

# Installation Guidance Note: Modul'up compact and decibel adhesive free sheet vinyl

## General Advice

The appearance, performance and durability of the installed floor covering will be determined to a large extent by the quality of the prepared subfloor and the conditions in which they are laid. As with any resilient floor covering irregularities in the subfloor will be apparent in the finished flooring.

It is important to ensure that all recommendations for substrate and site conditions are met prior to beginning the installation.

Beginning the installation is an implied acceptance of site conditions by the parties involved and liability for any failure directly related to inadequate site conditions becomes the responsibility of the installer and/or flooring contractor.

Subfloor preparation should be carried out in accordance with BS8203:2017 Code of practice for the installation of resilient floor coverings. Areas to receive flooring should be clean, free from other trades, fully enclosed and weather tight. Subfloors should be clean and free of contaminants, smooth, sound and permanently dry.

Always conduct moisture tests on **all** substrates. All ground-based level floors should have an effective moisture barrier.

Areas to receive flooring shall be adequately lit to allow for proper inspection of the substrate, installation and for final inspection.

The maximum tolerance in terms of flatness and evenness of the substrate is a 5mm deviation

under a 2m straight edge, Surface regularity should be within the SR2 surface regularity standard – less than 5mm under a 2m straightedge (BS8203:2017 section 6.2.3 and Annex C). (measured by moving the straight edge in all directions across the substrate) and 1mm under a 20cm straight edge. Any nibs, abrupt ridges or changes of level in the subfloor should be removed by sanding or grinding, or by localised application of a levelling compound.

Contaminants can affect the adhesion of the new floor covering and/or cause migrating stains. It is therefore important that contaminants such as cleaning chemical residues, old adhesive residues and remains of old floor coverings such as residues of carpet tile backings are removed or, where permissible, isolated with an appropriate subfloor treatment.

Areas to receive flooring shall be adequately lit to allow for proper inspection of the substrate, installation and for final inspection.

It is essential that the laying area is at a steady temperature of 18 to 27°C for 48 hours prior to, during, and for 24 hours after installation. The material and adhesive should be conditioned in the same environment for at least 24 hours prior to the installation. Where the floor coverings have been stored or transported immediately prior to delivery in temperatures below 10°C the acclimatisation period should be extended to 48 hours.

Prior to installation rolls should be checked to ensure that the correct colour, batch number and quantity have been received and that the material is in good condition. No claim will be accepted for incorrect colour, pattern or obvious damage if the material has been fitted.

Use material from the same batch/dye lot and install in roll number sequence. The use of different production batches will always result in visible shade differences. The batch number is clearly marked on the material packaging and must be checked before commencement of installation.

**Note:** For areas requiring a sustainable slip resistance product please visit our wetroom range – **Wetroom Solutions**



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## Existing flooring and substrates

Modul'up may be installed on the following substrates using the methods given below:

### Concrete and screeds bases:

It is important that the bases are clean, dry, smooth, even and free from loose gritty particles. It is recommended to apply a 3mm application of smoothing compound.

All ground-based level floors should have an effective damp proof membrane.

If any doubt exists a proprietary surface applied damp proof membrane (DPM) or other appropriate moisture protection system should be used (CFA Guide to Contract Flooring).

**\*Note:** *floor slabs circa 1965 or earlier are unlikely to contain an effective integral damp-proof membrane. Old floor slabs without a DPM may provide a moisture reading below 75% if they have previously been covered with a permeable floor covering such as vinyl composition tile or carpet. Potential ground water problems may not, therefore, come to light until the base is covered with an impermeable floor covering.*

### Asphalt floors:

Should be clean, sound and free from any cracks. The base should be primed (if required by the smoothing compound manufacturer) and covered with a minimum 3mm thickness of smoothing compound suitable for this type of base.

### Quarry tiles or ceramic tiles:

Should be laid on a concrete or cement screed substrate in sound condition, soundly adhered to the bedding screed (sealed ceramics tiles) or substrate (adhesive-bonded ceramics tiles) require no further treatment where differences in level are less than 1mm and/or grout width is less than 4mm. Small localised differences in level between 1mm and 2mm between tiles may be repaired with a suitable smoothing/levelling compound.

**Note:** *Old quarry tiles were often laid on subfloors without a suitable Damp-proof membrane. This should be checked prior to installation of the floor. If there is no integral DPM, or if any doubt exists, then a surface DPM must be installed*

### Expansion joints:

Floor coverings should never bridge these joints, the joints need to be brought through to the final floor finish, floor coverings should stop either side of the expansion joint.

If required a suitable expansion joint cover strip can be used to cover the joint (see expansion joint cover strips).

### Existing vinyl and cork flooring:

Before installation check the condition of the existing floor covering to ensure that it is well bonded to the base. Ensure that any loose or damaged sections of the floor coverings are removed and repaired. If an underfloor heating system has been installed, old flexible floor coverings must always be removed. Modul'up can only be laid on a substrate that has previously received only a single layer of floor covering. The rating of the old floor covering must satisfy the new rating required, particularly if the room is to be used for a different purpose.

**Note:** *Attention is drawn to Asbestos and man-made mineral fibres in buildings: practical guidance, published by DETR [7], which gives advice on the precautions to be taken when removing existing flooring containing asbestos." (BS8203:2017)*

### Wooden floors:

Loose or uneven floorboards should be secured and covered with plywood to provide an even surface. All protruding nail heads should be hammered flush. Particle board subfloors and **all** wood panel based floating subfloors should be overlaid with Plywood. (Refer to BS8203:2017 for Plywood performance specifications and installation requirements).

### Wood Blocks:

Modul'up may be installed on existing wood block floors except for wood blocks laid at ground floor level. Blocks should be securely bonded to the base, smooth, even and free of any oil or wax based finishes. If necessary, the blocks should be sanded to remove any contaminants and/or unevenness between the blocks. If any doubt exists, contact Forbo Flooring Technical Services for advice.

**For any subfloor not listed above or if any doubt exists, contact Forbo Flooring Technical Services.**



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## Underfloor heating

Forbo Flooring products may be installed over underfloor heated floors providing the maximum surface temperature of the substrate does not exceed 27°C under any condition of use.

It is imperative that the 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 floor covering installation commencing and remains off for at least 48 hours after the installation.

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°C – 27°C.

Where embedded electric underfloor heating systems are being used their compatibility should be checked with the supplier before installing Modul'up.

Surface applied mesh type electric underfloor heating systems should be covered with a layer of smoothing/levelling compound. The manufacturer of the smoothing compound should be consulted for advice on suitable products and recommendations for the minimum application thickness.

**Note:** These systems should never be placed directly under the finished floor covering.

If necessary, an alternate heating source should be used to maintain the room temperature at a minimum of 18°C prior to, during, and for 72 hours after installation.

The temperature of the underfloor heating system can be increased 72 hours following the installation. When raising the floor temperature, do so gradually so the substrate and flooring material can adapt to the temperature change together.

**Note:** Care should be taken when placing rugs or items of furniture (that do not allow hot air circulation) onto underfloor heated floors. Placing these item types onto the underfloor heated floor can create hot spots and thermal blocks, resulting in damage to your Modul'up floor.

## Installation

### Direction of laying

The following installation advice should be followed in relation to direction of sheet laying.

#### All over/Uni designs:

Reverse installation of alternate sheet lengths is required.



#### Directional designs:

Sheet lengths should be installed in the same direction.



The recommended installation direction for each design is also confirmed in the product brochures and packaging and printed on the underside of each roll.

## General

Modul'up is installed loose laid using standard installation techniques. Seams are supported with Modul'up 100mm wide single side adhesive (Forbo ref 792) tape for welding.

Always check the recommended direction of laying before cutting sheet length (see above).

Cut the sheet material to the required lengths allowing and overlap of 1 to 2cm for cutting of seams.

It is recommended that the roll lengths are rolled out and laid out flat in the installation area the day before installation to allow the product to settle.

There is no maximum limit for the floor area that can be laid but structural movement joints should not be covered with any part of the Modul'up system and a proprietary movement joint should be used.

Cross seams should be formed and cut in the same manner as for side seams.

A suitable cover strip should be used at door thresholds.



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## Cutting and fitting

Each sheet should be scribed to fit and the factory edge removed before cutting the seam. Seams should be overlapped and cut or under-scribed or cut with a seam cutter to form a close butt joint.

**Note:** do not cut the sheet too tightly to the walls. The sheet should be cut leaving a gap of 1mm at the perimeter of the room or any items of fixed furniture.

Scribe the long side of the sheet to the wall first. Place the sheet back against the wall. With the sheet fitted correctly in position along the length, and the ends riding up the end walls, trim the factory edge on the opposite side of the sheet (1 to 2cm) using a seam cutter or by striking a chalk line and cutting through the sheet following this line with a straight edge and utility knife. Scribe the sheet end to the walls.

Lay a strip of Modul'up single side adhesive tape with the non-slip side (without the protective film) facing the subfloor so that it lies equally either side of the seam (see fig.1).

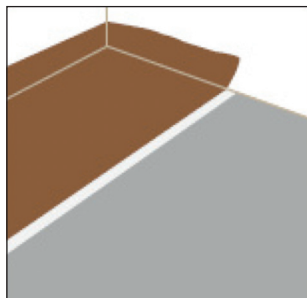


Fig. 1

Lay the next sheet alongside the first fitted sheet with the sheet ends lapping up the wall and the edge of the sheet overlapping the previously fitted sheet by approximately 1 - 2cm. Trim the factory edge of the opposite side of this sheet as above and apply a strip of Modul'up adhesive tape under the line of the seam.

Scribe and cut each end of this length as for the first sheet.

Cut the seam to form a close butted seam as above.

**Note:** use a hook blade when making the final cut for seams to avoid damaging the Modul'up adhesive tape, or when making any cut over vinyl asbestos tiles.

Repeat this process for each subsequent sheet length. The final length which abuts the opposite wall should be cut and fitted using the method described for the first length.

**Note:** it is best practice that factory edges are always be trimmed to form a true edge for seaming.

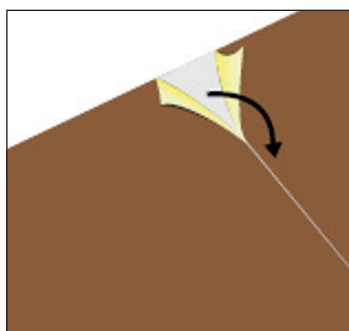


Fig. 2

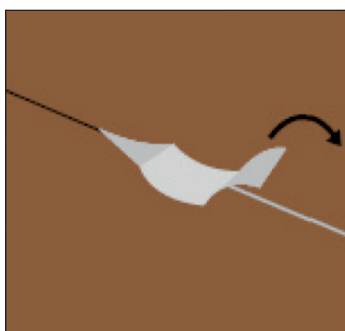
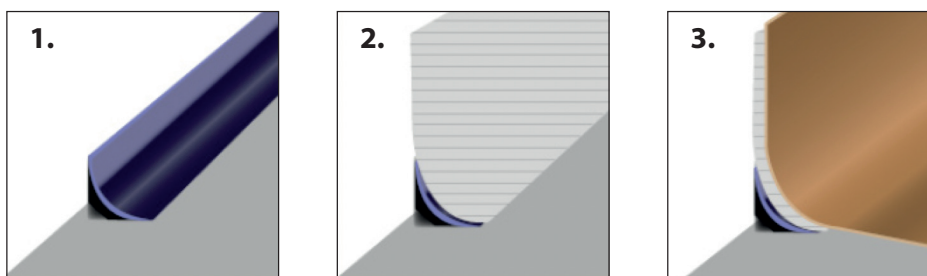


Fig. 3

Once all the sheets have been cut ready for welding, lift the sheet ends at each seam to reveal the Modul'up adhesive tape. Peel away the protective film, keeping the protective tape as close to the floor as possible (see figs. 2 and 3). Allow the floor covering to fall back into place along the seams and smooth out by hand along the seam as the protective tape is removed. Once completed press the sheet into the adhesive tape with a rubbing board to ensure optimum adherence of the floor covering to the tape.

## Coved Skirtings

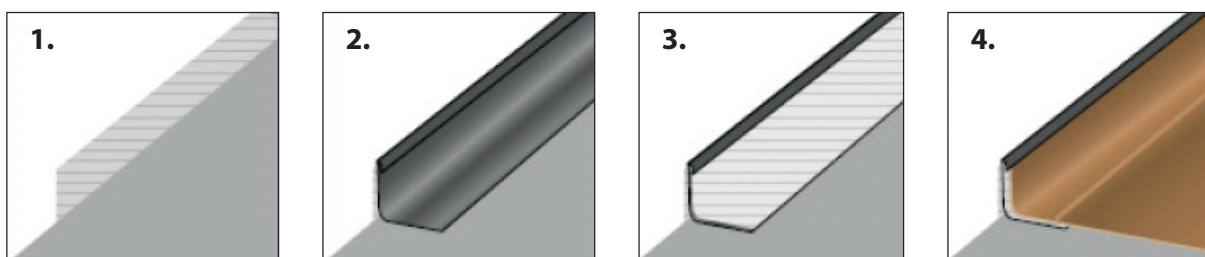
Modul'up can be used in conjunction site formed coved using standard techniques with a 35mm radius cove former (see below).



The cove former should be adhered using a suitable plasticiser resistant double-sided tape system.

The Modul'up sheet should be adhered to the wall and the cove former using the same double-sided tape system.

As an alternative to the above Modul'up skirting may be used. This system is particularly recommended where Modul'up is being installed over vinyl asbestos tiles (see below).



The Modul'up complete skirting should be adhered to the wall only using a suitable plasticiser resistant double-sided tape system. The Modul'up sheet should be adhered to the wall and the cove former using the same double-sided tape system (see below).

**Note:** If site formed coving is being used with Wood designs, the optimum visual effect will be achieved by laying with a border cove either in the same design with the plank lengths running parallel to the wall around the perimeter of the room or using a contrasting uni colour/all over design.

## Cutting seams for Wood designs

Eternal Wood ranges are manufactured with a selvedge on both edges of the roll. Adoption of the following advice will assist in achieving the optimum seam visual and minimise wastage.

There is usually a narrow selvedge on one side of the sheet and a wide selvedge on the other – this is intentional to allow for edge trimming (fig.1). The narrow selvedge should be trimmed to within 2 to 3mm of the print line or along the print line of the plank depending on the installer's preference for the location of the welded seam (fig.2). The wider selvedge on the opposite side of the sheet should have a minimal trim (fig.3).



Fig. 1



Fig. 2

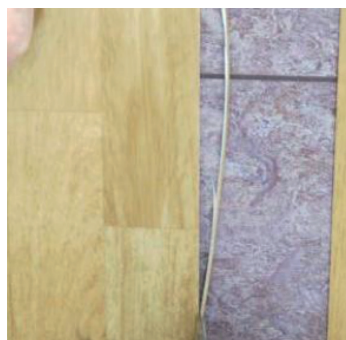


Fig. 3

**Note:** if the print line is also visible on the wider selvedge side of the sheet trim the sheet along the print line.



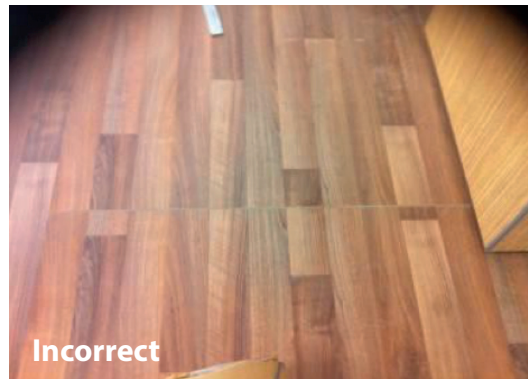
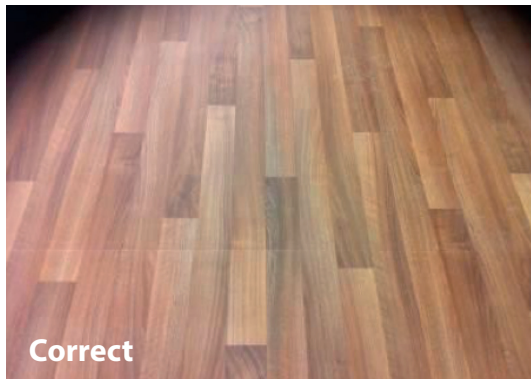
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After trimming, the plank that contains the welded seam may be slightly narrower than the main body. This will be lost in the overall design of the finished floor.

Whether the welded seam is cut along the print line or adjacent to it, pattern matching of the plank design on side seams is not necessary.

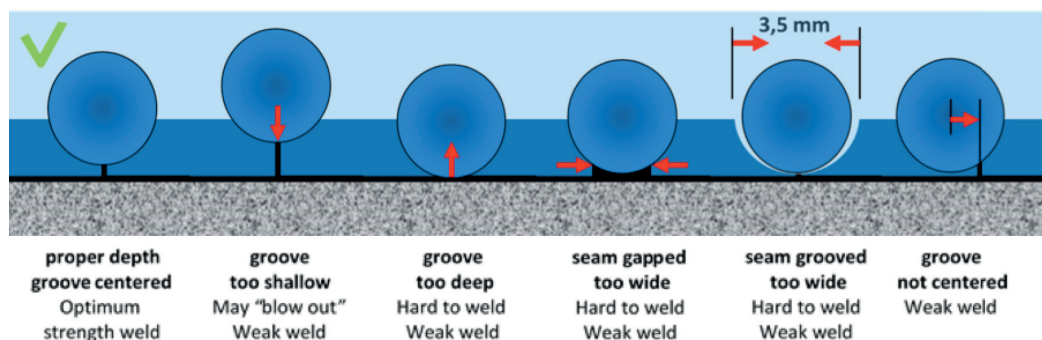
**Cross Seams** – Lay out the next roll aligning the plank design as shown below. Adjust the depth of the overlap to form a cross seam with continuity of pattern match of the plank design across the width of the sheet.



Unless agreed otherwise and where the setting out allows cross seams should be staggered for best visual effect.

### Seam forming and grooving

Seams should be grooved to a depth of approximately 2/3rds of the material thickness. A 'P' Type groover is recommended for manual grooving of seams, however, automatic or power groovers may be more productive on larger installations.



### Welding

Switch on the hot air gun and allow 5 to 7 minutes for it to reach the selected temperature. **Modul'up should be welded at a temperature of approximately 450°C. (see weld gun manual for setting details).** Fit the welding nozzle before switching on the hot air gun.

**If the gun is resting on the floor, ensure that the nozzle is not directed at the floor or anywhere dangerous.**

Weld guns will vary, so it is always advisable to practice weld techniques first on a piece of waste material to match the correct air gun temperature with welding speed. Modul'up should be welded with a 5mm Speedweld nozzle.

Make sure the groove is thoroughly cleaned before beginning to heat weld. Make sure that all electrical cables are laid out without tangles and that there are no obstructions along the seam to be welded.

Cut the welding cable to a consistent and generous length or unwind sufficient weld rod from the reel and put the reel in a position where you are working towards it. Have the power cable ahead of you if possible.

Start at a wall. Thread the cable through and weld moving backwards, away from the wall, maintaining a slight downward pressure so that the weld nozzle will force the weld cable into the groove. Do not let the cable melt in the nozzle.

A good weld is obtained by the correct combination of temperature, speed and downward pressure. The weld cable should be allowed to melt enough so that the melted rod reaches the bottom of the groove.

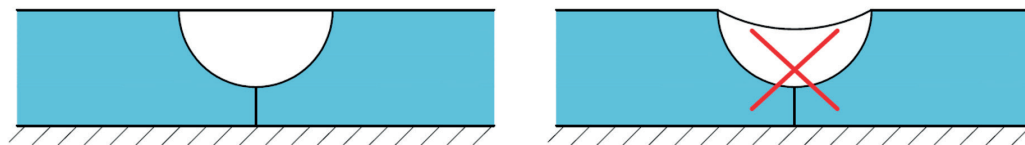
## Trimming

While the cable is still warm trim off most of the top half of the cable down to approximately 0.5mm using a sharp spatula and slide or Mozart knife which fits over the cable. This enables the cable to cool more quickly and enables a quick first cut to be made without risk of gouging the material.

The welding cable will dish slightly (concave downwards) as it cools. Wait until the material is completely cool before trimming flush with the surface of the sheet with a sharp spatula angled slightly across the line of cut or Mozart knife.

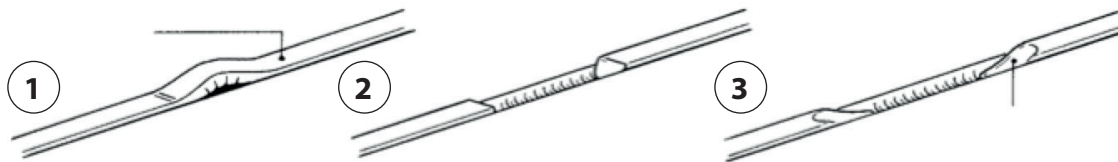


**Note:** Making the final trim while the welding rod and material is still warm can result in the weld cable dishing of the weld cable. This may result in subsequent seam soiling problems or cause permanent damage to the surface of the flooring.



## Joining up a weld

To join a weld in the middle of a seam trim off the loose ends and chamfer down the section to be overlapped with a hand groover. Ensure hot air gets into the groove and heats the cable. As the gun travels over the un-welded section apply pressure and carry the weld on over the section to be joined. Allow to cool and trim as normal.



## Perimeter sealing

In areas subject to wet spillages or cleaning methods the following advice should be followed:

Where the floor covering is flat laid without coved skirtings the perimeter edges should be sealed with a suitable waterproof and mould resistant flexible sealant. This should also be applied at abutments such as architraves together with any areas where pipes, etc. come up through the floor covering.

## On completion of the installation

First impressions may have more impact on the client than hours of skilled fitting.

The completed installation should be cleared of scrap material and debris, the floor swept or vacuumed, and any traces of adhesive residues removed from the floor and skirtings.

If the floor covering is to be protected from other trades or traffic prior to project completion, a protection product should be chosen that is appropriate for the type and level of traffic likely to be experienced and the potential for impact, scratching or indentation damage.

Gliders suitable for hard floors should be fitted to moveable furniture. Office chairs and other items of rolling furniture should be fitted with Type W castors.

If the optimum performance of any new floor covering is to be achieved, it is important that the correct cleaning and maintenance procedures are used from day one. Cleaning and maintenance guides for all Forbo flooring products are available for download:

**[www.forbo-flooring.co.uk/downloads](http://www.forbo-flooring.co.uk/downloads)**

Cleaning and maintenance guides should be passed onto the client or end user as appropriate on completion of the installation, and before any hand over clean is started.

### If in any doubt contact us:

#### Additional help and information

Tel: **0800 121 4780** (office hours)

Email: **[uktechnicalsupport@forbo.com](mailto:uktechnicalsupport@forbo.com)**

#### Forbo Flooring UK Limited

Web: **[www.forbo-flooring.co.uk](http://www.forbo-flooring.co.uk)**

### Additional Reference documents and information:

- Forbo Floor Coverings Installation Guide: **[www.forbo-flooring.co.uk](http://www.forbo-flooring.co.uk)**
- BS8203:2017
- The CFA Guide to Contract Flooring (Tel: 01159 411126)





Cleaning and maintenance guides for all Forbo Flooring sheet vinyl products are available for download at:  
**[www.forbo-flooring.co.uk/downloads](http://www.forbo-flooring.co.uk/downloads)**

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