Harvey Maria Rubber Flooring Tile
Installation Instructions

Inspection of the suitability of the area to be installed.

The performance of Harvey Maria rubber flooring depends on a number of factors including choice of the product, the preparation of subfloors, the installation and the correct maintenance. This document is intended as a guide in order to get the best results.

Always ensure that the floor covering has been appropriately specified for the intended use - our flooring advisers are available to help with choosing the correct flooring and with technical advice regarding installation and care. For example, fitting in areas with extended exposure to sunlight may result in colour fade and/or damage to the surface of the floor; fitting in areas where grit and contaminants come into contact with the floor may cause excessive scratching and/or staining. Improper cleaning and care may stain or damage the floor.

We reserve the right to modify the quality standards without notice. For best results the laying of rubber flooring should be carried out by trained fitters.

Prior inspection and preparation of the areas is vital to the performance of the product. Main points to consider during the inspection:

1. The flatness of the sub-floor.

• Uneven sub-floors will show through the tiles and will spoil the overall appearance of the installation particularly where low light strikes across the floor. British Standards state the sub-floor should be measured using a 3m straight edge placed in contact with the sub-floor and measuring any gaps underneath which should be less than 3mm (SR1). Isolated ridges or dips should also be considered. Any undulations should be smoothed out using an appropriate compound. Always consult the smoothing compound manufacturer for a specification.

2. Cracks in the sub-floor.

• There are many reasons for cracks including stress and settlement. All cracks must be attended to prior to applying a smoothing compound and they must be investigated to ensure the movement has not fractured the membrane under the screed. Just filling the cracks could lead to longer term problems with the floorcovering. If in doubt seek professional advice.

3. Dry sub-floor.

• Sub-floors solid or plywood need to be permanently dry. British Standards state a screed should be tested using Hygrometry as described in annex A in the standards. The maximum level of relative humidity in the screed is 75%. There are many manufacturers of moisture testing equipment such as Tramex and Protimeter whose instruments can be used to identify areas for further testing with a hygrometer. These instruments can also be used to check the relative humidity to British Standards. The duration of the test will depend on the sub-straight. Sand and cement will normally require 2 to 3 days against power floated which will require at least 7 days. Never test floors with underfloor heating artificial drying aids (de-humidifiers) switched on. Switch off for at least 4 days prior to setting the hygrometer and they should remain off during the test period.

• As a guide a new sand and cement screed will dry at a rate of 1mm per day for the first 75mm and 0.5mm per day up to 100mm. Thickness greater than 100mm can take considerably longer (150mm up to and over 1 year) given ideal drying conditions. Anhydrite screeds dry at a similar rate providing the surface laitance has been sanded off to allow evaporation or treat as power floated.

• Some types of sub-floors can be coated with a liquid damp proof membrane to prevent excess moisture affecting the floorcovering. Always consult the DPM manufacturer for suitability.

• Rooms below ground level are particularly vulnerable to high moisture levels see section 9 below.

• Plywood sub-floor moisture also needs to be checked. This can be done using the equipment described above with spike attachment. These work by pressing the spikes into the wood with the spikes (2) in line with the grain. The maximum moisture level is 15% although ideally 13% should be considered. Moisture levels above 17% need to be investigated. High levels could be caused by poor ventilation under the suspended sub-floor.

4. Contaminated sub-floor for example, oil, wax, varnish, adhesive, paint etc.

• All contamination should be removed prior to apply damp proof membranes, smoothing compounds and adhesive. Some preparation manufacturers have products that will adhere to small amounts of adhesive residues but please check with them for suitability. Oil is a serious problem that may require the removal of the screed or to use an isolating floating membrane.

5. Building expansion join(s)

• Expansion joins are required to be left clear and should be bridged over with a suitable cover strip. These can affect the aesthetics of the floorcovering but with prior consideration they can be designed into the floorcovering.

6. Stable temperature and humidity within acceptable limits.

• A stable atmosphere prevents stress to the floorcovering. An ideal atmosphere is ambient temperature between 16ºc (61ºf) to 22ºc (72ºf) and relative humidity maximum 70%. Quick and large changes of temperature should be avoided as this will negatively affect the tiles and adhesive.

• The sub-floor temperature is also important and should be at a minimum 15ºc (59ºf) maximum 27ºc (81ºf).

7. Underfloor heating suitability.

• The tiles can be installed over underfloor heating providing the sub-floor surface is controlled to a maximum of 27ºc (81ºf). The temperature should only be increased by a maximum of 3ºc (5ºf) each 12 hours. It is suggested that the sub-floor surface temperature is set at a minimum 15ºc (59ºf) maximum 27ºc (81ºf).

8. Structurally sound sub-floor i.e. minimal vertical movement and firm screed.

• Excess vertical movement can cause stress to the floorcovering. Measuring this is not easy but as a guide, place a straight edge across the floor and walk next to the straight edge. If the sub-floor dips by more than 10mm you should consider strengthening. Or if you walk with one foot either side of a join in the sub-floor and the joins move

independently this will transmit through to the floorcovering. In this instance it is recommended to remove and refit with sufficiently thicker plywood, or overlay with plywood of at least 6mm thickness which should be laid at right angles to the run of the board long joins. If in doubt seek expert advice.

• Laitance can be present on new screeds particularly Anhydrite screeds and should be removed by sanding or grinding. The strength of the surface can also be a problem to the effectiveness of the adhesive bond. To check for laitance or friable surface of a screed, scratch the surface with a hard sharp object such as a nail or similar (a "tear" device guarantees a constant pressure when scratching the screed). Scratch two lines approximately 10mm apart horizontally and vertically crossing each other. The appearance of the edges (for example, jagged or clean) provides a hint about the surface firmness of the screed as does the delamination of the surface between the lines. Be careful with Anhydrite screeds as laitance can form to a hard finish if not sanded within two weeks of laying the screed. This surface may appear firm but may delaminate with time and usage.

9. Below ground level areas.

• Ensure these areas are suitably ventilated to prevent a buildup of humidity and to reduce the risk of condensation.

• Moisture can penetrate the walls as well as the sub-floor and could affect the adhesive bond. Always check the moisture level using a suitable instrument or seek expert help.

Installation

A good installation starts with a proper storage of products:

• Check that the received material is correct in terms of quality, quantity and colour;
• On arrival the material should be stored flat in small piles in the room where it will be installed at least 24 hours before laying (min. temperature 18ºc).

Conditions to be checked:
• A working temperature between 18ºc and 30ºc is required for at least 24 hours prior to and during the installation, and for 24 hours afterwards;
• Relative humidity shall not exceed 75%;
• Subfloor shall be suitable for the laying;
• Residual moisture in the substrate shall not exceed 2%.

Adhesives
Adhesives of different composition can be used according to the conditions and characteristics of the surfaces to be covered and strictly following the manufacturer's instruction:

Harvey Maria Rubber Flooring Adhesive is an acrylic adhesive in water dispersion which hardens by evaporation and absorption of the water contained within it, therefore requiring a porous substrate. It is suitable for indoor installations, on cement base surfaces, screeds or primed plywood, when light to medium traffic is expected and no large water quantities are used for the cleaning.

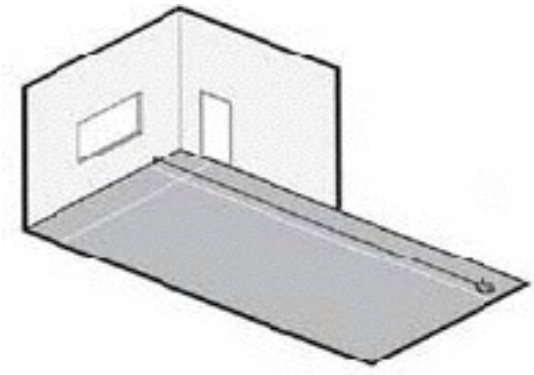
Two-components epoxy
Composed of an epoxy polymer (part A) which reticulates when mixed with a special hardener (part B).They harden through a chemical reaction between the two components. Suitable for indoor use on cement base surfaces when medium or heavy traffic is expected. Please ask for details of recommended epoxy adhesives.

Polyurethane two-components
Composed of a polyurethane polymer (part A) which reticulates when mixed with a special hardener (B). They harden through a chemical reaction between the two components. Suitable for indoor use on cement base surfaces when medium or heavy traffic is expected. Please ask for details of recommended polyurethane adhesives.

Polychloroprenic (contact adhesive)
Composed of Neoprene in dispersion with solvents that harden by evaporation and absorption through porous materials. Suitable for the laying of accessories (skirtings, stair treads, etc.) thanks to the quick setting of this kind of adhesives (which have to be applied on both the surfaces to be bonded).

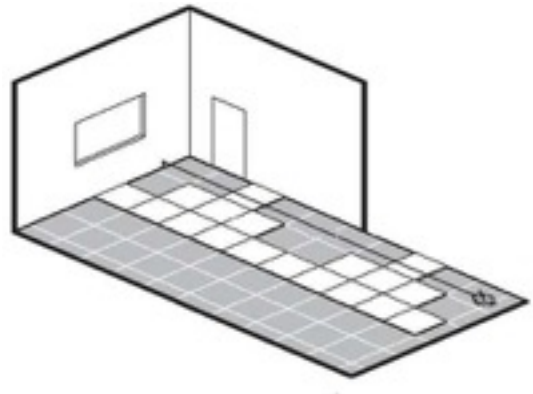
Use of adhesives
For proper preparation and application of the adhesives, it is necessary to strictly follow the manufacturer's directions. The adhesive must be applied with a notched trowel of the correct size notch which must be kept clean during the application. The adhesive manufacturer provides details of the notch size to suit the adhesive and the application. In general, a small notched trowel will prevent the spreading marks being visible once the adhesive has set.

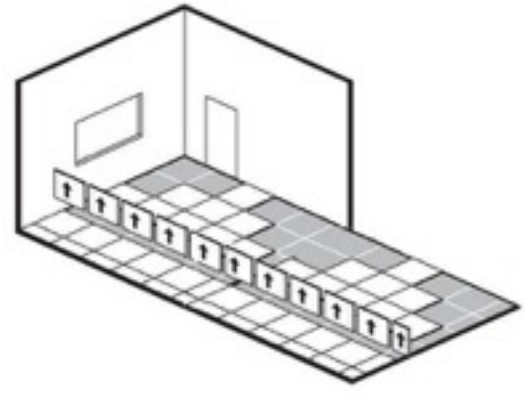
1. Setting out - Measure the room and mark the centrelines planning the laying in a way to reduce cuts and scraps.



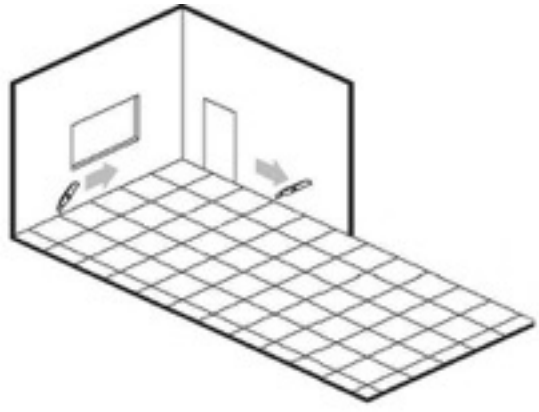
2. Loose lay - Loose lay the tiles (without adhesive) starting along the centrelines and following the arrows printed on the back of the tile taking special care to the alignment of joints and/or pattern. The loose laying is very important in order to check the colour uniformity and the absence of defects of the flooring. Claims for defects can only be investigated prior to fitting the floor.

Note: The following pictures are for laying Hemingway Grid Collection ie. side by side, full edge to full edge. For all other rubber floors, a brick bond is recommended.

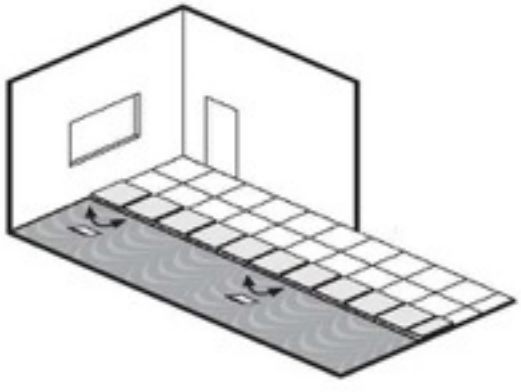




3. Cutting - Check the uniformity of colour and the absence of defects. The perimeter tiles should be trimmed off ready for bonding.

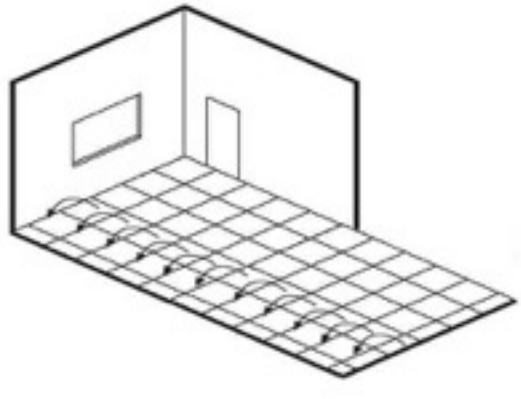


4. Adhesive - Tip over a row of tiles at a time. Spread the adhesive with the proper notched trowel as advised by the manufacturer.

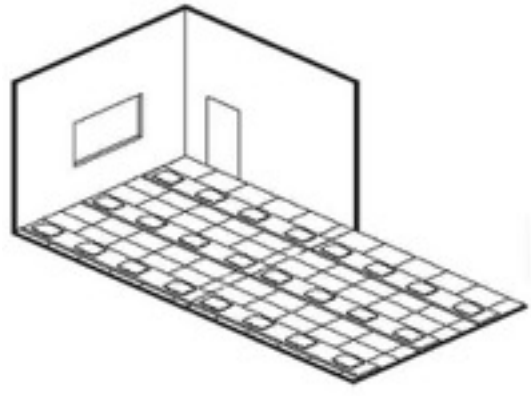


5. Fitting - Once the adhesive is ready to accept the tiles, put the tiles back in the starting position. Press/massage the flooring to make sure that all air is expelled and the tile is in full contact with the substrate. Special care has to be taken with regards to the positioning of the tiles to make sure the alignment of joints and studs is accurate.

Any excess adhesive should be removed as work progresses while still wet, using a cloth with neutral detergent (in case of acrylic adhesive), or with alcohol for two component adhesives.



6. Bonding - When using adhesive with long tackifying time, applying weights along the joints (bricks, sand bags,etc.) will help with the bonding process.



Notes:

Avoid using concentrated pressure on the floor with hands elbows or knees, during the installation to prevent the formation of permanent indents; do not walk on the flooring for at least 24 hours after the installation.

Always protect the floor after the installation with protective sheeting to avoid unnecessary damage when installing further equipment.

Edges of the floor can be finished with an edging trim or appropriately coloured mastic.

Harvey Maria smooth rubber flooring does not need sealing in normal domestic settings provided that the cleaning and care advice is strictly followed. In areas that cannot be shielded from strong sunlight, in areas likely to have prolonged standing water, in areas where entrance matting cannot be used, or simply to reduce the day to day cleaning and care requirements of this product, and in all commercial settings, it is recommended to seal the floor with a specialist polymer or polyurethane floor finish (e.g. Dr Schutz PU Anti-Color permanent sealer).

Following the cleaning and maintenance routine is essential to ensure the long life and best performance of the floor. For instance, to avoid staining from dirty water, cleaning should not be carried out in direct sunlight; after cleaning, ensure the floor is completely neutralised (pH=7) by rinsing with clean water; remove liquids from the floor to avoid stains and reduce the risk of slipping.

Shield the floor from strong sunlight to prevent damage to the surface of the tile. The surface temperatures should be maintained between 15°c (59°f) and 27°c (81°f). Note that surface temperatures may be significantly higher than ambient room temperatures.

These instructions are not exhaustive and are issued as general instructions. For more technical advice please contact Harvey Maria Ltd. Email: info@harveymaria.com