Conditions and requirements

- Concrete floors shall be constructed in accordance with the American Concrete Institute (ACI) 302.1R-04 Guide for Concrete Floor and Slab Construction and ACI 302.2R-06 Guide for Concrete Slabs that Receive Moisture Sensitive Flooring Materials. Please consult www.concrete.org for the most current editions of ACI’s.
- Floors must be finished and cured according to ACI with a minimum compressive strength of 3500 psi.
- Floors must be clean, dry and smooth. Any surface materials, such as paint, wax, grease, oil, adhesive residues, etc. must be mechanically removed.
- Floors must be free of any sealers, curing, hardening or parting compounds that would adversely affect the adhesive used with the flooring.
- A moisture barrier shall be installed prior to pouring of on or below grade slabs. All on-grade and below-grade concrete slabs regardless of the concrete’s age must have an effective moisture vapor barrier/retarder present under them. If a fully intact non-damaged vapor retarder cannot be confirmed then the concrete must be treated as if it will get wet from ground moisture at a future time.
- When a sub-slab vapor barrier/retarder cannot be confirmed, it is required to install a surface-applied moisture barrier system.

Moisture reduction barriers

While Altro does not approve any specific MRBs we do recognize the need for them in certain circumstances.

There are no known incompatibility issues with Altro floor coverings, their adhesives, and the many types of moisture reduction barriers available. Final determination of a particular product’s suit-ability and its warranties as regards to the performance of the moisture reduction system and/or any damage that may be caused to the Altro floor coverings and their adhesives due to deficiencies in the moisture reduction system are the responsibility of the moisture reduction system, manufacturer, and installer. Please reference ASTM F3010 Standard Practice for Two-Component Resin Based Membrane Forming Moisture Mitigation Systems for Use Under Resilient Floor Coverings.

- Always conduct moisture tests per ASTM F-2170 on all concrete slabs regardless of age or grade level. ASTM F-2170 relative humidity (RH) test results must not exceed 90% when using EcoFix 25E or 95% when using EcoFix 65 Spray. As a general rule, a 4” thick slab will require a minimum 3-month drying time before performing moisture tests.
- Concrete surface pH must be tested in several locations and be below a pH of 9.9.
- Wood floors must be double layer construction with a minimum thickness of 1”. The top layer shall be APA Underlayment Grade Plywood or other wood underlayment panel approved and warranted beneath resilient flooring. Consult with the underlayment manufacturer for specific recommendations and warranties.
- Maintain room temperature, adhesive and flooring material at 68° F – 80° F (20C – 26C) for 72 hours before, during and after installation.

Preparation

- The existing subfloor should be mechanically abraded to remove any paint, wax, grease, oil, plaster, sealers, curing compounds and other foreign materials that may be present from the construction process.
- A thorough vacuuming should be done to ensure a dust-free substrate.
- Remove all subfloor ridges and bumps.
- Fill low spots, cracks, control joints and other defects with a Portland-based latex underlayment material. Follow all manufacturers mixing and application instructions.
- High spots may need to be ground down to ensure a surface flatness of 3/16” in 10 ft. Always allow patching material to dry/cure completely before installing the Altro Resilient Floor Tile.
- For proper removal of existing flooring and adhesives refer to the Resilient Floor Covering Institute guidelines.
- Follow all applicable local, state, and federal regulations and laws pertaining to saw cutting, grinding, and patching work of concrete; all work is to comply with OSHA 3902 Respirable Crystalline Silica Standard.
Adhesives

Altro Dolce and Altro Dolce Essentials may be installed using either our pressure sensitive acrylic adhesive EcoFix 25E or our fast-acting EcoFix 65 Spray adhesive. Follow the installation instructions on the next page.

Using EcoFix 25E adhesive

- ASTM F-2170 relative humidity (RH) test results must not exceed 90%.
- Use EcoFix 25E adhesive wherever possible. Allow the adhesive to dry to a pressure-sensitive state before installing tile. When a wet set, hard set adhesive is needed, use EcoFix 20E hard set acrylic adhesive.
- Apply adhesive with a 1/32" deep x 1/16" wide x 1/32" notched trowel.
- Allow adhesive ample open time* to “gas off” and tack-up before proceeding to install tile. Installation too late in the pressure sensitive stage of the adhesive reduces the strength of the bond and can cause the lines of the adhesive to show through to the surface of the flooring.
- Flooring must be rolled in its entirety with a 100 lb. roller.
- The adhesive open time, working time, set and curing time will depend on the type of substrate, its absorbency, the temperature and the air humidity in the premises.
- Prohibit heavy traffic and pallet jack type rolling loads on floor tile for 72 hours after installation.

Using EcoFix 65 Spray adhesive

- Before use, be sure to shake can of EcoFix 65 Spray well.
- Spray from a standing position, holding can 20-30 inches (50-70cm) from floor.
- Protect walls from overspray with a spray shield or a piece of cardboard.
- Allow adhesive to dry to the touch. Test this by lightly touching the adhesive - there should be no adhesive transfer to your fingers. Too much adhesive or high humidity will increase dry time.
- Open working time after tack is 4 hours.
- Roll floor immediately with a 75-100 lb. roller.
- Floor is open to all traffic immediately after installation.
- Clean up with a damp cloth for wet overspray.
- Use mineral spirits for dry overspray.

Laying tile

- Ensure that tile is all from the same dye lot/batch. Mix tile from cartons to ensure shade variations are consistent. Failure to follow this may result in out of shade tile.
- Tiles should be laid following previously established guidelines.
- Lay tiles in a pyramid fashion, making sure each tile is firmly butted to the tiles laid before. In some cases, tile run-off may occur due to uneven subfloor surfaces. To correct this, snap a new chalk line ¼ inch less than the next full tile size. Cut tile to fit along the new chalk line. Continue installing tile from this new straight line.
- Terminate flooring at centerline under doors or where adjacent floor finish is different.
- Install reducer strips at unprotected or exposed edges where flooring stops.
- Scribe flooring to walls, columns, cabinets, floor outlets and other stationary objects to produce tight joints.
- Install flooring under movable partitions and under open cabinets without interrupting tile pattern.
- Roll and cross roll entire flooring with a 100 lb floor roller. Failure to do so may result in trowel ridge telegraphing and poor adhesive bond.
- Altro Dolce and Altro Dolce Essentials may be cut with traditional tools and methods, such as tile cutters and utility knives.

Protection

- Equip all heavy furniture, appliances and carts with soft, non-staining casters or rests of sufficient size to meet static load resistance requirements.
- Use plywood panels to protect flooring from damage that may occur when moving heavy objects over flooring.
- Flooring should be covered and protected from all other trades during construction with a suitable non-staining protective covering such Masonite™ or Ram Board®.

Tile layout

- In laying out commercial installations (large open areas, hallways, etc.), the use of a transit or laser is recommended to strike guidelines.
- The lines should be positioned so that tile will be used economically, with as little waste as possible.
- Installations in long hallways with adjoining rooms should be carefully planned to provide for one half the tile width along walls and in the doorways if possible.
- Tile size may be altered in doorways to allow for adjustments in adjoining rooms.
- In smaller rooms, where all border areas are plainly visible, care should be taken so that border tiles are uniform in width and as large as possible.