

MONOKOTE® MK-6/HY Extended Set Product Data Sheet

Product performance data and information

Product Description

MONOKOTE®MK-6/HY Extended Set fireproofing is a single component, mill-mixed fireproofing plaster (cementitious) which has a delayed set feature. Extended Set is the same as MK-6/HY, except this product can be left unattended in the delivery system for up to 4 days. The Extended Set product requires the addition of water to form a consistent, pumpable slurry. To achieve proper setting time, MONOKOTE®Accelerator must be injected into MONOKOTE®MK-6/HY Extended Set fireproofing during product application. In addition, a dye marker material should be added when Extended Set is introduced per mixing and application instructions. This product can be used on structural steel columns, beams, joists, trusses, floors and roof decking.

Features & Benefits

MONOKOTE®MK-6/HY Extended Set fireproofing offers the following features and benefits to fireproofing applicators:

| FEATURE | BENEFIT |
|--|---|
| Delayed set time | <ul style="list-style-type: none"> Allows applicator to significantly reduce or eliminate time consuming pump-in/pump-out procedure Allows applicator to increase daily productivity rate (bags/day) up to 20% Allows applicator to reduce waste water disposal and material scrap Allows applicator to complete fireproofing jobs in less time |
| Same in-place performance and fire rating performance as MK-6/HY | <ul style="list-style-type: none"> Durable UL listed (MK-6/HY) Factory inspected to ensure product performance Compliance with UBC, NBC, SBC and IBC Building Codes |
| Superior technical service & support | <ul style="list-style-type: none"> Provides application training and support Provides timely troubleshooting and follow up service |

Delivery & Storage

- All material to be used for fireproofing shall be delivered in original unopened packages bearing the name of the manufacturer, the brand and proper Underwriters Laboratories Inc. labels for fire hazard and fire-resistance classifications.
- The material shall be kept dry until ready for use. Packages of material shall be kept off of the ground, under cover and away from sweating walls and other damp surfaces. All bags that have been exposed to water before use shall be discarded. Stock of material is to be rotated and used before its expiration date.

Steel & Concrete Surfaces

- Prior to the application of Extended Set, an inspection shall be made to determine that all steel surfaces are acceptable to receive fireproofing. The steel to be fireproofed shall be free of oil, grease, excess rolling compounds or lubricants, loose mill scale, excess rust, noncompatible primer, lock down agent or any other substance that will impair proper adhesion. Where necessary, the cleaning of steel surfaces to receive fireproofing shall be the responsibility of the general contractor.
- The project architect shall determine if the painted or primed structural steel to receive fireproofing has been tested in accordance with ASTM E119, to provide the required fireresistance rating.
- Many fire-resistance designs allow the use of painted metal floor or roof deck in place of galvanized decking. Painted decking must be UL listed in the specific fire-resistance designs and must carry the UL classification marking. Consult your local GCP sales representative for details.
- Prior to application of Extended Set, a bonding agent approved by the fireproofing manufacturer shall be applied to all concrete substrates.
- Apply fireproofing to the underside of roof deck assemblies only after roofing application is complete and roof traffic has ceased.
- No fireproofing shall be applied prior to completion of concrete work on steel decking.

Performance Characteristics

| PHYSICAL PROPERTIES | RECOMMENDED SPECIFICATION | TYPICAL VALUES | TEST METHOD |
|---------------------------------|--|--|-----------------------|
| Dry density, minimum average | 15 pcf (240 kg/m ³) | 15 pcf (240 kg/m ³) | ASTM E605 |
| Bond strength | 200 psf (9.6 KPa) | 339 psf (16.2 KPa) | ASTM E736 |
| Compression, 10% deformation | 1,200 psf (51 KPa) | 1,483 psf (71.0 KPa) | ASTM E761 |
| Air erosion | Max 0.000 g/ft ² (0.00 g/m ²) | 0.000 g/ft ² (0.00 g/m ²) | ASTM E859 |
| High velocity air erosion | No continued erosion after 4 hours | No continued erosion after 4 hours | ASTM E859 |
| Corrosion | Does not contribute to corrosion | Does not contribute to corrosion | ASTM E937 |
| Bond impact | No cracking, spalling or delamination | No cracking, spalling or delamination | ASTM E760 |
| Deflection | No cracking, spalling or delamination | No cracking, spalling or delamination | ASTM E759 |
| Resistance to mold growth | No growth after 28 days | No growth after 28 days | ASTM G21 |
| Surface burning characteristics | Flame spread = 0 Smoke developed = 0 | Flame spread = 0 Smoke developed = 0 | ASTM E84 |
| Combustibility | Less than 5 MJ/m ² total, 20 kw/m ² peak heat release | Less than 5 MJ/m ² total, 20 kw/m ² peak heat release | ASTM E1354 |
| Impact penetration | Max 6 cm ³ abraded | 3.9 cm ³ | City of San Francisco |
| Abrasion resistance | Max 15 cm ³ abraded | 8.3 cm ³ | City of San Francisco |

Temperature & Ventilation

- The substrate temperature shall be a minimum of 40°F (4.5°C) for at least 1-hour prior to the application of the MONOKOTE®. Additionally, the air and substrate temperature during application and for a minimum of 24 hours after application shall be no less than 40°F (4.5°C).
- Provisions shall be made for ventilation to properly dry the fireproofing after application. In enclosed areas lacking natural ventilation, air circulation and ventilation must be provided to achieve a minimum total air exchange rate of 4 times per hour until the material is substantially dry.

Field Tests

- The architect will select an independent testing laboratory (for which the owner will pay) to sample and verify the thickness and density of the fireproofing in accordance with the applicable building code.
- The architect will select and the owner will pay for an independent testing laboratory to randomly sample and verify the bond strength of the fireproofing in accordance with the provisions of ASTM E736.
- Results of the above tests will be made available to all parties at the completion of pre-designated areas which shall have been determined at a pre-job conference.

Safety

- MONOKOTE® Extended Set is slippery when wet. The general contractor and applicator shall be responsible for posting appropriate cautionary "SLIPPERY WHEN WET" signs. Signs should be posted in all areas in contact with wet fireproofing material. Anti-slip surfaces should be used on all working surfaces.
- Safety Data Sheets (SDS) for MONOKOTE® MK-6/HY Extended Set are available upon request by calling 866-333-3SBM (3726) or by visiting our web site.

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GCP Applied Technologies Inc., 2325 Lakeview Parkway, Suite 450, Alpharetta, GA 30009, USA

GCP Canada, Inc., 294 Clements Road, West, Ajax, Ontario, Canada L1S 3C6

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