# Keel-to-Hull Joints

Industry

## Description of the Application

The joint between keel and hull is subjected to very high stresses, particularly when a boat is under sail or if it runs aground.

This critical joint must be designed and executed with great care to withstand these stresses.

The joint between the keel and the hull is particularly prone to leaks, which manifest themselves in the form of rust streaking and staining on the keel when the boat is removed from the water.


## Instructions for Making Keel-to-Hull Joints

### Preparation of the Substrate

***Aluminium Hulls***

*Heavily soiled surfaces should be cleaned off first 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.*

*Clean the substrate with Sika® Cleaner-205, using a clean, lint-free rag or a paper towel. Change rag frequently!*

*Drying time: minimum 10 minutes, maximum 2 hours.*

*Apply a thin, continuous coat of Sika® Primer-210 T, using a clean brush or a felt applicator.*

*Drying time: minimum 30 minutes, maximum 24 hours.*

***GRP Hulls***

*Heavily soiled surfaces should be cleaned off first with a pure solvent (Sika® Remover-208) to remove the worst of the soiling.*

*Lightly abrade contact area with a very fine sanding pad. Remove the dust with a vacuum cleaner.*

*Clean the substrate with Sika® Cleaner-205, using a clean, lint-free rag or a paper towel. Change rag frequently!*

*Drying time: minimum 10 minutes, maximum 2 hours.*

*Apply a thin, continuous coat of Sika® Primer-206 G+P or Sika® Primer-215, using a clean brush or felt applicator.*

*Drying time: minimum 30 minutes, maximum 24 hours.*

***Timber Hulls***

*Abrade the contact area on the hull with a sanding pad (80/100 grit) and remove the dust with a vacuum cleaner.*

*Apply a thin, continuous coat of Sika® Primer-290 DC, using a clean brush or a felt applicator.*

*Drying time: minimum 60 minutes, maximum 24 hours.*

***Steel Hulls, Coated with Two-Part Corrosion Protection Coating***

*Clean the substrate with Sika® Cleaner-205, using a clean, lint-free rag or a paper towel. Change rag frequently!*

*Drying time: minimum 10 minutes, maximum 2 hours.*

For the preparation of other substrates, please refer to the Primer Chart for Sika Marine Applications.

## Important Note

The bond face on the keel and the hull must also be wiped down with Sika® Cleaner-205. In case of lead keels, the contact area must additionally be given a coating with a two-part epoxy resin-based protective paint.Drying time: 24 hours minimum.

Note: All products sold subject to our current General Terms of Sale.
Please refer to the relevant Technical Data Sheet(s) and Safety Data Sheet(s) before using any of these products.

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Version 10/03

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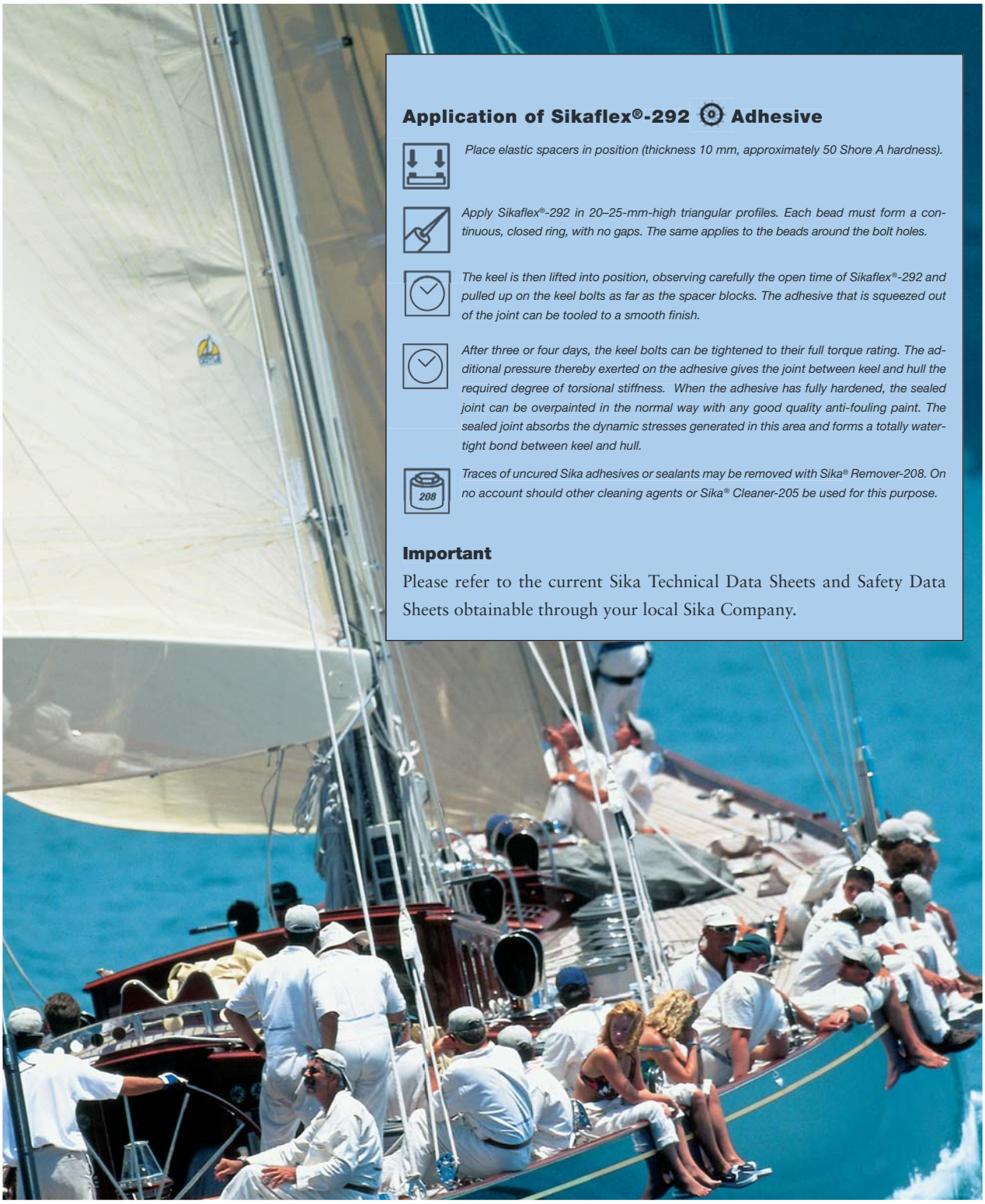

## Application of Sikaflex®-292 Adhesive

*Place elastic spacers in position (thickness 10 mm, approximately 50 Shore A hardness).*

*Apply Sikaflex®-292 in 20–25-mm-high triangular profiles. Each bead must form a continuous, closed ring, with no gaps. The same applies to the beads around the bolt holes.*

*The keel is then lifted into position, observing carefully the open time of Sikaflex®-292 and pulled up on the keel bolts as far as the spacer blocks. The adhesive that is squeezed out of the joint can be tooled to a smooth finish.*

*After three or four days, the keel bolts can be tightened to their full torque rating. The additional pressure thereby exerted on the adhesive gives the joint between keel and hull the required degree of torsional stiffness. When the adhesive has fully hardened, the sealed joint can be overpainted in the normal way with any good quality anti-fouling paint. The sealed joint absorbs the dynamic stresses generated in this area and forms a totally watertight bond between keel and hull.*

*Traces of uncured Sika adhesives or sealants may be removed with Sika® Remover-208. On no account should other cleaning agents or Sika® Cleaner-205 be used for this purpose.*

**Important**

Please refer to the current Sika Technical Data Sheets and Safety Data Sheets obtainable through your local Sika Company.



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