

Recommendations for insulating glass production with Edgetech Super Spacer® according to EN1279 and quality and test specifications for multi-pane insulating glass RAL-GZ 520

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1. Disclaimer

This manufacturing recommendation is written to the best of our knowledge and belief and according to our current state of knowledge. It is based on the practical experience we have gained since the beginning of our activity. Nevertheless, it makes no claim to correctness and completeness. The practical experience of insulating glass manufacturers in their daily activities and especially the experience in certain applications, production methods and principles sometimes differs from ours, from which other actions and recommendations are derived. Against this background, we ask you to enrich this production recommendation with constructive feedback.

This manufacturing recommendation has no legally binding function. Nor can any right to any damages or reparation or the resulting cost consequences be asserted or derived from it. Each application has its own and individual requirements, which are checked in each case and if necessary, need to be adapted. The responsibility for the manufactured insulating glass product remains with the insulating glass manufacturer and can in no case be transferred to the component supplier. The responsibility for controlling the function and quality of the incoming goods of the components also remains with the processor (insulating glass manufacturer). In any case, the compatibility and proper functional interaction of the components used must be verified, either by means of special tests or on the basis of experience acquired from the insulating glass manufacturer. This applies in particular to applications with products of different chemical compositions, such as in bonded glazing. Here, good project management of all parties involved is required in advance to check the compatibility of the components used. Therefore, no legally binding, solely valid recommendation for action can be derived from this manufacturing recommendation and anyone who uses the products and machines mentioned and thus manufactures insulating glass does so at his own risk.

1. Spacer products and their different applications

Note: For the production of multi-pane insulating glass with RAL quality mark RAL-GZ 520, quality-monitored spacers must be used. The Gütegemeinschaft Flachglas maintains a list from which it can be seen which Super Spacer® products are currently approved for quality-monitored MIG.

Note: Care must be taken to ensure that the adhesive surfaces on the spacer are not contaminated with adhesion-reducing substances. In general, it is recommended to wear gloves when processing and handling Super Spacer® products.

a. Edgetech Super Spacer® Premium and Super Spacer® Premium Plus

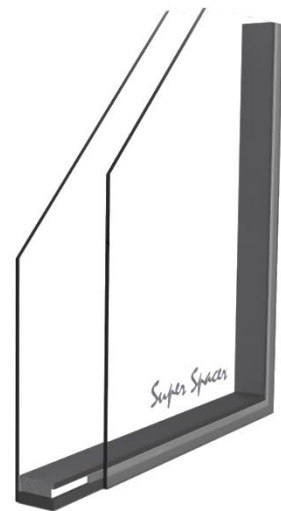
This is a spacer product made of rectangular solid foam material based on silicone, approx. 47 weight-% desiccant 3Å zeolite, a multi-layer polymer barrier film on the back and two acrylic adhesive strips for adhesion to the glass. Profile height: 4.8 mm or 6.5 mm. According to EN1279, the product requires a secondary sealing of hotmelt butyl, reactive hot melt or comparable sealant.

This product can be applied either manually with a tool for manual application or automatically by means of an application robot on flat glass panes and processed into an insulating glass in an insulating glass line. The product is suitable for insulating glass production for framed applications.



b. Super Spacer® TriSeal™ (T-Spacer™) Premium Super Spacer® TriSeal™ (T-Spacer™) Premium Plus Super Spacer® TriSeal™ (T-Spacer™) SG

This is a T-shaped spacer profile made of silicone-based solid foam material, approx. 47 % by weight of 3Å zeolite desiccant, a multi-layer polymer barrier film on the back, two acrylic adhesive strips for adhesion to the glass and two butyl extrusions in parallel. These can be pre-applied for manual processing (TriSeal™ version) or, in the case of automatic insulating glass production, applied to the corresponding side areas by means of the application robot in an insulating glass line directly before using the spacer profile (T-Spacer™ version). These butyl applications are intended for increased gas and moisture sealing. Profile height: 6.3 mm or 7.3 mm. The product is intended for the use of chemically curing 1-part or 2-part sealants based on polysulphide, polyurethane or silicone. It is also possible to use sealants based on MS polymer or modified PU. In any case, functionality (creep behavior, gas loss, Shore-A hardness) and compatibility must be tested. Further information can be found in the product data sheet and in the Material Safety Datasheet. In general, a set back of at least 4 mm is recommended for 2-part insulating glass sealants (PU, PS) and at least 6 mm for silicones. For 3-part insulating glass as well as large or heavy panes, correspondingly more back coverage is recommended, unless other requirements already require a higher sealant backing.



2. Securing the available water adsorption capacity of the desiccant

All Super Spacer® products are so-called flexible and prefabricated spacer products with integrated desiccant. The desiccant processed in the product must be protected from premature saturation. In spacer production, this is done by a defined short time in which the product is completed after the drying process, rolled on rolls and vacuum-sealed. Upon delivery, the product has, as a maximum of the initial moisture content, confirmed in the supplied manufacturing certificates. In order to keep this as low as possible, the following recommendations are given.

3. Test desiccant activity

Quanex provides a desiccant activity kit. This test kit includes material and instructions to determine desiccant activity. This test or the following method of moisture determination with the material moisture analyzer Sartorius MA150 or MA160 should be performed in the following situations:

- When opening the first carton of a new batch
- When a roll from a previously opened package is reused
- When using a roll from an unopened package whose date of manufacture is more than 3 years ago

Super Spacer® material must pass this desiccant test before it can be used. This test may be repeated up to 2 times if one layer of spacer material has been unrolled from the roll beforehand. Material that does not pass the test should be disposed of and either contact the Edgetech application service or the production manager should be informed.

4. Temporary storage

a. Material on the roll

Super Spacer® is packed for transport in vacuum-sealed, moisture-tight foil bags, if necessary, with additional, reusable PET bags. The Super Spacer® material should be used without delay once it has been removed from the vacuum packaging. Unused material should be resealed in moisture-proof foil bags. The bags should be tightly closed with adhesive tape or cable ties and stored with a hand's width away from the floor and outer walls and not in damp areas.

b. Material in small packaging (20m rolls)

Super Spacer® is also available in 20m rolls for consumption in small quantities (Super Spacer® Premium and Premium Plus only). These rolls are packed in vacuum-sealed foil bags. Unused Super Spacer® material should be repackaged in these foil bags and either sealed or sealed with tape and stored away from the floor or damp areas.

5. Protection of desiccant activity

a. Manual production, roller stands with protective covers (illustration image Appendix 6)

For temporary storage of the Super Spacer® material during processing on hand processing rollers, roller stands should be used, which are provided with protective covers. These protective covers protect the spacer material from contamination and reduce moisture absorption into the material. These roller stands are available with one, two or four roller seats.

b. Additional protective measures

The opening in the protective cover used to bring out the spacer material should be closed if production is interrupted for more than 15 minutes and the material should be returned completely under the protective cover.

The rolls should be removed from the roll stand in case of prolonged interruption (e.g. overnight) and packed again in foil bags and boxes. Unused material should be resealed in moisture-proof foil bags. The bags should be tightly closed with tape or cable ties and stored at a distance from the floor and wall and not in damp areas.

c. Storage with automatic application

Storage conditions for the material should be 75°F / 24°C ± 10°F / 6°C. This also applies to the use in the storage cabinet of an automatic applicator. The humidity conditions should be < 10% RH. It is recommended to place an appropriate moisture meter with a clearly visible indication in the spacer cabinet in such a way that it can be read from the outside through the closed door. Care must also be taken to ensure that the supply of the cabinet with dried compressor air works independently of the power supply of the insulating glass line and around the clock 24 hours / 7 days a week.

d. Production delays

The insulating glass unit should be completely assembled after the spacer has been applied to the first pane of glass. Please do not store partially finished units for later completion. The outer sealant should be applied immediately after assembly and compression of the insulating glass pane.

6. Incoming goods inspection / material inspection according to EN1279 before the production of insulating glass

Required inspections and tests for certain designs of multi-pane insulating glass and for components of multi-pane insulating glass used here (especially Super Spacer® T-Spacer™ and TriSeal™, Super Spacer® Premium, Premium Plus may be mentioned separately, MIG System Type B4)

EN 1279-6, Annex A, Table A.1 — Inspections and tests required for certain designs of multi-pane insulating glass and for certain designs of components of multi-pane insulating glass

Inspection table	A.3	A.4	A.5	A.6	A.7	A.8	A.9	A.10	A.11	A.12
MIG System Type ^a	all	gas-filled	secondary sealant		primary sealant	spacer				
			cold	hot		rigid hollow	hot applied ^b	prefabricated ^b	U-channel section	metal strips
B2	X	WR	X	X	X	X				
B3	X	WR	WR	WR			X			
B4	X	WR	X	X	WR			X		
B5	X	WR	X	X	WR				X	
B6	X									X

X: mandatory, WR: if relevant
a For design types of multi-pane insulating glass, see EN 1279-1:2018, Annex B.
b If the hot applied flexible spacer is also a prefabricated flexible spacer, both tables shall be used.

7. EN 1279-6, Annex A – Inspections and tests required for certain designs of multi-pane insulating glass and certain components

Table A.2 — Random sampling design for completed multi-pane insulating glass (monitoring plan to be determined by the manufacturer) Batch or daily production	Number of test specimens for controls
2 to 15	2
16 to 25	3
26 to 90	5
91 to 150	8
151 to 500	13
501 to 1200	20
1201 to 9999	32

The above quantities for the samples shall be taken into account according to the production figures.

Table A.3. Section 2, Production control					
Ref.	Material, inspection or testing	Recommended procedure (Decision by manufacturer)	Request	Recommended frequency (Decision by manufacturer)	Record
3.3	Position of spacer frame	Visual inspection	see system description	each multi-pane insulating glass	no
Table A.3. Section 3, Product control					
1.2	Dimensions of the multi-pane insulating glass (length, width and total thickness, edge displacement), position of spacer frame	Measurement	see applicable specifications	random sample plan (Tables A.2)	yes
1.6	Fogging (if no information on the volatile content of the relevant components is available)	EN 1279-4:2018, Annex C (see related test report in Annex 7)	no visible fogging	— once a year or more frequently where relevant, — when changing relevant components	yes yes
Table A.4. Section 2, production control					
1.2	Closing the gas filling opening	Visual control	Bonding of the puncture site	Any manually filled multi-pane insulating glass	No
Table A.5. Section 1, material control secondary sealant					
1.3a	Adhesion to spacers	See Appendix J, description here in Appendix 3	J1.4	Each batch one sample	yes

Table A.5. Section 2, Production control secondary sealant

1.2	Adhesion to glass and spacers	See Appendix J, description here in Appendix 4	J1.4	Each batch one sample	yes
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Table A.10. Section 1, Material Control

spacer system

1.1	Packaging and label	Visual inspection	see purchase specification	each batch: 1	No
1.2	Dimensions (length/width, shape)	Measurement	see certificate	each batch: 1	no
1.3	Hardness	Measurement, Appendix E Description here in Appendix 5	see test certificate (Shore hardness 0)	each batch: 1	yes
1.4	Adhesion of the spacer to secondary sealant	Detention test, Annex J, description here in Annex 3	see purchase specification	each batch: 2	yes
1.5	Adhesion of the spacer to glass	Detention test, Appendix J Description here in Appendix 4	see purchase specification	each batch: 2	yes
1.6	Volatile content or fogging test	EN 1279-4:2018, Annex H or C test report here in Appendix 7 and 8	see corresponding test report	each batch: 2	yes

Table A.10. Section 2, Production control

1.1	Position in relation to the glass edge	Measurement	see product description	per layer and width of spacer: 1	yes
1.2	Water adsorption capacity	Appendix H, H.3 here in Appendix 1 and 2	see Appendix	each batch: 1	yes
1.3	Cleanliness of the spacer	Visual inspection	no visible contamination	per layer and type: 1 frame	no
1.4	Connections	Visual inspection	no openings	each IG	no
1.5	Adhesion of the spacer to the glass	Appendix J (peel test) Description here in Appendix 3	see Appendix	per layer and width of spacer: 1	no

Table A.10. Section 3, Product Control					
1.1	Exceedances of absolute limit values	Visual inspection and measurements	see product description	Random sampling plan (Table A.2)	yes

According to EN1279-6 A.2 or A.3, if a manufacturing process is such that an inspection is not applicable or physically possible, the inspection can either be changed or ignored if it is properly documented. This applies, for example, to the adhesion test between sealant and spacer if polysulphide is used as the sealant. Similarly, the insulating glass manufacturer may use test methods other than those specified in Tables A1 and A2; e.g. for the adhesion test of the spacer to the glass or adhesion test of the spacer to the sealant described in EN1279-6 Annex J. Here, for example, either a simple pull-off test of the spacer from the glass, or a pull-off test of the spacer from a sealant bead can be carried out.

8. Other recommendations

For production in the insulating glass line, the following points must be checked. Apart from the machine recommendations, this also applies mutatis mutandis to the manual production of insulating glass.

a. Washing machine:

Washing water quality through the measurement of conductivity, manufacturer's recommendation of the washing machine for fresh water and return

Glass quality, seaming, edge deletion, cutting quality

b. Cleanliness of the workplace:

Open adhesive surfaces of glass, spacers, primary and secondary sealers are sensitive to dust. In the applicator, dust can accumulate on rollers, transport rollers and surfaces, forming lumps, lubricators and dirt. Avoidance helps to ensure quality.

c. Application robots in the insulating glass line:

The applicator in the insulating glass line requires regular, manufacturer-mandated or recommended maintenance and adjustment. This maintenance also includes the following inspections and tests to ensure proper functioning:

- Settings, article recipes
- Does the butyl temperature meet the specifications of the butyl manufacturer
- If the butyl application quantity is constant over the length and the same amount on both sides of the spacer
- Cut sample of the corner cut: the cut edge is parallel to the spine and remains enough spacer material with foil for a tight corner

If partially used rolls are repackaged, care must be taken to close the polybags / mylar bags carefully. It is best to store in drying cabinets with dried compressor air.

d. Gas press in insulating glass line / manual gas filling:

The following machine checks should be carried out regularly:

- maintenance conditions
- Parallelism of the plates
- Function of the gas filling device

After pressing, the following tests are required:

- Visual inspection of the compression, also for uniformity
- Optical inspection of acrylic adhesive adhesion
- Measurement of gas content

It is recommended to set the compression time as long as possible without increasing the cycle time.

For example, the Helantec ISO Altimeter device is recommended for adapting the internal window pressure to air pressure conditions when the altitude of the production site deviates significantly from the sea level of the later installation location.

When manually filling the insulating glass, the manufacturer's instructions and recommendations for the gas filling devices must be observed. Any puncture holes must be closed with barrier film that can be provided by Edgetech. Further information can be obtained via the application service.

e. Sealing the start/end corner:

Where the start and end of the spacer meet, the barrier film is interrupted. This joint, which is usually located in a corner, must be closed again with a barrier film. This can be done with the same barrier film that we provide according to the spacer widths. We recommend using PIB/Tape strips. This is a barrier film in which a butyl application is applied in the middle of the adhesive surface, which closes the seam from glass side to glass side. These strips are also available through Edgetech sales.

f. Sealing of the insulating glass unit:

The spacer must be positioned on the glass pane in such a way that there is sufficient space for the outer sealant between the spacer back and the glass edge. The position of the spacer must be uniform to the edge of the glass at all glass edges, the spacer must be applied at right angles to the glass.

When manually sealing insulating glass with Super Spacer® spacers, attention must be paid to the uniform and sufficient application of the sealant. Especially when sealing with hot melt butyl, attention must be paid to professional sealing, sufficient back covering, especially in the corners, good compression of the glass package with the spacer and application of the sealant without cold spots, air bubbles, etc. Further information can be obtained via the application service.

g. Stacking the finished insulating glass:

Stacking should be done on rack strips that are not too soft. When packing, care must be taken to ensure that the units are not compressed on one side and harden in this position.

h. Insulating glass production with manual spacer application:

For the application of the spacer in manual production, a so-called Manufacturing Manual is provided.

i. Insulating glass production of curved panes:

Special features of spacer application in curved insulating glass panes must be observed. Experience in handling the spacer system and insulating glass is required here. We can provide initial assistance through application training on site.

Annex 1 Desiccant Activity Test Kit

Desiccant Activity Test

Note: For those customers who cannot measure the initial load in the spacer with the heating scale, e.g. with manual processing to a lesser extent, there is an alternative measurement of desiccant activity using the moisture indication card. This method is not as accurate as the heat scale measurement, but indicates well an existing adsorption capacity in the spacer's desiccant.

The following instructions should help you correctly determine the activity of the desiccant in your Super Spacer®



Use one of the glass vials provided by Edgetech Europe GmbH.



Use one of the supplied indication cards approved by Edgetech Europe GmbH. Expose the indicator to the room air until the measuring fields turn pink.

(NOTE: The indicator cards are reusable.)



Place the indicator card in the glass vial so that the label faces the viewer outwards. This makes it easier to read the card later.



Take a sample of the Super Spacer® to be tested and cut it to about 4 mm width to fill the glass vial. ***(Please do not remove the protective film from the side adhesive surfaces)***



Fill the glass vial with the spacer pieces to the top and close it completely with the plastic stopper.

(IMPORTANT: For a good result, only FRESH spacers should be used and this should be filled immediately into the glass vial.)



If the 10% indicator turns blue within an hour as shown in the picture, the spacer can be considered to be good.

If the 10% indicator does not discolor over time, the test should be repeated with spacer material after two layers of the roll to be used have been unwound and disposed of. If the result is not positive after this second test, you should contact your Edgetech application service or inform your production manager.

Annex 2 Determination of moisture loading by means of moisture analyzers Sartorius MA 150 or MA-160

Note: Here the process on a heating scale MA160 is shown. The procedure for the MA150 works in the same way.

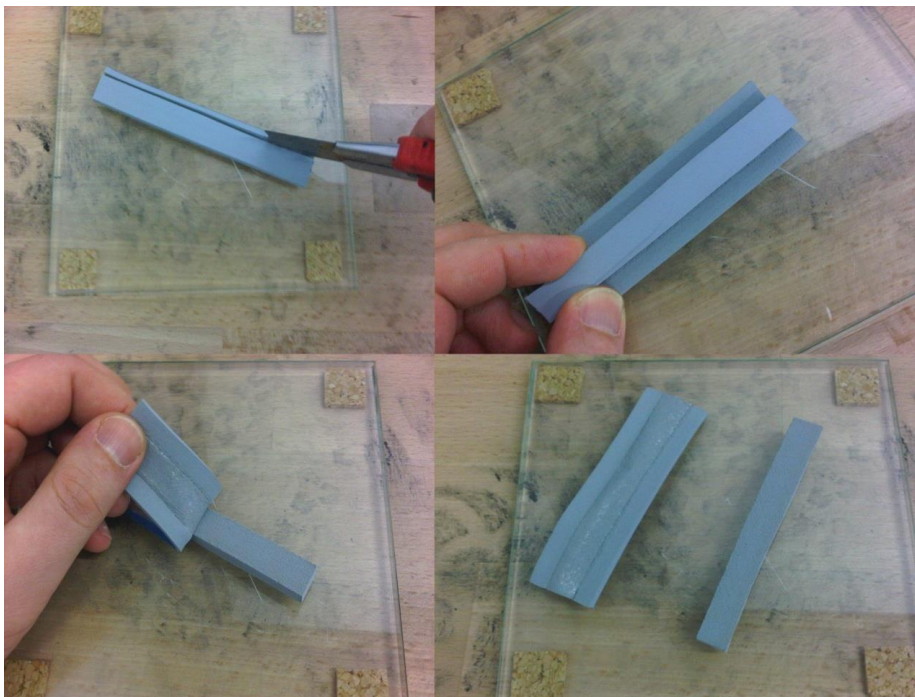
1. Necessary test sample/device
 - 10 - 15 cm long, laminated spacer piece (= end product)
 - Sartorius Heizwaage MA 160
2. The heat scale switches on automatically when connecting the mains plug. The manufacturer recommends 30 minutes to heat up the scale.
3. The scale is brought out of standby mode by pressing the marked symbol.



4. Press the start button to start a measurement.
The display now shows the steps necessary to prepare the measurement.
 - Open the hood.
 - Place the bowl, close the hood for buoyancy.
 - Waiting for standstill.
 - Open the hood after buoyancy.



5. After the balance is ready for use , the sample can be prepared.
This should be done as quickly as possible to avoid unnecessary moisture absorption into the spacer sample. Both acrylic sides of the test piece are cut off with a knife and the vapour barrier is removed.



6. The spacer is now placed on the heat scale for weight control. The **target weight is 5 g ± 0.5 g.** It can be shortened accordingly at the ends to reach the target weight.



7. The balanced sample should now be carefully cut lengthwise with a knife so that strips of approximately the same width are obtained. Specimens from 10 mm width are halved 1 x length, for specimens from 16 mm width 2 x length, etc. 1 – 2 mm thick specimens are cut from these strips.



8. The sample pieces are distributed on the measuring tray, which is then placed back on the heat scale with tweezers.

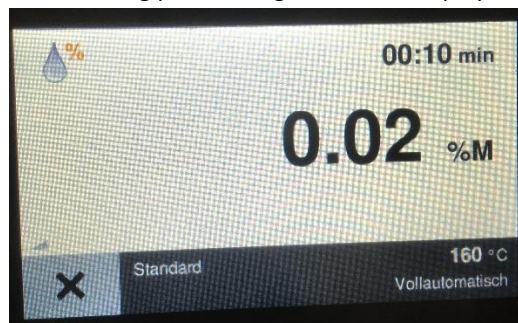


9. The heat scale lid is folded down, which triggers the start of the measurement (2)



The picture shows the weight in grams.

As soon as the lid is closed, the heating process begins and the display shows the mass loss in %.



10. After reaching the set temperature of 190°C, the scale tracks the mass loss of the weigher compared to the elapsed time.
11. After the set measuring time of 15 minutes, the device stops the measurement, measures the value of the weight and sets it in relation to the input weight. The mass loss is shown in the display as a % measured value.

12. The measuring dish is emptied. If no further measurements take place, the device can be switched off. For further measurements, the measuring tray is placed on again, Enter is pressed, waited until the display stops and Enter pressed again to set the tare weight of the tray again.
→ Proceed to point 4 of this instruction

13. The result is entered into the FPC documentation table. In the event of deviations from the target (>1.2%), the production manager must be informed.

Annex 3 EN1279-6:2018 Annex J, illustrated description of the test procedure Adhesion of the secondary sealant to the spacer (provisional, better description is in progress)

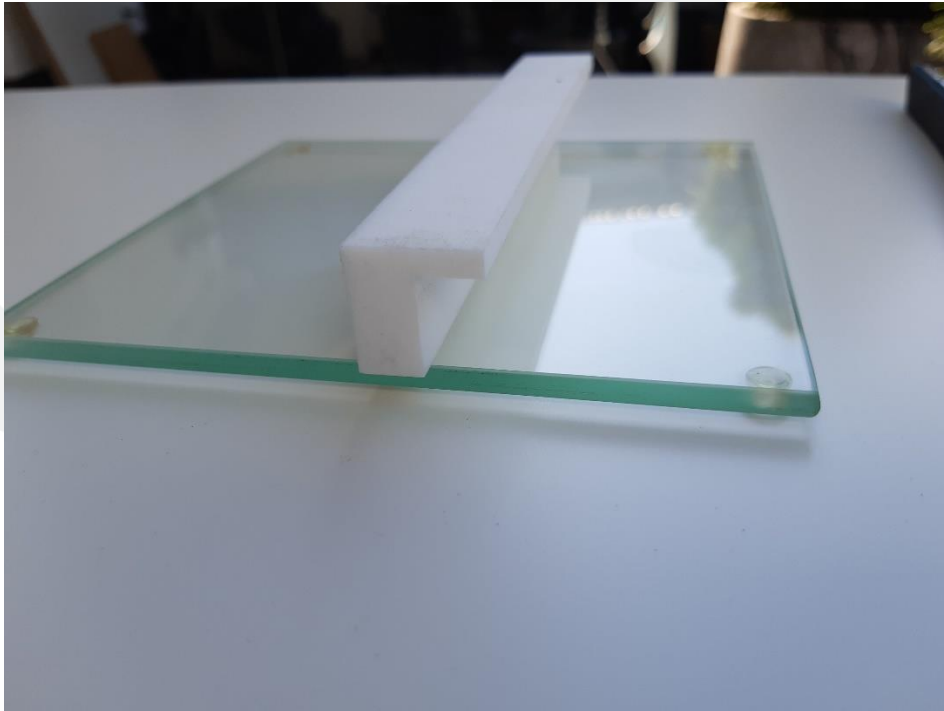
Adhesion test of sealant and spacer

The spacer is a flexible, preformed spacer with integrated desiccant.

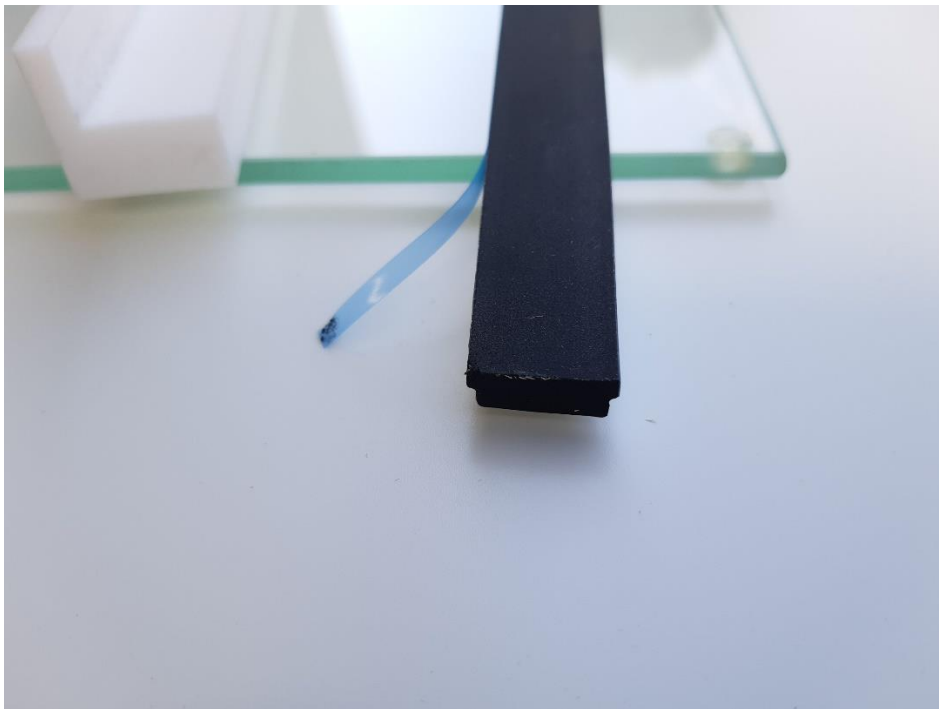
Recommended equipment for the test:

- A normal, cleaned float glass pane
- A piece of spacer cut off from the roll
- A teflon profile
- A spatula to distribute the sealant and remove the excess sealant
- A knife for cutting the spacer profile to length
- Sealant based on PU or silicone, or Hotmelt butyl

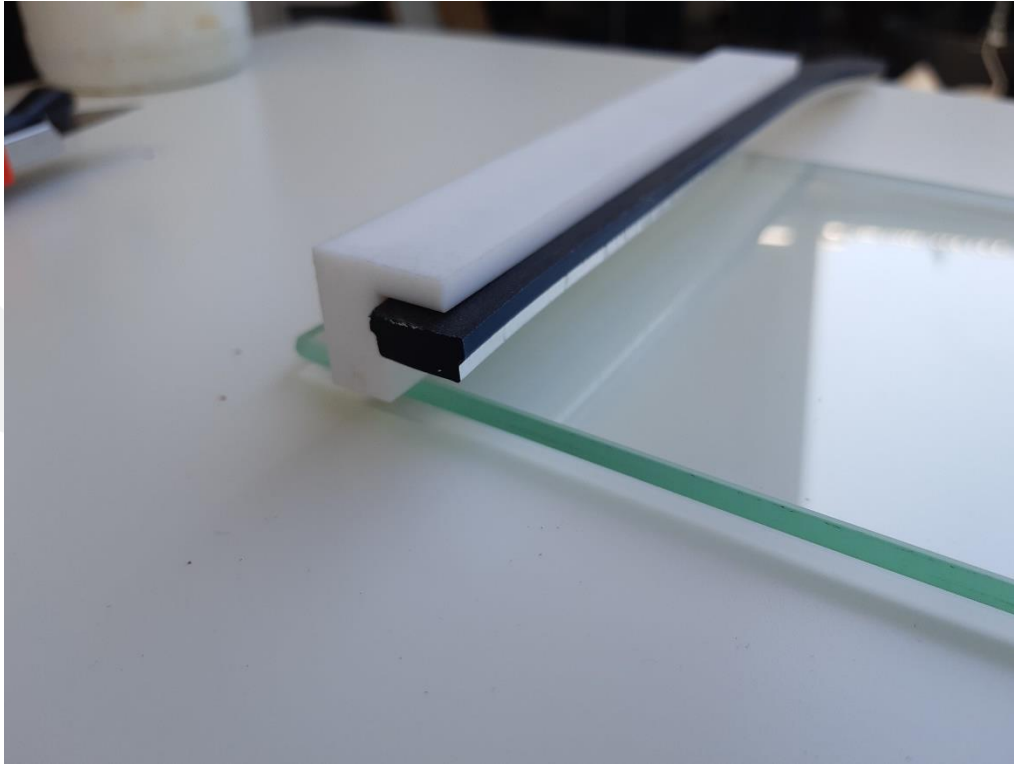




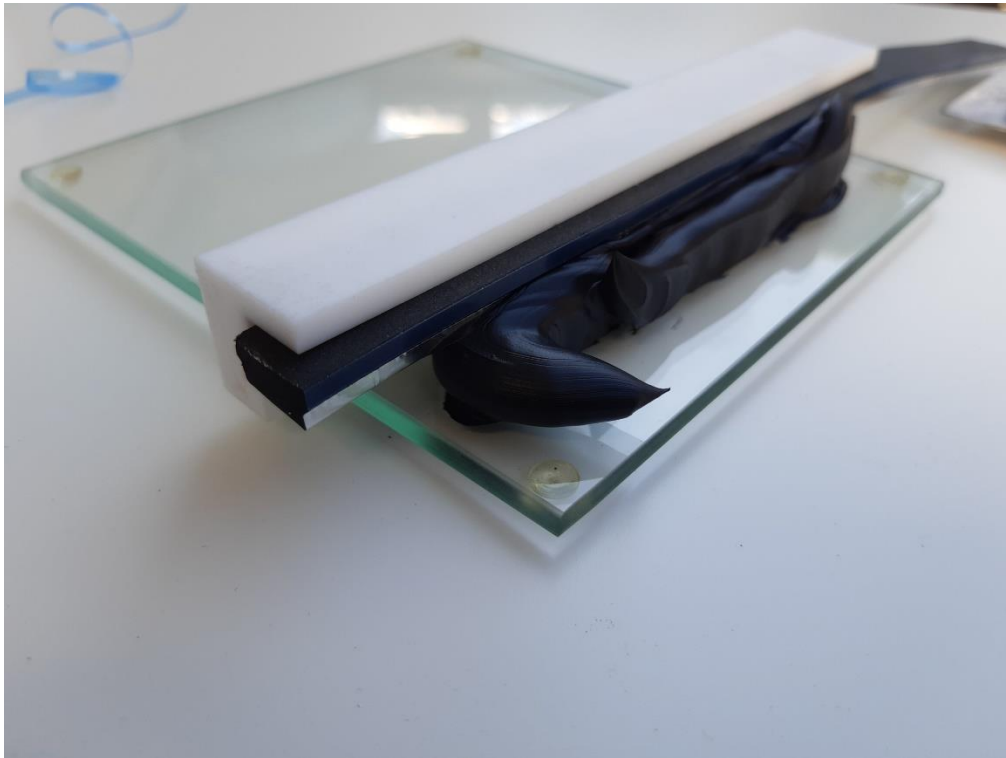
A plastic profile, preferably non-adhesive such as e.g. Teflon, nylon or similar as shown in the picture above, is placed on the glass pane.



Take the spacer, cut it about 15 cm longer than the teflon profile. Remove the protective film of the acrylic adhesive from the spacer on one side. With this side you glue the spacer, with the foam side to the narrow edge of the teflon profile as shown.



Place the teflon profile with the spacer on the glass as shown. The plastic profile can be fixed to the glass with a clamp.



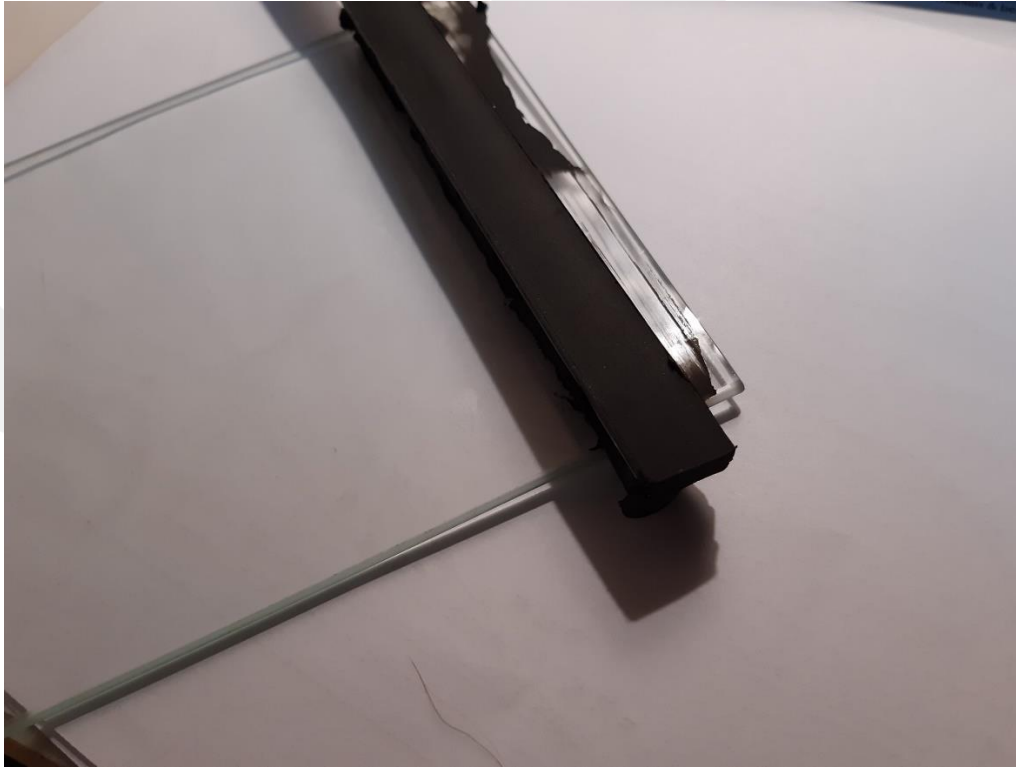
Apply fresh sealant either directly from the nozzle into the arrangement or first onto a spatula or similar, in order to then introduce it directly and without delay into the arrangement in the gap between the glass pane and the silver back of the spacer. Apply more sealant than is needed to fill the gap.



On the one hand, use the spatula to squeeze the sealant well between the spacer and the glass plate, so that as few air bubbles as possible remain in the sealant and remove protruding sealant laterally from the spacer. Thus, a consistent, replicable test of adhesion is always possible.



After 24 hours of curing of the sealant, remove the teflon profile from the spacer.



On the side where the spacer protrudes from the sealant, cut a few millimeters into the sealant without cutting into the spacer to produce a predetermined breaking point in the sealant.

Then pull the spacer vertically away from the sealant in about 90°.

If the spacer breaks off, drag on the other end of the spacer. Watch the spacer as it is pulled out of the sealant.

The test has been passed under the following conditions (for sealants that must have sufficient adhesion to the spacer, e.g. polyurethane, silicone or hotmelt butyl):

- 1) If the spacer can be detached from the sealant and at least about 50% of the surface is covered with sealant residues (cohesive fracture pattern).
- 2) If the spacer breaks off when trying to pull it out of the sealant.
- 3) If the barrier film of the spacer remains bonded to the sealant, but the foam part dissolves and a visible foam residue in the adhesive remains on the barrier film.

If the spacer with the sealant can be detached from glass without leaving any residue, it can be assumed that the glass has not been sufficiently cleaned. Then the glass washing process must be examined (checking water, additives and machine) and the test repeated.

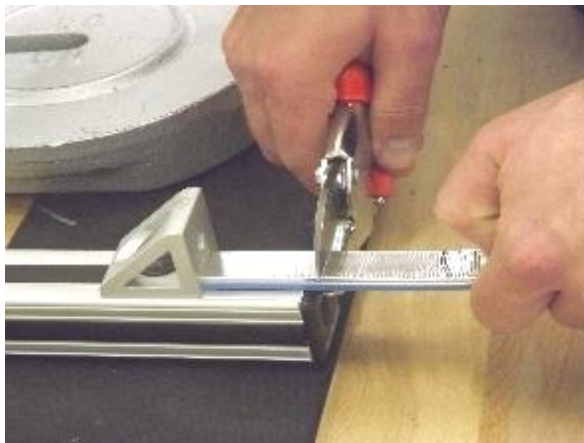
Annex 4 EN1279-6:2021 Annex J, illustrated description of the test procedure Spacer adhesion to glass

DE QS 005 WI – Glastest (All-In-One-Test)

Note: *The assembly to perform the test can be obtained from the Edgetech office.*

Objective: The purpose of this work instruction is to carry out the glass test in order to check the adhesion, the shear resistance and the surface wetting of the acrylic adhesive, as well as the parallelism or geometry of the applied spacer.

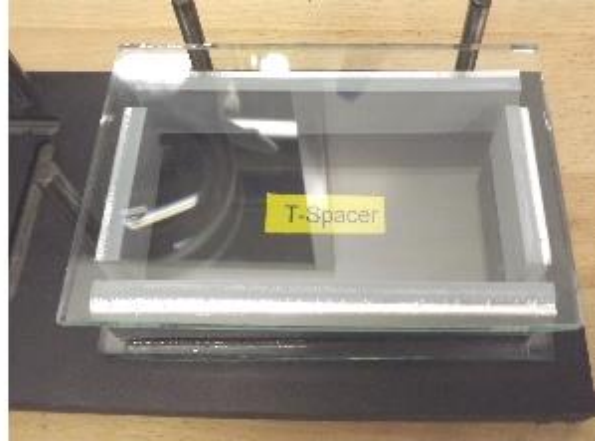
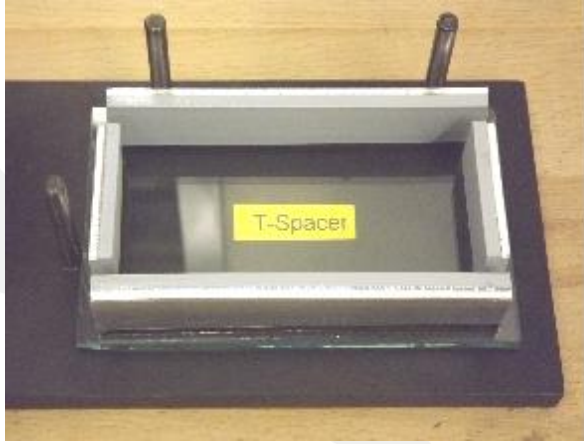
1. Necessary materials
 - Two 4.5 cm and two 9.5 cm long spacers (28 cm total)
 - Two glass panes measuring 7.5 cm x 12.7 cm and 3mm thick
 - Spacer mounting aid
 - Glass test assembly
 - Glass cleaners and cloths
2. Cleaning glass panes
3. Cutting the spacers using the markings on the glass test assembly



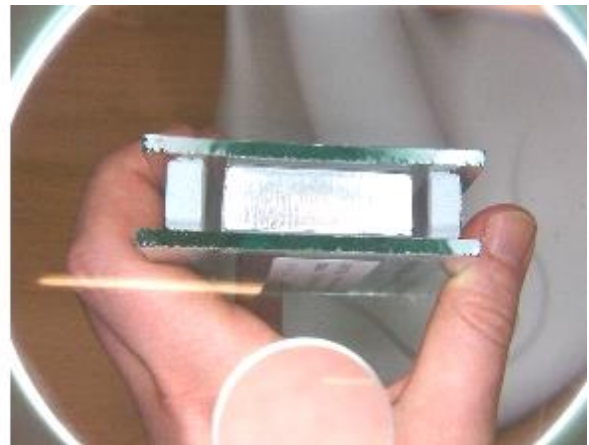
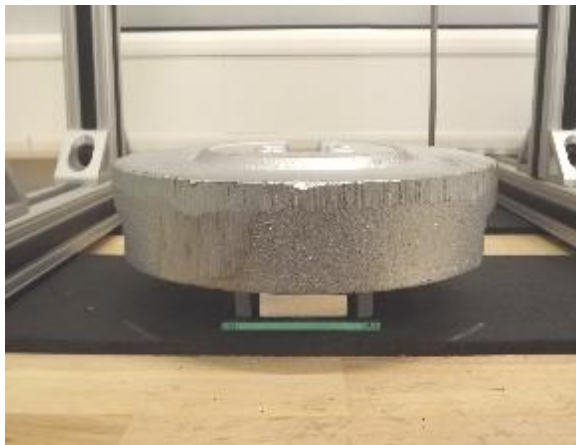
4. With the help of the spacer application aid, the spacer pieces are applied with the vapour barrier to the outside on the first glass pane.



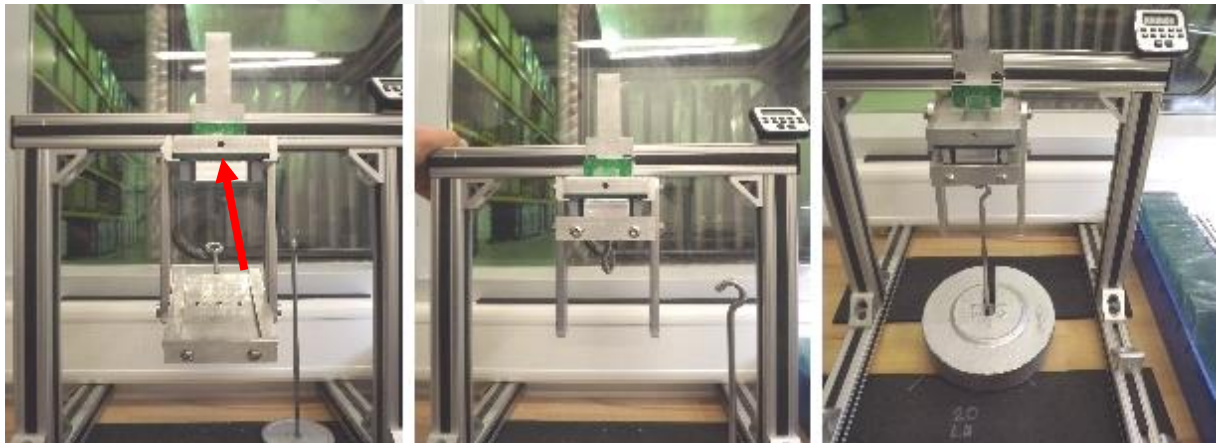
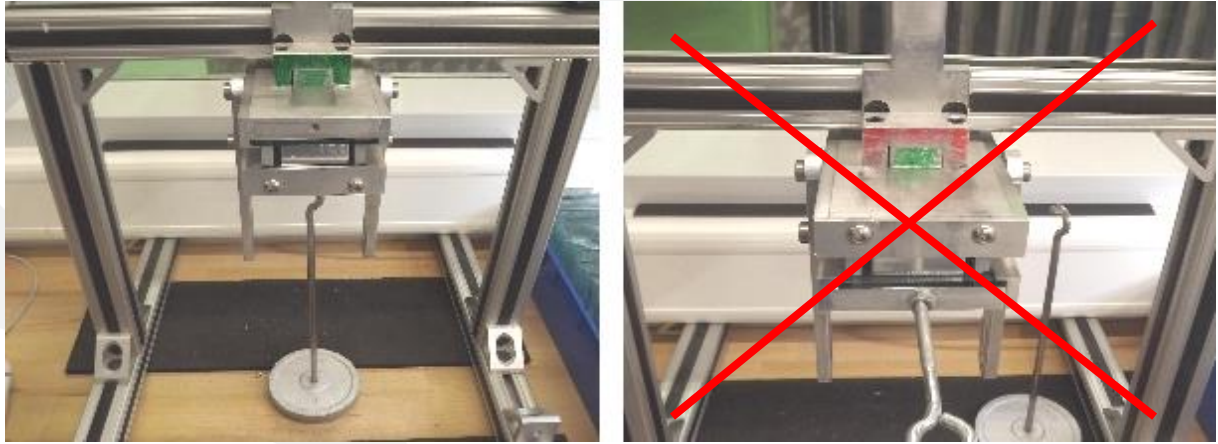
5. The first pane of glass is now applied to the orientation rods and the second pane of glass is placed.



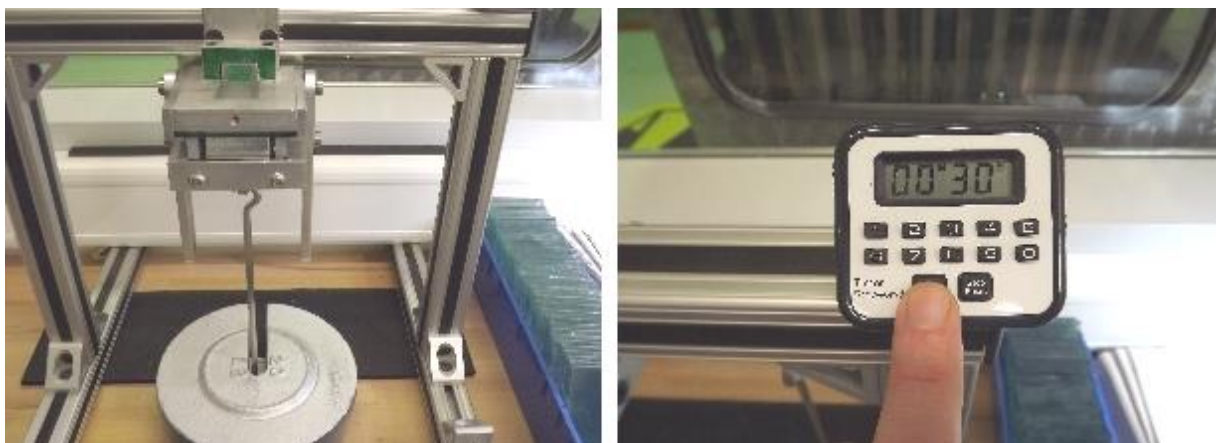
6. The 20 lb (approx. 9.07 kg) weight is placed on the sample disc for 30 seconds. Care must be taken to ensure that the spacer has not been applied crooked and that the acrylic adhesive shows good wetting on the glass surface (contact point becomes darker if well wetted). If the spacer is not applied vertically, check whether this was caused by an excessive inclination (antiparallelism) of the spacer shoulders.



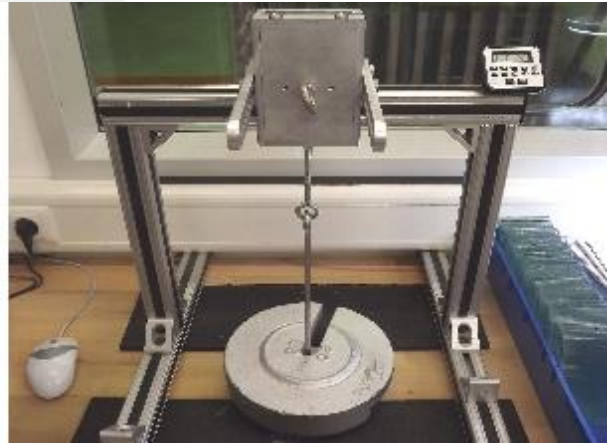
7. The glass test setup is assembled with the manufactured sample disc, as shown in the figure on the left and below.



8. The weight is attached for 30 seconds as shown below to test the adhesion of the acrylic adhesive



9. This is followed by the shear test. The structure is shown in the illustrations below, with the weight also attached for 30 seconds.



10. The sample piece is labeled and packed in a bag for archiving (example of the sticker)



Annex 5 EN1279-6:2018 Annex E, illustrated description of the test procedure Hardness measurement of the spacer

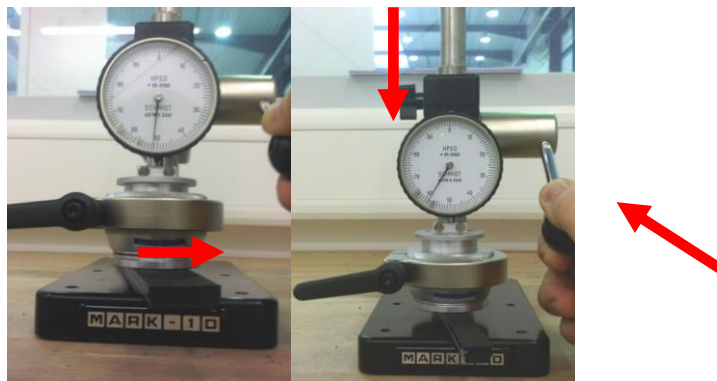
Objective: It is explained how a sample is correctly measured with the Shore-O gauge, to obtain the most accurate value possible.

Procedure: The operator takes an approximately 20 cm long sample of the spacer.

1. The test piece is placed with the foam side upwards under the tester and aligned in the middle.



2. For measurement, the apparatus is lowered by pressing the lateral lever on the sample until **the red line is just covered**. The lowering must under no circumstances apply a manual force to the testicle.



3. After 10 - 15 seconds, the result is read on the dial gauge. This measurement is carried out at a total of 3 different places and the results are averaged. The setpoint is ≥ 57 shore0. The measured value is entered in the FPC documentation.

Appendix 6 Image Double-Reel Stand

Double Reel Stand

Equipment solutions

The Edgetech Double Reel Stand is designed to meet your specific glass shop needs including:

- Two reel stations with central support require minimal floor space
- Sealed enclosure for temporary desiccant protection
- Spacer reel supported on hardened steel pins
- Reel slot protection to minimize moisture exposure
- See-through cover to monitor spacer levels
- Only one liner stripper is necessary



*Liner stripper not included.

Annex 7 EN1279-4:2018 or EN1279-6 Annex C foggingtest report

Nachweis

Überprüfung des Foggingverhaltens von Mehrscheiben-Isolierglas

Prüfbericht

Nr. 17-000862-PR01
(PB-H01-09-de-01)



Auftraggeber **Edgetech Europe GmbH**
Gladbacher Str. 23
52525 Heinsberg
Deutschland

Grundlagen

EN 1279-6; 2002-07;
Glas im Bauwesen, Mehrscheiben-Isolierglas, Teil 6: Produktionskontrolle und periodische Prüfungen, Anhang C, Foggingtest

Produkt	Mehrscheiben-Isolierglas
Bezeichnung	Super Spacer T-Spacer Premium
Außenmaß (B x H) in mm	352 x 502
Aufbau in mm	4 / 12 / 4
Abstandhalter	Basis Silikonschaum, Super Spacer T-Spacer Premium, Fa. Edgetech
Bauteil im SZR	-/-
Besonderheiten	-/-

Verwendungshinweise

Dieser Prüfbericht dient zum Nachweis des Foggingverhaltens von Einbauten im Scheibenzwischenraum von Mehrscheiben-Isolierglas

Gültigkeit

Die genannten Daten und Ergebnisse beziehen sich ausschließlich auf den geprüften und beschriebenen Probekörper.
Die Prüfung des Foggingverhaltens ermöglicht keine Aussage über weitere leistungs- und qualitätsbestimmenden Eigenschaften.

Veröffentlichungshinweise

Es gilt das ift-Merkblatt „Bedingungen und Hinweise zur Benutzung von ift-Prüfdokumentationen“.

Das Deckblatt kann als Kurzfassung verwendet werden.

Inhalt

Der Nachweis umfasst insgesamt 5 Seiten
1 Gegenstand
2 Durchführung
3 Einzelergebnisse



Das Mehrscheiben-Isolierglas-System mit dem Abstandhalter:

Super Spacer T-Spacer Premium

zeigt kein Fogging bei der Prüfung nach DIN EN 1279-6, Anhang C

ift Rosenheim
17.07.2017

Miriam Keill, B.Eng.
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Inspektion – EN ISO/IEC 17020
Zertifizierung Institute – IFT ISO/IEC 17025
Zertifizierung Managementsysteme – EN ISO/IEC 17021



Annex 8 EN1279-4:2018 or EN1279-6 Annex C fogging test report

Under the test report ift 18-001431-PR02 (PB-H01-09-en-01), there is also a report on the passed fogging test according to ift guideline VE-07/3 2018-01 at elevated temperature.