

TORLYS EVEREST XP FLOORING

DEAR CUSTOMER,

You have purchased a high quality **TORLYS Everest XP** hardwood floor, well suited for all residential rooms, including bathrooms*. 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.

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.

IMPORTANT: Before starting the installation, please carefully read this entire document, **paying special attention to (section 8) Completing the Installation.**

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 glue-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. Subfloor irregularities should be repaired using a cement-based polymer-modified floor leveling compound. Installation over an uneven subfloor will cause premature damage to the floor and make the floor feel unstable. All subfloors must be clean, free of dust, grease, paints, oils, curing compounds, sealers, or any other foreign material which may interfere with proper adhesion. All subfloors must be firm, flat (within 1/8" – 3.2 mm in 6ft – 1.8 m or 3/16" - 4.8mm in 10ft - 3m), smooth and dry. The moisture on concrete slabs must be less than or equal to 80% RH with in-situ probes as per ASTM F2170, 12% or less on plywood.

Self-Levelling Compounds should be obtained from a quality manufacturer that provides a warranty for this product's use as a flooring underlayment. Failure to have quality floor levelling will result in adhesion failure, ridging over underlayment joints or discolouration of floor planks. Follow

the flooring adhesive manufacturer's recommended substrate requirements.

It is essential that the crawl space under subfloors is sufficiently ventilated. Remove any obstacles and provide sufficient ventilation. A 6-mil/0.15mm 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..."*

Expansion Joints on Concrete Slabs: Expansion joints allow for movement between two concrete slabs. If flooring is required to be installed over a concrete expansion joint, flooring should be cut on top of that expansion joint, and the width of that cut should be enough to accommodate the type of transition moulding selected.

Note: this gap or any exposed edge can be finished with a small bead of flexible silicone. Holes, grooves, and other imperfections should be filled with a high-quality polymer-modified cement-based patching compound.

Non-Recommended Subfloors: Particleboard, flakeboard, chipboard, and any other similar products with low dimensional stability, variable porosity, etc., should not be used as subfloors for gluing down **TORLYS Everest XP Flooring**. Use only underlayments specifically designed for this purpose.

Do not install **TORLYS Everest XP Flooring** over any existing carpet, resilient* or floating floor covering.

**Beware that old resilient flooring may contain asbestos and products with asbestos will require specialized removal.*

TOOLS

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

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.

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.). Any wedges should be removed after the flooring installation has been completed, and the expansion/ contraction space should be covered by baseboard, quarter round/shoe mould, and/or drywall (if wall is undercut).

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”.

GLUE-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**.

Recommended Adhesive – TORLYS Smart Glue

TORLYS Smart Glue is a wet-set adhesive, allowing for some adjustment during installation (working time approximately 45 minutes); forms a stronger, permanent bond. Must be used on vertical (e.g., risers or walls) or ramp applications.

TORLYS Smart Glue Water Based Acrylic Flooring Adhesive, requires the use of a 1/8” x 1/8” x 1/8” V-notched trowel, following the installation instructions provided by TORLYS on the container.

IMPORTANT: Flash/open time is the waiting time required before installing flooring. Working time is the window of time for the adhesive to accept flooring. These times may vary depending on type of glue, temperature, humidity, substrate porosity, trowel size and jobsite conditions. Trowel sizes may vary depending on substrate and the site conditions.

When installing over non-porous substrates using TORLYS Smart Glue, additional flash/open time is required – refer to the container instructions.

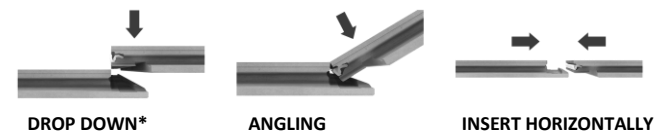
NOTE: It is the responsibility of the installer to determine if the subfloor to be covered is porous.

To determine if a subfloor is porous, place two droplets of water in various areas. If the subfloor is porous, the water will be absorbed within a few minutes.

The use of an adhesive primer may be necessary on extremely porous subfloors or difficult to bond to surfaces. Gypcrete or substrates with excessive chalking must be cleaned and then also primed with a product such as Mapei Primer T™ to ensure proper bonding.

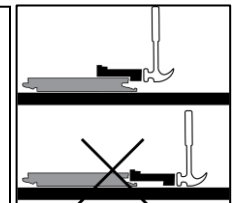
1) GENERAL

TORLYS Everest XP Premier has the four-sided Uniclic® joint. **TORLYS Everest XP Elite, Designer, Designer Plus and Twist** incorporates Unifit X® on the end joint to allow for drop down installation.



*Note: Applies only to product with the Unifit X® joint.

IMPORTANT: Use a hammer and the special TORLYS Tapping Block positioned as shown in diagram (right) or TORLYS Bulldog™ tool. Never use any other tapping block, as it may damage the planks.



For a short edge, you can angle the plank into place, for example in the first row. With the Unifit X® joint, you can drop down the plank to click it into place. Where you cannot angle or drop down the plank, you can engage it horizontally using a tapping block or Bulldog™ Tool. If tapping, use several small taps until the planks click together completely.

For a long edge, angle-click the plank into place. If you cannot angle-click the planks (e.g., when installing final row), tap planks together gradually. Begin tapping lightly at the corner of a plank until the joint has clicked together.

Repeat the process approximately every 12” (30 cm) until the entire long edge of the plank has clicked in with the next plank.

Use a TORLYS “Last-Board Puller” or Bulldog™ tool to pull exposed joints tight, where a tapping block and hammer will not fit.

Never attempt to knock the joint into place with one hit.

For the best results, follow the installation instructions and use only:

- A. **TORLYS INSTALLATION KIT**
(Wedges, TORLYS tapping block and last-board puller)
- B. **TORLYS MAINTENANCE PRODUCTS**
[TORLYS EcoCare (pH Neutral) Cleaner]
- C. **TORLYS BULLDOG™ TOOL**

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 wood filler 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.

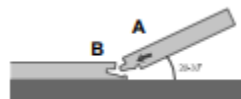
3) CORRECT INSTALLATION

Wood is the primary component of your **TORLYS Everest XP Flooring**. Since the humidity of a room can vary from one season to the next, the floor must be able to expand and contract in **ALL** directions. **A minimum of 1/2" (13 mm) expansion/contraction space** must be provided at all walls and vertical obstructions (e.g., around pipes and at thresholds).

These gaps may be covered by a moulding that is not fixed to the hardwood floor, but to the wall. Install the planks in the same direction as the longest wall, or the same direction in which the light falls, for a more appealing look.

Begin installing the floor from the left corner of the room. Always remember that the easiest way to install the floor is by placing the tongue (A) into the groove (B).

Lift plank being installed to 20–30-degree angle and keep tongue of the plank in the groove of installed plank, engage short end joints first. With gentle pressure and a gentle rocking motion push the plank down. Finish locking the plank with



a tap into place using a tapping block or TORLYS Bulldog™ tool.

Note: You will not be able to use the TORLYS Bulldog™ tool to repair flooring that is glued down.

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

4) THE FIRST ROWS

Once the installer has ensured the use of proper adhesive and the trowel is appropriate for the glue, it is possible to proceed with installation. Ensure 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. It is recommended to 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

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 & ripping

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

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.

Note: It can be helpful to dry-lay the first 2-3 rows before spreading adhesive.

Start spreading the glue using the recommended 1/8" x 1/8" x 1/8" V-notched trowel. Hold the trowel at a 60-degree angle to the subfloor, making sure the subfloor is covered 100% with adhesive, without voids or puddles. Only apply as much adhesive as can be covered within the allotted working time.

Note: Replace trowels with worn notches. Do not re-notch worn trowels.

IMPORTANT: WORKING TIME OF ADHESIVE MUST BE OBSERVED

TORLYS Smart Glue	Approximate Flash/Open Time	Working Time
Porous	5 – 10 minutes	45 minutes (approximate)
Non-Porous	Until dry to Touch	45 minutes (approximate)

Maintain a minimum spacing of 1/2" (13 mm), using wedges, if necessary.

Do not spread more adhesive than can be worked within the appropriate time frame.

Do not spread wet lay adhesive further than you can reach.

Coverage of **TORLYS Smart Glue** is 65-75 sq.ft./gal.

Continue by pressing firmly into the adhesive bed to ensure adequate transfer.

Lay the planks with the groove side facing you to use the tongue/groove system. Lay the first row along the wall.

Avoid working on the floor until the adhesive is fully cured.

IMPORTANT:

Angle the end joint of the second plank into the end joint of the already laid plank. Click the two together. Ensure that the planks of the first row are straight. Repeat until the first row is complete.

The cut piece from the first row becomes the starting piece for another row. Install the cut edge facing the wall, with the expansion wedge in place. Now angle this piece and click it into the first plank of the first row. The cut pieces should be a minimum of 15" (380 mm) in length.

Continue the second row with a full piece, placing the tongue of the long side into the groove of first row piece. For Everest XP Premier, move the short end until it is close to the end of the previous plank and lower into place. Finish by tapping the end joint closed. For all other Everest XP products with Unifit X® end joint, move the short end until it

is pushed tight against the previous plank before it is lowered.

You should hear an audible "snap" when the board end is tightly against the previous plank. Lower and click the plank into place. The plank must lock into the first row and the end joint must fit tightly into the previous plank. To ensure the short edge is fully engaged, use the rubber mallet to gently tap into place completely. The end joint is fully engaged when there is no ledging or overwood. Continue this method for each plank, covering the entire width of the room.

Please note that the stagger between the head joints should be minimum 15" (380 mm). Cut the last planks of each row leaving a minimum 1/2" (13 mm) expansion space to the wall.

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) THE FINAL ROW

As you approach the end wall it may be necessary to rip the width of the last row; measure and cut the planks of the final

row so that there is a minimum 1/2" (13 mm) expansion/contraction space between the final row and the wall. These planks will be tapped into the last row using the **Last-Board Puller or TORLYS Bulldog™ Tool**. Drop down short edges or tap together using TORLYS Tapping Block.

IMPORTANT: Immediately after installation, floor must be rolled with a 100 pound three-section roller in both directions. Use a hand roller in areas not reached with the 100-lb roller.

7) UNDER DOOR FRAMES

Saw the planks so that after installation there is a minimum 1/2" (13 mm) expansion/contraction space. This expansion/contraction space can be covered by undercutting the door jamb. If you cannot rotate this plank, use the TORLYS Tapping Block and hammer to tap the planks together.

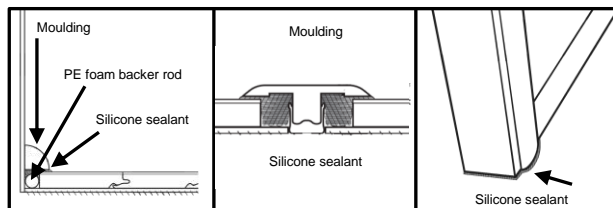
TORLYS has designed a special tool for this type of installation: the **TORLYS Bulldog™ tool**.

8) COMPLETING THE INSTALLATION – WATERPROOF*

After the floor adhesive has set (minimum 24 hours), remove any spacer wedges and, to create a waterproof seal around the entire perimeter, first fill all expansion spaces with compressible 1/2" (12 mm) PE foam backer rod (type Climashield or Climaloc); next, create a watertight seal by applying waterproof, flexible, 100% silicone sealant on top of the foam backer rod, covering at least 1/8" (3 mm) of the floor and 1" (25 mm) running up the wall (which will then be covered by baseboard, and quarter-round/ shoe mould, if required) or the door stop. Prior to installing the mouldings, apply the flexible silicone sealant along the portion of the moulding that will contact directly with the hardwood flooring surface. Install mouldings and immediately wipe away any excess silicone sealant.

Apply flexible silicone sealant to door frames and trims or any other fixed objects.

Please see drawings below.



*For **NON-WATERPROOF** installation, PE foam backer rod and silicone sealant are not required.

IN BATHROOMS: the use of a flexible silicone to seal the expansion and contraction space is mandatory in all bathroom installations.

Post Installation:

Prevent all traffic for a minimum of 24 hours. Restrict heavy traffic and rolling loads for a minimum of 72 hours after installation. Do not wash or begin wet maintenance procedures on the floor for a minimum of 5 days after installation to allow the adhesive to properly cure. Vacuum and then clean the floor with the use of a TORLYS Maintenance Kit.

9) RADIANT HEAT APPLICATION

TORLYS Everest XP Flooring is guaranteed for installation over radiant-heated subfloors. When installing over an in-floor radiant heat system, maintain the subfloor temperature at 60 - 65°F (15 to 18°C) for 24 hours before, during and 48 hours after the installation. The surface temperature of the subfloor should never exceed 80°F (27°C). For details and limitations, please check the *"TORLYS Flooring Warranty and Instructions for installation over radiant-heated subfloors"*.

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

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.

Head Office: TORLYS Inc.

1900 Derry Road E., Mississauga, Ontario, L5S 1Y6 Canada

www.torlys.com