

Installation Instructions Heterogeneous Vinyl Sheet Flooring

Timberline Plus

Please read all instructions before you begin the installation

Quick Reference Guide

Installation:	Conform to current AS / NZS 1884 standard and these Instructions.
Types of sub-floors:	Concrete, cement sheet, timber (with approved board underlayment).
Installation system:	Full spread hard-set adhesive.
Seams:	Heat weld or chemical weld.
Pattern repeat:	900mm x 1250mm.
Coving:	Readily coveable with pre-formed Armstrong Flooring cove fillet.
Adhesives (to be used to manufacturer's directions):	Use Armstrong Flooring recommended adhesives as set out in the Armstrong Flooring Recommended Adhesive guide or other reputable brand adhesives that have been tested with Armstrong Flooring/Walling products.
Trowel size:	V1 1.6mm deep x 1.6mm wide x 1.6mm apart or trowel as per adhesive manufacturers recommendation.
Special Instructions:	All rolls of Armstrong Flooring products are marked with a 'batch number', and rolls are numbered in consecutive order. When using more than one roll make sure the rolls have the same 'batch number' and when used side by side in the same area are installed in roll number order.

WARNING!

Resilient floorcoverings, adhesives and underlays manufactured in or imported to Australia prior to 1 January 1984 may contain asbestos. If it cannot be definitively established that the previous floorcoverings, adhesives and/or underlay do not contain asbestos

- You should avoid creating dust and should not sand, dry sweep, dry scrape, drill, saw, bead blast or mechanically chip or pulverise the existing floorcoverings, adhesives or underlay, and
- The previous flooring should only be removed by an appropriately licensed asbestos removal contractor.

To The Installer

Before cutting and installing Armstrong Flooring floor coverings inspect the materials in a well-lit area to ensure correct product, colour, pattern and quantity (as ordered), that given areas are from the same batch and there are no obvious transit damage, manufacturing defects or other visual faults. Armstrong Flooring reserves the right to refuse an adjustment or claim for materials that are cut or installed where a reasonable inspection of the materials before installation would have identified the fault.

If there is a problem or doubt of any kind, then stop immediately and call Armstrong Flooring Customer Service on 1800 632 624 (AU) or 0800 449 649 (NZ).

Do not cut or install any damaged or defective material unless accepted, agreed and approved by all parties concerned.

Job Site Preparation

Rolls should be stored upright with space between the rolls. Prior to installation material should be allowed to relax in a flat form to allow it to acclimatise to job climatic conditions. Roll out flat and stack up to ten sheets for 24 hours at 15°C to 28°C. Temperatures in areas to be covered should be maintained at a minimum 15°C to 28°C for 48 hours prior to, during and after installation. Never install the material if the temperature in the room is less than 15°C as per current AS / NZS 1884. Please note that cold subfloors have considerable influence on delaying the open and drying times of flooring adhesive.

Vinyl flooring sheet material direction, seam and cross join placement should be approved by the client prior to the installation. Do not place "T" joins in doorways. Avoid cross joins and seams in heavy traffic ways. Wherever possible lay the sheet down the length of the room to minimise the number of seams. Seams should run toward the main light source and or the length of the room. Sheets must be installed to avoid colour differences, e.g. reversing sheets, keeping batch and roll numbers together.

Suitably prepare and clean (sweep/vacuum) a cutting area. Armstrong recommend the use of a vinyl dolly to roll out the sheet vinyl face up. Cut the required lengths, loosely roll up face in and stand in the area to be installed, this will help to further condition the vinyl to the area.

Subfloors

The condition of the subfloor not only has an important bearing on the appearance of the finished installation but can dramatically affect the life and serviceability of the floorcovering. **Subfloor imperfections will show through the installed covering.**

It is essential, therefore, that the subfloor be dry, hard, rigid, smooth, level, porous, and free of old adhesive, dust, grease, paint or any other contaminant that may affect the adhesive from forming a secure bond to the subfloor surface. Note that contaminants such as oil, pens, asphalt, marking paint, crayons, etc. may cause discolouration and/or transfer through to the surface of the flooring.

Damp proofing must be undertaken in accordance with the National Construction Code and any other building requirements. Where required an effective damp proof membrane must be incorporated in the subfloor.

Concrete Subfloors

Concrete subfloors must be cured and completely dry. New slabs should dry for at least one day per mm of thickness. Concrete slabs in contact with fill, hardcore or the ground must have a damp-proof membrane to prevent entry of moisture. Waterproofing additives and curing compounds do not replace the damp-proof membrane. A moisture test should always be carried out prior to installation as per current AS / NZS 1884 Appendix A. RH Moisture vapor in concrete slabs should not exceed 80% relative humidity.

The surface of the concrete must be plane, smooth and sound and have no abrupt surface deviations as set out in AS / NZS 1884. Any contaminants which may prevent adhesive forming a secure bond must be completely removed by mechanical (e.g. diamond grinding or shot blasting) prior to the installation of floor preparation and/or floor coverings. If the surface is not satisfactory it should be repaired and levelled with a cementitious underlayment, applied according to manufacturer's recommendations.

Heated Subfloors

Flooring material can be installed over heated subfloors provided **the temperature at the surface of the slab does NOT exceed 28°C** otherwise discolouration or other material alterations may occur. If installing over a heated subfloor:

- Prior to the installation, the heating should be turned on for a minimum of 7 days prior to installation to remove traces of residual dampness that may be present in the subfloor.
- Heating should be turned off 48 hours prior to and during the installation to allow the subfloor to return to recommended installation temperature range.
- Heating should not be turned on until 48 hours after completion of installation to allow the adhesive to set and fully cure. Temperature can then be increased by 2 degrees per day until desired temperature is achieved.
- Maximum heating conditions should be avoided for a period of 7 days after installation to prevent any localised hot spots which may be detrimental to the adhesive bond and the floor coverings.

Strip Wood and Panelboard Timber Subfloors

A moisture test should be carried out prior to installation as per current AS / NZS1884 Appendix A.

All timber subfloors must have **at least 450mm** of good cross ventilation under the floor to prevent subfloor moisture build up which would cause distortion and movement of flooring members, bubbling/lifting of the flooring and/or excessive movement of underlay resulting in any distortion showing through the flooring.

New timber subfloors should be rigid, sound and constructed of seasoned timber and free from excessive cupping and warping. Old timber subfloors should have all loose boards re-nailed and badly worn or damaged boards must be replaced.

All timber floors must be sanded or planed to a clean level finish without undulations.

Overlay subfloor with hardboard or approved fibrous cement vinyl flooring underlay. The underlay sheets must be installed and fastened as per manufacturer's instructions. All board underlay end joints should be staggered. All joints and any raised edges of the underlay should be sanded smooth and level, leaving no deviation between sheet joints.

Hardboard underlay must be installed over structural grade particle board using the adhesive and fixing system specified by the board underlay manufacturer.

Clients should be advised of the potential for board underlay joints to show through in certain lighting conditions.

Existing Resilient Floors

Armstrong Flooring recommends the removal of existing resilient floor covering prior to the installation of new resilient floor coverings.

NOTE: Existing resilient flooring coverings may contain asbestos – see the 'WARNING' panel set out in these instructions.

Expansion/Construction Joints

Armstrong Flooring does not recommend that resilient floor coverings be installed across expansion/construction joints. Various expansion/construction joint covers are available and should be specified by the architect or agreed between the contractor and the client.

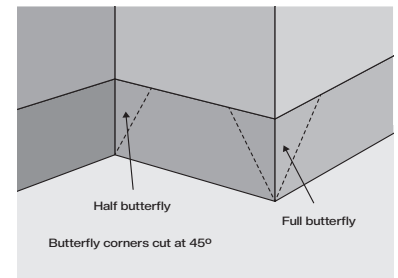
Installation

Cut material to length. Trim one factory edge, overlap the second sheet by a minimum of 10mm under scribe the joins leaving a maximum 0.5mm gap.

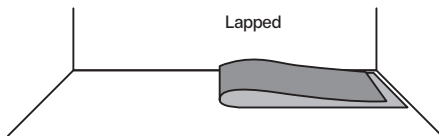
Loose lay the first two lengths and before adhering, step back and inspect the overall effect. If acceptable, then proceed and adhere, but if there is a problem or doubt of any kind then stop immediately and call Armstrong Flooring Customer Service on 1800 632 624 (AU) or 0800 449 649 (NZ).

For flat installations Armstrong recommend the material be fitted using paper template, bar or direct scribing techniques.

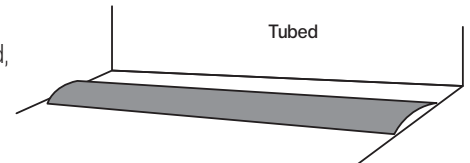
For coved installations, Armstrong Flooring recommends the use of the 20mm or 32mm cove fillet to support the coved vinyl. Internal and external corners to be butterfly corners at a 45-degree angle. Cove height set as per job requirements.



Adhesive Application



Sheets can be lapped or tubed.
Once the vinyl is pulled back to be glued, vacuum clean the subfloor surface and the back of the vinyl.



Following adhesive manufacturer's instructions:

- Spread the recommended adhesive to the properly prepared substrate using the recommended trowel notch size.
- Allow adhesive to tack up, tack time will be dependent on site and subfloor conditions.
- Lay vinyl flooring into the adhesive making sure to achieve a full wet transfer onto the back of the vinyl, using a cork push board or similar, expel any trapped air.
- Roll the vinyl with a 45kg roller in both directions (East/West, North/South) to flatten adhesive trowel lines and ensure full adhesive transfer.

Chemical Welding

- Overlap material allowing for any of the pattern match requirements.
- Double cut the seam using a straight blade and a straight edge.
- Roll the vinyl edges into the adhesive, avoiding getting adhesive between the sheets. Allow 24 hours for the adhesive to dry and cure before seam sealing.
- Cover the seam/cross join using a quality masking tape. Roll the tape to achieve good contact to the product surface.
- Using a rolling knife down the seam/cross join to split the tape.
- Insert the needle and allow the seam sealer to flow into the seam sealer to melt the wear layer fusing the two together.
- Allow approximately 20 minutes before removing the masking tape taking away any excess seam sealer.

Heat Weld Joins - Seam Preparation

- Trim the first side using a sheet vinyl edge trimmer or by cutting 10mm from the factory edge using a straight blade knife and straight edge.
- The second run of vinyl should overlap the first by 10mm to 15mm.
- After the vinyl has been placed into the adhesive under scribe the join, scribe the seams using a recess scribe set to provide a maximum gap of 0.5mm (when the gap between sheets is set correctly you should not be able to see any subfloor or adhesive through the gap).
- Cut along the scribe line keeping the knife upright to achieve a square edge, roll cut edge of vinyl into the adhesive using hand roller.
- Roll the entire floor in both directions using 45kg roller.

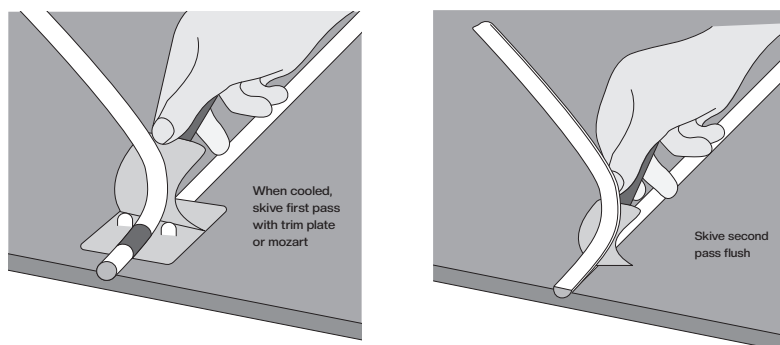
Heat Weld Installation

Routing or grooving and heat welding must be done once adhesive has set for 24 hours. For best welding results and to reduce damage to the surface of the vinyl use a fine air stream speed nozzle. **Armstrong Flooring weld rod must be used.**

- Groove just through the wear layer and into the white backing taking an even piece from each side of the seam/cross join.



- Set the temperature setting on the hot air welder, fitted with a speed nozzle, to deliver enough heat to fuse the weld rod to the sheet. Amperage of electrical supply, length of extension cord and wire size along with site conditions and subfloor temperature will affect the temperature setting. As a guide, a Leister weld gun fitted with a speed nozzle should be set to heat setting of around 400 to 450 degrees. **NOTE:** Practice welding on a piece of scrap material until correct settings are achieved.
- Insert weld rod into the speed nozzle and immediately insert the rod into the groove, hold the welding gun at an angle so that the tip of the speed nozzle is parallel with the material. A good weld will result when the weld just starts to flair on each side of the seam. If the weld rod in the joint flairs excessively you are going too slow. Scorching the material can occur if the heat setting is too high and/or if you are going too slow.
- To change directions in welding, shave off excess weld rod, groove the end of the weld rod for approximately 20mm to create a splice. Start welding from the opposite direction and continue welding until you overlap the grooved weld rod and continue for another 20mm before lifting weld off.
- Allow weld rod to cool to the room/ floor temperature, skive the excess weld rod off in two passes. The first pass using a quarter moon (spatula) knife with a trim plate or a Mozart trimming tool with the spacing plate before final skiving flush.



Too much heat may cause the product surface to craze or blister or may cause the vinyl to scorch. Be sure to test heat settings on a scrap piece before welding.

Precautions During Construction

All vinyl flooring should be protected during the construction period using a cardboard or paper-based floor protection system. Where additional or solid protection is required first install, cardboard or paper-based flooring protection system, and then rigid material over this (plywood, hardboard).

Surface protection should only be applied over clean floors. Do not apply tape or stick protection directly to the flooring.

Do not allow water to sit on or under the protection materials (this can cause whitening/clouding of the surface of the flooring, which may be irreversible). Should the protection materials be exposed to water and become wet, the protection materials **MUST** be immediately removed. Allow the floor to dry, then re-apply surface protection.

Armstrong Flooring does not recommend the use of plastic materials for the protection of vinyl floor or wall products during construction (e.g. builder's plastic, corflute®, sticky back carpet or vinyl protector or films), as these materials can damage the floor/wall.

Post Installation

- Remove all debris (electrostatic dust mop or vacuum) and damp mop using pH 7.0-8.5 neutral floor cleaner (follow manufacturer's instructions). Allow 48 hours before mopping using electrostatic dust mop or vacuum.
- Remove all floor preparation materials, any adhesive residue from flooring and skirtings/kick boards. Adhesive residue may be removed using a clean white cloth dampened with small amounts of mineral turpentine, carefully following warnings on container, immediately rinse with clean water (test in inconspicuous area first).
- To allow for the setting and drying of adhesives, do not allow heavy rolling loads for at least 24 hours after installation. If rolling loads cannot be avoided, protect the flooring by covering with paper-based protection and then to disperse the weight cover this with rigid material (plywood, hardboard).

For detailed maintenance instructions please refer to the Armstrong Flooring Cleaning and Care Instructions for Heterogeneous Flooring Products.

AU: customerservices@armstrongflooring.au
NZ: customerservices@armstrongflooring.co.nz