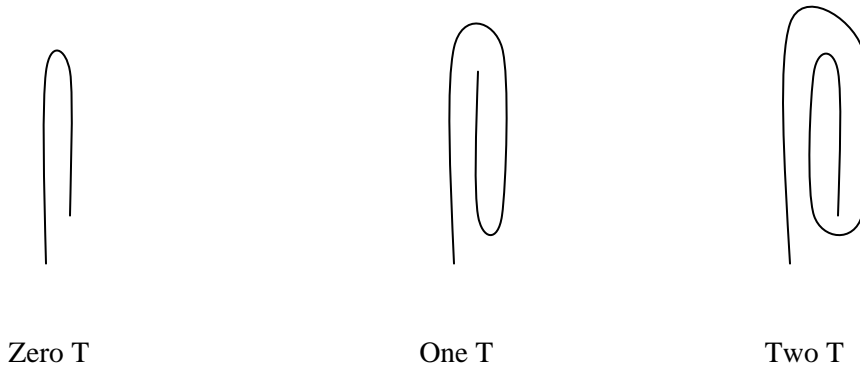


TECHNICAL BULLETIN
Mitsubishi Chemical America, Inc.
6/14/04

Correct Routing Depth

In routing the ALPOLIC panels special care must be taken to rout to the correct depth. The depth of the rout controls the radius of the bend when the return is made. This radius has a significant impact on the panels paint finish. If the rout is too deep the radius will be too small and the edge of the return will be sharp. This sharp edge can lead to paint cracking and a paint failure along the edge.

Paint manufacturers rate a paint's ability to bend using a test called the T bend test (ASTM D4145). Using a piece of the coated metal a bend is made so the metal is turned back on itself, this is a zero T (thickness) bend. The edge is observed for cracking. The metal is bent again so that now there are the two outside strips with one thickness of the metal in between (one T). If this is repeated so there are two thicknesses of metal between, it is referred to a two T.



As the T Bend number goes up the radius of the top bend becomes larger. The Fluorocarbon paint system is warranted by the paint manufacturer for two T. The more core material that is left behind the larger the radius once the return is bent. To ensure a two T radius a minimum of 0.008 to 0.016 inches or 0.2 to 0.4 mm of core material should be left. If the panels are over routed and the resulting radius does not meet the two T requirement, the **paint warranty is voided**. To ensure uniform and correct routing depth it is important to ensure the support material for the panel is level, flat and without voids. Resurfacing the support material on a regular basis is recommended.

A properly routed panel will have 0.008 to 0.016 inches of the polyethylene core remaining

