Norsk™ Multi-Purpose PVC Flooring Installation Instructions

IMPORTANT: Floor tiles and trim pieces must be stored in a moist free environment at a minimum of 65 degrees Fahrenheit and not in direct sunlight for a minimum of 48 hours prior to installation. The subfloor should be the same temperature as well. PVC like all building materials expands and contracts. Depending on job conditions, exposure to UV light, job size and type of application some job site modifications may be necessary to minimize the effects of expansion and contraction. If you have a large project, a project with direct exposure to UV light on part or the entire floor during installation may cause the floor tiles to be too pliable and locking mushroom teeth become difficult to connect for installation. So please be aware of direct sun on tiles prior to and during installation. Norsk-Stor nor its distributors, retailers or contractors will be responsible for buckling or separation caused by consumers failing to allow for expansion and contraction.

While this may seem complicated, don't feel intimidated. These are just important considerations to take while designing and installing your flooring system to ensure that it will look great for a long time. One advantage with using PVC tile, especially with Norsk's patented mushroom tooth design locking system is there will be less waste and installation is similar to a traditional tile floor.

Depending on the size of the area to be installed we recommend leaving a 1/4" to 1/2" expansion gap between the last tile and any walls or fixed objects. By not leaving an expansion gap, you run the risk of your tiles buckling if exposed to direct sunlight or excessive heat if they are installed in cooler temperatures and the tiles need to expand slightly. NOTE: Our tiles can handle heavy objects just make sure the floor has time to adjust to a fully expanded condition prior to putting permanent heavy fixtures or items including but not limited to safes, cabinets, workbenches and shelving units. Once the floor has been exposed to a nice warm day or direct sunlight and you have no issues of buckling or pushing against walls then it is safe to move any items onto floor. Trouble area's are mostly around Garage openings where direct sunlight will affect the most. Just remember to leave a 1/2" gap in these areas.

1 NUMBER OF BOXES NEEDED

- Measure the length and width of the room to get Square Feet. (ALWAYS ROUND UP TO NEXT FOOT) Measure any offsets separately.
- Determine the number of Norsk™ 6-pack boxes of tiles needed for each area by using the tile calculator located on our website www.Norsk-stor.com or taking your rounded up Square Footage number and dividing by 13.95 (Sq Ft. in each 6-pack of Norsk™ tiles) Then take that number and round up to the next box and that should leave you enough for cutting. Some people feel comfortable ordering one or two extra boxes to cover mistakes, and future replacement due to possible damage.

- For standard area tile installations (making a mat) only a Rubber Mallet is needed.
- For wall to wall installations or areas where cutting around objects is necessary the following tools *may be needed:* Good solid utility knife, Large Utility Shears, large carpenter's square, chalk line, and or even better is Black Sharpie (which is easier to see). If using a table saw make sure you have a new 80 tooth multi-purpose blade and follow all safety instructions included with table saw including safety glasses.

3 SUBFLOOR PREPARATION

- Commercial Applications
 - The surface to be covered is defined as the subfloor. The subfloor condition will determine the ultimate outcome of the installation. Clean the subfloor so that it is free of moisture, dirt, grease, or other foreign materials. Remove all protrusions such as high spots, nails, bolts, sand, dirt, etc. Fill all voids or cracks that are greater than 1/4" wide with an appropriate patching compound for subfloor surface.
 - Wood floors must be level, smooth and securely fastened.
 - This product can be installed on or above grade level. Any installations (i.e. basements) below grade level require the concrete to be tested for moisture. Concrete floors must be clean and free from any and all moisture and must remain so after the installation is complete. Leveling compounds may be used and sanded smooth prior to installation to eliminate uneven areas in the concrete floor. All newly poured concrete must cure properly prior to any installation.
 - To test below grade concrete for moisture, tape a thin plastic film approx. 18" x 18" in size and leave in place for 24 hours. If excessive moisture appears on the plastic film THE SUBFLOOR SHOULD BE SEALED PRIOR TO INSTALLATION. SEALING SUBFLOOR PREVENTS MICROBIAL GROWTH PROBLEMS FROM OCURRING. USE A SEALER RATED AND WARRANTED TO SEAL BELOW GRADE LEVEL SLABS (AVAILABLE AT LOCAL HARDWARE STORE) TO PREVENT VOIDING WARRANTY
 - Tile should be stored in a moist free environment at a minimum of 65 degrees Fahrenheit for at least 48 hours prior to installation. The subfloor should be the same temperature as well.

Garage Applications

The surface to be covered is defined as the "subfloor". The subfloor condition will determine the ultimate outcome of the installation. Clean the subfloor so that it is free of any loose dirt or particles and we recommend removing any wet oil or grease spots using an absorbent such as Pour-N-Restore. For best results, remove all protrusions such as high spots, nails, bolts, sand, dirt, etc. Fill all voids or cracks that are

- greater than 1/4" wide with an appropriate patching compound for subfloor surface. The tile will follow your sub-floor. If you want a flat, professional installation then you need to start with a flat subfloor.
- This product can be installed on or above grade level. Any installations (i.e. basements) below grade level require the concrete to be tested for moisture. Concrete floors must be clean and free from any and all moisture and must remain so after the installation is complete. Leveling compounds may be used and sanded smooth prior to installation to eliminate uneven areas in the concrete floor. All newly poured concrete must cure properly prior to any installation. Our Air-dry™ system will allow reasonable amounts of moisture to evaporate, however in any situation where moisture may be an issue it is always recommended to use a vented tile.
- To test below grade concrete for moisture, tape a thin plastic film approx. 18" x 18" in size and leave in place for 24 hours. If excessive moisture appears on the plastic film THE SUBFLOOR SHOULD BE SEALED PRIOR TO INSTALLATION. SEALING SUBFLOOR PREVENTS MICROBIAL GROWTH PROBLEMS FROM OCURRING. USE A SEALER RATED AND WARRANTED TO SEAL BELOW GRADE LEVEL SLABS (AVAILABLE AT LOCAL HARDWARE STORE) TO PREVENT VOIDING WARRANTY.
- Tile should be stored in a moist free environment at a minimum of 65 degrees Fahrenheit for at least 48 hours prior to installation. The subfloor should be the same temperature as well.

4 MINIMAL WASTE INSTALLATION

- No matter which installation instructions you choose to use the garage door will be the front of the garage and left and right will be determined based on standing at the garage door and looking in.
- Lay tiles out across front of garage and a row down the middle to determine where you will end up on both sides and the back trying to make sure you have approximately the same distance on either side. Note this distance needs to be 9" or less so you can use one tile for two sides. Same way with back end. If less than 9 inches you will have less waste. Sometimes that does not work out.
- Place the front tiles (at garage door) with the mushroom teeth pushed against door track. DO NOT attach trim until end.
- Working across the front towards the back place install tiles but do not finish either side as this will be one of the last steps.
- Adjust your front row ensuring it is straight and square as you move back away from the door. Continue to the next row of tile working from left to right until you have finished and you are left with 3 unfinished sides. Once you finish filling in floor you will have two sides and the

- back to complete by cutting to fit.
- Now begin to fill in both sides and back by cutting to fit each tile leaving a 1/4" to 1/2" gap for expansion and contraction. IMPORTANT: for areas up to 30 feet in width leave a 1/4" gap from the walls for expansion. For areas larger than 60 feet in width leave a 1/2" gap from the walls for expansion. Also direction the garage is facing can determine gap. If garage faces West and has a lot of sun exposure you may need to leave 1/2" gap on each side.
- Last Step is to put trim on front of garage. You should cut around tracks in door by making a U allowing 1/2" gap. You will probably have to trim off one or two mushroom teeth to accomplish this.
- Now when garage door comes down it will rest perfectly onto the trim and job will look clean and finished.

5 MINIMAL CUT INSTALLATION

• Install your first row of tiles working from left to right. Start with a full tile and cut the last tile to fit leaving room for expansion and contraction. Using this method you will have additional waste. Work your way from front to back, left to right insuring that adequate room is left for expansion and contraction on both edges. Choose side of garage for full tiles that you use or see the most because depending on size you may have a small piece on other side.

6 TILE INSTALLATION

To connect the tiles, align the teeth of the adjoining tile or border piece and *lightly tap* with a rubber mallet (DO NOT USE A REGULAR HAMMER OR OTHER METAL STRIKING TOOL), taking care to ensure that the teeth are aligned properly prior to lightly tapping to prevent damaging the tiles. IMPROPER ALIGNMENT COMBINED WITH HEAVY STRIKING WITH A RUBBER MALLET MAY DAMAGE THE INTERLOCKING TEETH. *NOTE: IF A TOOTH DOES NOT SET ALL THE WAY TURN YOUR RUBBER MALLET OVER AND USE THE WOOD HANDLE END TO PUSH AND TURN THE TOOTH IN.* Connecting these tiles in direct hot sunshine may make the tiles more pliable and installation more difficult.

7 WALL BORDER (Cut to fit areas) TILE PLACEMENT

Place a loose tile over the top of the last tile next to the wall. Place a second tile over it but near the wall, leaving the proper expansion gap, and mark the tile underneath at the bottom of (in between) the interlocking teeth. Cut along this line with your utility knife and install tile. (PLEASE NOTE IF THE TILE YOU ARE USING HAS TEETH ON IT YOU WILL HAVE TO MAKE YOUR MARK TO CUT AT THE BOTTOM OF THE TEETH. OTHERWISE YOUR GAP WILL BE TOO LARGE SINCE YOU WILL NOT HAVE THE TEETH TOWARDS THE WALL OR EDGE). Cut the tile along this line with your utility knife and install tile.

8 MAKING IRREGULAR CUTS AROUND OBJECTS

 Using tracing paper, make a pattern around any irregular objects and trace it on the back of a loose tile. Cut along the line with your utility knife. Carefully lay tile in place and secure with rubber mallet.

9 USING FINISHED BORDERS ON EXPOSED EDGES

 Border pieces are sold separately. Store all unused border pieces in a safe place for potential future use. Boarder pieces actually help link the tiles for a stronger connection by overlapping each tile by half. Corner tile pieces can be cut to make them into straight pieces. (See back of corner pieces for cutting guidelines) Each box will cover approximately cover 26 linear feet.

10 BASEBOARD WALL TRIM

 If baseboard wall trim is desired, rest it on top of the tile so as to not inhibit the expansion/contraction of tiles with temperature fluctuation.

11 ADHESIVES

- Adhesives are not recommended for use with Norsk™ tiles; they are designed for installation without the use of adhesives.
- Adhesives should only be used in applications where normal interlocking features do not work. Some potential applications are:
 - Sloped areas such as angled ramps, etc.
 - Areas where the tile will not conform irregular (curved or other) surfaces
 - Vertical wall spaces

12 CARE AND MAINTENANCE

- Avoid prolonged sun exposure to prevent color fading and warpage. This
 product is not recommended for exterior installations (except our Vented
 Tile) or applications that are exposed to continuous moisture and or
 grease (commercial kitchens require grease-proof mats). This product
 should not be used in applications where constant or heavy amounts of
 moisture or grease create slippery conditions.
- Cleaning:
- Clean dirt and/or debris by sweeping, vacuuming, or using a wet mop.
- Clean soiled surfaces by mopping or scrubbing with mild detergent.
- For heavy cleaning, a rotary scrubber with soft pad or nylon brushes should be used.
- The purchaser should pay special attention to all codes, laws, specifications and ratings for products specifically used in play areas, playgrounds, and other recreational uses where the safety of children and others are concerned.
- Use Norsk[™] trim for safety and a finished look.