

**STEEL JOISTS**

1. THE DESIGN, FABRICATION, AND ERECTION OF STEEL JOISTS AND JOIST GIRDERS SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE SPECIFICATIONS ADOPTED BY THE STEEL JOIST INSTITUTE.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW BY ENGINEER. FABRICATION SHALL NOT BEGIN PRIOR TO SHOP DRAWING APPROVAL BY ENGINEER.
3. JOIST MANUFACTURER SHALL DESIGN THE JOISTS AND JOIST GIRDER FOR A NET UPLIFT OF 20 PSF. JOIST MANUFACTURER SHALL PROVIDE ADDITIONAL BRIDGING AS REQUIRED TO BRACE JOISTS AND GIRDERS SUBJECT TO NET UPLIFT.
4. CONNECTIONS:
  - A. JOIST MANUFACTURER TO DESIGN WELD EACH SIDE OF GABLE JOISTS TO SUPPORTING STEEL.
5. JOISTS SHALL HAVE MINIMUM BRIDGING AS REQUIRED BY THE SJI AND AS OTHERWISE NOTED ON THE STRUCTURAL DRAWINGS. ALL BRIDGING RUNS AND DETAILS SHALL BE SHOWN ON JOIST SHOP DRAWINGS. FOR JOIST SPANS EXCEEDING OSHA TABLES A AND B FROM SUBPART R-STEEL ERECTION 1926.757, INSTALL A LINE OF BOLTED X-BRIDGING NEAR MID-SPAN PRIOR TO SLACKING HOIST LINES. FOR JOISTS BETWEEN 60 FEET AND 100 FEET, TWO LINES OF BOLTED X-BRIDGING SHALL BE INSTALLED NEAR THE THIRD POINTS OF THE JOIST PRIOR TO SLACKING HOIST LINES.
6. PLACE ADDITIONAL X-BRIDGING AT THE END OF EACH HORIZONTAL BRIDGING RUN IN LAST SPACE BETWEEN JOISTS, EXCEPT WHERE HORIZONTAL BRIDGING RUNS TERMINATE AT MASONRY OR CONCRETE WALLS. WHERE BRIDGING RUNS TERMINATE AT MASONRY OR CONCRETE WALLS, HORIZONTAL BRIDGING SHALL BE ANCHORED TO WALL.
7. NO MODIFICATION THAT AFFECTS THE STRENGTH OF A JOIST OR JOIST GIRDER SHALL BE MADE WITHOUT THE APPROVAL OF THE PROJECT STRUCTURAL ENGINEER OF RECORD.
8. WHERE JOISTS DO NOT CONNECT DIRECTLY TO THE COLUMN CAP PLATE, AT THE JOIST CLOSEST TO EACH COLUMN, PROVIDE DIAGONAL L2X2X3/16. ANGLE SHALL BE WELDED TO TOP OF COLUMN OR TO BOTTOM FLANGE OF BEAM AND TO THE FIRST TOP CHORD PANEL POINT OF JOIST WITH 2 INCH OF 1/8 INCH FILLET EACH END. ANGLE SHALL BE SUPPLIED BY THE STRUCTURAL STEEL FABRICATOR.
9. JOIST MANUFACTURER SHALL DESIGN JOIST SEATS FOR LATERAL ROLLOVER FORCE OF 1000 LBS. DUE TO WIND OR SEISMIC.

**METAL DECKING**

1. THE DESIGN, FABRICATION, AND ERECTION OF ALL STEEL DECK SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITION OF THE SPECIFICATIONS OF THE STEEL DECK INSTITUTE.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW BY ENGINEER. FABRICATION SHALL NOT BEGIN PRIOR TO SHOP DRAWING APPROVAL BY ENGINEER.
3. MATERIALS:
  - A. DECK FOR ROOF: 1-1/2" x 22 GAGE WIDE RIB STYLE, PAINTED WITH STANDARD SHOP COAT.
4. CONNECT 1-1/2" ROOF DECK TO SUPPORTS WITH 5/8" ROUND PUDDLE WELDS OR ITW BUILDEX BX14 POWDER ACTUATED FASTENERS OR #12-24 X 7/8" ICH TRAXX 4 CLIMASEAL (FOR TOTAL STEEL FLANGE THICKNESS OF .250" OR LESS) OR #12-24 X 1 1/4" ICH TRAXX 5 CLIMASEAL (FOR TOTAL STEEL FLANGE THICKNESS OF .500" OR LESS) AT 12" ON CENTER AT INTERIOR RIBS, 6" ON CENTER AT ENDS OF SHEETS AND PERIMETER. MINIMUM DISTANCE BETWEEN WELD OR FASTENER AND END OF METAL DECK IS 1". SCREW SIDE LAPS AT MIDSPAN OR 3'-0" MAXIMUM SPACING WITH #10 SELF-DRILLING SCREWS.
5. METAL DECK SHALL BE PROVIDED TO RUN CONTINUOUS OVER AT LEAST 3 SPANS EXCEPT AS NOTED OTHERWISE.
6. CONNECT METAL DECK TO STRUCTURAL MEMBERS, INCLUDING PERIMETER ANGLES.
7. MINIMUM METAL DECK END BEARING ON SUPPORTS = 1 1/2'.
8. LAP ENDS OF ROOF DECK 4' MINIMUM.
9. OPENINGS UP TO 6" SQUARE MAY BE CUT THROUGH METAL DECK WITHOUT REINFORCING. OPENINGS BETWEEN 6" AND 18" SHALL BE REINFORCED WITH STEEL ANGLES 2X2X1/4 PUDDLE WELDED TO THE METAL DECK FLUTES AND ORIENTED PERPENDICULAR TO THE FLUTES. STEEL REINFORCING ANGLE SHALL EXTEND A MINIMUM OF 2 FLUTES EACH SIDE OF THE OPENING.
10. WELDING OF METAL DECK SHALL BE IN ACCORDANCE WITH AWS D1.3-08.

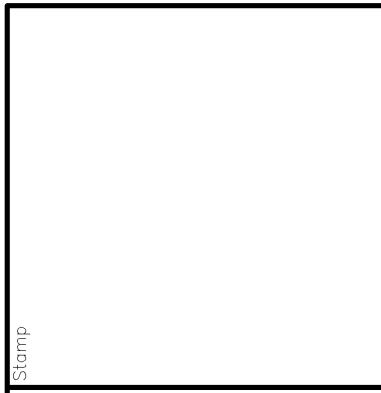
**COLD-FORMED STEEL FRAMING**

1. WORK SHALL MEET THE REQUIREMENTS OF THE FOLLOWING STANDARDS:
  - A. AMERICAN IRON AND STEEL INSTITUTE (A.I.S.I.) "STANDARD FOR COLD-FORMED STEEL FRAMING - GENERAL PROVISIONS", LATEST EDITION.
  - B. AMERICAN WELDING SOCIETY (A.W.S.), D.1.3, 2008 "STRUCTURAL WELDING CODE-SHEET STEEL."
2. MATERIALS:
  - A. STRUCTURAL FRAMING MEMBERS 43 MILS (18 GAGE) & LIGHTER: ASTM A1003 & C955, F<sub>y</sub> MINIMUM = 33 KSI, G60 GALVANIZED COATING.
  - B. ALL TRACK & BRIDGING: F<sub>y</sub> = 33 KSI MINIMUM, ASTM A1003 & C955, G60 GALVANIZED COATING.
  - C. SELF-DRILLING TAPPING SCREW FASTENERS:
    1. IN COMPLIANCE WITH SAE J78 SIZE & SPACING AS NOTED ON DRAWINGS.
    2. UNLESS NOTED OTHERWISE, SCREWS IN STEEL TO STEEL CONNECTIONS SHALL HAVE A MINIMUM EDGE DISTANCE & SPACING OF 3 TIMES THE NOMINAL SCREW DIAMETER.
    3. SCREWS ALONG THE EDGES OF WALL SHEATHING SHALL BE PLACED A MINIMUM OF 3/8" FROM THE SHEATHING EDGES.
    4. SCREWS SHALL BE OF SUFFICIENT LENGTH TO EXTEND THROUGH THE STEEL CONNECTION A MINIMUM OF 3 EXPOSED THREADS, AND SHALL PENETRATE INDIVIDUAL COMPONENTS OF CONNECTIONS WITHOUT CAUSING PERMANENT SEPARATION BETWEEN COMPONENTS.
  - D. WELDING ELECTRODES: E60XX, WELD SIZE AS NOTED ON STRUCTURAL DRAWINGS.
  - E. STUD CLIPS: "STIFFCLIP LB" SERIES, 68 MILS (14 GAGE) MIN., 50 KSI, MANUFACTURED BY THE STEEL NETWORK, INC., INSTALL PER MANUFACTURER'S RECOMMENDATIONS. SUBSTITUTES MAY BE CONSIDERED, SUBMIT MANUFACTURER'S DATA PRIOR TO INSTALLATION.
3. CONNECT ALL STUD CLIPS AND SLIDE CLIPS TO STRUCTURAL STEEL FRAMING WITH (2) POWDER DRIVEN FASTENERS (TYPE X-U NAIL, 0.157" DIAMETER, QUALIFIED PER ICC-ES ESR-2289) OR (2) #12-24, TEK 5 SELF DRILLING FASTENERS. CONNECTION TO COLD-FORMED STEEL MEMBERS PER MANUFACTURER'S RECOMMENDATIONS.
4. CUT ALL FRAMING COMPONENTS SO THEY FIT SQUARELY TOGETHER. STUDS MUST BEAR TIGHT AGAINST TRACK WEB. MEMBERS SHALL BE HELD POSITIVELY IN PLACE UNTIL PROPERLY FASTENED. BRACE WALL COMPONENTS AS REQUIRED DURING ERECTION TO PREVENT RACKING AND DISTORTION.
5. ALL FRAMING SHALL BE THE COMPONENTS SPECIFIED ON THE STRUCTURAL DRAWINGS AS MANUFACTURED IN ACCORDANCE WITH THE INDICATED STEEL STUD MANUFACTURERS ASSOCIATION (SSMA) SIZE, STYLE, AND MATERIAL THICKNESS. UNLESS NOTED OTHERWISE ON THE STRUCTURAL DRAWINGS, ALL FRAMING MEMBERS SHALL BE S-SECTIONS WITH 1-5/8" FLANGE WIDTH, AND ALL TRACK SHALL HAVE 1-1/4" FLANGE WIDTH.
6. FASTEN EACH STUD AT EACH FLOOR LEVEL, HORIZONTAL GIRT AND ROOF LEVEL, UNLESS NOTED OTHERWISE ON DRAWINGS. SEE DRAWINGS FOR TYPE OF CLIP TO INSTALL.

7. FASTENING OF COMPONENTS SHALL BE WITH SELF-DRILLING TAPPING SCREWS OR WELDING. ALL WELDED CONNECTIONS SHALL BE MADE BY WELDERS CERTIFIED FOR WELDING MEMBERS OF GAGE BEING USED PER AWS D.1.3-08.
8. BRIDGING REQUIREMENTS FOR BEARING AND EXTERIOR WALLS: MINIMUM BRIDGING 1 1/2" "C" CHANNEL WITH 1-1/2" X 2" X 54 MILS (16 GAGE) CLIP ANGLES AT EACH STUD.
  - A. WALLS UP TO 10 FEET HIGH:
    1. BEARING WALLS: TWO ROWS AT THIRD POINTS.
    2. NON-BEARING EXTERIOR WALLS: ONE ROW AT MID-HEIGHT.
9. LOCATE JOIST BRIDGING AT 5'-0" MAXIMUM SPACING FOR FLANGES 1 5/8" AND NARROWER. LOCATE JOIST BRIDGING AT 7'-0" MAXIMUM SPACING FOR FLANGES WIDER THAN 1 5/8". USE 54 MILS (16 GAGE) SOLID BRIDGING (NOT LESS THAN 2" SHALLOWER THAN JOIST) IN FIRST TWO AND LAST TWO JOIST SPACES. BETWEEN END SPACES INSTALL STRAP BRACING 2" X 54 MILS (16 GAGE) TOP & BOTTOM FOR 8'-0" RUN, THEN ONE SOLID 54 MILS (16 GAGE) BRIDGING IN SPACE, REPEATED AS REQUIRED.

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Sheet Title: **GENERAL NOTES**  
Project Title: **HIDDEN VALLEY POOL HOUSE**  
19308 Schmarr Drive  
Lawrenceburg, IN 47025

Issue: **0** Sheet No.: **S-6** OF 0