



FIREBARRIER MORTAR

1. PRODUCT NAME

A/D FIREBARRIER Mortar

2. PRODUCT DESCRIPTION

A non-combustible fiber reinforced, foamed cement mortar.

Basic Use: A/D FIREBARRIER Mortar is intended to provide non-combustible and tight fitting firestops at openings and penetrations through fire-rated wall and floor assemblies. A/D FIREBARRIER Mortar powder mixes easily with water to form a mousse or shaving cream-like non-slumping paste. This feature permits easy installation with a minimum of damming. When cured, A/D FIREBARRIER Mortar is self-supporting and therefore may be used for large openings where other firestopping materials are impractical.

Composition and Materials:

A/D FIREBARRIER Mortar mixes and trowels easily. Tools are cleaned with water. A/D FIREBARRIER Mortar requires and contains no solvents. It is comprised of materials of low toxicity. Dust protection is recommended – see “INSTALLATION”.

Color: A distinctive charcoal (dark grey).

Packaging: A/D FIREBARRIER Mortar is packaged in 15.5 lb. (7 kg) bags. A 275 mL measuring cup is provided in each bag of product for convenience. One bag will yield approximately 850 in.³ (13,930cm³) - approximately enough for a 1 x 2 ft. (305 x 610 mm) opening at an installed depth of 3 in. (75 mm). Note: Ignores volume occupied by penetrating items. Yield calculation is based on product mixed in accordance with our installation instructions.

Application Limitations:

- Do not install when temperature is below 40°F (5°C).
- In horizontal applications, intermediate support may be required.
- Do not permit pedestrian or other traffic.

Table 1 - PHYSICAL PROPERTIES	
Properties	Results
Before Curing	
Mix Time	1.5 to 5 min.
Pot Life	50 min. (max.)
Workability	Excellent
Wet Density	43.7 ± 0.6 pcf (700±10 kg/m ³)
Set Time	10 to 15 hr.
After Curing	
Density	40 ± 2.5 pcf (640 ± 40 kg/m ³)
Compressive Strength (28 days)	478 ± 44 psi (3.3 ± 0.3 MPa)
Shrinkage	None
Noncombustibility (ASTM E136)	Noncombustible
Noncombustibility (CAN4-S114)	Noncombustible
Thermal Conductivity (ASTM C-518)	0.197 W/m.°K @ 24°C (1.365 Btu. in/ft ² .h.°F)
*Values given are not intended to be used in specification preparation.	

· Where A/D FIREBARRIER Mortar will be subject to acidic exposure, like other Portland cement-based products it may require a protective coating.

3. TECHNICAL DATA

Physical Properties: Refer to Table 1.

Fire Resistance Ratings: A/D FIREBARRIER Mortar has been tested and certified by ULI, ULC, ITS and FM in accordance with ANSI / UL 1479, ASTM E814 and ULC-S115-95. For details of rated firestop systems see ULI's Fire Resistance Directory, Volume 2, ULC's List of Equipment and Materials, Firestop Systems and Components, ITS' s Listing Book and Factory Mutual' s Approval Guide. Current systems include:

ULI: CAJ-1126, -1128, -1195, -1196, -2249, -5095, -7029, -7030, -8029 and WL-8005.

ULC: SP196, -229, -230, -326, -341, -396, -422, -423, -424, -758, -765 and -767.

FM: 91, 92, 94 and 205

ITS: AD/PHV 180-01, -02 and -03.

4. INSTALLATION

Clean openings to be fire-stopped by removal of foreign matter and contaminants such as oil, dust, grease, frost, water, dirt, old sealants or glazing compounds, protective coatings, original formwork, etc.

Priming: Surfaces to receive A/D FIREBARRIER Mortar generally do not require priming.

Keying: For large horizontal openings, it is recommended that A/D FIREBARRIER Mortar be mechanically keyed into the concrete surround and/or that intermediate support be provided.

Mixing: A/D FIREBARRIER Mortar is mixed with water in the ratio of 2.6 quarts US (2.5 L) of water to each 15.5 lb. (7 kg) bag. An empty milk container makes a convenient measuring device for water at the job site. A measuring cup is supplied in each bag for convenience when mixing less than a full bag. Portion water and Mortar powder in accordance with Table 2.

Forming or Damming:

Horizontal openings may be dammed temporarily with any

convenient material (i.e. plywood, polystyrene insulation boards, wire mesh, etc.). Damming is generally not required for vertical openings due to the low slump, dimensional stability and cohesive strength of the mortar paste. Forms, if used, may be removed after 24 hours.

Placement: Apply A/D FIREBARRIER Mortar paste into opening with trowel, or pour into large horizontal openings from mixer or mixing container. Work paste with trowel to ensure that all voids are filled. Give particular attention to voids between multi-cable/pipe installations. Product may be vibrated for this purpose. Tool surface to desired finish. Clean up with water.

Re-Penetration: Should it become necessary to penetrate cured A/D FIREBARRIER Mortar for new or additional building services (i.e. cables or pipes), simply drill or poke through mortar to provide opening of sufficient size. After installation of new penetrating item(s), firestop remaining voids with fresh A/D FIREBARRIER Mortar or with A/D FIREBARRIER Mineral Wool and Silicone where permitted by fire tested system.

Precaution: Avoid inhalation of dust or contact with eyes. Use of dust mask and eye protection is recommended. Thoroughly wash

Table 2	
A/D FIREBARRIER Mortar Powder	Water
Full bag, 7 kg (15.5 lb.)	2.5 L (9 cups*) (2.6 quarts US)
¾ bag (32 cups*)	1.875 L (6¾ cups*) (2 quarts US)
½ bag (21¼ cups*)	1.25 L (4½ cups*) (1.3 quarts US)
¼ bag (10 ⅝ cups*)	0.625 (2¼ cups*) (0.7 quarts US)

*Note: Refers to 275 mL cup supplied in bag. Use clean potable water. Add mortar powder to water in mixer or mixing container. Mix until the mortar paste takes on a consistent mousse-like or shaving cream-like texture. DO NOT ADD MORE WATER – continue to mix until mixture “wets out”. Mixing time will depend on method used - 1½ to 3 minutes for mortar mixer, 3 to 5 minutes with electric hand-held mixer. Hand mixing may take longer.

NOTE: DO NOT ADD MORE WATER. IT IS NORMAL FOR MIX TO APPEAR QUITE DRY AT FIRST. CONTINUE TO MIX.

skin after contact and before eating, etc.
To safely use this product, read and abide by Material Safety Data Sheet (MSDS).

5. AVAILABILITY AND COST

Availability: A/D sales offices and technical representatives are located throughout North America. (See below)

6. MAINTENANCE

No maintenance should be required. If mortar becomes damaged replace damaged portion. Damage by other trades should be patched at the expense of trade causing damage.

7. TECHNICAL SERVICES

Contact nearest A/D office.



A/D FIRE PROTECTION SYSTEMS

Head Office: 420 Tapscott Road, Scarborough, Ontario, M1B 1Y4
Tel: (800) 263-4087 or (416) 292-2361 Fax: (416) 298-5887

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Contact By State or Province

AK, AR, AZ, CA, CO, HI, ID, LA, MT, NM, NV, OK, OR, TX, WA, WY, UT: Tel: (888) 323-3473, Fax: (949) 458-9220

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