

### **Laminate Moisture Requirements:**

Moisture—usually in the form of vapor—is a normal and necessary by-product of all concrete surfaces, regardless of the age or grade level of the concrete. As you may have experienced, too much moisture emissions can cause problems with all types of flooring products. Laminate is no exception. If ignored, moisture can compromise the integrity of the floor and the installation.

### **BEFORE YOU BEGIN... LOOK, THEN TEST!**

First, examine the concrete sub-floor. White concrete is a good indication of the quality of the concrete. Concrete that is off-white, gray, brown, or tan can contain contaminants, admixes, or be indicative of other problems that would make it unsuitable for installing Laminate. Conduct moisture tests in the same environments in which you will be installing the Laminate. Don't assume that the results will be the same from room to room. Plan to perform at least two tests per each 1,000 square feet of installation. Calcium chloride tests will provide meaningful data—if you conduct a sufficient number of tests. The use of the Tramex 'Concrete Moisture Encounter' meter will give you comparable results, a reading of 5 or less is an acceptable reading for most hard surface products.

### **Concrete Requirements**

Always test the concrete before beginning an installation. Using a calcium chloride test, you must find moisture levels *less than* 5 lbs./24 hr. /1000 sq. ft. Remember to perform at least two tests per 1,000 square feet. Basements and concrete sub-floors must be cured *at least 60 days* prior to installation.

### **Avoid Liability for Unsuitable Sub-Floors**

If your tests reveal excessive levels of moisture emissions from the slab—in excess of the manufacturer's specifications—immediately notify the general contractor, architect, and owner so that they can take measures to correct the situation. Excessive moisture is not **your** problem—however, if you do not take these measures and properly test and report the results, you could be placing yourself in the position of assuming liability for installing a floor on a sub-standard surface. It's vital that you obtain moisture data before accepting the substrate. Most flooring contractors walk a job before giving a quote. If you do not obtain the moisture data before accepting the substrate, you may have assumed the responsibility for its potential failure. Even though it may be common practice to obtain a "sign-off" for slab moisture conditions, it is illegal in many states' contracting laws to fail to disclose a known problem—regardless of who says that they are assuming complete liability for the installation. Compared to defending litigation and the often-endless cycles of having to repair a floor that has been damaged by moisture, taking the proper moisture tests is much easier and less costly!

### **Always Use a Moisture Barrier**

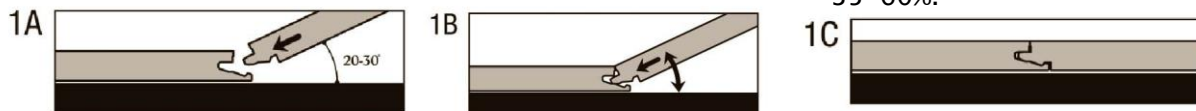
On concrete sub-floors, it is recommended to use an underlayment with a combination of a 6 ml vapor barrier and cushioning foam.

## Home Legend Uniclic® Laminate Product Installation Instructions

### General

Uniclic® angle is a revolutionary system for installing Laminate floors without using glue. The panels can be clicked together simply, thanks to the ingenious shape of the tongue and groove.

Position the panel to be installed at an angle of 20 to 30° to the panel already installed. Move the panel gently up and down while exerting forward pressure. The panels will automatically click into place. You can either insert the tongue into the groove, or the groove on to the tongue. The tongue into the groove is the easiest method. (See diagrams 1A - 1B - 1C.)



### Tools for installing the floor

For best results, it is essential that you follow the installation instructions exactly. Besides the regular tools for installing laminate floors

- (i.e. hammer, saw, pencil, measure) you will also need the following accessories.
- A pull bar, spacers and a tapping block
- underlayment system
- maintenance products

It will generally be necessary to saw some flooring panels during installation. To obtain a clean cut, the pattern side should face down when you use a jigsaw, saber saw or circular handsaw (with a carbide tipped blade) and up when you use a handsaw or a crosscut saw.

### 10 focus points

1. Thanks to the Uniclic® system, the floor floats and is installed without glue. You can walk on the floor during and immediately after installation.
2. With Uniclic® panels you can choose where you want to begin. Think about what will be the

easiest way to install the floor. We will demonstrate the installation for right-handed people, from left to right. You can work in the other direction if you want.

3. Make sure the panels are mixed sufficiently when you install them so that you do not end up with too many identical, light or dark panels next to each other.
4. Check all panels in daylight before and during installation. Defective panels must never be used.
5. The floor should preferably be installed parallel to how the light enters the room. The ideal conditions are 60-80°F at a relative humidity of 35-60%.

6. Under normal conditions, Home Legend flooring requires no acclimation period. Outside of the normal conditions, let the planks acclimate for 48 hours in the unopened packaging at the normal room temperature in the middle of the room where the floor is to be installed. \*Normal conditions means a difference of no less than 60 °F and 20% relative humidity between the stocking/transportation environment of the flooring and the final installation environment of the flooring.
7. Room humidity can vary according to the season, so it is vital that the floor is able to expand and contract. For this reason, make sure you leave a minimum expansion joint of 5/16" to 3/8" on all sides of the floor, around pipes, thresholds and under doors.
8. Large rooms must have expansion joints every 40 feet width-wise to the panels and every 40 feet length-wise. We recommend having an expansion joint between different rooms (e.g. under the door). Expansion joints can be finished

by means of a molding that is attached to the subfloor.

9. Ensure the end joints of the panels in two successive rows are never in line. Always ensure that the joints are staggered by at least 6 inches.
10. We recommend you purchase a few extra cartons of flooring. This will be useful to you if you have some damaged pieces, miscalculate the size of the room or miss cut some pieces. This also will help you if your floor needs a repair but your product is no longer manufactured.

### Preparing the room

- Check that the doors can still open and close after the floor and underlayment have been installed (3/8").
- Check whether the old molding can be removed. You can also leave the wall base and finish the floor with transitional profiles.
- Make sure the subfloor is flat. Any unevenness greater than 3/16" over the length of 10 feet must be smoothed out. It is vital that you use an underlayment to smooth any unevenness in the base floor.
- Make sure the subfloor is clean and dry.

### CONCRETE SUBFLOOR:

#### New Construction:

- A new concrete floor must dry at least 1 week per 3/8" thickness up to 1-1/2". Subfloors thicker than 1-1/2" require twice as much drying time. For example, a 2-1/2" concrete subfloor must dry for at least 8 weeks. The moisture content must be less than 2.5% (CM method) or less than 5 lbs/24 hours per 1000sqft (Calcium chloride method ASTM 1869).
- If there is underfloor heating, the subfloor must not exceed 84°F and the moisture content must be less than 1.5% (CM method). You do need to follow special installation instructions.

#### Renovation:

- Remove any damp-porous floor covering (carpet, needle felt, etc.) first.
- Damp-sealed floor covering (PVC, linoleum, VCT, etc.) does not have to be removed.

### WOODEN SUBFLOOR

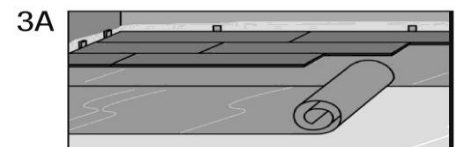
- Remove any existing damp-porous floor

covering first.

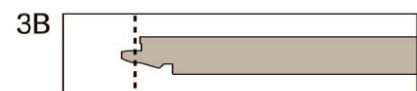
- Make sure the subfloor is stable. Nail down any loose parts and apply a leveling layer.
- It is necessary that the crawl space under the plank floor be sufficiently ventilated. Remove any obstacles and provide sufficient ventilation (1-1/2") of total ventilation holes per 40" of floor. The moisture content of the wood may not exceed 14%.

### Installing the floor

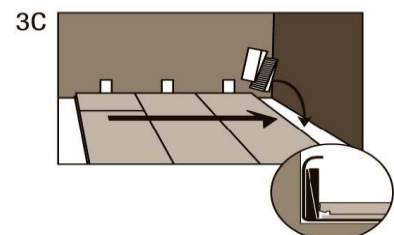
- First install the underlayment, per width and gradually as you progress. If the underlayment is pre-mounted on the panels, then only use the damp-proof moisture barrier with adhesive tape as provided. For Concrete, let the moisture barrier run up the wall a bit before cutting to size. For wood, cut the moisture barrier 1 inch from the wall. A molding will be attached to this later. (See diagram 3A.)



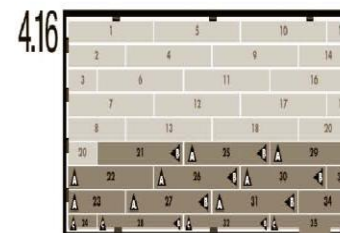
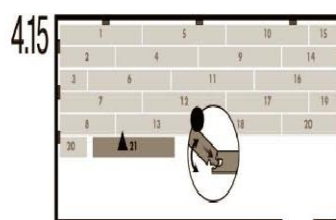
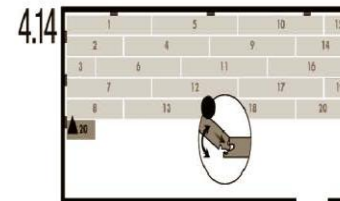
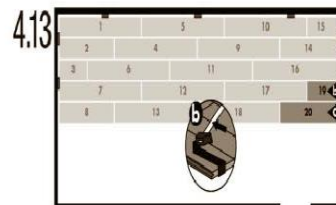
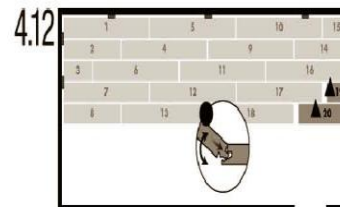
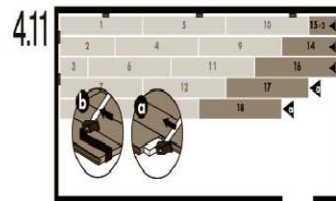
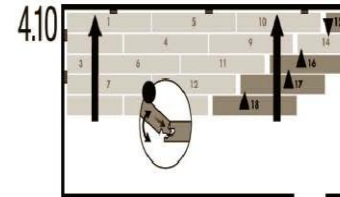
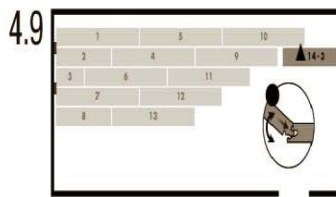
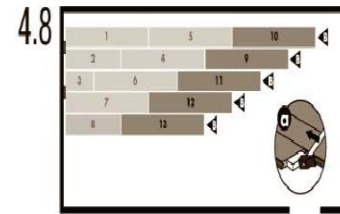
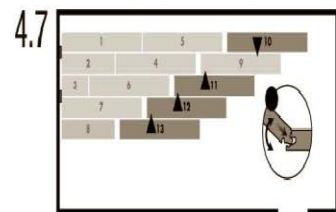
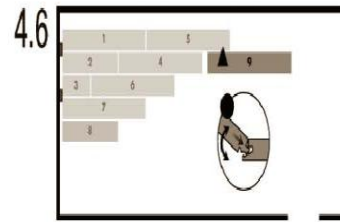
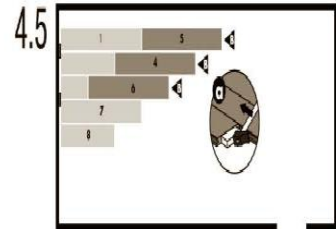
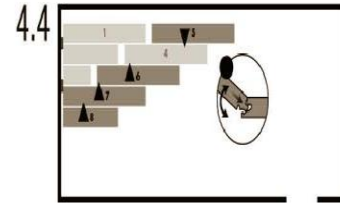
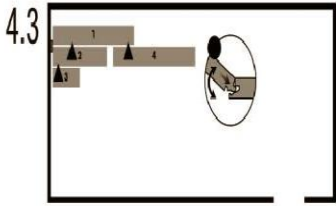
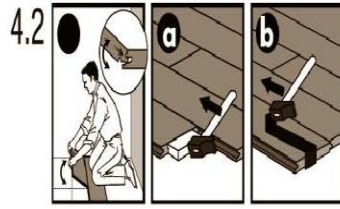
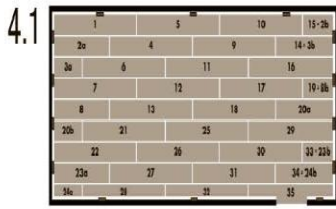
- Begin the first row with a whole plank. First saw off the tongue on both the long and the short sides. (See diagram 3B.)



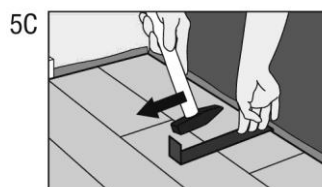
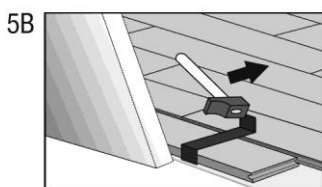
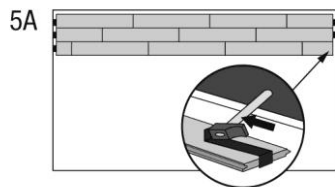
Put the plank with the sawn off sides against the walls. Put spacers between the planks and the wall. This will ensure that your expansion joint is wide enough: (5/16" to 3/8"). (See diagram 3C.)



The diagrams below indicate where the Uniclic® panels are clicked together by angling up and down.



- In places where it is too difficult to install the Uniclic® planks with the tapping block (e.g. against the wall), you can tap them together using the pull bar and a hammer. (See diagrams 5A - 5B - 5C.)



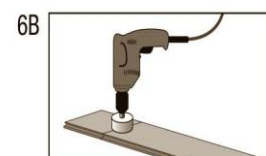
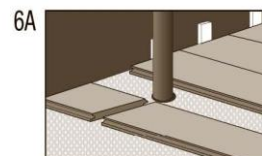
- There must be an 5/16" to 3/8" expansion joint between the last row and the wall. Keep this in mind when sawing the last row of panels.

### Wet Areas

Since prolonged water exposure could damage your laminate flooring, the following installation recommendations should be closely followed to validate your residential water warranty. Wet areas would include bathrooms, powder rooms, kitchens, mud rooms, foyers, and laundry rooms. No Home Legend flooring panels or Home Legend accessories are recommended for extreme humid applications such as in saunas or swimming pool areas. An expansion area of 5/16" - 3/8" must be provided around all vertical obstructions including walls, permanent cabinets, pipes etc. All perimeter expansion areas must be completely filled in with a water repellent sealant, a silicone based sealant. When applying sealant, it is helpful to first apply a strip of masking tape parallel to and approximately 1/32" from the edge of the flooring. Then fill the expansion area with sealant, remove any excess with a plastic scraper or putty knife, then remove the tape. Let dry for 24 hours before exposure to water.

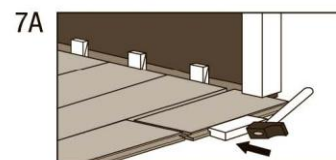
### Pipes

In rows where there is a pipe, make sure the pipe falls exactly in line with the short side of two panels. Take a drill bit with the same diameter as the pipe plus 3/4" for the expansion. Click the panels together on the short side and drill a hole in the center of the joint between the two panels. Now you can install the panels in the floor. (See diagrams 6A-6B-6C.)



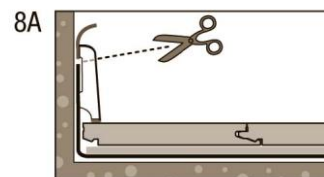
### Under doorframes

When sawing the panels, ensure that the expansion joint under the door is at least 3/8". If you cannot lift the panel, use an adapted tapping block or pull bar and hammer to tap the panels together with the planks flat on the floor. (See diagrams 7A-7B.)



### Finishing

- Remove all spacers.
- Install the molding on the plastic membrane that runs up the wall from under the floor. Never attach the molding to the floor. This method allows the floor to expand and contract under the molding.
- For a perfect finish around pipes, use rosettes or caulking.
- In places where profiles or base board cannot be placed, fill expansion gaps with caulking. (See diagram 8A.)



### Precautions

- Protect furniture and chair legs with proper felt or plastic caps.
- Avoid bringing dirt, water and sand indoors by providing a suitable floor mat at the door.
- Use (office) chairs and seats with soft wheels that

are suitable for a laminate floor and/or use a suitable desk mat.

- Ensure that humidity in the room is always at least 50%. Use a humidifier if you need to.

### **Maintenance**

- Never use wax or varnish coating on the floor.
- For dry maintenance, we recommend using a duster mop.
- For slightly damp maintenance, we recommend using a hard surface cleaner, spray mist mop only! Always wipe dry immediately until no more moisture is visible on the floor. We strongly recommend dry cleaning only for beveled edge products.
- Wet maintenance is absolutely forbidden. Remove any standing water immediately.
- To remove stubborn stains carefully, we recommend using denatured alcohol. Never use scouring products!
- In case your floor needs repair, use a tool called Unifix, which allows the damaged floor plank to be easily removed in minutes without replacing the entire floor. For Unifix to work properly the required expansion gap must be in place around the room's perimeter and extra flooring should be available for use in the repair.

### **Enjoy your floor.**

#### **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 appropriate NIOSH–designated dust mask. Avoid dust contact with skin and eyes.

**IMPORTANT HEALTH NOTICE FOR MINNESOTA RESIDENTS ONLY: THESE BUILDING MATERIALS EMIT FORMALDEHYDE. EYE, NOSE, AND THROAT IRRITATION, HEADACHE, NAUSEA AND A VARIETY OF ASTHMA-LIKE SYMPTOMS, INCLUDING SHORTNESS**

OF BREATH, HAVE BEEN REPORTED AS A RESULT OF FORMALDEHYDE EXPOSURE. ELDERLY PERSONS AND YOUNG CHILDREN, AS WELL AS ANYONE WITH A HISTORY OF ASTHMA, ALLERGIES, OR LUNG PROBLEMS, MAY BE AT GREATER RISK. RESEARCH IS CONTINUING ON THE POSSIBLE LONGTERM EFFECTS OF EXPOSURE TO FORMALDEHYDE. REDUCED VENTILATION MAY ALLOW FORMALDEHYDE AND OTHER CONTAMINANTS TO ACCUMULATE IN THE INDOOR AIR. HIGH INDOOR TEMPERATURES AND HUMIDITY RAISE FORMALDEHYDE LEVELS. WHEN A HOME IS TO BE LOCATED IN AREAS SUBJECT TO EXTREME SUMMER TEMPERATURES, AN AIR-CONDITIONING SYSTEM CAN BE USED TO CONTROL INDOOR TEMPERATURE LEVELS. OTHER MEANS OF CONTROLLED MECHANICAL VENTILATION CAN BE USED TO REDUCE LEVELS OF FORMALDEHYDE AND OTHER INDOOR AIR CONTAMINANTS. IF YOU HAVE ANY QUESTIONS REGARDING THE HEALTH EFFECTS OF FORMALDEHYDE, CONSULT YOUR DOCTOR OR CALL YOUR LOCAL HEALTH DEPARTMENT.

**WARNING! DO NOT MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC “CUTBACK” ADHESIVES OR OTHER ADHESIVES.**

These existing products may contain either asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern the removal and disposal of material. See 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.