

D A T A S U B M I T T A L



## Monokote® Z-3306

### Thermal Barrier

#### Product Information/ Description

Monokote® Z-3306 Thermal Barrier is a cementitious fire protective coating specifically formulated for application over rigid, urethane and polystyrene foam plastics. Spray applied to interior foam surfaces on walls and ceilings, Z-3306 forms a hard, durable, monolithic thermal barrier against heat and fire.

Z-3306 is a mill-mixed product requiring only the addition of water. It can be easily applied to required thickness in a single pass resulting in an efficient, low cost method of meeting building code and insurance requirements.

In developing Z-3306, Grace Construction Products 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 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 foam plastics for most building occupancies is permitted only when they are protected by an approved thermal barrier. Z-3306 has been successfully fire-tested and listed by Underwriters Laboratories, Inc. and Factory Mutual. Z-3306 has a proven field and laboratory record of performance, reliability, ease of application and low in-place cost.

Testing Agency	Test Method	Substrate	Thickness of Z-3306	Test Result
Underwriter's Laboratories Inc. (UL®) (USA)	UL 1715 (Room fire test) (UBC 26-3)	Urethane Foam	10 mm (3/8 in.)	Z-3306 approved
		Styrene Foam	10 mm (3/8 in.)	Z-3306 approved
ULI (USA)	ASTM E 119 Exposure (UBC 26-2)	Urethane Foam	19 mm (3/4 in.)	15 Minute Rating
			29 mm (1 1/8 in.)	30 Minute Rating
ULI (USA)	ASTM E 84 (Tunnel Test)	Urethane Foam	13 mm (1/2 in.)	Flame Spread 10 Smoke Developed 0
		Styrene Foam	13 mm (1/2 in.)	Flame Spread 5 Smoke Developed 0
ULC (Canada)	CAN4-S124M	Urethane Foam	21 mm (7/8 in.)	Classification A
		Urethane Foam	17 mm (3/4 in.)	Classification B
		Urethane Foam	20 mm (7/8 in.)	Classification C
		Urethane Foam	17 mm (3/4 in.)	Classification D
Factory Mutual System®	FM 4975	Urethane Foam	22 mm (7/8 in.)	Delay Ignition 10-15 minutes
		Styrene Foam	29 mm (1 1/8 in.)	Delay Ignition 10-15 minutes

- Proven Fire Test Performance – Z-3306 has successfully passed UL requirements as a thermal barrier over foam plastics.
- Economical – Ease of installation makes Z-3306 a low cost way to protect foam plastics.
- Workable – After being spray applied, Z-3306 may be lightly trowelled.
- Damage Resistant – Z-3306 dries to a hard, durable surface which resists damage.
- Humidity Resistant – Z-3306 can be used in high humidity conditions and reduces sweating often experienced in vegetable storage areas.
- Washable – When trowelled and painted, Z-3306 can be washed and cleaned.

### Physical Properties

- Bond Strength – 500 lbs/ft<sup>2</sup>
- Color – Grey or Off-white
- Theoretical Yield – 25 bd ft/bag (50 ft<sup>2</sup> at 1/2 in. thickness)

### Installation

Z-3306 is packaged in poly-lined bags for easy handling and storage.

Firebond Concentrate (bonding agent) must be applied to all surfaces before application of Z-3306.

Z-3306 is mixed with water in a plaster-type mixer to form a consistent, pumpable slurry. This slurry is then spray applied.

Where desired, the natural sprayed texture of Z-3306 can be lightly trowelled to form a semi-smooth, paintable surface. A thin (nominal 1/16 in.) latex stucco overspray may be applied to form a hard eggshell finish, capable of withstanding significant physical contact and surface abrasion.

### Typical Applications\*

Z-3306 may be used to protect foam plastics in many types of buildings. The following is a brief list of typical applications:

- Breweries, freezers and coolers
- Controlled atmosphere apple, potato and vegetable storage
- Ice arenas and recreation centers
- Indoor tennis courts and swimming pools
- Pig and dairy barns
- Seed storage and processing
- Water treatment plants

\* **NOTE:**

Many food processing applications require local inspection agency approvals in advance of installation.



Visit our web site at: [www.graceconstruction.com](http://www.graceconstruction.com)

printed on recycled paper

W. R. Grace & Co. - Conn. 62 Whittemore Avenue Cambridge, MA 02140

Monokote and Topkrete are registered trademarks of W. R. Grace & Co. - Conn.

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 the users' consideration, investigation and verification, but we do not warrant the results to be obtained. Please read all statements, recommendations or 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 which would infringe any patent or copyright. W. R. Grace & Co. - Conn., 62 Whittemore Avenue, Cambridge, MA 02140. In Canada, Grace Canada, Inc., 294 Clements Road, West, Ajax, Ontario, Canada L1S 5C6.

This product may be covered by patents or patents pending.

Copyright 2000. W. R. Grace & Co. - Conn. TB-106J Printed in U.S.A. 12/00 FA/AP/3M

**GRACE**  
Construction Products