

# Carbon Hinge Bonding Instructions

## Recommendations

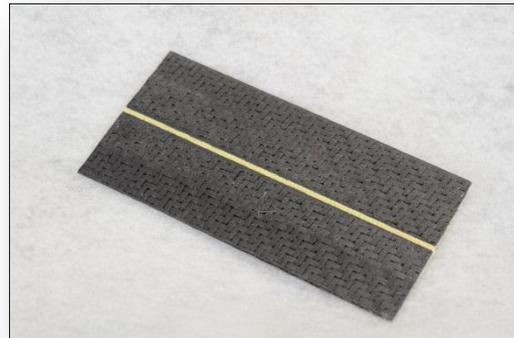
- Perform in a well-ventilated area
- Use gloves and a respirator (if recommended by the adhesive manufacturer)
- Eye protection

## Materials Required

- Carbon Hinge
- 400 grit sandpaper
- Your bonding surface
- Adhesive mixing sticks (required for 2 part adhesives)
- Adhesive mixing board

## Preparation

1. Your hinge has a pre-prepared bonding surface, so no preparation on the hinge is required. Ensure the matte peel ply face is used for bonding.

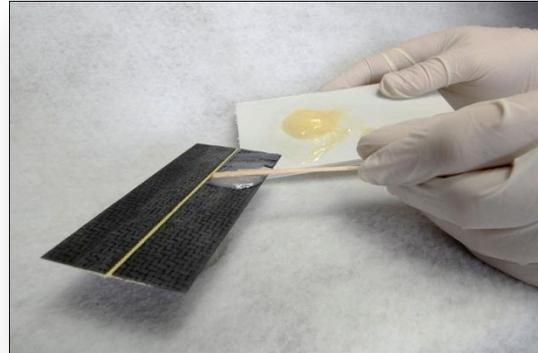


2. Using 400 grit sandpaper, prepare the surface the hinge will be attached to.

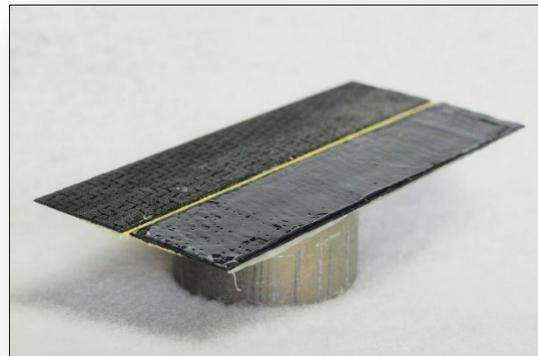


## Application

1. Wipe down the surfaces to remove any moisture



2. Apply a thin film of adhesive to the hinge, and to one of the bonding surfaces. There should be enough adhesive to cover the entire surface, but not so much that it leaks out the sides when the two surfaces are pressed together



3. Place the hinge onto the bonding surface, and apply pressure. Pressure can be achieved by any means including clamping, or weights. Ensure pressure is evenly distributed across the length of the hinge.



4. Wait for the adhesive manufactures suggested bonding time.
5. Repeat steps 1-4 again for the other side of the hinge.

## Adhesives

- We recommend a Methyl Methacrylate (MMA) adhesive for the bonding application.
- Methyl Methacrylate can be purchased as
  - Plexus Structural Adhesives ('MA' range)
  - Loctite Acrylic Structural Adhesives range
  - 3M Acrylic Adhesives range
- Adhesives such as superglue or Gorilla Glue can be used, however they are recommended for use in non-critical applications due to their reduced strength.
- Epoxies such as Araldite can be used; however the brittleness of epoxies can lead to delamination of the bond when subject to shock loads.
- VHB tapes can also be used as an alternative bonding method.

## Disclaimer

These instructions are only recommendations, which are based on our experience. We advise preliminary testing before use.

The advice and recommendations provided are of a general nature. Talon Technology is not responsible for, and expressly disclaims all liability for, damages of any kind arising out of use, reference to, or reliance on any information contained within this website or through use of the Carbon Hinge product.