MONOKOTE® Z-3306 G Product Data Sheet

Thermal barrier

Product Description

MONOKOTE® Z-3306/G Thermal Barrier is a gypsum based fire protective coating specifically formulated for application over sprayed polyurethane foam plastics (SPF) with a nominal density of 0.5 pounds per cubic foot (pcf). Spray applied to interior foam surfaces on walls and ceilings, Z-3306/G forms a well adhered, monolithic thermal barrier against heat and fire.

MONOKOTE® Z-3306/G is a mill-mixed product requiring only the addition of water. Prior to application of MONOKOTE® Z-3306/G, the application of FIREBOND® Concentrate at a nominal rate of 500 ft^2/gal is required to all foam surfaces. For maximum yield benefit and set characteristics, Z-3306/G can be applied using MONOKOTE® Accelerator.

With MONOKOTE® Accelerator, Z-3306/G can be applied to the required thickness in a continuous uninterrupted operation. This results in an efficient, low cost operation that meets building code and insurance requirements.

In developing MONOKOTE® Z-3306/G, GCP Applied Technologies has utilized its experience and technology as the producer of MONOKOTE® spray applied fireproofing products – the most widely used structural steel fireproofing brand in North America. Sales and technical service personnel located throughout the United States and Canada provide close technical support to contractors, owners and specifiers.

Benefits

While specific requirements differ from locality to locality, the use of nominal 0.5 pcf SPF for most building occupancies is permitted only when they are protected by an approved thermal barrier. MONOKOTE® Z-3306/G has been successfully fire-tested for performance, reliability, ease of application and low in-place cost.

- Proven fire test performance - MONOKOTE® Z-3306/G has successfully passed the International Building Code requirements for code compliant use as a thermal barrier over nominal 0.5 pcf urethane foam plastics.
- Economical - High application rate makes MONOKOTE® Z-3306/G the low cost way to protect foam plastics. The use of MONOKOTE® Accelerator adds more savings by maximizing yield and set charcteristics reducing labor and time to complete the project
- Damage resistant - MONOKOTE® Z-3306/G dries to a hard, durable surface which resists damage.

In-Place Performance: Physical Properties

- Bond Strength (ASTM E736) - minimum 200 psf
- Compressive Strength (ASTM E761) - 1,200 psf
- Density (ASTM E605) - minimum 15 pcf average; minimum 14 pcf individual
- Color - Gray
- Theoretical yield - maximum 44.5 bd ft/bag

TEST METHOD	THICKNESS OF Z-3306/G	TEST RESULTS
ASTM E84 (Surface Burning Characteristics)	N/A	Flame Spread = 0 Smoke Developed = 0
ULI (USA) - ASTM E119 Exposure - Urethane Foam*	3/4 in. (19mm)	Passed
NFPA 286/UL 1715 – Corner Room Test	3/4 in. (19mm)	Passed

* NFPA 275 requirements include ASTM E119 and a room corner test (NFPA 286, FM 4880 or UL 1715)

Installation

MONOKOTE® Z-3306/G is packaged in kraft poly-lined bags for easy handling and storage.

FIREBOND® Concentrate (Bonding Agent) must be applied to all foamed surfaces at a rate of 500 ft^2/gal prior to application of Z-3306/G. FIREBOND® should be allowed to become tacky or dry prior to application of MONOKOTE® Z-3306/G.

MONOKOTE® Z-3306/G is formulated for machine application in standard gypsum plaster type equipment. Z-3306/G is mixed with water in a paddle plaster-type mixer to form a consistent, pumpable slurry which is then spray applied to foamed plastic previously treated with FIREBOND® Concentrate.

Where desired, the natural sprayed texture of MONOKOTE® Z-3306/G can be lightly troweled to form a semi-smooth, paintable surface. After completely dry, MONOKOTE® Z-3306/G may be painted with acrylic and other paints formulated for interior use conditions over gypsum plaster based materials. Thin latex modified surface coatings may also be applied to MONOKOTE® Z-3306/G to increase surface hardness. All coatings must meet exposed interior use code requirements and surface burning characteristics (ASTM E84 of smoke < 450, Flame Spread < 200) Contact your GCP representative for guidance prior to application of coatings to MONOKOTE® Z-3306/G. So called “waterproofing coatings” of any kind will not prevent water penetration of MONOKOTE® Z-3306/G and may not be used.

Typical Application and Limits of Use

MONOKOTE® Z-3306/G may be used to protect foam plastics in many types of buildings. MONOKOTE® Z-3306/G is gypsum based and is designed for interior use only. MONOKOTE® Z-3306/G should not be used for exterior applications or exposure to continuous unconditioned high humidity environments or where free water may condense For high humidity or damp applications, GCP recommends the use of MONOKOTE® Z-3306 Portland Cement based Thermal Barrier.

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

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