PLAN NO.

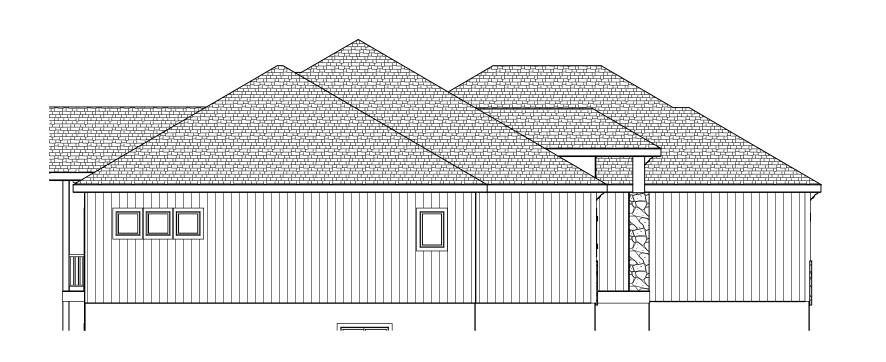
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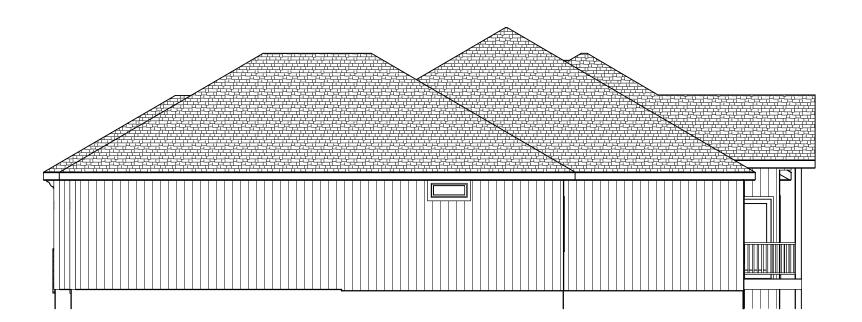
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1 OF 6



FRONT EL. STUCCO AND STONE





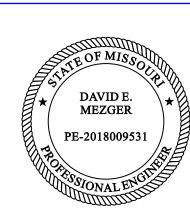
LEFT EL. 1/8 = 1-0

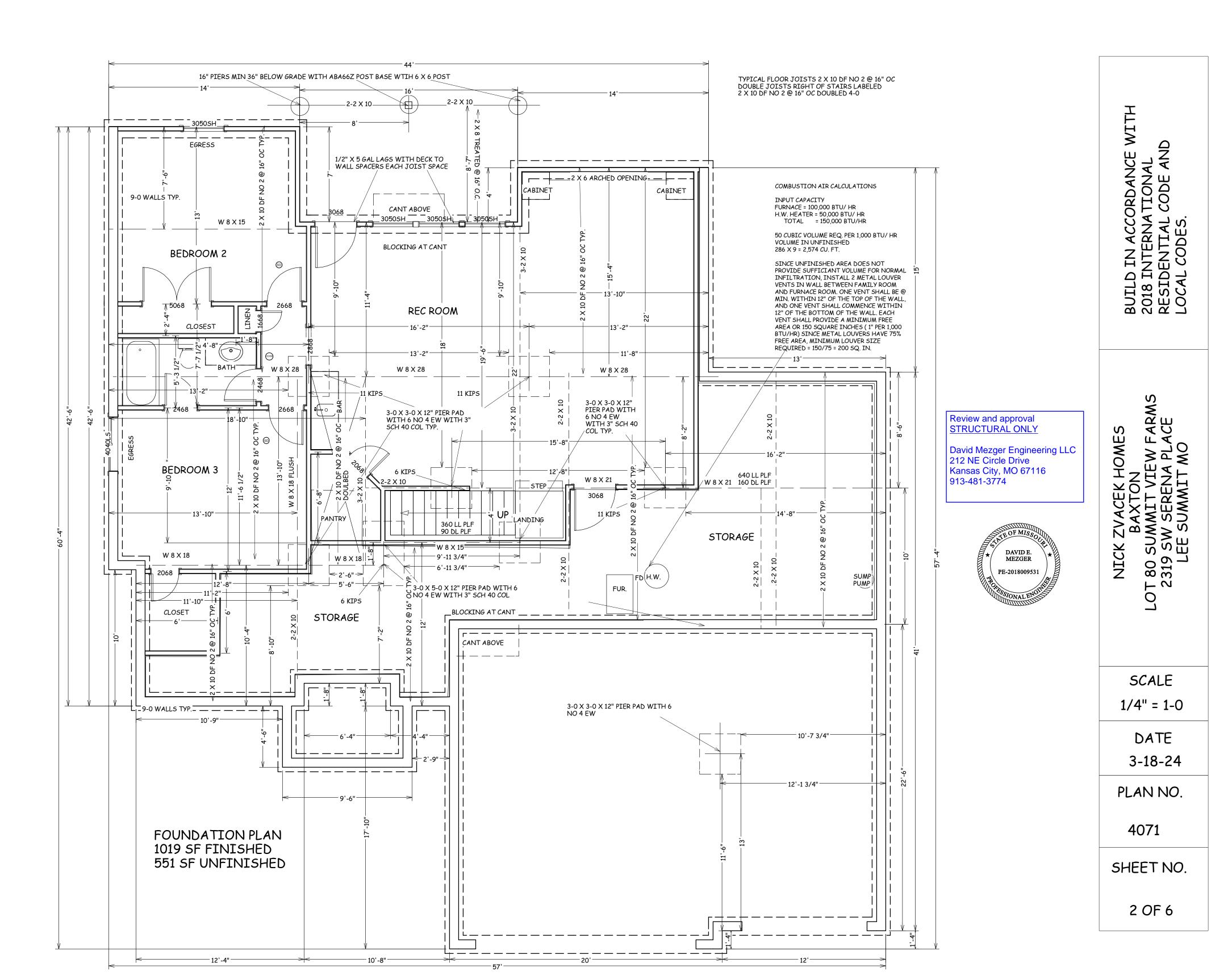


3 SIDES LP PANEL SIDING

REAR EL. 1/8 = 1-0 RIGHT EL. 1/8 = 1-0 Review and approval
STRUCTURAL ONLY

David Mezger Engineering LLC
212 NE Circle Drive
Kansas City, MO 67116
913-481-3774





11'-8 1/2"

11'-3 1/2"

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

Review and approval STRUCTURAL ONLY

David Mezger Engineering LLC 212 NE Circle Drive Kansas City, MO 67116 913-481-3774



SCALE

BAXTON T 80 SUMMIT VIEW FARMS 2319 SW SERENA PLACE LEE SUMMIT MO

LOT 2:

ZVACEK HOMES

NICK

1/4" = 1-0

DATE

3-18-24

PLAN NO.

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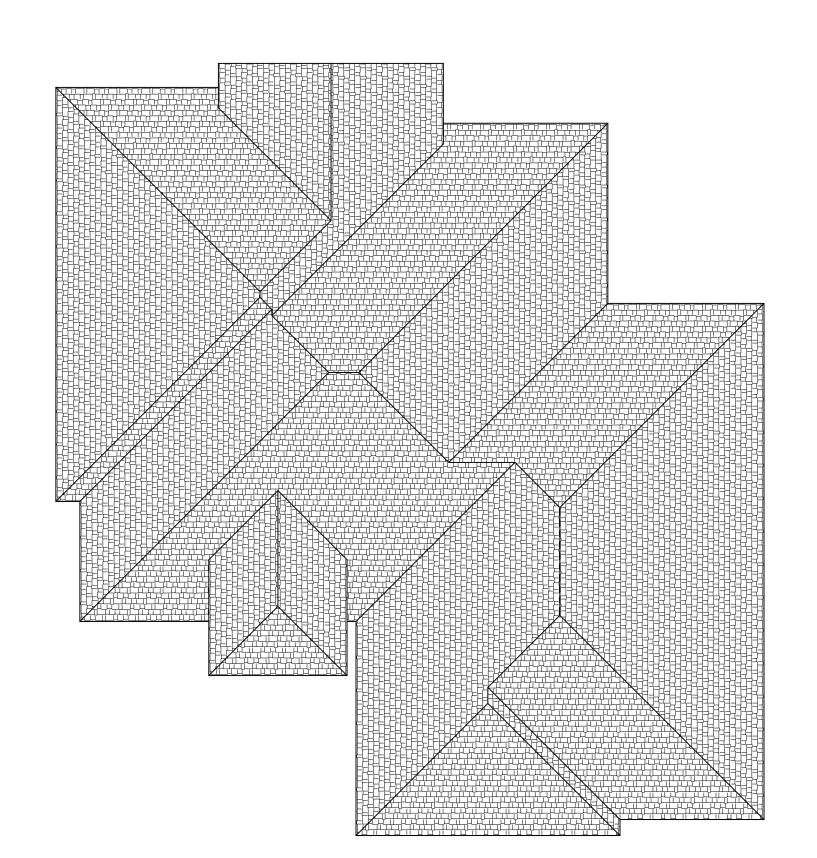
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3 OF 6

3-18-24

SHEET NO.

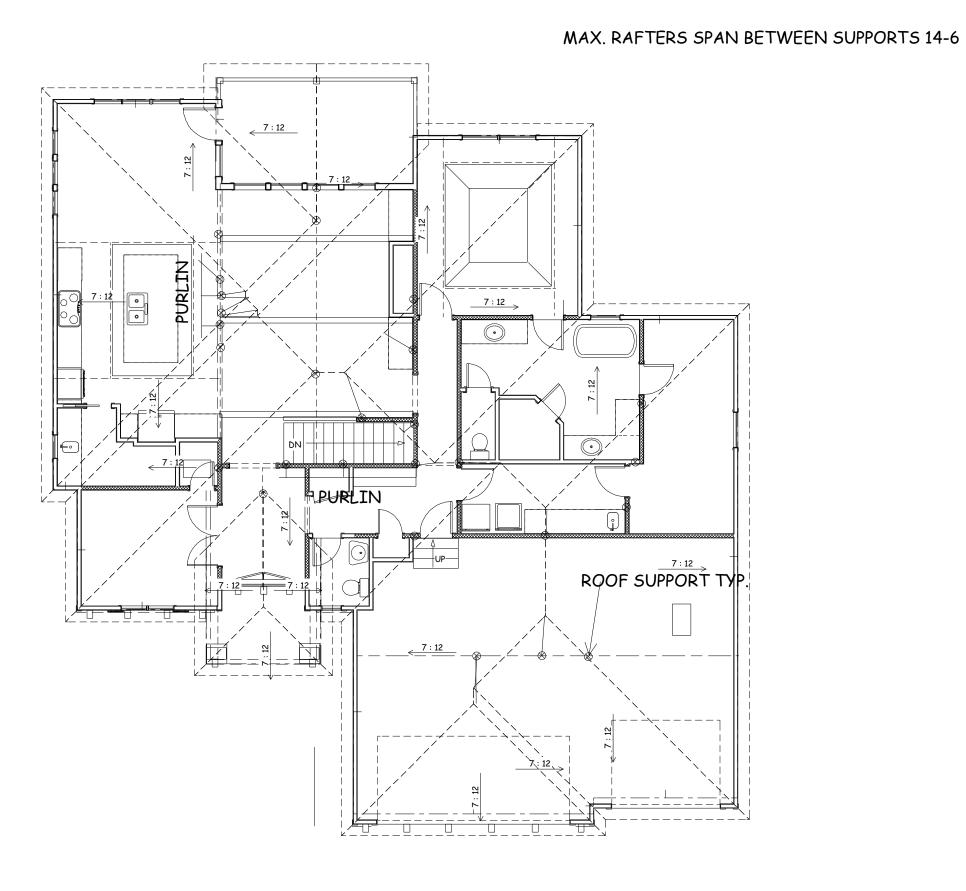
4 OF 6



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

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

12" SOFFITS TYP.



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

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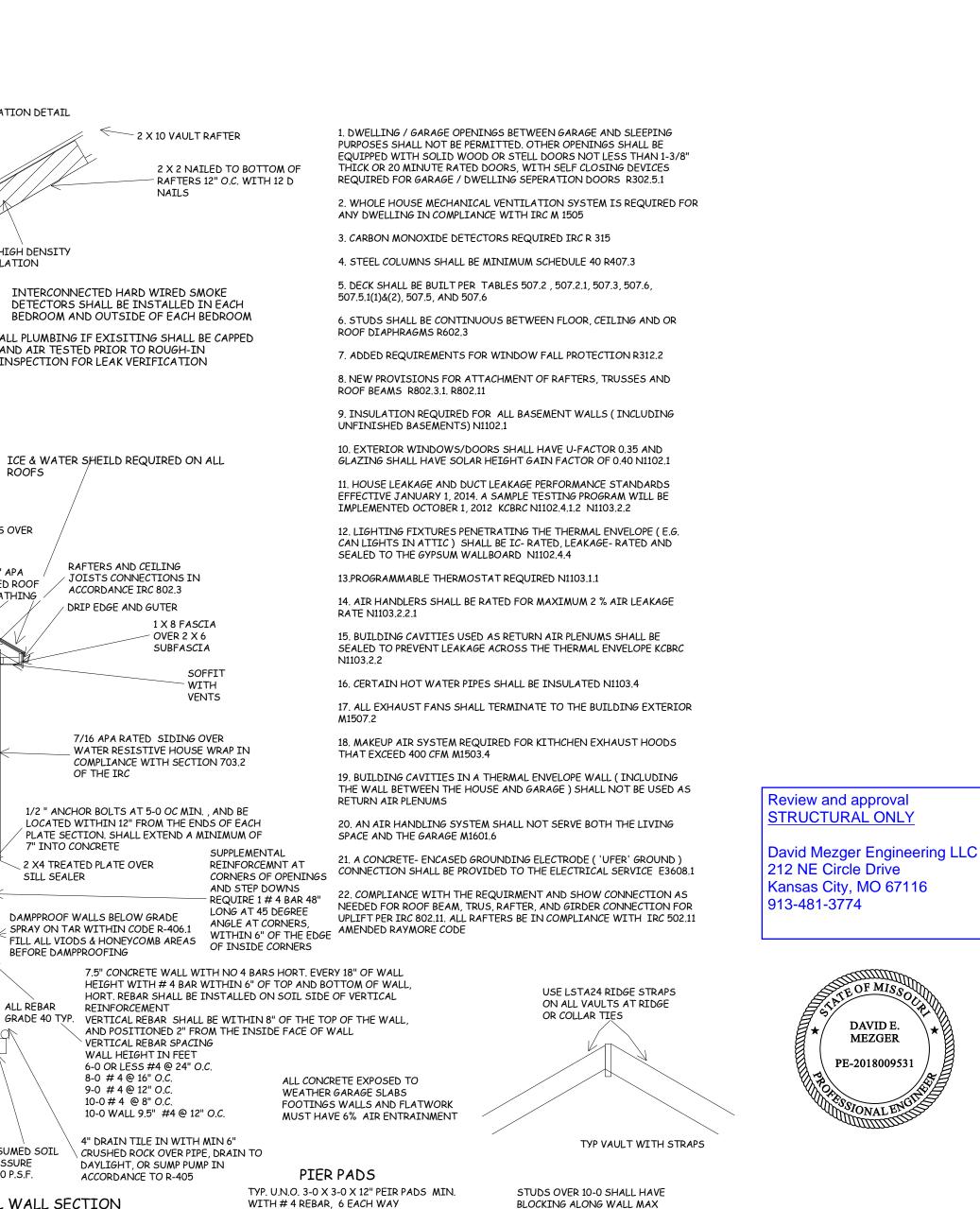


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DAVID E. MEZGER

PE-2018009531

5 OF 6



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

VAULT INSULATION DETAIL

R-38 HIGH DENSITY

INSULATION

COMP. SHINGLES OVER

RATED ROOF

SHEATHING

1" AIR SPACE WITH FOAM AIR

ROOF IS DESIGNED FOR 25

P.S.F. SNOW LOAD MIN.

2 X 6 DF NO. 2

AT 16" OC

2 X 6 DF NO. 2

1/2 GYP. BOARD

2 - 2 X 10 DF NO 2

AT 16" OC

HEADERS TYP. U.N.O.

2 X 4 DF NO. 2

16" OC TYP.

2 X 10 DF NO 2 @

4" CONCRETE SLAB WITH NO

4 BARS AT 2-0 OC EACH WAY,

OVER 6 ML VAPOR BARRIOR

OVER CRUSHED ROCK

INTERIOR DRAIN TILE MIN. 1-1/2"

PUMP IN ACCORDANCE TO R-405

MIN. DRAIN TO DAYLIGHT, OR SUMP

8 X 16 FOOTING WITH TWO NO 4

BARS HORIZONTAL 3" FROM THE

EXCEED MIN. FROST DEPTH OF 36"

BOTTOM, ALL FOOTINGS TO

MIN. STAIR HEADROOM 6-8

3/4" T & G SUB FLOOR

GLUED AND NAILED

AT 16" OC

ENERGY CONSERVATION CODE

R-10 IN CRAWL SPACE WALLS

R-15 IN WALLS

R-49 IN ATTICS

R-38 IN VAULTS

THE FOLLOWING VALUES ARE NEEDED.

R-30 REDUCTION FOR VAULTS IS ONLY FOR 500 SF

R-19 IN FLOORS OVER UNCONDITIONED SPACES

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

RIDGE BOARDS AND HIPS ARE TO BE 2 X MATERIAL, AND NOT LESS THAN

RAFTERS TO CEILING JOISTS

GARAGE SHALL HAVE 5/8 TYPE X

2,500 PSI BASEMENT FLOOR SLABS UNDISTURBED GRADE

3,000 PSI FOR FOOTINGS , FOUNDATION WALLS, AND OTHER VERTICAL

3,500 PSI FOR CARPORT AND GARAGE FLOOR SLABS ON UNDISTURBED GRADE,

PROVIDE RAFTER TIES PER SECTION 802.3

AND 802.3.1 WHEN UNABLE TO CONNECT

THE END CUT OF RAFTER

SHEET ROCK CEILING AND WALLS

ALL STUDS GO FROM FLOOR TO

CEILING OR RAFTER DIAFRAM TYP.

WALLS OVER 10-2 TO 18-0 STUDS SHALL BE 2 X 6 DF

MIN. CONCRETE STRENGTH

AND STRUCTURAL FLOOR SLABS

4 REBAR

RADON VENTING OF SLAB

ALL STAIRS

MIN. RUN 10"

MAX. RISE 7-3/4"

SPREAD FOOTING

MIN 8" DEEP X 16"

WIDE WITH TWO NO

NO 2 @ 16" O.C. TYP.

BASEMENT WALLS R-13 CAVITY OR R-10 CONTINOUS

2 X 10 VAULT RAFTER

INTERCONNECTED HARD WIRED SMOKE

DETECTORS SHALL BE INSTALLED IN EACH BEDROOM AND OUTSIDE OF EACH BEDROOM

ALL PLUMBING IF EXISITING SHALL BE CAPPED

AND AIR TESTED PRIOR TO ROUGH-IN

INSPECTION FOR LEAK VERIFICATION

ICE & WATER SHEILD REQUIRED ON ALL

RAFTERS AND CEILING
JOISTS CONNECTIONS IN

7/16 APA RATED SIDING OVER

1/2 " ANCHOR BOLTS AT 5-0 OC MIN. , AND BE

7" INTO CONCRETE

BEFORE DAMPPROOFING

ASSUMED SOIL

TYPICAL WALL SECTION

PRESSURE

2000 P.S.F.

SILL SEALER

2 X4 TREATED PLATE OVER

DAMPPROOF WALLS BELOW GRADE

SPRAY ON TAR WITHIN CODE R-406,1

FILL ALL VIODS & HONEYCOMB AREAS

REINFORCEMENT

8-0 # 4 @ 16" O.C.

10-0 # 4 @ 8" O.C.

VERTICAL REBAR SPACING

6-0 OR LESS #4 @ 24" O.C.

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

4" DRAIN TILE IN WITH MIN 6"

DAYLIGHT, OR SUMP PUMP IN

ACCORDANCE TO R-405

\ CRUSHED ROCK OVER PIPE, DRAIN TO

WALL HEIGHT IN FEET

LOCATED WITHIN 12" FROM THE ENDS OF EACH PLATE SECTION. SHALL EXTEND A MINIMUM OF

WATER RESISTIVE HOUSE WRAP IN

COMPLIANCE WITH SECTION 703.2 OF THE IRC

1 X 8 FASCIA

OVER 2 X 6

SUBFASCIA

SOFFIT

WITH **VENTS**

ACCORDANCE IRC 802.3

DRIP EDGE AND GUTER

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 WITHLADDER

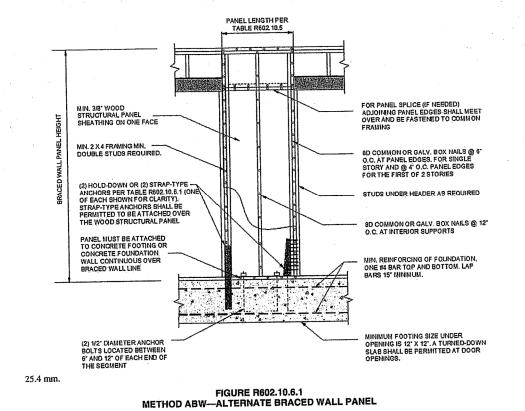
MUST MEET DASMA 115 MPH OR IRC 2018 REQUIRMENTS

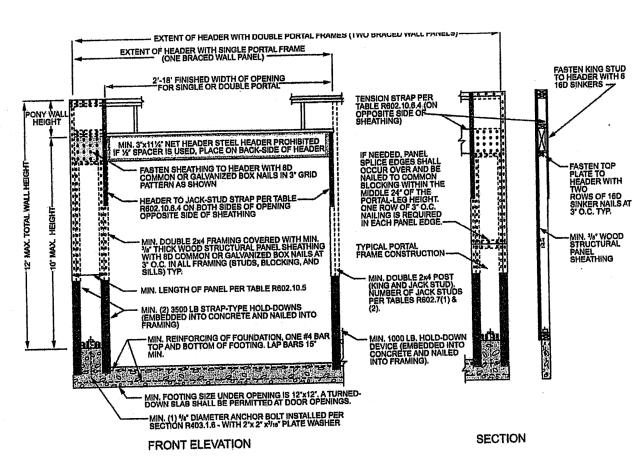
OF 6-0 O.C.

OVERHEAD GARAGE DOORS

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

	ı	T/ RACING REQUIR	ABLE R602.10.3(1) EMENTS BASED C	N WIND SPEED				
EXPOSURE C. SD-FOOT MEA 10-FOOT WAL 2 BRACED WA	N ROOF HEIGHT L 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 ^e (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		
		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		
	i	10	7.0	7.0	4.0	3.5		
	_	20	12.5	12.5	7.5	6.5		
	1 , ()	30	18.0	18.0	10.5	9.0		
≤ 115		40	23.5	23.5	13.5	11.5	ı	
1		50	29.0	29.0	16.5	14.0		
		60	34.5	34.5	20.0	17.0		
1.4		10	NP	10.0	6.0	5.0		
		20	NP	18.5	11.0	9.0	1	
	1	30	NP	27.0	15.5	13.0	ĺ	
1		40	NP	35.0	20.0	17.0		
		50	NP	43.0	24.5	21.0	l	
	199	60	NP	51.0	29.0	25.0	ľ	





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	CONNECTION CRITERI	A* '	
	MET	HODS, MATERIAL	MINIMUM THICKNESS	FIGURE	Fasteners	Spacing	
-			1 × 4 wood or approved metal straps at 45° to 60° angles for			Wood: per stud and top and bottom plates	
		Let-in-bracing	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 $(2^{1}/_{2}" long \times 0.113" dia.)$ nails or 2 - $1^{3}/_{4}" long staples$	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	"/2" or ²⁵ / ₃₂ " for maximum 16" stud spacing		$1^1/2^n$ long × 0.12" dia. (for 1l_2 " thick sheathing) $1^3/4$ " long × 0.12" dia. (for $^{25}l_{32}$ " thick sheathing) galvanized roofing nails	3" edges 6" field	
1	mitten				Nails or screws per Table R602.3(1) for exterior locations	For all braced wall panel locations: 7" edges (including top	
	Inter	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	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	

		IGTH OF BRACED WALL PANELS MINIMUM LENGTH' (Inches)				CONTRIBUTING LENGTH		
METHOD (See Table R602.10.4)				Wall Height			(Inches)	
			9 feet	10 feet	11 feet	12 feet		
DWB. WSP. SFB. P	BS, PCP, HPS, BV-WSP	8 feet 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 ⁶	
1	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		
	88	38	35	33	33	36	_	
	92	43	37	35	35	36	- Actual ^b	
	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	_		60	52	48	_	
	124				56	51	_	
	128				61	54	_	
	132				66	58	4	
	136			_		62	4 .	
	140	-				66	_	
	144				<u> </u>	72		
-	METHOD	0.6==1	9 feet	ortal header 10 feet	11 feet	12 feet	-	
(See Table R602,10.4)		8 feet	16	16	Note c	Note c		
PFH	Supporting roof only		24	24	Note c	Note c	48	
	Supporting one story and roof	24	27	30	Note d	Note d		
	PFG		18	20	Note e	Note e		
CS-PF	SDC A, B and C SDC D ₀ , D ₁ and D ₂	16 16	18	20	Note e	Note e		

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.

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

METHODS, MATERIAL				CONNECTION CHITERIA		
		MINIMUM THICKNESS	FIGURE	Fasteners	Specing	
Methods	PFH Portal frame with hold-downs	3/ ₈ "		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	
Sheathing Methods	CS-WSP Continuously sheathed wood structural panel	3/8"		Exterior sheathing per Table R602.3(3)	6" edges 12" field	
				Interior sheathing per Table R602.3(1) or R602.3(2)	Varies by fastener	
	CS-G ^{b,c} Continuously sheathed wood structural panel adjacent to garage openings	3/6"		See Method CS-WSP	See Method CS-WSP	
	CS-PF Continuously sheathed portal frame	uously sheathed 7/16"		See Section R602.10.6.4	See Section R602.10.6.4	
	CS-SFB ^a	Continuously sheathed maximum 16"		$1^{1}/_{2}$ " long × 0.12" dia. (for $\frac{1}{2}$ " thick sheathing) $1^{3}/_{2}$ " long × 0.12" dia. (for $\frac{25}{22}$ " 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 k/m², 1 mile per hour = 0.447 m/s.

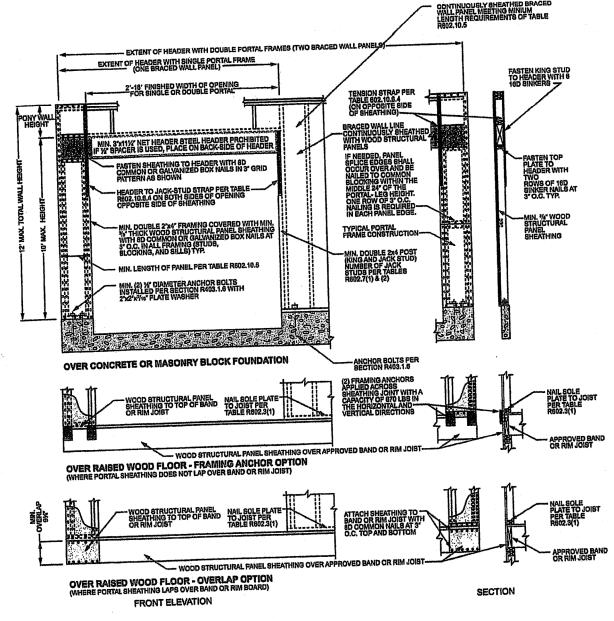
a. Adhesive attachment of well sheathing, including Method GB, shall not be permitted in Selsmic Design Categories C, D₀, D₁ and D₂.

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 Selsmic 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 Selsmic Design Categories D₀, D₁ and D₂.

e. Method applies to detached one- and two-family dwellings in Selsmic 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

Review and approval STRUCTURAL ONLY

David Mezger Engineering LLC

212 NE Circle Drive

913-481-3774

Kansas City, MO 67116



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

ARM HOMES BAXTON SUMMIT VIEW F 9 SW SERENA PL/ LEE SUMMIT MO NICK 80 3 319 F ~

> SCALE 1/4" = 1-0

> > DATE 3-18-24

PLAN NO.

4071

SHEET NO.

6 OF 6