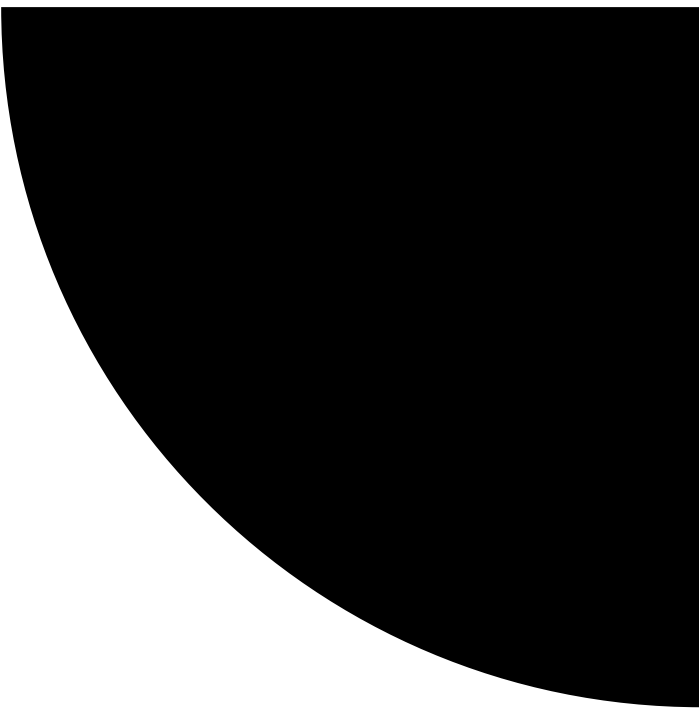


## Installation Instructions

# HETEROGENEOUS SHEET

Materials shall be installed in accordance with current AUSTRALIAN STANDARDS 1884 Floor coverings – Resilient sheet and tiles – Installation practices and these instructions.

**Please read all instructions before you begin the installation.**



# Installation Instructions

## HETEROGENEOUS SHEET

Please read all instructions before you begin the installation.

### QUICK REFERENCE GUIDE

#### Installation:

Conform to current AS 1884 standard

#### Types of sub-floors:

Concrete, cement sheet, timber (with approved board underlayment)

#### Installation system:

Full spread hard set adhesive – Seams

- Heat weld
- Chemical weld

#### Coving:

Readily coveable with pre-formed cove fillet

#### Adhesives:

- SV-200 hard set acrylic sheet vinyl adhesive
- LVT-200 hard set LVT/P adhesive
- PU-100 two part polyurethane adhesive
- Ardex AF 180ms Modified single part adhesive
- AF180ms modified single part adhesive
- SC100 contact adhesive

#### Trowel size:

Armstrong S-891 notched steel trowel 1.5mm deep, 1.5mm wide, 2.5mm apart.

Or a V1 1.6mm deep x 1.6mm wide x 1.6mm apart or trowel as per adhesive manufacturers recommendation

#### Recommendations:

Allow to condition to room/ floor temperature (15-28°C) for minimum 24 hours prior to installation

Trim one factory edge, overlap the second sheet by a minimum of 10mm under scribe the joins leaving a maximum 0.05mm gap. Welding should be done when adhesive is set, 24 hours.

Roll entire floor area in both direction with 45kg roller

Do not allow heavy rolling loads for at least 24 hours after installation

#### Special precautions:

All vinyl flooring should be protected during the construction period.

#### 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.

Where available Armstrong Flooring recommends the use of the lining felt from inside the roll, shiny side up, as or under any surface protection. Alternatively the use of cardboard or paper products would be acceptable.

Any surface protection should only be applied over clean floors.

Do not allow water to sit on or under the protection materials.

### TO THE INSTALLER

Please note that if material has been cut, fitted or installed, NO ADJUSTMENTS or CLAIMS (if any) will be considered due to the failure to comply with any of the following. Before cutting and installing Armstrong Flooring wall coverings make sure that you:

1. Check for obvious transit damage or manufacturing defects in good daylight conditions.
2. Check that the material is the correct colour, pattern and quantity ordered by the customer
3. 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 18°C. Never install the material if the temperature in the room is less than 15°C as per current Australian Standard AS 1884-2012 Section 4.1.1.
4. Use Armstrong Flooring recommended adhesive specifically formulated for the Armstrong Flooring product and job requirements.
5. All rolls of Armstrong Flooring products are marked with a 'batch number', and are numbered in consecutive order. When using more than one roll make sure the rolls have the same 'batch number' when used side by side in the same area and are installed in roll number order.
6. After loosely laying the first two lengths and before adhering, step back and inspect the overall effect. If acceptable, then go ahead and adhere, but if there is a problem or doubt of any kind then stop immediately and call the distributor or Armstrong Flooring Customer Service on **1800 632 624**.
7. Do not cut or install any damaged or defective material unless accepted, agreed and approved by all parties concerned.

### 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. It is essential, therefore, that the subfloor be dry, hard, rigid, smooth, level, porous, clean and free of old adhesive, dust, grease, paint, marking paint crayon or any other contaminant that may affect the adhesive from forming a secure bond to the subfloor surface.

**Remember that subfloor imperfections will show through the installed covering.**

#### **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 1884 appendix A 3.2.2**

R H Moisture vapor in concrete slabs should not exceed 80% relative humidity.

Care must be taken to ensure that the surface of the concrete is free from a burnished surface, parting or curing compounds, oil, grease, crayon, paint, old adhesive, dust and any other substances, which may prevent the adhesive from forming a secure bond. When any of the contaminants mentioned are present, they are to be completely removed by mechanical means like diamond grinding or shot blasting prior to the installation of floor preparation or vinyl floor covering materials.

The surface of the concrete must be plane, no more than a 4mm gap under 2meter long straight edge at rest on any two points 2 meters apart.

The surface of the concrete shall be smooth and free of cracks, holes and protrusions. 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. However, it is imperative that the temperature at the surface of the slab does not exceed 28°C. Prior to the installation, the heating should be turned for on a minimum of two weeks before the installation to remove traces of residual dampness that may be present in the subfloor. The heating should be turned off 48 hours prior to and during the installation. In order to allow the adhesive to set and fully cure the heating should not be turned on until seven days after the installation is completed, only increase the temperature by 2 degrees per day until required temperature is achieved.

#### **STRIP WOOD AND PANELBOARD TIMBER SUBFLOOR:**

Armstrong recommend to moisture test timber flooring as per current Australian Standard AS 1884, Appendix A 3.3.

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 as well as excessive movement of underlay. 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. Drum sand or diamond grind all timber floors to a clean level finish without undulations.

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

Hard Board underlay must be installed over structural grade particleboard using the adhesive and fixing system specified by the board underlay manufacturer.

Clients should be advised of the potential for board underlay join 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 fibers, which are not readily identifiable. You should note the details in the 'WARNING' panel set out later in these instructions before you carry out any removal works.

#### **EXPANSION/ CONSTRUCTION JOINTS:**

Armstrong Flooring does not recommend that resilient floorcoverings 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 purchaser.

#### **JOB SITE CONDITIONS:**

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. Please note that cold subfloors have considerable influence on the open time of flooring adhesive.

#### **VINYL FLOORING SHEET MATERIAL SET OUT:**

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 doorways. Avoid cross joins and seams in heavy traffic ways. Wherever possible lay the sheet down the length of the room to minimize the number of seams. Seams should run toward the main light source and or the length of the room.

#### **PREPARATION OF THE VINYL:**

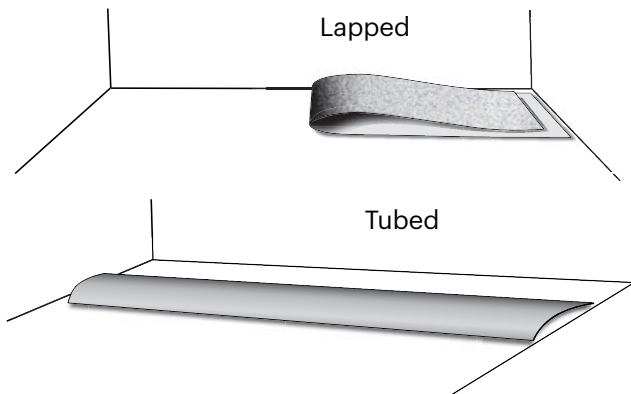
Vacuum clean a cutting area. Armstrong recommend the use of a vinyl Dolly to roll out the sheet vinyl face up. Cut the required lengths, loosely roll up face in and stand in the area to be installed, this will help to further condition the vinyl to the area.

#### **FLAT INSTALLATION:**

For flat installations Armstrong recommend the material be fitted using paper template, bar or direct scribing techniques or a wall trimmer. Cut the vinyl to a neat finish to the walls, skirtings and or kickboards.

#### **ADHESIVE APPLICATION:**

Decide how you want to pull back the vinyl, 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.

Spread the recommended adhesive using the nominated trowel notch size. Allow adhesive to tack up, depending on site and subfloor conditions tack time could vary, allow approximately 10/ 20 minutes. 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, then roll the vinyl with a 45kg roller in both directions to flatten adhesive trowel lines and ensure full adhesive transfer.



#### SEAM PREPARATION FOR CHEMICAL WELDING:

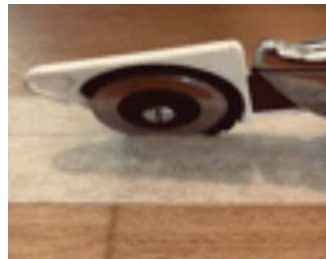
Overlap material allowing for any of the pattern match requirements.

Double cut the seam using a straight blade and a straight edge.

Roll the vinyl seam edges into the adhesive, avoid 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 PU coating. 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 as the needle moves along, do not rush this part. The seam will push apart and back together allowing 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.

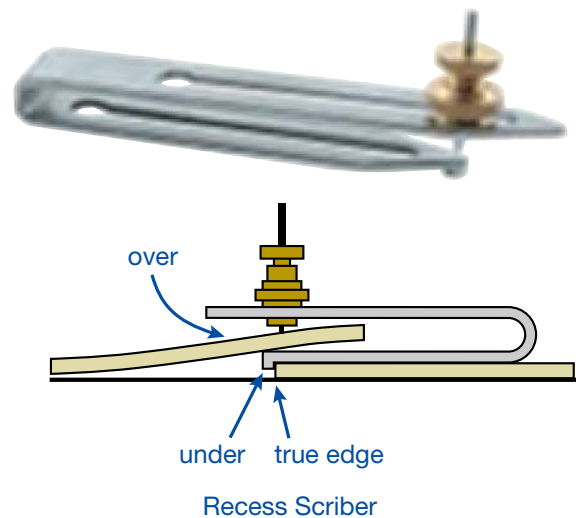
#### HEAT WELDED JOINS:

All factory edges should be removed during installation, for plain pattern material trim the first side using the Armstrong Flooring S-33 edge trimmer to create a true square edge.

Or alternatively with timber board designs by cutting back to the timber grout line using a straight blade knife and straight edge. The second run of vinyl should overlap the first allowing for the grout line to align. After the vinyl has been placed into the adhesive under scribe the joint.



Scribe the seams using Armstrong Flooring S-83 Recess Scriber set to provide a maximum gap of 0.4mm.



Cut on scribe line keeping knife upright to achieve a square edge, roll cut edge of vinyl into the adhesive using hand roller. Roll entire floor using 45kg roller.

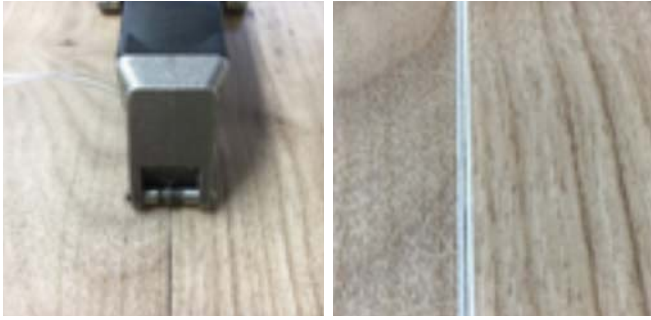
#### GROOVING AND WELDING:

Grooving the joint and Heat welding should only be done when adhesive has cured for 24 hours.

Rout or groove the seam in a "U" shape to a minimum of 1/3rd of the material thickness(0.7mm) using a grooving machine or hand groover.

Armstrong recommend the use of the Master Turbo® Groover, or similar.





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

**HEAT WELD SEAM INSTRUCTIONS:**

For best welding results and to reduce damage to the PU surface of the vinyl, Armstrong recommend the use of a fine air stream speed nozzle.



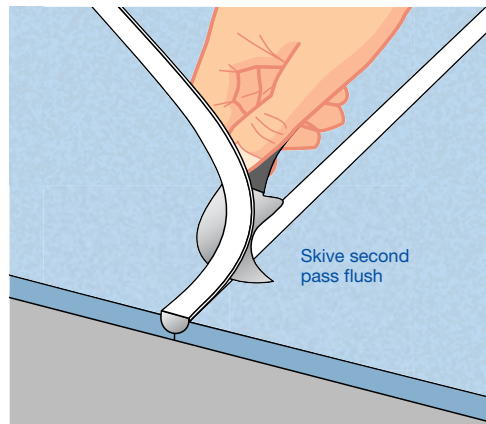
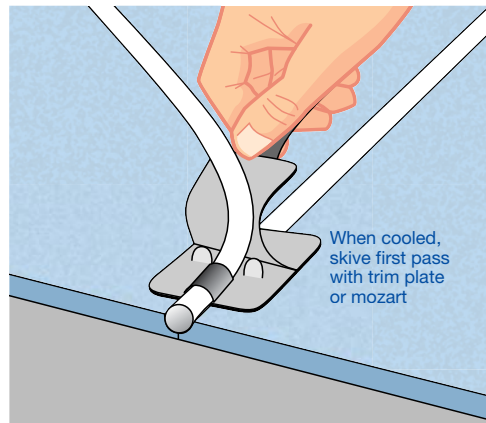
Leister fine airstream nozzle

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 fine air speed nozzle should be set to heat setting of around 350 to 400 degrees. Practice on a piece of scrap material until correct setting is 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 joint flairs excessively you are going too slow. Scorching the material can occur if the heat setting is too high.

To change directions in welding, shave off excess weld rod, using the Master Turbo Groover, 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.



Too much heat may cause the PU coating to craze or blister, or may cause the vinyl to scorch, be sure to test your heat setting on a scrap piece before welding.

**POST INSTALLATION CLEAN UP**

After installation is completed:

1. Remove all debris (electrostatic duct mop or vacuum).
2. Damp mop using neutral detergent.
3. remove all floor preparation materials, any adhesive residue from flooring and skirtings/ kick boards.

For maintenance instructions please refer to the document ARMSTRONG MAINTENANCE RECOMMENDATIONS FOR HOMOGENEOUS SHEET.



## ARMSTRONG FLOORING PTY LTD

FLOORCOVERINGS, ADHESIVES & ACCESSORIES MANUFACTURED IN AUSTRALIA AFTER 1st JANUARY, 1984  
**DO NOT CONTAIN ASBESTOS**



### WARNING

Vinyl flooring and adhesives manufactured in Australia prior to 1st January, 1984 may contain asbestos.

#### Existing Resilient Flooring

Do not sand, dry sweep, dry scrape, drill, saw, beadblast, or mechanically chip or pulverise existing resilient flooring, backing, lining felt or asphaltic 'cut-back' adhesives.

These products may contain either **asbestos fibres** or **crystalline silica**.

Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard.

Unless positively certain that the product to be removed is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content.

#### Where do I go to find out more about asbestos?

**Asbestos Awareness** [www.asbestosawareness.com.au](http://www.asbestosawareness.com.au) – provides information on a state by state basis about the dangers of asbestos, asbestos removal, who to contact and other important information.

**NOTE:** Vinyl flooring manufactured in Australia after January 1, 1984, **DOES NOT** contain asbestos. However, regulations, codes and directives as to the best method of handling asbestos do exist and it is the obligation of the installer to ensure that practices used are safe, without risk to health, and meet all legal requirements.

#### Disclaimer—Asbestos issues

The warnings and guidance contained in these instructions in relation to the potential for asbestos in floorcovering materials are given in good faith. However, regulations, codes and directives as to the best method of handling asbestos are under continual revision. It is the obligation of the installer to ensure that practices used are safe, without risk to health, and meet all legal requirements.

Armstrong Flooring Pty Ltd accepts no liability for any loss, costs, expense or injury, however incurred, arising from the presence of any asbestos in any floorcovering materials or asphaltic 'cut-back' adhesives and/or any reliance placed upon the procedures and recommended practices contained in these instructions.

#### Armstrong Flooring Pty Ltd

29 – 39 Mills Road, Braeside, 3195 Victoria Australia

For further information and samples:  
Australia Freecall 1800 632 624

Email [customer\\_services@armstrongflooring.com](mailto:customer_services@armstrongflooring.com) or contact us on the web

[www.armstrongflooring.com.au](http://www.armstrongflooring.com.au)

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