



Welkom

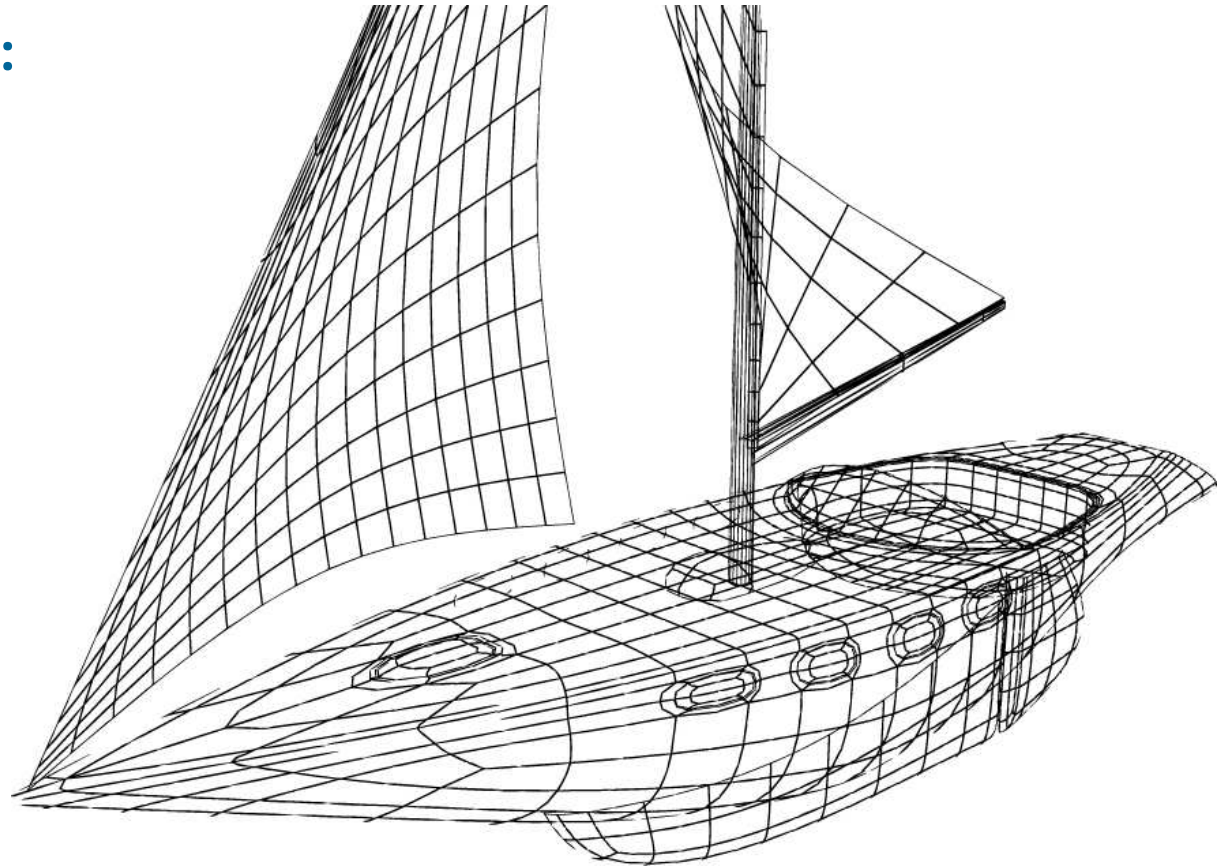
MANUAL FOR STRUCTURAL WINDOW BONDING MARINE



Manual for structural window bonding

Material used for windows:

- Glass (mineral)
- Acrylic (PMMA, organic)
- Carbonate (PC, organic)

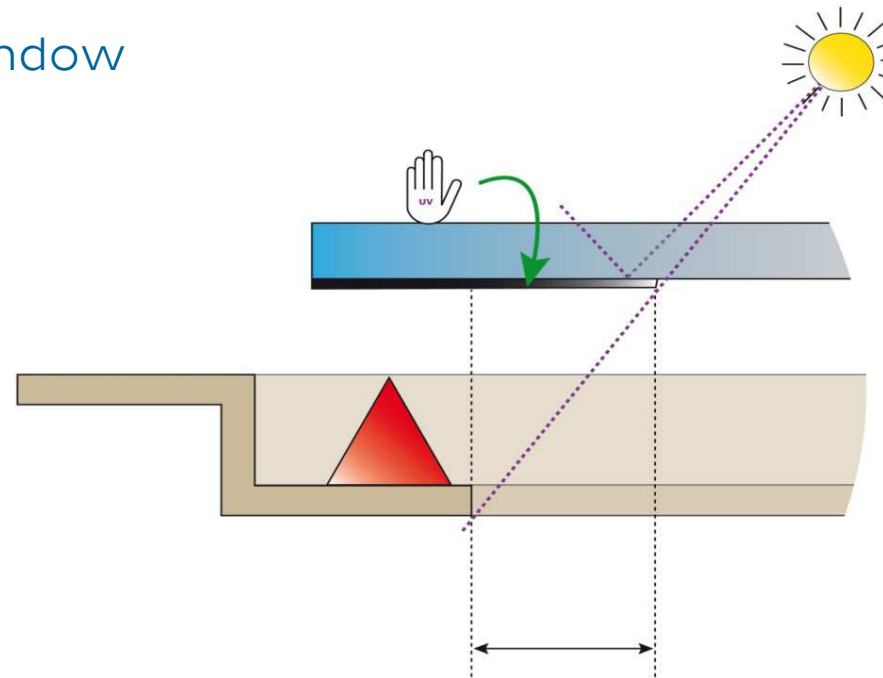


In general there are two options in windows

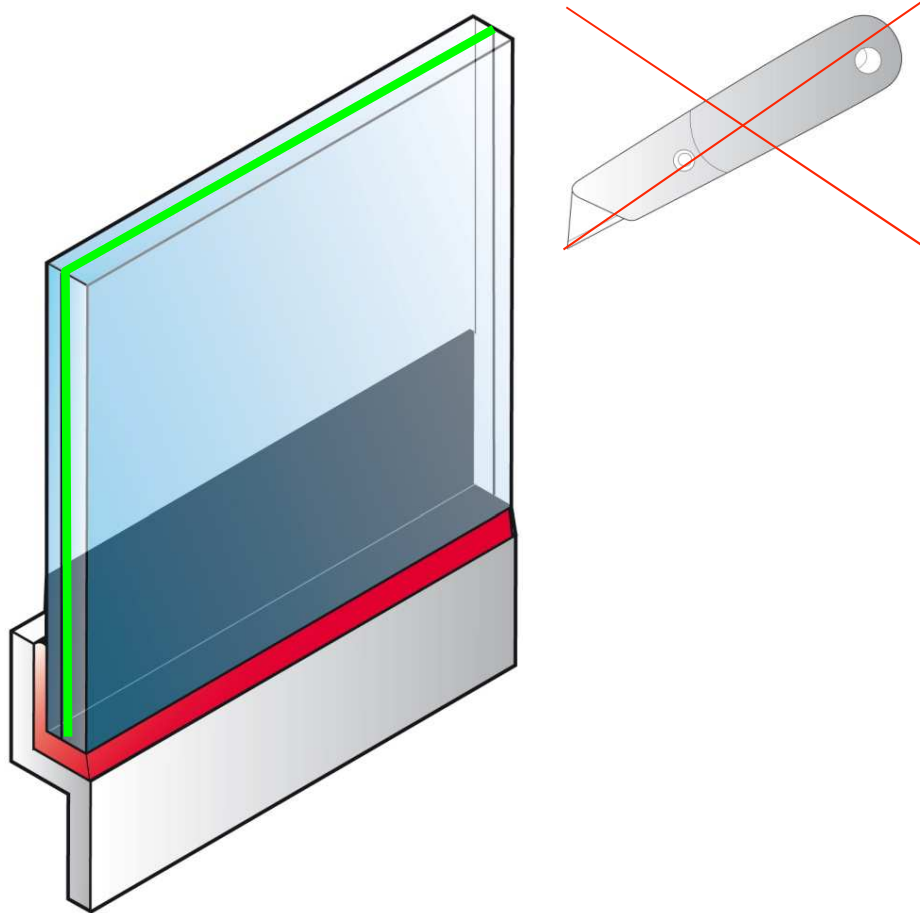
- Windows (Glass, PC, PMMA) with ceramic coating (frit)
- Windows (Glass, PC, PMMA) without ceramic coating

The ceramic coating has two functions

- Protection of the adhesive against UV
- Visual aspect of the bonded window



General info laminated windows



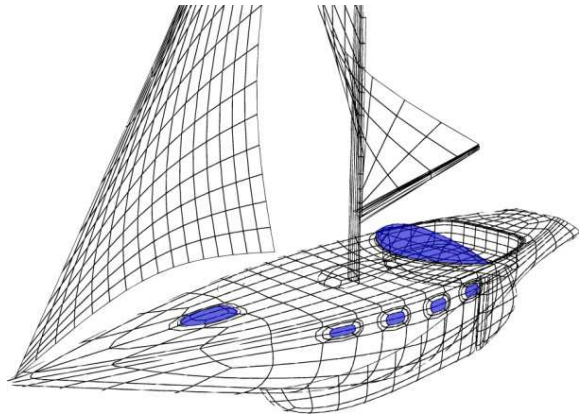
Hardened laminated glass with a PVB or resin inner layer

Added info regarding laminated windows:

- Do not cut squeezed out PVB foil away. PVB is in general a porous foil which contains an open cell structure and if damaged it can absorb water which can create white spots and delaminating between the two window panels
- Our MSR range will not harm any PVB or 2 K resin layer. But recommendations of the window supplier needs to be followed at any time.
- In general pre-treatments recommended by Bostik will not harm the PVB or the 2 K Resin layer used for laminated windows
- In general Prep G or Prep G plus will not harm the PVB or 2 K resin layer used for laminated windows
- Any damaged to PVB or 2 K resin layers needs to be avoided at any time, because it can influence the life time of the laminated window

Bostik products for window bonding and sealing

- SMP Technology
- High UV and water resistance
- Good durability



MSR Fast Tack



High initial tack

Bonding windows

Primerless adhesion

Plasticizer free

MSR Construction Adhesive (SSKF)



Easy workability



Bonding and sealing windows

Primerless adhesion

Plasticizer free

MSR Fast Tack

Viscous 1C SMP adhesive for **bonding** glass, acrylic and polycarbonate windows with high green strength.

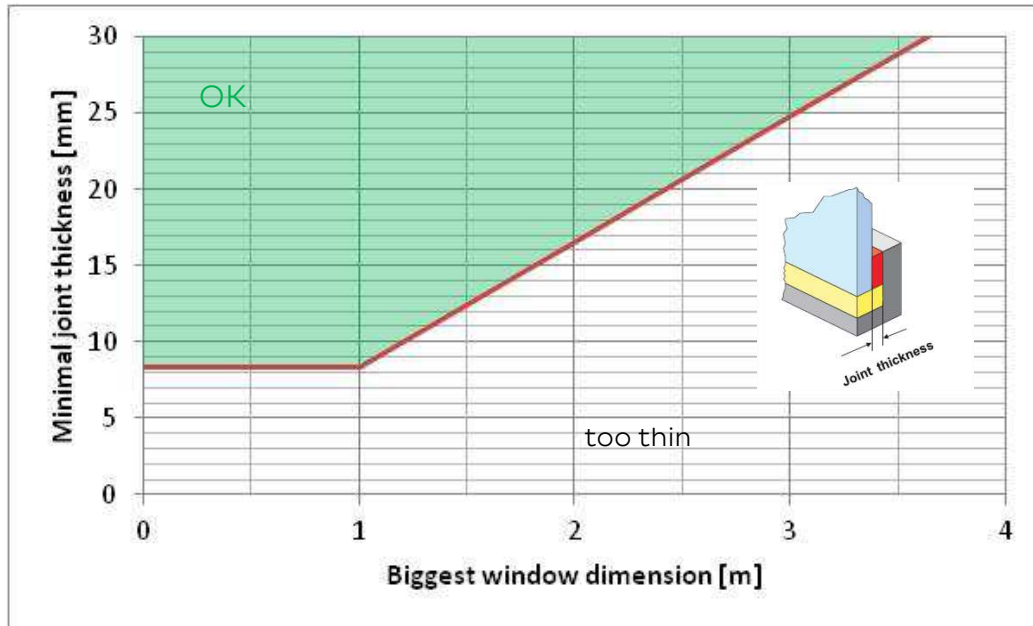
Specifications:

Open time	30 m
Shore A	60
Tensile stress at break	2.9 MPa
Tensile elongation at break	250%
Shear stress	2.4 MPa
Colour	Black and white

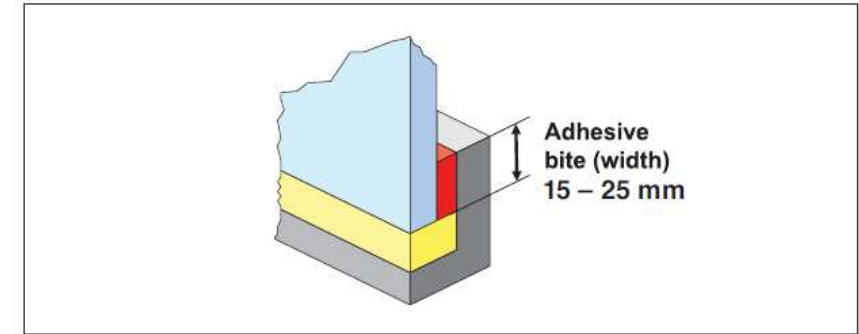
Can be used as Dual SMP

Adhesive dimensions for window bonding MSR FT*

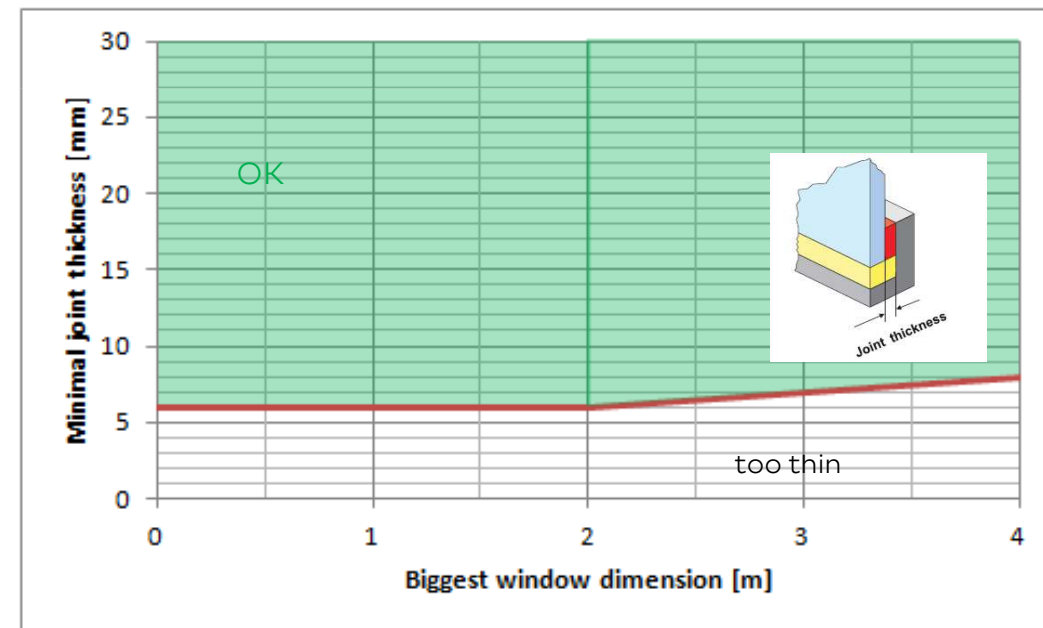
Joint thickness for organic (acrylic) windows



Adhesive width (bite)



Joint thickness for mineral (glass) windows



*these figures are based on standard figures, it is possible to calculate the exact dimensions needed for the application.

MSR Construction Adhesive

Medium viscous 1C SMP adhesive for **sealing and bonding** glass, acrylic and polycarbonate windows with easy workability.

Specifications:

Open time	15m
Shore A	55
Tensile stress at break	2.6 MPa
Tensile elongation at break	250%
Shear stress	2.5 MPa
Colour	Black, white, grey and brown

Can be used as Dual SMP

MSR Construction Adhesive SSKF

Medium viscous 1C SMP adhesive for **sealing and bonding** glass, acrylic and polycarbonate windows with easy workability and long open time.

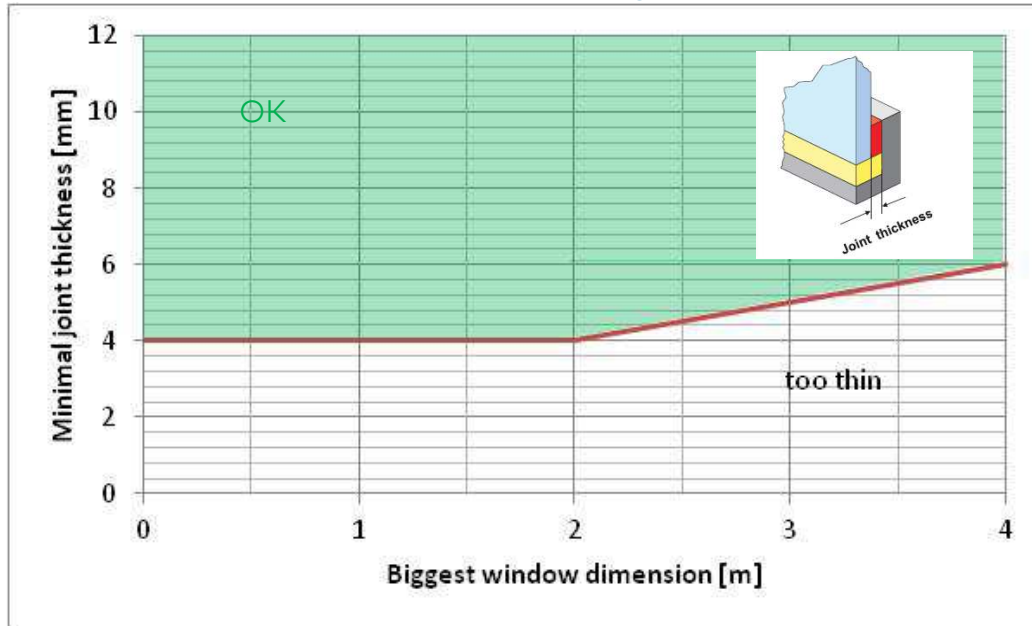
Specifications:

Open time	35m
Shore A	55
Tensile stress at break	2.6 MPa
Tensile elongation at break	250%
Shear stress	2.5 Mpa
Colour	Black, white, grey and brown

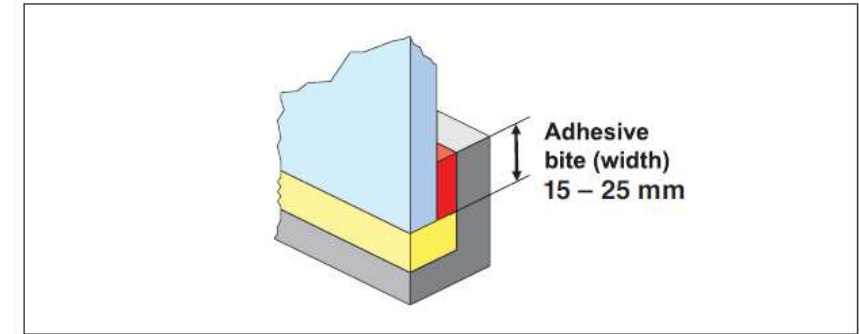
Can be used as Dual SMP

Adhesive dimensions for window bonding with MSR CA (SSKF)

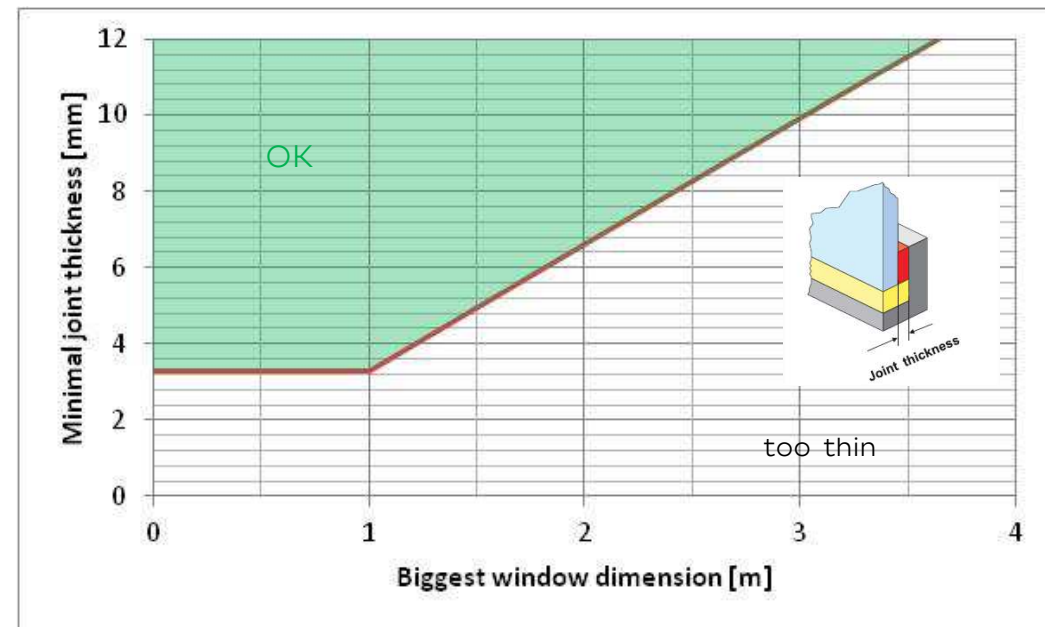
Joint thickness for mineral (glass) windows



Adhesive width (bite)



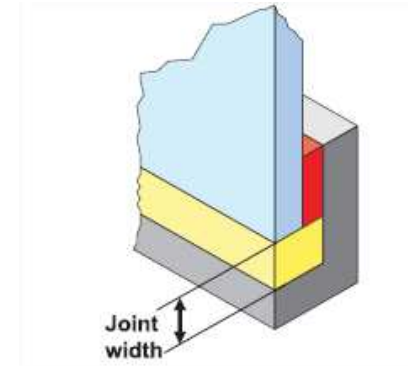
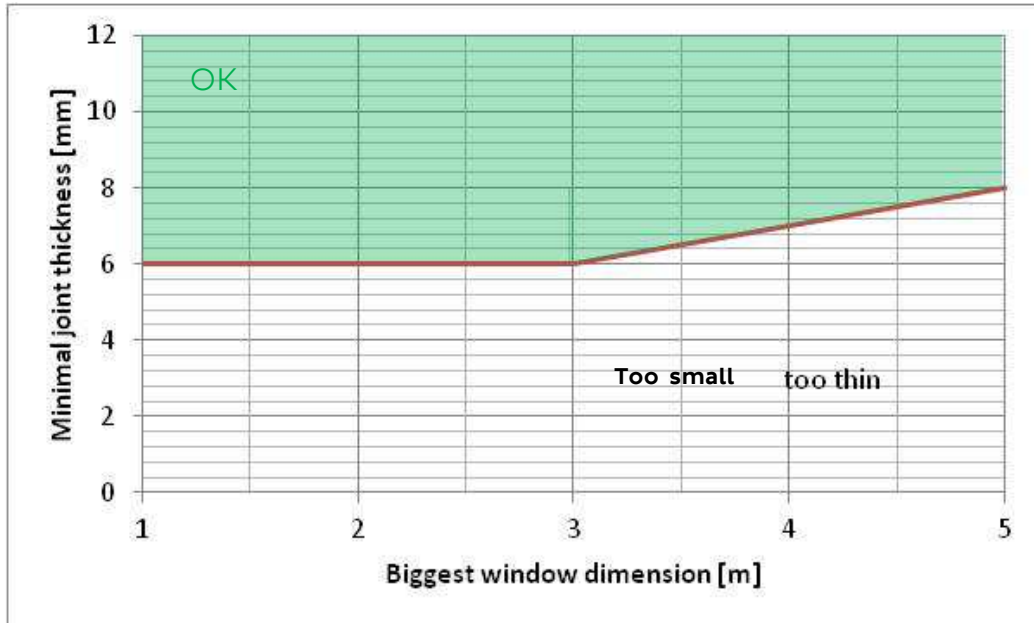
Joint thickness for organic (acrylic) windows



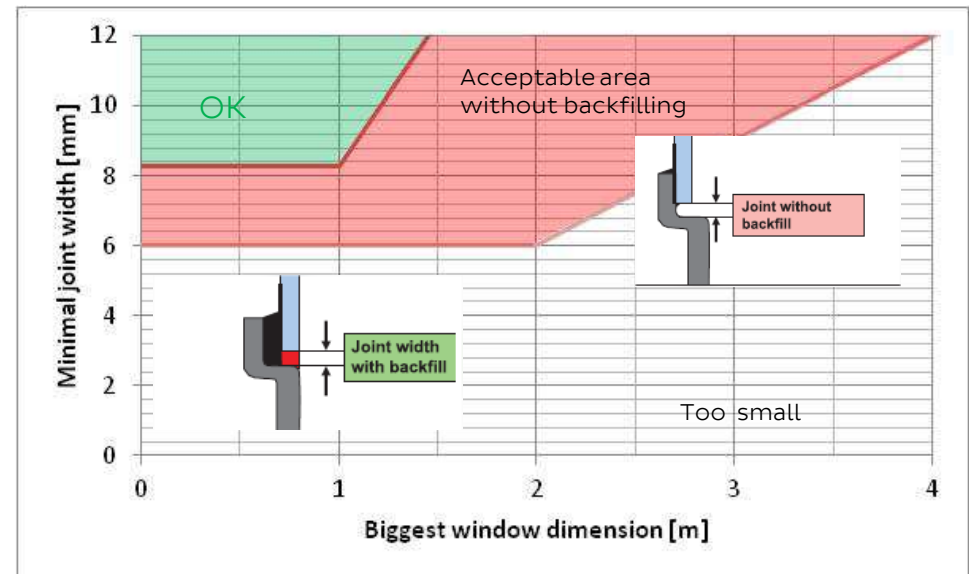
*these figures are based on standard figures, it is possible to calculate the exact dimensions needed for the application.

Adhesive dimensions for window sealing with MSR CA (SSKF)

Joint width for mineral (glass) windows

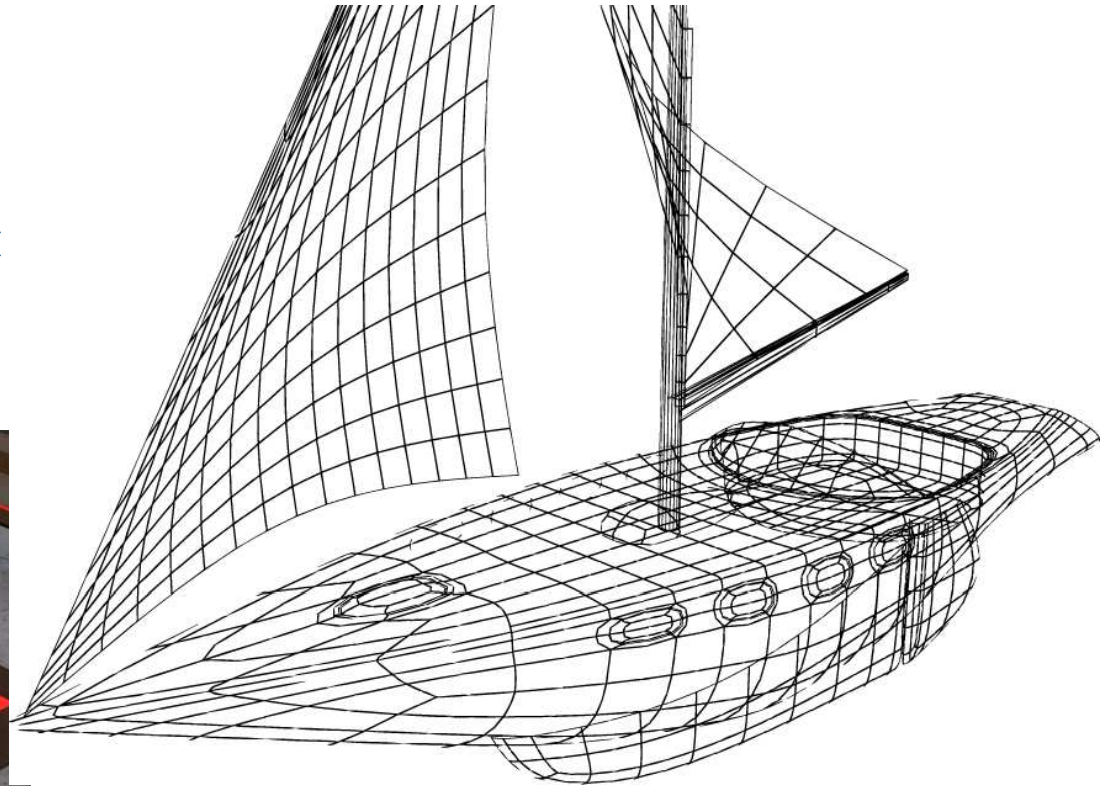


Joint width for organic (acrylic) windows



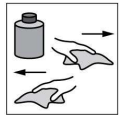
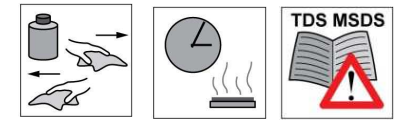
*these figures are based on standard figures, it is possible to calculate the exact dimensions needed for the application.

Manual for windows (glass, acrylic and PC) with ceramic coating (frit)



Window bonding **with** ceramic coating

Clean hull and windows with Simson Cleaner I



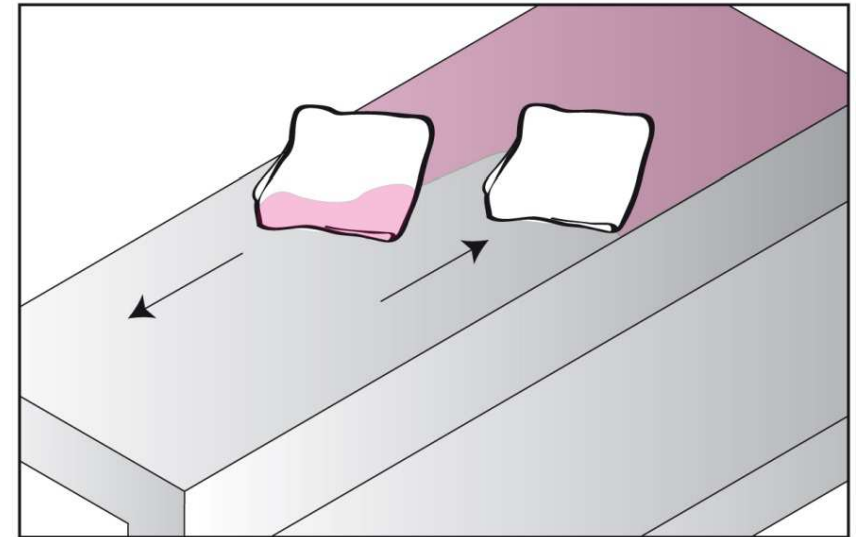
Wipe on , wipe off system



5 minutes evaporation time needed

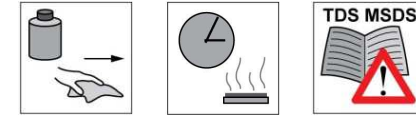
Use of a colourless and fluff free cloth

A dry colourless and fluff free cloth is used to remove the Cleaner I before the Cleaner I has been evaporated

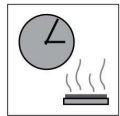


Window bonding **with** ceramic coating

Pre-treat hull with Simson Prep M



Wipe on in one direction to avoid spreading the contamination of the surface

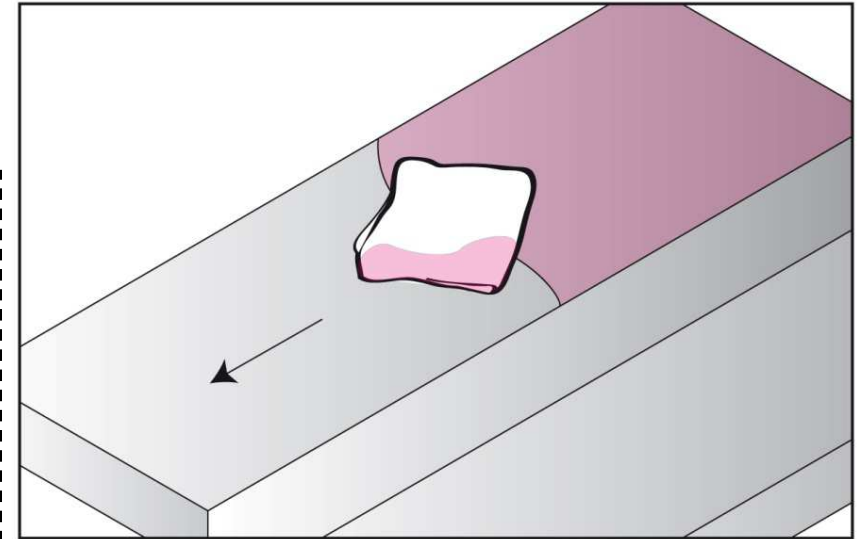


5 to 20 minutes open time / evaporation time needed

Use of a colourless and fluff free cloth

If the surface of the to be bonded materials are heavy contaminated, cleaning of surface with Simson Cleaner I will be strongly recommended

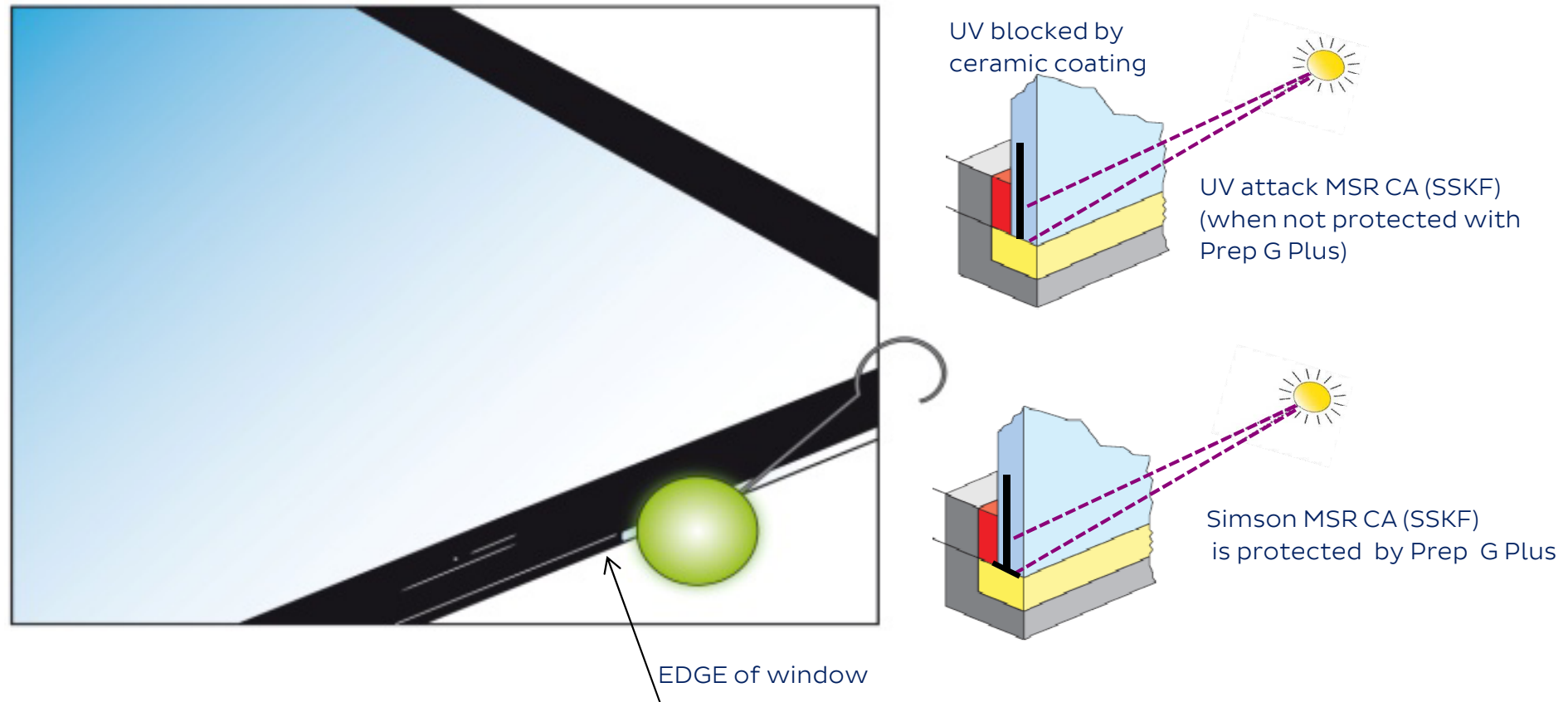
(see recommendation Simson Cleaner I)



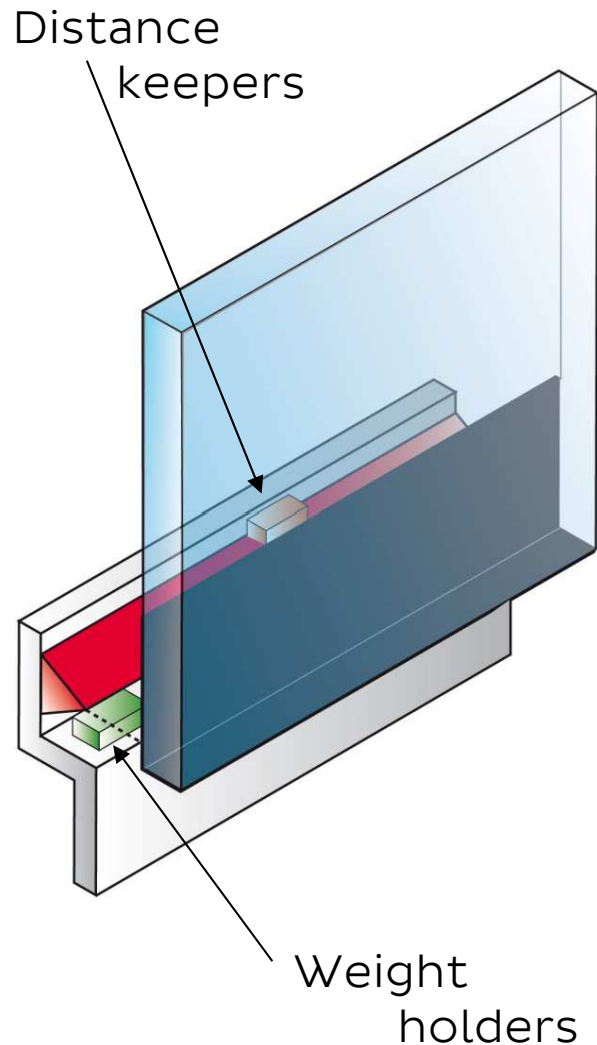
Window bonding **with** ceramic coating

Pre-treat the edges of the window with Prep G Plus

To have a 100% sustainable system it is advised to coat the edges of the windows with Bostik Prep G PLUS. Hereby also your sealing is protected by UV.



Window bonding **with** ceramic coating



Use the distance keepers to control the thickness of the bonding line. Minimum thickness and width needs to be discussed with your engineering department or with the technical support of Bostik.

Use weight holder to prevent the window for sliding. With our high green strength products clamping can be avoided in most cases.

Apply a triangle bead of the MSR product

Window bonding **with** ceramic coating

After bonding we advise a 24 hour curing process.

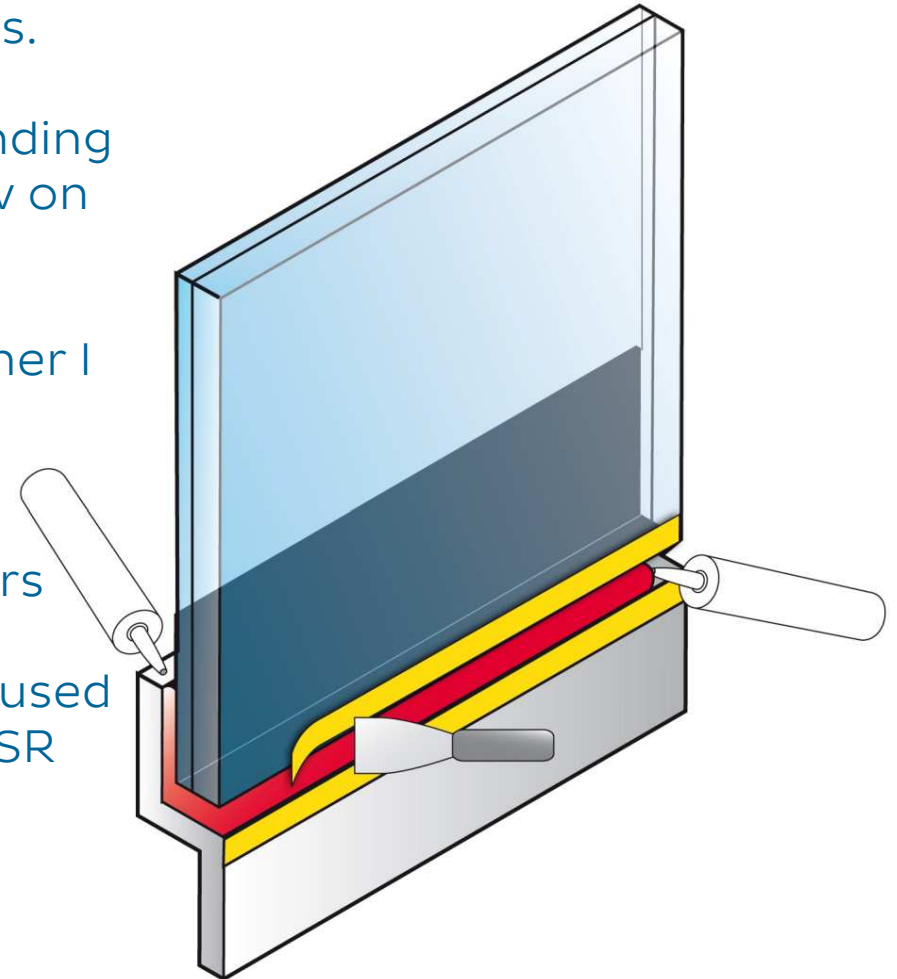
Avoid condensation or cleaning water on the bonding line, recommendation will be to seal the window on the interior side.

Clean the window on the exterior side with Cleaner I

Apply masking tape on both sides of the seam

Apply sealant into the seam and avoid air in closers

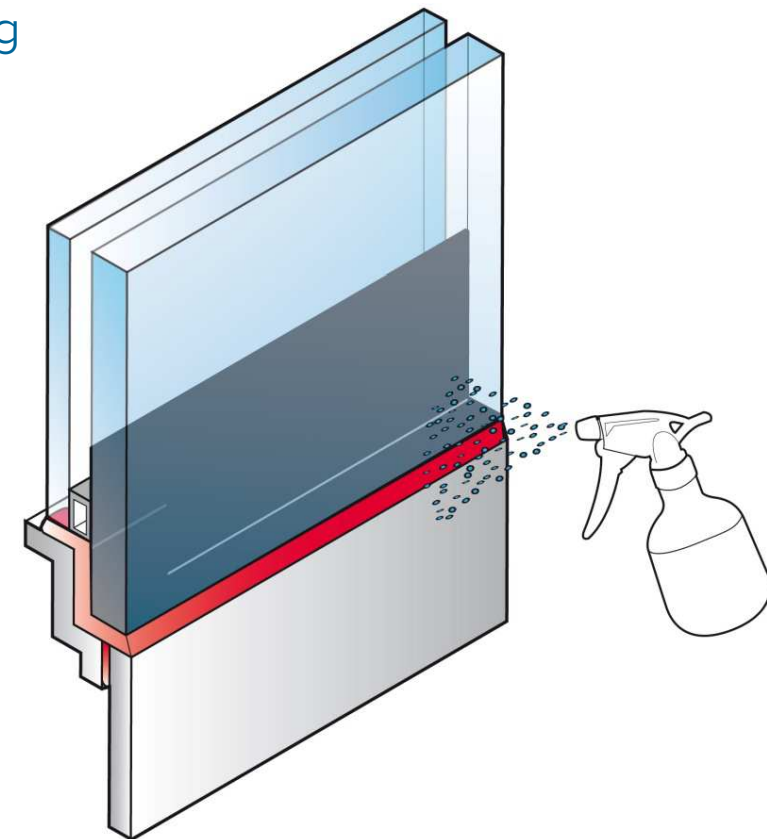
After the seam has been sealed, a spatula can be used to level the seam and to remove the excess of MSR product



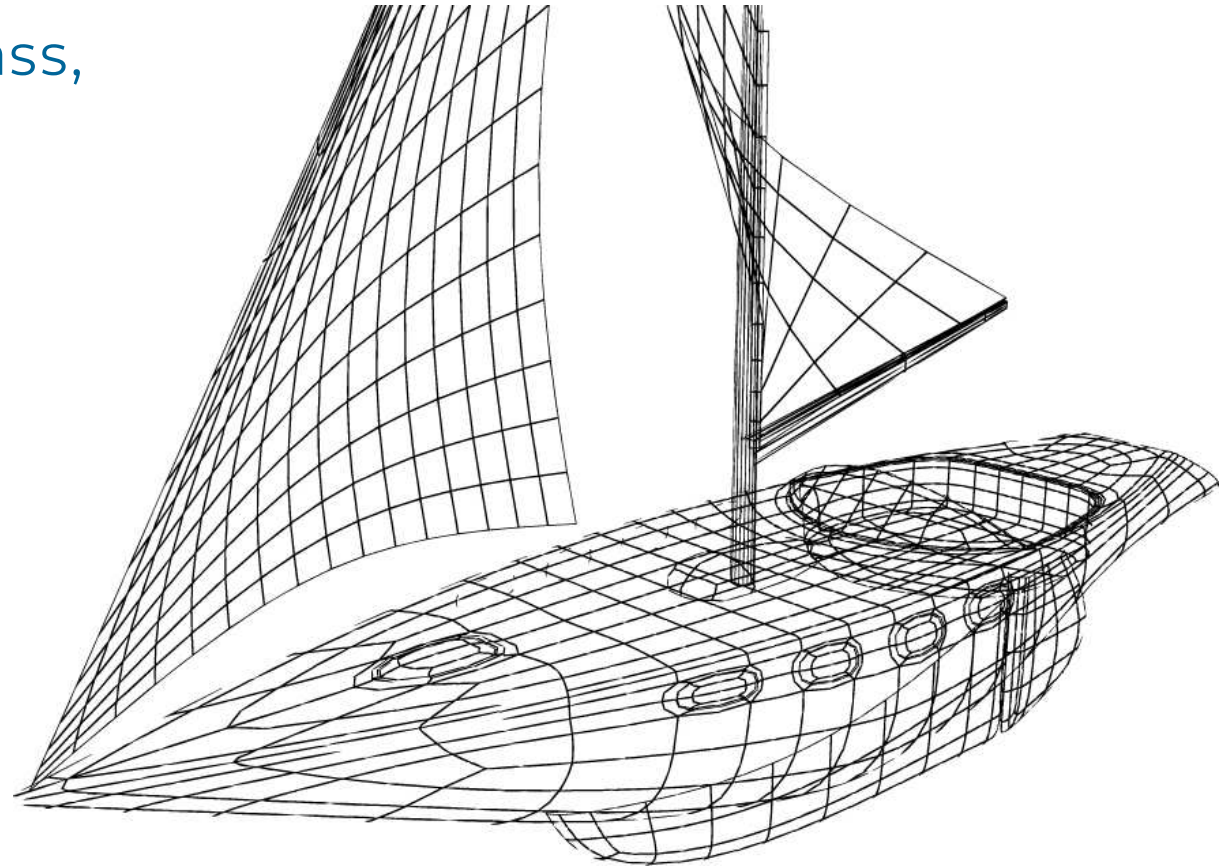
Window bonding **with** ceramic coating

Remove masking tape and, if needed, level the seam before the skin forming time with a small amount of soap mixed in tap water or with Simson Finishing soap. This can be sprayed onto the seam and the seam can be levelled easily by hand.

Never use lemon containing soap as this causes yellowing or degradation of the surface of the uses sealants and or used adhesives.

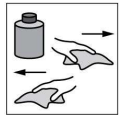
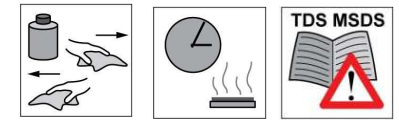


Manual for windows (glass, acrylic and PC) **without** ceramic coating

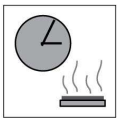


Window bonding **without** ceramic coating

Clean hull and windows with Simson Cleaner I



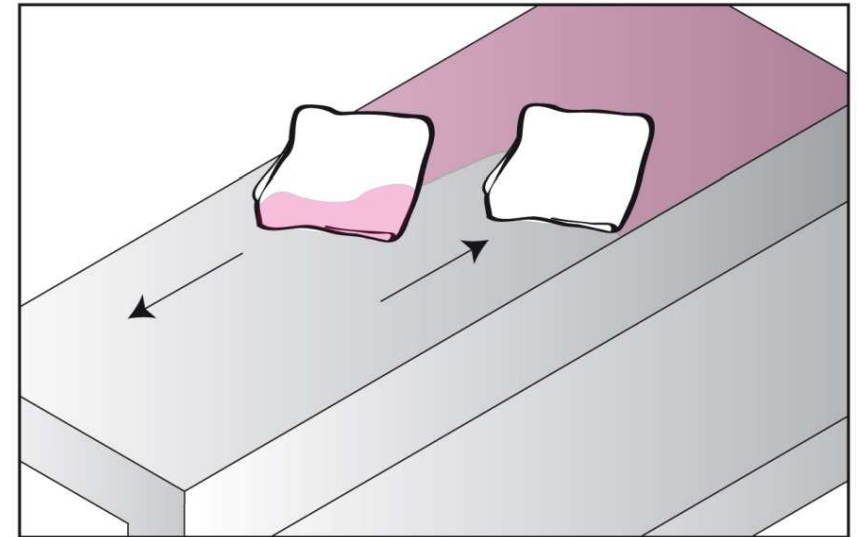
Wipe on , wipe off system



5 minutes evaporation time needed

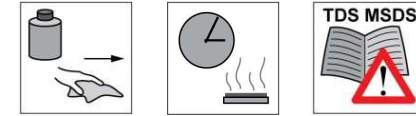
Use of a colourless and fluff free cloth

A dry colourless and fluff free cloth is used to remove the Cleaner I before the Cleaner I has been evaporated

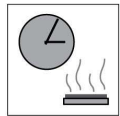


Window bonding **without** ceramic coating

Pre-treat hull and with Simson Prep M



Wipe on in one direction to avoid spreading the contamination of the surface

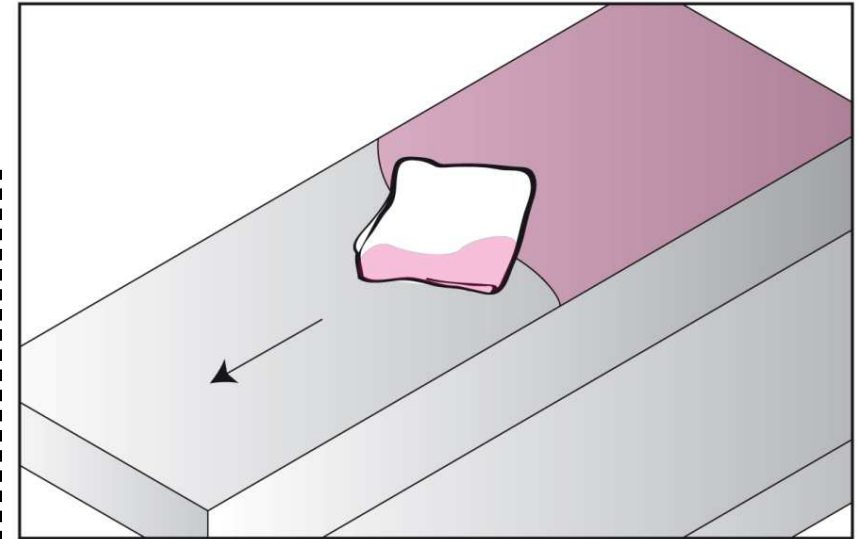


5 to 20 minutes open time / evaporation time needed

Use of a colourless and fluff free cloth

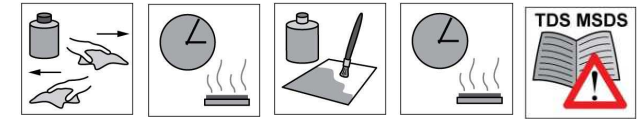
If the surface of the to be bonded materials are heavy contaminated , cleaning of surface with Simson Cleaner I will be strongly recommended

(see recommendation Simson Cleaner I)



Window bonding **without** ceramic coating

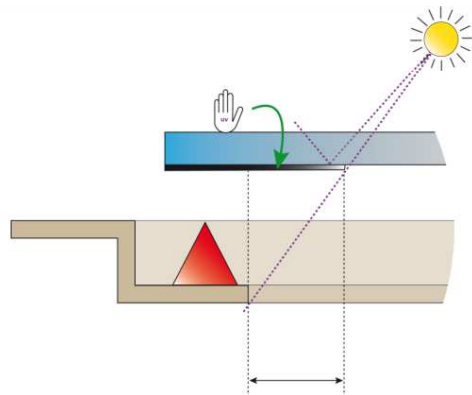
Pretreat window with Prep G (plus)



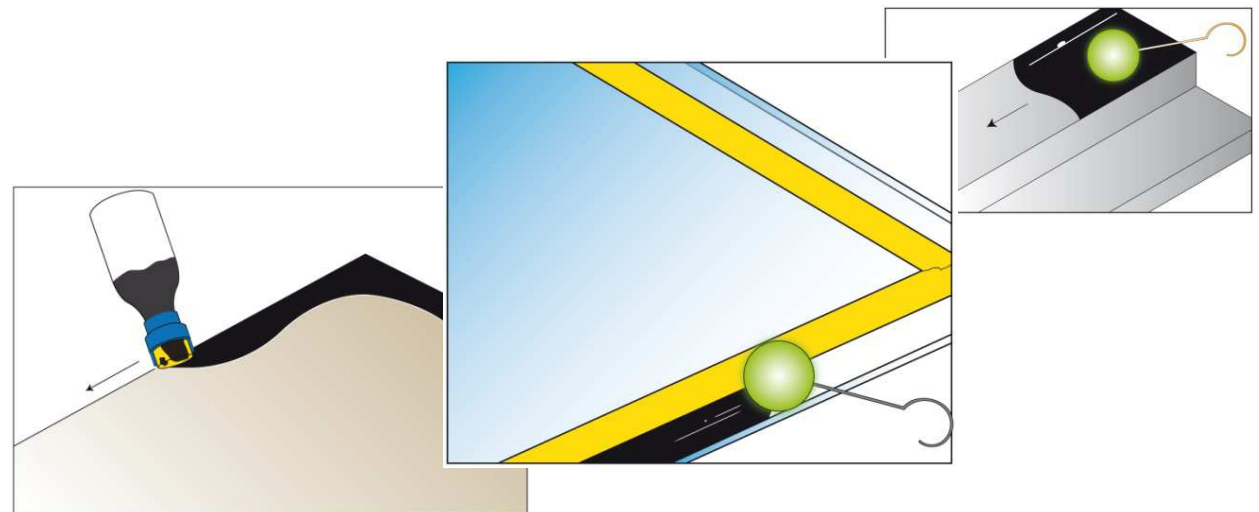
Apply Prep G (plus) with the popper tools to create a certain layer (covering power), also on the edge of the window.



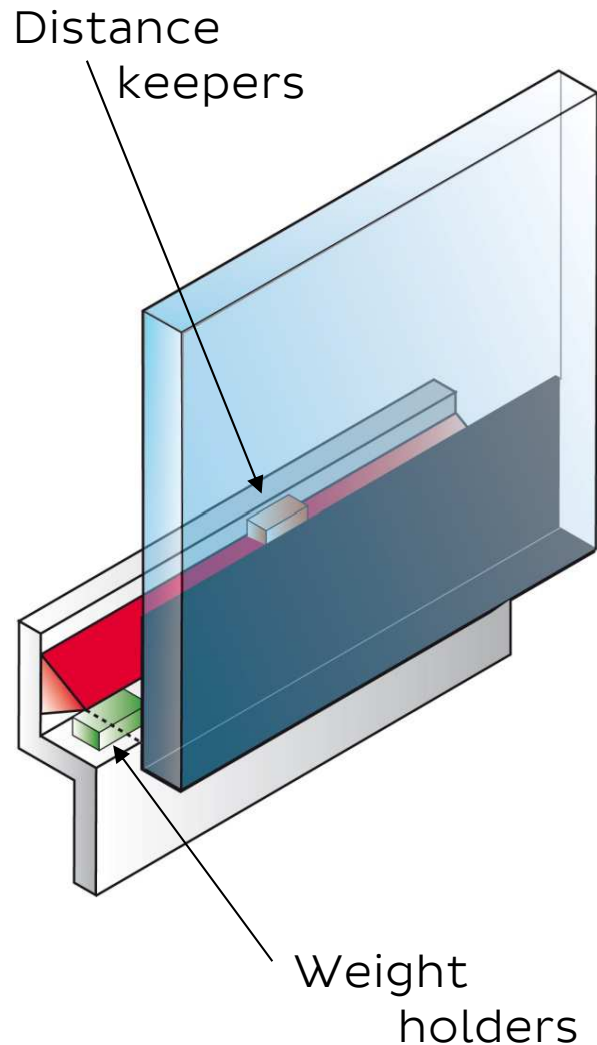
5 minutes (for Prep G plus 10 minutes evaporation time) evaporation time needed



Note: Make sure the applied Prep G (plus) has the right dimensions to avoid UV penetration on the bonding surface



Window bonding **without** ceramic coating



Use the distance keepers to control the thickness of the bonding line. Minimum thickness and width needs to be discussed with your engineering department or with the technical support of Bostik.

Use weight holder to prevent the window for sliding. With our high green strength products clamping can be avoided in most cases.

Apply a triangle bead of the Simson ISR product
For more information see 'Why a triangle bead'.

Window bonding **without** ceramic coating

After bonding we advise a 24 hour curing process.

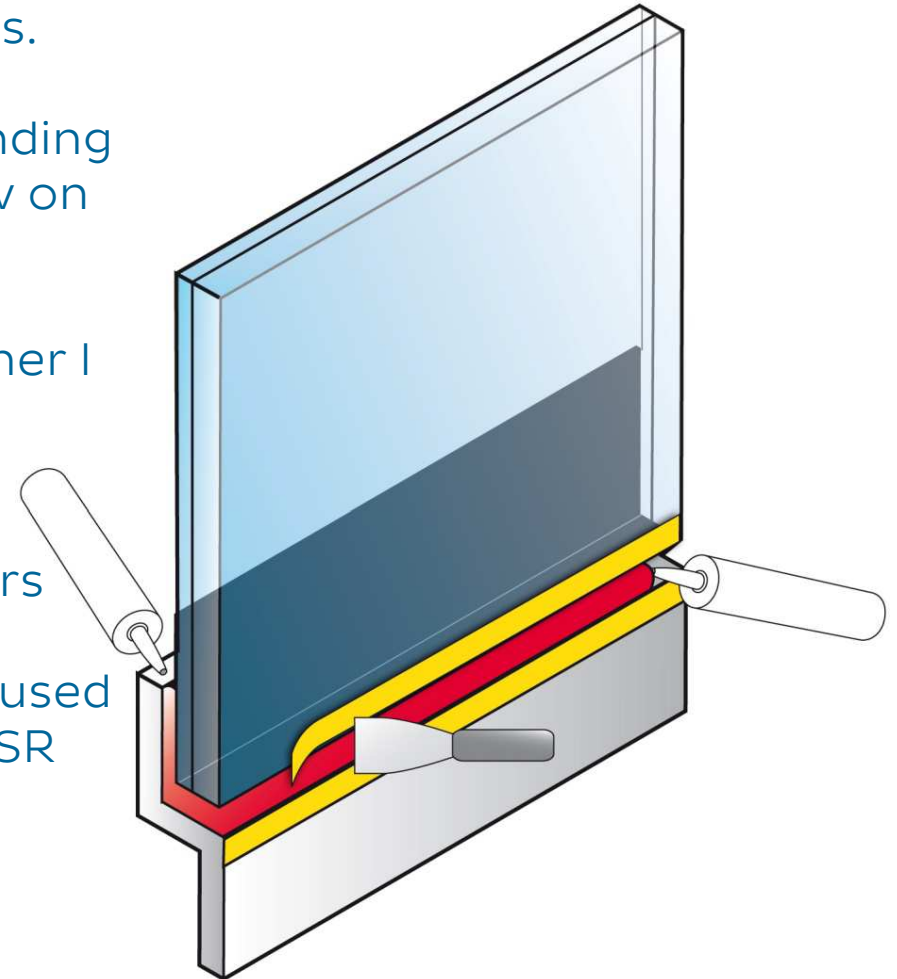
Avoid condensation or cleaning water on the bonding line, recommendation will be to seal the window on the interior side.

Clean the window on the exterior side with Cleaner I

Apply masking tape on both sides of the seam

Apply sealant into the seam and avoid air in closers

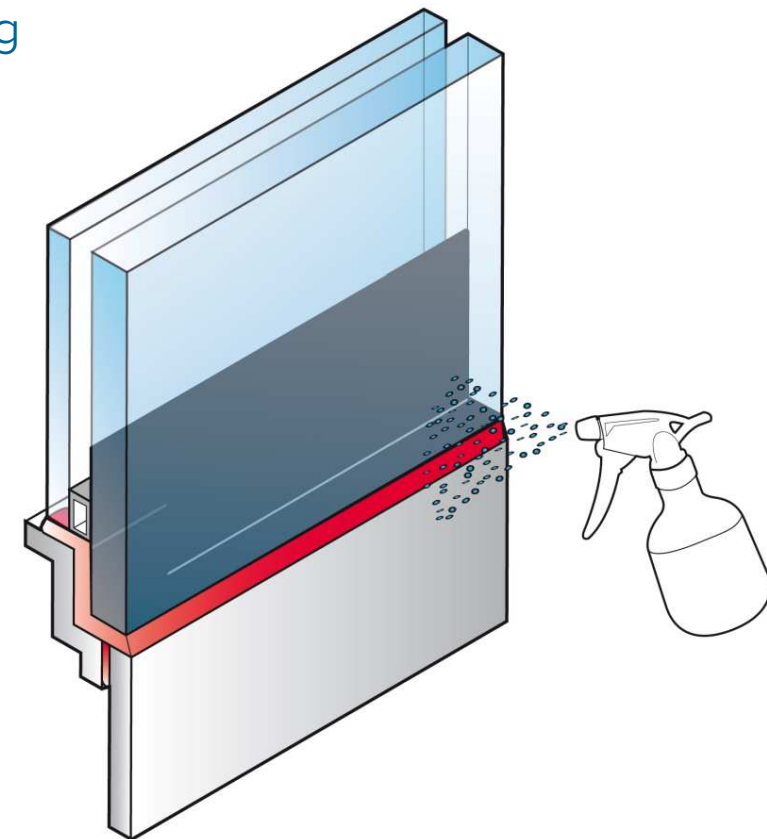
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Window bonding **without** ceramic coating

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Never use lemon containing soap as this causes yellowing or degradation of the surface of the uses sealants and or used adhesives.





Thank You

