

The preparation/dryness of the subfloor and installation procedures should all be as BS 8203: 2001. i.e.: The relative humidity of a solid subfloor should be below 75% RH when tested with a Hygrometer as described in this British Standard.

Prior to selecting a smoothing compound, it will be necessary to investigate what type of traffic the floorcovering once installed will be subjected to. Latex smoothing compounds are not suitable for areas that will receive heavy traffic, especially heavy-wheeled traffic with narrow wheels. Never subject a newly installed floorcovering to heavy wheeled traffic at an early stage, as this will disperse trowelled applied adhesive from below the floorcovering which may result in future problems. Wheels should be + 30mm and preferably made of neoprene. If it is necessary to traffic the floorcovering at an early stage, protect the installation with hardboard or plywood.

For specific subfloor types and preparation, please refer to our Subfloor Specification Sheet.

Although Tarkett may on occasion list a choice of adhesive, levelling compound and surface damp proof membrane manufacturers and types, we do not however guarantee the products listed (except for Tarkett Embond / wood adhesives) or suggest that the list of products or manufactures, are complete or current. Tarkett would not accept any liability (except for Tarkett Embond / wood adhesives) for any of these products failing to perform in conjunction with any of their products. It is the responsibility of the adhesive, levelling compound and surface damp proof membrane manufacturer and flooring contractor to ensure the products being used are appropriate for use and that they are applied in accordance with the manufacturers recommendations.

Recent studies have shown that micro-organisms can colonise, under certain conditions, the area between the subfloor (wooden or cement) and the installed flooring. These micro-organisms can thrive in warm, damp conditions where there is sufficient 'food' available – for example, certain types of levelling compound used prior to the flooring installation. During their normal life-cycle, these micro-organisms produce a colorant, usually pink, purple, red or black (but can be other colours), which can 'bleed' through to the surface of the PVC flooring product over a period of several months or longer.

Advice should always be sought from the manufacturers of subfloor preparations and adhesives prior to installation, to ensure that their products are suitable for the environment in which the PVC flooring is to be laid – this advice may include using products that contain biocides or of specific resin types.

For wooden fabricated underlay e.g. plywood, care must be taken to store the material in an area where it will not become damp or contaminated.

The 'bleed' through of colorant created by micro-biological activity below PVC floorcovering products is not attributable to a product/manufacturing fault.

It is imperative that underfloor heating systems have been previously commissioned and found to be functioning correctly prior to the floor finish being installed. Ensure that the underfloor heating system is switched off 48 hours prior to the floorcovering installation commencing and remains off for at least 48 hours after the installation is complete. During the period of decommissioning of the underfloor heating system, an alternative heating source should be provided, if required, to ensure that the area of installation is kept at a constant temperature of  $18^{\circ}\text{C}$  -  $27^{\circ}\text{C}$ . Gradually increase the temperature over a number of days by only a few degrees per day until the desired room temperature is reached. The temperature should never exceed the floorcovering industry agreed maximum of  $27^{\circ}\text{C}$  at the underside of the floorcovering (the adhesive line). Failure to follow these guidelines can result in the floorcovering de-bonding, joints opening, and on some occasions discolouring, all which can occur within a long or short period of time.

### **CONDITIONING**

It is important that the material (rolls) is stored in an upright position. 24 hours prior to use, the material should be cut to the desired lengths and acclimatised within the area to be installed by laying it flat on a prepared, clean subfloor at a temperature of  $18^{\circ}$  -  $27^{\circ}$ C. This temperature should be maintained throughout the duration of the installation. The minimum temperature of the subfloor should be  $15^{\circ}$ C. Care should be taken when handling all types of floorcoverings to ensure that safety procedures are followed and damage does not occur to the material.





#### **Installation procedure**

- 1. Prepare the subfloor as necessary and remove all traces of debris.
- 2. Ensure that material with the same batch number is allocated to each area to be installed. All rolls are numbered and should be used in consecutive order.
- 3. Plan the sheet direction of the area to be installed to ensure whenever possible that joins do not coincide with doorways, main traffic lanes, sinks or urinals.
- 4. Cut the lengths of the material 10cm longer than the size of the measured length of the room.
- Scribe the first sheet down the length of the room with the two ends lapped up the wall. Cut down the scribe mark using utility knives with straight and hook blades removing the scrap Linoleum and place into position. Always undercut when using a hook knife.
- 6. Place the sheet tightly against the wall, draw a pencil line down the edge of the Linoleum on the subfloor lengthways opposite the scribed wall.
- 7. When in position draw a pencil line at 90° to the edge of the sheet from the Linoleum onto the subfloor using a ruler. This cross mark should be approximately 20cm away from one of the ends still lapped up the wall.
- 8. Slide back the sheet along the first pencil line until the end of the sheet lies flat on the subfloor and slightly short of the wall. The two cross lines will now have moved apart.
- 9. Set the long scribers at the distance between the two lines and scribe this size from the wall onto the Linoleum at the same time keeping the scribers parallel with the sheet edge. With the scriber adjusted to this setting, the end of the sheet is now scribed and cut and the surplus removed.
- 10. Slide the Linoleum back into its previous position with the material now fitted to the long wall and end wall. Repeat this last procedure at the end still lapped up the opposite wall.
- 11. Install all consecutive sheets of Linoleum with the sheets running in the same direction (EXCEPT Style Elle xf², which is installed reversed).
- 12. Overlap the next sheet by 2.5cm with one end already 2-3cm short of one wall. Adjust the scribers to scribe a small amount off this end of the sheet and cut to size. Slide this end of the sheet into position against the wall just fitted to. Now repeat the procedure adopted for fitting the previous sheet where the Linoleum was still lapped up the remaining wall.
- 13. This entire procedure should be copied for all consecutive sheets apart from the last sheet, which should be installed in the same manner as the first.
- 14. Only install the amount of floorcovering that can be adhered to a subfloor in one day.
- 15. Just prior to adhering the Linoleum, all joins should be cut in to leave a 0.5mm gap. Strike a chalk- line 10mm in from the overlapped edge of the material and re-cut using a knife and straightedge by cutting through 2/3rds of the thickness prior to cutting with a hook knife. Use this good edge to now guide a pin-vice down the edge to create a 0.5mm gap. Deepen this cut with a straight bladed knife then finally undercut with a hook knife.
- 16. Carefully pull the sheets back half their length and re-sweep the subfloor and reverse of the Linoleum to ensure that no debris can be left on the subfloor.
- 17. Apply a suitable Linoleum adhesive such as, Uzin LE 2401, Laybond L48, or F Balls F52 F54, using an appropriate (2mm x 6mm) 'V' notched trowel as recommended by the adhesive manufacturer. Repeat procedure for second half of sheet as soon as first half has been adhered.





18. The responsibility for the choice of adhesive and its suitability for using under certain conditions is the responsibility of the Flooring Contractor, as is its proper and correct application.

#### Please note

- 19. Failures of sheet linoleum installations are almost always due to inadequate adhesive spread, late placing of the sheet into the adhesive, inadequate rolling to ensure overall bond or a combination of all three. In other words the adhesive did not set in contact with the linoleum. Pay close attention to the end of the sheets and at the perimeters of walls or areas that are inaccessible to a 68Kg roller, roll these areas with a hand roller.
- 20. The adhesive should be applied as recommended by the manufacture and the Linoleum placed into the adhesive whilst the adhesive is still wet. Roll the Linoleum down its length and then across its width using a 68Kg roller. Repeat rolling at 15 minute intervals until fully bonded to the subfloor, paying close attention to the seams, cross-joins, ends of the sheets and any inaccessible areas. Wipe any excess of adhesive away with a cloth moistened with water or if dry nothing stronger that white spirit.
- 21. In every full roll of Linoleum there is a stove bar. Some part rolls also contain a stove bar. These bars are identified as a bulge in the material and are approximately 25cm long x 2m wide. Extra care is required when installing stove bars. Adhere this area of the material with the Linoleum adhesive or use a contact adhesive. Always re-roll at 15 minute intervals and weight down. Some installers prefer to remove the stove bars when cutting off the lengths of material by careful planning of the area to be installed.

#### **BUTT JOINTS IN NON-WET AREAS**

If the seam is cut correctly it will remain even and not open during the products life, It is also sometimes more aesthetically pleasing to have an un-welded seam.

Providing an even, straight good seam is created, the area is not for wet application and will not be cleaned with excessive amounts of water, then the welding of the Linoleum xf product is not mandatory.

### **WELDING LINOLEUM – XF WELD**

- Allow at least 24 hours to lapse prior to hot welding with the Linoleum welding cable.
- 2. Groove seams using a 'P' type grooving tool or an automatic seam router. Do not use a triangular V-shaped paint scraper.
- 3. The groove should be deep enough to expose the jute backing but not too deep.





Make sure the groove is clear of all debris and excess adhesive prior to commencing welding.



Too Deep

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- 5. The recommended welding temperature is 450-500°C when fitted with a Tarkett speed-weld nozzle (1258012). Using a Leister hot air welding gun, this will require the setting to be number 6-7.5. If unsure consult manufacturer's instructions for correct setting. Set the welding gun at this temperature for several minutes prior to commencing welding to attain correct temperature.

Too Shallow



Correct





If welding Linoleum with a <u>4mm PVC speed nozzle that has a very narrow air outlet</u> this type of nozzle can cause dark lines or scorch marks on the edge of the weld or groove.

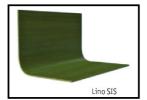
If an alternative Leister speed-weld nozzle is used to weld the material, it is essential that it is the type that has a wide air outlet.

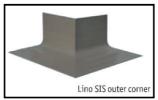
- 6. Try out the welding operation on a scrap piece of linoleum before welding the main area.
- 7. Weld at approximately 1 metre a minute (half the speed of welding vinyl).
- 8. Preferably 2 people welding. One operative welding 2 metres ahead of the other prior to the second person trimming the cable 1mm proud of the Linoleum with the aid of a spatula knife inserted into a welding slide. Finally when the weld has cooled trim the weld cable flush with the surface of the Linoleum with a spatula knife that has been sharpened correctly.

#### **LINOLEUM PRE-FORMED SET-IN COVING**

A pre-formed linoleum set- in coving is available in lengths and is 60 to 100 mm in height and protrudes 100 mm out at the toe. For inside and outside corners 45°, use a suitable mitre saw to cut the covings. Fix the coving to a prepared wall and subfloor with a contact adhesive. Measure the area to be installed and cut off the lengths of the linoleum so that they overlap onto the cove by approximately 20 mm. Overlap sheets by 25 mm and re-cut to leave a 0.3mm gap.

Adhere the linoleum using a recommended Linoleum adhesive from a reputable floorcovering adhesive manufacturer and apply to the subfloor as recommended (still overlapping onto the cove) up to the edge of the set-in cove. Using short scribers, (over& unders) scribe and cut the linoleum to the edge of the set-in cove and roll with a lino roller whilst the adhesive is still wet. After the lapse of at least 48 hours, hot weld all sheet to sheet and sheet to set-in coving joins with linoleum welding rod.





### **SELF COVING**

- (a) It is also possible to self-cove Linoleum over a 38mm radius cove former and up a wall to a desired height where it is normally finished to a PVC capping seal. This can be achieved in one piece with a minimum of joins if the size and shape of the area being installed is large and reasonably straightforward. e.g.: large rectangle shaped area with no or few rebated walls.
- (b) If the area being installed is more difficult, measure approximately 12.5-15cm out from the ends of each wall and strike chalk lines on the subfloor. Then install the cove former using a mitre box to achieve a firm support at internal and external mitres and adhere with a contact adhesive. The capping seal should be adhered at the desired height using the same contact adhesive. Measure the area to be installed and cut off the lengths of Linoleum and place on the subfloor so that they overlap beyond the chalk lines by approximately 2cm all round the room. Overlap sheets by 2.5cm and re-cut to leave a 0.3mm gap. Adhere the Linoleum up to the edge of the chalk lines. Adhere the Linoleum using F. Ball & Co F52/F54, Laybond Products Ltd 48X/90Super or Tremco Ltd, whilst still overlapped beyond the chalk lines. Roll with a 68Kg roller.

Again measure 12.5-15cm out from the ends of each wall and re-strike the chalk lines onto the Linoleum. Cut down the chalk-lines using a straightedge and straight and hooked utility knives. Remove scrap and re-roll whilst the adhesive is still wet. Now measure the distance from the edge of the Linoleum up and over the cove former to the height of the capping seal. This measurement should then be measured across the width of a sheet of Linoleum at either end of the sheet. Strike a chalk line between the two measurements. Cut down the chalk line using a straightedge and straight and hooked utility knives. Never cut the strips for the coving off the end of the roll, as these strips will tend to curl inwards and lift off the adhesive.



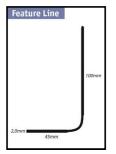


With the straight edge of the coving material butted against the finished edge of the Linoleum, allow the material to ride tightly over the cove former and scribe either end of the cove to fit. Repeat on all walls and then mitre the corners. Adhere with a contact adhesive. Gently heat the Linoleum with a hot air gun to ensure the material is tightly against the cove former. Trim the top of the Linoleum cove if required and tuck into the capping seal. After the lapse of at least 24 hours, hot weld all sheet to sheet and sheet to self-coving joins, including mitres, with Linoleum welding cable.

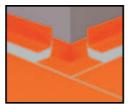
#### **PVC PRE-FORMED SET-IN COVING**

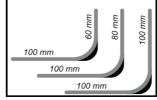
The installation of this type of coving is identical to installing Linoleum coving. To weld the PVC coving to Linoleum, use Linoleum welding cable. Do not use PVC welding cable.

Pre-formed PVC set- in coving is available in lengths and is normally 60 to 100mm in height and protrudes up to 100mm out at the toe. Fix the coving to a prepared wall and subfloor with a contact adhesive. Measure the area to be installed and cut off the lengths of the Linoleum so that they overlap onto the cove by approximately 2cm. Overlap sheets by 25mm and re-cut to leave a 0.3mm gap. Adhere the Linoleum using F. Ball & Co F52/F54, Laybond Products Ltd 48X/90super or Tremco Ltd Adhere the Linoleum using F. Ball & Co F52/F54, Laybond Products Ltd 48X/90super or Tremco Ltd, (still overlapping onto the cove) up to the edge of the set-in cove. Using short scribers, (over & unders) scribe and cut the Linoleum to the edge of the set-in cove and roll with a 68Kg roller whilst the adhesive is still wet. After the lapse of at least 24 hours, hot weld all sheet to sheet and sheet to set-in coving joins with Linoleum welding cable.









#### **PVC SIT-ON COVING**

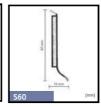
This type of coving should not be used when watertight joins are required. It is normally used as an alternative to a wooden skirting in areas that will not be subjected to large amounts of surface applied water.

Sit-on PVC coving is available in lengths of 2m as well as in coils of varying lengths and is normally 10cm in height and protrudes 1-1.5cm out at the toe. Install the floorcovering in the normal manner, scribing to a wall instead of a skirting and adhere to the subfloor. Fix the coving to a prepared wall with a contact adhesive. Prior to adhering the sit-on coving to the wall, the scribed edge of the floorcovering to the wall can be sealed with a sealant. This will provide extra protection to the floorcovering from surface moisture attack, but should not be used as a cheaper alternative to a pre-formed coving or self-coving when a watertight join is required.





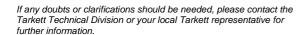














### **STOVE YELLOWING**

- 1. As with all linoleum products, a yellow cast may appear on the surface of Linoleum xf during its curing process in the stoves due to the oxidisation of the linseed oil.
- 2. This film will gradually disappear when exposed to light.
- 3. The more natural light the Linoleum xf is exposed to, the faster this yellow cast will disappear.
- 4. Depending on the amount of light in the area where installed, this may take a few days, weeks or months to reach the true colour.
- 5. Normally the areas that take the longest to clear, are the ones that are less exposed to light or have mainly artificial lighting.
- The effect is more obvious on lighter colour shades of linoleum.
- 7. Samples of linoleum should always be exposed to natural light whenever possible, prior to choosing the desired colour.
- 8. Placing a sample of Linoleum xf face up on a window ledge is ideal. Leave exposed for 2 days.
- 9. The material will now have reached its true colour.

