

Application Guide

AQUATEAK

GENERAL INSTALLATION RECOMMENDATIONS.

1) Aquateak can be installed in temperatures between 10°C to 30°C. Optimal install temperature is between 18°C – 25°C out of direct sunlight. For installation on aluminium substrates, it is critical to ensure that the surface temperature remains above the dew point. Installing Aquateak when the substrate is at or below the dew point can result in condensation forming on the surface, leading to poor adhesion, bubble formation and premature adhesion failure. A surface temperature at least 3°C above the dew point will ensure optimal application conditions.

2) Do not attempt to adjust or move the pad once the installation process has begun.

3) To prevent distortion, avoid pulling, stretching, or compressing pads during installation. Some shrinkage is possible, but generally a maximum of 5mm over a 2-meter length is acceptable – exceeding this may cause distortion.

4) When Applying AquaTeak over non-skid ensure the Aquateak extends 20mm past the edge of the non-skid and use 3M Primer 94 on the perimeter of the pad to increase the bond strength of the PSA to the substrate.

PSA PREPARATION.

Use methylated spirits, isopropyl alcohol or acetone and a clean rag to remove all grease, adhesive, mould-release, wax, dirt, and other substances from the entire area where Aquateak will be installed. Do not use white spirits. Next, abrade gelcoat and composite substrates with 120g or a purple Scotchbrite pad. Bare aluminium must be sanded with 180g using an orbital sander before any pads are installed to prevent bubble formation. Again, using isopropyl alcohol or acetone and a new clean rag wipe down the substrate to remove all contaminants, ensuring the area is completely dry before continuing.

To bond Aquateak to polyethylene or polypropylene, the key is to use a primer specifically formulated for low surface energy plastics like polyethylene and polypropylene. Thoroughly clean the PE/PP substrate with a degreaser or cleaner, ensuring the substrate is free of grease, oil and dirt. Next apply a compatible primer to the substrate according to the manufacturer's instructions and follow the installation recommendations for the chosen adhesive. NB. Compatibility tests recommended.

PSA INSTALLATION.

- Dry fit the pads in position to confirm correct alignment and positioning. Use tape to mark their location, which will help to accurately reposition them prior to pulling back any paper backing.

- Best practice is to install the larger and/or most central pad(s) first, turn the pad over so that the adhesive backing is face up. With a sharp blade, carefully cut the paper adhesive backing from the center of the pad towards the edges center to top edge, center to bottom edge to ensure it does not rip. Be sure to completely cut through the adhesive backing but DO NOT cut into the pad.

- When butt joining pads, we recommend that any cutting/machining be completed at least 48 hours in advance. Ideally, allow 4-5 days between cutting/machining and installation to enable the material to relax and de-stress, which helps to minimise post installation shrinkage.

- Aquateak should *not* be installed in hot conditions or direct sunlight when performing butt joins, as this can increase the risk of the pads separating due to shrinkage.

- When installing butt joints. Allow a slight overlap of 0.5mm to 0.75mm between the pad edges. Fully adhere the first pad to the substrate. Position the adjoining pad so that the overlap eliminates any visible gaps before adhering it in place. This method maintains a light tension, helping to minimise separation due to material shrinkage during the rolling process.

- Starting from the center cut you just made, peel back 5 cm of the paper backing and fold to crease it. Repeat on the other side. The paper should make a tent to keep the PSA from making contact with the substrate until it is ready to be bonded into place. Do not touch the PSA with your hands

- Turn the pad back over and reposition it exactly where you want it installed.

- Firmly press down by hand on the center of the pad where the exposed adhesive is. Apply pressure from the center of the pad outward center to top, center to bottom to ensure no air is trapped beneath the pad. Continue removing the backing in manageable sections, applying hand pressure to each area as you go, until the entire pad is applied. Once applied use a roller to apply gentle pressure across the entire pad to ensure uniform adhesion.

- Once complete take a small roller and apply pressure to the external perimeter ensuring the outside edge is fully adhered to a smooth surface. Avoid using excessive force as this will stretch, distort and/or compress the pad.

If bubbles are present after rolling out the pad:

- If the bubble is near an edge or a plank/caulking line, use a strong sharp pointed tool like the tip of a dart to carefully pierce the bubble with a twisting action (to prevent the PSA from resealing the puncture) along the edge or within the caulking line to minimise the visibility of the hole. Avoid using pins or hypodermic syringes, as these are prone to bending or breaking and are not suitable for this application.
- Press out the trapped air using your fingers and/or a roller.
- Once air has been expelled, roll over the pierced area to reactivate the pressure sensitive adhesive (PSA) and seal the hole.

If bubbles are located centrally in a pad:

- Carefully pierce the edge of the bubble.
- Press out the air using your fingers and/or a roller.
- Once air has been expelled, roll over the pierced area to reactivate the pressure sensitive adhesive (PSA) and seal the hole.

EPOXY ADHESIVE PREPARATION

Wood Decks

- Ensure that wooden decks are abraded and then cleaned. Dust and dirt should be removed from the surface, and the deck must be dry.

Steel Decks

- The surface should be degreased, abraded and degreased again, and any residue on the surface following the degreasing process should be removed. Wipe down with methylated spirits, isopropyl alcohol or acetone to remove the dust and any greasy residues. **Do not use white spirit.**

Aluminium Decks -

- Surface should be prepared only 10-15 minutes prior to the installation of Aquateak. This is to avoid oxidation, which would adversely affect the bond quality. As with the steel decks it should be degreased, abraded and degreased again, any residue being totally removed from the surface.

Aluminium deck surfaces have a surface layer of aluminium oxide which is produced when the surface is exposed to the air. This surface layer of oxide can prevent a successful bond from being achieved and must therefore be removed.

The oxide layer should be removed from the deck by light abrasion with a fine abrasive paper, 'Scotchbrite' pad or similar in the areas where the material will be laid. The abrasion dust must be totally removed, ideally by vacuuming, followed by cleaning with a suitable solvent such as acetone, methylated spirits or isopropyl alcohol. Do not use white spirits.

Once the surface has been abraded and cleaned, the Aquateak should be bonded – instructions for use of the adhesive should be followed carefully.

GRP Decks

- Sand the area with 120 grit sandpaper. Wipe down with methylated spirits, isopropyl alcohol or acetone to remove the dust and any greasy residues. **Do not use white spirit.**

EPOXY ADHESIVE APPLICATION

Application

Mask the outside perimeter of the area where the Aquateak will be installed after completing the preparation. Apply the adhesive to the back surface of the Aquateak sheet using a notched spreader. Making sure that the entire surface is evenly covered. If using Epoxy on a cambered deck, the Aquateak should be taped to hold the pads in place to prevent it from moving before the adhesive sets. Clean up excess adhesive with methylated spirits.

Note: Epoxy adhesives are not suitable for use with polypropylene and/or polyethylene applications.

Compatibility tests are recommended.