

# MALMO<sup>™</sup> LVT STICK DOWN HERRINGBONE FLOORING

## INSTALLATION INSTRUCTIONS

# Introduction & Installer / Owner Responsibilities

Thank you for choosing Malmo™ Herringbone LVT flooring. With correct preparation, installation and care & maintenance your Malmo™ LVT floor will last for many years and perform as intended.

The responsibility for ensuring the installation end use is appropriate, the sub floor is checked and prepared correctly, the installation is conducted correctly, as per these instructions and as per current BS standards for sub floor preparations and installation of Resilient vinyl floorcoverings (as per BS standards BS 8203 & BS 8204 ), lies solely with the installer.

This product is a trained installer fit product and therefore the installer should be appropriately trained, minimum NVQ level 2, in installation of vinyl & LVT stick down floor coverings by a recognized training organization or authority.

# Product Suitability, Checking, Storage & Acclimatisation

- Malmo<sup>™</sup> Herringbone LVT is suitable for internal use in normal domestic/residential & light, (small shop / boutique), to moderate, (medium to large shops), commercial use applications.
- The product can be used in normal domestic conservatories when installed correctly using the stated Durocoll adhesive. Window and door blinds/curtains should used during intense periods of high temperatures and sunlight.
- Malmo<sup>™</sup> Herringbone LVT is suitable for use over water piped, in screed, Under Floor Heating systems that have floor surface level temperature controls. (Malmo<sup>™</sup> LVT must **not be heated in excess of 27°C** at floor surface level.)
- Malmo™ Herringbone LVT is suitable for normal domestic bathrooms **but is not suitable for "walk in" wet room use.**
- This product is **not suitable for use externally or for areas of very high intense industrial class traffic** use such as large public use areas ie train stations/airports etc. If in doubt regarding the intended end use area **clarify your concerns with your supplier before commencing the installation**.
- Open a maximum of two packs and check the product is of the correct type and no defects, issues or concerns of any kind are apparent.
- Once you are satisfied that the product is correct and acceptable all the LVT packs should be STORED ON A VERY FLAT SURFACE a maximum of 2 packs quantity high and the packaging opened and be ACCLIMATISED ON SITE FOR A MINIMUM OF 48 HOURS before installation at a room ambient temperature of NOT LESS THAN 18°C AND NO MORE THAN 26°C, This temperature should be maintained during installation and ongoing use.

Correct acclimatization is very important as thin vinyl flooring is temperature sensitive and therefore **prior to installation** the product needs to equilibrate its temperature with that of the heated end room environment.

- Do not store any packs behind glass doors or panels or immediately in front of heating radiators.
- The adhesive and any other sub floor preparation products to be used should also be stored in the same appropriate conditions and acclimatized with the flooring for the same period so that the adhesive, associated preparation products, and flooring are acclimatized in the same conditions.
- Herringbone planks/tiles with any minor imperfections should be defect trimmed where possible and the good section of plank/tile used to start and finish rows.
- Any significant concerns regarding the product must be raised with your supplier immediately and the installation halted until those concerns have been clarified.
- The installation of Herringbone planks/tiles with clearly visible defects of any kind will invalidate the product warranty.

## Pre Installation key points to consider

## Checking & preparing the subfloor

NOTE! The quality of finish and performance of your chosen LVT flooring is directly linked to the quality of the sub floor and therefore it is vital that the sub floor onto to which the flooring is to be laid is assessed and prepared correctly in all normal industry and British Standard respects.

Preparation must include ensuring that the sub surface is dry, sound, and appropriately flat and all sub floor surfaces should be flattened / leveled appropriately using SCHONOX AP LEVELLING COMPOUND following the manufacturers instructions.

Concrete sub floors must be tested and dry in accordance with the sub floor humidity test method described within BRITISH STANDARD BS 8203 Annex A.

#### Existing subfloor coverings

- Remove all existing soft unfixed floorcoverings and any form of unsound or loose floorcovering and ensure the primary sub floor surface is fully suitable in all respects as per the current British standards BS 8203, BS 8204 in relation to a stick down LVT floor covering.
- Do not install LVT over any foam underlay.
- Scrape, hoovered or brushed clean, and smooth. Free of wax, paint, oil, sealers, surface coatings, old adhesives, curing agents, contamination and other debris.
- Check any sub floor surface coating that cannot be removed for primer & leveling compound compatibility prior to applying a primer and leveling compound. Consult the primer & leveling compound manufacturer for advice and recommendations before installing the primer & compound if needs be.
- NOTE! unprepared, unclean or contaminated sub floor surfaces can result in leveling compound / adhesive bonding failure.

### **Concrete subfloors**

- Concrete subfloors should be dry sound, completely free of any dirt, cement laitance, cleaning products, old adhesives, paints or any other form of surface coating that may impair adhesion of preparation products, leveling compounds, and result in telegraphing "show through" of the newly installed LVT.
- The sub floor surface should be primed to enhance adhesion using SCHONOX VD UNIVERSAL PRIMER, (Note Schonox VD Primer is NOT A DPM see notes below ref Schonox SDG Primer/ DPM where a primer/DPM is required), following the manufacturers instructions.
- Any significant cracks, holes, damage or unevenness should be treated by applying appropriate repair products BEFORE the final leveling compound is applied used.
- The sub floor surface **must be flat** as per BS 8203 & BS 8204 1 SR1 required levels as a minimum and leveled appropriately to ensure a perfectly flat sub surface is achieved **as any form of surface irregularity is likely to show telegraph and show though the thin** LVT flooring laid. No product fault claims will be accepted where sub floor irregularities result in visual defects with the LVT product laid.
- All concrete sub floor surfaces **SHOULD BE FLATTENED & LEVELLED USING SCHONOX AP LEVELLING COMPOUND** following the manufacturers instructions to ensure an appropriately flat sub surface is achieved.
- For particle board & Plywood sub surfaces prime with "SCHONOX VD PRIMER" followed by "SCHONOX APF" fibre Reinforced leveling compound following the manufacturers instructions.

Existing and new concrete subfloors must be correctly checked for moisture condition in accordance with building regulations BS 8203 & BS 8204 and RELATIVE HUMIDITY READINGS ATTAINED MUST BE LESS THAN 75% if readings attained exceed 75% then apply SCHONOX SDG LIQUID PRIMER/DPM, (MIN 2 COATS), liquid damp proof membrane system prior to installation following the manufacturers instructions (Non UFH sub floors).

NOTE! SCHONOX SDG PRIMER/DPM IS NOT SUITABLE FOR USE OVER RADIANT HEAT UNDER FLOOR HEATING SYSTEMS (UFH). WHERE AN EXISTING UFH SYSTEM IS WITHIN THE SUB FLOOR THE SUB FLOOR SHOULD BE APPROPRIATELY DRY BUT ENSURE THIS IS THE CASE BY CONDUCTING THE STANDARD BS HYGROMETER TEST TO CONFIRM THE HUMIDITY OF THE SUB FLOOR IS LESS THAN 75% AS PER BS BS 8203 & BS 8204.

- FOR NEW SUB FLOORS THAT CONTAIN A NEW UFH SYSTEM THE SUB FLOOR MUST ALSO BE APPROPRIATELY DRY, AND CHECKED FOR SUITABLE MOISTURE CONDITION AS PER BS 8203 & 8204 PRIOR TO INSTALLATION OF THE MALMO™ LVT.
- A NEWLY INSTALLED UFH SYSTEM **MUST HAVE BEEN FULLY COMMISSIONED AND IN OPERATION FOR A SUITABLE PERIOD OF TIME** TO ENSURE THE SUB FLOOR IS APPROPRIATELY DRY AND THAT THERE IS NO RISK OF MOISTURE BEING PURGED FROM THE SUB FLOOR WHEN THE SYSTEM IS USED AFTER THE LVT FLOORING HAS BEEN INSTALLED.

# NOTE! No claims for floor failures will be accepted where the cause is linked to moisture laden sub floors, or inadequately commissioned UFH systems.

### **Ceramic Tiles**

- All ceramic tile surfaces must be checked for suitable soundness and that all tiles are appropriately adhered with no risk of them becoming loose. Tiled surfaces should be abraded/sanded to ensure a good key for primers & levelers and If any doubts exist remove all the tiles first and prepare the sub floor beneath correctly.
- If installing over a sound tiled sub floor prepare the tile surfaces by abrading/sanding and apply "SCHONOX VD PRIMER" as per the manufacturers instructions. Overlay the primed tiled surface, with Schonox AP leveling compound to eradicate the risk of tile or grout line telegraphing "show through" when the LVT covering is installed.

### Wooden subfloors

- Wooden subfloors should be of high quality construction and be firm, sound, flat and smooth.
- Solid wood floorboard sub floors **must be overlaid with a minimum 6mm thick plywood** to BS636 and as per BS 8201 to ensure a suitably sound, flat and appropriate bonding surface is adhered to.
- The moisture content of the existing and new timber sub floor construction must not exceed 14% moisture content.
- Plywood & particle boards should be primed using "SCHONOX VD PRIMER" and smoothed over using "SCHONOX APF" fiber reinforced leveling compound. Ensure any wooden form of sub floor surface is appropriately flat before installing this LVT flooring product.
- All wooden suspended subfloors **must be free of any deflection movement when walked over**, If the sub floor is springy or deflects underfoot correct the movement appropriately prior to installing your LVT floorcovering.

**Basements and sub floor crawl/void spaces** must be appropriately dry and well ventilated minimum requirements current Building Regulation/ codes. Check all sub floor void vents or air bricks are clear of debris and not obstructed.

Exterior ground works should be complete with surface drainage offering a minimum drop of 75mm over 3.0 lin mt to direct the flow of water away from the structure. All gutters and downspouts should be in place. Ground level must be a minimum 150mm below any damp proof course (DPC).

### Asphalt / Mastic sub floors

Asphalt and Mastic sub floors should be to BS 6925 grade 1 and are oil based materials and as such require special assessment and preparation prior to installing stick down LVT over them. Use Schonox VD Primer applied correctly first followed by Schonox AP leveling compound.

**DO NOT apply Schonox Durocoll adhesive directly to any asphalt/bitumen sub floor surface.** Schonox VD primer and AP leveling compound must be used. **Always carry out a small test area before proceeding with a full application.** 

## Sub Floors that contain a Radiant Heat Under Floor Heating System (UFH)

Malmo<sup>™</sup> Herringbone LVT flooring is suitable for use over radiant under floor water piped heating systems only that are appropriately dry, in terms of humidity as per BS 8203 & BS 8204, and fully encased within a concrete screed.

**NOTE!** Schonox SDG Primer/DPM **is not suitable** for use over sub floors that contain a radiant heat UFH system). The sub floor **must be moisture assessed AND CONFORM TO to British Standards and be suitable in terms of moisture / humidity condition.** 

SCHONOX DUROCOLL LVT adhesive, VD Primer & AP Leveling compound are all suitable for use over UFH systems following the manufacturers instructions. The UFH system should have been switched off for a minimum of 48 hours prior to installation of the flooring. ENSURE that appropriate BS 8203 / 8204 sub floor moisture condition checks are conducted and pre installation commissioning and heat introduction protocols carried out, before and after the flooring is installed. Following installation of the flooring the UFH heating must be introduced SLOWLY AT A LOW LEVEL and be raised in small incremental stages over several days or more. Where an appropriate UFH system is in place the surface of the installed LVT flooring must not exceed 27°C and the system should have a fitted sensor to ensure this temperature is not exceeded. Do not use rugs over the flooring where an UFH system is in place as hot spots will be created by the insulating nature of rugs and distortion of the flooring under rugs may occur.

You should always consult the manufacturer or supplier of your heating system to confirm its suitability in terms of laying an LVT flooring over it, and to confirm that the heat output design is suitable for installation with Malmo<sup>™</sup> LVT flooring and if any specific commissioning processes in relation to your specific system should be employed both when turning on the system for the first time, and for its use after the flooring has been installed. The maximum KW heat output suitable for use with Malmo<sup>™</sup> Herringbone LVT flooring is a KW rating that **ensures the flooring surface is not heated above 27°C**, Consult your UFH system manufacturer to determine and clarify the system heat output.

NOTE! As flooring manufacturers / distributors we are unable to evaluate each sub floor system, or UFH system, and therefore the responsibility for the appropriateness of the sub floor, its construction and the suitability of any UFH system within it, lies with the installer of the flooring.

# LVT Installation

The installer of this product should be **appropriately trained**, **MIN NVO LEVEL 2**, in relation to the required sub floor checks and preparations that must take place and the industry norm installation techniques that must be followed in relation to a stick down LVT product installation and Herringbone pattern installations. The manufacturer and distributor of this product will not accept any floor failure claims that relate to incorrect or inadequate subs floor preparations being conducted or incorrect installation techniques being used to install this product.

Firstly – NOTE! THE ACCURACY OF THE SETTING OUT AND MARKING PROCEDURES ARE VITAL TO ENSURE RUN OUT AND GAPPING ISSUES ARE AVOIDED AS THE INSTALLATION PROGRESSES. Regularly check and double check measurements and board / floor alignment prior to starting installation and during installation.

Consider the required direction of the herringbone pattern in relation to major features in the room and the size of the room. Once a direction is decided snap a chalk line (A) along the entire centre line of the room and measure the width appropriately from the line to determine the final board cuts and ensure the final boards that will be installed are of suitable length either side of the room. If necessary relocate the initial centre line to suit. Snap a second (B) & third (C) chalk line either side of the first line at a distance equal to the corner points of the Herringbone plank/ tile when located together as diagram below.

Use a plywood template/backer board, (D), **cut exactly square** and 50mm larger in size than the length of planks/tiles being installed so that it can be used as a template and support for the first planks/tiles & rows installed. The template should be located in a diamond shape fashion with its upper and lower points aligned with the right hand side marker line as point (E) diagram below.

With the lines and template in place carefully spread a relatively small area of adhesive, (F), in front of the template **as per the adhesive manufacturer's instructions**, using the manufacturers stated notch size and type of trowel.

Once the adhesive has reached its correct state appropriate for laying into, carefully lay the first planks/tiles (G) & (H), so that the appropriate corners / end points match in alignment with the previous laid out centre and parallel lines and are tight to the sides of the plywood template. **Install from several open packs of flooring mixing individual planks/tiles to ensure blending of any colour variation occurs.** 

Install several subsequent rows above the starter rows in the same manner so a base pattern for installation is formed. Locate further planks/tiles in the same manner to the left and right of the starter planks/tiles (J), and measure and mark further left and right hand sets of lines, (K), parallel to the first set to use as plank/tile corner marker points as the installation progresses outwards. Progress the installation of the first three rows until they reach full room width.

ACCURATE ALIGNEMENT OF THE FIRST ROWS IS VITAL TO ENSURE ALL SUBSEQUENT ROWS ARE INSTALLED SQUARE AND RUN OUT OF ROWS & GAPPING DOES NOT OCCUR.

MAKE NUMEROUS ALIGNEMENT / MEASUREMENT CHECKS DURING INSTALLATION TO ENSURE THE BOARDS ARE / ROWS ARE ALWAYS SQUARE AND NOT RUNNING OUT.

As appropriate and as per the adhesive manufacturer's instructions, roll the installed rows of flooring with an appropriate weight roller. Continue installation in the same manner as the first rows until the installation is complete.

Upon completion of the flooring installation allow the adhesive to fully cure as per the adhesive manufacturers instructions. Install any required edge and transition profiles to cover the required edge expansion gaps.



## Points to note following completion of the installation:

- Be sure to keep any spare planks or tiles in case there is a future unforeseen need for a replacement.
- Use suitable protection to cover the floor when moving heavy furniture and appliances into place **once the full curing time of the adhesive has been reached.**
- Ensure proper use of floor felt protector pads under the legs of furniture or display units etc. to limit any scratching occurring.
- Where possible use furniture feet cups to help spread the weight of heavy objects, display units or furniture at the point where the feet of the object/furniture contact the floor surface as this will minimize indentations occurring within the LVT floor surface at these points. LVT can indent where heavy objects sit on the floor over time and therefore indentations resulting from heavy objects/furniture feet are not covered by the product warranty and are not grounds for complaint.
- Ensure room temperature is maintained between 18°C and 26°C.
- Avoid using mats where an under floor heating system is in place as hot spots are created under mats as they insulate the flooring beneath them and increased temperatures under mats can lead to plank distortion and movement.

# Malmo<sup>™</sup> Herringbone LVT Care & Maintenance

# Initial Maintenance upon completion of installation (and full curing of the adhesive has been reached):

## Domestic/Commercial use small medium sized floors:

- Thoroughly clean your floor by using **"Bona Tile & Laminate Floor Cleaner Kit"**, which is a hard surface cleaner also suitable for vinyl floor coverings, using an appropriate flat head mop.
- Vacuum or sweep the floor weekly, or more frequently if required. The vacuum head must be brush or soft felt. Do not use a vacuum that has beater bars or a hard metal head.
- A floor swivel head flat mop with replaceable cloth cover is highly recommended to eliminate finer particles of dirt and grit that may build up on the floor.
- Spillages and tracked in dirt should be wiped off the floor immediately.

Do not use general purpose cleaners, abrasive cleaners or cleaners containing bleach or oils.

The recommended Bona cleaner should be available through you flooring supplier.

## Ongoing Care & Maintenance:

- Sweep or vacuum the floor regularly to remove dirt, grit particles and dust.
- Prevent stains by wiping up spills immediately.
- Regular cleaning using the **"Bona Tile & Laminate Floor Cleaner Kit"**. Ensure the floor surface is completely dry before use as wet floors can be slippery.
- DO NOT use any form of wax or polish on the LVT as these can cause a slip hazard.

#### Commercial use larger area floors:

Larger area floors can be cleaned using a "Bona" mechanical "Power Scrubber" cleaner and Bona cleaning solution used by an appropriately trained person. The Bona Power Scrubber is suitable for cleaning hard surface floors including LVT based floor coverings.

Full details on the power scrubber can be found via the Bona flooring website **www.bona.com**. The power scrubber should be used in accordance with the Bona product instructions and used only with their **WHITE SOFT BRUSH ROLLERS** and at low speed for use with Malmo<sup>™</sup> rigid LVT. **DO NOT use any form of higher abrasive rollers** and if any doubts exist regarding the type and colour of rollers contact Bona UK for their advise before commencing use of the machine.

# NOTE! Care must always be taken with mechanical rotary cleaning machines when cleaning textured floor coverings in that the machine must be correctly used and only used in the same direction as the woodgrain texture of the floorboards.

Rotary brushes or rollers can ultimately have a wearing affect to the floor surface so must be used appropriately and **the machine in use must not be left rotating whilst the machine is stationary as excess heating of the flooring under the rollers can occur and the floor may have a resulting dull spot at its surface** and any resulting effects due to incorrect use of any mechanical cleaning machine are not covered by the LVT warranty.

### Malmo™ Herringbone LVT Flooring is not ultimately scratch or damage proof therefore:

- Use floor protector pads under the feet of all furniture to minimize scratching or damaging the floor surface. Ensure these are regularly checked and replace when necessary.
- Use workstation mats at desks, shop counters and tables etc to avoid premature wear from chair castors or chair feet.
- Use mats at any points where footfall is highly repetitive such as at kitchen sinks, shop counters, etc to avoid uneven wear patches forming over time.
- Ensure the bottom edges of any doors do not continually make contact with the floor surface when opened or excessive premature wear may occur.





- Use mats at doorway entrances to minimize dirt and grit being carried onto the floor which can then result in scratches appearing. Ensure these are regularly cleaned, maintained and replace when necessary.
- Avoid exposure to direct sunlight for prolonged periods particularly immediately behind glass doors. During peak sunlight hours use blinds or curtains to minimize direct sunlight on the floor surface as excessive heating of the surface can result in distortion of the planks / tiles.

# Recycling

Waste Malmo<sup>™</sup> Herringbone LVT can be recycled at your local Recofloor recycling agent www.recofloor.org or via your local council waste recycling facility.

# **Product Warranty**

Malmo<sup>™</sup> Herringbone LVT carries a limited, depreciating value, domestic/residential use, & Light commercial, (small shops, boutiques etc) to moderate commercial, (medium to large shops), warranty against total wear through of the surface wear layer due to a manufacturing defect under normal expected foot traffic use as follows:

• 2.5mm/0.55 wear layer products 25 year domestic / residential use or 10 year light/moderate commercial use.

Should any potential defects be found during installation of this product **halt the installation immediately and inform your supplier of your concerns and do not continue installation until the concern has been clarified. The product warranty will be voided** where the issue experienced results from incorrect sub floor checks and preparations, incorrect installation techniques conducted, damage or abuse of the flooring, incorrect maintenance carried out on the floor or inappropriate end use of the product.

The warranty is a limited, depreciating value, warranty with terms and conditions applicable. A copy of the associated Malmo™ LVT product warranty is available via your Malmo™ LVT supplier.

## Disclaimer

It is ultimately the installers responsibility to ensure he is fully conversant with the sub floor preparation & installation instruction procedures and is suitably trained, min NVQ level 2, & competent to carry out the stated procedures.

The information contained within this instruction leaflet is based on manufacturers recommendations, Relevant British Standards and industry best practices.

We reserve the right to amend these instructions without prior notice.

E&OE.

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