

Bonding Timber Components



Description of the Application

In yachts and pleasure craft as well as in ocean-going vessels, stairs, companionways and handrails are frequently made from tropical hardwood, chosen both for their durability and their attractive appearance.

The use of screws to attach these fixtures can impair both their durability and their appearance as they are vulnerable to moisture gaining

access through the fixing holes. Hardwood components like these can be fixed with adhesives, where the absence of screw holes leaves the wood unimpaired and more resistant. This is of particular importance where the wood is load-bearing as in the construction of accommodation ladders.

Bonding also has other benefits. The resilient adhesive layer softens the sound of footsteps and cushions vibrations, the integrity of painted surfaces can be preserved without loss of corrosion protection, and the effects of moisture penetration are eliminated.

Bonding Procedure for Timber Components

Preparation of Substrate

Fiberglass

 208	Heavily soiled surfaces should first be cleaned off with a pure solvent (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
 205	Treat the substrate with Sika® Aktivator 205 or Sika® Aktivator, using a clean, lint-free rag or paper towel. Change the rag frequently!
	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)

Two-Part Lacquer Coated Material (Timber, Aluminum or Steel)

	Ensure that the treated metal deck is compatible with Sikaflex®-291 otherwise sandblast off the treatment down to the metallic surface and use the Level II pre-treatment from the Primer Chart at www.sikaindustry.com for the appropriate substrate.
	Lightly abrade the contact area with a very fine sanding pad
	Remove all dust with a vacuum cleaner
 205 Aktivator	Treat the substrate with Sika® Aktivator 205 or Sika® Aktivator, using a clean, lint-free rag or paper towel. Change the rag frequently!
	Flash-off: 10 minutes (min) to 2 hours (max)

Untreated Timber (Teak, Mahogany)

	Abrade the contact area on the hull with a sanding pad (80/100 grit)
	Remove the dust with a vacuum cleaner
 290 DC LOT	Apply a thin, continuous coat of Sika® Primer-290 DC LOT, using a clean brush or a felt applicator on Teak. Use Sika® Primer-215 on mahogany
	Drying times: Sika® Primer-290 DC LOT: 30 minutes (min) to 3 months (max) Sika® Primer-215: 30 minutes (min) to 24 hours (max)

Stainless Steel, e.g. Ladders

 208	Heavily soiled surfaces should first be cleaned off with a pure solvent (Sika® Remover-208) to remove the worst of the soiling
	Lightly abrade the contact area with a very fine abrasive pad
	Remove the dust with a vacuum cleaner
 Aktivator	Treat the substrate with Sika® Aktivator 205 or Sika® Aktivator, using a clean, lint-free rag or paper towel. Change the rag frequently!
	Flash-off: 10 minutes (min) to 2 hours (max)
 206 G+P 210	Apply a thin, continuous coat of Sika® Primer-206 G+P or Sika® Primer-210, using a clean brush or a felt applicator
	Drying time: 30 minutes (min) to 24 hrs (max)

For the preparation of other substrates, please refer to the Primer Chart available at www.sikaindustry.com.

Apply Sikaflex®-291 Adhesive

 291	Apply Sikaflex®-291 adhesive to the previously prepared surface and spread over the area to be covered using a spreader with 2 mm triangular notches. The thickness layer should be about 0.5 – 1 mm
	The timber component must be placed in position within 30 minutes of applying the adhesive, so the adhesive should be applied only to an area large enough to receive the section of covering and fix the component to ensure that the bonded composite is left for at least 24 hours

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



 Always refer to the current Sika Product Data Sheets and Material Safety Data Sheets obtainable through your local Sika Company