



SPECTRALOCK® 2000 IG

DS-030.0-0315

**Globally Proven
Construction Solutions**



1. PRODUCT NAME

SPECTRALOCK® 2000 IG

2. MANUFACTURER

LATICRETE International, Inc.
1 LATICRETE Park North
Bethany, CT 06524-3423 USA

Telephone: +1.203.393.0010, ext. 235
Toll Free: 1.800.243.4788, ext. 235
Fax: +1.203.393.1684
Internet: www.laticrete.com

3. PRODUCT DESCRIPTION

SPECTRALOCK 2000 IG is a highly chemical resistant industrial grade epoxy grout for: ceramic tile, pavers, floor brick, packing house tile, and stone. SPECTRALOCK 2000 IG is supplied as factory proportioned kits consisting of epoxy resin, hardener, and silica filler.

Use in corrosive environments such as:

Industrial—bakeries, dairies, cheese factories, breweries, CIP rooms, meat packing plants, soft drink plants, confectioneries, canneries, distilleries, pharmaceutical factories, veterinary hospitals, clinics and kennels.

Commercial—institutional kitchens, fast food restaurants, cafeterias, laboratories, supermarkets.

Advantages

- High chemical resistance
- Improved temperature resistance
- Maximum physical strength
- Equipped with anti-microbial technology
- Highly resistant to bacteria attack
- Exceeds ANSI 118.3 (Epoxy) and ANSI 118.5 (Furan) performance requirements
- Water cleanable
- Fast curing
- Cures at low temperature

Packaging

2 Unit Pail Kit (Complete Unit – Grey and Black)

Unit Net Weight 28.5 lb (12.96 kg); 48 Pails Per Pallet

2 Unit Pail (Liquid Only)

Unit Net Weight 10.5 lb (4.8 kg); 48 Pails Per Pallet

4 Unit Carton (Liquid Only)

Unit Weight 16 lb (7.3 kg); 56 Cartons Per Pallet

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for two (2) years.

Limitations

- Maximum chemical resistance is achieved in seven (7) days at 70°F (21°C). Protect from exposure to strong chemicals until fully cured; at colder temperatures it takes longer to achieve full cure.
- Grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required, use a LATICRETE® Waterproofing Membrane (see Section 10 FILING SYSTEM).
- Please consult with LATICRETE Technical Services for specific recommendations, if grout will be exposed to chemicals other than those indicated on the chemical resistant chart.
- Not for use with color #44 Bright White.
- For interior use only.

Cautions

Consult MSDS for more safety information.

- Protect finished work from chemical exposure, dirt and traffic until fully cured.
- Until cured, SPECTRALOCK 2000 IG may irritate eyes and skin. Avoid contact with eyes and or prolonged contact with skin. In case of contact, flush thoroughly with water.
- **Do not** take internally. Silica sand may cause cancer or serious lung problems. Avoid breathing dust. Wear a respirator in dusty areas.
- Because propane gas heaters will cause epoxy grouts to yellow, refrain from using such heaters or properly vent all exhaust.
- Keep out of reach of children.

4. TECHNICAL DATA

VOC/LEED Product Information



This product has been certified for Low Chemical Emissions (ULCOM/GG UL2818) under the UL GREENGUARD Certification Program for Chemical Emissions for Building Materials, Finishes and Furnishings (UL 2818 Standard) by UL Environment.

Applicable Standards

ANSI A118.3, ANSI A118.5 ISO13007-1 RG

Performance Properties



Registration #143530

NSF Registration assures inspection officials and end users that formulation and labels meet appropriate food safety regulation. NSF International launched its voluntary Non-food Compounds Registration Program in 1999 to re-introduce the previous authorization program administered by the U.S. Department of Agriculture (USDA).

EVALUATION PER ANSI A118.3		
PROPERTY	VALUE	
TEST/ NO.	EVALUATION	REQUIREMENT
Water Cleanability (E5.1)	Pass	80 min.
Initial Setting Time (E5.2)	Pass	> 2.0 hrs.
Service Setting Time (E5.2)	Pass	< 7 days
Shrinkage (E5.3)	0.07%	< 0.25%
Sag (E5.4)	Pass	no change
Quarry Shear Bonds (E5.5)	2200 PSI (15.2 MPa)*	> 1000 psi (6.9 MPa)
Compressive Strength (E5.6)	8300 PSI (57.2 MPa)	> 3500 psi (24 MPa)
Tensile Strength (E5.7)	3000 PSI (20.7 MPa)	> 1000 psi (6.9 MPa)
Thermal Shock (E5.8)	2100 PSI (14.5 MPa)	> 500 psi (3.4 MPa)

* Tile Failed During Test TCA-061-93

EVALUATION PER ANSI A118.5			
Property	Test Method	Evaluation	Grout Requirement
Compressive Strength	ASTM C579	9255 PSI (63.8 MPa)	3000 psi (21 MPa)
Tensile Strength	ASTM C307	2672 PSI (18.4 MPa)	400 psi (2.75 MPa)
Absorption	ASTM C413	0.19%	Max. 1%
Modulus of Rupture	ASTM C580	5300 psi (37 MPa)	600 psi (4.1 MPa)
Initial Set, Hours	ASTM C308	2	Max 5
Final Set, Days	ASTM C308	6	Max 7
Linear Shrinkage	ASTM C531	0.07%	Max. 1%
Working Time Minutes	ASTM C308	80	Min. 10
Bond Strength	ASTM C321	Pass**	150 psi (1 MPa)

** Brick Failed During Test

SERVICE TEMPERATURE RANGE***	
Intermittent Exposure	up to 360°F/182°C
Constant Exposure	up to 185°F/80°C

***Service Temperature Exposure defined as: Intermittent—where hot materials, liquids or steam come in contact with grout for a short time.

Constant—where grout is subjected to continuous heat such as under a bakery oven.

Working Properties (70°F [21°C])

Working Time	80 minutes
Wet Density	93.6 lbs/ft ³ (1500 kg/m ³)

Time to Traffic

CURE TIME			
FLOOR TEMPERATURE	TIME TO LIGHT TRAFFIC ^A	TIME TO HEAVY TRAFFIC ^{AA}	FULL CURE ^{AAA}
50°F (10°C)	20 Hours	32 Hours	8 - 10 Days
60°F (16°C)	11 Hours	24 Hours	7 Days
70°F (21°C)	8 Hours	16 Hours	7 Days
80°F (27°C)	6 Hours	12 Hours	5 - 6 Days
90°F (32.2°C)	4 Hours	4 - 5 Hours	3 - 4 Days

^A Foot Traffic

^{AA} Place Equipment

^{AAA} Exposure to Chemical and Heat

Chemical Resistance ¹ Chart			
Chemical Name	Continuous Exposure	Inter-mittent Exposure	Splash Exposure
Food Acids			
Lactic to 10%	R	R	R
Acetic to 10%	R	R	R
Formic to 5%	R	R	R
Citric to 50%	R	R	R
Tartaric to 50%	R	R	R
Tannic to 50%	R	R	R
Oleic to 100%	R	R	R
Phosphoric to 80%	R	R	R
Mineral Acids			
Hydrofluoric acid ² 10%	R	R	R
Sulfuric to 50% ²	R	R	R
Nitric to 30% ²	R	R	R
Hydrochloric to ² 36.5%	R	R	R
Corrosive Cleaners			
Sodium Hypochlorite ² (Bleach) 3%	R	R	R
Sodium Hydroxide (Saturated)	R	R	R

Solvents			
Xylene	R	R	R
Ethyl Alcohol	R	R	R
Mineral Spirits	R	R	R
Toluene	R	R	R
Methylene Chloride	NR	NR	NR
Gasoline	R	R	R

¹ Chemical Resistance defined as:

Splash—minor spill wiped up quickly such as in a laboratory.

Intermittent—Exposure to chemicals where clean up takes place several times a day such as in a commercial kitchen.

Continuous—heavy exposure to chemicals where clean up is less frequent such as in an industrial food plant.

R=Recommended, NR=Not Recommended. Chemical Resistance determined in accordance with ASTM C267.

² Long Exposure will cause color change.

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

5. INSTALLATION

Refer to SPECTRALOCK® 2000 IG How to Install Guide DS 004.5 for more information.

Surface Preparation

Before starting to grout remove spacers and debris in grout joints and remove dust and dirt using a damp sponge. Allow to dry. Do not leave water standing in joints. Do not clean tiles with acid cleaners. Substrate temperature must be between 45°F (7°C) and 90°F (32°C).

Note: Temperature will affect working properties of SPECTRALOCK 2000 IG. Warm temperatures will speed curing and shorten working time. Cool temperatures will slow curing and require longer time to traffic. Store SPECTRALOCK 2000 IG (including Part C) at 70°F (21°C) for 24 hours prior to use.

Mixing

Pour SPECTRALOCK 2000 IG Part A and Part B into a clean mixing pail and mix thoroughly with a drill mixer until liquids are completely blended. Add all of the Part C powder. The mix will look thick at the beginning. Whip it thoroughly with high speed mixer (>450 rpm) until uniformly blended (Minimum 2 Minutes). This will aerate the grout to a very fluffy mix.

Application

For maximum pot life, remove grout from bucket and spread on floor or plastic sheeting. Spread the grout with sharp, firm rubber grout float. Work the grout paste into the joints. Insure the joint is filled and grout is not sitting on top. Remove excess grout from the face of the tiles with the edge of the grout float. Hold the float at 90° angle and pull it diagonally across the joints and tile to avoid pulling out the material.

Initial Cleaning – USE INITIAL WASH CLEANING ADDITIVE.

Once grout has been spread, wait approximately 30 minutes at 70°F (21°C) prior to beginning initial wash. Add Initial Wash cleaning additive to 2 gals (7.6 l) of clean water and mix until fully dissolved. Do not mix cleaning additive with grout. Wipe grout joints and tile surface with a white nylon pad and plenty of water (with the cleaning additive) using a circular motion. Drag a damp clean sponge diagonally over the scrubbed surface to remove grout residue.

Final Cleaning – USE FINAL WASH CLEANING ADDITIVE.

Wait at least 90 minutes after the initial wash at 70°F (21°C) for the final wash using the same procedure as in the initial wash. Prepare another two gallons of clean water and add the Final Wash cleaning additive and mix until fully dissolved. In the final wash avoid contact with the grout – clean tile surface only.

6. AVAILABILITY AND COST

Availability

LATICRETE® and LATAPOXY® materials are available worldwide.

For distributor information, call:

Toll Free: 1.800.243.4788

Telephone: +1.203.393.0010

For on-line distributor information, visit LATICRETE at

www.laticrete.com.

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM

DS 230.13: LATICRETE Product Warranty

A component of:

DS 025.0: LATICRETE 25 Year System Warranty
(United States and Canada)

8. MAINTENANCE

LATICRETE and LATAPOXY grouts require routine cleaning with a neutral pH soap and water. Contact the cleaner manufacturer if another cleaner type will be used to ensure compatibility with the grout. Installation performance and durability may depend on properly maintaining products supplied by other manufacturers. Routine maintenance can be done with detergents and a sponge or mop. For tough or difficult to remove soil, a bleaching cleaner (e.g. Soft Scrub, Comet, Ajax, etc. or electric dish washing detergent) on a nylon scrubbing pad or a long handled stiff bristle brush can be used. Please note: Prior to using any cleaning material on a tile, etc. installation, test a discrete area or scrap piece of tile to insure desired results. For additional information, please refer to the TDS 400, Grout Guide.

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 235

Telephone: +1.203.393.0010, ext. 235

Fax: +1.203.393.1948

Technical and Safety Literature

To acquire technical and safety literature, please visit our website at www.laticrete.com.

10. FILING SYSTEM

Additional product information is available on our website at www.laticrete.com. The following is a list of related documents:

- DS 230.13: LATICRETE® Product Warranty
- DS 025.0: LATICRETE 25 Year System
Warranty (United States and Canada)
- DS 236.0: 9235 Waterproofing Membrane
- DS 663.0: HYDRO BAN®
- DS 004.5: SPECTRALOCK® 2000 IG How to
Install