

UL SYSTEM NO. W-J-2399

PLASTIC PIPE THROUGH CONCRETE WALL OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.

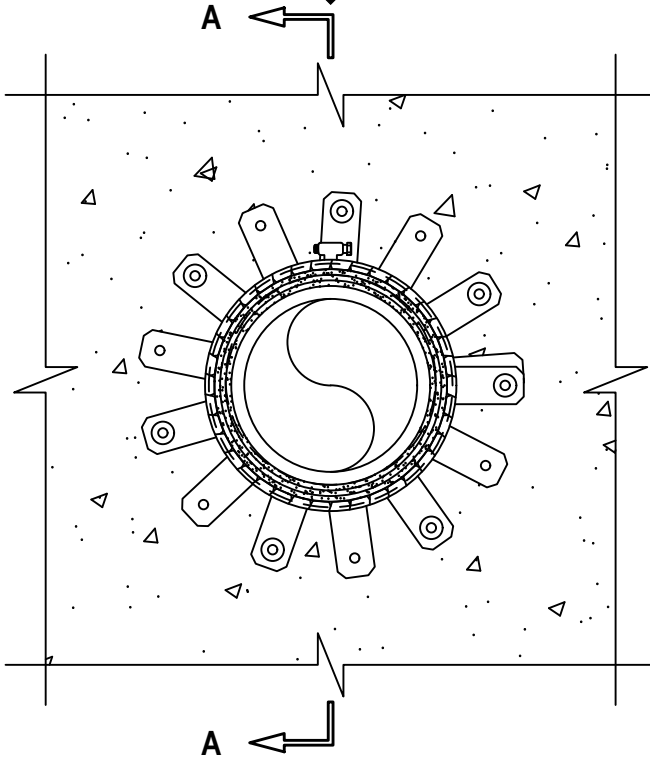
T-RATING = 2-HR.

L-RATING AT AMBIENT = 3 CFM / SQ FT

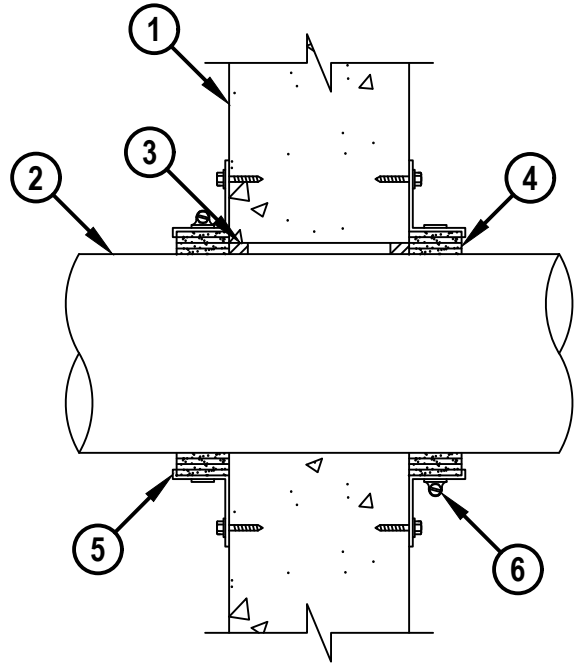
L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT

WJ2399a.031523

FRONT VIEW



SECTION A-A



HILTI, Inc.
Plano, Texas USA (800) 879-8000

Sheet	1 of 2
Scale	5/32" = 1"
Date	Mar. 15, 2023

Drawing No.
WJ
2399a

Saving Lives through Innovation and Education

UL SYSTEM NO. W-J-2399

PLASTIC PIPE THROUGH CONCRETE WALL OR BLOCK WALL ASSEMBLY

F-RATING = 2-HR.

T-RATING = 2-HR.

L-RATING AT AMBIENT = 3 CFM / SQ FT

L-RATING AT 400°F = LESS THAN 1 CFM / SQ FT

WJ2399a.031523

1. CONCRETE WALL ASSEMBLY (2-HR. FIRE-RATING) :
 - A. LIGHTWEIGHT OR NORMAL WEIGHT CONCRETE WALL (MINIMUM 6" THICK).
 - B. ANY UL/cUL CLASSIFIED CONCRETE BLOCK WALL.
2. PENETRATING ITEM TO BE ONE OF THE FOLLOWING NONMETALLIC PIPES :
 - A. MAXIMUM 6" NOMINAL DIAMETER PVC PLASTIC PIPE (SCHEDULE 80 OR 40) (CLOSED OR VENTED PIPING SYSTEM).
 - B. MAXIMUM 6" NOMINAL DIAMETER CPVC PLASTIC PIPE (SCHEDULE 80 OR 40) (CLOSED OR VENTED PIPING SYSTEM).
3. MINIMUM 5/8" DEPTH HILTI FS-ONE MAX INTUMESCENT FIRESTOP SEALANT.
4. HILTI CP 648E WRAP STRIP (NOMINAL 3/16" THICK x 1-3/4" WIDE) CONTINUOUSLY WRAPPED AROUND OUTER CIRCUMFERENCE OF THE PIPE, COVERING FOUR TIMES, WITH ENDS BUTTED AND HELD IN PLACE WITH TAPE (MASKING OR ALUMINUM). WRAP STRIP TO BE TIGHTLY BUTTED AGAINST WALL SURFACES.
5. HILTI 1-3/4" RETAINING COLLAR WRAPPED OVER THE WRAP STRIPS, OVERLAPPING MINIMUM 1". EVERY OTHER TAB OF RETAINING COLLAR (MINIMUM OF SEVEN) TO BE SECURED TO BOTH SIDES OF THE CONCRETE WALL WITH 1/4" DIAMETER STEEL EXPANSION BOLTS MINIMUM 1-1/4" LONG WITH 1-1/4" DIAMETER STEEL WASHERS.
6. NOMINAL 1/2" WIDE STAINLESS STEEL HOSE CLAMP FASTENED AT MID-HEIGHT OF RETAINING COLLAR OR TWO NO. 8 SHEET METAL SCREWS LOCATED AT OVERLAP LOCATION USED TO SECURE COLLAR TOGETHER.

NOTES : 1. MAXIMUM DIAMETER OF OPENING = 7".
2. ANNULAR SPACE = MINIMUM 0", MAXIMUM 3/8".



Hilti Firestop Systems

HILTI, Inc.
Plano, Texas USA (800) 879-8000

Sheet	2 of 2
Scale	-
Date	Mar. 15, 2023

Drawing No.

WJ
2399a

Saving Lives through Innovation and Education