#### GENERAL NOTES

- A. THESE GENERAL FOUNDATION NOTES SHALL APPLY TO THE STRUCTURAL DRAWINGS, UNLESS OTHERWISE SHOWN OR
- B. UNLESS OTHERWISE INDICATED, ALL DETAILS OF DESIGN, WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE IRC 2012 AND IBC 2012.
- C. SIMPSON STRONG TIE CONNECTORS OR EQUAL.

# FOUNDATION NOTES

- A. ALL FOUNDATION EXCAVATION SHALL BE CARRIED ON TO UNDISTURBED MATERIAL OR PLACED IN AN APPROVED STRUCTURAL FILL. ALL EXCAVATION SHALL BE FREE OF LOOSE SOIL AND WATER.
- B. ANY OVER-EXCAVATION OF SOIL SHALL BE BACKFILLED WITH CONCRETE.
- C. ALL BACKFILL AROUND FOOTINGS AND FILL UNDER SLABS SHALL BE COMPACTED TO NOT LESS THAN 95 % RELATIVE DENSITY. SEE SOILS REPORT FOR SITE PREPARATION SPECIFICATIONS.
- D. WATERPROOFING OF THE FOUNDATION SHALL BE CARRIED OUT BY THE CONTRACTOR AS PER ARCHITECT'S SPECIFICATIONS. THE ENGINEER SHALL NOT BE CONSIDERED RESPONSIBLE FOR THIS.
- E. ANY UNUSUAL SITE CONDITIONS (E.G. LOOSE FILL, SUB-SURFACE WATER, ETC.) SHALL BE REPORTED TO THE ENGINEER.
- F. ALL PIPES THROUGH GRADE BEAMS SHALL BE SLEEVED. ALL PIPES SHALL BE LOCATED AT MID-DEPTH OF GRADE BEAMS. SIZE OF SLEEVES SHALL NOT EXCEED 1/3 OVERALL DEPTH OF GRADE BEAM. SPACING OF SLEEVES SHALL NOT BE CLOSER THAN 3 DIAMETERS ON CENTER.

#### REINFORCED CONCRETE

- A. REINFORCED CONCRETE SHALL CONFORM TO APPLICABLE REQUIREMENTS OF THE U.B.C. AND ACI STANDARD 318.
- B. ALL CONCRETE USED IN THE FOUNDATIONS AND SLABS ON GRADE SHALL HAVE A COMPRESSIVE STRENGTH OF NOT LESS THAN 3000 P.S.I. AT 28 DAYS.
- C. THE MAXIMUM SLUMP SHALL NOT EXCEED 5 INCHES.
- D. ADDITIVES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED.

# REINFORCING STEEL

- A. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60 UNLESS OTHERWISE INDICATED, EXCEPT #3 BARS, WHICH MAY CONFORM TO ASTM A615 GRADE 40.
- B. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
- C. ALL REINFORCING STEEL SHALL BE LOCATED CORRECTLY AS PER THE PLAN AND SECURED IN POSITION ADEQUATELY, BEFORE AND DURING PLACEMENT OF CONCRETE.
- D. ALL DETAILS OF FABRICATION AND INSTALLATION OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE ACI MANUAL OF STANDARD PRACTICE.
- E. LAP REINFORCING BAR SPLICES AS FOLLOWS, UNLESS NOTED OTHERWISE.

BAR SIZE	SPLICE LENGTH
#3	2'-0"
#4	2'-6"
#5	3'-0"
#6	4'-0"

SPLICE TOP BARS AT MID-SPAN. SPLICE BOTTOM BARS OVER SUPPORTS.

- PROVIDE THE FOLLOWING MINIMUM CONCRETE COVER OVER REINFORCING STEEL:
- 3".....FOR CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH. 1 1/2"....FOR CONCRETE EXPOSED TO EARTH OR WEATHER
- WITH #5 BARS OR SMALLER. 2".....FOR CONCRETE EXPOSED TO EARTH OR WEATHER
- WITH #6 BARS OR LARGER. 3/4"......FOR CONCRETE NOT EXPOSED TO WEATHER OR NOT IN CONTACT WITH EARTH.

- 1. ALL FLOOR JOISTS ARE 2X12 #2 SPACED @ 16" O.C. UNLESS NOTED OTHERWISE.
- 2. ALL BEAM MEMBERS USED IN MULTIPLE
- SHALL BE #2 S.Y.P.

SHALL BE A MIN. OF (2)2x12 #2

- PROVIDE DOUBLE JOISTS UNDER EQUIPMENT AND STORAGE AREAS IN ATTIC. 4. UNLESS NOTED ON THE DRAWINGS, ALL HEADERS
- 5. TYPICAL ABBREVIATIONS USED IN THIS DRAWING MEAN AS FOLLOWS: F.R.B. = FOR ROOF BRACE. T.B.O. = TRUSSES BY OTHERS U.W.A. = UNDER WALL ABOVE.
- D.B. = DROP BEAM BLK = BLOCKING UPL = UNDER POINT LOAD
- FLOOR DEAD LOAD = 10 P.S.F., LIVE LOAD = 40 P.S.F. FLOOR DEAD LOAD ASSUMED IS 25 P.S.F. WHERE TILES ARE SHOWN IN PLAN.
- 7. SIMPSON STRONG TIE CONNECTORS OR EQUAL.

# FRAMING BEAM SCHEDULE-LVL

BEAM MARK	BEAM SIZE	SIMPSON HANGER (WHERE REQ'D)
B26	(2) 2X6	HU26-2
B28	(2) 2X8	HU28-2
B210	(2) 2X10	HU210-2
B212	(2) 2X12	HU212-2
B36	(3) 2X6	HU26-3
B38	(3) 2X8	HU28-3
B310	(3) 2X10	HU210-3
B312	(3) 2X12	HU212-3
B411	2-1 3/4" X 11 1/4" LVL	HGUS412
B412	2-1 3/4" X 11 7/8" LVL	HGUS412
B414	2-1 3/4" X 14" LVL	HGUS414
B416	2-1 3/4" X 16" LVL	HGUS414
B418	2-1 3/4" X 18" LVL	HGUS414
B611	3-1 3/4" X 11 1/4" LVL	HGUS5.50/12
B612	3-1 3/4" X 11 7/8" LVL	HGUS5.50/12
B614	3-1 3/4"X 14" LVL	HGUS5.50/14
B616	3-1 3/4" X 16" LVL	HGUS5.50/14
B618	3-1 3/4" X 18" LVL	HGUS5.50/14
B711	4-1 3/4" X 11 1/4" LVL	HGUS7.25/12
B712	4-1 3/4" X 11 7/8" LVL	HGUS7.25/12
B714	4-1 3/4" X 14" LVL	HGUS7.25/14
B716	4-1 3/4"" X 16" LVL	HGUS7.25/14
B718	4-1 3/4" X 18" LVL	HGUS7.25/14

# 1. FLOOR JOISTS SHALL BE 18" OPEN WEB TRUSSES SPACED AT 16" O.C.

(TYPICAL UNLESS NOTED OTHERWISE ON PLAN).

CRAWLSPACE FRAMING NOTES | FIRST FLOOR CEILING NOTES

- 2. ALL CEILING JOISTS ARE #2 S.Y.P. @ 16" O.C. UNLESS NOTED OTHERWISE.
- 3. SEE TYPICAL DETAIL SHEET FOR FRAMING NOTES.
- 4 ALL BEAM MEMBERS USED IN MULTIPLE NOS. OF 2x'S SHALL BE #2 SYP., UNLESS OTHERWISE NOTED.
- 5. BEAM SUPPORT DETAILS OR BEAM CONNECTION HANGERS, IF NOT GIVEN IN PLAN, SHALL BE AS PER SCHEDULE GIVEN ON THIS SHEET. THESE HANGERS SHALL BE INSTALLED AS PER THE MANUFACTURER'S REQUIREMENTS.
- 6. ALL FUR DOWNS AND VAULTED OR POP UP CEILING RAFTERS SHALL BE #2 S.Y.P. @ 16" OR 24" O.C. TO MATCH JOIST SPACING AND AS PER THE REQUIREMENTS OF THE ARCHITECTURAL DRAWINGS.
- 7. PROVIDE DOUBLE JOISTS UNDER EQUIPMENT AND STORAGE AREAS IN ATTIC.
- 8. UNLESS NOTED ON THE DRAWINGS, ALL HEADERS SHALL BE A MIN. OF (2)2x12 #2 SYP WITH 1-1/2" MIN. BEARING AT EACH END.
- 9 TYPICAL ABBREVIATIONS USED IN THIS DRAWING MEAN AS FOLLOWS:
- F.R.B. = FOR ROOF BRACE. U.W.A. = UNDER WALL ABOVE. D.B. = DROP BEAM
- \_\_PLF \_ = BLOCKING W/ POUNDS PER LINEAL FOOT CANT = CANTILEVERED PSL = PARALLEL STRAND LUMBER
- FB = FLUSH BEAM ALT = ADDITIONALLY LOADED TRUSS UPL = UNDER POINT LOAD
- 10. FLOOR DEAD LOAD = 10 P.S.F., LIVE LOAD = 40 P.S.F. FLOOR DEAD LOAD ASSUMED IS 25 P.S.F. WHERE TILES ARE SHOWN IN PLAN.
- 11. EXCEPT THE STRUCTURAL STEEL BEAMS, ALL BEAMS USED IN THIS PROJECT SHALL BE LVL WITH fb= 2600 PSI .
- 12. ALL STEEL USED IN THIS PROJECT SHALL BE ASTM GRADE A36. TUBULAR SECTIONS SHALL CONFORM TO ASTM A501.
- 13. PROVIDE A 1-1/2" MINIMUM BEARING EACH END FOR ALL BEAMS AND HEADERS & 3" MINIMUM BEARING EACH END FOR LVL'S TYPICAL UNLESS NOTED OTHERWISE.

# SECOND FLOOR CEILING NOTES

- 1. CEILING JOIST TO BE #2 SYP @ 16" O.C. U.N.O.
- 2. ALL BEAMS & HEADERS ARE #2 SYP 3. ALL HEADERS TO BE (2)2x8 #2 TYP UNO
- 4. ALL JOIST ARE SPACED @ 16" U.N.O.
- 5. FRB ...... FOR ROOF BRACE
- HDR ...... HEADER RSD ...... RAISED

#### DESIGN CRITERIA

ALL AREAS DESIGNED FOR:  $DEAD\ LOAD\ =\ 10\ P.S.F.$ LIVE LOAD = 20 P.S.F. [LIMITED ATTIC LOADING]

#### ROOF FRAMING NOTES

- 1. METAL ROOF RAFTERS ARE 2 X 8, #2 S.Y.P. @ 16" O.C. UNLESS NOTED OTHERWISE.
- 2. METAL ROOF DEAD LOAD = 10 P.S.F. AND LIVE LOAD = 20 P.S.F.
- DO NOT BRACE ROOF UPON CEILING JOISTS OR STRONGBACKS.
- 4. SEE TYPICAL DETAIL SHEET FOR FRAMING NOTES AND DETAILS.

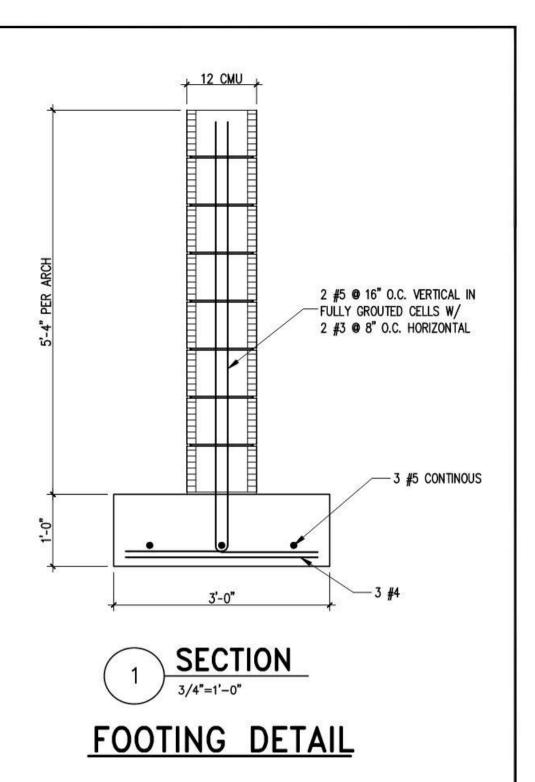
#### SHEARWALL SCHEDULE **TYPE** SHEATHING/NAILING PATTERN 1 LAYER OF 7/16" APA RATED SHEATHING SW1 EXP 1 W/8d GALVANIZED NAILS (\*\*)@ 6" OC @ ALL EDGES. 1 LAYER OF 7/16" APA RATED SHEATHING EXP 1 W/ 8d GALVANIZED NAILS (\*\*)@ 4" OC @ ALL EDGES. 1 LAYER OF 7/16" APA RATED SHEATHING EXP 1 W/ 8d GALVANIZED NAILS (\*\*)@ 3" OC @ ALL EDGES. 2 LAYERS OF 7/16" APA RATED SHEATHING (1 LAYER EACH SIDE OF WALL) EXP 1 W/ 8d GALVANIZED NAILS (\*\*)@ 6" OC @ ALL EDGES. 2 LAYERS OF 7/16" APA RATED SHEATHING (1 LAYER EACH SIDE OF WALL) EXP 1 W/8d GALVANIZED NAILS (\*\*)@ 4 OC @ ALL EDGES.

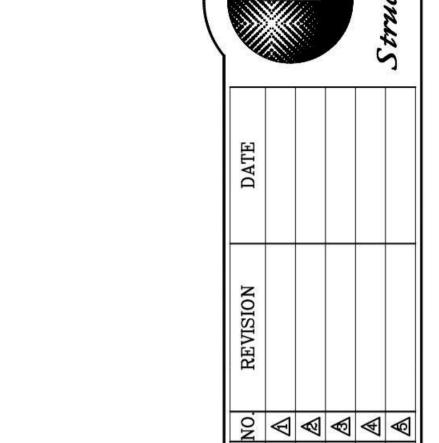
(#) "GALVANIZED NAILS", ONLY IF LOCATED IN OPEN AREAS, VENTED OR ENCLOSED AREAS. GALVANIZATION OF NAILS/FASTENERS NOT REQUIRED IN CONDITIONED AREAS. (SEE TEXAS REVISION TO IRC)

## SHEARWALL NOTES

- 1. ALL EXTERIOR WALLS TO HAVE 7/16" APA RATED SHEATHING EXP. 1 ALL AROUND W/ NAILING PATTERN 8d @ 6" O.C.
- 2. 1/2" DRYWALL WITH 5d COOLER NAILS @ 7" OC AT EDGES, W/ UNBLOCKED CONSTRUCTION. PROVIDE THIS AS STANDARD CONSTRUCTION AT ALL WALLS.
- 3. PROVIDE BLOCKING AT ALL SHEATHING EDGES. PROVIDE DOUBLE STUDS OR 4x4 MEMBERS @ EACH END OF SHEAR WALL, PROPERLY NAILED ONE HOLD DOWN ANCHOR AS NOTED ON PLAN. SEE HOLD DOWN ANCHOR SCHEDULE ON SHEAR WALL DETAIL SHEET. ALL HOLD DOWN ANCHOR SHALL BE SIMPSON OR EQUAL. SEE NOTE 12 FOR SUBSTITUTIONS.
- 4. PROVIDE CONTINUOUS HURRICANE CLIPS FROM ROOF TO FOUNDATION AS SHOWN IN DETAIL NOTED ON STRUCTURAL DRAWINGS. CLIPS SHALL BE SIMPSON TYPE H2.5 OR EQUAL. SEE NOTE 12 FOR SUBSTITUTIONS.
- 5. THE FLOOR DIAPHRAGM SHALL BE A MIN. OF 3/4" STRUCTURAL GRADE PLYWOOD & ROOF DIAPHRAGM SHALL BE A MIN. OF 7/16" STRUCTURAL GRADE PLYWOOD OR OSB. BOTH DIAPHRAGMS SHALL BE PLACED WITH 8d NAILS AT A MAX OF 6" AT ALL EXTERIOR EDGES.
- 6. ALL SHEAR WALLS SHALL BE TIED TO THE DIAPHRAGMS BY 10d NAILS @ A MAX OF 6" SPACING.
- (SW1 8') - INDICATES SHEAR WALL TYPE AND MIN. REQUIRED LENGTH, SEE SCHEDULE ABOVE, SINGLE LAYER SHEATHING CAN BE PLACED ON EITHER SIDE OF STUDS.
- 8. SEE FRAMING FOR BEAMS UNDER ALL SECOND FLOOR SHEARWALLS.
  ALTERNATELY PROVIDE MIN. (2)2X12 #2 SYP BEAMS OR CONTINUOUSLY BLOCKING UNDER ALL SECOND FLOOR SHEARWALLS.
  PROVIDE (2)TS-22 SIMPSON STRAPS (1) EACH SIDE TO TIE BEAM TO BEAM/ STUD.
- 9. ALL SHEAR WALLS SHALL HAVE HOLD DOWN STRAPS (2) CS-16 (3300#), OR EQUAL, AT EACH END. TYP. UNLESS NOTED OTHERWISE ON PLAN. SEE NOTE 7 FOR SUBSTITUTIONS.
- 10. SEE SHEAR WALL DETAIL SHEET FOR SHEAR WALL OPENING DETAILS.
- 11. SEE SHEAR WALL DETAIL SHEET FOR ADDITIONAL NOTES AND DETAILS. 12. ALL SUBSTITUTIONS TO THE SPECIFIED HARDWARE IN THIS DRAWING SHALL BE APPROVED BY THE ENGINEER OR RECORD.
- THE LATERAL LOAD DESIGN ON THESE DRAWINGS HAS BEEN CALCULATED FOR 110 MILES PER HOUR BASIC WIND SPEED WITH A 3 SECOND GUST AS PER THE INTERNATIONAL RESIDENTIAL CODE 2012 AND INTERNATIONAL BUILDING CODE 2012.

110 MPH 3 SECOND GUST EXPOSURE B





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C RESIDI 4X4 ALL TERRAIN COH SINGLE FAMILY R HOUSTON, TEXAS

20160 YS DRN. VS GENERAL

09/01/2021

SCALE: 1/4"=1'-0"

NOTES

#### GENERAL FRAMING NOTES IRC-TABLE R602.3(1) - CON'T. IRC-TABLE R602.3(1) FLOOR JOISTS WALL FRAMING NUMBER AND TYPE OF SPACING OF FASTENERS 1/2" STRUCTURAL CELLULOSIC 1/2" GALVANIZED ROOFING NAIL, 1/6" CROWN OR 1" 3 DESCRIPTION OF BUILDING FASTNER (a,b,c) FIBERBOARD SHEATHING CROWN STAPLE 16 GA., 11/4" LONG 1. GENERAL. SPANS FOR FLOOR JOISTS SHALL BE IN ACCORDANCE WITH IRC 1. FROM SILL TO BRACED DOUBLE TOP PLATES. THE DOUBLE TOP ROOF TABLE NO. R502.3.1(2). HEADERS, GIRDERS AND BEAMS TO BE #2 SYP. PLATES SHALL BE CONSIDERED BRACED IF SUPPORTING CEILING 25/2" STRUCTURAL CELLULOSIC 13/4" GALVANIZED ROOFING NAIL, 7/6" CROWN OR BLOCKING BETWEEN JOISTS OR RAFTERS JOIST, FLOOR JOIST, OR RAFTERS. FIBERBOARD SHEATHING 1" CROWN STAPLE 16 GA., 11/2" LONG 3-8d (2½" x 0.113") TO TOP PLATE, TOE NAIL 2. BEARING. THE ENDS OF EACH JOIST SHALL HAVE NOT LESS THAN 1.5 INCHES OF BEARING ON WOOD SUPPORT AND SHALL BE INCREASED AS 2. FRAMING DETAILS. STUDS SHALL BE PLACED WITH THEIR WIDE DIMENSION 3-8d (2½" x 0.113") CEILING JOISTS TO PLATE, TOE NAIL 1/2" GYPSUM SHEATHING (d) 1½" GALVANIZED ROOFING NAIL; STAPLE REQUIRED BY LOAD. BEARING LOADS SHALL BE TRANSFERRED TO THE SILLS PERPENDICULAR TO THE WALL. NOT LESS THAN THREE STUDS SHALL BE CEILING JOISTS NOT ATTACHED TO PARALLEL RAFTER, LAPS OVER GALVANIZED, 3-10d BY STUDS OR COLUMNS WITH EQUAL OR GREATER THAN CROSS-SECTION INSTALLED AT EACH CORNER OF AN EXTERIOR WALL. 11/2" LONG; 11/4" SCREWS, TYPE W OR S OF THE SUPPORTED BEARING. 3-10d (3" x 0.128") COLLAR TIE TO RAFTER, FACE NAIL OR 134" GALVANIZED ROOFING NAIL; STAPLE %" GYPSUM SHEATHING (d) BEARING AND EXTERIOR WALL STUDS SHALL BE CAPPED WITH DOUBLE TOP 3. FRAMING DETAILS. JOISTS SHALL BE SUPPORTED LATERALLY AT THE ENDS 11/4" x 20 GAUGE RIDGE STRAP GALVANIZED, PLATES INSTALLED TO PROVIDE OVERLAPPING AT CORNERS AND AT AND AT EACH SUPPORT BY SOLID BLOCKING EXCEPT WHERE THE ENDS OF 15/8" LONG; 15/8" SCREWS, TYPE W OR S 3-16d BOX NAILS TOE NAILS ON ONE SIDE AND INTERSECTIONS WITH OTHER PARTITIONS, END JOINTS IN DOUBLE TOP PLATES JOISTS ARE NAILED TO A HEADER, BAND OR RIM JOIST, SOLID BLOCKING RAFTER OR ROOF TRUSS TO PLATE. TOE NAIL TOE NAIL ON OPPOSITE SIDE (3½" x 0.135") SHALL BE NOT LESS THAN 2 INCHES IN THICKNESS AND THE FULL DEPTH OF SHALL BE OFFSET AT LEAST 48 INCHES. STUDS SHALL HAVE FULL BEARING WOOD STRUCTURAL PANELS, COMBINATION SUBFLOOR UNDERLAYMENT TO FRAMING OR 3-10d COMMON NAILS OF EACH RAFTER OR TRUSS ON A PLATE OR SILL NOT LESS THAN 2 INCHES IN THICKNESS HAVING A $(3" \times 0.148")$ 6d DEFORMED (2" x 0.120") NAIL OR WIDTH NOT LESS THAN THE WALL STUD. 34" AND LESS NOTCHES ON THE ENDS OF JOISTS SHALL NOT EXCEED ONE FOURTH THE 8d COMMON (2 1/2" x 0.131") NAIL ROOF RAFTERS TO RIDGE, VALLEY OR HIP RAFTERS: 4-16d (3½" x 0.135") JOIST DEPTH. HOLES BORED IN JOIST SHALL NOT BE WITHIN 2 INCHES OF 3. BRACING. ALL EXTERIOR WALLS AND MAIN CROSS-STUD PARTITIONS SHALL 8d COMMON (2 1/2" x 0.131") NAIL OR THE TOP OR BOTTOM OF THE JOIST, AND THE DIAMETER OF ANY SUCH HOLE 3-16d (3½" x 0.135") TOE NAIL FACE NAIL BE EFFECTIVELY AND THOROUGHLY BRACED AS REQUIRED BY IRC R602.10. 8d DEFORMED (2 1/2" x 0.120") NAIL SHALL NOT EXCEED ONE THIRD THE DEPTH OF THE JOIST. NOTCHES IN THE TOP OR BOTTOM OF JOISTS SHALL NOT EXCEED ONE SIXTH THE DEPTH AND 10d COMMON (3" x 0.148") NAIL OR 11/4" - 11/4" 4. HEADERS. ALL OPENINGS 4 FEET WIDE OR LESS IN BEARING WALLS SHALL BUILT-UP STUDS-FACE NAIL 10d (3" x 0.128) 24" O.C. SHALL NOT BE LOCATED IN THE MIDDLE THIRD OF THE SPAN. NOTCHES AND 8d DEFORMED (2 1/2" x 0.120") NAIL BE PROVIDED WITH HEADERS CONSISTING OF EITHER TWO PIECES OF 2-INCH HOLES NOT ALLOWED IN HEADERS, GIRDERS OR BEAMS. ABUTTING STUDS AT INTERSECTING WALL CORNERS, FRAMING LUMBER PLACED ON EDGE AND SECURELY FASTENED TOGETHER OR 16d (3½" x 0.135") 12" O.C. FOR SI: 1 INCH = 25.4mm, 1 foot = 304.8mm, 1 mile per hour = 0.447m/s; 1 Ksi = 6.895 MPa. FACE NAIL JOISTS FRAMING FROM OPPOSITE SIDES OF A BEAM, GIRDER OR PARTITION 4-INCH LUMBER OF EQUIVALENT CROSS SECTION. ALL OPENINGS MORE THAN 16" O.C. ALONG EACH EDGE BUILT-UP HEADER, TWO PIECES WITH 1/2" SPACER 16d (31/2" x 0.135") SHALL BE LAPPED AT LEAST 3" OR THE OPPOSING JOIST SHALL BE TIED ALL NAILS ARE SMOOTH-COMMON, BOX OR DEFORMED SHANKS EXCEPT WHERE OTHERWISE STATED. NAILS USED FOR 4 FEET WIDE SHALL BE PROVIDED WITH HEADERS OR LINTELS. EACH END OF TOGETHER IN AN IRC APPROVED MANNER, JOISTS FRAMING INTO THE SIDE FRAMING AND SHEATHING CONNECTIONS SHALL HAVE MINIMUM AVERAGE BENDING YIELD STRENGTHS AS SHOWN: 80ksi A LINTEL OR HEADER SHALL HAVE A LENGTH OF BEARING OF NOT LESS THAN 16d (3½" x 0.135") CONTINUED HEADER, TWO PIECES 16" O.C. ALONG EACH EDGE OF A GIRDER SHALL BE SUPPORTED BY STEEL FRAMING HANGERS OR FOR SHANK DIAMETER OF 0.192 INCH (20d COMMON NAIL), 90 ksi FOR SHANK DIAMETERS LARGER THAN 0.142 INCH 1.5 INCHES FOR THE FULL WIDTH OF THE HEADER OR LINTEL. ALL 4-8d (2½" x 0.113") CONTINUOUS HEADER TO STUD, TOE NAIL BUT NOT LARGER THAN 0.177 INCH, AND 100 ksi FOR SHANK DIAMETERS OF 0.142 INCH OR LESS. SUPPORTING MEMBER SHALL BE DESIGNED TO SUPPORT LOADS SPECIFIED BY STAPLES ARE 16 GAUGE WIRE AND HAVE A MINIMUM 7/16-INCH ON DIAMETER CROWN WIDTH. THE CODE. 10d (3" x 0.128") 24" O.C. DOUBLE STUDS, FACE NAIL 4. FRAMING AROUND OPENINGS. TRIMMER AND HEADER JOISTS SHALL BE NAILS SHALL BE SPACED AT NOT MORE THAN 6 INCHES ON CENTER AT ALL SUPPORTS WHERE SPANS ARE 48 DOUBLED, OR OF LUMBER OF EQUIVALENT CROSS SECTION, WHEN THE SPAN 10d (3" x 0.128") 24" O.C. DOUBLE TOP PLATES, FACE NAIL INCHES OR GREATER. 5. BRIDGING, UNLESS COVERED BY INTERIOR OR EXTERIOR WALL COVERINGS OR OF THE HEADER EXCEEDS 4 FEET. THE ENDS OF HEADER JOISTS MORE THAN FOUR-FOOT BY 8-FOOT OR 4-FOOT BY 9-FOOT PANELS SHALL BE APPLIED VERTICALLY. DOUBLE TOP PLATES, MINIMUM 24-INCH OFFSET SHEATHING MEETING THE MINIMUM REQUIREMENTS OF THIS CODE, ALL STUD 6 FEET LONG SHALL BE SUPPORTED BY FRAMING ANCHORS OR JOIST 3-16d (3½" x 0.135") SPACING OF FASTENERS NOT INCLUDED IN THIS TABLE SHALL BE BASED ON TABLE R602.3(2). OF END JOINTS, FACE NAIL IN LAPPED AREA PARTITIONS OR WALLS OF 6 FT OR HIGHER SHALL HAVE BRIDGING NOT LESS HANGERS UNLESS BEARING ON A BEAM, PARTITION OR WALL. TAIL JOISTS FOR REGIONS HAVING BASIC WIND SPEED OF 110 MPH OR GREATER, 8d DEFORMED (2 1/2" x 0.120) NAILS SHALL BE 16d (3½" x 0.135") 16" O.C. SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL SHALL BE SUPPORTED AT HEADER BY STEEL FRAMING ANCHORS. THAN 2 INCHES IN THICKNESS AND OF THE SAME WIDTH AS THE STUDS USED FOR ATTACHING PLYWOOD AND WOOD STRUCTURAL PANEL ROOF SHEATHING TO FRAMING WITHIN MINIMUM FITTED SNUGLY AND NAILED THERETO TO PROVIDE ADEQUATE LATERAL 48-INCH DISTANCE FROM GABLE END WALLS, IF MEAN ROOF HEIGHT IS MORE THAN 25 FEET, UP TO 35 FEET SOLE PLATE TO JOIST OR BLOCKING AT BRACED 3-16d (3½" x 0.135") 16" O.C. 5. SUPPORTING BEARING PARTITIONS. BEARING PARTITIONS PERPENDICULAR SUPPORT. MAXIMUM. TO JOISTS SHALL NOT BE OFFSET FROM SUPPORTING GIRDER, WALLS OR WALL PANELS FOR REGIONS HAVING A BASIC WIND SPEED OF 100 MPH OR LESS, NAILS FOR ATTACHING WOOD STRUCTURAL PARTITIONS MORE THAN THE JOIST DEPTH. JOISTS UNDER AND PARALLEL TO 3-8d (2½" x 0.113") 6. CUTTING AND NOTCHING. IN EXTERIOR WALLS AND BEARING PARTITIONS. PANEL ROOF SHEATHING TO GABLE END WALL FRAMING SHALL BE SPACED 6 INCHES ON CENTER. WHEN BASIC WIND BEARING PARTITIONS SHALL BE DOUBLED. STUD TO SOLE PLATE, TOE NAIL ANY WOOD STUD MAY BE CUT OR NOTCHED TO A DEPTH NOT EXCEEDING 25 OR 2-16d (3½" x 0.135") 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 PERCENT OF ITS WIDTH. CUTTING OR NOTCHING OF STUDS TO A DEPTH NOT 6. BLOCKING. SOLID SAWN FLOOR JOISTS SHALL BE BLOCKED AS FOLLOWS: WALLS; AND 4 INCH ON CENTER TO GABLE END WALL FRAMING. 2-16d (3½" x 0.135") GREATER THAN 40 PERCENT OF THE WIDTH OF THE STUD IS PERMITTED IN TOP OR SOLE PLATE TO STUD, END NAIL A. TWO BY FOUR: NO BLOCKING. GYPSUM SHEATHING SHALL CONFORM TO ASTM C 1396 AND SHALL BE INSTALLED IN ACCORDANCE WITH GA 253. NONBEARING PARTITIONS SUPPORTING NO LOADS OTHER THAN THE WEIGHT B. TWO BY SIX OR EIGHT; THE ENDS SHALL BE HELD IN PLACE BY TOP PLATES, LAPS AT CORNERS AND 2-10d (3" x 0.128") FIBERBOARD SHEATHING SHALL CONFORM TO ASTM C 208. FULL-DEPTH SOLID BLOCKING, BRIDGING, NAILING, APPROVED OF THE PARTITION. INTERSECTIONS, FACE NAIL SPACING OF FASTENERS ON FLOOR SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING HANGERS OR BOLTING TO OTHER FRAMING MEMBERS. 2-8d (2½" x 0.113") BRACE TO EACH STUD AND PLATE, FACE NAIL MEMBERS AND REQUIRED BLOCKING AND AT ALL FLOOR PERIMETERS ONLY. SPACING OF FASTENERS ON ROOF C. TWO BY TEN OR TWELVE; BRIDGING, FULL-DEPTH SOLID BLOCKING 7. BORED HOLES. A HOLE NOT GREATER IN DIAMETER THAN 40 PERCENT OF SHEATHING PANEL EDGES APPLIES TO PANEL EDGES SUPPORTED BY FRAMING MEMBERS AND REQUIRED BLOCKING STAPLES 134" OR CROSS BRACING SHALL BE INSTALLED AT INTERVALS NOT TO THE STUD WIDTH MAY BE BORED IN ANY WOOD STUD. BORED HOLES NOT BLOCKING OF ROOF OR FLOOR SHEATHING PANEL EDGES PERPENDICULAR TO THE FRAMING MEMBERS NEED NOT BE EXCEED 8 FEET UNLESS BOTH EDGES ARE HELD IN LINE THEIR 2-8d (2½" x 0.113") " x 6" SHEATHING TO EACH BEARING, FACE NAIL GREATER THAN 60 PERCENT OF THE WIDTH OF THE STUD ARE PERMITTED IN PROVIDED EXCEPT AS REQUIRED BY OTHER PROVISIONS OF THIS CODE. FLOOR PERIMETER SHALL BE SUPPORTED ENTIRE LENGTH. NONBEARING PARTITIONS OR IN ANY WALL WHERE EACH BORED STUD IS STAPLES 134" BY FRAMING MEMBERS OR SOLID BLOCKING D. REFER TO IRC R502.1.2 FOR MORE DETAILS ON REQUIRED BLOCKING WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE. DOUBLED. PROVIDED NOT MORE THAN TWO SUCH SUCCESSIVE DOUBLED STUDS 2-8d (2½" x 0.113") " x 8" SHEATHING TO EACH BEARING, FACE NAIL PROVIDE TWO TOE NAILS ON ONE SIDE OF THE RAFTER AND TOE NAILS FROM THE CEILING JOIST TO TOP PLATE IN ARE SO BORED. AVOID NOTCHES AND HOLES IN COLUMNS. IN NO CASE STAPLES 134" ACCORDANCE WITH THIS SCHEDULE. THE TOE NAIL ON THE OPPOSITE SIDE OF THE RAFTER SHALL NOT BE REQUIRED SHALL THE EDGE OF THE BORED HOLE BE NEARER THAN 5/8 INCH TO THE ROOF AND CEILING 3-8d (2½" x 0.113") WIDER THAN 1" x 8" SHEATHING TO EACH EDGE OF THE STUD. BORED HOLES SHALL NOT BE LOCATED AT THE SAME BEARING, FACE NAIL 4 STAPLES 134" NOTES FOR CODE COMPLIANCE SECTION OF STUD AS A CUT OR NOTCH. FLOOR 3-8d (2½" x 0.113") JOIST TO SILL OR GIRDER, TOE NAIL RIM JOIST TO TOP PLATE, TOE NAIL 8d (2½" x 0.113") 6" O.C. 1. THE BUILDING STRUCTURE IN THESE DRAWINGS HAVE BEEN DESIGNED AS PER IRC 2012 1. GENERAL. THE FRAMING DETAILS GIVEN HERE APPLY TO ROOFS HAVING A (ROOF APPLICATIONS ALSO) INCLUDING ITS AMENDMENTS. MINIMUM SLOPE OF 3:12 OR GREATER. WHEN THE ROOF SLOPE IS LESS THAN 6" O.C. RIM JOIST OR BLOCKING TO SILL PLATE, TOE NAIL 8d (2½" x 0.113") 2. THE STRUCTURE HAS BEEN DESIGNED FOR 110 MPH 3 SECOND GUST AS REQUIRED BY IRC 2012. 3:12. MEMBERS SUPPORTING RAFTERS AND CEILING JOISTS SUCH AS RIDGE POST BASE SCHEDULE 3. THE DESIGN CRITERIA IS AS PER IRC 2012. 2-8d (2½" x 0.113") " x 6" SUBFLOOR OR LESS TO EACH JOIST, BOARDS, HIPS AND VALLEYS SHALL BE DESIGNED AS BEAMS. THIS STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS: STAPLES 134" A. ROOF = 20 P.S.F.2. SPANS, ALLOWABLE SPANS FOR CEILING JOISTS SHALL BE IN ACCORDANCE 2" SUBFLOOR TO JOIST OR GIRDER, BLIND AND 2-16d (3½" x 0.135") B. CEILING = 10 P.S.F. & 20 P,S,F, @ LIMITED ATTIC LOADING. WITH THE REQUIREMENTS OF THE CODE. POST SIZE SIMPSON EMBEDDED POST BASE SIMPSON BOLTED POST BASE FACE NAIL C. FLOOR SYSTEM = 40 P.S.F. AT EACH BEARING " PLANKS (PLANK & BEAM - FLOOR & ROOF) 2-16d (3½" x 0.135") 3. FRAMING. RAFTERS SHALL BE FRAMED DIRECTLY OPPOSITE EACH OTHER AT THE RIDGE AND WHEREVER POSSIBLE ON THE HIPS AND VALLEYS. RIDGES SHALL NAIL EACH LAYER AS FOLLOWS: BE AT LEAST 1-INCH NOMINAL THICKNESS AND NOT LESS IN BUILT-UP GIRDERS AND BEAMS 10d (3" x 0.128") 32" O.C. AT TOP AND BOTTOM ABU66 **CB66** DEPTH THAN THE CUT END OF THE RAFTER. AT ALL VALLEY AND HIPS THERE 2-INCH LUMBER LAYERS AND STAGGERED. TWO NAILS SHALL BE A SINGLE VALLEY OR HIP RAFTER NOT LESS THAN 2-INCH NOMINAL AT ENDS AND AT EACH SPLICE. ABU88 **CB88** THICKNESS AND NOT LESS IN DEPTH THAN THE CUT END OF THE RAFTER. LEDGER STRIP SUPPORTING JOISTS OR RAFTERS 3-16d (3½" x 0.135") AT EACH JOIST OR RAFTER WHENEVER THE RAFTERS DO NOT ALIGN WITH EACH OTHER ON THE RIDGE. HIP OR VALLEY, THE RIDGE, HIP OR VALLEY MUST BE DESIGNED AS A BEAM. SPACING OF FASTENERS DESCRIPTION OF BUILDING DESCRIPTION OF FASTENER (b,c,e) INTERMEDIATE SUPPORTS MATERIAL 4. RAFTER TIES. RAFTERS SHALL BE NAILED TO ADJACENT CEILING JOIST TO (inches) (i) (inches) (c,e) FORM A CONTINUOUS TIE BETWEEN EXTERIOR WALLS WHEN SUCH JOISTS ARE WOOD STRUCTURAL PANELS, SUBFLOOR, ROOF AND INTERIOR WALL SHEATHING TO FRAMING AND PARTICLEBOARD WALL PARALLEL TO THE RAFTERS. WHERE NOT PARALLEL, RAFTERS SHALL BE TIED TO 2-INCH BY 4-INCH (NOMINAL) MINIMUM-SIZED CROSS TIES. RAFTER TIES SHEATHING TO FRAMING SHALL BE SPACED NOT MORE THAN 4 FEET ON CENTER. THE SEAT CUT AT THE 6d COMMON (2" x 0.113") NAIL 12 (g) RAFTER BIRD'S-MOUTH SHALL BE NO LONGER THAN IT'S BEARING MEMBER. (SUBFLOOR WALL) (i) 3/8" - 1/3" 8d COMMON(21/2" x 0.131") NAIL (ROOF)(f) 5. PURLINS. PURLINS TO SUPPORT ROOF LOADS MAY BE INSTALLED TO REDUCE THE SPAN OF RAFTERS WITHIN ALLOWABLE LIMITS AND SHALL BE SUPPORTED 8d COMMON NAIL (2½" x 0.131") 19/32" - 1" 12 (g) BY STRUTS TO BEARING WALLS OR BEAM. THE MAXIMUM SPAN OF 2-INCH BY 4-INCH PURLINS SHALL BE 4 FEET. THE MAXIMUM SPAN OF 2-INCH BY 10d COMMON (3" x 0.148") NAIL OR 8d (2½" x 0.131") DEFORMED NAIL 11/8" - 11/4" 6-INCH PURLIN SHALL BE 6 FEET BUT IN NO CASE SHALL THE PURLIN BE SMALLER THAN THE SUPPORTED RAFTERS. STRUTS SHALL BE NOT SMALLER OTHER WALL SHEATHING (h) THAN 2-INCH BY 4-INCH MEMBERS. THE UNBRACED LENGTH OF STRUTS SHALL NOT EXCEED 8 FEET AND THE MINIMUM SLOPE OF THE STRUTS SHALL BE NOT LESS THAN 45 DEGREES FROM THE HORIZONTAL. CONTINUED NEXT COLUMN 6. BLOCKING. ROOF RAFTERS AND CEILING JOISTS SHALL BE SUPPORTED LATERALLY TO PREVENT ROTATION AND LATERAL DISPLACEMENT. SEE FLOOR **GUARDRAIL** JOIST NO. 6 ON THIS DOCUMENT. 7. ROOF SHEATHING. PLYWOOD USED FOR ROOF SHEATHING SHALL BE BONDED BY INTERMEDIATE OR EXTERIOR GLUE. PLYWOOD ROOF SHEATHING EXPOSED ON THE HANDRAIL UNDERSIDE SHALL BE BONDED WITH EXTERIOR GLUE. PLYWOOD MUST BE OF POST -MINIMUM 1/2" THICKNESS AND MEET ALL OTHER REQUIREMENTS OF THE CODE. END JOINTS IN PLYWOOD SHALL OCCUR OVER SUPPORTS AND END JOINTS BLOCKING -1/2" THK PL(ASTM A36) 1/2" THK PL(ASTM A36) SHALL BE STAGGERED A MINIMUM OF ONE MEMBER ON ADJACENT ROWS. BETWEEN STUDS SUB-FLOORING -6- 5/8"ø LAG BOLTS EMBEDDED MIN. 4" INTO WOOD BEAM WOOD BEAM HANDRAIL - (4)THRU STEEL BRACKET BOLTS PER LUMBER. SHEATHING USED AS STRUCTURAL SUBFLOOR SHALL BE MINIMUM MANUFACTURER (MIN THREE FOURTHS INCH THICK AND INSTALLED PERPENDICULAR TO THE VALUE REQUIRED = SUPPORTS. JOINTS SHALL OCCUR OVER SUPPORTS UNLESS END-MATCHED 500 LBS IN LUMBER IS USED, IN WHICH CASE EACH PIECE SHALL BEAR ON AT LEAST TENSION). PLAN VIEW TWO SUPPORTS. SUBFLOORING MAY BE OMITTED WHEN JOIST SPACING DOES **ELEVATION SECTION** NOT EXCEED 16 INCHES AND 1-INCH NOMINAL TONGUE-AND-GROOVED THRU BOLT WOOD STRIP FLOORING IS APPLIED PERPENDICULAR TO THE SUPPORTS SECTION VIEW W/ 1½" SQ WASHERS 2. PLYWOOD. PLYWOOD USED AS STRUCTURAL SUBFLOOR SHALL BE MINIMUM THREE FOURTHS INCH THICK AND INSTALLED PERPENDICULAR TO THE SUPPORTS. HANDRAIL POST DETAIL **GUARDRAIL POST DETAIL** HANDRAIL BRACKET DETAIL 3. FASTENERS. GLUE IN ACCORDANCE WITH ADHESIVE MANUFACTURER'S DIRECTIONS SHALL BE PROVIDED ATTACHING SUBFLOOR TO EACH JOIST. 2X12 BLOCKING SHALL BE SECURED TO STUDS WITH MIN 4-10d BEAMS SUPPORTING HANDRAIL/ GUARDRAIL POST SHALL BE BEAMS SUPPORTING HANDRAIL/ GUARDRAIL POST SHALL BE TOE NAILS TOP AND BOTTOM EACH SIDE. FASTENERS SHALL BE INSTALLED PER IRC TABLE R602.3(1).--NAILING SECURED TO THEIR SUPPORTS WITH SIMPSON HANGERS. SECURED TO THEIR SUPPORTS WITH SIMPSON HANGERS. TYPICAL HANDRAIL/GUARDRAIL DETAIL NOTE: 1. GUARDRAIL DESIGNED FOR 50 PLF OR 200 LB LOAD IN ANY DIRECTION AT THE TOP PER TABLE R301.5 2012 IRC. 2. FOR ANY HANDRAIL/ GUARDRAIL SITUATION DIFFERENT THAN ABOVE CONDITIONS, YOU MAY CONTACT THIS OFFICE FOR SPECIAL DESIGN.

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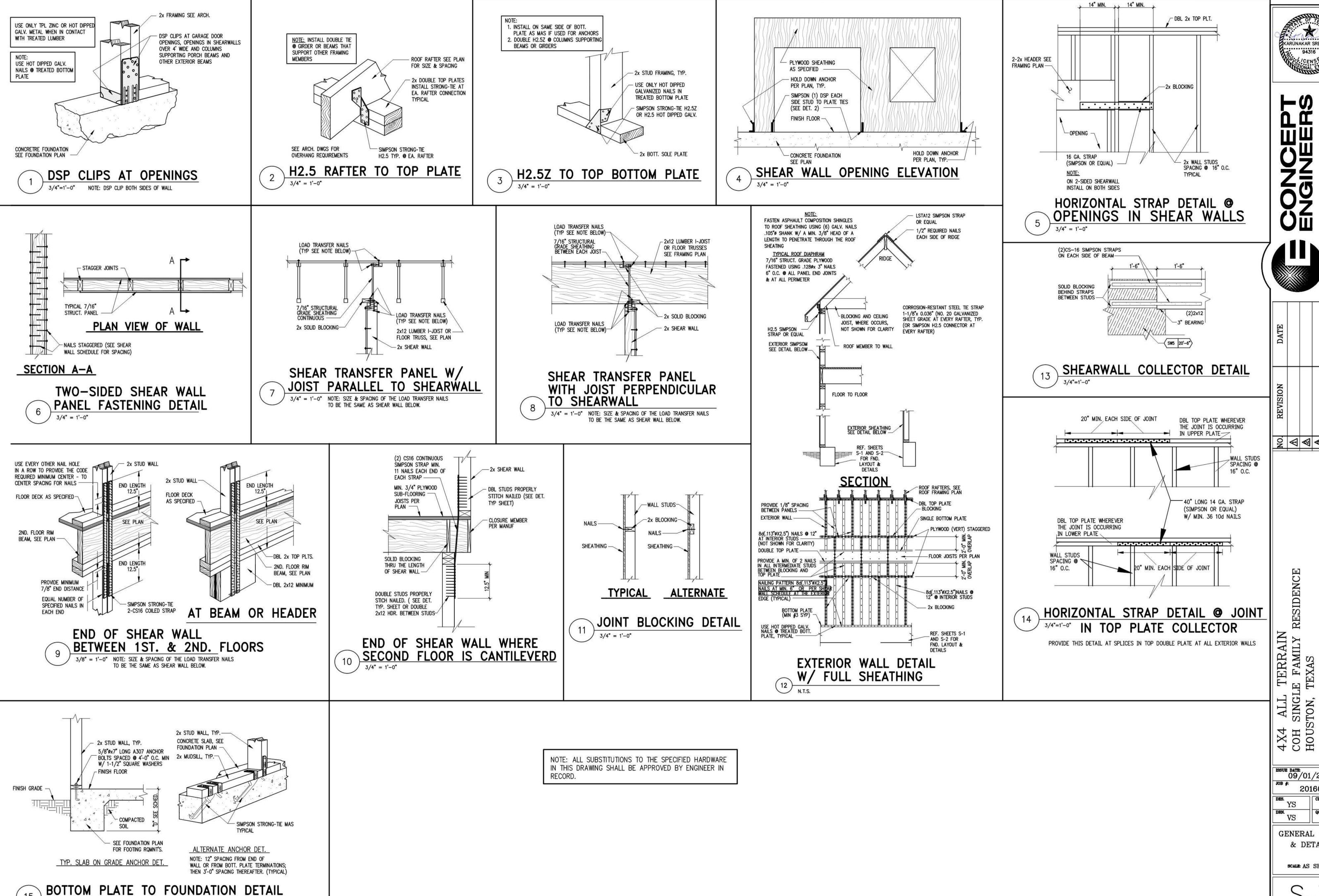
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GENERAL DETAILS

SCALE: AS SHOWN

S-2



3/4" = 1'-0"

09/01/2021 20160 YS YS

GENERAL NOTES & DETAILS

SCALE: AS SHOWN

