

## Selection & Specification Data

**Generic Type** Cementitious inorganic fireproofing formulation.

**Description** Single powder component mixed with clean, potable water before it is used in application. Recommended uses for the fire protection of structural steel, bulkheads, and upgrading the fire resistance of any existing concrete. Recommended areas of application are refineries, petrochemical, pharmaceutical facilities, pulp and paper mills, offshore platforms, nuclear and conventional power plants, factories, warehouses, institutional and biomedical facilities.

- Features**
- Easily applied by spray or trowel
  - Lightweight – 1/3 the weight of concrete for equal fire protection
  - Excellent physical properties – hard, durable
  - Nonflammable – during or after application
  - Asbestos free – complies with EPA and OSHA regulations
  - Chloride free – no special priming required
  - Non-friable – high impact strength
  - Single package – mixed with clean, potable water at the job site
  - Investigated for exterior use by Underwriters Laboratories, Inc.
  - Quality Manufactured – under strict Carboline quality standards
  - UL factory inspection service

**Finish** If a smooth finish is required this may be done by trowel, roller or brush typically within 1 to 2 hours after final application of Pyrocrete 240 High Yield.

**Primers** Pyrocrete 240 High Yield neither promotes nor prevents corrosion. The fireproofing should not be considered as part of the corrosion protection system. For applications where primers are required, use an appropriate alkaline resistant primer. For contour applications where primers are recommended, Pyrocrete 240 High Yield must meet minimum UL bond strength criteria.

## Selection & Specification Data (cont.)

**Topcoats** Generally not required. In severely corrosive atmospheres, consult Carboline 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 where operating temperatures exceed 200°F (93°C).

## Physical Data (Typical Values)

Color	Non-Uniform	Speckled Gray
Density (Average)	ASTM E 605 <sup>(1)</sup>	47 lbs/ft <sup>3</sup>
Durometer Hardness (Shore D)	ASTM D2240	55
Compressive Strength	ASTM E761	836 psi
Coefficient of Thermal Expansion		4.5 X10 <sup>-6</sup> (inch / inch °F)
Bond Strength	ASTM E736	2097 psf
Bond Impact	ASTM E760	Pass
Impact Resistance	ASTM D2794	Indents at 20 foot pounds
Deflection	ASTM E759	Pass
Flame Spread	ASTM E84	0
Smoke Development	ASTM E84	0
Corrosion	ASTM E937	0.00 gm/mm <sup>2</sup>
Insulation "K" Factor	ASTM C177	1.09 (BTU in/hr ft <sup>2</sup> -F)
Specific Heat		0.36 BTU/lb/°F
Shrinkage		<0.5%
Coverage 50 lb. bag <sup>(2)</sup>		15.4 Bd.Ft.
Shelf Life		Two years
(1) Air dry at ambient conditions until constant weight. Do not force dry. 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.

# Pyrocrete® 240 High Yield

## Approvals

Pyrocrete 240 High Yield has been tested by Underwriters Laboratories, Inc. and is classified for exterior or interior use.

It is listed under the following designs:

ASTM E119 (U.L. 263, NFPA 251)

**Columns** -Y707,Y708, Y718, Y719, Y720, Y721, Y722, Y723

**Beams** – N771, N772, N773, N774, N775, N785, N786, N787, N788, S731, S732, S733, S737, S738

**Floor Ceiling Assembly** – D767, D768, D769, D770, D771, D772, D773, D774, D775, D776, D777, D783, D927, D928,

**Roof Assembly** – P734, P735, P736, P737, P738, P739, P926, P927, P928, P929, G706, G707, G708, J713, J714, J715, J716

**Walls** – U704

U.L. 1709

Rapid temperature rise that simulates a hydro-carbon fire exposure.

**Columns** – XR716,XR717

## Packaging, Handling & Storage

<b>Shipping Weight (Approximate)</b>	Bag weight is 50 lbs. (22.7 kg) Truckload = 880 bags 40 bags per pallet plastic shrink wrapped.
<b>Storage (General)</b>	Material should be kept dry, covered, and off of the ground.
<b>Storage Temperature &amp; Humidity</b>	-20°F to 150°F (-29°C to 66°C) 0 to 90% relative humidity
<b>Shelf Life</b>	Min. 24 months

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



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