



Installation and maintenance guidance

Altro Adhesive-Free Flooring

Altro Cantata
Altro Wood adhesive-free
Altro Illustra adhesive-free

May 2025

Key points to consider when installing Altro adhesive-free flooring.

- Confirm that the correct product is selected for the area type.
- Always hot weld the flooring joints and ensure that the correct tools are used for grooving, hot welding, and trimming.
- Leave the finished floor appropriately protected from other trades using a suitable non-staining floor protecting covering.
- Altro adhesive-free flooring must be installed in accordance with AS/NZ 1884:2021 & NZS AS 1884-2013.
- Only competent trained installers are recommended for the installation of Altro adhesive-free flooring.



General

Altro adhesive-free flooring can be laid 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 adhesive-free flooring include:

- Temporary or permanent walkways or areas where the substrate may need to be used again later.
- Paint, resin, vinyl, linoleum, rubber, meeting subfloor requirements.
- Over existing quarry tiles, terrazzo and ceramics that are dry, sound, well bonded and suitably prepared.
- On new cementitious screeds or slabs where the moisture level is less than 97% RH.
- Over old soundly fixed, non friable asbestos tiles or vinyl sheet.
- Over internally heated subfloors providing they are dry, i.e. 75% RH.

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.

Moisture tests should always be carried out on all substrates before commencement of installation and results recorded. All ground level concrete floors must have an effective damp proof membrane (DPM) fitted under the slab. If any doubt exists a surface applied moisture vapour barrier or other appropriate moisture protection system should be used in accordance with AS 1884:2021 & NZS 1884:2013 and manufacturers recommendations.

In environments with high solar exposure, such as north-facing floor-to-ceiling windows, and areas experiencing negative air pressure from smoke extraction systems, Altro recommends installing a fully bonded system. Additionally, to reduce UV-induced material degradation and thermal stress, applying a UV protection film to the glass is advised.

Please contact Altro Technical Services for further information.

Contents

01

Storage and Site Conditions

Cool rooms

Subfloors

Timber subfloors

Concrete subfloors

Heated subfloors

Subfloor moisture testing

Expansion joints

03

Floor Wastes

Approved installation tape and the recommended use of adhesive

04

Laying

Coving

Seams

Grooving

Forming a hot welded joint

Trimming weld

06

Post Install

Cleaning and maintenance

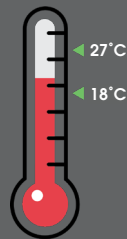
STORAGE AND SITE CONDITIONS

To ensure the integrity of the flooring during transportation for periods exceeding 24 hours, it is imperative to maintain an upright position at all times. In cases where transporting the flooring in a horizontal orientation is necessary, securely fasten the rolls and avoid placing excessive weight on them.

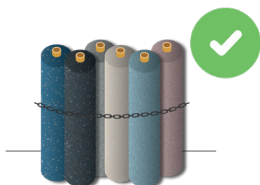
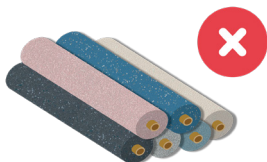
The material should be stored for approximately 24 hours at a room temperature of not below 18°C.

If the floor covering has been stored or transported immediately prior to delivery at a temperature of less than 10°C, then the acclimatisation period should be extended to 48 hours.

When laying, the area should be at a steady temperature of between 18°C and 27°C with a relative air humidity of between of 35% and 65% RH for at least 48 hours prior to, during and for at least 24 hours after completion. The surface temperature of the subfloor must not be below +10°C.



When stored, all rolls must be standing in a dry, covered secured location, away from other trades and the public.



Before installation, verify the correct color and quantity of flooring has been delivered. Ensure that there are no manufacturing defects or damages resulting from transportation. It is important to note that claims related to warranty for color, batch, or obvious material defects will only be considered if the flooring has not been permanently bonded.

Pattern ranges of Altro safety flooring will require the pattern to be matched from sheet to sheet (for further information contact Altro).

Cool rooms

In cold or freezer room environments, Altro does not recommend an adhesive-free installation. Refer to Altro's Safety Flooring Installation Guide for the approved procedure.

SUBFLOORS

Correct subfloor preparation is key in achieving a successful installation. Any irregularities in the subfloor will be seen in the finished installation. The below information is not exhaustive and is provided as informational guidance only. If doubt persists, further advice should be sought via the relevant sub floor preparation manufacturer, Australian Standards for the installation of resilient floorcoverings or Altro Technical Services.

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. Consideration should be taken at an early stage regarding the age of the building or substrate, which will help ascertain if an integral sheet membrane is present. It should not be presumed where existing membranes are present, that they are effective and functioning.

All subfloors must conform to the requirements set out in **AS/NZ 1884:2021 & NZS AS 1884-2013 - Section 3 - Subfloors**

and Underlays. The subfloor surface must be clean and free of any debris / dust or loose particles. Absorbent surfaces may need priming using a suitable acrylic primer or Altro W165 wall and floor primer. The primed surface must be completely dry before installation starts. Prior to installation, all material including tapes and primer, should be allowed to reach room temperature.

Timber subfloors

To achieve an acceptable substrate, all wooden floorboards and non-structural particle boards must be firmly affixed. These should then be covered using a certified timber flooring underlay with a minimum thickness of 5.5 mm, or alternatively, a cementitious underlayment approved by the manufacturer, applied at a minimum thickness of 4mm.

Concrete subfloors

When installing Altro adhesive-free flooring on a new concrete sub-floor with an integral and effective damp-proof membrane, the relative humidity reading for the sub-floor can be as high as 97% RH. When installing Altro adhesive-free flooring on an existing concrete subfloor without an integral and effective damp-proof membrane and where the relative humidity of the subfloor exceeds 75% RH (but less than 97% RH), **provision for additional ventilation should be made such as with ventilated skirting's.**

Altro adhesive-free flooring is not recommended for use in the following areas;

- On ground floor timber bases that are not adequately ventilated.
- On woodblock ground floors.
- On magnesite.
- On subfloors which contain an effective damp proof membrane but exceed a relative humidity reading of above 97% RH
- Timber floors such as laminate or engineered hardwood.
- Hybrid flooring.

- Carpets or tiles, underlays or other soft flooring such as cushion, acoustic vinyl or cork.
- Access flooring systems.
- On internally heated subfloors which
- exceed 75% RH
- In minus temperature environments such as walk-in freezers.

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

Heated subfloors

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 27°C. The relative humidity of the subfloor must be 75% RH or less.

The floor covering can be installed whilst the underfloor heating is on, only if the floor covering has been acclimatised and laid out in the room for 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 acclimatised 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°C 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.

Subfloor moisture testing

Concrete floors must be Relative Humidity assessed in accordance with ASTM F2170. Application and treatment of floors if required based on readings must be adhered to.



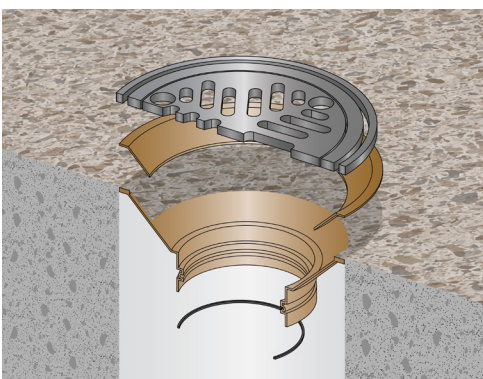
Timber, plywood, and particle board must also be assessed, in accordance with AS/NZS1080.1 & AS/NZS 2098.1.

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.

FLOOR WASTES

In areas with floor wastes, a vinyl waste clamp system must be installed at all drainage points to ensure a watertight seal. An approved contact adhesive should be applied to bond the flooring securely at these locations, adhering to the manufacturer's specified application methods, curing times, and safety requirements.



APPROVED INSTALLATION TAPE AND RECOMMENDED USE OF ADHESIVE

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 Altro W165 wall and floor primer 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.

Additional rolls of tape are available from Altro. Please contact the Altro Customer Care Centre for further information.

LAYING

Before starting the installation process, it is important to prepare the floor properly. Remove any loose particles and thoroughly vacuum the floor to ensure a clean surface.

Set out of vinyl should follow an approved seam layout with cross joins staggered over multiple widths and if possible, utilised in traffic free areas. Seams at a minimum must be 300mm from all floor wastes.

Ensure that all materials used in a specific area come from the same manufacturing batch. For large projects requiring multiple rolls, install areas using rolls with sequential numbers. Note that different products in the Altro adhesive-free flooring range have specific laying direction requirements due to their designs and characteristics. For Altro Wood adhesive-free, the rolls should be laid in the same direction. In contrast, Altro Cantata adhesive-free and Altro Illustra adhesive-free require reverse laying, meaning the lengths should be installed in opposite directions.

Refer to the roll label for detailed guidance, or contact Altro Technical Services for further assistance.

Cut the material into the required lengths and allow it to acclimate, laying loose and face-up, for a minimum of two hours before installation. "Back rolling" or "dressing" the material aids in conditioning before installation. Once conditioned and positioned, overlap all joints by approximately 20mm and cut them in to achieve a tight fit. For all Altro resilient floor coverings, trimming and removing factory edges is mandatory. Selvages must be removed to ensure proper pattern alignment. Joints can be cut at any stage of the process using standard industry methods.

Application of the tape can be completed before or during the installation and should

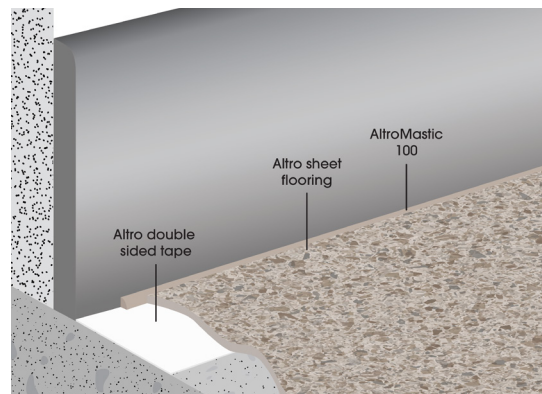
be placed approximately 1mm from all edges.

Additionally, use Altro double-sided tape to secure the flooring material to the subfloor at any termination points, like door entrances

In areas with high traffic or frequent turning points, applying additional tapes can provide enhanced adhesion and durability.

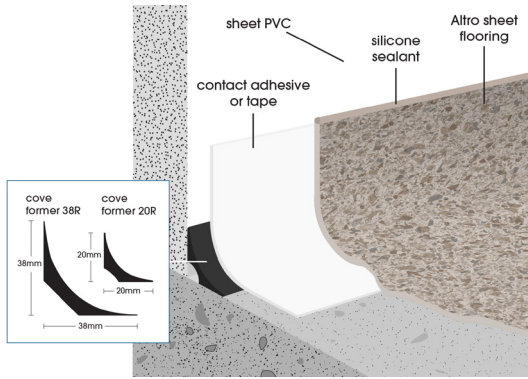
Installation can take place using traditional methods. Once satisfied that the flooring is laying flat turn back the sheet, clean off the back of the sheet and remove the film from the tape. When placing the sheet, use a Push board or similar, to disperse air ensuring the sheet in position is free from rucks or distortion. Thoroughly roll the taped sections using a hand roller. Once satisfied, repeat on the adjacent side. A 1mm gap should be left between the flooring and perimeter edges.

All flat laid areas of Altro adhesive free floor covering must be sealed around perimeters and exposed edges with AltroMastic 100. This also applies to door frames and around fixtures and fittings.



Coving

Altro safety flooring can be flat laid or self-coved. The use of a 20 or 32mm cove fillet when coving is recommended. Coving height should be at a minimum of 75mm to a maximum of 150mm. A pencil cove detail is an option, provided the internal radius does not exceed 5mm.

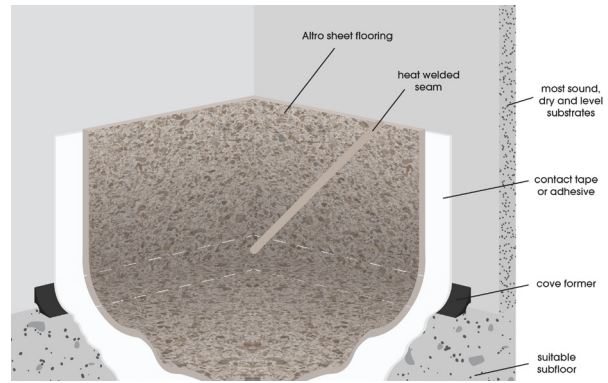
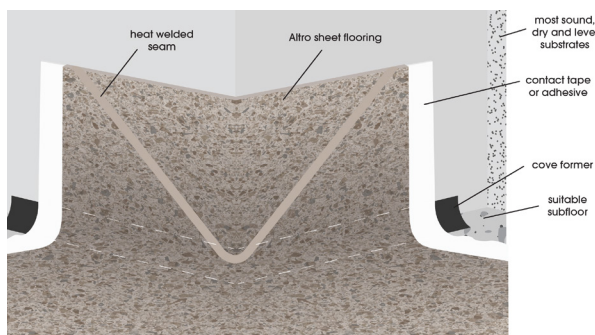


To securely install flooring to coved areas, apply Altro adhesive tape over the cove former and across the entire vertical surface up to the designated cove height. For enhanced adhesion, Altro W165 should be applied beforehand, ensuring a strong and durable bond.

Note:

While tape serves as a highly secure bonding agent, installers still have the conventional option of employing either water-based or solvent-based contact adhesives to attach coved flooring or forming into clamp waste systems. The choice between these adhesives hinges on the suitability of the areas and adherence to safety requirements during the installation process.

To safeguard welds from potential structural wall movement, install and weld both internal and external joints at a 45 degree angle, as illustrated in the diagrams below. This technique enhances weld strength and stability, ensuring long-term durability across various condition. The choice between these adhesives hinges on the suitability of the areas and adherence to safety requirements during the installation process.



Utilising heat can aid in shaping the vinyl during coving; however, it is crucial to exercise caution to prevent burning or causing damage to the vinyl surface.

It is recommended to refer to the Altro detail diagram sheet for the appropriate finishes and sealing techniques to maintain a watertight and secure installation. Proper sealing helps prevent water damage, maintain hygiene, and ensure the longevity of the flooring system in moisture-prone areas.

Once fully installed, all joints and mitres within the installation should be hot welded with the matching colour Altro Weldrod™, as detailed in the Altro safety flooring installation guidance sheet.

Seams

All seams must be cut, cleaned and rolled before proceeding. Joins should be double or scribed cut to maintain a consistently tight seam along the entire length.

Altro Safety floor seams must be heat welded only. Chemically welded or butt joined is not permitted. All seams must be cut, cleaned and rolled before proceeding. Joins should be double or scribed cut to maintain a consistently tight seam along the entire length.

Grooving

A 3mm wide groove to two-thirds depth of the flooring must be cut evenly along each floor joint. It is recommended that a P type, Plane, or mechanical power groover is used

to ensure the correct gauge and radius is achieved.



Forming a hot welded joint

After installing the vinyl flooring and preparing the seams, use a hot air welding gun with a 5mm high-speed welding nozzle to hot weld all joints and mitres using the matching Altro Weldrod™ color, in accordance with the Altro safety flooring installation guidelines. As no adhesive is required, welding can be performed immediately without any waiting time.



To ensure the correct temperature setting, test the weld on a spare piece of flooring before starting.

Start by welding the internal and external miters on the coved sections, followed by the floor seams. It is important to keep the filter of the welding gun clear from debris to maintain the optimal weld temperature.

Trimming weld

For a smooth, flush finish when welding seams, use a two-pass cutting method. Start by trimming the weld with a trimming plate, leaving an excess of 0.5mm to 0.7mm after the initial cut. Once the weld has fully

cooled, perform the final cut. Always use tools specifically designed for cutting back joint seams, as well as internal and external welds. Ensure cutting blades are sharp and in good condition for optimal results. Following these guidelines will help achieve a strong, compliant seam.



POST INSTALL

Remove any residual adhesive and thoroughly sweep/vacuum floor clean. Spot clean with AltroClean 44+ and a clean white cloth as required. Using a suitable non-staining material, protect completed floor areas from following trades until ready for use. A stronger grade protection material should be used if heavy machinery is to be temporarily moved/stored on floor area.

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.

Please note: A distinction should always be made between adhesive and non-adhesive dirt. Non-adhesive dirt should be removed using a dry method of cleaning. Loose dust, for example, can be removed simply by brushing or using a vacuum cleaner with a hard floor brush.

1. Final cleaning after installation

The final cleaning after installation is intended to remove all dirt introduced during the construction phase. Red pads and JuliPads can be used with single-disc machines.

Please note: Initial treatment is not necessary.

Altro adhesive-free flooring does not require extra surface polish or treatment following installation. The surface only requires ongoing cleaning and maintenance on a regular basis with the correct cleaning solution and equipment. The use of a polish will reduce the slip resistance of the floor covering.

2. Routine cleaning

Routine cleaning should be conducted with a detergent that contains no care product ingredients and which dries on the surface without leaving any residue. Alternatively, routine cleaning can be carried out using another certified cleaning agent in accordance with the guidelines as given by the cleaning agent's manufacturer. These products should not contain any substances that form a film. Switching to a different detergent can have negative repercussions for the cleaning effect. 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.

3. Machine cleaning

The use of a scrubbing / vacuum machine is particularly effective in large buildings. We

recommend the use of cleaning machines in combination with micro-brush pads to deal with open spaces and hallways. For smaller areas, please use machines with a high suction capacity; they should also be equipped with constant suction mode when moving onwards or backwards.

Please note: Routine cleaning should be carried out using a microfiber mop in accordance with the manufacturer's guidelines. As a rule, we recommend using a mop with a working width of 40 cm.

4. Basic cleaning

In the event of basic cleaning becoming necessary due to an excessive introduction of dirt, it can be carried out without further ado in accordance with the instructions of the respective cleaning agent manufacturer.

5. 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.

6. List of cleaning agents

A list of the specific products available from the respective manufacturers for final cleaning, routine cleaning and basic cleaning can be found at www.altro.com.

If you have any questions, please contact Altro for technical advice 03 9764 7000.

We do not assume any responsibility for the effectiveness and satisfaction of expectations associated with the cleaning and care products suggested by the manufacturers. If you have inquiries, including those related to product sources, we encourage you to reach out to the manufacturers directly.

