

Please read the following information carefully, you will need to refer to it often throughout the building process. It contains information on corrosion protection, drilling, deburring, gusset building etc. Also included is a section on bolt and rivet selection to assist you in areas of the manual where bolt or rivet sizes have not been indicated.

## 1.1 Metal Surface Preparation

As a protective measure against corrosion, mating metal surfaces should be fully deburred, cleaned with Acetone, and then coated liberally with primer. This provides a seal between the surfaces to prevent corrosion and moisture ingress. It is a good practice to coat the end of the rivet on the inside surface after installation.

As an optional measure, the rivets can be dipped in primer prior to installation. This provides protection inside the hole and seals out moisture, be careful to avoid getting excess chromate on the exterior surfaces.

Epoxy primer must be mixed in accordance with the manufacturers directions as displayed on the containers. It is advisable to mix only the amount required at the time in a small container for immediate use. However, it is possible to mix larger amounts for reuse but these must be kept in a sealed container and stored in a freezer or refrigerator.

## 1.2 Drilling Holes

It is good practice to only use a #40 drill to make pilot holes when doing any assembly work. If possible never drill to final hole size until assembly is complete and you are confident to do so. This allows for any movement between parts or adjustment you may need to make which could cause misalignment of the holes during final assembly.

- Always use a sharp drill bit as:
  - A sharp bit will not wander as easily as a dull one.
  - You can drill faster with a sharp bit.
  - You don't have to push as hard, risking bending flanges etc.
- Always be careful to drill square to the work surface.
- Always make sure when drilling through multiple parts or layers that they are clamped together tightly and there is no movement during drilling.
- Always deburr holes on both sides of each part before final assembly.
- Always keep work surfaces clean and free from swarf which can scratch and damage panels.