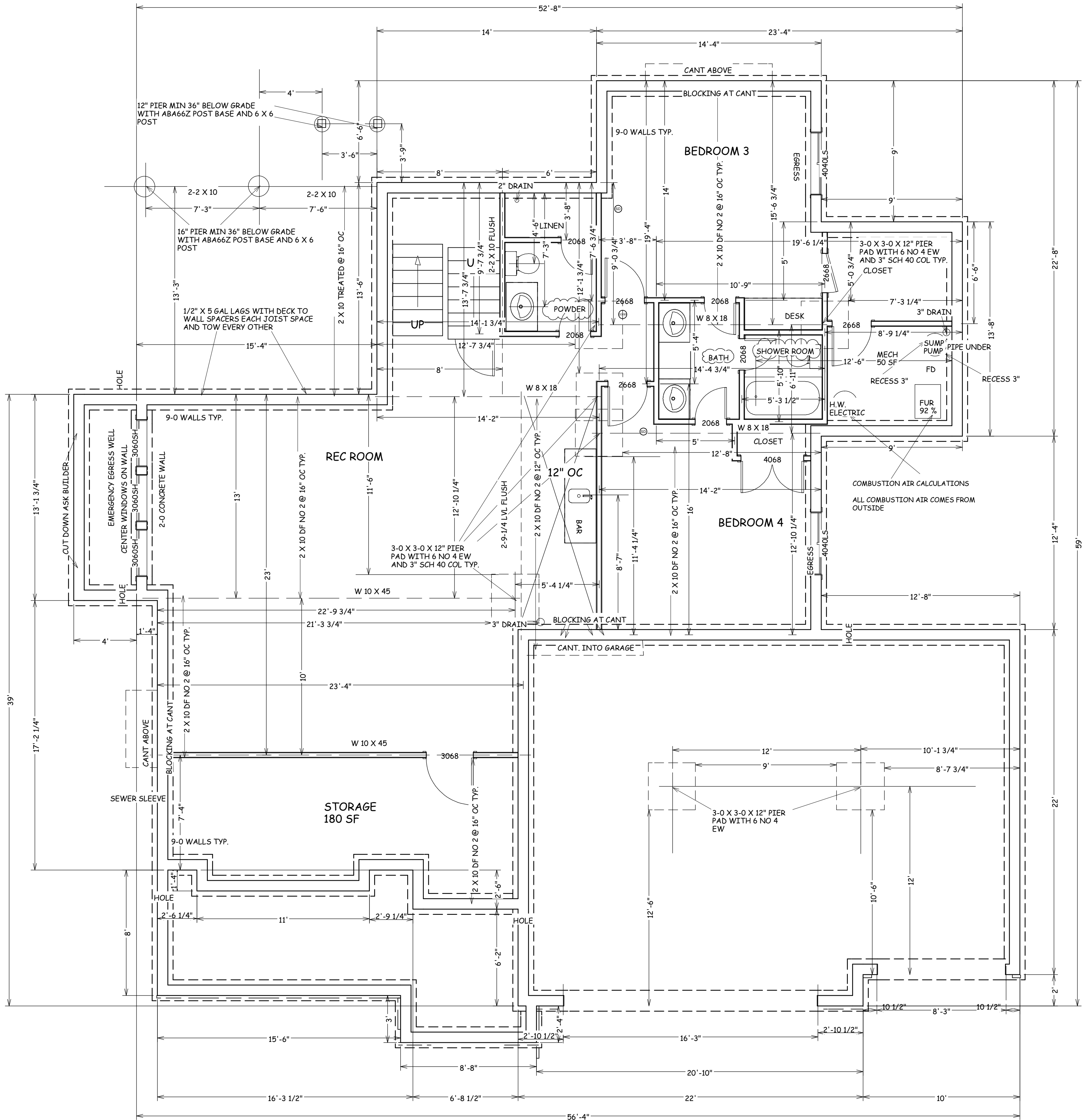
20. AN AIR HANDLING SYSTEM SHALL NOT SERVE BOTH THE LIVING  
SPACE AND THE GARAGE M1601.6

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 802.11  
AMENDED KAYMORE CODE

7.5" CONCRETE WALL WITH NO 4 BARS HORT. EVERY 18" OF WALL  
HEIGHT WITH # 4 BAR WITHIN 6" OF TOP AND BOTTOM OF WALL.  
HORT. REBAR SHALL BE INSTALLED ON SOIL SIDE OF VERTICAL  
REINFORCEMENT  
VERTICAL REBAR SHALL BE WITHIN 8" OF THE TOP OF THE WALL,  
AND POSITIONED 2" FROM THE INSIDE FACE OF WALL  
VERTICAL REBAR SPACING  
WALL HEIGHT IN FEET  
6-0 OR LESS #4 @ 24" O.C.  
9-0 # 4 @ 16" O.C.  
9-0 # 4 @ 12" O.C.  
10-0 # 4 @ 8" O.C.  
10-0 WALL #4 @ 12" O.C.

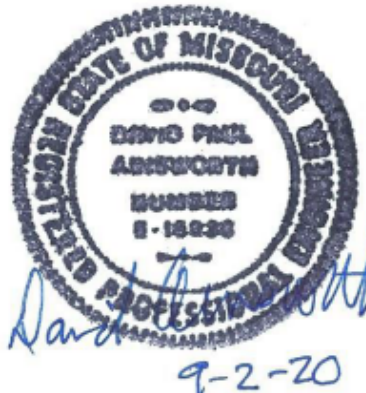
4" DRAIN TILE IN WITH MIN 6"  
CRUSHED ROCK OVER PIPE. DRAIN TO  
DAYLIGHT, OR SUMP PUMP IN  
ACCORDANCE TO R-405  
ASSUMED SOIL  
PRESSURE  
2000 P.S.F.



FOUNDATION PLAN  
1174 SF FINISHED

RELEASE FOR  
CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI

09/08/2020



BUILD IN ACCORDANCE WITH  
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TRUMARK HOMES  
BROOKSIDE III  
LOT 93 MONTICELLO  
4700 NE SARATOGA  
LEE SUMMIT MO

SCALE  
1/4" = 1-0

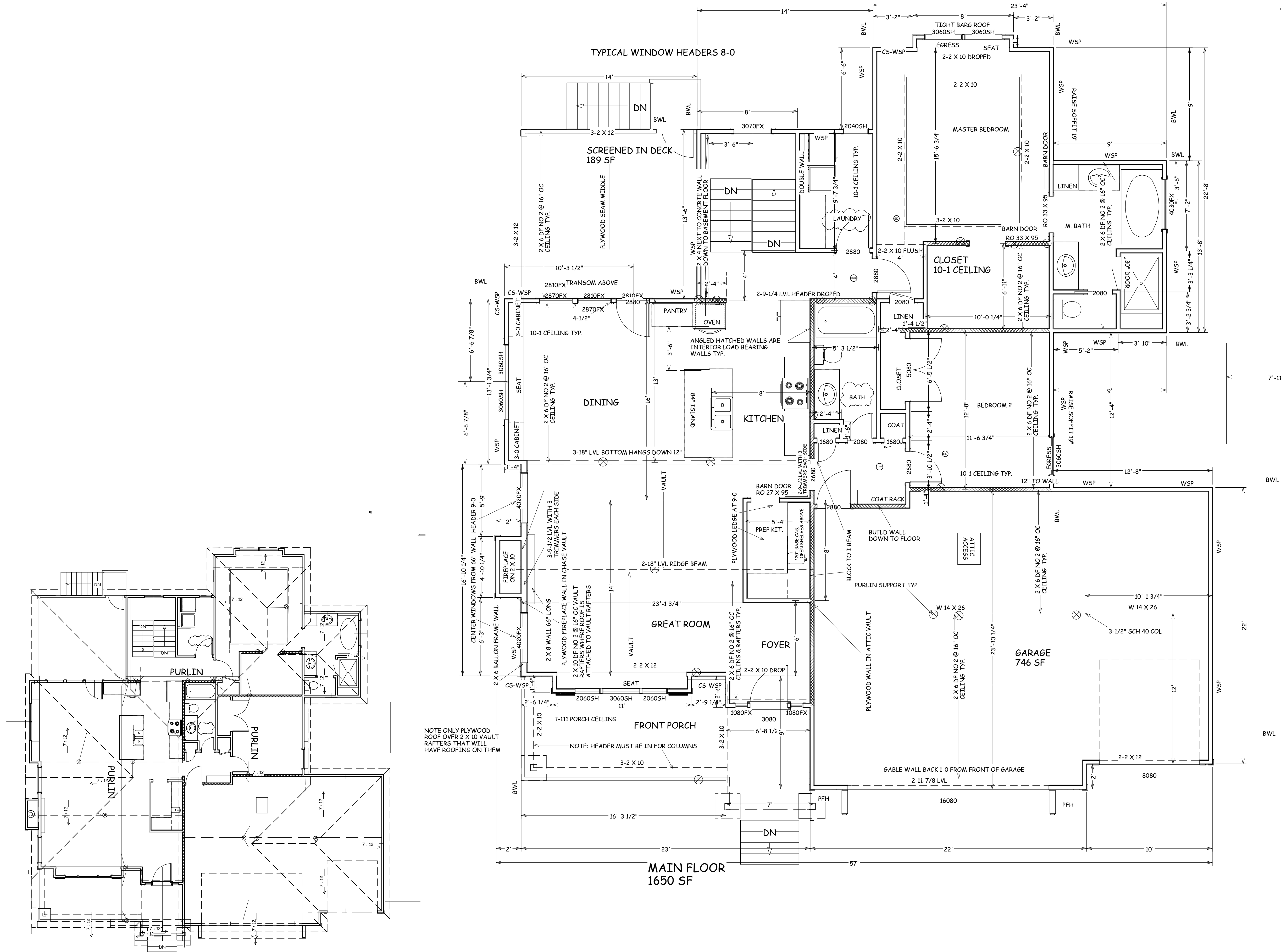
DATE  
9-2-20

PLAN NO.  
3207

SHEET NO.

2 OF 4





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

RAFTERS 2 X 6 DF NO 2 @ 16" OC TYP.  
HIPS AND RIDGES 2 X 8 DF NO 2

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LOT 93 MONTICELLO  
4700 NE SARATOGA  
LEE SUMMIT MO

SCALE  
1/4" = 1'-0"

DATE  
9-2-20

PLAN NO.  
3207

SHEET NO.  
3 OF 4



TABLE R602.10.3(1) BRACING REQUIREMENTS BASED ON WIND SPEED						
EXPOSURE CATEGORY B • 30-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 <sup>a</sup>				
Ultimate Design Wind Speed (mph)	Story Location	Braced Wall Line Spacing <sup>b</sup> (feet)	Method LIB <sup>c</sup>	Method GB	Methods DWB, WSP, SFB, FBS, PCF, HPS, BWSP, ABW, PPH, PFC, 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	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

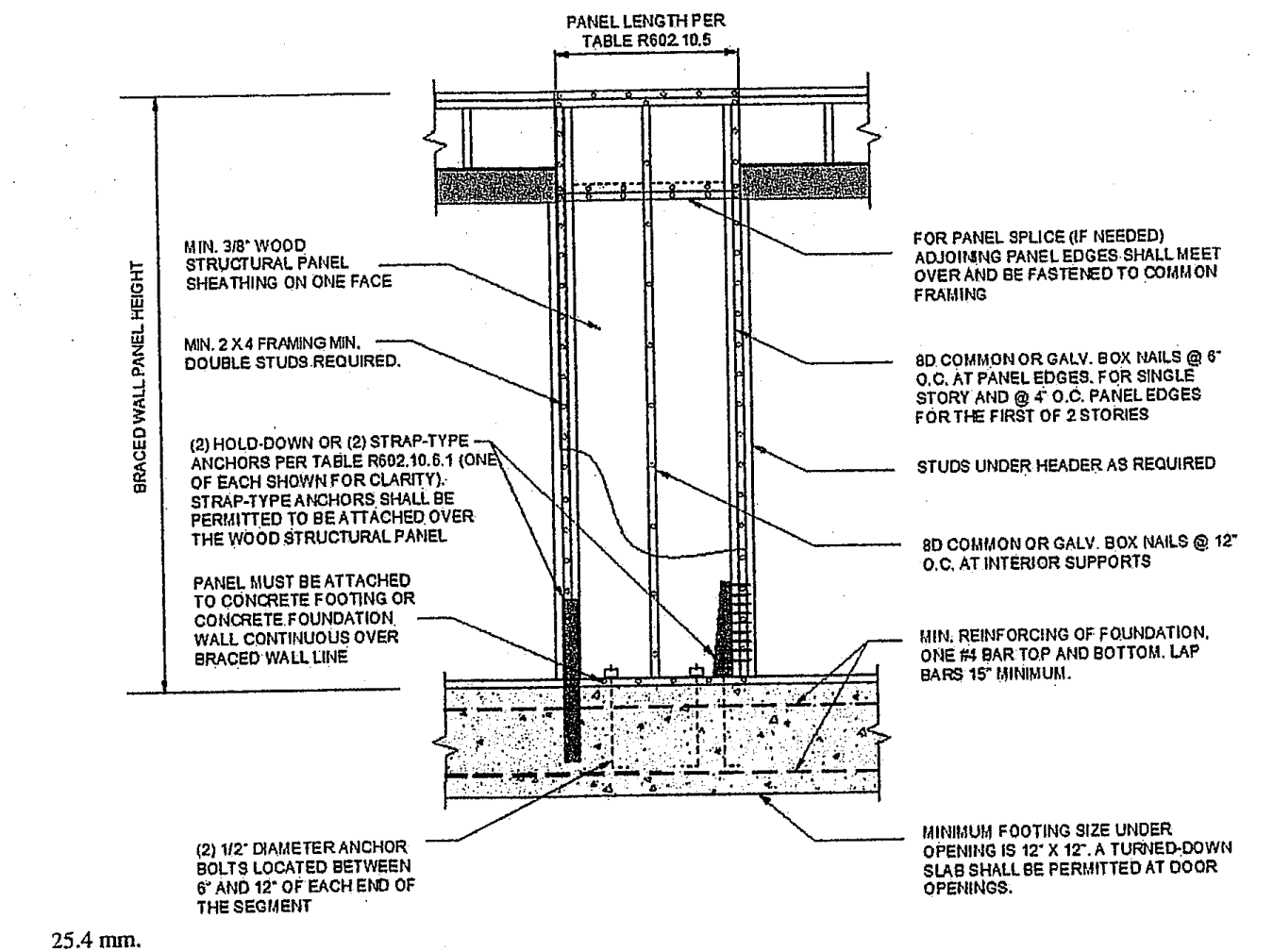
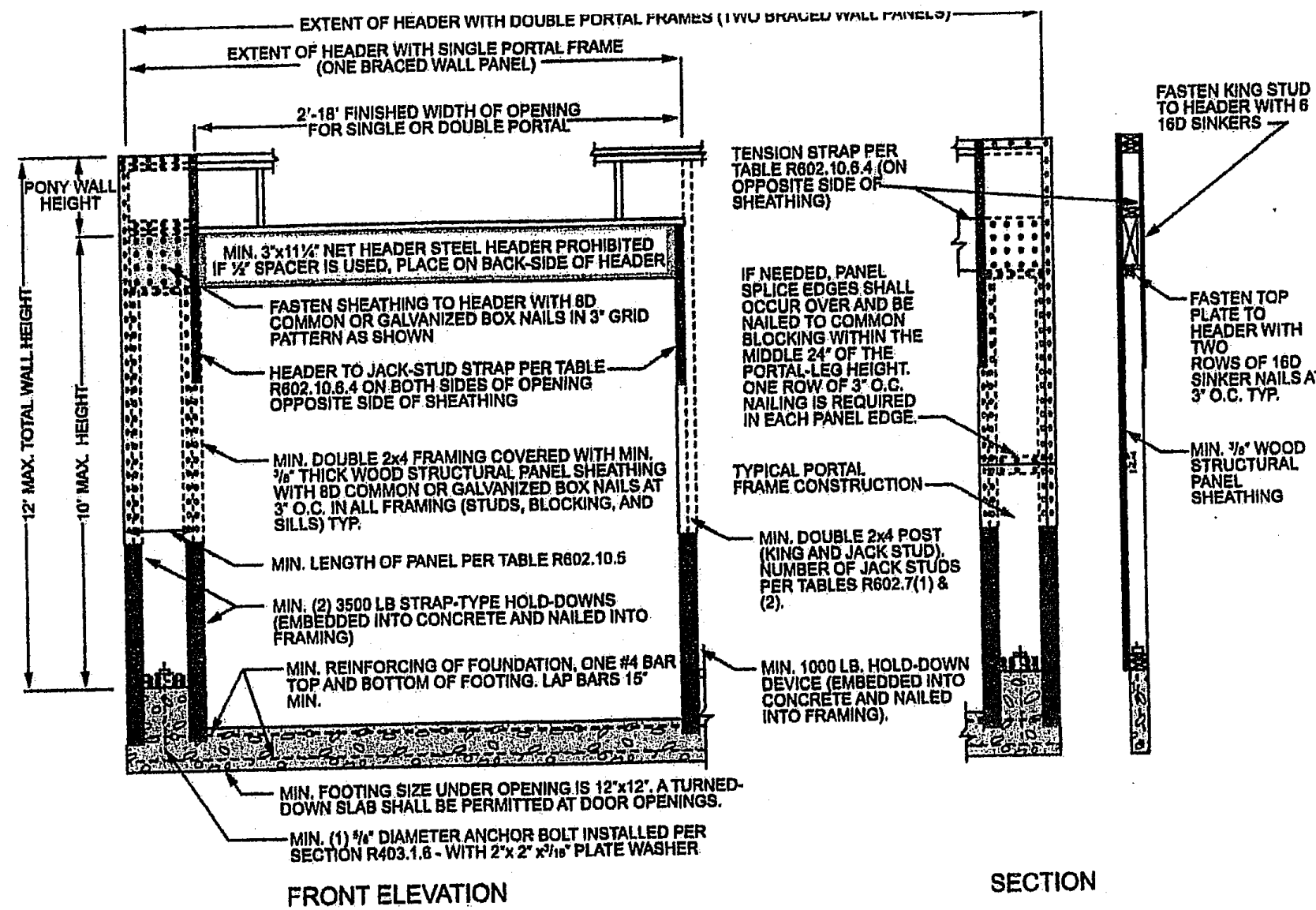


FIGURE R602.10.6.1  
METHOD ABW—ALTERNATE BRACED WALL PANEL



FRONT ELEVATION

SECTION

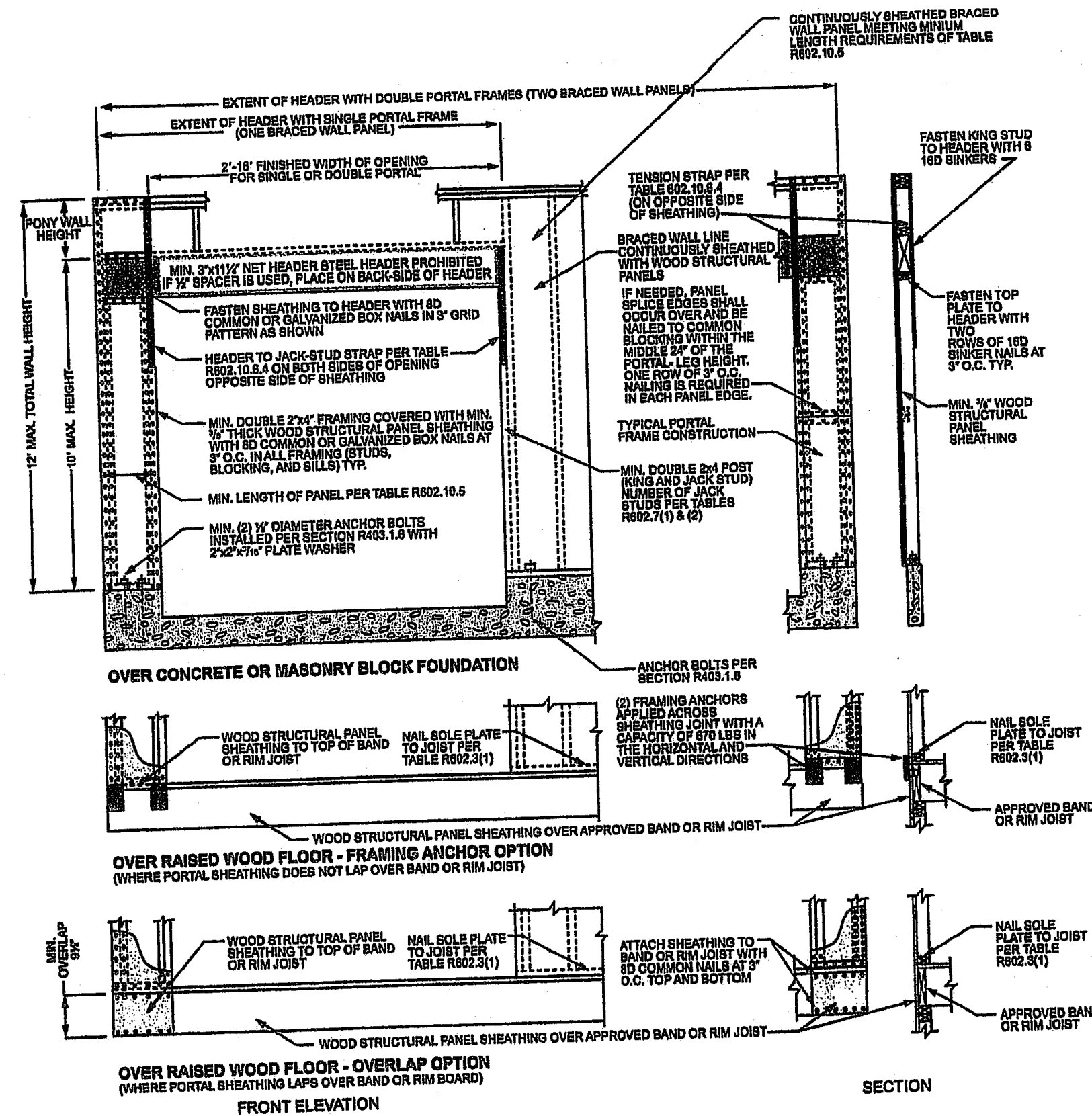
4 mm, 1 foot = 304.8 mm.

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 <sup>a</sup>		
			Fasteners	Spacing	
LIB 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 or 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	
DWB 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 1/4" long staples	Per stud	
WSP Wood structural panel (See Section R604)	1/2"		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 <sup>b</sup> 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 5/8" for maximum 16" stud spacing		1 1/2" long x 0.12" dia. (for 1/2" thick sheathing) 1 1/4" long x 0.12" dia. (for 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	
FBS Particleboard sheathing (See Section R605)	3/4" or 1/2" for maximum 16" stud spacing		For 3/4", 6d common (2" long x 0.113" dia.) nails For 1/2", 8d common (2 1/2" long x 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, 3/16" dia. head nails or 1/4" long, 16 gage staples	6" o.c. on all framing members	
HPS Hardboard panel siding	1/2" 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	1/2"		See Section R602.10.6.1	See Section R602.10.6.1	

TABLE R602.10.5 MINIMUM LENGTH OF BRACED WALL PANELS						
METHOD (See Table R602.10.4)	MINIMUM LENGTH <sup>a</sup> (inches)					CONTRIBUTING LENGTH (inches)
	8 feet	9 feet	10 feet	11 feet	12 feet	
DWB, WSP, SFB, FBS, PCF, HPS, BV-WSP	48	48	48	53	58	Actual <sup>b</sup>
GB	48	48	48	53	58	Double sided = Actual Single sided = 0.5 x Actual
LIB	55	62	69	NP	NP	Actual <sup>b</sup>
ABW	SDC A, B and C, ultimate design wind speed < 140 mph	28	32	34	38	42
	SDC D <sub>1</sub> , D <sub>2</sub> and D <sub>3</sub> ultimate design wind speed < 140 mph	32	32	34	NP	NP
CS-G	Adjacent clear opening height (inches)	24	27	30	33	36
CS-WSP, CS-SFB	≤ 64	24	27	30	33	36
	64	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	33	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	—	—	—	—	66
	140	—	—	—	—	72
	144	—	—	—	—	72
METHOD (See Table R602.10.4)	Portal header height					
	8 feet	9 feet	10 feet	11 feet	12 feet	
PFH	Supporting roof only	16	16	16	Note c	Note c
PFH	Supporting one story and roof	24	24	24	Note c	Note c
PPG		24	27	30	Note d	Note d
CS-PF	SDC A, B and C	16	18	20	Note e	Note e
	SDC D <sub>1</sub> , D <sub>2</sub> and D <sub>3</sub>	16	18	20	Note e	Note e

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 where 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 PPG 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.



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

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

RELEASE FOR  
CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
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09/08/2020

