

Installation guidance

Altro flooring - sheet

Altro Operetta™, Altro Orchestra™, Altro Serenade™, Altro Zodiac™,
Altro Orchestra™ Custom, Altro Piccolo™

Storage

Altro resilient flooring should be laid in accordance with the Code of Practice BS 8203:2017. The material should be stored for a minimum of 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.

Ensure that the material used in any one area is from the same manufacturing batch.

The material should be checked for any possible faults prior to laying and should be conditioned before adhering to the subfloor for a minimum of 2 hours. Sheet material should be cut into lengths and laid loose for conditioning. The surface temperature of the subfloor must not be below +10°C, and for installations over underfloor heating must be between +18°C and +22°C. Prior to installation, all material including adhesives should be allowed to reach room temperature.

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

Subfloor

The subfloor must conform to the requirements of BS 8203:2017 and reach a minimum surface regularity of SR2. The subfloor surface must be clean and free from contamination such as debris / dust or loose particles. Absorbent surfaces may need priming using a suitable

acrylic primer or diluted acrylic adhesive / pressure sensitive adhesive in accordance with manufacturer's instructions, spray adhesives and PVA used as primers should be avoided. The primed surface must be completely dry before installation starts. Prior to installation, all material including adhesives and primer if using, should be allowed to reach room temperature.

Timber subfloors

For best possible results all wooden floor boards, wood based panel boards, particle boards including orientated strand board (OSB) should be securely fixed and overlaid with a minimum 5.5 mm thickness plywood to provide a smooth and even surface. Wood based floating flooring, such as chipboard, also require overlaying with a minimum 5.5 mm thickness suitable flooring grade plywood. Any bumps, dips or voids may be evident in the finished flooring if not overlaid with a suitable plywood. Flooring grade plywood such as Hanson SP101 or similar should be used. Refer to BS 8203: 2017 and the Contract Flooring Association for guidance and advice for a suitable plywood specification. All screw and nail head fixings must be below surface of overlaid plywood and any indentations and joints in the plywood filled with an appropriate filler. A further application of primer and a flexible fibre reinforced smoothing compound may be necessary over the plywood.

Suspended timber floors should be adequately ventilated in accordance with BS 8203:2017. Floor boards and similar substrates should be of a grade and thickness of timber appropriate for the construction of the floor, nature of the building, expected design loading and have a moisture content of max 8% (equivalent to 40% RH at +20°C).

Wood block floors

Altro smooth flooring can be installed on existing wood block floors EXCEPT for wood blocks laid at ground floor level. If above ground level, and there is no chance of moisture ingress, they should be securely bonded to the base, and be smooth, even and free of any oil or wax based finishes. Wood blocks should be covered with minimum 5.5 mm thickness flooring grade plywood (Hanson SP101 Ply or similar) to provide a smooth an even surface before installation of Altro smooth flooring. If any doubt exists, contact Altro Technical Services for advice.

Concrete subfloors

All ground level floors should have a suitable moisture barrier and for glued down floors must not exceed 75% RH. If any doubt exists a surface applied damp proof membrane (DPM) or other appropriate moisture protection system should be used in accordance with BS 8203:2017. If in any doubt please contact Altro Technical Services for more advice.

Expansion Joints

Altro smooth 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.

Adhesive

For the correct choice of AltroFix™ adhesive, refer to the Altro adhesives data sheets. Excess adhesive should be removed with a cloth with a neutral detergent in the case of acrylic adhesive or with alcohol for two component adhesives. Removal of excess adhesive should be done as work progresses and whilst the adhesive is still wet.

Please note: Backing materials may vary. All Altro fleece backed products need to be installed whilst the adhesive is wet, however instructions may differ dependent on subfloor type.

Installation

Altro resilient flooring can be straight laid or used in conjunction with “sit on” or “set in” skirtings. The materials can also be self-coved. The sheet flooring should be reverse-laid (not the wood patterned sheet), i.e. the lengths are laid against each other in opposing directions. Consult the label for the relevant instructions. Refer to the Altro detail diagram sheet of the appropriate finishes or the Altro safety flooring installations guidance sheet for self-coving.

Once the material has been laid out and conditioned, all joints should be overlapped by approximately 20mm and cut in to form a tight joint to remove the factory edge, and any damage from storage and handling. The patterned wood ranges will require the pattern to be matched from sheet to sheet and the selvedge should be cut back to the nearest plank (for further information contact Altro). These can either be cut in before or after applying the adhesive and will depend upon the preference of the flooring installer, however, it should be borne in mind that in large installations if the joints and / or the perimeter has been cut in, any movement of the sheet whilst placing it into the adhesive will create a problem. A 2mm gap should be left between the flooring and perimeter edge to be filled later with AltroMastic 100. Turn the material back and apply the adhesive to the subfloor in accordance with the manufacturer's instructions.

After the specified open time, which can depend upon the subfloor, underlayment and ambient conditions, place the floorcovering back into the adhesive pushing out any air bubbles. Remove any excess adhesive immediately and depending upon the adhesive used (refer to Altro's adhesives data sheets) roll the whole area with a floor roller both width ways and length ways. All joints within the sheet should be overlapped before cutting in, grooving and hot welding.

Grooving

A 3mm wide groove to 2/3 depth of the flooring must be cut evenly along each floor joint using a hand or automatic rotary grooving tool. With acoustic backed products, such as Altro Orchestra, Altro Serenade or Altro Piccolo, care must be taken not to expose the foam backing and will require shallower grooving. Use of the special Altro automatic grooving blades is recommended as standard blades are quickly worn when used on safety flooring. When self coving products with PUR coatings, it is imperative that internal corners are grooved to ensure coatings are removed.

Forming a hot welded joint

After cutting in and adhering the sheet vinyl flooring, and following the initial curing period of the adhesive, all joints must be hot welded with Altro Weldrod™, using a hot air welding gun fitted with a 5mm high speed welding nozzle. Internal and external mitres should be hot welded. After a long period of use, the filter of the welding gun may become clogged with debris. This must be kept clear to reach the optimum weld temperature. Where possible, allow 24 hours between laying and welding, to ensure the adhesive is fully cured. However, when installing Altro adhesive-free flooring welding can be carried out immediately after installation as no wet adhesive is used with this system.

Welding

The internal and external mitres on the coved sections should be welded first. Turn the speed nozzle at the end of the welding gun to the up position, for easier starting, or use an Altro coving speed nozzle. Once the mitres are finished, turn the nozzle to the down position to hot weld the grooved floor joints.

Finishing

Once the weld has cooled, trim the weld with the most appropriate tool such as a spatula fitted with a spatula guide or sledge. Then once fully cooled, using the spatula only, trim the weld flush with the surface of the flooring material. For external mitres use the square router blade and for internal mitres the round router blade. For details on equipment and tools, refer to Altro's Recommended Equipment and Tools data sheet.

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 / adhesive bond line, should never exceed 27°C. The relative humidity of the subfloor must be 75% RH / 2 CM% or less.

Glued down Altro smooth flooring must be installed while the underfloor heating is 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 several days, by a maximum of 5°C per day, until the desired room temperature is reached.

The temperature at the underside of the floor covering, i.e. the subfloor / adhesive bond line, should never exceed 27°C.

Adhesive-free flooring can be installed whilst the underfloor heating is on, only if the floor covering has been acclimatised 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.

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

Protection and maintenance

Altro smooth flooring must be covered and protected from all other trades with a suitable non-staining protective covering. 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. Claims against damage due to incorrect protection will not be accepted.

For maintenance of Altro smooth flooring refer to the Altro resilient flooring recommended cleaning methods.

For further information or technical advice

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