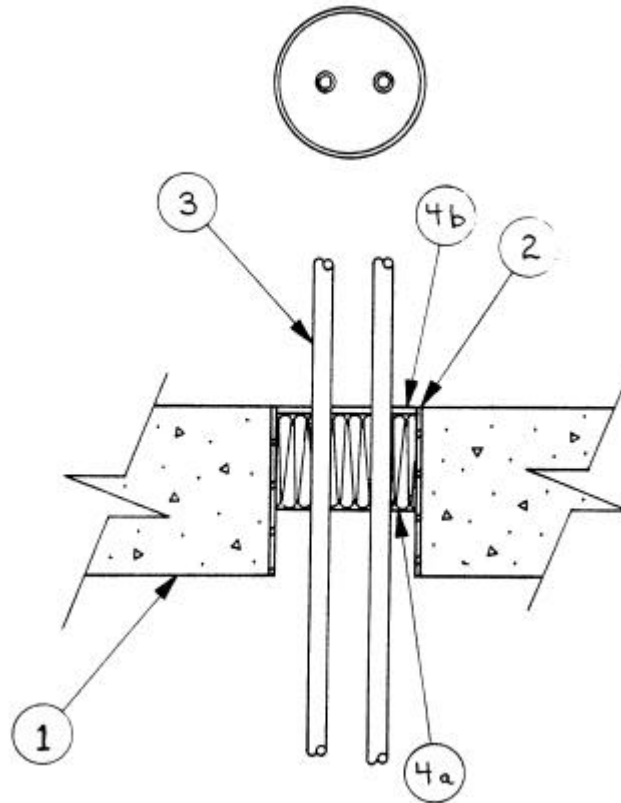


**SYSTEM No. SP221
(For Horizontal Separation)**

F and FH Ratings - 3 h
FT and FTH Ratings - 0&3 h (See Item 3)



- 1. Floor** – Normal-density concrete, 178 mm thick. Maximum size of opening 227 mm diameter.
- 2. PVC Sleeve** (optional) – 227 mm diameter, 12 mm diameter wall thickness cast or grouted into floor or wall assembly flush with floor or wall surfaces.
- 3. Copper Pipes** – 13.9 mm OD, 13 mm ID copper pipe cast or grouted into floor or wall assembly flush with floor or wall surfaces. Minimum clearance of 70 mm between pipe and edge of opening. Minimum 36 mm clearance between pipes. When no pipes penetrate assembly, FT and FTH Ratings are 3 h.

Type of Penetrating Item	Ratings, h	
	F and FH	FT and FTH
None	3	3
Copper pipe(s) (Item 3)	3	0

SP221 continued...

- **4. Firestop System Components** – (Guide No. 40 U19.13).

(a) Type "A/D FIREBARRIER Mineral Wool" to be compressed 33% (minimum) between pipes and perimeter of opening, minimum depth of 100 mm. A minimum 5 mm deep space to be left above mineral wool for seal (Item 4b).

(b) For horizontal separations, Type "A/D FIREBARRIER Seal" applied over mineral wool (Item 4a) to a minimum wet depth of 5 mm, or Type "A/D FIREBARRIER Silicone Sealant SL" to a minimum depth of 6.4 mm.

For vertical separations, Type "A/D FIREBARRIER Seal NS" applied over mineral wool (Item 4a) to a minimum wet depth of 5 mm, or Type "A/D FIREBARRIER Silicone Sealant" to a depth of 6.4 mm, symmetrically to both sides of the assembly.

A/D FIRE PROTECTION SYSTEMS INC.