

MALMO™ LVT STICK DOWN FLOORING

INSTALLATION INSTRUCTIONS

Introduction & Installer/ Owner Responsibilities

Thank you for choosing Malmo™ 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 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™ 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 be used during intense periods of high temperatures and sunlight.
- Malmo™ LVT is suitable for use over water piped, in screed, Under Floor Heating systems that have floor surface level temperature controls. (Malmo™ LVT must **not be heated in excess of 27°C** at floor surface level.)
- Malmo™ 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 **FULLY OPENED** and the planks/tiles **STORED ON A VERY FLAT SURFACE** a maximum of **2 packs quantity high & 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 prior to installation and needs to equilibrate its temperature with that of the heated end room environment.

- **Do not store any boards or tiles 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.
- 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 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 **SCONOX 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 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™ 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™ 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™ 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 NVQ 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. **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.**

Installing the LVT Wood decor planks:

- The planks should be installed in the direction of the traffic flow in your room. It is recommended to lay the planks parallel to the longest room dimension.
- Measure the room width to determine the width of the last row of planks. If the width of the last row of planks is less than 75mm, the width of the first row of planks will have to be cut accordingly to ensure the first and last rows are of equal width.
- Carefully measure the room to determine the alignment of the walls and snap a chalk line to ensure the first row is laid correctly aligned. **Failure to lay the first row correctly aligned can lead to gapping of joints for subsequent rows that can increase row by row.**
- **NOTE!** THE LVT TILES HAVE “DIRECTIONAL ALIGNMENT” arrows embossed onto the reverse face of them. for some decors it is important to lay the planks aligned in the same direction, however with wood effect decors this is not necessary due to the normal pattern/decor variances that wood effect planks are designed to have.
- Begin laying planks from the left hand corner/side of the starting wall laying them to the right.
- **Mix planks from at least three different open boxes** to blend the planks and ensure the visual effect of the print decor repeat is minimized.
- **Use the correct size - A1 / A2 NOTCHED TROWEL for the SCHONOX DURACOLL ADHESIVE to be used. Note: Incorrect notched, incorrect type or worn trowels can affect the application of the adhesive, result in too much or too little adhesive being applied, and therefore compromise the adhesion, and finished quality of the laid flooring.**
- Once the first section of adhesive has been applied to the sub floor and has reached its open or dry tack state, **(consult the adhesive manufacturer instructions to determine its flooring application point)**, lay the first row into the adhesive ensuring the long edges are located accurately against the chalk line, the short ends are located tightly together and that the planks are **pushed firmly onto the bed of adhesive.** Avoid transferring adhesive from the sub floor onto the surface of the LVT product and if this occurs wipe of the adhesive quickly with an appropriate adhesive cleaner.
- **Leave a small edge expansion gap of minimum 2mm around all perimeter edges of the floor** and any fixed objects, such as pipes etc, within the body of the floor.

- **Existing sub floor expansion gaps or breaks with a concrete sub floor should be mirrored within the LVT floor covering as if not any movement between sub floor sections will create issues with an unbroken floorcovering above it.**
- The last plank in the row will need to be cut. To do so measure the distance between the wall and the end of the previous installed plank and ensure the final plank is longer than 300mm.
- LVT planks are cut using a sharp utility knife and a straight edge. Score the surface of the plank with the knife and then snap the plank at the score line.
- The off cut part of the plank can be used as the first piece in the second row of planks provided it is more than 300mm in length. Always stagger end joints from row to row by at least 300mm.
- Repeat this installation process working from left to right, row by row. Remember to offset all end joints by at least 300mm.
REGULARLY CHECK ALL PLANK ARE IN ALIGNMENT AND NOT RUNNING OUT!
- Cutting shapes around fixed objects can be easily done with a utility knife. Simply make a pattern out of heavy paper to fit round any irregular objects. Place the pattern upon the plank and then make one or several cuts on the plank surface with the blade. Then bend and snap the plank to break it to shape and trim any rough edges with the knife.
- **Roll the floor I laid area in both directions before the adhesive is fully cured, and within the adhesive manufacturers specified time period to roll, using a 75kg roller (this may be required as the installation progresses using a smaller roller or smoothing board)** to ensure full contact of the LVT underside into the adhesive.
- Allow the adhesive manufacturers stated cure time before using the floor.
- Fit appropriate transition mouldings where planks meet other types of flooring.
- Install appropriate trims or skirtings around the perimeter of the installed rooms as required.

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 lime of the adhesive has been reached.**
- Ensure proper use of floor felt protector pads under the legs of furniture etc. to limit any scratching occurring.
- Where possible use furniture feet cups to help spread the weight of heavy objects 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 object points 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.

Installing LVT Tiles:

- Tile format products are laid commencing from a center line of the rooms longest direction.
- **NOTE! THE LVT TILES HAVE "DIRECTIONAL ALIGNMENT" ARROWS EMBOSSED ONTO THE REVERSE FACE OF THEM. IT IS IMPORTANT WITH TILE EFFECT LVT TO ENSURE THAT WHEN INSTALLING TILE DECORS THE DIRECTION ARROWS ARE ALL POINTING IN THE SAME DIRECTION WHICH THEN ENSURES THAT COLOUR/SHADE & TEXTURE UNIFORMITY OVERALL IS ACHIEVED.**
- The line position should be set to allow for cuts to the final rows to the side walls being equal and greater than 75mm in width.
- A center line across the room at 90 degrees to the first line should be set and ensure that the cuts to the end walls are again equal and greater than 75mm.
- **Use the correct size notched and type of trowel as stated by the manufacturer of the adhesive to be used.**
- Once the first section of adhesive has been applied to the sub floor, and has reached its dry tack state, **(Consult the adhesive manufacturers instructions to determine its flooring application point)**, lay the first row into the adhesive ensuring the long edges are located accurately against the chalk line, the short edges are located tightly together, and that the tiles are pushed firmly onto the bed of adhesive.
- **CHECK ALL TILES OF THE FIRST ROW ARE IN ALIGNMENT AND NOT RUNNING OUT!**

- Avoid transferring adhesive from the sub floor onto the surface of the LVT tiles and if this occurs wipe off the adhesive with an appropriate adhesive cleaner.
- **Leave a clear edge expansion gap of minimum 2mm around all perimeter edges of the floor** and any fixed objects, such as pipes etc, within the body of the floor.
- **Existing sub floor expansion gaps or breaks with a concrete sub floor should be mirrored within the LVT floor covering as if not any movement between sub floor sections will create issues with an unbroken floorcovering above it.**
- **Roll the floor / laid area in both directions before the adhesive is fully cured. and within the adhesive manufacturers specified time period. using a 75kg roller, (this may be required as the installation progresses using a smaller roller or smoothing board).** to ensure full contact of the LVT underside into the adhesive.
- The last tile in the row will need to be cut. To do so measure the distance between the wall and the end of the previous installed tile.
- LVT tiles are cut using a sharp utility knife and a straight edge. Score the surface of the plank with the knife and then snap the tile at the score line.
- The off cut part of the tile can be used as the first piece in the second row of planks provided it is appropriate in length.
- Cutting shapes around fixed objects can be easily done with a utility knife. Simply make a pattern out of heavy paper to fit round any irregular objects. Place the pattern upon the tile and then make one or several cuts on the plank surface with the blade. Then bend and snap the tile to break it to shape and trim any rough edges with the knife.
- Repeat this installation process working from left to right, row by row. **REGULARLY CHECK ALL TILES ARE STILL IN ALIGNMENT AND NOT RUNNING OUT!**
- When the installation is complete **roll the floor in both directions before the adhesive is fully cured, and within adhesive the manufacturer specified time period after the adhesive has been applied and the flooring laid, using a 75kg roller** to ensure full contact of the LVT underside into the adhesive.
- Allow the adhesive manufacturers stated cure time before using the floor.
- Fit appropriate transition mouldings where planks meet other types of flooring.
- Install appropriate trims or skirtings around the perimeter of the installed rooms as required.

Points to note following completion of the installation:

As per above details for plank product installation.

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 your 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™ 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.

Always test compatibility of your machine and cleaner fluid on a small floor area first.

Malmo™ 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 cleaned and maintained and replace when necessary.
- **Use workstation mats at desks and tables** 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 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.

