

Amtico Acoustic LVT Installation Guidelines

ADES-IN-20250218-06-EN

Applies to:

Amtico Signature, Signature Safety, Form, Spacia, Spacia Safety and First.

Introduction & areas of use

Amtico Acoustic LVT products offer improved acoustic performance when compared with standard products. Amtico Acoustic LVT products should be installed in the same manner as our standard products using the correct adhesive as per our guidance below. Installation must not begin until all other trades have been completed.

Amtico Signature, Spacia and Form Acoustic products are suitable for most general Commercial and Residential locations.

Amtico First Acoustic products are suitable for moderate Commercial and Residential use.

Amtico Signature and Spacia Safety Acoustic products are designed for Commercial areas where sustainable enhanced slip resistance is required.

They are not suitable for external or unheated areas, or areas where extremes of temperature are expected such as in conservatories. Very heavy rolling loads such as forklift or pallet trucks should be avoided. Whilst the product conforms to EN ISO 24343-1 in terms of indentation, care should always be taken to minimise heavy point loading or by using load spreading plates or cups.

All 915 x 915 mm (36 x 36") product should be installed in a tessellated format.

Receiving materials, conditioning & storage

Before laying flooring, all materials must be checked to ensure that the batches are identical and free from defects. Complaints with regard to clearly identifiable defects cannot be accepted once the flooring has been laid.

Boxes of Amtico Acoustic LVT products should be removed from pallets and separated from one another as part of the acclimatisation process. Ensure that the heating/air conditioning is fitted and operating. Alternatively, temporary heating or cooling may be used to maintain a constant temperature within the specified range.

Amtico Acoustic LVT products, adhesive and subfloor must be allowed to stabilise to a constant temperature between 18°C-27°C (64-81 F) for a period of at least 24 hours before, during and after installation. If Amtico Acoustic LVT products and adhesive have been stored outside of this temperature range, then it is recommended that acclimatisation is increased to 48 hours. Amtico Acoustic LVT products must be stored flat and kept away from direct sunlight, heaters or air vents for proper conditioning.

Subfloor Preparation

The suitability of subfloors and site conditions must be assessed prior to beginning an installation to ensure that they are in accordance with Amtico Flooring and subfloor manufacturers' guidelines and national standards.

Good preparation is essential as the finished appearance of the floor will only be as good as the quality of the base and preparation over which it is installed. The base should be hard, smooth, clean, dry and free from defects. The surface should be even in order to achieve good fitting and adhesion. Any irregularities in the subfloor will show through the finished floor.

The guidance notes provided by Amtico Flooring are intended to give general information on the methods that can be used to prepare various subfloor types.

The quality and preparation of subfloors, testing for moisture content and relative humidity, and installation procedures must be in accordance with Amtico Flooring technical guidelines and country specific standards (BS 8203 and BS 8204 for UK).

Moisture in Subfloors

Moisture testing of all subfloors is essential before installation can begin. This is true of new and old buildings. Moisture testing must be carried out and recorded. All moisture tests must be undertaken in accordance with Local regulations (e.g. BS 8203 for UK) and using an appropriate method to suit the subfloor type. The subfloor may be considered dry when the relative humidity is 75% or below. If readings are above this level, a surface damp proof membrane can be applied. Consult manufacturers for instructions. Alternatively subfloors can be given sufficient time to dry.

Solid Subfloors

Concrete / Sand and Cement

Amtico Acoustic LVT products must only be installed on suitably dry concrete or sand and cement subfloors. Drying time will depend on several conditions, including thickness of slab, location, type of construction, temperature and humidity. New concrete bases contain a high percentage of residual moisture.

Subfloors must be thoroughly mechanically cleaned of all paint, curing agents, grease, wax and any other foreign matter. The use of solvents to remove surface contaminants is not permitted.

The floor must be hard, smooth, level and free from cracks. Use a suitable repair compound to fill grooves, cracks, holes and depressions.

Please refer to section titled Levelling / Smoothing Compounds for Solid Subfloors.

Power Floated Concrete

Power Floated Concrete has a relatively non-absorbent, low porosity surface which will increase the drying time. It is not a suitable surface for direct application of adhesive. Surface laitance may also be produced by the power floating procedure. For these reasons, it is recommended that an appropriate method of mechanical preparation such as shot blasting or scarifying is used to prepare the surface.

Please refer to section titled Levelling / Smoothing Compounds for Solid Subfloors.

Anhydrite (Calcium Sulphate)

Anhydrite screeds can be difficult to identify and can be mistaken for the more traditional cement based products. If these screeds are prepared in the same way as a sand and cement screed then the risk of failure is high.

Provided ambient conditions are acceptable, anhydrite screeds dry at a similar rate to their cement-based counterparts. In the case of the floor screed not being sufficiently dry please consult the manufacturer on how to proceed, in most cases the screed should be allowed to dry out to an acceptable level.

When the floor is sufficiently dry preparation can begin. Please refer to section titled Levelling / Smoothing Compounds for Solid Subfloors.

Asphalt

Mastic asphalt is normally applied between 15 and 20 mm thickness and sets to a dense hard mass which is impermeable to moisture and therefore forms an efficient damp-proof membrane. Mastic asphalt is often applied over an existing concrete base which lacks a conventional DPM. If the asphalt is cracked or damaged it will need to be repaired and damp proofing may be required.

The asphalt will need to be cleaned before preparation can begin. Please refer to section titled Levelling / Smoothing Compounds for Solid Subfloors.

Levelling / Smoothing Compounds for Solid Subfloors

Most solid subfloors will require an application of a compatible compound to provide a hard, smooth and level surface to which adhesive and Amtico Acoustic LVT products can be applied.

The selection of a suitable compound is critical in determining the long term durability and appearance of the flooring system. Generally these compounds should be applied at a minimum of 3 mm thickness. The manufacturer of this compound can supply details of the product within their range that should be used to suit the end use application together with details of which primer should be used.

Expansion Joints

Expansion joints are incorporated into concrete floor slabs in order to permit movement without causing cracks to form. These joints should not be filled with smoothing compound or overlaid with Amtico Acoustic LVT products. In all cases they should be mirrored through to the surface.

Timber floors

Existing Floorboards

Loose floor boards should be firmly nailed down and any damaged boards replaced. If necessary, the boards should be planed and/ or levelled with a suitable levelling compound prior to covering with plywood. See section on Plywood Overlays.

Wood subfloors that exhibit excessive deflection, or are "springy" or "give" when walked on are not suitable for installing Amtico Acoustic LVT products unless suitable remedial work is carried out.

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Chipboard, Hardboard, Particleboard

Amtico Acoustic LVT products should not be adhered directly to such subfloors whether they are free floating or fixed, and floors should always be overlaid with plywood prior to installation of Amtico Acoustic LVT products. See section on Plywood Overlays.

Wood Block Floors

Existing wood block floors laid onto a concrete base are unsatisfactory as an underlayment for resilient floors, even when plywood has been fitted. Such floors must be lifted and the subfloor suitably prepared.

Plywood Overlays

Plywood should be a minimum of 6 mm thickness with a Plywood classification EN636-2 or 3, and a glue bond classification EN314-2 Class 3 Exterior. The thickness selected should be determined by the quality of the surface being covered.

Panels should be acclimatised to the site conditions as recommended by the supplier. Plywood should be protected against damage or water prior to application.

The plywood should be laid in sheet sizes not exceeding 2440 x 1220 mm, and fixed using screws or ring shank nails. Fixing should start at the centre of each sheet – nailing or screwing at 150 mm intervals at intermediate centres and at 100 mm centres along the perimeters with the fixing line 12 mm from the edge. All fixings should be finished flush with the surface. Joint lines should be staggered, and every effort made to prevent coincidence of joints in the sheets and the timber base.

We would recommend the use of a suitable compound to ensure the joints of the plywood and all fixings are not visible when the installation is complete. The manufacturer of this compound can supply details of the product within their range that should be used to suit the end use application together with details of which primer should be used.

Other subfloor types

Existing Resilient Floors

It is recommended that Amtico Acoustic LVT products are not directly applied over existing resilient floors (with the exception of Amtico Access and Click Smart). Generally, the old flooring should be removed and the base prepared to suit the type of subfloor uncovered. Please refer to relevant section.

Some older resilient floors and adhesives can contain asbestos. In case of doubt, contact the relevant local authority for advice on their removal and disposal.

Terrazzo, Stone & Quarry tiles

Some existing flooring materials such as Terrazzo, Stone & Quarry tiles may be suitable for the installation of Amtico Acoustic LVT products if properly prepared. These bases may be sufficiently porous to allow moisture to pass through to the back of the tile, and must be checked for moisture and damp-proofed if necessary. Worn and damaged areas must be repaired, including any tiles that are insecure, which must be removed. The surface must be thoroughly cleaned of all sealants and varnishes, as well as foreign matter such as oil, grease, wax, etc. It is recommended that a suitable mechanical method is used to prepare the surface, as this will also provide a satisfactory surface ready for preparation. Please refer to section titled Levelling / Smoothing Compounds for Solid Subfloors.

Metal

(i) Direct Application

The metal surface should be cleaned/degreased and then prepared by grinding or scarifying to ensure that it is clean and free from any contamination, such as rust or metal oxide. It should then be mechanically abraded to give a surface key. Amtico Acoustic LVT products can then be installed onto the prepared surface using Amtico Universal 2-Part Adhesive.

Note that under no circumstances should a water-based adhesive be used for bonding directly to metal.

(ii) Indirect Application

The metal surface should be cleaned/degreased and then prepared by grinding or scarifying to ensure that it is clean and free from any contamination, such as rust or metal oxide. It should then be mechanically abraded to give a surface key.

A suitable primer should be applied to the metal surface prior to putting down a suitable compound, which must be applied as recommended by the manufacturer.

Once the levelling compound has dried, any adhesive from our range can potentially be used subject to the restrictions described in the Adhesive Section.

Raised Access Floors

Amtico Acoustic LVT products cannot be fitted directly to raised floor panels. Where this is required, the panels should be level and stable, and then overlaid with plywood, using appropriate fixings to suit the panels surface – see section on Plywood Overlays.

Note that Amtico Access has been specifically developed for fitting directly onto raised access floor panels.

Underfloor Heating

There are various types of underfloor heating systems available, including hot water and electrical systems. All should be embedded within a subfloor to allow an even and controlled dissipation of warmth. In all cases, the temperature limitations are the same – the heating system must operate so that the temperature at the subfloor surface (i.e. the adhesive interface) should not exceed 27°C.

The heating system must be commissioned before Amtico Acoustic LVT products are installed, to ensure that the subfloor is stable, the heating system is working as required with no leaks or cable breaks.

Underfloor heating should be switched off for 48 hours before, and should not be switched back on until 48 hours have elapsed after installation. It is recommended that the heating is slowly re-applied to return it to the required operating temperature.

With underfloor heating systems, it is the responsibility of the manufacturer and/or installer to recommend appropriate procedures and materials for producing a surface suitable for installing Amtico Acoustic LVT products. For electrical systems, this will require that the heating elements are fully embedded in a well-bonded and appropriate levelling compound, and that the temperature is adequately controlled to maintain the temperature at the subfloor surface at a maximum of 27°C.

Care should be taken in the placing of large insulating items such as rugs, beanbags and towels onto floors containing underfloor heating. This can result in localised "hot-spots" which may lead to distortion or discolouration of Amtico Acoustic LVT products. No responsibility can be accepted under these circumstances.

Adhesive Selection & Application

Recommended Adhesives

Only Amtico adhesives should be used – others may not give adequate performance and could fail.

Amtico HT Extra Adhesive

This is a single part, wet set, water based adhesive with very low emissions (EC1 Plus) with a working time of 20 minutes. Recommended for all areas including those with underfloor heating. Follow the instructions on the packaging. Apply adhesive using an A2 trowel.

Amtico SF Adhesive

This is a very low emissions (EC1 Plus), water-based acrylic adhesive with a working time of 1 hour that is recommended for use in all areas except those subject to heat and moisture. Apply adhesive using an A2 trowel.

Amtico Universal 2-Part Adhesive

Universal 2-Part Adhesive is a wet-set adhesive that can be used for bonding Amtico Acoustic LVT products in wet areas such as bathrooms. It may also be used for high temperature areas and for bonding directly to non absorbent subfloors.

Universal 2-Part has a working time up to 60 minutes, is entirely solvent free and classified as EC1R Plus very low emissions.

Application

Follow the instructions on the packaging. Spread adhesive evenly using an A2 trowel. Do not use worn trowels.

Only spread sufficient adhesive that can be covered within the recommended working time.

Amtico Acoustic LVT products should be rolled with a 45kg (100lbs) roller soon after tile placement to flatten the adhesive ridges, and then again approximately 20 minutes after this to ensure full contact. Always clean away excess adhesive before it is allowed to dry – use a soft cloth moistened with water or Amtico Adhesive Remover. Dried adhesive can be removed by carefully scraping it off the tile, or by using a 3M red pad moistened with Amtico Adhesive Remover.

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Post Installation

Protecting Finished floors

Amtico Acoustic LVT products should ideally be the last finish to be installed into the room. If other trades are programmed to work after the floor installation, then suitable protection is advised to prevent damage to the floors.

Overshoes can be worn after installation, and rigid floor protection used for heavy items and dust sheets when painting or plastering activities are taking place.

Silicone Sealant

As standard practice Amtico Flooring recommends Amtico Acoustic LVT products should be neatly cut into place up to the skirting and with all our adhesive bonded ranges an expansion gap or silicone sealant is not needed.

If silicone is requested or specified a neat bead of clear or colour matched silicone sealant can be applied but we would recommend delaying application until the flooring adhesive is fully cured. Early application of silicone sealants can cause problems such as minor gapping and lifting at perimeters. Silicone dries and contracts at a fast rate, which can pull the outside tile of the installation towards the skirting board. If sealant is used, settlement and natural movement of the property and skirting may also result in perimeter issues over a longer time period.

Loading the floor

Take care not to load the floor until the adhesive is cured, ideally wait 24 hours before exposing the floor to heavy point or rolling loads to allow the adhesive to fully cure. Early placement of heavy or point loaded items can lead to indentations in the adhesive layer.

Cleaning

Do not clean the new Amtico floor for 24 hours after installation to allow adhesive to cure. For full details of cleaning recommendations please see our separate cleaning and maintenance guidelines on our website.

For any further assistance on any aspect of installation, maintenance or care of any Amtico floor please contact us on 02476861409 or email technical.support@amtico.com. Our office hours are Monday to Friday 08:30-16:45.