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

ROOF PLAN
1/8 = 1-0
SIDE TO SIDE 8/12
FRONT TO BACK 7/12

SHINGLES

FRONT EL.
STUCCO, BOARD AND BATT, & STONE
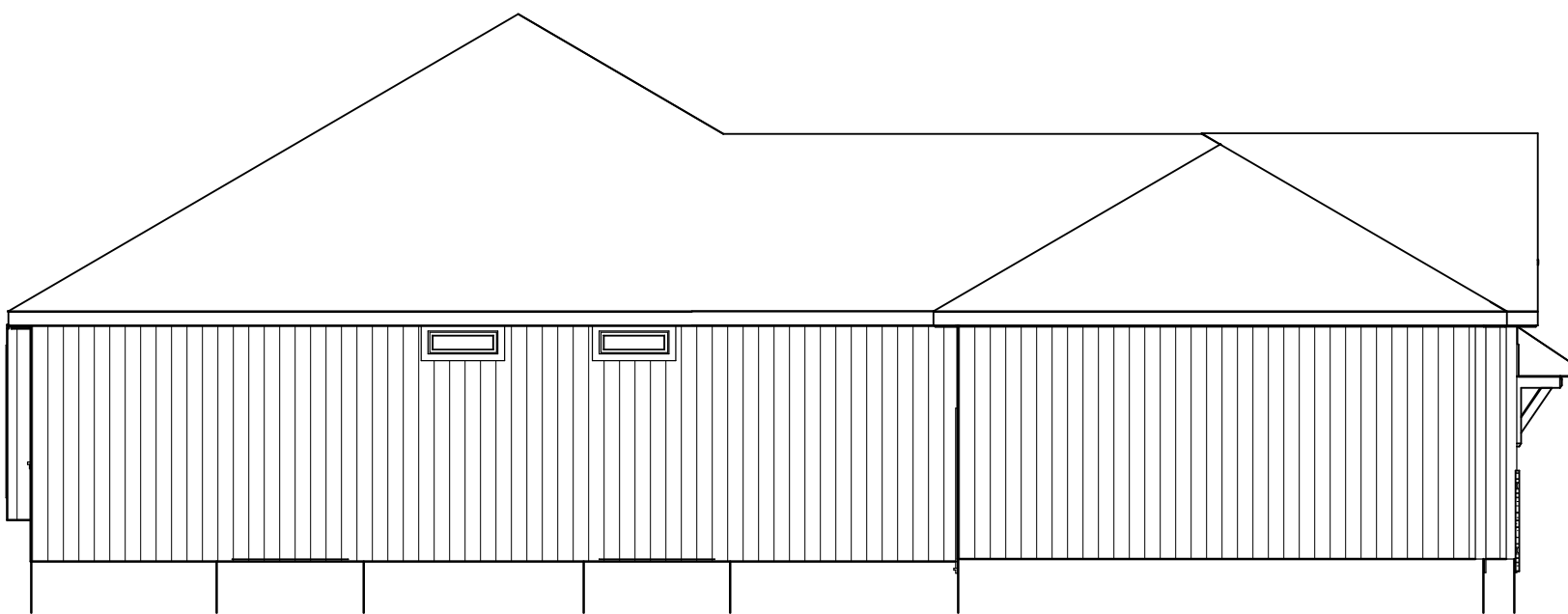
LEFT EL.
1/8 = 1-0

RIGHT EL.
1/8 = 1-0

REAR EL.
1/8 = 1-0

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

LOT 125 MONTICELLO
4812 NE JAMESTOWN DR
LEE SUMMIT MO

TRUMARK HOMES
KYLE II

SCALE
1/4" = 1-0

DATE
10-5-21

PLAN NO.
3596

SHEET NO.
1 OF 5

COMBUSTION AIR CALCULATIONS
ALL COMBUSTION AIR COMES FROM OUTSIDE

28'-4"
43'
14'-8"

9-0 WALLS TYP.
13'-6"
W 8 X 15
5'-4"
HW
FUR 92%
FD
PATIO OVER

BEDROOM 2
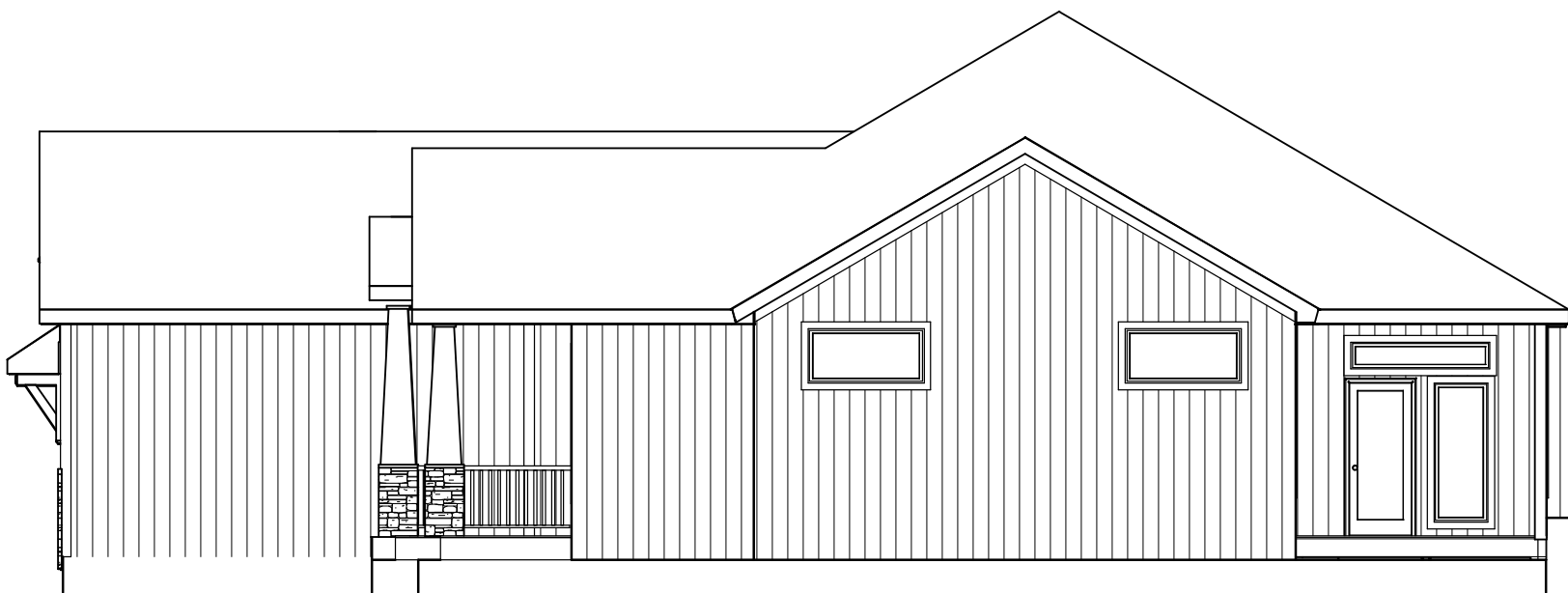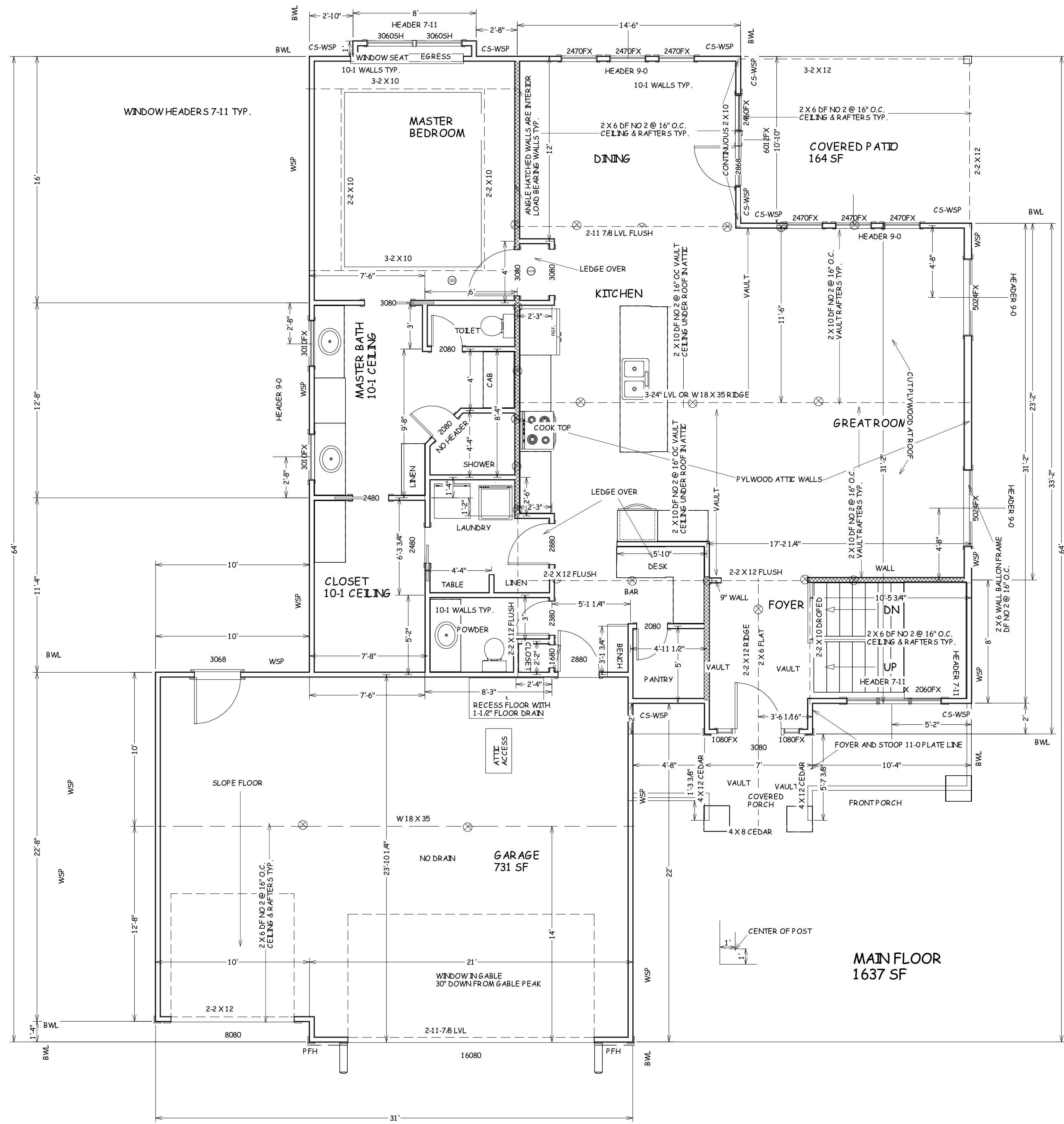10'-6"

MECH ROOM
33 SF
5068

CANT ABOVE
CANT ABOVE

11'-2"
15'
BLOCKING AT CANT.
16'
10 7 1/2"
2468
12' 1 1/2"
CLOSET
3'
9'-6"
POWDER

6'-4"
EGRESS WELL
4'

12'
EGRESS

2468
BEAM POCKET
7'-5"
2 X 10 DF NO 2 @ 16" OC TYP.
15'

DRAIN TILE
2'-4"

40'
2468
3-2 X 10
3'-8"
2668
2 X 10 DF NO 2 @ 12" OC

START PLYWOOD 2-0 OFF THIS EDGE

BLOCKING AT CANT.
CANT ABOVE
CHECK HEIGHT WITH BUILDER

7'-2"
BATH
2 X 8 DF NO 2 @ 16" OC DOUBLED UNDER SHOWER
11'-2"
8'-2 1/2"
FAMILY ROOM
22'
23'-6"
W 12 X 35

8'-4"
9'-6"
8'-2"
3068
2668

19'-6"
OPTIONAL WINDOW WELL
31'-10"

2468
3-2 X 10
12'
2'-4"
5'-4"
14'-6"
15'
2 X 10 DF NO 2 @ 12" OC
3-2 X 10
13'-6"

6'-4"
EGRESS WELL
2-2 X 10
3-0 X 3-0 X 12" PIER PAD WITH 6 NO 4 EW WITH 3" SCH 40 COL. TYP.

16'-8"
13'
9'-10"
EGRESS

4'
3" STUB
2 X 10 DF NO 2 @ 16" OC TYP.
BEDROOM 3
12'

9-0 WALLS TYP.
2-2 X 10
2" STUB FOR BAR
8-0 BAR
4-2 X 10
4-2 X 10
RAILING

W 8 X 15
3068
11'-6"
UP
13'-6"
4'

CLOSET
4068
4068
6'-1"
4'-4"
RECESS 3"

10'
2'-8"
3-0 DOOR
3" STUB
STORAGE
78 SF
2-2 X 10
U
FD
SUMP PUMP
8'-5"
16'-4"

DRAIN TILE
6'-4"
BEAM POCKET
6'-4"
W 12 X 35
SEWER SLEEVE

3" HOLE FOR GARAGE FLOOR DRAIN 6" BELOW GARAGE DOOR NOTCH
RECESS FLOOR WITH 1-1/2" FLOOR DRAIN
DRAIN TILE
BB
5'
DRAIN TILE
2'

8'-6"
8'
3-0 X 3-0 X 12" PIER PAD WITH 6 NO 4 EW WITH 3" SCH 40 COL. TYP.
3-0 X 3-0 X 12" PIER PAD WITH 6 NO 4 EW WITH
4'-4"
7'-8"
10'

10'
11'
2'
2'
7'
7'-4"
21'-8"

22'-8"
22'-8"
12'-8"
12'-6"
12'-6"
14'
4'-8"
15'-4"

1'-4"
10 1/2"
8'-3"
10 1/2"
2'-4 1/2"
16'-3"
2'-4 1/2"

10'
21'
53'

FOUNDATION PLAN
1231 SF FINISHED
111 SF UNFINISHED
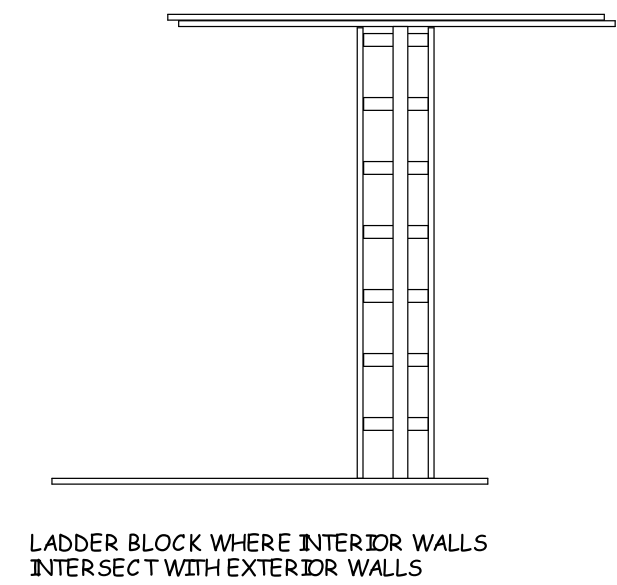
BUILD IN ACCORDANCE WITH
2018 INTERNATIONAL
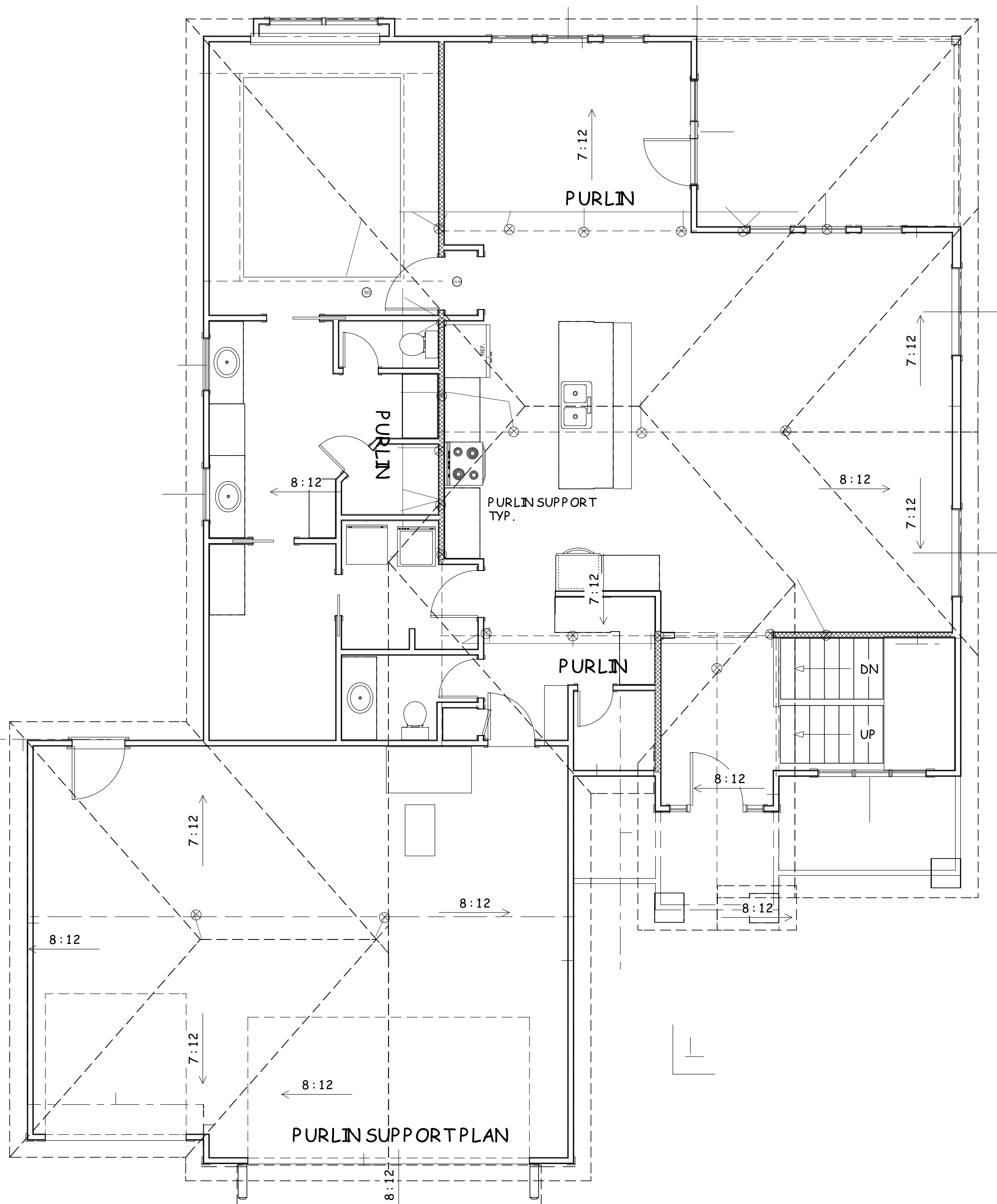RESIDENTIAL CODE AND
LOCAL CODES.

LOT 125 MONTICELLO
4812 NE JAMESTOWN DR
LEE SUMMIT MO

TRUMARK HOMES
KYLE II

SCALE
1/4" = 1-0

DATE
10-5-21

PLAN NO.
3596

SHEET NO.
3 OF 5

Main Floor Labels

MASTER BEDROOM
10-1 WALLS TYP.
WINDOW SEAT
EGRESS
HEADER 7-11
3060SH 3060SH
CS-WSP
BWL

DINING
10-1 WALLS TYP.
HEADER 9-0
2470FX 2470FX 2470FX
CS-WSP
ANGLE HATCHED WALLS ARE INTERIOR LOAD BEARING WALLS TYP.
CONTINUOUS 2 X 10
2 X 6 DF NO 2 @ 16" O.C. CEILING & RAFTERS TYP.

COVERED PATIO
164 SF
3-2 X 12
2 X 6 DF NO 2 @ 16" O.C. CEILING & RAFTERS TYP.
CS-WSP 2470FX 2470FX 2470FX CS-WSP
HEADER 9-0
2-2 X 12

WINDOW HEADERS 7-11 TYP.

TYPICAL EXTERIOR CORNER TILE CORNER WITH STUDS

LADDER BLOCK WHERE INTERIOR WALLS INTERSECT WITH EXTERIOR WALLS

KITCHEN
TOILET
2080
CAB
COOK TOP
SHOWER
LINEN
LEDGE OVER
2-11 7/8 LVL FLUSH
2 X 10 DF NO 2 @ 16" O.C. VAULT CEILING UNDER ROOF IN ATTIC
3-24" LVL OR W 18 X 35 RIDGE
VAULT
2 X 10 DF NO 2 @ 16" O.C. VAULT RAFTERS TYP.
PLYWOOD ATTIC WALLS
GREAT ROOM
CUT PLYWOOD AT ROOF

MASTER BATH
10-1 CEILING
HEADER 9-0
3010FX
2480

CLOSET
10-1 CEILING
10-1 WALLS TYP.
POWDER
TABLE
LINEN
DESK
BAR
2-2 X 12 FLUSH
9" WALL
FOYER
DN
UP
WALL
2 X 6 WALL BALLOON FRAME DF NO 2 @ 16" O.C.
2 X 6 DF NO 2 @ 16" O.C. CEILING & RAFTERS TYP.
HEADER 7-11
2060FX
PANTRY
VAULT
2-2 X 12 RIDGE
2 X 6 FLAT
3068

RECESS FLOOR WITH 1-1/2" FLOOR DRAIN
LAUNDRY
2480
2880
LEDGE OVER

ATTIC ACCESS
CS-WSP
1080FX 3080 1080FX
FOYER AND STOOP 11-0 PLATE LINE
4 X 12 CEDAR
VAULT
COVERED PORCH
FRONT PORCH
4 X 8 CEDAR
CENTER OF POST

GARAGE
731 SF
NO DRAIN
SLOPE FLOOR
W 18 X 35
2 X 6 DF NO 2 @ 16" O.C. CEILING & RAFTERS TYP.
WINDOW IN GABLE 30" DOWN FROM GABLE PEAK
2-2 X 12
8080
PFH
16080
PFH
2-11 7/8 LVL

MAIN FLOOR
1637 SF

BWL WSP

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 CONTINOUS

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

2 X 10 VAULT RAFTER
1" AIR SPACE WITH FOAM AIR CHUTES
2 X 2 NAILED TO BOTTOM OF RAFTERS 12" O.C. WITH 12 D NAILS
R-38 HIGH DENSITY INSULATION

RIDGE BOARDS AND HIPS ARE TO BE 2 X MATERIAL, AND NOT LESS THAN THE END CUT OF RAFTER

ROOF IS DESIGNED FOR 25 P.S.F. SNOW LOAD MIN.
COMP. SHINGLES OVER 15# FELT
7/16" APA RATED ROOF SHEATHING
2 X 6 DF NO. 2 AT 16" OC
PROVIDE RAFTER TIES PER SECTION 802.3 AND 802.3.1 WHEN UNABLE TO CONNECT RAFTERS TO CEILING JOISTS

RAFTERS AND CEILING JOISTS CONNECTIONS IN ACCORDANCE IRC 802.3
DRIP EDGE AND GUTER
1 X 8 FASCIA OVER 2 X 6 SUBFASCIA
SOFFIT WITH VENTS

GARAGE SHALL HAVE 5/8 TYPE X SHEET ROCK CEILING AND WALLS

2 X 6 DF NO. 2 AT 16" OC
1/2 GYP. BOARD

ICE & WATER SHIELD REQUIRED ON ALL ROOFS

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.

2 X 6 DF NO. 2 HEADERS TYP. U.N.O.
2 X 4 DF NO. 2 AT 16" OC
3/4" T &G SUB FLOOR GLUED AND NAILED
2 X 10 DF NO 2 @ 16" OC TYP.

2 - 2 X 10 DF NO 2 HEADERS TYP. U.N.O.

7/16 APA RATED SIDING OVER WATER RESISTIVE HOUSE WRAP IN COMPLIANCE WITH SECTION 703.2 OF THE IRC

1/2 " ANCHOR BOLTS AT 5-0 OC MIN. , AND BE LOCATED WITHIN 12" FROM THE ENDS OF EACH PLATE SECTION. SHALL EXTEND A MINIMUM OF 7" INTO CONCRETE

2 X 4 TREATED PLATE OVER SILL SEALER

SUPPLEMENTAL REINFORCEMENT AT CORNERS OF OPENINGS AND STEP DOWNS REQUIRE 1 # 4 BAR 48" LONG AT 45 DEGREE ANGLE AT CORNERS, WITHIN 6" OF THE EDGE OF INSIDE CORNERS

DAMPROOF WALLS BELOW GRADE SPRAY ON TAR WITHIN CODE R-406.1 FILL ALL VOIDS & HONEYCOMB AREAS BEFORE DAMPROOFING

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 8" 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 BARRIOR OVER CRUSHED ROCK

RADON VENTING OF SLAB

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"

ASSUMED SOIL PRESSURE 2000 P.S.F.

ALL REBAR GRADE 40 TYP.

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.
8-0 # 4 @ 16" O.C.
9-0 # 4 @ 12" O.C.
10-0 # 4 @ 8" O.C.
10-0 WALL 9.5" #4 @ 12" O.C.

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

MIN. STAIR HEADROOM 6-8

4" DRAIN TILE IN WITH MIN 6" CRUSHED ROCK OVER PIPE, DRAIN TO DAYLIGHT, OR SUMP PUMP IN ACCORDANCE TO R-405

TYPICAL WALL SECTION

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

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

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

TYP VAULT WITH STRAPS

STUDS OVER 10-0 SHALL HAVE BLOCKING ALONG WALL MAX OF 6-0 O.C.

1. DWELLING / GARAGE OPENINGS BETWEEN GARAGE AND SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS SHALL BE EQUIPPED WITH SOLID WOOD OR STELL 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 KITHCHEN 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

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

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 REQUIRD 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

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

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

OVERHEAD GARAGE DOORS MUST MEET DASMA 115 MPH OR IRC 2018 REQUIRMENTS

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

PURLIN
PURLIN
PURLIN
PURLIN SUPPORT TYP.
PURLIN
7 : 12
8 : 12
7 : 12
7 : 12
7 : 12
7 : 12
8 : 12
8 : 12
8 : 12
8 : 12
8 : 12
8 : 12
8 : 12
DN
UP

PURLIN SUPPORT PLAN

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

Ultimate Design Wind Speed (mph)	Story Location	Braced Wall Line Spacing (feet)	Method LIB[b]	Method GB[b]	Methods DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP, ABW, PFH, PFG, 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

TABLE R602.10.4
BRACING METHODS

METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Spacing
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 (2¹⁄₂" 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 (2¹⁄₂" long × 0.113" dia.) nails or 2 - 1³⁄₈" 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 — Wood structural panels with stone or masonry veneer (See Section R602.10.6.5)	⁷⁄₁₆"	See Figure R602.10.6.5	8d common (2¹⁄₂" × 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 ²⁵⁄₃₂" for maximum 16" stud spacing		1¹⁄₂" long × 0.12" dia. (for ¹⁄₂" thick sheathing) 1³⁄₄" long × 0.12" dia. (for ²⁵⁄₃₂" 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 (2¹⁄₂" long × 0.131" dia.) nails	3" edges 6" field
PCP — Portland cement plaster	See Section R703.7 for maximum 16" stud spacing		1¹⁄₂" 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 1¹⁄₂" 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

TABLE R602.10.4—continued
BRACING METHODS

METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Spacing
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
CS-WSP — Continuously sheathed wood structural panel	³⁄₈"		Exterior sheathing per R602.3(3) — Interior sheathing per Table R602.3(1) or R602.3(2)	6" edges 12" field — Varies by fastener
CS-G[a,e] — Continuously sheathed wood structural panel adjacent to garage openings	³⁄₈"		See Method CS-WSP	See Method CS-WSP
CS-PF — 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 ²⁵⁄₃₂" for maximum 16" stud spacing		1¹⁄₂" long × 0.12" dia. (for ¹⁄₂" thick sheathing) 1³⁄₄" long × 0.12" dia. (for ²⁵⁄₃₂" 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 = 47.8 N/m², 1 mile per hour = 0.447 m/s.
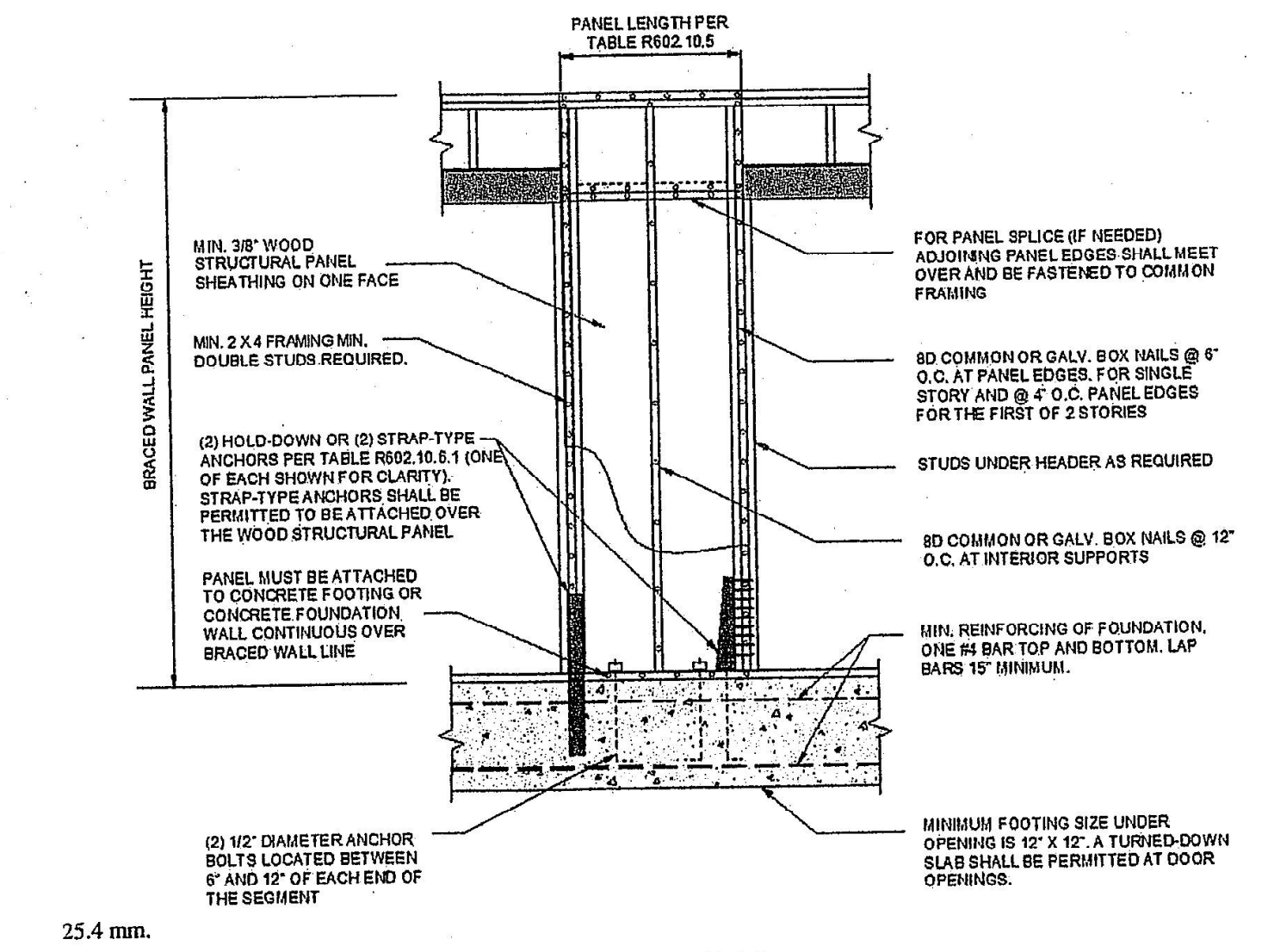
a. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, D₀, D₁ and D₂.
b. Applies to panels next to garage door opening where supporting gable end wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories 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 D₁ through D₂ only.

FIGURE R602.10.6.1
METHOD ABW—ALTERNATE BRACED WALL PANEL

25.4 mm.

TABLE R602.10.5
MINIMUM LENGTH OF BRACED WALL PANELS

METHOD (See Table R602.10.4)		MINIMUM LENGTH[a] (inches) Wall Height					CONTRIBUTING LENGTH (inches)
		8 feet	9 feet	10 feet	11 feet	12 feet	
DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP		48	48	48	53	58	Actual[b]
GB		48	48	48	53	58	Double sided = Actual — Single sided = 0.5 × 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	48
	SDC D₀, D₁ and D₂, ultimate design wind speed < 140 mph	32	32	34	NP	NP	
CS-G		24	27	30	33	36	Actual[b]
CS-WSP, CS-SFB	Adjacent clear opening height (inches)						
	≤ 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	Actual[b]
	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	

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
	Supporting one story and roof	24	24	24	Note c	Note c
PFG		24	24	27	30	Note d
CS-PF	SDC A, B and C	16	18	20	Note e	Note e
	SDC D₀, D₁ and D₂	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.
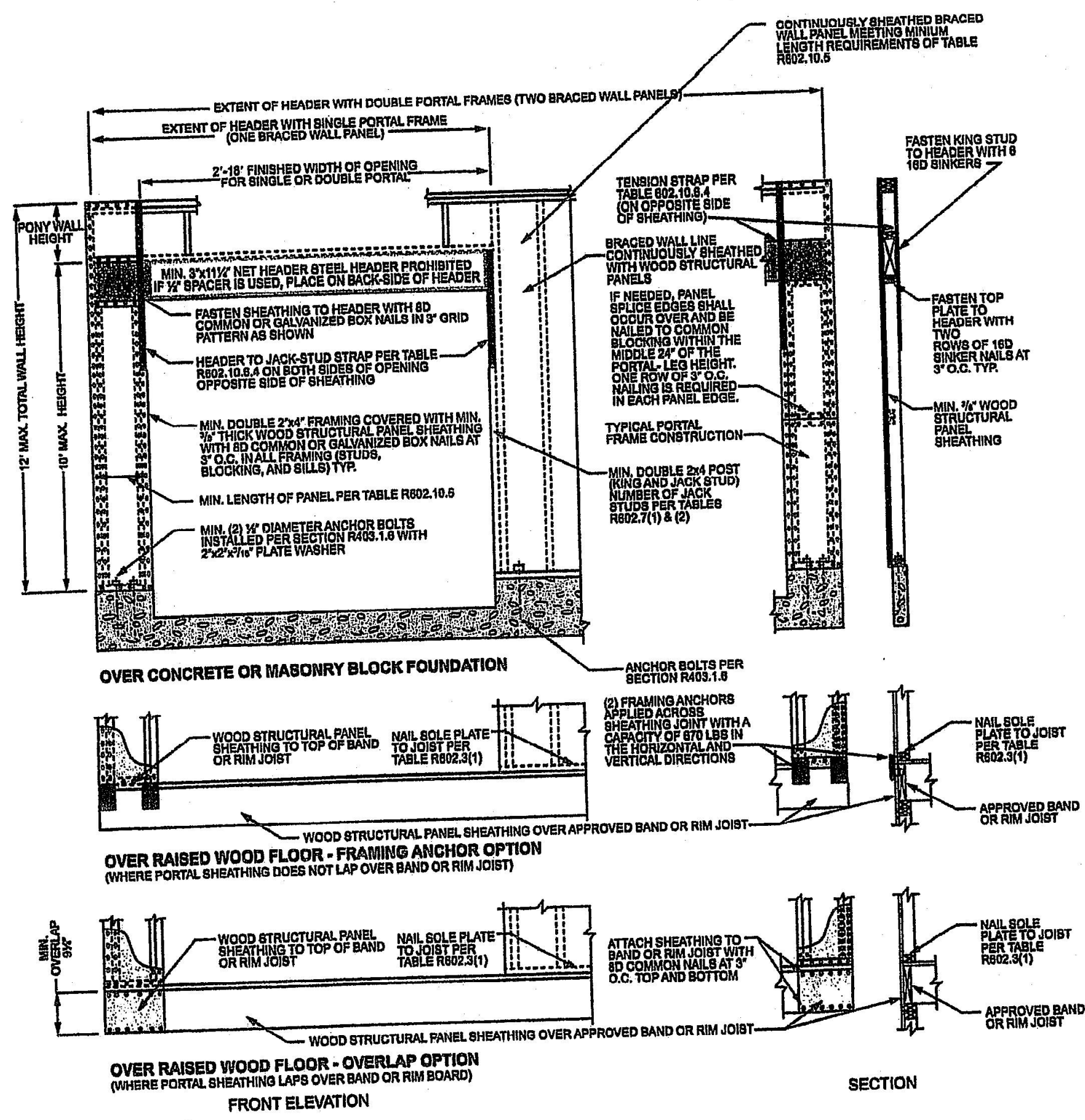d. Maximum header height for PFG is 10 feet in accordance with Figure R602.10.6.3, but wall height shall be permitted to be increased to 12 feet with pony wall.
e. Maximum header height for CS-PF is 10 feet in accordance with Figure R602.10.6.4, but wall height shall be permitted to be increased to 12 feet with pony wall.

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

4 mm, 1 foot = 304.8 mm.

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

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

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