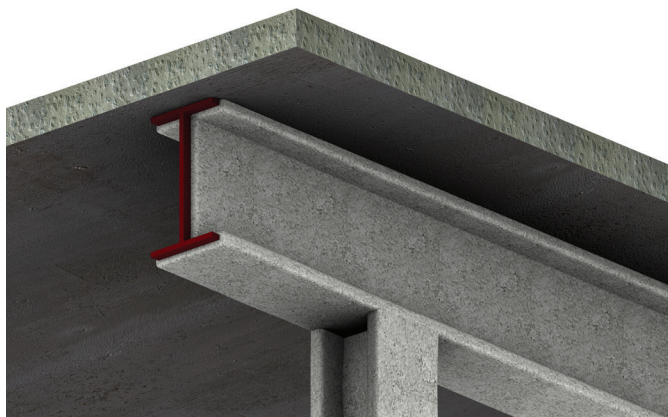


PROMASPRAY®-C450 (UL TYPE PMCP2)

Vermiculite & Portland Cement Based Wet Mix Spray



Flie R14613, Type PMCP2



Material properties

Dry Density (Sprayed upwards)	+/- 365kg/m³ +/- 15%
Dry Density (Sprayed downwards)	+/- 390kg/m³ +/- 15%
Alkalinity	pH 12 - 12.5
Thermal conductivity λ (20°C)	0.095W/mK
Specific heat capacity	+/-949J/kg/K
Maximum heat load	+/-300kW/m²
Melting point	>1430°C

Static data

Colour	Grey
Cure	By hydraulic set
Processing temperature	+ 4°C to + 45°C
Substrate temperature	+ 4°C to + 45°C
Minimum layer thickness per spray	8mm
Thickness range	8 to 58mm
Apply waiting time between layers	(50% RH, 20°C) ± 2 to 6 hours

All physical and mechanical values are averages based on standard production and tested according to internal procedures. The typical values are given for guidance. The figures can change dependent on the test methods used. If a particular value is of prime importance for a specification, please consult Promat Technical Department.

Product description

PROMASPRAY®-C450 (UL Type PMCP2) is a durable fiber-free modified cement-bound spray mortar based on vermiculite. The vermiculite is factory dried premixed with cement and various inorganic additives. The addition of water on site is creates a fire-resistant insulation mortar, which is applied with specialized spraying equipment.

Benefits

- Non-combustible
- Good insulating & properties
- Very durable
- Erosion resistant (resistant to rain and leakage water)
- Good acoustic absorption
- Fiber free
- Light weight
- Monolithic finish
- Slightly textured surface
- Can be painted over

Fire Resistant Applications

Suitable for fire-resistant applications in indoor climate (Z2), in indoor climate with high exposure humidity (Z1) and indoor climate and protected outdoor climate (Y):

- Steel supporting structures
- Concrete support structures
- Sheet steel roofs
- Concrete floors, hollow core slabs, steel plate concrete floors

Certificates & approvals

- Fire resistance:
 - Tested up to 240 minutes according to European standards in various fire resistant constructions.
 - Tested up to 240 minutes - UL 263 Certified for United States
- Type PMCP2 Spray-Applied Fire Resistive Materials for use in UL Design Nos. D958, D794, G715, J722, N798, N799, P747, P748, P749, P940, S744, S745, S748, Y732, Y733, Y734.
- Fire reaction: Euroclass A1 according to EN 13501-1
- CE marking according to ETA 13/0379
- DoP available at www.promat-ce.eu
- Consult the test report / classification document / assessment report for further details.

PROMASPRAY®-C450 (UL TYPE PMCP2)

Vermiculite & Portland Cement Based Wet Mix Spray

Preparation

Typical substrates	Unprimed and primed steel, concrete frames, metal floor/roof decks and return air plenums.
Substrate preparation	The substrate shall be clean, dry and free from dust, loose millscale, loose rust, oil and any other condition preventing good adhesion. PROMASPRAY®-C450 can be applied to unprimed or primed steelwork. Prior to the application, incompatible primers should be prepared by the application of Promat® SBR Bonding Latex used as a keycoat.
Mesh reinforcement	Most fire tests conducted have been carried out without mesh reinforcement, to demonstrate the ability of PROMASPRAY®-C450 to stay in place under the most severe fire conditions. However, for maximum long term in service durability, the use of lightweight mesh reinforcement is recommended where vibration or mechanical damage and the possibility of subsequent de-bonding exist.

Application

Initial steps	Application of PROMASPRAY®-C450 must be carried out by an applicator recognised by Promat.
Methods	Mix PROMASPRAY®-C450 with potable water in a suitable mixer and apply by a spraying machine approved by Promat. PROMASPRAY®-C450 may be centrally pumped vertically or horizontally, enabling all spray plant and material storage to be contained in one area.
Limitations	PROMASPRAY®-C450 may be applied when the substrate and air temperatures are at least 2°C and rising, but should not be applied if the substrate or air temperatures are less than 4°C and falling. Maximum substrate and air temperature is 45°C. Substrate temperature should be at least 2°C above dew point temperature.

Transport and storage

- During transport and storage, the material must be protected and placed free from the ground in a well-ventilated and dry area.
- Storage temperatures are not critical as long as the dry conditions are maintained.
- In a normal, dry environment, the material can be up to 12 months after the production date.

Packaging

- 12.5kg bags

Safety in use

- Wear recommended personal protective equipment.
- A safety data sheet is available for safety details.

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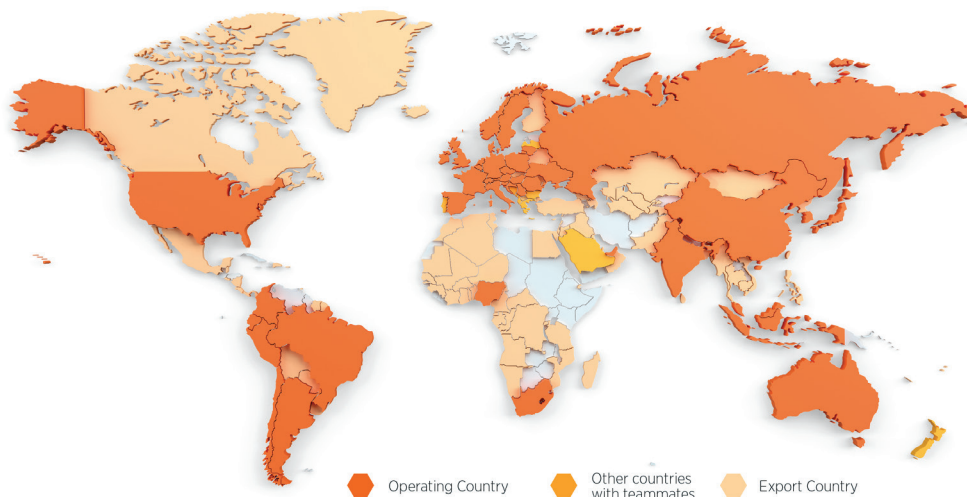
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About Etex

Etex is an international building materials specialist; the company wants to inspire people around the world to build living spaces that are ever more safe, sustainable, smart and beautiful. Founded since 1905 and headquartered in Belgium, Etex currently operates more than 140 sites including plants, quarries and offices in 45 countries with over 13,500 employees globally.

Etex fosters a collaborative and caring culture, a pioneering spirit and a passion to always do better for its customers. Building on its experience and global market needs, the company strives to improve its customers quality of living with ever more effective lightweight solutions.

Its three R&D centres support four global sales divisions:

- Building Performance: Leader in plasterboards and fibre cement boards, and the global reference in passive fire protection solutions for the residential and commercial segments.
- Exteriors: Provider of innovative, durable, high performance and beautiful fibre cement exterior materials for architectural, residential and agricultural projects.
- Industry: Front runner of engineering expertise to drive the future of high performance thermal and acoustic insulation as well as passive fire protection in the industrial, aerospace and energy sectors.
- New Ways: New Ways offers high-tech, lightweight, factory-assembled panel and modular solutions based on timber and steel framing.

Etex is Inspiring Ways of Living, for more information, please visit our website: www.etexgroup.com