TORLYS EVEREST XP FLOORING

DEAR CUSTOMER,

You have purchased a high quality **TORLYS Everest XP** hardwood floor. Please take a moment to review these installation instructions and plan your installation carefully.

Please note that IMPROPER INSTALLATION CAN VOID WARRANTIES. Installation of 100 square feet (9 m²) of flooring is enough to verify quality and acceptance.

*TORLYS Everest XP Flooring is not suitable for use in SAUNAS or other abnormal use or conditions including, but not limited to, water damage from plumbing, storms, floods, and excessive water saturation on the surface or trapped between subfloor and floor.

If encountering difficulty during installation, STOP and contact TORLYS Customer Service at: 1 (855) 486-7597 and ask for the Technical Department.

IMPORTANT: Stapling your TORLYS Everest XP flooring will void your Surface Waterproof Warranty.

Closed-in porches, solariums, screened in gazebos -ALL of these can experience rapid and unbalanced changes in the interior environment that cannot be properly controlled. Installation under these conditions is NOT recommended.

GENERAL GUIDELINES

SET UP

To ensure you have sufficient material on hand, calculate the total area of the room and add 5% of material to allow for custom cutting. Forty-eight hours prior to installation, place the closed packages in the middle of the properly conditioned room (see **Layout** section), **NEVER** against a wall or in a corner, nor near hot or cold air-vents or in direct sunlight. Do not open the packages until you are ready to begin installation. Flooring is to be stored on a flat floor to prevent distortion. Inspect each plank before installation. If you find any defects, either cut out the defect or do not use the plank. Contact your supplier immediately.

IMPORTANT: TORLYS EVEREST XP FLOORING is a natural material and therefore no two planks are alike... this adds to its beauty. Some variation in grain, colour, and shade, as well as knots and mineral streaks, should be expected. Always work from several boxes at the same time and shuffle planks for the best appearance. If you are not satisfied with the appearance of your flooring, please contact your dealer prior to installation. Do not install flooring deemed to be unacceptable. Acceptance or rejection of flooring must be made on the full shipment of flooring received and not on a carton-by-carton or plank-by-plank basis.

Please Note: The TORLYS Warranty does not cover labour for installation of planks with visible defects.

PREPARATION

Remove existing carpet, baseboards, quarter-rounds, and thresholds. Undercut door jambs using a piece of flooring material as a guide. Repair all defects in the subfloor. Additional expansion and contraction space can be achieved by undercutting drywall.

CHECK THAT:

- The jobsite has been cleaned and cleared of debris that could potentially damage the finish of your TORLYS floor.
- The doors can still open and close after installing the floor.
- Doors may have to be cut to supply sufficient clearance.
- The door jambs may need to be adapted to install the floor under them.
- For aesthetic appearance we suggest that you do an accurate measurement across the width of the room to ensure that the pieces of the last row are no less than 2" (5 cm) wide. Cut the width of the pieces of the first and last row as needed.

SUBFLOORS

Walking noise can occur in any floor made of wood and/or wood products and will change (increase/decrease/cease) depending on the environmental conditions, including staple-down applications. This is not considered a manufacturing defect, and therefore not covered under our warranties. It is possible to reduce the potential for squeaking, popping and crackling sounds by ensuring the subfloor is structurally sound; this includes ensuring the deck is tightly fastened to the joists and ensuring the joists are placed securely.

Repair any defects in the subfloor. Installation over an uneven subfloor will cause premature damage to the floor and make the floor feel unstable. All subfloors must be clean, firm, flat (within $3/16^{\prime\prime}-4.8$ mm in 10ft-3 m), smooth and dry.

The moisture content of the plywood or OSB must be 12% or less. See section 1) Set-up for details. It is essential that the crawl space under subfloors is sufficiently ventilated. Remove any obstacles and provide sufficient ventilation. A 6 mil (0.15 mm) poly vapour barrier must be installed on crawl space floor. *

*In construction terminology, a crawl space is defined as:"a shallow space below the living quarters of a house, normally enclosed by the foundation wall...".



STAPLE-DOWN Installation Instructions

LAYOUT

The floor should be installed from several cartons at the same time to ensure colour and shade mix. If possible, lay the planks parallel to window light.

The ideal environment is a temperature of 60 °F - 70 °F (16 °C - 21 °C) and relative humidity of 40 - 60%.

The floor will be stronger and more stable if the joints are staggered at least 15" (380 mm) in each row. Staggered or irregular joints result in less waste and enhance the overall appearance of the floor. Do not stair step the flooring across the room. All mouldings, door frames, etc., should be undercut to allow an expansion and contraction space around the entire perimeter of the floor. Be sure to leave the minimum 1/2" (13 mm) expansion and contraction space on all sides of the floor, around pipes, thresholds, under doors and around any fixed objects (floor vents, kitchen cabinets/islands, etc.). The expansion/ contraction space should be covered by baseboard, quarter round/shoe mould, and/or drywall (if wall is undercut).

NOTE: always use a **TORLYS Tapping Block** to protect the edges of the planks. Make sure the Tapping Block is in good condition. Hold Tapping Block down when using it.

PREVENTATIVE MAINTENANCE

To ensure the full benefit of your **TORLYS Everest XP Flooring** and to extend its beauty for years to come, we recommend the following preventative maintenance suggestions:

- Install floor protectors on furniture legs to protect against scratches and dents. These furniture pads should have no wrinkles and be made of soft, non-staining material (e.g., felt pads); the felt pads should be of adequate size to support the weight of the furniture and a minimum of 1" (2.5 cm) in diameter. The floor protectors should sit flat on the floor and be inspected periodically for cleanliness and wear. For heavy pieces of furniture (e.g., couches) the use of coaster-cups is recommended. Castor chairs should have castors and/or a chair pad designed for hard-surface floors.
- Do not drag furniture or other heavy objects on the floor.
 Avoid high heels or shoes that need repair. Some types of high heel shoes can severely damage the surface of any floor covering. For minor scratch repairs, a touch-up kit is available at your TORLYS Dealer.
- Close your curtains or blinds where continuous or extreme sunlight will shine on your floor. Also, UV protection in windows will help with the performance of your furnishings. A combination of heat and sunlight can cause most furnishings and flooring to fade or change colour.
- Sweep and vacuum floor regularly. Use correct hard surface vacuum tools. DO NOT use rotating beater bars, floor scrubbers, steamers, jet mops, buffers, or similar products.

- Wipe up spills immediately. DO NOT allow topical moisture to remain on the floor longer than the time specified in the product warranty.
- Avoid sand and grit build up. At doorways and areas of heavy wear, use protective mats or rugs that are marked "non-staining". For dry maintenance, use a dust mop, vacuum cleaner, or dry cloth. For damp maintenance, use the TORLYS EcoCare Cleaning Kit, available from your Authorized Dealer, and follow the maintenance instructions on the container.

Never wax or use oil-based products on your **TORLYS Everest XP Flooring**.

Basic cleaning is with a damp cloth.

IMPORTANT: Some species of wood are sensitive to light. It is natural for their colour to darken or soften over time.

IMPORTANT: To keep your warranty valid, use TORLYS recommended maintenance products and follow TORLYS maintenance instructions. For more information on maintenance products and instructions go to: www.torlys.com.

Maintain the humidity level at 40 – 60%. Certain regions have extreme changes in humidity levels, which may affect all natural floors. To maintain humidity within a healthy range, a humidifier or dehumidifier may be required.

Gapping can occur in natural floors with seasonal fluctuations and when in extremely dry conditions (Low R.H.). Wood that is too dry may "split" or "check" and can also lead to a noisy floor. Wood that is too damp will "cup" or "crown".

STAPLE-DOWN METHOD

NOTE: It is the owners/installers responsibility to ensure that the jobsite conditions and subfloor are environmentally and structurally acceptable prior to the installation of any **TORLYS Everest XP Flooring.**

1) SET UP

Test wood substructures and wood flooring for moisture content using a pin type moisture meter. Take a minimum of 5 subfloor readings per room (4 corners + the middle), please ensure a minimum of 20 readings per 1000 ft2 (100 m2). Ensure the average subfloor moisture content is 12% or less.

APPROVED SUBFLOOR TYPES

Information Source: NWFA (www.nwfa.org)

WOOD SUBFLOOR GUIDELINES

Subfloor panels should conform to:

 U.S. Voluntary Product Standard PS 1-95 Construction and Industrial Plywood and/or



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- U.S. Voluntary Product Standard PS 2-04 and/or Canadian Performance Standard CAN/CSA 0325.0-92
 - Construction Sheathing
 - Other CSA standards apply

Note: Both CD Exposure 1 plywood & OSB Exposure 1 subfloor panels are appropriate subfloor materials, the proper thickness of the materials is determined by the factors listed below:

- On Truss/Joist spacing of 16" (406 mm) on center or less, the industry standard for single panel subflooring is nominal 5/8" (15.1 mm) CD Exposure 1 Plywood or 3/4" (19 mm) OSB Exposure 1 subfloor panels.
- 2) On Truss/Joist spacing of more than 16" up to 19.2" (488mm) on center, the industry standard for single panel subflooring is nominal 3/4" T&G CD Exposure 1 Plywood glued & mechanically fastened or nominal 3/4" OSB Exposure 1 subfloor panels glued & mechanically fastened.
- 3) Truss/Joist systems of more than 19.2" on center up to a maximum of 24" (610 mm) the industry standard for single panel subflooring is nominal 7/8" T&G CD Exposure 1 Plywood subfloor panels glued & mechanically fastened or nominal 1" OSB Exposure 1 subfloor panels glued & mechanically fastened.

Note: All panels are 4' x 8' sheets

- For existing wood floors, install TORLYS Everest XP
 Flooring at right angles to the existing flooring.
- Do not staple-down TORLYS Everest XP Flooring over particle board.
- Do not install over existing glue-down hardwood floors.

OTHER SUBFLOOR GUIDELINES

Existing Hardwood Flooring

- When installing TORLYS Everest XP Flooring directly over old wood or strip floors, sand any high spots. Renail the old floor to reduce any squeaks or loose boards.
- When stapling down TORLYS Everest XP Flooring, the orientation of the planks should be at 90° to the old floor. The moisture content of the old floor should not exceed 12%.

RESILIENT TILE, RESILIENT SHEET VINYL

- Ensure that the resilient tile or sheet vinyl is well bonded to the subfloor, remove any loose tiles or cut out any sections where the adhesion of the sheet vinyl to the subfloor is compromised and fill with an appropriate floor patching compound. We cannot accept responsibility for delamination of the resilient tile or resilient sheet vinyl from the subfloor. When in doubt concerning the integrity or nature of the existing resilient floor, do not install.
- Do not install over more than one layer or over any resilient substrate that exceeds 1/8" thickness.

 Staple-down installation can only be used on wood subfloors.

WARNING! DO NOT MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC "CUTBACK" ADHESIVES OR OTHER ADHESIVES. Previously installed resilient floor covering products and the asphaltic or cutback adhesives used to install them may contain either asbestos fibers and/or crystalline silica. If the existing resilient floor covering must be removed, see the current edition of the Resilient Floor Covering Institute (RFCI) publication "Recommended Work Practices for Removal of Resilient Floor Coverings" for detailed information and instructions on removing all resilient covering structures.

2) PRE-INSTALLATION PREPARATION Inspect the flooring

- It is the installer's responsibility to inspect the material for colour, grade, milling and finishing; the installers MUST cull any pieces that may not be acceptable once installed. Examples: mineral streaks, knots and variation in grain are all characteristics of TORLYS Everest XP Flooring. These pieces can still be used as starting boards or finishing boards.
- This product is manufactured in accordance with generally accepted industry recommendations which permit a defect tolerance not to exceed 5%. Note that the defects may be of a manufacturing or natural type.

Please note: We cannot accept responsibility for any costs incurred when planks with visible defects are permanently installed.

Pre-Existing Wood Subfloor Preparation

When installing **TORLYS Everest XP Flooring** over a preexisting wooden subfloor it is important to identify the type of subfloor:

- Do not install over particle board.
- For plywood subfloors, identify the thickness of the sheets used; refer to the Approved Sub Floor Types Section to determine if the sheet thickness and truss/joist center to center spreads are within acceptable guidelines. Inspect the existing plywood sheets, verify their integrity, and replace any that appear to have suffered damage. Sand down any high spots and tighten the plywood connection to the joists using 2" (50 mm) #8 screws. The moisture content of the plywood should not exceed 12%.
- For OSB Subfloors, identify the thickness of the sheets used: refer to the Approved Subfloor Types section to determine if the sheet thickness and truss/joist center to center spreads are within acceptable guidelines. Inspect the existing OSB sheets, verify their integrity and replace any that appear to have suffered water damage. Sand down any high spots and tighten the OSB connections to



STAPLE-DOWN Installation Instructions

the joists using 2" (50 mm) #8 screws. The moisture content of the OSB should not exceed 12%.

Blending the Cartons

To achieve uniform appearance across the entire surface of the floor, we recommend that you open several cartons at a time and lay out the flooring. Ensure you mix the planks from the various opened cartons. This process will optimize the aesthetic appearance of the flooring. It is important to have proper lighting conditions to verify that the colour is consistent, and any visual defect can be seen.

Transition Mouldings

Installation cannot exceed 50' (15 m) in any direction without installing a transition moulding (e.g., T-Moulding).

Transitions are required in doorways less than 30" (76 cm).

Match Transition mouldings (e.g., Reducers)

For the best appearance compare the transition mouldings and flooring before installation, identify the pieces that best match the mouldings for colour and grain, set them aside and then install them as needed.

Note: If using flush-mount stair nosing in conjunction with this flooring, do not commence installation before referring to the stair nosing instructions. For details go to www.torlys.com

Install or Apply a Vapour Retarder

Install or apply a 15 lb. asphalt-type flooring paper, or equivalent, over the entire subfloor. This will work as vapour retarder (not as a vapour barrier!) and it will also help the planks slide over the surface of the subfloor making for an easier installation.

Expansion Space

Expansion space around the perimeter is essential and should be ½" (13 mm). It may be necessary to undercut the drywall to provide enough space for expansion.

3) INSTALLATION GUIDELINES

It is important to ensure that the flooring installer has set up the stapler to properly fasten the flooring. Signs of improper set up include:

- Damaged boards.
- · Finish chipping.
- Dimpling (small depression where the staple was set).
- Squeaking, popping & crackling.

RECOMMENDED TOOLS Primatech Q180 Stapler or equivalent

- Use 1-1/2" or 1-1/4" staples; 18 gauge, 1/4" crown.
- The Primatech Q180
 Stapler comes with a "shoe" attachment (photo 1)



which should be used when setting the staples on **TORLYS Everest XP Flooring**.

Adjust the air pressure to 80 to 100 psi.

ADDITIONAL TOOLS REQUIRED

- Hammer (1 lb.)
- Tape Measure
- Pencil
- Saw, utility knife
- Tapping Block*
- Last-Board Puller*
- 3/8" (10 mm) Wedges*
- Non-marring, soft, white rubber mallet
- Mask (3M™ Tekk Protection™ Sanding and Fibreglass Disposable Respirator, 8200HB5-A), or equivalent.

When sawing pieces off the planks, use a fine-toothed hand saw, jigsaw, chop-saw, or guillotine.

*Note: available in a TORLYS Installation Kit

**OPTIONAL: for ease of installation use TORLYS Bulldog™ tool.

4) INSTALLATION INSTRUCTIONS

Once the installer has ensured the use of proper fasteners and has determined that the stapler is properly set up, it is possible to proceed with installation. Ensure that the semi-permeable vapour retarder is installed and that the floor is clean and free of any debris. Select a starter wall; the longest outside wall is best as it is most likely to be straight and square with the room. Install the flooring perpendicular to the joist system.

Measure the width of the room, deduct 1" or 26mm and divide by the width of the planks. The dimension left, divided by two, is the width of your starting row. If starting with a full width plank, saw off the tongue of the long edge of all the first-row planks.

Orient the first plank in the left corner of the room. Maintain a minimum spacing from the wall of 1/2" (13mm). Dry-lay all the planks of the first row to ensure that the last piece is not less than 8" (200mm) long. If necessary, cut a piece off the short end of the first plank to be installed.

Note: to protect the face of the planks, always cut with the saw teeth cutting into the face of the plank. This is important for both cross cutting and ripping.

Staple Patterns:

- Staples should be set 2" (50mm) from the ends of the planks, and 4" (100mm) to 6" (160mm) apart.
- Staples should be properly set on the bottom of the groove side of the board. (Diagram A)

Note: proper alignment is critical. A misaligned starter row can cause side and end gaps to appear in the rows of flooring that follow.



STAPLE-DOWN Installation Instructions

Use a chalk line or straightedge to ensure the flooring is running straight. Face nail the edge of the plank closest to the wall either by hand or with an 18-gauge pneumatic nailer. If nailing by hand, pre-drilling nail holes may be necessary. If the stapler fits, fasten the lower lip of the groove with the stapler properly positioned (Diagram A). Install the second row, making sure there is a correct stagger between the short end joints of both rows. Staple the second row into place (Photo 2).





Note: do NOT staple the short ends of the planks.

Continue to install the flooring making sure the required fastening pattern is followed. For a better visual result, stagger the end joints by at least 15" (380 mm) and avoid a "step pattern". If needed use a tapping block to ensure the planks are properly engaged; there should be no gaps between the long sides of the planks, nor should there be any gaps at the joints between the ends of the planks.

As you approach the end wall it may be necessary to rip the width of the last row; ensure that you measure to allow for the prescribed expansion space. If the stapler does not fit between the long side of the planks of the last row and the wall, those planks can be tapped together without the need to be nailed. Face nail the last board near the finishing wall. Nail holes can be filled using a colour-coordinated wood filler.

5) REVERSING THE DIRECTION OF THE INSTALLATION

If the installation requires its direction to be reversed, reversible planks can be made. The reversible planks will have to be either glued down with TORLYS Smart Glue or a urethane hardwood flooring adhesive or taped down (with TORLYS Smart Tape).

Notes:

- Subfloor must be clean, dry, and free of any contaminants including dust, to ensure proper adhesion of the glue or tape.
- Floor direction can only be reversed from the tongue side of the installed planks.

Remove the long side tongues from all planks you are using to change direction of the installation; these trimmed edges will be butted against each other to change the direction.

IMPORTANT: When removing the tongues from the long side of the planks, care should be taken to not damage the edge milling or the finish of the flooring. The tape or adhesive can be applied to the back of the planks being used to reverse direction or can be applied to the subfloor where these planks will be installed.

Install the reversed planks by butting the tongue side to the tongue side of the planks and press into the adhesive or tape. Proceed installing the rest of the rows following the Installation Instructions above.

*Make sure you do not work on the floor until the adhesive is fully cured. We recommend the use of weights on the floor until the adhesive sets completely.

6) COMPLETING THE INSTALLATION

After installing your floor, you can immediately walk on it and begin the final touches. Remove any spacer blocks and install baseboard. Never attach the baseboard to the floor itself. You need to allow the floor to expand and contract underneath the baseboard. Finish around the pipes with flexible silicone seal or pipe collars. Where no mouldings or baseboards can be installed, or where undercutting is not an option, fill the expansion/contraction space with flexible silicone seal.

Note: The use of stains, filler, or putty sticks for the correction of minor defects or to fill nail holes during installation is accepted as normal procedure. Face nailing where necessary is also accepted as normal procedure.

7) RADIANT HEAT APPLICATION

TORLYS Everest XP Flooring is guaranteed for installation over radiant-heated subfloors. For details and limitations, please check the "<u>TORLYS Flooring Warranty and Instructions for installation over radiant-heated subfloors</u>".

Visit our website at: www.torlys.com, for detailed information.

IMPORTANT: Always confirm with the manufacturer of the radiant heat system for suitability in staple-down applications.

ATTN: INSTALLERS - CAUTION: Wood Dust

Sawing, sanding, and machining wood products can produce wood dust. Airborne wood dust can cause respiratory, skin and eye irritation. The International Agency for Research on Cancer (IARC) has classified wood dust as a nasal carcinogen in humans.

Precautionary Measures: Power tools should be equipped with a dust collector. If high dust levels are encountered use an approved dust mask. Avoid dust contact with skin and eyes.

For more information, please contact TORLYS Customer Service at: 1 (855) 486-7597 and ask for the Technical Department.

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