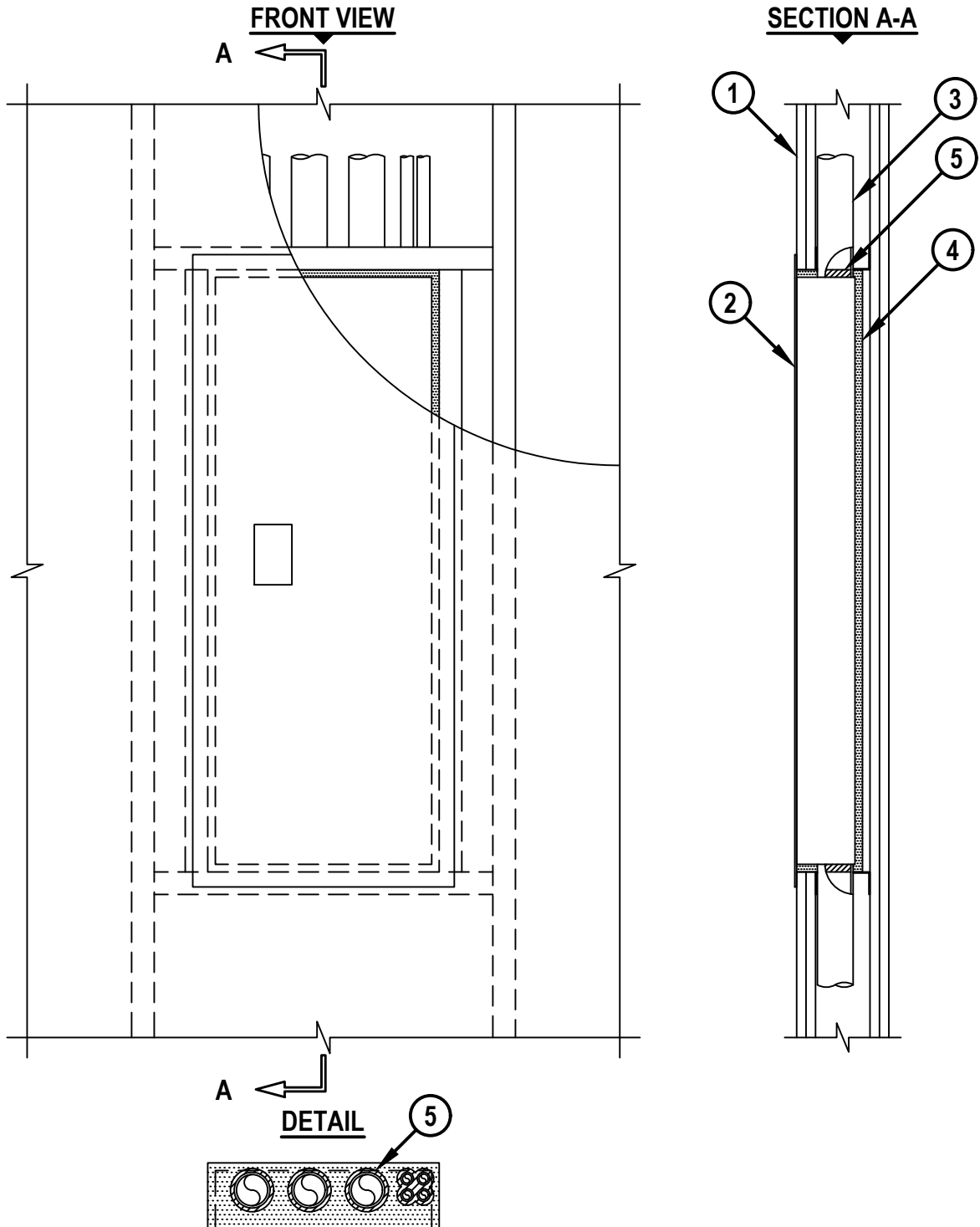


UL/cUL SYSTEM NO. W-L-7324
METALLIC BOX THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR.
 T-RATING = 1-HR. OR 2-HR.

WL7324b.010622



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Sheet	1 of 3
Scale	3/32" = 1"
Date	Jan. 06, 2022

Drawing No.
**WL
 7324b**

Saving Lives through Innovation and Education

METALLIC BOX THROUGH GYPSUM WALL ASSEMBLY

F-RATING = 1-HR. OR 2-HR.

T-RATING = 1-HR. OR 2-HR.

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1. GYPSUM WALL ASSEMBLY (UL/cUL CLASSIFIED U400, V400, OR W400 SERIES) (1-HR. OR 2-HR. FIRE-RATING) (2-HR SHOWN) TO CONSIST OF THE FOLLOWING CONSTRUCTION FEATURES:
 - A. MINIMUM 3-5/8" WIDE STEEL STUDS SPACED MAXIMUM 24" O.C. ADDITIONAL STUDS INSTALLED HORIZONTALLY AT THE TOP AND BOTTOM OF THE STEEL BOX, AND VERTICALLY AS REQUIRED FOR STEEL BOX ATTACHMENT.
2. STEEL BOX - STEEL ELECTRICAL PANEL BOX, STEEL UTILITY BOX, OR STEEL MED-GAS VALVE BOX (20 GA. OR HEAVIER) WITH MAXIMUM DIMENSIONS OF 14-3/8" WIDE BY 39" HIGH BY 3-7/8" DEEP AND WITH STEEL DOOR AND MOUNTING FLANGE. MOUNTING FLANGE TO COVER OPENING IN GYPSUM BOARD. SIDES OF STEEL BOX TO BE SECURED FROM INSIDE OF BOX TO WALL FRAMING USING STEEL SCREWS AFTER APPLICATION OF WRAP MATERIAL (ITEM 4) (SEE NOTE NO. 2 BELOW).
3. TOP, BOTTOM, AND/OR SIDES OF BOX MAY BE PENETRATED BY UP TO TWENTY OF THE FOLLOWING ITEMS :
 - A. NOMINAL 1/2" TO NOMINAL 2" DIAMETER STEEL PIPE.
 - B. NOMINAL 1/2" TO NOMINAL 2" DIAMETER CAST OR DUCTILE IRON PIPE.
 - C. NOMINAL 1/2" TO NOMINAL 2" DIAMETER COPPER PIPE OR TUBING.
 - D. NOMINAL 1/2" TO NOMINAL 2" DIAMETER STEEL CONDUIT OR EMT.
 - E. NOMINAL 1/2" TO NOMINAL 2" DIAMETER FLEXIBLE STEEL CONDUIT.
4. HILTI CFP-ES ENDO-SHIELD INSTALLED IN ONE LAYER SIZED TO COVER OUTSIDE BACK AND FOUR SIDES OF STEEL BOX. AT THE CORNERS OF THE STEEL BOX WRAP IS TO BE CUT HORIZONTALLY OR VERTICALLY EXTENDING FROM THE CORNER OF THE BOX THROUGH THE EDGE OF THE MATERIAL. CIRCULAR OPENINGS MADE IN WRAP TO ACCOMMODATE PIPES, TUBES, OR CONDUITS SIZED MAXIMUM 1/2" LARGER THAN THE OUTSIDE DIAMETER OF THE PIPE, TUBE, OR CONDUIT. WRAP MATERIAL IS FOLDED TO MAINTAIN CONTACT WITH BACK AND FOUR SIDES OF STEEL BOX. AT THE CORNERS OF THE BOX, EXCESS WRAP MATERIAL TO BE TRIMMED AT TOP AND BOTTOM SO THAT IT IS FLUSH WITH THE WRAP ON THE SIDES. CORNERS TO BE SEALED WITH ALUMINUM FOIL OR FOIL-SCRIM-KRAFT TAPE (SEE NOTES NO. 3, 4, AND 5 BELOW).
- 4A. [OPTIONAL - NOT SHOWN] HILTI CFP-ES ENDO-SHIELD MAY BE INSTALLED TO COVER THE INSIDE BACK AND FOUR SIDES OF STEEL BOX. WHEN INSTALLED INSIDE THE BOX, WRAP MAY BE CUT IN INDIVIDUAL PIECES WITH CORNERS SEALED WITH ALUMINUM FOIL OR FOIL-SCRIM-KRAFT TAPE. MECHANICALLY FASTEN THE WRAP ON THE INSIDE BACK OF THE BOX WITH SHEET METAL SCREWS WITH 3/4" STEEL WASHERS. LOCATE ONE FASTENER AT EACH CORNER (SEE NOTES NO. 4, 5, AND 6 BELOW).



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5. MINIMUM 1/2" DEPTH OF HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT OR HILTI CP 618 FIRESTOP PUTTY STICK TO BE INSTALLED WITHIN EACH OPEN END OF THE PIPES, CONDUITS, OR TUBES THAT TERMINATE WITHIN THE BOX. ADDITIONAL SEALANT OR PUTTY TO FILL CUTOUTS MADE IN WRAP TO ACCOMMODATE PIPES, TUBES, OR CONDUITS.
6. [NOT SHOWN] MINIMUM 1/4" BEAD OF FS-ONE MAX INTUMESCENT FIRESTOP SEALANT OR HILTI CP 606 FLEXIBLE FIRESTOP SEALANT APPLIED OVER EXPOSED EDGE OF HILTI CFP-ES ENDO-SHIELD PRIOR TO INSTALLING MOUNTING FLANGE OF STEEL BOX (ITEM 2).

NOTES :

1. MAXIMUM SIZE OF OPENING = 15-3/8" x 40".
2. ELECTRICAL COMPONENT AND WIRING INSTALLATION TO COMPLY WITH THE NATIONAL ELECTRICAL CODE (NFPA 70).
3. AS AN ALTERNATIVE TO TRIMMING, EXCESS WRAP MATERIAL MAY BE FOLDED ONTO THE SIDES AND SECURED WITH ALUMINUM FOIL OR FOIL-SCRIM-KRAFT TAPE.
4. AS AN OPTION, WHERE PENETRANT SPACING DOESN'T ALLOW INDIVIDUAL OPENINGS, WRAP MAY BE CUT AROUND TWO OR MORE PENETRANTS - NOT TO EXCEED 1/2" ANNULAR SPACE BETWEEN WRAP AND PENETRANTS.
5. [OPTIONAL - NOT SHOWN] A BEAD OF CONSTRUCTION ADHESIVE MAY BE APPLIED TO THE BACK AND SIDES OF STEEL BOX AT THE EDGE PRIOR TO APPLICATION OF WRAP MATERIAL.
6. THE OPTIONAL INTERNAL MOUNTING OF HILTI CFP-ES ENDO-SHIELD IS NOT ALLOWED WHEN ELECTRICAL COMPONENTS ARE INSTALLED IN THE BOX (ITEM 2).



Hilti Firestop Systems

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