



ROOF LAYOUT PLAN

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

ROOF FRAMING NOTES:

ALL HIPs TO BE S.Y.P. No. 2x8'S
 ALL VALLEYS TO BE S.Y.P. No. 2x8'S
 ALL RAFTERS TO BE S.Y.P. No. 2x6'S AT 16" O.C. U.N.O. (TYP.)
 ALL RIDGES TO BE S.Y.P. No. 2x8'S

SUPPORT ALL RIDGE BEAMS, HIP RAFTERS AND HIP BEAMS EVERY 8 FEET WITH 2x6 STRONGBACK BRACING DOWN TO INTERIOR WALL.

2x6 RAFTERS TO BE SUPPORTED BY CONT. BRACING FOR HORIZONTAL SPANS OF 11'-0" OR GREATER.

COLLAR TIES SHALL BE SPACED AT 32" o.c. (EVERY OTHER RAFTER)

ROOF SHEATHING TO BE MIN. 1/2" PLYWOOD DECKING

▲ 2x6 STRONGBACK BRACING DOWN TO INTERIOR WALL

----- RAFTER PURLIN BRACING DOWN TO INTERIOR WALL

GENERAL STRUCTURAL NOTES

1. **TIMBER GRADES**
 - A. ROOF RAFTERS NO. 2 SYP, KD, S4S (U.N.O.)
 - B. CEILING & FLOOR JOIST NO. 2 SYP, KD, S4S (U.N.O.)
 - C. BEAMS & HEADERS NO. 2 SYP, KD, S4S
 - D. STUDS STUD GRADE, SYP, KD, S4S
 - E. WOOD POSTS NO. 2 SYP, TREATED LUMBER
2. **JOIST**
 - A. **JOIST BLOCKING**
 - 1) JOIST SHALL BE LATERALLY SUPPORTED AT EACH END AND AT EACH SUPPORT BY SOLID BLOCKING EXCEPT WHERE THE ENDS OF JOIST ARE NAILED INTO A HEADER BAND/ROW JOIST OR TO AN ADJOINING STUD. SOLID BLOCKING SHALL NOT BE LESS THAN TWO INCHES IN THE THICKNESS AND SHALL MATCH THE DEPTH OF THE JOIST.
 - 2) PROVIDE SOLID BLOCKING UNDER ALL BEARING WALLS PERPENDICULAR TO THE DIRECTION OF THE JOIST.
 - 3) PROVIDE DOUBLE JOIST UNDER ALL BEARING WALLS PARALLEL TO THE DIRECTION OF THE JOIST.
 - B. **JOIST BRIDGING**
 - 1) PROVIDE BRIDGING AT ALL FLOOR JOIST AT SPACING NOT TO EXCEED 8'-0".
 - C. **JOIST HOLES AND NOTCHES**
 - 1) NOTCHES IN THE TOP OR BOTTOM OF JOIST SHALL NOT EXCEED ONE SIXTH (1/6) OF THE JOIST DEPTH AND SHALL NOT BE LOCATED WITHIN THE MIDDLE THIRD OF THE SPAN.
 - 2) HOLES SHALL NOT BE CLOSER THAN 2" TO THE TOP OR BOTTOM OF JOIST. THE DIAMETER OF ANY HOLE SHALL NOT EXCEED ONE FOURTH (1/4) THE JOIST DEPTH UNLESS APPROVED BY THE ENGINEER.
3. **BEAMS AND HEADERS**
 - A. AT BEAMS MADE UP OF A NUMBER OF 2x JOIST, EACH JOIST WILL BEAR ON WALL STUD (I.E. NUMBER OF WALL STUDS SHALL MATCH NUMBER OF JOIST BEARING ON THESE STUDS). THE CENTERLINE OF EACH BEAM SHALL BE THE CENTERLINE OF THE SUPPORTING WALL STUDS.
 - B. ALL BEAMS MADE OF 2x JOIST SHALL BE FASTENED AS FOLLOWS:
 - 1) FOR MAXIMUM HORIZONTAL SPACING OF BOLTS:
 - 2-2x12 6d NAILS @ 12" TOP & BOTTOM, STAGGERED EACH FACE
 - 3-2x12 20d NAILS @ 12" TOP & BOTTOM, STAGGERED EA FACE
 - 4-2x12 OR MORE 5/8" BOLTS @ 12" top & bottom, staggered (W/STUD WASHERS)
 - BOLTS SHALL BE 5/8" LOCATED 2" MINIMUM FROM BEAM EDGES AND SHALL BE STAGGERED @ TOP & BOTTOM ROWS, PROVIDE STANDARD WASHERS @ EACH FACE.
 - C. ALL DOOR AND WINDOW HEADERS (OR AT ANY OTHER OPENING) THAT ARE NOT SPECIFIED ON THE PLANS SHALL BE AS FOLLOWS:
 - 1) FLOORING FRAMING: 2-2x12
 - 2) CEILING FRAMING: 2-2x8
 - D. MINIMUM BEARING OF ANY BEAM OR HEADER AT A STUD WALL IS 3".
4. **STUD WALLS:**
 - A. STUDS SHALL BE AS FOLLOWS:
 - 1) 2x4 @ 16" AT ALL FLOORS IN ONE AND TWO STORY STRUCTURES.
 - 2) 2-2x4 OR 2x6 @ 16" AT ALL STUD WALLS AT FIRST FLOOR AREAS DIRECTLY BELOW A THIRD FLOOR.
 - B. PROVIDE A MINIMUM OF TWO STUDS AT EACH SIDE OF OPENING LARGER THAN 4'-0", FULL HEIGHT OF WALL (KING STUDS).
 - C. MAXIMUM STUD WALL HEIGHT SHALL BE AS FOLLOWS:
 - 1) 2x4 STUDS @ 16" 10 FEET HIGH
 - 2) 2x4 STUDS @ 16" 13 FEET HIGH
 - 3) 2x6 STUDS @ 16" 16FEET HIGH
 - D. BLOCKING AND LATERAL STRUCTURES
 - 1) PROVIDE BLOCKING AND/OR TEMPORARY CROSS BRACING AS REQUIRED TO ENSURE STUD STRAIGHTNESS ACCORDING TO SPECIFIED TOLERANCES.
 - 2) MAXIMUM TOLERANCE FRO STUD STRAIGHTNESS IN EITHER DIRECTION IS 1/4" PER TEN FEET OF STUD HEIGHT.
5. **ROOF DECKING**
 - A. A MINIMUM THICKNESS SHALL BE 7/16" MINIMUM THICK CDX PLYWOOD OR OSB SHEATHING FOR ROOFS WITH ASPHALT OR METAL ROOF COVERINGS AND 1/2" MINIMUM THICK CDX PLYWOOD OR OSB SHEATHING FOR TILE ROOFS.
 - B. MINIMUM NAILING SHALL BE AS PER REQUIRED BUILDING CODES OR PER MANUFACTURER.
 - C. PLYWOOD CLIPS SHALL BE INSTALLED @ 1/8" GAP BETWEEN ALL PANEL EDGES. PROVIDE 1 CLIP PER SPAN (JOIST SPACING). CLIPS SHALL BE SIMPSON PSC1, OR APPROVED EQUAL, TO MATCH CORRESPONDING PLYWOOD THICKNESS.
6. **PLYWOOD FLOOR DECK:**
 - A. PLYWOOD SHALL BE 1/2" THICK AND SHALL BE STANDARD C-D EXTERIOR GRADE.
 - B. LAY PANELS IN A STAGGERED PATTERN.
 - C. BLOCK ALL EDGES WITH 2-2x4 BLOCKING.
 - D. GLUE AND NAIL TO FRAMING MEMBERS AS FOLLOWS:
 - 1) GLUE SHALL CONFORM TO APA SPECIFICATION AFS-01, APPLIED IN A CONTINUOUS BEAD & IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
 - 2) ALL NAILS SHALL BE 8d OR 10d SCREW SHANK.
 - 3) NAIL SPACING SHALL BE AS FOLLOWS:
 - 4" O.C. @ PANEL EDGES
 - 12" O.C. @ INTERMEDIATE SUPPORTS
7. **CONNECTIONS AND FASTENERS:**
 - A. CONNECTIONS SHALL BE AS MANUFACTURED BY SIMPSON STRONG-TIE OR EQUAL (NAIL ALL NAIL HOLES).
 - B. PROVIDE BASE AND CAP CONNECTORS AT ALL COLUMNS AS FOLLOWS:
 - 1) COLUMN BASE CONNECTOR: ABU SERIES
 - 2) COLUMN CAP CONNECTOR: PC SERIES
 - C. WHERE REQUIRED, JOIST HANGERS SHALL BE 16 GA. GALVANIZED "U-STANDARD" JOIST HANGERS, APPLICABLE TO CORRESPONDING SIZE, INCLUDING DOUBLE OR TRIPLE JOISTS.
 - D. WHERE REQUIRED, BEAM/PURLIN HANGER SHALL BE 12 GA. GALVANIZED, "B-SERIES" APPLICABLE TO CORRESPONDING SIZE.
 - E. PROVIDE 5/8" DIAMETER ANCHOR BOLTS AT ALL EXTERIOR STUD WALL SILL PLATES. BOLTS SHALL BE 10" LONG, ASTM A-307 (U.N.O.) AT SPACING SPECIFIED IN THE PLANS.
 - F. ANCHOR BOLTS SHALL BE INSTALLED AT A MINIMUM OF 12" FROM EACH CORNER.
 - G. WHERE CALLED OUT, ALL THROUGH BOLTS SHALL BE ASTM A-307. PROVIDE ROUND STANDARD WASHERS AT ALL WOOD SURFACES.
 - H. ALL BOLTS, NUTS, WASHERS, NAILS & OTHER FASTENERS EXPOSED TO WEATHER OR USED FOR SHEATHING, EXTERIOR COVERING AND ROOFING MATERIAL SHALL BE GALVANIZED OR STAINLESS STEEL.

THIS STRUCTURE HAS BEEN DESIGNED TO RESIST A 3 SECOND WIND GUST SPEED OF 120 MPH, EXPOSURE "C" AND IN ACCORDANCE WITH THE 2009 IRC, THE CITY OF KEMAH BUILDING STANDARDS AND TEXAS WINDSTORM STANDARDS.



MIKE McCOY, P.E. #59865
 JUNE 29, 2015

PROJECT NO:	
DATE DRAWN:	
BY:	
CHECKED:	
ISSUED:	
REVISIONS:	

McCoy Engineering and Inspection, L.L.C. is a registered professional engineering firm in the State of Texas. The seal of the State of Texas is hereby acknowledged. The seal of the State of Texas is hereby acknowledged. The seal of the State of Texas is hereby acknowledged.

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