



Info sheet 202

Bonding onto ship decks with Sabatack 750 (XL) and Sabadeck (Fast)



SABA Dinxperlo BV

Industriestraat 3 NL-7091 DC Dinxperlo PO Box 3 NL-7090 AA Dinxperlo T +31 (0)315 65 89 99 F +31 (0)315 65 89 89 E info@saba.nl www.saba.nl

Our recommendations and instructions for use are based on the present status of know-how and technique. Clients and users should evaluate our products by themselves, with regard to utilization and requirements of their own choice. We shall take no responsibility in case our products are not being used subject to our recommendations and/or instructions for use. Furthermore, General Terms and Conditions of SABA Dinxperlo BV will apply to our recommendations, instructions for use and the delivery of our products.

Version number: 2010-11-08, replaces all previous versions

Page 1 of 6



1. Introduction

The SABA Marine product range consists of various sealing and bonding products for the professional boat and yacht builder. This info sheet describes how various types of decking can be bonded using SABA products.

In addition to various types of wood, including teak, ship decks can also be covered with synthetic decking that is often supplied on a roll. Dependent on the type of decking and the method of use, SABA recommends using various products to obtain a durable bond that is resistant to freshwater and saltwater.

2. Choice of product

Wooden (teak) decking

Wooden (teak) decking can be structurally bonded as standard using Sabadeck. When a rapid, controlled bond is required or when a vacuum pump is used in the bonding process, SABA recommends using Sabadeck Fast. The drawing below illustrates the use of Sabadeck (Fast):



Direct bonding of a teak component onto a ship deck using Sabadeck (Fast)

Strips of synthetic decking

Strips of synthetic decking including PVC and modified cork can be structurally bonded using Sabadeck. If the synthetic decking is on a roll and therefore the material is under tension, SABA recommends using Sabatack 750 or Sabatack 750 XL. Both products offer a higher initial bond than Sabadeck and therefore are better able to handle the tension in the material. For a fast, controlled bond of (large) surfaces or when a vacuum pump is used in the bonding process, SABA recommends - as it does for teak and other wood - using Sabadeck Fast.



Technical information	Sabatack 750	Sabatack 750 XL	Sabadeck	Sabadeck Fast
Skin time	approx. 10 minutes	approx. 15 minutes	approx. 15 minutes	approx. 15 minutes
Open time	approx. 12 minutes	approx. 30 minutes	approx. 60 minutes	approx. 60 minutes
Tack free	after approx. 4 hours	after approx. 4 hours	after approx. 48 hours	after approx. 48 hours
Viscosity	medium	medium	low	low
Hardness Shore A	approx. 55	approx. 55	approx. 35	approx. 35
Cure rate	approx. 3 mm/24 hours	approx. 3 mm/24 hours	approx. 2 mm/24 hours	n.a., controlled polymerisation
Modulus at 100%	approx. 1.5 N/mm ²	approx. 1.5 N/mm ²	approx. 0.7 N/mm ²	approx. 0.7 N/mm ²
Tensile strength	approx. 2.6 N/mm ²	approx. 2.6 N/mm ²	approx. 2.0 N/mm ²	approx. 2.0 N/mm ²
Elongation at break	approx. 330%	approx. 330%	approx. 426%	approx. 426%
Paintable based on test data	yes	yes	No	no
Temperature resistance	-40 °C to +120 °C	-40 °C to +120 °C	-30 °C to +80 °C	-30 °C to +80 °C
Working temperature	+5 °C to + 35 °C	+5 °C to + 35 °C	+5 °C to + 35 °C	+5 °C to + 35 °C
Certificates	Germ. Lloyd, WRAS, Wheelmark, ISEGA	Germ. Lloyd, WRAS, Wheelmark, ISEGA	Wheelmark	Wheelmark

3. Working method

Note:

- When applying the product/s, protect your work from sunshine and rain.
- Work in a draught and dust-free area.
- The air temperature during application must be at least 5 °C and at the maximum 35 °C.
- The temperature of the surfaces to be bonded must be at least 3 °C above the dew-point. The dew-point can be derived from the air temperature and the air humidity.
- The bonding surfaces must be sufficiently dry; the maximum moisture is 14%. The moisture percentage can be measured using a 'protimeter' or a similar device.
- Consult the SABA Marine pre-treatment table for the cleaners and primers to use.

Before and when applying the product/s, record the conditions, the product/s used, the charge numbers and the activities carried out in the SABA Marine work list. This to guarantee the quality of your project. The SABA Marine work list is included at the back of this info sheet.

3.1 Pre-treatment

3.1.1 Cleaning and degreasing the surfaces to be bonded

Completely remove any old layers of adhesive, thus creating two clean bonding surfaces. In addition, the bonding surfaces must be free of contamination, including oils, grease, corrosion, mill scale and dust.



Degrease the bonding surfaces using a cleaner. The choice of cleaner depends on the type of material of the ship deck and the type of decking. The products to use for pre-treatment are listed in the SABA Marine pre-treatment table. Use a (lint free) clean cloth or roller to apply the cleaner.

Note:

- Allow the cleaner to thoroughly evaporate.
- The bonding surfaces of the ship deck and the decking must be pre-treated. In practice, this can mean that a maximum of two different cleaners and/or two different primers must be used to create a single bond.
- Degrease new polyester several times. Allow substances to thoroughly evaporate from the substrate (it must be free of styrene).
- To achieve a better mechanical bond on the substrate, we recommend that it be lightly sanded and degreased.

3.1.2 Priming the bonding surfaces

After cleaning and degreasing, the surfaces can, if applicable, be primed. The choice of primer depends on the type of surface and can be determined by using the SABA Marine pre-treatment table. Apply a thin, even layer of primer to the surface using a brush or a primer applicator.

Note:

- Allow the primer to thoroughly evaporate.

3.2 Application method

When applying the 1-component products in 600 ml sausages or 290 ml cartridges, use a manual or air-powered gun. When using Sabadeck Fast, the two components must first be mixed. Part B in the sausage should be added to Part A and then mixed into a homogenous whole either manually using a spatula or electrically using an electrical mixing wand.



Apply using a spreader

Apply Sabadeck (Fast) or Sabatack 750 (XL) using an adhesive spreader, so that an even and complete layer of between a minimum of 2 and a maximum of 5 mm is created between the substrate and the decking to be bonded. This is important to prevent water penetrating from under the ship deck. To fill local uneven areas, a maximum layer thickness of 10 mm is allowed.



3.3 Holding in position and allowing to cure

After bonding the decking to the substrate, it must be held in position. This can be accomplished using mechanical fasteners (screws), by applying even pressure using props or struts or by using a vacuum pump. A condition is that sufficient force must be applied and it must be maintained during the entire curing time.

Note:

- A vacuum pump can only be used in combination with Sabadeck Fast.
- Allow the bonded deck to cure sufficiently, before sealing it.

Curing system

Sabadeck (Fast) and Sabatack 750 (XL) are (air) humidity-curing systems. Therefore, take the weather conditions into account. In particular the temperature and the air humidity influence the application time and curing rate. The advantage of Sabadeck Fast is that the product is insensitive to the degree of air humidity as the second component controls the degree of humidity itself (controlled polymerisation).

Product	Curing rate in mm per 24 hours at 23 °C and 75% relative air humidity
Sabadeck	2 mm
Sabadeck Fast	n.a., controlled polymerisation
Sabatack 750 (XL)	3 mm

4. Repair and maintenance

Remove remains of old sealant and adhesive entirely. Then build up an entirely new bond or seal.

5. Pre-treatment table

For the correct pre-treatment of the substrates to be bonded, please consult the SABA Marine pre-treatment table.

6. References

- Safety Data Sheet Sabadeck, Sabadeck Fast, Sabatack 750, Sabatack 750 XL
- Product Data Sheet Sabadeck, Sabadeck Fast, Sabatack 750, Sabatack 750 XL
- SABA Marine pre-treatment table



SABA Marine work list

A. Project details:

Activities performed by:

Date:

Location:

Project name:

Project no:

Any 'previous' sealing system (only when replacing the old seal):

B. Pre-treatment:

Product	Charge number(s)	Explanation
Sabaclean 21		
Sabaclean 48		
SABA Primer Marine		
SABA Primer 9002		
SABA Primer 9102		

C. Products used:

Product	Packaging	Number	Charge number(s)
Sabadeck			
Sabadeck Fast			
Sabacaulk			
Sabatack 720			
Sabatack 750			
Sabatack 750 XL			
Sabatack 760			
Sabatack 760 XL			
Sabatack 780			

D. Measured application conditions:

Activity	Bonding	Priming	Sealing
Time			
Air temperature (°C)			
Relative air humidity (%)			
Dew-point (°C) from table			
Temperature of bonding surfaces (°C)			
Humidity of bonding surfaces (%)			

Work situation: open air conditioned

E. Situation sketch / comments:

SABA Dinxperlo BV

Industriestraat 3 NL-7091 DC Dinxperlo PO Box 3 NL-7090 AA Dinxperlo T +31 (0)315 65 89 99 F +31 (0)315 65 89 89 E info@saba.nl www.saba.nl

Our recommendations and instructions for use are based on the present status of know-how and technique. Clients and users should evaluate our products by themselves, with regard to utilization and requirements of their own choice. We shall take no responsibility in case our products are not being used subject to our recommendations and/or instructions for use. Furthermore, General Terms and Conditions of SABA Dinxperlo BV will apply to our recommendations, instructions for use and the delivery of our products.