

# INSTALLATION OF SHEET

The installation of Homogeneous, Heterogeneous, Rubber and Safety vinyl sheet.

## 3.1 RECEIPT & STORAGE

On receipt of rolls:

- ▶ Check that colours correspond to those ordered, that quantities are correct and that there is no damage.
- ▶ In particular, check that rolls are from one batch, if that was requested on the order.
- ▶ On arrival at site, the rolls should be safely secured in an upright position; (2m widths only) and stored, together with the adhesive, at a minimum temperature of 18°C for at least 24 hours before laying.
- ▶ Inflammable adhesives require special storage conditions. Contact the adhesive manufacturer or see current literature for details.
- ▶ To achieve best results, site conditions should be as described in BS 8203 or prevailing local/national standards. A working temperature of between 18°C and 27°C is required for at least 48 hours prior to, and during, the installation period; and for 24 hours afterwards. Conditioning should be carried out in the same room or areas as the installation, to prevent thermally induced dimensional changes.

## 3.2 PRIOR TO INSTALLATION (UNDERFLOOR HEATING)

On installations where underfloor heating is used:

- ▶ The system should be fully tested and commissioned prior to the flooring installation commencing.
- ▶ Underfloor Heating systems should be switched off and be fully cooled for a minimum of 48 hours prior to the installation commencing. The system should remain off and fully cooled during the installation and for a minimum of 48 hours afterwards. It should then be slowly brought back up to the working temperature incrementally over several days.
- ▶ A maximum subfloor temperature; (at the adhesive line) of 27°C should never be exceeded. Specialist high temperature adhesives should be used in areas with underfloor heating, direct sunlight, and areas of high solar gain. Please refer to the Polyflor Approved Adhesive List or contact your adhesive manufacturer for more information.

## 3.3 PREPARATION OF WORK AREA


The work area should now be prepared to receive the sheet flooring.

- ▶ Ensure that all other trades have completed their work and removed all their equipment and materials.
- ▶ Remove all debris and vacuum the whole subfloor area.
- ▶ Check the condition of the subfloor and make good as necessary.

**KEY POINT**

Commencement of work is deemed by many as acceptance of the site conditions as suitable for laying floor coverings.

- ▶ Stone or power grind any cementitious subfloor to remove any 'nibs' or ridges.
- ▶ Remove any surface contaminants, which may affect adhesion. Sweep or vacuum again prior to laying.
- ▶ If required by the contract, or if in doubt, check the moisture content of the subfloor and record the results and method used. Good lighting is essential.
- ▶ It is important to note that commencement of work is deemed by many as acceptance of the site conditions as suitable for laying floor coverings.

 Further information on subfloors and subfloor preparations can be found in Section two.

**3.4 LAYOUT OF SHEET**

- ▶ The architect may have provided a drawing showing the direction in which the material should be laid. In this case, lay the sheet as directed.
- ▶ Where the architect has left the direction to the discretion of the flooring contractor; at the tender stage show in which direction the material will be laid and state that your estimate is based on this.
- ▶ Always pay particular attention to where seams will fall, avoiding such occurrences as seams in the centre of doorways.
- ▶ If large windows are installed, minimise the effect of the joints by laying towards the window.

**3.5 SLABBING THE SHEET**

- ▶ Polyflor recommends that all Polyflor sheet flooring be rolled out face upward, taking care not to damage the surface, and cut approximately to size.
- ▶ Allowance of at least 75mm should be made at the ends for trimming in, the slabs should then be left overnight for 24 hours, to condition at a minimum temperature of 18°C.

**3.6 FITTING THE FIRST LENGTH**

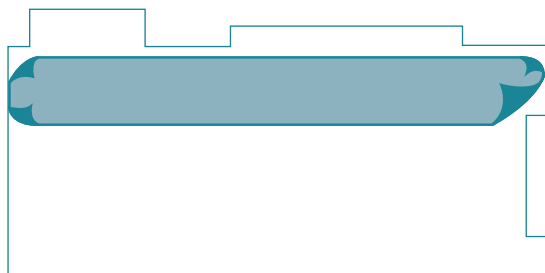


Figure 3.1 Lining up the First Sheet

- ▶ Place the first sheet in position next to the wall with the outer edge approximately 15mm from the nearest point.
- ▶ Adjust the lie of the sheet so that the inner edge is parallel with the axis of the room (Figure 3.1).
- ▶ Depending upon the depth of the recesses, use either a bar scriber or a pair of scribes to trace the profile of the wall. The scribes should be set to allow for the deepest recess or rake of the wall. Holding the scribes vertically and square to the edge, trace the wall profile onto the face of the sheet (Figure 3.2). With this method, all irregularities of the wall will be accurately reproduced onto the surface of the sheet. If the scribed line is difficult to see due to the colour or decoration, rub suitably contrasting chalk dust into the line to highlight it.



Figure 3.2 Scribing the wall profile

- ▶ Ease the sheet away from the wall and, using a hook blade trimming knife, cut off the excess material to the scribed line. Slide the sheet back against the wall and check the fit, making any minor adjustments as necessary.
- ▶ When satisfied that the fit on the first edge is correct, use a pencil to trace the opposite edge onto the subfloor (line A-B in Figure 3.3).
- ▶ In the centre of the room, draw a line on both the sheet and subfloor square to the main axis of the sheet (line C-D in Figure 3.3).

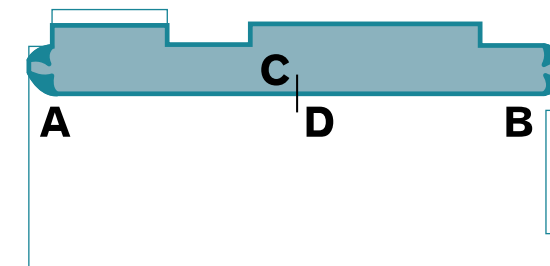


Figure 3.3 Marking the position

**KEY POINT**

If fitting to set-in coving, the same principles apply but a reverse scribe must be used to trace the toe onto the sheet.

It is normal to free hand cut to the coving, allowing 12mm overlap for final trimming in.

- ▶ Keeping the inner edge of the sheet on line A-B, slide the sheet back to clear the wall at one end of the room.
- ▶ Set the scribers to the distance now between lines C and D (Figure 3.4). Trace the end wall profile and cut to fit as described earlier.
- ▶ Repeat for the other end of the sheet. Once completed, the whole sheet - when slid back into position - should fit the wall profiles exactly.

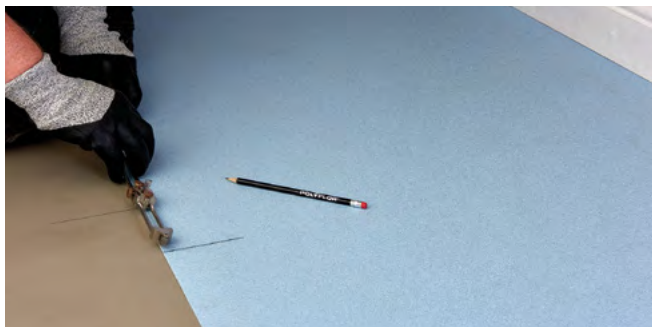


Figure 3.4 Setting the scriber

**3.7 FITTING SUBSEQUENT LENGTHS**

- ▶ Place the second length parallel to the first length, with a minimum of 10mm overlap along the adjoining edges or overlap of selvedge.
- ▶ On the opposite side, trace the edge along the whole length onto the subfloor. In the middle, draw a line C-D at right angles to the main axis, as previously described.
- ▶ Using the longitudinal line as a guide, slide back the sheet from the end wall and fit as described in Section 3.6.
- ▶ Repeat for the opposite end.
- ▶ Repeat the sequence for all remaining lengths.
- ▶ On the final length, which abuts the opposite wall, fit as described for the first length (Section 3.6).

**3.8 ALIGNMENT OF DECORATION (HETEROGENEOUS RANGES ONLY)**

This type of floor covering features a print layer with a regular, repeat decoration (e.g. wood plank). With wood effect designs:

- ▶ To maximise the final appearance of the installation and to ensure the decorative effect is not lost, it is important that care is taken to align the decoration of each adjacent sheet.
- ▶ The edge of the printed plank can be used in the lengthwise direction as a guide.

The label and printed information on the backing of the sheet must be checked and the product reverse laid when instructed.

**3.9 CUTTING IN THE SEAMS**

Polyflor recommends that all Polyflor sheet floor coverings are welded. Trimming off the factory edges and seam cutting is a prerequisite to enable successful grooving and welding.

**Note:** The seams should be cut before the adhesive is applied.

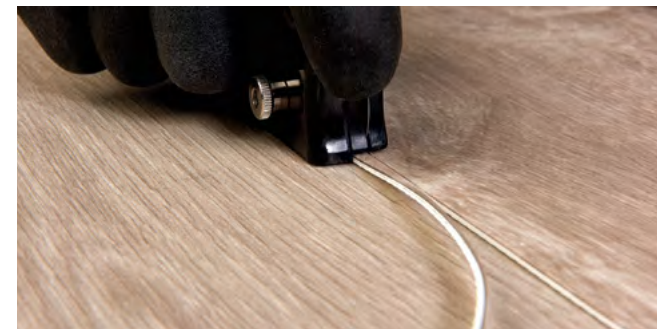


Figure 3.5 Cutting in the seams

**3.10 ADHERING THE SHEET**

Use of the correct adhesives is of paramount importance for the installation to be successful. Polyflor provide a comprehensive approved adhesive list available at polyflor.com or by contacting the **Polyflor Customer Technical Services Department (CTSD)**.

In areas subjected to direct sunlight or extremes/fluctuations in temperatures, Polyflor always recommends the use of an approved polyurethane; epoxy or suitable high temperature adhesive. Polyflor provides this information only as guidance. The legal responsibility for the supply and performance is that of the adhesive manufacturer.

Prior to adhering the sheet, it is important to read and understand the adhesive manufacturer's instructions, recommendations and safety advice. You need to know the hazards and limitations of the adhesive, especially the open time.

- ▶ Spread the adhesive using a suitable trowel to the manufacturer's recommendations ensuring that the correct notch size is maintained throughout the installation. If the notch shows signs of wear the trowel should be renewed immediately.
- ▶ If pressure sensitive adhesive is used the resultant serrated adhesive edges should be flattened with a lambswool roller pre-wetted with adhesive.
- ▶ Never spread more adhesive than can be laid within the open time. Polyflor does not recommend any method of adhesive application, such as spraying, which cannot guarantee the spread rate.

**KEY POINT**

Always follow the approved adhesive manufacturer's instructions closely.

- ▶ After each section has been laid, with the exception of the perimeter, thoroughly roll the sheet in both directions with a 68kg articulated floor roller. Repeat for each section until the main field of sheet has been laid.
- ▶ When spreading dispersion based adhesives on impervious or non-porous bases; (including bases where a surface applied damp proof membrane or moisture vapour suppressant has been applied) it is important to apply a suitable smoothing compound of not less than 3mm thickness. Failure to apply the correct depth of smoothing compound can result in moisture becoming trapped between the sheet and the impervious or non-porous base. This can ultimately lead to failures in the adhesive bond and in some cases discolouration of the vinyl sheet products.



Figure 3.6 Spread the adhesive

- ▶ The smoothing underlayment or adhesive supplier will provide details on which product(s) within their range should be used to suit the end use application and subfloor construction, and where applicable details of which primer should be used.
- ▶ Adhesive selection should be based on both the floor covering; substrate type and site conditions. Always select an adhesive from the Polyflor Approved Adhesive list. If in doubt about adhesive choice please contact [Polyflor CTSD](mailto:Polyflor CTSD) on +44 (0) 161 767 1912.

### 3.10.1 Premature trafficking of newly laid floors

Early trafficking may disturb the adhesive bond and weaken it, resulting in the associated problems of tracking, indentation, debonding etc. After the sheet has been installed, only light foot traffic should be allowed for at least 24 hours. Furniture etc. should only be returned after this time. The material should be protected with hardboard or plywood for at least 48 hours if subject to heavy trafficking.

## 3.11 PATTERN TEMPLATE METHOD

Areas which call for a considerable amount of fitting around obstacles, or which are too confined to lay down a sheet for fitting by normal methods, can be dealt with by templating the floor in felt paper.

For new buildings consider coming to an agreement with the main contractor to fit fixtures such as WCs and sinks after the vinyl has been laid.

- ▶ Dry fit the area with felt paper, leaving a gap of 15mm to 20mm around obstructions and walls.
- ▶ Draw around the fittings using a suitable measuring and marking device. Mark the template 'This Side Up'.
- ▶ Place the sheet in a larger area with the face uppermost. Place the template on top ensuring the direction of decoration is correct. Secure the template firmly in position and mark the position of all obstacles using the template as a guide.
- ▶ Using a sharp trimming knife, cut the sheet to the marked lines and fit into position.

**Do not use the felt paper template as an underlay.**

## 3.12 PREPARATION FOR SKIRTING PROFILE

- ▶ Ensure that all surfaces are firm, dry and free of dust, grease and oil.
- ▶ Fair faced brickwork or block work should have a skim coat applied, as this provides a smooth, firm surface of known porosity which will minimise adhesive usage and improve adhesion. Alternatively, 5.5mm thick plywood can be cut into appropriate width strips and then securely fixed to the block work to provide a smooth surface onto which the skirting can be fitted.
- ▶ Surfaces may require priming prior to application.
- ▶ All painted surfaces must be stripped back and wire brushed to remove all traces of paint as this can impair adhesion.

## 3.13 SITE FORMED COVERED SKIRTINGS

Polyflor fully flexible flooring, in conjunction with the Polyflor Ejecta cove former range (see also Section 11) can be used to create site formed covered skirting to form a hygienic watertight finish.

- ▶ Adhere the sections of cove former using an approved contact adhesive. Use a mitre-block to accurately cut internal and external corners and only adjust for length on straight cuts.

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**ACOUSTIC FLOOR**

Polyflor Acoustic Flooring ranges are not normally site formed. For further advice contact Polyflor CTSD +44 (0) 161 767 1912



Figure 3.7 Taper towards a doorway

- ▶ To prevent a difficult fit, and potential weak spot near doorways, cut away the back edge of the cove former on a taper for 150mm so that there is minimal cove former near the doorway (Figure 3.7). Heating the cove former will enable the shape to be formed but do not use a naked flame.

**3.13.1 Fitting Ejecta capping strip (type CS-N) Figure 3.6**

**KEY POINT**

Use only the Contact Adhesives that appear on the Polyflor Approved Adhesive List relevant to the product installed.

- ▶ Mark the walls around the room to the height the coving will reach. Minimum 100mm or as directed.
- ▶ Place the sheet to the walls and mark to the same height as previous. Using a straight edge and sharp knife, trim off the excess.
- ▶ Pull back the sheet from the walls. Fit the capping strip to the wall with a Polyflor approved contact adhesive so that the top of the sheet will sit inside the cap.
- ▶ Using the Polyflor approved contact adhesive, apply to the face of the cove former and up to the capping strip. Coat the back of the sheet with contact adhesive and leave both to dry.
- ▶ When dry, push the sheet into place and tuck the top edge into the capping strip. Roll with a hand roller to ensure even contact.

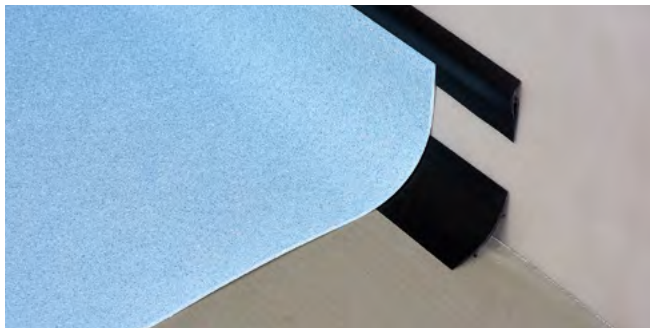


Figure 3.6 CS-N capping strips

**3.13.2 Fitting with sit-on capping strip (Type CS) Figure 3.7**

- ▶ Mark the walls around the room to the height the coving will reach. Minimum 100mm or as directed.
- ▶ Apply a Polyflor approved contact adhesive to the face of the cove former and up to the marked line on the wall. Coat the back of the sheet with the contact adhesive and leave both to dry.
- ▶ When dry, push the sheet into place and roll with a hand roller to ensure even contact.
- ▶ Using a straight edge and sharp knife, trim off the excess back to the required height as described earlier.
- ▶ Using a piece of capping strip, mark where the strip overlaps the wall and sheet. Apply a Polyflor approved contact adhesive between the lines and to the back of the capping strip. When dry, push into place.

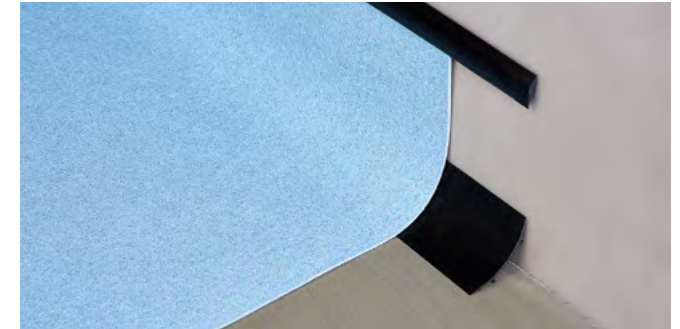


Figure 3.7 CS Capping strip

**3.14 FITTING TO CERAMIC WALL TILES (CT strip) Figure 3.8**

For the junction between site formed coved skirting and ceramic wall tiles, Polyflor Ejecta CT strip should be used.

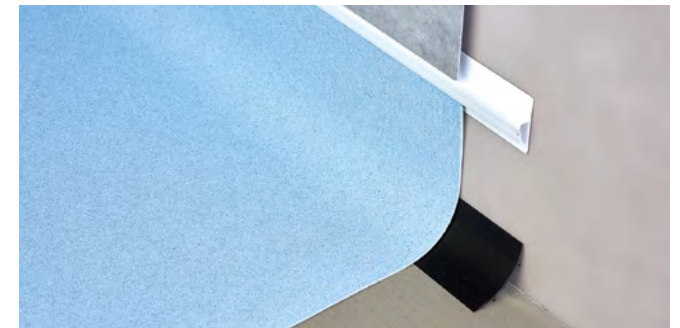


Figure 3.8 Fitting to Ceramic tiles

The flexible section is designed to accept ceramic tiles on one side and various gauges of material on the other.

- ▶ The Polyflor CT strip should be adhered using a Polyflor approved contact adhesive.
- ▶ The edge between the CT strip and the ceramic tiles should be grouted.
- ▶ The Polyflor sheet should be fitted into the bottom edge of the CT strip and adhered to the wall using a contact adhesive as recommended by Polyflor. A thin bead of mastic sealant should be run along the underside edge of the CT strip and the Polyflor sheet.

### 3.15 FITTING OF AN EXTERNAL CORNER (Wrap around method)

Welded external corners can be prone to damage from wheeled traffic. To prevent this, use the 'wrap around' method (illustrated in Figure 3.9).



Figure 3.9 External corners 'wrap around method'



For further details on recommended finishes refer to Section eleven.

