Reviewed for Code Compliance

07/19/2024



<u>Design Loads</u> Floors

50 PSF

The design herein and all construction standards shall utilize the 2018 International Building Code.

- <u>Concrete:</u> 1. Place footings on firm, undisturbed natural soil. Footings placed on compacted fill shall require the approval of a geotechnical engineer. 2. No concrete shall be poured on frozen sub-grade or be subject to freezing conditions until
- fully cured. 3. All concrete form work shall be adequately braced and tied to form true lines, square
- corners and plumb walls. Trench forming is not allowed. 4. All cast-in-place concrete shall be type I/II and develop 3,000 PSI compressive strength in
- 28 days. 5. All concrete work and reinforcement detailing shall be in accordance with ACI Building Code
- 301 and 318. 6. All reinforcing shall be deformed bars conforming to ASTM A615 grade 60. Deformed bars
- specified to be field bent, stirrups, and ties can be grade 40, UNO. . Welded wire fabric shall conform to ASTM 185 and shall be lapped 1 full mesh at splices and be tied together.
- 8. Concrete protection for reinforcement shall be: -3" minimum for concrete cast against earth
 - -2" minimum for concrete poured in forms
 - -3/4" in slabs and walls, not exposed to weather
- 9. Reinforcement shall be fabricated and placed per ACI 315. Make all bars continuous around corners. Lap splices shall be a minimum of 50 bar diameters.
- 10. Slabs, footings, and walls shall not have joints in a horizontal plane. Any stop in concrete work (cold joints) must be made at a third point of span with vertical bulkheads and horizontal shear keys. Continue top bar in wall down through corners of openings for 2'-0" & tie with a vertical bar 3' from opening.

<u>Metals:</u>

- Miscellaneous clips, anchors and connectors shall be Simpson strong tie or approved equal, unless otherwise noted. Products shall be installed in accordance with manufacturer's
- instructions. 3. All steel shall be fabricated and erected per AISC Steel Construction Manual. 4. Welding shall be done by a qualified welders.

PLUMBING ACCESS PENETRATION CUT PROCEDURE, INFORMATION AND REQUIREMENTS: -CONCRETE AND METAL PAN APPROXIMATELY 4" THICK.

-BAR JOIST SPACING @ 3'-0" OC PER ORIGINAL STRUCTURE PLANS. -BAR JOIST SHALL NOT BE DAMAGED OR ALTERED IN ANY MANNER. -LOCATE EXACT FLOOR JOIST LAYOUT & MARK ON EXISTING FLOOR.

-LOCATE PROPOSED 24"X24" MAX ACCESS LOCATION & VERIFY JOIST LAYOUT AND ANY CONFLICTS ASSOCIATED WITH SAW-CUT OPERATION. -DETERMINE METAL PAN ORIENTATION.

-ACCESS PENETRATION SHALL BE COMPLETED WITH A DEMO-SAW TO CUT THE CONCRETE FIRST WITHOUT CUTTING METAL PAN TO THE POINT WHERE CAN NO LONGER SUPPORT CONCRETE WEIGHT. -REMOVE CONCRETE CUT LEAVING THE METAL PAN IN PLACE.

-CUT METAL PAN IN A 22"X24" SQUARE LEAVING 1" METAL LINE AROUND TO ALLOW THE RE-INSTALLMENT AND ATTACHMENT OF CUT METAL PAN BY WELDING TO EXISTING 1" METAL LINE.

-PLACE SHORT WOOD 2X'S ACROSS BAR JOIST FOR SUPPORT WHILE WORKING IN JOIST SPACE. -DO NOT STEP ON OR PLACE ANY MATERIAL ON CEILING DRYWALL OR DAMAGE CEILING DRYWALL IN ANY MANNER. -PROCEED WITH PLUMBING ALTERATIONS ONCE SPACE IS SAFE TO WORK IN.

-INSTALL CUT-OUT METAL PAN BACK INTO ITS ORIGINAL POSITION AND WELD IN PLACE. $\frac{1}{4}$ " WELDS MAX. IF NECESSARY, PROVIDE METAL SPLICE TO ASSIST IN CREATING A PROPER INSTALLATION OF CUT-OUT METAL PAN. -NO GAPS IN METAL CUT SEAM SHALL BE ALLOWED. CLOSE ALL GAPS WITH WELDED PLATES. -INSPECTIONS ARE REQUIRED BY RCRBD FOR ALTERED PLUMBING PIPING, REPLACED CUT-OUT METAL PAN AFTER WELDED IN

PLACE BUT PRIOR TO REPLACEMENT CONCRETE. -POUR A 4000 PSI CONCRETE MIX INTO PAN TO PROPER LEVEL.



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