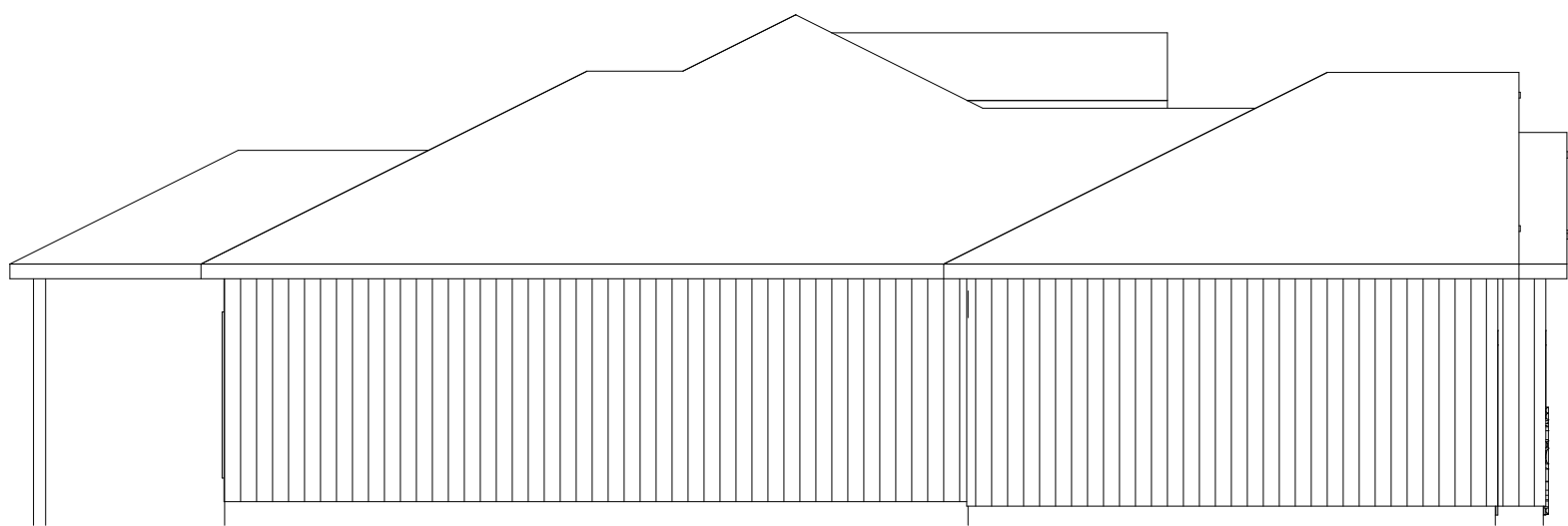


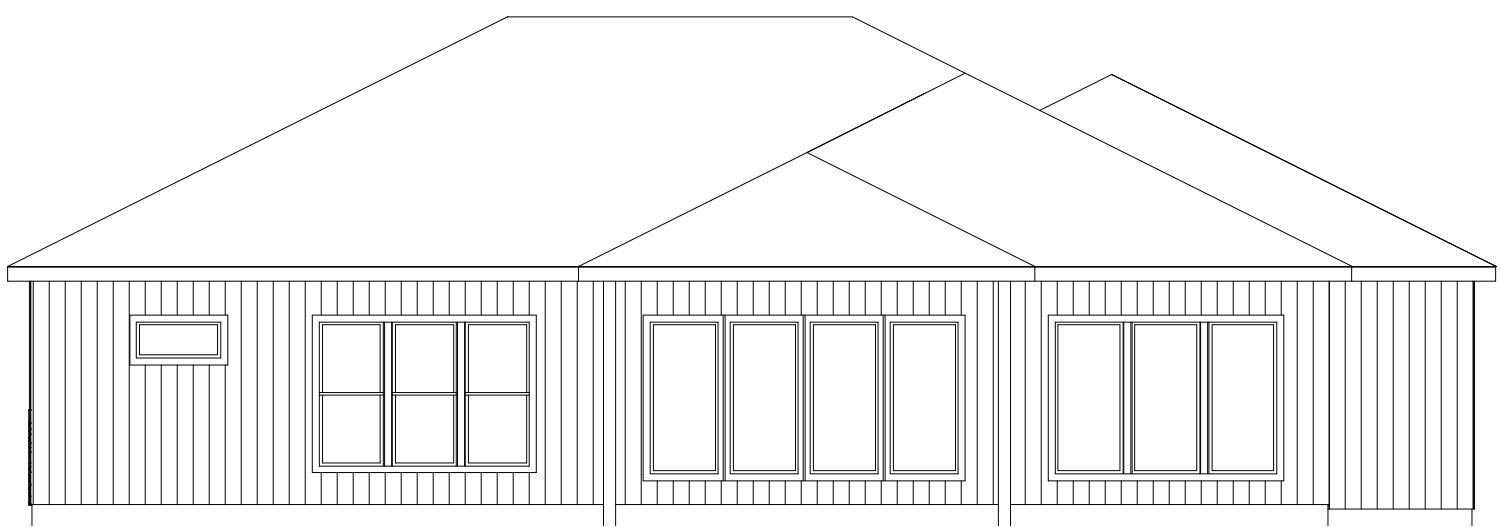
ROOF PLAN
1/8" = 1'-0"
ROOF PITCHES 6/12 TYP.
RAFTERS 2 X 6 DF NO 2 @ 16" OC TYP.
HIPS AND RIDGES 2 X 8 DF NO 2 TYP.



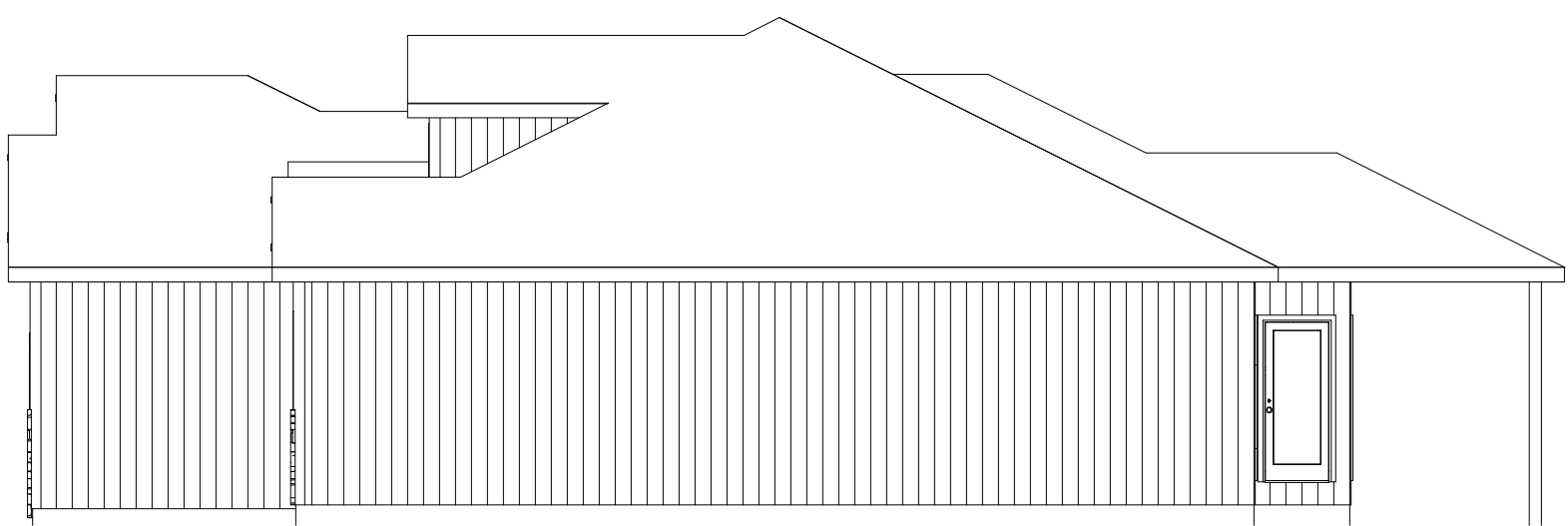
FRONT EL.
LAP, SHAKE AND STONE SIDING



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



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



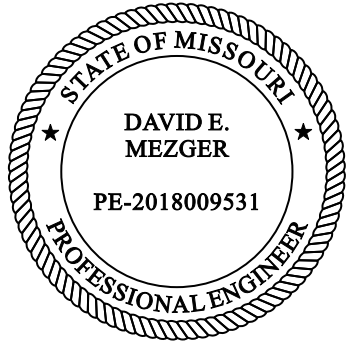
RIGHT EL.
1/8" = 1'-0"

3 SIDES LP PANEL

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI

Review and Approval
Structural Only

David Mezger Engineering LLC
212 NE Circle Dr.
Kansas City, MO 64116



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

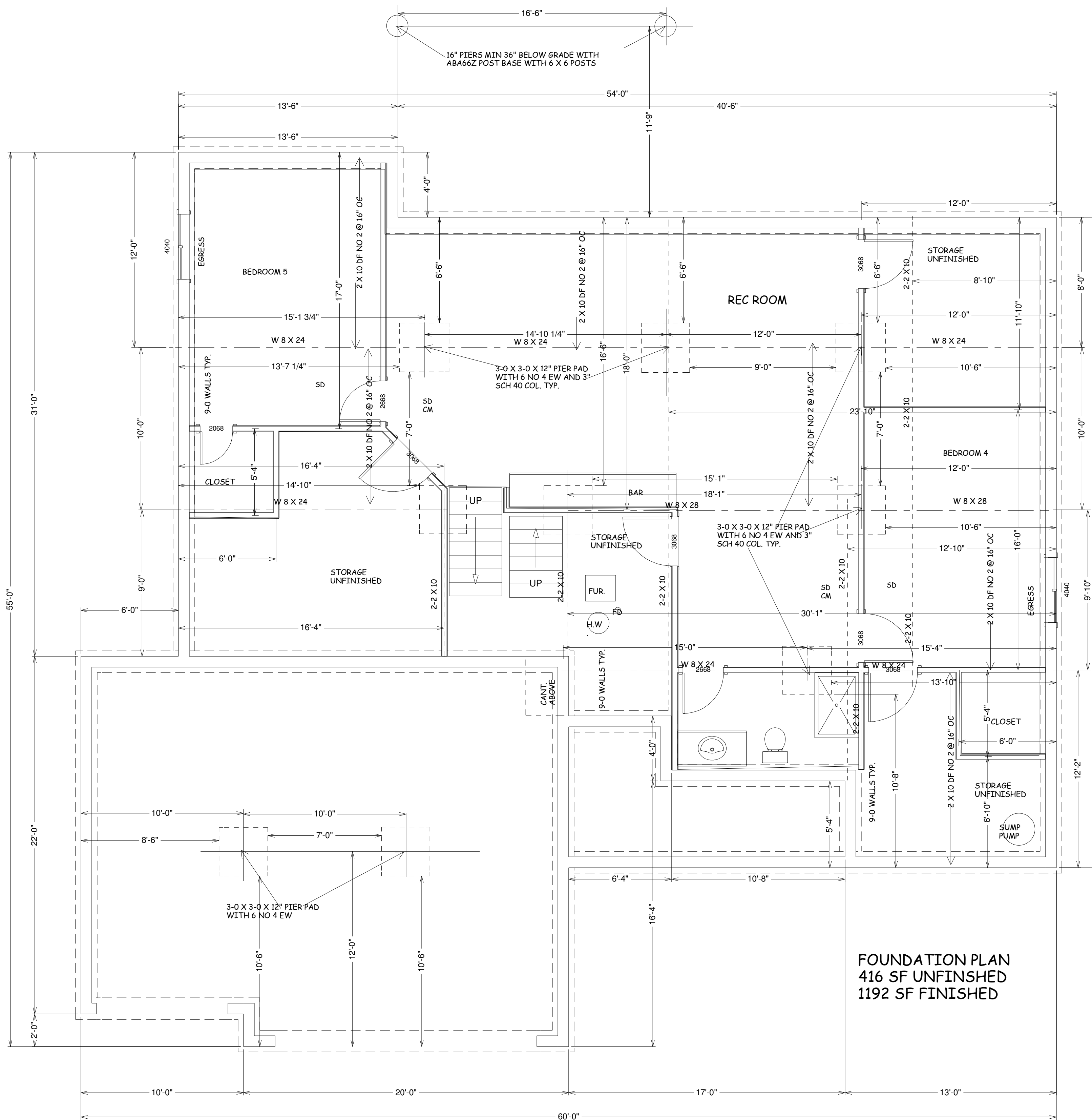
BEHOME LLC
LOT 73 MONTICELLO
1225 NE GOSHEN DR
LEE SUMMIT MO

SCALE
1/4" = 1'-0"

DATE
2-23-22

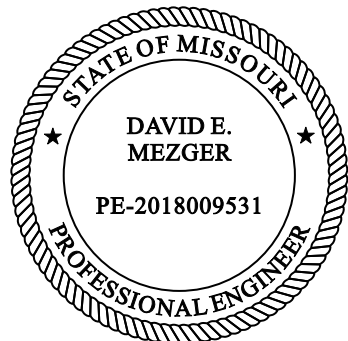
PLAN NO.
3298

SHEET NO.
1 OF 5



Review and Approval
Structural Only

David Mezger Engineering LLC
212 NE Circle Dr.
Kansas City, MO 64116



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

BEHOME LLC
LOT 73 MONTICELLO
1225 NE GOSHEN DR
LEE SUMMIT MO

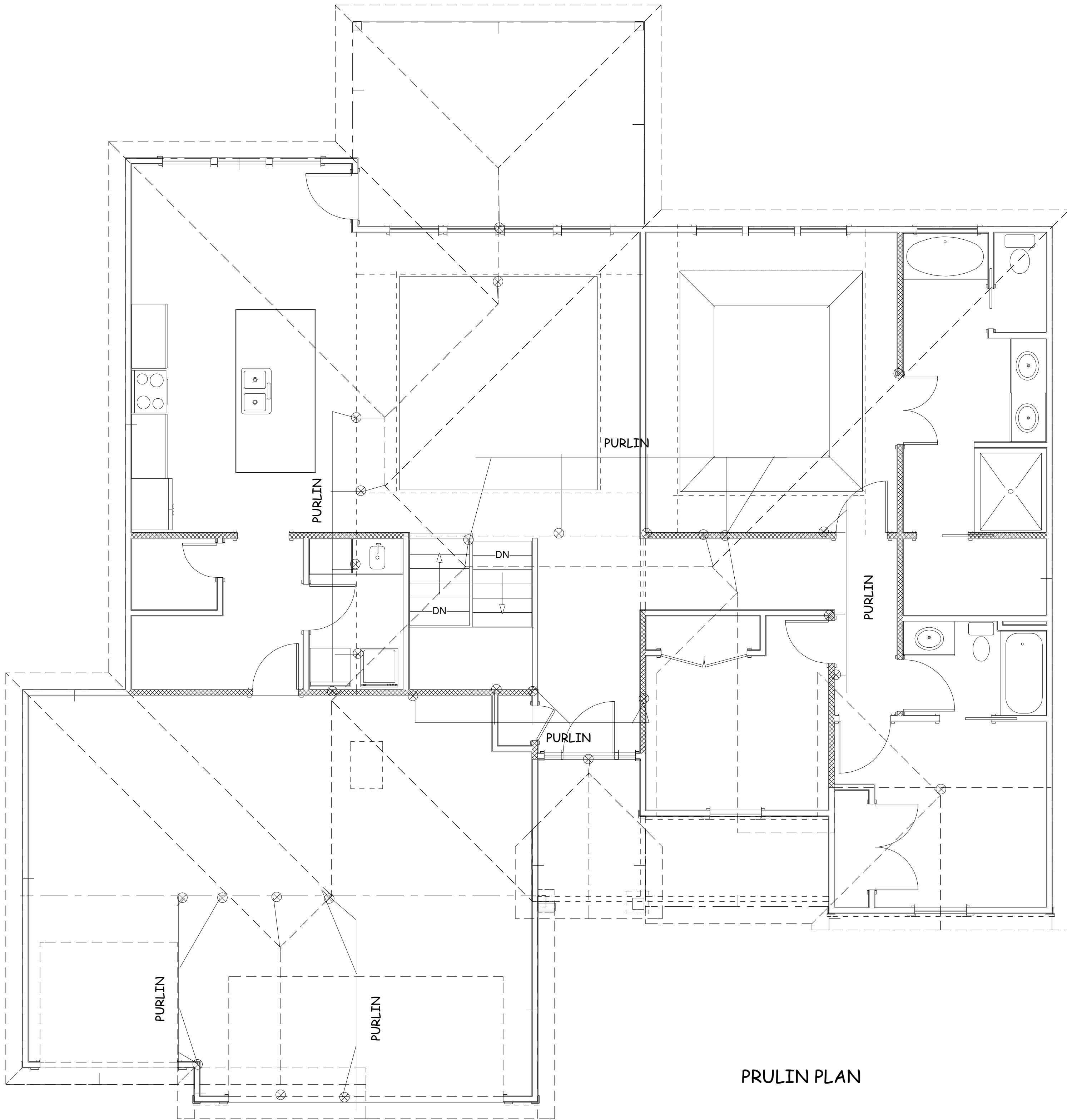
SCALE
1/4" = 1-0

DATE
2-23-22

PLAN NO.
3298

SHEET NO.

2025
RELEASE FOR
CONSTRUCTION
AS NOTED IN PLANS REVIEW
Development Services
LEE'S SUMMIT, MISSOURI



PRULIN PLAN

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

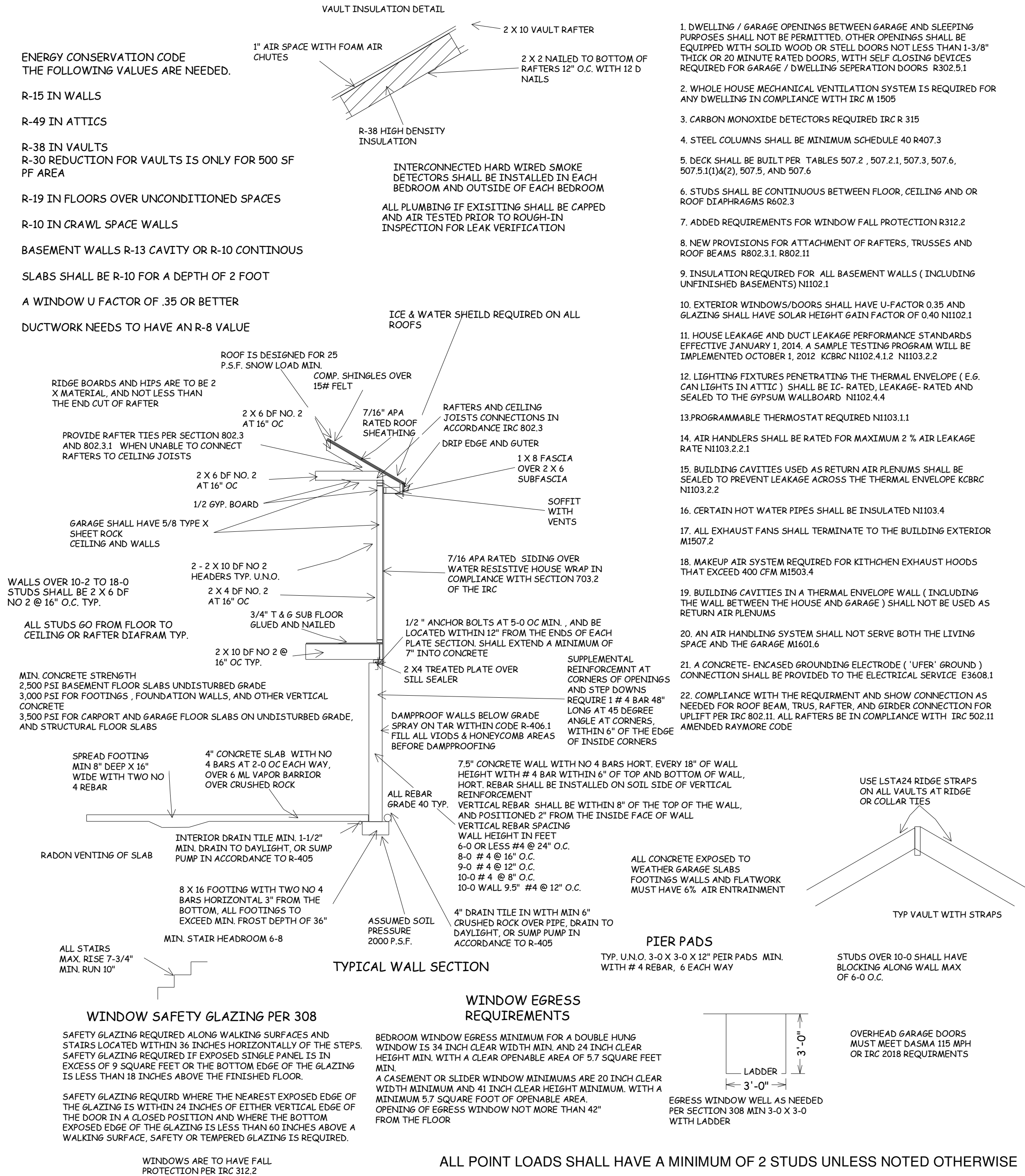
R-10 IN CRAWL SPACE WALLS

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



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

Review and Approval
Structural Only

David Mezger Engineering LLC
212 NE Circle Dr.
Kansas City, MO 64116



| 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 ^a | | | | |
|---|----------------|--|-------------------------|-----------|---|-----------------------------------|
| Ultimate Design Wind Speed (mph) | Story Location | Braced Wall Line Spacing ^b (feet) | Method LIB ^c | Method GB | Methods DWB, WSP, SFB, FBS, PCP, HPS, BV-WSP, ABW, PFH, 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 | 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 |

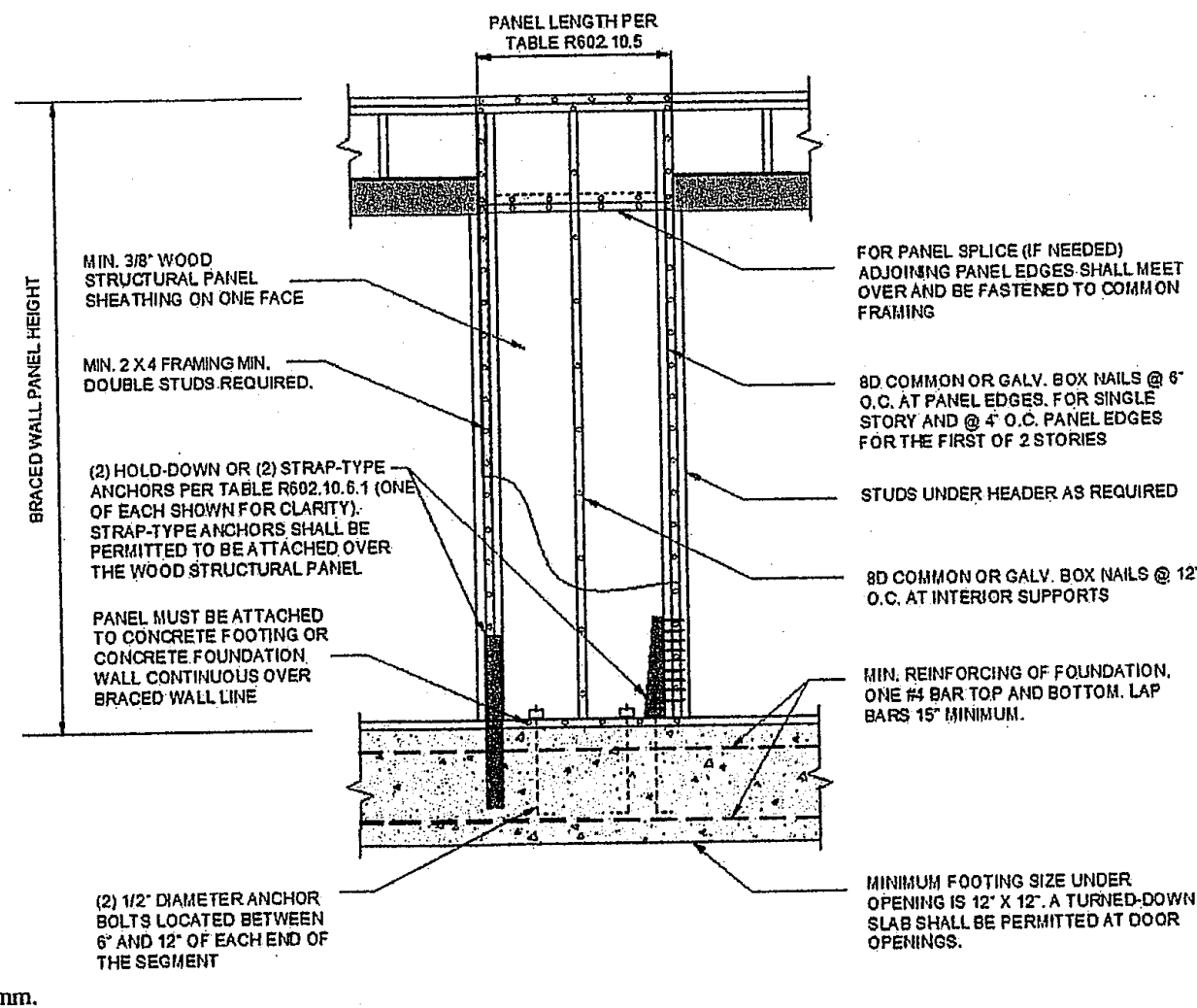
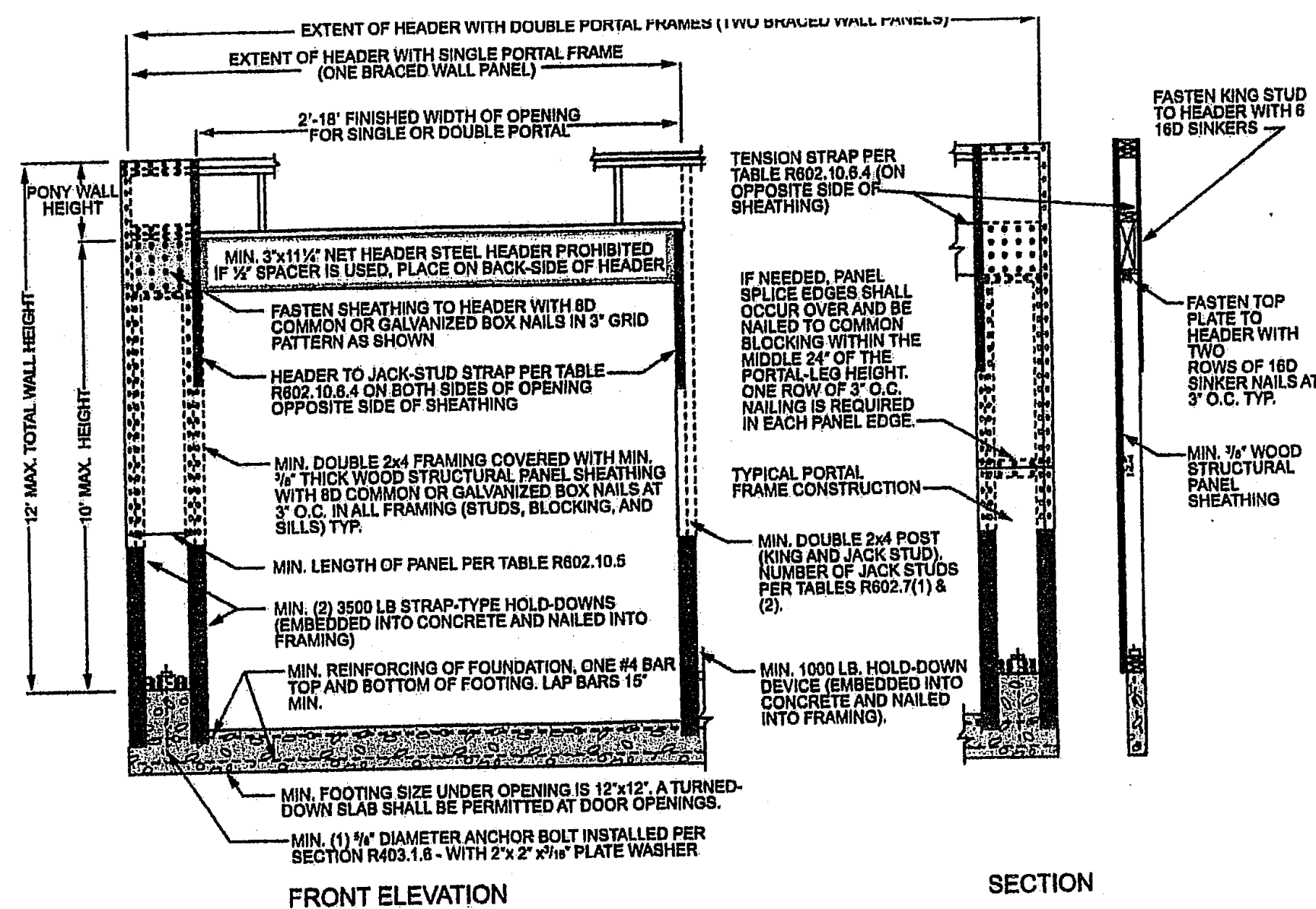


FIGURE R602.10.6.1
METHOD ABW—ALTERNATE BRACED WALL PANEL



4 mm, 1 foot = 304.8 mm.

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

| METHODS, MATERIAL | MINIMUM THICKNESS | FIGURE | CONNECTION CRITERIA ^a | |
|--|---|------------------------|---|---|
| | | | Fasteners | Spacing |
| LIB Let-in-bracing | 1 x 4 wood or approved metal straps at 45° to 60° angles for maximum 16\"/> | | Wood: 2-8d common nails or 3-8d (2 1/2\"/> | Wood: per stud and top and bottom plates Metal: per manufacturer |
| DWB Diagonal wood boards | 1/4\"/> | | 2-8d (2 1/2\"/> | 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\"/> |
| BV-WSP ^b Wood structural panels with stone or masonry veneer (See Section R602.10.6.5) | 3/8\"/> | See Figure R602.10.6.5 | 8d common (2 1/2\"/> | 4\"/> |
| SFB Structural fiberboard sheathing | 1/2\"/> | | 1 1/2\"/> | 3\"/> |
| 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\"/> |
| FBS Particleboard sheathing (See Section R605) | 3/4\"/> | | For 1/2\"/> | 3\"/> |
| PCP Portland cement plaster | See Section R703.7 for maximum 16\"/> | | 1 1/2\"/> | 6\"/> |
| HPS Hardboard panel siding | 3/8\"/> | | 0.092\"/> | 4\"/> |
| ABW Alternate braced wall | 3/4\"/> | | 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, FBS, PCP, 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 _s , D _i and D _o , 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 |
| | 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 | 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 | — | — | — | — | 62 |
| | 140 | — | — | — | — | 66 |
| | 144 | — | — | — | — | 72 |
| | METHOD (See Table R602.10.4) | 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 |
| | PFH | 24 | 27 | 30 | Note d | Note d |
| | CS-PF | SDC A, B and C | 16 | 18 | 20 | Note e |
| | | SDC D _s , D _i and D _o | 16 | 18 | 20 | 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 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.
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.

| METHODS, MATERIAL | MINIMUM THICKNESS | FIGURE | CONNECTION CRITERIA ^a | |
|--|-------------------|--------|---|-------------------------|
| | | | Fasteners | Spacing |
| PFH Portal frame with hold-downs | 3/4\"/> | | See Section R602.10.6.2 | See Section R602.10.6.2 |
| PFH Portal frame at garage | 3/4\"/> | | See Section R602.10.6.3 | See Section R602.10.6.3 |
| 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\"/> |
| CS-G ^b 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 | 3/8\"/> | | See Section R602.10.6.4 | See Section R602.10.6.4 |
| CS-SFB ^c Continuously sheathed structural fiberboard | 1/2\"/> | | 1 1/2\"/> | 3\"/> |

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, D_s, D_i, and D_o.
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 D_s, D_i, and D_o, 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 D_s, D_i, and D_o.
e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D_s through D_o only.

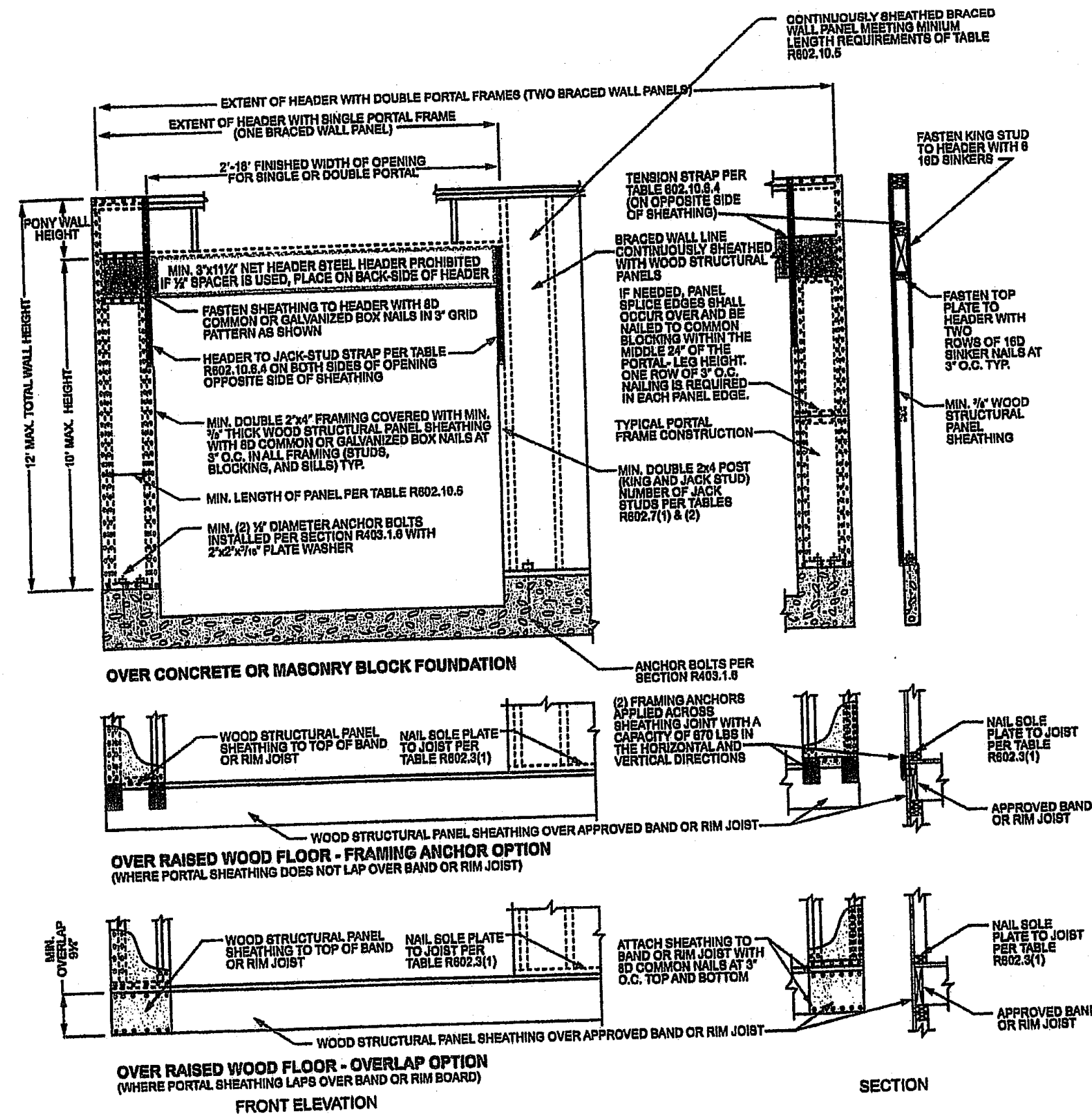


FIGURE R602.10.6.4
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

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

Review and Approval
Structural Only

David Mezger Engineering LLC
212 NE Circle Dr.
Kansas City, MO 64116



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

BEHOME LLC
LOT 73 MONTICELLO
1225 NE GOSHEN DR
LEE SUMMIT MO

SCALE
1/4" = 1-0

DATE
2-23-22

PLAN NO.
3298

SHEET NO.

RELEASE FOR
CONSTRUCTION
AS NOTED BY
ENGINEER'S REVIEW
DATE 02/23/22
LEE'S SUMMIT, MISSOURI