

# Fire Barrier Mortar T

# **Product Data & Installation Instructions**

## 1. Product Description

3M Fire Barrier Mortar T is an excellent firerated fill material designed to seal floor and wall penetrations with ease and at a low cost. By adjusting the water mix ratio, the 3M Fire Barrier Mortar T is easily formed to meet a variety of installer preferences – anything from low viscosity (pourable), to high viscosity (trowelable). 3M Fire Barrier Mortar T is a non-shrink mortar and has been designed to meet the fire test requirements of a number of global fire test standards.

# 3M Fire Barrier Mortar T Features

- Economical
- Excellent Adhesion
- Variable mix ratio
- Asbestos Free
- Fiber-reinforced prevents crack propagation
- Non-shrink formulation

# 2. Typical Physical Properties

2. Typical Thysical Troperties	
Color	Brown-Grey
Odor	No perceptible odor
Bulk Powder density	$913 \text{ kg/m}^3$
Bulk Density	$1390 \mathrm{kg/m}^3$
Application temperature	0° to 43°C
Working Time	30 minutes to 1 hour
Maximum service	1200°C
temperature	
Modulus of Rupture	$20 \text{ kg/cm}^2$
after Drying at 110°C	
Fire Performance	tested per BS476 part
	20 for up to 3 hrs.

## 3. Mix Ratio

The typical mix ratio (Mortar T : Water) is 3:1 for wall openings, and 2:1 for floor openings.

Note: Cure properties and ultimate strength will compromised for mix ratios (Mortar T: Water) less than 2:1

## 4. Installation Techniques

### Floor applications:

Dam the opening at the bottom side (cutting to fit tightly around any penetrating items) for temporary support. Fill the opening (in one operation) with 3M Fire Barrier Mortar T to the depth required in the local fire test approval or manufacturer's recommendations. If combustible materials are used for damming, remove after the Mortar T has set.

#### Wall applications:

Use a trowel to apply the Mortar T into the opening and around any penetrating items. Fill the opening (in one operation) with 3M Fire Barrier Mortar T to the depth required in the local fire test approval or manufacturer's recommendations. Damming may be necessary on each side of the wall to support the Mortar T until it sets. The Mortar may also be cast into pre-formed blocks and then installed with wet Mortar in a masonry fashion. If combustible materials are used for damming, remove after the Mortar T has set.

## 5. Yield

When mixed properly with water, three 20 kg bags will yield approximately 1 square meter at 63 mm depth.

## 6. Precaution

- This mortar will conduct electricity when wet. DO NOT install in contact with live exposed conductors of electricity such as bus bars or on old cloth type cable jacketing. Consult electrician or electrical engineer in case of doubt.
- This product is not a load-bearing material.
- Consult Material Safety Data Sheet (MSDS) for additional information on the safe handling, use, storage, and disposal of this product.

## 7. Packing and Availability

The 3M Fire Barrier Mortar T is available in convenient 20 kg bags (powder) from your local Authorized 3M Fire Protection Products Distributor.

# 8. Storage

3M Fire Barrier Mortar T must be stored in dry conditions. When properly stored in an unopened bag, the shelf life is at least 1 year.

#### 9. Maintenance

3M Fire Barrier Mortar T is expected to be stable indefinitely under normal condition of use. Avoid presence of typical concrete poisons (i.e., sulfates, bleaches, etc) which may deteriorate the product.

# **Importance Notice to Purchaser**

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