

RigidWood™ Firm & Flex with FoamPlus™ Blue - Glue-down

DEAR CUSTOMER,

Please take a moment to review these installation instructions and plan your installation carefully.

TORLYS RigidWood™ Firm & Flex can be installed in 3-season homes (FIRM : from -4°F to 122°F / -20°C to 50°C; FLEX : from -22°F to 122°F / -30°C to 50°C)
Thermal shock - very rapid and extreme changes in temperature - may cause damage to the floor. The use of a continuous vapour barrier and proper insulation is mandatory in the crawl space.

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: In bathroom installations, the expansion gap must be filled with flexible silicone sealant.

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 of flooring and the adhesive, in the middle of the room, 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.

Do not install TORLYS RigidWood™ Firm & Flex with FoamPlus™ Blue until it is acclimatized to the required room temperature of 60°F - 70°F (16°C - 21°C); the relative humidity (RH) in the air should be between 35% and 65%. The required room temperature should be maintained for 48-hours before, during and 5 days after installation. Temperature of subfloor should never exceed 80°F (27°C).

Inspect each plank before installation. If you find any defects, do not use the plank. Contact your supplier immediately.

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

PREPARATION

Remove any existing flooring, baseboards, quarter-rounds and thresholds and undercut door jambs, using a piece of flooring material as a guide. Repair all defects in the sub-floor. All existing residual adhesive shall be removed or covered with a high quality self-leveling compound designed for this purpose.*

(Important : Old adhesives may contain asbestos. For specific removal instructions, please refer to the Resilient Floor Covering Institute's publication *Recommended Work Practices for Removal of Resilient Floor Coverings*).

**Manufacturers such as Mapei have products that meet these criteria for self-leveling and should be contacted for further information.*

CHECK THAT :

- The job-site 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 measure the width of the room to ensure that the width of the pieces of the first and last row is approximately the same and not less than 2" (5cm). Cut the width of the pieces of the first and last row as needed.

TOOLS

- Last-Board Puller*
- Tapping Block*
- 3/8" (10mm) Wedges*
- Saw, Utility Knife
- The appropriate trowel size for the adhesive used
- 100 pound three-section roller
- Hammer (1 lb.)
- Tape Measure
- Pencil
- Floor scraper

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

**Note : available in a TORLYS Installation Kit*

OPTIONAL : for ease of installation use TORLYS Bulldog™ Tool.

SUBFLOORS

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 sub-floors must be clean, firm, flat (within 1/8" – 3.2mm in 6ft – 1.8m 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.

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 RigidWood™ Firm & Flex with FoamPlus™ Blue. Use only underlayments specifically designed for use under resilient floors.

Do not install TORLYS RigidWood™ Firm & Flex with FoamPlus™ Blue 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.*

LAYOUT

The floor should be installed from several cartons at the same time, shuffling planks to ensure colour and shade mix. The ideal environment is a temperature of 60°F - 70°F (16°C - 21°C) and the RH in the air should be between 35% and 65% - these conditions should be kept constant while the adhesive achieves full bond strength (approximately 5 days).

Match Transition Mouldings (e.g. Stair Nosing)
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.

The floor will be stronger and more stable if the joints are staggered at least 12" (30cm) 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. A minimum of 1/8" (3.2mm) expansion wedges must be used on all walls and vertical obstructions to allow for proper expansion/contraction space. The wedges should be removed after the flooring installation has been completed, and the expansion/ contraction space should be covered by baseboard, quarter round, and/or drywall (if wall is undercut).

Note : Never hit the planks directly with your hammer or rubber mallet. Always use a **TORLYS Tapping Block or TORLYS Bulldog™ Tool** to protect the edges of the planks. Make sure the Tapping Block is in good condition. Hold Tapping Block down when using it. Gently tap all planks into their final locking position.

GLUE-DOWN PROCEDURES

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 (eg., risers or walls) or ramp applications.

TORLYS Smart Glue Water Based Acrylic Flooring Adhesive, requires the use of a 1/16" x 1/16" x 1/16" square 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 whether or not the sub-floor to be covered is porous.

To determine if a sub-floor is porous, place two droplets of water in various areas. If the sub-floor 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.

INSTRUCTIONS

1) GENERAL

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

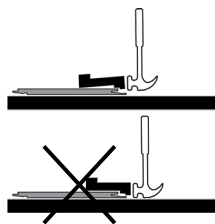
Use a TORLYS “Last-Board Puller” to pull exposed joints tight, where a tapping block and hammer will not fit.

For a short edge, use several small taps until the planks click together completely.

For a long edge, and 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” (30cm) until the entire long edge of the plank has clicked in with the next plank.

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

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



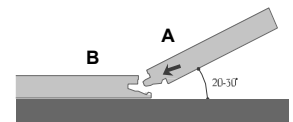
- A) **TORLYS INSTALLATION KIT**
(Wedges, TORLYS tapping block and last-board puller)
- B) **TORLYS MAINTENANCE PRODUCTS**
[TORLYS (pH Neutral) Cleaner]
- C) **TORLYS BULLDOG™ TOOL**

2) CORRECT INSTALLATION

A minimum of 1/8” (3.2mm) expansion/contraction gap must be provided at all walls and vertical obstructions. These gaps may be covered by a moulding that is not fixed to the floor, but to the wall.

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 Bulldog™ tool.

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

3) THE FIRST ROWS

Saw off the tongue of the first plank, both on the short as well as the long edge. For all other first-row planks cut off the tongue on the long edge. Orient the first plank in the left corner of the room. Maintain a minimum spacing from the wall and all vertical obstructions of 1/8” (3.2mm), using wedges.

Start spreading the glue using the recommended 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.

Install flooring after the appropriate flash/open time :

IMPORTANT :
WORKING TIME OF ADHESIVE MUST BE OBSERVED

TORLYS Smart Glue	<u>Approximate Flash/Open Time</u>	<u>Working Time</u>
Porous	5 - 10 minutes	45 minutes (approximate)
Non-Porous	Until Dry to Touch	45 minutes (approximate)

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

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

For coverage refer to the label on the adhesive container.

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

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

IMPORTANT :

Turn the plank inclined with the end joint into the already laid plank. Click the two together. Ensure that the planks of the first row are straight.

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 8" (20cm) in length. Continue the second row with a full piece, placing the tongue of the short side into the groove of the adjacent piece. Click the plank lengthwise into place. If necessary, use the tapping block and a number of smaller taps until the planks lock into place completely.

Do not attempt to knock the joint into place with one hit. Continue this method until the final row.

PLEASE NOTE that the stagger between the head joints should be minimum 12" (30cm). Cut the last planks of each row leaving a minimum 1/8" (3.2mm) gap to the wall.

4) THE FINAL ROW

Measure and cut the planks of the final row so that there is a minimum 1/8" (3.2mm) expansion/contraction space between the final row and the wall. These planks will be angled and tapped into the last row using the Last-board Puller or Bulldog™ Tool.

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.

5) UNDER DOOR FRAMES

Saw the planks so that after installation there is a minimum 1/8" (3.2mm) expansion/contraction gap.

This expansion/contraction gap can be covered by undercutting the door jamb. If you cannot rotate this plank, use the TORLYS Tapping Block or last board puller, and hammer, to tap the planks together.

6) COMPLETING THE INSTALLATION

After the floor adhesive has set (minimum 24 hours), you can remove all spacer blocks and install baseboards and/or quarter rounds. Never attach the baseboard to the floor itself. You need to allow the floor to expand and contract underneath the baseboard. Finish around pipes with pipe collars or flexible silicone. Where no mouldings or baseboards can be installed, or where undercutting is not an option, fill the expansion/contraction gap with flexible silicone seal.

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 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.

7) INSTALLATION OVER RADIANT HEAT

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 Radiant Heat Warranty and Installation Instructions](#)". Visit our website at : www.torlys.com for detailed information.

8) PREVENTATIVE MAINTENANCE

To ensure the full benefit of your TORLYS **RigidWood™ Firm & Flex with FoamPlus™ Blue** floor 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.
- **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.
- **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.**
- **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 Natural Glow Maintenance Kit**, available from your Authorized Dealer, and follow the maintenance instructions on the container.
Basic cleaning is with a damp cloth. Excess water can cause a slip and fall hazard.

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

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