# **INSTALLATION GUIDELINES** OUTDOOR & MARINE ROLL-OUT FLOORING



Congratulations on your selection of G-Floor<sup>®</sup> Outdoor & Marine flooring, the most durable sheet flooring available. It is waterproof, easy to maintain, and resistant to stains, bait smells, and many common chemicals. G-Floor Outdoor & Marine flooring is the finishing component of a decking system that also includes underlayment, sealants, fasteners, patch compounds and adhesive.

To maximize the G-Floor Outdoor & Marine lifecycle, proper subfloor preparation and installation with compatible products in a suitable environmental range is required. The following guidelines are recognized as best practices for installation of G-Floor Outdoor & Marine flooring. Always follow safe work practices, wear appropriate Personal Protective Equipment and understand requirements for chemical usage.

Better Life Technology<sup>®</sup> respects the user's right to deviate from these guidelines. Please consult with the manufacturers who supply each separate component of the subfloor system to ensure compatibility and possible conflicts with installation practices.

# Installation On Marine Grade Plywood Sub-Floor

## MATERIAL STORAGE

All products must be allowed to acclimate for at least 24 hours prior to installation. We do not recommend installing product if the temperature is below 60° Fahrenheit. All flooring material must be properly stored prior to use. Please keep in a dry environment, in a temperature range between 60° - 85° F. If the product is delivered on a roll, ensure the product is rotated every three months to avoid flat spots. Please do not stack more than three rolls high and do not store upright. For long term storage, we recommend rolling the product square and tight on the original core, and secure with stretch wrap. Do not store material folded, or without a center core the full width of the material as it can cause flat spots or ripples.

Adhesive and flooring must be acclimated on-site. The minimum temperature should be no less than 60 ° F for 24 hours before, during and 24 hours after installation.

## MOISTURE

Wood is a cellulose material which is in a constant state of seeking moisture equilibrium with its surrounding environment. Dimensional changes depend on the moisture level of the decking. It expands when the humidity is high, which adds moisture. It shrinks when conditions are dry, which releases moisture.

The average moisture percentages vary based upon the geographic area. This variation affects the stability of the decking and may transfer to the finished flooring. Please consult with the wood decking underlayment supplier for moisture content guidelines and tolerances.

## CROSSMEMBERS

Apply butyl tape or adhesive sealant caulk, such as ChemLink<sup>®</sup> M-1 Marine sealant to each crossmember. Be certain the butyl tape is centered on each deck underlayment seam. When caulk is used, apply a double bead and ensure adequate coverage spans unbroken through both underlayment edges.

## DECKING

Inspect underlayment and cull sheets for damaged edges. Any excess can be utilized as fill sections for aft, fill or bow decking. Apply sealants to the plywood seam edges. Make every effort to seal seams to prevent moisture from having contact with flooring and adhesives.

If floor is made of multiple wooden planks, ensure that the entire floor is level and that there are no gaps or unfilled spaces between planks. Joints between planks should be level and smooth.

## ATTACHMENT

Proper screw placement and spacing is a priority to firmly anchor the decking to the crossmembers. Along seams, screws are recommended at six inch intervals, offset distance from each other. Place the screws one half to three quarter's inch from the underlayment edge. Screw spacing should not exceed twelve inches apart. Center the screws on crossmembers or structural components. Ensure that screws are secured with the heads just below the deck surface.

## UNDERLAYMENT PREPARATION

Lightly sand the decking underlayment joints to ensure they are flat and even, spot sand other areas as required. Care must be taken not to over sand or dish out the underlayment surface. Apply a flexible waterproof patch to spot fill substrate imperfections. Ensure the filler is applied smoothly or sanded flat. Allow adequate time for the filler to gain hardness prior to application of adhesive. This is necessary to avoid cross contamination of filler and adhesive. Please consult with the patch manufacturer for suitability, compatibility and usage instructions.

## ADHESIVE FOR MARINE GRADE PLYWOOD SUBFLOOR

G-Floor<sup>®</sup> Marine & Outdoor Adhesive has been approved for outdoor and marine flooring applications on wood decking through rigorous qualification and testing processes. The adhesive can be troweled with a 1/16" x 1/16" x 1/16" square notch trowel or applied with a nap roller. The application rate must be monitored to yield 40 to 50 square feet per gallon.

Stir the adhesive prior to use and every 2 or 3 hours to ensure the contents are blended. Keep the pail lid secured when not in use to protect from drying. After spreading the adhesive, allow a minimum of five minutes open time for the adhesive to gain green strength. More open time is required for cooler temperatures or high humidity. The adhesive should just start to develop a skin.

Place the flooring flat and smooth on the adhesive, avoid trapping air or forming ridges. Roll in length and width with a seventyfive pound weighted roller as soon as the material is set in to the adhesive. Ensure 100% adhesive transfer between the two surfaces. For best results, re-roll after one hour.

Flooring must maintain contact with adhesive until curing is complete (24-48 hours). To facilitate proper contact, secure the edges by stapling around the entire perimeter of the boat and floor penetrations and install the edge rail.

There are many suitable adhesives for both marine grade plywood and composite decks that will bond G-Floor<sup>®</sup> Outdoor & Marine flooring. You must use an appropriate marine grade adhesive. Follow specific manufacturer recommendations.

For additional details on the G-Floor Marine & Outdoor Adhesive , please contact the adhesive manufacturer:

Chemical Technology Incorporated 26067 Groesbeck Highway Warren, MI 48089 586.533.2477

## INSTALLATION

Unroll the G-Floor<sup>®</sup> Outdoor and Marine flooring and position pattern side up. Align the pattern edge with the length of the surface, allowing for excess to trim on all four edges. It may be preferred to center patterned flooring on the surface by balancing the design along both side edges.

## OPTIMAL INSTALLATION TIPS:

- 1. Excessive moisture content in plywood substrates could cause seam swelling, resulting in buckling or stretching of the finished flooring.
- 2. Improper placement of screws (too few screws, screws spaced too far apart, screws driven too deeply into the plywood) can disrupt the integrity and holding power of the underlayment.
- 3. Applying adhesive too quickly after patching substrate imperfections can cause cross contamination. This leads to adhesive and filler failure and may not properly bond with decking and/or G-Floor Outdoor & Marine flooring.
- 4. Applying an insufficient amount of adhesive can cause future bond failure of the G-Floor Outdoor & Marine flooring. Always monitor the adhesive application process to ensure sufficient coverage.
- 5. Applying G-Floor Outdoor & Marine flooring too quickly after spreading adhesive lengthens the curing time and weakens the early tack strength resulting in movement of the flooring.

# Installation On Marine Grade Composite Sub-Floor

## MATERIAL STORAGE

All products must be allowed to acclimate for at least 24 hours prior to installation. We do not recommend installing product if the temperature is below 60° Fahrenheit. All flooring material must be properly stored prior to use. Please keep in a dry environment, in a temperature range between 60° - 85° F. If the product is delivered on a roll, ensure the product is rotated every three months to avoid flat spots. Please do not stack more than three rolls high and do not store upright. For long term storage, we recommend rolling the product square and tight on the original core, and secure with stretch wrap. Do not store material folded, or without a center core the full width of the material as it can cause flat spots or ripples.

Adhesive and flooring must be acclimated on-site. The minimum temperature should be no less than 60 ° F for 24 hours before, during after installation.

## MOISTURE

The major advantage to G-Floor<sup>®</sup> Outdoor & Marine flooring installed on a composite deck is that it provides the most moisture resistant barrier available in the market. Composite decks and G-Floor Outdoor & Marine flooring do not absorb water or allow for the free flow of air. Therefore, adhesive selection is very important to use a marine based adhesive.

#### CROSSMEMBERS

Cross members must be clean from any chemicals or debris. Additionally, cross members need to be flat across the entire deck to assure complete contact with the composite deck. If the crossmembers are not flat the composite deck may bridge and not properly adhere to the surface.

Apply adhesive sealant caulk, such as ChemLink<sup>®</sup> M-1 Marine sealant to each crossmember. Place a <sup>1</sup>/<sub>4</sub> inch double bead on each cross member.

#### DECKING

The composite decking is then laid on the crossmembers. Assure decking is in contact with all the crossmembers. Screw through the deck and into the cross members around the exterior edge to hold deck in place while the adhesive cures. The cure can take up to 24 hours.

Each screw is slightly counter sunk just below the deck surface. Place a small amount of ChemLink M1 Marine sealant on each screw head and use a putty-knife to smooth the surface.

Once installed, deck and subfloor must be completely smooth and free of debris. Voids and uneven subfloor will show through the finished product if not sealed and leveled properly.

## ATTACHMENT

Proper screw placement and spacing is a priority to firmly anchor the decking to the crossmembers. Along seams, screws are recommended at six inch intervals, offset distance from each other. Place the screws one half to three quarter's inch from the underlayment edge. Screw spacing should not exceed twelve inches apart. Center the screws on crossmembers or structural components. Ensure that screws are secured with the heads just below the deck surface.

## UNDERLAYMENT PREPARATION

Lightly sand the decking underlayment joints to ensure they are flat and even, spot sand other areas as required. Care must be taken not to over sand or dish out the underlayment surface. Apply a flexible waterproof patch to spot fill substrate imperfections. Ensure the filler is applied smoothly or sanded flat. Allow adequate time for the filler to gain hardness prior to application of adhesive. This is necessary to avoid cross contamination of filler and adhesive. Please consult with the patch manufacturer for suitability, compatibility and usage instructions.

#### INSTALLATION

Unroll the G-Floor<sup>®</sup> Outdoor and Marine flooring and position pattern side up. Align the pattern edge with the length of the boat, allowing for excess to trim on all four edges. It may be preferred to center patterned flooring on the boat by balancing the design along both side edges.

## OPTIMAL INSTALLATION TIPS:

- 1. Improper placement of screws (too few screws, screws spaced too far apart, screws driven too deeply into the plywood) can disrupt the integrity and holding power of the underlayment.
- 2. Applying adhesive too quickly after patching substrate imperfections can cause cross contamination. This leads to adhesive and filler failure and may not properly bond with decking and/or G-Floor Outdoor & Marine flooring.
- 3. Applying an insufficient amount of adhesive can cause future bond failure of the G-Floor Outdoor & Marine flooring. Always monitor the adhesive application process to ensure sufficient coverage.
- 4. Applying G-Floor Outdoor & Marine flooring too quickly after spreading adhesive lengthens the curing time and weakens the early tack strength resulting in movement of the flooring.

# **Exterior Installation - Non-Marine**

For exterior installation where material will be subject to extreme weather, temperature or moisture G-Floor<sup>®</sup> Outdoor & Marine imaged and supported material should be secured to the subfloor. The material may be installed by securing only the edges or fully adhered to wood or concrete subfloors. Please read and follow all recommendations below.

\*For superior long-term installation, we do recommend fully adhering this material\*

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Adhesive and flooring must be acclimated on-site. The minimum temperature should be no less than 60 ° F for 24 hours before, during after installation.

#### INSTALLATION

Unroll the G-Floor Outdoor & Marine flooring and position pattern side up. Align the pattern edge with the length of the boat, allowing for excess to trim on all four edges. It may be preferred to center patterned Outdoor & Marine flooring on the boat by balancing the design along both side edges.

#### ADHESIVE INSTALLATION FOR WOOD SUBFLOOR

G-Floor<sup>®</sup> Marine & Outdoor Adhesive has been approved for outdoor and marine flooring applications on wood decking through rigorous qualification and testing processes. The adhesive can be troweled with a 1/16" x 1/16" x 1/16" square notch trowel or applied with a nap roller. The application rate must be monitored to yield 40 to 50 square feet per gallon.

Stir the adhesive prior to use and every 2 or 3 hours to ensure the contents are blended. Keep the pail lid secured when not in use to protect from drying. After spreading the adhesive, allow a minimum of five minutes open time for the adhesive to gain green strength. More open time is required for cooler temperatures or high humidity. The adhesive should just start to develop a skin.

Place the flooring flat and smooth on the adhesive, avoid trapping air or forming ridges. Roll in length and width with a seventy-five pound weighted roller as soon as the material is set in to the adhesive. Ensure 100% adhesive transfer between the two surfaces. For best results, re-roll after one hour.

Flooring must maintain contact with adhesive until curing is complete (24-48 hours). To facilitate proper contact, secure the edges by stapling around the entire perimeter of the boat and floor penetrations and install the edge rail.

There are many suitable adhesives for both marine grade plywood and composite decks that will bond G-Floor<sup>®</sup> Outdoor & Marine flooring. You must use an appropriate marine grade adhesive. Follow specific manufacturer recommendations.

When installing multiple pieces of Outdoor & Marine flooring, full adhesion is highly recommended.

#### SEAMS FOR ADHERED FLOORING

All seams must be sealed to create a waterproof barrier. This will prevent damage to the flooring and adhesive. Seams can be sealed by either heat weld or cold weld techniques. When choosing material, make sure to use vinyl compatible components that are rated for exterior use.

Additionally, all edges should be finished with railing or other edging product to ensure protection from weather elements.

#### NON-ADHESIVE INSTALLATION FOR WOOD SUBFLOOR

Placement of single piece, full area coverage G-Floor<sup>®</sup> Outdoor & Marine flooring may be accomplished without adhesive. After placing the flooring and trimming to fit, simply secure edges by stapling around the entire perimeter of flooring. Edges should be finished with proper edge rails to protect from weather elements.

#### **Concrete Slab/Patio Installation**

#### ADHESIVE

Acrylic- or water-based adhesives that are rated for exterior applications are required. Ensure that chosen adhesive is appropriate for vinyl flooring and concrete. Follow all adhesive manufacturer recommendations when installing.

## SUBFLOOR PREPARATION

Ensure concrete is fully cured and flat. Clean any staining as best as possible. Any stains may affect adhesive performance. Any cracks or expansion joints should be patched and allowed to fully cure before adherence. Failure to properly prepare subfloor may lead to its defects showing through the material.

## FLOORING PREPARATION

Material should be unrolled 24-48 hours prior to installation to allow the vinyl to relax. Material may initially have ripples that will dissipate over the allotted time. Once the mat lays flat, it may be placed in the area to be installed. The vinyl can be trimmed to fit with a straight edge and utility knife.

#### EDGES & SEAMS

All seams must be sealed to create a waterproof barrier. This will prevent damage to the flooring and adhesive. Seams can be sealed by either heat weld or cold weld techniques. When choosing material, make sure to use vinyl compatible components that are rated for exterior use.

Additionally, all edges should be finished with railing or other edging product to ensure protection from weather elements.

#### BLUSHING

When G-Floor<sup>®</sup> Imaged or Clear material is not fully adhered, it can be subject to blushing. Blushing is a chemical reaction produced by moisture being trapped between the material and subfloor. It can generally be cured with heat and /or direct sunlight to allow the moisture to evaporate. In more extreme cases, an alternate heat source or high powered fan m,ay ne needed to help dry the moisture.