

3 Installation of Homogeneous vinyl sheet



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 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. A working temperature of between 18°C and 26°C is required for at least 24 hours prior to, and during, the laying period and for 24 hours afterwards. Conditioning areas and laying areas should be of similar temperature, to prevent thermally induced dimensional changes.

In installations where underfloor heating is used, this should be switched off from 48 hours prior to installation until 48 hours afterwards.

It should then be slowly brought back up to the working temperature, a maximum of 27°C.

Adhesives capable of withstanding

temperatures up to 27°C should be used. Where direct sunlight, sometimes in conjunction with underfloor heating, creates high surface temperatures on the floor, an approved epoxy or polyurethane adhesive should be used.

The work area should now be prepared to receive the vinyl sheet flooring. Ensure that all other trades have completed their work and removed all their equipment and materials. Remove all debris and sweep or vacuum the whole floor area. Check the condition of the subfloor and make good as necessary. 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 being suitable for laying floorcoverings.

3.1 LAYOUT OF VINYL SHEET

The architect may have provided a drawing showing the direction in which the material should be laid. In this case, lay the vinyl sheet as directed. If the architect has left this to the discretion of the flooring contractor, it is advisable to show at the tender stage 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.

3.2 SLABBING THE VINYL SHEET

Polyflor recommends that all Polyflor vinyl 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.

3.3 FITTING THE FIRST LENGTH

3.3.1 Non-foam backed products

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 1).

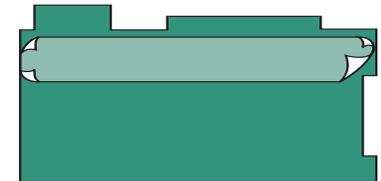


Figure 1 Lining up the first sheet

Depending upon the depth of the recesses, either a bar scriber or a pair of scribers should be used to trace the profile of the wall. The scribers should be set to allow for the deepest recess or rake of the wall. Holding the scribers vertically and square to the vinyl edge, trace the wall profile onto the face of the sheet (Figure 2). With this method, all irregularities of the wall will be accurately reproduced onto the surface of the vinyl sheet. If, because of the colour or decoration, the scribed line is difficult to see, rub suitably contrasting chalk dust into the line to highlight it.





Figure 2 Scribing the wall profile

Ease the sheet away from the wall and, using a hook blade trimming knife, cut off the excess vinyl 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).

In the centre of the room, draw a line on both the vinyl and subfloor square to the main axis of the sheet (line C-D in Figure 3).

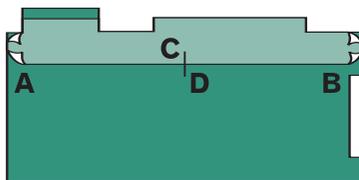


Figure 3 Marking the position

Keeping the inner edge of the vinyl 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 4). Trace the end wall

profile and cut to fit as described in preceding paragraphs.

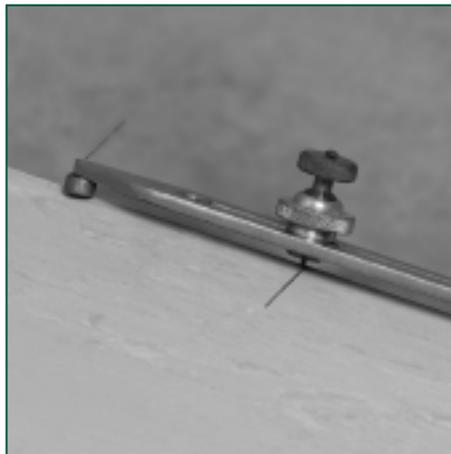


Figure 4 Setting the scriber

Repeat for the other end of the sheet. Once completed, the whole sheet - when slid back into position - should fit the wall profiles exactly.

Note: If fitting to set-in coving, the same principles apply but a reverse scriber 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.

3.4 FITTING SUBSEQUENT LENGTHS

Place the second length parallel to the first length, with a maximum 25mm overlap along the adjoining edges. 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 3.3.1. 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 3.3.1).

3.5 CUTTING IN THE SEAMS

Polyflor recommends that all Polyflor vinyl sheet floorcoverings are welded. Seam cutting, grooving and heat welding are described in detail in Section 11.

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

3.6 ADHERING THE VINYL SHEET

Prior to adhering the vinyl 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.

Never spread more adhesive than can be laid within the open time. Polyflor does not recommend any method of adhesive application, such as rolling or spraying, which cannot guarantee the spread rate.

3.6.1 Wet set adhesives

Wherever practical, start with central strips first, as these are usually easier, having fewer recesses or awkward fittings.

A. Fold back the sheet to just over half its length, making sure the remaining half retains its position.

B. Spread the adhesive using a notched trowel of the correct size, as recommended by the adhesive manufacturer. Maintain the correct size of notch at all times, recutting as necessary as work progresses.

C. When the adhesive is ready to accept the floorcovering, roll the vinyl sheet back into place, rubbing from the centre to the edge, taking care not to twist the roll or trap air bubbles.

D. Check that seams are without gaps and remove any excess adhesive.

E. Roll with a 68kg articulated floor roller, firstly in the short direction, then in the long. In corners and other awkward areas, use a hand roller.

F. Repeat over the whole floor until all the sheets are adhered.

G. Roll the whole area thoroughly again, between one and four hours later.

3.6.2 Adhering foam-backed vinyl sheet

Trim the material to size ensuring that approximately 150mm excess remains along the length of the material at both edges of the room. Spread the adhesive until 1 linear metre away from both edges of the room, and place the vinyl into position. The vinyl can then be rolled.

Once this has been carried out the edges of the length of material can then be trimmed and bonded.

Further advice can be obtained from Polyflor Customer Technical Services Department.

3.6.3 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 vinyl 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. Where liable to be subject to heavy trafficking, the vinyl should be protected with hardboard or plywood for at least 48 hours.

3.6.4 Pressure-sensitive adhesives

These adhesives are designed to go completely dry prior to laying into and are particularly well

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suitable to dense subfloors where there is difficulty with moisture uptake. They have the advantage of very long open times but, because they are laid into dry, have the disadvantage that the adhesive ridges are not flattened when the vinyl is rolled. To eliminate this disadvantage, Polyflor recommends an alternative method of application:

A. Fold back all the sheets to just over half their length.

B. Spread the adhesive with the correct notch trowel. Maintain the correct size of notch at all times. Then roll out the adhesive ridges with a long handled, short pile adhesive roller.

Note: To maintain the correct spread rate, the adhesive roller should be pre-wetted with adhesive. This will prevent it taking adhesive from the floor.

C. Wrap the roller in a polyethylene bag and hang up when not in use. This will prevent it from drying out. It also prevents flats being formed and avoids regular washing out and pre-wetting.

D. When the adhesive is completely dry and ready to lay into, it will change from opaque to clear or translucent. The adhesive will be tacky to the touch. It is worth remembering that air flow is the most critical factor in the drying time and not temperature. Electric fans can be used to accelerate the drying time.

E. Place a length of 100mm wide polyethylene strip onto the edge of the adhesive adjacent to the fold in the vinyl sheet (Figure 5).

This will prevent the sheet sticking to the last 100mm of adhesive.

F. Roll the central sheet back into place along the longitudinal line, taking care not to twist the roll

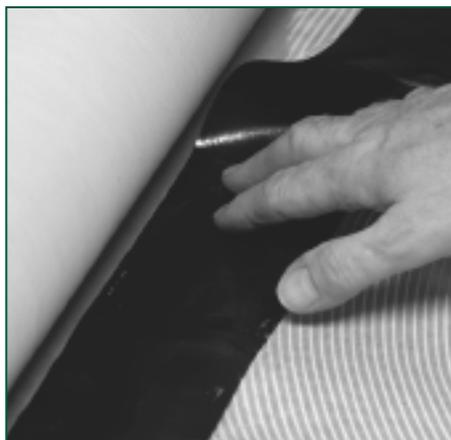


Figure 5 Polyethylene strip

or trap air bubbles. (A length of wide polyethylene strip can be rolled out on top of the adhesive to enable it to be walked on. This can be helpful when fitting the first length up to the line. Roll it up from the far end on completion.)

G. Fit all the other sheets, working outwards from the central sheet, as described previously. Take extra care to ensure that seams are without gaps and remove any excess adhesive as work proceeds.

H. Fold back the second halves of the vinyl sheets and remove the polyethylene strip which was stuck to the edge of the adhesive. Repeat sequence of adhering vinyl sheet as described previously.

I. Roll thoroughly in both directions using a 68kg articulated floor roller. In corners and other awkward areas, use a hand roller. Repeat again after 1 – 4 hours.

3.7 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.

Note: In new buildings, it may be worthwhile discussing installation with the main contractor who may agree to fitting WCs, sinks etc. after the vinyl has been laid.

A. Dry fit the area with felt paper, leaving a gap of 15mm to 20mm around obstructions and walls.

B. Draw around the fittings using a compass set at 25mm. Mark the template "This Side Up".

C. Place the vinyl 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, with a pair of scribes set at 25mm, mark the position of all obstacles using the template as a guide.

D. Using a sharp vinyl trimming knife, cut the vinyl sheet to the scribed lines and fit into position.

Note: Do not use the felt paper template as an underlay.

3.8 SITE FORMED COVERED SKIRTINGS

Polyflor fully flexible vinyl flooring, in conjunction with Polyflor Ejecta cove former (see also Section 9) can be used to create site formed covered skirting. In shower areas, for example, the vinyl sheet can be extended up the wall and, when welded, will form a water-tight base. Alternatively, in hospital corridors or office complexes, a contrasting colour can be used for decoration or identification.

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

Note: The installation of Polyflor Ejecta vinyl flooring accessories using contact adhesives is covered in detail in Section 9.

B. 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 6). Heating the cove former will enable the shape to be formed but do not use a naked flame.



Figure 6 Taper towards a doorway



Figure 7 CS-N capping strip

3.8.1 Fitting with clip-in capping strip (type CS-N)

- A.** Draw a line on the walls around the room to the height the coving will reach.
- B.** Place the vinyl to the walls and then draw a line to the same height as previous. Using a straight edge and sharp knife, trim off the excess.
- C.** Pull back the sheet from the walls. Fit the capping strip to the wall with contact adhesive so that the top of the sheet will sit inside the cap.
- D.** Apply contact adhesive to the face of the cove former and up to the capping strip. Coat the back of the vinyl with contact adhesive and leave both to dry.
- E.** When dry, push the vinyl into place and tuck the top edge into the capping strip (Figure 7). Roll with a hand roller to ensure even contact.

3.8.2 Fitting with sit-on capping strip (Type CS)

- A.** Using a height gauge fitted with a pencil, draw a line on the walls around the room to the



Figure 8 CS capping strip

height the coving will reach.

- B.** Apply contact adhesive to the face of the cove former and up to the pencil line on the wall. Coat the back of the vinyl with contact adhesive and leave both to dry.
- C.** When dry, push the vinyl into place and roll with a hand roller to ensure even contact.
- D.** Reduce the height gauge to allow for the thickness of the floorcovering and adhesive. Draw a line on the vinyl to the same height as previous. Using a straight edge and sharp knife, trim off the excess.
- E.** Using a piece of capping strip, mark where the strip overlaps the wall and vinyl sheet. Apply contact adhesive between the lines and to the back of the capping strip. When dry, push into place (Figure 8).

Note: Welded external corners are prone to breaking open due to damage from wheeled traffic. To prevent this from occurring, and as an alternative to the traditional mitre, the joint may be cut at an angle and taken around the corner and welded (Figure 9).

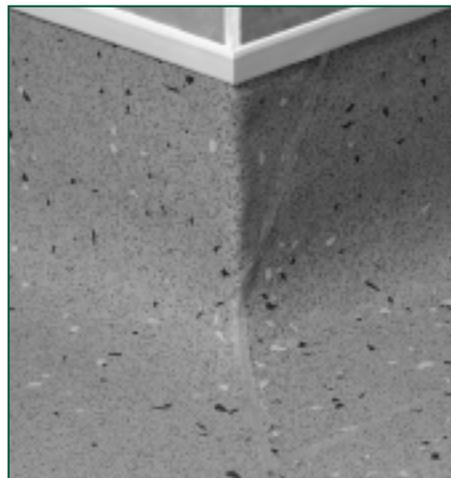


Figure 9 External corners

3.9 FITTING TO CERAMIC WALL TILES

For the junction between site formed covered skirting and ceramic wall tiles, Polyflor Ejecta CT strip should be used. The flexible section is designed to accept ceramic tiles on one side and various gauges of vinyl on the other.

The Polyflor CT strip should be adhered using a contact adhesive as recommended by Polyflor. The edge between the CT strip and the ceramic tiles should be grouted. The Polyflor should be fitted into the bottom edge of the CT strip and adhered to the wall using a contact adhesive as recommended by Polyflor. See also Section 14. A thin bead of mastic sealant should be run along the underside edge of the CT strip and the Polyflor (Figure 10).

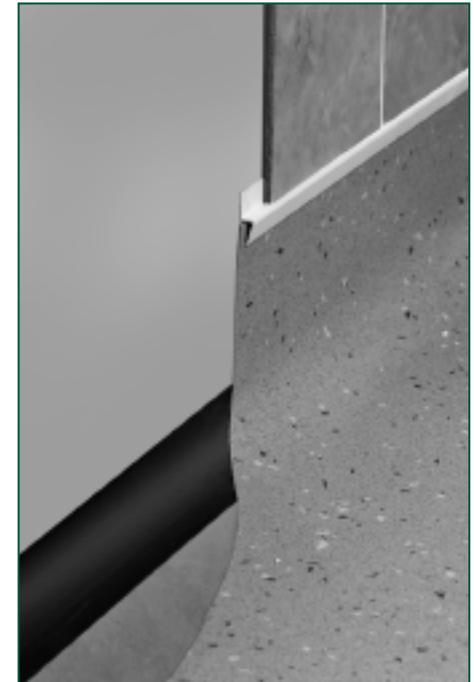


Figure 10 Fitting to ceramic tiles