Important Notices

These Installation Instructions cover most installation procedures. If you run across a situation that isn’t addressed in this document or requires more detailed assistance please contact the Interface Help Desk. U.S. (877) 733-7403 / Canada (888) 224-2972.

All carpet tiles should be carefully inspected for damage or defects prior to installation. Interface will not be responsible for any cost associated with replacement or repair as a result of damaged or defective tiles being installed when said damage or defects were identifiable prior to installation.

If you encounter any conditions or defects during installation that could jeopardize the installation or affect the installation procedure, you should STOP the installation immediately and call the Interface Help Desk. U.S. (877) 733-7403 / Canada (888) 224-2972.

The carpet tiles are warranted in accordance with Interface's Standard Product Warranty. If you do not have a copy of Interface’s Standard Product Warranty and wish to obtain one, call the Interface Help Desk. U.S. (877) 733-7403 / Canada (888) 224-2972 or visit our website at www.interface.com/warranty.

EXCEPT AS EXPRESSLY PROVIDED IN THE STANDARD PRODUCT WARRANTY, INTERFACE MAKES NO REPRESENTATION OR WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS OF ITS PRODUCTS FOR ANY PARTICULAR PURPOSES, AND HEREBY DISCLAIMS THE SAME.

Without limiting the foregoing, Interface will not be responsible for tears, burns, cuts, pulls or other damage, deterioration, problems or loss caused by abuse, neglect, misuse, improper installation, improper maintenance, flood, use on stairs, or use with athletic equipment, or installations over substrates where hydrostatic pressure or groundwater intrusion exists. Interface is not responsible for subfloor conditions. The installer has the responsibility for obtaining a successful installation. When required below, moisture and pH testing at the installation site are not the responsibility of Interface, and issues related to or arising from excessive moisture and/or pH are specifically excluded from the Interface warranty except as expressly set forth herein and in Interface’s product warranty. The Interface warranty also does not cover any problems or damages arising from or related to the use of adhesives or non-recommended installation techniques or conditions.

WARNING: IN THE EVENT THAT ANY ASBESTOS-CONTAINING MATERIALS OR OTHER HAZARDOUS MATERIALS ARE ENCOUNTERED DURING INSTALLATION, YOU SHOULD STOP THE INSTALLATION IMMEDIATELY AND OBTAIN ASSISTANCE FROM A QUALIFIED REMEDIATION CONSULTANT OR CONTRACTOR PRIOR TO PROCEEDING.

Area Rug Installation Instructions are available at interface.com/install.

Installation Instructions for any product are subject to change. Please check for updates on our website interface.com/install immediately

Pre-Installation Visit

Conditioning prior to installation is important for all products. For this reason, the jobsite must be completely sealed (all exterior windows and doors properly installed) before beginning the installation process or before any floor preparations are performed. The jobsite, along with the floor covering materials and adhesive, must be acclimated to a temperature between 65°F (18.3°C) and 85°F (29.4°C) and air humidity from 45% to 65% for at least 48 hours before, during, and continuously after the final installation. The substrate temperature should be at least 5°F (-15°C) higher than the dew point. These conditions are best achieved with a functioning HVAC system.
Concrete Moisture and Alkalinity Testing

MOISTURE TESTING

Moisture testing may not be required for every installation. Review the information below to determine whether or not it is required for your jobsite.

NO TESTING REQUIRED SITUATIONS –

If concrete meets the prior site conditioning found on page 1 AND fits one of the three scenarios below, then NO Moisture (RH, Impedance) or Alkalinity (pH) testing is required.

1. New construction on and above-grade concrete that is a minimum of 60 days old.
2. Existing Renovation for on-grade concrete with intact/working moisture vapor retarder (ASTM E-1745).
3. Existing renovation for above-grade concrete substrate.

If the above criteria are met, Interface requires – XL Brands HM99 High Moisture Adhesive.

ALL OTHER CONCRETE SITUATIONS -

If the project does not fit one of these three scenarios, testing is required. This includes all on-grade concrete where the presence and/or efficacy of a moisture vapor retarder is unknown (as per ASTM E-1745 Class B and in accordance with ACI 302-2001). Note that prior site conditioning must also be met in this situation.

Before installing, all concrete floors, regardless of age, must comply with the moisture and pH requirements stated below, and must otherwise be suitable for carpet tile installation as set forth herein. The moisture conditions of the concrete should be determined by use of the In Situ probe relative humidity (RH) test method (ASTM F 2170). The testing device must be properly maintained and calibrated in accordance with the manufacturer's specifications and frequency recommendations. Certificates of calibration should be maintained for test validation.

Interface allows for carpet tile installation under a variety of conditions depending on the type of slab and the moisture and pH test results at time of installation. For best results we require the pH test developed by Interface. Please see Standard Practice for pH Testing Concrete Floors p. 11.

<table>
<thead>
<tr>
<th>Carpet Product Backing System</th>
<th>Installation System/ Adhesive</th>
<th>Required Primer</th>
<th>Moisture Limit</th>
<th>Surface pH Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CQuest™Bio / CQuest™BioX</td>
<td>XL Brands Adhesive 2000 Plus (U.S.) or Adhesive 2500 Plus (Canada)</td>
<td>None</td>
<td>Up to 90% RH</td>
<td>Between 7.0 and 10.0</td>
</tr>
<tr>
<td></td>
<td>XL Brands RH95</td>
<td>Up to 95% RH</td>
<td></td>
<td>Between 7.0 and 11.0</td>
</tr>
<tr>
<td></td>
<td>XL Brands HM99 High Moisture Adhesive</td>
<td>None</td>
<td>Up to 95% RH with ASTM F2170 Up to 4% with ASTM F2659 (Both tests are required)</td>
<td>Between 8.0 and 12.0</td>
</tr>
</tbody>
</table>

All XL Brands written requirements for product application, including but not limited to moisture and pH testing protocols, must be met for Interface warranty eligibility. More information concerning the proper use of XL Brands can be obtained through your local Interface representative or by visiting www.xlbrands.com.

Full Spread Adhesive Application

Apply adhesive with a 1/16" x 1/32" x 1/32" U-notch trowel. Expect a spread rate of 220-260 square feet per gallon.

XL Brands 2000 Plus, 2500 Plus and HM99 Adhesives are PSA (Pressure-Sensitive Adhesives) and do allow for modularity, but the HM99 is more aggressive and may require more effort to pick up and replace tiles. We do not recommend installing the tiles into wet adhesive, but rather allowing the adhesive to dry completely so it no longer transfers prior to laying in tiles.

NOTE: Moisture and pH test reflect only the conditions of the concrete at the time of testing. Stated moisture and pH limitations must be maintained before, during and at all times following installation to avoid installation and product failures and to preserve warranty coverage. If the moisture and/or pH test results are outside of the stated allowable limits, STOP and DO NOT PROCEED with the installation. Seek further advice from Interface before proceeding. Refer to Preparing the Subfloor for additional information concerning issues relating to surface conditions of the concrete slab prior to installation.

NOTE: The required pre-installation moisture and alkalinity tests should be performed to ASTM standards. Per CRI guidelines it is recommended that these tests be performed by a qualified independent testing consultant. Interface will not be responsible for failures, problems, or damage arising from high moisture, high alkalinity, or other subfloor conditions.

NOTE: New or bare concrete is defined as concrete free of adhesive residue, paint, sealers, primers and other applied materials.
INSPECT INTERFACE CARPET TILES TO BE SURE THEY MEET THE ORDER SPECIFICATIONS. IF THE WRONG PRODUCT OR COLOR IS INSTALLED, INTERFACE WILL NOT BE RESPONSIBLE FOR CORRECTING THE PROBLEM.

The labels on each carton indicate product style, pattern, color, run number and dye lot. Be sure the style, pattern and color match the specifications for each area of your installation.

Check to confirm that you have the right quantity and correct installation method. Be sure you also have enough tiles to establish an "attic stock" for future replacements.

Open all cartons to inspect for damaged or defective tiles. If you find any, call the Interface Help Desk. U.S. (877) 733-7403 / Canada (888) 224-2972.

LIGHTING

Ensure adequate overhead lighting is provided. Ideally, lighting should mimic or consist of the same conditions expected at time of occupancy.

INSTALLATION OF CARPET TILES SHOULD BE THE LAST ITEM ON THE CONSTRUCTION SCHEDULE. CAREFULLY CONSIDER THE RISKS IF YOU ARE ASKED TO INSTALL CARPET TILES TOO EARLY. IF CARPET TILES ARE INSTALLED BEFORE CONSTRUCTION IS COMPLETE, ANY STAINING, SOILING OR DAMAGE CAUSED BY OTHER TRADES MAY VOID THE PRODUCT WARRANTY.

Preparing the Subfloor (Concrete)

INSTALLING OVER CONCRETE

Before installing, all concrete floors, regardless of age, must comply with the requirements stated below, and must otherwise be suitable for carpet tile installation as set forth herein.

Substrate Preparation:

- The substrate must be inspected to ensure that it is completely dry, clean, porous, smooth and structurally sound. They shall be free of any foreign materials that might prevent adhesive bond, including dust, dirt, paint, grease, solvent, wax, markings, oil, fungicides, alkaline salts, excessive carbonation, laitance, mold, mildew, curing or release agents, fire retardant chemicals, sealers or existing adhesives, or anything that would interfere with the adhesive making a good bond directly to the substrate or stain or discolor the floorcovering. Remember, the adhesive bonds to the material it touches. If it is applied over old adhesive residue or coatings that are soft, brittle, or not otherwise physically sound or well bonded to the substrate, the entire installation is compromised. Such residues, if not removed, become the substrate onto which the new floor covering will be adhered. High traffic areas are commonly seen to be the first areas to show delamination over substrates not properly prepared. All substrate preparations must conform to appropriate ASTM F710 and CRI 104 guidelines.

- The surface temperature of radiant-heated floors should not exceed 85°F (29.4°C).

- Adhesives and subsequent floor covering should not be installed over any substrate where silicate compounds have been applied or entrained, or where chemical or solvent cleaners or adhesive removers have been used.

- Concrete compromised by outside sources, ground water intrusion and/or hydrostatic pressure are not acceptable substrates and are specifically excluded.

- Portland cement-based patches, levelers and skim coats are required for floor preparation.

Substrate shall be flat and smooth and within 1/4" in 10 feet. Level the floor to the standards outlined in the American Concrete Institute specifications for Concrete Buildings in regard to troweled finish and finishing tolerances. Leveling compounds must be cementitious based.

Level the floor to the standards outlined in the American Concrete Institute specifications for Concrete Buildings in regard to troweled finish and finishing tolerances. Leveling compounds must be cementitious based.
Preventing the Subfloor (Concrete continued)

**INSTALLING OVER CONCRETE (continued)**

- Any cracks, holes or other substrate irregularities should be repaired using a good Portland Cement based product (Ardex Feather Finish, Ardex K-15, Henry’s 547, Armstrong S-184 or similar cement-based compound) in strict compliance with the manufacturer’s guidelines.

- Excessively hard or smooth concrete surfaces may need to be abraded to achieve porosity. A mechanically prepared surface can be accomplished by abrasive (sand) blasting, grinding, sanding and shot blasting. The concrete surface profile (CSP) must be between 1-2 to ensure a proper bond. Concrete substrates may be tested for porosity by placing 0.05mL bead of water on the surface to observe absorption. If the water is not absorbed within one minute, the floor should be considered non-porous. Non-porous concrete surfaces are generally rendered porous by mechanically abrading, sanding or bead-blasting the surface of the concrete.

- Porosity of the substrate affects adhesive open time and eventual drying time. Adhesives generally dry quicker over porous substrates, whereas adhesives applied over non-porous substrates can take much longer to dry.

- Interface recommends that dusty and/or porous conditions be primed using XL Brands Prelude or a similar product.

- Prior to installation, a bond test must be conducted.

**NOTE:** All adhesives, solvent based materials and other contaminants should be removed and encapsulated prior to application of adhesive and installation of carpet. Contact the Interface Help Desk. U.S. (877) 733-7403 / Canada (888) 224-2972.

**Bond Test:**

After any substrate preparations, a bond test should be conducted before beginning the installation. It is up to the end user to ensure proper adhesive coverage is applied that is appropriate for the floor covering and job site conditions. A bond test is a mock-up installation done prior to the general installation of the floor covering to indicate whether the adhesive will bond satisfactorily to the substrate and floor covering. Bond testing will aid in identifying both the working characteristics of the adhesive, such as the appropriate open and working time for the site conditions, and any potential bonding problems to the substrate or floor covering. Select an approximately 3-foot square (minimum) area in a typical location on the substrate and put down the adhesive and subsequent floor covering using the exact techniques that will be used for the installation. After 24 hours, observe the mock-up installation to see if any obvious problems may exist. The floor covering should be tightly bonded to the substrate and remaining dimensionally positioned in the way it was installed. If necessary, the slab would need to be mechanically profiled to an untreated depth, until a successful bond test can be achieved.
Preparing the Subfloor (Gypsum-Based Underlayment)

INSTALLING OVER GYPSUM-BASED UNDERLAYMENT

Interface recommends that the gypsum-based product be installed at a commercial strength of 3500 psi or higher to help prevent cracking.

Interface recommends properly sealing gypsum-based underlayment before installing Interface carpet tiles. Sealing the surface of the gypcrete allows the carpet to properly release from the adhesive and it reduces the natural dusting of gypsum-based materials.

Installing over properly applied gypsum-based underlayment will not void the Interface standard product warranty, but Interface assumes no liability for issues relating to or resulting from the use of gypsum or any other underlayment. For this reason, claims associated with the use/failure of an underlayment product should be directed to the underlayment manufacturer or the individual(s) responsible for its application.

Preparing the Subfloor (Wood, Plywood or Particle Board)

INSTALLING OVER WOOD, PLYWOOD OR PARTICLE BOARD

Repair loose or broken boards. Secure with 8-D cement-coated screw nails.

If the majority of the boards are worn or badly cupped, cover with 5/8 inch (1.6 cm) exterior grade AD plywood secured with 8-D cement-coated screw nails spaced 6 inches (15.2 cm) apart. Sand seams smooth.

Sand the finish down to bare wood. Remove dust by sweeping, then wiping with a tack cloth. All wood surfaces should be primed prior to application of an adhesive. Interface recommends XL Brands TriSeal or similar product.

NOTE: All adhesives, solvent based materials and other contaminants should be removed and encapsulated prior to application of adhesive and installation of carpet. Contact the Interface Help Desk. U.S. (877) 733-7403 / Canada (888) 224-2972.

Preparing the Subfloor (Vinyl)

INSTALLING OVER VINYL TILE

WARNING: EXISTING FLOOR COVERING MAY CONTAIN ASBESTOS OR OTHER HAZARDOUS MATERIALS. IN THE EVENT ASBESTOS-CONTAINING MATERIALS OR OTHER HAZARDOUS MATERIALS ARE ENCOUNTERED, YOU SHOULD STOP THE INSTALLATION IMMEDIATELY AND OBTAIN ASSISTANCE FROM A QUALIFIED REMEDIATION CONSULTANT OR CONTRACTOR PRIOR TO PROCEEDING.

Use an appropriate non solvent stripper or a sander to remove the wax top coat.

Remove any damaged or loose vinyl tiles and replace with comparable thickness tile or patching compound.
INSTALLING OVER SHEET VINYL
Do not install Interface carpet tile with adhesive over sheet vinyl. The sheet vinyl must be removed with a scraper. Any existing adhesive remaining on subfloor should be removed by grinding/scraping and residue encapsulated. Once removed, follow instructions for subfloor found under the sheet vinyl.

INSTALLING OVER NATURAL MATERIALS
For natural materials such as granolithic, terrazzo, marble, ceramic tile, etc., either breakout and remove all material or replace damaged areas with substitute material of the same thickness to create a flat, level floor.

Patch and fill cracks and irregularities, including grout lines, with one of the following approved patching compounds: Ardex Feather Finish, Ardex K-15, Henry's 547 or similar cement based compound.

NOTE: Some patching compounds can be mixed with water while some must be mixed with latex. Follow the manufacturer’s specification and instructions for use.

Sand top surface to remove glaze. Remove dust by sweeping, then wiping with a tack cloth.

All porous surfaces should be primed prior to application of an adhesive. Interface recommends XL Brands TriSeal or similar product.

INSTALLING OVER RAISED ACCESS FLOORS
Patch or replace any damaged floor panel inserts.

Panels should be free of any dirt, grease, oil, paint, sealer, adhesive or other materials from floor.

NOTE: All adhesives, solvent based materials and other contaminants should be removed and encapsulated prior to application of adhesive and installation of carpet. Contact the Interface Help Desk. U.S. (877) 733-7403 / Canada (888) 224-2972.
Establishing the Starting Point

Snap a Line

1. Measure to determine the center point and mark. Snap a chalk line.

Measure

2. Measure 8 feet (243.8 cm) out from your center point along the chalk line. Make a mark.

Measure

3. Measure 6 feet (182.9 cm) from your center point at a right angle to your chalk line and make a mark.

Measure

4. Measure the distance between your marks. It should be exactly 10 feet (304.8 cm). If it is, your quadrants will be square. Snap a chalk line here.

NOTE: If the room is too small for the above measurements, reduce them by half. Measure 4 feet (121.9 cm) vertically and 3 feet (91.4 cm) horizontally. In this case, the measurement between your two marks should be exactly 5 feet (152.4 cm).

DETERMINE IF CENTER LINES NEED TO BE OFFSET

The need to offset either or both center lines will depend upon the installation method and tile format (squares or planks).

Dry fit (without adhesive) a row of tiles along the entire length of your vertical and horizontal center lines. Go all the way to the walls. If necessary, offset either or both center lines to ensure perimeter tiles will be cut no less than half size, or 9.84 inches (25 cm).
Approved installation methods vary by product and are printed on box labels. An arrow is printed on the back of each tile to indicate direction.

**SQUARE TILES**

**Monolithic Installation**
Point all arrows in the same direction.

**Quarter-Turn Installation**
During installation, rotate tiles so that arrows are turned 90 degrees every other tile.

**Ashlar Installation**
Offset front and back tile joints with arrows facing in the same direction.

**Non Directional Installation**
Lay tiles in any direction without regard for the arrows.

**Brick Installation**
Offset the side joints of the tiles with arrows facing in the same direction.

**25CM X 1M SKINNY PLANK TILES**

**Ashlar Installation**
Offset the front and back tile joints. We recommend a variable drop ashlar for our Skinny Planks, as shown here, but our products can also be installed with a half drop ashlar.

**Herringbone Installation**
Lay tiles in an L pattern.

**50CM X 1M PLANK TILES**

**Ashlar Installation**
Offset front and back tile joints.

**Herringbone Installation**
Lay tiles in an L pattern.

**NOTE:** INTERFACE ASSUMES NO LIABILITY FOR ISSUES RELATED TO OR RESULTING FROM INSTALLING OUT OF SPECIFICATION, INCLUDING, BUT NOT LIMITED TO, RECOMMENDED INSTALLATION METHOD.
Adhesive Installation

APPLYING ADHESIVE

Full Spread Adhesive Application
Apply adhesive with a 1/16” x 1/32” x 1/32” U-notch trowel. Expect a spread rate of 220-260 square feet per gallon.

Adhesive in Special Situations
Flatwire - never apply adhesive directly over flatwire. The flatwire may be damaged if the tiles need to be removed.
Uneven areas - any surface that cannot be leveled may require adhesive or double-sided tape to hold a tile in place.

Tile Installation (Laying Tiles)

LAYING TILES
Lay an initial tile at the established starting point. Following the center lines closely, lay an anchor row of 10 additional tiles aligned with the center line. In smaller rooms, your anchor rows may consist of fewer than 11 tiles.

Measure your anchor rows. For an installation of square tiles, each should equal 550 cm (11 tiles x 50 cm each, or 216 17/32”) with no more than a 3mm (1/8”) gain. If the gain is more than 3 mm, the tiles aren’t tight enough and should be laid again. After relaying, measure again. If tiles are less than 550 cm they are too tight and should be laid again.

Tip Into Place
Don’t position tiles by sliding them across the adhesive. This will cause the corner to bend under. Instead, brush the pile back with one hand, then tip a corner of the tile into place. Position the rest of the tile once the corner is properly aligned. Do not catch the pile in the joints.

Lay Tiles in Step or Pyramid Pattern
1. Lay two tiles vertically, and check that they are square to the anchor rows.
2. Lay two tiles horizontally, and check that they are square to the anchor rows.
3. Lay one tile to complete the step.
4. Follow the ABCD pattern laid out here until you reach the end of your anchor rows. Repeat laying anchor rows and ABCD patterns in all quadrants until complete.
Floor Outlets
Floor outlets are usually wired after carpet tiles have been installed. Consequently, you should install tiles directly over floor outlets and mark the location with tape. This way, it will be easy to see which tiles need to be lifted for cutouts later.

Flatwire
Tile layout should allow flatwire to be centered under a row of tile.

Trench Headers
Tile layout should allow trench headers to be centered under a row of tile. Secure the tiles on either side of trench headers with adhesive. This will prevent the installation from shifting while servicing trench headers.

Raised Access Floors
Raised access floor panels are susceptible to subtle flexing. To ensure uniform appearance, avoid matching raised access floor seams with tile joints.

Tiles adjacent to fixtures, architectural elements and walls need to be cut. Follow these guidelines:

- If practical, remove the base molding before installing perimeter tiles. Replace molding when finished.
- Replace blades often. Sharp blades make cutting quicker, easier and more precise.
- Never use other tiles as a cutting surface. Place tiles on layers of cardboard before cutting.
- Always secure cut tiles with adhesive.

Preparing for Occupation

Final Inspection and Vacuum
Inspect the entire installation, paying close attention to joints and any tiles that have been cut. Vacuum the floor with a pile lifter. If you don’t have a pile lifter, use an upright vacuum cleaner.

Follow CRI Installation Standards
In addition to the specific floor preparation and installation instructions detailed here, the Carpet and Rug Institute’s Carpet Installation Standard must be followed. Please note that many of the Interface installation requirements may exceed or differ from those in the CRI Standard. In the event of conflict between the Interface Installation Instructions and the CRI Standard, you should follow the Interface Installation Instructions.
Prior To Installation

The following testing protocol should be followed when concrete does not meet the requirements for “No Test.”

Moisture and pH testing at the installation site are not the responsibility of Interface. Concrete should be tested for alkalinity using an approved pH test kit. The approved pH test kit should include pH test strips capable of measuring a range of 0 - 14 along with deionized or distilled water. The area to be tested must be weather-tight and conditioned, via the building’s HVAC system, to a temperature range of 65° - 85° Fahrenheit (18.3° - 29.4° Celsius) and a relative humidity range of 45% - 65%. These temperature and humidity ranges must be maintained for at least 48 hours prior to commencing the test and at all times during the test. The concrete surface temperature should not be less than 65° Fahrenheit (18.3° Celsius).

All adhesives, coatings, finishes, dirt, curing compounds, sealants and other substances should be removed from the area to be tested. Non-chemical methods, such as sanding, grinding, or bead blasting should be used to remove these substances to achieve an appropriate state for testing. Any cleaning should take place a minimum of 48 hours before testing.

Once the above conditions have been met:

1. Abrade the surface using 100 grit sandpaper to a minimum depth of 1/32” but no more than 1/8”.
2. Apply a small amount (approximately 1” in diameter) of de-ionized or distilled water.
3. Allow the de-ionized/distilled water to stand for 60 seconds.
4. Dip the 0-14 pH test strip into the puddle and remove.
5. Allow the test strip to stand for 15 seconds.
6. Compare to the pH chart in the test kit to determine pH level.
7. At least three pH tests must be performed for the first 1,000 square feet of space. One additional test should be performed for each additional 1,000 square feet thereafter.

The concrete slab should have an alkalinity level within the range as set forth on p. 2 to be suitable for carpet installation without a primer. Refer to the chart on p. 2 if pH levels fall outside of acceptable ranges STOP, and DO NOT proceed with installation. Call the Interface Americas Help Desk. U.S. (877) 733-7403 / Canada (888) 244-2972.

NOTE: Results obtained by this method reflect only the conditions of the concrete at the time of testing. Stated pH limitation must be maintained for the life of the installation to avoid installation and product failures and to preserve warranty coverage.