

## Precautions for use

- May cause eye and skin irritation. Avoid contact with eyes.
- Avoid prolonged or repeated contact with the skin.
- During spraying, wear suitable respiratory equipment.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- After contact with skin, wash with soap and water.

*All statements, technical information and recommendations contained herein are based on tests we believe to be reliable, but their accuracy and completeness are not guaranteed. The user shall be responsible for determining the suitability of the product for his particular application. To discuss application requirements please call your 3M representative.*

### Material Safety Data Sheets available upon request:

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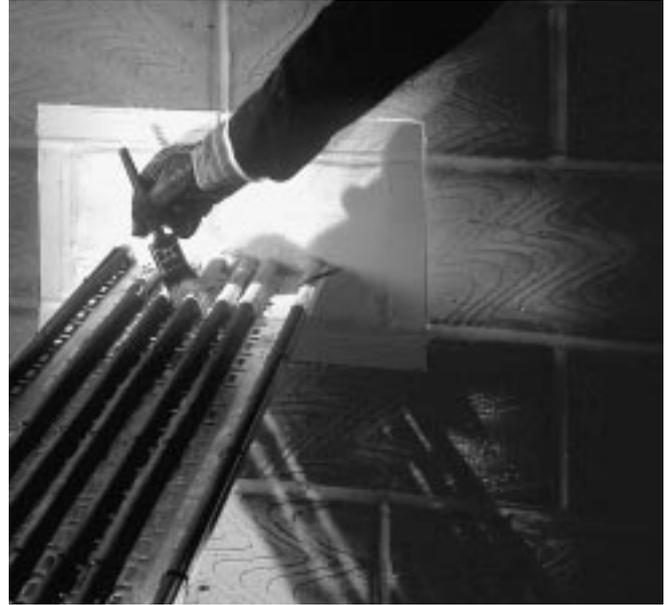
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# FireDam™ 2000 Coating

Technical Bulletin  
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## Product description

3M FireDam™ 2000 Coating is a white, ready mixed, water based thixotropic coating. It is designed to provide fire protection to a variety of substrates. Large electrical and mechanical through penetrations can be sealed to provide up to 4 hours fire rating using 3M FireDam™ 2000 Coating applied to mineral fiber boards. The spread of flames along electrical cables can also be suppressed, and the generation of corrosive or toxic gases from PVC cables suppressed.

In the presence of heat or fire, the 3M FireDam™ 2000 Coating intumesces (expands) up to 10 times, forming an insulating char which significantly slows any heat transfer. The expanding char fills voids, including those left by perishing materials.

## Applications

3M FireDam™ 2000 Coating can be brush, trowel or spray applied to a variety of surfaces. The coating dries to a white semi-flexible film allowing normal movement of the substrate. The effectiveness of the coating is in direct relation to film thickness. As only a relatively thin coating is needed, it allows radiation of heat from cables during operation.

The following are typical examples of applications for FireDam™ 2000 intumescent coating:

- Coating of the entire length of cables to maintain the power supply to important equipment while data are being saved or a fire extinguished (recommended wet thickness 3 mm).
- Partial coating of cables (4 m every 10 m, with a recommended wet thickness of 3 mm) to prevent fire from spreading along cable runs.
- Coating of mineral wool boards to fire stop large penetrations in walls and floors.

## Benefits

- Up to 4 hours fire rating for penetration seals.
- Fire resistance for cables and cable trays.
- Suppresses toxic gases and smoke emission.
- Flexible coating.
- Halogen free formula does not give off corrosive gases in a fire
- Good adhesion to most surfaces.
- Spray, trowel or brush applied.
- Water cleanup of tools and equipment.

## Application techniques

- **Surface preparation :**  
Surface to be coated must be free from oil, grease, visible moisture, dust, dirt or other materials likely to impair adhesion.
- **Coating preparation :**  
Stir content if necessary, and may be diluted with water to adjust viscosity to spray equipment in use.
- **Temperature during application :**  
Substrate and air temperature to be above 4°C and below 40°C.
- **Brush :**  
For small applications : standards paint brushes suitable.
- **Airless spray :**  
Most industrial pumps : e.g. Graco, Wagner, Volume air, DeVillois... Use air supply of at least 4 bars with electrical engine; remove the strainer if necessary.

## • Trowel :

To coat surfaces with a defined thickness, a trowel could be used.

## General applications

To provide a high fire and insulation rating (according to the standard BS 476: Part 20) two coated boards are inserted into the void one from each side of the wall or floor and fitted around the services. Any gaps are filled with 3M FireDam™ 350 Caulk to give a cold-smoke seal. Next the surfaces of the caulk and 50 mm out from the opening are coated with a final layer of 3M FireDam™ 2000 Coating. The electrical cables are then coated over a distance of 150 mm from each side of the seal (see figure 1).

## Availability

FireDam 2000 coating

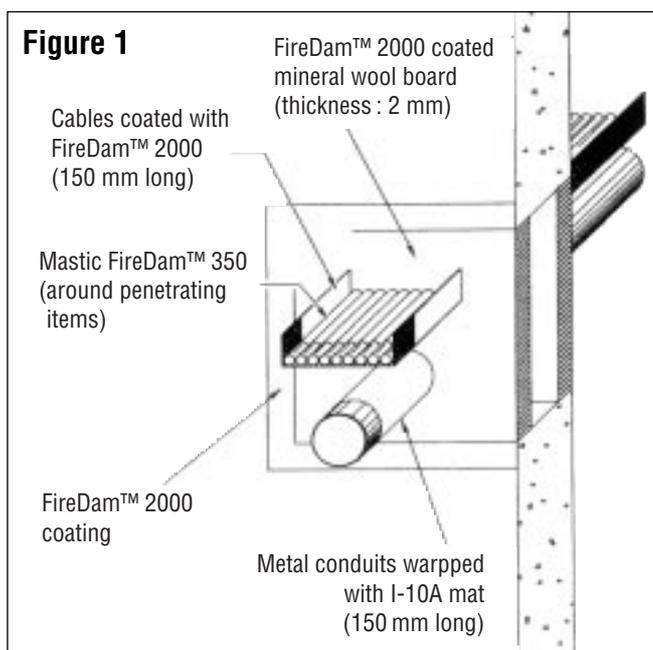
Weight	Units per box	Weight (empty pails)	Stock number
19,5 kg	1x15 l	1 130 g	FS 910007145
260 kg	1x200 l	–	FS 910006980

FireDam 2000 coated boards

Reference	Units per box	Dimension (mm)	Stock number
FD 240	1	1000x600	FT 510069725
FD 120	1	1000x600	FT 510069733

FD 240: one side coated

FD 120: double side coated



## Standards

Tested according to the standards: BS476:  
Part 20 (UK), Arrêté du 30/06/83 (Fr),  
NF F 16-101/102 (Fr), Arrêté du 21/04/83 (Fr),  
DIN 4102: Teil 1/2/3 (Ge), IEC 331: 1970,  
IEC 332: Part 3: 1992, Circolare 91 (It).

## Technical data

Color	White
Aspect	Thixotropic suspension
Density	1.3 kg/l
Solids content	75%
Covering power (thickness for wet layer)	1.6 m <sup>2</sup> /l for 0.6 mm thickness 1 m <sup>2</sup> /l for 1 mm thickness 0.5 m <sup>2</sup> /l for 2 mm thickness
Number of layers	2-3
Thickness of wet layer	0.5-2.5 mm
Tack free time	30 minutes approx.
Drying time	2-8 hours depending on thickness, moisture and temperature
Storage temperature	Between 5 and 45°C
Shelf life	12 months
Expansion rate	Up to 10 times
Expansion begins	230°C approx.
Adhesion	All common building materials
Oxygen index	41%