



SUPERIOR FLOORING WARRANTY

A GUIDE TO GENERAL WARRANTY & CLAIMS
INFORMATION FOR YOUR SUPERIOR FLOOR.

IMPORTANT INFORMATION

Congratulations on your purchase of your new floor! Your flooring is a premium product that is designed to stand up to the challenges of modern-day living. Superior Flooring is manufactured by Herwynen Sawmill Ltd. under strict hardwood flooring industry standards which permit a defect tolerance of up to 5% of the quantity required. Customers are advised to purchase more than the total square footage required for the application to cover cutting, waste, and defect tolerance. We recommend 3%-5% extra for all Superior Flooring and Enhanced Hardwood Flooring products. All pieces must be inspected before actual installation and any piece which does not meet the installer or owner's personal standard must not be installed.

Wood is a natural product. If repairs are needed during and/or after installation, this is considered normal. The use of touch up markers, wax fillers, or wood putty to fix or repair imperfections in the flooring is standard practice. Furthermore, for the larger repairs, a board replacement may be necessary during or after installation. These repairs are considered normal and are the responsibility of the retailer/installer.

Our installation instructions and warranty take precedence over NWFA guidelines. However, for situations not specified by our installation guidelines, NWFA guidelines are recommended. If the installer has concerns with grading, manufacturing, or finishing quality and cannot place the board in a less conspicuous place (i.e. closet), or cannot eliminate the imperfection, they should not install the material in question and contact their retailer. Pieces not installed because of colour variation, appearance, length, or personal subjective standards are not considered defective. Once the board is installed, it is deemed acceptable by both the installer and/or homeowner. The installer or homeowner is fully responsible for all installed hardwood flooring, even if the homeowner is not present at the time of installation.

Herwynen Sawmill Ltd. will only replace products with a defect rate exceeding the acceptable 5% rate (excluding the 3 to 5% cutting loss). Herwynen Sawmill Limited cannot be held liable for improper installation of its products or poor judgment by the installer.

Herwynen Sawmill Ltd. will not warranty Superior or Enhanced Flooring products that aren't stored or installed within the moisture and relative humidity ranges specified in this warranty. Furthermore, Superior and Enhanced Flooring products MUST NOT be stored on the construction site or acclimatized before installation, doing so will void your warranty.

GENERAL WARRANTY

This warranty is available to the original purchaser of the product and is limited to the repair, refinishing, or replacement of the defective board or boards. If an acceptable resolution is not possible, Herwynen Sawmill Ltd. will refund the original purchase price of the defective floor. This is done on a pro-rated basis, based upon the proportion of the floor that is determined by Herwynen Sawmill Ltd., acting reasonably, to be defective. This warranty will be null and void if any replacement or attempts to repair are conducted without the knowledge and approval of Herwynen Sawmill Ltd. Herwynen Sawmill Ltd.

will not be liable for any consequential or other additional damages beyond those stated above. The limitations on liability expressed in this document shall nevertheless apply to the relationship between the end user of this product and Herwynen Sawmill Ltd.

LIMITED STRUCTURAL WARRANTY

Every piece of Superior Flooring is subjected to many strict quality control inspections. Excluding

a 5% allowance, Herwynen Sawmill Ltd. warrants to the original purchaser that its product in its original manufactured and purchased condition will be free from milling defects and structural deficiencies for the lifetime of the floor. This is the only structural warranty extended to the hardwood floor materials manufactured by Herwynen Sawmill Ltd. and all implied warranties including statutory warranties of any kind are expressly excluded.

WEAR LAYER WARRANTY

Herwynen Sawmill Ltd. warrants to the original purchaser that, under conditions which normally exist in a single-family residence, the finish wear layer of our pre-finished hardwood flooring will not wear through or peel from the wood for thirty-five years with the time calculated from the date of purchase by the original purchaser. This warranty is valid provided that regular maintenance as specified in this document is performed on a regular basis on the floor and the floor is properly installed. This is the only finish warranty extended to the hardwood floor materials manufactured by Herwynen Sawmill Ltd. and all implied warranties including statutory warranties of any kind are expressly excluded.

EXCLUSIONS

This warranty does not extend to or cover:

- Scratches, indentations, damage by neglect or any other damage caused by improper handling, storage, installation, environmental extremes outside our acceptable ranges,
- Improper maintenance,
- Insufficient protection, misuse or improper alterations of the original manufactured product,
- Water damage,
- Fire damage,
- Improper installation,
- Improper use of in-floor heating,
- Substandard subfloors,
- Discoloration due to variations in the exposure to sunlight,
- Furniture transfer marks on the floor,
- Marks or damage from spiked heel shoes, pets, and insects.

Furthermore, checking and cracking caused by improper moisture control is not covered by this warranty as all wood floors will expand and contract with the change of seasons.

In addition, your warranty will not be valid if our products are installed over an existing floor or a crawl space with an exposed earth floor, or improperly over radiant heat.

The damaged or otherwise unsatisfactory part of the floor which is subject to a claim under this warranty must be easily noticeable from a regular standing position, and cover at least 15% of the total floor area covered by the hardwood flooring in the application which is to be subject to a claim under this warranty.

CLAIMS INFORMATION

Claims are made first by contacting the dealer/retailer from whom the product has been purchased. If such dealer is not able to resolve the problem, or they have determined that the issue at hand is a manufacturer's defect, then that dealer must contact Herwynen Sawmill Ltd.

Claims will only be considered for review if an authorized Superior Flooring reseller contacts Herwynen Sawmill Ltd in this manner.

By making a claim against the warranty, the person claiming shall be deemed to acknowledge the right of Herwynen Sawmill Ltd to attend the premises in which the floor is installed and remove any samples required to determine the cause and condition for which the claim has been made.

REGISTRATION

This warranty will be null and void in the event that the product is not registered within 30 days of the purchase date.

You can register your warranty by visiting superiorflooring.ca/warranty-registration



STORAGE & HANDLING

Your hardwood floor is a natural organic product which is affected by the humidity levels in the air around it. Both before and after installation it will absorb or release moisture. Wood is a natural material that seeks to be in balance with its surroundings. Hardwood destined for use in wood floors is carefully kiln-dried for that purpose. Typically, hardwood will expand during the summer months and shrink in the winter. Acceptable humidity levels **(Chart 1)** should be maintained at all times in the rooms where your floor is installed. You will receive the wood for your floor in specially designed cartons that have been stored in a controlled environment. These conditions must be maintained throughout shipping, installation, and thereafter.

The following considerations are important, and failure to follow them will void your warranty.

ACCLIMATION

Herwynen Sawmill Ltd. will not warranty Superior or Enhanced Flooring products that aren't stored and installed within the relative humidity range specified in Chart 1. Superior and Enhanced Flooring products cannot be stored on the construction site or acclimatized before install, doing so will void your warranty.

SUBFLOOR MOISTURE CONTENT

Measure the moisture content of the sub floor and the hardwood to be installed using a moisture meter. The moisture reading of the sub floor must be between 6% and 12% maximum. Hardwood strips must be under 2% maximum difference when compared to the sub floor. If the moisture content of the sub-floor is too low or high, postpone installation. Increase ventilation or use a humidifier or dehumidifier to adjust moisture levels before installation.

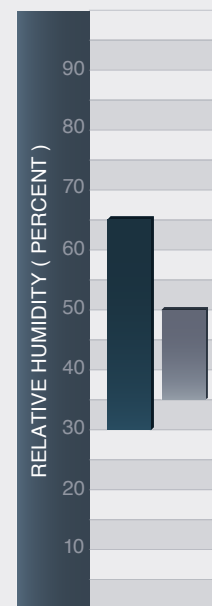
SUBFLOOR DESIGN

For wood sub-floors, hardwood flooring must be installed on plywood or OSB over joists. If the existing sub floor consists of particle board, then it will be necessary to overlay it with at least 5/8" plywood before installation. Be sure hardwood flooring is installed over industry standard sub-floors and underlayment, which as a minimum standard, must be 5/8" A.P.A. approved C.S.P/D.F.P. plywood C.O.F.I stamped, 23/32" or thicker O.S.B. underlay grade PS2-92, or 5/8" tongue and groove boards.

RELATIVE HUMIDITY

Drywall, plaster and concrete must be completely dry and the heating system fully operational with the temperature maintained at 22°C for one to two weeks before the flooring is delivered to the site. All concrete in the structure must have cured for at least 30 days.

CHART 1



Acceptable humidity levels should be maintained at all times in the rooms where your floor is installed.

■ Superior Engineered Flooring & Enhanced Hardwood Flooring
30 - 65%

■ Superior Hardwood Flooring
35 - 50%



CONCRETE SUBFLOORS

Concrete leveling is a very important point. Concrete must be flat/level within 3/16th over a 10 ft. span (< 5 mm over 3 m). For new concrete, allow a minimum of 30 days cure time prior to start of concrete moisture tests. Various methods and testing devices exist to check the moisture level of a concrete subfloor.

POLYETHYLENE TEST

Polyethylene test (Astm D 4263), a preliminary surface test, not a warranted test. Tape a plastic film of 2'x2' (60 x 60 cm) at several points over concrete for 48 hours to see if concrete changes color or condensation occurs. If beads of water are found on the subfloor or the concrete appears darker, further testing is necessary. This method is empirical and is a preliminary test, further analysis will be required. The reading is valid at 24 hours, but it's even better if the test can stay in place until 72 hours have passed.

RELATIVE MOISTURE TEST

Relative moisture test (Astm F 2170), thorough test. Using an ultrasonic sensor, check the relative humidity of the concrete slab to 40 % of its depth. A reading of 75 % RH or less indicates that the concrete slab is ready to receive the wooden floor; a reading between 75% and 85 % indicates that it is preferable to place a waterproof membrane before installing the wood floor. Never install a hardwood floor when moisture level is greater than 85%.

CALCIUM CHLORIDE TEST

Calcium chloride test (Astm F 1869), thorough test. The Calcium Chloride Test works by measuring changes in weight of anhydrous calcium chloride crystals. A small plastic dish of crystals is sealed with a plastic tape. The entire dish is weighed on a gram scale prior to exposure, and the weight, date and time the test was started must be recorded. The lid is then opened, and the dish of crystals is carefully set down on the concrete for 60 to 72 hours. The dish is enclosed within a 7-by-10-inch cover, which is sealed to the concrete. During this time, the only source of moisture being absorbed by the crystals is what can evaporate out of the covered concrete surface area.

At the end of the test, the dome is removed and the lid is placed back on the dish and sealed. Again the dish is weighed on the gram scale and the date and time are marked. The change in weight is multiplied by a constant and divided by hours to provide an estimated rate of evaporation, in pounds (which is the equivalent weight of the water that evaporates out of a 1,000-square foot surface area during 24 hours). Water weighs 8.3 pounds per gallon. If the test reports 8.3 pounds emission, then one-gallon of water is leaving a 1,000-square foot surface area in 24 hours.

A conservative, but generally recommended, allowable amount of moisture emission as expressed by the calcium chloride test is 3.0 pounds per 1,000 square feet per 24 hours at the time of the installation of the flooring. A note of caution: Use care in dealing with the lid, removal of the dish, and weighing as exposure to the atmosphere will dramatically affect the results.

RADIANT HEAT INSTALLATIONS

(ENGINEERED AND ENHANCED)

Refer to the Radiant Heat Compliance Handout for information on radiant heat.



HUMIDITY LEVELS

(35-50% FOR SOLID AND 30-65% FOR ENGINEERED AND ENHANCED)

IMPORTANT CUPPING AND GAPPING INFORMATION AS A RESULT OF RELATIVE HUMIDITY CHANGES

Relative Humidity (RH) is the ratio of the actual amount of water vapour contained in the air at a given temperature to the maximum amount of water vapour that the air at that same temperature can hold, expressed as a percentage.

Wood is a hygroscopic material and always contains water. It constantly exchanges water vapour with the air, picking it up when relative humidity is high, and giving it off when relative humidity is low. Since wood swells as it absorbs water, and shrinks as it releases water, both its moisture content and its dimensions are controlled by the relative humidity of the surrounding air. Wood moisture content is equal to the weight of water contained in the wood divided by the oven dry weight of the wood, expressed as a percentage.

Inside homes however, where the relative humidity of outdoor air is drawn inside and drastically altered by heating and cooling without humidification or dehumidification, wide seasonal swings in relative humidity will cause wood moisture content and dimensional changes to occur. Since warm air can hold more water vapour than cold air, the relative humidity of air with a certain absolute humidity can be changed by simply changing its temperature. If in winter, for example, outside air is at 20°F and 65% RH is drawn inside and warmed to 70°F without humidification, its relative humidity drops to about 10%. In summer, outside air at 70°F and 60% RH that flows into a basement at 60°F will end up at 82% RH.

EFFECTS OF EXCESSIVE OR INSUFFICIENT MOISTURE ON SOLID HARDWOOD

Moisture or lack of it is hardwood's worst enemy. Solid hardwood flooring will perform well if relative humidity is maintained within the recommended range as shown in **Chart 2**.

| | Temperature | | Relative Humidity (Percent) | | | | | | | | | | | |
|--|-------------|----|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| | °F | °C | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 55 | 60 | 65 |
| CHART 2: RECOMMENDED MOISTURE CONTENT FOR SUPERIOR SOLID HARDWOOD | 30 | -1 | 1.4 | 2.6 | 3.7 | 4.6 | 5.5 | 6.3 | 7.1 | 7.9 | 9.5 | 10.4 | 11.3 | 12.4 |
| | 40 | 4 | 1.4 | 2.6 | 3.7 | 4.6 | 5.5 | 6.3 | 7.1 | 7.9 | 9.5 | 10.4 | 11.3 | 12.4 |
| | 50 | 10 | 1.4 | 2.6 | 3.7 | 4.6 | 5.5 | 6.3 | 7.1 | 7.9 | 9.5 | 10.4 | 11.3 | 12.4 |
| | 60 | 15 | 1.3 | 2.5 | 3.6 | 4.6 | 5.4 | 6.2 | 7.0 | 7.8 | 9.4 | 10.2 | 11.1 | 12.1 |
| | 70 | 21 | 1.3 | 2.5 | 3.5 | 4.5 | 5.4 | 6.2 | 6.9 | 7.7 | 9.2 | 10.1 | 11.0 | 12.0 |
| | 80 | 26 | 1.3 | 2.4 | 3.5 | 4.4 | 5.3 | 6.1 | 6.8 | 7.6 | 9.1 | 9.9 | 10.8 | 11.7 |
| | 90 | 32 | 1.2 | 2.3 | 3.4 | 4.3 | 5.1 | 5.9 | 6.7 | 7.4 | 8.9 | 9.7 | 10.5 | 11.5 |
| | 100 | 37 | 1.2 | 2.3 | 3.3 | 4.2 | 5.0 | 5.8 | 6.5 | 7.2 | 8.7 | 9.5 | 10.3 | 11.2 |

Low relative humidity: Solid hardwood flooring installed in a house with low humidity will start to show gaps between the boards. This is strictly a cosmetic issue and does not affect the structural integrity of the product. When the humidity returns to its recommended range, these gaps should start to disappear. If the gapping is extreme because the humidity was way below the recommended range, this will take more time to correct itself.

High relative humidity: If the humidity is too high in the house, the most common issue with solid hardwood floors is cupping. This damage can be either temporary (seasonal) or permanent depending on its extremity and the duration of the time it was exposed to high moisture. During this time of high humidity, the floor boards will expand. This expansion can exasperate the gapping during the winter months as the boards will not move back to their original location once they have been forced to move.

EFFECTS OF EXCESSIVE OR INSUFFICIENT MOISTURE ON **ENGINEERED & ENHANCED HARDWOOD**

Although Engineered and Enhanced Flooring is much more stable than solid hardwood, it will still react to changes in relative humidity according to the season. Engineered and Enhanced Flooring should be maintained within the recommended range on **Chart 3**. If the relative humidity is too low the flooring will start to dry cup and/or crack in winter months.

CHART 3:
RECOMMENDED
MOISTURE CONTENT
FOR SUPERIOR
ENHANCED &
ENGINEERED

| Temperature | | Relative Humidity (Percent) | | | | | | | | | | | | |
|-------------|----|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|--|
| °F | °C | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 50 | 55 | 60 | 65 | |
| 30 | -1 | 1.4 | 2.6 | 3.7 | 4.6 | 5.5 | 6.3 | 7.1 | 7.9 | 9.5 | 10.4 | 11.3 | 12.4 | |
| 40 | 4 | 1.4 | 2.6 | 3.7 | 4.6 | 5.5 | 6.3 | 7.1 | 7.9 | 9.5 | 10.4 | 11.3 | 12.4 | |
| 50 | 10 | 1.4 | 2.6 | 3.7 | 4.6 | 5.5 | 6.3 | 7.1 | 7.9 | 9.5 | 10.4 | 11.3 | 12.4 | |
| 60 | 15 | 1.3 | 2.5 | 3.6 | 4.6 | 5.4 | 6.2 | 7.0 | 7.8 | 9.4 | 10.2 | 11.1 | 12.1 | |
| 70 | 21 | 1.3 | 2.5 | 3.5 | 4.5 | 5.4 | 6.2 | 6.9 | 7.7 | 9.2 | 10.1 | 11.0 | 12.0 | |
| 80 | 26 | 1.3 | 2.4 | 3.5 | 4.4 | 5.3 | 6.1 | 6.8 | 7.6 | 9.1 | 9.9 | 10.8 | 11.7 | |
| 90 | 32 | 1.2 | 2.3 | 3.4 | 4.3 | 5.1 | 5.9 | 6.7 | 7.4 | 8.9 | 9.7 | 10.5 | 11.5 | |
| 100 | 37 | 1.2 | 2.3 | 3.3 | 4.2 | 5.0 | 5.8 | 6.5 | 7.2 | 8.7 | 9.5 | 10.3 | 11.2 | |

Low relative humidity: If the relative humidity is below 30% for a prolonged period, the face lamella will start to contract. This can cause what is called dry cupping and is considered normal when relative humidity is too low. The floor should return to its normal state once the relative humidity is back to normal (30-65%). If the relative humidity drops below 20%, the construction of Superior Engineered Flooring and Enhanced Hardwood Flooring is such that the core material will minimize the face lamella's contraction. If the lamella is under too much stress, and the core is not allowing the face to move (minimize cupping) the face lamella has no other choice but to relieve its pressure by stress cracking. Stress cracking is NOT covered under this warranty.

High relative humidity: In Engineered and Enhanced Flooring, if the relative humidity is too high, the flooring will start to crown. Once the relative humidity goes back to within the specified range, it can should settle down and return to it's original state.

Relative Humidity variations can be minimized with proper ventilation, humidification or heating. You may need to improve your humidification and/or dehumidification system in order to maintain the required humidity levels.



**SUPERIOR HARDWOOD FLOORING
BY HERWYNEN SAWMILL**

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