

Polycryl FR

Acrylic based flexible vapor proof protective coating

Class A fire rated protective coating for facades applications.



CHARACTERISTICS

- ▶ Class A fire rated
- ▶ Environmentally friendly. Low VOC (<10 g/L)
- ▶ Excellent UV, weatherability & color retention properties
- ▶ Single component. Easy to use
- ▶ Cold applied
- ▶ Excellent resistance to vapor and moisture
- ▶ Excellent resistance to carbon dioxide diffusion
- ▶ Excellent resistance to chloride ion penetration
- ▶ Breathable
- ▶ Good abrasion resistance properties
- ▶ Heat resistant
- ▶ Excellent adhesion on most porous and nonporous substrates
- ▶ Prevents fungal growth



DESCRIPTION

Polycryl FR is a an acrylic based single component, class A fire-rated protective coating especially designed as moisture vapor barrier on facades application.

FIELDS OF APPLICATION

- Can be used as vapor / damp proof coating for a wide variety of applications, which includes the following:
- facade cladding system
 - damp proof membrane in sandwich constructions
 - vapor proof barrier coating for interior & exterior floor & walls

ENVIRONMENTAL INFORMATION

Contributes toward satisfying LEED® v4 requirements of the EQ Credit- Low-emitting Materials (for the VOC content).

APPLICATION INSTRUCTION

The application temperature should be between 5°C to 45°C. Application procedures may vary slightly depending upon site conditions. The general recommended guidelines for the application of the acrylic coating system is as



TDS_Polycryl FR_GCC_0625

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follows:

SURFACE PREPARATION

The surface shall be cleaned thoroughly of all contaminants like dust, traces of curing compound, oil and grease. Light mechanical grinding/grit blasting/high pressure water jet may be used to clean the surface of all the contaminants depending on the degree of contamination on the surface to be coated. All surface imperfections and protrusions shall be removed and repaired. Structurally unsound and friable concrete must be removed and repaired with a suitable Polycrete* concrete repair mortar.

PRIMING

A primer coat is recommended, particularly on the vertical surfaces to seal the pores and stabilize the surface. The primer coat can be made in the site by diluting the Polycryl FR 1 to 1 with water. The primer should be applied at a coverage rate of 4-5m²/L. On horizontal surfaces Polycryl FR can be applied directly without primer provided that recommended surface preparation has been carried out.

MIXING

Polycryl FR is single component but stirring of the pail is recommended prior to the application of the coating. This will remove any sediment which may occur during storage.

The use of a slow speed drill and suitable paddle should be used in order to avoid the formation of air bubbles.

APPLICATION

Apply the coating with a brush, roller or airless spray. Allow the coating to dry completely before applying the subsequent coats. 2 coats should always be applied; the second coat at 90° to the first. We recommend that a non-woven geo-textile membrane be embedded into the first coat whilst it is still wet at all expansion joints projections and corner fillets to reinforce these areas. Allow the final coating to cure fully (72 hours) after which it can be put in service. For roof applications, the coating should be applied @1.1 L/m²/coat for a DFT of 1.5mm in 2 coats. As a protective coating, vapor barrier on concrete/render/plaster surfaces, the coating should be applied @0.70 L/m²/coat for a DFT of 1mm in 2 coats.

CLEANING

Clean all the tools with water after use. Hardened materials can be removed mechanically only. Partially used materials in pails can be re-used; all cured and partially cured material should be removed before re-using the material.

STORAGE AND SHELF LIFE

Store under cover, out of direct sunlight and protect from extreme temperatures. In tropical climate the product must be stored in air - conditioned environment (<25°C). Shelf life is up to 12 months when stored as recommended.

HEALTH AND SAFETY

As with all construction chemicals products caution should always be exercised. Protective clothing such as gloves and goggles shall be worn. Treat any splashes to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting, but call for medical assistance immediately.

SUPPLY

Polycryl FR 15L pail

TECHNICAL SPECIFICATION

PROPERTIES	VALUES	STANDARDS
Color	White/Grey	-
Density, [g/cc]	1.60±0.05	ASTM D 1475
Solid content, [%]	70±3	ASTM D 1644
VOC, [g/L]	<10	
Tensile strength, (MPa)	≥1.0	ASTM D412
Elongation, (%)	≥35	ASTM D412
Reaction to fire	Class A	ASTM E84
Water vapor transmission g/m ² /24Hours	0.25	ASTM E96
Pull off Test, N/mm ²	>1.0	BS 1881-part-207
Abrasion resistance	Good	ASTM D 4060
Impact resistance	Good	-
Application temperature,	5°C to 45°C	-

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.

