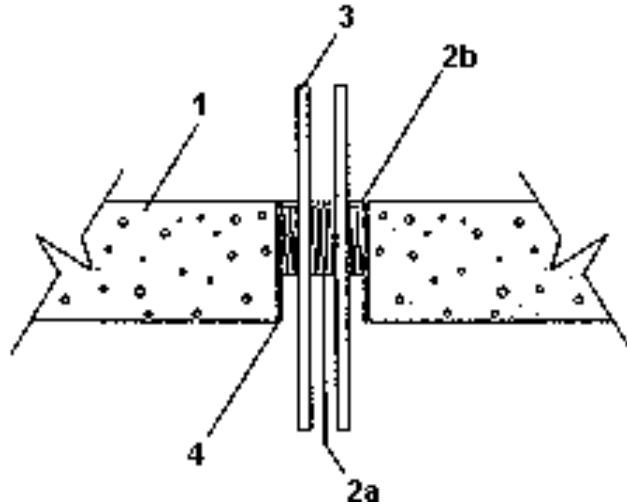


ITS DESIGN NO. AD/PH 180-03

Horizontal (Floor), F RATING - 3 HOURS, T RATING - No Penetrations - 3 HOURS, - With Penetrations - 10 MINUTES
TEST PRESSURE DIFFERENTIAL - 5 Pa (0.02 IN. OF WATER) MINIMUM



1. **Floor:** 7" (178 mm) thick, normal density concrete slab. Maximum size of opening 9" (227 mm) diameter.
2. **Firestop Components:**
 - a. Type "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 pipe and perimeter of opening at a minimum depth of 4" (100 mm). Minimum $13/64$ " (5 mm) deep space to be left above mineral wool for installation of seal 2(b).
 - b. Type "A/D Firebarrier Seal"* - applied over mineral wool to a minimum thickness of $13/64$ " (5 mm).
3. **Copper Pipe:** Nominal $1/2$ " (13 mm) diameter with a wall thickness of $1/32$ " (0.85 mm). Minimum clearance of $2 \ 3/4$ " (70 mm) between pipe and perimeter of through opening. Minimum $1-13/32$ " (36mm) clearance between pipes.
4. **PVC Pipe Sleeve (Optional) :** 9" (227 mm) O.D. or smaller $1/2$ " (13 mm) wall thickness.

*Component bearing the Warnock Hersey Certification Mark