

T1-60™ Economical Tile Adhesive

1 Product Name

T1-60™ Economical Tile Adhesive

2 Manufacturer

Custom Building Products
 Technical Services 10400 Pioneer Boulevard, Unit 3
 Santa Fe Springs, CA 90670
 Customer Support: 800-272-8786
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3 Product Description

Offers economical and durable bonds for most wall, floor and countertop installations of ceramic tile. Offers superior adhesion and easy clean-up. Meets ANSI A136.1 Type I requirements for organic adhesives.

Recommended for tile up to 8" (20 cm) on any one side. Can be used with wall or countertop tile up to 15" (38 cm) but dry time significantly increases. For any tile with one or more sides greater than 15" (38 cm) CUSTOM recommends using a polymer modified thinset mortar for setting large format tile. Call Technical Services for more information at 800-282-8786.

Key Features

- For basic floor and wall tile installations
- Easy to clean-up
- Ideal for small format tile

Suitable Tile Types

Vitreous, semi-vitreous or non-vitreous tile: ceramic impervious porcelain, mosaic, quarry tile, slate and natural stone

Suitable Substrates

- Concrete, mortar beds, masonry, Portland cement plaster
- [WonderBoard® Lite](#), 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

Proprietary blend of acrylic copolymers, calcium carbonate and inorganic materials.



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, use a 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.
- 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

3.5 gal (13.25 L) 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) TCNA Handbook for Ceramic Tile Installation, TCNA Method EJ171



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Technical Chart

Property	Test Method	Requirement	Typical Results
Open Time			50 Minutes
Adjustment Time			40 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	Pass
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

Environmental Consideration

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

- Up to 2 points towards MR Credit 5, Regional Materials
- Complies with all Federal, SCAQMD, and CARB standards for VOC's

5 Instructions

General Surface Prep

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

Surfaces must be structurally sound, clean, dry and free from grease, oil, dirt, curing compounds, sealers, adhesives or any other contaminant that would prevent a good bond. Glossy or painted surfaces must be sanded, stripped and cleaned of waxes, dirt or any 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 broomed or brushed 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 roughened or scarified. Sheet vinyl must be well-bonded and stripped of old finish. Roughen the surface by sanding or scarifying, rinse and allow to dry. Expansion joints should never be bridged with setting material. Do not sand flooring materials containing asbestos. Ambient temperature, surfaces and materials should be maintained at a temperature above 50° F (10° C) or below 100° F (38° C) for 72 hours.

Bonding to Concrete Surfaces

Concrete or plaster must be fully cured and 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 broomed or brushed finish to enhance the bond. Smooth concrete slabs must be mechanically abraded to ensure a good bond.

For residential service rating, see TCNA F1160.

Bonding to Plywood Surfaces

Plywood floors must be structurally sound and must meet all ANSI A108.01 Part 3.4 requirements. See TCNA F142. For questions about proper subfloor installation, call Custom technical services.

Bonding to Backerboards

As an alternative to an additional layer of plywood, WonderBoard® Backerboard may be installed over non-deflecting plywood subfloors. Refer to TCNA F144 and W244.

Bonding to Existing Surfacing Material

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 bond strength, 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

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 and F125A for placement of perimeter and field movement joints.

Mixing Procedures

Product is Ready-to-Use. Reseal remaining product in original container for future use.



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Application of Product

INSTALLATION TO CONFORM TO ANSI A108.4. Use a properly-sized notch trowel to ensure proper coverage under tiles. Using flat side of trowel, apply skim coat of adhesive with appropriate size trowel. Apply additional adhesive with notch side of trowel held at a 45° angle to the surface, combing in one direction. Press tile firmly into place in a perpendicular motion across ridges, moving back and forth.

Perpendicular pressing flattens ridges and closes valleys allowing maximum coverage. With some tile, back-buttering is advisable. Adjust tile promptly and beat in with a beating block and rubber mallet. Periodically pull up a tile and check the back to ensure complete coverage with the adhesive. Do not apply more adhesive than can be covered with tile in 30 minutes. If adhesive starts to skin over (not sticky), retrowel before setting tile. Do not apply more adhesive than is necessary to achieve a sufficient bond.

Curing of Product

Minimum dry time for 8" x 8" (20.3 cm x 20.3 cm) tile is 24-72 hours before applying grout. Dry time will be extended if using larger tiles, bonding to non-porous surfaces, 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.

Storage

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

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.

6 Availability & Cost

Item Code	Size	Color	Package
T1603	3 1/2 gal. (13.25 L)	White	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.

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

Fusion Pro® Single Component® Grout

CEG-Lite™ 100% Solids Commercial Epoxy Grout

Prism® Ultimate Performance Grout

CEG-IG 100% Solids Industrial Grade Epoxy Grout

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Coverage

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" 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 sizes, use the material calculator at CustomBuildingProducts.com or contact CUSTOM Technical Services at 800-282-8786.



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