

Bonding KYDEX® Sheet to Metal

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.

Solvent Cementing

Preparation for Bonding:

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.

CURBELL PLASTICS 1-888-CURBELL www.curbellplastics.com

Curbell Plastics is a proud supplier of SEKISUI | SPI materials.

SEKISUI SPI

ISO 9001 and 14001 Certified

Customer Service

6685 Low St, Bloomsburg, PA 17815 USA Phone: 800.325.3133, +1.570.389.5810 Outside the US: +1.570.389.5814 Fax: 800.452.0155, +1.570.387.7786 Email: info@sekisui-spi.com

Technical Service

Phone: 800.682.8758 Fax: +1.570.387.8722 Outside the US: +1.570.387.6997 techservice@sekisui-spi.com

sekisui-spi.com

Because we cannot anticipate or control the many different conditions under which this information and our products may be used, we do not guarantee the applicability of the accuracy of this information or the suitability of our products in any given situation. Users should conduct their own tests to determine the suitability of each product for their particular purposes. Data in the physical property table represents typical values and are to serve only as a guide for engineering design. Results are obtained from specimens under ideal laboratory conditions. Right to change physical properties as a result of technical progress is reserved. THE PRODUCTS DISCUSSED ARE SOLD WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, EITHER EXPRESSED OR IMPLIED, EXCEPT AS PROVIDED IN OUR STANDARD TERMS AND CONDITIONS OF SALE. Buyer assumes all responsibility for loss or damage arising from the handling and use of our products, whether done in accordance with directions or not. In no event shall the supplier or the manufacturer be liable for incidental or consequential damages. Also, statements concerning the possible use of our products are not intended as recommendations to use our products in the infringement of any patent. Consult local code and regulatory agencies for specific requirements regarding code compliance, transporting, processing, recycling and disposal of our product. Product not intended for use as a heat resistant surface. Texture, product grade and other conditions may cause variations in appearance.

This information supersedes all previously published data.