CW PTY LTD
CW BRANDS

GSA

GLOBAL SEALANTS & ADHESIVES

Facade - Low Modulus Hybrid SEALANT

TOPICS

- GSA Facade features
- GSA Façade vs Polyurethane
- Technical specifications
- How to apply
- Demo Tests
- Accessories

Description

GSA Façade can be used for several sealing applications

The most common applications are

- Dilation and construction joints
- Perimeter joints around door and window frames
- Aluminium Composite panel sealing

GSA FAÇADE

. . . FEATURES & BENEFITS

Feature		Benefit
Technology	SPUR	Will not bubble in humid conditions, can be applied to damp substrate, temperature stable.
Solvent Content	None	Odourless and easier to work with. Less harmful to skin and lungs. Low VOC
Slump	None	Application properties maintained up to 50mm width. Easier to tool and finish. Less mess.
Tooling	Dry, wet or soap	Unaffected by tooling method. Easier to tool. Faster to finish and clean.
Mechanical Resistance	Medium	Suitable for pedestrian traffic such as walkways and stairways.

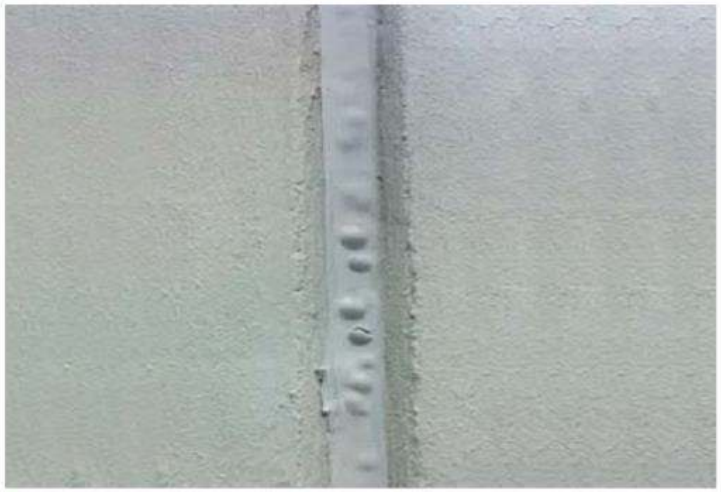
GSA FACADE

. . . OUR COMPETITIVE ADVANTAGE

No Bubbling	Unaffected by applications in low temperature	Adhesion to damp substrates
Smooth matt texture	No slump & easy to gun and tool	Non staining

GSA FAÇADE VS PU

. . . BUBBLING



Traditional Polyurethane sealant might cause bubbling due to moisture and isocyanate

GSA Façade 100% bubble free formulation

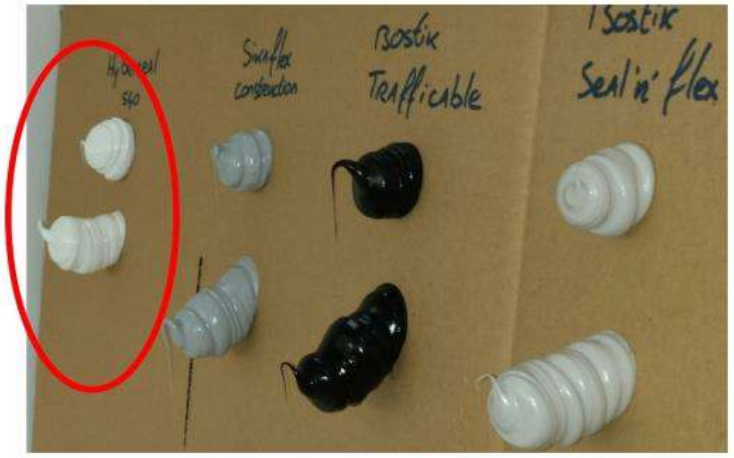
SLUMP-TEST RESULTS

The “horizontal Boeing” test:

- Dots of material applied to cardboard.
- After application board is turned 90 degrees.
- “slump” is measured in mm after XXX time
- GSA Facade showed **no “slump” at all!**

The results:

- Bostik Seal’n’Flex (grey) 10 mm
- Bostik Trafficable (black) 30 mm
- Sika Sikaflex Construction (concrete-grey) 20 mm
- GSA Facade (white) **00 mm**



GSA FACADE

. . . WHAT DOES THE APPLICATOR WANT

- Excellent non sag
- Minimum stringing
- Easy tooling
- Easy extrusion
- Matt finish
- Usability in all weather conditions
- Minimum dirt pick up

GSA FAÇADE VS PU

. . . BUBBLING CONSEQUENCES

- PU sealants have to be replaced due to bubbling
- Rework is done
- Increase overhead costs
- Loss of competiveness
- Loss of reputation

GSA Façade is ISOCYONATE FREE and therefore no risk on bubbling

GSA FAÇADE VS PU

. . . IMPACT

- Working efficiency + 15%
- Decrease overhead – 15%
- No claims
- Increase revenue
- Build brand reputation
- Increase brand reputation

GSA FAÇADE VS PU

. . . UV BENCHMARK

UV resistance: GSA FACADE vs competitors

Our french R&D department lead a battery of tests to compare our POLYFLEX 442 and HYBRISEAL FAÇADE sealants to competitors products.

Operation principle :

- Artificial weathering with a Suntest CPS machine
- Power 500 W/m²
- Temperature: around 50°C
- Test made with 500, 1000 and 2000 hours of exposure
- For each picture you can see:
  - On the left side, the original color protected by a masking tape
  - On the right side, the color affected by UV

Product	Brand	After 500 hours	After 1000 hours	After 2000 hours
Masterseal NP1	BASF			
PU Flex 60	Tambour			
Sika Pro	Sika			
Sika Hyflex 250	Sika			
Soudaflex 40 FC	Soudal			
EMFI PU 40 FC	3M			
GSA				
Polyflex 442	Den Braven			

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. . . HYBRIDS, POLYURETHANES, SILICONES

Hybrids, Polyurethanes & Silicones

	Technical performance										Ease of application							Score (as %)
	Environmental friendliness	Non-bubbling	Weather resistance	Mechanical properties	Heat resistance	Mechanical stability based on application	Non-dirt pickup	Stain resistance	Storage stability	Hydrophilic bond	Low temperature gun ability	High temperature gun ability	Slump resistance	Quick cure	Body (tooling)	Paintability with water-based paint	Adhesion to various substrates	
GSA	10	10	8	10	9	9	10	8	10	8	9	8	10	10	8	10	9	92
Polyurethanes in general	5	6	8	10	8	8	9	8	7	7*	7	7	7	7	8	10	7	76
Silicones in general	9	10	10	9	10	10	5	5	9	2	10	10	10	10	10	3	5	81

* polyurethanes have the ability to bond to dampened surfaces but can accelerate the bubbling effect in the skin of the joint sealant

GSA FACADE

. . . TECHNICAL SPECIFICATIONS

100% modulus	0.45 MPa (N/mm²)
Density	1.34 g/ml
Tensile strength	1.3 MPa (N/mm²)
Elongation at break	> 600%
Joint movement	+/- 25%
Resistance to vertical flow	0 mm (ISO 7390)
Shore A hardness	25 Shore A (DIN 53505)
Skin formation	90 minutes (@23°C/50% RH)
Curing time	2,5mm/day (@23°C/50% RH)
Application temperature	+5°C till +40°C (surface and ambient air)
Temperature resistance	-30°C till +100°C
VOC content	< 10g/L

GSA FACADE

. . . SUMMARY

- Low modulus
- Highly elastic
- Hydrophilic
- EN 15651-1: F-EXT-INT-CC 25LM
- Excellent adhesion to most substrates
- High resistance to ageing and weathering
- No bubbling
- Silicone & isocyanate free
- EN 15651-4 (PW) & ASTM C920 Class 25

GSA FACADE

. . . PRODUCT RANGE

- White
- Off white
- Concrete grey
- Dark grey
- Black
- Limestone
- Redwood

600 ml Sausages – 12 sausages per box

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. . . HOW TO APPLY









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. . . HOW TO APPLY (CONT.)






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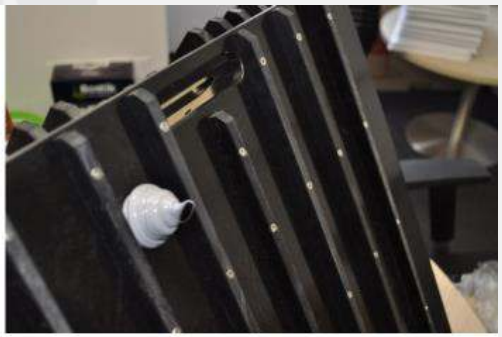
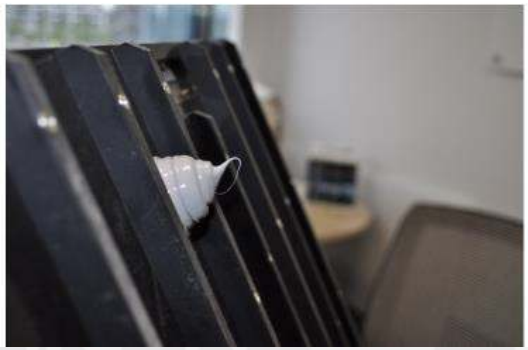
. . . DEMO ONE – SLUMP TEST





Minimal slumping is crucial for users as it means the sealant will not fall from the joint and is easier to work with.

1. Gun a blob of sealant approx. 30mm wide and 40mm deep
2. Observe sealant holding form & not sliding from the board or drooping over
3. Repeat with competitor product to observe competitive advantage

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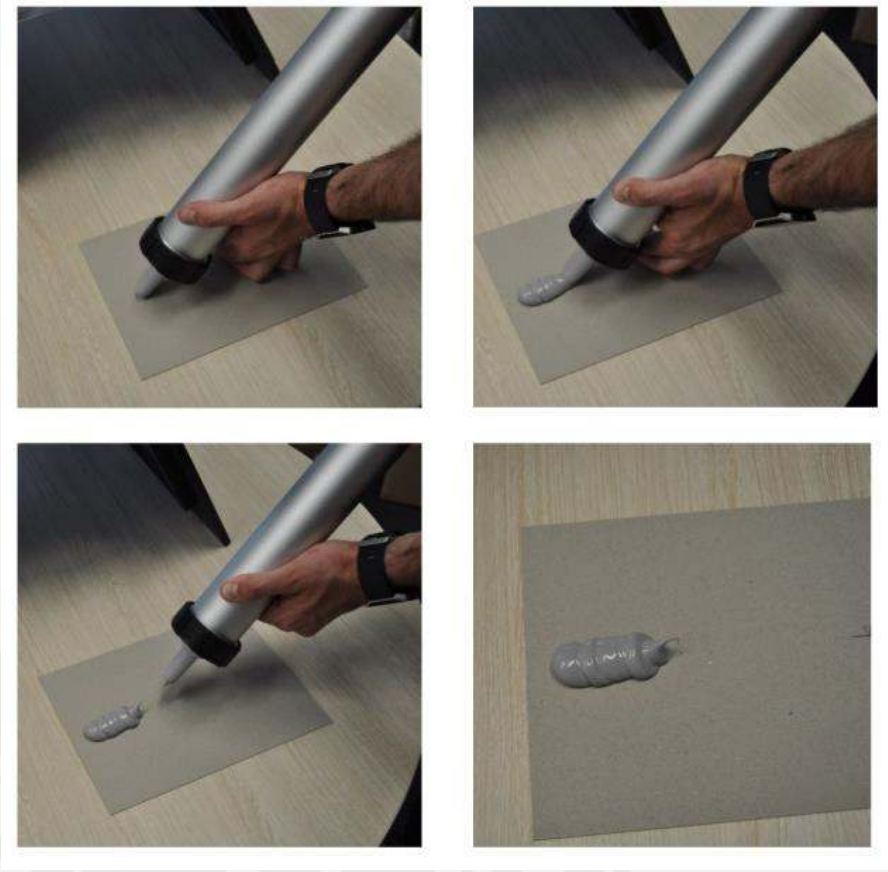
. . . DEMO TWO – STRING TEST



Minimal stringing assists with application ease and cleanliness of the finished seal thus making the product more workable

1. Gun a thick bead of sealant along a card or paper
2. After approx. 60mm release the pressure catch
3. Slowly drag away the nozzle observing the stringiness of the sealant.
4. Repeat with competitor product to show advantage

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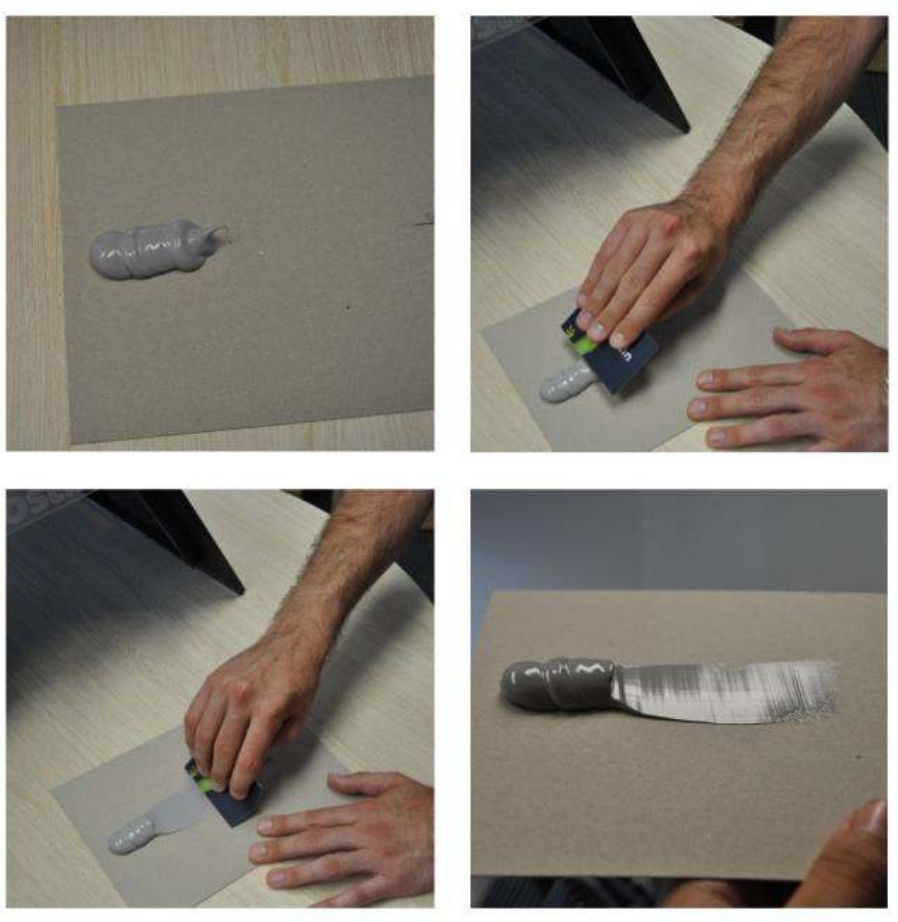
. . . DEMO THREE – SMOOTHNESS TEST



1. Use the same bead from the string test
2. Use a business card and scrape the bead to a thin, smooth finish
3. Observe the consistency of the sealant
4. Repeat with competitor product to show advantage. Poor quality sealants will often look grainy

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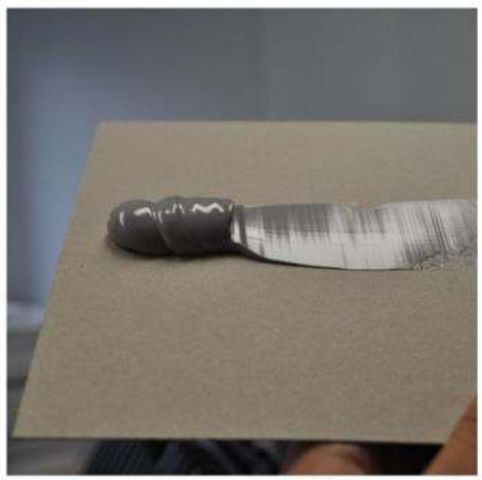
. . . DEMO FOUR – ODOUR TEST



1. Use the same card from the smoothness test
2. Examine the odour of the sealant
3. Compare with typical polyurethane
4. Solvent polyurethane sealants are harmful to the lungs and skin after prolonged use and can cause headaches, dry skin, etc.

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. . . DEMO FIVE - TOOLABILITY TEST

1. Insert a backing rod into the 20mm channel on the demo board
2. Fill the join
3. Using a light soap solution and your finger. Model the joint to a clean finish
4. Repeat with competitor product to show the difference in ease of tooling

. . . Do it once . . . do it right