



BEDDING AND SEALING FITTINGS AND HARDWARE

GENERAL DESCRIPTION

All kinds of deck fittings and hardware need to be securely fixed and totally watertight. Some of these fittings can be subject to very high forces, such as tensile, torsion and shear stresses. Poorly sealed joints can suffer serious damage such as metal corrosion, osmosis and water leaks which can cause damage to interior furnishings and fittings.

BEDDING AND SEALING OF FITTINGS SUBJECT TO HIGH MECHANICAL STRESSES

Deck fittings such as chain plates, winches and guide rollers must absorb very high dynamic stresses.

For this purpose a high-performance product, such as Sikaflex®-292i, should be used in conjunction with additional mechanical fixings.

BEDDING AND SEALING OF FITTINGS SUBJECT TO MINIMAL MECHANICAL STRESSES





Deck fittings, such as ventilators and cover strips, need to be waterproofed, but are not subject to high tensile or torsion stresses.

These fittings can be effectively bedded and sealed with only Sikaflex®-291i or if the joint remains visible and is exposed to weathering, the use of Sikaflex®-295 UV is recommended.



BEDDING AND SEALING FITTINGS AND HARDWARE

SUBSTRATE PREPARATION






TIMBER DECKS

	Abrade the contact area on the deck with a sanding pad (80 / 100 grit)
	Remove the dust with a vacuum cleaner
	Apply a thin, continuous coat of Sika® MultiPrimer Marine using a clean brush or a roller felt applicator.
	Drying times: Sika® MultiPrimer Marine 30 minutes (min) to 24 hours (max)

PAINTED DECKS






	Pre-treat the substrate with Sika® Aktivator-100, using a clean, lint-free rag or a paper towel. Change the rag frequently!
	Flash-off: 10 minutes (min) to 2 hours (max)

BRONZE, BRASS OR STAINLESS STEEL FITTINGS






	Slightly abrade the contact area with a very fine sanding paper or abrasive pad
	Pre-treat the substrate with Sika® Aktivator-100, using a clean, lint-free rag or a paper towel. Change the rag frequently!
	Flash-off: 10 minutes (min) to 2 hours (max)
	Apply a thin, continuous coat of Sika® MultiPrimer Marine, using a clean brush or a felt applicator
	Drying time: 30 minutes (min) to 24 hours (max)

For coloured metals please use only Sikaflex®-295 UV or Sikaflex®-591.

ALUMINUM FITTINGS

	Lightly abrade the contact area with a very fine sanding paper
	Pre-treat the substrate with Sika® Aktivator-100, using a clean, lint-free rag or a paper towel. Change the rag frequently!
	Flash-off: 10 minutes (min) to 2 hours (max)
	Apply a thin, continuous coat of Sika® MultiPrimer Marine, using a clean brush or a felt applicator
	Drying time: 30 minutes (min) to 24 hours (max)

APPLICATION OF Sikaflex®-291i, -292i OR -295 UV ADHESIVES

	Mask the surrounding area before priming and sealing
	These adhesives should be applied to the deck and to the screw fixing holes in a bead of the required thickness. The fitting should then be pressed into position
	The fixing screws should be tightened slightly to leave about 1 mm of adhesive under the fitting
	Use a plastic spatula to remove excess sealant squeezed out around the edges and remove the masking tape
	After 24 hours tighten the screws

IMPORTANT:
For the preparation of other substrates, please refer to the Sika Pre-Treatment Charts for Marine Applications.



Fig. 1 A selection of cleats that can be sealed or bonded using Sika adhesives



Fig. 2 Applying Sikaflex®-292i



Fig. 3 A port-hatch, both bonded and sealed using Sikaflex®



BONDING OF RUB RAILS AND FENDERS

GENERAL DESCRIPTION

Rub rails and fenders are designed to protect the hull of a vessel against damage. These act as a bumper to absorb impacts and scrapes, and the more elastic these are, the more effectively they perform this function.

The elastic behaviour varies according to the type of material used, so the shock-absorbing performance of the rub rail can be significantly improved by the use of an elastic adhesive joint. This provides maximum protection to the hull.

Rub rails of timber, PVC or polyurethane can be securely bonded to marine hulls using Sikaflex®-292i. The resulting elastic joint helps to absorb most of the shear and tensile stresses to which they are subjected when a vessel is docking or casting off.

If rub rails are secured with screws, a similar effect can be obtained by back-filling the rail profile with Sikaflex®-291i; a highly elastic polyurethane sealant. As well as absorbing torsional stresses, this technology also seals the screw holes and prevents water or dirt from getting behind the rub rail.










IMPORTANT:

If the rub rail has a different chemical composition and is not fixed using a mechanical fixing method, please seek advice from your local Sika company.

BONDING RUB RAILS TO THE HULL

SUBSTRATE PREPARATION

GRP HULLS

 208	Heavily soiled surfaces should first be cleaned off with a pure solvent, like Sika® Remover-208, to remove the worst of the soiling
	Lightly abrade the contact area with a very fine sanding pad
	Remove the dust with a vacuum cleaner
 SA 100	Pre-treat the substrate with Sika® Aktivator-100, using a clean, lint-free rag or a paper towel. Change the rag frequently!
	Flash-off: 10 minutes (min) to 2 hours (max)
 SMM	Apply a thin, continuous coat of Sika® MultiPrimer Marine, using a clean brush or a felt applicator
	Drying time: 30 minutes (min) to 24 hours (max)

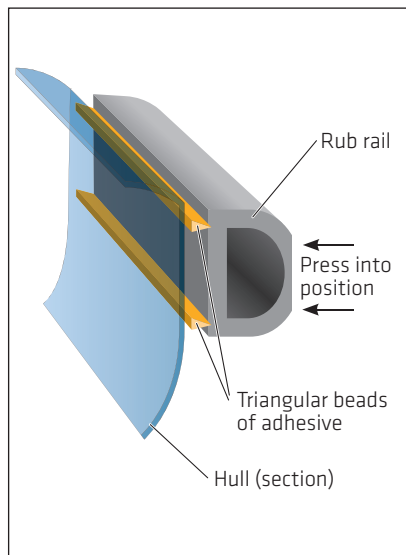








Fig. 4 Assembly of a rub rail







FINISHED PAINTED HULLS OF ALUMINUM OR STEEL, COATED WITH A TWO-PART LACQUER

 SA 100	Pre-treat the substrate with Sika® Aktivator-100, using a clean, lint-free rag or a paper towel. Change the rag frequently!
	Flash-off: 10 minutes (min) to 2 hours (max)









TIMBER RUB RAILS

	Abrade the contact area of the hull with a sanding pad (80 / 100 grit)
	Remove the dust with a vacuum cleaner
 SMM	Apply a thin, continuous coat of Sika® MultiPrimer Marine using a clean brush or a felt applicator.
	Drying times: Sika® MultiPrimer Marine 30 minutes (min) to 24 hours (max)

MOULDED PVC OR POLYURETHANE RUB RAILS

	The bond face of the rub rails must be free from mould release agents or other chemical contaminants. All traces of such substances must be removed before proceeding with Sika® Remover-208
	Abrade the bond face of the rub rail with coarse sand paper (60 / 80 grit) to key the surface
 SA 205	Pre-treat the substrate with Sika® Aktivator-205 using a lint-free rag or paper towel. Change rag frequently.
	Flash-off min. 10 min to max 2h.
 SMM	Apply a thin continuous coat of Sika® MultiPrimer Marine using a clean brush or felt applicator
	Drying time: 30 minutes (min) to 24 hours (max)

APPLICATION OF Sikaflex®-292i OR Sikaflex®-291i

	Apply a masking tape on the substrate
 292i 291i	Apply Sikaflex®-292i (or Sikaflex®-291i) if rub rails are to be held using additional mechanical fixings) to the bond area using an appropriate triangular bead (Fig.1)
	Assemble the components within 20 minutes of applying the adhesive
	Press the rub rail into place, either directly onto the face of the hull
	Use clamps, etc., to hold the rub rail in position while the adhesive sets. If the rub rail is to be secured with mechanical fixings, any holes should also be filled with adhesive
	Remove excessive adhesive and the masking tape
 208	Uncured Sika adhesives or sealants can be removed with Sika® Remover-208
	Clamps and other fastening aids can be removed after 24 hours. Full service strength is attained after approximately 7 days

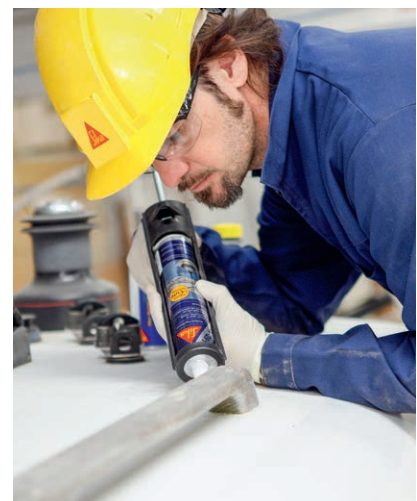


Fig. 5 Sealing the edge of a chrome hand-rail