



# **KeelShield Aluminum Application Instructions**

Note: KeelShield can adhere to crafts made of all metals. (Anti-fouling paint must be removed before installation.) It will **not** work on pontoon boats, boats whose trailers have weight bearing rollers, bunks, or pads that the KeelShield will rest on or encounter when the boat is launched and loaded. It will **not** work on certain models of Alumacraft, Lund, G3 Angler Series, Egret, and Crestliner boats. It will **not** work if the leading edge is installed below the resting waterline. Contrary to popular belief, KeelShield Keel Guards can be used on aluminum hull even if they aren't completely flat. The first thing to check is if hull composition. Hulls that have smooth or light protrusions are compatible with KeelShield. However, hulls that feature sharp edges or large protrusions will not work with KeelShield. Keel Guards fit and install on 34 of aluminum due to its flexibility and tough nature. To see if your boat is compatible check out the compatibility guide on the bottom. As per the manufacturer, installation of the product when stated it will not work on your vessel will not have any warranty coverage.

#### **Needed for installation:**

- Isopropyl alcohol
- Paper towels
- Hand protection (latex gloves work just fine)
- Minimum temperature of 70° F.

Also helpful is an extra set of hands, a wax pen or crayon, and painters tape or masking tape. It is recommended to seal the edges of your KeelShield with a marine grade sealant that is below the waterline after installation.

#### **Surface Preparation**

Your boat hull and KeelShield needs to be 70° F or warmer; if below this temperature you may run into some adhesion problems in the future. If there are no gouges or scratches more than ¼" in depth, your KeelShield can be placed over existing damage. If your hull has extensive damage or your keel is leaking, you will need to make repairs before installing your KeelShield. If making the repairs yourself be sure to follow the manufacturer's instructions on curing before installation of your KeelShield.

- Take the KeelShield Out of the package and lay it flat. Find your resting waterline. The leading edge **MUST** start 6"-9" above your resting waterline.
- Once found, mark with a grease pen, pencil, or crayon.
- Hold or tape your KeelShield to your hull with the leading edge placed at the point where you marked. Trace around the KeelShield with a wax pen, pencil, or crayon.
- Take some painters tape or masking tape to tape this area off. This is the area you will be preparing for adhesive.
- Preparing the part of your hull you have traced around is the most important step in the installation of your KeelShield.
  - Do NOT use Acetone, Lacquer thinner, or any other cleaner or solvent to clean for your KeelShield installation. All of these leave a film when they evaporate that will interfere with the adhesive and cause failure. Isopropyl alcohol is the only cleaner that when it evaporates does not leave a film.

- Take your isopropyl alcohol and some paper towels and wipe the area you have traced/taped around thoroughly. Do this until your paper towel removes no dirt and comes away clean.
- Take a scuff pad and gently scuff the area you have traced around.
  - Note: If you have loose paint in this area you will need to remove it with a fine grit sandpaper. You do
    not have to apply strong pressure, but simply remove the gloss from this area.
- Once again take the isopropyl alcohol and do a thorough wash of this area as you did before scuffing.

Your hull is now ready for your KeelShield.

**DO NOT** touch your hull with your hands as this will leave oils that will interfere with the 3M adhesive system.

## **Application**

Look at your KeelShield. You will notice the 7<sup>th</sup> ridge is the center of the product. It may help you on the next step to take your wax pen, crayon, or a piece of tape to mark the 7<sup>th</sup> rise.

- To help make Keel Guard as flexible as possible warm in the sun for 30 minutes before application to allow the Keel Guard to easily form around the keel, and any ribs or protrusions. As an alternative you can use a hairdryer to accomplish the same results.
- If you taped the area remove the tape now. Take your KeelShield and peel back about 1 foot of the middle strip of the release liner on the back of the product. Peeling back the strip will expose the 3M adhesive.
  - o **Do NOT** touch the adhesive with your hands as this will leave oil on it and will ruin the adhesion.
- Carefully line the venter of your KeelShield up with the center of your hull and gently press along with your hand. Make sure you line up with the center as once the adhesive touches your hull it cannot be moved.
- Once you have pressed on the first foot, pull about 1'-2' of the middle release liner and continue to gently press on with your hand until you have the entire center length of you KeelShield attached to you hull.

Now that the middle of your KeelShield is attached to the center of your hull. It's time to finish the installation. *Do one side at a time*.

- Choose one side and pull off about 1' of the release liner to expose the 3M adhesive.
- Take your hand and start in the center and roll your hand out to the outer edge, pressing your KeelShield on. By starting in the middle, you are removing air bubbles while adhering it to your hull.
- Once the first foot is done continue with the same side pulling off 1'-2' of the release liner as you press from the middle out.
- Once you complete once side you go ahead and repeat the process on the other side.

**Note:** Some of you may run into chines, steps, or strakes that your KeelShield needs to go over. If you can't get your KeelShield to mold around them with your hand you can use the handle of a screwdriver.

- Now that the KeelShield is attached to the hull, take the squeegee applicator and use it to apply pressure to the
  grooves and rises. You can also use a rolling pin or laminate roller to apply pressure to the ridges. It is important
  to pay special attention to all the edges. The adhesive system is pressure sensitive so the key for the best bond is
  pressure.
- Now that you are done with the applicator, use the isopropyl alcohol and wipe all the marks from your wax pen, crayon, or pencil off your hull and KeelShield.

Once the Keel Guard is installed, use a marine grade sealant for areas below the waterline around the leading
and trailing edge. It is important to seal areas that are uneven and where small gaps are possible. The goal is to
allow no water to work its way underneath the keel guard and ruin the adhesion.

There is **NO** down time and you can use your boat as soon as you complete the installation process. But if you choose to follow the recommendation to seal the edges you will need to follow the instructions found on the sealant for cure time before using your boat.

#### **Note for Trailered Boats:**

Make sure your rollers move freely. Your KeelShield cannot rest on or be directly next to weight bearing rollers or bunks. The friction caused form transportation will eventually cause the KeelShield to come off.

## Manufacturer's Warranty:

Your KeelShield has a lifetime warranty for the original purchaser of the product for as long as you own your boat. To place a warranty claim you will need proof of purchase along with a picture of the KeelShield that needs warranty.

### **Compatibility Chart:**

- Crestliner
- Fisher
- G3- some models
- Lowe
- Mirrocraft
- Monark
- Polar Kraft
- Princecraft

- Ranger
- Sea Ark some models
- Smoker Craft some models
- Starcraft
- Tracker
- Triton
- Weldcraft
- Xpress