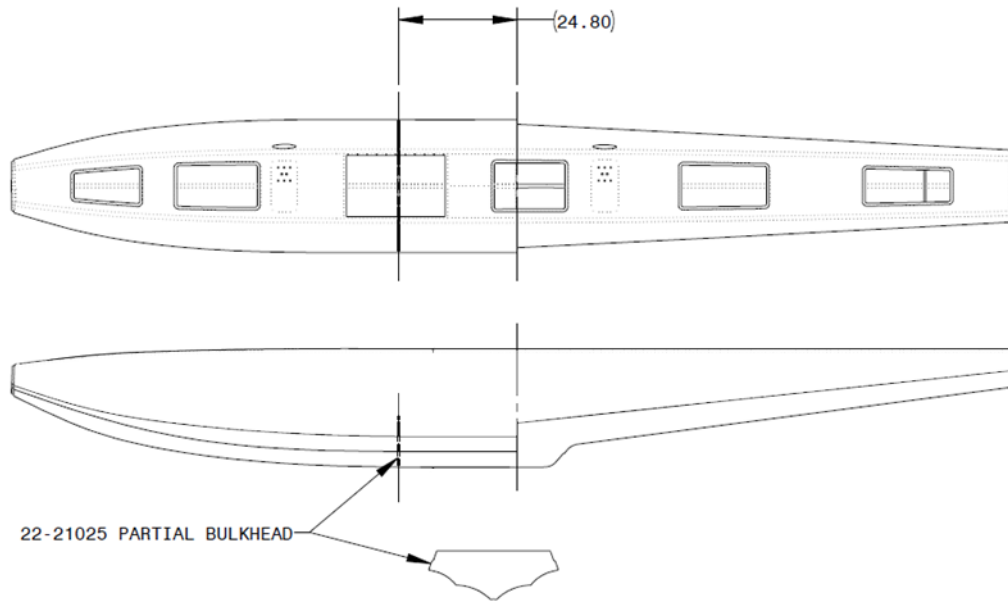




## Mixing Cups

Tongue Depressors (for mixing or sweeping the bonding fillet)



1. Assure a suitable, dry, well-ventilated working area. If the floats are to be left on the airplane, then assure that a suitable shop vacuum is running near the activities described below to remove contaminants during preparation, and to ventilate the float cavity during application and curing of the adhesive. Use proper personal protective equipment while mixing and applying adhesive.
2. Stabilize uncured adhesive temperature, storing it in ambient temperature for 12-24 hours before mixing. (55°-77° or per mfg data sheet)
3. Thoroughly clean a bonding area, centered between bulkheads, approximately 24.8 inches forward of the float step, and fully dry.
4. Fit 22-21025 Partial Bulkhead in the location shown in figure above. Clearance to interior features of the hull should be 0.00 inches to approximately 0.125 inches. Use a barrel type sander, sanding block, or other similar tools to remove interferences from the bulkhead as needed. Assure clear area in bottom centerline for draining.
5. Lightly abrade bonding area of the interior of the hull (2 inches minimum width). (Intent is to remove any grease, dirt, or other contamination, and to expose raw resin. It is not necessary to expose composite fabric.)
6. Clean this area thoroughly with acetone and allow time to completely dry.
7. Temporarily affix the partial bulkhead in place using masking tape or other means.
8. Recommended ambient temperature for adhesive application: 65°-85°F
9. Prepare a "pastry bag" to be loaded with methacrylate after mixing.

**NOTE:**

Avoid excessive handholding of the bagged adhesive. Heat will shorten the working time. Refer to mfg tech data sheet for work times based on temperatures.

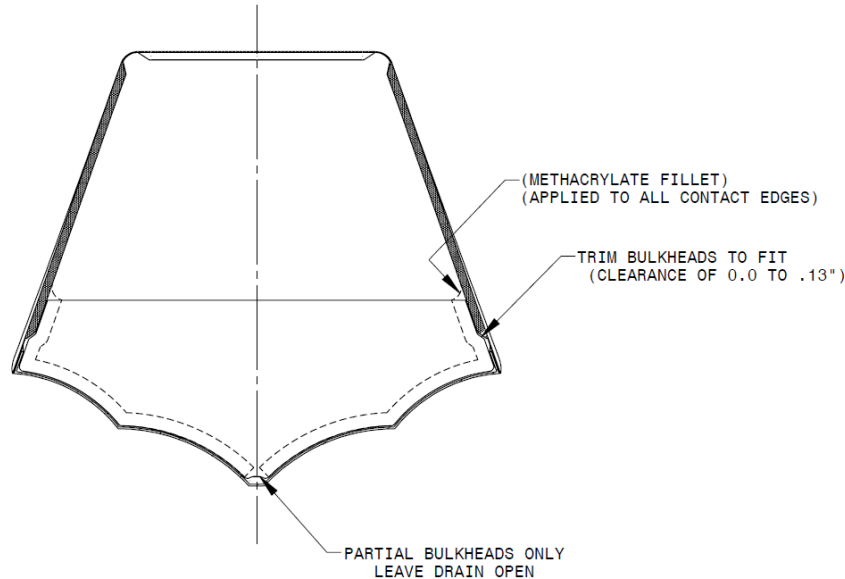
10. Adhesive is applied in two sweeps to minimize the amount of mass applied at one time. Read the following steps before mixing, so that at least half of the unmixed adhesive is

reserved for the second sweep, and mixes are staged to accommodate the working and cure times required.

**NOTE:**

“When mixing large masses of material at one time, a large amount of heat may be generated due to the exothermic reaction created by the rapid-curing of the product. This heat can result in the release of entrapped air, steam, and volatile gases. To prevent this, dispense only enough material for use within the working time of the product and confine gap thickness to no more than its maximum gap fill capability.”

11. Methacrylate must be combined thoroughly in a 10:1 ratio by volume, or a 9:1 ratio by weight. Assure a complete and thorough mixing. Unmixed product will not cure.
12. Load the pastry bag with mixed adhesive and cut about 1/4" from the tip.
13. Apply a 3/8" to 1/2" bead of adhesive then smoothly sweep the entire outline with the smaller radius 3/8 inch tool. Do NOT apply adhesive in the drainage area at the bottom center of the bulkhead.



14. Allow at least 1.5 hours of cure time, with a small fan in the float bay to ventilate gasses while curing.
15. Remove masking tape after adhesive is set.
16. Inspect the first sweep (Radius of 3/8" Fillet) for voids and for full curing. Cured adhesive should be a rubber-like, flexible hardness (72 Shore D). Uncured adhesive will be spongy, liquified, or gel-like. Fill voids as necessary. Smaller, open voids may be filled in the second sweep. Remove all uncured adhesive completely with mechanical means, (a knife, spatula, etc.) then thoroughly clean the affected surface with a solvent and fully dry.
17. Repeat this process to overlay with another layer of adhesive with a larger radius tool of approximately 3/4 inches.
18. Provide ventilation during cure.
19. Repeat inspection and re-work for voids and uncured adhesive.
20. Full cure (temperature dependent) is expected within 120 minutes.

This completes the installation of 22-21025 Partial Bulkhead.

**END**