

Repair Instructions for HYTAC-W, WF, WFT, FLX, FLXT, C1R, B1X and XTL

Innovative Tooling Materials for Thermoforming

This procedure is for filling small voids or cut areas in HYTAC products. It is suitable only for small voids – typically less than 1/8” (3mm) diameter/width. (Bonding pieces of plugs together requires a separate type of adhesive and will generally leave a visible bond line. See “CMT Adhesive Recommendation Guide.”)

The repair kit procedure is identical for any of the HYTAC materials specified above. Separate repair kits exist – check to be sure the kit you are using matches the HYTAC material to be repaired.

Kit contents:

- Container of base material
- Squeeze bottle of room temperature catalyst
- Mixing/spreading tool
- Appropriate MSDS sheets
- Mixing/repair instructions

Procedure:

Clean the area to be repaired with isopropyl alcohol, making sure all grit, dirt, moisture, or other residue is removed. Perform a light sanding if necessary and wipe again with alcohol. Allow the plug to dry.

Place the plug in an oven at 140°F (60°C) to allow the heat the plug to heat for about 1 hour.

Place the container of base material in the 140°F (60°C) oven (along with the plug) and heat for 20 minutes.

Remove container of base material and plug from oven using protective tools to prevent burns. Open squeeze bottle of catalyst and mix entire contents into the container of base material. (Mix ratios will be affected and likely cause failure if a partial mix is attempted.) Mix thoroughly for 2 minutes, scraping the sides and bottom of the container using the supplied mixing tool.

Apply mixed contents to the area to be repaired, working the syntactic mix into the void(s). Apply small amounts, being careful to avoid trapping air underneath the mix. Slightly overfill the void to allow for shrinkage. (Excess material may be sanded off when the patched plug has been cured.)

Repeat the above step as many times as necessary to fill the void(s). The syntactic mix has a working life of about 60 minutes before the viscosity begins to build and the product becomes unusable.

Cure the patched plug overnight in an oven set to 220°F (100°C). Lightly sand the surface as needed when the plug has cured and cooled to obtain the desired surface.