

Bonding KYDEX® Sheet to Metal

For information applicable to KYDEX® FST please refer to 300 series technical briefs.

TB - 150-C

Introduction

Due to its excellent chemical resistance, KYDEX® thermoplastic sheet can be more difficult to cement than other plastics. Herein we discuss how to cement KYDEX® sheet to itself and other plastics, Metals, and Wood. Strong bonds can be obtained for most applications using the methods shown below. KYDEX® sheet can also be joined to itself or to other materials using mechanical fasteners in place of adhesives.

Preparation for Bonding:

Cementing

Solvent

For best bonding results, the substrates MUST be free from dirt, grease, and dust. To clean the surfaces wipe with a solvent such as isopropyl alcohol before you apply the adhesive. Remember that the bonding process works best if done in a temperature controlled environment of approximately 18° - 24°C (65° - 75°F).

Product Name	Phone	Web
Uralane 5774 (Huntsman)	1.800.817.8260	www.huntsman.com
Lord 406/19 & 661/6 (Lord)	1.877.275.5673	www.lordadhesives.com
Devcon Metal Welders I & II (Devcon)	1.800.933.8266	www.devcon.com
JDC B1132 foam tape (JDC Inc)	1.615.754.9797	www.jdcinc.com
Arlon 101 foam tape (Arlon)	1.800.854.0361	www.arlon-std.com

Recommended Primers:

3M[™] Prep Solvent-70 Cleaner

3M[™] Tape Primer 94

FOR ADDITIONAL INFORMATION: call 1-800-362-3550.

Please Note: For bonding KYDEX[®] sheet to aluminum, all of the above listed adhesives may be used. Acrylic based adhesives such as Devcon's 'Metal Welder 'or 'Metal Welder II' can be used to form very strong bonds with KYDEX[®] sheet. Both of the 'Welder' products are 2-part adhesives, which are available in cartridges. The Welders produce a strong bond, which cure in about 15 minutes. The adhesives are grey in color. Also, there is a 'Composite Welder' that is good for bonding one composite to another such as KYDEX® sheet to another plastic or metal. The 'Composite Welder' is blue/green in color. You may order the 'Welder' products from Devcon in the US by calling 1.800.933.8266, in Europe by calling 44.1.933.675.299 or on the web at www.devcon.com. When using these adhesives, be sure to join your substrates immediately after applying the adhesive since they have a fast cure time.

Using Foam Tapes:

For application methods and cure times of the foam tape adhesives, please reference their respective manufacturer's technical data sheets. JDC B1132: 1.615.754.9797 www.jdcinc.com

Using Urethane Adhesives:

Uralane 5774 is a two part urethane adhesive. Please reference the manufacturer's technical briefs for recommended ratios and application methods.

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This information supersedes all previously published data.

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