

# Sealing and bonding mineral glazing

## APPLICATION DESCRIPTION

The direct mineral glazing into frames or directly into the hull or deck, requires a full understanding of all the important principles involved.

It is essential that the glass meets all the demands and standards required for the intended application, such as IMO resolutions or other regulations as laid down by the classification societies.

In case of self cleaning glass we ask you to consult the Corporate Technical Service Sika Industry.

The adhesive bond line must be protected against UV radiation.

This may be achieved using several materials and methods:

- Using a black, ceramic coated border with a light transmission of less than 0.01%.



### IMPORTANT:

Local and international rules for maritime constructions and appropriate legislation must always be observed.



# BONDING AND SEALING MINERAL GLASS WITH Sikaflex®-296

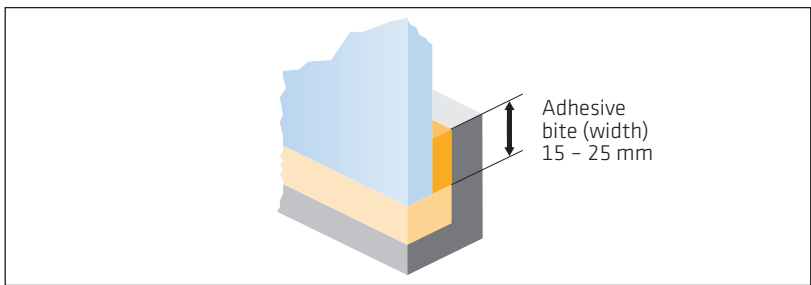
## ADHESIVE AND SEALANT DIMENSIONING

The dimensioning of the adhesive and the joint geometry must be carried out in accordance with Sika's basic rules of calculation. If deck movement is negligible the following dimensions are recommended.

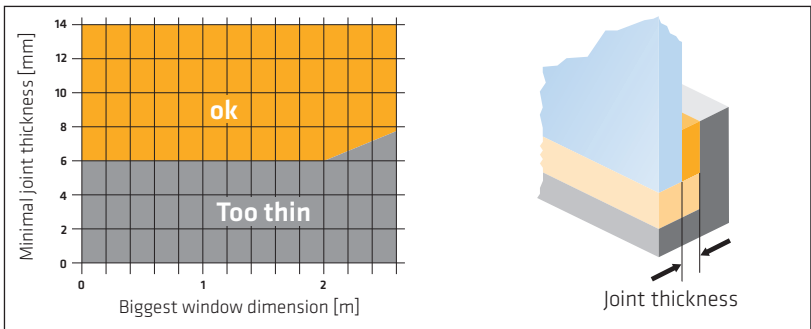
**IMPORTANT:**  
At all times recommendations from classification societies must be respected

Basis of calculation substrate aluminum-glass, wind load 2,4 kN/m<sup>2</sup>, ΔT = 40° C

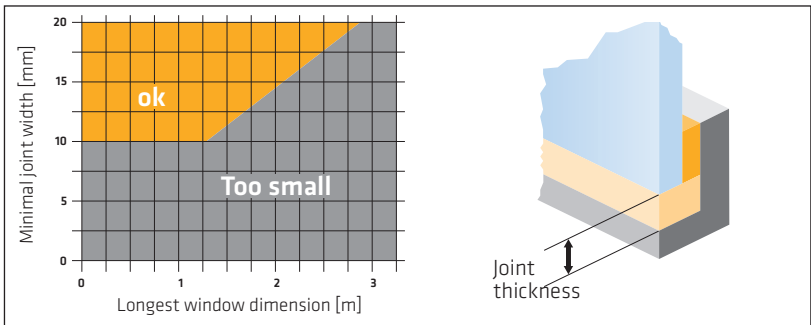
## DETERMINATION OF THE ADHESIVE WIDTH (BITE)



## ADHESIVE THICKNESS










## JOINT WIDTH



Note: For insulating glass or important projects consult Corporate Technical Service



## SUBSTRATE PREPARATION

### GRP FRAME





-  Lightly abrade the gel coat of the contact area with a very fine sanding pad
-  Remove the dust with a vacuum cleaner
-  Mask off any areas that need it
-  Pre-treat the substrate with Sika® Aktivator-205, using a clean, lint-free rag or paper towel. Change the rag frequently!  
**SA 205**
-  Flash-off: 10 minutes (min) to 2 hours (max)
-  Apply a thin, continuous coat of Sika® MultiPrimer Marine, using a clean brush or felt applicator  
**SMM**
-  Drying time: 30 minutes (min) to 24 hours (max)

For the preparation of other types of frames, please refer for the Pre-Treatment Chart for marine application.





### GLASS WITH EXTERNAL UV PROTECTION OR WITH BLACK CERAMIC BORDER (TRANSMISSION < 0.01%)





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



### GLASS WITH BLACK CERAMIC GLASS BORDER (TRANSMISSION > 0.01% VISIBLE LIGHT)

-  Pre-treat the substrate with Sika® Aktivator-100, using a clean, lint-free rag or paper towel. Change the rag frequently!  
**SA 100**
-  Flash-off: 10 minutes (min) to 2 hours (max)
-  Apply a thin, continuous coat of Sika® Primer-206 G+P, using a clean brush or felt applicator  
**206 G+P**
-  Drying time: 30 minutes (min) to 24 hours (max)

## APPLICATION OF Sikaflex®-296 ADHESIVE

	Place spacers in position. Depending on the size of the glazing panel, the thickness of the spacer should be chosen accordingly. Shore A hardness of the spacer approximately 40 or less
	Avoid interruption of the bead by the spacers
 296	Apply Sikaflex®-296 to the frame rebate or glazing panel using a triangular nozzle with a bead width of at least 10 mm
	Assemble all components within 20 minutes of applying the adhesive

	To prevent slip down of vertical glazing panels, distance blocks (wood or plastic) must be placed in the lower rebate during installation. After curing, these must be removed. The rebate gap must be at least 10 mm
	Clamps and other fastening aids can be removed after 24 hours. After this time, the expansion gap between glazing panel and the rebate should be filled and sealed with Sikaflex®-296. This sealant joint can be tooled to a smooth finish using Sika® Tooling Agent N. This must be carried out before skinning of the sealant
 296	
 Tooling	

	After tooling remove any masking tape before the adhesive skins over
 208	Uncured Sika adhesives or sealants can be removed with Sika® Remover-208



Pre-treatment of the ceramic ink area with Sika® Aktivator-100



Adhesive is applied to the window frame



The window is fitted