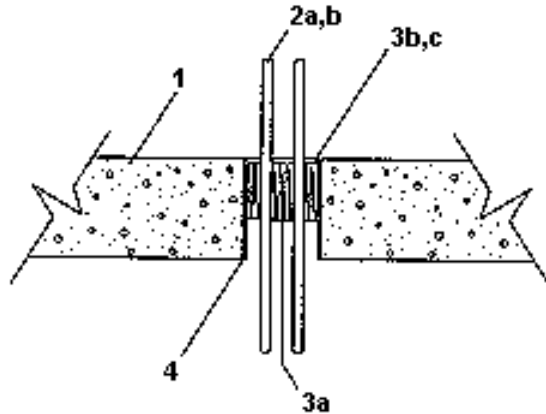


ITS DESIGN NO. AD/PHV 180-04

Horizontal or Vertical (Floor or Wall),
F RATING - NO PENETRATIONS, OR 2(a) - 3 HOURS, 2(b) - 1 HOUR,
T RATING - NO PENETRATIONS - 2 HOURS, 2(a), (b) - 40 MINUTES
TEST PRESSURE DIFFERENTIAL - 4 Pa (0.016 IN. OF WATER) MINIMUM



1. **Floor or Wall:** Minimum 6" (152 mm) thick normal density concrete. Maximum size of opening 10-3/4" x 4-1/2" (272 mm x 116 mm).

2. Penetrations:

a. Nominal 2" (51 mm) diameter Schedule 40 steel pipe reliably supported above the opening. Minimum 2-11/32" (60 mm) clearance to be maintained between pipes and minimum 1-7/32" (31 mm) clearance to be maintained between pipes and perimeter of opening.

b. Nominal 2" (51 mm) copper pipe with a 1/16" (1.59 mm) wall thickness. See 2(a) for clearances.

3. Firestop Components:

a. "A/D Firebarrier" or other Mineral Wool of minimum 4 pcf ($65 \text{ kg/m}^3 \pm 1/2 \text{ pcf}$) (8 kg/m^3 compressed a minimum of 33% between pipes and edge of opening. Minimum depth of 4" (100 mm) required. Minimum of 1/2" (13 mm) space to be left above insulation for 3(b) or 3(c).

b. "A/D Firebarrier Silicone Sealant"* - applied over 3(a) to a minimum depth of 1/2" (13 mm) For vertical applications apply to a minimum depth of 1/2" (13 mm) on both sides of assembly. OR

c. For horizontal applications only, "A/D Firebarrier Silicone Sealant SL"* - applied over 3(a) to a minimum depth of 1/2" (13 mm), flush with the top surface of the slab.

*Component bearing the Warnock Hersey Certification Mark