

# AUTOMOTIVE GLASS REPLACEMENT FOCUS ON PERFORMANCE



**BUILDING TRUST** 

# LEADING SOLUTIONS

Designed and tested for maximum efficiency

Sika is a Tier 1 supplier and development partner to the global automotive industry. Together with our customers, we help create the automobiles of tomorrow. Sika aftermarket solutions have been driving the automotive industry worldwide for more than 30 years. Our intelligent products combine state-of-the-art technology with user-oriented application properties which make it easy to get started right away.

#### THE LEADING BRAND FOR WINDSCREEN ADHESIVES

Based on our competencies as a leading OEM supplier we provide a comprehensive portfolio for sealing and bonding, noise damping and protective coating applications in car body repair. Innovation, performance, reliability and ease of use make Sika products the number one choice of automotive glass and body shop professionals all around the world.

#### **TRUST A POWERFUL GROUP**

Sika is a Swiss-based specialty chemicals company with more than 100 years of experience. For Sika, innovation has always been the driving force in its quest to become the global leader. It all started more than 25 years ago, when we started supplying BMW with the Black-Primerless adhesive system. Over the years, we went on to develop relationships with almost all vehicle manufacturers globally.

In 2014, Sika was applying for more than 70 patents. Our products are used in 50 % of all vehicles produced. Sika is a global player, but highly focused on having people in the market who speak the local language and who know about your business; we currently cover 93 countries.

At the time of writing, more than

**300 MILLION** windscreens have been replaced using

Sika adhesives

Over

# **30 MILLION**

headlights, sunroofs and spoilers are bonded with Sika adhesives annually

**10UT OF 3** windscreens worldwide is replaced using Sika adhesive Local Sika presence in over

**5** countries

50 %

of vehicles produced worldwide use Sika technology

Sika technology saves

**80 MILLION** liters of fuel annually (240 million kg of CO<sub>2</sub>) Sika supplies more than

**400 MILLION** acoustic damping parts per year

# CUSTOMER SAFETY IS OUR MISSION

The windscreen is an integral part of a vehicle's safety system. Its role is to stay in place and keep occupants inside the vehicle in case of an accident. It not only serves as the backboard for the inflating passenger airbag; today's vehicles are also stiffened by the bonded windscreen. It is vital that the windscreen stays attached to the car body even in a rollover accident. If a windscreen is not installed properly, it can come loose in a collision and separate from the car body flange, causing serious injuries. Reliable and easy to use adhesive systems from Sika make the difference and ensure the highest safety standards for every one of your installations.

# INNOVATION IS OUR PASSION

We are focused on the three core values that have made us number one in the global markets: **INNOVATION, SIMPLICITY AND SAFETY.** Our aim is to simplify the professional application process with reliable and fast curing adhesive systems and short safe drive-away times that maximize the safety of vehicle owners and passengers.

Making visions come true

Sika adhesive solutions continue to lead as best-inclass. We do more than just respond to the needs of our professional customers; we also take future requirements of the automotive industry into account. This enables us to launch powerful innovations while focusing on you and your customers' needs. From professionals, for professionals **SIMPLICITY** 

Your daily work inspires our development efforts. That's why we closely collaborate with automotive glass technicians and vehicle body experts in order to find intelligent solutions that meet your requirements perfectly, making Sika products easy to use, straight out of the box. Always more than required **SAFETY** 

We are serious about taking no shortcuts when it comes to protecting vehicle drivers and passengers. Sika applies the highest safety standards and outperforms international requirements.

MORE THAN 60 CRASH TESTS NO SHORTCUTS TO SAFETY FROM TECHNICIANS, FOR TECHNICIANS EASY HANDLING SAVE TIME. INCREASE PRODUCTIVITY

# SAFETY WITHOUT COMPROMISE

Advanced Sika SDAT Standard

Sika is the one and only adhesive manufacturer worldwide using a 95<sup>th</sup> percentile crash test dummy. Due to the use of a heavier dummy, our tests can cover a higher percentage of people worldwide. **WITH SIKA, YOU ARE ON THE HIGH ROAD TO SAFETY.** 

Sika is the pioneer in Safe Drive-Away Time (SDAT): we continuously monitor market developments, simulating and modeling our solutions in order to provide the safest conditions for vehicle drivers and occupants in every situation. Meeting the requirements of national and international law is not enough

for Sika. We always want to go one step further. We always test our Sika Safe Drive-Away Time under more severe conditions than the FMVSS 212 standard requires. This makes your automotive glass business, and your customer's life, a bit safer than safe.

#### **OUTPERFORMING REQUIREMENTS**

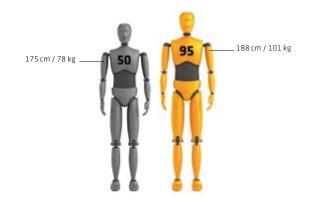
Optimizing is our business, not only with regard to our total competence but also in terms of our testing standards. The 1976 FMVSS 212 standard utilizes a 50<sup>th</sup> percentile dummy, which is designed to represent about half of the adult male population. When Sika introduced our first crash standards, the US and some other countries did not have laws requiring vehicle passengers to wear seats belt. These days use of seat belts is enforced by law.



At Sika we decided to improve our testing standard and started to utilize a taller and heavier 95<sup>th</sup> percentile dummy, covering significantly more people and therefore more of your potential customers. In addition, we started to belt our crash test dummies. The combination of the 95<sup>th</sup> percentile dummy with seat belts is as critical as our old standard but comes much closer to reality.

#### SIKA'S TESTING CONDITIONS

	Former Sika SDAT standard	NEW Sika SDAT standard
Dummy:	50 <sup>th</sup> percentile dummy	95 <sup>th</sup> percentile dummy
Use of seat belt:	Sika used unbelted dummies in order to cover countries with- out seat belt laws	Use of belted dummies, as seat belt use is now mandatory
Crash test:	In line with FMVSS 212	In line with FMVSS 212





# PERFORM WITH THE ULTIMATE TECHNOLOGY

PowerCure is the latest technology for accelerated curing adhesives. For the first time here, Sika is taking a total solution approach. We believe reaching the next level of technology is only possible if the system reflects the reality an automotive glass technician has to deal with every day. Power-Cure has been developed together with automotive glass technicians from the very beginning; it is designed for both mobile and shop environments and has proven its reliability under the harshest conditions.

PowerCure adhesives reach a new level of performance at an unmatched level of comfort. For the first time here, we have developed a total solution for vehicle glass replacement, and this has allowed us to question each little step, from mounting a unipack to the actual extrusion of the adhesive. The PowerCure system is probably the first ever to be developed together with automotive glass professionals from the very beginning.

- Simple as a one-component
- Minimized waste, maximized yield of adhesive
- Ergonomic design
- Fastest unit replacement on the market
- Long working time but quick curing

# CURED TO OEM LEVEL

SikaTack<sup>®</sup> ELITE allows a car to be lifted by its windscreen in as little as 60 minutes. This is what we understand practically by adhesives which are cured to OEM level.

# PERFORMANCE BEYOND SDAT

Having just a short Safe Drive-Away Time (SDAT) is not the definition of a safe system! Vehicle manufacturers apply stricter standards for releasing a vehicle back into operation than the average automotive glass shop. Up until now, no system has been able to reach car manufacturers' (OEM) performance requirements quickly enough and easily enough to be used by independent automotive glass companies.

### **PowerCure ADHESIVES ARE DIFFERENT!**

## 60 minutes CURED TO OEM LEVEL

#### CURED TO OEM LEVEL

PowerCure adhesives cure independently of the climate from the inside of the bead. They cure within minutes to the strength level specified by vehicle manufacturers. PowerCure adhesives reinforce the car's body structure to the original level within just 60 minutes, whereas one-component products can require up to several weeks depending on the climate. Rapid deployment of structural integrity is one of the key reasons why some vehicle manufacturers require their service centers to use accelerated or two-component adhesives. There are further benefits to using PowerCure adhesives too:

- comebacks can be repaired quickly without risk of soiling car interiors
- sensors can be calibrated quickly and without any concerns
- insurance and subcontracted work will meet all OEM standards

and you could even lift a vehicle by the windscreen just 60 minutes after installation.

#### ADHESIVE FOR VEHICLE GLASS REPLACEMENT

Product	SikaTack® ELITE designed for PowerCure
Technology	Accelerated polyurethane adhesive
Safe Drive-Away Time (SDAT)	30 min
SDAT temperature conditions	-10°C to 40°C
Cured to OEM level	60 min
Open time (23°C/50 % r.h.)	10 min
Application temperature	Cold-applied
All-in-one modulus	$\checkmark$



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# THE HIGHEST PRECISION IN YOUR HANDS

The PowerCure adhesive system delivers the precision and performance of high-end pump systems found at vehicle manufacturer's production lines. It combines high flexibility, ergonomic and easy handling, and minimizes waste in a clear and focused design. The use of a single, brushless motor mechanically couples extrusion, dosing and dynamic mixing, and allows controlling of extrusion speed on the go without compromise. Providing the fastest curing adhesives at unmatched comfort level, PowerCure is the total solution for smaller sealing and bonding applications.



«FROM THE VERY BEGINNING WE ANALYZED WORKING AND HANDLING PROCEDURES OF APPLICATORS IN THE FIELD. EVERY LITTLE STEP WAS QUESTIONED AND CONSTANTLY CHALLENGED. WE AIMED TO MAKE USING PowerCure AS SIMPLE AS USING A SINGLE COMPONENT PRODUCT. IN MANY ASPECTS IT'S EVEN SIMPLER AND FASTER.»

David Tobler, Head Automotive Aftermarket

# POWERCURE

### **PowerCure DISPENSER**

**Single motor design:** The PowerCure Dispenser matches the precision of pump and dosing systems found on vehicle manufacturers' production lines. The use of a single, brush-less motor mechanically couples extrusion, dosing and dynamic mixing. This allows users to control extrusion speed on the go without compromise.



# AUTOMOTIVE GLASS PRODUCT RANGE

From Sika cleaning products to premium adhesives, we ensure an efficient process right from the beginning. Automotive glass professionals benefit from an excellent workflow with well-matched products.

ADHESIVES	SikaTack <sup>®</sup> ELITE Designed for PowerCure	SikaTack <sup>®</sup> PRO	SikaTack <sup>®</sup> DRIVE
Technology			
Accelerated polyurethane	✓		
One-component polyurethane		✓	✓
Pre-treatment process			
Black Primerless		✓	✓
All Black	✓	✓	✓
Properties			
Cold-applied	✓	✓	✓
SDAT	30 min	30 min	60 min
SDAT test standard	95 <sup>th</sup> percentile FMVSS 212	95 <sup>th</sup> percentile FMVSS 212	95 <sup>th</sup> percentile FMVSS 212
Cured to OEM level	60 min		
Working time	10 min	8 min	12 min
All-in-one modulus	$\checkmark$	$\checkmark$	$\checkmark$

PRE-TREATMENT PROCEDURES	Black-Primerless process	All-Black process
Float glass and ceramic coated glass	•	•
Bare metal scratches < 5 cm <sup>2</sup>	• •	•
Bare metal scratches 5 cm <sup>2</sup> to 150 cm <sup>2</sup>	• • •	••
Intact OEM and aftermarket paint*	• •	•
PVC and RIM encapsulation	••	•
Trimmed residual bead	•	optional/ $lacksquare$
Pre-applied adhesive system	•	optional/ $lacksquare$
PMMA/PC**	••	•

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# AUTOMOTIVE GLASS ADHESIVES

### SikaTack<sup>®</sup> ELITE

High-speed Performance in Every Climate



SikaTack® ELITE is an advanced windscreen adhesive, specifically developed and engineered for our innovative PowerCure system technology. The quick curing of SikaTack® ELITE enables you to meet OEM requirements in less than 60 minutes! The

Safe Drive-Away Time is already reached just 30 minutes after installation. Boost your business with a potentially record-breaking performance.

### Thatcham ® Quality Assured

Repair Equipment

#### THATCHAM APPROVAL

SikaTack<sup>®</sup> ELITE is a Thatcham-approved repair product.

#### YOUR BENEFITS

■ True 30 min Safe Drive-Away Time,

- tested under the new  $95^{th}$  percentile FMVSS 212 standard
- Cures to OEM level within 60 min
- Meets all OEM requirements, including Volvo, VW, Audi, etc.
- Fast curing
- Curing independent of climate conditions
- Very short cut-off string
- Compatible with all car makes due to Sika's all-in-one modulus

SikaTack® ELITE requires the PowerCure Dispenser as well as the PowerCure Mixer Nozzle. For pre-treatment, SikaTack® ELITE requires the Sika All-Black bonding process.

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#### AVAILABLE ITEMS

■ Box with 14 × 600 ml PowerCure Pack

Item No. 496374

### **PowerCure System**

The PowerCure adhesive system delivers the precision and performance of high-end pump systems found in vehicle manufacturers' production lines. It combines high levels of flexibility, and ergonomic and easy handling, and minimizes waste in a clear and focused design.





Further Information and Video Tutorials

### SikaTack<sup>®</sup> PRO

Premium Choice for Automotive Glass Professionals



Our innovative windscreen adhesive has been tested under the most severe conditions. With our all-in-one technology, SikaTack<sup>®</sup> PRO is a perfect fit for all car makes and models, and delivers high value for money.

#### YOUR BENEFITS

- True 30 min Safe Drive-Away Time,
- tested under the new 95<sup>th</sup> percentile FMVSS 212 standard
- Safe Drive-Away Time valid for all climates, ranging from -10 to 35°C
- Very short cut-off string
- Compatible with all car makes due to Sika's all-in-one modulus
- Compatible with Sika's Black-Primerless and All-Black bonding process

#### AVAILABLE ITEMS

- Box with 12 × 300 ml cartridge, blackItem No.496038■ Box with 12 × 400 ml unipack, blackItem No.496039
- Box with 20 × 600 ml unipack, black Item No. 496037

### SikaTack<sup>®</sup> DRIVE

The Application Champion



SikaTack® DRIVE is a windscreen adhesive with superior application properties: it is the application champion on the market. SikaTack® DRIVE offers a true 60 min Safe Drive-Away Time for climates ranging from 5°C to 35°C. With Sika's all-in-one modu-

lus technology, it is a great choice for all car makes and models.

### YOUR BENEFITS

- True 60 min Safe Drive-Away Time
- Short cut-off string
- Compatible with all car makes due to Sika's all-in-one modulus technology
- Compatible with Sika's Black-Primerless and All-Black bonding process

#### AVAILABLE ITEMS

- Box with 12 × 300 ml cartridge, black Item No.
- Box with 12 × 400 ml unipack, black Item No. 97234
- Box with 20 × 600 ml unipack, black Item No. 97233

### SikaTack<sup>®</sup> MOVE Transportation

All-in-one Solution for Bus and Coach Glass Replacement



SikaTack<sup>®</sup> MOVE Transportation is a windscreen adhesive with excellent weathering stability. It is ideally suited for the replacement of bus and coach glass where it can be used for bonding as well as sealing application. SikaTack<sup>®</sup>

MOVE Transportation offers a 2-hour Safe Drive-Away Time for supported windscreens.

#### YOUR BENEFITS

- 2-hour Safe Drive-Away Time for supported bus and coach glass\*
- Excellent weathering stability; useful for exterior joint sealing
- Compatible with Sika's Black-Primerless and All-Black bonding process

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#### AVAILABLE ITEMS

■ Box with 20 × 600 ml unipack, black

Item No. 89696

401648

\*special advice on Safe Drive-Away Time for heavy bus and coach glass is available upon request.

### Sikaflex®-223

Weathering-resistant Joint Sealant



Sikaflex®-223 is a multipurpose joint sealant with excellent adhesion on aluminum, GRP, stainless steel, 2-c coatings and organic glass (polycarbonate and PMMA). Due to its excellent weathering resistance, it is well suited

for open joints. In the automotive aftermarket, it can be used for the bonding of plastic windscreens when the bond line is protected from UV light.

#### YOUR BENEFITS

- Excellent weathering stability; useful for sealing exterior joints
- Repair solution for plastic windscreens (bond line needs UV protection)\*
- Compatible with Sika's Black-Primerless and All-Black bonding process

#### AVAILABLE ITEMS

■ Box with 12 × 300 ml cartridge, black	Item No.	525949
■ Box with 20 × 600 ml unipack, black	ltem No.	514643
■ Box with 12 × 300 ml cartridge, white	Item No.	525948
■ Box with 20 × 600 ml unipack, white	Item No.	514644

\* protection of bond line by a black frit or external protection, e.g. with Sika® UV Shielding Tape.

### SikaFast®-1640

**Rear Mirror Bonding Kit** 



#### SikaFast®-1640 is designed for bonding rear mirror brackets to vehicle windscreens. It is suitable for bonding glass, ceramics and metals as well as a combination of these materials. The rear mirror can be installed just minutes after the bracket has been bonded.

#### YOUR BENEFITS

- Ideal for bonding rear mirror brackets to windscreens
- Very fast curing to handling strength
- Easy to use
- 100 % reactive substance, no solvents

#### AVAILABLE ITEMS

■ Box with 25 × 50 g + 10 ml kit, light yellow

Item No. 517865

### SikaFast®-5211NT



SikaFast®-5211 NT is a fast curing, flexible structural adhesive designed to replace mechanical fixings such as rivets, screws or welding. It is suitable for high strength fastening of concealed joints and exhibits excellent

adhesion on different types of substrates including top coats, plastics, glass, wood, etc. Suitable for bonding of complex rear mirror brackets.

#### YOUR BENEFITS

- Adhesion to a wide range of substrates
- Low odor
- Fast strength development

### AVAILABLE ITEMS

- Box with 12 × 10 ml syringe, grey
- Box with 12 × 250 ml, grey

ltem No. 466659 ltem No. 413411

# AUTOMOTIVE GLASS CLEANING AND PRE-TREATMENT

### Sika<sup>®</sup> Cleaner PCA

**Contamination Remover** 



A smart cleaning foam usually used in combination with Sika<sup>®</sup> Cleaner G+P, designed specifically for removing contamination that cannot be sufficiently removed with standard cleaners or without scratching the surface. See the effect before the treatment is even finished!

We recommend using Sika® Cleaner PCA as part of the windscreen pre-treatment process. It can be used in combination with the Black-Primerless and All-Black bonding process.

#### YOUR BENEFITS

- Easy to use
- Highly reliableMultipurpose product
- Removes many kinds of contamination such as green snake
  - contamination, fingerprints, tape residues, etc.
- Can be used for primer application

#### AVAILABLE ITEMS

Box with 168 pads, light grey
Box with 48 pads, light grey
Item No. 529100

Sika<sup>®</sup> Cleaner G+P High-quality Glass and Plastic Cleaner



This alcohol-based solution for cleaning glass and non-porous surfaces is used to clean windscreens and remove finger marks and residues. It leaves no residue on the surface, thus ensuring easy use and there is no need to re-polish the windscreen.

#### YOUR BENEFITS

- Streak-free drying
- Quick drying
- Non-freezing winter version available

#### AVAILABLE ITEMS

- Box with 12 × 500 ml trigger spray, light blue Item No. 52742
- Box with 251 bottle, light blue
- Box with 4 × 5 l concentrate 1:4, light blue



### Sika<sup>®</sup> Aktivator PRO

The all-season Glass Activator for Black-Primerless Bonding



This unique pre-treatment agent is specially designed to provide adhesion on automotive glass replacement substrates. Thanks to the single wipe application, Sika® Aktivator PRO simplifies the work activities, increases performance and boosts quality.

#### YOUR BENEFITS

- Single wipe application
- 3 min flash-off time
- All-season technology

## AVAILABLE ITEMS

■ Box with 24 × 30 ml can, colorless	ltem No.	161886
Box with 8 × 100 ml can, colorless	Item No.	161887
■ Box with 6 × 250 ml can, colorless	Item No.	154884
Box with 4 × 1000 ml can, colorless	Item No.	154885



### Sika<sup>®</sup> Primer-207

The All-Black Pre-treatment Solution for Automotive Glass Replacement





This multipurpose glass and paint primer is specially designed for automotive glass replacement. Sika® Primer-207 offers excellent adhesion performance as a one-step primer for float glass and ceramic-coated

glass as well as OEM and aftermarket paints, PVC, PMMA, ABS and a number of other plastic materials. It is also useful as a corrosion protection primer for the AGR business.

 ${\sf Sika}^{\otimes}$  Primer-207 is used as part of the Black-Primerless and All-Black bonding process for automotive glass replacement.

#### YOUR BENEFITS

- Quick drying: only takes 3 min, all year round
- One product: simplifies work procedures and inventories
- One solution for all typical AGR substrates

#### AVAILABLE ITEMS

■ Box with 24 × 30 ml can, black	ltem No.	417300
■ Box with 8×100 ml can, black	ltem No.	417301
Box with 6 × 250 ml can, black	Item No.	417302

### Sika® Remover-208

**Cleaning Agent for Surface Preparation and Removal of Uncured Adhesives** 



Sika® Remover-208 is used to remove uncured traces of Sikaflex® and SikaTack® products from tools and equipment. It is also suitable as a cleaner for non-porous and painted substrates prior to bonding.

#### AVAILABLE ITEMS

- Box with 4×1000 ml can, colorless
- Box with 12 × 400 ml aerosol, colorless

Item No. 34288 Item No. 135750

# AUTOMOTIVE GLASS ACCESSORIES

From intelligent repair sets to easy-to-use applicator guns, our versatile accessories help you complete your Sika toolkit and increase the productivity of your working processes.

### Sika<sup>®</sup> Gun HD



The Sika® Gun HD is a heavy duty, lightweight manual caulking gun for cartridges with a high gear ratio for easy, one-handed application. It is ideal for the manual application of Sika windscreen adhesives.

#### YOUR BENEFITS

■ High gear ratio for easy, one-handed use

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■ Durable lightweight design (600 g)

#### AVAILABLE ITEMS

■ Box with Sika® Gun HD

Item No. 452901

### Sika® Application Gun



The Sika® Application Gun is the ideal dispenser for one-component windscreen adhesives. It is based on the Milwaukee C18PCG but comes with a clear barrel and improved extrusion plunger, increasing the adhesive yield of unipacks.

Box contents: Sika® Application Gun, 2Ah 18V Li-ion rechargeable battery, charger with EU/CH cord, spare parts set, documentation.

#### AVAILABLE ITEMS

- Box with 220V EU/UK CTR300 version
- Box with 220V EU/UK UP600 version

Item No. 425589 Item No. 425591

### **PowerCure Dispenser**



The PowerCure Dispenser is required to extrude PowerCure adhesives such as SikaTack® ELITE.

Box contents: Sika PowerCure Dispenser, 2Ah 18V Li-ion rechargeable battery, charger with EU/CH cord, spare parts set, documentation.

#### AVAILABLE ITEMS

Box with 220V EU/CH 2Ah
Box with 220V EU/UK 2Ah

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### Sika<sup>®</sup> Nozzle Cut



Specially designed for fast and easy V-shape cutting of adhesive cartridge nozzles.

#### AVAILABLE ITEMS

■ Box with Sika® Nozzle Cut

Item No. 92729

### Sika<sup>®</sup> Cleaner-350 H

Hand Wipes



For the easy removal of fresh, uncured polyurethane or primer from your hands. Gentle cleansing for your skin and other surfaces.

#### AVAILABLE ITEMS

■ Box with 6 × 70 pc bucket

Item No. 523490

### **PowerCure Mixer Nozzles**



PowerCure adhesives such as SikaTack<sup>®</sup> ELITE require the use of PowerCure mixing nozzles.

#### AVAILABLE ITEMS

- Box with 50 units V-cut mixers Iter
- Box with 40 units round mixer nozzles

Item No. 483560 Item No. 496783

### **PowerCure Spare Parts**



Spare parts for the Power-Cure Dispenser are available to order online at: www.sika.com/powercure.

There is a range of spare parts available for small repairs on-site as well as the corresponding instructions.

#### AVAILABLE ITEMS

Box with Li-lon battery 18V 2Ah	Item No.	494106
Box with spare cover, grey	Item No.	494111
Box with hand pad, black	Item No.	494112
Box with mixer cap, red	Item No.	494109
Box with tooth rack cover, red	Item No.	494118

# OUTSTANDING SERVICE THANKS TO PowerCure

"On the commercial vehicle segment, the PowerCure solution from Sika allowed the introduction of a new, faster service level and to react more flexibly on customer appointments."

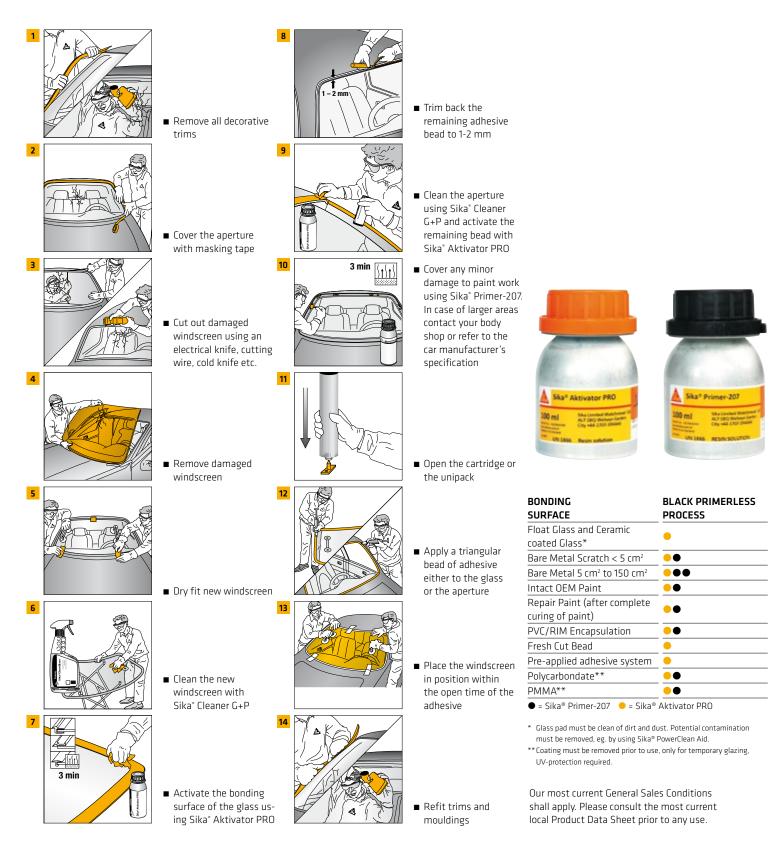
Nils Villwock – junited®AUTOGLAS Scheessel – Verden www.autoglas-villwock.de

## POWERCURE

# TIPS AND TRICKS

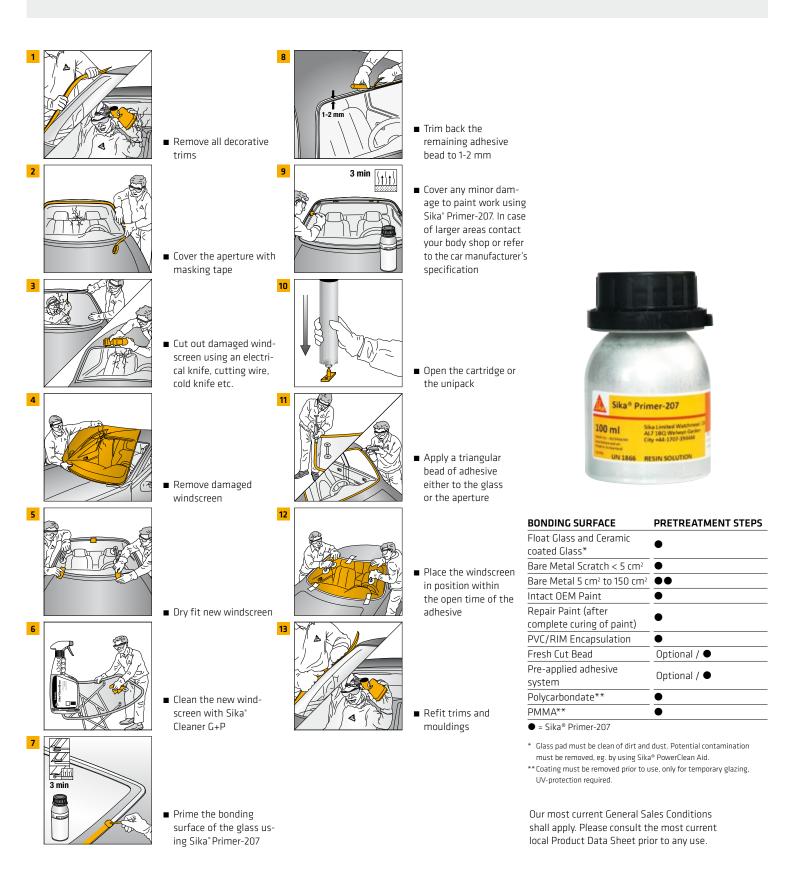


# BLACK-PRIMERLESS PROCESS AUTOMOTIVE GLASS REPLACEMENT



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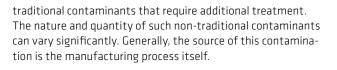
# ALL BLACK PROCESS AUTOMOTIVE GLASS REPLACEMENT



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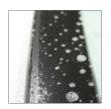
# CONTAMINATION REMOVAL

In general, Sika<sup>®</sup> Cleaner G+P is ideal for removing traditional forms of surface contamination such as dirt, dust and skin oils that are commonly found on automotive glass parts. However, it has been Sika's experience that many parts contain so-called non-





 Mould release agents associated with encapsuled parts (where trim is bonded to the part)



 Silicone residue from a vacuum tube laminating process which is used for the lamination process of laminated safety glass

#### **Recommended Procedure**



**1⁵⁺ step:** Wet glass



**4**<sup>th</sup> **step:** Immediate detection of removal effect visible





**2<sup>nd</sup> step:** Check contamination



**3**<sup>rd</sup> **step:** Use fresh unit Sika<sup>®</sup> Cleaner PCA. Start cleaning ceramic frit



# BONDING PLASTIC WINDSCREENS (PMMA AND PC)

Plastic windscreens can be found on vehicles such as:

- Construction machines
- Special purpose vehicles (police, army, etc.)
- Lightweight construction vehicles
- Roof modules on some vehicles

Typical materials used are PMMA (polymethacrylate) and PC (polycarbonate). In the manufacturing process, many poly-

carbonate sheets are coated with a scratch-resistant surface. Unlike standard float glass, plastic windscreens have a much higher thermal expansion coefficient, resulting in greater movement (expansion and contraction of the window). In addition, plastic windscreens do not have ceramic coating on the glass, nor any other integrated UV protection for the bond line. For these reasons, the following procedures must be followed when bonding plastic windscreens.

#### Permanent glazing

If the coating is unknown, it is recommended to test the surface before bonding (contact Sika for support); otherwise, use the following procedure:

Step 1	Abrade the bonding area with an abrasive pad (e.g. from sia Abrasives) or sand paper	Remove scratch-resistant coating on the bonding area
Step 2	Remove dust and clean surface with Sika® Cleaner G+P	Clean surface from dust
Step 3	Apply Sika® Primer-207, flash off for 10 minutes	Create suitable surface for bonding
Step 4	Apply Sikaflex®-223. Layer thickness as per table below	Bonding

#### **Adhesive Thickness**

LARGEST WINDSCREEN LENGTH	TRIANGULAR BEAD REQUIRED ADHESIVE BEAD DIMENSION*		IENSION*	
L	H		D	
L (m)	H (mm)	B (mm)	D (mm)	B (mm)
0.5	8	6	4	6
1.0	8	8	4	8
1.5	12	10	6	10
2.0	16	12	8	12
Over 2.0 Meter			contact Sika	

\* important: confirm to minimal adhesives thickness, D.

#### UV protection

To ensure a durable bond, the bond line of transparent windscreens must be protected against UV light. Possible solutions are:

- Suitable print color
- Protective metal or opaque plastic trims
- Sika® UV Shielding Tape

Without UV protection, Sika<sup>®</sup> Primer-207 will eventually wear off on the plastic windscreen. The exact point at which this will result in a failure depends largely on the weather, the quality of the synthetic material and the general load.

# NOTES


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# SIKA FULL RANGE SOLUTIONS FOR CONSTRUCTION:



LIQUID APPLIED ROOFING



JOINT SEALING



SINGLE PLY ROOFING



FAÇADE STRUCTURAL ADHESIVES



CONCRETE



FLOORING



CONCRETE REPAI



INDUSTRY





WATERPROOFING



DISTRIBUTION

IN

# FOR MORE INFORMATION:



#### WHO WE ARE

Sika Limited and Sika Ireland Limited are part of the global Sika Group, specialising in the manufacture and supply of chemical based products. Sika have a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing, and protecting in the building sector and the motor vehicle industry. Sika has subsidiaries in 101 countries around the world and manufactures in over 200 factories. With more than 20,000 employees Sika generates annual sales of CHF 7.09 billion (£5.45bn). We are also committed to providing quality, service, safety and environmental care.

In the UK and Ireland, we provide market-leading solutions for concrete, waterproofing, roofing, flooring, refurbishment, sealing & bonding, and industry, and have manufacturing sites in Welwyn Garden City, Preston, Leeds and Dublin with more than 870 employees and a turnover of more than £260 million.

The information, and, in particular, the recommendations relating to the application and end use of Sika® products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. Please refer to our homepage www.sika.co.uk for our current standard terms & conditions applicable to all orders. Users should always refer to the most recent issue of the Product Data Sheet for the product concerned, copies of which will be supplied on request.



SIKA LIMITED

# SGS



#### Contact

Head Office Watchmead Welwyn Garden City Hertfordshire, AL7 1BQ United Kingdom

#### SIKA IRELAND LIMITED

Sika House Ballymun Industrial Estate Dublin 11 D11 DA2V Ireland Phone +441707394444 Fax +441707329129 E-Mail enquiries@uk.sika.com www.sika.co.uk Second

#### Contact

Phone +353 1 862 0709 Fax +353 1 862 0707 E-Mail info@ie.sika.com www.sika.ie ✔@SikaIreland

