



B-4050 MULTI-PURPOSE CERAMIC TILE ADHESIVE

Description

ProSpec® B-4050 is a white acrylic based adhesive developed for the interior installation of ceramic tile on walls, floors and countertops.

Features

- Ready to use - no mixing required
- Good water resistance
- Excellent slip resistance
- Quick initial set
- Low odor
- Non-flammable
- Excellent workability
- White color, wet and dry
- Creamy consistency
- Interior only
- Long open time
- Freeze thaw stable
- Exceeds ANSI A136.1 Type I & II
- Contains Micro Defense® Technology for mold and mildew resistance

Uses

For installation of:

- Ceramic Tile
- Porcelain Tile
- Quarry Tile
- Flat Backed Natural Stone
- Cork Underlayment

For installation over:

- Countertops
- Properly cured plaster (walls only)
- Properly cured and finished concrete
- Wherever organic adhesives are specified to install ceramic tile
- Tile backerboard
- Gypsum dry wall board (walls only)
- Exterior grade plywood (interior floors only)
- For other substrates, contact the ProSpec Technical Department

NOTE: It is the user's responsibility to determine the suitability of all tile and substrates prior to installation.

Technical Data

Typical Values	ANSI A136.1
Shear Strength Wet "Type I"	
>95 psi (0.7 MPa)	50 psi (0.3 MPa)
Shear Strength Wet "Type II"	
99 psi (0.7 MPa)	20 psi (0.1 MPa)
Mold Resistance	
No growth	Must not support growth
Stain Resistance	
Pass	<70% penetration

Typical Values	ANSI A136.1
Color	
White	n/a
Impact	
Pass	
Heat Resistance	
Pass	

B-4050 MULTI-PURPOSE CERAMIC TILE ADHESIVE

Preparation

The substrate must be dry and clean. It must be free from loose particles, wax, sealers, curing compounds, grease, efflorescence, old adhesive, paint and all other foreign materials. Only apply to surfaces that are frost-free and will be above 70° F (21° C) for 48 hours. Surfaces must be structurally sound, free of movement and dimensionally stable. These surfaces must be within the tolerances of trueness and plumbness. B-4050 is only to be applied in a thin layer and is not designed for leveling.

New concrete must be fully cured and have a broom finish. Smooth troweled surfaces should be etched or scarified to insure bond. Inspect surfaces that the tile will be applied to and accessories to be used. Notify the architect or other designated authority in writing of any defects or conditions that prevent a satisfactory tile installation (see ANSI A108.4).

Interior wood or tile backerboard (Plywood - residential floors only):

- Plywood double wood floor required
- Maximum joist spacing: 16" (406 mm) on center
- Subfloor: $19/32$ " exterior grade plywood or 1" (25 mm) nominal boards
- Underlayment: $19/32$ " exterior grade plywood or tile backerboard with $1/8$ " (3 mm) gaps between sheets. These gaps will be filled with the ProSpec B-4050 Multi-Purpose Adhesive when it is applied to set the tile. Plywood must be a Group I CC plugged or better.
- Maximum variation in surface shall not exceed $1/8$ " (3 mm) in 10' (3 m) from required plane.

- Use 6 D ring shank nails in overlay at 6" (152 mm) on center along the sheet edge and at 8" (203 mm) on centers throughout the sheet.
- Overlap all joints of the subfloor.
- Damp mop floor to remove any dust or sawdust. Allow to dry before applying ProSpec B-4050 Multi-Purpose Adhesive.

Shower Walls Using Tile Backerboard

When using a Tile Backerboard on shower walls, attach the Backerboard to the studs using non-corrosive fasteners. The Backerboard **must** be stopped a minimum of $1/4$ " (6 mm) from the top of the mud bed. A flexible sealant must then be placed between the wall and floor to prevent deterioration of the ProSpec B-4050. Do not use ProSpec B-4050 on the shower floor.

Expansion joints are necessary for all installations. All installations must conform to the current specification ANSI A108.5 and the TCA Handbook for ceramic tile installations.

Expansion joints shall be located (refer to the TCA Handbook for Ceramic Tile Installation):

- Where tile work abuts restraining surfaces, such as perimeter walls, curbs, columns, pipes and the like.
- Directly over joints in structural floor and over construction or cold joints.
- Directly over expansion or control joints.
- Where specified in the architectural drawing.

NOTE: It is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

B-4050 MULTI-PURPOSE CERAMIC TILE ADHESIVE

Application

All installations must conform to the current specifications in ANSI A108.4 and the TCA Handbook for Ceramic Tile Installations.

Tile, adhesive and substrate must be maintained at least 70° F (21° C) for 24 hours before and after installation.

1. Select the proper trowel size:

The proper trowel is one that will insure a minimum of 1/32" (1 mm) layer of adhesive between the tile and substrate after the tile has been properly set. The proper trowel should also result in a minimum of 80% coverage for dry areas and 95% in damp areas (shower walls).

2. For walls in damp areas and on porous, water sensitive surfaces such as gypsum, apply ProSpec® B-4050 as a skim coat using the flat side of the trowel. Allow to dry (2 to 4 hours) then apply more adhesive over the skim coat using the notched side of the proper trowel. Cut away 1/4" of the wallboard above the tub or mud bed in shower floor. Caulk this area and around pipes and other openings with a sealant. Do not use B-4050 to set grab bars or fixtures.

3. Apply ProSpec B-4050 with the proper trowel. Adhesives are flexible and thus are not designed to be applied in thick layers. Trowel no more than can have tile applied in 35 to 50 minutes or before the adhesive has formed a skin. Once skinned, scrape off the adhesive and re-trowel with fresh material. Skinning time will vary with temperature, humidity and substrate.

4. Place the tile into the wet adhesive and use a wood or rubber beating block to set. Occasionally remove a tile to insure proper coverage.

5. Tile may be grouted as soon as the adhesive is set to where the tile cannot be moved, typically 24 to 48 hours. Temperature, humidity, substrate, tile and adhesive thickness will affect the drying time.

6. Grout with ProSpec Unsanded Tile Grout, ProSpec Sanded Tile Grout or ProSpec B-7000 Epoxy Grout.

7. ProSpec B-4050 can be cleaned from the tools and tile using soapy water before it has dried. Dried B-4050 can be removed using mineral spirits.

VOC Content

55.5 g/l

Best Performance

- ProSpec® B-4050 is not recommended for use in installing button or lugged back ceramic tile on floors. Use ProSpec thin set mortars or ProSpec epoxy.
- B-4050 is not recommended for use on concrete slabs, on grade, where hydrostatic pressure exists.
- Organic mastic adhesives are not recommended in areas subject to continual moisture exposure.
- B-4050 is not recommended for use in continually wet areas like shower floors or exterior applications.
- Test marble with B-4050 prior to use - staining may occur.
- Maximum tile size of 12" x 12"
- B-4050 is not recommended over non-absorptive surfaces.

Coverage

Coverage per 1 Gallon:

3/16" x 5/32" V notch trowel covers approximately 55-70 ft² (5-7 m²)

1/4" x 1/4" square notch trowel covers approximately 25-40 ft² (2-4 m²)

These coverages are approximations and may vary with type and condition of trowel and substrate.



B-4050 MULTI-PURPOSE CERAMIC TILE ADHESIVE

Packaging

1 Gallon (3.8 L) and 3.5 Gallons (13.2 L)

Shelf Life

One year from the date of manufacture in properly stored and unopened containers. Do not store in direct sunlight, skinning may occur in the container.

Caution

KEEP OUT OF REACH OF CHILDREN AND ANIMALS. Eye and skin irritant. Contains Acrylic Resin Emulsion, Ethylene Glycol and Petroleum Distillates. Avoid

contact with eyes and skin. In case of contact, flush eyes for 15 minutes and consult a physician. Wash off skin with soap and water. Avoid prolonged contact

with skin. If swallowed call a physician immediately. Do not induce vomiting. Avoid exposure to vapors. Move to fresh air.

First Aid

ProSpec® B-4050 Multi-Purpose Adhesive is a heavy bodied water-based product. Inhalation may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system or may cause or may aggravate certain lung diseases or conditions.

Eyes:

Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Get medical attention if irritation occurs.

Skin:

Wash skin with water and soap or a mild detergent. Seek medical treatment if irritation or inflammation develops.

Inhalation:

Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside.

Ingestion:

Do not induce vomiting. Call a physician immediately.

For additional information, call Bonsal American at 704-525-1621 or CHEMTREC at 800-424-9300 or 703-527-3887 outside of the USA.

Refer to Material Safety Data Sheet (MSDS) for further information.

LIMITED 1 YEAR WARRANTY FROM DATE OF MANUFACTURE: Bonsal American warrants that this product and the materials used therein meet or exceed the applicable standards listed and enforced at the time of manufacture. Bonsal American will replace any product or part which proves defective due to quality of ingredients used or due to the manufacturing process itself. This Warranty shall apply only if the product is used in strict accordance with applicable specifications and instructions provided by Bonsal American for its use, and Bonsal American shall not be liable otherwise. Replacement of any defective product, or, at Bonsal American's option, refund of the purchase of any defective product shall be the buyer's sole remedy under this Warranty, and Bonsal American shall in no event be liable for any damages in excess of the purchase price of the defective product. BONSAL AMERICAN SHALL IN NO EVENT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES INCLUDING LOSS OF PROFITS OF ANY KIND. Product demonstrations are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. This Warranty constitutes the sole warranty given by Bonsal American in connection with this product. No modification of this Warranty in favor of any buyer shall be valid unless given in writing and signed by an officer of Bonsal American. Bonsal American has authorized no person to make or give any other warranties or representation, oral or written on its behalf. IN PARTICULAR, THERE ARE NO IMPLIED WARRANTIES, INCLUDING WITHOUT EXCEPTION WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.