

CONNEXION™ Grout

Technical Data Sheet

MANUFACTURED BY



Features & Benefits

- Consistent Color
- Stain Resistant
- No Sealing Required
- Indoor/Outdoor
- Superior Water Resistance
- Antimicrobial

PRODUCT DESCRIPTION

Connexion™ Grout is a premium, pre-mixed water-based grout offering the ultimate in color accuracy, water resistance, and stain and crack protection. This grout is designed to pair with locking tile systems and offers the highest performance resin system of any pre-mixed grout available. This quick-setting formulation installs up to 50% faster than traditional grouts and never needs to be sealed. Connexion™ Grout is approved for intermittent water exposure after only 3 days of cure (review technical data sheet for more details). Unlike other grouts that contain loose color pigments which can cause staining or be washed away during the installation process, Connexion™ Grout contains quartz aggregate and is color coated to ensure perfect consistency every time. Connexion™ Grout contains antimicrobial protection which helps protect against the growth of bacteria, mold and mildew on the surface of the dried grout and enables it to offer resistance to stains caused by mold.

ENVIRONMENTAL

Connexion™ Grout is engineered to appeal to today's green conscious marketplace seeking to help construction projects obtain U.S. Green Building Council LEED® certification. Its unique combination of features and benefits produces one-of-a-kind specification potential for architects and designers. See tile manufacturer's instructions regarding compatibility and installation details.

PHYSICAL PROPERTIES

Description	Results
Water Cleanability (per ANSI 118.3)	Pass
Density	13.8 lbs/gal
Vertical Joint Sag (per ANSI 118.3)	Pass
Installation Temperature Range	40°F - 100°F (4°C - 38°C)
Shelf Life	2 years (in original unopened container)
Compressive Strength	>3,500 psi*
Tensile Strength	510 psi
VOC Content	35 g/L (as calculated by SCAQMD Rule #1168)
Recycled Content	8% pre-consumer recycled glass

*Test results were performed in an actual grout joint.

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WORKING PROPERTIES

Description	Time
Working Time	3 hours
Tack-Free Time	8 hours
Ready for Light Foot Traffic	24 hours
Ready for Heavy Foot Traffic	3 days
Stain Resistant (Food, Beverages, etc.)	3 days
Cure Time Before Intermittent Water Exposure (>70°F/21°C and <50% RH)	3 days

PRODUCT BENEFITS

- Designed for locking tile systems
- Does not require grout sealer
- Can be exposed to intermittent wet areas in just 3 days
- Premixed, for easy installation
- Water clean-up
- Resistant to stains and chemicals
- No pigment*
- No additional admixtures
- No shading or color streaking
- UV stable
- Re-sealable container
- Non-sag formula ideal for vertical surfaces

* Arctic White contains some loose pigment

DIRECTIONS FOR USE

Read and understand this technical data sheet and associated material safety data sheet completely before beginning. Always use protective clothing (gloves and eye protection) when working with grout. When installing tile, follow applicable ANSI, TCNA and NTCA installation standards.

INSTALLATION

PRIOR TO GROUTING FULL INSTALLATION, APPLY TO A TEST AREA TO BECOME FAMILIAR WITH APPLICATION AND TO ENSURE PRODUCT SATISFACTION.

PRIOR TO APPLYING GROUT

1. Walk over the tile and make sure all tiles are completely locked together. Check for gaps and

CHEMICAL RESISTANCE PROPERTIES (PER ASTM C267)

Chemical Resistance	Typically Found In	Results
Acetic Acid (3%)	Vinegar	Pass
Ammonium Chloride	Shampoo	Pass
Citric Acid Solution (100 g/L)	Household Cleaners	Pass
Lactic Acid	Milk	Pass
Phosphoric Acid (10%)	Household Cleaners	Pass
Sulfamic Acid (10%)	Cleaning Agents	Pass
Sodium Hypochlorite (1:1) 3%	Bleach, Household Chemicals, Disinfectants	Pass
Hydrochloric Acid (10%)	Muriatic Acid	Pass

Results shown are typical and reflect test procedures used by the Tile Council of North America (TCNA).

uniformity of gap joints. If using a traditional tile installation method, ensure tile is firmly set and mortar is completely dry.

NOTE: When waterproofing, ensure waterproofing products are installed over the mud bed (not under). Wait at least 24 hours after setting tile before grouting with Connexion™ Grout. Always follow tile manufacturer's instructions before grouting.

2. Remove all spacers, water, debris and adhesive from tile joints. Make sure the tile and the grout joints are clean and free of any contaminants that may inhibit the bond. For best results, the surface of tile should be at room temperature (70°F/21°C to 75°F/24°C). Grout materials are affected by temperature and humidity variations. Cool temperatures and/or high humidity will slow cure time.
3. To facilitate cleaning it is helpful to pre-seal porous or matte-finished surfaces (including unglazed porcelain, matte-finished glazed tile, and matte glass) with a water-based sealer (natural stone) or grout release (tile), including sides of natural stone. The textured surfaces of these tiles allow the grout to settle into the textured surfaces during application making it more difficult to easily clean. For glass, metal, marble, stone and other soft tiles, prepare a mock-up and test the grout to ensure compatibility and that the grout may be installed without scratching the tile.

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4. Prior to re-grouting existing grout joints, completely remove all of the old grout and any surface contaminants. Rinse any residual material out of grout joints, then allow joints to completely dry before re-grouting.

APPLICATION

1. Lightly dampen a sponge with clean water and apply to the top of the tile in a 2 to 10 square foot area (an arm's length). Wet tile enough to dampen while ensuring water is not pooling in grout joints.

INSTALLATION TIP: Add 1 tablespoon of Dawn® dishwashing liquid per gallon of water and use to pre-wet tile to act as a grout release on matte finished tile surfaces.

NOTE: Do not use Dawn® dishwashing liquid in water used to clean up grout after application.

WHILE GROUTING

2. Grout small areas at a time. Typically grout a 2 to 10 square foot area (an arm's length) or an area you can comfortably grout in **2 to 3 minutes**. It is more a matter of time spent spreading grout than distance covered. Spreading too far without cleaning within two to three minutes will allow the grout to begin to cure on the surface of the tile and create haze issues. Work grout back and forth along the joint holding the float at a 45 degree angle to the face of the tile ensuring grout joints are completely packed. Ensure you have enough product on the surface of the tile while grouting to ensure you can easily move it around and pack the joints. Then hold the float at a 90 degree angle to the face of the tile and moving the trowel at a 45 degree angle to the line of the grout joint remove the excess grout with the float. This should remove 95% of the grout from the tile surface.

NOTE: For best results, **do not grout a large area** and make sure to clean as you go.



INITIAL CLEAN-UP

We recommend using a sponge with a blue microfiber on one side and two rinse buckets as follows:



1. Double-rinse your sponge before each cleaning by dipping the sponge into the first bucket of water and then the second bucket of water. Squeeze sponge after rinsing in each bucket.
2. Using the yellow side of the sponge, lightly work the sponge in a circular motion to loosen grout residue on the surface of the tile and tool and form the grout joints. Now dip the sponge in the second bucket of water. Using the blue side of the sponge, hold the sponge flat on the surface of the tile and wipe off excess grout residue at a 45 degree angle to the grout joints.
3. Repeat this process **once** and then move on to the next grouting area. Remember not to spread an area larger than you can clean within 2 to 3 minutes.
4. Change the first bucket of rinse water approximately every 50 to 100 square feet or when the second bucket of rinse water no longer appears clean or clear. This avoids re-depositing the clear binder back on the surface of the tile.
5. There is no need to change both buckets of rinse water as you simply move the second bucket into the first bucket position and place the fresh bucket of rinse water in the second bucket position. This saves time and water!

Check your work as you clean. Repair any low spots with additional grout. **DO NOT** over wash grout joints.

INSTALLATION TIP: If working alone, only grout as far as you can reach (arm's length) before cleaning. If working as a team, one person should grout, while the other(s) are cleaning immediately (no more than 2 to 3 minutes) behind the first person.



6. Squeeze as much water out of sponge as possible before placing on tile.

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Use light pressure and keep sponge flat on tile surface.



Do not bend sponge as this pulls grout from the joint.

7. Place sponge flat on tile surface and use very light pressure to ensure a full, flush grout joint.

COVERAGE CHART (SQ. FT.) 9 LB. UNIT CONNEXION™ QUICK-LOCK TILE

TILE SIZE	JOINT WIDTH	
	$\frac{1}{8}"$	$\frac{3}{16}"$
6" x 24" x $\frac{5}{16}"$	119	80
6" x 36" x $\frac{5}{16}"$	127	86
12" x 24" x $\frac{5}{16}"$	197	132
15" x 30" x $\frac{5}{16}"$	244	165

OTHER TILE SIZES

1" x 1" x $\frac{1}{4}"$	16	-
2" x 2" x $\frac{1}{4}"$	32	-
3" x 6" x $\frac{5}{16}"$	53	36
4" x 4" x $\frac{5}{16}"$	53	36
4 $\frac{1}{4}"$ x 4 $\frac{1}{4}"$ x $\frac{5}{16}"$	54	36
4" x 8" x $\frac{1}{2}"$	47	32
6" x 6" x $\frac{1}{2}"$	47	32
8" x 8" x $\frac{3}{8}"$	84	56
12" x 12" x $\frac{3}{8}"$	126	84
13" x 13" x $\frac{3}{8}"$	137	91
16" x 16" x $\frac{3}{8}"$	168	112
18" x 18" x $\frac{3}{8}"$	189	126
24" x 24" x $\frac{3}{8}"$	253	168

Average coverage per container - coverage will vary based on tile size, joint width and depth.

AFTER SPREADING GROUT

If this process is followed consistently, the only grout residue remaining should be easily removed by moving a dry cotton (white and lint free) or microfiber cloth across the surface of the tile in a circular motion two or three times.

After grouting for approximately 1 1/2 hours, inspect the area to see if you notice a film/haze on the surface of the tile. If you notice a film or haze, lightly tap the grout joints with your finger to ensure the joint is firm and the grout does not transfer to your finger tip. When joint is firm, use an alcohol-based clear glass cleaner (for luxury vinyl tile, test first on a separate piece for compatibility) to remove any residual film or haze.

Spray alcohol-based clear glass cleaner on a nylon cleaning pad (such as a microfiber towel or 3M® Doodlebug™) designed for delicate surfaces. Rub the cleaning pad lightly over the haze on the tile being careful not to disturb the grout joints.

Excessive haze may require a direct spray on the surface of the tile, more dwell time or repeated cleaning. Do not flood surface with cleaner. Allow cleaner to rest on the tile/stone surface for at least 60 seconds to ensure sufficient penetration. Use a damp sponge and clean water to rinse and remove film and cleaner. Finish by drying the tile surface with a clean towel or cloth. Remove any remaining film/haze before moving to next area to be grouted. This process eliminates the chances of having to go back for secondary haze removal (next day).

RESIDUAL HAZE

If additional haze removal is necessary Bostik Blaze™ Grout Haze Cleaner may be used. Make sure the grout is sufficiently cured to withstand light finger pressure without losing form. The approximate waiting time before additional cleaning is 3 hours in low humidity/warm temperature (<50% RH and >70°F/21°C) environments and 6 hours in high humidity/cool temperature (>50% RH and <70°F/21°C) environments. Spray Blaze™ on a nylon cleaning pad designed for delicate surfaces. Rub the cleaning pad lightly over the haze on the tile being careful not to disturb the grout joints.

Excessive haze may require direct spray on surface, more dwell time or repeated cleaning. Do not flood surface with cleaner. Allow Blaze™ to rest on the tile/stone surface for at least 60 seconds to ensure sufficient penetration. Use a damp sponge and clean water to remove film and cleaner.

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Finish by drying the tile surface with a clean towel or cloth. If the grout has remained on the floor an extended period of time prior to cleaning or excessive residual product was not removed by Blaze™, contact Floor and Decor.

MAINTENANCE

After grout has completely cured, for daily cleaning, use a neutral pH, water-based cleaner designed to be used for ceramic tile. Periodically or when grout joints appear soiled, a mild abrasive everyday household cleaner such as Soft Scrub® with bleach may be used. Apply Soft Scrub® with bleach directly on the grout joint and allow it to sit for approximately 5 minutes. Then, gently scrub the grout joints with a white scrub pad, rinse and allow to dry. **DO NOT** use undiluted bleach or other harsh chemicals. The use of “No Rinse” and/or acid base cleaners are not recommended.

CURE TIME & PROTECTION

1. Humidity, more than temperature, affects the rate at which Connexion™ Grout cures. The lower the humidity, the faster the cure.
2. Under normal conditions, light foot traffic is acceptable after 24 hours; heavy foot traffic after 72 hours.
3. Let cure at least 72 hours before exposure to food stains.
4. For ANY area that will later receive intermittent water exposure, allow the area to cure 3 days.
5. Wait 7 days before exposing grouted area to household cleaners (see Chemical Resistance Properties Table).
6. Protect outdoor installations (having proper drainage-no standing water) for 3 days by tenting the grouted area (at least one foot above the surface).
7. Protect grout from stains and chemicals while curing.

LIMITATIONS

- Follow manufacturer's instructions for setting materials, waterproofing, anti-fracture membranes, etc., used on the job.
- Minimum recommended grout joint width is 1/16" for floors and walls.
- Maximum recommended grout joint width is 1/2" for floors and 1/4" for walls.

- Do not use with river rock or pebble tiles as joints may exceed 1/2 inches.
- Do not use as a setting mortar.
- Not for use in heavy commercial or industrial applications (i.e., chemical plants, commercial kitchens, commercial showers, shipping/receiving, service areas, dairies, breweries, meat packing houses, etc.), or in areas subjected to harsh or persistent chemicals or enzymatic cleaners, or areas exposed to aggressive cleaning routines such as pressure washing or steam cleaning.
- Not a replacement for a waterproofing membrane. When a waterproofing system is required under ceramic tile or stone, consult Floor and Decor.
- Do not use on slabs with high moisture emission rates. **NOTE:** When waterproofing, ensure waterproofing products are installed over the mud bed (not under).
- Protect grout from stains and chemicals during the cure process.
- Do not grout when tile surface is above 100°F (38°C).
- Do not use vinegar or acid solutions for clean up during installation process.
- Do not use for commercial re-grouting or wet environment re-grouting installations, including showers, steam showers, and outdoor applications.
- Not for use in hot tubs, steam showers, or areas to be submerged in water (such as pools, fountains or water features).
- Use care when grouting glass, metal or polished surfaces to avoid scratching. Test on a small area first.
- Use of a sealer before grouting is always recommended on frosted glass, marble, stone, slate and other natural, porous tiles.
- Use an approved waterproofing membrane on top of mud bed installations before installing tile or stone. Follow manufacturers' recommendations for all waterproofing materials. For liquid applied waterproofing materials, apply to within 1" of any drains to prevent weep hole blockage.
- Use of enzymatic floor cleaners will void all warranties.
- Caulk all corners (floor/wall change of plane) with an appropriate caulk after grout has cured.
- Long-term exposure to any substance increases the potential for staining.

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STORAGE/SHELF LIFE

1. Connexion™ Grout can be used for a period of up to two (2) years from date of manufacturer if stored in original unopened container at temperatures above 32°F (0°C).
2. After opening, Connexion™ Grout can be saved for reuse if properly resealed in original container (always wipe the pail lip clean prior to resealing to ensure proper seal is achieved with the vapor lock lid).
3. Do not freeze.

WARNING

CAUTION IRRITANT. MAY IRRITATE EYES, SKIN AND RESPIRATORY TRACT. Do not get in eyes, on skin or on clothing. Do not breathe fumes. Use with adequate ventilation. Wash thoroughly after handling. Store container in a cool, dry area with lid tightly sealed. Do not reuse container. ⚠ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

KEEP OUT OF REACH OF CHILDREN

FIRST AID TREATMENT

If in eyes or on skin, rinse with water for at least 15 minutes. If swallowed, call a Poison Control Center or doctor immediately. Do not induce vomiting.

SEE SAFETY DATA SHEET

CHEMICAL EMERGENCY: 800-424-9300 (USA), 703-527-3887 (International)

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