

Direct bonding to MonoPan® with untreated / unpainted surface

Adhesive bonding to materials with low surface energy such as MonoPan® requires a special surface treatment upfront and should be done properly and carefully to provide strong and lasting connections.

Following table shows a selection of possible adhesive systems:

Strength	Application	Manufacturer	System*	Processing	Remarks
+	Strips / Profiles	SABA	Cleaner 48 Primer 4518 Sabatack 750 / 780	1-component-gun / 1-component-application system	Cured after 1 week (humidify surroundings!) Application temperature +15 to +30 °C
+	Small parts / Profiles	3M	Hotmelt: 3764 TC or 3748 TC	Hotmelt gun	Cured after cooling down. Tempering base materials possible necessary before bonding.
++	Small parts / Profiles	3M	DP8005 or DP8010	2-component-application system	Cured after 1-2 days Processing temperature +10 to +30 °C
++	Small parts	Sichel	PowerPrimer Superglue 99	Low viscosity: manual application	Resilient after ca. 1-2 days Application temperature +10 to +30 °C

*: surfaces to be bonded have to be clean and free of grease/oil, even if no cleaner is specified.

The column "Remarks" shows our customers' experience, however, it does not provide exact product properties and we do not take any warranties. In any case you should follow carefully the instructions provided by the manufacturer of the adhesives used.

The SABA adhesive systems have proved to be extremely well suitable for applications, especially in commercial bodybuilding. For this system the process information is given below and could be retrieved directly from the supplier:

Process steps:

1. Clean with SABA cleaner 48
2. Prepare with surface primer with: SABA 4518
3. Bond with adhesive: SABA Sabatack 750 or 780

Bonding details:

- Before applying the adhesives please be sure to humidify the surrounding providing moisture for the adhesive to cure. Do not wet the bonding surfaces
- Apply the adhesive
- Wait 2 to 3 minutes for the adhesive to take up the moisture
- Join the parts.
- let the connection cure

Bonding after surface treatment

Surface treatments are very useful make effective preparations for bonding, e.g. Plasma-, Corona treatment and flaming. For smaller parts fluorination is also very good.

Please get advised from companies providing the services or machinery concerning these surface treatments.

Bonding to a painted surface

Bonding to pre-painted MonoPan® is less critical than on unpainted. The Paint system with adhesion promoter already provides the necessary adhesion to the low surface energy material. However it is of importance to use adhesive systems that are compatible with the paint system. The following list shows our selection of possible adhesives.

In case of 1-component.adhesive please note, that the adhesive can cure (necessary access of humidity and air). In case of doubt please use a 2-component-adhesive system.

Strength	Application	Manufacturer	System*	Processing	Remarks
+	Strips / Profiles	Sika	Activator Sikaflex 252	1-component-gun / 1-component-application system	Cured after 1-2 weeks (uncritical when rivets are use additionally) Application temperature +10 to +30 °C Cured after ca. 2 days Application temperature +10 to +30 °C
+	Strips / Profiles	Sika	Activator Sikaflex 254+Booster	2-component-application system	Cured after 1-2 weeks (uncritical when rivets are use additionally) Application temperature +10 to +30 °C Cured after ca. 2 days Application temperature +10 to +30 °C
+	Strips / Profiles	Kömmerling	Körabond HG 81 Körapop 225	1-component-gun / 1-component-application system	Fully cured after 1 week (uncritical when rivets are use additionally) Application temperature +5 to +30 °C
+	Strips / Profiles	Kömmerling	Körabond HG 81 Körapop 225 / 2K	MIXPAC®-2K- Pneumat gun or 2-component-application system	Cured after ca. 2 days Application temperature +10 to +30 °C
+	Strips / Profiles	SABA	Sealtack 750 oder 780	1-component-gun / 1-component-application system	Cured after 1 week (humidify surroundings!) Application temperature +15 to +30 °C

*: surfaces to be bonded have to be clean and free of grease/oil, even if no cleaner is specified.

Please follow the instructions provided by the adhesive manufacturer in all cases, with are the only safe information. Wihag Composites does not give any guaranties in that matter.

Further information on the adhesive manufacturers can be found on following internet addresses:

www.saba-adhesives.com
www.mmm.de
www.sichel.de
www.sika.de
www.titgemeyer.de
www.koe-chemie.de

For applications, treatment and storage please pay attention to the „Technical Data Sheet“ of the manufacturer.

The specifications in this data sheet represent the current state of our technical knowledge and its purpose is to inform about MonoPan® and its applications. The specifications therefore do not guarantee particular properties or suitability for a specific application. We reserve the right to make changes in accordance with technological processes and other developments. We guarantee faultless quality in accordance with our conditions of sale.