

Direct bonding to the Omnia panel with untreated/unpainted surface

Adhesive bonding to materials with low surface energy, i.e. the Omnia Panel should only be done by suitably qualified personnel.

The following table shows a selection of possible adhesive systems:

Strength	Application	Manufacturer	System*	Processing	Remarks
+	Strips, Profiles	SABA	Cleaner 48 Primer 4518 Sealtack 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	Tempering base materials possibly necessary before bonding.
++	Small parts, Profiles	3M	DP8005	2-component application system	Fully cured after 1-2 days Application temperature +10 to +30 °C
++	Small parts	Sichel	PowerPrimer Superglue 99	Low viscosity: manual application	Fully cured after 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 "Remarks" column shows values from our experience; however it gives no guaranteed product properties. Please follow the instructions provided by the adhesive manufacturer in all cases.

The SABA adhesive system has proved to be especially suitable for transport applications. For this system the processing information is:

Process steps: Bonding details:

1. Clean with SABA cleaner 48
 - Before applying the adhesive be sure to humidify the surroundings, providing moisture for the adhesive to cure. Do not wet the bonding surfaces.
2. Prepare with surface primer SABA 4518
3. Bond with adhesive SABA Sealtack 750 or 780
 - Apply adhesive
 - Wait 2-3 minutes for the adhesive to absorb the moisture.
 - Join parts.
 - Leave to cure (~3 days)

Bonding after surface treatment

Surface treatments are very useful and effective as preparation for bonding, e.g. plasma or corona treatment and flaming. For smaller parts fluorination is also very good.

Please seek advice from companies providing these services or machinery concerning the mentioned surface treatments.

Bonding to a painted surface

Bonding to pre-painted Omnia panel is less critical than on unpainted. The paint with adhesion promoter already provides the necessary adhesion to the low surface energy material. However it is of utmost 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 verify 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 (not critical when rivets are used in addition) Application temperature +10 to +30 °C
+	strips, profiles	Sika	Activator Sikaflex 254+Booster	2-component application system	Cured after approx. 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 (not critical when rivets are used in addition) Application temperature +5 to +30 °C
+	strips, profiles	Kömmerling	Körabond HG 81 Körapop 225 / 2K	MIXPAC®-2KPneumat Gun or 2-component application system	Cured after approx. 2 days Application temperature +10 to +30 °C
+	strips, profiles	SABA	Sealtack 750 or 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.

The above information details our experience with the adhesion systems; however please follow the applicable instructions provided by the adhesive manufacturer in all cases.

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

www.saba.nl or their dealer in the UK:

www.chemique.co.uk

www.3m.com

www.sika.co.uk

www.titgemeyer.de

www.sichel.de

www.koe-chemie.de

For applications, treatment and storage please pay attention to the manufacturer's technical data sheets.

The specifications in this data sheet represent the current state of our technical knowledge and its purpose is to inform about the Omnia Panel 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.