

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
CODES ADMINISTRATION
LEE'S SUMMIT, MISSOURI

04/22/2020

REVISION TABLE

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11656 W. 75TH STREET SHAWNEE, KS 66214 V: 913-631-2222 F: 800-780-8608

KS. COA. #E1312 MO. COA. #2006034946-F

LEE'S SUMMIT, MO

THIS PLAN HAS BEEN DESIGNED TO CONFORM WITH THE 2018 IRC

3/23/2020 38982 HD #: Drawn By: Reviewed By:

FRONT

SQUARE FOOTAGE

UNFINISHED BASEMENT 345 SF

COVERED DECK

FIRST FLOOR

GARAGE

FRONT STOOP

FINISHED BASEMENT

175 SF

1216 SF

1562 SF

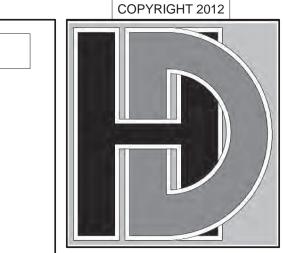
45 SF

426 SF

ELEVATION SHEET NUMBER:

COMP. ROOF TYP. ~2x4 RAKE TRIM OVER 2x8 RAKE BD (TYP. AT GABLES) — CEDAR SHAKE SIDING— ENTRY PLATE
11' - 1" SIDING 5/4x2 TRIM OVER 5/4X8 TRIM BD 5/4x2 TRIM OVER 5/4X8 TRIM BD 1ST FL TOP PLATE
9' - 1" HARDIBOARD SIDING-5/4x2 TRIM OVER 5/4X8 TRIM BD 5/4x2 TRIM OVER 5/4X8 TRIM BD HARDIBOARD SIDING-TOP OF WALL
-1' - 0" STONE VENEER W/ STONE CAP RETURN TO CORNER AT LEFT AND 24" AT RIGHT 1 FRONT ELEVATION

1/4" = 1'-0"



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SUMMIT,

EE'S

3-1/2" SCH. 40 STEEL COL. ON 54"x54"x16" CONCRETE PAD W/ (9) #4 BARS EACH WAY (30.4K MAX)

3-1/2" SCH. 40 STEEL COL. ON F 60"x60"x18" CONCRETE PAD W/ (10) #4 BARS EACH WAY (37.5K MAX)

MIN. 6X6 TRTD/CDR POST ON 16" Ø B CONC PIER WITH USP PAU 66 BASE OR = (2787# MAX)

(6283# MAX) PIERS TO TERMINATE ON ORIGINAL SOIL

OF 1500 PSF MINIMUM BEARING. PIERS TO TERMINATE AT A POINT 36"

MINIMUM BELOW FINISH GRADE. POST ARE NOT TO EXCEED AN UNBRACED LENGTH OF 12' WITHOUT CONTACTING HD ENGINEERING FOR GUIDANCE.

-HOUSE WILL BE PROVIDED WITH A "UFER" GROUND

OVER 10 FEET TALL IS TO BE A CONTINUOUS STUD

TYPICAL TIE DOWN AT NARROW WALL USP HPAHD 22 OR = (4200# STRAP) ─ BLOCK DOWN

FOUNDATION

Date:

| HD #:

Drawn By:

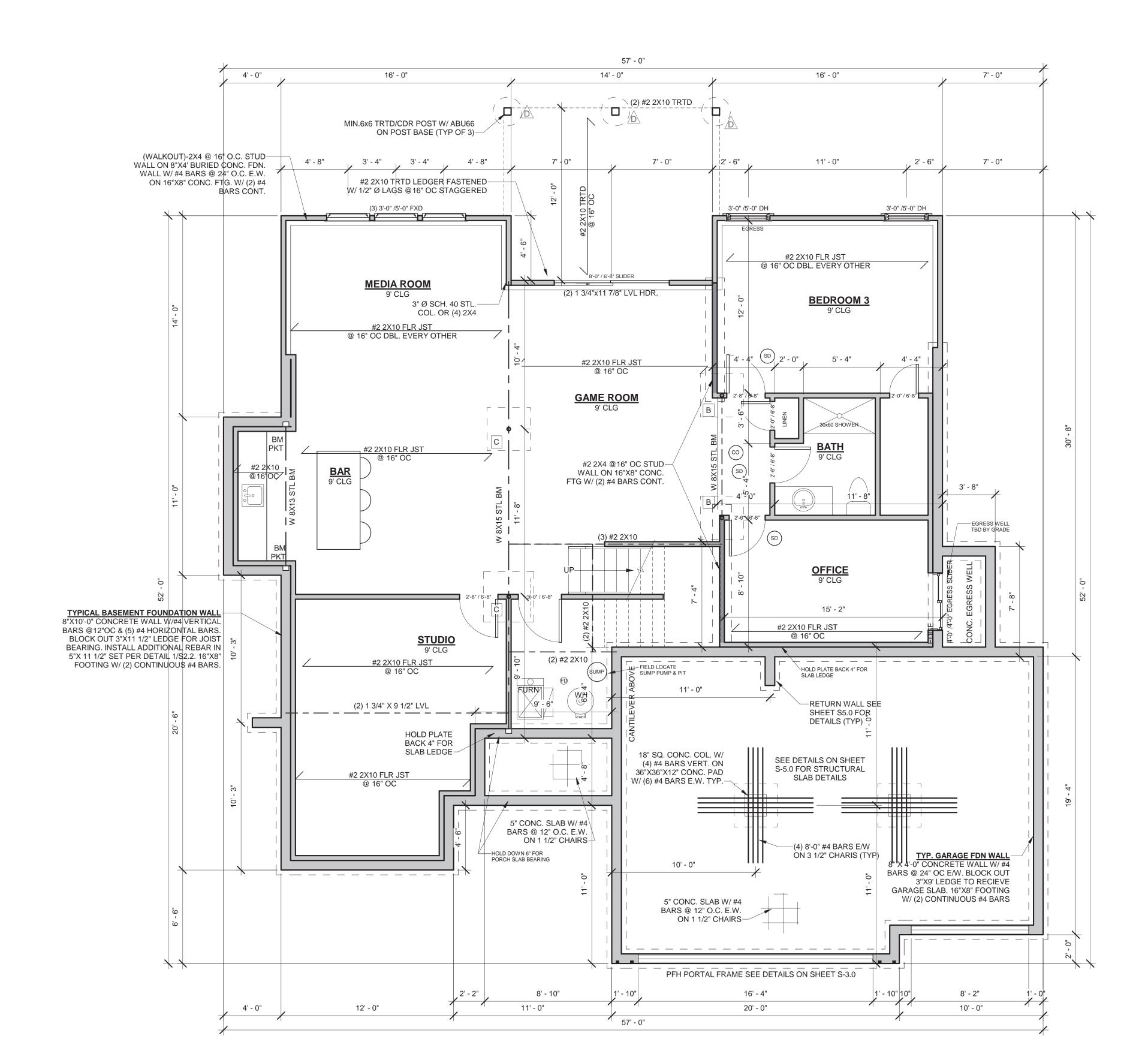
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COLUMN PAD SCHEDULE

WAY (9.4K MAX)

3" SCH. 40 STEEL COL. ON 36"x36"x12" B CONCRETE PAD W/ (6) #4 BARS EACH WAY (13.5K MAK)

3" SCH. 40 STEEL COL. ON 42"x42"x14" CONCRETE PAD W/ (7) #4 BARS EACH WAY (18.4K MAX)

3" SCH. 40 STEEL COL. ON 30"x30"x12"
A CONCRETE PAD W/ (5) #4 BARS EACH

3-1/2" SCH. 40 STEEL COL. ON 48"x48"x16" CONCRETE PAD W/ (8) #4 BARS EACH WAY (24.0K MAX)

DECK PIER SCHEDULE

FOUNDATION ANCHORING NOTES

PERIMETER OF FOUNDATION

1ST FLOOR EXTERIOR/ **GARAGE WALL**

FOUNDATION WALL

MIN. 1/2" ANCHOR BOLTS SHALL BE INSTALLED @ 36"

∕ 2x4 BOTTOM PLATE

⁻16d COMMON (0.162"x3 ½") NAILS @12" OC THROUGH

SUBFLOOR AND RIM JOIST

BOTTOM PLATE, INTO

- ANCHOR BOLTS AS

FOUNDATION PLAN

SPECIFIED ON

⁻³₄" SUBFLOORING

-RIM JOIST

O.C. MAX AND WITHIN 6"-12" FROM THE END OF

EACH SECTION OF SILL PLATE ALONG ENTIRE

MIN. 6X6 TRTD/CDR POST ON 12" \varnothing CONC PIER WITH USP PAU 66 BASE OR =

C CONC PIER WITH USP PAU 66 BASE OR = (3535# MAX)

MIN. 6X6 TRTD/CDR POST ON 24" Ø CONC PIER WITH USP PAU 66 BASE OR =

GENERAL NOTES:

-WINDOW SHALL HAVE FALL PROTECTION PER IRC

PER IRC SECTION 3608.1.5 -ALL TALL STUD WALLS TO BE CONSTRUCTED PER TABLE R602.3.1 ON SHEET S-2.0 ANY STUD WALL

-OVERHEAD GARAGE DOORS MUST MEET DASMA 90 MPH REQUIREMENTS

-ALL HEADERS NOT LABELED SHALL BE MIN (2) #2-2X10 DFL

-DBL ALL JST UNDER ISLAND -INSTALL W8X15 STEEL BEAM MIN. UNDER ALL F.P. WALLS/HEARTHS (THAT WILL RECEIVE ROCK) UNLESS NOTED AS A LARGER BEAM. ANY STONE OVER 2" DEEP, NOTIFY ENG. TO VERIFY LOADS

PLAN LEGEND / NOTES:

- LOAD BEARING WALL — – — – LOAD BEARING BEAM ■ -USP HPAHD 22 OR EQUAL 4200# STRAP

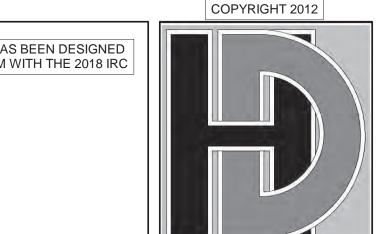
- SMOKE DETECTOR - CARBON MONOXIDE DETECTOR

FIRST CHOICE CUSTOM HOMES 1627 SW BLACKSTONE PL., LEE'S SUMMIT, MO

Combustion	Air		
Per IRC 2018 G2407.5.1 Fuel Burning Appliance #1 Fuel Burning Appliance #2 Fuel Burning Appliance #3	Furnace	100000 50000 NA	Btu/h
Total Btu/h		150000	Btu/h
Area of Usable Space Ceiling Heigh in Usuable Space (no sheetr	ock)	72 9	sq. ft ft
Required Volume of Air = Total B	tu/h * (50 cu	.ft./1000 E	Btu/h)
	=	7500	cu.ft.
Required Area of Usable Space Standard Method Work?		833 BAD	sq.ft.
Combustion Air Trai	nsfer Grille		
Per IRC 2018 G2407.5.3.1 Required Opening Free Space = 1 sq.in./1 Size of Grill(s) to be used Note: If Fuel Burning Appliances are enclo required within 12" of floor and (1) opening top of enclosure	= = sed, (1) oper	-	'

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SUMMIT, MO

LEE'S

SPECIFIED PER PLAN. FOR EXAMPLE, IF REQUIRED IS 4" O.C., BOTTOM LAP SHALL
FIRST BE NAILED AT 4" O.C. (NAIL
"A"), THEN FULL DEPTH SECTION
OF OVERLAP PANEL SHALL BE

NAILING WITH SPACING AS

NAILED @ 4" O.C. (NAIL "B")

SEE S-6.0 & S-7.0 FOR ALL DECK FRAMING NOTES AND DETAILS

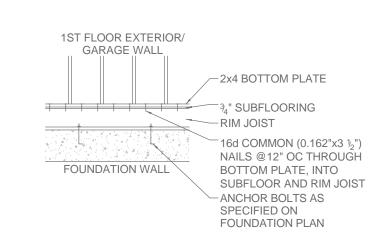
3/8" APA REQUIRED NAILING PATTERN FOR SHIPLAP PANEL SHEATHING

ALIGNMENT

WALL_ STUD

FOUNDATION ANCHORING NOTES

 MIN. 1/2" ANCHOR BOLTS SHALL BE INSTALLED @ 36" O.C. MAX AND WITHIN 6"-12" FROM THE END OF EACH SECTION OF SILL PLATE ALONG ENTIRE PERIMETER OF FOUNDATION



GENERAL NOTES:

-WINDOW SHALL HAVE FALL PROTECTION PER IRC -HOUSE WILL BE PROVIDED WITH A "UFER" GROUND PER IRC SECTION 3608.1.5 -ALL TALL STUD WALLS TO BE CONSTRUCTED PER

TABLE R602.3.1 ON SHEET S-2.0 -OVERHEAD GARAGE DOORS MUST MEET DASMA 90 MPH REQUIREMENTS

ALL TALL STUD WALLS TO BE CONSTRUCTED PER TABLE R602.3.1 ON SHEET S-2.0

XXXXXX BRACED WALLS:

SEE CALCULATIONS ON SHEET S-3.0, PER ASCE7-10 REQUIREMENTS AS ALLOWED BY IRC 2012 R301.2.1

ALL EXTERIOR WALLS SHALL BE SHEATHED PER ANY ONE OF THE FOLLOWING OPTIONS:

- $\sqrt[7]{_{16}}$ " APA-RATED PLYWOOD/OSB WITH 8d NAILS @ 6" O.C. AT EDGES AND @ 12" O.C. IN THE FIELD • 7/16" SHIPLAP PANEL SHEATHING (I.E. LP SMARTSIDE OR
- EQUIVALENT) WITH 8d NAILS @ 6" O.C. AT EDGES AND @ 12" O.C. •3/8" SHIPLAP PANEL SHEATHING (I.E. LP SMARTSIDE OR EQUIVALENT) WITH 6d NAILS @ 4" O.C. AT EDGES AND @ 12" O.C. IN THE FIELD

CM DETECTOR

LEGEND / NOTES: - LOAD BEARING WALL — – — – LOAD BEARING BEAM - SMOKE DETECTOR - CARBON MONOXIDE

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FIRST FLOOR SHEET NUMBER:
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4' - 0"

4' - 0"

PLANT LEDGE ABOVE

16' - 0"

11' - 0"

(3) #2 2X10

(3) #2 2X10

MASTER BED

#2 2X6 CLG JST

(3) #2 2X10 RAISE CLG 10"

7' - 8"

WIC 11' CLG

LAUNDRY

9' CLG

DOUBLE STEP CLG (3) #2 2X10 RAISE CLG 10"
9'-0" FLAT CLG

3'-0" /5'-2" DH

3'-0" /5'-2" DH

MASTER BATH

BATH 9' CLG

#2 2X6 CJ @ 16" OC

2'-7" /6'-0" CSMT2'-7" /6'-0" CSMT

EGRESS EGRESS 12' - 0"

12' - 0"

57' - 0"

2'-6" /6' 6" FXD

(4) 2X4 STUD CQL.—

8' - 6"

—36" HIGH RAILI

ATTIC | ACCESS |

ZERO ENTRY/ACCESSIBLE

10' - 0"

57' - 0"

THRESHOLD - 1/2" MAX.

(2) 4 2/4||V0 4/9|| 1 1/4|

× I F/P

16' - 0"

(2) 1 3/4"X11 7/8" LVL UPSET

<u>KITCHEN</u>

DINING ROOM

√ (3) 1 3/4"X11 7/8" LVL UPSET

9' CLG

9' - 6"

GARAGE

(2) 1 3/4"X14" LVL HDR PFH PORTAL FRAME SEE DETAIL ON SHEET S-3.0

W18X35 STL. BM.

10' - 0"

PANTRY 9' QLG

-ZERO ENTRY/ACCESSIBLE THRESHOLD - 1/2" MAX.

(4) 2X4 STUD COL.

(2) #2 2x12 HDR

5' - 2"

4' - 10"

EACH END—

8' - 0"

8' - 0"

7' - 0"

14' - 0"

(2) #2 2X10 (2) #2 2X10

SEE NOTES & DETAILS ON SPEETS S-6.0 AND S-7.0 FOR CQVERED DECK

5' - 0"

COVERED DECK

2'-6" /6'-6" FXD 6'-0" / 8'-0" SLIDER

5' - 8"

FRONT PORCH

(2) #2 2X10

___10"X10" COLUMN__

2' - 8" | 3' - 4 1/2" | 4' - 11 1/2"

11' - 0"

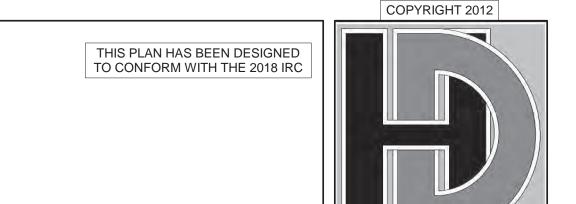
11' CLG

(2) 1 3/4"X9 1/2" LVL

#2 2X6 CLG JST

GREAT ROOM

(2) 1 3/4"X14" LVL UPSET (4) 2X4 STUD CQL.-



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NOTE: CODE MINIMUM L/240 DEFLECTION

GREATER THAN CODE MAX HORIZONTAL CLEARSPAN SPACING #2-2x6 @24" O.C. #2-2x6 @16" O.C. #2-2x8 @24" O.C. #2-2x8 @16" O.C. #2-2x10 @24" O.C. @16" O.C.

ROOF DESIGNED FOR LIGHT ROOF COVERING 30PSF

MAX HORIZONTAL CLEARSPAN

TOTAL LOAD [10PSF DL, 20PSF LL (SL)]

@24" O.C.

@16" O.C.

@24" O.C.

@16" O.C.

@24" O.C.

@16" O.C.

RAFTERS (DOUG-FIR, OR EQUAL): SEE SPAN CHARTS BELOW

CODE MINIMUM RAFTERS

#2-2x6

#2-2x6

#2-2x8

#2-2x8

#2-2x10

#2-2x10

DEFLECTION = L/360 LIVE LOAD, L/240 TOTAL LOAD VAULTS TO BE 2x10 DEPTH

ALL RIDGES, HIPS, AND VALLEYS NOT MARKED SHALL BE (1) NOMINAL SIZE LARGER THAN THE INTERSECTING RAFTERS

PURLINS ARE 2x6 MIN. PURLIN STRUTS ARE AT 4'-0" O.C.

PURLIN STRUTS SHALL BE INSTALLED AT NOT LESS THAN A 45 DEGREE ANGLE WITH THE HORIZONTAL ALL PURLINS STRUTS SHALL HAVE A MAXIMUM UNBRACED LENGTH

OF 8'-0" PURLINS STRUTS SHALL BE CONSTRUCTED IN A "T" CONFIGURATION AND PER THE FOLLOWING CHART

PURLIN STRUT	MAX PURLIN STRUT LENGTH
(2) 2x4	8'-0"
(1) 2x4 & (1) 2x6	12'-0"
(1) 2x6 & (1) 2x8	20'-0"
(2) 2x6 & (1) 2x8	30'-0"
CONSULT A DOH /ENGD	> 20' 0"

GENERAL NOTES:

-WINDOW SHALL HAVE FALL PROTECTION PER IRC

312.2.4 -HOUSE WILL BE PROVIDED WITH A "UFER" GROUND PER IRC SECTION 3608.1.5 -ALL TALL STUD WALLS TO BE CONSTRUCTED PER TABLE R602.3.1 ON SHEET S-2.0

-OVERHEAD GARAGE DOORS MUST MEET DASMA 90 MPH REQUIREMENTS

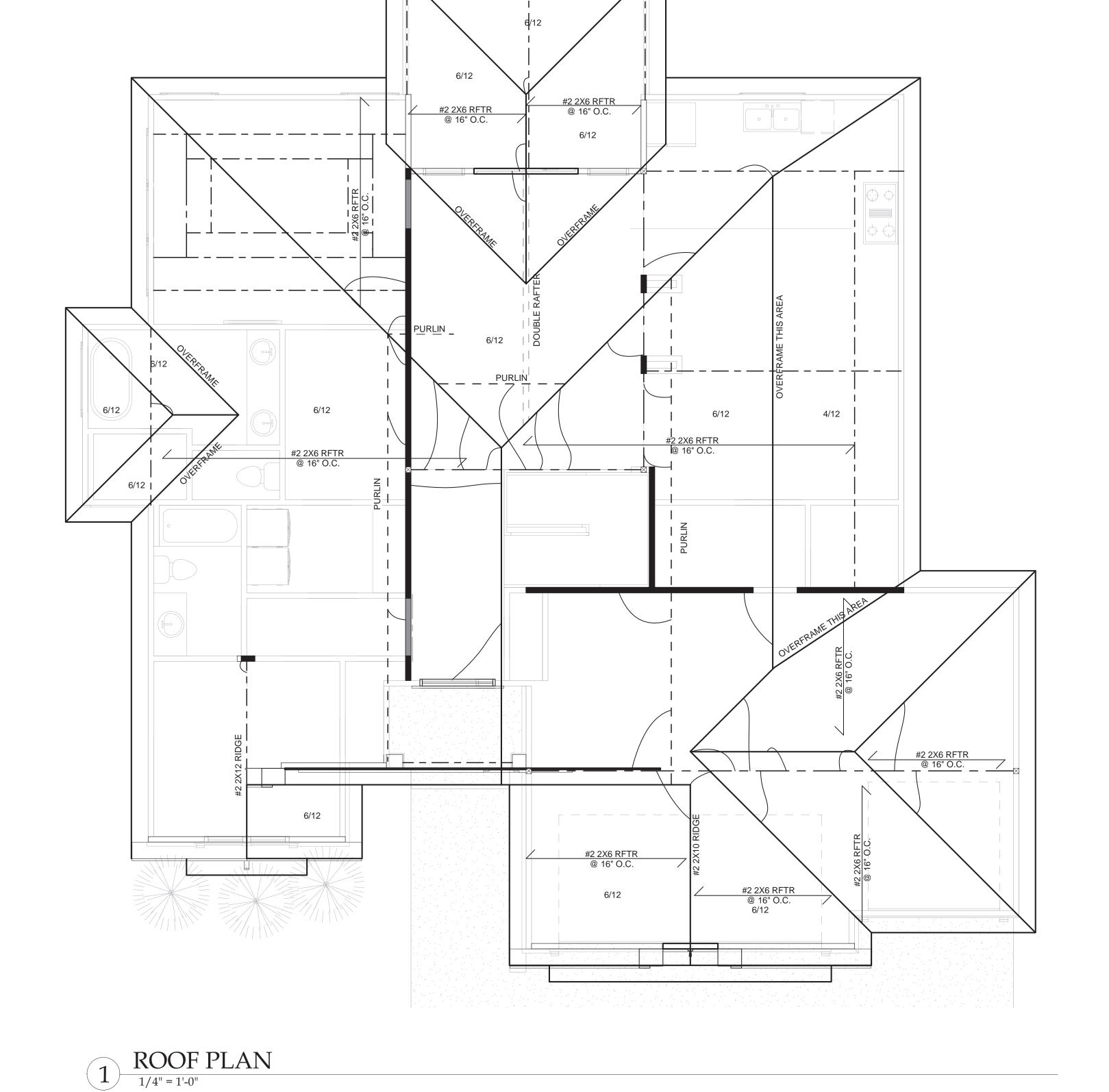
LEGEND / NOTES: - LOAD BEARING WALL — — — — - LOAD BEARING BEAM - - - - - - - PURLIN

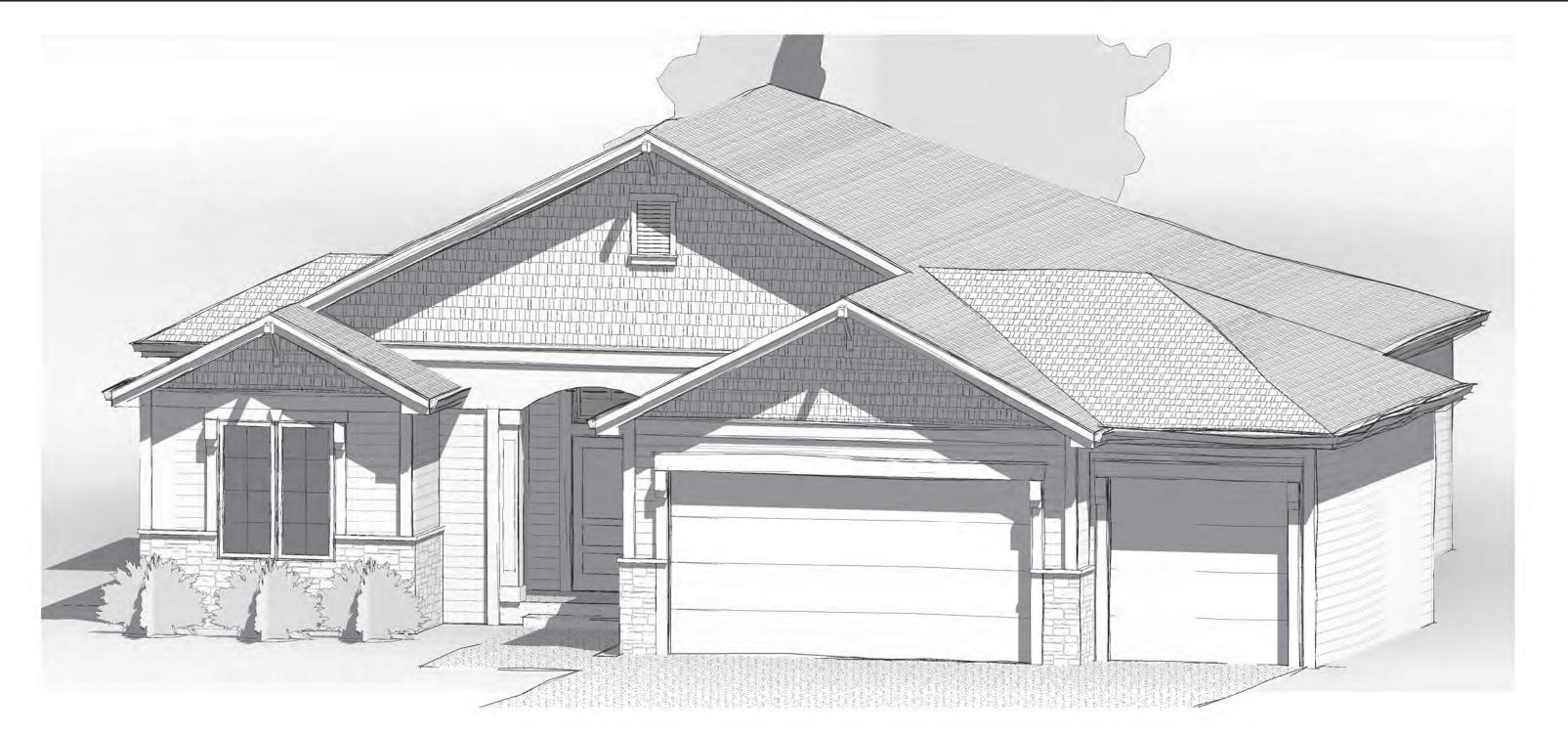
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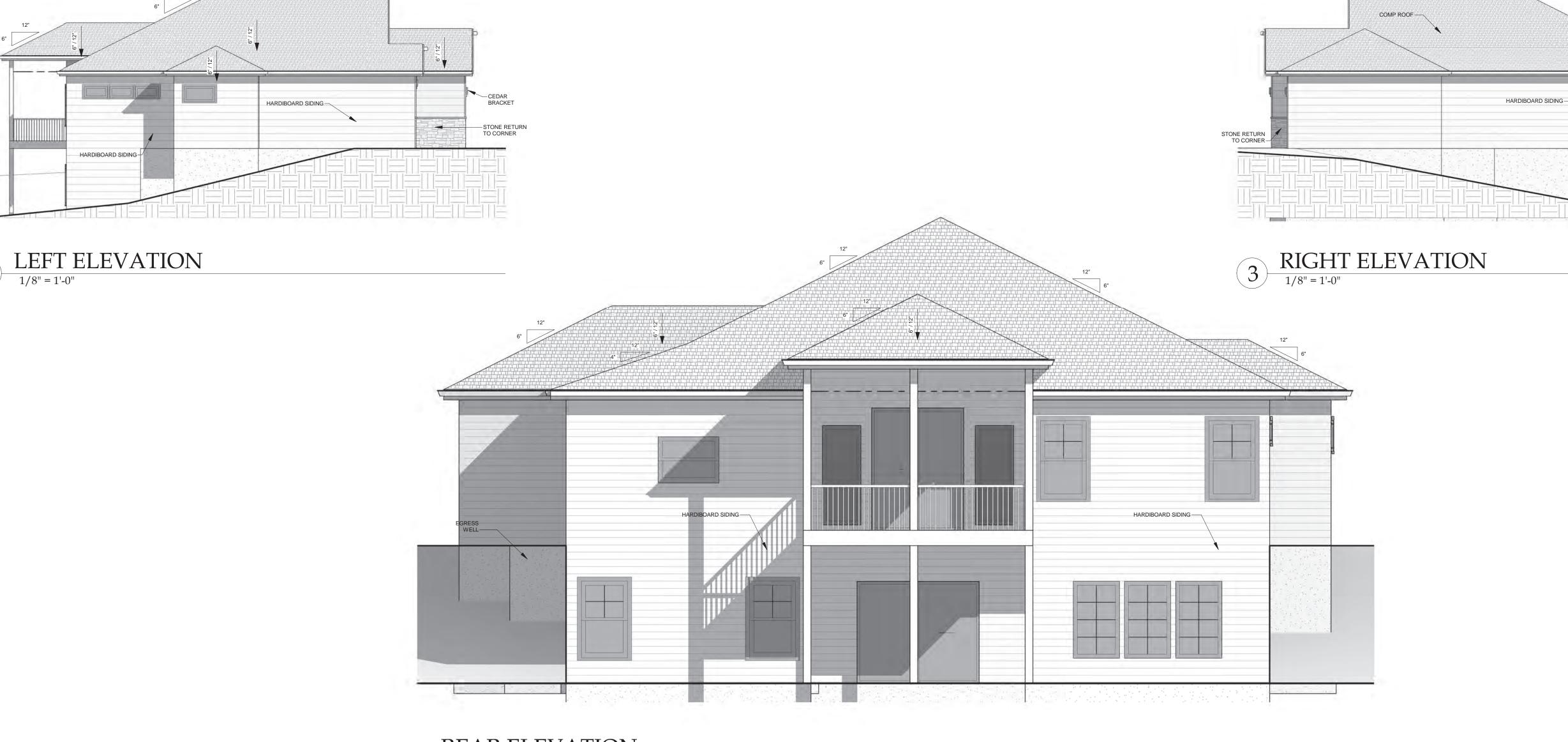
3/23/2020 38982 HD #: Drawn By: Reviewed By:

ROOF PLAN





1 PERSPECTIVE



4 REAR ELEVATION

1/4" = 1'-0"

ELEVATION OPTION A

FIRST CHOICE CUSTOM HOME:

MCKINLEY COTTAGE, 1627 SW Blackstone Place

LEE'S SUMMIT, MO

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 Date:
 3/23/2020

 HD #:
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 Drawn By:
 PJH

 Reviewed By:
 CLS

SHEET NUMBER:
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GENERAL NOTES:

1. PLANS SHALL COMPLY WITH THE 2018 INTERNATIONAL RESIDENTIAL CODE, 2018 IECC, AND ALL AMENDMENTS AS ADOPTED BY THE AHJ. IF ANY CHANGES OR DEVIATIONS ARE MADE FROM THESE PLANS THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE AUTHORITY AND THE ENGINEER TO EVALUATE THE CHANGES AND MAKE ANY APPROPRIATE MODIFICATIONS TO THE PLANS. 2. WHERE DISCREPANCIES EXIST BETWEEN THE STANDARD COMMENTS, NOTES FOR THE DESIGN PROFESSIONAL OR THE CODE, THE MOST RESTRICTIVDE SHALL APPLY.

3. THE CONTRACTUAL OBLIGATION OF THESE PLANS IS TO PROVIDE THE OWNER/BUILDER AND THE AHJ WITH A SET OF PLANS THAT MEET AHJ AND CODE REQUIREMENTS FOR A SINGLE SITE CONSTRUCTION PROJECT. UNLESS REQUESTED BY OUR CLIET, CODE/AHJ MINIMUM DESIGNS WILL BE UTILIZED. ALSO, UNLESS REQUESTED BY THE OWNER, OUR FIRM CAN NOT AND WILL NOT BE AUTHORIZED TO VISIT THE SITE TO EVALUATE THE SITE OR ANY CONSTRUCTION FOR THIS PROJECT. IMPLEMENTATION OF ALTERNATES TO THE DESIGNS INCLUDING BUT NOT LIMITED TO PIER DESIGNS, FOUNDATION ALTERATIONS, OR ANY STRUCTURAL CHANGES NOT PROVIDED BY HD ENGINEERING OR A PROFESSIONAL REFERRED BY HD ENGINEERING SHALL RELEASE HD ENGINEERING FROM ALL LIABILITY ASSOCIATED WITH THIS DESIGN.

4. OUR FIRM HIGHLY RECOMMENDS THAT ANY SITE WITH GREATER THAN A 15% GRADE, ANY SITE WHERE A PREVIOUS STRUCTURE WAS LOCATED, OR ANY SITE WITH FILL MATERIAL OR A POTENTIAL SOIL BEARING CAPACITY BELOW 1500 PSF SHOULD BE EVALUATED BY OUR FIRM OR AN HD ENGINEERING REFERRED GEOTECHINICAL FIRM PRIOR TO PLACING FOOTINGS.

5. DUE TO THE WIDE VARIETY OF SOIL CONDITIONS IN OUR AREA AND THE WIDE VARIETY OF PLASTICITY INDEX AND SOIL BEARING CAPACITIES OUR FIRM RECOMMENDS ALL SITES BE EVALUATED BY HD ENGINEERING OR AN HD ENGINEERING REFERRED GEOTECHNICAL FIRM PRIOR TO PLACEMENT OF ANY "STANDARD" FOUNDATIONS.

FOUNDATION NOTES:

1. THE FOUNDATION DESIGN SHALL COMPLY WITH THE ENFORCING JURISDICTION RESIDENTIAL FOUNDATION STANDARD IN LIEU OF ENGINEERING REPORT REQUIREMENTS BASED ON ACTUAL

2. FOUNDATION WALLS SHALL BE DAMP-PROOFED PER IRC SECTION R406.

3. PROVIDE A MINIMUM 4" PERFORATED DRAIN AROUND USABLE SPACE BELOW GRADE OR OTHER EQUIVALENT MATERIALS PER IRC SECTION 405.1. THE PIPE SHALL BE COVERED WITH NOT LESS THAN 6" OF WASHED GRAVEL OR CRUSHED ROCK. THE DRAIN SHALL DAYLIGHT TO THE EXTERIOR BELOW THE FLOOR LEVEL OR TERMINATE IN A MINIMUM 20 GALLON SUMP PIT. 4. FOUNDATION DESIGN SHALL BE BASED ON A MINIMUM SOIL BEARING CAPACITY OF 1500 PSF 5. FOOTINGS SHALL BE A MIN. OF 16" WIDE AND 8" DEEP W/ (2) #4 BARS CONTINUOUS, LOCATED A MIN. OF 3" CLEAR FROM BOTTOM. FOOTINGS SHALL BE A MINIMUM OF 36" BELOW GRADE FOR

6. COLUMN PADS SHALL BE A MINIMUM OF 24"X24"X8" WITH (3) #4 BARS EACH WAY.

7. FOUNDATION WALLS SHALL BE A MINIMUM 8" THICK W/ MINIMUM #4 BARS @ 24" O.C. HORIZONTAL AND VERTICAL W/ THE TOP BAR WITHIN 8" OF THE TOP OF THE WALL UNLESS NOTED

8. REINFORCEMENT SHALL LAP A MINIMUM OF 24" 9. INTERIOR BEARING WALLS AND COLUMNS SHALL BE ISOLATED FROM THE BASEMENT FLOOR

10. INTERIOR NON-BEARING WALLS, OTHER THAN THOSE RESTING DIRECTLY ON THE FOOTING, SHALL BE ISOLATED FROM THE FLOOR FRAMING ABOVE BY A SEPARATION OF ½". 11. CONCRETE FLOOR SLABS ON GRADE, SHALL BE A MINIMUM 4" THICK OVER A MINIMUM 4" BASE OF SAND, GRAVEL, OR CRUSHED STONE. BASEMENT SLABS SHALL HAVE A MIN. 6 MIL POLYETHYLENE OR APPROVED VAPOR RETARDER WITH JOINTS LAPPED NOT LESS THAN 6" SHALL BE PLACED BETWEEN THE FLOOR SLAB AND THE BASE COURSE.

12. FLOOR SLABS SUPPORTED BY FILL CONSISTING OF MORE THAN 24" OF GRANULAR FILL OR 8" OF EARTH SHALL BE REINFORCED PER A SEPARATE ENGINEERING DESIGN.

13. BASEMENT FOUNDATION SILL PLATES SHALL BE BOLTED TO THE FOUNDATION W/ A MINIMUM OF 1/2" ANCHOR BOLTS EMBEDDED AT LEAST 7" INTO THE CONCRETE AND SPACED NOT MORE THAN 3' ON CENTER AND WITHIN 12" OF EACH END PIECE PER IRC SECTION R403.1.6. 14. FOUNDATION WINDOW WELLS FOR SECONDARY MEANS OF EGRESS SHALL PROVIDE A MINIMUM 3'X3' HORIZONTAL AREA.

15. THE BASE OF ALL FOOTING EXCAVATIONS SHOULD BE FREE OF ALL WATER AND LOOSE MATERIAL PRIOR TO PLACING CONCRETE. CONCRETE SHOULD BE PLACED AS SOON AS POSSIBLE AFTER EXCAVATING SO THAT EXCESSIVE DRYING OR DISTURBANCE OF BEARING MATERIALS DOES NOT OCCUR. SHOULD THE MATERIALS AT BEARING LEVEL BECOME EXCESSIVELY DRY OR SATURATED, WE RECOMMEND THAT THE AFFECTED MATERIAL BE REMOVED PRIOR TO PLACING CONCRETE.

16. IT IS RECOMMENDED THAT ALL FOOTING EXCAVATIONS BE EVALUATED AND TESTED BY A GEOTECHNICAL ENGINEER IMMEDIATELY PRIOR TO PLACEMENT OF FOUNDATION CONCRETE. UNSUITABLE AREAS IDENTIFIED AT THIS TIME SHOULD BE CORRECTED. CORRECTIVE PROCEDURES WOULD BE DEPENDENT UPON CONDITIONS ENCOUNTERED AND MAY INCLUDE DEEPENING OF FOUNDATION ELEMENTS, OR UNDERCUTTING OF UNSUITABLE MATERIALS AND REPLACEMENT WITH ENGINEERED FILL.

STAIRWAY NOTES:

1. STAIRWAYS SHALL PROVIDE A MAXIMUM 7 3/4" RISE AND MIN. 10" RUN.

2. PROVIDE MINIMUM 36" GUARDRAILS ON THE OPEN SIDES OF RAISED FLOORS, PORCHES AND BALCONIES. MINIMUM 34" GUARDRAILS ON THE OPEN SIDES OF STAIRWAYS LOCATED MORE THAN 30" ABOVE THE FLOOR OR GRADE BELOW. GUARDRAIL ENCLOSURES SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL PATTERNS THAT DO NOT ALLOW PASSAGE OF A SPHERE

3. EACH STAIRWAY OF 3 OR MORE RISERS SHALL PROVIDE A CONTINUOUS HANDRAIL ON AT LEAST ONE SIDE BETWEEN 34" AND 38" ABOVE THE NOSING OF THE THREADS.

4. HANDRAILS SHALL HAVE A CIRCULAR CROSS-SECTION OF 1 1/4" MINIMUM TO 2" MAXIMUM OR OTHER APPROVED GRABABLE SHAPE PER IRC SECTION R311.7.8.5

5. PROVIDE A MINIMUM 6'-8" OF HEADROOM CLEARANCE IN STAIRWAYS.

6. ENCLOSED ACCESSIBLE SPACE UNDER STAIRWAYS SHALL HAVE WALLS AND THE UNDERSIDE OF THE STAIR AND LANDING PROTECTED WITH 1/2" GYPSUM BOARD ON ENCLOSURE SIDE. 7. WINDERS SHALL PROVIDE A MINIMUM TREAD OF AT LEAST 6" AT ANY POINT WITHIN CLEAR WIDTH OF STAIRS. WINDER TREAD PROPORTION TO COMPLY WITH IRCR311.7.5.2.1.

1. GLAZING IN HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC SECTION R308.4 SHALL BE OF APPROVED SAFETY GLAZING MATERIALS. GLASS IN STORM DOORS, INDIVIDUAL FIXED OR

GLAZING NOTES:

OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24" ARCH OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS WITHIN 60" OF THE FLOOR, WALLS ENCLOSING STAIRWAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 60" OF THE TOP OR BOTTOM OF THE STAIR, ENCLOSURES FOR SPAS, TUBS, SHOWERS AND WHIRLPOOLS, GLAZING IN FIXED OR OPERABLE PANELS EXCEEDING 9 S.F. AND WHOSE BOTTOM EDGE IS LESS THAN 18" ABOVE THE FLOOR OR WALKING SURFACE WITHIN 36" 2. IN DWELLING UNITS, WHERE THE OPENING OF AN OPERABLE WINDOW IS LOCATED MORE THAN 72 INCHES ABOVE THE FINISHED GRADE OR SURFACE BELOW, THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW SHALL BE A MINIMUM OF 24 INCHES ABOVE THE FINISHED FLOOR OF THE ROOM IN WHICH THE WINDOW IS LOCATED. OPERABLE SECTIONS OF WINDOWS SHALL NOT PERMIT OPENINGS THAT ALLOW PASSAGE OF A 4 INCH DIAMETER SPHERE WHERE SUCH

FRAMING NOTES:

1. ALL LUMBER SIZES ARE FOR DOUGLAS FIR-LARCH UNLESS OTHERWISE NOTED.

OPENINGS ARE LOCATED WITHIN 24 INCHES OF THE FINISHED FLOOR.

2. ALL HEADERS TO BE A MINIMUM OF (2) #2-2X10'S UNLESS OTHERWISE NOTED.

3. BLOCK CANTILEVERS, DOOR JAMBS, AND OVER BEAMS.

SHALL BE ISOLATED FROM THE FLOOR FRAMING ABOVE.

4. ALL HEADERS/BEAMS TO BEAR ON A MINIMUM OF (2) 2X4 POSTS UNLESS NOTED OTHERWISE. 5. INTERIOR NON-BEARING WALLS, OTHER THAN THOSE RESTING DIRECTLY ON THE FOOTING

6. WHERE JOISTS RUN PARALLEL TO FOUNDATION WALLS, SOLID BLOCKING FOR A MINIMUM OF (2) JOIST SPACES SHALL BE PROVIDED AT A MAXIMUM OF 4' CENTERS TO TRANSFER LATERAL LOADS ON THE WALL TO THE FLOOR DIAPHRAGM. THE BLOCKING SHALL BE SECURELY NAILED TO THE JOISTS AND FLOORING. NAIL JOISTS AND BLOCKING TO SILL PLATE WITH (4) 10D NAILS.

7. IF DUCTS ARE INSTALLED IN THE FIRST JOIST SPACE(S), NAIL 2X4'S FLAT AT 4' CENTERS WITHIN THE JOIST SPACE(S) AND THEN PROVIDE SOLID BLOCKING, INSTALLED UPRIGHT, IN THE NEXT TWO JOIST SPACES. SECURE THE 2X4'S TO THE SILL PLATE WITH (4) 10D NAILS. 8. ALL SILLS AND SLEEPERS SUPPORTED ON CONCRETE OR MASONRY AND FURRING ATTACHED

TO CONCRETE OR MASONRY SHALL BE OF DECAY RESISTANT MATERIALS. 9. JOISTS UNDER BEARING PARTITIONS SHALL BE SIZED TO CARRY THE DESIGN LOAD IN

ACCORDANCE WITH IRC SECTION R502.4. 10. JOISTS FRAMING FROM OPPOSITE SIDES OVER BEARING SUPPORTS SHALL LAP A MINIMUM OF

3" AND SHALL BE NAILED TOGETHER WITH A MINIMUM 10D FACE NAILS. 11. JOISTS FRAMING INTO A WOOD GIRDER OR BEAM SHALL BE SUPPORTED BY APPROVED FRAMING ANCHORS OR ON MINIMUM 2"X2" LEDGER STRIPS.

12. HEADER AND TRIMMERS SHALL BE OF SUFFICIENT CROSS SECTION TO SUPPORT THE FLOOR FRAMING. TRIMMER JOISTS SHALL BE DOUBLED WHEN THE HEADER IS SUPPORTED MORE THAN 3' FROM THE TRIMMER JOIST BEARING. WHEN THE HEADER SPAN EXCEEDS 4', THE HEADER AND TRIMMER SHALL BE DOUBLED.

13. JOISTS AT SUPPORTS SHALL BE SUPPORTED LATERALLY AT THE ENDS BY FULL-DEPTH SOLID BLOCKING NOT LESS THAN 2" NOMINAL THICKNESS OR BY ATTACHMENT TO A HEADER, BAND OR RIM JOIST OR TO AN ADJOINING STUD OR OTHERWISE PROVIDED WITH LATERAL SUPPORT TO PREVENT ROTATION.

14. ALL WALL COVERINGS TO COMPLY WITH IRC SECTION 702 AND 703

15. ALL RAFTER / COLLAR TIES TO COMPLY WITH IRC SECTIONS 804 16. ALL RAFTERS TO HAVE 2x4 COLLAR TIES @ 48" OC IN UPPER 1/3 OF DISTANCE BETWEEN CEILING AND ROOF

17. BLOCKING BETWEEN JOISTS UNDER A PERPENDICULAR LOAD-BEARING WALL IS NOT REQUIRED

MEMBRANE (IF REQUIRED BY LOCAL CODE) 19. I-JOIST AND FLOOR TRUSS SYSTEMS SHALL BE FIRE PROTECTED PER IRC AS ADOPTED BY AHJ 20. STUDS SHALL BE CONTINUOUS FROM THE FLOOR TO THE ROOF/ CEILING DIAPHRAGM PER IRC

18. BOTTOM OF ALL FLOOR ASSEMBLIES SHALL BE PROVIDED WITH A $\frac{1}{2}$ " GYPSUM WALLBOARD

CONCRETE NOTES:

1. CONCRETE SHALL BE AIR-ENTRAINED (5%-7%) WITH A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 2500 PSI FOR BASEMENT AND INTERIOR FLOOR SLABS, 3000 PSI FOR BASEMENT AND FOUNDATION WALLS AND 3500 PSI FOR PORCHES, CARPORTS AND GARAGE FLOOR SLABS.

EMERGENCY EGRESS AND RESCUE NOTES:

1. PROVIDE ONE WINDOW FOR EACH BEDROOM THAT HAS A MINIMUM OPENABLE AREA OF 5.7 S.F. WITH A MINIMUM OPENABLE HEIGHT OF 24" AND WIDTH OF 21". IN ADDITION, THE OPENABLE PORTION OF EGRESS WINDOWS SHALL NOT EXCEED 44" ABOVE THE ADJOINING FLOOR OR PERMANENT STEP.

2. PROVIDE SMOKE ALARMS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING AREA AND ON EACH FLOOR INCLUDING BASEMENTS. ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE DWELLING.

GARAGE NOTES:

1. THE GARAGE FLOOR SHALL SLOPE TOWARDS THE GARAGE DOORWAYS OR SLOPE TO A TRENCH OR UNTRAPPED DRAIN THAT DISCHARGES DIRECTLY TO THE EXTERIOR ABOVE GRADE. 2. DOORS BETWEEN THE GARAGE AND DWELLING - MINIMUM 1 3/8" SOLID WOOD, SOLID OR HONEY-COMBED CORE STEEL DOOR NOT LESS THAN 1 3/8" THICK, OR 20 - MINUTE FIRE - RATED EQUIPPED WITH SELF CLOSING DEVICE PER IRC2018 R302.5.1..

3. GARAGE VEHICLE DOORS AND FRAMES SHALL BE DESIGNED AND INSTALLED TO MEET THE 115-MPH 3-SECOND GUST LOADING PER DASMA 108 AND ASTM E 330-96 PER IRC2018 R301.2.1 4. THE GARAGE SHALL BE SEPARATED FROM THE DWELLING AND ITS ATTIC AREAS BY MINIMUM 5/8" GYPSUM BOARD APPLIED TO THE GARAGE SIDE. WHERE HABITABLE SPACE OCCURS ABOVE THE GARAGE, THE FLOOR CEILING ASSEMBLY SHALL BE PROTECTED WITH MINIMUM 5/8" TYPE X GYPSUM BOARD ON THE GARAGE CEILING. WHERE A FLOOR/CEILING SPACE IS PROVIDED ABOVE THE GARAGE COLUMNS AND BEAMS SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED WITH 5/8" GYPSUM BOARD OR EQUIVALENT.

5. GARAGE DOOR H-FRAME FOR THE ATTACHMENT OF THE TRACK AND COUNTER BALANCE SHALL CONSIST OF THE FOLLOWING: 2x6 VERTICAL JAMBS RUNNING FROM FLOOR TO CEILING ATTACHED WITH 1 3/4"X.120" NAILS AT 7" CENTERS STAGGERED WITH (7) 3 1/4"X.120" NAILS THRU THE JAMB INTO THE HEADER, MINIMUM 2X8 HEADER FOR ATTACHMENT OF COUNTER BALANCE

6. ANY ATTACHED GARAGE TO THE MAIN HOUSE SHALL BE PROVIDED WITH A SINGLE HEAT DETECTOR. HEAT DETECTOR SHALL BE HARDWIRED AND INTERCONNECETED WITH THE HOUSEHOLD SMOKE ALARM SYSTEM. HEAT DETECTOR SHALL BE LISTED FOR THE AMBIENT ENVIRONMENT AND INSTALLED PER MANF. INSTRUCTIONS.

MECHANICAL/INSULATION:

1. BUILDING ENVELOPE INSULATION SHALL COMPLY WITH IRC TABLE N1102.1.1 OR THE 2018 IECC. (SEE S-6.0 FOR MORE DETAILS)

VENTILATION:

1. ENCLOSED ATTICS SHALL HAVE CROSS VENTILATION FOR EACH SEPARATE SPACE BY VENTILATING OPENINGS PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATING OPENINGS SHALL BE PROVIDED WITH CORROSION-RESISTANT WIRE MESH, WITH 1/8" TO 1/4" OPENINGS. THE TOTAL FREE VENTILATING AREA SHALL NOT BE LESS THAN 1/150 OF THE AREA OF SPACE VENTILATED, EXCEPT WHERE THE VENTILATORS AREA LOCATED IN THE UPPER PORTION OF THE SPACE TO BE VENTILATED THE REQUIRED AREA MAY BE REDUCED TO 1/300.

SHEATHING SCHEDULE

ALL SHEATHING MATERIALS TO BE APPLIED PERPENDICULAR TO JOISTS AND ENDS STAGGERED

BUILDING COMPONENT	MATERIAL	FASTENING		
ROOF SHEATHING	7/16" PLYWOOD	16 GA X 1 3/4" STAPLES @ 6" OC EDGES & 12" OC IN FIELD		
	1x 4 #3 FURRING	1/2" CROWN STAPLES		
FLOOR SHEATHING	3/4" T&G YELLOW	14 GA X 1 3/4" STAPLES @ 6" OC EDGES & 12" OC IN FIELD		
TEOOK SHEATHING	PINE PLYWOOD	12.5 GA X 1 1/2" RING OR SCREW SHANK NAILS @ 6" OC EDGES & 12" OC IN FIELD		
WALL COVERING	1/2" GYPSUM SHEATHING	6D COMMON NAILS: 1 5/8" GALVANIZED STAPLES; 1 1/4" SCREWS, TYPE W OR S @ 4" OC EDGES & 8" OC IN FIELD		
CEILING COVERING	1/2" GYPSUM SHEATHING	7" OC NAILED / 12" OC SCREWED W/ 13GA, 1 3/8" LONG, 19/64" HEAD; 0.098 Ø, 1 1/4" LONG, ANG-RINGED; 5D COOLER NAIL, 0.086 Ø, 1 5/8" LONG, 15/64" HEAD; OR GYP BD NAIL, 0.086 Ø, 1 5/8" LONG, 19/64" HEAD		
EXTERIOR WALL -	7/16" APA RATED SHEATHING	8D COMMON NAILS @ 6" OC EDGES & 12" OC IN THE FIELD		
SHEATHING	RATED PANEL SIDING, RATED 16" OC, $\frac{7}{16}$ " THICK	8D BOX OR SINKER NAILS @ 6" OC EDGES & 12" OC IN THE FIELD		

FRAME FASTENING SCHEDULE

COMPONENT	FASTEN TO	FASTEN W/
	RIDGE / VALLEY / HIP	TOENAIL W/ (4) 16D FACENAIL W/ (3) 16D
	PLATE LEDGER STRIPS SUPPORTING JOISTS	TOENAIL W/ (3) 10D
RAFTERS	OR RAFTERS	FACENAIL W/ (3) 16D
	COLLAR TIE TO RAFTERS	FACENAIL W/ (3) 10D
	TOP PLATE	TOENAIL W/ (3) 8D @ EACH END
	WHERE CLG JST RUN P. FACENAIL TO RAFTERS	
CEILING JOISTS	LAPS OVER PARTITIONS	FACENAIL W/ (3) 10D
	BLOCKING BETWEEN JOISTS OR	TOENAIL W/ (3) 8D
	RAFTERS TO TOP PLATE	. ,
	BUILT-UP BEAMS, 2" LUMBER LAYERS, FACENAIL OPPOSITE SIDES, (2) @ EACH END PLUS	10D @ 32" OC STAGGERED, TOP & BOTTOM, OPPOSITE SIDES
BEAMS	BUILT-UP BEAMS OF ENGINEERED LUMBER, FACE NAIL OPPOSITE SIDES	(2) ROWS @ 12" OC
<i>32.6</i>	BUILT-UP HEADER, TWO PIECES W/ ½" SPACER	16D @16" OC ALONG EDGES
	BUILT-UP HEADER, TWO PIECES, NO $\frac{1}{2}$ " SPACER	3" x 0.131" NAILS @ 12" OC ALONG EDGES
	BEARING	TOENAIL W/ (2) 18D @ EACH END
	RIM JOIST TO SILL OR TOP PLATE	TOENAIL W/ 8D COMMON OR 10D BOX NAILS @ 6" OC
	JOIST TO SILL OR GIRDER	TOENAIL W/ (3) 8D
	JOIST TO RIM JOIST	FACENAIL W/ (3) 16D TOENAIL W/ (2) 8D
FLOOR JOISTS	BRIDGING TO JOIST	TOENAIL W/ (2) 8D - ONE
	I-JOIST TO BEARING PLATE	INTO EACH SIDE AT LEAST 1½" FROM THE END
	RIM JOIST TO I-JOIST	FACENAIL W/ (2) 10D BOX NAILS - ONE INTO EACH FLANGE
	SOLE PLATE TO LSL RIM BOARD	16D BOX NAILS @ 12" OC
	SINGLE JOIST HANGERS *	10D FACENAILS AND TONAILS
	DOUBLE JOIST HANGERS *	16D FACENAILS AND TOENAILS
	TOP & SOLE PLATE TO STUD	END NAIL W/ (2) 16D
	STUD TO SOLE AND TOP PLATE	TOENAIL W/ (4) 8D
	DOUBLE TOP PLATES	FACENAIL W/ 16D @ 16" OC
	DOUBLE TOP PLATE LAP SPLICE	FACENAIL W/ (8) 16D
	TOP PLATE LAPS & INTERSECTIONS	FACENAIL W/ (2) 16D FACENAIL W/ 16D @ 24" OC
	DOUBLE STUDS BUILT-UP CORNER STUDS	FACENAIL W/ 16D @ 24 OC
WALLS	BOILT-OF CORNER STODS	@ 24" OC FACENAIL W/ (2) 16D IN
	STEEL "X" BRACING	EACH TOP & BOTTOM PLATE & (1) 8D PER STUD
	SOLE PLATE TO JOIST OR BLOCKING	FACENAIL W/ 16D @ 16" OC
	SOLE PLATES TO JOIST OR BLOCKING AT BRACED WALL LINES, PERPENDICULAR TO FRAMING	FACENAIL W/ (3) 16D @ 16" OC ALONG BRACED WALL PANEL
	TOP PLATE TO JOIST OR BLOCKING AT BW LINES, PERPENDICULAR TO FRAMING	TOENAIL W/ 8D @ 6" OC ALONG BRACED WALL PANEL
	SOLE PLATES TO JOIST OR BLOCKING AT BW LINES PARALLEL TO FRAMING, BLOCKING @ 16" OC	FACENAIL W/ (3) 16D @ 16" OC ALONG BW PANEL & AT EACH BLOCK
	TOP PLATE TO JOIST OR BLOCKING AT BW LINES, PARALLEL TO FRAMING, BLOCKING @ 16" OC	TOENAIL W/ 8D @ 6" OC ALONG BW PANEL & AT EACH BLOCK
	NON-STRUCT. SIDING OVER STRUCT. SHEATHING	(1) 6D BOX NAIL IN EACH STUD
	FIBER CEMENT PLANK SIDING	(1) 6D GALVANIZED NAIL IN EACH STUD
	WINDOW INSTALLATION NAILING	$1\frac{3}{4}$ " - 2" ROOFING NAILS @ 12" OC MAX.
	I) NO JOIST HANGER NAILS ALLOWED F CONNECTORS, 3) TOENAILS SHALL ALV	the control of the co

OR SCREWS ALLOWED IN CONNECTORS, 3) TOENAILS SHALL ALWAYS BE A FULL 3" OR 3/2" NAIL COLUMN CONNECTION TO STEEL BEAMS SHALL BE WITH A CLIP POST CAP WITH ALL FOUR TAB EARS BENT AROUND THE BOTTOM FLANGE OF THE BEAM. FOR A BEARING PLATE, FOUR HOLES SHALL BE DRILLED IN THE BOTTOM FLANGE OF THE STEEL BEAM TO MATCH THE HOLE PATTERN OF THE PLATE. $\frac{1}{2}$ " X 2" BOLTS SHOULD THEN BE INSTALLED WITH A FLAT WASHER, LOCK WASHER, AND A NUT IN EACH OF THE HOLES. THE POST CAP MAY BE WELDED TO THE STEEL BEAM IN ACCORDANCE WITH AWS D1.1-92 AS AN ALTERNATIVE, AND WOULD NEED TO BE INSPECTED BY AN AWS-CERTIFIED INSPECTOR.

DESIGN LOADS (PSF)

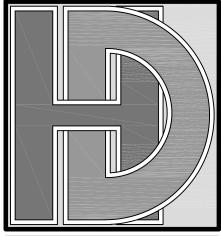
THE DWELLING SHALL COMPLY WITH THE FOLLOWING LOAD CONDITIONS

AREA	MIN DEAD LOAD	MIN LIVE LOAD
EXTERIOR BALCONIES	10	60
DECKS, STAIRS	10	40
CEILING JOISTS / ATTICS NO STORAGE - SCUTTLE ACCESS ONLY ROOF SLOPE 3:12 OR LESS	10	10
CEILING JOISTS / ATTICS NO STORAGE - SCUTTLE ACCESS ONLY ROOF SLOPE OVER 3:12	10	10
CEILING JOISTS / ATTICS WITH STORAGE - DOOR PULL DOWN LADDER ACCESS	10	20
ROOMS: NON-SLEEPING	10	40
ROOMS: SLEEPING	10	30
ROOF: LIGHT ROOF COVERING	10	20
ROOF: HEAVY ROOF COVERING / CONCRETE / TILE / SLATE	20	20
GUARDRAILS, HANDRAILS	200# LL	NORMAL

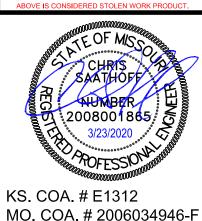
ENGINEERED LUMBER

MIN DESIGN REQUIREMENTS

	F _b (psi)	E (psi)	F _V (psi)
LVL	2600	1.8x10^6	285
GLULAM	2400	1.8x10^6	190
DADALLAM	2600	2.0×10^6	200



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REVISION TABLE

Date: 3/23/2020 HD #: 38982 Drawn by: AWH Reviewed by: CLS



TABLE R 602.3(5) SIZE, HEIGHT, AND SPACING OF WOOD STUDS

			BEARING WAL	LS		NONBEARING	WALLS
STUD SIZE (inches)	LATERALLY UNSUPPORTED STUD HEIGHT ^a (feet)	MAXIMUM SPACING WHERE SUPPORTING A ROOF-CEILING ASSEMBLY OR A HABITABLE ATTIC ASSEMBLY, ONLY (inches)	MAXIMUM SPACING WHERE SUPPORTING ONE FLOOR, PLUS A ROOF-CEILING ASSEMBLY OR A HABITABLE ATTIC ASSEMBLY (inches)	MAXIMUM SPACING WHERE SUPPORTING TWO FLOOS, PLUS A ROOF-CEILING ASSEMBLY OR A HABITABLE ATTIC ASSEMBLY (inches)	MAXIMUM SPACING WHERE SUPPORTING ONE FLOOR HEIGHT (Inches)	LATERALLY UNSUPPORTED STUD HEIGHT a (feet)	MAXIMUM SPACING (inches)
2 X 3 ^b						10	16
2 X 4	10	24 c	16 c		24	14	24
3 X 4	10	24	24	16	24	14	24
2 X 5	10	24	24		24	16	24
2 X 6	10	24	24	16	24	20	24

FOR SI: 1 INCH = 25.4mm, 1 FOOT = 304.8mm

a. LISTED HEIGHTS ARE DISTANCES BETWEEN POINTS OF LATEAL SUPPORT PLACED PERPENDICULAR TO THE PLANE OF THE WALL. BEARING WALL SHALL BE SHEATHED ON NOT LESS THAN ONE SIDE OR BRIDGING SHALL BE INSTALLED NOT GREATER THAN 4 FEET APART MEASURED VERTICALLY FROM EITHER END OF THE STUD. INCREASES IN UNSUPPORTED HEIGHT ARE PERMITTED WHERE IN COMPLIANCE WITH EXCEPTION 2 OF SECTION R602.3.1 OR DESIGNED IN ACCORDANCE WITH ENGINEERING PRACTICES.

b. SHALL NOT BE USED IN EXTERIOR WALLS

c. A HABITABLE ATTIC ASSEMBLY SUPPORTED BY 2X4 STUDS IS LIMITED TO A ROOF SPAN OF 32 FEET. WHERE THE ROOF SPAN EXCEEDS 32 FEET, THE WALL STUDS SHALL BE INCREASED TO 2X6 OR THE STUDS SHALL BE DESIGNED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICE.

COLUMN CONNECTION TO STEEL BEAMS SHALL BE WITH A CLIP POST CAP WITH ALL FOUR TAB EARS BENT AROUND THE BOTTOM FLANGE OF THE BEAM. FOR A BEARING PLATE, FOUR HOLES SHALL BE DRILLED IN THE BOTTOM FLANGE OF THE STEEL BEAM TO MATCH THE HOLE PATTERN OF THE PLATE. 1/2" X 2" BOLTS SHOULD THEN BE INSTALLED WITH A FLAT WASHER, LOCK WAHER, AND A NUT IN EACH OF THE HOLES. THE POST CAP MAY BE WELDED TO THE STEEL BEAM IN ACCORDANCE WITH AWS D1.1-92 AS AN ALTERNATIVE, AND WOULD NEED TO BE INSPECTED BY AN AWS-CERTIFIED INSPECTOR.

COLUMN SCHEDULE

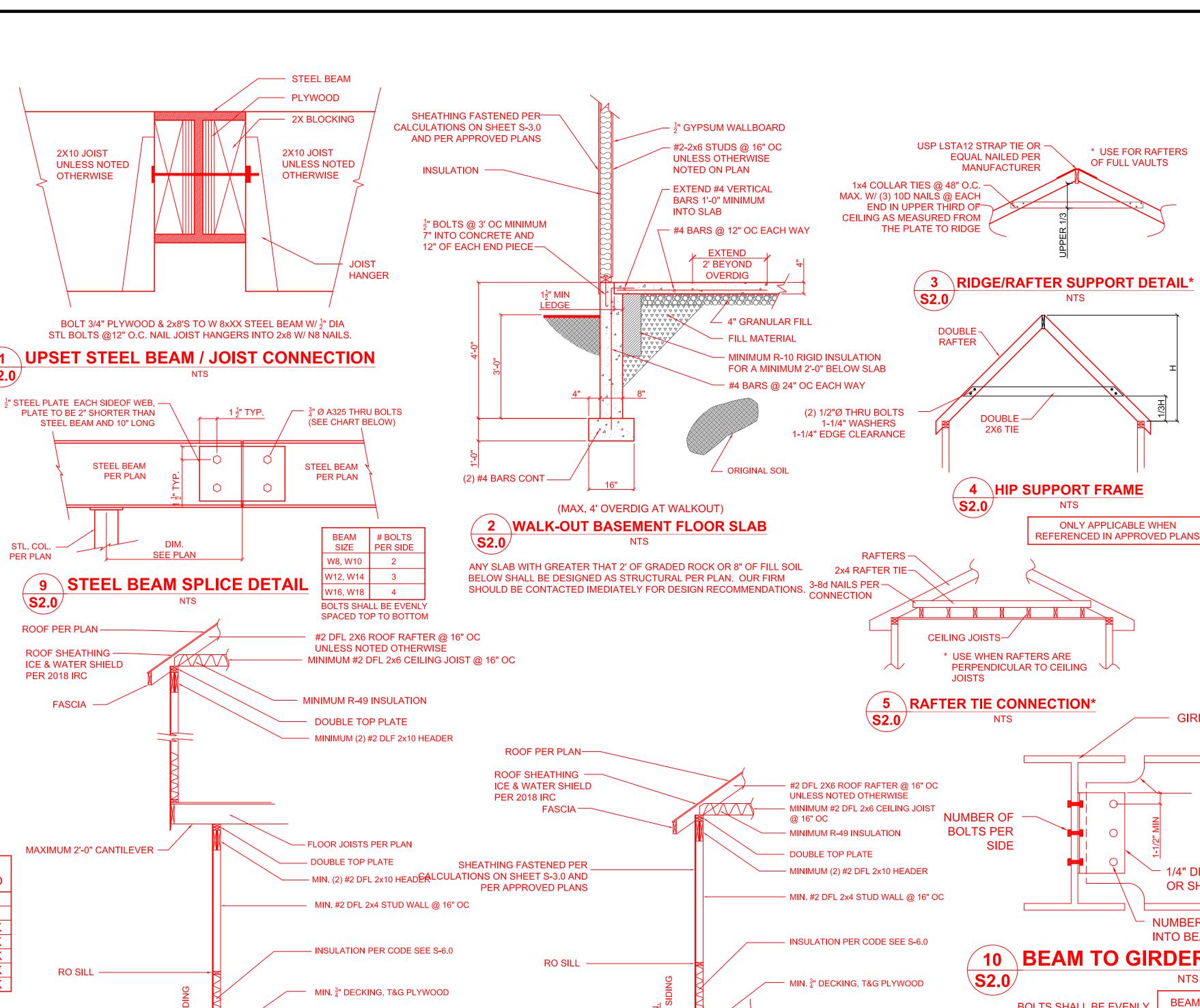
BASED ON FOOTING SIZE (ASSUME 1500 PSF SOIL)

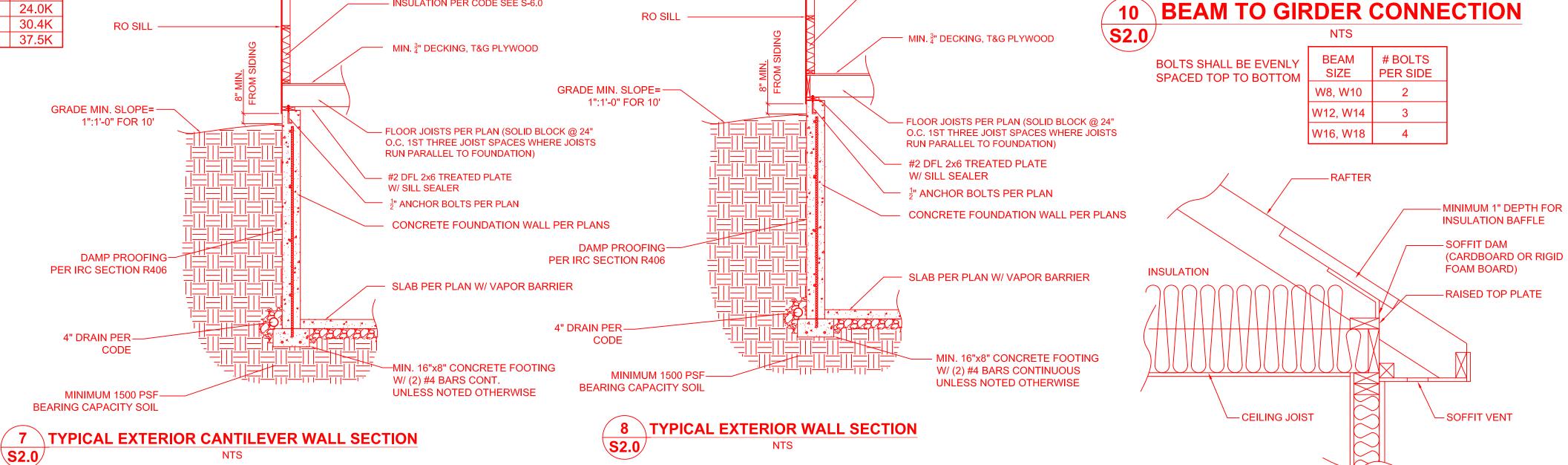
PAD SIZE	REINFORCEMENT	COL MIN	COL TYPE	MAX LOAD
24x24x12	(4) #4 BARS E/W	3"	SCH40	6K
30x30x12	(5) #4 BARS E/W	3"	SCH40	9.4K
36x36x12	(6) #4 BARS E/W	3"	SCH40	13.5K
42x42x14	(7) #4 BARS E/W	3"	SCH40	18.4K
48x48x16	(8) #4 BARS E/W	3"	SCH40	24.0K
54x54x16	(9) #4 BARS E/W	3½"	SCH40	30.4K
60x60x18	(10) #4 BARS E/W	3½"	SCH40	37.5K

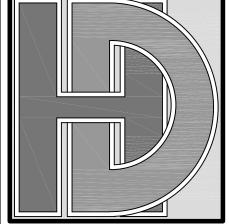
MAX RISER HEIGHT IS 7 3/4" MINIMUM TREAD RUN IS 10" USE AT EVERY STAIR WITH THREE OR MORE RISERS AND AT EVERY FLOOR OPENING MORE THAN 30" ABOVE GRADE OR THE FLOOR 3 7/8" MAX FREE SPACE FOR STAIRS MORE THAN 3'-0" IN WIDTH, MAINTAIN MIN 18"

OC FOR STRINGERS

6 STAIR / RAIL DETAIL







* USE FOR RAFTERS

OF FULL VAULTS

ONLY APPLICABLE WHEN

GIRDER BEAM PER PLAN

COPE AS NEEDED

- 1/4" DBL ANGLE

OR SHEAR TAB

NUMBER OF BOLTS

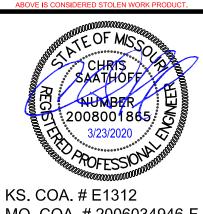
11 RAFTER ON RAISED TOP PLATE

INTO BEAM

STEEL BEAM

PER PLAN

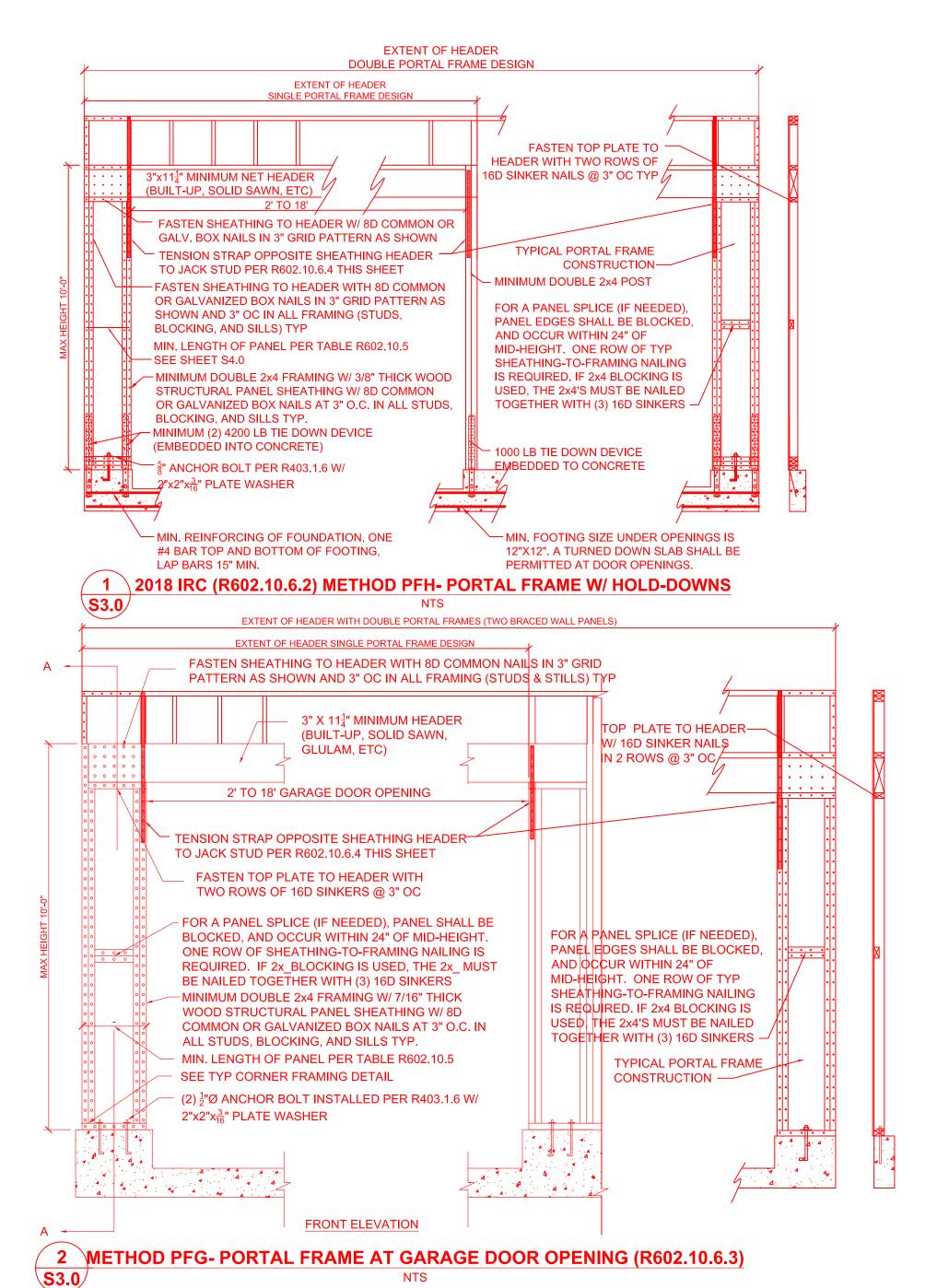
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KS. COA. # E1312 MO. COA. # 2006034946-F

REVISION TABLE

Date: 3/23/2020 HD #: 38982 Drawn by: AWH Reviewed by: CLS



TENSION STRAP CAPACITY REQUIRED FOR RESISTING WIND PRESSURES PERPENDICULAR TO METHOD PFH, PFG AND CS-PF BRACED WALL

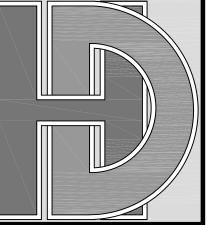
PANELS IRC2018 TABLE R602.10.6.4

				TE	NSION STI	RAP CAPAC	ITY REQUI	RED (POUI	NDS) ^a				
MINIMUM WALL STUD FRAMING	MAX. PONY WALL HEIGHT	MAX. TOTAL	MAX. OPENING	ULTIMATE DESIGN WIND SPEED V _{ult} (MPH)									
NOMINAL SIZE & GRADE	(FEET)	WALL HEIGHT (FEET)	WIDTH (FEET)	110	115	130	110	115	130				
				Е	XPOSURE	В	E	EXPOSURE	С				
	0	10	18	1,000	1,000	1,000	1,000	1,000	1,050				
			9	1,000	1,000	1,000	1,000	1,000	1,750				
	1	10	16	1,000	1,025	2,050	2,075	2,500	3,950				
			18	1,000	1,275	2,375	2,400	2,850	DR				
			9	1,000	1,000	1,475	1,500	1,875	3,125				
274 NO. 2 CDADE	2	2 10	10	10	10	16	1,175	2,175	3,525	3,550	4,125	DR	
2X4 NO. 2 GRADE			18	2,075	2,500	3,950	3,975	DR	DR				
	2	2 1					9	1,150	1,500	2,650	2,675	3,175	DR
			12	16	2,875	3,375	DR	DR	DR	DR			
			18	3,425	3,975	DR	DR	DR	DR				
	4	12	9	2,275	2,750	DR	DR	DR	DR				
	4	12	12	3,225	3,775	DR	DR	DR	DR				
			9	1,000	1,000	1,700	1,700	2,025	3,050				
	2	12	16	1,825	2,150	3,225	3,225	3,675	DR				
2V6 CTUD CDADE			18	2,200	2,550	3,725	3,750	DR	DR				
2X6 STUD GRADE			9	1,450	1,750	2,700	2,725	3,125	DR				
	4	12	16	2,050	2,400	DR	DR	DR	DR				
			18	3,350	3,800	DR	DR	DR	DR				

a. DR = DESIGN REQUIRED

b. STRAP SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

The content of the				RESI	IDENTIAL SEISMIC	& WIND ANALYSIS		INPUT	
## 15 Part Par		OF HOUSE:				DEAD LOAD (not)	ADEA (H²)		
## CAMPACH CAN LOCK ## CAM	ROOF					10	2550	25500	
\$15 0.000 F. M. D. 100 F. M. 100 F.	EILING TRST FLOOR				7	10	1559	15590	
### CONTRIBUTION OF THE PROPERTY OF THE PROPER	IRST FLOOR EXT. W	ALL DL							
## 2007 10 2000 10	RST FLOOR INT. PA	RTITION WALL DL				DEAD LOAD (psf) 6			
ACCOUNTS		PRO		DESIGN PER 115 MPH	3-SECOND GUST, EXPOSI				
March 1975 2015 2016	SLOPED BOOF	AREA	LOAD		SLOPED POOF	AREA	LOAD		
### 1900 1.00	VERT. ROOF	247.5	3451		VERT. ROOF	0	0		
Commonwealth Comm		7							
Application						ZONE C	11.6	2a (FIG. 28.6-1, ASCE7)	
### CONTRIPATION OF CONTRIPATI			ZONE A		17.4	ZONE D	3.4	11.4	
Comment Comm		wall to be sheathed, de		ea and enter here. If no		D analysis under ASCE7 10 and IDC//D	OC 2012)		
### CALL PRINTS OF CA			ressure)	qz10_ASD=U.6qz10 (Desig	gn velocity Pressure for AS	D analysis under ASCE7-10 and IRC/IB	C 2012)		
Table Tabl									
Comment Comm			SCE7 SEISMIC MAP)						
### CONTROL From ACE Fig. 28.11 Ver 12" for Ver VR Report Filter	os (= 2/3 * S _S * F _a)	11.4-1)							
Part	(from ASCE7 Table 1	2.2-1)						6.5	
TROOP	OCATION!				<u>SEISMIC</u>		n ASCE7 (Ea. 10.0.4)	V/- 40 + 0 + 14	/ D) /lbc)
Sheating Geodetics	ST FLOOR					Fron	11 AOUE / (Eq. 12.8-1):	1401	r K) (IDS.)
Common Nation Common Natio	ASEMENT							1401	
Control Codes 15 Control Cod	Sheathing	Location	Min. Sheathi	ng Schedule			Allowak	ole Shear (#/LF)	Code Reference
C Past or 10 Past Past or 10 Pas	Exterior <u>(C</u>	<u>)ption #4)</u>	sheathing, or 3/8" shipl	lap panel sheathing with	O.C. Field for 7/16" APA sheathing OR @ 4" O.C.	rated plywood/OSB or shiplap panel Edges, 12" O.C. Field for 3/8" shiplap		220	
Common Nation 1 100 Promotions (g. 27 O.C. Eggs. 12	Exterior <u>(C</u>)ption #5)	sheathing, or 3/8" shipl	lap panel sheathing with	O.C. Field for 7/16" APA sheathing OR @ 3" O.C.	rated plywood/OSB or shiplap panel Edges, 12" O.C. Field for 3/8" shiplap		320	
Table 16 GB Street (FP) 96 WB Sheet (FP) 96 S	Exterior <u>(C</u>)ption #6)	sheathing, or 3/8" shipl tighter nail spacing an	lap panel sheathing with double studs at each		/8" penetration @ 3" O.C. Edges, 12"		410	
16 Get Support CEP Type VE Size X Size (3) 154 (g) entire size state Size	Inte	rior	1 2 3 3		No. 6. 1 ¹ / ₄ " Type W or S.S.	crave @ 8" O.C. Edges 12" O.C. Eigld		60	
TRICOR SHEATHING OPTION FOR RESIDENCY THAT 57	me	101							2306.4.4
DEFIN OF STELLOR FIRST FLORE ENTER OR STELLOR AND	Inte	rior						325	
DEFIN OF STELLOR FIRST FLORE ENTER OR STELLOR AND									
DEFIN OF STELLOR FIRST FLORE ENTER OR STELLOR AND						WIDTH OF 1ST STORY (ET.)	57		
EXTERCASTRUCTURAL WALL LENGTHS (II) A RESISTANCES PRONT-TO-BACK RESISTANCE (Ibi) SIDE-TO-SIDE RESISTANCE (Ibi) RESISTANCE (Ibi) SIDE-TO-SID	EXTERIOR SHEATHIN	G OPTION FOR FIRST	FLOOR	4					
SEISMACE DATE DESTINACE	XTERIOR SHEATHIN	G OPTION FOR BASE	MENT WALLS	5		The second secon			
SEISMAC RESISTANCE (Its.) SIDE-TO-SIDE RESISTANCE (Its.) FRONT-TO-BACK RESISTANCE (Its.) SIDE-TO-SIDE RESISTANCE (Its.) RESISTANCE (Its.) SIDE-TO-SIDE RESISTANCE (Its.) RESISTANCE (I						GAR. WALL: 1=F-B, 2=S-S	2		
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SEBMIC WIND Silest value (et in)				16	6080	0	0	16	8512
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ADDITIONAL RESISTANCE REQUIRED (POUNDS) RESISTANCE REQUIRED (POUNDS) RESISTANCE RESISTAN	ASEMENT ST FLOOR FRONT-TO- ST FLOOR SIDE-TO- ASEMENT FRONT-TO	0 D-BACK SIDE D-BACK	ADDITIONAL RESISTANC SEISMIC 0 0 0	WIND 0 0 0		diameter (in.) Shear value (per NDS) Spacing F-B (inches)	0.5 944 543.0	1st Floor F-B	
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IOTES: 1) SEE ATTACHED CALCULATIONS FOR PORTAL FRAME OR PERFORATED SHEAR WALL RESISTANCE CAPACITIES (IF APPLICABLE). SEE SHEET SI FOR INTERIOR STEEL X-BRACE INSTALLATION, 3) INTERIOR WALLS SHEATHED WITH OSB SHALL BE ATTACHED WITH SAME STAPLE/NALLING TITERN AS EXTERIOR OSB ON SAME FLOOR (SEE TABLE ABOVE) AND ARE CNLY APPLICABLE FOR FULL OSB SHALL BE ATTACHED WITH SAME STAPLE/NALLING WIND UPLIFT ANALYSIS OVERHANG I 16.56 285 PITCH OF 6 OR LESS: EOH-13.3, E-7.2, G-52 LENGTH (FT) PRESSURE (PSF) LINEAL FT OF OH UPLIFT PER FT' (LBS) OVERHANG I 16.56 235 PRESSURE (PSF) PRESSURE ZN E (PSF) PRESSURE ZN E (PSF) PRESSURE ZN E (PSF) PRESSURE ZN E (PSF) TOTAL APEA (FT) SA424 3865.74 15.12 10.5 33420 143.4 LONG PERIMETER TOTAL APEA (FT) ZONE E APEA (FT) ZONE GAREA (FT) PRESSURE ZN E (PSF) PRESSURE ZN E (PSF) PRESSURE ZN E (PSF) TOTAL FORCE (LBS) FORCE PER LINEAL FT @ PERIMETER (LBS) MAIN ROOF** 3391.5 4.74.24 3865.74 15.12 10.5 33420 143.4 LONG PERIMETER TOTAL UPLIFT PER LINEAL FOOT ALONG EXTERIOR (POUNDS) 160.0 UPLIFT CK RESISTANCE DUE TO DEAD WEIGHT X (8) 100 TOBANUS 251.6 DIE FOR CONSTRUCTION: E CONTINUOUS STRUCTURAL PANEL SHEATHING BRACING METHOD REQUIRES USE OF THE ABOVE TABLE FOR SHEATHING OF THE ENTIRE STRUCTURE. IN ADDITION, FRAMING MEMBERS SHALL BE @ 16' O.C. MAX, BLOCKED, AND W/ SHEATHING APPLIED DIRECTLY TO FRAMING MEMBERS DIE FOR DESIGN: LI WALLS USED IN THE CALCULATION OF THE RESISTANCE FOR THIS STRUCTURE SHALL HAVE A MINIMUM UNINTERRUPTED HEIGHT OF 8-0' AND LENGTH OF 2-8'. ALLOWABLE RESISTANCES HAVE BEEN #FT AND CREASED BY WAY FOR WIND LOADS, PER VALUES IN 2012 BIG SECTION 2306 AND AF8PA SDPWS TABLE 4.3A. FOR EXAMPLE, 7/16' APA-RATED SHEATHING WITH 80 @ 6' & 12' HAS A SEISMIC SHEAR VALUE OF 230 MIND SHEAR VALUE OF 335#/FT - 40% GREATER THAN THAT OF SEISMIC) DIETE SOIL SITE CLASS ASSUMED TO BE CLASS D. IF SITE CONDITIONS ARE	ASEMENT ST FLOOR FRONT-TO-S ASEMENT FRONT-TO-S ASEMENT SIDE-TO-S ST FLOOR FRONT-TO	O-BACK SIDE O-BACK SIDE	ADDITIONAL RESIS SEISMIC 0 0 0 0 0 ADDITIONAL RESISTANCE REQUIRED (POUNDS)	WIND 0 0 3796 RESISTANCE REQUIR PORTAL FRAMES OR PERF. SHEAR WALL	INTERIOR X-BRACES	diameter (in.) Shear value (per NDS) Spacing F-B (inches) spacing S-S (inches) STANCE PROVIDED BY EXTERIOR W INTERIOR WALL LENGTH W/ 1/2"	ALLS** BURIED CONCRETE FOUNDATION WALL MIN. LATERAL RESISTANCE /FT	1st Floor F-B 1st Floor S-S RESISTANCE PROVIDED BY ADDITIONAL METHODS (POUNDS)	OK?
SEE SHEET ST FOR INTERIOR STEEL X-BRACE INSTALLATION, 3; INTERIOR WALLS SHEATHED WITH OSB SHALL BE ATTACHED WITH SAME STAPLE/NALING TITERN AS EXTERIOR OSB ON SAME FLOOR (SEE TABLE ABOVE) AND ARE ONLY APPLICABLE FOR FULL-HEIGHT SECTIONS OF 2*-8" OR LONGER WIND UPLIFT ANALYSIS WIND UPLIFT ANALYSIS WIND UPLIFT ANALYSIS WIND UPLIFT ANALYSIS OVERHANG ASSET LENGTH (FT.) PRESSURE (PSF) LINEAL FT. OF OH UPLIFT PER FT* (LBS) OVERHANG 1 16.56 235 16.56 TOTAL AREA (FT*) ZONE G AREA (FT*) PRESSURE (PSF) PRESSURE ZN G (PSF) TOTAL FORCE (LBS) FORCE PER LINEAL FT @ PERIMETER (LBS) MAIN ROOF** 3391.5 -474.24 3865.74 15.12 10.5 33420 143.4 LONG PERIMETER TOTAL UPLIFT PER LINEAL FOOT ALONG EXTERIOR (POUNDS) 160.0 UPLIFT OK NSIDE EXTERIOR WALLS RESISTANCE DUE TO DEAD WEIGHT & (9) 10d TOENAILS 251.6 DIE FOR CONSTRUCTION: E CONTINUOUS STRUCTURAL PANEL SHEATHING BRACING METHOD REQUIRES USE OF THE ABOVE TABLE FOR SHEATHING OF THE ENTIRE STRUCTURE. IN ADDITION, FRAMING MEMBERS SHALL BE @ 16" O.C. MAX, BLOCKED, AND W. SHEATHING APPLIED DIRECTLY TO FRAMING MEMBERS TOTE FOR DESIGN: L WALLS USED IN THE CALCULATION OF THE RESISTANCE FOR THIS STRUCTURE SHALL HAVE A MINIMUM UNINTERRUPTED HEIGHT OF 8-0" AND LENGTH OF 2-8". ALLOWABLE RESISTANCES HAVE BEEN #FT AND CREASED BY 40%, FOR WIND LOADS, PER YALLES IN QUILLES IN CSHEAR VALUE OF 335#/FT - 40% GREATER THAN THAT OF SEISMIC) WIND SHEAR VALUE OF 335#/FT - 40% GREATER THAN THAT OF SEISMIC) THE FOR EASE ON THE CALCULATION OF THE RESISTANCE FOR THIS STRUCTURE SHALL HAVE A MINIMUM UNINTERRUPTED HEIGHT OF 8-0" AND LENGTH OF 2-8". ALLOWABLE RESISTANCES HAVE BEEN #FT AND CREASED BY 40%, FOR WIND LOADS, PER YALUES IN A 2012 IBCS SECTION 2306 AND AFRAPA SDRW/S TABLE 4.3A. FOR EXAMPLE, 7/16" APA-RATED SHEATHING WITH 80 @ 6" & 12" HAS A SEISMIC SHEAR VALUE OF 220 WIND SHEAR VALUE OF 335#/FT - 40% GREATER THAN THAT OF SEISMIC) THE SOIL SITE CLASS ASSUMED TO BE CLASS D. IF SITE CONDITIONS ARE	ST FLOOR FRONT-TO ST FLOOR SIDE-TO-S ASEMENT SIDE-TO-S ST FLOOR FRONT-TO ST FLOOR SIDE-TO-S ASEMENT FRONT-TO	D-BACK SIDE D-BACK SIDE D-BACK SIDE	ADDITIONAL RESIS SEISMIC 0 0 0 0 0 0 ADDITIONAL RESISTANCE REQUIRED (POUNDS) 0 0 0	WIND 0 0 3796 RESISTANCE REQUIR PORTAL FRAMES OR PERF. SHEAR WALL	INTERIOR X-BRACES	diameter (in.) Shear value (per NDS) Spacing F-B (inches) spacing S-S (inches) STANCE PROVIDED BY EXTERIOR W INTERIOR WALL LENGTH W/ 1/2"	ALLS** BURIED CONCRETE FOUNDATION WALL MIN. LATERAL RESISTANCE /FT (1500#/FT)	1st Floor F-B 1st Floor S-S RESISTANCE PROVIDED BY ADDITIONAL METHODS (POUNDS) 0 0 24304	OK? YES YES YES YES
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WIND SHEAR VALUE OF 335#/FT - 40% GREATER THAN THAT OF SEISMIC) DITE: SOIL SITE CLASS ASSUMED TO BE CLASS D. IF SITE CONDITIONS ARE	ST FLOOR FRONT-TO-ST FLOOR SIDE-TO-SASEMENT FRONT-TO-ST FLOOR SIDE-TO-SASEMENT SIDE-TO-SASEMENT FRONT-TO-ST FLOOR SIDE-TO-SASEMENT FRONT-TO-SASEMENT FRONT-TO-SASEMENT SIDE-TO-SASEMENT SIDE-TO-S	D-BACK SIDE D-BACK SIDE D-BACK SIDE D-BACK SIDE D-BACK SIDE D-BACK SIDE ACHED CALCULATION R INTERIOR STEEL X- DR OSB ON SAME FLO X/12 6 LENGTH (FT.) 1 TOTAL AREA (FT²) 3391.5 WALLS JCTION: RUCTURAL PANEL SH / SHEATHING APPLIE	ADDITIONAL RESISTANCE ADDITIONAL O O O O O O O O O O O O O	WIND 0 0 3796 RESISTANCE REQUIF PORTAL FRAMES OR PERF. SHEAR WALL RESISTANCE OR PERFORATED SHE 3) INTERIOR WALLS SHE E) AND ARE ONLY APPL PITCH OF 6 OR LESS: LINEAL FT. OF OH 235 ZONE G AREA (FT²) 3865.74 FOOT ALONG EXTERIOR (PO WEIGHT & (3) 10d TOENAILS THOD REQUIRES USE ONG MEMBERS	AR WALL RESISTANCE C, IEATHED WITH OSB SHALLICABLE FOR FULL-HEIGH WIND UPLIFT EOH-13.3, E-7.2, G-5.2 UPLIFT PER FT* (LBS) 16.56 PRESSURE ZN. E (PSF) 15.12 UNDS)	diameter (in.) Shear value (per NDS) Spacing F-B (inches) spacing S-S (inches) STANCE PROVIDED BY EXTERIOR W INTERIOR WALL LENGTH W/ 1/2" GYPSUM BOARD PER TABLE (FT.) APACITIES (IF APPLICABLE), L BE ATTACHED WITH SAME STAPLE IT SECTIONS OF 2'-8" OR LONGER ANALYSIS PRESSURE ZN. G (PSF) 10.5 160.0 251.6	O.5 944 543.0 195.5 /ALLS** BURIED CONCRETE FOUNDATION WALL MIN. LATERAL RESISTANCE /FT (1500#/FT) 62 64 E/NAILING TOTAL FORCE (LBS) 33420 UPLIFT OK	1st Floor F-B 1st Floor S-S RESISTANCE PROVIDED BY ADDITIONAL METHODS (POUNDS) 0 0 24304 25088 FORCE PER LINEAL FT @ 143.4	OK? YES YES YES YES YES OCC. MAX.,
	ST FLOOR FRONT-TO-ST FLOOR SIDE-TO-ST FOR CONSTRUCTION	D-BACK SIDE D-BACK SIDE D-BACK SIDE D-BACK SIDE D-BACK SIDE ACHED CALCULATION R INTERIOR STEEL X- DR OSB ON SAME FLO X/12 6 LENGTH (FT.) 1 TOTAL AREA (FT²) 3391.5 VALLS VALLS THE CALCULATION C	ADDITIONAL RESISTANCE SEISMIC 0 0 0 0 0 0 0 0 0 0 0 3796 NS FOR PORTAL FRAME-BRACE INSTALLATION, OOR (SEE TABLE ABOV) DEGREES 26.6 ASCE 7 PRESSURE (PSF) 16.56 ZONE E AREA (FT²) -474.24 TOTAL UPLIFT PER LINEAL RESISTANCE DUE TO DEAD HEATHING BRACING ME DIRECTLY TO FRAMIN	WIND 0 0 3796 RESISTANCE REQUIF PORTAL FRAMES OR PERF. SHEAR WALL RESISTANCE OR PERFORATED SHE 3) INTERIOR WALLS SHE E) AND ARE ONLY APPL PITCH OF 6 OR LESS: LINEAL FT. OF OH 235 ZONE G AREA (FT²) 3865.74 FOOT ALONG EXTERIOR (PO WEIGHT & (3) 10d TOENAILS THOD REQUIRES USE ONG MEMBERS	ALL HAVE A MINIMUM UNII	diameter (in.) Shear value (per NDS) Spacing F-B (inches) spacing S-S (inches) STANCE PROVIDED BY EXTERIOR W INTERIOR WALL LENGTH W/ 1/2" GYPSUM BOARD PER TABLE (FT.) APACITIES (IF APPLICABLE), L BE ATTACHED WITH SAME STAPLE IT SECTIONS OF 2'-8" OR LONGER ANALYSIS PRESSURE ZN. G (PSF) 10.5 160.0 251.6 R SHEATHING OF THE ENTIRE STRUCT	O.5 944 543.0 195.5 /ALLS** BURIED CONCRETE FOUNDATION WALL MIN. LATERAL RESISTANCE /FT (1500#/FT) 62 64 E/NAILING TOTAL FORCE (LBS) 33420 UPLIFT OK TURE. IN ADDITION, FR	1st Floor F-B 1st Floor S-S RESISTANCE PROVIDED BY ADDITIONAL METHODS (POUNDS) 0 0 24304 25088 FORCE PER LINEAL FT @ 143.4	OK? YES YES YES YES YES OF O.C. MAX.,
THE RESERVE OF THE PARTY OF THE	ASEMENT ST FLOOR FRONT-TO ST FLOOR SIDE-TO-S ASEMENT FRONT-TO ASEMENT SIDE-TO-S ASEMENT FRONT-TO ASEMENT FRONT-TO ASEMENT FRONT-TO ASEMENT SIDE-TO-S NOTES: 1) SEE ATT SEE SHEET S1 FOR ATTERN AS EXTERIOR OVERHANG WAIN ROOF** ALONG PERIMETER INSIDE EXTERIOR V OTE FOR CONSTRU- HE CONTINUOUS STI NBLOCKED, AND W OTE FOR DESIGN: LL WALLS USED IN INCREASED BY 40% I	D-BACK SIDE D-BACK SIDE D-BACK SIDE D-BACK SIDE D-BACK SIDE D-BACK SIDE ACHED CALCULATION R INTERIOR STEEL X- DR OSB ON SAME FLO X/12 6 LENGTH (FT.) 1 TOTAL AREA (FT²) 3391.5 WALLS VALLS THE CALCULATION COFOR WIND LOADS, P	ADDITIONAL RESISTANCE O O O O O O O O O O O O O O O O O O O	WIND 0 0 3796 RESISTANCE REQUIF PORTAL FRAMES OR PERF. SHEAR WALL RESISTANCE OR PERFORATED SHEAR 3) INTERIOR WALLS SHEAR E) AND ARE ONLY APPL PITCH OF 6 OR LESS: LINEAL FT. OF OH 235 ZONE G AREA (FT²) 3865.74 FOOT ALONG EXTERIOR (POWEIGHT & (3) 10d TOENAILS THOD REQUIRES USE ONG MEMBERS R THIS STRUCTURE SHARES SECTION 2306 AND AFA	ALL HAVE A MINIMUM UNII	diameter (in.) Shear value (per NDS) Spacing F-B (inches) spacing S-S (inches) STANCE PROVIDED BY EXTERIOR W INTERIOR WALL LENGTH W/ 1/2" GYPSUM BOARD PER TABLE (FT.) APACITIES (IF APPLICABLE), L BE ATTACHED WITH SAME STAPLE IT SECTIONS OF 2'-8" OR LONGER ANALYSIS PRESSURE ZN. G (PSF) 10.5 160.0 251.6 R SHEATHING OF THE ENTIRE STRUCT	O.5 944 543.0 195.5 /ALLS** BURIED CONCRETE FOUNDATION WALL MIN. LATERAL RESISTANCE /FT (1500#/FT) 62 64 E/NAILING TOTAL FORCE (LBS) 33420 UPLIFT OK TURE. IN ADDITION, FR	1st Floor F-B 1st Floor S-S RESISTANCE PROVIDED BY ADDITIONAL METHODS (POUNDS) 0 0 24304 25088 FORCE PER LINEAL FT @ 143.4	OK? YES YES YES YES YES O TO C. MAX.,



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CUSTOM HOME CHC

REVISION TABLE

Date: 3/23/2020

HD #: 38982 Drawn by AWH

Reviewed by: CLS

ALLOWABLE LOADS FOR PNEUMATIC OR **MECHANICALLY DRIVEN NAILS AND STAPLES**

51

64

75

61

79

89

89

101

106

113

113

128

128

154

178

178

170

97

103

103

118

118

163

163

166

TYPICAL CONNECTION DETAIL FOR PANEL SPLICE AT BOTTOM PLATE

54

55

PENETRATION REQUIRED INTO MAIN

MEMBER FOR LATERAL

STRENGTH (IN.)

1-1/8

1-1/4

1-3/8

1-1/2

1-1/2

1-1/2

1-1/2

1-5/8

1-3/4

1-3/4

2-1/8

2-1/8

2-1/8

NAIL GUN

NAILS/

WIRE DIA.

.063

.072

.080

.092

.120

16

15

13

12-1/2

11-1/2

10-1/2

10-1/4

10

10

.128 10-1/2

.131

.135

.148

.162

.177

.177

.148

FASTENER

DESCRIPTION

16 GA. STAPLE

15 GA. STAPLE

14 GA. STAPLE

6d COOLER NAIL

6d SINKER NAIL

6d BOX NAIL

6d CASING NAIL

7d COOLER NAIL

6d COMMON NAIL

8d COOLER NAIL

8d SINKER NAIL

8d BOX NAIL

8d CASING NAIL

6d RING SHANK NAIL

6d SCREW SHANK NAIL

8d RING SHANK NAIL

8d SCREW SHANK NAIL

10d Cooler Nail

10d Sinker Nail

12d Short

10d Box Nails

12d Box Nails

10d Casing Nails

8d Common Nails

16d Short

12d Sinkers

16d Box Nails

10d Ring Shank Nails

10d Screw Shank Nails

12d Ring Shank Nails

12d Screw Shank Nails

10d Common Nails

12d Common Nails

16d Sinker Nails

20d Box Nails

30d Box Nails

16d Ring Shank Nails

16d Screw Shank Nails

16d Common Nails

40d Box Nails

20d Ring Shank Nails

20d Screw Shank Nails

20d Sinker Nails

20d Common Nails

ALLOWABLE LOADS (IN POUNDS)

42

46

41

42

DF/L

32

37

41

23

24

28

32

31

31

32

33

36

36

40

43

LATERAL STRENGTH | WITHDRAWL STRENGTH

TABLE R602.10.5 MINIMUM LENGTH OF BRACED WALL PANELS

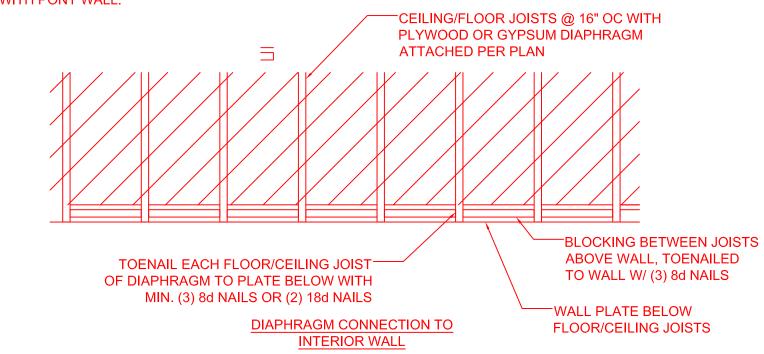
			MIN	IIMUM LEI (INCHES			
(5	METHOD SEE TABLE R602.10.4)		V	VALL HEIG	HT		CONTRIBUTING LENGTH (INCHES)
(0	EE TABLE NOOZ.10.4)	8 FEET	9 FEET	10 FEET	11 FEET	12 FEET	(IIVOTILO)
DWB,WSF	P,SFB,PBS,PCP,HPS,BV-WSP	48	48	48	53	58	ACTUAL ^b
	GB	48	48	48	53	58	DOUBLE SIDED = ACTUA SINGLE SIDED=.5xACTUA
	LIB	55	62	69	NP	NP	ACTUAL ^b
A D144	SDC A, B, AND C ULTIMATE DESIGN WIND SPEED<140	28	32	34	38	42	40
ABW	SDC D ₀ ,D ₁ ,D ₂ ULTIMATE DESIGN WIND SPEED<140	32	32	34	NP	NP	48
5511	SUPPORTING ROOF ONLY	16	16	16	NOTE C	NOTE C	48
PFH	SPTNG. ONE STORY & ROOF	24	24	24	NOTE C	NOTE C	48
	PFG	24	27	30	NOTE D	NOTE D	1.5 x ACTUAL ^b
	CS-G	24	27	30	33	36	ACTUAL ^b
	CS-PF	16	18	20	NOTE E	NOTE E	ACTUAL⁵
	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	
CS-WSP, CS-SFB	100	_	44	40	38	38	
US-SED	104	-	49	43	40	39	ACTUAL⁵
	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	

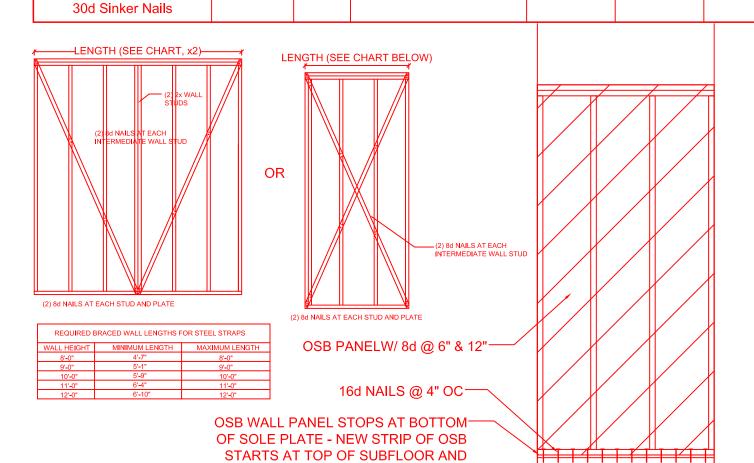
USE THE ACTUAL LENGTH WHEN IT IS GREATER THAN OR FOLIAL TO THE MINIMUM LENGTH

c. MAX. HEADER HEIGHT FOR PFH IS 10' IN ACCORDANCE WITH R602.10.6.2, WALL HEIGHT MAY BE INCREASED TO 12'

d. MAX. OPENING HEIGHT FOR PFG IS 10' IN ACCORDANCE WITH R602.10.6.3, WALL HEIGHT MAY BE INCREASED TO

e. MAX. OPENING HEIGHT FOR CS-PF IS 10' IN ACCORDANCE WITH R602.10.6.4, WALL HEIGHT MAY BE INCREASED TO 12' WITH PONY WALL.





CONTINUES DOWN PAST BOTTOM OF

(2) ROWS OF 8d NAILS @ 6" OC INTO RIM-

8d NAILS @ 3" OC INTO SILL PLATE—

SILL PLATE

BOARD

FOR SI: 1 INCH= 25.4 MM, 1 FOOT= 304.8 MM, 1 MILE PER HOUR =0.447 M/S; 1 KSI= 6.895 MPa A. ALL NAILS ARE SMOOTH-COMMON, BOX OR DEFORMED SHANKS EXCEPT WHERE OTHERWISE STATED. NAILS USED FOR FRAMING AND SHEATHING CONNECTIONS SHALL HAVE MINIMUM AVERAGE BENDING YIELD STRENGTHS AS SHOWN: 80 KSI FOR SHANK DIAMETER OF 0.192 INCH (20D COMMON), NAILS FOR SHANK DIAMETERS LARGER THANK 0.142 INCH BUT NOT LARGER THANK 0.177

INCH, AND 100 KSI FOR SHANK DIAMETER OF 0.142 INCH OR LESS.

B. STAPLES ARE 16 GAGE WIRE AND HAVE A MINIMUM 7/16 - INCH ON DIAMETER CROWN WIDTH. C. NAILS SHALL BE SPACED AT NOT MORE THAN 6 INCHES ON CENTER AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES OR

GREATER. D. FOUR-FOOT BY 8-FOOT OR 4-FOOT BY 9-FOOT PANELS SHALL BE APPLIED VERTICALLY.

E. SPACING OF FASTENERS NOT INCLUDED IN THIS TABLE SHALL BE BASED ON TABLE R602.3(2).

F. FOR REGIONS HAVING BASIC WIND SPEED OF 110 MPH OR GREATER, 8D DEFORMED (2 ½ X 0.120) NAILS SHALL BE USED FOR ATTACHING PLYWOOD AND WOOD STRUCTURAL PANEL ROOF SHEATHING TO FRAMING WITHIN MINIMUM 48-INCHES DISTANCE FROM GABLE END WALLS, IF MEAN ROOF HEIGHT IS MORE THAN 25 FEET, UP TO 35 FEET MAXIMUM.

G. FOR REGIONS HAVING BASIC WIND SPEED OF 100 MPH OR LESS, NAILS FOR ATTACHING WOOD STRUCTURAL PANEL ROOF SHEATHING TO GABLE END WALL FRAMING SHALL BE SPACED 6 INCHES ON CENTER. WHEN BASIC WIND SPEED IS GREATER THAN 100 MPH, NAILS FOR ATTACHING PANEL ROOF SHEATHING TO INTERMEDIATE SUPPORTS SHALL BE SPACED 6 INCHES ON CENTER FOR MINIMUM 48-INCH DISTANCE FROM RIDGES, EAVES AND GABLE END WALLS; AND 4 INCHES ON CENTER TO GABLE END WALL FRAMING.

H. GYPSUM SHEATHING SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH GA 253. FIBERBOARD SHEATHING SHALL CONFORM TO ASTM C 208.

I. SPACING OF FASTENERS ON FLOOR SHEATHING PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND REQUIRE BLOCKING AND

AT ALL FLOOR PERIMETERS ONLY. SPACING OF FASTENERS ON ROOF SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND REQUIRED BLOCKING. BLOCKING OF ROOF OR FLOOR SHEATHING PANEL EDGES PERPENDICULAR TO THE FRAMING MEMBERS NEED NOT BE PROVIDED EXCEPT AS REQUIRED BY OTHER PROVISIONS OF THIS CODE. FLOOR PERIMETER SHALL BE SUPPORTED BY FRAMING MEMBERS OR SOLID BLOCKING.

J. WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE, PROVIDE TWO TOE NAILS ON ONE SIDE OF THE RAFTER AND TOE NAILS FROM CEILING JOIST TO TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE. THE TOE NAIL ON THE OPPOSITE SIDE OF THE RAFTER SHALL NOT BE REQUIRED.

TABLE R602.3(1) FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER A.B.C	SPACING OF FASTENERS	
1	ROC BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE. TOE NAIL	4-8D BOX (2 ½" X 0.113")	TOE NAIL	
<u> </u>		3-8D (2 ½" X 0.113") - 3-10D (3"X0.128") 3-3"X 0.131" NAILS	PER JOIST, TOE NAIL	
3	CEILING JOISTS TO PLATE, TOE NAIL CEILING JOISTS NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER PARTITIONS (SEE SECTION R802.5.2 AND TABLE R802.52	4-10D BOX (3"X 0.128") 3-16D COMMON (3 ½"X 0.162") 4-3"X 0.131"NAILS	FACE NAIL	
4	CEILING JOIST ATTACHED TO PARALLEL RAFTER (HEEL JOINT) SEE SECTION R802.5.2 AND TABLE R802.5.2)	TABLE R802.5.2	FACE NAIL	
5	COLLAR TIE TO RAFTER, FACE NAIL OR 1 $\frac{1}{4}$ " X 20GA. RIDGE STRAP TO RAFTER	4-10D BOX (3" X 0.128") 3-10D COMMON (3" X 0.148") 4-3" X 0.131" NAILS	FACE NAILS EACH RAFTER	
6	RAFTER OR ROOF TRUSS TO PLATE	3-16D BOX NAILS (3½" X0.135") 3-10D COMMON NAILS (3" X 0.148" 4-10D BOX (3" X 0.128" 4-3" X0.131" NAILS	2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSI SIDE OF EACH FAGTER OR TRUSS ¹	
7	ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS OR ROOF RAFTER TO MINIMUM 2" RIDGE BEAM	4-16D(3 ½" X 0.135"); OR 3-10D COMMON (3" X 0.148") 4-10D BOX (3" X 0.128"); OR 4-3" X 0.131" NAILS 3-16D(3 ½" X0.135"); OR 2-16D COMMON (3 1/2" X0.162") 3-10D BOX (3" X 0.128"); OR 3-3" X 0.131" NAILS	TOE NAIL	
	WA	ALL		
8	STUD TO STUD (NOT BRACED WALL PANELS)	16D (3 ½" X 0.162") 10D BOX (3" X 0.128"); OR 3" X 0.131" NAILS	24" OC FACE NAIL 16" OC FACE NAIL	
9	STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS (AT BRACED WALL PANELS)	16D BOX (3 1/2" X 0.135"); OR 3" X 0.131" NAILS 16D COMMON (3 ½" X 0.162")	12" OC FACE NAIL 16" OC FACE NAIL	
40		16D COMMON (3 ½ X 0.162")	16" OC EACH EDGE FACE NAIL	
10	BUILT-UP HEADER (2" TO 2" HEADER WITH 2" SPACER)	16D BOX (3 ½" X 0.135") 5-8D BOX (2½" X 0.113") or 4-8D COMMON (2½" X 0.131")	12" OC EACH EDGE FACE NAIL	
11	CONTINUOUS HEADER TO STUD	4-10D BOX (3" X 0.128") 16D COMMON (3 ½" X 0.162")	TOE NAIL 16" OC FACE NAIL	
12	TOP PLATE TO TOP PLATE	10D BOX (3" X 0.128") OR 3" X 0.131" NAILS	12" OC FACE NAIL	
13	DOUBLE TOP PLATE SPLICE	8-16D COMMON (3 ½" X 0.162"); or 12-16D BOX (3 ½" X 0.135"); or 12-10D BOX (3" X 0.128"); or 12-3" X 0.131"	FACE NAIL ON EACH SIDE OF END JOINT (MINIMUM 24" LAP SPLIC LENGTH EACH SIDE OF END JOINT)	
14	BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING	NAILS 16D COMMON (3 ½" X 0.162")	16" OC FACE NAIL	
15	(NOT AT BRACED WALL PANELS BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST OR BLOCKING (NOT AT BRACED WALL PANELS	16D BOX (3 1/2" X 0.135"); OR 3" X 0.131" NAILS 3-16D BOX (3 1/2" X 0.135"); or 2-16D COMMON (3 1/2" X 0.162"); or 4-3" X 0.131" NAILS	12" OC FACE NAIL 3 EACH 16" OC FACE NAIL 2 EACH 16" OC FACE NAIL 4 EACH 16" OC FACE NAIL	
16	TOP OR BOTTOM PLATE TO STUD	4-8D BOX (2 ½" X 0.113"); or 3-16D BOX (3 ½" X0.135"); or 4-8D COMMON (2 ½" X0.131");or 4-10D BOX (3" X0.128"); or 3-3" X 0.131" NAILS	TOE NAIL	
10	TOP OR BOTTOM PLATE TO STOD	3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162"); or 3-10D BOX (3" X0.128");or 3-3" X 0.131" NAILS	END NAIL	
17	TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	3-10D BOX (3" X 0.128"); or 2-16D COMMON (3 ½" X0.162"); or 3-3" X 0.131" NAILS	FACE NAIL	
18	1" BRAVE TO EACH STUD AND PLATE	3-8D BOX (2 ½" X 0.113"); or 2-8D COMMON (2 ½" X0.131") or 2-10D BOX (3" X 0.128"); or 2 STAPLES 1 ¾"	FACE NAIL	
19	1" X 6" SHEATHING TO EACH BEARING	3-8D BOX (2 ½" X 0.113"); or 2-8D COMMON (2 ½" X0.131") or 2-10D BOX (3" X 0.128"); or 2 STAPLES 1" CROWN,	FACE NAIL	
20	1" X 8" AND WIDER SHEATHING TO EACH BEARING	16GA., 1 $\frac{3}{4}$ " LONG 3-8D BOX (2 $\frac{1}{2}$ " X 0.113"); or 3-8D COMMON (2 $\frac{1}{2}$ " X0.131") or 3-10D BOX (3" X 0.128"); or 3 STAPLES, 1" CROWN, 16GA., 1 $\frac{3}{4}$ " LONG WIDER THAN 1" X 8" 4-8D BOX (2 $\frac{1}{2}$ " X 0.113"); or 3-8D COMMON (2 $\frac{1}{2}$ " X0.131") or 3-10D BOX (3" X 0.128"); or 4 STAPLES, 1" CROWN, 16GA., 1 $\frac{3}{4}$ " LONG	FACE NAIL	
	FLO	OR		
21	JOIST TO SILL, TOP PLATE OR GIRDER	4-8D BOX (2 ½" X 0.113"); or 3-8D COMMON (2 ½" X0.131") or 3-10D BOX (3" X 0.128"); or 3-3" X 0.131: NAILS	TOE NAIL	
	RIM JOIST, BAND JOIST OR BLOCKING TO SILL OR TOP PLATE	8D BOX (2 ½" X 0.113")	4" OC TOE NAIL	
22				
22	(ROOF APPLICATIONS ALSO)	8D COMMON (2 ½" X 0.131"); or 10D BOX (3" X0.128") or 3-3" X 0.131" NAILS	6" OC TOE NAIL	
22	1" X 6" SUBFLOOR OR LESS TO EACH JOIST	3-3" X 0.131" NAILS 3-8D BOX (2½" X 0.113"); or 2-8D COMMON (2½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN,	6" OC TOE NAIL	
	· · · · · · · · · · · · · · · · · · ·	3-3" X 0.131" NAILS 3-8D BOX (2 ½" X 0.113"); or 2-8D COMMON (2 ½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN, 16GA., 1 ¾" LONG 3-16D BOX (3 ½" X 0.135"); or		
23	1" X 6" SUBFLOOR OR LESS TO EACH JOIST	3-3" X 0.131" NAILS 3-8D BOX (2 ½" X 0.113"); or 2-8D COMMON (2 ½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN, 16GA., 1 ¾" LONG 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D BOX (3 ½" X 0.135"); or	FACE NAIL	
23 24	1" X 6" SUBFLOOR OR LESS TO EACH JOIST 2" SUBFLOOR TO JOIST OR GIRDER	3-3" X 0.131" NAILS 3-8D BOX (2 ½" X 0.113"); or 2-8D COMMON (2 ½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN, 16GA., 1 ¾" LONG 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D COMMON (3 ½" X 0.162") 3-16D COMMON (3 ½" X 0.162"); or 4-10D BOX (3" X0.128") or 4-3" X 0.131" NAILS; or 4-3" X 14GA.	FACE NAIL BLIND AND FACE NAIL	
23 24 25	1" X 6" SUBFLOOR OR LESS TO EACH JOIST 2" SUBFLOOR TO JOIST OR GIRDER 2" PLANKS (PLANK & BEAM-FLOOR AND ROOF)	3-3" X 0.131" NAILS 3-8D BOX (2 ½" X 0.113"); or 2-8D COMMON (2 ½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN, 16GA., 1 ¾" LONG 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D COMMON (3 ½" X0.162") 3-16D COMMON (3 ½" X0.162")	FACE NAIL BLIND AND FACE NAIL AT EACH BEARING, FACE NAIL END NAIL	
23 24 25	1" X 6" SUBFLOOR OR LESS TO EACH JOIST 2" SUBFLOOR TO JOIST OR GIRDER 2" PLANKS (PLANK & BEAM-FLOOR AND ROOF)	3-3" X 0.131" NAILS 3-8D BOX (2½" X 0.113"); or 2-8D COMMON (2½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN, 16GA., 1¾" LONG 3-16D BOX (3½" X 0.135"); or 2-16D COMMON (3½" X0.162") 3-16D BOX (3½" X 0.135"); or 2-16D COMMON (3½" X0.162") 3-16D BOX (3½" X 0.162") 3-16D COMMON (3½" X 0.162"); or 4-10D BOX (3" X0.128") or 4-3" X 0.131" NAILS; or 4-3" X 14GA. STAPLES, ½" CROWN	FACE NAIL BLIND AND FACE NAIL AT EACH BEARING, FACE NAIL END NAIL NAIL EACH LAYER AS FOLLOWS: 32" OC AT TIP AN BOTTOM AND STAGGERED 24" OC FACE NAIL AT TOP AND BOTTOM STAGGEF	
23 24 25 26	1" X 6" SUBFLOOR OR LESS TO EACH JOIST 2" SUBFLOOR TO JOIST OR GIRDER 2" PLANKS (PLANK & BEAM-FLOOR AND ROOF) BAND OR RIM JOIST TO JOIST	3-3" X 0.131" NAILS 3-8D BOX (2 ½" X 0.113"); or 2-8D COMMON (2 ½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN, 16GA., 1 ¾" LONG 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D COMMON (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D COMMON (3 ½" X 0.162"); or 4-10D BOX (3" X0.128") or 4-3" X 0.131" NAILS; or 4-3" X 14GA. STAPLES, 76" CROWN	FACE NAIL BLIND AND FACE NAIL AT EACH BEARING, FACE NAIL END NAIL NAIL EACH LAYER AS FOLLOWS: 32" OC AT TIP AN BOTTOM AND STAGGERED	
23 24 25 26	1" X 6" SUBFLOOR OR LESS TO EACH JOIST 2" SUBFLOOR TO JOIST OR GIRDER 2" PLANKS (PLANK & BEAM-FLOOR AND ROOF) BAND OR RIM JOIST TO JOIST	3-3" X 0.131" NAILS 3-8D BOX (2 ½" X 0.113"); or 2-8D COMMON (2 ½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN, 16GA., 1 ¾" LONG 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D COMMON (3 ½" X 0.162") 3-16D COMMON (3 ½" X 0.162") 3-16D COMMON (3 ½" X 0.162"); or 4-10D BOX (3" X0.128") or 4-3" X 0.131" NAILS; or 4-3" X 14GA. STAPLES, 76" CROWN 20D COMMON (4" X 0.192"); or 10D BOX (3" X 0.128"); or 3-10D BOX (3" X 0.128"); or 3-3" X 0.131" NAILS AND: 2-20D COMMON (4" X 0.192"); or 3-10D BOX (3" X 0.128; or 3-3" X 0.131" NAILS 4-16D BOX (3 ½" X 0.128; or 3-3" X 0.131" NAILS 4-16D BOX (3 ½" X 0.135"); or 3-26D COMMON (3 ½" X 0.162"); or	FACE NAIL BLIND AND FACE NAIL AT EACH BEARING, FACE NAIL END NAIL NAIL EACH LAYER AS FOLLOWS: 32" OC AT TIP AN BOTTOM AND STAGGERED 24" OC FACE NAIL AT TOP AND BOTTOM STAGGER ON OPPOSITE SIDES	
23 24 25 26 27	1" X 6" SUBFLOOR OR LESS TO EACH JOIST 2" SUBFLOOR TO JOIST OR GIRDER 2" PLANKS (PLANK & BEAM-FLOOR AND ROOF) BAND OR RIM JOIST TO JOIST BUILT-UP GIRDERS AND BEAMS, 2-INCH LUMBER LAYERS	3-3" X 0.131" NAILS 3-8D BOX (2½" X 0.113"); or 2-8D COMMON (2½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN, 16GA., 1¾" LONG 3-16D BOX (3½" X 0.135"); or 2-16D COMMON (3½" X0.162") 3-16D BOX (3½" X 0.135"); or 2-16D COMMON (3½" X0.162") 3-16D COMMON (3½" X 0.162") 3-16D COMMON (3½" X 0.162"); or 4-10D BOX (3" X0.128") or 4-3" X 0.131" NAILS; or 4-3" X 14GA. STAPLES, 7½" CROWN 20D COMMON (4" X 0.192"); or 10D BOX (3" X 0.128"); or 3" X 0.131" NAILS AND: 2-20D COMMON (4" X 0.192"); or 3-10D BOX (3" X 0.128; or 3-3" X 0.131" NAILS 4-16D BOX (3½" X 0.128; or 3-3" X 0.131" NAILS	FACE NAIL BLIND AND FACE NAIL AT EACH BEARING, FACE NAIL END NAIL NAIL EACH LAYER AS FOLLOWS: 32" OC AT TIP AN BOTTOM AND STAGGERED 24" OC FACE NAIL AT TOP AND BOTTOM STAGGER ON OPPOSITE SIDES FACE NAIL AT END AND AT EACH SPLICE	
23 24 25 26 27	1" X 6" SUBFLOOR OR LESS TO EACH JOIST 2" SUBFLOOR TO JOIST OR GIRDER 2" PLANKS (PLANK & BEAM-FLOOR AND ROOF) BAND OR RIM JOIST TO JOIST BUILT-UP GIRDERS AND BEAMS, 2-INCH LUMBER LAYERS LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	3-3" X 0.131" NAILS 3-8D BOX (2 ½" X 0.113"); or 2-8D COMMON (2 ½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN, 16GA., 1 ¾" LONG 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D COMMON (3 ½" X 0.162"); or 4-10D BOX (3" X 0.128") or 4-3" X 14GA. STAPLES, 7/6" CROWN 20D COMMON (4" X 0.192"); or 4 10D BOX (3" X 0.128"); or 3" X 0.131" NAILS AND: 2-20D COMMON (4" X 0.192"); or 3-10D BOX (3" X 0.128; or 3-3" X 0.131" NAILS 4-16D BOX (3½" X 0.135"); or 3-26D COMMON (3½" X 0.162"); or 4-10D BOX (3" X 0.128"); or 4-3" X 0.131" NAILS 2-10D BOX (3" X 0.128"); or 4-3" X 0.131" NAILS 2-10D BOX (3" X 0.128"); or 4-3" X 0.131" NAILS	FACE NAIL BLIND AND FACE NAIL AT EACH BEARING, FACE NAIL END NAIL NAIL EACH LAYER AS FOLLOWS: 32" OC AT TIP AN BOTTOM AND STAGGERED 24" OC FACE NAIL AT TOP AND BOTTOM STAGGER ON OPPOSITE SIDES FACE NAIL AT END AND AT EACH SPLICE AT EACH JOIST OR RAFTER, FACE NAIL EACH END, TOE NAIL SPACING OF FASTENERS EDGES INTERMEDIATE SUPPORTS	
23 24 25 26 27 28 29 ITEM	1" X 6" SUBFLOOR OR LESS TO EACH JOIST 2" SUBFLOOR TO JOIST OR GIRDER 2" PLANKS (PLANK & BEAM-FLOOR AND ROOF) BAND OR RIM JOIST TO JOIST BUILT-UP GIRDERS AND BEAMS, 2-INCH LUMBER LAYERS LEDGER STRIP SUPPORTING JOISTS OR RAFTERS BRIDGING OR BLOCKING TO JOIST DESCRIPTION OF BUILDING ELEMENTS DD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR V	3-3" X 0.131" NAILS 3-8D BOX (2 ½" X 0.113"); or 2-8D COMMON (2 ½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN, 16GA., 1 ¾" LONG 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D COMMON (3 ½" X 0.162") 3-16D COMMON (3 ½" X 0.162"); or 4-10D BOX (3" X0.128") or 4-3" X 0.131" NAILS; or 4-3" X 14GA. STAPLES, 76" CROWN 20D COMMON (4" X 0.192"); or 10D BOX (3" X 0.128"); or 3-3" X 0.131" NAILS AND: 2-20D COMMON (4" X 0.192"); or 3-10D BOX (3" X 0.128; or 3-3" X 0.131" NAILS 4-16D BOX (3" X 0.128; or 3-3" X 0.131" NAILS 4-16D BOX (3" X 0.128"); or 4-3" X 0.131" NAILS 2-10D BOX (3" X 0.128"); or 4-3" X 0.131" NAILS 2-10D BOX (3" X 0.128"); or 4-3" X 0.131" NAILS NUMBER AND TYPE OF FASTENER ABBLE AND TYPE OF FASTENER	FACE NAIL BLIND AND FACE NAIL AT EACH BEARING, FACE NAIL END NAIL END NAIL NAIL EACH LAYER AS FOLLOWS: 32" OC AT TIP AN BOTTOM AND STAGGERED 24" OC FACE NAIL AT TOP AND BOTTOM STAGGERED ON OPPOSITE SIDES FACE NAIL AT END AND AT EACH SPLICE AT EACH JOIST OR RAFTER, FACE NAIL EACH END, TOE NAIL SPACING OF FASTENERS EDGES (INCHES) H INTERMEDIATE SUPPORTS (INCHES) C.E. (INCHES) C.E.	
23 24 25 26 27 28 29 ITEM	1" X 6" SUBFLOOR OR LESS TO EACH JOIST 2" SUBFLOOR TO JOIST OR GIRDER 2" PLANKS (PLANK & BEAM-FLOOR AND ROOF) BAND OR RIM JOIST TO JOIST BUILT-UP GIRDERS AND BEAMS, 2-INCH LUMBER LAYERS LEDGER STRIP SUPPORTING JOISTS OR RAFTERS BRIDGING OR BLOCKING TO JOIST DESCRIPTION OF BUILDING ELEMENTS DD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR VER FRAMING [SEE TABLE R602.3(3) FOR WOOD SRUCTLED.	3-3" X 0.131" NAILS 3-8D BOX (2 ½" X 0.113"); or 2-8D COMMON (2 ½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN, 16GA., 1 ¾" LONG 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D COMMON (3 ½" X 0.162") 3-16D COMMON (3 ½" X 0.162"); or 4-10D BOX (3" X0.128") or 4-3" X 0.131" NAILS; or 4-3" X 14GA. STAPLES, 76" CROWN 20D COMMON (4" X 0.192"); or 10D BOX (3" X 0.128"); or 3-3" X 0.131" NAILS AND: 2-20D COMMON (4" X 0.192"); or 3-10D BOX (3" X 0.128; or 3-3" X 0.131" NAILS 4-16D BOX (3" X 0.128; or 3-3" X 0.131" NAILS 4-16D BOX (3" X 0.128"); or 4-3" X 0.131" NAILS 2-10D BOX (3" X 0.128"); or 4-3" X 0.131" NAILS 2-10D BOX (3" X 0.128"); or 4-3" X 0.131" NAILS NUMBER AND TYPE OF FASTENER ABBLE AND TYPE OF FASTENER	FACE NAIL BLIND AND FACE NAIL AT EACH BEARING, FACE NAIL END NAIL NAIL EACH LAYER AS FOLLOWS: 32" OC AT TIP AN BOTTOM AND STAGGERED 24" OC FACE NAIL AT TOP AND BOTTOM STAGGER ON OPPOSITE SIDES FACE NAIL AT END AND AT EACH SPLICE AT EACH JOIST OR RAFTER, FACE NAIL EACH END, TOE NAIL SPACING OF FASTENERS EDGES (INCHES) " INTERMEDIATE SUPPORTS (INCHES) " (INCHES) C.E. RTICLEBOARD WALL SHEATHING TO IG TO WALL FRAMING]	
23 24 25 26 27 28 29 ITEM WOO	1" X 6" SUBFLOOR OR LESS TO EACH JOIST 2" SUBFLOOR TO JOIST OR GIRDER 2" PLANKS (PLANK & BEAM-FLOOR AND ROOF) BAND OR RIM JOIST TO JOIST BUILT-UP GIRDERS AND BEAMS, 2-INCH LUMBER LAYERS LEDGER STRIP SUPPORTING JOISTS OR RAFTERS BRIDGING OR BLOCKING TO JOIST DESCRIPTION OF BUILDING ELEMENTS DD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR V FRAMING [SEE TABLE R602.3(3) FOR WOOD SRUCTU	3-3" X 0.131" NAILS 3-8D BOX (2 ½" X 0.113"); or 2-8D COMMON (2 ½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN, 16GA., 1 ¾" LONG 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D COMMON (3 ½" X 0.162"); or 4-10D BOX (3" X 0.128") or 4-3" X 14GA. STAPLES, 7 CROWN 20D COMMON (4" X 0.192"); or 4-3" X 14GA. STAPLES, 7 CROWN 20D COMMON (4" X 0.192"); or 3" X 0.131" NAILS AND: 2-20D COMMON (4" X 0.192"); or 3-10D BOX (3" X 0.128"); or 3-3" X 0.131" NAILS 4-16D BOX (3 ½" X 0.135"); or 3-26D COMMON (3 ½" X 0.162"); or 4-10D BOX (3" X 0.128"); or 4-3" X 0.131" NAILS 2-10D BOX (3" X 0.128"); or 4-3" X 0.131" NAILS NUMBER AND TYPE OF FASTENER VALL SHEATHING TO FRAMING AND PAF JRAL PANEL EXTERIOR WALL SHEATHIN 6D COMMON (2½" X 0.131" NAIL (SUBFLOOR, WALL)) 6D COMMON (2½" X 0.113" NAIL (SUBFLOOR, WALL)) 8D COMMON (2½" X 0.113" NAIL (SUBFLOOR, WALL)) 8D COMMON (2½" X 0.113" NAIL (SUBFLOOR, WALL))	FACE NAIL BLIND AND FACE NAIL AT EACH BEARING, FACE NAIL END NAIL NAIL EACH LAYER AS FOLLOWS: 32" OC AT TIP AN BOTTOM AND STAGGERED 24" OC FACE NAIL AT TOP AND BOTTOM STAGGER ON OPPOSITE SIDES FACE NAIL AT END AND AT EACH SPLICE AT EACH JOIST OR RAFTER, FACE NAIL EACH END, TOE NAIL SPACING OF FASTENERS EDGES (INCHES) H INTERMEDIATE SUPPORTS (INCHES) C.E. RTICLEBOARD WALL SHEATHING TO IG TO WALL FRAMING] 6 12 F	
23 24 25 26 27 28 29 ITEM WOO 30 31	1" X 6" SUBFLOOR OR LESS TO EACH JOIST 2" SUBFLOOR TO JOIST OR GIRDER 2" PLANKS (PLANK & BEAM-FLOOR AND ROOF) BAND OR RIM JOIST TO JOIST BUILT-UP GIRDERS AND BEAMS, 2-INCH LUMBER LAYERS LEDGER STRIP SUPPORTING JOISTS OR RAFTERS BRIDGING OR BLOCKING TO JOIST DESCRIPTION OF BUILDING ELEMENTS DESCRIPTION OF BUILDING ELEMENTS DESCRIPTION OF BUILDING FOR WOOD SRUCTU \[\frac{3}{8} - \frac{1}{2}'' \] \[\frac{19}{32}" - 1" \]	3-3" X 0.131" NAILS 3-8D BOX (2½" X 0.113"); or 2-8D COMMON (2½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN, 16GA., 1¾" LONG 3-16D BOX (3½" X 0.135"); or 2-16D COMMON (3½" X0.162") 3-16D COMMON (3½" X 0.135"); or 2-16D COMMON (3½" X0.162") 3-16D COMMON (3½" X 0.162"); or 4-10D BOX (3" X 0.128") or 4-3" X 0.131" NAILS; or 4-3" X 14GA. STAPLES, 76" CROWN 20D COMMON (4" X 0.192"); or 10D BOX (3" X 0.128"); or 3" X 0.131" NAILS AND: 2-20D COMMON (4" X 0.192"); or 3-10D BOX (3" X 0.128"); or 3" X 0.131" NAILS AND: 2-20D COMMON (4" X 0.192"); or 3-10D BOX (3" X 0.128"); or 3-3" X 0.131" NAILS 4-16D BOX (3½" X 0.128"); or 4-3" X 0.131" NAILS 4-16D BOX (3½" X 0.128"); or 2-8D COMMON (2½" X 0.131") NAILS 2-10D BOX (3" X 0.128"); or 2-8D COMMON (2½" X 0.131" or 2-3" X 0.131") NAILS NUMBER AND TYPE OF FASTENER VALL SHEATHING TO FRAMING AND PAFIRAL PANEL EXTERIOR WALL SHEATHIN 6D COMMON (2½" X 0.113" NAIL (SUBFLOOR, WALL) 18D COMMON (2½" X 0.113" NAIL (SUBFLOOR, WALL) 18D COMMON (2½" X 0.113" NAIL (SUBFLOOR, WALL) 18D COMMON (2½" X 0.113" NAIL (ROOF); or RSRS-01; 2¾" X 0.113" NAIL (2½" X 0.131" or RSRS-01; 2¾" X 0.113" NAIL (2½" X 0.131" or RSRS-01; 2¾" X 0.113" NAIL (2½" X 0.131) OR RSRS-01; 2¾" X 0.113" NAIL (2½" X 0.131) OR RSRS-01; 2¾" X 0.113" NAIL (2½" X 0.131) OR RSRS-01; 2¾" X 0.113" NAIL (2½" X 0.131) OR RSRS-01; 2¾" X 0.113" NAIL (2½" X 0.131) OR RSRS-01; 2¾" X 0.113" NAIL (205F)	FACE NAIL BLIND AND FACE NAIL AT EACH BEARING, FACE NAIL END NAIL NAIL EACH LAYER AS FOLLOWS: 32" OC AT TIP AN BOTTOM AND STAGGERED 24" OC FACE NAIL AT TOP AND BOTTOM STAGGER ON OPPOSITE SIDES FACE NAIL AT END AND AT EACH SPLICE AT EACH JOIST OR RAFTER, FACE NAIL EACH END, TOE NAIL SPACING OF FASTENERS EDGES (INCHES) " INTERMEDIATE SUPPORTS (INCHES) " (INCHES) ".E.E. RTICLEBOARD WALL SHEATHING TO NG TO WALL FRAMING] 6 12 F 6 12 F	
23 24 25 26 27 28 29 ITEM WOO	1" X 6" SUBFLOOR OR LESS TO EACH JOIST 2" SUBFLOOR TO JOIST OR GIRDER 2" PLANKS (PLANK & BEAM-FLOOR AND ROOF) BAND OR RIM JOIST TO JOIST BUILT-UP GIRDERS AND BEAMS, 2-INCH LUMBER LAYERS LEDGER STRIP SUPPORTING JOISTS OR RAFTERS BRIDGING OR BLOCKING TO JOIST DESCRIPTION OF BUILDING ELEMENTS DD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR V FRAMING [SEE TABLE R602.3(3) FOR WOOD SRUCTU	3-3" X 0.131" NAILS 3-8D BOX (2 ½" X 0.113"); or 2-8D COMMON (2 ½" X0.131") or 3-10D BOX (3" X 0.128"); or 2 STAPLES, 1" CROWN, 16GA., 1 ¾" LONG 3-16D BOX (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X0.162") 3-16D COMMON (3 ½" X 0.135"); or 2-16D COMMON (3 ½" X 0.162") 3-16D COMMON (3 ½" X 0.162") 3-16D COMMON (3 ½" X 0.162"); or 4-10D BOX (3" X 0.128") or 4-3" X 0.131" NAILS; or 4-3" X 14GA. STAPLES, 76" CROWN 20D COMMON (4" X 0.192"); or 10D BOX (3" X 0.128"); or 3" X 0.131" NAILS AND: 2-20D COMMON (4" X 0.192"); or 3-10D BOX (3" X 0.128; or 3-3" X 0.131" NAILS 4-16D BOX (3 ½" X 0.135"); or 3-26D COMMON (3 ½" X 0.162"); or 3-26D COMMON (3 ½" X 0.135"); or 4-10D BOX (3" X 0.128"); or 4-3" X 0.131" NAILS 2-10D BOX (3" X 0.128"); or 4-3" X 0.131" NAILS NUMBER AND TYPE OF FASTENER VALL SHEATHING TO FRAMING AND PAF JRAL PANEL EXTERIOR WALL SHEATHIN 6D COMMON (2 ½" X 0.131" NAIL (ROOF); or RSRS-01 (2 ½" X 0.113" NAIL (ROOF); or RSRS-01 (2 ½" X 0.113") NAIL (ROOF) 8D COMMON NAIL (2 ½" X 0.131 NAIL (ROOF); or RSRS-01; 2 ¾" X 0.113") NAIL ROOF 10D COMMON NAIL (2 ½" X 0.131; or RSRS-01; 2 ¾" X 0.131") NAIL ROOF 10D COMMON NAIL (2 ½" X 0.131; or RSRS-01; 2 ¾" X 0.131") DEFORMED NAIL	FACE NAIL BLIND AND FACE NAIL AT EACH BEARING, FACE NAIL END NAIL NAIL EACH LAYER AS FOLLOWS: 32" OC AT TIP AN BOTTOM AND STAGGERED 24" OC FACE NAIL AT TOP AND BOTTOM STAGGER ON OPPOSITE SIDES FACE NAIL AT END AND AT EACH SPLICE AT EACH JOIST OR RAFTER, FACE NAIL EACH END, TOE NAIL SPACING OF FASTENERS EDGES (INCHES) H INTERMEDIATE SUPPORTS (INCHES) C.E. RTICLEBOARD WALL SHEATHING TO IG TO WALL FRAMING] 6 12 F	
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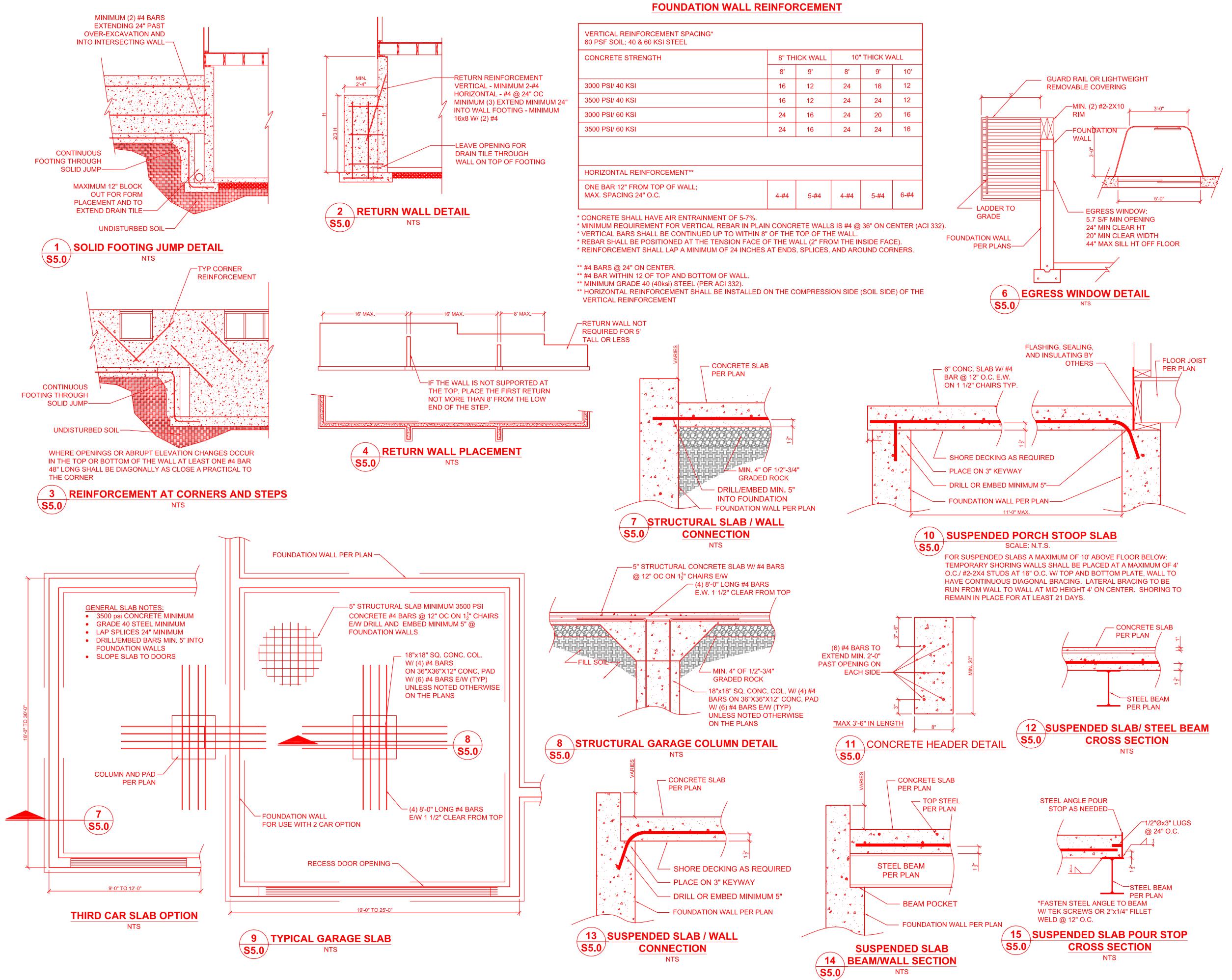
RUCTURAL

REVISION TABLE

Date: 3/23/2020

HD #: 38982 Drawn by: AWH

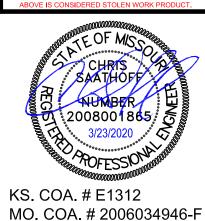
Reviewed by: CLS



HD ENGINEERING
& DESIGN, INC.
www.hdengineers.com

11656 W 75TH ST
SHAWNEE, KS 66214
V: 913-631-2222
F: 800-780-8608

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S M O M

FIRST CHOICE CUSTOM 1627 SW BLACKSTONE PLAC MCKINELY COTTAGE LEE'S SUMM STRUCTURAL DETAILS

REVISION TABLE

Date: 3/23/2020

Reviewed by: CLS

HD #: 38982

Drawn by: AWH

STRUCTURAL
DETAILS

SHEET NUMBER:
RELEASE FOR CONSTRUCTION
LIST SUMMIT, MISSOURI

CATHEDRAL / VAULTED CEILING

FRAMING AND INSULATION

MINIMUM R-38 INSULATION REQUIRED

WHERE THE CEILING IS APPLIED DIRECTLY TO THE BOTTOM

MINIMUM INSULATION VALUE, RAFTER SIZES WILL NEED TO BE INCREASED, OR ADEQUATE FURRING SHALL BE USED TO

N ADDITION, IF THE RAFTER SIZE IS INCREASED IT SHALL BE

VERIFIED THAT THE RIDGE BE A MINIMUM OF ONE NOMINAL SIZE

OBTAIN THE MINIMUM JOIST DEPTH FOR THE REQUIRED INSULATION.

LARGER THAN THE RAFTERS BEING RECEIVED. (SEE CHART BELOW)

2x6

R-13

R-19

 $6\frac{1}{4}$ "

2x10

CONDENSED R-38

8 <u>1</u>"

2x12

R-38

10 1"

OF THE RAFTERS, A MINIMUM 1" AIR SPACE SHALL BE

NOTE: RAFTER SIZES SPECIFIED ON PLANS ARE THE MINIMUM REQUIRED FOR STRUCTURAL PURPOSES ONLY.

THE SHEATHING FOR VENTILATION (R806.3)

IF FULL RAFTER DEPTH IS NOT ADEQUATE FOR

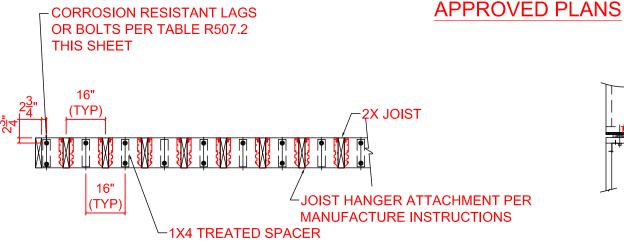
BUILDER TO VERIFY:

MAXIMUM INSULATION VALUE

1" AIR SPACE (FIBERGLASS)

PROVIDED BETWEEN THE TOP OF THE INSULATION AND

DECK DETAILS ARE ONLY APPLICABLE WHEN DECK IS SHOWN AND DESIGNED ON



5 GUARDRAIL DETAIL

 $\frac{1}{2}$ " GYP. CAP OR EQUAL

- 2X4 CLEAT W/ WEATHER

STRIPPING ON BOTTOM

R-49 INSULATION INSIDE

─ GYP. PER SHEATHING SCHEDULE

2x12 BOX MIN. 22"X30"

SCALE: $\frac{1}{2}$ " = 1'-0"

CANNOT PASS A 4" SPHERE

THE BOTTOM RAIL AND FLOOR

HANDRAIL REQUIRE ON ONE

SIDE OF STAIRS WITH 4 OR

MORE RISERS 34" TO 38" ABOVE STAIR NOSING-

BETWEEN BALUSTERS OR

GUARDRAIL MINIMUM 36"

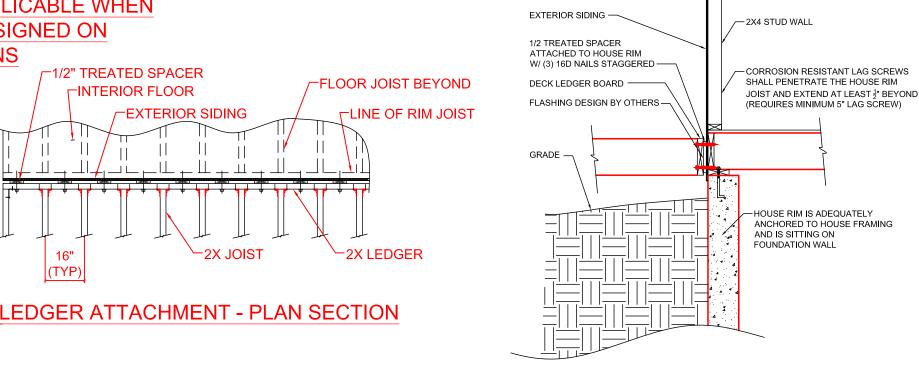
EXCEEDS 30" OVER GRADE-

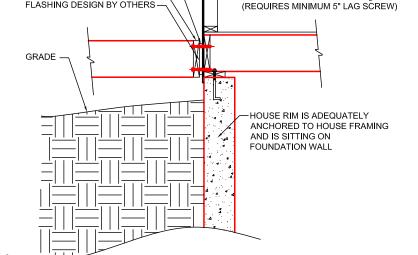
WHERE DECK FLOOR

-CANNOT PASS A 6" SPHERE THROUGH TRIANGLE FORMED BY

RISER, TREAD AND BOTTOM RAIL

2 \LEDGER ATTACHMENT - FRONT ELEVATION





DECK POST NOTE

ALL POST SUPPORTING ROOF LOADS SHALL BE CONTINUOUS FROM THE PIER CONNECTION TO THE ROOF SUPPORTING STRUCTURE. IF POST SPLICES ARE REQUIRED THE SPLICE SHALL BE ENGINEERED 4 LEDGER ATTACHMENT - SECTION VIEW

BY THE ENGINEER OF RECORD FOR THE PROJECT **TABLE IRC2018 R507.9.1.3(1)** DECK LEDGER CONNECTION TO BAND JOIST

(DECK LIVE LOAD = 40 PSF, DECK HEAD LOAD = 10 PSF, SNOW LOAD < 40 PSF)

•		<u> </u>			_ *	-	<u> </u>	
JOIST SPAN	6' AND LESS	6'-1" TO 8'	8'-1" TO 10'	10'-1" TO 12'	12'-1" TO 14'	14'-1" TO 16'	16'-1" TO 18'	
CONNECTION DETAILS	ON-CENTER SPACING OF FASTENERS d.e							
1/2" LAG SCREW WITH 15/32" MAX. SHEATHING ^{c,d}	30	23	18	15	13	11	10	
1/2" DIAM. BOLT WITH 15/32" MAX. SHEATHING ^d	36	36	34	29	24	21	19	
1/2" DIAM. BOLT WITH 15/32" MAX. SHEATHING & 1/2" STACKED WASHERS °	36	36	29	24	21	18	16	

For SI: 1 inch = 25.4mm, 1 foot = 304.8mm, 1 pound per square foot = 0.0479 kPa a. Ledges shall be flashed in accordance with Section R703.4 to prevent water from contacting the house band joist.

b. Snow load shall not be assumed to act concurrently with live load.

c. The tip of the lag screw shall fully extend beyond the inside face of the band joist.

d. Sheathing shall be wood structural panel or solid sawn lumber.

e. Sheathing shall be permitted to be wood structural panel, gypsum board, fiberboard lumber or foam sheathing. Up to $\frac{1}{2}$ " thinckness of stacked washers shall

be permitted to substitute for you to $\frac{1}{2}$ " of allowable sheathing thickness where combined with wood structural panel or lumbers sheathing.

TABLE IRC2018 R507.9.1.3(2) PLACEMENT OF LAG SCEWS AND BOLT IN DECK LEDGERS ADN BAND JOISTS

MINIMUM END AND EDGE DISTANCES AND SPACING BETWEEN ROWS							
	TOP EDGE	BOTTOM EDGE	ENDS	ROW SPACING			
LEDGER	2 inches d	$\frac{3}{4}$ inches	2 inches ^b	$1\frac{5}{8}$ inches			
BAND JOIST °	$rac{3}{4}$ inches	2 inches	2 inches ^b	1 $\frac{5}{8}$ inches $^{^{\text{b}}}$			

For SI: 1 inch = 25.4mm.

a. Lag screws of bolts shal lbe staggered from the top to the bottom along the horizontal run of the deck ledger in accordance with Figure R507.9.1.3(1)

b. Maximum 5 inces c. For engineered rim joists, the manufacturer's recommendations shall govern.

d. The minimum distances from bottom row of lag screws or bolts to the top of the ledger shall be in accordance with Figure R507.9.1.3(1)

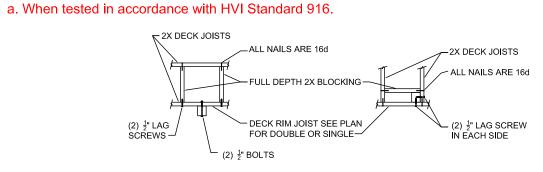
MINIMUM INSULATION & FENSTRATION VALUES BY COMPONENT, PER IRC2018 N1102.1.2

CLIMATE ZONE	FENSTRATION	SKYLIGHT	GLAZED SHGC	INSULATED METAL	INSULATED WOOD	CEILING	WOOD FRAMED	FLOOR	BASEMENT	SLAB R-VALUE	CRAWL SPACE WALL	DUCTWORK OVER	DUCTWORK (ALL
	U-FACTOR	U-FACTOR	FENSTRATION	DOOR U-VALUE	DOOR U-VALUE	R-VALUE	WALL R-VALUE	R-VALUE	WALL R-VALUE	& DEPTH	R-VALUE	OUTSIDE R-VALUE	OTHER) R-VALUE
4 EXCEPT MARINE	0.32	0.55	0.40	0.60	0.50	49	15	19	10 CONTINUOUS OR 13 CAVITY	R-10 2 FT.	10 CONTINUOUS OR 13 CAVITY	8	6

MINIMUM MECHANICAL EQUIPMENT EFFICIENCY VALUES BY COMPONENT, PER IRC2018 N1103.6.1

FAN LOCATION	AIR FLOW RATE MINIMUM (CFM)	MINIMUM EFFICACY CFM/WATT	AIR FLOW RATE MAXIMUM (CFM)				
HRV OR ERV	ANY	1.2 CFM/WATT	ANY				
RANGE HOOD	ANY	2.8 CFM/WATT	ANY				
IN-LINE FAN	ANY	2.8 CFM/WATT	ANY				
BATHROOM UTILITY FAN	10	1.4 CFM/WATT	< 90				
BATHROOM UTILITY FAN	90	2.8 CFM/WATT	ANY				

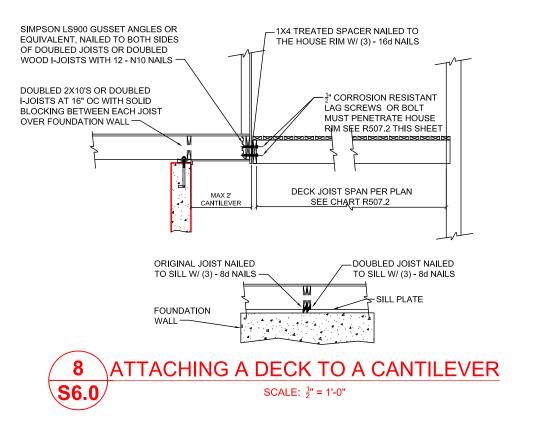
For SI: 1 cubic foot per min = 28.3 L/min.

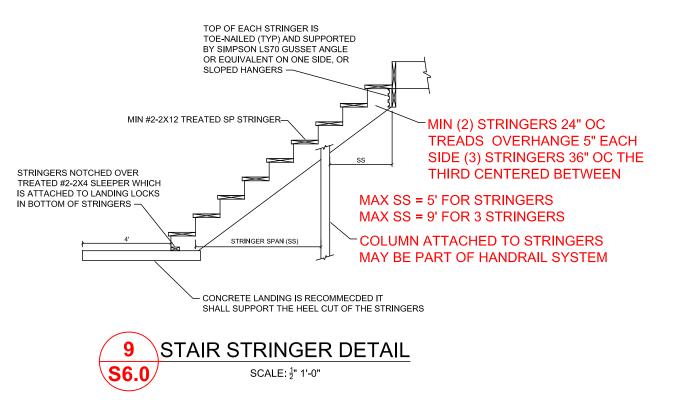




1) BUILDING THERMAL ENVELOPE IS REQUIRED TO BE SEALED WITH AN AIR BARRIER AS PER N1102.4.1 OF THE 2012 IRC 2) RECESSED LIGHTING SHALL BE SEALED TO PREVENT LEAKAGE BETWEEN THE CONDITIONED SPACE AND UNCONDITIONED SPACE 3) ALL DUCTS, AIR HANDLERS, FILTER BOXES, AND BUILDING CAVITIES USED AS DUCTS SHALL BE SEALED AS PER N1103.2 OF THE 2012 IRC

6 ATTIC ACCESS DETAIL





DUCT SEALING METHOD. PER IRC2018 W1103.3.2

N1103.2.2 (R403.2.2) SEALING (MANDATORY) DUCTS, AIR HANDLERS, AND FILTER BOXES SHALL BE SEALED. JOINTS AND SEAMS SHALL COMPLY WITH SECTION M1601.4.1 OF THIS CODE.

EXCEPTIONS:

SYSTEMS.

1. AIR-IMPERMEABLE SPRAY FOAM PRODUCTS SHALL BE PERMITTED TO BE APPLIED WITHOUT ADDITIONAL JOINT SEALS. 2. WHERE A DUCT CONNECTION IS MADE THAT IS PARTIALLY INACCESSIBLE, THREE SCREWS OR RIVETS SHALL BE EQUALLY SPACED ON THE EXPOSED PORTION OF THE JOINT SO AS TO PREVENT A HINGE EFFECT.

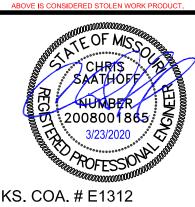
3. CONTINUOUSLY WELDED AND LOCKING-TYPE LONGITUDINAL JOINTS AND SEAMS IN DUCTS OPERATING AT STATIC PRESSURE LESS THAN 2 INCHES OF WATER COLUMN (500 Pa) PRESSURE CLASSIFICATION SHALL NOT REQUIRE ADDITIONAL CLOSURE

DUCT TIGHTNESS SHALL BE VERIFIED BY EITHER OF THE FOLLOWING: 1. POSTCONSTRUCTION TEST: TOTAL LEAKAGE SHALL NOT BE LESS THAN OR EQUAL TO 4 CFM (113.3 L/MIN) PER 100FT² (9.29m²) OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. (25 Pa) ACROSS THE ENTIRE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE. ALL REGISTER BOOTS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST.

2. ROUGH-IN TEST: TOTAL AIR LEAKAGE SHALL BE LESS THAN OR EQUAL TO 4 CFM (113.3 L/MIN) PER 100FT² (9.29m²) OF CONDITIONED FLOOR AREA WHEN TESTED AT A PRESSURE DIFFERENTIAL OF 0.1 INCHES W.G. (25 Pa) ACROSS THE ENTIRE SYSTEM, INCLUDING THE MANUFACTURER'S AIR HANDLER ENCLOSURE. ALL REGISTERS SHALL BE TAPED OR OTHERWISE SEALED DURING THE TEST. IF THE AIR HANDLER IS NOT INSTALLED AT THE TIME OF THE TEST, TOTAL AIR LEAKAGE SHALL BE LESS THAN OR EQUAL TO 3 CFM (85 L/MIN) PER 100FT² (9.29m²) OF CONDITIONED FLOOR AREA.

EXCEPTION: THE TOTAL LEAKAGE IS NOT REQUIRED FOR DUCTS AND AIR HANDLERS LOCATED ENTIRELY WITHIN THE BUILDING THERMAL ENVELOPE.

HD ENGINEERING & DESIGN, INC. www.hdengineers.com 11656 W 75[™] ST SHAWNEE, KS 66214 V: 913-631-2222 F: 800-780-8608



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