

#### 1. Product Name

CEG-IG 100% Solids Industrial Grade Epoxy 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

CEG-IG is an industrial grade, water cleanable, 100% solids epoxy grout that has high chemical, temperature and stain resistance. It is formulated for harsh environments such as commercial kitchens and food processing facilities. CEG-IG is a two component epoxy system that combines a pigmented hardener with epoxy resins and recycled aggregates to fill joint widths from 1/16" to 1/2" (1.6-13mm) and won't shrink or sag. With its fast cure time, CEG-IG provides a quick return to service.

CEG-IG is compatible with both CEG-Lite Part A and CEG Part A epoxy grout color pigment and hardener products.

#### **Key Features**

- Color consistent, stain and chemical resistant
- Easy to spread and clean-up
- $\circ~$  No sagging in vertical joints
- $\circ~$  Contains recycled LEED contributing materials
- Exceeds ANSI A118.3
- Can be used as a mortar

#### Uses

- $\circ~$  CEG-IG can be used as both a grout and as a setting mortar
- Use with virtually any tile: vitreous, semi-vitreous or impervious tile including ceramic, mosaic, quarry, pavers, porcelain, brick, mini-brick and green marble
- $\circ~$  Use to fill joint widths from 1/16" to 1/2" (1.6-13mm)
- $\circ~$  May be used for both floor and wall installations
- Interior and exterior applications. When used as a grout on exterior applications, color variations may occur over time.
- Floors, countertops, backsplashes, tubs and shower areas
- Excellent for use in chemical and food processing plants

such as dairies, breweries, bottling plants, meat processing plants, restaurants, commercial kitchens, fast food restaurants, cafeterias, supermarkets and textile and metal finishing plants where the use of acids, alkalis, solvents, strong detergents, cleaners and other chemicals would normally cause erosion and damage to the setting beds and grout joints. See chemical resistance chart for details.

 Hospitals, clinics, pharmaceutical factories, laboratories and similar installations where clinical sanitation is maintained by harsh cleaning methods. See chemical resistance chart for details.

#### Suitable Substrates (when used as a bonding mortar)

- Plumb and true masonry, concrete, cured Portland cement mortar beds
- Bond directly to brick, ceramic tiles, cementitious backer board, steel, glass and fiberglass.

#### **Composition of Product**

2-part formula, with part A pigmented liquid epoxy hardener and part B liquid epoxy resins combined with recycled aggregates.

#### Benefits of Product in the Installation

- 2-part 100% Solids Epoxy
- 2-part 100% Soli
  No shrinkage
- Easy to spread and water clean-up
- No additive needed for critical grouting application
- Contains recycled materials that may contribute to LEED credits
- Exceeds ANSI 118.3 (100% Epoxy) and ANSI 118.5 (Furan) performance requirements
- Excellent resistance to industrial cleaners.
- Excellent solvent resistance.
- Excellent resistance to inorganic and organic acids.
- $\circ~$  Early return to service. As early as seven hour cure time at 75°F (23°C).

#### Limitations to the Product

- Should not be used in an environment with temperature requirements above 360°F (182°C) for any extended period of time.
- When used to install tile in an area that will be continually wet (e.g. swimming pools, gang showers, etc.), it is recommended that the complete installation be cured 14 days prior to constant submersion in water.
- Epoxy, epoxy residue, or wash water will discolor painted or anodized surfaces upon contact. Protect these surfaces from exposure.
- Should be tested for possible staining or slight color changes when used with porous, absorptive, textured tile and stone units such as rough textured ceramic tile, natural stone or marble.
- All epoxies are temperature sensitive. Epoxies are easiest to apply when temperatures are between 70°F and 85°F (21°C and 29°C). Lower temperatures will cause the epoxy to become stiff and more difficult to work and will extend initial set. Higher temperatures will cause the epoxy to become more fluid and will accelerate the set.
- With all epoxies, a crystallization effect can occur when the liquid gets below 45°F (7°C) and/or has experienced multiple cycles of high and low temperature changes. If material is hard, place the sealed container (with the lid on), in warm tap water at approximately 120°F (49°C) for 10 to 20 minutes, and when re-liquified, let the material return to room temperature before mixing.
- Colors may appear slightly different than shown on color samples. When color considerations are critical, a mock-up should be constructed prior to final selection and



application.

- 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. <u>Polyblend® NonSanded</u> <u>Grout</u> may be appropriate for joints smaller than 1/8" or for tile not suited for sanded grout.
- Not for use in movement joints or changes of plane in the tile installation. In these areas us an appropriate caulk or sealant such as <u>Commercial 100% Silicone Caulk</u> or <u>Polyblend® Ceramic Tile Caulk</u>.

#### Packaging

Grout mixture requires two separately-sold parts:

- Part A 1.3 lb (.58 kg) container of pigmented liquid epoxy hardener, available in 40 standard colors
- Part B 27.7 lb (12.6 kg) liquid epoxy resin combined with aggregates

### 4. Technical Data

#### **Applicable Standards**

Detailed installation procedures and use of epoxy mortars may be found in the TCNA Handbook under F-114, F-115, F-116E, F-125, F-128, F-143, F-131, F-132, F-134, F-135, F-200, F-205, TR-712 and TR-713 and in addition, in ANSI A108.6. Exceeds ANSI A118.3 specifications. Conforms to requirements for chemical-resistant, water cleanable tile setting and grouting epoxy found in ANSI A108.6, ANSI A118.3, and ANSI A118.5.

#### Technical Chart ANSI A118.3 Properties

Property	Test Metho	d Requir	rement Typical results
Water clean-ability	ANSI 118.3 S 5.1	ection >80 mi	inutes >80 minutes
Initial Set	ANSI 118.3 S 5.2	>2nrs	6 hrs
Shrinkage	ANSI 118.3 S 5.3	ection <0.25%	6 0.05%
Sag in Vertical Joint	ANSI 118.3 S 5.4	NO CHA	
Shear bond to quarry tile	/ ANSI 118.3 S 5.5	ection >1000	psi >1300 psi
Compressive Strength	ANSI 118.3 S 5.6	>3500	
Tensile Strength		ection >1000	
Thermal shock resistance	ANSI 118.3 S 5.8	ection >500 p	osi >1300 psi
ANSI A118.5 Prope	erties		
Property			ntTypical results
Compressive Strengt			9500 psi
Tensile Strength	ASTM C307		3200 psi
Absorption	ASTM C413	<1%	0%
Modulus of Rupture	ASTM C580	600 psi	7000 psi
Initial Set	ASTM C308	>5 hours	6 hours
Final Set	ASTM C308	<7 days	pass
Working Time	ASTM C308		40 minutes
Bond Strength	ASTM C321	>150 psi	pass
Linear Shrinkage	ASTM C531	< 1%	0.05%

#### **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

#### Instructions General Surface Prep USE CHEMICAL-RESISTANT GLOVES, such as nitrile, when handling product.

All surfaces on which tiles are to be set must be dry, structurally sound, and not subject to temperatures below 65° F (18° C) or above 95° F (35° C). Surfaces must be dry and free of all grease, oil, dirt, dust, curing compounds, sealers, coating, efflorescence, old adhesive residues, gypsum-based underlayments and any other foreign matter. Other substrates like existing ceramic tile, steel, glass and fiberglass must all be free of all oils, coatings, dust and moisture. In addition, these surfaces should be roughened to ensure a good bond. It is also absolutely essential that the existing surface be structurally sound and firmly attached to the supporting structure.

For Construction/Expansion/Control/Isolation Joints, follow installation procedures as outlined in TCNA EJ-171.

NOTE: On porous or rough tiles, pre-grout sealing with a grout release such as <u>Aqua Mix Grout Release</u> or <u>TileLab SurfaceGuard</u> may be necessary to prevent staining. Try a test patch to be sure. Epoxy and epoxy wash residue should not be allowed to dry on painted, anodized and thin metal-plated surfaces. Clean uncured materials from these surfaces immediately with soap and water.

#### **Bonding To Concrete Surfaces**

In some applications, CEG-IG<sup>™</sup> may be used as a mortar when bonding to cement surfaces. Cleaning may be accomplished via mechanical abrasion, scraping or chipping. Smooth, steel- troweled concrete floors must be roughened to ensure a superior bond. Dry porous concrete should not be pre-dampened with water before applying CEG-IG. Instead, skimcoat a thin layer of CEG-IG first, then apply sufficient CEG-IG with the appropriate notch trowel.

#### **Mixing Procedures**

Open Part B and stir thoroughly to eliminate the effects of settling due to shipping. Add the entire contents of two parts pigment Part A to Part B and stir to produce a homogeneous consistency, eliminating any color streaks from appearing in the mixed unit. Do not mix partial units. Make sure to scrape bottom and sides of container during mixing.

NOTE: **TWO PART A UNITS OF COLOR ARE REQUIRED FOR ONE PART B RESIN COMPONENT. GROUT WILL NOT HARDEN OR COME TO THE DESIRED COLOR IF INCORRECTLY MIXED**. For best results, use a power mixer at 300 RPM or less to avoid entrapping air bubbles which cause pinholes in the grout. Do not overmix as this will cause the epoxy to flash set.

#### Application of Product Application for Use as a Grout

Remove all grout from container and spread out in piles over the surface to be grouted as soon as mixing is completed. This will extend working time. When grouting walls, place epoxy on a mortarboard placed on the floor. Grout vertical surfaces as soon as possible after mixing. Apply grout using a hard epoxy rubber float, filling all joints full and even with surface of tile.

It is important to achieve 100% fill coverage with no voids in the joints to prevent pinholes and slumping of the epoxy grout. Remove excess epoxy by holding the grout float at a 90° angle and pulling the float diagonally across the grout joints using it like a squeegee.



Removing as much epoxy as possible will make final cleaning easier. Avoid gouging joints. Do not allow epoxy to set on face of tile. Apply liberal amounts of clean, warm water to the grouted area. Adding a few drops (maximum) of dishwashing liquid to the water will aid in cleanup. Using a grout sponge and as little pressure as possible, work in a circular motion across tiles to lossen epoxy film and to finish the joints smoothly. Change rinse water (and sponge if buildup occurs) frequently to aid in cleanup and minimize epoxy residue left behind. As a final step, clean film from tile by dragging a damp, clean microfiber towel flatly across the tiles. Pot life will vary depending on ambient conditions; pot life is approximately 60 minutes at 75° F (24° C).

#### Application for Use as a Mortar

Spread mixed epoxy with flat side of trowel onto substrate. Then, reapply additional mortar to a depth sufficient to be notched with a suitable trowel. Troweling should leave enough mortar to give minimum of 80% contact with back of the tile and a leave a mortar bed of about 3/32" (2.4 mm) for ceramic mosaic tile to 1/4" (6.3 mm) for quarry tile. Temperature affects set time; therefore, it is advisable to occasionally remove a tile to be sure mortar has not skinned over and sufficient transfer is being made. Approximate tack time is 30 minutes at 75°F (24°C). Pot life is approximately 60 minutes at 75°F (24°C). Should epoxy mortar get on surface of tile, it will be necessary to remove it with a damp sponge before it cures. Epoxy residue should not be allowed to cure on unintended surfaces (e.g. painted, wall papered, carpeted, wood, concrete, masonry and stucco surfaces).

#### **Curing of Product**

Available for light traffic after 7 hours with ambient temperature at 70° with 50% relative humidity; narrower grout joints and job site conditions may increase cure time. Because propane gas heaters will yellow epoxy, refrain from using such heaters or properly vent all exhaust during the curing process. Protect from harsh industrial cleaners for seven days and from aggressive chemicals for 14 days. Initial maintenance for the first seven days should be using clean water only. All grouting and cleaning should be completed within 80 minutes. If a grout haze is present on the tile, depending on the severity, use <u>Aqua Mix NanoScrub</u> alone or in conjunction with <u>Aqua</u> <u>Mix Sealer & Coating Remover</u> or <u>Aqua Mix Non-Cement Grout Haze</u> <u>Remover</u>. Mechanical scrubbing with the above cleaners can be used when necessary.

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.

#### **Cleaning of Equipment**

Clean tools and hands with water before material dries.

#### Storage

#### **Health Precautions**

May irritate eyes. May irritate skin Do not swallow. Do not get in eyes. Do not get on skin or clothing. Do not breath fumes. KEEP OUT OF REACH OF CHILDREN. Wear Safety glasses and chemical resistant gloves. First Aid Treatment: If swallowed, call a poison control center or doctor immediately. Do not induce vomiting. If in eyes, rinse with water 15 minutes. If on skin, rinse well with water.

#### **Conformance to Building Codes**

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

#### 6. Availability & Cost

Item Code	Size	Grout Color	Package	
Part A		1		
LWCEG09A-EA	1.3 lbs	#9 Natural Gray	Tub	
LWCEG10A-EA	1.3 lbs	#10 Antique White	Tub	
LWCEG11A-EA	1.3 lbs	#11 Snow White	Tub	
LWCEG19A-EA	1.3 lbs	#19 Pewter	Tub	
LWCEG52A-EA	1.3 lbs	#52 Tobacco Brown	Tub	
LWCEG59A-EA	1.3 lbs	#59 Saddle Brown	Tub	
LWCEG60A-EA	1.3 lbs	#60 Charcoal	Tub	
LWCEG95A-EA	1.3 lbs	#95 Sable Brown	Tub	
LWCEG105A-EA	1.3 lbs	#105 Earth	Tub	
LWCEG115A-EA	1.3 lbs	#115 Platinum	Tub	
LWCEG122A-EA	1.3 lbs	#122 Linen	Tub	
LWCEG135A-EA	1.3 lbs	#135 Mushroom	Tub	
LWCEG145A-EA	1.3 lbs	#145 Light Smoke	Tub	
LWCEG156A-EA	1.3 lbs	#156 Fawn	Tub	
LWCEG165A-EA	1.3 lbs	#165 Delorean Gray	Tub	
LWCEG172A-EA	1.3 lbs	#172 Urban Putty	Tub	
LWCEG180A-EA	1.3 lbs	#180 Sandstone	Tub	
LWCEG183A-EA	1.3 lbs	#183 Chateau	Tub	
LWCEG185A-EA	1.3 lbs	#185 New Taupe	Tub	
LWCEG186A-EA	1.3 lbs	#186 Khaki	Tub	
LWCEG333A-EA	1.3 lbs	#333 Alabaster	Tub	
LWCEG335A-EA	1.3 lbs	#335 Winter Gray Tub		
LWCEG370A-EA	1.3 lbs	#370 Dove Gray	Tub	
LWCEG380A-EA	1.3 lbs	#380 Haystack	Tub	
		1	1	



LWCEG381A-EA	1.3 lbs	#381 Bright White	Tub
LWCEG382A-EA	1.3 lbs	#382 Bone	Tub
LWCEG386A-EA	1.3 lbs	#386 Oyster Gray	Tub
LWCEG401A-EA	1.3 lbs	#540 Truffle	Tub
LWCEG541A-EA	1.3 lbs	#541 Walnut	Tub
LWCEG542A-EA	1.3 lbs	#542 Graystone	Tub
LWCEG543A-EA	1.3 lbs	#543 Driftwood	Tub
LWCEG544A-EA	1.3 lbs	#544 Rolling Fog	Tub
LWCEG545A-EA	1.3 lbs	#545 Bleached Wood	Tub
LWCEG546A-EA	1.3 lbs	#546 Cape Gray	Tub
LWCEG640A-EA	1.3 lbs	#640 Arctic White	Tub
LWCEG641A-EA	1.3 lbs	#641 Cool White	Tub
LWCEG642A-EA	1.3 lbs	#642 Ash	Tub
LWCEG643A-EA	1.3 lbs	#643 Warm Gray	Tub
LWCEG644A-EA	1.3 lbs	#644 Shadow	Tub
LWCEG645A-EA	1.3 lbs	#645 Steel Blue	Tub
LWCEG646A-EA	1.3 lbs	#646 Coffee Bean	Tub
LWCEG647A-EA	1.3 lbs	#647 Brown Velvet	Tub
Part B			
CEGIGB2	27.7 lbs	n/a	Pail

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.

## 7. Product Warranty

Custom® Building Products warrants to the original consumer purchaser that its product shall be free from defects in material and workmanship under normal and proper usage for a period of one year following the date of original purchase. Custom's® sole liability under this warranty shall be limited to the replacement of the product. Some states, countries or territories do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty will not extend to any product which has been modified in any way or which has not been used in accordance with Custom's® printed instructions. Custom® makes no other warranties either expressed or implied. This warranty gives you specific legal rights, and you may have other rights that vary from state to state or from one country/territory to another. CEG-IG<sup>™</sup> is also eligible for Custom's® Lifetime Warranty. For details and complete warranty information, visit /reference-library/warranties.aspx

## 8. Product Maintenance

For routine cleaning, use <u>Aqua Mix Concentrated Stone & Tile</u> <u>Cleaner</u> or degreasing cleaners like <u>Aqua Mix Heavy Duty Tile &</u> <u>Grout Cleaner</u> or <u>Aqua Mix 1+2 Deep Clean</u>.

## 9. Technical Services Information

For technical assistance, contact Custom® Building Products.

## 10. Filing System

Additional product information is available from the manufacturer upon request.



#### **Coverage Chart**

#### Per unit of CEG-IG (2 Part A + 1 Part B) in ft<sup>2</sup> (m<sup>2</sup>)

Tile Size	Joint Width					
Width x Length x Thickness	1/16" (1.6 mm)	1/8" (3 mm)	3/16" (4.8 mm)	1/4" (6.3 mm)	3/8" (9.5 mm)	1/2" (13 mm)
1" x 1" x 1/4" (2.5 x 2.5 x .64 cm)	103 ft² (9.6 m²)	58 ft² (5.4 m²)	43 ft² (4 m²)	36 ft² (3.3 m²)	29 ft² (2.7 m²)	26 ft² (2.4 m²)
2" x 2" x 1/4" (5 x 5 x .64 cm)	194 ft² (18.1 m²)	103 ft² (9.6 m²)	73 ft² (6.8 m²)	58 ft² (5.4 m²)	43 ft² (4 m²)	36 ft² (3.3 m²)
3" x 3" x 1/4" (7.6 x 7.6 x .64 cm)	286 ft² (26.6 m²)	149 ft² (13.8 m²)	103 ft² (9.6 m²)	80 ft² (7.4 m²)	58 ft² (5.4 m²)	47 ft² (4.4 m²)
4.25" x 4.25" x 1/4" (10.8 x 10.8 x .64 cm)	400 ft² (37.2 m²)	206 ft² (19.1 m²)	141 ft² (13.1 m²)	109 ft² (10.1 m²)	77 ft² (7.1 m²)	61 ft² (5.6 m²)
4" x 8" x 1/2" (10.2 x 20.3 x 1.3 cm)	249 ft² (23.1 m²)	128 ft² (11.9 m²)	87 ft² (8.1 m²)	67 ft² (6.2 m²)	47 ft² (4.4 m²)	36 ft² (3.3 m²)
6" x 6" x 1/4" (15.2 x 15.2 x .64 cm)	560 ft² (52 m²)	286 ft² (26.5 m²)	194 ft² (18.1 m²)	149 ft² (13.8 m²)	103 ft² (9.6 m²)	80 ft² (7.5 m²)
6" x 6" x 1/2" (15.2 x 15.2 x 1.3 cm)	280 ft² (26 m²)	143 ft² (13.3 m²)	97 ft² (9 m²)	74 ft² (6.9 m²)	52 ft² (4.8 m²)	40 ft² (3.7 m²)
8" x 8" x 3/8" (20.3 x 20.3 x 1 cm)	495 ft² (46 m²)	251 ft² (23.3 m²)	170 ft² (15.8 m²)	130 ft² (12.1 m²)	89 ft² (8.3 m²)	69 ft² (6.4 m²)
12" x 12" x 3/8" (30.5 x 30.5 x 1 cm)	739 ft² (68.6 m²)	373 ft² (34.7 m²)	251 ft² (23.4 m²)	191 ft² (17.7 m²)	130 ft² (12 m²)	99 ft² (9.2 m²)
16" x 16" x 3/8" (40.6 x 40.6 x 1 cm)	983 ft² (91.3 m²)	495 ft² (46 m²)	333 ft² (30.9 m²)	251 ft² (23.3 m²)	170 ft² (15.8 m²)	130 ft² (12.1 m²)
18" x 18" x 3/8" (45.7 x 45.7 x 1 cm)	1104 ft² (102.6 m²)	556 ft² (51.7 m²)	373 ft² (34.7 m²)	282 ft² (26.2 m²)	191 ft² (17.7 m²)	145 ft² (13.5 m²)
20" x 20" x 3/8" (50.8 x 50.8 x 1 cm)	1226 ft² (113.9 m²)	617 ft² (57.3 m²)	414 ft² (38.5 m²)	312 ft² (29 m²)	211 ft² (19.6 m²)	160 ft² (14.9 m²)
24" x 24" x 3/8" (61 x 61 x 1 cm)	1470 ft² (136.6 m²)	739 ft² (68.7 m²)	495 ft² (46 m²)	373 ft² (34.7 m²)	251 ft² (23.3 m²)	191 ft² (17.7 m²)
6" x 24" x 3/8" (15.2 x 61 x 1 cm)	593 ft² (55.1 m²)	300 ft² (27.9 m²)	203 ft² (18.8 m²)	154 ft² (14.3 m²)	105 ft² (9.8 m²)	81 ft² (7.5 m²)
12" x 24" x 3/8" (30.5 x 61 x 1 cm)	983 ft² (91.3 m²)	495 ft² (46 m²)	333 ft² (30.9 m²)	251 ft² (23.4 m²)	170 ft² (15.8 m²)	130 ft² (12 m²)
6" x 36" x 3/8" (15.2 x 91.4 x 1 cm)	634 ft² (58.9 m²)	321 ft² (29.8 m²)	217 ft² (20.2 m²)	164 ft² (15.2 m²)	112 ft² (10.4 m²)	86 ft² (8 m²)
9 x 36" x 3/8" (22.9 x 91.4 x 1 cm)	885 ft² (82.2 m²)	446 ft² (41.4 m²)	300 ft² (27.9 m²)	227 ft² (21.1 m²)	154 ft² (14.3 m²)	117 ft² (10.9 m²)
12" x 48" x 3/8" (30.5 x 122 x 1 cm)	1178 ft² (109.4 m²)	593 ft² (55.1 m²)	398 ft² (37 m²)	300 ft² (27.9 m²)	203 ft² (18.9 m²)	154 ft² (14.3 m²)

Chart for estimating purposes. Coverage may vary based on installation practices and jobsite conditions. For more tile and joint sizes, use the <u>Material Calculator</u> at CustomBuildingProducts.com or contact CUSTOM Technical Services at <u>800-282-8786</u>.

