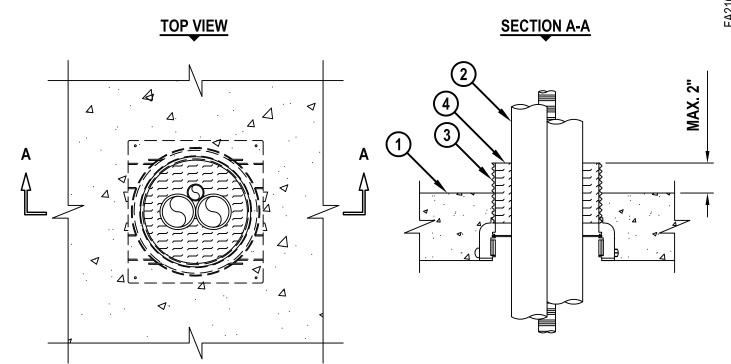
UL SYSTEM NO. F-A-2103

MULTIPLE NONMETALLIC PIPES THROUGH CONCRETE FLOOR OR CONCRETE OVER METAL DECKING

F-RATING = 2-HR. T-RATING = 0-HR.



- 1. CONCRETE FLOOR ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK).
 - B. STEEL FLOOR UNIT/FLOOR ASSEMBLY LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE FLOOR (MINIMUM 4-1/2" THICK) OVER METAL DECKING.
- 2. NONMETALLIC PIPE OR CONDUIT BUNDLE TO CONSIST OF ANY OF THE FOLLOWING (MAX. QTY. = 3):
 - A. MAXIMUM 2" NOMINAL DIAMETER PVC PLASTIC PIPE (CELLULAR AND SOLID CORE) (CLOSED OR VENTED PIPING SYSTEM).
 - B. MAXIMUM 2" NOMINAL DIAMETER CPVC PLASTIC PIPE (CLOSED PIPING SYSTEM ONLY).
 - C. MAXIMUM 1" NOMINAL DIAMETER ELECTRICAL NONMETALLIC TUBING (ENT).
- 3. HILTI CP 680-P [2", 3", 4" OR 6"] OR CP 680-PX [2" OR 3"] CAST-IN FIRESTOP DEVICE, CAST OR GROUTED INTO CONCRETE FLOOR.
- 4. MINIMUM 4" THICKNESS MINERAL WOOL (MINIMUM 4 PCF DENSITY) TIGHTLY PACKED INTO DEVICE, COMPLETELY FILLING ANNULAR SPACE AROUND NONMETALLIC PIPES OR CONDUITS.

NOTES: 1. PVC PLASTIC PIPE = SCH 40; CPVC PLASTIC PIPE = SDR 13.5.

2. FOR CONCRETE FLOOR OVER METAL DECKING APPLICATIONS, A METAL DECK ADAPTER KIT IS REQUIRED.



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

Sheet	1 of 1
Scale	5/32" = 1"
Date	July 8, 2015

FA 2103e