

Pyrocrete[®] 341

Proven Protection Under Fire[®]



Pyrocrete 341 is the next generation in passive fire protection.

Pyrocrete 341 is a major advancement in cementitious PFP. It offers the petrochemical industry a “3-for-1” advantage. Three major features in one product. In one single product you can expect excellent durability, the most extensive certification in the industry and enhanced application properties. Pyrocrete 341 is manufactured using only the highest quality raw materials, with strict QA/QC protocols all under the UL follow up service. This process ensures the highest quality product for our customers worldwide.

Pyrocrete 341 Performance Advantages

Pyrocrete 341 is the most extensively tested cementitious fireproofing product in the industry.

The superior physical properties and early hardness development of Pyrocrete 341 promote high durability when handling, shipping, during construction, and while in service.

Pyrocrete 341 can achieve three main test standards at a single thickness, without adding additional material to account for erosion.

Application Features

The high-build and enhanced curing characteristics of Pyrocrete 341 provide the opportunity to complete many applications in a single lift and dramatically increase throughput for field and shop applications.


| ENHANCED APPLICATION ADVANTAGES | |
|---------------------------------|---|
| DESCRIPTION | APPLICATION BENEFITS |
| Build | Up to 1-1/2" (38.1mm) |
| Pumping pressure | 40% reduction |
| Working time | 6 hours |
| Hose length | Maximum 250' (76m) |
| Hopper stability | Remains consistent |
| Impact resistance | ASTM-D-2794 |
| Trowel application | Up to 1-1/2" (38.1mm) 3/4" (19.05mm) for overhead applications |
| Shop application | Increase throughput |
| Cure to recoat | 30 minutes |
| Cure to handle or ship | 4 days |



The most extensively tested cementitious fireproofing product in the industry.

Pyrocrete 341 meets the rigorous exposures of hydrocarbon fire, jet fire, and cryogenic spill protection, with zero erosion factors. This combination offers facility owners and engineering construction firms a simplified, single product solution to meet all PFP key performance design criteria for long term asset protection.

Certifications & Listings:

- › UL 1709 Rapid Rise Hydrocarbon Fire 
 - Design No. XR747
 - Multi-section analysis
 - Up to 4 hours
- › UL 2431 Durability of Fire Resistive Materials
 - Category I-A (outdoor, heavy industrial)
 - Exceeds a 22-year exterior life cycle
 - Resistant to acid and solvent spray exposures
- › ISO 22899-1 Jet Fire Resistance
 - 15 minutes to 120 minutes
 - Multi-temperature analysis
 - Multi-duration analysis
- › ISO 20088-1 Cryogenic Spill Resistance
 - Periods of resistance up to 90 minutes
 - Multiple end point temperatures down to -58°F (-50°C)

Combined Performance:

- › ISO 20088-1 cryogenic spill protection followed by ISO 22899-1 jet fire exposure
- › Four bar overblast exposure followed by UL 1709 hydrocarbon fire exposure
- › NFPA 290 hose stream (extended up to 150 minutes)

Mechanical Properties

The mechanical properties of Pyrocrete 341 demonstrate superior long term performance necessary to meet the rigorous demands of petrochemical environments.

| MECHANICAL PROPERTIES FOR LONG TERM PERFORMANCE | | |
|---|---------------|--|
| PROPERTIES / DESCRIPTION | TEST STANDARD | PYROCRETE 341 |
| Design density | ASTM-E605 | 52 - 55 lb./ft ³ (833 - 881 kg/m ³) |
| Shore D0 hardness | ASTM-D2240 | 88 |
| Bond strength | ASTM-E736 | 23,734 psf (1,136 kPa) |
| Flame spread/smoke development | ASTM-E84 | 0 / 0 |
| Compressive strength | ASTM-E761 | 1,561 psi (10.76 MPa) |
| Impact resistance | ASTM-D2794 | Pass (No cracking at 23 ft-lbs. (31.19 J)) |
| Accelerated aging | UL 2431 | Category I-A and exterior environmental purpose (outdoor/heavy industrial) |
| Chemical resistance | UL 2431 | Resistant to acid and solvent spray exposures |
| Corrosion to steel induced by SFRM | ASTM-E-937 | 0.00 g/mm ² |

UL 2431 POST UL/1709



ISO 20088-1 CRYOGENIC



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