



01-1484

Date: 06/05/2026

Submittal No: 16

Project: William Penn ES Mod.
BP-02 General
2201 San Emidio St.
Bakersfield, CA 93304

Owner: Bakersfield City School District
1300 Baker St.
Bakersfield, CA 93304

Architect: SCArchitect, Inc.
1601 New Stine Rd. Ste. 280
Bakersfield, CA 93309

Contractor: JTS Construction
P.O. Box 41765
Bakersfield, CA 93384-1765

Subcontractor: Michael Surface Solutions, Inc.

Submittal: Ceramic Tile

Contractor's Stamp
JTS CONSTRUCTION
BY: Omar Cabral
DATE: 6/5/2026
REVIEWED/RESUBMIT

Architect's Stamp



Transmittal Letter

Project: William Penn Elementary School Modernization- Ceramic Tile

Contractor: JTS Construction

We are sending you							
<input type="checkbox"/>	Attached	<input type="checkbox"/>	Under Separate Cover via: the following:				
<input type="checkbox"/>	Shop Drawings	<input type="checkbox"/>	Prints	<input type="checkbox"/>	Plans	<input checked="" type="checkbox"/>	Submittal
<input type="checkbox"/>	Copy of Letter	<input type="checkbox"/>	Change Order	<input type="checkbox"/>	Samples	<input type="checkbox"/>	Closeout
<input type="checkbox"/>	Total Quantity	<input type="checkbox"/>	Reproducible	<input type="checkbox"/>	Specification		

Submittal	Manufacturer	Date	Description
Section 09	Daltile	6/1/2026	1 - Floor Tile Daltile Keystone 2"x2": Color -TBD
Section 09	Daltile	6/1/2026	2 - Wall Tile & Tile Base Daltile Color Wheel Classic 4"x4", Color- TBD
Section 09	Custom Building Products	6/1/2026	3 - Grout for Wall and Floor Tiles Custom Polyblend Plus Grout
Section 09	Schluter Systems	6/1/2026	4 - Transition: Tile to CPT Schluter Reno-TK AETK100, Satin Anodized Aluminum
Section 09	Schluter Systems	6/1/2026	5 - Transition: Tile to VCT Schluter Reno-U AEU100, Satin Anodized Aluminum
Section 09	Dyna-Crete	6/1/2026	6 - Wall and Floor Floating Dyna-Crete: Deck Mud 710- For Floor Dyna-Crete: Fat Mud 730- For Wall
Section 09	Merkrete Laticrete Custom Building Products	6/1/2026	7 - Thinset Merkrete- 720 Marble Pro Laticrete- 252 Silver CBP- VersaBond CBP- AcrylPro
Section 09	Custom Building Products	6/1/2026	8 - Adhesive - RB Custom- RedGard Water Proofing Membrane

These are transmitted as checked below

<input type="checkbox"/>	For Approval	<input type="checkbox"/>	Approved as Submitted	<input type="checkbox"/>	Resubmit copies for approval
<input type="checkbox"/>	For Your Use	<input type="checkbox"/>	Approved as Noted	<input type="checkbox"/>	Submit (#) copies for distribution
<input type="checkbox"/>	As Requested	<input type="checkbox"/>	Returned for Corrections	<input type="checkbox"/>	Return (#) corrected prints
<input type="checkbox"/>	For Review and Comment	Revise and Resubmit / Work May not Proceed			
FOR BIDS DUE:			PRINTS RETURNED AFTER LOAN		

Comments:

Please confirm received to binu@michaelsurfacesolutions.com

Note:

Select Color For Floor and Wall tile from Group (1) Color Group	Binu K Jose, Operations Manager
Select Color For Grout	
Signed on: 06/01/2026	

7101 Schirra Ct. Bakersfield, CA 93313 Ph:661-688-0088 Fax:661-688-0089

DIR # PW-LR-1000877947 **CA LIC # 1088958** | **Estimating@michaelsurfacesolutions.com**
Flooring | Tile | Countertops | Polish Concrete | Epoxy Coating | Waterproof Decking | Gypcrete



MOSAIC

KEYSTONES™
COLORBODY™ PORCELAIN



 daltile®

Select Color For Floor Tile from Group (1)

FINISHES: MATTE | CRISS CROSS | ABRASIVE

GROUP 1



GROUP 2



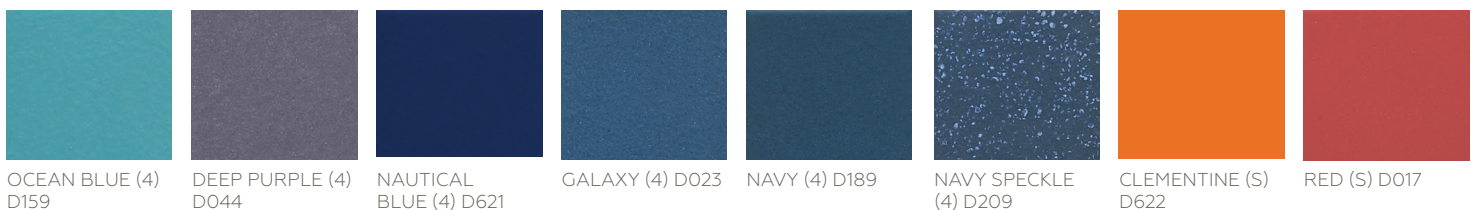
GROUP 3



GROUP 4



GROUP 5



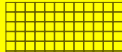

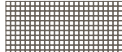

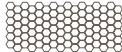



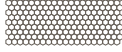













(1), (2), (3), (4) AND (5) INDICATE PRICE GROUPS. (1) BEING THE LEAST EXPENSIVE.

KEYSTONES™

COLORBODY™ PORCELAIN

Floor Tile

SIZES

ColorBody Porcelain Dot-Mount Mosaics	Thickness	Finish	Made in U.S.A.
 2 x 2 Mosaic 12" x 24" Sheet (30.48 cm x 60.96 cm Sheet)	1/4"	M T A	
 1 x 1 Mosaic 12" x 24" Sheet (30.48 cm x 60.96 cm Sheet)	1/4"	M A	
 2" Hexagon Mosaic 12" x 24" Sheet (30.48 cm x 60.96 cm Sheet)	1/4"	M T	
 Organic 2" Hexagon Mosaic 12" x 24" Sheet (30.48 cm x 60.96 cm Sheet)	1/4"	M	
 1" Hexagon Mosaic 12" x 22-5/8" Sheet (30.48 cm x 58.10 cm Sheet)	1/4"	M	
 2 x 1 / 1 x 1 Windmill Mosaic 12" x 24" Sheet (30.48 cm x 60.96 cm Sheet)	1/4"	M	
 1" Penny Round Solid Colors 10" x 22" Sheet (25.40 cm x 55.88 cm Sheet)	1/4"	M	
 1" Penny Round Retro Dot 10" x 22" Sheet (25.40 cm x 55.88 cm Sheet)	1/4"	M	
 1" Penny Round Rosette 10" x 22" Sheet (25.40 cm x 55.88 cm Sheet)	1/4"	M	
 1" Penny Round Diamond 10" x 22" Sheet (25.40 cm x 55.88 cm Sheet)	1/4"	M	
 Organic 1" Penny Mosaic 12" x 22" Sheet (30.48 cm x 55.88 cm Sheet)	1/4"	M	

- M** Matte Finish
- T** Textured Finish (Textured Finish available in D617, D317, D161, D014, D182, D023, D311 only.)
- A** Abrasive Finish (Abrasive Finish available in all colors, except D017 Red and D622 Clementine, on a made to order basis.)

1" x 1" and 2" x 2" mosaics are available in every color and can be ordered in standard or custom patterns and blends. All colors in 1" x 1" and 2" x 2" size can also be ordered with ClearFace mounting system (which is recommended for use in pool tanks and submerged applications).

All other sizes are available in select colors (see color groups section for details) and can be made to order in standard or custom patterns and blends.

Please see the "Pattern and Border Guide" (available on-line) for templates; and for order assistance please contact your local Daltile Sales Representative.

To view Keystones complete product information visit our website at daltile.com

MOSAIC

APPLICATIONS

	Target DCOF wet	Suitable
Dry & Level – Interior Floor	N/A	✓
Wet & Level – Interior Floor	≥ 0.42	✓
Shower Floors - Standard Center Drain	≥ 0.42	✓
Shower Floors - Linear Drain	≥ 0.55 (Matte) ≥ 0.60 (Abrasive)	✓ ✓
Exterior Floor Applications (including patios, pool decking & other wet areas with minimal footwear)	≥ 0.55	✓*
Ramps & Inclines	≥ 0.65	
Walls/Backsplashes	N/A	✓
Countertops	N/A	✓
Pool Linings	N/A	✓
Pool Tank/Submerged	N/A	✓**

A DCOF value of ≥0.42 is the standard for tiles specified for level interior spaces expected to be walked upon when wet, as stated in ANSI A137.1-A326.3. For more information about DCOF and the DCOF AcuTest™, visit daltile.com/DCOF.


APPLICATION NOTES:

Suitable for exterior applications (provided it is noted as suitable in the applications chart above) in freezing and non-freezing climates, when proper installation methods are followed.

* Keystones mosaics have recurrent grout joints and reflect a DCOF of ≥ 0.55 wet making them suitable for these applications.

** Keystones mosaics with ClearFace™ mounting system recommended for pool tanks and submerged applications.

INSTALLATION

Grout Joint Recommendation	Shade Variation
1/8" Approximately*	 Low (V1) to Random (V4)

Solid colors have medium shade variation, mottled and speckled colors have medium, and blends have random.

* Organic Hex and Penny Mosaic grout joints are intended to vary due to the unique mosaic shape.

PERFORMANCE CHARACTERISTICS

	ASTM#	Result
Water Absorption	C373	< 0.5%
Breaking Strength	C648	> 300 lbf
Scratch Hardness	C1895	7.0 - 8.0
Chemical Resistance	C650	Resistant

For additional information on test results, visit us at: daltile.com/information/TestResults.

DURABILITY

Floor Surface Wear Resistance

1	Residential Bathrooms	3	All Residential / Light Commercial
2	All Residential Areas	④	All Residential / Commercial

PRE-CONSUMER RECYCLED MATERIALS

All or select items within this series meet the requirements for these qualifications. For more information, visit daltile.com.

LRV & MUNSELL

COLOR #	LRV Illuminate-OBS: F02-02 (CWF)	MUNSELL
D037 Pepper White	65.8	4.7Y 8.3/0.7
D335 Almond	61.8	2.0Y 8.1/1.4
D618 Castle Rock	10.9	8.4PB 3.8/0.4
D311 Black	6.5	0.3P 3.0/0.2
D144 Artisan Brown	15.8	9.5YR 4.5/1.9
D147 Buffstone Range	35.7	2.4Y 6.4/1.1
D161 Urban Putty	39.9	1.5Y 6.7/1.8
D014 Desert Gray	40.2	2.9Y 6.8/0.6
D023 Galaxy	9.3	4.6PB 3.7/4.9
D044 Deep Purple	13.6	5.6P 4.3/1.9
D050 Mottled Medium Brown	26.6	0.3Y 5.7/2.2
D090 Pumpkin Spice	28.1	6.1YR 5.7/5.6
D109 Architectural Gray	31.6	3.3Y 6.1/1.3
D116 Emerald	18.1	2.1G 4.9/2.9
D117 Moonshine	57.0	2.9Y 7.9/0.7
D118 Brown Berry	9.4	10.0R 3.5/2.7
D132 Uptown Taupe	31.0	8.7YR 6.1/1.4
D138 Golden Granite	70.6	1.9Y 8.6/1.0
D142 Luminary Gold	51.1	1.0Y 7.4/4.7
D148 Spa	46.0	7.3G 7.2/1.2
D152 Mint Ice	57.2	6.5GY 7.9/1.3
D159 Ocean Blue	25.8	2.4B 5.8/4.5
D160 Cornsilk	64.2	2.6Y 8.2/4.1
D166 Elemental Tan	24.2	9.4YR 5.4/2.1
D169 Waterfall	37.2	9.4B 6.7/2.9
D175 Elemental Tan Speckle	33.2	9.6YR 6.2/2.5
D181 Mustard	42.0	9.2YR 6.8/6.7
D182 Suede Gray	24.1	9.8RP 5.5/1.2
D189 Navy	7.2	2.4PB 3.3/2.2
D192 Aegean	23.3	1.2BG 5.5/2.4
D195 Oak Moss	8.2	9.0GY 3.4/1.3
D197 Aqua Glow	35.3	8.7BG 6.6/3.4
D200 Desert Gray Speckle	41.7	3.7Y 6.9/0.6
D201 Urban Putty Spk	44.7	1.7Y 7.1/1.8
D202 Uptown Taupe Speckle	26.9	9.1YR 5.7/1.2

COLOR #	LRV Illuminate-OBS: F02-02 (CWF)	MUNSELL
D204 Artisan Brown Speckle	16.4	0.5Y 4.6/1.5
D208 Suede Gray Speckle	23.7	1.7Y 5.4/0.2
D209 Navy Speckle	9.9	5.1PB 3.8/4.0
D317 Biscuit	69.9	3.5Y 8.6/0.9
D325 Marble	57.1	0.5Y 7.9/1.3
D372 Sea Speck	14.1	3.2B 4.5/3.0
D452 Cypress	25.5	2.4GY 5.6/1.6
D617 Arctic White	75.0	0.4GY 8.8/0.4
D619 Lime Sherbert	44.5	5.6GY 7.1/5.0
D620 Sunshine	66.3	7.1Y 8.2/7.2
D621 Nautical Blue	8.5	5.2PB 3.7/6.9
D017 Red	13.3	5.6R 4.2/8.8
D622 Clementine	36.7	2.2YR 6.3/9.9

GROUP 4

Color Name	Keystones Unglazed 1 x 1 & 2 x 2	2 x 2 and 2" Hexagon Criss Cross	Keystones Organic 2" Hex & 1" Penny	Penny Rounds	Keystones 1" Hex	Keystones 2" Hex	Trim**
D044 Deep Purple	MTO	N/A	NA	N/A	N/A	N/A	MTO
D023 Galaxy	STK	STK	STK	N/A	STK	N/A	MTO
D619 Lime Sherbet	STK	N/A	NA	N/A	N/A	N/A	MTO
D181 Mustard	STK	N/A	NA	N/A	N/A	N/A	MTO
D621 Nautical Blue	STK	N/A	NA	N/A	N/A	N/A	MTO
D189 Navy	STK	N/A	NA	N/A	N/A	N/A	MTO
D209 Navy Speckle	STK	N/A	NA	N/A	N/A	N/A	MTO
D159 Ocean Blue	STK	N/A	STK	N/A	N/A	N/A	MTO
D090 Pumpkin Spice	MTO	N/A	NA	N/A	N/A	N/A	MTO
D620 Sunshine	STK	N/A	NA	N/A	N/A	N/A	MTO

GROUP 5

Color Name	Keystones Unglazed 1 x 1 & 2 x 2	2 x 2 and 2" Hexagon Criss Cross	Penny Rounds	Keystones 1" Hex	Keystones 2" Hex	Trim
D017 Red #	MTO	N/A	N/A	N/A	N/A	N/A
D622 Clementine #	MTO	N/A	N/A	N/A	N/A	N/A

Available in 1 x 1 and 2 x 2 only (no trim) on a made to order basis.

STK Trim stocked in S862, S886, SC886, C813, C833, CB813, CK813, S832, SC813, MB4C, MB5, MB5A, MB5B and made to order in SC862, SB816, SC816, SCR-L833, S812 and C701

* Trim Stocked in S886, SC886, C833 and SC813. Made-to-Order in C701, SCR-L833, CK813, MB5B and MB5A. No other trim available.

+ Trim Made-to-order in S886, SC886, C833, SC813, C701, SCR-L833, CK813, MB5B and MB5A. No other trim available.

** Group 4 trim offered in in S886, SC886 and C701. No other trim offered.

STK = stocked, N/A = Not available, MTO = Made-to-Order. Made to Order items require 6 - 8 week lead time.

NOTES

Since there are variations in all fired ceramic and natural products, tile and trim supplied for your particular installation may not match samples. Final confirmation should be made from actual tiles and trim prior to installation. Manufactured in accordance with ANSI A137.1 standards.

Not for use on ramps. Water, oil, grease, improper drainage and certain footwear can create slippery conditions. Floor applications expected to be exposed to these conditions require extra caution in product selection.

For additional information refer to "Factors to Consider" at: daltile.com/Factors.

Random visuals enhance the natural beauty of this product. To achieve optimal results, all tile should be selected from multiple cartons and shading and graphic arrangement planned prior to installation.

Special care should be taken when grouting with dark pigmented colors. A grout release is recommended to prevent finely powdered pigments from lodging in the pores of the surface. Use of a latex modified thin-set is recommended for installation.

CLEARFACE™ MOUNTING SYSTEM

- Keystones™ ClearFace™ is a mounting system intended primarily for use in swimming pools and submerged applications. ClearFace™ mounted tile is a premium product to existing paper-face offerings and supplements dot-mounted mosaics.
- Additionally, ClearFace™ allows the contractor to see chips as they are being installed, allowing for realignment when wet should a chip need adjustment. ClearFace's premium feature includes complete tile-back-to-substrate mortar transfer.
- All Keystones 1" and 2" colors are available on a standard made-to-order basis using the ClearFace™ mounting system.
- Complete tile-to-substrate mortar transfer
- Premium alternative for swimming pool installations
- Provides 100% contact between the tile and setting materials, providing additional bond strength
- Allows for visual inspection and better alignment during installation
- Comes with extended 25-year pro-rated limited warranty



7834 C.F. Hawn Freeway,
Dallas, Texas 75217 | 1.800.933.TILE

To view the complete collection of Daltile® products and information, visit our website at daltile.com.



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May contain Recycled
and/or Reclaimed Materials
www.dalTile.com/leed

SAFETY DATA SHEET

CERAMIC TILE

Tile Series: Keystone

1. PRODUCT IDENTIFICATION

Common Name: Ceramic Tile (For purposes of this SDS, the term “ceramic” encompasses all types of tile products manufactured/sourced by Dal-Tile Corporation.)

Synonyms: Ceramic Tile and Wares

Manufacturer Name: Dal-Tile Corporation

Address: Headquarters Office
7834 C.F. Hawn Freeway, Dallas, TX 75217

Emergency Assistance: Environmental, Health and Safety Department
Richard Ray - (214) 309-4295
1-800-933-TILE; (214) 398-1411 (24-hour number)

Recommended Use: Building Material - Tile products manufactured/sourced by Dal-Tile Corporation are environmentally preferable building materials when compared to other floor/wall coverings. As defined by guidelines issued by the Environmental Protection Agency, the American Society for Testing & Materials, and the Federal Trade Commission, Tile is one of the most environmentally friendly building materials you can buy today. Should you desire additional information, please direct your inquiry to the address above.

This document has been prepared in accordance with the Occupational Safety and Health Administration (OSHA) Hazard Communication standard, 29 Code of Federal Regulations (CFR) 1910.1200(g), Safety Data Sheets.

2. HAZARDS IDENTIFICATION

Tile products are mixtures of predominantly clays, silica sand, and other natural occurring minerals that have been mixed with water and fired in a high temperature kiln. The finished, fired tiles are odorless, stable, non-flammable, and pose no immediate hazard to health. Respiratory, hand and eye protection may be needed to prevent excess exposure to airborne particulates if dust is produced by cutting tiles during installation or if dust is produced by any other operations, including demolition/removal projects.

Emergency Overview: Danger! Lung injury and Cancer Hazard

GHS Classification (Global Harmonized Standard Classification):



Carcinogenicity Category 1A (H350)

Specific target organ toxicity, single exposure; Respiratory tract irritation - Category 3 (H335)

Specific target organ toxicity, repeated exposure - Category 1A (H372)

GHS Label, Hazards and Precautionary Statements

GHS Pictogram:

Crystalline Silica:		Category 3 (Respiratory tract irritation) (H335)
		Categories 1A(Carcinogenicity)(H372)

Label Signal Word: Danger

Hazard Statements:

(H350) May cause CANCER (inhalation)

(H335) May cause respiratory irritation

(H372) Causes damage to organs (lung/respiratory) through prolonged or repeated exposure (inhalation)

2. HAZARDS IDENTIFICATION (CONT)

Precautionary Statements:

- Do not handle until all safety precautions have been read and understood. (P202)
- Do not breathe dust/spray. (P260 + P261)
- Wash skin thoroughly after handling. (P264)
- Do not eat, drink or smoke when using this product. (P270)
- Wear protective gloves, protective clothing, eye protection, face protection. (P280)

Potential Health Effects:

Inhalation: Do not breathe dust. See "Health Hazards" in Section 11 for more details.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Tile products are mixtures of predominately Clays, Silica Sand and other naturally-occurring minerals, that have been mixed with water and fired in a high temperature kiln.

Tiles are manufactured in various shapes, sizes, and colors.

These products do not contain asbestos.

Under normal conditions these products do not release hazardous materials after installation and are not considered hazardous waste should disposal be necessary.

Composition	CAS# / EINECS#	Estimated % by Wt.	EU Class
Crystalline silica as quartz	CAS: 14808-60-7 EINECS: 238-878-4	0-30	(67/548/EEC) Xn R48/20
Clays	CAS: 1332-58-7 EINECS: 265-064-6	20-55	(67/548/EEC) Xi R36/37/38
Nepheline syenite	CAS: 37244-96-5 EINECS: N/A	0-50	(67/548/EEC) Xi R36/37/38
Talc	CAS: 14807-96-6 EINECS: 238-877-9	0-40	(67/548/EEC) Xi R36/37/38
Feldspar	CAS: 68476-25-5 EINECS: 270-666-7	0-15	(67/548/EEC) Xi R36/37/38
Biotite	CAS: 12001-26-2 EINECS: 215-479-3	0-5	(67/548/EEC) Xi R36/37/38

4. FIRST AID MEASURES

- Eyes: Immediately flush eyes with large amounts of water for at least 15 minutes if dust gets in eyes. Get medical attention if irritation persists.
- Skin: Wash thoroughly after working with tiles.
- Inhalation: Remove to fresh air if exposed to large amounts of tile dust. Administer artificial respiration if breathing has stopped. Keep victim at rest. Call for prompt medical attention.
- Ingestion: Not applicable for intact tiles.

Have emergency eyewash station available in area where tiles are cut.

5. FIRE-FIGHTING MEASURES AND INFORMATION

- Flash Point (Method Used): Not applicable
- Autoignition Temperature: Not applicable
- Flammable Limits (% by Volume in Air): LEL - not applicable
UEL - not applicable
- Fire Extinguishing Media: None required Non-flammable
- Special Fire Fighting Procedures: None required
- Fire and Explosion Hazards: None

6. ACCIDENTAL RELEASE MEASURES

Avoid creating excessive dust. Clean up dust with a vacuum system with a High-efficiency particulate (HEPA) air filter vacuum or damp sweeping. See Section 8 of this SDS concerning PPE information for clean-up.

7. HANDLING AND STORAGE

When cutting, grinding or removing, use equipment with integral dust collection and/or use local exhaust ventilation. Use wet cutting methods to reduce generation of dust. Use respiratory protection in the absence of effective engineering controls.

Do not store near acids. If tiles contact some acids, damage/discoloration to the surface may occur.

Shelf life is unlimited.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure Table

Composition	OSHA PEL	NIOSH IDLH	ACGIH TLV*	Units
Crystalline silica as quartz -respirable fraction	10 %SiO ₂ +2	0.05	0.025	mg/m ³
-total dust	30 %SiO ₂ +2	N.E.	N.E.	mg/m ³
Clays -respirable fraction	5	N.E.	2	mg/m ³
-total dust**	15	N.E.	10	mg/m ³
Nepheline syenite -respirable fraction**	5	N.E.	N.E.	mg/m ³
-total dust**	15	N.E.	N.E.	mg/m ³
Talc -respirable fraction	2	2	2	mg/m ³
-total dust**	15	10	10	mg/m ³
Feldspar -respirable fraction	N.E.	N.E.	N.E.	mg/m ³
-total dust**	15	N.E.	N.E.	mg/m ³
Biotite -respirable fraction**	5	15	3	mg/m ³
-total dust**	15	N.E.	N.E.	mg/m ³

* 2006 Edition, respirable fraction to be determined as per Appendix D of ACGIH TLV.

** Covered as particles not otherwise regulated per OSHA and particles not otherwise classified per ACGIH.

N.D. - Not determined

N.E. - Not established

8.2 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Use adequate ventilation to keep exposure to dust below recommended exposure levels. Avoid inhalation of dust. The highest probability of silica exposure occurs during installation using dry cutting methods or during removal of installed tile. Wet cutting methods are recommended.

Respiratory Protection: Use of a properly fitted NIOSH/MSHA approved particulate respirator is recommended when cutting tiles for installation or during the removal of installed tile.

Eye Protection: Use dust-proof goggles or safety glasses with side shields. Contact lenses may absorb irritants. Do not wear contact lenses in work areas.

Skin Protection: Cotton or leather work gloves should be worn when cutting this product to minimize skin exposure to dust and/or cuts. Wash hands prior to eating, drinking, or smoking, and at the end of the work shift, after cutting operations are conducted.

NOTE: Personal protection information in Section 8 is based on general information for normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the assistance of an industrial hygienist or other qualified professional be obtained.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brittle solid; color may vary
Odor:	Odorless
Melting Point:	Not Available (>2200 °F)
Boiling Point:	Not applicable
Vapor Pressure:	Not applicable
Vapor Density (Air = 1):	Not applicable
Solubility in Water:	Insoluble
Specific Gravity (H ₂ O = 1):	1.6 to 2.1
Percent Volatile by Volume:	Not applicable
Evaporation Rate (Ethyl Ether = 1):	Not applicable
Viscosity:	Not applicable
Volatility:	0 g/L Volatile Organic Compounds (VOCs)

10. STABILITY AND REACTIVITY

Stability:	Stable in current form.
Conditions to Avoid:	Avoid contact with acids (e.g., acetic, hydrofluoric, etc.)
Incompatibility (Materials to Avoid):	Avoid contact with acids (e.g., acetic, hydrofluoric, etc.)
Hazardous Polymerization:	Will not occur.
Hazardous Decomposition Products:	None.

11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Primary Routes of Exposure

None for intact tile. Inhalation and potential exposure to eyes, hands, or other body parts if contact is made with broken tile, and/or during procedures involving the cutting of tiles, and/or for operations involving the removal of installed tiles.

Acute Effects

No acute effects from exposure to intact tile are known. Working with broken or cut tile produces a potential for cuts to the hands and exposed body parts. Acute effects such as eye irritation may occur if associated with high dust operations such as dry cutting tile or during the removal of installed tile. In very rare cases, symptoms of acute silicosis, a form of silicosis (a nodular pulmonary fibrosis) associated with exposure to respirable crystalline silica, may develop following acute exposure to extremely dusty environments caused by generation of tile dust. Signs such as labored breathing and early fatigue may indicate silicosis; however, these same symptoms can arise from many other causes.

Chronic Effects

No chronic effects are known for exposure to intact tile. Long-term, continual exposure to respirable crystalline silica at or above established permissible occupational exposure limits may lead to the development of silicosis, a nodular pulmonary fibrosis (NPF). NPFs are also associated with pulmonary tuberculosis, bronchitis, emphysema, and other airway diseases. This type of chronic exposure to silica dust may also result in the development of autoimmune disorders, chronic renal disease, and other adverse health effects. Recent epidemiologic studies demonstrate that workers exposed to elevated silica concentrations have a significant risk of developing chronic silicosis. Signs such as labored breathing and early fatigue may indicate silicosis; however, these same symptoms can also arise from many other causes.

Potential Adverse Interactions

Silicosis may be complicated by severe mycobacterial or fungal infections and result in tuberculosis (TB). Epidemiologic studies have established that silicosis is a risk factor for developing TB. Any existing respiratory or pulmonary diseases may be complicated by exposure to respirable crystalline silica. Smoking may increase the risk of adverse effects if done in conjunction with occupational exposure to silica dust at or above permissible exposure limits.

Carcinogen Status

Respirable crystalline silica is classified by the International Agency for Research on Cancer (IARC) as a Group I Carcinogen (carcinogenic to humans). The National Toxicology Program (9th Report) lists respirable crystalline silica as "Known to be a Human Carcinogen". USDOL/OSHA and NIOSH have recommended that crystalline silica be considered a potential occupational carcinogen.

Overview of Animal Testing

Short term experimental studies of rats have found that intratracheal instillation of quartz particles leads to the formation of discrete silicotic nodules in rats, mice and hamsters.

Oral (silica) Lethality

- LD50 Rat oral >22,500 mg/kg
- LD50 Mouse oral >15,000 mg/kg
- LC50 Carp >10,000 mg/l (per 72 hr.)

12. ECOLOGICAL INFORMATION

No information available at this time.

13. DISPOSAL CONSIDERATIONS

Waste should be disposed of in a landfill certified to accept such materials in accordance with federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

D.O.T Shipping Name: Not applicable
 Hazard Class: Non-regulated (for disposal purposes material is non-hazardous Class III regulated material)
 ID Number: Not applicable
 Marking: Not applicable
 Label: None
 Placard: None
 Hazardous Substance/RQ: Not applicable
 Shipping Description: Porcelain/Ceramic Tiles
 Packaging References: None

15. REGULATORY INFORMATION

This product and/or its components have been previously introduced into U.S. commerce and is listed in the Toxic Substances Control Act (TSCA) Inventory of Chemicals in Commerce. Hence, it is subject to all applicable provisions and restrictions under TSCA 40 CFR Section 721 and 723.250.

This tile contains <1 percent by weight each of the following elements, which are SARA 313 Recordable: Antimony, Arsenic, Barium, Beryllium, Cadmium, Cobalt, Chromium, Copper, Manganese, Mercury, Nickel, Lead, Silver, Thallium, Tin, Titanium, Vanadium, and Zinc.

Title 22 Division 2, California Code of Regulation Chapter 3 (Proposition 65): This product contains a chemical or chemicals known to the State of California to cause cancer and/or birth defects or other reproductive harm.

This product or its components meets the following hazard definition(s) as defined by the Occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200):

<input type="checkbox"/> Combustible Liquid	<input type="checkbox"/> Flammable Aerosol	<input type="checkbox"/> Oxidizer
<input type="checkbox"/> Compressed Gas	<input type="checkbox"/> Explosive	<input type="checkbox"/> Pyrophoric
<input type="checkbox"/> Flammable Gas	<input checked="" type="checkbox"/> Health Hazard (Sections 3 & 11)	<input type="checkbox"/> Unstable
<input type="checkbox"/> Flammable Liquid	<input type="checkbox"/> Organic Peroxide	<input type="checkbox"/> Water Reactive
<input type="checkbox"/> Flammable Solid		

Based on information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1200.

Note: The information in this data sheet provides information related to the potential hazards associated with dusts which may be produced during cutting or otherwise changing the shape of the tile during installation and/or removal.

16. ADDITIONAL INFORMATION

Global Harmonization Identification System

GHIS: Health: 3 Fire: 4 Reactivity: 4

Hazardous Material Identification System

HMIS: Health: 0 Fire: 0 Reactivity: 0

National Fire Protection Association

NFPA: Health: 0 Fire: 0 Reactivity: 0

STEP-BY-STEP FLOOR TILE INSTALLATION

Quick Tips:

- Ensure your surface is clean, smooth, dry and free of wax, soap scum and grease.
- Carefully read and follow all instructions and precautions on the adhesive or mortar package. Mix only enough to be used within 30 minutes.
- Since variation of shades is an inherent characteristic of ceramic tile, mix tiles from several cartons as you set, for a blended effect.

STEP 1: SURFACE PREPARATION

Tile may be installed over most structurally sound substrates, if they are clean, smooth, dry and free of wax, soap scum and grease.

Any damaged, loose or uneven areas must be repaired, patched and leveled.

Remove any moldings, trim, appliances, etc., which could interfere with installation.

Door jambs may be undercut for tile to slip under.

STEP 2: LAYOUT

Begin by marking the center point of all four walls.

Snap chalk lines between the center points of opposite walls, which will intersect at the center of room. Make sure they're perfectly square, and adjust if necessary.

Next, lay out a row of loose tiles along the center lines in both directions, leaving spaces for uniform joints (use tile spacers). If this layout leaves cuts smaller than 1/2 tile at walls, adjust the center line by snapping a new line 1/2 tile closer to the wall. Repeat along other center line if necessary.

Now divide the room into smaller grids (approx. 2' x 3') by snapping additional lines parallel to center lines.

STEP 3: APPLYING ADHESIVE

Select the right adhesive for the substrate you're using. Carefully read and follow all instructions and precautions on the adhesive or mortar package. Mix only enough to be used within 30 minutes.

Using the type of trowel recommended on the adhesive package spread a 1/4" coat on the surface of one grid area, using the flat side of the trowel. Do not cover guidelines.

Next, use the notched side of trowel to comb adhesive into standing ridges by holding trowel at a 45-degree angle.

Then remove excess adhesive, leaving a uniform, ridged setting bed.

Don't spread a larger area than can be set in 15 minutes.

STEP 4: CUTTING TILE

Carefully measure tiles to be cut and mark with a pencil or felt-tip pen.

Make straight or diagonal cuts with a tile cutter, curved cuts with a nipper (chipping away small pieces for best results) and full-length curved cuts with a rod saw.

Sharp-cut edges may be smoothed with a carborundum stone.

STEP 5: SETTING TILE

Variation of shades is an inherent characteristic of ceramic tile – mix tiles from several cartons as you set, for a blended effect.

Begin installing tiles in the center of the room, one grid at a time. Finish each grid before moving to the next.

Start with the first tile in the corner of the grid and work outward.

Set tiles one at a time using a slight twisting motion. Don't slide tiles into place.

Insert tile spacers as each tile is set, or leave equal joints between tiles.

Fit perimeter tiles in each grid last, leaving 1/4" gap between tile and wall.

Any rectangle porcelain should never be set in a running bond pattern, rather no more than a 1/3 overlap; the joint should be widened to 3/16" and use of a large unit porcelain mortar should be employed.

When grid is completely installed, tap in all tiles with a rubber mallet or hammer and wood block to ensure a good bond and level plane.

Remove excess adhesive from joints with a putty knife and from tile with a damp sponge.

Do not walk on tiles until they are set (usually in 24 hours).

STEP 6: GROUTING JOINTS

Generally, you should wait about 24 hours before grouting (refer to the adhesive package for specifics).

Carefully read and follow all instructions and precautions on the grout package. Make only enough to use in about 30 minutes.

Remove tile spacers and spread grout on the tile surface, forcing down into joints with a rubber grout float or squeegee. Tilt the float at a 45-degree angle.

Remove excess grout from surface immediately with the edge of float. Tilt it at a 90-degree angle and scrape it diagonally across tiles.

Wait 15-20 minutes for grout to set slightly, then use a damp sponge to clean grout residue from surface and smooth the grout joints. Rinse sponge frequently and change water as needed.

Let dry until grout is hard and haze forms on tile surface, then polish with a soft cloth. Rinse again with sponge and clean water if necessary.

Wait 72 hours for heavy use.

Don't apply sealers or polishes for three weeks, and then only in accordance with manufacturer's recommendations.



WALL

CLASSIC

COLOR WHEEL™ COLLECTION – GLAZED CERAMIC



 daltile®
IMAGINE WHAT'S POSSIBLE™

Select color For Wall Tile and Tile Base from Group (1)

SIZES:



FINISHES: MATTE | GLOSSY

GLOSSY

WHITE 0100 (1)	ARCTIC WHITE 0190 (1)	BISCUIT K175 (1)	ALMOND 0135 (1)	URBAN PUTTY 0161 (2)	ARCHITECTURAL GRAY 0109 (2)
ELEMENTAL TAN 0166 (2)	ARTISAN BROWN 0144 (2)	DESERT GRAY X114 (1)	SUEDE GRAY 0182 (2)	CHALKBOARD 0180 (2)	BLACK K111 (2)

MATTE

MATTE ARCTIC WHITE 0790 (1)	MATTE BISCUIT K775 (1)	MATTE ALMOND X735 (1) <small>* 3 x 6, 3 x 6 Bevel, and 6 x 6 only.</small>	MATTE URBAN PUTTY 0761 (2)	MATTE ARCHITECTURAL GRAY 0709 (2) <small>* 3 x 6, and 6 x 6 only.</small>	
MATTE ELEMENTAL TAN 0766 (2)	MATTE ARTISAN BROWN 0744 (2)	MATTE DESERT GRAY X714 (1) <small>* 3 x 6 Bevel, and 6 x 6 only.</small>	MATTE SUEDE GRAY 0782 (2)	MATTE CHALKBOARD 0780 (2)	MATTE BLACK K711 (2)

ACCENT*

CORNSILK 0160 (3) <small>* 4 x 4, and 6 x 6 only.</small>	MUSTARD 1012 (3)	SUNFLOWER DH50 (3)	ORANGE BURST 1097 (3)	CURRANT SH17 (3)	PLUM CRAZY 1178 (3)
SPA 0148 (3)	GARDEN SPOT 0141 (3) <small>* 6 x 6 only.</small>	KEY LIME 1098 (3)	ELECTRIC BLUE 1194 (3)	COBALT DM14 (3)†	WOOD VIOLET 1467 (3)
WATERFALL 0169 (3) <small>* 4 x 4, and 6 x 6 only.</small>	EMERALD 0115 (3)	OCEAN BLUE 1049 (3)	SEA BREEZE 1174 (3)	GALAXY 1469 (3)	NAVY K189 (3)

♦ Accent available in Glossy finish only. † Subject to crazing; black grout not recommended (1), (2) and (3) indicate price groups. (1) being the least expensive
 Made in the U.S.A. designation is subject to change. Please visit daltille.com for the most current manufacturing information.



STAINPROOF



DENTPROOF



SCRATCH-RESISTANT*
*Applicable to products with Matte and Textured Finishes



FIRE-RESISTANT*
*Not Applicable to Heat-Insulated Mosaics







SIMPLICLEAN™

VISIT THE WHY TILE PAGE AT WWW.DALTILE.COM FOR A COMPLETE LIST OF QUALIFICATIONS AND EXCLUSIONS.

Wall Tile

SIZES

			Thickness	Finish
	6 x 6 Wall Tile	6" x 6" (15.31 cm x 15.31 cm)	5/16"	G M
	4 x 4 Wall Tile	4-1/4" x 4-1/4" (10.90 cm x 10.90 cm)	5/16"	G M
	3 x 6 Wall Tile	3" x 6" (7.65 cm x 15.31 cm)	5/16"	G M
	3 x 6 † Bevel Wall Tile	3" x 6" (7.65 cm x 15.31 cm)	3/8"	G M

G Glossy Finish **M** Matte Finish

† Bevel is available in Group 1 colors only.

APPLICATIONS

	Target DCOF wet	Suitable
Dry & Level – Interior Floor	N/A	
Wet & Level – Interior Floor	≥ 0.42	
Shower Floors - Standard Center Drain	≥ 0.42	
Shower Floors - Linear Drain	≥ 0.42 (Mosaic) ≥ 0.60 (Floor)	
Exterior Floor Applications (including patios, pool decking & other wet areas with minimal footwear)	≥ 0.60	
Ramps & Inclines	≥ 0.65	
Walls/Backsplashes	N/A	✓
Countertops	N/A	✓*
Pool Linings	N/A	✓**


A DCOF value of ≥0.42 is the standard for tiles specified for level interior spaces expected to be walked upon when wet, as stated in ANSI A137.1-A326.3. For more information about DCOF and the DCOF AcuTest™, visit daltilo.com/DCOF.

APPLICATION NOTES:

Suitable for exterior applications (provided it is noted as suitable in the applications chart above) non-freezing climates, when proper installation methods are followed.

* Matte finish and all sink rails only. No Bevel Tile. Darker colors may show scratches.
** Wall tile, trim and liner only.

INSTALLATION

Grout Joint Recommendation	Shade Variation
1/16" (Features a lugged edge that creates an automatic 1/16" grout joint.)	 Low (V1)

PERFORMANCE CHARACTERISTICS

	ASTM#	Result
Water Absorption	C373	≤ 20.0%
Breaking Strength	C648	≥ 125 lbf
Scratch Hardness	C1895	≥ 4
Chemical Resistance	C650	Resistant
Abrasion Resistance	C1027	N/A

For additional information on test results, visit us at: daltilo.com/information/TestResults.

NOTES

Since there are variations in all fired ceramic and natural products, tile and trim supplied for your particular installation may not match samples. Final confirmation should be made from actual tiles and trim prior to installation. Manufactured in accordance with ANSI A137.1 standards.

For additional information refer to "Factors to Consider" at: daltilo.com/Factors.

LRV & MUNSELL

Color #	LRV Illuminate-OBS: F02-02 (CWF)	Munsell
SEMI-GLOSS		
0100	83.9	2.6Y 9.2/0.5
0190	83.9	7.0Y 9.2/0.2
K175	75.9	5.2Y 8.8/0.9
0135	68.0	2.9Y 8.4/1.2
0161	48.0	1.7Y 7.3/1.5
0166	26.8	1.1Y 5.7/1.6
0144	14.5	5.9YR 4.3/1.3
0109	37.9	6.0Y 6.6/1.0
X114	43.7	1.4GY 7.0/0.3
0182	22.6	1.9B 5.3/0.1
0180	11.4	1.3B 3.9/0.4
K111	5.0	10.0B 2.6/0.1
MATTE		
0790	83.4	4.9Y 9.2/0.2
K775	75.9	5.2Y 8.8/0.9
X735	70.9	3.5Y 8.6/1.2
0761	48.1	2.5Y 7.3/1.5
0766	26.8	0.2Y 5.7/1.7
0744	13.9	7.6YR 4.3/1.3
0709	36.9	5.6Y 6.5/1.0
X714	43.9	3.6GY 7.0/0.4
0782	22.3	9.8G 5.3/0.1
0780	11.1	0.6B 3.9/0.4
K711	5.8	3.3PB 2.8/0.1
ACCENT		
K189	5.9	5.0PB 2.9/1.2
1012	48.1	9.7YR 7.2/6.9
1049	18.0	1.9B 5.0/4.5
1097	26.4	10.1R 5.6/10.2
0115	11.7	3.3G 4.1/4.9
1174	9.1	5.8PB 3.6/5.6
1178	6.8	5.9RP 3.1/2.0
SH17	14.0	5.1R 4.4/11.1
0141	24.7	3.0GY 5.5/2.1
0148	48.3	3.7BG 7.4/1.3
0160	73.3	3.3Y 8.7/3.3
0169	40.4	9.7B 6.9/2.6
1469	9.3	4.5PB 3.6/2.7
DH50	70.6	4.7Y 8.4/8.8
DM14	4.7	9.9PB 2.5/4.4
1098	50.9	2.6GY 7.4/5.2
1194	19.0	0.3PB 5.2/6.7
1467	16.6	7.0P 4.6/2.2



All or select items within this series meet the requirements for these qualifications. For more information, visit daltilo.com.

CLASSIC

COLOR WHEEL™ COLLECTION – GLAZED CERAMIC

WALL

TRIM

TRIM		Thickness	Pieces/ Carton
S1/212J / 1/2 x 12 Jolly	1/2" x 11-15/16" (1.29 cm x 30.36 cm)	1/4" 7.23 mm	12
A106 / 1 x 6 Quarter Round	1" x 6" (2.43 cm x 15.16 cm)	5/16" 7.90 mm	152
AC106 / 1 x 6 Quarter Round Corner	1" x 6" (2.43 cm x 15.16 cm)	5/16" 7.90 mm	120
SURFACE BULLNOSE			
S4269 / 2 x 6 Bullnose	2" x 6" (5.15 cm x 15.31 cm)	5/16" 7.90 mm	100
SN4269 / 2 x 2 Bullnose Corner	2" x 2" (5.15 cm x 5.15 cm)	5/16" 7.90 mm	25
S4669 / 6 x 6 Bullnose	6" x 6" (15.31 cm x 15.31 cm)	5/16" 7.90 mm	50
SCRL4669 / 6 x 6 Bullnose Corner	6" x 6" (15.31 cm x 15.31 cm)	5/16" 7.90 mm	50
S4449 / 4 x 4 Bullnose	4-1/4" x 4-1/4" (10.90 cm x 10.90 cm)	5/16" 7.90 mm	100
SCRL4449 / 4 x 4 Bullnose Corner	4-1/4" x 4-1/4" (10.90 cm x 10.90 cm)	5/16" 7.90 mm	100
S4369MOD / 3 x 6 Bullnose (on 6" side)	3" x 6" (7.65 cm x 15.31 cm)	5/16" 7.90 mm	100
S4639MOD / 3 x 6 Bullnose (on 3" side)	3" x 6" (7.65 cm x 15.31 cm)	5/16" 7.90 mm	100
SCR4369M / 3 x 6 Bullnose Corner Right	3" x 6" (7.65 cm x 15.31 cm)	5/16" 7.90 mm	100
SCL4369M / 3 x 6 Bullnose Corner Left	3" x 6" (7.65 cm x 15.31 cm)	5/16" 7.90 mm	100
RADIUS BULLNOSE			
A4200 / 2 x 6 Bullnose	2" x 6" (5.28 cm x 15.20 cm)	5/16" 7.90 mm	100
AN4200 / 2 x 2 Bullnose Corner	2" x 2" (5.28 cm x 5.28 cm)	5/16" 7.90 mm	20
FLAT TOP COVE BASE ^			
A3601 / 6 x 6 Cove Base	6" x 6" (15.31 cm x 15.31 cm)	5/16" 7.90 mm	44
SCR3601 / 6 x 6 Cove Corner Right	6" x 6" (15.31 cm x 15.31 cm)	5/16" 7.90 mm	20
SCL3601 / 6 x 6 Cove Corner Left	6" x 6" (15.31 cm x 15.31 cm)	5/16" 7.90 mm	20
A3401 / 4 x 4 Cove Base	4-1/4" x 4-1/4" (10.90 cm x 10.90 cm)	5/16" 7.90 mm	84
SCR3401 / 4 x 4 Cove Corner Right	4-1/4" x 4-1/4" (10.90 cm x 10.90 cm)	5/16" 7.90 mm	30
SCL3401 / 4 x 4 Cove Corner Left	4-1/4" x 4-1/4" (10.90 cm x 10.90 cm)	5/16" 7.90 mm	30
A3361MOD / 3 x 6 Cove Base	3" x 6" (7.65 cm x 15.31 cm)	5/16" 7.90 mm	36
SCR3361M / 3 x 6 Cove Base Corner Right	3" x 6" (7.65 cm x 15.31 cm)	5/16" 7.90 mm	36
SCL3361M / 3 x 6 Cove Base Corner Left	3" x 6" (7.65 cm x 15.31 cm)	5/16" 7.90 mm	36
SANITARY COVE BASE ^			
S3619T / 6 x 6 Cove Base	6" x 6" (15.31 cm x 15.31 cm)	5/16" 7.90 mm	40
SCR3619T / 6 x 6 Cove Base Corner Right	6" x 6" (15.31 cm x 15.31 cm)	5/16" 7.90 mm	20

TRIM (CON'T)

		Thickness	Pieces/ Carton
SCL3619T / 6 x 6 Cove Base Corner Left	6" x 6" (15.31 cm x 15.31 cm)	5/16" 7.90 mm	20
S3419T / 4 x 6 Cove Base	4-1/4" x 6" (10.90 cm x 15.31 cm)	5/16" 7.90 mm	60
SCR3419T / 4 x 6 Cove Base Corner Right	4-1/4" x 6" (10.90 cm x 15.29 cm)	5/16" 7.90 mm	20
SCL3419T / 4 x 6 Cove Base Corner Left	4-1/4" x 6" (10.90 cm x 15.31 cm)	5/16" 7.90 mm	20
SANITARY COVE BASE - Slim Foot Design ^			
S3619TN / 6 x 6 Cove Base	6" x 6" (15.31 cm x 15.31 cm)	5/16" 7.90 mm	40
SC3619TN / 1 x 6 Cove Base Corner	1" x 6" (2.43 cm x 15.16 cm)	5/16" 7.90 mm	60

^ Available in Group 1 & 2 Colors. Group 3 Colors are Made-to-Order.

^ Available in Group 1 Colors. Group 2 & 3 Colors are Made-to-Order.

TRIM USAGE

Wall Tile	6 x 6	4 x 4	3 x 6	3 x 6 Bevel
Jolly	S1/212J	S1/212J	S1/212J	S1/212J
Quarter Round	A106	A106	A106	A106
Quarter Round Corner	AC106	AC106	AC106	AC106
SURFACE BULLNOSE				
Bullnose	S4669	S4449	S4369MOD & S4639MOD	
Corner	SCRL4669	SCRL4449	SCR4369M & SCL4369M	
Bullnose	S4269	S4269	S4269	
Corner	SN4269	SN4269	SN4269	SN4269
RADIUS BULLNOSE				
Bullnose	A4200	A4200	A4200	
Corner	AN4200	AN4200	AN4200	
FLAT TOP COVE BASE				
Cove Base	A3601	A3401	A3361MOD	A3361MOD
	SCR3601 & SCL3601	SCR3401 & SCL3401	SCR3361M & SCL3361M	SCR3361M & SCL3361M
	Best Match			

Tile Base



May contain Recycled
and/or Reclaimed Materials
www.daltile.com/leed

SAFETY DATA SHEET

CERAMIC TILE

Tile Series: **COLOR WHEEL COLLECTION - CLASSIC**

1. PRODUCT IDENTIFICATION

Common Name: Ceramic Tile (For purposes of this SDS, the term “ceramic” encompasses all types of tile products manufactured and/or sourced by Dal-Tile Corporation.)

Synonyms: Ceramic Tile and Wares

Manufacturer Name: Dal-Tile Corporation

Address: Headquarters Office
7834 C.F. Hawn Freeway, Dallas, TX 75217

Emergency Assistance: Environmental, Health and Safety Department
Richard Ray - (214) 309-4295
1-800-933-TILE; (214) 398-1411 (24-hour number)

Recommended Use: Building Material - Tile products manufactured/sourced by Dal-Tile Corporation are environmentally preferable building materials when compared to other floor/wall coverings. As defined by guidelines issued by the Environmental Protection Agency, the American Society for Testing & Materials, and the Federal Trade Commission, Tile is one of the most environmentally friendly building materials you can buy today. Should you desire additional information, please direct your inquiry to the address above.

This document has been prepared in accordance with the Occupational Safety and Health Administration (OSHA) Hazard Communication standard, 29 Code of Federal Regulations (CFR) 1910.1200(g), Safety Data Sheets.

2. HAZARDS IDENTIFICATION

Tile products are mixtures of predominantly clays, silica sand, and other natural occurring minerals that have been mixed with water and fired in a high temperature kiln. The finished, fired tiles are odorless, stable, non-flammable, and pose no immediate hazard to health. Respiratory, hand and eye protection may be needed to prevent excess exposure to airborne particulates if dust is produced by cutting tiles during installation or if dust is produced by any other operations, including demolition/removal projects.

Emergency Overview: Danger! Lung injury and Cancer Hazard

GHS Classification (Global Harmonized Standard Classification):



Carcinogenicity Category 1A (H350)

Specific target organ toxicity, single exposure; Respiratory tract irritation - Category 3 (H335)

Specific target organ toxicity, repeated exposure - Category 1A (H372)

GHS Label, Hazards and Precautionary Statements

GHS Pictogram:

Crystalline Silica:		Category 3 (Respiratory tract irritation) (H335)
		Categories 1A(Carcinogenicity)(H372)

Label Signal Word: Danger

Hazard Statements:

(H350) May cause CANCER (inhalation)

(H335) May cause respiratory irritation

(H372) Causes damage to organs (lung/respiratory) through prolonged or repeated exposure (inhalation)

2. HAZARDS IDENTIFICATION (Continued)

Precautionary Statements:

- Do not handle/install until all safety precautions have been read and understood. (P202)
- Do not breathe dust/spray. (P260 + P261)
- Wash skin thoroughly after handling/installing. (P264)
- Do not eat, drink or smoke when handling/installing this product. (P270)
- Wear protective gloves, protective clothing, eye protection, face protection when handling/installing this product. (P280)

Potential Health Effects:

Inhalation: Do not breathe dust. See "Health Hazards" in Section 11 for more details.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Tile products are mixtures of predominately Clays, Silica Sand and other naturally-occurring minerals, that have been mixed with water and fired in a high temperature kiln.

Tiles are manufactured in various shapes, sizes, and colors.

These products do not contain asbestos.

Under normal conditions these products do not release hazardous materials after installation and are not considered hazardous waste should disposal be necessary.

Composition	CAS# / EINECS#	Estimated % by Wt.	EU Class
Crystalline silica as quartz	CAS: 14808-60-7 EINECS: 238-878-4	0-30	(67/548/EEC) Xn R48/20
Clays	CAS: 1332-58-7 EINECS: 265-064-6	20-55	(67/548/EEC) Xi R36/37/38
Nepheline syenite	CAS: 37244-96-5 EINECS: N/A	0-50	(67/548/EEC) Xi R36/37/38
Talc	CAS: 14807-96-6 EINECS: 238-877-9	0-40	(67/548/EEC) Xi R36/37/38
Feldspar	CAS: 68476-25-5 EINECS: 270-666-7	0-20	(67/548/EEC) Xi R36/37/38

4. FIRST AID MEASURES

- Eyes: Immediately flush eyes with large amounts of water for at least 15 minutes if dust gets in eyes. Get medical attention if irritation persists.
- Skin: Wash thoroughly after working with tiles.
- Inhalation: Remove to fresh air if exposed to large amounts of tile dust. Administer artificial respiration if breathing has stopped. Keep victim at rest. Call for prompt medical attention.
- Ingestion: Not applicable for intact tiles.

Have emergency eyewash station available in area where tiles are cut.

5. FIRE-FIGHTING MEASURES AND INFORMATION

- Flash Point (Method Used): Not applicable
- Autoignition Temperature: Not applicable
- Flammable Limits (% by Volume in Air): LEL - not applicable
UEL - not applicable
- Fire Extinguishing Media: None required Non-flammable
- Special Fire Fighting Procedures: None required
- Fire and Explosion Hazards: None

6. ACCIDENTAL RELEASE MEASURES

Avoid creating excessive dust. Clean up dust using a vacuum system with a High-efficiency particulate (HEPA) air filter vacuum or damp sweeping. See Section 8 of this SDS concerning PPE information for clean-up.

7. HANDLING AND STORAGE

Do Not Dry Cut using motorized equipment due to potential exposure to Harmful Silica Dust. Use wet cutting methods to reduce generation of dust. When cutting, grinding or removing, use equipment with integral dust collection and/or use local exhaust ventilation. Use respiratory protection in the absence of effective engineering controls.

Do not store near acids. If tiles contact some acids, damage/discoloration to the surface may occur.

Shelf life is unlimited.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Exposure Table

Composition	OSHA PEL	NIOSH IDLH	ACGIH TLV*	Units
Crystalline silica as quartz -respirable fraction	0.05	0.05	0.025	mg/m3
-total dust	15	N.E.	N.E.	mg/m3
Clays -respirable fraction	5	N.E.	2	mg/m3
Nepheline syenite -respirable fraction**	5	N.E.	N.E.	mg/m3
Talc -respirable fraction	2	2	2	mg/m3
-total dust**	15	10	10	mg/m3
Feldspar -respirable fraction	N.E.	N.E.	N.E.	mg/m3
-total dust**	15	N.E.	N.E.	mg/m3

* 2017 Edition, respirable fraction to be determined as per Appendix D of ACGIH TLV.

** Covered as particles not otherwise regulated per OSHA and particles not otherwise classified per ACGIH.

N.D. - Not determined

N.E. - Not established

8.2 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Use adequate ventilation during installation and/or removal to keep exposure to dust below recommended exposure levels. Avoid inhalation of dust. The highest probability of silica exposure occurs during installation using dry cutting methods or during removal of installed tile. Do Not Dry Cut using motorized equipment due to potential exposure to Harmful Silica Dust. Use wet cutting methods to reduce generation of dust.

Respiratory Protection: Use of a properly fitted NIOSH/MSHA approved particulate respirator is recommended when cutting tiles for installation or during the removal of installed tile.

Eye Protection: Use dust-proof goggles or safety glasses with side shields. Contact lenses may absorb irritants. Do not wear contact lenses in work areas.

Skin Protection: Cotton or leather work gloves should be worn when cutting this product to minimize skin exposure to dust and/or cuts. Wash hands prior to eating, drinking, or smoking, and at the end of the work shift, after cutting operations are conducted.

NOTE: Personal protection information in Section 8 is based on general information for normal uses and conditions. Where special or unusual uses or conditions exist, it is suggested that the assistance of an industrial hygienist or other qualified professional be obtained.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brittle solid; color may vary
Odor:	Odorless
Melting Point:	Not Available (>2200 °F)
Boiling Point:	Not applicable
Vapor Pressure:	Not applicable
Vapor Density (Air = 1):	Not applicable
Solubility in Water:	Insoluble
Specific Gravity (H ₂ = 1):	1.6 to 2.1
Percent Volatile by Volume:	Not applicable
Evaporation Rate (Ethyl Ether = 1):	Not applicable
Viscosity:	Not applicable
Volatility:	0 g/L Volatile Organic Compounds (VOCs)

10. STABILITY AND REACTIVITY

Stability:	Stable in current form.
Conditions to Avoid:	Avoid contact with acids (e.g., acetic, hydrofluoric, etc.)
Incompatibility (Materials to Avoid):	Avoid contact with acids (e.g., acetic, hydrofluoric, etc.)
Hazardous Polymerization:	Will not occur.
Hazardous Decomposition Products:	None.

11. TOXICOLOGICAL INFORMATION

Potential Health Effects

Primary Routes of Exposure

None for intact tile. Inhalation and potential exposure to eyes, hands, or other body parts if contact is made with broken tile, and/or during procedures involving the cutting of tiles, and/or for operations involving the removal of installed tiles.

Acute Effects

No acute effects from exposure to intact tile are known. Working with broken or cut tile produces a potential for cuts to the hands and exposed body parts. Acute effects such as eye irritation may occur if associated with high dust operations such as dry cutting tile or during the removal of installed tile. In very rare cases, symptoms of acute silicosis, a form of silicosis (a nodular pulmonary fibrosis) associated with exposure to respirable crystalline silica, may develop following acute exposure to extremely dusty environments caused by generation of tile dust. Signs such as labored breathing and early fatigue may indicate silicosis; however, these same symptoms can arise from many other causes.

Chronic Effects

No chronic effects are known for exposure to intact tile. Long-term, continual exposure to respirable crystalline silica at or above established permissible occupational exposure limits may lead to the development of silicosis, a nodular pulmonary fibrosis (NPF). NPFs are also associated with pulmonary tuberculosis, bronchitis, emphysema, and other airway diseases. This type of chronic exposure to silica dust may also result in the development of autoimmune disorders, chronic renal disease, and other adverse health effects. Recent epidemiologic studies demonstrate that workers exposed to elevated silica concentrations have a significant risk of developing chronic silicosis. Signs such as labored breathing and early fatigue may indicate silicosis; however, these same symptoms can also arise from many other causes.

Potential Adverse Interactions

Silicosis may be complicated by severe mycobacterial or fungal infections and result in tuberculosis (TB). Epidemiologic studies have established that silicosis is a risk factor for developing TB. Any existing respiratory or pulmonary diseases may be complicated by exposure to respirable crystalline silica. Smoking may increase the risk of adverse effects if done in conjunction with occupational exposure to silica dust at or above permissible exposure limits.

Carcinogen Status

Respirable crystalline silica is classified by the International Agency for Research on Cancer (IARC) as a Group I Carcinogen (carcinogenic to humans). The National Toxicology Program (9th Report) lists respirable crystalline silica as "Known to be a Human Carcinogen". USDOL/OSHA and NIOSH have recommended that crystalline silica be considered a potential occupational carcinogen.

Overview of Animal Testing

Short term experimental studies of rats have found that intratracheal instillation of quartz particles leads to the formation of discrete silicotic nodules in rats, mice and hamsters.

Oral (silica) Lethality

LD50 Rat oral	>22,500 mg/kg
LD50 Mouse oral	>15,000 mg/kg
LC50 Carp	>10,000 mg/l (per 72 hr.)

12. ECOLOGICAL INFORMATION

No information available at this time.

13. DISPOSAL CONSIDERATIONS

Waste should be disposed of in a landfill certified to accept such materials in accordance with federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

U.S. D.O.T Shipping Name: Not applicable
 Hazard Class: Non-regulated (for disposal purposes material is non-hazardous Class III regulated material)
 ID Number: Not applicable
 Marking: Not applicable
 Label: None
 Placard: None
 Hazardous Substance/RQ: Not applicable
 Shipping Description: Porcelain/Ceramic Tiles
 Packaging References: None

Not regulated for transportation under the IATA/ICAO, IMDG, EU ADR, or Canadian TDG Regulations.

15. REGULATORY INFORMATION

This product and/or its components have been previously introduced into U.S. commerce and is listed in the Toxic Substances Control Act (TSCA) Inventory of Chemicals in Commerce. Hence, it is subject to all applicable provisions and restrictions under TSCA 40 CFR Section 721 and 723.250.

This tile contains <1 percent by weight each of the following elements, which are SARA 313 Recordable: Antimony, Arsenic, Barium, Beryllium, Cadmium, Cobalt, Chromium, Copper, Manganese, Mercury, Nickel, Lead, Silver, Thallium, Tin, Titanium, Vanadium, and Zinc.

Title 22 Division 2, California Code of Regulation Chapter 3 (Proposition 65): This product has been evaluated for exposure levels and results conclude use of this product does not create an exposure to chemical(s) which is(are) known to the State of California to cause cancer, birth defects or other reproductive harm.

This product or its components meets the following hazard definition(s) as defined by the Occupational Safety and Health Hazard Communication Standard (29 CFR Section 1910.1200):

<input type="checkbox"/> Combustible Liquid	<input type="checkbox"/> Flammable Aerosol	<input type="checkbox"/> Oxidizer
<input type="checkbox"/> Compressed Gas	<input type="checkbox"/> Explosive	<input type="checkbox"/> Pyrophoric
<input type="checkbox"/> Flammable Gas	<input checked="" type="checkbox"/> Health Hazard (See Sections 3 & 11)	<input type="checkbox"/> Unstable
<input type="checkbox"/> Flammable Liquid	<input type="checkbox"/> Organic Peroxide	<input type="checkbox"/> Water Reactive
<input type="checkbox"/> Flammable Solid		

Based on information presently available, this product does not meet any of the hazard definitions of 29 CFR Section 1910.1200.

Note: The information in this data sheet provides information related to the potential hazards associated with dusts which may be produced during cutting or otherwise changing the shape of the tile during installation and/or removal.

16. ADDITIONAL INFORMATION (for intact tile)

Global Harmonization Identification System

GHIS: Health: 4 Fire: 4 Reactivity: 4

Hazardous Material Identification System

HMIS: Health: 0 Fire: 0 Reactivity: 0

National Fire Protection Association

NFPA: Health: 0 Fire: 0 Reactivity: 0

SDS Preparation Date: 08/29/18 Revision Date: 02/18/19



STEP-BY-STEP WALL TILE INSTALLATION

Quick Tips:

- For wall layout, find the center point of the wall using a level to draw a plumb line in the wall's center.
- Generally you should wait about 24 hours before grouting (refer to the adhesive package for specifics).

STEP 1: SURFACE PREPARATION

Tile may be installed over most structurally sound substrates, if they are clean, smooth, dry and free of wax, soap scum and grease.

Any damaged, loose or uneven areas must be repaired, patched and leveled.

Remove any moldings, trim, appliances, etc., which could interfere with installation.

STEP 2: WALL LAYOUT

Begin by finding the center point of the wall, using a level to draw a plumb line in the wall's center.

Lay out a row of loose tiles across the bottom of the wall from the center line leaving uniform joints between tiles. (Daltile products have integral spacer lugs so tiles can be butted together leaving a consistent 1/16" joint automatically.)

If this layout leaves cuts smaller than 1/2 tile, adjust center line 1/2 tile closer to the side wall.

Next, determine the lowest point of the floor or tub, using a level horizontally. Stack two tiles here, and at the top draw a horizontal line on the wall.

With the level, continue the line around all side walls to be tiled. This is a guideline for the first row of tiles to be set above.

STEP 3: COUNTERTOP LAYOUT

Begin with counter trim, then set full tiles from the first row working back – thus all cut tiles will be placed on the back row against wall. Trim pieces are available for use around recessed appliances.

Snap parallel chalk lines on the substrate as needed to keep rows straight.

Countertops should have a tile backsplash at least 4" high for protection. For backsplashes, match up joints with the countertop tile. Begin with full tiles working up from countertop – this way cut tiles will be at the top, under the cabinets.

Use bullnose trim pieces on flat walls or sides.

STEP 4: APPLYING ADHESIVE

Select the right adhesive for the substrate you're using. Carefully read and follow all instructions and precautions on the adhesive or mortar package. Mix only enough to be used within 30 minutes.

Using the type of trowel recommended on the adhesive package spread a 1/4" coat on the surface of one grid area, using the flat side of the trowel. Do not cover guidelines.

Next, use the notched side of trowel to comb adhesive into standing ridges by holding trowel at a 45-degree angle.

Then remove excess adhesive, leaving a uniform, ridged setting bed.

Don't spread a larger area than can be set in 15 minutes.

STEP 5: CUTTING TILE

Carefully measure tiles to be cut and mark with a pencil or felt-tip pen.

Make straight or diagonal cuts with a tile cutter, curved cuts with a nipper (chipping away small pieces for best results) and full-length curved cuts with a rod saw.

Sharp-cut edges may be smoothed with a carborundum stone.

STEP 6: SETTING TILE

Variation of shades is an inherent characteristic of ceramic tile – mix tiles from several cartons as you set, for a blended effect.

Begin installing tiles in the center of the wall, one grid at a time. Finish each grid before moving to the next.

Start with the first tile in the corner of the grid and work outward.

Set tiles one at a time using a slight twisting motion. Don't slide tiles into place.

Insert tile spacers as each tile is set, or leave equal joints between tiles.

Fit perimeter tiles in each grid last, leaving 1/4" gap between tile and wall.

Any rectangle porcelain should never be set in a running bond pattern, rather no more than a 1/3 overlap; the joint should be widened to 3/16" and use of a large unit porcelain mortar should be employed.

When grid is completely installed, tap in all tiles with a rubber mallet or hammer and wood block to ensure a good bond and level plane.

Remove excess adhesive from joints with a putty knife and from tile with a damp sponge.

Do not touch the tiles until they are set (usually in 24 hours).

STEP 7: GROUTING JOINTS

Generally, you should wait about 24 hours before grouting (refer to the adhesive package for specifics). Carefully read and follow all instructions and precautions on the grout package. Make only enough to use in about 30 minutes.

Remove tile spacers and spread grout on the tile surface, forcing down into joints with a rubber grout float or squeegee. Tilt the float at a 45-degree angle.

Remove excess grout from surface immediately with the edge of float. Tilt it at a 90-degree angle and scrape it diagonally across tiles.

Wait 15-20 minutes for grout to set slightly, then use a damp sponge to clean grout residue from surface and smooth the grout joints. Rinse sponge frequently and change water as needed.

Let dry until grout is hard and haze forms on tile surface, then polish with a soft cloth. Rinse again with sponge and clean water if necessary.

Wait 72 hours for heavy use.

Don't apply sealers or polishes for three weeks, and then only in accordance with manufacturer's recommendations.



CERAMIC TILE CARE INSTRUCTIONS

Daltile product experts provide step-by-step instructions for the best way to care for and maintain ceramic tile.

[ALL ABOUT CERAMIC TILE](#)

ROUTINE CARE

Glazed tile products should be cleaned routinely with an all-purpose, low VOC, household or commercial cleaner. The product chosen should also be grout joint cleaning compatible. The type of product may vary depending on the tile application and use. A multipurpose spray cleaner, which removes soap scum, hard water deposits and mildew designed for everyday use can be used on wall tile areas in residential baths and showers. A cotton mop, cloth, sponge, or non-metallic brush should be used to apply and agitate cleaner. Rinse the area with clean water and dry thoroughly. Routine cleaners should never contain harsh chemicals as these can damage tile. Acids can damage grout and the glazed surface of the tile. Ammonia can discolor grout.

Regular dust mopping, sweeping, or vacuuming is recommended prior to cleaning with liquid products.

Unglazed tile should be cleaned routinely with concentrated tile cleaners with a neutral pH for safe regular use. These cleaners are better suited for removing grease, oils, and normal spills from unglazed products. Again these products will vary depending on the application, amount of traffic and the use. The product chosen should also be compatible with the grout.

REMOVAL OF SEALERS, WAXES, FLOOR FINISHES

Glazed ceramic tile should not be sealed. It is recommended that grout be sealed.

If you need to remove a topical sealer or floor wax from a ceramic tile you should use a tile sealer and adhesive remover. Always test a small area first. Apply a liberal amount of undiluted sealer & adhesive remover to a manageable area. Allow it to set without drying until coating or residue softens. Reapply if necessary until sealer softens and can be removed. If necessary, agitate with white nylon scrub pad. Wipe up the residue with a cotton towel or sponge. Rinse thoroughly with clean water. Do not use ceramic sealer removers on natural stone products.

GROUT CARE

Grout is the material used to fill the spaces between the individual tiles. Grout comes in many colors. While color is important to the final finished look of the tile installation, it has little effect on the functionality of the grout. The purpose of grout is, simply, to fill the joint between the tiles and becomes a permanent, integral component of the finished installation. Grout darkens over time so we recommend that it be sealed regularly to preserve and protect it. Grout can be stained to normalize the color of older grout.

GROUT INSTALLATION

Immediately after tile has been installed and grouted, the new installation should be covered with brown paper to protect it from debris during the remaining construction process. The grout joints should be dampened daily with water using a clean sponge or mop during the first seven days. This procedure facilitates the grout cure and color lock. The paper will allow for two important things: (1) to protect the newly installed tile grout and (2) to allow moisture to escape from the grout as it cures, further protecting the look and utility of the floor. This is an important step in achieving color consistency. Never use plastic or non-absorbent materials to protect freshly installed tile. These types of non-absorbent products will trap moisture, causing the grout to discolor during the curing period. The protective brown paper should remain until construction is complete and the floor is opened for intended (post-construction) use.

Following a curing period of at least 24 hours, grout haze can be removed with plain water or a grout haze remover, which usually contains Sulfamic acid. Sulfamic acid can also be purchased in powder form and mixed with water to different strengths by qualified professionals. Similarly, epoxy grout haze can be removed with an epoxy haze remover. These removers are formulated to

safely and quickly remove cured epoxy haze from new tile installations. Their unique formulation will soften most epoxy hazes for easy removal without damaging the grout or tile, usually in one application. Sulfamic acid or grout removers should never be used on natural stone products.

PENETRATING/IMPREGNATING SEALER

Most tile installations use cementitious grouts. This type of grout should be sealed after installation to prevent it from staining. The grout should be sealed with a penetrating/impregnating sealer (often called grout sealers), which does not contain silicone, as silicone can shorten the useful life of the sealer. Epoxy grouts, conversely, are chemically cured and acid resistant, and as a result, do not require a sealer. The application of a good quality penetrating/impregnating sealer into the grout joints of a cementitious grout will not change the natural color of the grout, but will prevent the penetration of moisture, simplify maintenance, and help prevent staining or discoloration. Only the grout needs to be sealed, it is not required for glazed tiles to be sealed. Grout can be sealed 72 hours after installation.

There are different grades of penetrating/impregnating sealers. Be sure you are aware of the life-span of your sealer. You may need to reapply the sealer on an annual basis depending on the sealer quality, traffic patterns, and maintenance routine. Some sealers have multiple year warranties. Refer to the manufacturer warranty, technical & product information for specific details on product installation, useful life, and product applications (including any warnings) before use.

GROUT MAINTENANCE

Neither sealing the grout nor using an epoxy grout will guarantee against surface buildup or discoloration of the grout. Grout needs to be cleaned on a periodic basis to remove any surface buildup. Routine grout cleaning can be done with a daily concentrated household or commercial cleaner depending on the application. When heavy-duty grout cleaning is required, you will need to use a professional strength tile and grout cleaner that is capable of removing grease, soap scum, body oil, mildew stains, algae, and synthetic or acrylic waxes from the grout joints. However, such a product should contain non-polluting chemicals and low VOC levels. This type of product can be purchased from most home centers, or through your local professional floor covering dealer.

GROUT COLOR RESTORATION

When grout has been stained to the point that it cannot be maintained or returned to its natural color, you can return the grout back to its original color or any other color through the use of a grout stain. Grout stains are epoxy-based products that are specifically designed to penetrate into the grout and seal the surface with a permanent color. Once the grout has been stained there is no need to seal it any further with a penetrating/impregnating sealer. Prior to staining, the grout joint should be cleaned thoroughly to remove any dirt, oils, grease, or sealers with a professional strength tile and grout cleaner.

DISCLAIMER

CARE AND MAINTENANCE GUIDE

Dal-Tile does not manufacture installation products or countertop cleaning/maintenance products. Dal-Tile provides the information on this page to its customers as an information source only. Please contact an installation product manufacturer directly, *prior* to usage, to obtain proper handling instructions, application instruction and warnings concerning potential health hazards for any product contemplated for use.

To ensure your products will provide you with a lifetime of beauty and utility, proper maintenance is crucial. Natural stone products are porous by nature and require a different maintenance program than traditional ceramic tile. Dal-Tile also strongly recommends testing a small area PRIOR to usage of any installation/cleaning/maintenance product to determine whether the product serves its intended purpose.

SAFETY PRECAUTION TO CUSTOMERS

The products described in this document may have chemicals that cause reactions in certain individuals. Dal-Tile strongly recommends the use of safety glasses, respirators (masks) and gloves in handling any materials that contain chemicals. Dal-Tile recommends the proper disposal of any scrap tile/stone, installation and/or maintenance products discussed herein.

Daltile 1-Year Limited Warranty

Daltile warrants that manufactured products will be free from defect for a period of one year from date of purchase. Defect is defined as a shortfall in the product to perform to Daltile specifications as disclosed in product literature, within industry-allowable tolerances as set forth in standard, national industry protocols. **THIS ONE-YEAR EXPRESS WARRANTY IS THE SOLE WARRANTY EXTENDED AND REPLACES ANY STATUTORY WARRANTIES TO THE MAXIMUM EXTENT ALLOWABLE BY LAW.** Customer misuse including negligence, physical, or chemical abuse is not covered by this warranty. Installation defects are not covered by this warranty. All warranty claims must be reported immediately. Failure to report any warranty claim within 30 days of defect discovery will void this warranty. All products must be inspected prior to installation. Visual defects or nonconformities apparent prior to installation voids this warranty.

Tile is subject to variation in technical specifications, including DCOF, due to inherent variability in the raw materials and production process. Express technical specifications are not guarantees of minimum or maximum thresholds of performance. Tile containing abrasives create a rough surface, creating cleaning challenges because dirt and other contaminants lodge in the surface. Extra attention is necessary to ensure contaminants are removed promptly. Unless specifically stated otherwise, tile recommended for floor or wall applications refers to interior applications only. Daltile does not recommend its products for use on ceilings or roofs. Local building codes may dictate minimum tile performance specifications. Daltile does not warrant product installations that violate building codes. Photographic color images may not be an exact product match. Product samples are representative only. Express color match warranties are only extended to actual product samples.

Other Daltile Warranties

Implied Warranties Limited in Duration and Scope

Any implied warranty applicable to the product sale, including the implied warranty of merchantability or the implied warranty of fitness for a particular purpose is limited in duration to the duration of this written warranty or the maximum statutory period, whichever is less. Some states do not allow limitations on implied warranty duration, so the above limitation may not apply to you.

The Federal Magnuson-Moss Warranty Act limits disclaimers of implied warranties involving consumer products. To the maximum extent allowable by federal and state law, this warranty supplements or supersedes federal and state consumer goods warranty protections.

Implied Warranty of Fitness for a Particular Purpose

Daltile provides detailed information in its product literature with regard to appropriate tile and stone applications. In these specified applications, Daltile limits the duration of the implied warranty of fitness for a particular purpose to one year or the maximum statutory period prescribed by law, whichever is less. Failure to comply with recommended applications voids this warranty.

Natural stone products are mined and cut from natural formations. Because these products are not subject to a manufacturing process, quality warranties are limited to the specified representations in product literature and guidelines established by the Marble Institute of America. Daltile does not

warrant natural stone products for shade, size, thickness, warping, cleft variations, surface finish variations, or other natural variances on stone products.

Remedy Limitation and Disclaimer

If a defect in materials or workmanship is discovered within the one-year period, Daltile will either refund the price of the product or provide a replacement product after a reasonable number of attempts to remedy product defects. Buyer's remedy is limited to replacement or repair of the defective product. No consequential (including, but not limited to, lost profits) or incidental damages are recoverable. Daltile disclaims all express warranties not contained in this limited express warranty. Any representations made in connection with the sale of this product that differs from the terms of this warranty are not valid and should be brought to the attention of Daltile immediately (1-800-933-TILE).

Legal Notice: Warning Tile and installation products contain chemicals known to the state of California to cause cancer, birth defects, reproductive harm, respiratory harm or other health problems. For more product-specific information on chemical content, obtain an MSDS at Daltile.com or contact Daltile at 1-800-833-TILE.

To Make a Claim

1. The original purchaser must notify a Daltile Sales Service Center or an authorized representative in writing within 30 days of the occurrence of any defect.
2. After notification, Daltile or an authorized representative will inspect and/or test the product for defect and complete a Product Claim Action form. No claim will be honored without product inspection by Daltile or an authorized representative.
3. Upon determination that the product defect claim is valid, Daltile will notify the purchaser in writing. Daltile reserves the right to repair, replace or refund the originally purchased product, at its sole discretion.

Polyblend®Plus Sanded Grout

1 Product Name

Polyblend®Plus Sanded Grout

2 Manufacturer

Custom Building Products
 Technical Services
 10400 Pioneer Boulevard, Unit 3
 Santa Fe Springs, CA 90670
 Customer Support: 800-272-8786
 Technical Services: 800-282-8786
 Fax: 800- 200-7765
 Email: contactus@cbpmail.net
custombuildingproducts.com

3 Product Description

Polyblend Plus has all of the great features of original Polyblend, plus some new value-added enhancements to improve performance, finished color, and color consistency. It is now an ANSI A118.7 polymer-modified, cement-based sanded grout that produces hard, dense joints that resist shrinking, cracking, and wear. Formulated for durability, Polyblend Plus Sanded Grout accommodates 1/8"-1/2" (3.1-12.7 mm) joints for interior or exterior installations, including floors, countertops, walls, ceilings, showers, fountains, and pools.

Key Features

- Brighter, more vivid finished color
- Enhanced color consistency
- Better resistance to efflorescence
- Meets ANSI 118.7 High Performance Grout Standard without additive
- Easy to use - Just mix with water
- Polymer fortified for hard, durable, professional results

Uses

- Use to fill joint widths 1/8" to 1/2" (3.1 to 12.7 mm)
- May be used for both floor and wall installations
- Interior and exterior applications
- Residential and commercial applications
- Countertops, tub surrounds, showers and high traffic areas
- Submerged conditions (swimming pools, spas, water features and fountains)

Suitable Tile Types

- Vitreous, semi-vitreous or non-vitreous tile: ceramic, mosaic, quarry, cement body tiles
- Impervious porcelain and glass tile
- Brick and stone veneer
- Cement-based precast terrazzo
- Natural stone tile

Composition of Product

Polyblend® Plus Sanded Grout is a dry, Portland cement based grout with silica sand, inorganic aggregates and chemicals.

Benefits of Product in the Installation

- Hard, durable grout joints
- Resists shrinking, cracking, powdering and wear



Limitations to the Product

- Should not be installed when ambient or surface temperature is lower than 50°F (10°C) or higher than 100°F (38°C).
- Some ceramic, glass, metal, marble or stone tiles can be scratched or damaged by the silica aggregate filler. Perform a test on a small area prior to use. Polyblend® Plus NonSanded Grout may be appropriate for joints up to 1/8" or for tile not suited for sanded grout.
- Tile or stone with high absorption, surfaces that are porous or rough, textured surfaces and some types of porcelain tile may require sealing prior to grouting to prevent possible staining. Use Aqua Mix® Grout Release or TileLab® SurfaceGard® Sealer to prevent staining when required.
- Color variation can occur due to tile type, tile porosity, jobsite and climatic conditions, application and cleaning techniques. Variation can be minimized by following directions and using as little water as possible for cleanup.
- A CUSTOM grout color card is truest representation of the grout formula. Refer to the latest CUSTOM grout color card to choose a color. Perform a mockup to determine suitability. Various lighting types and conditions will affect the final grout and tile colors' appearance.
- Not for use in either industrial applications or in areas subjected to harsh or continuous chemicals, high heat or high-pressure cleaning. For heavy industrial tile installations, use CEG-IG 100% Solids Epoxy Grout.
- Chemicals in salt-based pool filtration systems can cause a reaction with blue, green and red grouts. Contact Technical Services for recommendations.
- Not for use in movement joints or changes of plane in the tile installation. In these areas, use an appropriate caulk or sealant such as Commercial 100% Silicone Sealant or Ceramic Tile Caulk.

Packaging

Available in 2 sizes:

- 7 lb (3.17 kg) box
- 25 lb (11.34 kg) bag

25 lb bag available in 40 colors. 7 lb box available in 15 colors. Color matching is available.



Polyblend®Plus Sanded Grout

4 Technical Data

Applicable Standards

American National Standards Institute (ANSI) ANSI A108.10, A118.6 & A118.7 of the American National Standards for the Installation of Ceramic Tile ASTM International (ASTM)

- ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or (50-mm) Cube Specimens)
- ASTM C531 Standard Test Method for Linear Shrinkage
- ASTM C580 Standard Test method for Flexural Strength
- ISO 13007-3

Approvals

Polyblend® Plus Sanded Grout exceeds ANSI A118.6 & A118.7 standards.

Technical Chart

Property	Test Method	Requirement	Typical Results
Pot Life	ANSI A118.7		1 - 2 Hours
28 Day Shrinkage	Section 3.3	< 0.20%	< 0.20%
28 Day Water Absorption	Section 3.4	< 5%	< 5%
1 Day Compressive Strength	Section 3.5	> 500 psi (35.2 kg/cm sq)	> 500 psi (35.2 kg/cm sq)
28 Day Compressive Strength	Section 3.5	> 3000 psi (210.9 kg/cm sq) > 3000 psi	> 3000 psi (210.9 kg/cm sq)
28 Day Tensile Strength	Section 3.6	> 500psi (35.2 kg/cm sq)	> 500psi (35.2 kg/cm sq)
28 Day Flexural Strength	Section 3.7	> 1000psi (70.3 kg/cm sq)	> 1000psi (70.3 kg/cm sq)

Environmental Consideration

Custom® Building Products is committed to environmental responsibility in both products produced and in manufacturing practices. Use of this product can contribute towards LEED® v3 certification:

- Up to 2 points towards MR Credit 5, Regional Materials
- Up to 1 point towards IEQ Credit 4.1, Low-Emitting Materials – Adhesives & Sealants

5 Instructions

General Surface Prep

Always wear proper protective equipment when handling the product, including IMPERVIOUS GLOVES, such as nitrile, safety glasses, and a NIOSH N95 respirator (mask).

Tile or stone must be firmly bonded to a sound substrate, and setting material must be cured a minimum 24-48 hours before cement grout is applied, unless rapid-setting mortars are used. See the corresponding data sheet for the bonding mortars used in your application. Remove spacers and ensure that the grout joints are uniform in depth and width and free of loose debris, contaminants and excess mortar. Use [TileLab® SurfaceGard® Sealer](#) or [Aqua Mix® Grout Release](#) to seal tile or stone subject to staining or when using a grout that contrasts with the color of the tile.

Mixing Ratios

- Mix 2 qt - 2.5 qt (1.9 L - 2.3 L) clean water to 25 lb (11.3 kg) grout
- Mix 1 pt - 1.25 pt (0.5 L - 0.6 L) clean water to 7 lb (3.2 kg) grout.

Mixing Procedures

When installing more than 1 container of grout at a time, blend dry powders prior to mixing with water. Mix with a trowel or low speed mixer (less than 300 rpm) to achieve a smooth, lump-free consistency (approximately 3 minutes). Let the mixture stand (slake) for 5 minutes, and then remix and use. Periodically remix to keep the mixture workable, but do not add water, which can weaken the grout, cause color variation and possible cause shrinkage, cracks and pinholes. Discard grout when it becomes too stiff to work.

Application of Product

Installation must conform to ANSI A108.10. Lightly dampen absorptive, highly porous tile with clean, cool water, but leave no standing water in the joints. Holding a rubber grout float at a 45° angle, completely fill the joints. Holding the edge of the float at a 90° angle, remove excess grout. At 70° F, do not spread more grout than can be cleaned within 30 minutes of the grout firming and use as little water as possible for grout clean-up (higher temperatures may shorten this time frame).

Using a damp, small pore grout sponge in a circular motion, smooth and level joints and remove excess grout. Change the water and rinse the sponge frequently. Haze can be removed after 3 hours with cheesecloth or wrung-out sponge. If haze persists, the installation can be washed after three days with Aqua Mix NanoScrub or after ten days with Aqua Mix® Sulfamic Acid Crystals, TileLab® Sulfamic Acid Cleaner or Aqua Mix® Cement Grout Haze Remover. Perform a test in an inconspicuous area prior to complete application. Movement joints are required for perimeters and other changes of plane in all installations. See TCNA Detail EJ171 for recommendations.

Curing of Product

Curing time is affected by ambient and surface temperatures and humidity. For exterior applications, it is recommended that the installation is misted periodically with clean, cool water for 3 days.

Exterior applications must be protected from rain, snow and other wet conditions for at least 7 days with temperature above 50° F (10° C). If inclement weather is expected, protect the work area with tenting at least 1 foot (30 cm) above the finished surface to allow air flow.

Enclose and protect installations and maintain >50° F (10° C) temperatures for at least 72 hours for proper cure.

Sealing of Grout



Polyblend®Plus Sanded Grout

If the use of a sealer is desired for extra protection, apply a penetrating sealer such as AquaMix® Sealer's Choice Gold or AquaMix Ultra-Solv® or TileLab® Surface Guard. Cleaning of equipment Clean tools and hands with water before the material dries.

Cleaning of equipment


Clean tools and hands with water before the material dries.

Storage

Protect from freezing. Store in a cool, dry area.

Health Precautions

DANGER: CAUSES SEVERE SKIN BURNS AND SERIOUS EYE DAMAGE. PROLONGED OR REPEATED INHALATION OF DUST MAY CAUSE LUNG DAMAGE OR CANCER. DO NOT BREATHE DUST OR SWALLOW. You cannot rely on pain to alert you to cement burns. Portland cement can cause dermatitis or sensitization. A NIOSH N95 respirator (mask) is recommended, especially in poorly ventilated areas, when use is frequent, or when permissible exposure limits may be exceeded. Immediately wash contaminated body and clothing thoroughly. If in eyes: rinse cautiously with water for several minutes; remove contact lenses if easy to do; continue rinsing. If inhaled: remove person to fresh air and keep comfortable for breathing. If swallowed: rinse mouth; do NOT induce vomiting. If you experience a burn, rash or skin irritation: immediately see a doctor. Immediately seek medical attention if any symptoms are significant or persist. In Emergency: 1-800-535-5053. **Contains silica sand, portland cement, titanium dioxide and may contain carbon black.** Before handling read Safety Data Sheet at www.custombuildingproducts.com. **KEEP OUT OF REACH OF CHILDREN.**

 **WARNING:** This product can expose you to chemicals including crystalline silica, which is known to the State of California to cause cancer, and hexavalent chromium compounds, which are known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Conformance to Building Codes

Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

Polyblend®Plus Sanded Grout

6 Availability & Cost

Location	Grout Color	Item Code	Size	Package	Item Code	Size	Package
USA	#09 NATURAL GRAY	PBPG097-4	7 lb (3.17 kg)	Box	PBPG0925	25 lb (11.34 kg)	Bag
USA	#10 ANTIQUE WHITE				PBPG1025	25 lb (11.34 kg)	Bag
USA	#11 SNOW WHITE	PBPG117-4	7 lb (3.17 kg)	Box	PBPG1125	25 lb (11.34 kg)	Bag
USA	#19 PEWTER	PBPG197-4	7 lb (3.17 kg)	Box	PBPG1925	25 lb (11.34 kg)	Bag
USA	#52 TOBACCO BROWN				PBPG5225	25 lb (11.34 kg)	Bag
USA	#59 SADDLE BROWN				PBPG5925	25 lb (11.34 kg)	Bag
USA	#60 CHARCOAL	PBPG607-4	7 lb (3.17 kg)	Box	PBPG6025	25 lb (11.34 kg)	Bag
USA	#95 SABLE BROWN				PBPG9525	25 lb (11.34 kg)	Bag
USA	#105 EARTH				PBPG10525	25 lb (11.34 kg)	Bag
USA	#115 PLATINUM	PBPG1157-4	7 lb (3.17 kg)	Box	PBPG11525	25 lb (11.34 kg)	Bag
USA	#122 LINEN	PBPG1227-4	7 lb (3.17 kg)	Box	PBPG12225	25 lb (11.34 kg)	Bag
USA	#135 MUSHROOM				PBPG13525	25 lb (11.34 kg)	Bag
USA	#145 LIGHT SMOKE				PBPG14525	25 lb (11.34 kg)	Bag
USA	#165 DELOREAN GRAY	PBPG1657-4	7 lb (3.17 kg)	Box	PBPG16525	25 lb (11.34 kg)	Bag
USA	#172 URBAN PUTTY				PBPG17225	25 lb (11.34 kg)	Bag
USA	#183 CHATEAU				PBPG18325	25 lb (11.34 kg)	Bag
USA	#185 NEW TAUPE				PBPG18525	25 lb (11.34 kg)	Bag
USA	#186 KHAKI				PBPG18625	25 lb (11.34 kg)	Bag
USA	#333 ALABASTER				PBPG33325	25 lb (11.34 kg)	Bag
USA	#335 WINTER GRAY				PBPG33525	25 lb (11.34 kg)	Bag
USA	#370 DOVE GRAY				PBPG37025	25 lb (11.34 kg)	Bag
USA	#380 HAYSTACK	PBPG3807-4	7 lb (3.17 kg)	Box	PBPG38025	25 lb (11.34 kg)	Bag
USA	#381 BRIGHT WHITE	PBPG3817-4	7 lb (3.17 kg)	Box	PBPG38125	25 lb (11.34 kg)	Bag
USA	#382 BONE	PBPG3827-4	7 lb (3.17 kg)	Box	PBPG38225	25 lb (11.34 kg)	Bag



CUSTOM®

Polyblend®Plus Sanded Grout

USA	#386 OYSTER GRAY	PBPG3867-4	7 lb (3.17 kg)	Box	PBPG38625	25 lb (11.34 kg)	Bag
USA	#540 TRUFFLE				PBPG54025	25 lb (11.34 kg)	Bag
USA	#541 WALNUT				PBPG54125	25 lb (11.34 kg)	Bag
USA	#542 GRAYSTONE				PBPG54225	25 lb (11.34 kg)	Bag
USA	#543 DRIFTWOOD				PBPG54325	25 lb (11.34 kg)	Bag
USA	#544 ROLLING FOG	PBPG5447-4	7 lb (3.17 kg)	Box	PBPG54425	25 lb (11.34 kg)	Bag
USA	#545 BLEACHED WOOD				PBPG54525	25 lb (11.34 kg)	Bag
USA	#546 CAPE GRAY				PBPG54625	25 lb (11.34 kg)	Bag
USA	#640 ARCTIC WHITE	PBPG6407-4	7 lb (3.17 kg)	Box	PBPG64025	25 lb (11.34 kg)	Bag
USA	#641 COOL WHITE				PBPG64125	25 lb (11.34 kg)	Bag
USA	#642 ASH				PBPG64225	25 lb (11.34 kg)	Bag
USA	#643 WARM GRAY				PBPG64325	25 lb (11.34 kg)	Bag
USA	#644 SHADOW				PBPG64425	25 lb (11.34 kg)	Bag
USA	# 645 STEEL BLUE				PBPG64525	25 lb (11.34 kg)	Bag
USA	#646 COFFEE BEAN	PBPG6467-4	7 lb (3.17 kg)	Box	PBPG64625	25 lb (11.34 kg)	Bag
USA	#647 BROWN VELVET	PBPG6477-4	7 lb (3.17 kg)	Box	PBPG64725	25 lb (11.34 kg)	Bag
USA - Special Order	All 40 colors				PBGXXX50	50 lb (22.68 kg)	Bag



CUSTOM®

Polyblend®Plus Sanded Grout

Location	Grout Color	Item Code	Size	Package	Item Code	Size	Package
Canada	#09 NATURAL GRAY	CPBPG097-4	7 lb (3.17 kg)	Box	CPBPG0925	25 lb (11.34 kg)	Bag
Canada	#10 ANTIQUE WHITE				CPBPG1025	25 lb (11.34 kg)	Bag
Canada	#11 SNOW WHITE	CPBPG117-4	7 lb (3.17 kg)	Box	CPBPG1125	25 lb (11.34 kg)	Bag
Canada	#19 PEWTER	CPBPG197-4	7 lb (3.17 kg)	Box	CPBPG1925	25 lb (11.34 kg)	Bag
Canada	#52 TOBACCO BROWN				CPBPG5225	25 lb (11.34 kg)	Bag
Canada	#59 SADDLE BROWN				CPBPG5925	25 lb (11.34 kg)	Bag
Canada	#60 CHARCOAL	CPBPG607-4	7 lb (3.17 kg)	Box	CPBPG6025	25 lb (11.34 kg)	Bag
Canada	#95 SABLE BROWN				CPBPG9525	25 lb (11.34 kg)	Bag
Canada	#105 EARTH				CPBPG10525	25 lb (11.34 kg)	Bag
Canada	#115 PLATINUM	CPBPG1157-4	7 lb (3.17 kg)	Box	CPBPG11525	25 lb (11.34 kg)	Bag
Canada	#122 LINEN	CPBPG1227-4	7 lb (3.17 kg)	Box	CPBPG12225	25 lb (11.34 kg)	Bag
Canada	#135 MUSHROOM				CPBPG13525	25 lb (11.34 kg)	Bag
Canada	#145 LIGHT SMOKE				CPBPG14525	25 lb (11.34 kg)	Bag
Canada	#165 DELOREAN GRAY	CPBPG1657-4	7 lb (3.17 kg)	Box	CPBPG16525	25 lb (11.34 kg)	Bag
Canada	#172 URBAN PUTTY				CPBPG17225	25 lb (11.34 kg)	Bag
Canada	#183 CHATEAU				CPBPG18325	25 lb (11.34 kg)	Bag
Canada	#185 NEW TAUPE				CPBPG18525	25 lb (11.34 kg)	Bag



CUSTOM®

Polyblend®Plus Sanded Grout

Canada	#186 KHAKI				CPBPG18625	25 lb (11.34 kg)	Bag
Canada	#333 ALABASTER				CPBPG33325	25 lb (11.34 kg)	Bag
Canada	#335 WINTER GRAY				CPBPG33525	25 lb (11.34 kg)	Bag
Canada	#370 DOVE GRAY				CPBPG37025	25 lb (11.34 kg)	Bag
Canada	#380 HAYSTACK	CPBPG3807-4	7 lb (3.17 kg)	Box	CPBPG38025	25 lb (11.34 kg)	Bag
Canada	#381 BRIGHT WHITE	CPBPG3817-4	7 lb (3.17 kg)	Box	CPBPG38125	25 lb (11.34 kg)	Bag
Canada	#382 BONE	CPBPG3827-4	7 lb (3.17 kg)	Box	CPBPG38225	25 lb (11.34 kg)	Bag
Canada	#386 OYSTER GRAY	CPBPG3867-4	7 lb (3.17 kg)	Box	CPBPG38625	25 lb (11.34 kg)	Bag
Canada	#540 TRUFFLE				CPBPG54025	25 lb (11.34 kg)	Bag
Canada	#541 WALNUT				CPBPG54125	25 lb (11.34 kg)	Bag
Canada	#542 GRAYSTONE				CPBPG54225	25 lb (11.34 kg)	Bag
Canada	#543 DRIFTWOOD				CPBPG54325	25 lb (11.34 kg)	Bag
Canada	#544 ROLLING FOG	CPBPG5447-4	7 lb (3.17 kg)	Box	CPBPG54425	25 lb (11.34 kg)	Bag
Canada	#545 BLEACHED WOOD				CPBPG54525	25 lb (11.34 kg)	Bag
Canada	#546 CAPE GRAY				CPBPG54625	25 lb (11.34 kg)	Bag
Canada	#640 ARCTIC WHITE	CPBPG6407-4	7 lb (3.17 kg)	Box	CPBPG64025	25 lb (11.34 kg)	Bag
Canada	#641 COOL WHITE				CPBPG64125	25 lb (11.34 kg)	Bag

Canada	#642 ASH				CPBPG64225	25 lb (11.34 kg)	Bag
Canada	#643 WARM GRAY				CPBPG64325	25 lb (11.34 kg)	Bag
Canada	#644 SHADOW				CPBPG64425	25 lb (11.34 kg)	Bag
Canada	# 645 STEEL BLUE				CPBPG64525	25 lb (11.34 kg)	Bag
Canada	#646 COFFEE BEAN	CPBPG6467-4	7 lb (3.17 kg)	Box	CPBPG64625	25 lb (11.34 kg)	Bag
Canada	#647 BROWN VELVET	CPBPG6477-4	7 lb (3.17 kg)	Box	CPBPG64725	25 lb (11.34 kg)	Bag

See our color card for truest color representation when selecting or specifying a grout color. Final installed shade may vary with the tile type, color and porosity as well as jobsite conditions and finishing techniques. For best results, perform a test on a small, inconspicuous area or create a sample board prior to installation.



Polyblend®Plus Sanded Grout

7 Product Warranty

NOTICE: Obtain the applicable **LIMITED WARRANTY** at www.custombuildingproducts.com/product-warranty or send a written request to Custom Building Products, Inc., Five Concourse Parkway, Atlanta, GA 30328, USA. Manufactured by or under the authority of Custom Building Products, Inc. © 2022 Quikrete International, Inc.

8 Product Maintenance

Clean with a pH-neutral cleaner such as [Aqua Mix Concentrated Tile & Stone Cleaner](#) or [TileLab Grout & Tile Cleaner](#).

9 Technical Services Information

For technical assistance, contact Custom® technical services at 800-272-8786 or visit custombuildingproducts.com.

10 Filing System

Additional product information is available from the manufacturer upon request.

Related Products

Ceramic Tile Caulk

Commercial 100% Silicone Sealant

TileLab® SurfaceGard® Sealer

StainBlocker for Grout

Polyblend® Non-Sanded Grout

Polyblend®Plus Sanded Grout

Coverage

For 25 lb. bag of Polyblend in ft² (m²) per bag

Tile Size	Joint Width				
	1/8" (3 mm)	3/16" (4.8 mm)	1/4" (6.3 mm)	3/8" (9.5 mm)	1/2" (13 mm)
Width x Length x Thickness					
1" x 1" x 1/4" (2.5 x 2.5 x .64 cm)	54 ft ² (5 m ²)	40 ft ² (3.7 m ²)	33 ft ² (3.1 m ²)	27 ft ² (2.5 m ²)	24 ft ² (2.2 m ²)
2" x 2" x 1/4" (5 x 5 x .64 cm)	96 ft ² (8.9 m ²)	68 ft ² (6.3 m ²)	54 ft ² (5.0 m ²)	40 ft ² (3.7 m ²)	33 ft ² (3.1 m ²)
3" x 3" x 1/4" (7.6 x 7.6 x .64 cm)	138 ft ² (12.9 m ²)	96 ft ² (8.9 m ²)	74 ft ² (7 m ²)	54 ft ² (5 m ²)	43 ft ² (4 m ²)
4.25" x 4.25" x 1/4" (10.8 x 10.8 x .64 cm)	192 ft ² (17.8 m ²)	131 ft ² (12.2 m ²)	101 ft ² (9.4 m ²)	71 ft ² (6.6 m ²)	56 ft ² (5.2 m ²)
6" x 6" x 1/4" (15.2 x 15.2 x .64 cm)	266 ft ² (24.7 m ²)	181 ft ² (16.8 m ²)	139 ft ² (12.9 m ²)	96 ft ² (8.9 m ²)	75 ft ² (7.0 m ²)
8" x 8" x 3/8" (20.3 x 20.3 x 1 cm)	234 ft ² (21.7 m ²)	158 ft ² (14.7 m ²)	121 ft ² (11.2 m ²)	83 ft ² (7.7 m ²)	64 ft ² (6 m ²)
12" x 12" x 3/8" (30.5 x 30.5 x 1 cm)	348 ft ² (32.3 m ²)	234 ft ² (21.7 m ²)	177 ft ² (16.5 m ²)	121 ft ² (11.2 m ²)	92 ft ² (8.6 m ²)
16" x 16" x 3/8" (40.6 x 40.6 x 1 cm)	462 ft ² (42.8 m ²)	310 ft ² (28.8 m ²)	234 ft ² (21.7 m ²)	158 ft ² (14.7 m ²)	121 ft ² (11.2 m ²)
18" x 18" x 3/8" (45.7 x 45.7 x 1 cm)	518 ft ² (48.1 m ²)	348 ft ² (32.3 m ²)	262 ft ² (24.4 m ²)	177 ft ² (16.5 m ²)	135 ft ² (12.5 m ²)
20" x 20" x 3/8" (50.8 x 50.8 x 1 cm)	574 ft ² (53.4 m ²)	385 ft ² (35.8 m ²)	291 ft ² (27 m ²)	196 ft ² (18.2 m ²)	149 ft ² (13.8 m ²)
24" x 24" x 3/8" (61 x 61 x 1 cm)	688 ft ² (63.9 m ²)	461 ft ² (42.8 m ²)	348 ft ² (32.3 m ²)	234 ft ² (21.7 m ²)	177 ft ² (16.5 m ²)
6" x 24" x 3/8" (15.2 x 61 x 1 cm)	279 ft ² (26 m ²)	189 ft ² (17.5 m ²)	143 ft ² (13.3 m ²)	98 ft ² (9.1 m ²)	75 ft ² (7 m ²)
12" x 24" x 3/8" (30.5 x 61 x 1 cm)	461 ft ² (42.8 m ²)	310 ft ² (28.8 m ²)	234 ft ² (21.7 m ²)	158 ft ² (14.7 m ²)	121 ft ² (11.2 m ²)
6" x 36" x 3/8" (15.2 x 91.4 x 1 cm)	299 ft ² (27.8 m ²)	202 ft ² (18.7 m ²)	153 ft ² (14.2 m ²)	104 ft ² (9.7 m ²)	80 ft ² (7.4 m ²)
9 x 36" x 3/8" (22.9 x 91.4 x 1 cm)	416 ft ² (38.6 m ²)	279 ft ² (26 m ²)	211 ft ² (19.6 m ²)	143 ft ² (13.3 m ²)	109 ft ² (10.2 m ²)
12" x 48" x 3/8" (30.5 x 122 x 1 cm)	552 ft ² (51.3 m ²)	370 ft ² (34.4 m ²)	279 ft ² (26 m ²)	189 ft ² (17.5 m ²)	143 ft ² (13.3 m ²)

For 7 lb bag of Polyblend (sq ft/sq m per bag)

Tile Size	Joint Width				
	1/8" (3 mm)	3/16" (4.8 mm)	1/4" (6.3 mm)	3/8" (9.5 mm)	1/2" (13 mm)
Width x Length x Thickness					
1" x 1" x 1/4" (2.5 x 2.5 x .64 cm)	15 ft ² (1.4 m ²)	11 ft ² (1 m ²)	9 ft ² (.9 m ²)	8 ft ² (.7 m ²)	7 ft ² (.6 m ²)
2" x 2" x 1/4" (5 x 5 x .64 cm)	27 ft ² (2.5 m ²)	19 ft ² (1.8 m ²)	15 ft ² (1.4 m ²)	11 ft ² (1 m ²)	9 ft ² (.9 m ²)
3" x 3" x 1/4" (7.6 x 7.6 x .64 cm)	39 ft ² (3.6 m ²)	27 ft ² (2.5 m ²)	21 ft ² (1.9 m ²)	15 ft ² (1.4 m ²)	12 ft ² (1.1 m ²)
4.25" x 4.25" x 1/4" (10.8 x 10.8 x .64 cm)	54 ft ² (5 m ²)	37 ft ² (3.4 m ²)	28 ft ² (2.6 m ²)	20 ft ² (1.9 m ²)	16 ft ² (1.5 m ²)
6" x 6" x 1/4" (15.2 x 15.2 x .64 cm)	74 ft ² (6.9 m ²)	51 ft ² (4.7 m ²)	39 ft ² (3.6 m ²)	27 ft ² (2.5 m ²)	21 ft ² (1.9 m ²)
8" x 8" x 3/8" (20.3 x 20.3 x 1 cm)	66 ft ² (6.1 m ²)	44 ft ² (4.1 m ²)	34 ft ² (3.1 m ²)	23 ft ² (2.2 m ²)	18 ft ² (1.7 m ²)
12" x 12" x 3/8" (30.5 x 30.5 x 1 cm)	97 ft ² (9 m ²)	66 ft ² (6.1 m ²)	50 ft ² (4.6 m ²)	34 ft ² (3.1 m ²)	26 ft ² (2.4 m ²)
16" x 16" x 3/8" (40.6 x 40.6 x 1 cm)	129 ft ² (12 m ²)	87 ft ² (8.1 m ²)	66 ft ² (6.1 m ²)	44 ft ² (4.1 m ²)	34 ft ² (3.1 m ²)
18" x 18" x 3/8" (45.7 x 45.7 x 1 cm)	145 ft ² (13.5 m ²)	97 ft ² (9 m ²)	73 ft ² (6.8 m ²)	50 ft ² (4.6 m ²)	38 ft ² (3.5 m ²)
20" x 20" x 3/8" (50.8 x 50.8 x 1 cm)	161 ft ² (14.9 m ²)	108 ft ² (10 m ²)	81 ft ² (7.6 m ²)	55 ft ² (5.1 m ²)	42 ft ² (3.9 m ²)
24" x 24" x 3/8" (61 x 61 x 1 cm)	193 ft ² (17.9 m ²)	129 ft ² (12 m ²)	97 ft ² (9 m ²)	66 ft ² (6.1 m ²)	50 ft ² (4.6 m ²)
6" x 24" x 3/8" (15.2 x 61 x 1 cm)	78 ft ² (7.3 m ²)	53 ft ² (4.9 m ²)	40 ft ² (3.7 m ²)	27 ft ² (2.5 m ²)	21 ft ² (2.0 m ²)
12" x 24" x 3/8" (30.5 x 61 x 1 cm)	129 ft ² (12 m ²)	87 ft ² (8.1 m ²)	66 ft ² (6.1 m ²)	44 ft ² (4.1 m ²)	34 ft ² (3.1 m ²)
6" x 36" x 3/8" (15.2 x 91.4 x 1 cm)	84 ft ² (7.8 m ²)	56 ft ² (5.2 m ²)	43 ft ² (4 m ²)	29 ft ² (2.7 m ²)	22 ft ² (2.1 m ²)
9 x 36" x 3/8" (22.9 x 91.4 x 1 cm)	116 ft ² (10.8 m ²)	78 ft ² (7.3 m ²)	59 ft ² (5.5 m ²)	40 ft ² (3.7 m ²)	31 ft ² (2.8 m ²)
12" x 48" x 3/8" (30.5 x 122 x 1 cm)	155 ft ² (14.4 m ²)	104 ft ² (9.6 m ²)	78 ft ² (7.3 m ²)	53 ft ² (4.9 m ²)	40 ft ² (3.7 m ²)

Chart for estimating purposes. Coverage may vary based on installation practices and jobsite conditions. For more tile and joint sizes, use the [Material Calculator](#) at CustomBuildingProducts.com or contact CUSTOM Technical Services at [800-282-8786](tel:800-282-8786).





SAFETY DATA SHEET

Section 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

Product Name: Polyblend® Plus Sanded Grout

Product Code: Not Available

1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Product Use: Grout

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEETS

Name/Address: Custom Building Products
Five Concourse Parkway, Suite 1900
Atlanta, GA 30328

Telephone Number: 1-(800)-282-8786

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Telephone Number: INFOTRAC 1-800-535-5053 (US and Canada)
INTERNATIONAL + 1-352-323-3500

Section 2: HAZARD(S) IDENTIFICATION

2.1 CLASSIFICATION OF THE CHEMICAL IN ACCORDANCE WITH PARAGRAPH (d) OF 29 CFR 1910.1200 (OSHA HAZCOM2012)

Skin Corrosion	Category 1C
Serious Eye Damage	Category 1
Skin Sensitization	Category 1B
Specific Target Organ Toxicity—Single Exposure	Category 3
Specific Target Organ Toxicity—Repeated Exposure	Category 1
Carcinogenicity	Category 1A

2.2 LABEL ELEMENTS ACCORDING TO OSHA HAZCOM2012

2.2a SIGNAL WORD:
DANGER!

2.2b HAZARD STATEMENTS

Causes severe skin burns and eye damage
Causes serious eye damage
May cause an allergic skin reaction
May cause respiratory irritation
Causes damage to organs through prolonged or repeated inhalation of dust
May cause cancer through inhalation of dust

SAFETY DATA SHEET

2.2c HAZARD PICTOGRAMS



2.2d PRECAUTIONARY STATEMENTS

i. PREVENTION	Wash hands thoroughly after handling. Do not breathe dust. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear impervious gloves/protective clothing/eye protection.
ii. RESPONSE	If on skin (or hair): Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: call a poison center/doctor. If swallowed: Rinse mouth. Do NOT induce vomiting. If exposed or concerned: get medical advice/attention.
iii. STORAGE	Store in a well-ventilated place. Keep container tightly closed.
iv. DISPOSAL	Dispose of contents/containers in accordance with all local, state, provincial, and federal regulations.

2.3 ADDITIONAL INFORMATION

2.3a HNOC – HAZARDS NOT OTHERWISE CLASSIFIED

Not Applicable

2.3b UNKNOWN ACUTE TOXICITY

<1% of the mixture consists of ingredient(s) of unknown acute toxicity.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 MIXTURES

Chemical Name	CAS Number	Weight %
Crystalline Silica, Quartz	14808-60-7	40 – 70%*
Portland Cement	65997-15-1	30 – 60%*
Calcium Carbonate	1317-65-3	1 – 5%*
Titanium Dioxide	13463-67-7	1 – 5%*
Carbon Black	1333-86-4	0.1 – 1.0%*

*Means that the component will fall into one of the ranges specified due to batch-to-batch variability and to protect Confidential Business Information.

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Section 4: FIRST-AID MEASURES

4.1 DESCRIPTION OF THE FIRST-AID MEASURES

ROUTES OF EXPOSURE	DESCRIPTION
Eye Contact:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.
Skin Contact:	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
Inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
Ingestion:	If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

ROUTES OF EXPOSURE	DESCRIPTION
Eye Contact:	Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Skin Contact:	Causes severe skin burns. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause sensitization by skin contact.
Inhalation:	May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated exposure. This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica from this product can cause silicosis, a serious disabling and fatal lung disease.
Ingestion:	May be harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Note to Physicians:	Symptoms may not appear immediately.
Specific Treatments:	In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Section 5: FIRE-FIGHTING MEASURES

5.1 FLAMMABILITY

Flammability: Not Flammable/Not Combustible by WHMIS/OSHA HAZCOM2012 Criteria

SAFETY DATA SHEET**5.2 EXTINGUISHING MEDIA**

5.2a. Suitable Extinguishing Media:
Treat for surrounding material.

5.2b. Unsuitable Extinguishing Media:
Not Available

5.3 SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

5.3a. Products of Combustion:
May include, and are not limited to: oxides of carbon and hydrogen sulfide

5.3b. Explosion Data

i. **Sensitivity to Mechanical Impact:**
Not Available

ii. **Sensitivity to Static Discharge:**
Not Available

5.4 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS

Keep upwind of fire. Wear full fire fighting turn-out gear(full bunker gear) and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Methods for Containment: Recover all usable material. Pick up large pieces, and then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Cleaning-Up: Vacuum or sweep material and place in a disposal container. Dispose of unwanted material properly in accordance with all local, regional, national and international regulations.

Section 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Handling: Use in well-ventilated areas. Wear impervious gloves and eye protection. Do not mix with other chemical products, except as indicated by the manufacturers. Do not get in eyes. Do not get on skin or clothing. Do not breathe dust. Do not take internally.

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General Hygiene Advice: Use good industrial hygiene practices and wear recommended personal protection. Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage: Keep out of the reach of children. Keep container tightly closed. Store at room temperature and keep containers closed when not in use. Keep dry until use.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETER

Exposure Guidelines:

Occupational Exposure Limits		
Chemical Name	OSHA-PEL	ACGIH-TLV
Crystalline Silica, Quartz	0.05 mg/m ³	0.025 mg/m ³ (Resp.)
Portland Cement	5 mg/m ³ (Resp.) 15 mg/m ³ (Total)	10 mg/m ³ (Resp.)
Calcium Carbonate	5 mg/m ³ (Resp.) 15 mg/m ³ (Total)	5 mg/m ³ (Resp.)
Titanium Dioxide	5 mg/m ³ (Resp.) 15 mg/m ³ (Total)	6 mg/m ³
Carbon Black	3.5 mg/m ³	3.0 mg/m ³

8.2 EXPOSURE CONTROLS

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

8.3 INDIVIDUAL PROTECTION MEASURES

8.3a. Personal Protective Equipment:

- i. **Eye/Face Protection:** Wear approved eye/face protection [properly fitted dust- or splash-proof chemical safety goggles/face (face shield)]
- ii. **Skin Protection:**
 1. **Hand Protection:** Wear impervious gloves, such as nitrile.
 2. **Body Protection:** Wear suitable protective clothing
- iii. **Respiratory Protection:** A NIOSH approved respirator or filtering face piece, such as N95, is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

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- iv. **General Health and Safety Measures:** Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.):	Solid Powder (Various Colors)
Odor:	Characteristic
Odor Threshold:	Not Available
pH:	10.0 – 12.5 when wet
Melting point/Freezing point:	Not Available
Initial boiling point and boiling range:	Not Available
Flash point:	>212°F(>100°C)
Evaporation rate (Water=1):	Not Available
Flammability:	Not Flammable/Not Combustible
Upper Flammability/Explosive Limit:	Not Available
Lower Flammability/Explosive Limit:	Not Available
Vapor Pressure	Not Available
Vapor Density:	Not Available
Relative Density:	2.0 – 3.0 g/mL
Solubility in Water:	Slightly Soluble
Partition coefficient: n-octanol/water:	Not Available
Auto-ignition temperature:	Not Available
Decomposition Temperature:	Not Available
Viscosity (cps):	Not Available
VOC Content:	0 g/L

Section 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

No dangerous reaction known under conditions of normal use.

10.2. CHEMICAL STABILITY

Stable under normal storage conditions. Keep dry in storage.

10.3. POSSIBILITY OF HAZARDOUS REACTION

No dangerous reaction known under conditions of normal use.

10.4. CONDITIONS TO AVOID

Heat. Incompatible materials.

10.5. INCOMPATIBLE MATERIALS

Strong acids. Strong Oxidizers.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

Upon decomposition, this product may yield oxides of carbon and hydrogen sulfide.

Section 11: TOXICOLOGICAL INFORMATION

11.1. LIKELY ROUTES OF EXPOSURE:

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Skin contact, skin absorption, eye contact, inhalation, and ingestion.

11.2. SYMPTOMS RELATED TO PHYSICAL/CHEMICAL/TOXICOLOGICAL CHARACTERISTICS:

Eye Contact: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Skin Contact: Causes severe skin burns. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause sensitization by skin contact.

Inhalation: May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated exposure. This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica from this product can cause silicosis, a serious disabling and fatal lung disease.

Ingestion: May be harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

Acute Toxicity(ATE _{mix} =7,466 mg/kg)		
Chemical Name	LC50	LD50
Crystalline Silica, Quartz	Not Available	Oral: >10,000 mg/kg, rat
Portland Cement	Not Available	Oral: >5,000 mg/kg, rat
Calcium Carbonate	Not Available	Oral: 6,450 mg/kg, rat
Titanium Dioxide	Not Available	Oral: >5,000 mg/kg, rat
Carbon Black	Not Available	Oral: >8,000 mg/kg, rat

Carcinogenicity	
Chemical Name	Chemical Listed as Carcinogens or Potential Carcinogen (NTP,IARC,OSHA,ACGIH,CP65)
Crystalline Silica, Quartz	N-2, I-1, O-1, ACGIH-A2, CP65
Portland Cement	ACGIH-A4
Calcium Carbonate	Not Listed
Titanium Dioxide	N-2, I-2B, O-1, ACGIH-A2, CP65
Carbon Black	ACGIH-A3, CP65

11.3. DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT AND LONG-TERM EXPOSURE

SHORT-TERM	
Skin Corrosion/Irritation:	Causes severe skin burns
Serious Eye Damage/Irritation:	Causes serious eye damage
Respiratory Sensitization:	Not Classified
Skin Sensitization:	May cause an allergic skin reaction
STOT-Single Exposure:	May cause respiratory irritation
Aspiration Hazard:	Not Classified
LONG-TERM	
Carcinogenicity:	May cause cancer through inhalation of dust
Germ Cell Mutagenicity:	Not Classified
Reproductive Toxicity:	Not Classified
STOT-Repeated Exposure:	Causes damage to organs through prolonged or repeated exposure through inhalation of dust



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Synergistic/Antagonistic Effects: Not Classified

Section 12: ECOLOGICAL INFORMATION

12.1. ECOTOXICITY

May cause long-term adverse effects to the aquatic environment. Keep from entry into sewers and waterways.

Ecotoxicity		
Chemical Name	EC50/NOEC-48 Hours	LC50/NOEC-96 Hours
Crystalline Silica, Quartz	Not Available	Not Available
Portland Cement	Not Available	Not Available
Calcium Carbonate	Not Available	Not Available
Titanium Dioxide	Not Available	Not Available
Carbon Black	Not Available	Not Available

12.2. PERSISTENCE AND DEGRADABILITY

Not Available

12.3. BIOACCUMULATIVE POTENTIAL

Not Available

12.4. MOBILITY IN SOIL

Not Available

12.5. OTHER ADVERSE EFFECTS

Not Available

Section 13: DISPOSAL CONSIDERATIONS

13.1. DISPOSAL METHOD

Dispose of contents/containers in accordance with all local, state, provincial, and federal regulations

13.2. OTHER DISPOSAL CONSIDERATIONS

Not Available

Section 14: TRANSPORT INFORMATION

DOT (U.S.)	TDG (CANADA)	IATA
UN NUMBER: Not Regulated	UN NUMBER: Not Regulated	UN NUMBER: Not Regulated
UN PROPER SHIPPING NAME: Not Regulated	UN PROPER SHIPPING NAME: Not Regulated	UN PROPER SHIPPING NAME: Not Regulated
TRANSPORT HAZARD CLASS (ES):	TRANSPORT HAZARD CLASS (ES):	TRANSPORT HAZARD CLASS (ES):

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Not Regulated	Not Regulated	Not Regulated
PACKING GROUP (if applicable):	PACKING GROUP (if applicable):	PACKING GROUP (if applicable):
Not Regulated	Not Regulated	Not Regulated

SUMMARY: Product is NOT regulated under DOT/TDG and other transportation regulations.

14.1. ENVIRONMENTAL HAZARDS

Not Available

14.2. TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not Available

14.3. SPECIAL PRECAUTIONS FOR USER

Do not handle until all safety precautions have been read and understood.

Section 15: REGULATORY INFORMATION

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATIONS SPECIFIC FOR THE CHEMICAL


Canada: This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations and the SDS contains all the information required by the Hazardous Products Regulations.

US: SDS prepared pursuant to the Hazard Communication Standard (29 CFR 1910.1200) HazCom 2012

15.2. US FEDERAL INFORMATION:

CHEMICAL NAME	SARA TITLE III			
	SECTION 302 (EHS) TPQ (LBS)	SECTION 304 EHS RQ (LBS)	CERCLA RQ (LBS)	SECTION 313 (TRI)
Crystalline Silica, Quartz	Not Listed	Not Listed	Not Listed	Not Listed
Portland Cement	Not Listed	Not Listed	Not Listed	Not Listed
Calcium Carbonate	Not Listed	Not Listed	Not Listed	Not Listed
Titanium Dioxide	Not Listed	Not Listed	Not Listed	Not Listed
Carbon Black	Not Listed	Not Listed	Not Listed	Not Listed

15.3. US STATE RIGHT TO KNOW LAWS:

California Proposition 65:	 WARNING: This product can expose you to chemicals including crystalline silica which is known to the State of California to cause cancer and hexavalent chromium compounds which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov .
Other U.S. States "Right to Know" Lists:	Silica, Quartz: CAS#14808-60-7 Portland Cement: CAS#65997-15-1 Calcium Carbonate: CAS#1317-65-3 Titanium Dioxide: CAS#13463-67-7 Gypsum: CAS#13397-24-5

Conforms to OSHA HazCom 2012 Standard and WHMIS 2015

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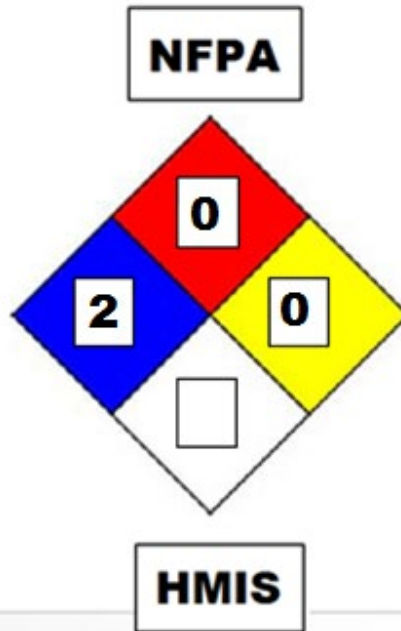
	Carbon Black: CAS#1333-86-4
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15.4. GLOBAL INVENTORIES


































Chemical Name	USA TSCA	Canada DSL/NDSL
Crystalline Silica, Quartz	Yes	DSL
Portland Cement	Yes	DSL
Calcium Carbonate	Yes	NDSL
Titanium Dioxide	Yes	DSL
Carbon Black	Yes	DSL

15.5. NFPA AND HMIS RATINGS:

<p align="center">HEALTH HAZARD</p> <p>4 EXTREME - Highly toxic. May be fatal on short-term exposure.</p> <p>3 SERIOUS - Toxic. Full protective suit and breathing apparatus should be worn.</p> <p>2 MODERATE - Breathing apparatus and face mask must be worn.</p> <p>1 SLIGHT - Breathing apparatus may be worn.</p> <p>0 MINIMAL - No precautions necessary.</p>	<p align="center">FLAMMABILITY HAZARD</p> <p>4 EXTREME - Deeply flammable gas or liquid. Flash Point below 73°F.</p> <p>3 SERIOUS - Flammable. Flash Point 73°F to 100°F.</p> <p>2 MODERATE - Combustible. Requires moderate heating to ignite. Flash Point below 200°F.</p> <p>1 SLIGHT - Slightly combustible. Requires strong heating to ignite.</p> <p>0 MINIMAL - Will not burn under normal conditions.</p>
<p align="center">SPECIFIC HAZARD</p> <p>OXIDIZER OX</p> <p>ACID ACID</p> <p>ALKALI ALK</p> <p>CORROSIVE COR</p> <p>Use NO WATER W</p> <p>RADIATION ☼</p>	<p align="center">INSTABILITY HAZARD</p> <p>4 EXTREME - Explosive at room temperature.</p> <p>3 SERIOUS - May detonate if shocked or heated under confinement or mixed with water.</p> <p>2 MODERATE - Unstable. May react with water.</p> <p>1 SLIGHT - May react if heated or mixed with water.</p> <p>0 MINIMAL - Normally stable. Does not react with water.</p>



Hazard Index	
4	Severe Hazard
3	Serious Hazard
2	Moderate Hazard
1	Slight Hazard

<p>2 HEALTH</p> <p>0 FLAMMABILITY</p> <p>0 REACTIVITY</p> <p>E PERSONAL PROTECTION</p>	<p align="center">PROTECTIVE EQUIPMENT INDEX</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>A </td> <td>G </td> </tr> <tr> <td>B </td> <td>H </td> </tr> <tr> <td>C </td> <td>I </td> </tr> <tr> <td>D </td> <td>J </td> </tr> <tr> <td>E </td> <td>K </td> </tr> <tr> <td>F </td> <td>X Ask your supervisor for special handling instructions.</td> </tr> </table>	A 	G 	B 	H 	C 	I 	D 	J 	E 	K 	F 	X Ask your supervisor for special handling instructions.
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B 	H 												
C 	I 												
D 	J 												
E 	K 												
F 	X Ask your supervisor for special handling instructions.												

15.6. SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

CP65	California Proposition 65
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OSHA (O)	Occupational Safety and Health Administration
ACGIH (G)	American Conference of Governmental Industrial Hygienists <ul style="list-style-type: none"> • A1 – Confirmed human carcinogen • A2 – Suspected human carcinogen • A3 – Animal carcinogen • A4 – Not classifiable as a human carcinogen • A5 – Not suspected a human carcinogen
IARC (I)	International Agency for Research on Cancer <ul style="list-style-type: none"> • 1 – The agent (mixture) is carcinogenic to humans • 2A – The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals. • 2B – The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals. • 3 – The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans. • 4 – The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.
NTP (N)	National Toxicology Program <ul style="list-style-type: none"> • 1 – Known to be carcinogens • 2 – Reasonably anticipated to be carcinogens

Section 16: OTHER INFORMATION

Date of Preparation: February 19, 2020

Version: 2.0

Revision Date: November 10, 2020

Disclaimer: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products.

Prepared by: Custom Building Products
 Phone: (800)-282-8786
www.custombuildingproducts.com

End of Safety Data Sheet

Polyblend® Plus Non-Sanded Grout



- Resists shrinking, cracking, powdering and wear
- Excellent for highly-glazed ceramic tile and highly-polished marble or natural stone

Limitations to the Product

- Should not be installed when ambient or surface temperature is lower than 50°F (10°C) or higher than 100°F (38°C).
- Tile or stone with high absorption, surfaces that are porous or rough, textured surfaces and some types of porcelain tile may require sealing prior to grouting to prevent possible staining. Use [Aqua Mix® Grout Release](#) or [TileLab® SurfaceGard® Sealer](#) to prevent staining when required.
- Color variation can occur due to tile type, tile porosity, jobsite and climatic conditions, application and cleaning techniques. Variation can be minimized by following directions and using as little water as possible for cleanup.
- A CUSTOM grout color card is truest representation of the grout formula. Refer to the latest CUSTOM grout color card to choose a color. Perform a mockup to determine suitability. Various lighting types and conditions will affect the final grout and tile colors' appearance.
- Not for use in either industrial applications or in areas subjected to harsh or continuous chemicals, high heat or high-pressure cleaning. For heavy industrial tile installations, use [CEG-IG 100% Solids Epoxy Grout](#).
- Chemicals in salt-based pool filtration systems can cause a reaction with blue, green and red grouts. Contact Technical Services for recommendations.
- Not for use in movement joints or changes of plane in the tile installation. In these areas, use an appropriate caulk or sealant such as [Commercial 100% Silicone Sealant](#) or [Ceramic Tile Caulk](#).

1. Product Name

Polyblend® Plus Non-Sanded Grout

2. Manufacturer

Custom Building Products
 Technical Services
 10400 Pioneer Boulevard, Unit 3
 Santa Fe Springs, CA 90670
 Customer Support: 800-272-8786
 Technical Services: 800-282-8786
 Fax: 800- 200-7765
 Email: contactus@cbpmail.net
custombuildingproducts.com

3. Product Description

Polyblend Plus has all of the great features of original Polyblend, plus some new value-added enhancements to improve performance, finished color, and color consistency. It is an ANSI A118.6 polymer-modified, cement-based non-sanded grout designed for highly glazed or polished tile, marble and natural stone that would be scratched by sanded grouts. This durable, non-shrinking grout accommodates joints up to 1/8" (3 mm) and can be used for interior or exterior installations, including floors, countertops, walls, ceilings, showers, fountains and pools.

Key Features

- Brighter, more vivid finished color
- Enhanced color consistency
- Better resistance to efflorescence
- Easy to use - Just mix with water
- Polymer fortified for hard, durable, professional results

Uses

- Use to fill joint widths up to 1/8"
- May be used for both floor and wall installations
- Interior and exterior applications
- Residential and commercial applications
- Countertops, tub surrounds, showers and high traffic areas
- Submerged conditions (swimming pools, spas, water features and fountains)

Composition of Product

Polyblend® Plus Non-Sanded Grout is a dry, Portland cement based grout with inorganic aggregates and chemicals.

Benefits of Product in the Installation

- Hard, durable grout joints

Packaging

Available in 2 sizes:

- 10 lb (4.5 kg) box
- 25 lb (11.34 kg) bag

Available in 40 standard colors; color matching is available.

4. Technical Data

Applicable Standards

American National Standards Institute (ANSI) ANSI A108.10, A118.6
 American National Standards for the Installation of Ceramic Tile
 ASTM International (ASTM)

- ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or (50-mm) Cube Specimens)
- ASTM C531 Standard Test Method for Linear Shrinkage
- ASTM C580 Standard Test method for Flexural Strength

Technical Chart

Property	Test Method	Requirement	Typical Results
Pot Life	A118.6		1-2 hours
Shrinkage	Section 4.3	< 0.30%	< 0.30%
Water Absorption	Section 4.4	< 18%	< 18%
1 Day Compressive Strength	Section 4.5	> 500 psi (35.2 kg/cm sq.)	> 500 psi (35.2 kg/cm sq.)

Polyblend® Plus Non-Sanded Grout

28 Day Compressive Strength	Section 4.5	> 3000 psi (210.9 kg/cm sq.)	> 3000 psi (210.9 kg/cm sq.)
Tensile Strength	Section 4.6	> 250 psi (17.6 kg/cm sq.)	>250 psi (17.6 kg/cm sq.)
Flexural Strength	Section 4.7	>500 psi (35.2 kg/cm sq.)	>500 psi (35.2 kg/cm sq.)

Environmental Consideration

Custom® Building Products is committed to environmental responsibility in both products produced and in manufacturing practices. Use of this product can contribute towards LEED® v3 certification:

- Up to 2 points towards MR Credit 5, Regional Materials
- Up to 1 point towards IEQ Credit 4.1, LowEmittingLow Emitting Materials – Adhesives & Sealants

5. Instructions

General Surface Prep

USE CHEMICAL-RESISTANT GLOVES, such as nitrile, when handling product.

Tile or stone must be firmly bonded to a sound substrate, and setting material must be cured a minimum 24-48 hours before cement grout is applied, unless rapid-setting mortars are used. See the corresponding data sheet for the bonding mortars used in your application. Remove spacers and ensure that the grout joints are uniform in depth and width and free of loose debris, contaminants and excess mortar. Use [TileLab® SurfaceGard® Sealer](#) or [Aqua Mix® Grout Release](#) to seal tile or stone subject to staining or when using a grout that contrasts with the color of the tile.

Mixing Ratios

- Mix 2.9 pt (1.4 L) clean water to 10 lb (4.5 kg) grout.
- Mix 7.25 pt (3.43 L) clean water to 25 lb (11.34 kg) grout.

For increased stain resistance use [StainBlocker for Grout Additive](#). See datasheet for details.

Mixing Procedures

Dry mix bags of different batches together as they can vary slightly in color. Mix with a trowel or low speed mixer (less than 300 rpm) for approximately 3 minutes to achieve a smooth, lump-free consistency. If needed add: up to 0.2pts (0.1L) of water for each 10 lb. (4.5 kg) powder. Let the mixture stand (slake) for 5 minutes, and then remix and use. Periodically remix grout to keep it workable but do not add water as it can weaken the grout, cause color variation, shrinkage, cracking and pinholes. Discard grout when it becomes too stiff to spread.

Application of Product

Installation must conform to ANSI A108.10. Lightly dampen absorptive, highly porous tile with clean, cool water, but leave no standing water in the joints. Holding a rubber grout float at a 45° angle, completely fill the joints. Holding the edge of the float at a 90° angle, remove excess grout. At 70° F, do not spread more grout than can be cleaned within 30 minutes of the grout firming and use as little water as possible for grout clean-up (higher temperatures may shorten this time frame).

Using a damp, small pore grout sponge in a circular motion, smooth

and level joints and remove excess grout. Change the water and rinse the sponge frequently. Haze can be removed after 3 hours with cheesecloth or wrung-out sponge. If haze persists, the installation can be washed after three days with [Aqua Mix NanoScrub](#) or after ten days with [Aqua Mix® Sulfamic Acid Crystals](#), [TileLab® Sulfamic Acid Cleaner](#) or [Aqua Mix® Cement Grout Haze Remover](#). Perform a test in an inconspicuous area prior to complete application. Movement joints are required for perimeters and other changes of plane in all installations. See TCNA Detail EJ171 for recommendations.

Curing of Product

Curing time is affected by ambient and surface temperatures and humidity. For exterior applications, it is recommended that the installation is misted periodically with clean, cool water for 3 days.

Exterior applications must be protected from rain, snow and other wet conditions for at least 7 days with temperature above 50° F (10° C). If inclement weather is expected, protect the work area with tenting at least 1 foot (30 cm) above the finished surface to allow air flow.

Enclose and protect exterior installations and maintain >50° F (10° C) temperatures for at least 72 hours for proper cure.

Sealing of Grout

If the use of a sealer is desired for extra protection, apply a penetrating sealer such as [AquaMix® Sealer's Choice Gold](#) or [AquaMix Ultra-Solv®](#) or [TileLab® Surface Guard](#). Cleaning of equipment Clean tools and hands with water before the material dries.

Cleaning of Equipment

Clean tools and hands with water before the material dries

Health Precautions

This product contains Portland cement. Avoid eye contact or prolonged contact with skin. Wash thoroughly after handling. If eye contact occurs, flush with water for 15 minutes and consult a physician. Use with adequate ventilation; do not breathe dust and wear a NIOSH approved respirator. If ingested, do not induce vomiting; call a physician immediately.

Conformance to Building Codes

Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

6. Size & Availability

Location	Grout Color	Item Code	Size	Package	Item Code	Size	Package
USA	#9 Natural Gray	PBPG0910	10 lb (4.5 kg)	Box	NSPG0925*	25 lb (11.34 kg)	Bag
USA	#10 Antique White	PBPG1010	10 lb (4.5 kg)	Box	NSPG1025*	25 lb (11.34 kg)	Bag
USA	#11 Snow White	PBPG1110	10 lb (4.5 kg)	Box	NSPG1125*	25 lb (11.34 kg)	Bag
USA	#19 Pewter	PBPG1910	10 lb (4.5 kg)	Box	NSPG1925*	25 lb (11.34 kg)	Bag
USA	#52 Tobacco Brown	PBPG5210	10 lb (4.5 kg)	Box	NSPG5225*	25 lb (11.34 kg)	Bag
USA	#59 Saddle Brown	PBPG5910	10 lb (4.5 kg)	Box	NSPG5925*	25 lb (11.34 kg)	Bag
USA	#60 Charcoal	PBPG6010	10 lb (4.5 kg)	Box	NSPG6025*	25 lb (11.34 kg)	Bag
USA	#95 Sable Brown	PBPG9510	10 lb (4.5 kg)	Box	NSPG9525*	25 lb (11.34 kg)	Bag
USA	#105 Earth	PBPG10510	10 lb (4.5 kg)	Box	NSPG10525*	25 lb (11.34 kg)	Bag
USA	#115 Platinum	PBPG11510	10 lb (4.5 kg)	Box	NSPG11525*	25 lb (11.34 kg)	Bag
USA	#122 Linen	PBPG12210	10 lb (4.5 kg)	Box	NSPG12225*	25 lb (11.34 kg)	Bag
USA	#135 Mushroom	PBPG13510	10 lb (4.5 kg)	Box	NSPG13525*	25 lb (11.34 kg)	Bag
USA	#145 Light Smoke	PBPG14510	10 lb (4.5 kg)	Box	NSPG14525*	25 lb (11.34 kg)	Bag

Polyblend® Plus Non-Sanded Grout

USA	#165 Delorean Gray	PBPG16510	10 lb (4.5 kg)	Box	NSPG16525*	25 lb (11.34 kg)	Bag
USA	#172 Urban Putty	PBPG17210	10 lb (4.5 kg)	Box	NSPG17225*	25 lb (11.34 kg)	Bag
USA	#183 Chateau	PBPG18310	10 lb (4.5 kg)	Box	NSPG18325*	25 lb (11.34 kg)	Bag
USA	#185 New Taupe	PBPG18510	10 lb (4.5 kg)	Box	NSPG18525*	25 lb (11.34 kg)	Bag
USA	#186 Khaki	PBPG18610	10 lb (4.5 kg)	Box	NSPG18625*	25 lb (11.34 kg)	Bag
USA	#333 Alabaster	PBPG33310	10 lb (4.5 kg)	Box	NSPG33325*	25 lb (11.34 kg)	Bag
USA	#335 Winter Gray	PBPG33510	10 lb (4.5 kg)	Box	NSPG33525*	25 lb (11.34 kg)	Bag
USA	#370 Dove Gray	PBPG37010	10 lb (4.5 kg)	Box	NSPG37025*	25 lb (11.34 kg)	Bag
USA	#380 Haystack	PBPG38010	10 lb (4.5 kg)	Box	NSPG38025*	25 lb (11.34 kg)	Bag
USA	#381 Bright White	PBPG38110	10 lb (4.5 kg)	Box	NSPG38125*	25 lb (11.34 kg)	Bag
USA	#382 Bone	PBPG38210	10 lb (4.5 kg)	Box	NSPG38225*	25 lb (11.34 kg)	Bag

USA	#386 Oyster Gray	PBPG38610	10 lb (4.5 kg)	Box	NSPG38625*	25 lb (11.34 kg)	Bag
USA	#540 Truffle	PBPG54010	10 lb (4.5 kg)	Box	NSPG54025*	25 lb (11.34 kg)	Bag
USA	#541 Walnut	PBPG54110	10 lb (4.5 kg)	Box	NSPG54125*	25 lb (11.34 kg)	Bag
USA	#542 Graystone	PBPG54210	10 lb (4.5 kg)	Box	NSPG54225*	25 lb (11.34 kg)	Bag
USA	#543 Driftwood	PBPG54310	10 lb (4.5 kg)	Box	NSPG54325*	25 lb (11.34 kg)	Bag
USA	#544 Rolling Fog	PBPG54410	10 lb (4.5 kg)	Box	NSPG54425*	25 lb (11.34 kg)	Bag
USA	#545 Bleached Wood	PBPG54510	10 lb (4.5 kg)	Box	NSPG54525*	25 lb (11.34 kg)	Bag
USA	#546 Cape Gray	PBPG54610	10 lb (3.17 kg)	Box	NSPG54625*	25 lb (11.34 kg)	Bag
USA	#640 Arctic White	PBPG64010	10 lb (4.5 kg)	Box	NSPG64025*	25 lb (11.34 kg)	Bag
USA	#641 Cool White	PBPG64110	10 lb (4.5 kg)	Box	NSPG64125*	25 lb (11.34 kg)	Bag
USA	#642 Ash	PBPG64210	10 lb (4.5 kg)	Box	NSPG64225*	25 lb (11.34 kg)	Bag
USA	#643 Warm Gray	PBPG64310	10 lb (4.5 kg)	Box	NSPG64325*	25 lb (11.34 kg)	Bag
USA	#644 Shadow	PBPG64410	10 lb (4.5 kg)	Box	NSPG64425*	25 lb (11.34 kg)	Bag
USA	#645 Steel Blue	PBPG64510	10 lb (4.5 kg)	Box	NSPG64525*	25 lb (11.34 kg)	Bag
USA	#646 Coffee Bean	PBPG64610	10 lb (4.5 kg)	Box	NSPG64625*	25 lb (11.34 kg)	Bag
USA	#647 Brown Velvet	PBPG64710	10 lb (4.5 kg)	Box	NSPG64725*	25 lb (11.34 kg)	Bag

Location	Grout Color	Item Code	Size	Package	Item Code	Size	Package
Canada	#9 Natural Gray	CPBPG0910N	10 lb (4.5 kg)	Box	CPBPG0925N*	25 lb (11.34 kg)	Bag
Canada	#10 Antique White	CPBPG1010N	10 lb (4.5 kg)	Box	CPBPG1025N*	25 lb (11.34 kg)	Bag
Canada	#11 Snow White	CPBPG1110N	10 lb (4.5 kg)	Box	CPBPG1125N*	25 lb (11.34 kg)	Bag
Canada	#19 Pewter	CPBPG1910N	10 lb (4.5 kg)	Box	CPBPG1925N*	25 lb (11.34 kg)	Bag
Canada	#52 Tobacco Brown	CPBPG5210N	10 lb (4.5 kg)	Box	CPBPG5225N*	25 lb (11.34 kg)	Bag
Canada	#59 Saddle Brown	CPBPG5910N	10 lb (4.5 kg)	Box	CPBPG5925N*	25 lb (11.34 kg)	Bag
Canada	#60 Charcoal	CPBPG6010N	10 lb (4.5 kg)	Box	CPBPG6025N*	25 lb (11.34 kg)	Bag
Canada	#95 Sable Brown	CPBPG9510N	10 lb (4.5 kg)	Box	CPBPG9525N*	25 lb (11.34 kg)	Bag
Canada	#105 Earth	CPBPG10510N	10 lb (4.5 kg)	Box	CPBPG10525N*	25 lb (11.34 kg)	Bag
Canada	#115 Platinum	CPBPG11510N	10 lb (4.5 kg)	Box	CPBPG11525N*	25 lb (11.34 kg)	Bag
Canada	#122 Linen	CPBPG12210N	10 lb (4.5 kg)	Box	CPBPG12225N*	25 lb (11.34 kg)	Bag
Canada	#135 Mushroom	CPBPG13510N	10 lb (4.5 kg)	Box	CPBPG13525N*	25 lb (11.34 kg)	Bag
Canada	#145 Light Smoke	CPBPG14510N	10 lb (4.5 kg)	Box	CPBPG14525N*	25 lb (11.34 kg)	Bag

Canada	#165 Delorean Gray	CPBPG16510N	10 lb (4.5 kg)	Box	CPBPG16525N	25 lb (11.34 kg)	Bag
Canada	#172 Urban Putty	CPBPG17210N	10 lb (4.5 kg)	Box	CPBPG17225N*	25 lb (11.34 kg)	Bag
Canada	#183 Chateau	CPBPG18310N	10 lb (4.5 kg)	Box	CPBPG18325N*	25 lb (11.34 kg)	Bag
Canada	#185 New Taupe	CPBPG18510N	10 lb (4.5 kg)	Box	CPBPG18525N*	25 lb (11.34 kg)	Bag
Canada	#186 Khaki	CPBPG18610N	10 lb (4.5 kg)	Box	CPBPG18625N*	25 lb (11.34 kg)	Bag
Canada	#333 Alabaster	CPBPG33310N	10 lb (4.5 kg)	Box	CPBPG33325N*	25 lb (11.34 kg)	Bag
Canada	#335 Winter Gray	CPBPG33510N	10 lb (4.5 kg)	Box	CPBPG33525N*	25 lb (11.34 kg)	Bag
Canada	#370 Dove Gray	CPBPG37010N	10 lb (4.5 kg)	Box	CPBPG37025N*	25 lb (11.34 kg)	Bag

Canada	#380 Haystack	CPBPG38010N	10 lb (4.5 kg)	Box	CPBPG38025N*	25 lb (11.34 kg)	Bag
Canada	#381 Bright White	CPBPG38110N	10 lb (4.5 kg)	Box	CPBPG38125N*	25 lb (11.34 kg)	Bag
Canada	#382 Bone	CPBPG38210N	10 lb (4.5 kg)	Box	CPBPG38225N*	25 lb (11.34 kg)	Bag
Canada	#386 Oyster Gray	CPBPG38610N	10 lb (4.5 kg)	Box	CPBPG38625N*	25 lb (11.34 kg)	Bag
Canada	#540 Truffle	CPBPG54010N	10 lb (4.5 kg)	Box	CPBPG54025N*	25 lb (11.34 kg)	Bag
Canada	#541 Walnut	CPBPG54110N	10 lb (4.5 kg)	Box	CPBPG54125N*	25 lb (11.34 kg)	Bag
Canada	#542 Graystone	CPBPG54210N	10 lb (4.5 kg)	Box	CPBPG54225N*	25 lb (11.34 kg)	Bag
Canada	#543 Driftwood	CPBPG54310N	10 lb (4.5 kg)	Box	CPBPG54325N*	25 lb (11.34 kg)	Bag

Canada	#544 Rolling Fog	CPBPG54410N	10 lb (4.5 kg)	Box	CPBPG54425N*	25 lb (11.34 kg)	Bag
Canada	#545 Bleached Wood	CPBPG54510N	10 lb (4.5 kg)	Box	CPBPG54525N*	25 lb (11.34 kg)	Bag
Canada	#546 Cape Gray	CPBPG54610N	10 lb (4.5 kg)	Box	CPBPG54625N*	25 lb (11.34 kg)	Bag
Canada	#640 Arctic White	CPBPG64010N	10 lb (4.5 kg)	Box	CPBPG64025N*	25 lb (11.34 kg)	Bag
Canada	#641 Cool White	CPBPG64110N	10 lb (4.5 kg)	Box	CPBPG64125N*	25 lb (11.34 kg)	Bag
Canada	#642 Ash	CPBPG64210N	10 lb (4.5 kg)	Box	CPBPG64225N*	25 lb (11.34 kg)	Bag
Canada	#643 Warm Gray	CPBPG64310N	10 lb (4.5 kg)	Box	CPBPG64325N*	25 lb (11.34 kg)	Bag

Canada	#644 Shadow	CPBPG64410N	10 lb (4.5 kg)	Box	CPBPG64425N*	25 lb (11.34 kg)	Bag
Canada	#645 Steel Blue	CPBPG64510N	10 lb (4.5 kg)	Box	CPBPG64525N*	25 lb (11.34 kg)	Bag
Canada	#646 Coffee Bean	CPBPG64610N	10 lb (4.5 kg)	Box	CPBPG64625N*	25 lb (11.34 kg)	Bag
Canada	#647 Brown Velvet	CPBPG64710N	10 lb (4.5 kg)	Box	CPBPG64725N*	25 lb (11.34 kg)	Bag

* Indicates special order item.

7. Product Warranty

Obtain the applicable LIMITED PRODUCT WARRANTY at www.custombuildingproducts.com/product-warranty or send a written request to Custom Building Products, Inc., Five Concourse Parkway, Atlanta, GA 30328, USA. Manufactured under the authority of Custom Building Products, Inc. © 2019 Quikrete International, Inc.

8. Product Maintenance

Clean with a pH-neutral cleaner such as [Aqua Mix AquaKleen](#), [Aqua Mix Concentrated Tile & Stone Cleaner](#) or [TileLab Grout & Tile Cleaner](#).

9. Technical Services Information

For technical assistance, contact Custom® technical services at 800-272-8786 or visit custombuildingproducts.com.

10. Filing System

Additional product information is available from the manufacturer upon request.

Related Products

Ceramic Tile Caulk
Commercial 100% Silicone Sealant
TileLab® SurfaceGard® Sealer
StainBlocker for Grout
Polyblend® Plus Sanded Grout

Polyblend® Plus Non-Sanded Grout

Coverage Chart

For 10 lb. box of Polyblend Plus Nonsanded in ft² (m²) per bag

Tile Size Width x Length x Thickness	Joint Width	
	1/16" (1.63 mm)	1/8" (3 mm)
1" x 1" x 1/4" (2.5 x 2.5 x .64 cm)	40 ft ² (3.7 m ²)	23 ft ² (2.1 m ²)
2" x 2" x 1/4" (5 x 5 x .64 cm)	76 ft ² (7.1 m ²)	40 ft ² (3.7 m ²)
3" x 3" x 1/4" (7.6 x 7.6 x .64 cm)	112 ft ² (10.4 m ²)	58 ft ² (5.4 m ²)
4.25" x 4.25" x 1/4" (10.8 x 10.8 x .64 cm)	156 ft ² (14.5 m ²)	80 ft ² (7.5 m ²)
6" x 6" x 1/4" (15.2 x 15.2 x .64 cm)	219 ft ² (20.3 m ²)	112 ft ² (10.4 m ²)
8" x 8" x 3/8" (20.3 x 20.3 x 1 cm)	194 ft ² (18 m ²)	98 ft ² (9.1 m ²)
12" x 12" x 3/8" (30.5 x 30.5 x 1 cm)	289 ft ² (26.8 m ²)	146 ft ² (13.6 m ²)
18" x 18" x 3/8" (45.7 x 45.7 x 1 cm)	432 ft ² (40.1 m ²)	217 ft ² (20.2 m ²)
20" x 20" x 3/8" (50.8 x 50.8 x 1 cm)	480 ft ² (44.6 m ²)	241 ft ² (22.4 m ²)
24" x 24" x 3/8" (61 x 61 x 1 cm)	575 ft ² (53.4 m ²)	289 ft ² (26.8 m ²)
6" x 24" x 3/8" (15.2 x 61 x 1 cm)	232 ft ² (21.5 m ²)	117 ft ² (10.9 m ²)
12" x 24" x 3/8" (30.5 x 61 x 1 cm)	384 ft ² (35.7 m ²)	194 ft ² (18 m ²)
6" x 36" x 3/8" (15.2 x 91.4 x 1 cm)	248 ft ² (23 m ²)	126 ft ² (11.7 m ²)
9 x 36" x 3/8" (22.9 x 91.4 x 1 cm)	346 ft ² (32.2 m ²)	175 ft ² (16.2 m ²)
12" x 48" x 3/8" (30.5 x 122 x 1 cm)	461 ft ² (42.8 m ²)	232 ft ² (21.5 m ²)

Chart for estimating purposes. Coverage may vary based on installation practices and jobsite conditions. For more tile and joint sizes, use the [Material Calculator](https://www.custombuildingproducts.com/material-calculator) at CustomBuildingProducts.com or contact CUSTOM Technical Services at 800-282-8786.



SAFETY DATA SHEET

Section 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

Product Name: Polyblend® Plus Non-Sanded Grout

Product Code: Not Available

1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Product Use: Grout

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEETS

Name/Address: Custom Building Products
Five Concourse Parkway, Suite 1900
Atlanta, GA 30328

Telephone Number: 1-(800)-282-8786

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Telephone Number: INFOTRAC 1-800-535-5053 (US and Canada)
INTERNATIONAL + 1-352-323-3500

Section 2: HAZARD(S) IDENTIFICATION

2.1 CLASSIFICATION OF THE CHEMICAL IN ACCORDANCE WITH PARAGRAPH (d) OF 29 CFR 1910.1200 (OSHA HAZCOM2012)

Skin Corrosion	Category 1C
Serious Eye Damage	Category 1
Skin Sensitization	Category 1B
Specific Target Organ Toxicity—Single Exposure	Category 3
Specific Target Organ Toxicity—Repeated Exposure	Category 1
Carcinogenicity	Category 1A

2.2 LABEL ELEMENTS ACCORDING TO OSHA HAZCOM2012

2.2a SIGNAL WORD:
DANGER!

2.2b HAZARD STATEMENTS
Causes severe skin burns and eye damage
Causes serious eye damage
May cause an allergic skin reaction
May cause respiratory irritation
Causes damage to organs through prolonged or repeated inhalation of dust
May cause cancer through inhalation of dust

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2.2c HAZARD PICTOGRAMS



2.2d PRECAUTIONARY STATEMENTS

i. PREVENTION	Wash hands thoroughly after handling. Do not breathe dust. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear impervious gloves/protective clothing/eye protection.
ii. RESPONSE	If on skin (or hair): Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: call a poison center/doctor. If swallowed: Rinse mouth. Do NOT induce vomiting. If exposed or concerned: get medical advice/attention.
iii. STORAGE	Store in a well-ventilated place. Keep container tightly closed.
iv. DISPOSAL	Dispose of contents/containers in accordance with all local, state, provincial, and federal regulations.

2.3 ADDITIONAL INFORMATION

2.3a HNOC – HAZARDS NOT OTHERWISE CLASSIFIED

Not Applicable

2.3b UNKNOWN ACUTE TOXICITY

<1% of the mixture consists of ingredient(s) of unknown acute toxicity.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 MIXTURES

Chemical Name	CAS Number	Weight %
Calcium Carbonate	1317-65-3	30 – 60%*
Portland Cement	65997-15-1	30 – 60%*
Titanium Dioxide	13463-67-7	1 – 5%*
Carbon Black	1333-86-4	0.1 – 1.0%*
Crystalline Silica, Quartz	14808-60-7	0.1 – 1.0%*

*Means that the component will fall into one of the ranges specified due to batch-to-batch variability and to protect Confidential Business Information.

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Section 4: FIRST-AID MEASURES

4.1 DESCRIPTION OF THE FIRST-AID MEASURES

ROUTES OF EXPOSURE	DESCRIPTION
Eye Contact:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.
Skin Contact:	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.
Inhalation:	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
Ingestion:	If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention.

4.2 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

ROUTES OF EXPOSURE	DESCRIPTION
Eye Contact:	Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Skin Contact:	Causes severe skin burns. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause sensitization by skin contact.
Inhalation:	May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated exposure. This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica from this product can cause silicosis, a serious disabling and fatal lung disease.
Ingestion:	May be harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Note to Physicians:	Symptoms may not appear immediately.
Specific Treatments:	In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

Section 5: FIRE-FIGHTING MEASURES

5.1 FLAMMABILITY

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Flammability: Not Flammable/Not Combustible by WHMIS/OSHA HAZCOM2012 Criteria

5.2 EXTINGUISHING MEDIA

5.2a. Suitable Extinguishing Media:
Treat for surrounding material.

5.2b. Unsuitable Extinguishing Media:
Not Available

5.3 SPECIFIC HAZARDS ARISING FROM THE CHEMICAL

5.3a. Products of Combustion:
May include, and are not limited to: oxides of carbon and hydrogen sulfide

5.3b. Explosion Data

i. **Sensitivity to Mechanical Impact:**
Not Available

ii. **Sensitivity to Static Discharge:**
Not Available

5.4 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS

Keep upwind of fire. Wear full fire fighting turn-out gear(full bunker gear) and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Methods for Containment: Recover all usable material. Pick up large pieces, and then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Cleaning-Up: Vacuum or sweep material and place in a disposal container. Dispose of unwanted material properly in accordance with all local, regional, national and international regulations.

Section 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Handling: Use in well-ventilated areas. Wear impervious gloves and eye protection. Do not mix with other chemical products, except as

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indicated by the manufacturers. Do not get in eyes. Do not get on skin or clothing. Do not breathe dust. Do not take internally.

General Hygiene Advice: Use good industrial hygiene practices and wear recommended personal protection. Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage: Keep out of the reach of children. Keep container tightly closed. Store at room temperature and keep containers closed when not in use. Keep dry until use.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETER

Exposure Guidelines:

Occupational Exposure Limits		
Chemical Name	OSHA-PEL	ACGIH-TLV
Calcium Carbonate	5 mg/m ³ (Resp.) 15 mg/m ³ (Total)	5 mg/m ³ (Resp.)
Portland Cement	5 mg/m ³ (Resp.) 15 mg/m ³ (Total)	10 mg/m ³ (Resp.)
Titanium Dioxide	5 mg/m ³ (Resp.) 15 mg/m ³ (Total)	6 mg/m ³
Carbon Black	3.5 mg/m ³	3.0 mg/m ³
Crystalline Silica, Quartz	0.05 mg/m ³	0.025 mg/m ³ (Resp.)

8.2 EXPOSURE CONTROLS

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

8.3 INDIVIDUAL PROTECTION MEASURES

8.3a. Personal Protective Equipment:

- i. **Eye/Face Protection:** Wear approved eye/face protection [properly fitted dust- or splash-proof chemical safety goggles/face (face shield)]
- ii. **Skin Protection:**
 1. **Hand Protection:** Wear impervious gloves, such as nitrile.
 2. **Body Protection:** Wear suitable protective clothing
- iii. **Respiratory Protection:** A NIOSH approved respirator or filtering face piece, such as N95, is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained

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health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

- iv. **General Health and Safety Measures:** Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.):	Solid Powder (Various Colors)
Odor:	Characteristic
Odor Threshold:	Not Available
pH:	10.0 – 12.5 when wet
Melting point/Freezing point:	Not Available
Initial boiling point and boiling range:	Not Available
Flash point:	>212°F(>100°C)
Evaporation rate (Water=1):	Not Available
Flammability:	Not Flammable/Not Combustible
Upper Flammability/Explosive Limit:	Not Available
Lower Flammability/Explosive Limit:	Not Available
Vapor Pressure	Not Available
Vapor Density:	Not Available
Relative Density:	2.0 – 3.0 g/mL
Solubility in Water:	Slightly Soluble
Partition coefficient: n-octanol/water:	Not Available
Auto-ignition temperature:	Not Available
Decomposition Temperature:	Not Available
Viscosity (cps):	Not Available
VOC Content:	0 g/L

Section 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

No dangerous reaction known under conditions of normal use.

10.2. CHEMICAL STABILITY

Stable under normal storage conditions. Keep dry in storage.

10.3. POSSIBILITY OF HAZARDOUS REACTION

No dangerous reaction known under conditions of normal use.

10.4. CONDITIONS TO AVOID

Heat. Incompatible materials.

10.5. INCOMPATIBLE MATERIALS

Strong acids. Strong Oxidizers.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

Upon decomposition, this product may yield oxides of carbon and hydrogen sulfide.

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Section 11: TOXICOLOGICAL INFORMATION

11.1. LIKELY ROUTES OF EXPOSURE:

Skin contact, skin absorption, eye contact, inhalation, and ingestion.

11.2. SYMPTOMS RELATED TO PHYSICAL/CHEMICAL/TOXICOLOGICAL CHARACTERISTICS:

Eye Contact: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Skin Contact: Causes severe skin burns. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause sensitization by skin contact.

Inhalation: May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated exposure. This product contains crystalline silica. Prolonged or repeated inhalation of respirable crystalline silica from this product can cause silicosis, a serious disabling and fatal lung disease.

Ingestion: May be harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

Acute Toxicity (ATE _{mix} =5,658 mg/kg)		
Chemical Name	LC50	LD50
Calcium Carbonate	Not Available	Oral: 6,450 mg/kg, rat
Portland Cement	Not Available	Oral: >5,000 mg/kg, rat
Titanium Dioxide	Not Available	Oral: >5,000 mg/kg, rat
Carbon Black	Not Available	Oral: >8,000 mg/kg, rat
Crystalline Silica, Quartz	Not Available	Oral: >10,000 mg/kg, rat

Carcinogenicity	
Chemical Name	Chemical Listed as Carcinogens or Potential Carcinogen (NTP, IARC, OSHA, ACGIH, CP65)
Calcium Carbonate	Not Listed
Portland Cement	ACGIH-A4
Titanium Dioxide	N-2, I-2B, O-1, ACGIH-A2, CP65
Carbon Black	ACGIH-A3, CP65
Crystalline Silica, Quartz	N-2, I-1, O-1, ACGIH-A2, CP65

11.3. DELAYED, IMMEDIATE, AND CHRONIC EFFECTS OF SHORT AND LONG-TERM EXPOSURE

SHORT-TERM	
Skin Corrosion/Irritation:	Causes severe skin burns
Serious Eye Damage/Irritation:	Causes serious eye damage
Respiratory Sensitization:	Not Classified
Skin Sensitization:	May cause an allergic skin reaction
STOT-Single Exposure:	May cause respiratory irritation
Aspiration Hazard:	Not Classified
LONG-TERM	
Carcinogenicity:	May cause cancer through inhalation of dust
Germ Cell Mutagenicity:	Not Classified



SAFETY DATA SHEET

Reproductive Toxicity:	Not Classified
STOT-Repeated Exposure:	Causes damage to organs through prolonged or repeated exposure through inhalation of dust
Synergistic/Antagonistic Effects:	Not Classified

Section 12: ECOLOGICAL INFORMATION

12.1. ECOTOXICITY

May cause long-term adverse effects to the aquatic environment. Keep from entry into sewers and waterways.

Ecotoxicity		
Chemical Name	EC50/NOEC-48 Hours	LC50/NOEC-96 Hours
Calcium Carbonate	Not Available	Not Available
Portland Cement	Not Available	Not Available
Titanium Dioxide	Not Available	Not Available
Carbon Black	Not Available	Not Available
Crystalline Silica, Quartz	Not Available	Not Available

12.2. PERSISTENCE AND DEGRADABILITY

Not Available

12.3. BIOACCUMULATIVE POTENTIAL

Not Available

12.4. MOBILITY IN SOIL

Not Available

12.5. OTHER ADVERSE EFFECTS

Not Available

Section 13: DISPOSAL CONSIDERATIONS

13.1. DISPOSAL METHOD

Dispose of contents/containers in accordance with all local, state, provincial, and federal regulations

13.2. OTHER DISPOSAL CONSIDERATIONS

Not Available

Section 14: TRANSPORT INFORMATION

DOT (U.S.)	TDG (CANADA)	IATA
UN NUMBER:	UN NUMBER:	UN NUMBER:
Not Regulated	Not Regulated	Not Regulated
UN PROPER SHIPPING NAME:	UN PROPER SHIPPING NAME:	UN PROPER SHIPPING NAME:
Not Regulated	Not Regulated	Not Regulated

SAFETY DATA SHEET

TRANSPORT HAZARD CLASS (ES): Not Regulated	TRANSPORT HAZARD CLASS (ES): Not Regulated	TRANSPORT HAZARD CLASS (ES): Not Regulated
PACKING GROUP (if applicable): Not Regulated	PACKING GROUP (if applicable): Not Regulated	PACKING GROUP (if applicable): Not Regulated

SUMMARY: Product is NOT regulated under DOT/TDG and other transportation regulations.

14.1. ENVIRONMENTAL HAZARDS

Not Available

14.2. TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not Available

14.3. SPECIAL PRECAUTIONS FOR USER

Do not handle until all safety precautions have been read and understood.

Section 15: REGULATORY INFORMATION

15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATIONS SPECIFIC FOR THE CHEMICAL


Canada: This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations and the SDS contains all the information required by the Hazardous Products Regulations.

US: SDS prepared pursuant to the Hazard Communication Standard (29 CFR 1910.1200) HazCom 2012

15.2. US FEDERAL INFORMATION:

CHEMICAL NAME	SARA TITLE III			
	SECTION 302 (EHS) TPQ (LBS)	SECTION 304 EHS RQ (LBS)	CERCLA RQ (LBS)	SECTION 313 (TRI)
Calcium Carbonate	Not Listed	Not Listed	Not Listed	Not Listed
Portland Cement	Not Listed	Not Listed	Not Listed	Not Listed
Titanium Dioxide	Not Listed	Not Listed	Not Listed	Not Listed
Carbon Black	Not Listed	Not Listed	Not Listed	Not Listed
Crystalline Silica, Quartz	Not Listed	Not Listed	Not Listed	Not Listed

15.3. US STATE RIGHT TO KNOW LAWS:

California Proposition 65:	 WARNING: This product can expose you to chemicals including crystalline silica which is known to the State of California to cause cancer and hexavalent chromium compounds which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov .
Other U.S. States "Right to Know" Lists:	Calcium Carbonate: CAS#1317-65-3 Portland Cement: CAS#65997-15-1

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	Gypsum: CAS#13397-24-5 Titanium Dioxide: CAS#13463-67-7 Carbon Black: CAS#1333-86-4 Silica, Quartz: CAS#14808-60-7
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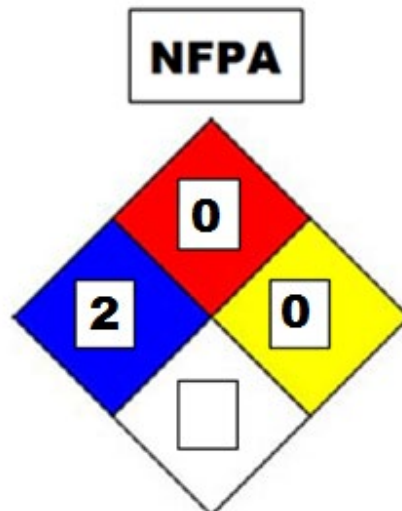
15.4. GLOBAL INVENTORIES

Chemical Name	USA TSCA	Canada DSL/NDSL
Calcium Carbonate	Yes	NDSL
Portland Cement	Yes	DSL
Titanium Dioxide	Yes	DSL
Carbon Black	Yes	DSL
Crystalline Silica, Quartz	Yes	DSL

15.5. NFPA AND HMIS RATINGS:












HEALTH HAZARD 4 EXTREME - Highly toxic. May be fatal on short-term exposure. 3 SERIOUS - Toxic. Full protective suit and breathing apparatus should be worn. 2 MODERATE - Breathing apparatus and face mask must be worn. 1 SLIGHT - Breathing apparatus may be worn. 0 MINIMAL - No precautions necessary.	FLAMMABILITY HAZARD 4 EXTREME - Extremely flammable gas or liquid. Flash Point below 73°F. 3 SERIOUS - Flammable. Flash Point 73°F to 100°F. 2 MODERATE - Combustible. Requires moderate heating to ignite. Flash Point below 200°F. 1 SLIGHT - Slightly combustible. Requires strong heating to ignite. 0 MINIMAL - Will not burn under normal conditions.
SPECIFIC HAZARD OXIDIZER OX ACID AC ALKALI AL CORROSIVE CO Use NO WATER W RADIATION RA	INSTABILITY HAZARD 4 EXTREME - Explosive at room temperature. 3 SERIOUS - May detonate if shocked or heated under confinement or mixed with water. 2 MODERATE - Unstable. May react with water. 1 SLIGHT - May react if heated or mixed with water. 0 MINIMAL - Normally stable. Does not react with water.

NFPA



HMIS

Hazard Index	
4	Severe Hazard
3	Serious Hazard
2	Moderate Hazard
1	Slight Hazard

2 HEALTH	PROTECTIVE EQUIPMENT INDEX	
0 FLAMMABILITY	A 	G 
0 REACTIVITY	B 	H 
E PERSONAL PROTECTION	C 	I 
	D 	J 
	E 	K 
	F 	X Ask your supervisor for special handling instructions.

SAFETY DATA SHEET

15.6. SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

CP65	California Proposition 65
OSHA (O)	Occupational Safety and Health Administration
ACGIH (G)	American Conference of Governmental Industrial Hygienists <ul style="list-style-type: none"> • A1 – Confirmed human carcinogen • A2 – Suspected human carcinogen • A3 – Animal carcinogen • A4 – Not classifiable as a human carcinogen • A5 – Not suspected a human carcinogen
IARC (I)	International Agency for Research on Cancer <ul style="list-style-type: none"> • 1 – The agent (mixture) is carcinogenic to humans • 2A – The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals. • 2B – The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals. • 3 – The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans. • 4 – The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.
NTP (N)	National Toxicology Program <ul style="list-style-type: none"> • 1 – Known to be carcinogens • 2 – Reasonably anticipated to be carcinogens

Section 16: OTHER INFORMATION

Date of Preparation: February 19, 2020

Version: 2.0

Revision Date: November 10, 2020

Disclaimer: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products.

Prepared by: Custom Building Products
 Phone: (800)-282-8786
www.custombuildingproducts.com

End of Safety Data Sheet

GROUT SOLUTIONS

prism **SCG**

prism

CEGTM

POLYBLEND **HP** POLYBLEND **PLUS**

Right Grout. Right Color.
For Any Job.



CUSTOM[®]

TILE INSTALLATION SYSTEMS

CUSTOM's 40 color palette complements and

S Select Grout Color For Floor Tile,
Wall Tile & Tile Base

#640 Arctic White

#381 Bright White

#11 Snow White

#641 Cool White

#642 Ash

#545 Bleached Wood

#333 Alabaster

#10 Antique White

#382 Bone

#643 Warm Gray

#544 Rolling Fog

#115 Platinum

#546 Cape Gray

#386 Oyster Gray

#543 Driftwood

#542 Graystone

#165 Delorean Gray

#335 Winter Gray

#09 Natural Gray

#19 Pewter

#644 Shadow

#370 Dove Gray

#645 Steel Blue

#122 Linen

#183 Chateau

#172 Urban Putty

#380 Haystack

#186 Khaki

#135 Mushroom

#145 Light Smoke

#541 Walnut

#185 New Taupe

#105 Earth

#59 Saddle Brown

#52 Tobacco Brown

#646 Coffee Bean

#95 Sable Brown

#647 Brown Velvet

#540 Truffle

#60 Charcoal

All colors available in all grout types.

Sample colors shown approximate grout color. Final installed shade may vary with the tile type, color and porosity as well as jobsite conditions and finishing techniques.

Color Selection Tips

Complementary

Pick a grout color similar to your tile color to create a uniform look to your floor.



Contrast

When a contrasting grout color is used, your tile grout lines stand out highlighting tile shapes and patterns creating a checkerboard effect.



Use a qualifying system of eligible surface prep and tile setting products from CUSTOM and we'll warrant the entire tile installation for life, including materials, tile and labor to repair in the event of a defect. See CustomBuildingProducts.com for more details.

Transition: Tile - CPT

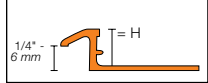
1.4 Schluter®-RENO-TK



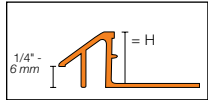
Aluminum (1/4" - 6 mm)



Aluminum
5/16" - 3/8" (8 - 10 mm)



Aluminum
1/2" (12.5 mm)



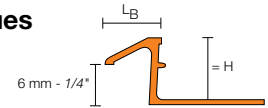
Stainless steel, Brass



H = mm - in.	Item No.				
	Stainless steel 304 (1.4301 = V2A) (E)	Brushed stainless steel 304 (1.4301 = V2A) (EB)	Solid brass (M)	Satin anodized aluminum (AE)	
6 - 1/4	-	-	-	AETK 60	
8 - 5/16	ETK 80	EBTK 80	MTK 80	AETK 80	
10 - 3/8	ETK 100	EBTK 100	MTK 100	AETK 100	
11 - 7/16	ETK 110	EBTK 110	-	-	
12.5 - 1/2	ETK 125	EBTK 125	MTK 125	AETK 125	
H = mm - in.	Item No.				
	Bright chrome anodized aluminum (ACB)	Satin nickel anodized aluminum (AT)	Brushed nickel anodized aluminum (ATGB)	Brushed antique bronze anodized aluminum (ABGB)	
6 - 1/4	ATK 60 ACB	ATK 60 AT	-	-	
8 - 5/16	ATK 80 ACB	ATK 80 AT	ATK 80 ATGB	ATK 80 ABGB	
10 - 3/8	ATK 100 ACB	ATK 100 AT	ATK 100 ATGB	ATK 100 ABGB	
12.5 - 1/2	ATK 125 ACB	ATK 125 AT	ATK 125 ATGB	ATK 125 ABGB	

Length supplied: 8' 2-1/2" - 2.5 m

Diagram Values



H = mm - in.	L _B = mm - in.	
	Aluminum	Stainless steel/Brass
6 - 1/4	7.5 - 19/64	-
8 - 5/16	8.5 - 21/64	7 - 9/32
10 - 3/8	8.5 - 21/64	11 - 7/16
11 - 7/16	-	13.5 - 17/32
12.5 - 1/2	15.5 - 39/64	16.5 - 21/32

ADA-Compliant

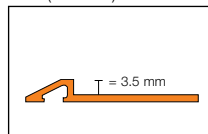
Note: RENO-TK is available in radius (sizes 60 - 100) in all materials except stainless steel.

Transition: Tile-VCT

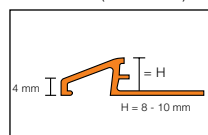
1.2 Schluter®-RENO-U



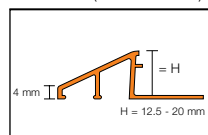
Aluminum
1/8" (3.5 mm)



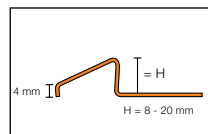
5/16" - 3/8" (8 - 10 mm)



1/2" - 3/4" (12.5 - 20 mm)



Stainless steel, Brass



H = mm - in.	Item No.					
	Stainless steel 304 (1.4301 = V2A) (E)	Brushed stainless steel 304 (1.4301 = V2A) (EB)	Solid brass (M)	Satin anodized aluminum (AE)	Bright chrome anodized aluminum (ACB)	
3.5 - 1/8	-	-	-	AEU 35	-	
8 - 5/16	EU 80	EBU 80	MU 80	AEU 80	AU 80 ACB	
10 - 3/8	EU 100	EBU 100	MU 100	AEU 100	AU 100 ACB	
11 - 7/16	EU 110	EBU 110	-	-	-	
12.5 - 1/2	EU 125	EBU 125	MU 125	AEU 125	AU 125 ACB	
15 - 9/16	EU 150	EBU 150	MU 150	AEU 150	-	
17.5 - 11/16	EU 175	EBU 175	-	AEU 175	-	
20 - 3/4	EU 200	EBU 200	-	-	-	

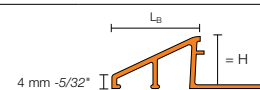
H = mm - in.	Item No.				
	Satin nickel anodized aluminum (AT)	Brushed nickel anodized aluminum (ATGB)	Brushed antique bronze anodized aluminum (ABGB)	Satin brass anodized aluminum (AM)	
8 - 5/16	AU 80 AT	AU 80 ATGB	AU 80 ABGB	AU 80 AM	
10 - 3/8	AU 100 AT	AU 100 ATGB	AU 100 ABGB	AU 100 AM	
12.5 - 1/2	AU 125 AT	AU 125 ATGB	AU 125 ABGB	AU 125 AM	

Length supplied: 8' 2-1/2" - 2.5 m

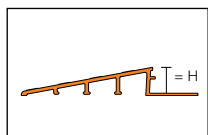
ADA-Compliant

Note: When leading edge abuts lower surface covering, sizes 3/4" (20 mm) and 11/16" (17.5 mm) are not ADA-compliant. When leading edge rests on top of lower surface covering, sizes 3/4" (20 mm), 9/16" (15 mm), and 11/16" (17.5 mm) are not ADA-compliant.

Diagram Values



H = mm - in.	L _B = mm - in.	
	Aluminum	Stainless steel/Brass
3.5 - 1/8	9 - 23/64	-
8 - 5/16	12.5 - 31/64	13 - 33/64
10 - 3/8	16.5 - 21/32	17.5 - 11/16
11 - 7/16	-	19.5 - 49/64
12.5 - 1/2	22 - 55/64	23 - 29/32
15 - 9/16	27.5 - 1-5/64	28 - 1-7/64
17.5 - 11/16	27 - 1-1/16	33.5 - 1-5/16
20 - 3/4	31.5 - 1-15/64	40 - 1-37/64



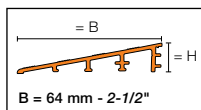
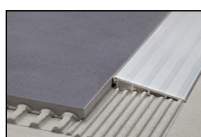
1.8 Schluter®-RENO-RAMP

H = mm - in.	Item No.	
	Satin anodized aluminum (AE)	
B = 50 mm - 2"		
6 - 1/4	AERP 60 B50	
B = 64 mm - 2-1/2"		
10 - 3/8	AERP 100 B65	
12.5 - 1/2	AERP 125 B65	
B = 89 mm - 3-1/2"		
12.5 - 1/2	AERP 125 B90	
15 - 9/16	AERP 150 B90	
20 - 3/4	AERP 200 B90	

Length supplied: 8' 2-1/2" - 2.5 m

ADA-Compliant

Note: RENO-RAMP sizes 3/4" - 20 mm and 9/16" - 15 mm are not ADA-compliant.



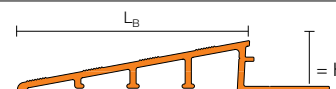
1.8 Schluter®-RENO-RAMP-K

H = mm - in.	Item No.	
	Satin anodized aluminum (AE)	
B = 64 mm - 2-1/2"		
12.5 - 1/2	AERPK 125 B65	

Length supplied: 8' 2-1/2" - 2.5 m

Diagram Values

Length supplied: 8' 2-1/2" - 2.5 m



H = mm - in.	L _B = mm - in.
6 - 1/4	50 - 2
10 - 3/8	64 - 2-1/2
12.5 - 1/2	64 - 2-1/2
12.5 - 1/2	89 - 3-1/2
15 - 9/16	89 - 3-1/2
20 - 3/4	89 - 3-1/2



DECK MUD 710

PORTLAND CEMENT MORTAR BED

Product Description

Deck Mud 710 is a blend of Portland cement and graded silica aggregates, developed to produce a dense substrate for setting ceramic tile. **Deck Mud 710** requires only the addition of water to provide an easy to apply setting bed for ceramic, mosaic, quarry and paver tile over concrete, wood subfloors and countertops. Tile can be set over **Deck Mud 710** following the ANSI A108.1A (Wet-Set Method), A108.1B (Pre-float Method) or A108.1C (Contractor's Option) procedure.

Physical Data

COVERAGE

55 lb. bag - Approximately 5.5 sq. ft. at 1" thick.

APPLICABLE STANDARDS

American National Standard Specification for the installation of ceramic tile – ANSI A108.1A, A108.1B, A108.1C, A108.4, A108.5 and A108.6.

ASTM C-150 Standard Specification for Portland Cement.

ASTM C-144 Standard Specification for Aggregate for Masonry Mortar.

ASTM C-897 Standard Specification for Aggregates used in Portland Cement Plaster.

Color - Gray

Texture – Medium sanded powder consisting of Portland cement and silica sand.

Packaging - 55 pound multi-wall bags.

WORKING TIME

Approximately 30 minutes depending on ambient conditions.

USE TEMPERATURE RANGE

Use in temperature range above 40°F (Do not allow fresh mortar to freeze for the first 72 hours).

Installation

CONCRETE FLOORS

Surfaces must be clean of any foreign materials before covering. Saturate clean, smooth concrete surface with water immediately prior to placing **Deck Mud 710**. The surface shall be free of standing water. Before placing the **Deck Mud 710**, spread a very thin continuous layer of pure Portland cement paste on the concrete surface or dust a thin layer of dry Portland cement on the concrete and wet it. Broom the pure Portland cement slurry or the wetted Portland cement dust to completely coat the surface with a thin uniform coating. Immediately apply **Deck Mud 710** over the pure cement coating. Firmly tamp and screed the **Deck Mud 710**. The thickness should be a minimum of 3/4" and up to 5".

SHOWERS

A minimum thickness of 1 1/4" **Deck Mud 710** is required for shower receptors. Showers require a suitable waterproof membrane and reinforcement. Consult local building codes, ordinances and trade practices.

WOOD FLOORS AND COUNTERTOPS

Place a cleavage membrane such as 15 lb. roofing felt or 4 mil polyethylene film. Reinforce with metal lath. Place reinforcing and **Deck Mud 710** over the membrane. Lap reinforcing at least one full mesh and support so that reinforcing shall be approximately in the middle of the **Deck Mud 710**.

Reinforcing shall not butt against vertical surfaces. Tamp firmly and screed the **Deck Mud 710** level with proper slop to drain. **Deck Mud 710** shall be a minimum of 3/4" thick.

MIXING

Dry **Deck Mud 710** should be added to clean, portable water in the temperature range of 50°F to 80°F, at the rate of approximately 1/2 gallon per 55 lb. bag. Mix thoroughly until a consistent mix is obtained. Discard mortar when initial set is reached. Do not add any other materials to **Deck Mud 710**.

CLEANING

Water is all that is needed to remove uncured mortar.

CURING

A minimum cure is obtained in 12 - 24 hours, depending on ambient temperatures. As with concrete, the strength increases significantly with age during the first 28 days.

Safety - CAUTION: May cause eye, skin or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for Silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water, and consult a physician promptly. Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with skin where possible and wash exposed skin areas promptly with water.

KEEP OUT OF REACH OF CHILDREN.

STORAGE

Six months if kept in sealed bags.

Guarantee

The recommendations, suggestions, statements and technical data are based on the best knowledge available to Dyna-Crete/Funston Industrial Sands and are given for informational purposes ONLY and without any responsibility for their use. Dyna-Crete/Funston Industrial Sands MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE PRODUCT SOLD HEREIN except that the quality of the ingredients shall be in accordance with Dyna-Crete/Funston Industrial Sands specifications. It is expressly understood and agreed that the buyer's sole and exclusive remedy shall be replacement of defective products and under no circumstances shall Dyna-Crete/Funston Industrial Sands be liable for incidental or consequential damages. Dyna-Crete/Funston Industrial Sands neither assumes nor authorizes any others to assume for it any liability with respect to furnishing of the product. Handling and use of the product are beyond the control of Dyna-Crete/Funston Industrial Sands, therefore no warranty is made, expressed or implied, as to the results obtained from the use of the product or against any claims for infringement of patents resulting from use of the product.

This writing constitutes a complete and exclusive statement of the understanding between the Dyna-Crete/Funston Industrial Sands and buyer. There were no oral agreements or warranties, expressed or implied, collateral to or affecting the furnishing of the product. This understanding shall not be modified except in writing by an officer of Dyna-Crete/Funston Industrial Sands.

NOTICE: The information in this bulletin is presented in good faith, but no warranty, expressed or implied, is given nor is freedom from any patent. In as much as any assistance furnished by Dyna-Crete/Funston Industrial Sands with reference to the safe use and disposal of its products is provided without charge. Dyna-Crete/Funston Industrial Sands assumes no obligation or liability therefore, except to the extent that any such assistance shall be given in good faith.

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

Product Name: Dyna-Crete 710 Deck Mud

Product Code: 710

1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Product Use: Various commercial and industrial uses

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Name/Address: Funston Industrial Sands
4801 Feather River Blvd 30C
Oroville, CA 95965

Telephone Number: 530-534-5023

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Number: 530-534-5023

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE (OSHA 29 CFR 1910.1200)

Skin Irritation	Category 2
Skin Corrosion	Category 1B
Serious Eye Damage	Category 1
Skin Sensitization	Category 1B
STOT-SE	Category 3
STOT-RE	Category 1
Carcinogenicity	Category 1A

2.2 LABEL ELEMENTS ACCORDING TO OSHA HAZCOM2012

2.2a SIGNAL WORD

DANGER!

2.2b HAZARD STATEMENTS

Causes skin irritation
May cause an allergic skin reaction
Causes severe skin burns and serious eye damage
May cause respiratory irritation
Causes damage to organs through prolonged or repeated exposure
May cause cancer through chronic inhalation

2.2c PICTOGRAMS



2.2d PRECAUTIONARY STATEMENTS

Do not handle until all safety precautions have been read and understood.
Wear impervious gloves, such as nitrile. Wear eye protection, and protective clothing.
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.
Use only in a well-ventilated area.
Do not breathe dust.

If swallowed: Rinse mouth. DO NOT induce vomiting
If inhaled: Remove person to fresh air and keep comfortable for breathing
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and continue rinsing.
If on skin: Remove immediately all contaminated clothing and wash before reuse. Rinse skin with water.
If significant skin irritation or rash occurs: Get medical advice or attention.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/containers in accordance with all regulations.

2.3 ADDITIONAL INFORMATION

The Portland cement in this product can cause serious, potentially irreversible damage to skin, eye, respiratory and digestive tracts due to chemical (caustic) burns, including third degree burns.

Burns from Portland cement may not cause immediate pain or discomfort. You cannot rely on pain to alert you to cement burns. Therefore precautions must be taken to prevent all contact with Portland cement. Cement burns can become worse even after contact has ended. If there is contact with this product, immediately remove all product from body and thoroughly rinse with water. If you experience or suspect a cement burn or inflammation you should immediately see a healthcare professional.

Skin burns and irritation may be caused by brief exposure, though often are caused by extended exposure of 15 minutes, an hour, or longer. Interaction of Portland cement with water or sweat releases a caustic solution which produces the burns or irritation. Any extended exposure should be treated as though a burn has occurred until determined otherwise.

Skin contact with Portland cement can also cause inflammation of the skin, referred to as dermatitis. Signs and symptoms of dermatitis can include itching, redness, swelling, blisters, scaling, and other changes in the normal condition of the skin. Signs and symptoms of burns include the above and whitening, yellowing, blackening, peeling or cracking of skin.

The Portland cement in this product may cause allergic contact dermatitis in sensitized individuals. This overreaction of the immune system can lead to severe inflammation. Sensitization may result from a single exposure to the low levels of Cr(VI) in Portland cement or repeated exposures over months or years. Sensitization is long lasting and, after sensitization, even very small quantities can trigger the dermatitis. Sensitization is uncommon. Individuals who experience skin problems, including seemingly minor ones, are advised to seek medical attention.

2.3a HNOC – HAZARDS NOT OTHERWISE CLASSIFIED

Not Applicable

2.3b UNKNOWN ACUTE TOXICITY

None

2.3c WHMIS CLASSIFICATION

Class D2B – Skin/Eye Irritant
Class D2A – Chronic Toxic Effects
Class D2A – Carcinogen
Class E – Corrosive Material

2.3d LABEL ELEMENTS ACCORDING TO WHMIS

Hazard Symbols



Signal Word
DANGER!

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCE

Product Name: Dyna-Crete 710 Deck Mud

Hazardous Components	CAS Number	Weight %
Sand, Silica, Quartz	14808-60-7	55-85*
Portland Cement	65997-15-1	10-30*

*The component will fall into one of the ranges specified due to batch-to-batch variability.

SECTION 4: FIRST-AID MEASURES

4.1 DESCRIPTION OF THE FIRST-AID MEASURES

General Information: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

After Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses and continue rinsing.

After Inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

After skin contact: In case of contact, immediately wash skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. If significant skin irritation or rash occurs, get medical advice or attention.

After ingestion: If swallowed, DO NOT induce vomiting. If conscious, have victim rinse mouth and drink plenty of water. Call a physician or get medical advice/attention immediately. Never give anything by mouth to an unconscious person.

4.2 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

Eye Contact: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

After Inhalation: May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated inhalation. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

After skin contact: Causes skin irritation. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause sensitization by skin contact.

After ingestion: May be harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Immediately seek medical advice or attention if symptoms are significant or persist.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABILITY

Non-flammable and non-combustible.

5.2 EXTINGUISHING MEDIA

5.2a SUITABLE EXTINGUISHING MEDIA

Treat for surrounding material.

5.2b UNSUITABLE EXTINGUISHING MEDIA

Not Available.

5.3 SPECIAL HAZARDS ARISING FROM THE CHEMICAL

5.3a PRODUCTS OF COMBUSTION

None.

5.3b EXPLOSION HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES

Non-explosive in presence of shocks

5.4 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS

Keep upwind of fire. Wear full fire-fighting turn-out gear (full bunker gear) and respiratory protection (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unprotected personnel.

6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP

6.2a METHODS FOR CONTAINMENT

Recover all usable material. Pick up large pieces, and then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

6.2b METHODS FOR CLEANING UP

Vacuum or sweep material and place in a disposal container. Dispose of unwanted material properly in accordance with all local, regional, national and international regulations.

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND STORAGE

7.1 HANDLING

Ensure good ventilation/exhaustion at the workplace. DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight fitting goggles is recommended. Wear appropriate PPE (See Section 8). Do not mix with other chemical products, except as indicated by the manufacturer. Do not get in eyes, on skin or clothing. Good housekeeping is important to prevent accumulation of dust.

7.2 STORAGE

Keep out of the reach of children. Keep container tightly closed. Store at room temperature and keep containers closed when not in use. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Keep dry until use.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 COMPONENTS WITH LIMIT VALUES THAT REQUIRE MONITORING AT THE WORKPLACE

Hazardous Components	CAS Number	PEL (OSHA) mg/M ³	TLV (ACGIH) mg/M ³
Sand, Silica, Quartz	14808-60-7	0.1	0.025 (resp)
Portland Cement	65997-15-1	5 (resp) 15 (total)	10 (resp)

8.2 EXPOSURE CONTROLS

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

8.3 GENERAL PROTECTIVE AND HYGENIC MEASURES

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

8.3a PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: Wear approved eye protection (properly fitted dust- or splash-proof chemical safety glasses).

Skin Protection: Wear gloves of adequate length to offer appropriate skin protection from splashes. Nitrile, Butyl and PVC gloves have been found to offer adequate protection for incidental contact. Precautions must be observed because burns occur with little warning -- little heat is sensed.

Respiratory Protection: A NIOSH-approved dust mask or filtering face piece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional, following requirements found in OSHA's respirator

standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance:	Granular Solid
Color:	Gray
Odor:	None
Odor Threshold:	Not Applicable
pH:	10-13
Freezing Point:	Not Applicable
Melting Point:	Not Applicable
Boiling Point:	Not Applicable
Flash Point:	Not Applicable
Flammability:	Not Flammable
Auto Igniting:	Product is not self-igniting
Vapor Pressure:	Not Applicable
Density:	2.6 to 3.15
Solubility in Water:	Insoluble
VOC Content:	0 g/L

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY

No dangerous reaction known under conditions of normal use.

10.2 CHEMICAL STABILITY

Stable under normal storage conditions. Keep dry in storage.

10.3 POSSIBILITY OF HAZARDOUS REACTION

No dangerous reaction known under conditions of normal use.

10.4 THERMAL DECOMPOSITION/CONDITIONS TO BE AVOIDED

No decomposition if used according to specification.

10.5 INCOMPATIBLE MATERIALS

Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, or oxygen difluoride may cause fires.

10.6 HAZARDOUS DECOMPOSITION OR BY-PRODUCTS

Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas – silicon tetrafluoride.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 LIKELY ROUTES OF EXPOSURE

Skin contact, skin adsorption, eye contact, inhalation, or ingestion.

11.2 SYMPTOMS RELATED TO PHYSICAL/CHEMICAL/TOXICOLOGICAL CHARACTERISTICS

Inhalation:	May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated exposure. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.
Skin contact:	Causes skin irritation. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause sensitization by skin contact. Product becomes extremely alkaline when exposed to moisture, and can cause alkali burns and affect the mucous membranes.
Eye Contact:	Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Ingestion:	Harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

11.3 DELAYED, IMMEDIATE AND CHRONIC EFFECTS OR SHORT AND LONG-TERM EXPOSURE

Short Term

Skin Corrosion/Irritation: Causes severe skin burns.

Serious Eye

Damage/Irritation: Causes severe eye damage.

Respiratory

Sensitization: Not available

Skin Sensitization: May cause an allergic skin reaction.

SHOT - Single

Exposure: (Category 3) May cause respiratory irritation.

Aspiration Hazard: Not available

Long Term

Carcinogenicity: May cause cancer through chronic inhalation.

Germ Cell Mutagenicity: Not available

Reproductive Toxicity: Not available

SHOT - Repeated

Exposure: (Category 1) Causes damage to lungs through prolonged/repeated exposure.

Synergistic/Antagonistic

Effects: Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1 ECOTOXICITY

May cause long-term adverse effects to the aquatic environment. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or un-neutralized.

12.2 PERSISTENCE AND DEGRADABILITY

Not Available.

12.3 BIOACCUMULATIVE POTENTIAL

Not Available.

12.4 MOBILITY IN SOIL

Not Available.

12.5 OTHER ADVERSE EFFECTS

Not Available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 DISPOSAL METHOD

Dispose of contents/containers in accordance with all local, state, provincial, and federal regulations.

13.2 OTHER DISPOSAL CONSIDERATIONS

Not Available.

SECTION 14: TRANSPORTATION INFORMATION

	DOT (U.S.)	TDG (CANADA)
UN-Number	Not Regulated	Not Regulated
UN Proper Shipping Name	Not Regulated	Not Regulated
Transport Hazard Class(es)	Not Regulated	Not Regulated
Packing Group (if applicable)	Not Regulated	Not Regulated

14.1 ENVIRONMENTAL HAZARDS

Not Available.

14.2 TRANSPORTATION IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 & THE IBC CODE

Not Available.

14.3 SPECIAL PRECAUTIONS FOR USER

Do not handle until all safety precautions have been read and understood.

SECTION 15: REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATIONS SPECIFIC FOR THE CHEMICAL

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

US: SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

15.2 US FEDERAL INFORMATION

SARA 302/311/312/313

Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302, 311, 312 or 313.

RCRA: Crystalline silica (quartz) is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR §261 et seq.

CERCLA: Crystalline silica (quartz) is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR §302.

Emergency Planning and Community Right to Know Act


(SARA Title III): Crystalline silica (quartz) is not an extremely hazardous substance under Section 302 and is not a toxic chemical subject to the requirements of Section 313.

FDA: Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR §175.300(b)(3)(xxvi).

NTP: Respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, is classified as Known to be a Human Carcinogen.

OSHA Carcinogen: Crystalline silica (quartz) is not listed.

15.3 US STATE RIGHT TO KNOW LAWS

California Prop. 65:  **WARNING:** This product can expose you to chemicals including Crystalline Silica, which is known to the State of California to cause cancer and Portland Cement, which is known to the State of California to cause birth defects, or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

California Inhalation Reference Exposure Level (REL):

California established a chronic REL of 3 µg for silica (crystalline, respirable). A chronic REL is an airborne level of a substance at or below which no adverse health effects are anticipated in individuals indefinitely exposed to the substance at that level.

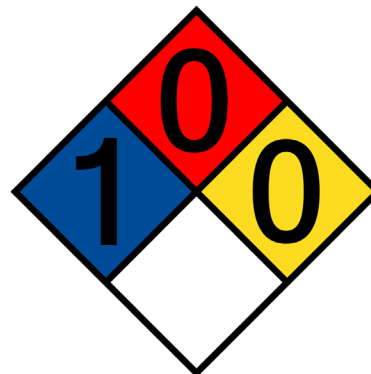
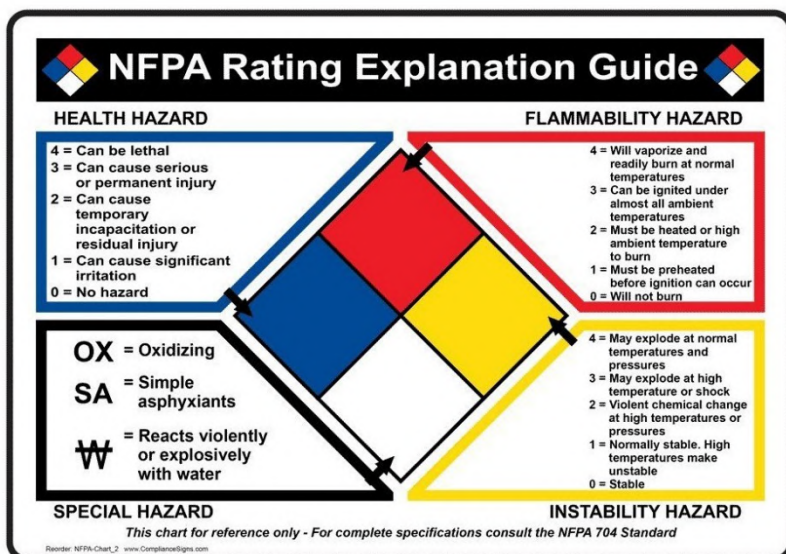
Massachusetts Toxic Use Reduction Act:

Silica, crystalline (respirable size, <10 microns) is "toxic" for purposes of the Massachusetts Toxic Use Reduction Act.

15.4 GLOBAL INVENTORIES

Chemical Name	USA TSCA	Canada DSL/NDSL
Sand, Silica, Quartz	Yes	DSL
Portland Cement	Yes	DSL

15.5 NFPA RATINGS



SECTION 16: OTHER INFORMATION

10.1 REACTIVITY

Date of Preparation: March 26, 2018
Revision Date: October 31, 2018
Disclaimer: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products.
Prepared by: Funston Industrial Sands
Phone: 530-534-5023

END OF SAFETY DATA SHEET



PRODUCT INFORMATION

FAT MUD 730

PORTLAND CEMENT MORTAR BED

Product Description

Fat Mud 730 is a blend of Portland cement, lime and graded silica aggregates, developed to produce a dense water resistant scratch and level coat for the installation of ceramic tile. **Fat Mud 730** requires only the addition of water to provide an easy to apply, sag free setting bed for wall ceramic, mosaic, paver and quarry tile. **Fat Mud 730** can be used as the one coat method. Tile can be set over **Fat Mud 730** following the ANSI A108.1A (Wet-Set Method), A108.1B (Pre-float Method) or A108.1C (Contractor's Option) procedure.

Physical Data

COVERAGE

50 lb. bag - Approximately 8 to 10 sq. ft. at 1/2" thick.

APPLICABLE STANDARDS

American National Standard Specification for the installation of ceramic tile – ANSI A108.1A, A108.1B, A108.1C, A108.4, A108.5 and A108.6.

ASTM C-150 Standard Specification for Portland Cement.

ASTM C-144 Standard Specification for Aggregate for Masonry Mortar.

ASTM C-897 Standard Specification for Aggregates used in Portland Cement Plaster.

Color - Gray.

Texture - Medium sanded powder consisting of Portland cement, silica sand, organic and inorganic chemicals.

Packaging - 50 pound multi-wall bags.

WORKING TIME

Approximately 45 minutes depending on ambient conditions.

USE TEMPERATURE RANGE

Use in temperature range above 40°F (do not allow fresh mortar to freeze for the first 72 hours).

Installation

APPLICATION OF SCRATCH COAT

Apply scratch coat of **Fat Mud 730** to properly prepared metal lath or to clean masonry. Brush, hammer or heavy sandblast concrete surfaces for a degree of roughness to provide adequate mechanical bond. **Fat Mud 730** will enhance the bond to masonry surfaces. Allow scratch coat to cure for at least 24 hours before applying a mortar bed of **Fat Mud 730**.

APPLICATION OF MORTAR BED

Immediately prior to applying **Fat Mud 730** as a plumb coat, evenly saturate scratch coat or clean concrete block surface with water. Apply **Fat Mud 730** to provide a plumb and true surface the proper distance back from the finished wall. The minimum combined thickness of the scratch coat and the plumb coat shall be 3/4".

When the one coat method using a mortar setting bed is specified, install a membrane. Attach metal lath through the membrane to the backing. Apply a thin mortar bed 3/8" to 3/4" thick and set tile while the mortar bed remains plastic. Consult ANSI A108.1A, A108.1B or A108.1C for specific information. If one of the thinset methods is specified over a mortar bed, consult ANSI A108.4, A108.5 or A108.6.

MIXING

Dry **Fat Mud 730** should be added to clean, potable water in the temperature range of 50°F to 80°F, at the rate of approximately one gallon and one pint water for 50 lb. bag. Mix thoroughly until a consistent mix is obtained. Discard mortar when initial set is reached. Do not add any other materials to **Fat Mud 730**.

CLEANING

Water is all that is needed to remove uncured mortar.

CURING

A minimum cure is obtained in 12-24 hours, depending on ambient temperatures. As with concrete, the strength increases significantly with age during the first 28 days.

Safety - CAUTION: May cause eye, skin or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for Silica dust. Contains Portland cement. If any cement or cement mixtures get into the eye, flush immediately and repeatedly with water, and consult a physician promptly. Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with skin where possible and wash exposed skin areas promptly with water.

KEEP OUT OF REACH OF CHILDREN.

STORAGE

Six months if kept in sealed bags.

Guarantee

The recommendations, suggestions, statements and technical data are based on the best knowledge available to Dyna-Crete/Funston Industrial Sands and are given for informational purposes ONLY and without any responsibility for their use. Dyna-Crete/Funston Industrial Sands MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE PRODUCT SOLD HEREIN except that the quality of the ingredients shall be in accordance with Dyna-Crete/Funston Industrial Sands specifications. It is expressly understood and agreed that the buyer's sole and exclusive remedy shall be replacement of defective products and under no circumstances shall Dyna-Crete/Funston Industrial Sands be liable for incidental or consequential damages. Dyna-Crete/Funston Industrial Sands neither assumes nor authorizes any others to assume for it any liability with respect to furnishing of the product. Handling and use of the product are beyond the control of Dyna-Crete/Funston Industrial Sands, therefore no warranty is made, expressed or implied, as to the results obtained from the use of the product or against any claims for infringement of patents resulting from use of the product.

This writing constitutes a complete and exclusive statement of the understanding between the Dyna-Crete/Funston Industrial Sands and buyer. There were no oral agreements or warranties, expressed or implied, collateral to or affecting the furnishing of the product. This understanding shall not be modified except in writing by an officer of Dyna-Crete/Funston Industrial Sands.

NOTICE: The information in this bulletin is presented in good faith, but no warranty, expressed or implied, is given nor is freedom from any patent. In as much as any assistance furnished by Dyna-Crete/Funston Industrial Sands with reference to the safe use and disposal of its products is provided without charge. Dyna-Crete/Funston Industrial Sands assumes no obligation or liability therefore, except to the extent that any such assistance shall be given in good faith.

FUNSTON INDUSTRIAL SANDS

4801 Feather River Blvd. 30-C • Oroville, CA 95965 • Phone: (530) 534-5023 • Fax: (530) 534-7078

SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

Product Name: Dyna-Crete 730 Fat Mud

Product Code: 730

1.2 RECOMMENDED USE OF CHEMICAL AND RESTRICTIONS ON USE

Product Use: Various commercial and industrial uses

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Name/Address: Funston Industrial Sands
4801 Feather River Blvd 30C
Oroville, CA 95965

Telephone Number: 530-534-5023

1.4 EMERGENCY TELEPHONE NUMBER

Emergency Number: 530-534-5023

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE (OSHA 29 CFR 1910.1200)

Skin Irritation	Category 2
Skin Corrosion	Category 1B
Serious Eye Damage	Category 1
Skin Sensitization	Category 1B
STOT-SE	Category 3
STOT-RE	Category 1
Carcinogenicity	Category 1A

2.2 LABEL ELEMENTS ACCORDING TO OSHA HAZCOM2012

2.2a SIGNAL WORD

DANGER!

2.2b HAZARD STATEMENTS

Causes skin irritation
May cause an allergic skin reaction
Causes severe skin burns and serious eye damage
May cause respiratory irritation
Causes damage to organs through prolonged or repeated exposure
May cause cancer through chronic inhalation

2.2c PICTOGRAMS



2.2d PRECAUTIONARY STATEMENTS

Do not handle until all safety precautions have been read and understood.
Wear impervious gloves, such as nitrile. Wear eye protection, and protective clothing.
Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.
Use only in a well-ventilated area.
Do not breathe dust.

If swallowed: Rinse mouth. DO NOT induce vomiting
If inhaled: Remove person to fresh air and keep comfortable for breathing
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and continue rinsing.
If on skin: Remove immediately all contaminated clothing and wash before reuse. Rinse skin with water.
If significant skin irritation or rash occurs: Get medical advice or attention.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/containers in accordance with all regulations.

2.3 ADDITIONAL INFORMATION

The Portland cement in this product can cause serious, potentially irreversible damage to skin, eye, respiratory and digestive tracts due to chemical (caustic) burns, including third degree burns.

Burns from Portland cement may not cause immediate pain or discomfort. You cannot rely on pain to alert you to cement burns. Therefore precautions must be taken to prevent all contact with Portland cement. Cement burns can become worse even after contact has ended. If there is contact with this product, immediately remove all product from body and thoroughly rinse with water. If you experience or suspect a cement burn or inflammation you should immediately see a healthcare professional.

Skin burns and irritation may be caused by brief exposure, though often are caused by extended exposure of 15 minutes, an hour, or longer. Interaction of Portland cement with water or sweat releases a caustic solution which produces the burns or irritation. Any extended exposure should be treated as though a burn has occurred until determined otherwise.

Skin contact with Portland cement can also cause inflammation of the skin, referred to as dermatitis. Signs and symptoms of dermatitis can include itching, redness, swelling, blisters, scaling, and other changes in the normal condition of the skin. Signs and symptoms of burns include the above and whitening, yellowing, blackening, peeling or cracking of skin.

The Portland cement in this product may cause allergic contact dermatitis in sensitized individuals. This overreaction of the immune system can lead to severe inflammation. Sensitization may result from a single exposure to the low levels of Cr(VI) in Portland cement or repeated exposures over months or years. Sensitization is long lasting and, after sensitization, even very small quantities can trigger the dermatitis. Sensitization is uncommon. Individuals who experience skin problems, including seemingly minor ones, are advised to seek medical attention.

2.3a HNOC – HAZARDS NOT OTHERWISE CLASSIFIED

Not Applicable

2.3b UNKNOWN ACUTE TOXICITY

None

2.3c WHMIS CLASSIFICATION

Class D2B – Skin/Eye Irritant
Class D2A – Chronic Toxic Effects
Class D2A – Carcinogen
Class E – Corrosive Material

2.3d LABEL ELEMENTS ACCORDING TO WHMIS

Hazard Symbols



Signal Word
DANGER!

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 SUBSTANCE

Product Name: Dyna-Crete 730 Fat Mud

Hazardous Components	CAS Number	Weight %
Sand, Silica, Quartz	14808-60-7	45-75*
Portland Cement	65997-15-1	10-30*
Lime	01305-62-0	5-10*

*The component will fall into one of the ranges specified due to batch-to-batch variability.

SECTION 4: FIRST-AID MEASURES

4.1 DESCRIPTION OF THE FIRST-AID MEASURES

General Information: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

After Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses and continue rinsing.

After Inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

After skin contact: In case of contact, immediately wash skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. If significant skin irritation or rash occurs, get medical advice or attention.

After ingestion: If swallowed, DO NOT induce vomiting. If conscious, have victim rinse mouth and drink plenty of water. Call a physician or get medical advice/attention immediately. Never give anything by mouth to an unconscious person.

4.2 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

Eye Contact: Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

After Inhalation: May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated inhalation. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.

After skin contact: Causes skin irritation. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause sensitization by skin contact.

After ingestion: May be harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Immediately seek medical advice or attention if symptoms are significant or persist.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABILITY

Non-flammable and non-combustible.

5.2 EXTINGUISHING MEDIA

5.2a SUITABLE EXTINGUISHING MEDIA

Treat for surrounding material.

5.2b UNSUITABLE EXTINGUISHING MEDIA

Not Available.

5.3 SPECIAL HAZARDS ARISING FROM THE CHEMICAL

5.3a PRODUCTS OF COMBUSTION

None.

5.3b EXPLOSION HAZARDS IN PRESENCE OF VARIOUS SUBSTANCES

Non-explosive in presence of shocks

5.4 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS

Keep upwind of fire. Wear full fire-fighting turn-out gear (full bunker gear) and respiratory protection (SCBA).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unprotected personnel.

6.2 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP

6.2a METHODS FOR CONTAINMENT

Recover all usable material. Pick up large pieces, and then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

6.2b METHODS FOR CLEANING UP

Vacuum or sweep material and place in a disposal container. Dispose of unwanted material properly in accordance with all local, regional, national and international regulations.

SECTION 7: PRECAUTIONS FOR SAFE HANDLING AND STORAGE

7.1 HANDLING

Ensure good ventilation/exhaustion at the workplace. DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight fitting goggles is recommended. Wear appropriate PPE (See Section 8). Do not mix with other chemical products, except as indicated by the manufacturer. Do not get in eyes, on skin or clothing. Good housekeeping is important to prevent accumulation of dust.

7.2 STORAGE

Keep out of the reach of children. Keep container tightly closed. Store at room temperature and keep containers closed when not in use. Avoid any dust buildup by frequent cleaning and suitable construction of the storage area. Keep dry until use.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 COMPONENTS WITH LIMIT VALUES THAT REQUIRE MONITORING AT THE WORKPLACE

Hazardous Components	CAS Number	PEL (OSHA) mg/M ³	TLV (ACGIH) mg/M ³
Sand, Silica, Quartz	14808-60-7	0.1	0.025 (resp)
Portland Cement	65997-15-1	5 (resp) 15 (total)	10 (resp)
Lime	01305-62-0	5	5

8.2 EXPOSURE CONTROLS

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

8.3 GENERAL PROTECTIVE AND HYGENIC MEASURES

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

8.3a PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: Wear approved eye protection (properly fitted dust- or splash-proof chemical safety glasses).

Skin Protection: Wear gloves of adequate length to offer appropriate skin protection from splashes. Nitrile, Butyl and PVC gloves have been found to offer adequate protection for incidental contact. Precautions must be observed because burns occur with little warning -- little heat is sensed.

Respiratory Protection: A NIOSH-approved dust mask or filtering face piece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health

and safety professional, following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance:	Granular Solid
Color:	Gray
Odor:	None
Odor Threshold:	Not Applicable
pH:	10-13
Freezing Point:	Not Applicable
Melting Point:	Not Applicable
Boiling Point:	Not Applicable
Flash Point:	Not Applicable
Flammability:	Not Flammable
Auto Igniting:	Product is not self-igniting
Vapor Pressure:	Not Applicable
Density:	2.6 to 3.15
Solubility in Water:	Insoluble
VOC Content:	0 g/L

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY

No dangerous reaction known under conditions of normal use.

10.2 CHEMICAL STABILITY

Stable under normal storage conditions. Keep dry in storage.

10.3 POSSIBILITY OF HAZARDOUS REACTION

No dangerous reaction known under conditions of normal use.

10.4 THERMAL DECOMPOSITION/CONDITIONS TO BE AVOIDED

No decomposition if used according to specification.

10.5 INCOMPATIBLE MATERIALS

Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, or oxygen difluoride may cause fires.

10.6 HAZARDOUS DECOMPOSITION OR BY-PRODUCTS

Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas – silicon tetrafluoride.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 LIKELY ROUTES OF EXPOSURE

Skin contact, skin adsorption, eye contact, inhalation, or ingestion.

11.2 SYMPTOMS RELATED TO PHYSICAL/CHEMICAL/TOXICOLOGICAL CHARACTERISTICS

Inhalation:	May cause respiratory tract irritation. Causes damage to organs through prolonged or repeated exposure. This product contains crystalline silica. Prolonged or repeated inhalation of respirable silica from this product can cause silicosis.
Skin contact:	Causes skin irritation. Handling can cause dry skin, discomfort, irritation, and dermatitis. May cause sensitization by skin contact. Product becomes extremely alkaline when exposed to moisture, and can cause alkali burns and affect the mucous membranes.
Eye Contact:	Causes serious eye damage. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Ingestion:	Harmful if swallowed. Ingestion may cause discomfort and/or distress, nausea or vomiting.

11.3 DELAYED, IMMEDIATE AND CHRONIC EFFECTS OR SHORT AND LONG-TERM EXPOSURE

Short Term

Skin Corrosion/Irritation: Causes severe skin burns.

Serious Eye

Damage/Irritation: Causes severe eye damage.

Respiratory

Sensitization: Not available

Skin Sensitization: May cause an allergic skin reaction.

SHOT - Single

Exposure: (Category 3) May cause respiratory irritation.

Aspiration Hazard: Not available

Long Term

Carcinogenicity: May cause cancer through chronic inhalation.

Germ Cell Mutagenicity: Not available

Reproductive Toxicity: Not available

SHOT - Repeated

Exposure: (Category 1) Causes damage to lungs through prolonged/repeated exposure.

Synergistic/Antagonistic

Effects: Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1 ECOTOXICITY

May cause long-term adverse effects to the aquatic environment. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Must not reach bodies of water or drainage ditch undiluted or un-neutralized.

12.2 PERSISTENCE AND DEGRADABILITY

Not Available.

12.3 BIOACCUMULATIVE POTENTIAL

Not Available.

12.4 MOBILITY IN SOIL

Not Available.

12.5 OTHER ADVERSE EFFECTS

Not Available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 DISPOSAL METHOD

Dispose of contents/containers in accordance with all local, state, provincial, and federal regulations.

13.2 OTHER DISPOSAL CONSIDERATIONS

Not Available.

SECTION 14: TRANSPORTATION INFORMATION

	DOT (U.S.)	TDG (CANADA)
UN-Number	Not Regulated	Not Regulated
UN Proper Shipping Name	Not Regulated	Not Regulated
Transport Hazard Class(es)	Not Regulated	Not Regulated
Packing Group (if applicable)	Not Regulated	Not Regulated

14.1 ENVIRONMENTAL HAZARDS

Not Available.

14.2 TRANSPORTATION IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 & THE IBC CODE

Not Available.

14.3 SPECIAL PRECAUTIONS FOR USER

Do not handle until all safety precautions have been read and understood.

SECTION 15: REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATIONS SPECIFIC FOR THE CHEMICAL

Canada: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

US: SDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

15.2 US FEDERAL INFORMATION

SARA 302/311/312/313

Components: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302, 311, 312 or 313.

RCRA: Crystalline silica (quartz) is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR §261 et seq.

CERCLA: Crystalline silica (quartz) is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 40 CFR §302.

Emergency Planning and Community Right to Know Act


(SARA Title III): Crystalline silica (quartz) is not an extremely hazardous substance under Section 302 and is not a toxic chemical subject to the requirements of Section 313.

FDA: Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR §175.300(b)(3)(xxvi).

NTP: Respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, is classified as Known to be a Human Carcinogen.

OSHA Carcinogen: Crystalline silica (quartz) is not listed.

15.3 US STATE RIGHT TO KNOW LAWS

California Prop. 65:  **WARNING:** This product can expose you to chemicals including Crystalline Silica, which is known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

California Inhalation Reference Exposure Level (REL):

California established a chronic REL of 3 µg for silica (crystalline, respirable). A chronic REL is an airborne level of a substance at or below which no adverse health effects are anticipated in individuals indefinitely exposed to the substance at that level.

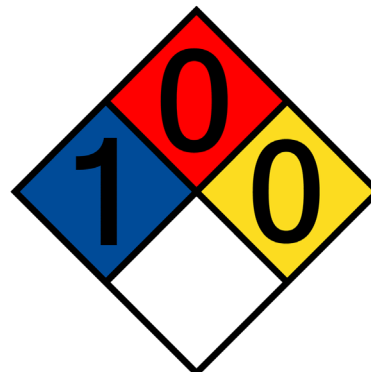
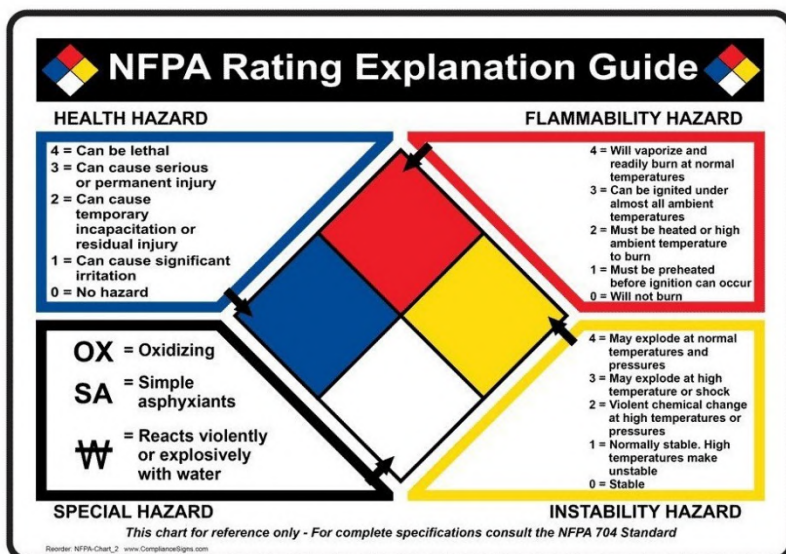
Massachusetts Toxic Use Reduction Act:

Silica, crystalline (respirable size, <10 microns) is "toxic" for purposes of the Massachusetts Toxic Use Reduction Act.

15.4 GLOBAL INVENTORIES

Chemical Name	USA TSCA	Canada DSL/NDSL
Sand, Silica, Quartz	Yes	DSL
Portland Cement	Yes	DSL
Lime	Yes	DSL

15.5 NFPA RATINGS



SECTION 16: OTHER INFORMATION

10.1 REACTIVITY

Date of Preparation: August 20, 2017
 Revision Date: October 31, 2018
 Disclaimer: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products.
 Prepared by: Funston Industrial Sands
 Phone: 530-534-5023

END OF SAFETY DATA SHEET



Structalath No. 17 SF CR II is a welded wire lath engineered to enhance the performance of stucco cladding. Structalath is designed for worker friendly. Easy to handle, Structalath improves construction site efficiency. Structalath is an approved alternative to 1.14 lb/yd² welded wire lath specified in ASTM C 933.

FEATURES

- 17 ga. galvanized steel wire is precision welded to form 1 ½" x 1 ½" openings
- Rolls are 38 3/8" wide by 150 ft. long (50 square yards). *Also available in 48" and 54" widths*
- Weight of roll is 1.0 lb/yd²
- Galvanizing of the wire meets requirements in ASTM A641-03
- Design promotes uniform plaster thickness
- Provides superior reinforcement and crack resistance
- Each and every cross wire is securely furred
- Hat channel furr provides for superior stucco embedment
- Longitudinal wires are cold rolled (flattened) to eliminate curvature memory
- Cold rolled (CR) process increases tensile and breaking load of wire
- Rolls out flat and stays flat
- Easy to fold around corners with clean bending lines
- Structalath can be attached with either nails or staples

DETAILS

- A. Width of furring leg 3/8"
- B. Furring height 1/4" to the underside of the cross wire
- C. Furring rows every 3" on centre
- D. Every cross wire is furred
- E. Tabs are aligned with edge wire and extend 1/4" beyond edge wires
- F. Overall width is 38 3/8". Designed for full coverage of 9' - 3" wall heights including code required overlaps

Note: Also available in 48" & 54" roll width

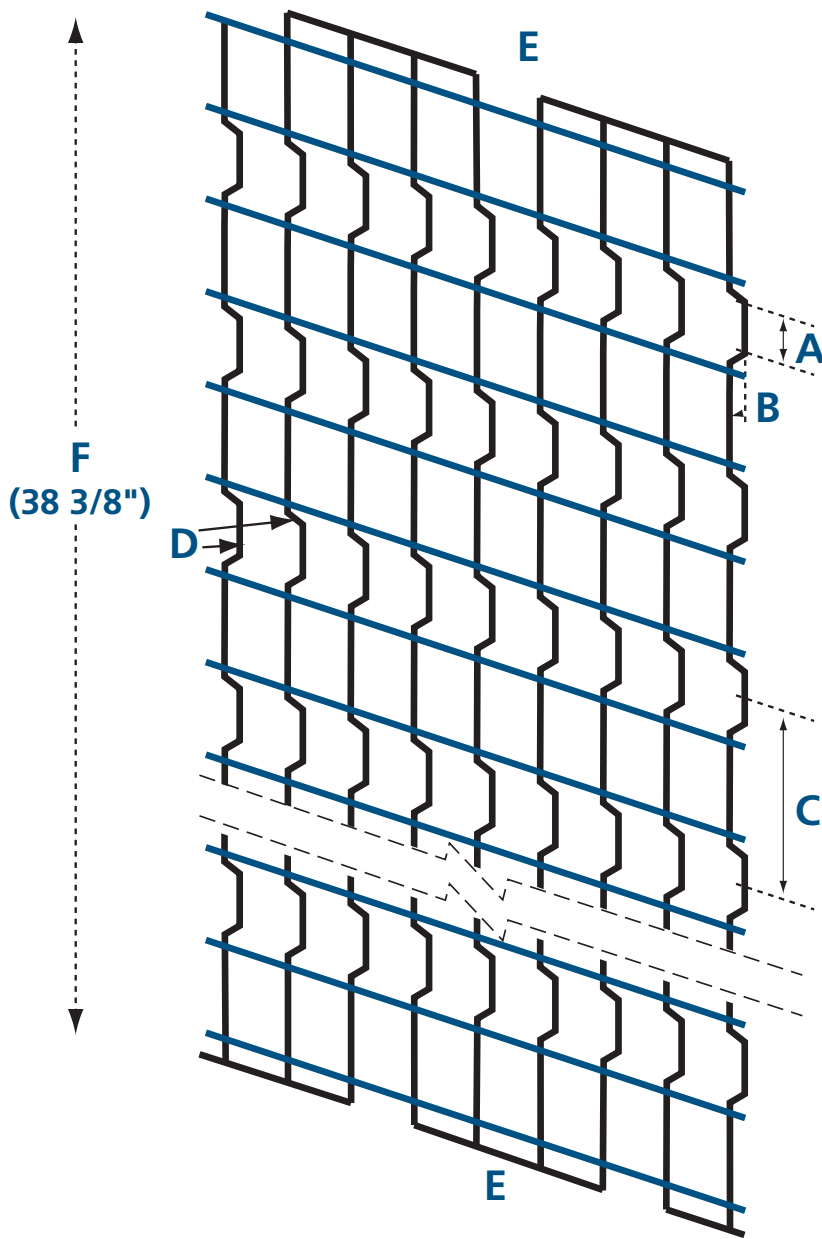
PACKAGING

- 32 rolls per pallet
- Each rolls is banded with poly strapping indicating manufacturer & IAPMO UES 2017
- English/Spanish installation instructions available

Note: Structalath 316 is the same product as Structalath II except for a reduced furr depth of 3/16" to ensure adequate embedment of lath for 1-Coat Stucco systems.

Fully conforms to the requirements for stucco reinforcing as defined in UBC, IBC and IRC building codes

Dimensions – Length = 150' and width = 38 3/8"
 (Also available in 48" or 54" width)
 50 square yards/roll



DETAILS

- A. Width of furring leg 3/8"
- B. Furring height 1/4" to the underside of the cross wire
- C. Furring rows every 3" on centre
- D. Every cross wire is furred
- E. Tabs are aligned with edge wire and extend 1/4" beyond edge wires
- F. Overall width is 38 3/8". Designed for full coverage of common wall heights with 3 courses of lath including code required overlaps

Note: Test results are available upon request

Cold Rolled: All longitudinal wires are cold rolled to a structurally designed shape.

Structalath products are for use as alternative laths used as reinforcement for exterior plaster complying with IBC Section 2507, IRC Section R703.6.1 or UBC Section 2508

About This Product

The HDX 20 ft. x 100 ft. Clear Plastic Sheeting is suitable for construction and DIY projects. It is made of premium-quality polyethylene to ensure long-term use. This sheeting can be used as a temporary cover for equipment and supplies. You can also create a vapor barrier or cover crawl spaces thanks to its multipurpose design.

Highlights

- Made of polyethylene
- Up to 2,000 sq. ft. of coverage
- Clear (natural) color - allows light to pass through
- 6 mil thickness
- Serves as a temporary cover or vapor barrier
- Ideal for construction and DIY projects
- Get the right coverage - click here for Home Depot's buying guide
- For residential or commercial use

HDX™ PLASTIC SHEETING				
APPLICATION	ULTRA LIGHT DUTY (.31-7 MIL)	LIGHT DUTY (1.0-2.0 MIL)	MEDIUM DUTY (3.5-4.0 MIL)	HEAVY DUTY (6.0 MIL)
Drop Cloth				
Paint Overspray Protection				
Equipment Cover				
Furniture Cover				
Dust Barrier				
Vapor Barrier				
Temporary Cover				
Temporary Containment/Enclosure				
General Purpose				
Curing Blanket (concrete)				
	●●○○○	●●●○○	●●●●○	●●●●●

Product Information

Dimensions

Sheet Length (ft.)	100 ft
Sheet Width (ft.)	20 ft
Thickness (mil)	6 MIL

Details

Color Family	Clear
Features	No Additional Features

Kit	No
Package Quantity	1
Returnable	90-Day
Self-adhesive	No


MERKRETE

720 Marble Pro

Premium Grade Polymer Modified Portland Cement Medium Bed Thin Set Mortar

2. Manufacturer

Parex USA, Inc.
4125 E. La Palma Ave, Suite 250
Anaheim, CA 92807
866-516-0061
www.merkrete.com

3. Product Description

BASIC USE: Merkrete 720 Marble Pro is a premium grade polymer modified portland cement medium bed thin set mortar for installing porcelain, ceramic tile and natural stone. It is ideal for large format, ceramic, porcelain gauged and irregular thickness stone tile installations.

Uses: 720 Marble Pro can be used as a thin set mortar for ceramic tile and natural stone for both walls and floors in interior and exterior applications. It is recommended for use in the thin set installation method for absorptive, semi-vitreous and vitreous tile over properly prepared masonry, concrete, cement backer board, and existing ceramic tile. In interior dry areas, it is suitable for gypsum board and plywood substrates. It is used as a thin set from 3/32" (2.4 mm) to 3/4" (19.1 mm) after the tiles have been properly beat in. 720 Marble Pro is suitable for both residential and commercial construction.

Advantages

- Easy adjustments against lippage
- Ideal for large format tile
- Freeze thaw stable
- Interior and exterior
- Bonds to most surfaces
- Available in both gray and white colors
- Exceeds ANSI A118.4 for latex portland cement mortar and ANSI A118.11 for EPG latex portland cement mortar.

Suitable Substrates

- Brick masonry
- Cementitious Backer Unit (CBU)¹
- Cement mortar beds
- Cement plaster
- Cement terrazzo
- Ceramic tile and stone
- Concrete
- Concrete masonry
- Exterior grade plywood²
- Gypsum wallboard²
- Merkrete waterproofing/crack isolation membranes

¹ Consult backer unit manufacturer for installation recommendations and to verify acceptability for exterior use

² Interior use only

4. Technical Data

Applicable Standards: Merkrete 720 Marble Pro meets or exceeds industry requirements ANSI A118.4 for latex portland cement mortar and ANSI A118.11 for EPG latex portland cement mortar. Follow ANSI A108.5 for installation.

Properties

ANSI 118.4	ANSI Requirements	720 Marble Pro Results
Open Time at 70° F	> 50 minutes	> 60 minutes
Glazed Wall Tile, 12 week shear	> 300 psi	> 460 psi
Impervious Mosaic, 28 day shear	> 200 psi	> 320 psi
Quarry Tile, 12 week shear	> 150 psi	> 400 psi
LEED v3 NC VOC	EQ Credit 4.1	720 Marble Pro Results
VOC	< 65 g/l	0 g/l



720 Marble Pro

Premium Grade Polymer Modified
Portland Cement Medium Bed Thin Set Mortar

Packaging: 50 lb. bag (22.7 kg.) 48 bags per pallet | Colors: Gray and White

Shelf Life: Reference Parex USA Expiration Date of Products Technical Bulletin.

5. Installation

Surface Preparation: All surfaces must be between 40° F (4° C) to 95° F (35° C) and structurally sound (deflection per industry standard of L/360 for ceramic tile and L/720 for natural stone), dry, clean and free from oil, grease, wax, paint, old adhesives, sealers and curing compounds. Any contaminants which inhibit proper bond must be removed. Substrate preparation should be completed following ANSI A108 AN-2 "General Requirements for Sub-surfaces." All substrates should be plumb and true, surface deviation should not exceed 1/4" in 10'. Patching, leveling or areas requiring a mortar bed should be prepared using Merkrete underlayments. Movement (expansion) joints should be provided to comply with TCNA method EJ 171.

Note: Vinyl asbestos tile or any substrate containing asbestos must not be sanded or scarified. Must be handled according to EPA regulations.

Substrates

Plywood Substrates: Maximum joist spacing should be 16" on center. Plywood should be APA Grade Exposure 1. Maintain a gap of 3/16" between plywood underlayment sheets edges and all that abut walls, columns, posts and adjacent sheets. All plywood installations should be interior areas only and protected from exposure to moisture.

1. Plywood should be underlayment grade or better, two layers 1 1/8" total thickness for joint 16" OC.
2. Internal application only.

Cement Substrates: All concrete substrates should be cured a minimum of 28 days. Smooth steel troweled floors should be roughed up using mechanical chipping, scraping or shot blasting. Dampen porous or dry concrete prior to installation of tile. Do not leave puddles or standing water.

Cementitious Backer Unit: Follow backer unit manufacturer's instructions.

Mixing: In a clean container, add approximately 5 quarts (4.7 liters) of clean potable water. Then add the contents of the 50 lb. (22.7 kg.) 720 Marble Pro mortar. Mix thoroughly by hand or with a slow speed mixer to a smooth, thick, trowelable consistency. Allow mortar to slake for approximately 10 minutes, and then remix before using. Remix without adding additional water or powder. Mortar consistency shall be such that when applied with the recommended notched trowel to the substrate, the ridges formed in the mortar do not flow or slump. During use, stir mortar mix occasionally. Do not temper with additional water. Do not add any additives to 720 Marble Pro.

Application: Apply mortar to the substrate with the flat side of the trowel, with enough pressure to firmly work into the surface. With a notched trowel, immediately follow with a heavier coat of material using the appropriate trowel and enough mortar to provide 100% coverage to the back of the tile. For some extruded or lug back tiles, back-buttering of tiles may be required. Do not spread more mortar than can be covered in 20 minutes or before the mortar skins over. It is advised that during the installation, remove a tile to insure the mortar has not skinned over and check the tile and substrate mortar coverage. Comb the mortar using an appropriate notched trowel in one direction. Place tiles in mortar, slide back and forth perpendicular to the ridges to insure proper coverage. Do not adjust tiles set in mortar after 15 minutes.




720 Marble Pro

Premium Grade Polymer Modified
Portland Cement Medium Bed Thin Set Mortar

Limitations: Do not use 720 Marble Pro below 40° F (4° C) or above 95° F (35° C). Use caution; do not allow mortar to freeze for the first 72 hours. Do not soak tiles previous to installation. 720 Marble Pro must not be used to apply over asphalt sheeting, vinyl covered wall board, Masonite®, cement asbestos board, metal, glass, plastic, gypsum mortar beds or other unstable substrates. Improperly cured or wet plywood, particle board or strip wood are not suitable substrates. Installations that will be continually wet like swimming pools, fountains and gang showers, the completed installation should be cured a minimum of 14 days and allowed to dry before exposure to water. For white or light colored marbles use 720 Marble Pro White mortar. Some dimensional stone tile like resin backed, black, green and red marbles may warp when installed with water based setting materials. These water sensitive stone tiles should be installed with Merkrete Pro Epoxy. For use of 720 Marble Pro over additional substrates or situations not mentioned in these instructions, contact Merkrete Technical Services.

Cleaning: Uncured 720 Marble Pro can be cleaned from tiles, tools, and equipment with water. Water is all that is needed to remove any uncured mortar from tiles, tools and equipment.

Coverage:

RECOMMENDED NOTCH SIZE		
		
1/4" x 1/4" 6 mm x 6 mm	1/4" x 3/8" 6 mm x 10 mm	1/2" x 1/2" 12 mm x 12 mm
Ceramics	Quarry Tile, Rough Stone	Large Tile, Marble, Stone
APPROXIMATE COVERAGES		
65 – 75 Ft ² 6.0 – 6.9 m ²	55 – 65 Ft ² 5.1 – 6.0 m ²	35 – 45 Ft ² 3.2 – 4.2 m ²

*Coverage depends on trowel notch size, substrate and job conditions.

6. Availability

Merkrete 720 Marble Pro is available at leading tile houses and construction distributors. Contact Merkrete or visit our web site for the name of the nearest dealer at www.merkrete.com.

7. Warranty

5 year, 10 year and Limited Lifetime system warranties are available. Contact Merkrete Technical Systems for specific warranty information.

8. Maintenance

None required, but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

9. Technical Services

Merkrete Systems maintains technical field representatives available throughout the country. Call Technical Services at 800-226-2424 for the nearest representative.

10. Literature

For the most up to date technical information (details, submittals, SDS, or data sheets), refer to our websites at www.parexusa.com or www.merkrete.com.



252 Silver

DS-676-0120

**Globally Proven
Construction Solutions**



- Non-Water Soluble Cut-Back Adhesive
- Vinyl Or Other Resilient Tile
- Gypsum Wallboard
- Cement Plaster
- Cement Terrazzo
- Plastic Laminate
- Cement Backer Board
- Steel

1. PRODUCT NAME

252 Silver

2. MANUFACTURER

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

Telephone: +1.203.393.0010, ext. 1235
Toll Free: 1.800.243.4788, ext. 1235
Fax: +1.203.393.1684
Website: laticrete.com

3. PRODUCT DESCRIPTION

252 Silver is an economical polymer modified, bagged, cementitious thin-set powder to be mixed only with water using the thin-set method of installation.

Uses

- Designed for interior and exterior floor and wall installations of all types of ceramic tile, porcelain tile and stone over concrete, exterior glue plywood and a variety of other substrates.

Advantages

- Interior and exterior.
- Exceeds ANSI A118.4 shear bond strength requirements.
- Bonds to most surfaces.

Suitable Substrates

- Concrete
- Exterior Glue Plywood (Interior Only)
- Concrete Masonry
- Brick Masonry

Packaging

50 lb bag (22.7 kg); 56 bags per pallet.

Color

Grey and White

Approximate Coverage

Approximately 60-70 ft²/50 lb bag (5.6-6.5/22.7 kg bag) with 1/4" x 3/8" (6 mm x 9 mm) notched trowel.

Approximately 80-95 ft²/50 lb bag (7.4-8.8/22.7 kg bag) with 1/4" x 1/4" (6 mm x 6 mm) notched trowel.

Coverage will vary depending on trowel notch size, type and size of tile, and substrate.

Shelf Life

Two (2) year shelf life. ***High humidity will reduce the shelf life of bagged product.

Limitations

- Not for use directly over particle board, luan, Masonite® or hardwood floors.
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- Adhesives/mastics, mortars and 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 SYSTEMS).
- Not for use in submerged applications. For these applications, use 254 Platinum.
- Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick

and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for thin bed ceramic tile/brick installations or L/480 for thin bed stone installations where L=span length (except where local building codes specify more stringent deflection requirements)

Cautions

- Consult SDS for more safety information.
- Some marbles and other natural stone have low flexural strength and may not be suitable for installation over wood floors.
- Use LATAPOXY® 300 Adhesive for installing green marble, water sensitive stone, agglomerates and resin backed tiles and stones.
- During cold weather, protect finished work from traffic until fully cured.
- Use white mortar for white or light-colored stone.
- Contains portland cement and silica sand. Causes severe skin burns and eye damage. Wear protective gloves, protective clothing and eye protection. In case of contact, flush thoroughly with water.
- DO NOT take internally. Silica sand may cause cancer, respiratory irritation or serious lung problems. Do not breathe dust. Wear a respirator in dusty areas.
- 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.

Total VOC Content pounds/gallon (grams/liter) of product in unused form is 0.00 lb./gal (0.00 g/l).

Applicable Standard

- ANSI A118.4 and A118.11 This product has a cradle-to-gate (with options) Product-Specific (Type III) Environmental Product Declaration. The PCR review, life cycle assessment and declaration were independently verified by UL Environment in accordance with ISO 14025, ISO 14040 and ISO 14044.

Physical Properties

Test	Test Method	Results	ANSI Specification
Porcelain Tile Shear Strength	ANSI A118.4-7.2.5	250-350 psi (1.7-2.4 MPa)	>200 psi (1.4 MPa)
Porcelain Tile Shear Strength Water Immersion	ANSI A118.4-7.2.4	175-200 psi (1.2-1.4 MPa)	>150 psi (1.0 MPa)
Quarry Tile to Plywood Shear Strength	ANSI A118.11-4.1.2	150-170 psi (1.0-1.2 MPa)	>150 psi (1.03 MPa)

Working Properties

Open Time	30 minutes
Pot Life	2 hours
Time to Heavy Traffic	24 hours
Wet Density	103 lbs/ft ³ (1653 kg/m ³)

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

- All surfaces should be between 40°F (4°C) and 90°F (32°C) and structurally sound, clean and free of all dirt, oil, grease, paint, concrete sealers or curing compounds. Rough or uneven concrete surfaces should be made smooth with Latex Portland Cement Underlayment to provide a wood float (or better) finish. Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. New concrete slabs shall be damp cured and 28 days old before application. All slabs must be plumb and true to within 1/4" (6 mm) in 10 ft (3 m). Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI specification A108.01-3.7 "Requirements for Movement Joints: Preparations by Other Trades" or TCNA detail EJ-171 "Movement Joints—Vertical & Horizontal". Do not cover expansion joints with mortar.

1. Installer must verify that deflection under all live, dead and impact loads of interior plywood floors does not exceed industry standards of L/360 for ceramic tile and brick or L/480 for stone installations where L=span length.

2. Minimum construction for interior plywood floors.

SUBFLOOR: 5/8" (15 mm) thick exterior glue plywood, either plain with all sheet edges blocked or tongue and groove over bridged joints spaced 16" (400 mm) o.c. maximum; fasten

plywood 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. along intermediate supports with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) between sheet ends and 1/4" (6 mm) between sheets edges; all sheet ends must be supported by a framing member; glue sheets to joints with construction adhesive.

UNDERLAYMENT: 5/8" (15 mm) thick exterior glue plywood fastened 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. in the panel

field (both directions) with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) to 1/4" (6 mm) between sheets and 1/4" (6 mm) between sheet edges and any abutting surfaces; offset underlayment joints from joints in subfloor and stagger joints between sheet ends; glue underlayment to subfloor with construction adhesive. Refer to Technical Data Sheet 152 "Bonding Ceramic Tile, Stone or Brick Over Wood Floors" for complete details.

Mixing

Place clean, potable water into a clean pail. Add 252 Silver. Use approximately 5 qts (4.7 L) of water for 50 lbs (22.7 kg) of powder. (To mix smaller quantities use 3.6 parts powder to 1 part water.) Mix by hand or with a slow speed mixer to a smooth, trowelable consistency. Allow mortar to slake for 5–10 minutes. Remix without adding any more water or powder. During use, stir occasionally to keep mix fluffy. **DO NOT** temper with water.

Application

Apply mortar to the substrate with the flat side of the trowel, pressing firmly to work into surface. Comb on additional mortar with the notched side.

Note: Use the proper sized notched trowel to ensure full bedding of the tile. Spread as much mortar as can be covered with tile in 15–20 minutes. Back butter large tiles > 8" x 8" (200 mm x 200 mm) to provide full bedding and firm support. Place tiles into wet, sticky mortar and beat in using a beating block and rubber mallet to embed tile and adjust level. Check mortar for complete coverage by periodically removing a tile and inspecting bedding mortar transfer onto back of tile. If mortar is skinned over (not sticky), remove and replace with fresh mortar.

Grouting

Grout installation after a minimum of 24 hours curing time at 70°F (21°C). Grout with SPECTRALOCK® PRO Premium Grout†, SPECTRALOCK PRO Grout†, PERMACOLOR® Grout, or 1500 Sanded Grout or 1600 Unsanded Grout gauged with 1776 Grout Enhancer or with water.

Cleaning

Clean tools and tile work with water while mortar is fresh.

6. AVAILABILITY AND COST

Availability

LATICRETE 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 laticrete.com

Cost

Contact a LATICRETE Distributor in your area.

7. WARRANTY

See 10. FILING SYSTEM:

- DS.230.05: 5 Year System Warranty
- DS.230.13: 1 Year Product Warranty

8. MAINTENANCE

LATICRETE and LATAPOXY grouts require routine cleaning with a neutral pH soap and water. All other LATICRETE and LATAPOXY materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers. All stone and tile should be maintained and sealed with LATICRETE STONETECH® professional products as appropriate for the specific tile/stone and installation situation.

9. TECHNICAL SERVICES

Technical Assistance

Information is available by calling the LATICRETE Technical Service Hotline:

Toll Free: 1.800.243.4788, ext. 1235

Telephone: +1.203.393.0010, ext. 1235

Fax: +1.203.393.1948

Technical and Safety Literature

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

10. FILING SYSTEM

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

- DS 230.13: LATICRETE Product Warranty
- DS 230.0: LATICRETE 5 Year Warranty (United States and Canada)
- DS 236.0: 9235 Waterproofing Membrane
- DS 250.0: PERMACOLOR® Grout
- DS 256.0: 1500 Sanded Grout
- DS 258.0: 1600 Unsanded Grout
- DS 265.0: 1776 Grout Enhancer
- DS 633.0: LATAPOXY 300 Adhesive
- DS 681.0: SPECTRALOCK PRO Premium Grout†

LATICRETE International, Inc.

One LATICRETE Park North, Bethany, CT 06524-3423 USA • 1.800.243.4788 • +1.203.393.0010 • www.laticrete.com

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- DS 685.0: SPECTRALOCK PRO Grout†
- DS 663.0: HYDRO BAN®
- DS 677.0: 254 Platinum
- TDS 152: “Bonding Ceramic Tile, Stone or Brick Over Wood Floors”
- DS 026.0: STRATA_MAT™

LATICRETE International, Inc.

One LATICRETE Park North, Bethany, CT 06524-3423 USA • 1.800.243.4788 • +1.203.393.0010 • www.laticrete.com

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VersaBond® Professional Thin-Set Mortar

1 Product Name

VersaBond® Professional Thin-Set Mortar

2 Manufacturer

Custom Building Products
 Technical Services
 10400 Pioneer Boulevard, Unit 3
 Santa Fe Springs, CA 90670
 Customer Support: 800-272-8786
 Technical Services: 800-282-8786
 Fax: 800- 200-7765
 Email: contactus@cbpmail.net
custombuildingproducts.com

3 Product Description

A professional formula, all-purpose mortar, polymer-modified to provide good bond strength for floor and tile projects. VersaBond® cures quickly even in cold climates and adheres to most surfaces, exceeding ANSI A118.4 and A118.11 without the need for additives.

Key Features

- For most standard installations
- Fast setting even in cold weather

Suitable Tile Types

- Vitreous, semi-vitreous or non-vitreous tile: ceramic, mosaic, quarry, cement body tile
- Impervious porcelain and glass tile
- Brick and thin brick
- Cement-based precast terrazzo
- Natural stone tile

Suitable Substrates

- Concrete, mortar beds, masonry, Portland cement plaster
- [WonderBoard® Lite cement backerboard](#)
- Liquid applied waterproofing membranes such as [RedGard®](#) and [Custom® 9240](#)
- Crack prevention sheet membranes such as [Crack Buster® Pro](#)
- Uncoupling membranes such as [RedGard® Uncoupling Mat](#)
- Surfaces treated with [MBP Multi-Surface Bonding Primer](#)
- Exterior Grade Plywood (interior residential and light commercial dry areas)
- Gypsum wallboard (interior dry areas)
- Existing ceramic tile (scarified)
- Fully-bonded sheet vinyl flooring (scarified)
- Plastic laminates (scarified)
- Cutback adhesive (see preparation instructions)

Composition of Product

VersaBond® Fortified Thin-Set Mortar is a dry, proprietary blend of Portland cement, copolymers, inorganic aggregates and chemicals



Benefits of Product in the Installation

- Cost-efficient, all-purpose mortar
- Good bond strength
- Cures quickly even in cold climates
- Approved for industry-recommended interior and exterior applications
- Exceeds ANSI A118.4 and A118.11 standards without the need for additives

Limitations to the Product

- Do not bond directly to hardwood, Luan plywood, particle board, parquet, cushion or sponge-back vinyl flooring, metal, fiberglass, plastic or OSB panels.
- Not recommended for interior and exterior pools and water features. CUSTOM recommends [MegaLite® Crack Prevention Mortar](#), [MegaFlex® Crack Prevention Mortar](#) and [ProLite® Large Tile and Stone Mortar](#) for the installation of ceramic and porcelain tile in submerged applications. For additional information, contact Custom Technical Services.
- When setting moisture sensitive natural stone, cement or agglomerate tile use [EBM-Lite™ Epoxy Bonding Mortar 100% Solids](#) or [CEG-Lite™ 100% Solids Commercial Epoxy Grout](#).
- Do not use to install resin-backed stone; use [EBM-Lite™ Epoxy Bonding Mortar 100% Solids](#), [CEG-Lite™ 100% Solids Commercial Epoxy Grout](#) or contact Custom's® Technical Services for recommendations.
- For clear or translucent glass, CUSTOM recommends [Glass Tile Premium Thin-Set Mortar](#). When setting glass tile larger than 6" x 6" (15 x 15 cm), contact Custom's® Technical Services for recommendations.
- When setting dimensional stone larger than 12" x 12" (30 x 30 cm), contact Custom's® Technical Services for recommendations regarding subfloor deflection requirements.

Packaging

- 50 lb (22.68 kg) and 25 lb (11.34 kg) bags
- Gray or white



CUSTOM®

VersaBond® Professional Thin-Set Mortar

4 Technical Data

Applicable Standards

American National Standards Institute (ANSI) — ANSI A108.5, A118.4 and A118.11 of the American National Standards for the Installation of Ceramic Tile ASTM International (ASTM)

- ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in or [50-mm] Cube Specimens)
- ASTM C627 Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester

Resilient Floor Covering Institute - (RFCI) Recommended Work Practices for Removal of Resilient Floor Coverings
Tile Council of North America (TCNA) - TCNA Handbook for Ceramic Tile Installation, TCNA Method EJ171
ISO 13007-2

Technical Chart

Property	Test Method	Requirement	Typical Results
Pot Life			4 Hours
Open Time	A118.4 Section 5.3	> 20 minutes	Pass
4 Week Shear Bond Strength			
Glazed Wall Tile	A118.4 Section 5.1.5	> 300 psi	450 - 550 psi (31.6 - 38.7 kg/cm ²)
Porcelain Tile	A118.4 Section 5.2.4	> 200 psi	300 - 400 psi (21.1 - 28.1 kg/cm ²)
Quarry Tile to Plywood	A118.11 Section 4.1.2	> 150 psi	150 - 250 psi (10.5 - 17.6 kg/cm ²)

Environmental Consideration

Custom® Building Products is committed to environmental responsibility in both products produced and in manufacturing practices. Use of this product can contribute towards LEED® v3 certification:

- Up to 2 points towards MR Credit 5, Regional Materials
- Up to 2 points towards MR Credit 4, Recycled Content
- Up to 1 point towards IEQ Credit 4.1, Low-Emitting Materials – Adhesives & Sealants

5 Instructions

General Surface Prep

USE CHEMICAL-RESISTANT GLOVES, such as nitrile, when handling product.

Surfaces must be structurally sound. Remove all grease, oil, dirt, curing compounds, sealers, adhesives or any other contaminant that would prevent a good bond. Glossy or painted surfaces must be sanded, or abraded, and stripped of all contaminants. Concrete must be cured 28 days and accept water penetration. Concrete must be free of efflorescence and not subject to hydrostatic pressure. Concrete slabs should have a coarse finish to enhance the bond. Plywood flooring including those under resilient flooring must be structurally sound and meet all ANSI and deflection requirements. For questions about proper subfloor installation, call Technical Services. Smooth concrete surfaces, existing glazed tile, terrazzo, or polished stone should be scarified. Sheet vinyl must be well bonded and stripped of old finish. Roughen the surface by sanding or abrading, then rinse and allow to dry. Expansion joints should never be bridged with setting material. Do not sand flooring materials containing asbestos. Ambient temperature should be maintained above 50° F (10° C) or below 100° F (38° C) for 72 hours to achieve proper bond.

Bonding to Concrete Surfaces

Concrete or plaster must be fully cured and must accept water penetration. Test by sprinkling water on various areas of the substrate. If water penetrates, then a good bond can be achieved; if water beads, surface contaminants are present, and loss of adhesion may occur. Contaminants should be mechanically removed before installation. Concrete must be free of efflorescence and not subject to hydrostatic pressure. Concrete slabs should have a coarse finish to enhance the bond. Smooth concrete slabs must be mechanically abraded to achieve proper bond.

Bonding to Lightweight Cement and Gypsum Surfaces

Lightweight or gypsum based underlayments must obtain a minimum 2000 psi (13.8 MP) compressive strength. The underlayment must be sufficiently dry and properly cured to the manufacturer's specifications for permanent, non-moisture permeable coverings. Surfaces to be tiled must be structurally sound and subject to deflection not to exceed the current ANSI Standards. Surfaces shall be free of all grease, oil, dirt, dust, curing compounds, waxes, sealers, efflorescence, or any other foreign matter.

All Lightweight cement or Gypsum surfaces should be primed with a properly applied sealer or a primer coat of [RedGard](#), consisting of 1 part RedGard diluted with 4 parts clean, cool water. Mix in a clean bucket at low speed to obtain a lump free solution. The primer can be brushed, rolled or sprayed to achieve an even coat. Apply the primer coat to the floor at a rate of 300 sq. ft./ (7.5 sq. m/L). Drying time depends on site conditions, but is normally less than 1 hour. Extremely porous surfaces may require 2 coats. At this point, RedGard can be applied to the primed lightweight or gypsum based surface. Refer to the individual product data sheet or packaging directions for application instructions. Expansion joints must be installed in accordance with local building codes and ANSI/TCNA guidelines. Refer to TCNA EJ171.

Bonding to Plywood Surfaces

Plywood floors, including those under resilient flooring, must be structurally sound and must meet all ANSI A108.01 Part 3.4 requirements. Maximum allowable deflection: L/360 tile L/720 stone. See TCNA F150-13 Tile Installations, TCNA F141-13 and F250-13 for Stone. For questions about proper subfloor installation requirements, call Custom technical services.



VersaBond® Professional Thin-Set Mortar

Bonding to Backerboards

As an alternative to an additional layer of plywood, WonderBoard backerboard may be installed over plywood subfloors for ceramic tile installations. Refer to TCNA F144-13 tile installations, TCNA F250-13 stone installations. Call Custom technical services when installing natural stone over plywood subfloor.

Bonding to Existing Surfacing Material

Existing Ceramic Tile, Resilient Flooring or Plastic Laminates: Resilient flooring or plastic laminates must be well bonded, as well as clean and free of all contaminants. Roughen the surface by sanding or scarifying; rinse and allow to dry. Do not sand flooring that contains asbestos. For existing well bonded ceramic tile, mechanically abrade the surface. Rinse and allow to dry. When sanding, an approved respirator should be used.

Bonding to Cutback Adhesive

Adhesive layers must be removed, as they reduce mortar bond strength to cement surfaces. Use extreme caution; adhesives may contain asbestos fibers. Do not sand or grind adhesive residue, as harmful dust may result. Never use adhesive removers or solvents, as they soften the adhesive and may cause it to penetrate into the concrete. Adhesive residue must be wet scraped to the finished surface of the concrete, leaving only the transparent staining from the glue. To determine desirable results, do a test bond area before starting. Refer to the RFCI Pamphlet, "Recommended Work Practices for Removal of Resilient Floor Coverings" for further information.

Movement Joint Placement

Movement joints are required for perimeters and other changes of plane in all installations. Expansion joints and cold joints, as described in ANSI A108.01, should never be bridged with setting material. They must be brought through the tile work and filled with an appropriate elastomeric sealant, such as [Custom's 100% Silicone](#). Contact Custom's Technical Services for the proper treatment of control or saw cut joints. Refer to TCNA EJ171, F125 & F125A.

Mixing Ratios

Mix 6 qts (5.68 L) clean water per 50 lb (22.68 kg) bag of mortar.

Mixing Procedures

Mix by hand or use a low 150 – 200 rpm speed 1/2" (13 mm) drill to achieve a smooth, paste-like consistency. Let the mixture slake or stand 5 – 10 minutes; stir again and use. Stir occasionally, but do not add more water. When properly mixed, troweled ridges will stand without slump.

Application of Product

Installation must conform to ANSI A108.5. Use a properly-sized notch trowel to ensure proper coverage under tiles. Using the flat side of the trowel, apply a skim coat of mortar to the surface. With the notch side of the trowel held at a 45° angle, apply additional mortar to the surface, combing in one direction. Press the tile firmly into place in a perpendicular motion across ridges, moving back and forth. The perpendicular motion flattens ridges and closes valleys, allowing maximum coverage. With some tile, back-buttering is advisable. Adjust the tile promptly and beat it in with a beating block and rubber mallet. Mortar can be applied up to 1/4" (6 mm) thick after beat in. Periodically pull up a tile and check the back to ensure proper adhesive coverage. If the material has skinned over (not sticky to the touch), recomb with the notch trowel; if too dry, remove and replace the dry material with fresh material. Material in the bucket will remain workable for approximately 4 hours.

Curing of Product

Curing time is affected by ambient and surface temperatures and humidity. Use the following as a guideline. Allow 24 hours before grouting and light traffic, and 7-10 days before heavy or vehicular traffic. Before exposure to heavy or vehicular traffic, assure assembly is rated "Heavy or Extra Heavy" per TCNA Service Requirements. As necessary, use plywood or other load distributing protection when moving heavy equipment across tiled assembly.

Cleaning of equipment

Clean with water before the material dries.

Storage

Store in a cool dry area.

Health Precautions

This product contains Portland cement and free silica. Avoid eye contact or prolonged contact with skin. Wash thoroughly after handling. If eye contact occurs, flush with water for 15 minutes and consult a physician. Do not breathe dust; wear a NIOSH approved respirator

Conformance to Building Codes

Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

6 Availability & Cost

Location	Item Code	Size	Color	Package
USA	MTSG25	25 lb (11.34 kg)	Gray	Bag
USA	MTSG50	50 lb (22.68 kg)	Gray	Bag
USA	MTSW50	50 lb (22.68 kg)	White	Bag
Canada	CVBG50	50 lb (22.68 kg)	Gray	Bag
Canada	CVBW50	50 lb (22.68 kg)	White	Bag



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VersaBond® Professional Thin-Set Mortar

7 Product Warranty

Obtain the applicable **LIMITED PRODUCT WARRANTY** at www.custombuildingproducts.com/product-warranty or send a written request to Custom Building Products, Inc., Five Concourse Parkway, Atlanta, GA 30328, USA. Manufactured under the authority of Custom Building Products, Inc. © 2017 Quikrete International, Inc.

When VersaBond® Fortified Thin-Set Mortar is used as a part of a qualifying full installation system of CUSTOM products, the installation can qualify for up to a 10 year system warranty. CUSTOM will repair and/or replace, at its discretion, the affected area of the system. For more information, find details and limitations to this warranty at custombuildingproducts.com.

8 Product Maintenance

Properly installed product requires no special maintenance.

9 Technical Services Information

For technical assistance, contact Custom technical services at 800-282-8786 or visit custombuildingproducts.com.

10 Filing System

Additional product information is available from the manufacturer upon request.

Expected Wear

Properly installed tile will last for more than 60 years.

Related Products

Polyblend® Sanded Grout



CUSTOM®

VersaBond® Professional Thin-Set Mortar

Coverage

SQUARE FOOT COVERAGE PER 50 LB BAG (SQUARE METER PER 22.68 KG)

Trowel Size	Min Coverage	Max Coverage
Longest side of tile less than 8" use 1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) Square-Notch	85 sq. ft. (8.8 M ²)	95 sq. ft. (8.8 M ²)
Longest side of tile 8" to 15" use 1/4" x 3/8" x 1/4" (6 x 9.5 x 6 mm) Square-Notch	60 sq. ft. (5.6 M ²)	67 sq. ft. (6.2 M ²)

Recommended minimum coverage (80% for dry areas and 95% for wet areas and exteriors). Back buttering may be necessary.

Note that mortar coverage does not include backbuttering tiles. When backbuttering, consider the tile underside pattern and depth to estimate thickness and usage to add to your estimate.

Chart for estimating purposes. Coverage may vary based on installation practices and jobsite conditions. For more sizes, use the material calculator at CustomBuildingProducts.com or contact CUSTOM Technical Services at 800-282-8786.



CUSTOM®

AcrylPro® Professional Tile Adhesive



1. Product Name

AcrylPro® Professional Tile Adhesive

2. Manufacturer

Custom Building Products
 Technical Services 10400 Pioneer Boulevard, Unit 3
 Santa Fe Springs, CA 90670
 Customer Support: 800-272-8786
 Technical Services: 800-282-8786
 Fax: 800-200-7765
 Email: contactus@cbpmail.net
 custombuildingproducts.com

3. Product Description

Professional grade tile and stone adhesive. Engineered for the intermittent water exposure seen in tub surrounds and shower walls. Sag resistant and ideal for small format tile, pavers and stone installation on walls, floors and countertops. Recommended for tile up to 8" (20 cm) on any side, but can be used up to 15" (38.1 cm) with significantly longer dry times.

Meets ANSI A136.1, Type 1

Key Features

- For standard wall and floor tile installations
- Just spread and set
- Ideal for small format tile
- Sets porcelain, ceramic and stone

Suitable Substrates

- Concrete, mortar beds, masonry, Portland cement plaster
- Approved cement backerboards
- Exterior Grade Plywood (EGP) interior residential and light commercial dry areas
- Gypsum wallboard (interior dry areas)
- Existing ceramic tile
- Plastic laminates
- Cutback adhesive (see preparation instructions)

Composition of Product

AcrylPro® Ceramic Tile Adhesive is a ready-to-use, proprietary blend of acrylic copolymers, calcium carbonate and inorganic materials.

Benefits of Product in the Installation

- High bond strengths for 8" x 8" (20.3 cm x 20.3 cm) floor tile

- Meets ANSI A136.1, Type 1 requirements for intermittent water exposure

Limitations to the Product

- Recommended floor tile size: 8" (20 cm) or less on all sides.
- If dry time is a concern due to tile size or other limitations noted, use a traditional polymer modified thinset mortar instead.
- Do not bond directly to hardwood, Luan plywood, particle board, parquet, cushion or sponge-back vinyl flooring, metal, fiberglass, plastic or OSB panels.
- When setting moisture sensitive natural stone, cement or agglomerate tile, check with Custom Technical Services; use EBM-Lite™ Epoxy Bonding Mortar 100% Solids or CEG-Lite™ 100% Solids Commercial Epoxy Grout.
- When installing ceramic plank tile greater than 15" (38.1 cm) long, use a cement mortar designed for large format tile.
- Do not use over non-porous surfaces such as waterproofing membranes, coated tile backer board and vinyl flooring.
- Do not use to install resin-backed marble or stone; use EBM-Lite™ Epoxy Bonding Mortar 100% Solids or CEG-Lite™ 100% Solids Commercial Epoxy Grout.
- Recommended for interior use only. Do not use for steam rooms, shower floors or underwater. For those installations, use CUSTOM® Polymer-Modified Mortar Systems.
- Not for use over radiant heat systems.
- Installation dry time varies depending on tile size and density, substrate porosity and ambient conditions.
- Do not use to install fixtures, ungauged natural stone, gauged stone thicker than 3/8" (9.5 mm), transparent glass tile, translucent stone, Saltillo pavers or lug back tile on floors.

Packaging

- 1 qt (0.95 L) pail
- 1 gal (3.78 L) pail
- 3.5 gal (13.25 L) pail
- Canada: 1 qt (0.95 L), 6.5 lb (2.9 kg) pail
- Color: White

4. Technical Data

Applicable Standards

American National Standards Institute (ANSI) ANSI A108.4 and A136.1, Type 1 American National Standards for the Installation of Ceramic Tile

Tile Council of North America (TCNA) Handbook for Ceramic Tile Installation, TCNA Method EJ171

Technical Chart

Property	Test Method	Requirement	Typical Results
Open Time			75 Minutes
Adjustment Time			45 Minutes
Freeze-Thaw Stability			Stable
Shear Bond Strength			
7 Day Dry	A136.1 Section 6.2.3.1	> 50 psi	Pass
28 Day Dry	A136.1 Section 6.2.3.3	> 50 psi	Pass
Type I After Water Immersion	A136.1 Section 6.2.3.2	> 50 psi	Meets

AcrylPro® Professional Tile Adhesive

Heat Resistance	A136.1 Section 6.2.3.5	> 10 lbs. per tile	Pass
Impact Resistance	A136.1 Section 6.2.3.6	Tile Remain Bonded	Pass
Staining	A136.1 Section 6.3	< 70% Penetration	Pass
Resistance to Mold Growth	A136.1 Section 6.4	No Growth	Pass

Canada	CARL40003	3 1/2 gal (13.25 L)	White	Pail
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Related Products

Polyblend® Plus Sanded Grout
 Fusion Pro® Single Component® Grout
 CEG-Lite™ 100% Solids Commercial Epoxy Grout
 CEG-IG 100% Solids Industrial Grade Epoxy Grout
 Prism® Ultimate Performance Grout

Environmental Consideration

Custom® Building Products is committed to environmental responsibility in both products produced and in manufacturing practices. Use of this product can contribute towards LEED® v3 certification:

- Up to 2 points towards MR Credit 5, Regional Materials
- Up to 1 point towards IEQ Credit 4.1, Low-Emitting Materials - Adhesives & Sealants

Movement Joint Placement

Construction, contraction, expansion and isolation joints as described in ANSI A108.01, should never be bridged with setting material. They must be brought through the tile work and filled with an appropriate elastomeric sealant. Contact Custom® Building Products for the proper treatment of control or saw cut joints. Refer to TCNA F125, F125A and TCNA EJ171.

Curing of Product

Minimum dry time for 8" x 8" (20.3 cm x 20.3 cm) tile is 24 hours before applying grout. Dry time will be extended if using larger tiles, bonding to non-porous surface, in high humidity, or if temperature is below 60 degrees F (15 degrees C). Do not apply excess adhesive.

Cleaning of Equipment

Remove fresh adhesive from tile surfaces with a damp cloth. Clean tools in warm soapy water.

Health Precautions

This product contains petroleum distillates. Avoid eye contact or prolonged contact with skin. If ingested, do not induce vomiting; call a physician immediately. Use with adequate ventilation.

Conformance to Building Codes

Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

5. Size & Availability

Location	Item Code	Size	Color	Package
USA	ARL4000QT	1 qt (.946 L)	White	Pail
USA	ARL40001	1 gal (3.78 L)	White	Pail
USA	ARL40003	3 1/2 gal (13.25 L)	White	Pail
Canada	CARL4000QT	1 qt (.946 L)	White	Pail
Canada	CARL40001	1 gal (3.78 L)	White	Pail

AcrylPro® Professional Tile Adhesive

Coverage Chart

SQUARE FOOT COVERAGE PER GALLON (SQUARE METER PER 3.78 L)

Trowel Size	Min Coverage	Max Coverage
3/16" x 5/32" (5 x 4 mm) V-notch for tile up to 6" (15 cm) on any one side	40 sq. ft. (3.7 m ²)	60 sq. ft. (5.6 m ²)
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) sq. notch for tiles up to 12" (30 cm) on any one side	15 sq. ft. (1.4 m ²)	25 sq. ft. (2.3 m ²)
1/4" x 3/8" x 1/4" (6 x 9 x 6 mm) sq. notch for tiles up to 15" (38 cm) on any one side	10 sq. ft. (.93 m ²)	14 sq. ft. (1.4 m ²)

Recommended minimum coverage (80% for dry areas and 95% for wet areas). Back buttering may be necessary. For any tile with the longest side 15" +, use a medium bed mortar from CUSTOM designed for large format and heavy tile.

Chart for estimating purposes. Coverage may vary based on installation practices and jobsite conditions. For more tile and joint sizes, use the material calculator at CustomBuildingProducts.com or contact CUSTOM Technical Services at (800) 282-8786.

RedGard® Waterproofing and Crack Prevention Membrane

1 Product Name

RedGard® Waterproofing and Crack Prevention Membrane

2 Manufacturer

Custom Building Products
 Technical Services
 10400 Pioneer Boulevard, Unit 3
 Santa Fe Springs, CA 90670
 Customer Support: 800-272-8786
 Technical Services: 800-282-8786
 Fax: 800-200-7765
 Email: contactus@cbpmail.net
custombuildingproducts.com

3 Product Description

RedGard® is a ready-to-use, rapid drying, liquid applied elastomeric, waterproofing and crack prevention membrane that does not require fabric in the field, coves or corners. It can be used for interior or exterior commercial, industrial or residential tile and stone floor & wall installations. Easily applied with roller, trowel or sprayer producing a continuous water and moisture barrier with outstanding adhesion. Bonds directly to metal and drains of PVC, stainless steel and ABS. Reduces concrete moisture vapor transmission to protect moisture sensitive tile, stone and other flooring types. RedGard meets ANSI A118.10-LV requirements for waterproofing membranes and ANSI A118.12 High Performance $\geq 1/8"$ (≥ 3 mm) for crack isolation membranes. Meets Uniform Plumbing Code specifications for use as a shower pan liner. Listed with IAPMO R & T, File #4244 UPC®, ICC-ES ESR-1413. Meets low perm requirements for steam room vapor barriers per ASTM E-96 Procedure E.

Key Features

- Ready to use - Quick dry formula
- Fabric not required
- Listed with IAPMO for use as a shower pan liner
- Elastomeric – Isolates cracks up to 1/8" (3mm)
- Meets steam shower requirements for low perm membrane
- Manages concrete moisture vapor emissions up to 12lbs./ 85%RH
- Rated for Extra Heavy Service Conditions per TCNA/ASTM C627
- Flood test immediately after drying

Uses

- Interior surfaces / exterior concrete and masonry surfaces
- Shower pans, showers, tub surrounds
 - Swimming pools, fountains, water features
 - Spas, hot tubs, steam showers, steam rooms
- Industrial, commercial and residential applications
- Commercial /residential kitchens, food processing areas
- Exterior balconies and decks over occupied/unoccupied spaces
- Exterior facades



Suitable Substrates

- Concrete, cement mortar, masonry
- Cement Backerboard
- Post-Tension Concrete*
- Gypsum-based underlayment (min. 2000 psi compressive strength)
- Lightweight Concrete (min. 2000 psi compressive strength)
- Existing ceramic tile and resilient flooring
- Drywall (interior dry areas)
- Coated Glass Mat Water-Resistant Gypsum Backer Board
- APA/CANPLY rated EGP/Exterior Glue Plywood and OSB/Oriented Strand Board (interior, dry areas only for water protection and crack isolation applications)
- Bonds directly to metals*
- Floor heating systems*
- Pipe penetrations/transitions - PVC, ABS, copper, brass and stainless-steel (abrasion required)

* Deflection requirements and material selection can affect success of the tile assembly. Contact Custom Building Products Technical Services for cautions, limitations and recommendations.

Composition of Product

RedGard® is a liquid-applied elastomeric waterproofing material that cures to form a monolithic membrane.

Benefits of Product in the Installation

- Thin/low profile membrane, from 0.015–0.038" (0.4–0.96 mm) thickness after cure. (Thickness is determined by application)
- Easy to use and can be applied by roller, trowel or airless sprayer
- Reduces curing time with quick-dry formula
 - Rated for extra heavy-duty service (TCNA/ASTM C627)
 - Isolates cracks up to 1/8" (3 mm)
 - Reduces efflorescence from substrates
- Meets Uniform Plumbing Code specifications for use as a shower pan liner IAPMO/File #4244 UPC®, ICC-ES ESR-1413
- GreenGuard Gold Certification # 135952-420
- LEED EQc 4.2 Low VOC Emitting Materials/MRc5 Regional Materials
- Non-flammable / No solvents



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RedGard® Waterproofing and Crack Prevention Membrane

Limitations to the Product

- Ambient and surface temperatures must be above 40°F (4°C) at time of installation and for 72 hours after application.
- Tile over membrane within 72 hours in exterior applications to avoid extended exposure to ultraviolet rays. Alternately, tent area or cover with sun blocking sheeting; or apply a flat application of high performance thinset mortar; or apply a one-time additional coat of liquid prior to 72 hrs. to extend timeframe another 72hrs.
- Existing concrete slabs on-ground relative humidity levels to be ≤85% and pH levels ≥7 or ≤13. *
- Do not apply over wet surfaces or surfaces subject to hydrostatic pressure.
- Use [Crack Buster® Pro Crack Prevention Mat Underlayment](#) to relocate tile joints over saw cuts/control joints in concrete slabs. See details in Movement Joint Placement section for instructions to accommodate waterproofing over concrete slab joints.*
- Do not use as an adhesive.
- Some glass tile manufacturers do not recommend use of a membrane behind their glass tile products.
- Do not use pre-mixed adhesives over membrane.
- Do not apply over unstable substrate conditions such as laitance, weak or powdery surfaces.
- Do not use over pressure treated wood surfaces.
- Do not use as a wear surface; the membrane must be covered with tile or other permanent flooring.
- Do not expose membrane to solvent-based materials.
- Compatible with water-based paints only.

*Contact Technical Services for other conditions not listed and/or additional information.

Packaging

- 1-gallon (3.78 L) pail
- 3.5-gallon (13.2 L) pail

4 Technical Data Applicable Standards

Material Standards

- Exceeds American National Standards Institute/ANSI A118.10 Load Bearing, Bonded, Waterproofing Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation
- Exceeds American National Standards Institute/ANSI A118.12 Crack Isolation Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation
- ASTM C627 Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester
- ASTM D638 Standard Test Method for Tensile Properties of Plastics ASTM E-96 Standard Test Methods for Water Vapor Transmission of Materials/Method E
- Conforms to Wisconsin's performance requirements for "safing material" as established by Comm. 84.30 (6)(f) of the Wisconsin Administrative Code; CA Section 01350 and passes CDPH V1.2-2017.
- Uniform Plumbing Code specifications for use as a shower pan liner. Listed with IAPMO R & T, File #4244 UPC®, ICC-ES ESR-1413

Installation Standards

- American National Standards Institute (ANSI) ANSI A108.01, A108.02, A108.13, A108.17
- Tile Council of North America (TCNA) TCNA Handbook for Ceramic Tile Installation, includes methods EJ171 (movement joints), Methods F125 & F125A for crack isolation and crack transference protection
- Meets/exceeds requirements as listed in Specifications Guide 09 30 00 Tile Installation Manual published by the Terrazzo, Tile & Marble Association of Canada/TTMAC Approvals

Approvals

RedGard® has tested and complies with Uniform Plumbing Code and International Plumbing Code standards for use as a shower pan liner per IAPMO Research and Testing, Inc., File No. 4244. RedGard® has tested and complies with International Building Code (IBC), International Residential Code (IRC) and International Plumbing Code (IPC) standards for water resistance per ICC Evaluation Service, ESR-1413. RedGard® conforms to "safing material" requirements established by the Wisconsin Administrative Code, Chapter Comm 84.30-6f.

- GREENGUARD Gold Certificate # 135952-420
- LEED EQc4.1 & 4.2 Low VOC Emitting Materials/MRc5 Regional Materials
- ASTM C627 (Robinson) for extra heavy service rating
- ASTM E-96 Method E, meeting requirements of <0.5 perms
- Los Angeles Department of Building and Safety - per LAMC 98,0502



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RedGard® Waterproofing and Crack Prevention Membrane

Technical Chart

Property	Test Method	Requirement	Typical Results
Fungus Resistance	A118.10 Section 4.1	No Growth	Pass
Seam Strength	A118.10 Section 4.2	> 8 lbs. per 1" >16 lbs. per 2"	>16 lbs. per 2"
Breaking Strength	A118.10 Section 4.3	> 170 psi	484 psi (34kg/cm ²)
Dimensional Stability	A118.10 Section 4.4	+/- 0.7%	0.05%
Waterproofness	A118.10 Section 4.5	No Water Penetration	Pass at 25 mils dry
Steam Shower Requirement	ASTM E-96 Method E	< 0.5 perms	0.35 perms at 30 mils dry
Shear Bond Strength to Cement Mortar			
Four Week Shear Strength	A118.10 Section 5.5	> 50 psi	267 psi (18.8 kg/cm ²)
Shear Strength After Water Immersion	A118.10 Section 5.4	> 50 psi	89 psi (6.3 kg/cm ²)
System Crack Resistance			
Standard Performance	A118.12 Section 5.4	> 1/16" and < 1/8"	Pass at 30mils dry
High Performance	A118.12 Section 5.4	> 1/8"	Pass at 30mils dry
Point Load	A118.12 Section 5.2	> 1000 lbs.	> 1000 psi
Robinson Test ASTM C627	A118.12 Section 5.3	As Specified	14 Cycles; Extra Heavy
VOC Test Results			
VOC Content	EPA Method 24	SQAQMD Rule 113/CARB SCM 2019 (<100 g/L)	<5 g/L (0% CARB VOC)
VOC Emissions	Complies with CA Section 01350 & CDPH V1.2-2017		Compliant (TVOC=0.5 mg/m3 or less)

Environmental Consideration

Custom® Building Products is committed to environmental responsibility in both products produced and in manufacturing practices. Use of this product may contribute to LEED® certification.

Instructions

General Requirements Installing Finishes Using Products Manufactured by Custom Building Products

Note: The recommendations within this document are common industry standards and Custom Building Products' requirements. Additional limitations or specific recommendations may be listed within datasheets of products used in an installation assembly. When those instructions conflict with this document, the most stringent requirements and limitations shall apply.*

All substrates and surfaces must be structurally sound, stable and suitable for the project's usage including managing weight and deflection from live and dead loads for the lifetime of the structure. Minimum deflection requirements are L/360 for all flooring finishes over concrete and all vertical substrates; L/720 for natural stone over wood framing.

Concrete, cement-based and gypsum-based underlayment and patching compounds must be adequately cured and not exhibit signs of excessive moisture emissions, condensation, efflorescence and hydrostatic conditions/issues beyond the finish product manufacturers' limits or other products within the assembly.

CUSTOM®/CustomTech™ cement-based preparation products may be used in assemblies over concrete with high moisture vapor emission levels provided that other materials such as finish flooring, adhesives or membranes are recommended in these conditions. Consult the manufacturers for their limitations and requirements. Effective moisture mitigation is required when products and finishes in the assembly limit moisture emission levels. **Note:** Moisture mitigation systems manage moisture vapor emissions from the initial concrete placement and when an effective vapor retarder/barrier is placed directly below on-ground slabs. They are not intended to manage excessive water intrusion or negative hydrostatic pressure.

Concrete is to have ≥3000 psi (20.7 MPa) compressive strength and lightweight or gypsum-based underlayment must obtain ≥2000 psi (≥13.8 MPa) compressive strength and tensile strengths ≥200 psi (≥1.4 MPa). Surfaces must be clean, dry and free from contaminants that would prevent or inhibit adhesion bonding. Contaminants and curing compounds should be mechanically removed before installation. Most CUSTOM® products require absorptive surfaces. To assess surface absorption, refer to [ASTM F3191](#) for horizontal areas and place water droplets no higher than 1" (25mm) from the surface (≤1/2" / ≤12mm is preferred). Use a damp sponge to evaluate water absorption on vertical or overhead areas. Cracks in concrete 1/8" (3mm) or wider are generally considered to be structural. Cracks and differential (out of plane) substrate surfaces are to be evaluated by the contractually-obligated project design professional, and remedied prior to applying and installation system. Follow appropriate industry standards and individual product recommendations for treating concrete slab shrinkage cracks and slab joint treatment. Consult [ASTM F710](#) for resilient, carpet tile, carpet and wood flooring; or [ANSI A108](#) and [TCNA](#) -Movement Joints for ceramic tile and natural stone tile.

All surfaces must be flat and smooth (and properly pitched, level or plumb when required) prior to installing finishes. Flatness tolerances vary for finishes as shown below from the required plane, when measured from the high points in the surface. It is the responsibility of the installer to determine the suitability of the substrate and any required preparation work necessary to ensure a successful installation.

Industry Tolerances - Flatness and Pitch:

Ceramic tile <15" - 1/4 in. in 10 ft. (6 mm in 3 m) and no more than 1/16 in. in 1 ft. (1.6 mm in 0.3 m)

Ceramic tile ≥15" & Gauged Porcelain Tile/Panels - 1/8 in. in 10 ft. (3 mm in 3 m) & no more than 1/16 in. in 2 ft. (1.6 mm in 0.6 m)

Resilient, Carpet Tiles, Carpet - 3/16 in. (3.9 mm) in 10 ft and 1/32 in. (0.8 mm) in 12 in. (305 mm)

Hardwood – Concrete 1/8 - 3/16 in. in 10 ft radius (3 -3.9 mm in 305cm radius)

Hardwood – Plywood 3/16 in. in 10 ft (3.9 mm in 305 cm) or 1/8 in. in 6 ft (3 mm in 183 cm)

Pitch - Exterior and drainage areas to be sloped at a minimum of ¼ in. per linear ft (≥6 mm in 300 mm)

RedGard® Waterproofing and Crack Prevention Membrane

Substrate and ambient temperatures, relative humidity, UV exposure, excessive wind and inclement weather can affect product performance, drying or curing timeframes during and after installation. Acceptable temperatures for products, mixing water and additives are generally between 50°F - 90°F (10° - 32° C). The area where finishes are installed should be acclimated prior to installation by providing heat or cooling and protection as needed. These conditions are to stay in place during and after installation to allow products to properly cure. Disable radiant heating systems at least 24 hours prior, during and 72hrs after installation. Follow radiant heating system manufacturer's instructions for start-up procedures to gradually introduce heat. Follow industry guidelines for water and moisture exposure to installation assemblies, especially with fill and draining rates in water features.

* Consult individual product datasheets for recommendations and limitations regarding project conditions. Assembly mockups can determine suitability for these conditions on specific projects. Contact CUSTOM Technical Services for questions and product information: [CONTACT CUSTOM](#) or (800) 282-8786. Instructional videos, bulletins and white papers available at: custombuildingproducts.com/reference-library.aspx

Industry Association References:

[International Building Code](#) (IBC)
[International Residential Code](#) (IRC)
[American Concrete Institute](#) (ACI)
[International Concrete Repair Institute](#) (ICRI)
[ASTM International](#) (ASTM)
[Tile Council of North America](#) (TCNA)
[American National Standards Institute](#) (ANSI)
[Resilient Floor Covering Institute](#) (RFCI)
[National Wood Flooring Association](#) (NWFA)
[Natural Stone Institute](#) (NSI)
[National Tile Contractors Association](#) (NTCA)
[International Masonry Institute](#) (IMI)

5 General Surface Prep

WEAR IMPERVIOUS GLOVES, such as nitrile, and eye protection when handling product.

All surfaces must be structurally sound, clean, dry and free from contaminants such as grease, oil, dirt, dust, curing compounds, waxes, sealers, efflorescence, or any other foreign matter.

Concrete must be fully cured and have an effective under-slab vapor retarder/barrier. Any existing flooring must be well bonded and stripped of old finish. All substrates should support anticipated live and dead loads in design/performance and meet all international, local, regional or provincial code requirements.

Exterior and wet areas must have proper sloping to drains without divots that would affect drainage. All surfaces must be structurally sound, clean, dry and free from contaminants that would prevent a proper bond. Concrete must be troweled smooth but not burnished (highly polished) and cured for 28 days. Most existing surfaces are to be scarified and flattened and all defects must be repaired. Dormant cracks should be treated in accordance with TCNA F125 or TCNA F125A methods.

Concrete and Masonry Surfaces

All surfaces must be structurally sound, clean, dry and free from contaminants such as grease, oil, dirt, dust, curing compounds, waxes, sealers, efflorescence, or any other foreign matter. Concrete must be fully cured and have an effective under-slab vapor retarder/barrier. Any existing flooring must be well bonded and stripped of old finish.

Mortar beds must be sufficiently cured prior to applying liquid membrane and flood testing. Depending on water/latex ratios to mortar when mixed, ambient temperatures and humidity, and substrate porosity, mortar bed cure times will vary. Contact Technical Services for recommendations.

All substrates should support anticipated live and dead loads in design/performance and meet all international, local, regional or provincial code requirements.

Bonding to Lightweight Cement and Gypsum Surfaces

Lightweight or gypsum-based materials must obtain a minimum of 2000 psi (13.8 MPa) compressive strength at the recommended cure time. The underlayment must be sufficiently dry and properly cured to the manufacturer's specifications for permanent, non-moisture permeable coverings. Surfaces to be covered must be clean, structurally sound and subject to deflection not to exceed the current ANSI standards. Expansion joints must be installed in accordance with local building codes and ANSI/TCNA guidelines.

Prime all surfaces to receive RedGard® with properly applied manufacturer's sealer or with a primer coat of RedGard®, consisting of 1-part RedGard®, diluted with 4 parts clean, cool water. In a clean pail, mix at low speed (≤300rpm). Apply the diluted mixture using a clean, fine head bristle broom to scrub in the primer solution at a rate of 300 ft/gallon (7.5 M/L). Keep the surface of the substrate wet for at 3-5 minutes during application to ensure adequate and even distribution / penetration of primer coat. Allow primer coat to dry, then apply at least one coat of "undiluted" RedGard® before adhering tile, floor patch or other flooring material applications. See Coverage Section for square foot rates by application.

RedGard® as a Vapor Barrier

When used as a vapor barrier over concrete, apply one full coat (70 sq. ft. per gallon) where vapor transmission is up to 8 lbs. per 1000 sq. ft. per day and two full coats (70 sq. ft. per gallon each coat) where vapor transmission is up to 12 lbs. per 1000 sq. ft. per day. Refer to ASTM F1869 for more information on Vapor Transmission Testing.



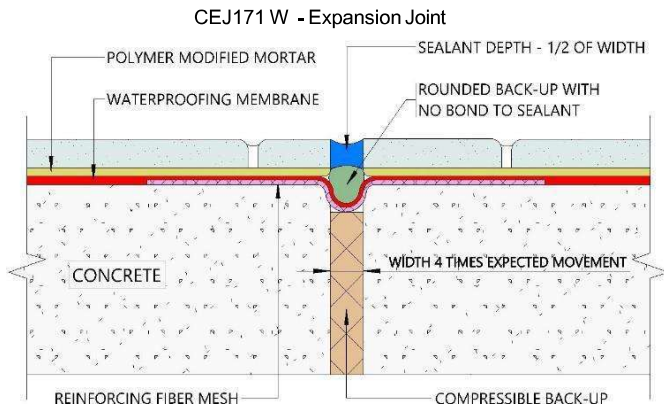
RedGard® Waterproofing and Crack Prevention Membrane

Movement Joint Placement

All tile assemblies, including those using Porcelain tiles, expand and contract with temperature changes and/or exposure to moisture and are subject to movement by the underlying structure due to live and dead loads. For these reasons, do not bridge joints with tile when they are designed to experience movement. Carry these types of joints from the substrate through the tile in locations, widths and frequency recommended by the Tile Council of North America (TCNA) or Terrazzo, Tile & Marble Association of Canada (TTMAC).

Follow [ASTM C1193](#) guidelines using [CUSTOM® Commercial100% Silicone Sealant](#) or other suitable sealant applying the sealant as flush as possible with the tile edges.

RedGard® can be used to waterproof movement joints using proper methods incorporating suitable sealant and other industry approved expansion joint materials as illustrated below. Assure that movement joints are free of debris and mortar and install using the appropriate specified method.



See [CUSTOM®](#) details at links below or on our website for reference:

- EJ 171 W – Expansion Joint ([PDF](#)) ([DWG](#))
- CEJ 171 AW – Construction Joint ([PDF](#)) ([DWG](#))
- CEJ 171 BW – Contraction Joint ([PDF](#)) ([DWG](#))
- CEJ 171 CW – Expansion Joint ([PDF](#)) ([DWG](#))
- CEJ 171 DW – Isolation -Expansion Joint ([PDF](#)) ([DWG](#))
- CEJ 171 EW – Expansion Joint, Cement Mortar, Bonded ([PDF](#)) ([DWG](#))
- CEJ 171 FW – Generic Movement Joint ([PDF](#)) ([DWG](#))
- CEJ 171 GW – Perimeter Joint ([PDF](#)) ([DWG](#))
- CEJ 171 HW – Expansion Joint, Mortar, Cleavage Membrane ([PDF](#)) ([DWG](#))
- CEJ 171 IW – Perimeter Joint ([PDF](#)) ([DWG](#))
- CEJ 171 JW – Perimeter Movement Joints ([PDF](#)) ([DWG](#))
- CEJ 171 KW – Movement Joint in Tile and Backerboard ([PDF](#)) ([DWG](#))
- CEJ 171 LW – Generic Movement Joint with Backerboard ([PDF](#)) ([DWG](#))
- CEJ 171 GCW – Generic Movement Joint Concrete / Masonry Wall ([PDF](#)) ([DWG](#))
- CEJ 171 ECW – Expansion Joint – Concrete or Masonry Wall ([PDF](#)) ([DWG](#))
- CEJ 171 NMW – Movement Joint – Reinforced Mortar Bed ([PDF](#)) ([DWG](#))
- CEJ 171 BMW – Movement Joint – Bonded Mortar Bed ([PDF](#)) ([DWG](#))
- CEJ 171 SJBW – Steam Shower/Room Slip Joint–Backerboard Unit ([PDF](#)) ([DWG](#))
- CEJ 171 SJMW – Steam Shower/Room Slip Joint–Mortar Bed ([PDF](#)) ([DWG](#))
- CEJ 171 WPM – Combined Waterproofing Movement Joint Details ([PDF](#))

Application of Product

For all applications, use RedGard®, a thinset mortar or suitable patch to fill cracks $\geq 1/8"$ (≥ 3 mm) before applying RedGard® liquid. In high temperatures, windy conditions and when applying over very porous substrates, lightly dampen the surface or use a diluted mixture of RedGard® as a primer coat prior to the normal application. (Primer Coat- *In a separate container, dilute 1-part RedGard® with 4 parts water and mix until well blended. Use either a paint brush, a 3/8" (10 mm) rough- textured, synthetic roller or airless sprayer to apply the primer coat to the entire area to be waterproofed.*) The membrane appearance is pink when wet and dries to a dark red color. It typically takes 1-1.5 hours to turn completely red. After the first coat turns red, inspect the film for integrity and fill any voids or pinholes with additional material and apply second coat.

RedGard® as a Waterproof Membrane

Coat corners and intersections of the floors and walls, extending $>2"$ (5 cm) on either side with RedGard® liquid using either a paint brush, a 3/8" (10 mm) rough-textured, synthetic roller or a 3/16"-1/4" (56 mm) V-notch trowel. For extra seam protection, embed [CUSTOM® Waterproofing Reinforcing Tape](#) into the liquid for changes of plane and over gaps $>1/8"$ (>3 mm). Allow these areas to dry before re-applying.

For general waterproofing, apply RedGard® at a rate of 110 sq. ft per gallon in each coat, NOTE: A minimum of two coats is required when using a roller or brush to assure that continuous coverage is achieved. If using a roller, apply a continuous, even film with overlapping strokes. Apply the second coat at right angles to the first coat for best results. When using a trowel, spread the liquid with the trowel held at a $>30^\circ$ angle, and then flatten the ridges. Over a solid wall surface, a minimum 15 mils thickness is required above a tub surround or shower floor cove. The membrane appearance is pink when wet and dries to a dark red color. It typically takes 1-1.5 hours to turn completely red. After the first coat turns red, inspect the film for integrity and fill any voids or pinholes with additional material and apply second coat.

To meet the waterproofing requirements of ANSI A118.10 and IAMPO, two coats should be applied at a rate of 80 sq. ft. per gallon each coat. In all cases, the wet film thickness of any coat should not exceed 40mils.

An airless sprayer may be used for the waterproofing application. The sprayer must produce between 1900 - 2300 psi, with a flow rate of 1.0 - 1.5 GPM and must have a tip orifice size of 0.025 - 0.029. See [CUSTOM Technical Bulletin TB35](#) for instructions.



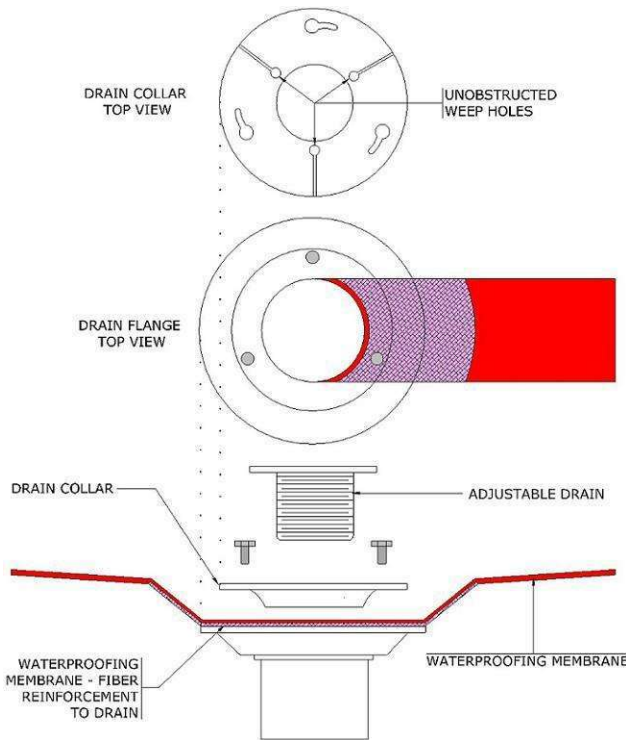
RedGard® Waterproofing and Crack Prevention Membrane

RedGard® at Drains

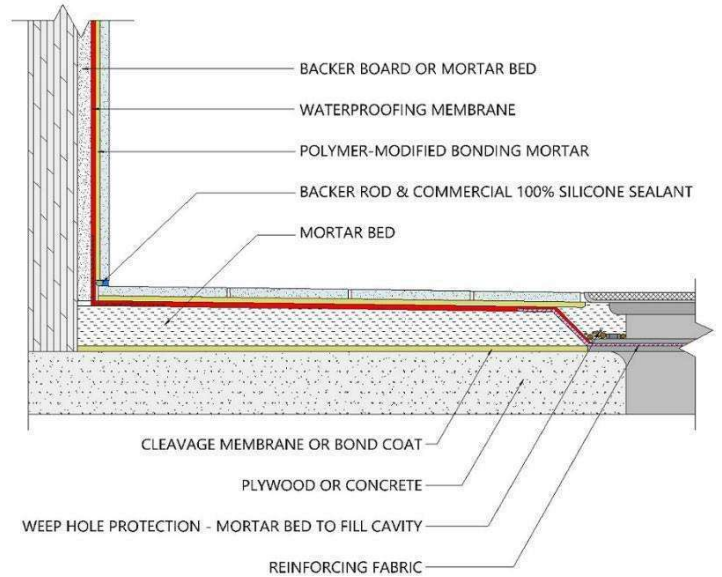
Drains are to be securely fastened to prevent movement. Prior to applying RedGard®, substrate is to be properly sloped toward drain flange. Remove any contaminants on drain flange that might inhibit bonding and protect threaded bolt holes with tape or inserting bolts before applying liquid.

Cut and fit pieces of reinforcing fabric (approximately 3" long.) to contour and encompass drain flange. Apply a coat of RedGard® overlapping transition from substrate or mortar bed to drain flange using a brush. Embed reinforcing fabric into RedGard® liquid. Overlap saturated fabric and use the brush to keep it flat. Continue applying RedGard® to adjacent areas designated to be waterproofed. Allow first application of RedGard® to dry, then recoat all areas to create a monolithic membrane. After final coat is dry, clamp collar to membrane and tighten.

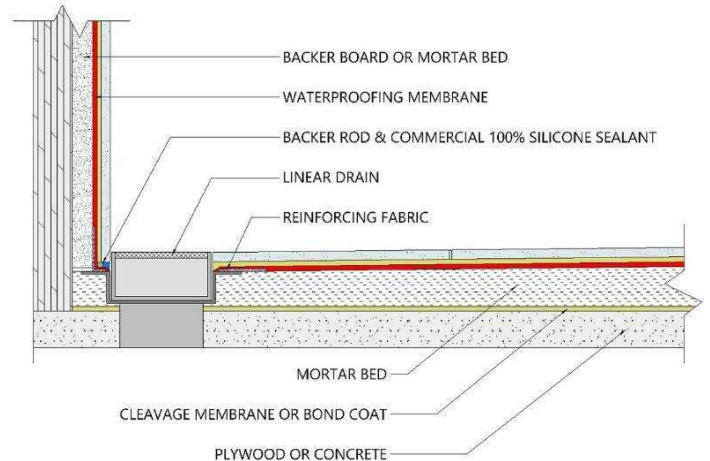
RedGard® Circular Drain Assembly Detail



RedGard®, Mortar Bed & Circular Drain (CB421)



RedGard®, Mortar Bed & Linear Drain



NOTE: Download the illustrated installation details referenced above at the links below: (need to add docs to site and activate links below)

- RedGard® - Circular Drain Assembly Detail ([PDF](#)) ([DWG](#))
- RedGard® - Mortar Bed & Circular Drain (CB421) ([PDF](#)) ([DWG](#))
- RedGard® - Mortar Bed & Linear Drain ([PDF](#)) ([DWG](#))



RedGard® Waterproofing and Crack Prevention Membrane

RedGard® as a Crack Prevention Membrane

RedGard® can be applied using either a V-notched trowel, a 3/8" (9.5 mm) rough textured roller, or a bristle brush. Fill non-structural cracks using either RedGard®, thinset mortar or patch. Then apply RedGard liquid at least 6" beyond any tile that will be bridging the crack. When using a notched trowel, immediately use the flat side and flatten the ridges to form a continuous, even coat of material.

For continuous general crack isolation, cover the entire substrate with one coat of RedGard® applied at a rate of 100 sq. ft. per gallon.

To meet specification requirements for ANSI A118.12, apply two coats of RedGard at a rate of 50 sq. ft. per gallon per coat.

NOTE: Cracks $\geq 1/8$ " or displaying differential movement may be due to structural movement and should be assessed and/or treated by an appropriate structural engineer or consultant.

Curing of Product

RedGard® is dry when it turns solid red, with no visible pink color. Typically, drying time is 1-1.5 hours for each coat. After the second coat is applied and both coats are fully dry, the application area can be flood tested. Membrane will lighten in color when wet and darken again when dry. This reaction is normal. Drying time can be extended to as much as 12 hours in conditions of very low surface and/or ambient temperatures and when applying in high humidity.

Protection

Maintain ambient and surface temperatures above 40°F (4°C) at time of installation and for 72 hours after application. Care should be taken to prevent the membrane from becoming contaminated by bond inhibiting materials, solvents or being punctured after application. Cover RedGard with tile, an additional coat of liquid, a flat application of mortar or UV blocking sheeting if not to be tiled within 72 hours when exposed to sunlight. Protect RedGard from water intrusion that could occur behind or beneath the applied membrane if drip edges and/or flashing is not in place at the time of application.

Tile and Stone Installation

Install tile or stone with a Custom® Building Products polymer-modified mortar that meets ANSI A118.4 or A118.15 standards based on application requirements.

Cleaning of Equipment

Clean tools and hands with water before the material dries. Clean all spray equipment immediately after use.

Health Precautions

IMPORTANT: Read carefully before using. WEAR IMPERVIOUS GLOVES, such as nitrile, and eye protection.


WARNING: EYE & SKIN IRRITANT. May be harmful if swallowed. Do not mix with other chemical products. Avoid contact with eyes and prolonged contact with skin. Do not breathe in vapors. Do not take internally. Immediately wash contaminated body and clothing thoroughly. Use in well-ventilated areas. Wear a NIOSH compliant vapor respirator, especially in poorly ventilated areas.

If eye or skin contact occurs:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If inhaled: Remove person to fresh air and keep comfortable for breathing. If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately seek medical advice or attention if symptoms are significant or persist. In Emergency: 1-800-535-5053. **Contains: Styrene-butadiene polymer, limestone, and ammonium hydroxide.** Before handling read Safety Data Sheet at www.custombuildingproducts.com.

KEEP OUT OF REACH OF CHILDREN.

 **WARNING:** This product can expose you to chemicals including crystalline silica, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

6 Availability & Cost

Location	Item Code	Size	Color	Package
USA	LQWAF1	1 gallon (3.78 L)	Pink	Pail
USA	LQWAF3	3.5 gallon (13.2 L)	Pink	Pail
Canada	CLLQWAF1	1 gallon (3.78 L)	Pink	Pail
Canada	CLLQWAF3	3.5 gallon (13.2 L)	Pink	Pail

7 Product Warranty

Obtain the applicable **LIMITED PRODUCT WARRANTY** at www.custombuildingproducts.com/product-warranty or send a written request to Custom Building Products, Inc., Five Concourse Parkway, Atlanta, GA 30328, USA.

Manufactured under the authority of Custom Building Products, Inc.® 2017 Quikrete International, Inc.

When RedGard® Waterproofing and Crack Prevention Membrane is used as a part of a qualifying full installation system of CUSTOM products, the installation can qualify for up to a lifetime system warranty. CUSTOM will repair and/or replace, at its discretion, the affected area of the system. For more information, find details and limitations to this warranty at custombuildingproducts.com.

8 Product Maintenance

Properly installed product requires no special maintenance. Do not use as a wear surface.

9 Handling & Storage

Protect from freezing. Store in a cool, dry area.

10 Technical Services Information

For technical assistance, contact Custom technical services at 800-272- 8786 or visit custombuildingproducts.com.



RedGard® Waterproofing and Crack Prevention Membrane

Coverage

Size	Coverage
RedGard as Crack Prevention Membrane:	
1 Gallon (3.78 L)	100 sq. ft. (9.3 M2)
3.5 Gallon (13.2 L)	350 sq. ft. (32.5 M2)
RedGard as Crack Prevention Membrane meeting ANSI A118.12	
1 Gallon (3.78 L)	25 sq. ft. (2.3 M2)
3.5 Gallon (13.2 L)	88 sq. ft. (8.2 M M2)
RedGard as Waterproof Membrane:	
1 Gallon (3.78 L)	55 sq. ft. (5.1 M2)
3.5 Gallon (13.2 L)	192 sq. ft. (17.8 M2)
RedGard as IAPMO Pan Liner meeting ANSI A118.10:	
1 Gallon (3.78 L)	40 sq. ft. (3.7 M2)
3.5 Gallon (13.2 L)	140 sq. ft. (13 M2)

Chart for estimating purposes. Coverage may vary based on installation practices and jobsite conditions.

