



KEEL TO HULL BONDING

There are so many different types of keels being attached to hulls of yachts from static keels with and without bulbs of all different styles and configurations to canting keels again usually a blade type with a bulb. Fix190 (MSP190) is very well suited for bonding keel-hull connections. Fix190 (MSP190) adheres and seals the keel to hull joint extremely well. Even if though the keel construction substrate material is made from materials such as cast-iron, aluminium, fibreglass, lead, carbon fibre etc.

HOW TO APPLY:

- It is very important not to smother all the surfaces with the Product, as this will only prevent the Product from fully curing in a reasonable period of time.
- Applying a continuous triangular line of Fix190 (MSP190) is the best way to apply the product to the surfaces, this ensures complete bonding on all surfaces and very little if any air entrapment during application. (Refer to page 2).

PREPERATION:

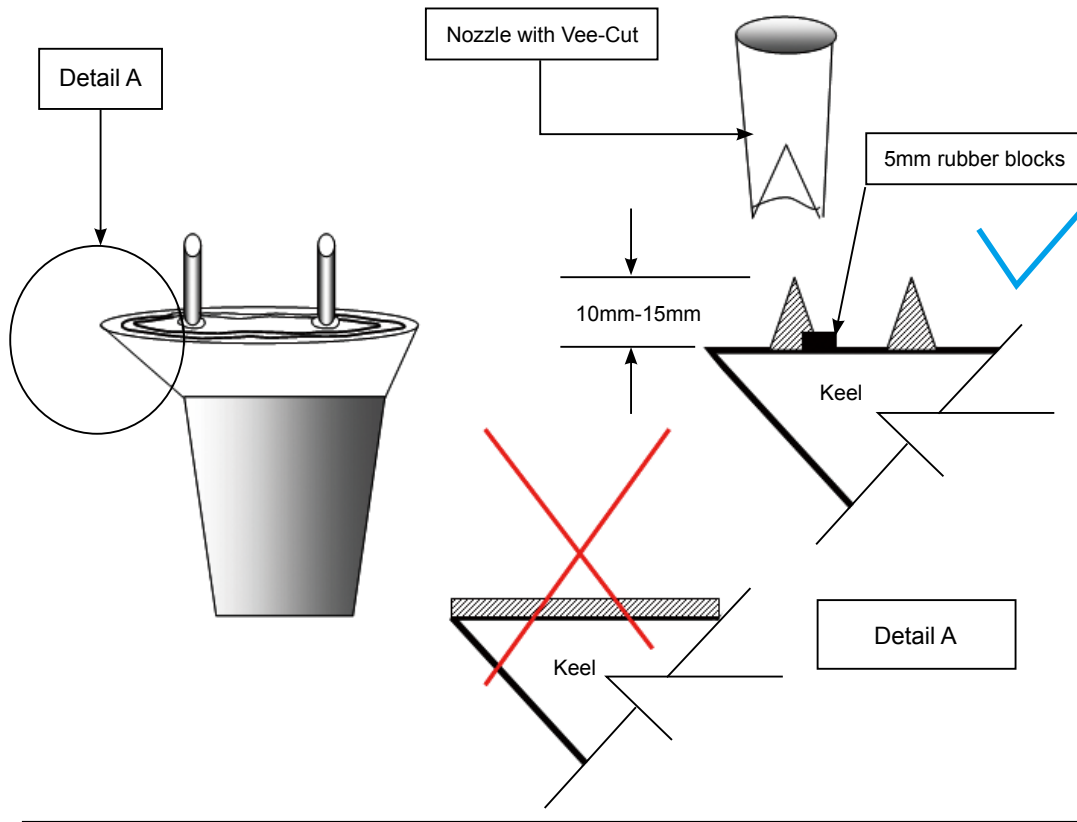
1. Abrade the proposed bonding area with 100 grit sandpaper to take off the gloss from the yachts gel coat and any wax that may be present, and eliminate dust with brush or vacuum extractor.
2. If a bedding plate has been inserted into the fibreglass then abrade the contact surface with 100 grit eliminate any debris or dust with a brush or vacuum extractor.
3. Carefully Mask Tape the perimeter area to be prepared on the vessel.
4. Wipe bonding area with 100% Industrial Alcohol Cleaner or Methylated Spirits in a lint free cloth to remove any oil, release agent or wax that might still be present from all surfaces to be sealed.
5. Removable keels have a number of threaded studs protruding from the keel, ensure all threaded studs have been wiped clean thoroughly with 100% Industrial alcohol cleaner or methylated spirits.
6. Most keels have a keel plate that the keel bolts pass through and then the nuts are applied to lock down the keel plate from the inside of the yacht. Prepare all these surfaces also to ensure they

are prepared in accordance to above standard procedures.

APPLYING Fix190 (MSP190) :

- Apply Fix190 (MSP190) onto the bonding surface in the shape of a triangular run, with a height of 10 to 15mm. As the seal is required to be watertight, it is important that the triangular adhesive sealant run forms a continuous, closed ring, with no gaps. The same applies to the adhesive sealant run around the anchoring bolt-holes.
- Place a series of 5mm high rubber blocks internally into the line of sealant, without cutting the sealant continuous run.
- Lift the keel into position thereby squashing the triangular adhesive sealant run of the Fix190 (MSP190) between the bonding surfaces, within it's skin time.
- Some may choose to apply more Fix190 (MSP190) down into the bolt cavity between bolt and outer diameter of the holes, and then again as they did on top of the keel apply a continuous run of adhesive sealant around the perimeter and around each bolt hole.
- Carefully place the keel plate over the bolts and allow the keel plate to contact with the adhesive sealant, use rubber packers as you did on the keel to ensure you do not over-tighten during the adhesive sealant wet stage.
- Thread on each washer and bolt and lightly tighten each nut to the keel plate, tighten until the rubber blocks are sealed.
- Remove any displaced material that is not required at this time.
- In a minimum of 2-3 days you may tighten up each keel bolt to its full torque.
- This is the best time to apply a finishing wipe between the keel and yacht hull as it will be in its final position.
- Most anti-foul paints can be applied over Fix190(MSP190) after 1 day. Test is always best.





DECK TO HULL AND FLYBRIDGE BONDING

