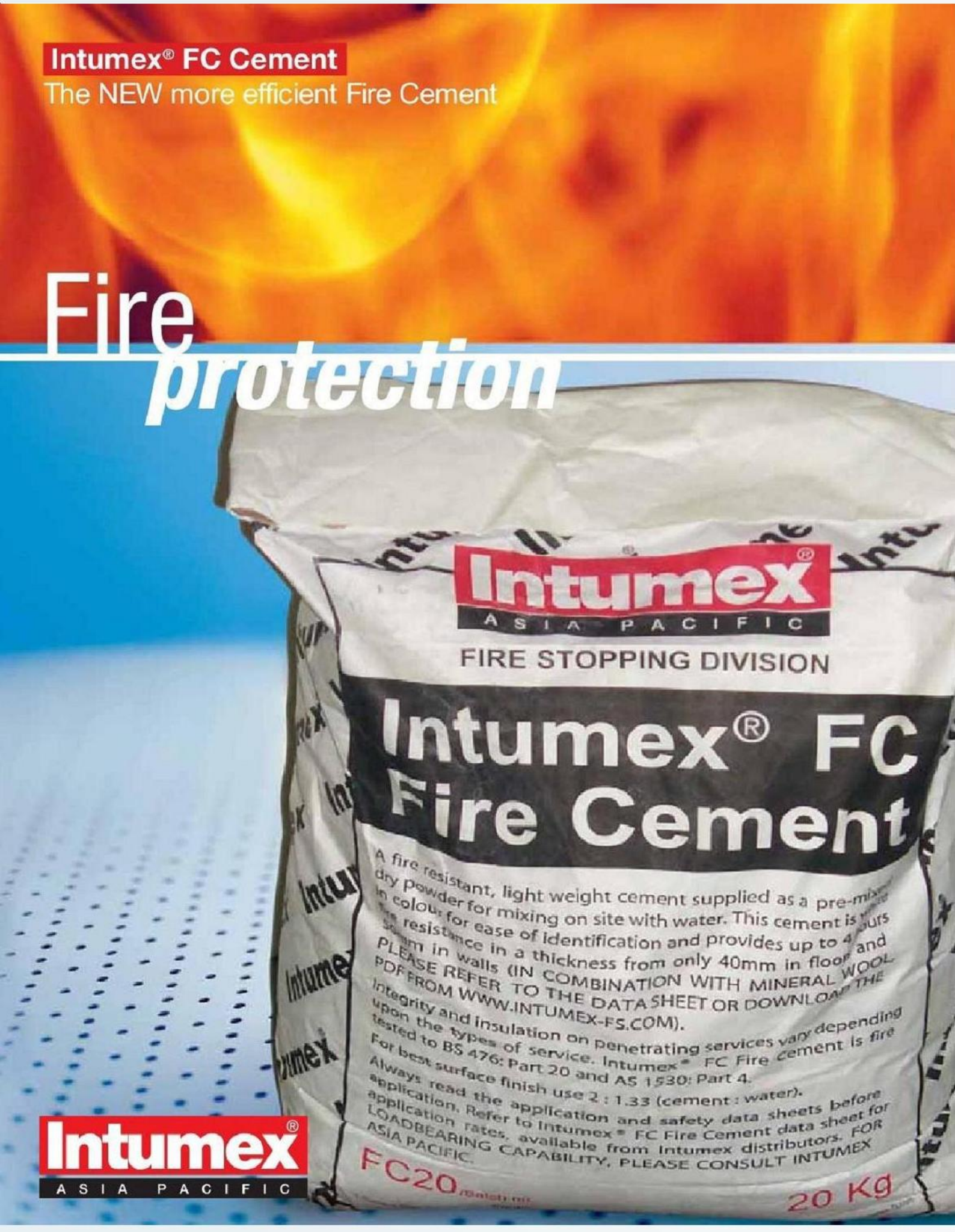
Intumex® FC Cement

The NEW more efficient Fire Cement

Fire *protection*



Intumex®
ASIA PACIFIC

Intumex® FC - Fire Cement

General Information

Intumex® FC Fire Cement is a hard setting, one component cement (mix with water).

Intumex® FC Fire Cement is fire resistant and has been tested in walls and floors and achieved 4-hour fire ratings. Please consult the installation instructions contained on every bag of Intumex® FC. (NOTE: Insulation achieved will be dependent upon the building element and type of service.)

Un-reinforced and reinforced Intumex® FC Fire Cement has been tested for loadbearing capacity. Please consult the installation instructions contained on every bag of Intumex® FC.

General Information

Intumex® FC Fire Cement can be used to seal openings through which building services pass when installed in accordance with the installation instructions.

Intumex® FC Fire Cement can also be used for unpenetrated barriers.

Properties

- High fire resistance up to 4 hours integrity and insulation (-/240/240).
- Easily mixed with water to chosen consistency.
- Does not shrink whilst curing or when exposed to fire.
- Good load bearing performance when installed in the correct manner, please consult Intumex Asia Pacific for details.
- Sets within 2 to 3 hours.
- Hard white finish.
- Can be readily cut or drilled and resealed, allowing installation of additional services after completion.

Packaging

Supplied in re-inforced paper bags, 20kg in weight.

Intumex® FC - Fire Cement

Applications

- Intumex® FC Fire Cement should not be installed at temperatures below +5°C.
- Do not attempt to remix by adding more water after the compound has started to set.
- Do not use a mix ratio of less than 2 (powder) : 1.33 (water).

Technical Data

Colour	White
Consistency	Powder
Density (nominal)	Loose 730 kg/m³ Wet cast 1450~1650 kg/m³ Cured 950~1100 kg/m³
Consumption (dry cement)	Cured density: 0.95~1.1 kg/m² per mm thickness
Mixing ratio	Pouring mix for floors is 2kg of powder: 1.8kg of water Packing mix for walls is 2kg of powder: 1.35kg of water
Expansion on setting	0.1% (approximate)
Thermal conductivity	0.2 W/mK
Flexural strength	1~3 N/mm² (varies with water content) SEE NOTE ON PAGE 4 concerning loadbearing capacity
Compressive strength	5.4 N/mm² (varies with water content)
Curing time	2~3 hours
Pot life	20~40 minutes (depending on consistency of mix and weather conditions)

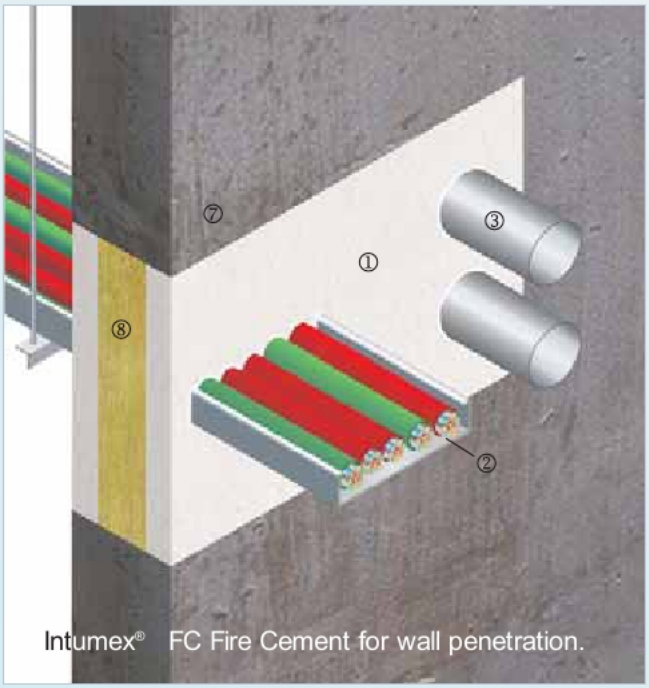
Storage

- Store in a cool dry place.
- Protect from heat and frost.
- Sealed bags can be stored for 12 months.
- Opened bags should be resealed and used within 24 hours. In some humid climates this time can be dramatically reduced.

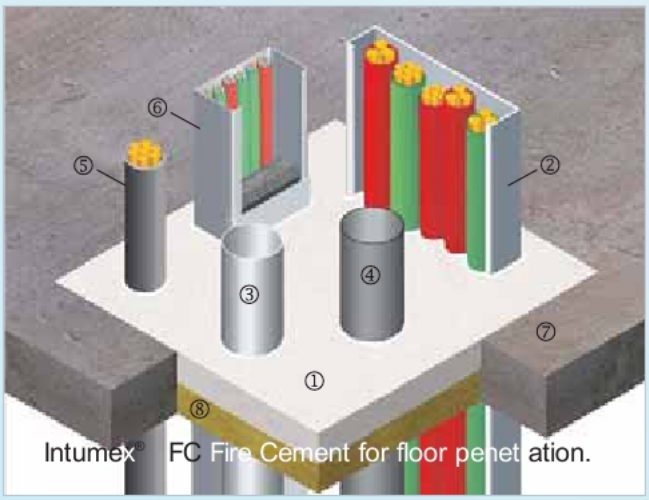
Safety Measures

- Avoid contact with eyes and food. Read Safety data sheet before using.

Intumex® FC - Applications



Intumex® FC Fire Cement for wall penetration.



Intumex® FC Fire Cement for floor penetration.

Intumex® FC penetration seals

① Intumex® FC Fire Cement

Wall penetration
For FRL -240/180 use 25mm Intumex® FC +
50mm x 140kg mineral wool +
25mm cement
For FRL -/240/240 use 50mm of Intumex® FC
50mm x 140kg mineral wool +
50mm cement

Floor penetration
For various FRLs use Intumex® FC (per table below) +
50mm x 120kg mineral wool

FRL	1 hour	2 hours	3 hours	4 hours
Thickness	30mm	30mm	40mm	40mm

② Electric cables and cable trays

③ Metal pipe

④ Plastic pipe with Intumex® UC Fire Protection Collar mounted flush with underside of mineral wool

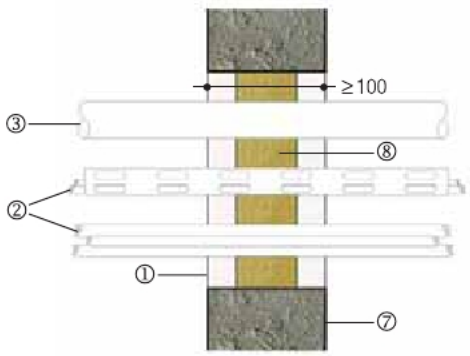
⑤ Armoured cable

⑥ Cable trunking and cables with Intumex® SJ Electrical Junction Seal

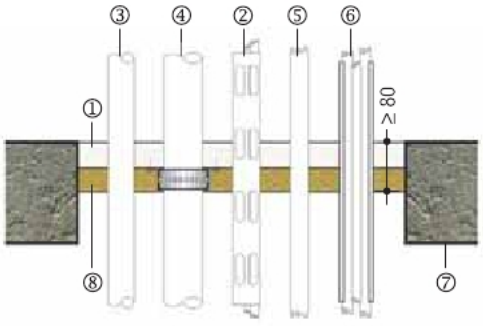
⑦ Wall element or floor slab

⑧ Mineral wool as in ①

NOTE: A series of tests have been performed on installation samples of the Intumex® Cement in order to ascertain its loadbearing capacity when used in a thickness of 100mm, 70mm and 50mm within an aperture of 1000mm x 600mm. These tests show that within certain parameters the construction can be deemed as being load bearing. Please note that the load bearing capacity is determined by a combination of factors, including but not exclusive to, the following. Dimensions of opening, thickness of Intumex cement, overall percentage of surface area filled by services, types of services passing through the cement. If load bearing capability is a requirement for any particular installation, please consult your local Intumex office with full details of your requirements.



Details of wall penetration.



Details of floor penetration.