

Selection & Specification Data

Generic Type Cementitious inorganic fireproofing formulation supplied as a single powder component that is mixed with clean, potable water prior to application.

Description A single package powder component mixed with clean, potable water before application. Pyrolite 22 is designed to fireproof interior structural beams, joists, walls, roofs, decks, girders, columns, electrified floors and pre-cast concrete units.

- Features**
- Cementitious – Durable, remains in place during construction and beyond.
 - Excellent film build – On all surfaces including columns, beams and decks.
 - Applicator friendly – High film build, no alum required for increased coverage and easy clean-up.
 - Asbestos-free – Complies with EPA and OSHA regulations.
 - Mineral –Wool free – No airborne fibers.
 - Alum and Chloride free – No special priming required.
 - Styrene free – No toxic decomposition gasses.
 - Economical – Maintains project on budget.
 - Multiple U.L. Designs – Provides for design flexibility with over 40 U.L. designs.
 - Quality Manufactured – Under strict Carbolite quality standards.
 - U.L. inspection service, consistent quality in every bag.
 - Ready to Use – No site additives required.
 - RETRO-LITE 22 (blue) is available for special order for asbestos abatement .

Finish PYROLITE 22 is normally left as a sprayed finish. Material can be tamped down after spray application.

Primers PYROLITE 22 is alum-free and neither promotes nor prevents corrosion. Fireproofing should not be considered part of the corrosion protection system. Primers are not required or recommended. For contour applications where steel is primed, bond strength must meet minimum U.L. criteria. Please contact the Fireproofing Division for further information.

Selection & Specification Data (cont.)

Topcoats Generally not required. In severely corrosive atmospheres, consult Carbolite Technical Service for selection of the coating most suitable for the operating environment.

Dry Film Thickness Recommended thickness depends on desired rating and assembly to be fireproofed. See attached design details.

Temperature Resistance Not recommended for use as a refractory cement or where operating temperatures exceed 200°F (93°C).

Physical Data (Typical Values)

Property	Method	Result/Value
Color	Normal	Non-Uniform Tan
Density ⁽¹⁾ (Average)	ASTM E605 ⁽¹⁾	22 lbs/ft ³ (.35 g/cm ³)
Compressive Strength	ASTM E761	6019 PSF
Air Erosion	ASTM E859 ASTM E1042	<0.025 (g/ft ²) @ 24 hrs 0.003 (g/ft ²) @ 48 hrs
Fungi Resistance	ASTM G21 ASTM D3273	Passes
Bond Strength Unprimed Steel	ASTM E736	653 psf
Impact Resistance	ASTM E760	Pass
Deflection Resistance	ASTM E759	Pass
Flame Spread	ASTM E84	10
Smoke Development	ASTM E84	0
Corrosion	ASTM E937	0.00 gm/mm ²
Insulation "K" Factor	ASTM C177	0.76 (BTU in/hr ft ² -°F at 75°F)
Specific Heat		0.37 BTU/lb°F
Shrinkage		<0.5%
Coverage 43 lb. bag ⁽²⁾		28.6 BFM
Shelf Life		1 year
(1) Air dry at ambient conditions until constant weight. Do not force cure. Use ASTM E605 Positive Bead Displacement.		
(2) Material losses during mixing and application will vary and must be taken into consideration when estimating job requirements.		

Test reports and additional data available upon written request.

Approvals

UNDERWRITERS LABORATORIES INC.

PYROLITE 22 / RETRO-LITE 22 has been tested in accordance with UL 263 / ASTM E119 / NFPA 251) classified for interior use in the following designs:

- **Columns** - Y707, Y708
- **Roof Assembly** – P734, P735, P736, P737, P738, P739, P926, P927, P928, P929
- **Roof Beams** – S731, S732, S733
- **Beams** – N771, N772, N773, N774, N775
- **Floor Ceiling Assembly** – D767, D768, D769, D770, D771, D772, D773, D774, D775, D776, D777, D927, D928
- **Walls** – U704
- **Pre-cast Concrete & Steel Joists** – G706, G707, G708, J713, J714, J715, J716

City of New York Department of Buildings

PYROLITE 22 has been found acceptable for use in accordance with the following report numbers:

MEA-268-98M	Floor / Ceiling
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MEA-271-98M	Floor / Ceiling
MEA-272-98M	Beams
MEA-273-98M	Roof / Ceiling
MEA-274-98M	Roof / Ceiling
MEA-275-98M	Beam for Roof Ceiling
MEA-276-98M	Wall
MEA-277-98M	Column

Shipping Weight (approximately)	Bag weight is 43 lbs. (20 kg) Truckload = 880 bags: 40 palletized bags and the pallet is plastic wrapped. 1000 bags loose loaded
Storage (General)	Material should be kept dry, covered, and off of the ground.
Storage Temperature & Humidity	-20°F to 150°F (-29°C to 66°C) 0 to 90% relative humidity
Shelf Life	Min. 12 months

***Shelf Life: (actual stated shelf life) when kept at recommended storage conditions and in original unopened containers.**

Packaging, Handling & Storage

January 2006 replaces September 2004

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