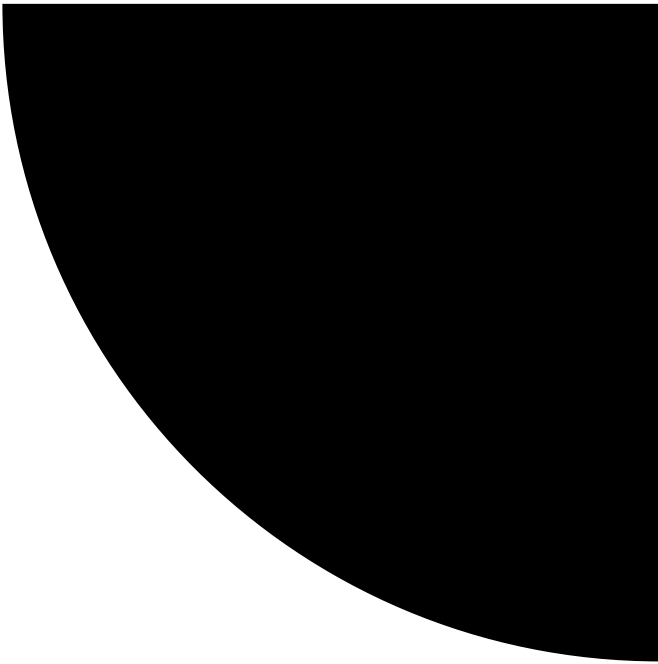


ArmstrongFlooring™

Commercial Vinyl Sheet Flooring

Installation Guide



Commercial Sheet Flooring Installation Guide

Please read all instructions before you begin the installation.

PRE-INSTALLATION SITE CONDITION CHECKS

Types of sub-floors:

- Concrete
- Timber floor with min. 45cm well-ventilated air space below
- The existing resilient flooring
- Ceramic tile, terrazzo, marble floor

Subfloor conditions:

- Solid, dry, clean, 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.
- Hardness of floor can be tested using a sclerometer as shown below.



- Moisture content is equal or less than 3% (CM) when conducting the moisture test.
- Levelness of the subfloor must be less than 2mm gap within the 2 meters length. (Accordance to BS 8204 Part2 SR1)
- Free from grease, foreign debris and dust.
- The unqualified subfloor must be treated prior to the installation.

Temperature and humidity checks:

- The indoor temperature should be maintained between 18°C to 38°C
- The relative humidity should be maintained between 40-75%.

*Conditioning the room/ floor's temperature for minimum 24 hours prior to installation for optimal result (if possible).

Production Batch number (Tonality) checks:

All rolls of Armstrong Flooring products are marked with a 'batch number' and 'Roll No.'. When installing more than one roll in an area, do ensure the rolls are having same the 'batch number' and whilst installing different rolls side by side, do install in sequence of ascending "Roll No.".

Example:

Roll 1: "Roll No. XXX4190404"

Roll 2: "Roll No. XXX4190405"

Roll 3: "Roll No. XXX4190406"

Adhesives:

- Vinyl sheet adhesive

Examples:

Uzin - KE 2000 S, Ardex - AF 178

Or any brands with equivalent usage/specifications

Trowel size:

- A2 or A3 trowel notch

Material checks:

1. Check for obvious transit damage or manufacturing defects in good daylight conditions.
2. Check material is correct colour code (SKU) and ensure sufficient quantity for the entire site.
3. Allow all the materials to acclimatise to job climatic conditions 48 hours before installation, unpack the materials 24 hours in advance to release the stress to minimize the dimension variance. Avoid immediate installation after unpacking.
4. 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 Representative.
5. Do not cut or install any damaged or defective material unless accepted, agreed and approved by all parties concerned.

Structural and Seams checks:

Expansion/ construction (Structural) joints

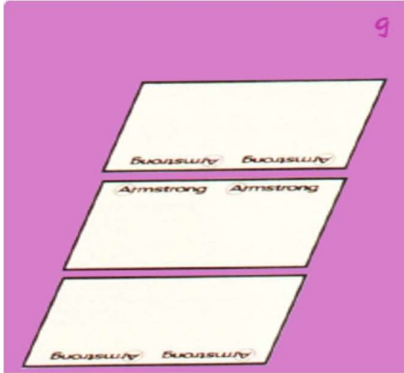
Armstrong Flooring does not recommend that resilient floorcoverings be installed across expansion/ construction joints. Various expansion/ construction joint covers are available and should be specified by the architect or agreed between the contractor and the purchaser.

Vinyl flooring sheet material set out (Seams)

Vinyl flooring sheet material direction, seam and cross joint placement should be approved by the client prior to the installation. Avoid cross joints 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. On each vinyl surface one edge of the vinyl will have Armstrong logos while the other edge does not have. It is recommended to install the sides with logo beside each other while the sides without logo beside each other which will reduce shading issues as shown on the picture below. The logo can be wipe away easily with a clean damp cloth.

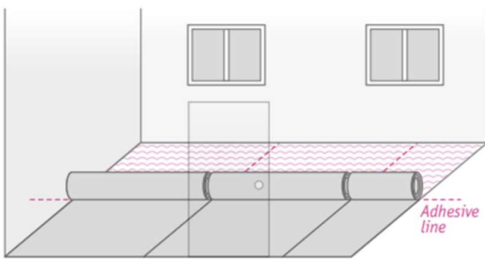


COVERED INSTALLATIONS:

Armstrong flooring recommend the use of the 20mm or 32mm cove fillet to support the covered vinyl. The standard cove height estimated 100-150mm based on site requirements.



ADHESIVE APPLICATION:



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 or reach the "Opening Time", depending 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, then roll the vinyl with a 50kg roller in both directions to flatten adhesive trowel lines and ensure full adhesive transfer.

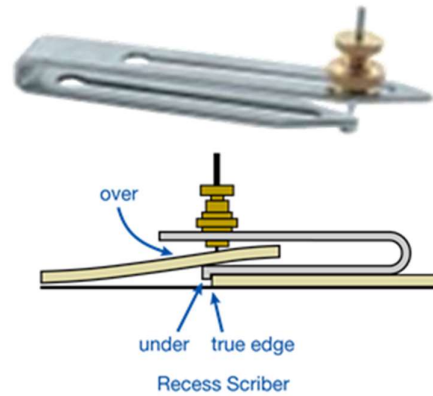


SEAM PREPARATION:

All factory edges should be removed during installation, trim the first side using the Edge trimmer.



Or alternatively 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 10 to 15mm. After the vinyl has been placed into the adhesive under scribe the join, scribe the seams using a recess scriber set to provide a gap of about 0.5mm.

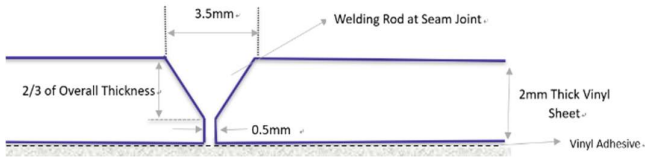


Cut along the scribe line keeping the knife upright to

achieve a square edge, roll cut edge of vinyl into the adhesive using hand roller. Roll entire floor using 50kg roller.

Routing or grooving and Heat welding should only be done when adhesive has cured for 24 hours.

Rout or groove the seam in a "U" or "V" shape to a maximum depth of 2/3rd the material thickness using a grooving machine or hand groover.



HEAT WELD SEAM INSTRUCTIONS:

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



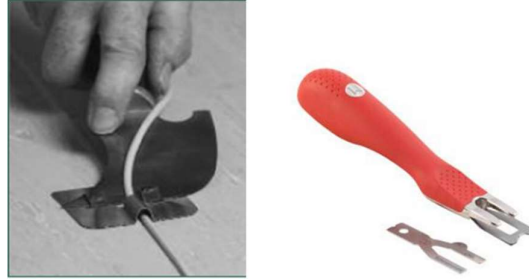
Leister fine airstream nozzle

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 speed nozzle should be set to heat setting of around 400 to 450 degrees. **Test weld on a piece of scrap material until correct setting is achieved.**

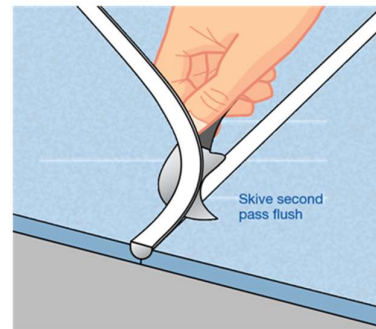
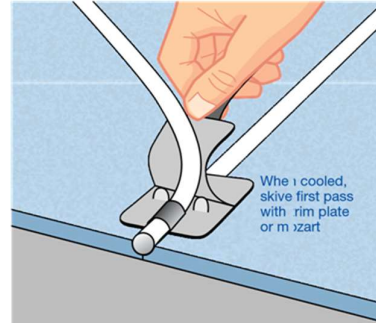
Insert weld rod into the speed nozzle and immediately insert the rod into the groove, hold the welding gun at an angle so that the tip of the speed nozzle is parallel with the material. A good weld will result when the weld just starts to flair on each side of the seam. If the weld joint flairs excessively 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, 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.



Allow weld rod to completely cool before final skiving (trimming).



POST INSTALLATION

Upon installation completed:

- Remove all debris and clean the floor using electrostatic duct mop or vacuum.
- Damp mop using neutral detergent.
- Remove all floor preparation materials, any adhesive residue from flooring and skirtings/ kick boards.
- Do not allow heavy rolling loads for at least 48 hours after installation.

Protection:

All vinyl flooring should be protected during the construction period by using protective covering of plain, undyed Kraft paper/cardboard. Ensure that the covering does not contain inks, marks or other agents to stain the new floor.

Inspection method:

Inspector should be standing upright having a view of the floor approximately 2 meters away from the "checked area" with good day light conditions. Lighting should not be directly on top of the "checked area", please refer to "Fig 1" below.

Post installation – Inspection method

Fig 1.

