

TYPE FP

1. PRODUCT NAME:

A/D Type FP

2. PRODUCT DESCRIPTION

Basic Use: A/D Type FP is a sprayed fire resistive material intended for application to structural steel, concrete and other substrates. It provides excellent fire protection, thermal insulation and acoustic properties in one, high quality, 100% asbestos-free product.

Composition and Materials:

A/D Type FP is a noncombustible blend of mineral wool, Portland cement and proprietary ingredients. Factory blended, it requires only the addition of water at the job site.

Limitations: A/D Type FP is not intended for direct exposure to weather or excessive physical abuse. Contact your A/D representative for alternative product recommendations.

Packaging: A/D Type FP is packaged in 18.6-kg (41 lb.) polyethylene bags.

Color: Grey.

3. TECHNICAL DATA

Fire Resistance Ratings:

A/D Type FP has been subjected to numerous fire tests in accordance with CAN/ULC-S101 and ASTM E-119. Refer to ULC's "List of Equipment and Materials" and UL's "Fire Resistance Directory" for fire rated designs. Contact A/D for a list of current designs. See TABLE 4.

Insulation: As insulation, A/D Type FP provides a R value of R4 per inch ("K" value 0.25). This eliminates cold floors – for a much more comfortable environment – and also reduces energy costs. Being noncombustible, it needs no flame retardant additives and remains, permanently fire resistive. Because of its sprayed joint-free application, it provides a continuous blanket of insulation, without thermal bridging through gaps and metal pins. And because it does not support fungus growth it is ideal for food storage. In tests by the ORTECH International (O.R.F), it maintained 97% of its thermal resistance in an environment with R.H. of 95%.

Acoustical Treatment:

A/D Type FP can be applied to render a monolithic textured finish with high sound absorbency. Refer to Table 3.

PHYSICAL PROPERTIES –TABLE 1

Property/Test	A/D Type FP
Density, ASTM E605	10.1 lbs/ft ³ (165 kg/m ³)
Combustibility, ASTM E136	Passed, noncombustible
Combustibility, CAN4-S114	Passed, noncombustible
Compressive Strength, ASTM E761	205lb/ft ² (9.8 kPa)
Cohesion Adhesion, ASTM E736	203lb/ft. ² (9.7 kPa)
Impact, ASTM E760	Passed
Deflection, ASTM E759	Passed
Air Erosion, ASTM E859	0.02 g/ft ² (0.235 g/m ²) @ 24hr
Surface Burning, ASTM E84	Flame Spread: 0, Smoke: 0

Sound Isolation Data:

A/D Type FP is a highly efficient and low cost sound barrier. 1 inch (25 mm) of A/D Type FP can provide an STC up to 52. Cutouts for electrical boxes and joints are completely sealed by the spraying operation. The following STC values resulted when A/D Type FP was applied to the interior face of a partition consisting of a single layer of gypsum board on a metal or wood stud frame and tested in accordance with ASTM E90. Contact A/D for sound transmission loss data at specific frequencies.

SOUND TRANSMISSION – TABLE 2

Gypsum Board Thickness	A/D Type FP Thickness	STC
2-1/2" (63 mm) metal studs, 24" (610 mm) O.C.		
1/2" (13mm)	1/2" (13 mm)	45
1/2" (13mm)	7/8" (22 mm)	48
5/8" (16 mm)	3/4" (19 mm)	48
5/8" (16 mm)	1" (25 mm)	51
2" x 4" (50x100 mm) wood studs, 16" (406 mm) O.C.		
5/8" (16 mm)	1" (25 mm)	52

SOUND ABSORPTION DATA - TABLE 3

A/D Type FP Thickness	Mounting Method	Coefficient of Sound Absorption						NRC
		Frequency (Hertz)						
		125	250	500	1000	2000	4000	
3/8 in. (10 mm)	Solid	.28	.18	.28	.48	.74	.94	.45
1/2 in. (13 mm)	Solid	.28	.21	.42	.72	.92	1.04	.55
1 in. (25 mm)	Solid	.25	.37	.81	1.01	1.02	1.05	.80
1 in. (25 mm)	Metal Lath	.35	.96	1.03	.95	.96	1.05	1.00

Tests carried out by the National Research Council of Canada in Ottawa, Nov. 8, 1989

4. INSTALLATION

Surface Preparation:

Surfaces to receive A/D Type FP must be free of dirt, oil, grease, loose scale or other substances that may impair adhesion. Surfaces may be sprayed with Type TC55 adhesive per design requirements. Hangers, clips or other attachments must be in place prior to fireproofing application.

Method:

A/D Type FP is applied only by authorized applicators using specific "dry-mix" type fireproofing equipment.

5. FINISHES

A/D Type FP finishes vary according to particular end use requirements and application techniques. For normal fireproofing installations the product is

sprayed to the required density and water tamped. Where a harder finish is required the product may be board tamped and / or sealed at additional cost.

6. AVAILABILITY AND COST

Availability: A/D sales offices and technical representatives are located throughout North America

7. MAINTENANCE

No maintenance should be required. Damaged caused by other trades should be patched at the expense of trade causing damage.

8. TECHNICAL SERVICE

Please contact your nearest A/D representative or office

ULI and ULC FIRE TEST DESIGNS - TABLE 4

Construction Type	Rating(s), hours					Design No.	
	1	1.5	2	3	4	ULI	ULC
Protected Floor	-	U	U	R	-	D838	
	-	-	B	-	-		D842
	U	-	B	-	-		D848
	-	U	U	B	-	D849	D849
	U	-	B	-	-	D852	
	U	U	U	R	-	D863*	
	-	-	-	B	-		F803
	-	-	-	B	-		F804
	-	U	U	B	-		F808
	-	U	B	-	-		F809
	-	U	B	-	-		F811
	U	U	R	R	-	D864*	F817*
	B	-	-	-	-		F818*
Unprotected Floor	B	B	B	B	-	D918	
	B	B	R	R	-		F906*
Concrete Floor	B	B	R	-	-		I800*
Beams	U	-	U	U	-	N809	N809
	U	-	U	U	-	N810	N810
	U	U	U	-	-	N812	
Protected Roof	U	-	-	-	-	P824*	R806
	B	B	B	-	-	P828	
Metal Wall Assembly	B	B	B	B	B		W802*
Wide Flange Columns	B	B	B	B	B		Z805*
	-	-	B	B	B	X808	X820*
	-	-	B	B	B	X813	X821*
	-	-	B	B	B	X819	X822*
Pipe and Tube Columns	B	B	B	-	-		Z806*
	B	B	B	-	-		Z807*
	B	B	B	B	B		Z810

R = Restrained
U = Unrestrained
B = Both R and U

* Our most frequently referenced designs are asterisked.



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