



## INSTALLATION INSTRUCTIONS

This document provides the installation instructions for **Firm Loc™**. **Firm Loc™** is based on patent-pending technology utilizing a vertical push-down tongue and groove system with pre-applied adhesive in the grooves.

## GENERAL GUIDELINES

All instructions and recommendations are based on the most recent information available. They should be followed for an ideal installation.

1. **Firm Loc™** should be installed in indoor climate-controlled locations between 65° - 85°F. It should NEVER be installed outdoors.
2. **Firm Loc™** should be acclimated in the climate-controlled locations for 48 hours before starting installation.
3. **Firm Loc™** should only be installed after the jobsite has been cleaned and cleared of debris that could potentially damage a finished plank installation.
4. During the **Firm Loc™** installation, mix and install planks from several different cartons to minimize shade variation
5. The finished **Firm Loc™** installation should be protected from exposure to direct sunlight.

## SUBFLOOR INFORMATION

Although **Firm Loc™** is designed to be a “floating” floor installation, proper preparation of the subfloor is still a major part of a successful installation. Roughness or unevenness of the subfloor may telegraph through the new floor, resulting in an unsightly surface and cause excessive wear on high spots or indentation on low spots. All subfloor and underlayment patching must be done with a non-shrinking, water-resistant Portland cement patching compound.

### A. Concrete Subfloors

1. Concrete subfloors must be dry, smooth and free from dust, solvent, paint, wax, grease, oil, asphalt sealing compounds and other extraneous materials. The surface must be hard and dense, and free from powder or flaking.

2. New concrete slabs must be thoroughly dry (at least six weeks) and completely cured. The final responsibility for determining if the concrete is dry enough for installation of the flooring lies with the floor covering installer.
3. Holes, grooves, expansion joints and other depressions must be filled with a Portland cement-based underlayment, and troweled smooth and feathered even with the surrounding surface.
4. Concrete floors with a radiant heating system are satisfactory, provided the temperature of the floor does not exceed 90°F at any point. Before installation, turn on the heating system to eliminate any residual moisture.

## **B. Wood Subfloors**

1. Wood subfloors must be suspended at least 18" above the ground. Adequate cross-ventilation must be provided, and the ground surface of a crawl space must be covered with a suitable vapor barrier.
2. Wood subfloors directly on concrete or installed over sleeper construction are NOT suitable for the installation.
3. All wood and wood composition panels, including plywood, OSB, flake board and particle board, can be used providing they are smooth, flat, structurally sound and free of deflection.
4. A 1/4" underlayment panel should be installed over the subfloor if the surface of the wood subfloor is not smooth.

## **C. Existing Floor Coverings**

1. **Firm Loc™** can be installed over most existing hard-surface floor coverings provided the existing floor surface is smooth, or can be made smooth.
2. Ceramic tile should be made smooth by applying a cementitious overlay such as patching or leveling compound to smooth out grout joints.
3. For existing resilient floor, it may be required to apply an embossing leveler over a deeply embossed floor. Heavily cushioned vinyl flooring or vinyl flooring consisting of multiple layers are NOT suitable subfloor for installation.

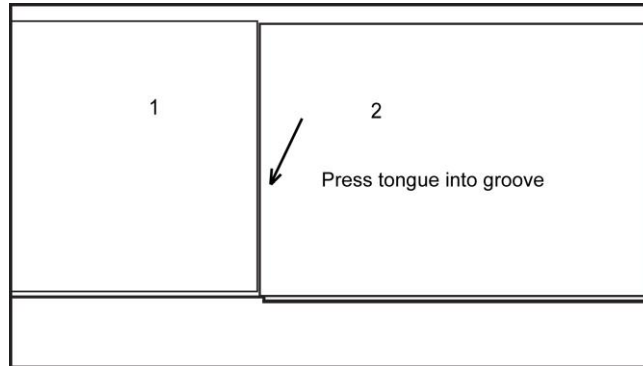
## **INSTALLATION**

### **A. Plank Layout**

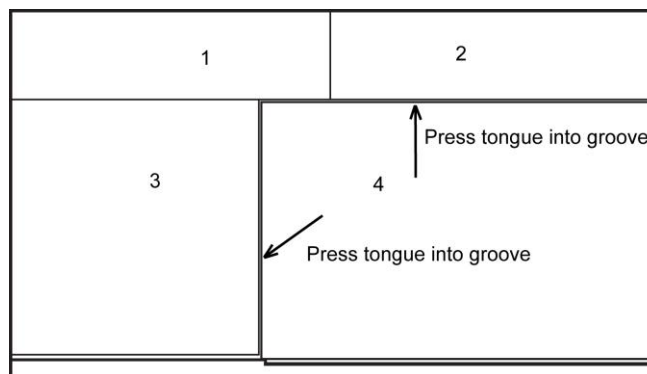
Do not secure individual planks of **Firm Loc™** to the subfloor as it is designed to be a floating floor. All doorjambes should be undercut and cabinets cannot be installed on top of **Firm Loc™**. Wall moldings and transition strips should be installed at any exposed plank edges but should not be fastened through the planks.

1. First, determine how you want the flooring to run. Typically for plank products, the flooring runs the length of the room. There may be exceptions since it is all a matter of preference.

2. To avoid narrow plank widths or short plank lengths near the walls/doors, it is important to do some pre-planning. Using the width of the room, calculate how many full boards will fit into the area and how much space remains that will need to be covered by partial planks. Divide the remaining space by two to calculate the width of the partial planks. Do the same along the length.
3. Note that if the first row of planks does not need to be trimmed in width, it will be necessary to cut off the unsupported tongue so that a clean, solid edge is toward the wall.
4. 5/16" expansion gaps should be kept from the wall during the installation. This will allow space for the natural expansion and contraction of the planks.
5. The planks should be installed from left to right. From the top left corner of the room, put the first plank in place so that both the head and side seam grooves are exposed. **Firm Loc™** is designed as a vertical push-down tongue and groove system with pre-applied adhesive in the grooves.
6. **Figure 1:** Install the second plank in the first row by pushing down the short side tongue into the short side groove of the first plank. Continue installing additional planks along the first row using the same push down method.



7. To start the second row, cut a plank that is at least 6" shorter than the first plank in the first row (you may use the left over from the last plank of the first row). Then install this first plank by pushing down the long side tongue into the groove of the plank in the first row.
8. **Figure 2:** Install the second plank in the second row by pushing down the short side tongue into the previously installed first plank short side groove, while at the same time pushing down the long side tongue into the groove of the plank in the first row.



9. The remaining planks can be installed in the room using the same technique. Make sure the required expansion gaps are maintained against all fixed vertical parts (such as walls, doors, cabinets etc).
10. The planks can be cut easily with a utility knife, just score the top of the plank and snap the plank in two.
11. Use a 100lb 3-section roller afterwards on the installed floor to ensure all **Firm Loc™** adhesive grooves are engaged fully.

## **B. REPAIRS**

For damaged planks you have to remove the damaged planks and insert new pieces without the short and long end grooves.

1. Using a sharp utility knife and a straight edge, cut out the center of the damaged plank by leaving approximately 1" strip attached to the adjacent planks.
2. Carefully cut back from the four corners of the plank to the inside edges in space left by the cut out plank.
3. Remove the plank edges carefully from of the adjacent planks making sure the tongues and grooves of the adjacent planks are not damaged.
4. Using a utility knife, remove the groove strip on both the long and short ends of the replacement plank.
5. Place some double-sided carpet tape along the four sides of the adjacent planks. Only the top side release paper of the carpet tape should be removed.; the bottom side release paper should NOT be removed and the carpet tape should NOT be adhered to the subfloor.
6. Position the replacement plank by pushing in the tongue of the long and short sides into the groove of the adjoining planks, thus fitting the replacement plank in the stops. The carpet tape will hold the replacement plank in place with its adjacent planks. Use a hand roller to further secure the carpet tape underneath the planks.

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