

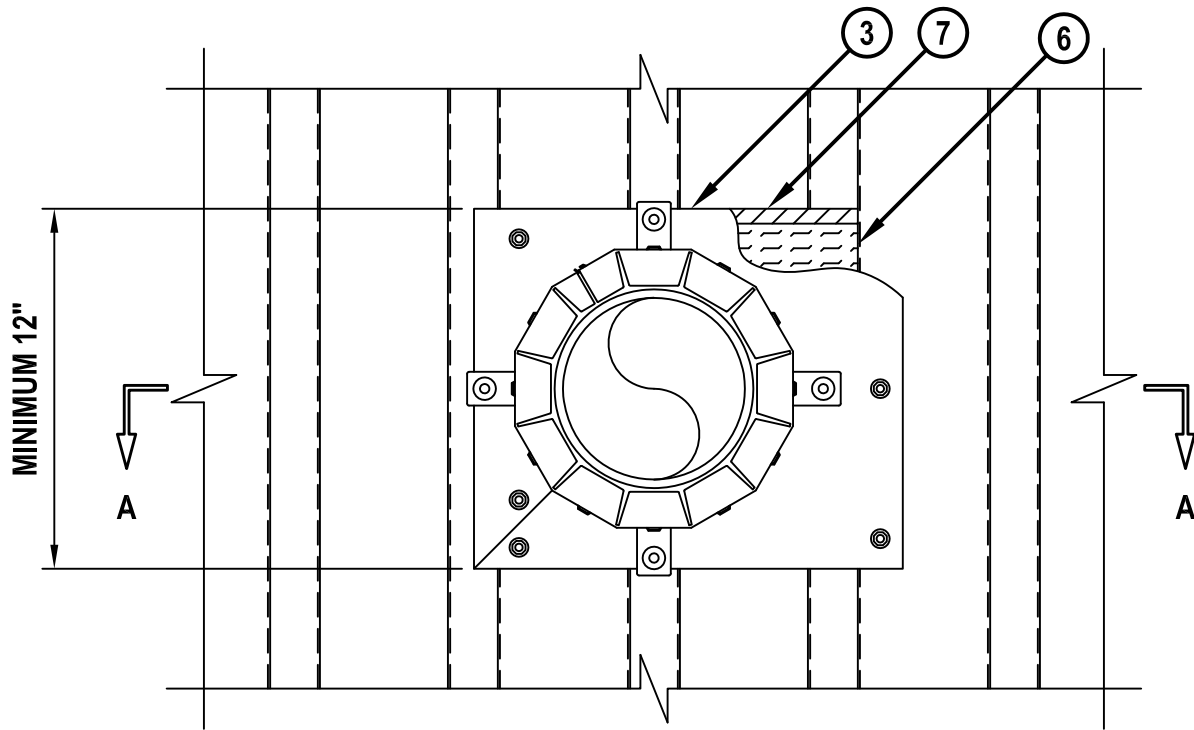
UL SYSTEM NO. F-A-2025

PLASTIC PIPE THROUGH CONCRETE FLOOR OVER METAL DECKING

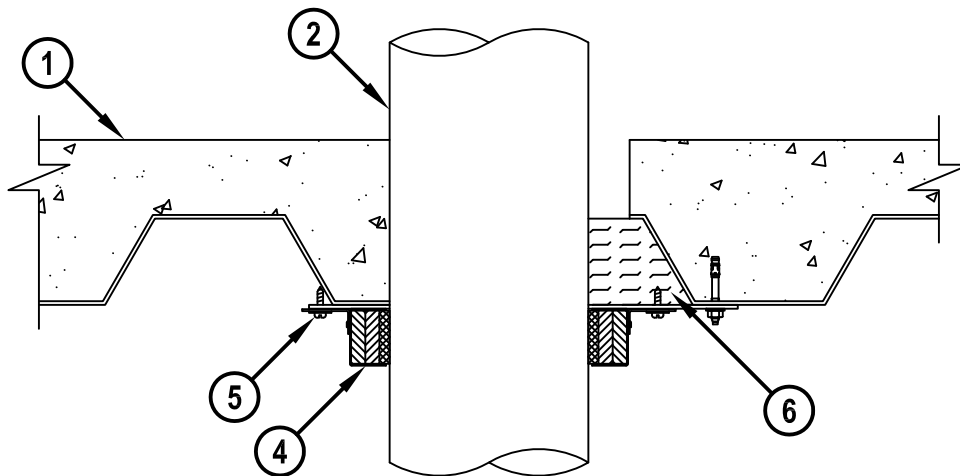
F-RATING = 2-HR.

T-RATING = 2-HR.

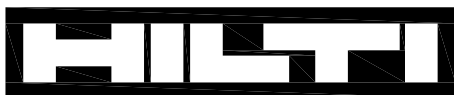
BOTTOM VIEW



SECTION A-A



FA2025p.011515



Hilti Firestop Systems

HILTI, Inc.
Tulsa, Oklahoma USA (800) 879-8000

Sheet 1 of 2

Scale 5/32" = 1"

Date Jan. 15, 2015

Drawing No.

**FA
2025p**

Saving Lives through Innovation and Education

PLASTIC PIPE THROUGH CONCRETE FLOOR OVER METAL DECKING

F-RATING = 2-HR.

T-RATING = 2-HR.

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1. NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 2-1/2" THICK) OVER METAL DECKING (2-HR. FIRE-RATING).
2. PENETRATING ITEM TO BE ANY OF THE FOLLOWING (ALSO SEE NOTE NO. 3 BELOW) :
 - A. MAXIMUM 6" NOMINAL DIAMETER PVC PLASTIC PIPE (CELLULAR OR SOLID CORE).
 - B. MAXIMUM 6" NOMINAL DIAMETER ABS PLASTIC PIPE (CELLULAR OR SOLID CORE).
 - C. MAXIMUM 6" NOMINAL DIAMETER FRPP PLASTIC PIPE.
 - D. MAXIMUM 6" NOMINAL DIAMETER CPVC PLASTIC PIPE (CLOSED PIPING SYSTEM ONLY).
3. SHEET METAL PLATE (MIN. 18 GA.) FASTENED TO VALLEYS OF DECKING WITH 1/4" x 1-3/4" LONG STEEL EXPANSION BOLTS WITH STEEL NUTS AND MINIMUM 3/4" STEEL WASHERS OR 0.145 x 1-1/4" LONG POWDER ACTUATED FASTENERS WITH 1-7/16" DIAMETER STEEL WASHER, HILTI 1/4" x 1-1/4" LONG KWIK-CON II CONCRETE SCREW ANCHOR, 1/4" x 1-3/4" KWIK-BOLT 3 STEEL EXPANSION ANCHOR, OR HILTI X-DNI 27 P8 S15 POWDER ACTUATED FASTENER WITH INTEGRATED WASHER AT EACH CORNER, AT EACH PLATE/VALLEY INTERSECTION AND AT BOTH SIDES OF SLIT MADE TO PERMIT INSTALLATION AROUND PIPE. FASTENERS NOT TO EXCEED 10" SPACING.
4. HILTI CP 643N FIRESTOP COLLAR WITH FASTENING HOOKS.
5. EACH FASTENING HOOK SECURED TO VALLEY OF DECKING WITH 1/4" x 1-1/2" LONG STEEL EXPANSION BOLTS WITH STEEL NUTS AND MINIMUM 3/4" STEEL WASHERS. WHERE ANCHOR HOOKS ARE BENEATH THE CREST OF DECKING, SECURE FASTENING HOOKS WITH NO. 10 x 1/2" LONG SELF-DRILLING SELF TAPPING STEEL SCREWS AND WASHERS.
6. MINERAL WOOL (MIN. 4 PCF DENSITY) TIGHTLY PACKED TO FILL METAL DECK FLUTES ABOVE METAL PLATE AND RECESSED TO ACCOMMODATE SEALANT.
7. MINIMUM 1/4" DEPTH HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT TO COMPLETELY COVER MINERAL WOOL WITHIN FLUTES.
8. [NOT SHOWN] MINIMUM 1/2" BEAD HILTI FS-ONE MAX OR FS-ONE INTUMESCENT FIRESTOP SEALANT APPLIED AROUND PERIMETER OF METAL PLATE.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 8".
 2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 1-1/2".
 3. CLOSED OR VENTED PIPING SYSTEM (PVC, ABS, FRPP = SCHEDULE 40; CPVC = SDR 13.5).
 4. SHEET METAL PLATE TO EXTEND MINIMUM 1-1/2" ON THE FLOOR UNIT VALLEY ON EACH END.



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