

Addressing Water Damage

When a wood floor has been damaged by a leak or a flood, it must be addressed before further damage occurs.

The first step in repairing a water-damaged wood floor is to identify and eliminate the source of moisture. Once the moisture source has been identified and removed, the floor can then be assessed.

It is important to understand that water will migrate to areas below the wood floor system anytime there is a flood. When water damage occurs, the wood flooring and subflooring systems must be evaluated to determine the extent of damage and ensuing repairs.

Subfloor Materials Evaluation

- Plywood - swelling, distortion, and delamination can occur when exposed to high levels of moisture. Moisture tests should be conducted using insulated pin, hammer probe type meters on the surface, on the backing, and within the core of the material in several areas of the damaged material to properly assess the extent of moisture intrusion. Replace when the damage is evident. Ensure replacement material is within acceptable MC ranges prior to reinstallation of wood flooring.
- Oriented Strand Board (OSB) - swelling can occur with OSB when exposed to water. Swelling in OSB can create a decrease in density and a reduction in within-board strength due to the release of compaction stress created during the pressing process of manufacturing. This will directly affect how existing fasteners hold the wood flooring to the subflooring material. Replace when damage is evident. Ensure replacement material is within acceptable MC ranges prior to reinstallation of wood flooring.

- Concrete - concrete is a porous material. It typically does not become damaged when exposed to water; however, adhesives, sealers and other compounds will slow the drying of a wetted concrete slab. Moisture levels must be evaluated and properly addressed prior to installation of new flooring. Concrete substrates should be dried by use of airflow, heat, and dehumidifiers until moisture levels are within the flooring and adhesive manufacturers' required ranges.



Wood Flooring Materials Evaluation and Remediation

- Identify the type of flooring and installation methods.
 - Identify type of substrate.
 - Existing materials below the flooring surface may create additional mitigation costs and concerns (i.e., asbestos underlayment, radiant heating systems, etc.).
- Determine the target moisture content for the geographic area and for the facility.
 - Reference the EMC chart on page 12 of the *NWFA Moisture & Wood* Publication.