

# Pyrocrete® 40



**Pyrocrete 40 is designed for the fire protection of exterior structural steel, vessel skirts, and for upgrading the fire resistance of any existing concrete. Pyrocrete 40 has highly competitive ratings for UL 1709, ASTM E119 and BS-476 (hydrocarbon curve) fire standards.**

**PRODUCT DETAILS** Pyrocrete 40 has high compressive strength, providing a more durable material that is resistant to onsite damage. Less damage equals lower repair costs to the contractor in the field.

High bond strength enables Pyrocrete 40 to have stronger adhesion than inferior products. High bond strength prevents disbondment and cracking of the material which may eventually lead to a failure.

High coverage rates result in higher yields per bag. This translates into fewer bags to purchase, fewer bags to mix, and fewer bags to apply.

Extended material shelf life allows for greater flexibility when ordering and stocking material for upcoming projects.

## APPLICATIONS

PETROCHEMICAL  
PHARMACEUTICAL  
POWER PLANTS  
PARKING GARAGES  
COMMERCIAL BUILDINGS  
AIR PLENUMS

## FEATURES

- › Most cost effective fireproofing solution at 40 lb/ft<sup>3</sup> density
- › Outstanding coverage at 18.3 board feet per 50 lbs. bag (1.65 m<sup>2</sup> at 25.4 mm thickness per 22.7 kg bag)
- › Excellent physical properties - hard, durable
- › UL 1709, ASTM E-119 and BS-476 rated
- › Lath is optional for UL 1709 contour designs
- › Easily applied by spray or trowel - eliminating the need for separate spray & trowel grade materials
- › Lightweight - 1/5 the weight of concrete for equal fire protection
- › Successfully tested for cryogenic exposure, 3 bar overblast and hose stream endurance

# Pyrocrete® 40

## Quality Product Backed by Quality Service

- › Carboline Company has been solving tough corrosion and fireproofing problems since 1947
- › Industrial service centers and sales offices located around the world
- › Over 20 worldwide manufacturing locations with a global network of sales and technical support
- › Industry leading field service and technical engineering support team
- › Certified to ISO 9001

## Reasons To Use Pyrocrete 40

| PERFORMANCE FEATURE                    | ADVANTAGE   | BENEFIT   |
|--|---|---|
| High density (40 lbs/ft <sup>3</sup> ) | Hard, yet 1/5 the installed weight of concrete                            | Resists handling and site damage                    |
| Outstanding coverage                   | 18.3 ft <sup>2</sup> per bag @ 1" (1.65 m <sup>2</sup> per bag @ 25.4 mm) | Greater yield per unit, most economical application |
| High compressive strength              | Durable, resists crushing/flexing damage                                  | Less impact damage, lower repair costs.             |
| High bond strength                     | Prevents disbondment & cracking   | Prevents failure, lower repair costs                |
| UL 1709 ratings (hydrocarbon)          | Lath is optional for UL 1709 contour designs                              | Material and labor savings to install               |
| BS-476 ratings (hydrocarbon curve)     | Low BS-476 thicknesses  | Faster application, less coats                      |

| COVERAGE RATES<br>(BASED ON 4 SIDED UL 1709 CONTOUR DESIGNS) <sup>1</sup> |                                    |  |
|---|------------------------------------|--|
| Hourly Rating   | Pyrocrete 40 Thickness (UL XR-705) | Pyrocrete 40 Coverage Rates (ft <sup>2</sup> per bag) <sup>2</sup> |
| ¾   | N/A                                | N/A  |
| 1   | 13/16" (21mm)                      | 22.5 (2.1 m <sup>2</sup> )   |
| 1 ½   | 1-1/8" (29mm)                      | 16.2 (1.5 m <sup>2</sup> )   |
| 2   | 1-3/8" (35mm)                      | 13.3 (1.2 m <sup>2</sup> )   |
| 2 ½   | 1-9/16" (40mm)                     | 11.7 (1.1 m <sup>2</sup> )   |
| 3   | 1-13/16" (46mm)                    | 10.0 (0.9 m <sup>2</sup> )   |
| 4   | 2-3/16" (56mm)                     | 8.3 (0.7 m <sup>2</sup> )  |

| COVERAGE RATES<br>(BASED ON 4 SIDED BS-476 HYDROCARBON DESIGNS) <sup>(3)</sup> (4) |                                      |   |
|--|--------------------------------------|---|
| Hourly Rating in Minutes   | Pyrocrete 40 Thickness (HP/A of 197) | Pyrocrete 40 Coverage Rates (m <sup>2</sup> per bag) <sup>2</sup> |
| 30   | 10 mm (0.4")                         | 4.3 (46.5 ft <sup>2</sup> )                                       |
| 60   | 20 mm (0.8")                         | 2.2 (23.2 ft <sup>2</sup> )                                       |
| 90   | 29 mm (1.1")                         | 1.5 (16.0 ft <sup>2</sup> )                                       |
| 120  | 36 mm (1.4")                         | 1.2 (12.9 ft <sup>2</sup> )                                       |
| 180  | 50 mm (2.0")                         | 0.9 (9.3 ft <sup>2</sup> )  |
| 240  | 62 mm (2.4")                         | 0.7 (7.5 ft <sup>2</sup> )  |
| 4  | 1-1/2" (38mm)                        | 9.5   |

Notes: <sup>1</sup> UL 1709 thicknesses based on W10 x 49 (W/D = 0.84, or HP/A = 159)

<sup>2</sup> Coverage based on 50 lbs. (22.7 kg) bags (one board ft = one ft<sup>2</sup> of material at one inch or 0.09 m<sup>2</sup> of material at 25.4 mm)

<sup>3</sup> BS-476 (hydrocarbon curve) thicknesses based on W8 x 28 (W/D = 0.68 or HP/A = 197)

<sup>4</sup> BS-476 (hydrocarbon curve) ratings range from HP/A: 30 to 300



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