



altro

Installation instructions for Altro Stronghold™ 30 adhesive-free

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General

Altro Stronghold 30 adhesive-free flooring has the combined benefit of Altro's highest rating for slip resistance, minimizing the risk in wet and greasy areas, with an adhesive free floor system for maximum impact with minimum downtime.

Altro adhesive-free flooring can be installed over a variety of surfaces without the need to fully adhere the material to the subfloor. This overcomes many of the problems encountered in laying sheet flooring over new or old subfloors.

Typical areas of use for Altro Stronghold 30 adhesive-free flooring include:

- Temporary or permanent walkways or areas where the substrate may need to be used again later.
- Over old, soundly fixed asbestos tiles or vinyl sheet.
- Over existing resin or paint systems that are sound.
- Over existing quarry tiles that are dry, sound, well bonded and suitably prepared.
- On new concrete slabs where the moisture level is less than 97% RH (Relative Humidity).
- Over internally heated subfloors providing they are dry, ie 75% RH or less.

Altro Stronghold 30 adhesive-free can be installed in areas up to 480 yd² in size. For areas larger than this please contact your local technical services representative for advice.

Correct subfloor preparation is key in achieving a successful installation. Any irregularities in the subfloor will be seen in the finished installation.

Any failure directly related to inadequate subfloor conditions or subfloor preparation is the responsibility of the installer and/or flooring contractor once the installation has started.

A fully intact and efficient sub slab vapor barrier/retardant must be in place. Conduct moisture tests per ASTM F2170 on all concrete slabs regardless of age or grade level. Relative humidity tests must not exceed 98% RH.

Altro Stronghold 30 adhesive-free flooring must be fully adhered to the subfloor in walk in coolers and freezers.

It is recommended to fully adhere Altro Stronghold 30 adhesive-free flooring in areas subject to negative pressure caused by smoke or air exaction systems within a building.

Storage

- HVAC must be in permanent operation prior to installation.
- Rolls should be kept standing upright, in a secure location to prevent toppling over, for a minimum of 72 hours at 68°F (20°C).
- The installation area and Altro materials must be maintained and installed between 68°F (20°C)-85°F (29°C) with relative air humidity between 35% and 65%.
- A minimum temperature of 68°F (20°C) must be maintained for 72 hours before, during, and there after, exception is for cooler and freezer installations.

Note: It is essential the flooring is checked for any possible faults prior to installation.

Cut the flooring into required lengths and lay freely for a minimum of 2 hours for conditioning before fitting. Altro Stronghold 30 adhesive-free must be back rolled after being cut into required lengths to take out any tension in the product.

Ensure that the material used in any one area is from the same manufacturing batch and that sheets are laid in the same direction.

Any liquid or contaminant ingress from above including damage, incorrect and/or poor installation techniques will invalidate the product guarantee.

Claims against guarantee for color, batch or obvious material defects will only be considered if the flooring has not yet been installed.

Substrates

The subfloor surface must be clean and free of any debris/dust or loose particles. Absorbent surfaces can be primed with Altro Ecofix + adhesive. Apply Ecofix + adhesive in a light/thin film, be certain to remove excess. An alternative a suitable acrylic primer/adhesive can be used in accordance with manufacturer's instructions. **Spray adhesives must not be used.**

The primed surface must be completely dry before installation starts. Prior to installation, all material including tapes and primer if using, should be allowed to reach room temperature.

Wood subfloors

Wood underlayments for Altro flooring must be:

- Structurally sound
- Prepared in accordance with ASTM F1482 be designed for resilient flooring underlayment purposes.
- Have panels smooth enough so that texture or graining will not telegraph through.
- Resist dents and punctures from concentrated loads.
- Free of any substance that may stain vinyl such as marking inks, paints, solvents, adhesives, asphalt, dye, etc.
- Be of uniform density, porosity and thickness.
- Installed in strict accordance with the board manufacturers recommendations.

Wood floors should be double layer construction with a minimum total thickness of 1". The subfloor must be rigid, free from movement, and have at least 18" of well-ventilated air space below.

Wood subfloors must not exceed 8% moisture content when measured with a Delmhorst Wood Moisture Tester.

Crawl spaces shall be insulated and protected by a vapor barrier. Do not install Altro floor covering over wood floors built on wooden sleepers directly in contact with any concrete or earth.

Wood underlayments must meet local and national building codes. Trade associations, such as the APA - The Engineered Wood Association offer structural guidelines for meeting various code requirements.

Certain underlayment panels may cause staining. Consult the underlayment panel manufacturer for specific panel recommendations, panel warranties, and application instructions.

Do not install over particle board, chip board, OSB, Masonite™ or Luan type panels unless specifically warranted by the manufacturer for use as an underlayment.

Regardless of the type and manufacturer of the underlayment panel used, any failures in the performance of the underlayment or floor covering due to the underlayment is the responsibility of the underlayment manufacturer, and/or the underlayment installer.

Concrete subfloors

All concrete new or existing must meet the requirements of ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring and ACI 302.2R-06 Guide for concrete slabs that receive moisture sensitive flooring materials.

- All on and below grade concrete subfloors require a confirmed permanently effective vapor retarder that meets the current requirements of ASTM E1745 The Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.
- Moisture testing must be performed and documented on all concrete regardless of the grade level and age, per ASTM F2170. Results are not to exceed RH 98%.
- Concrete floors must be smooth, rigid, dry, and clean.
- Spray paints, permanent markers and other indelible ink markers must not be used on the concrete subfloor as they could bleed through, telegraphing up to the surface and permanently staining the flooring material. If these contaminants are present on the substrate, they must be mechanically removed prior to installation of the flooring.

The concrete shall be flat to within the equivalent of 3/16" in 10 ft, per ASTM F710.

- Concrete must have a minimum compressive strength of 3500 psi.
- Lightweight concrete (less than 115 lbs per cubic foot) may be unsuitable for covering with resilient flooring.
- Gypsum based substrates and underlayments may be unsuitable.

Expansion Joints

Altro adhesive-free flooring should never bridge an expansion joint. The joints need to be brought through to the final floor finish, and the floor coverings should finish either side of the joint. If required a suitable expansion joint cover strip can be used - please contact Altro Technical Services for more advice.

Approved installation tape

Altro adhesive-free flooring is a loose laid floor and is laid with the aid of the Altro double sided adhesive tape. This tape is supplied with each roll of Altro adhesive-free flooring.

Please note that the surface area to receive the tape must be clean and dust free. Absorbent surfaces may need priming using a suitable acrylic primer or diluted acrylic adhesive or pressure sensitive adhesive in accordance with manufacturer's instructions, spray

adhesives used as primers should be avoided. The primed surface must be completely dry before installation starts.

In order to provide the optimum installed system and to conform to the conditions of the guarantee please ensure that only this tape is used in connection with Altro adhesive-free flooring.

Please note: Tape consumption is reduced in commercial kitchen areas or areas prone to spillage. In these areas AltroFix MP600 or similar moisture tolerant MS Polymer must be used to all exposed edges and all drain systems. See below for further detail.

Additional rolls of tape are available for purchase through Altro or your Altro distributor.

Installation

Material should be checked for defects, unmatched dye lots, etc. If a fault has been found, do not proceed. Warranty claims against defective material will only be considered if the flooring has not yet been installed.

Cut into lengths as determined by the flooring design. Allow lengths to lay loose for 2 hours to assist in conditioning the flooring. Back roll lengths to take out any remaining tension in the product.

Slab temperature should be between 65°F (18°C) and 80°F (27°C).

Once laid out and conditioned, all joints should be overlapped by approximately 1" and cut in to a net fit. A 1/8" gap should be left between the flooring and perimeter edge to be filled later with AltroMastic 100.

Altro double sided tape should be used under all joints including hot welded joints and the perimeter of the room/installation.

The tape can also be used on the cove section when self covering the flooring – (for self coving, see Altro safety flooring installation guidance). It is also recommended that at any point where the flooring finishes, such as at door entrances, the material should be adhered to the subfloor using the Altro double sided tape. Areas of high traffic or turning points can have additional tapes applied to the area.

A 6" band of AltroFix MP600 should be applied around all areas prone to thermal shock, i.e.. drains/drainage systems. Avoid placing joints that will need hot welding, where the band of AltroFix MP600 is used, such as around drains. AltroFix MP600 or AltroFix 30 must be used with all wet area accessories (i.e. shower transition trim, gulley edge and gulley angle).

Once fully installed, all seams and corners within the installation should be heat-welded with the matching color Altro weldrod.

The finished installation must be completely sealed around all perimeters between the adhesive-free floor covering and wall covering or other floor surfaces, around exposed edges including pipes, door frames etc. with AltroMastic 100, and with the use of conventional clamping or welding type drain gulleys and access covers.

Altro Stronghold 30 adhesive-free flooring is not recommended for use in the following areas:

- Ground floor timber bases that are not adequately ventilated.
- Woodblock ground floors
- Magnesite
- Subfloors which contain an effective damp proof
- Membrane but exceed a relative humidity reading of above 98% RH.
- Internally heated subfloors which exceed
- 75% RH / 2 CM%.
- In walk in freezers and coolers.

The uses given in this datasheet are examples only. If in doubt, please contact Altro Technical Services for further information.

Underfloor heating

Underfloor heating must be fully commissioned and taken through two complete cycles of heating up and cooling down prior to the floor covering being installed. The temperature at the underside of the floor covering, i.e. the subfloor/tape bond line, should never exceed 80°F (27°C).

The floor covering can be installed whilst the underfloor heating is on, only if the floor covering has been acclimated and laid out in the room for at least 2 hours before installation. Issues will arise if the underfloor heating system is not commissioned and/or the floor covering is not acclimated beforehand, and the temperature of the underfloor heating is increased from cold quickly instead of incremental. If installing the floor covering over the underfloor heating while switched off, it should be switched off 48 hours prior to the floor covering installation and should remain off for the duration of the installation and at least 48 hours after completion. After the 48 hours have elapsed the temperature of the heating system should be increased gradually over a number of days, by a maximum of 5°F per day, until the desired room temperature is reached.

Please contact Altro Technical Services for more advice on installing adhesive free flooring over underfloor heating.

Protection

Flooring should be covered and protected from all other trades during construction with a suitable non-staining protective covering such as Masonite™ or Ram Board®.

Self adhesive protection should never be used directly on the floor surface. The use of temporary protection is particularly pertinent when relocating heavy furniture or equipment.

Please ensure that the wheels of any rolling loads are in good condition and are freewheeling.

Cleaning and maintenance

Basics

The contractor must provide the customer with cleaning and maintenance instructions. You can download these from www.altro.com. Correct cleaning and maintenance have a decisive influence on the service life and preservation of the value of the installed flooring.

Preventive measures

Soiling can be greatly reduced by providing suitably dimensioned “walk-off areas” with appropriate doormats at the entrances to buildings. These should have a length of at least 4–6 strides.

Initial Cleaning

Sweep or vacuum floor surface to remove all loose dust and debris.

- Apply diluted* AltroClean 44 to the floor. For moderate soiling use a 1:40 dilution ratio. For heavy soiling use 1:10. Allow to sit for five minutes to allow the cleaner to attack the surface soil.
- Scrub floor with an automatic scrubber (3-in-1 machine) or a standard low speed swing machine (150rpm to 350rpm) fitted with an Altro Unipad™.
- If using a standard low-speed swing machine, remove wash water with a wet vac. Ensure the floor is thoroughly rinsed with fresh, clean water. No cleaning residue should remain on the floor.
- Allow surface to dry before use.
- Finish is not recommended and will lessen the slip-resistant properties of safety and slip-resistant flooring.

Routine Cleaning

Route cleaning should be conducted with AltroClean 44™, AltroClean 44+ (for heavy oil and grease areas) or with an equivalent cleaner intended for vinyl flooring and used in accordance with the guidelines as directed by the manufacturer. Ensure the floor is thoroughly rinsed with fresh, clean water. No cleaning residue should remain on the floor.

We recommend aligning the cleaning cycle to the accumulation of dirt. The standard technique recommended is two-stage wiping, in which dirt and dust are removed without residue or streaks.

Machine cleaning

Sweep and/or vacuum floor surface to remove all loose dust and debris. Apply diluted* AltroClean 44™ to the floor. Allow to sit for five minutes to allow the cleaner to attack the surface soil. **DO NOT** flood the floor unless the flooring system was designed for holding water and was installed per Altro’s instructions. Always allow the adhesive to dry and cure before flooding any floor.

Scrub floor with an automatic scrubber (3 in 1 machine) or a standard low speed swing machine (150rpm to 350rpm) fitted with an Altro Unipad™. If using a standard low-speed swing machine, remove wash water with a wet vac. Ensure the floor is thoroughly rinsed with fresh, clean water. No cleaning residue should remain on the floor. Allow surface to dry before use.

Removing stains

Stains and smears from the soles and heels of shoes that cannot be removed by routine cleaning can be dealt with using suitable stain removers and cleaning techniques.

We accept no liability for the cleaning and care products recommended by the manufacturers as regards effectiveness and fulfillment of expectations. If you have any questions, including regarding sources of supply, please contact the manufacturers directly.