Sealing Areas Exposed to UV Radiation

Application Description

On modern ships, yachts and motor boats the joints between different materials must be sealed for water-proofing, corrosion, etc. But they must also supply an aesthetic finish to the joint.

High-performance sealant joints can be made with conventional one-component, polyurethane-based systems, which, due to their excellent adhesion to various substrates, allow permanent elasticity and resistance against water ingress and corrosion.

Conventional polyurethane sealants, however, exhibit some sensitivity to UV radiation. After prolonged periods of exposure the joint may show fine cracks and degradation at the surface. This does not affect the sealing properties, as it is only a surface blemish. If a durable surface aspect is required, a specifically formulated, UV-resistant polyurethane should be used.

Most vessels and in particular, luxury yachts, require a large number of such joints and hence require the use of a high-durability sealant. Sikaflex®-295 UV provides excellent resistance against solar UV radiation and seawater attack.

Sikaflex®-295 UV is therefore particularly suited for sealing such areas as deck fittings, hatches and window rebates.

Performing UV-Resistant Sealing Applications

Substrate Preparation

Wood

	Abrade the contact area on the hull with a sanding pad (80/100 grit)
	Remove the dust with a vacuum cleaner
215	*Apply a thin, continuous coat of Sika® Primer-215, using a clean brush or a felt applicator.*
	Drying time: Sika® Primer-215 - 30 minutes (min) to 24 hours (max)

Aluminium and Stainless Steel

205 Aktivator	*Pretreat the substrate with Sika® Aktivator or Sika® Aktivator 205, using a clean, lint-free rag or a paper towel. Change the rag frequently! Sika® Aktivator must be applied with the wipe on/wipe off method.*
	Flash-off: 10 minutes (min) to 2 hours (max)

Fiberglass

	Lightly abrade the contact area with a very fine sanding pad
	Remove the dust with a vacuum cleaner
205 Aktivator	*Pretreat the substrate with Sika® Aktivator or Sika® Aktivator 205, using a clean, lint-free rag or a paper towel. Change the rag frequently! Sika® Aktivator must be applied with the wipe on/wipe off method.*
	Flash-off: 10 minutes (min) to 2 hours (max)
206 G+P 215	*Apply a thin, continuous coat of Sika® Primer-206 G+P or Sika® Primer-215, using a clean brush or a felt applicator*
	Drying time: 30 minutes (min) to 24 hours (max)

Acrylic and Polyurethane-Based Paint

205 Aktivator	*Pretreat the substrate with Sika® Aktivator or Sika® Aktivator 205, using a clean, lint-free rag or a paper towel. Change the rag frequently! Sika® Aktivator must be applied with the wipe on/wipe off method.*
	Flash-off: minimum 10 minutes, maximum 2 hours

For the preparation of other substrates, please refer to the Primer Chart available at www.sikaindustry.com or contact your local Sika organisation.

Applying Sikaflex®-295 UV Adhesive

	Mask the surrounding area before priming and sealing
295 UV	*Sikaflex®-295 UV should be applied to the joint in a bead of the required dimensions taking care to avoid air entrapment*
N	*Use a plastic spatula to remove excess sealant squeezed out around the edges. Tool to a smooth finish within the tack-free time of the sealant using an appropriate tooling agent. Do NOT use alcohol or alcohol containing solvents.*
208	*Uncured Sika adhesives or sealants may be removed with Sika® Remover-208 or mineral spirits and remove the masking tape*

Do not use Sika® Aktivator or Sika® Aktivator 205 or any other cleaning agent or solvent for cleaning purposes

For bonding transparent substrate, please refer to Sika's Bonding and Sealing Organic Windows and Bonding and Sealing Mineral Glass guides at www.sikaindustry.com

Please consult Sika Technical Service Department if joints are prone to high dynamic stresses