

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 ⁽¹⁾ | Non-Uniform | Speckled Gray |
|------------------------------------|---------------------------|--|
| Density (Average) | ASTM E 605 ⁽²⁾ | 47 lbs/ft ³ |
| Durometer Hardness (Shore D) | ASTM D2240 | 55 |
| Compressive Strength | ASTM E761 | 836 psi |
| Coefficient of Thermal Expansion | | 4.5 X10 ⁻⁶ (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 ² |
| Insulation "K" Factor | ASTM C177 | 1.09 (BTU in/hr ft ² °F) |
| Specific Heat | | 0.36 BTU/lb/°F |
| Shrinkage | | <0.5% |
| Coverage 50 lb. bag ⁽³⁾ | | 15.4 Bd.Ft. |
| Shelf Life | | Two years |

- (1) Product color may vary due to variations in color of portland cement
- (2) Air dry at ambient conditions until constant weight. Do not force dry. Use ASTM E605 Positive Bead Displacement.
- (3) Material losses during mixing and application will vary and must be taken into consideration when estimating the 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

UL 1709

Rapid temperature rise that simulates a hydrocarbon fire exposure.

Columns – XR716, XR717

Packaging, Handling & Storage

| | |
|---|---|
| Shipping Weight (Approximate) | Bag weight is 50 lbs. (22.7 kg) Truckload = 880 bags 40 bags per pallet plastic shrink wrapped. |
| 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. 24 months |

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

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