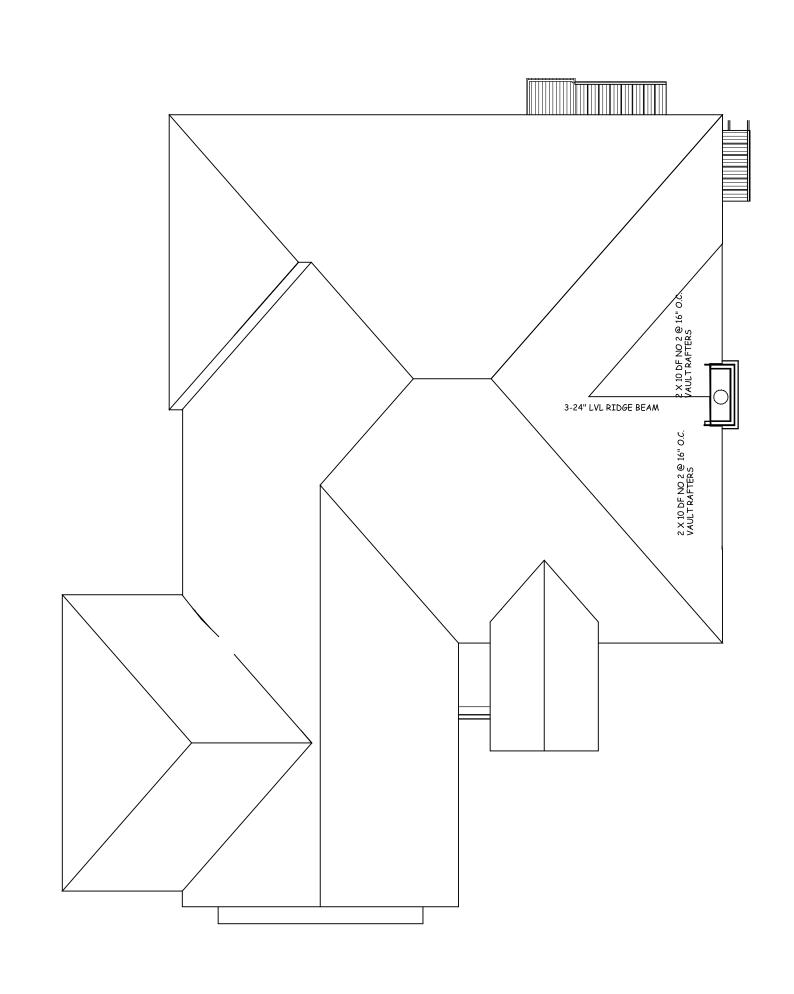
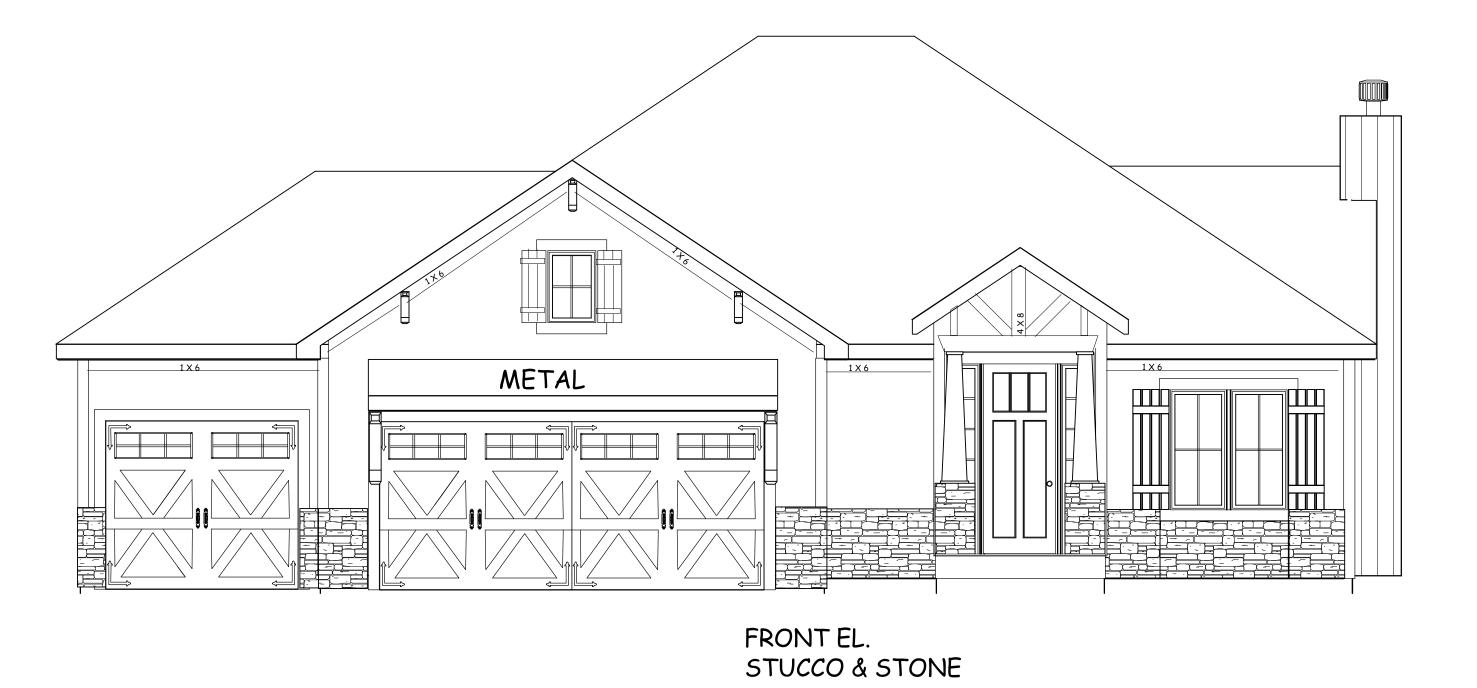
SHEET NO.

1 OF 5

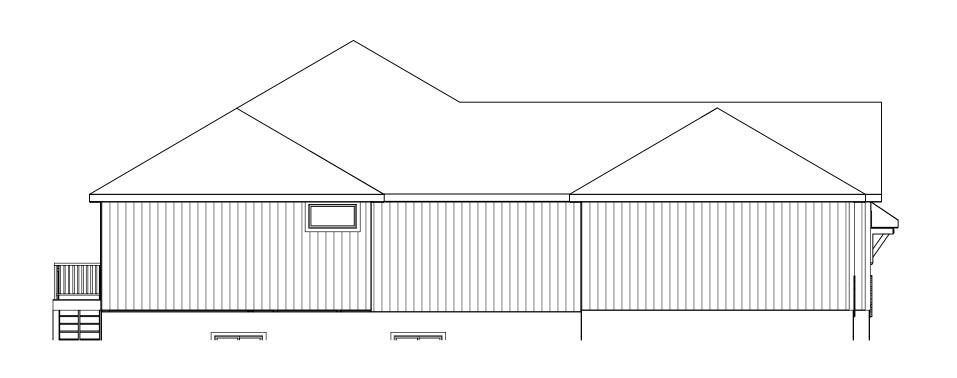


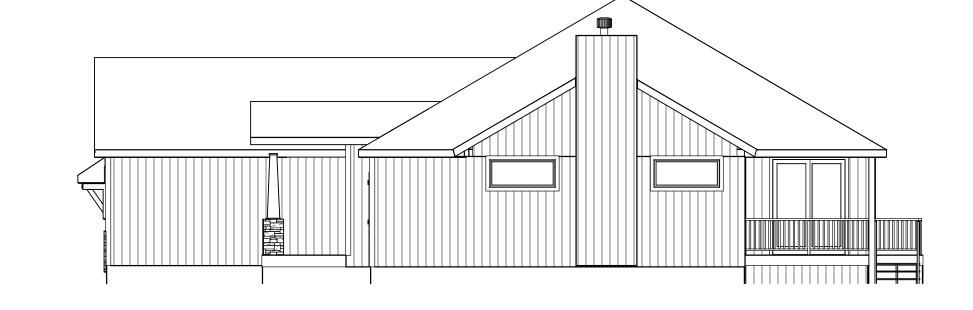
ROOF PLAN 1/8 = 1-0 SIDE TO SIDE 8/12 FRONT TO BACK 7/12

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



10-1 MAIN FLOOR PLATE LINE TYP.





LEFT EL. 1/8 = 1-0



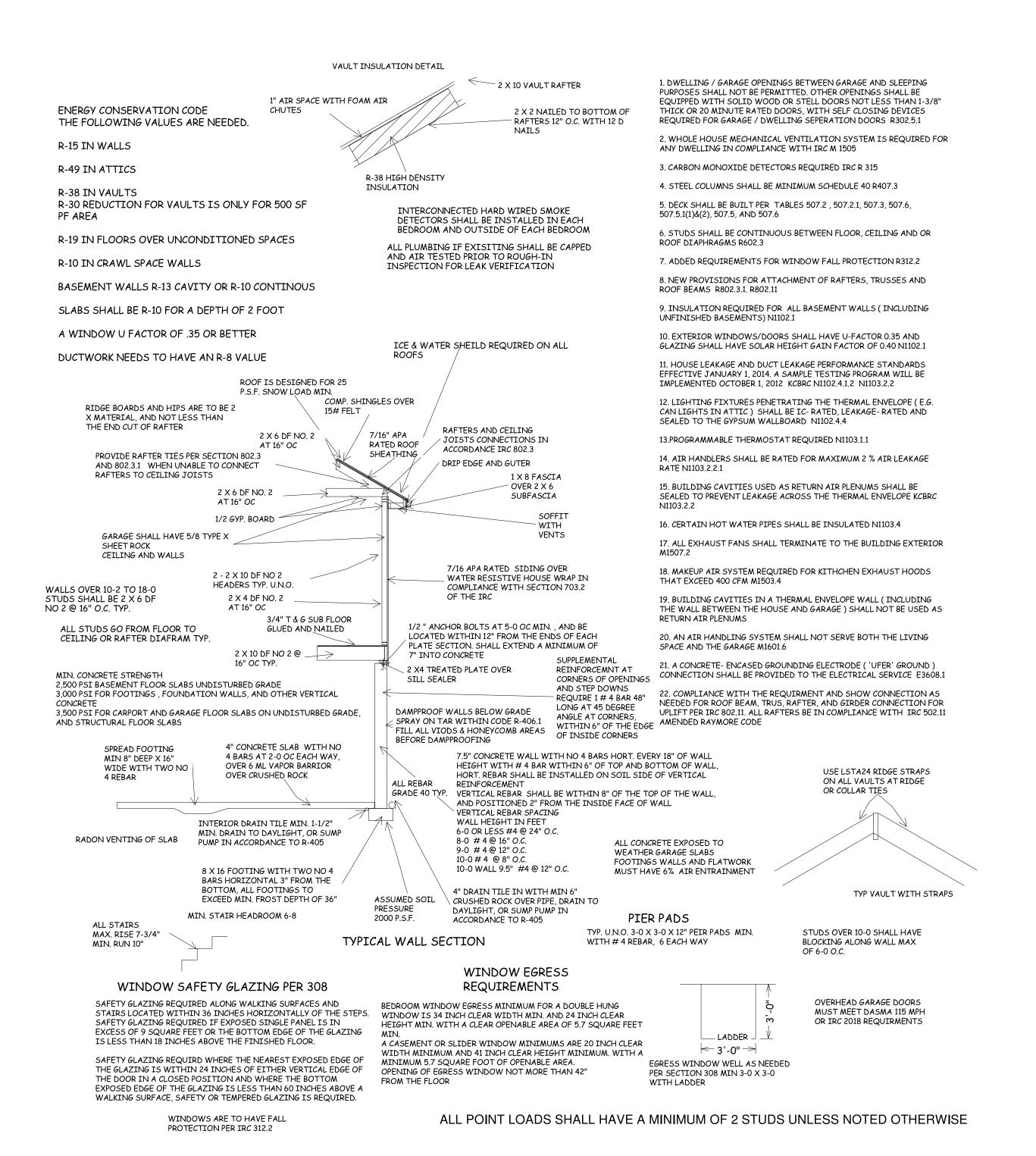
REAR EL. 1/8 = 1-0

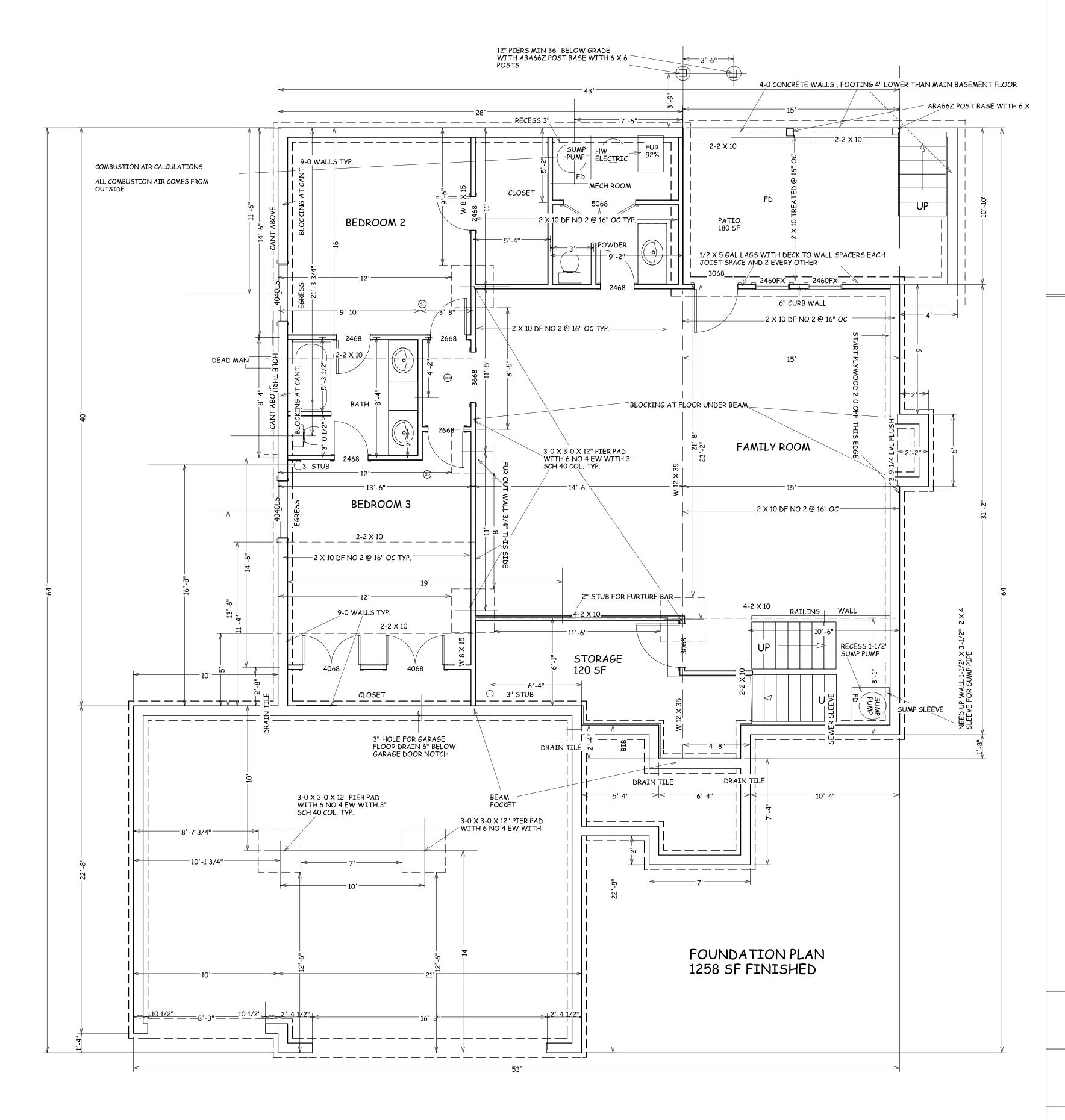


RIGHT EL.

1/8 = 1-0









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

08/31/2020



Ш HOME TRUMARK I KYLE II

SCALE 1/4" = 1-0

DATE 8-21-20

PLAN NO.

3203

SHEET NO.

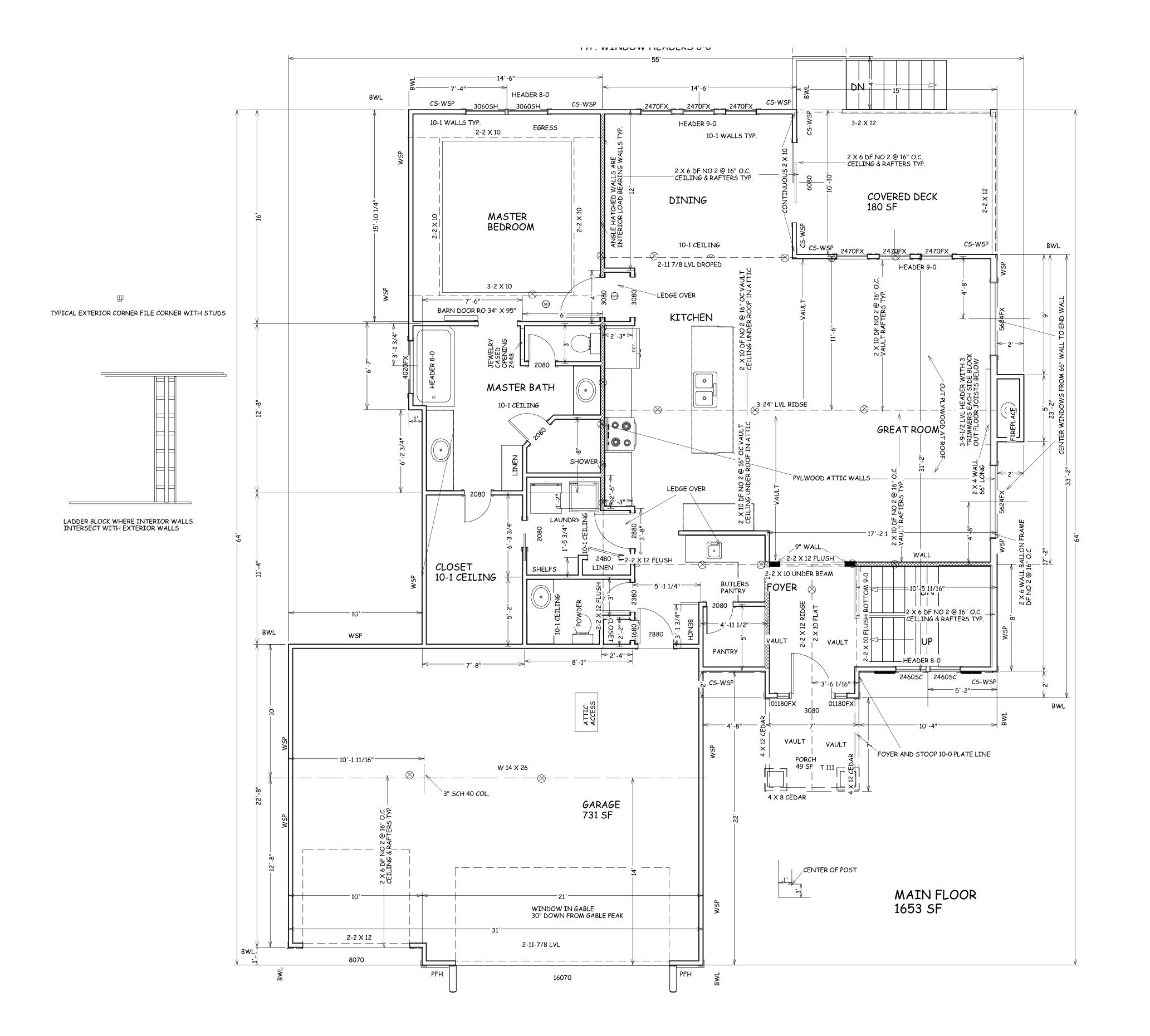
2 OF 5

PLAN NO.

3203

SHEET NO.

3 OF 5





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

08/31/2020

PURLIN SUPPORT PLAN

LOT 47 MONTICELLO 1316 NE GOSHEN DR LEE SUMMIT MO

TRUMARK HOMES KYLE II

SCALE 1/4" = 1-0

DATE

8-21-20 PLAN NO.

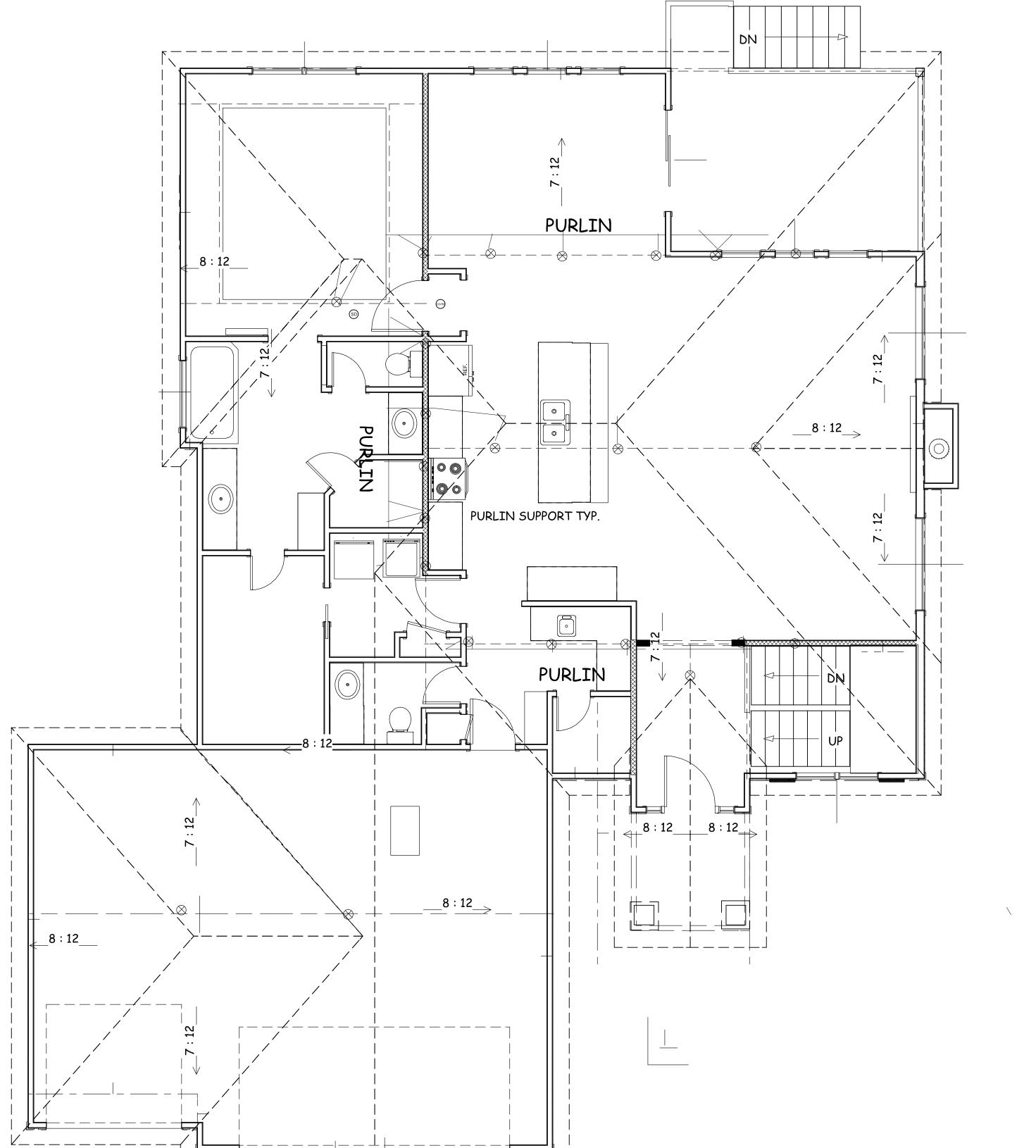
3203

SHEET NO.

4 OF 5



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



3203

SHEET NO.

5 OF 5

TABLE R602.10.4 BRACING METHODS

METHOD (See Table R602.10.4)			TABLE R602.10.5 GTH OF BRACED WALL PANELS MINIMUM LENGTH* (Inches) Wall Height				CONTRIBUTING LENGTH	
							(inches)	
	-	8 feet	9 feet	10 feet	11 feet	12 feet		
DWB, WSP, SFB, P	BS, PCP, HPS, BV-WSP	48	48	48	53	58	Actual ⁶	
GB		48	48	48	53	58	Double sided = Actual Single sided = 0.5 × Actual	
	LIB	55	62	69	NP	NP	Actual ⁶	
;	SDC A, B and C, ultimate design wind speed < 140 mph	28	32	34	38	42	48	
ABW	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		
	76	30	29	30	33	36	_	
	80	32	30	30	33	36		
	84	35	32	32	33	36		
ė.	88	38	35	33	33	36	4	
	92	43	37	35	35	36		
	96	48	41	38	36	36 38	_	
CS-WSP, CS-SFB	100		44	40	38	39	Actual ^b	
	104		49	43	40		Acida	
	108		54	46	43	41	-	
	112			50	45	45	┩.	
	116			55	48		-	
	120		·	60	52	48		
2	124	_			56	51	_	
	128				61	54		
	132				66	58	_	
	136					62	-	
	140					66	-	
<u>1</u> 1900 − 10 − 1200 − 1000 −	144				i –	72		
METHOD (See Table R602,10.4)		8 feet	9 feet		11 feet	12 feet		
Tarita	Supporting roof only	16	16	16	Note c	Note c	48	
PFH	Supporting one story and roof		24	24	Note c	Note c		
	PFG	24	27	30	Note d	Note d		
	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	Actual ^b	

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.

METHOD PFH-	FIGURE R6 PORTAL FR	02.10.6.2 AME WIT	H HOLD-DOW	'NS
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 5 6	es.	

IF NEEDED, PANEL
SPLICE EDGES SHALL
OCCUR OVER AND BE
NAILED TO COMMON
BLOCKING WITHIN THE
MIDDLE 24" OF THE
PORTAL-LEG HEIGHT.
ONE ROW OF 3" O.C.
NAILING IS REQUIRED
IN EACH PANEL EDGE.—

TYPICAL PORTAL FRAME CONSTRUCTION—

- MIN. DOUBLE 2x4 POST (KING AND JACK STUD). NUMBER OF JACK STUDS PER TABLES R602.7(1) &

MIN. 1000 LB. HOLD-DOWN DEVICE (EMBEDDED INTO CONCRETE AND NAILED INTO FRAMING).

SECTION

EXPOSURE CATEGORY B 3D-FOOT MEAN ROOF HEIGHT

raced Wall Line

10-FOOT WALL HEIGHT **2 BRACED WALL LINES**

Design Wind

≤ 115

MIN. 3/8° WOOD STRUCTURAL PANEL

SHEATHING ON ONE FACE

MIN. 2 X 4 FRAMING MIN.

(2) HOLD-DOWN OR (2) STRAP-TYPE ANCHORS PER TABLE R602,10.6.1 (ONE)

OF EACH SHOWN FOR CLARITY). STRAP-TYPE ANCHORS SHALL BE PERMITTED TO BE ATTACHED OVER THE WOOD STRUCTURAL PANEL

PANEL MUST BE ATTACHED TO CONCRETE FOOTING OR

CONCRETE FOUNDATION

WALL CONTINUOUS OVER

(2) 1/2" DIAMETER ANCHOR

BOLTS LOCATED BETWEEN 6" AND 12" OF EACH END OF

EXTENT OF HEADER WITH SINGLE PORTAL FRAME
(ONE BRACED WALL PANEL)

2'-18' FINISHED WIDTH OF OPENING FOR SINGLE OR DOUBLE PORTAL

MIN. 3"x11%" NET HEADER STEEL HEADER PROHIBITED IF X" SPACER IS USED, PLACE ON BACK-SIDE OF HEADER

- FASTEN SHEATHING TO HEADER WITH 8D COMMON OR GALVANIZED BOX NAILS IN 3" GRID PATTERN AS SHOWN

HEADER TO JACK-STUD STRAP PER TABLE
R602.10.6.4 ON BOTH SIDES OF OPENING
OPPOSITE SIDE OF SHEATHING

MIN. DOUBLE 2x4 FRAMING COVERED WITH MIN.

3/6" THICK WOOD STRUCTURAL PANEL SHEATHING
WITH 8D COMMON OR GALVANIZED BOX NAILS AT
3" O.C. IN ALL FRAMING (STUDS, BLOCKING, AND
SILLS) TYP:

IN. LENGTH OF PANEL PER TABLE R602.10.5

-MIN. (1) 1/4" DIAMETER ANCHOR BOLT INSTALLED PER SECTION R403.1.6 - WITH 2"x 2" x 1/16" PLATE WASHER

FRONT ELEVATION

THE SEGMENT

25.4 mm.

PONY WALL HEIGHT

4 mm, 1 foot = 304.8 mm.

BRACED WALL LINE

DOUBLE STUDS REQUIRED.

MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE

Method GB

12.5

18.0

23.5

29.0

34.5

27.0

43.0

12.5

15.0

18.0

12.5

18.0

23.5

29.0

34.5

PANEL LENGTH PER TABLE R602 10.5

W 1 8 8 8

FIGURE R602.10.6.1 METHOD ABW—ALTERNATE BRACED WALL PANEL

· EXTENT OF HEADER WITH DOUBLE PORTAL PRAMES (TWO BRAVED WALL PARELS)-

Methods DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP, ABW, PFH, PFC, CS-SFB

5.5

7.0

9.0

10,5

7.5

10.5

13.5

16.5

20.0

11.0

20.0

24.5

29.0

FOR PANEL SPLICE (IF NEEDED)

ADJOINING PANEL EDGES SHALL MEET

OVER AND BE FASTENED TO COMMON

8D COMMON OR GALV. BOX NAILS @ 6"

STUDS UNDER HEADER AS REQUIRED

8D COMMON OR GALV. BOX NAILS @ 12" O.C. AT INTERIOR SUPPORTS

HIN, REINFORCING OF FOUNDATION,

ONE #4 BAR TOP AND BOTTOM. LAP

OPENING IS 12" X 12". A TURNED-DOWN

FASTEN KING STUD TO HEADER WITH 6 16D SINKERS

- FASTEN TOP PLATE TO HEADER WITH TWO

ROWS OF 16D SINKER NAILS AT 3" O.C. TYP.

-MIN. 1/6" WOOD STRUCTURAL PANEL SHEATHING

SLAB SHALL BE PERMITTED AT DOOR OPENINGS.

BARS 15" MINIMUM.

O.C. AT PANEL EDGES. FOR SINGLE STORY AND @ 4" O.C. PANEL EDGES FOR THE FIRST OF 2 STORIES

Methods CS-WSP, CS-G,

2.0

4.5

6.0

7.5

9.0

9.0

11.5

14.0

17.0

13.0

17.0

21.0

25.0

Alternate braced wall

BRACE WALL DETAILS	
WIND SPEED 115 MPH	
WIND EXPOSURE A	Ĭ
SEISMIC DESIGN CAEGORY A	

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.

			BRACING WETTE				
				CONNECTION CRITERIA"			
METHODS, MATERIAL		MINIMUM THICKNESS	FIGURE	Fasteners	Spacing		
	LIB	1 × 4 wood or approved metal straps		Wood: 2-8d common nails or 3-8d (2 ¹ / ₂ " long x 0.113" dia.) nails	Wood: per stud and top and bottom plates		
Intermittent Bracing Methods	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 $(2^{1}l_{2}^{2})$ long × 0.113" dia.) nails or 2 - $1^{3}l_{4}^{2}$ long staples	Per stud		
	WSP Wood			Exterior sheathing per Table R602.3(3)	6" edges 12" field		
	structural panel (See Section R604)	ructural panel '8		Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener		
	BV-WSP ^a 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		
	SFB Structural fiberboard sheathing	1/2" or ²⁵ / ₃₂ " 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 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	panel locations: /" ledges (including top		
	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	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	3/8"		See Section R602.10.6.1	See Section R602.10.6.		

		99
		OONTINUOUSLY SHEATHED BRACED WALL PANEL MEETING MINIUM LENGTH REQUIREMENTS OF TABLE RE02, 10.5
	EXTENT OF HEADER WITH SINGLE PORTAL FRAME (ONE BRACED WALL PANEL) 2'-18' FINISHED WIDTH OF OPENING FOR SINGLE OR DOUBLE PORTAL MIN. 3'x11'V' NET HEADER STEEL HEADER PROHIBITED IF 'Y' SPACER IS USED, PLACE ON BACK-SIDE OF HEADER IF 'Y' SPACER IS USED, PLACE ON BACK-SIDE OF HEADER PATTERN HEATHING TO HEADER WITH 8D COMMON OR GALVANIZED BOX NAILS IN 3' GRID PATTERN AS SHOWN HEADER TO JACK-STUD STRAP PER TABLE REO2.10.8.4 ON BOTH SIDES OF OPENING OPPOSITE SIDE OF SHEATHING WITH BO COMMON OR GALVANIZED BOX NAILS AT 3' O.C. INAIL FRAMING (STUDS, BLOCKING, AND SILLS) TYP. MIN. LENGTH OF PANEL PER TABLE REO2.10.5 MIN. (2) W DIAMETER ANCHOR BOLTS INSTALLED PER SECTION RAGS.1.8 WITH Z'22'x'16' PLATE WASHER OVER CONCRETE OR MASONRY BLOCK FOUNDATION	TENSION STRAP PER TABLE 802.10.8.4 (ON OPPOSITE SIDE OF SHEATHING) BRAGED WALL LINE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANELS IF NEEDED, PANEL SPLICE EDGES SHALL OCCUR OVER AND BE NAILED TO COMMON BLOCKING WITHIN THE MIDDLE 24' OF THE MIDDLE 24' OF THE MIDDLE 24' OF THE ONE ROW OF 3' O.C. NALINIS IS REQUIRED IN EACH PANEL EDGE. TYPICAL PORTAL FRAME CONSTRUCTION MIN. DOUBLE 2x POST (KING AND JACK STUD) NUMBER OF JACK STUDS PER TABLES R802.7(1) & (2)
	WOOD STRUCTURAL PANEL NAIL SOLE PLATE SHEATHING TO TOP OF BAND TO JOIST PER OR RIM JOIST TABLE R802.3(1)	SECTION RA03.1.8 (2) FRAMING ANCHORS APPLIED ACROSS SHEATHING JOINT WITH A CAPACITY OF 670 LBS IN THE HORIZONTAL AND VERTICAL DIRECTIONS APPROVED BAND OR RIM JOIST
8	WOOD STRUCTURAL PANEL SHEATHING OVER APPLICATION (WHERE PORTAL SHEATHING DOES NOT LAP OVER BAND OR RIM JOIST) WOOD STRUCTURAL PANEL SHEATHING TO TOP OF BAND OR RIM JOIST WOOD STRUCTURAL PANEL TO JOIST PER TABLE R602.3(1) WOOD STRUCTURAL PANEL SHEATHING OVER APPLICATION AND TO STRUCTURAL PANEL SHEATHING OVER	ATTACH SHEATHING TO PLATE TO JOIBT PER TABLE R802.3(1) O.C. TOP AND BOTTOM APPROVED BAND
	OVER RAISED WOOD FLOOR - OVERLAP OPTION (WHERE PORTAL SHEATHING LAPS OVER BAND OR RIM BOARD)	SECTION

TABLE R602.10.4—continued BRACING METHODS

INIMUM THICKNESS

stud spacing

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

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

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, Do, D, and D,

a. Autesive attachment of wan sheating, including including the find on the 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.

METHODS, MATERIAL

PFH

Portal frame with

hold-downs

Portal frame at garage

CS-WSP Continuously sheather

wood structural pane

Continuously sheathed

wood structural panel

adjacent to garage

openings

CS-PF

portal frame

CS-SFB^d

structural fiberboard

CONNECTION CRITERIA'

Fasteners

See Section R602.10.6.2

See Section R602.10.6.3

Exterior sheathing per

Table R602.3(1) or R602.3(2)

See Method CS-WSP

See Section R602.10.6.4

 $1\frac{1}{2}$ " long × 0.12" dia.

(for $\frac{1}{2}$ " thick sheathing) $\frac{1}{4}$ " long × 0.12" dia. (for $\frac{25}{32}$ " thick sheathing) galvanized roofing nails

Table R602.3(3)

Spacing

See Section R602.10.6.2

See Section R602.10.6.3

6" edges 12" field

Varies by fastener

See Method CS-WSP

See Section R602.10.6.4

3" edges 6" field

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

FRONT ELEVATION

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

