

Customer Technical Update
Pilkington Activ™
The world's first self-cleaning glass
December 2008



PILKINGTON
NSG Group Flat Glass Business



Products Compatible with Pilkington Activ™

December 2008

Testing has demonstrated that the use of incorrect materials and in particular silicone containing products with Pilkington Activ™ can affect its performance. This list has been created to help identify compatible materials for use with Pilkington Activ™

This update contains information which is designed to provide you with up to date information about the technical aspects of Pilkington Activ™, in particular glazing materials that are compatible with the product.

New information added since the last edition is shown in RED so you can easily find it.

If you have any further questions, please contact your Pilkington Sales Manager.

Additional advice can be found in the "Handling and Processing Guidelines for Window Manufacturers".

Further information is also available from our websites www.pilkington.com and www.activglass.com

The suppliers that are listed in this document submitted products for testing.

The samples submitted were tested for compatibility with Pilkington Activ™ and the results were positive.

There may be other equivalent products that are also compatible, but which have not been tested.

For any product, guidance should be sought from the supplier regarding its suitability as a glazing material, or its compatibility with other glazing materials.

The glazing method should also take into account the recommendations given in relevant national standards, regulations, codes of practice and recommendations of the manufacturer or supplier of the glazing material.

Pilkington Activ™ has been tested to EN1096-2 which tests the durability of the coating. There is not currently an EN standard to cover self-cleaning performance.

The products are all listed with the dates that they were tested. Please check with the supplier that they have not changed their raw materials or manufacturing process in any way that would affect their product's compatibility. Pilkington supply this information as a service to their customers but accept no responsibility for any loss or damage incurred as a result of using this information.

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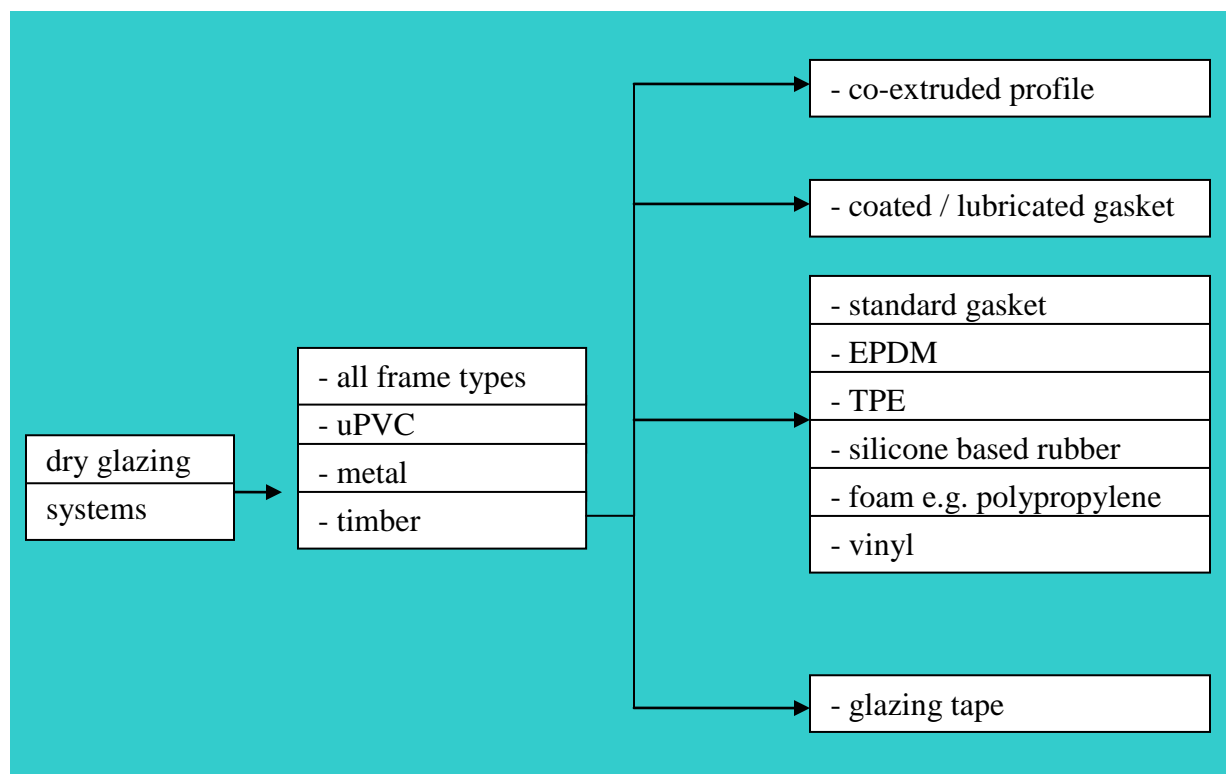
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1. Dry Glazing System Materials - Residential and Commercial Applications



When glazing Pilkington Activ™, the strongly preferred option is to use a co-extruded gasket or a dry rubber gasket.

Only if the use of a dry gasket or co-extruded system is not possible should a rubber gasket lubricated with glycerol or alternative silicone free / siloxane free lubricant be used.

If all of the above options are unavailable then Pilkington Activ™ may be glazed with a recommended silicone emulsion lubricant on a thermoplastic (TPE) rubber gasket. If this option is utilized care should be taken and the following points have to be taken into consideration.

1. All of the lubricated gaskets have been tested for compatibility with Pilkington Activ™ in the vertical orientation. Some of the gaskets that are lubricated with a siloxane emulsion have occasionally shown very low levels of leaching (<2cm) around the perimeter of the glass.
2. Lubricants added to gaskets should only be applied by the manufacturer. Under no circumstances should additional lubricant be added to the gasket. Addition of extra lubricant is likely to result in uncured material on the surface and significantly increases the chances of leaching
3. Due to the longer residence time of water on the gasket, there is the potential for an increased level of leaching if these same gaskets used in sloped glazing. Please check with your supplier to ensure gaskets lubricated with siloxane emulsion are not used in sloped installations.

UNDER NO CIRCUMSTANCES SHOULD A SILICONE OIL LUBRICATED GASKET BE GLAZED AGAINST PILKINGTON ACTIV™.

1.1 Co-extruded Gaskets

| Supplier | Product Name | Date Tested | Website | Telephone |
|------------------|---|-------------|--|---------------------------|
| Duraflex | Duraflex co-extruded gasket | 01.12.2002 | www.duraflex.co.uk | UK 01452 726010 |
| Industrial Flexo | Co-extruded gasket. Sample ID: 22.97.8001.0 | 01.10.2003 | www.avon-rubber.com | UK +44 (0) 1225 861100 |
| Profile 22 | Bubblex | 15.2.06 | www.profile22.co.uk | UK 01952 290910 |
| Rehau AG | Rau-pren | 13.12.2002 | www.rehau.com | Germany 09131 92 5362 |
| Ultraframe | Ultramframe Co-extruded profiles | 12.3.2006 | www.ultraframe.com | UK 01200 443311 |
| Veka Ltd | Co-extruded profile | 15.01.2003 | www.veka.com | UK 01282 716611 |

1.2 Coated / Lubricated Gaskets *

- Note: Lubricated / Coated samples sent for testing showed little or no hydrophobic leaching and therefore passed tests. Due to the nature of these lubricants they must be applied by the manufacturer and be fully dried prior to use. Under no circumstances should additional lubricant be applied on site.**

Check with supplier that the amount of lubricant applied to the gasket has not change composition/ increase, as this may reduce product compatibility.

| Supplier | Product Name | Date Tested | Website | Telephone |
|--|--|-------------|--|---|
| AVATEC Industrieprodukte GmbH Lubricant Supplier | Polymer S EPDM Siloxane Lubricated | 01.10.2005 | | Germany +49 2861 90297-0 |
| Barbe | Silicone free mounting lubricant | 15.2.06 | www.barbe.de | Germany +49 611 182920 |
| CGP Chemicals Ltd | CGP 2321 Profile Coating | 15.2.06 | www.cgpchemicals.co.uk | UK:-01283511101 sales@cgpchemicals.co.uk |
| Deflex-Dichtsysteme | EPDM gasket with glycerol | 01.12.2002 | www.deflex.de | Germany 0203 31808- 0 |
| | EPDM + Talc | 01.12.2002 | | |
| | Any TPE/EPDM Gasket with Deflex- Gummispray A1 | Q2 08 | | |
| DJ Profiles | EPDM with glycerol | 27.01.2003 | www.trelleborg.com | UK 01952 290303 |
| Fa. Dätwyler Inter GmbH | EPDM with special slip-polymer | 01.12.2002 | www.daetwyler.ch | Germany 049 50459109-22; Switzerland 041 875 1122; UK Swindon, France Estreé, Italy Milano, Poland Pruszkow |
| Fa. M.O.L. Gummiverarbeitung | EPDM with lubricant | 01/2005 | www.mol-seals.de | Germany 49 (0) 4441 - 9245-0 |
| Fabprene | Glycerol Lubricated EPDM | 01.01.2006 | www.fabprene.co.uk | UK +44 (0)161 342 6902. |
| FinnProfiles Oy | TPE 57SHA | 13.11.2002 | | Finland 08 817 6090 |
| Flevo Rubber | Talc Lubricated EPDM 60 | 01.11.2005 | www.flevo-extrusion.nl | Netherlands +31 320 233007 |
| | Talc Lubricated EPDM 70 | | | |
| | Talc Lubricated EPDM 80 | | | |
| | Promol Lubricated EPDM 60 | | | |
| | EPDM 60 Shore with HC Glide 811 lubricant | 10.2006 | | |
| | EPDM 70 Shore with HC Glide 811 lubricant | | | |

1.2 Coated / Lubricated Gaskets *

- Note: Lubricated / Coated samples sent for testing showed little or no hydrophobic leaching and therefore passed tests. Due to the nature of these lubricants they must be applied by the manufacturer and be fully dried prior to sue. Under no circumstances should additional lubricant be applied on site.**

Check with supplier that the amount of lubricant applied to the gasket has not change composition/ increase, as this may reduce product compatibility.

| Supplier | Product Name | Date Tested | Website | Telephone |
|---|---|-------------|--|---|
| Goldschmidt GmbH (Lubricant Supplier) | TPE Gasket with Siloxanxe based Slip Coating Getren P3300 | 01.12.2002 | www.getren.com | Germany +49 201173 2570 |
| GTG Gummitechnik W. Bartelt | EPDM with slip coating | 01.12.2002 | www.gtg-group.com | Germany +49 (0) 9073 9507-0 |
| | EPDM gasket with organic lubricant | 01.12.2002 | | |
| | EPDM gasket with water based lubricant | 01.12.2002 | | |
| IEB Gummitechnik Eisele & Co | TPE gasket with lubricant Getren P 3300 | 01.12.2002 | www.ieb-gummitechnik.de | Germany +49 6061 9597-0 |
| | TPE gasket with soapy water | 01.12.2002 | | |
| Industrial Flexo | EPDM gasket with E5 lubricant. Sample ID: 22.95.8419.1 | 01.10.2003 | www.avon-rubber.com | UK +44 (0) 1225 861100 |
| Leeser GmbH | EPDM with slip coating | 06/2008 | www.leeser.de | Tel + 49 2433 4508 – 247 |
| Linear | TPE 4058-101 | 02.09.2002 | | UK 01325 375126 |
| Mehren | Mehren EPDM gasket with talc | 18.06.2002 | www.mehren.no | Norway 0337 85500 |
| Meteor Gummiwerke K. H. Bädje GmbH & Co. KG | Colourlock AC 600 EPDM | 01/2005 | www.meteor.de | Germany +49-(0)5067/25-0 |
| Phoenix Benelux BVBA | EDPM with slip coating | 01.08.2004 | www.phoenix-benelux.com www.phoenix-dt.de | Belgium +32 (0) 3 206 7420 Germany +49 3622-633494 |
| Profile 22 | TPE Silicone | 15.01.2003 | www.profile22.co.uk | UK 01952 290910 |
| Saargummi | Nova Strip | 06.11.2002 | www.saargummi.de | Germany 0687469-0 |

1.2 Coated / Lubricated Gaskets *

- Note: Lubricated / Coated samples sent for testing showed little or no hydrophobic leaching and therefore passed tests. Due to the nature of these lubricants they must be applied by the manufacturer and be fully dried prior to sue. Under no circumstances should additional lubricant be applied on site.**

Check with supplier that the amount of lubricant applied to the gasket has not change composition/ increase, as this may reduce product compatibility.

| Supplier | Product Name | Date Tested | Website | Telephone |
|--|---|-------------|--------------------|---|
| Savatech | STL 50410 glycerol EPDM | 13.12.2002 | www.savatech.co.uk | UK 020 82883508 |
| | STL 50410G glycerol EPDM | 13.12.2002 | | |
| | STL 50410 talc (EPDM) | 13.12.2002 | | |
| | STL 50410G talc (EPDM) | 13.12.2002 | | |
| Any TPE/EPDM Schill + Seilacher AG Lubricated Gasket | Struktol VP 5289 Siloxane Based Lubricant | 1.2007 | www.struktol.de | Herr Mille Tel. Germany +49 3642-721 659 |
| Semperit | EPDM with slip coating | 14.02.2002 | www.semperit.at | Germany 0991 27020; Austria 02630 310 214; France 01 30 25 87 25; Italy 0425 410 680 (Roiter); Sweden 08 88 04 20; Netherlands 033 245 8324; UK 0118 921 4801 |
| | EPDM gasket with glycerol | 14.02.2002 | | |
| | EPDM + Talc | 14.02.2002 | | |
| Slottseal Extrusions Ltd | Slottseal gasket TPE | 05.11.2002 | | UK 01604 759535 |
| Synseal | TPE gasket with glycerol | 01.02.2004 | www.synseal.com | UK 01623 443200 |
| | VTP TPR Gasket Coated with Synseal Slip Coating | 10.2006 | | |
| TPP | Easy Set EPDM and Glide Polymer | 01.10.2005 | www.tpp-bv.com | Phone 0031 (0)578-677330 |

1.2 Coated / Lubricated Gaskets *

- Note: Lubricated / Coated samples sent for testing showed little or no hydrophobic leaching and therefore passed tests. Due to the nature of these lubricants they must be applied by the manufacturer and be fully dried prior to use. Under no circumstances should additional lubricant be applied on site.**

Check with supplier that the amount of lubricant applied to the gasket has not change composition/ increase, as this may reduce product compatibility.

| Supplier | Product Name | Date Tested | Website | Telephone |
|--|---|-------------|---------------------------------------|---|
| Trelleborg | EPDM with slip coating | 01.08.2004 | www.trelleborg.com/industrialprofiles | Sweden 0370 48191; UK 0121 352 3873; Norway 0648 66160; Finland 03314 30900; Denmark 075 64 72 52; France 0556 70 25 95; Belgium 055 20 67 64; Germany 0626 192350; Poland 042 613 6322; export from Sweden +46 381 60519 |
| | Trelleborg EPDM extruded gasket | 18.12.2002 | | |
| | Plastmo 6805077 EPDM | 01.08.2004 | | |
| | Plastmo 6805079 EPDM | 01.08.2004 | | |
| | Trelleborg extruded gasket with talc | 01.09.2002 | | |
| | EPDM gasket with potato starch | 01.09.2002 | | |
| Vredestein | Tauchmittel 525A(EPDM) + glycerol | 22.01.2003 | www.vredestein-sealings.com | NL 0317 399 256 |
| Any TPE/EPDM Getren 3300 Lubricated Gasket | Getren 3300 Lubricated Siloxane Based Lubricant | 01/2005 | www.getren.com | Germany +49 201173 2570 |
| J Allcock and Sons Ltd | Allcosil Lubricant on approved gasket | 1/7/2007 | www.allcocks.co.uk | UK 0161 223 7181 |

1.3 Dry EPDM Gaskets

| Supplier | Product Name | Date Tested | Website | Telephone |
|--------------------------------|---|-------------|---|--|
| Fa. Dätwyler Inter | Dry EPDM | 01.12.2002 | www.daetwyler.ch | Germany 049 50459109-22; Switzerland 041 875 1122; UK Swindon, France Estreé, Italy Milano, Poland Pruszkow |
| Flevo Rubber | Dry EPDM 60 | 01.11.2005 | www.flevo-extrusion.nl | Netherlands +31 320 233007 |
| | Dry EPDM 70 | | | |
| | Dry EPDM 80 | | | |
| GTG Gummitechnik W. Bartelt | Dry EPDM gasket | 01.12.2002 | www.gtg-group.com | Germany +49 (0) 9073 9507-0 |
| Industrial Flexo | Dry EPDM gasket 70. Sample ID: 22.80.8016.0 | 01.10.2003 | www.avon-rubber.com | UK +44 (0) 1225 861100 |
| | Peroxide EPDM gasket. Sample ID: 22.95.8419.0 | 01.10.2003 | | |
| Mehren | Mehren Gasket | 18.06.2002 | www.mehren.no | Norway 0337 85500 |
| Reddiglaze | Reddiglaze EPDM | 17.09.2002 | www.reddiglaze.com | UK 01905 795432 (also export into Europe) |
| | Wooden frame gasket | 17.09.2002 | | |
| Rehau AG | Dry EPDM gasket | 13.12.2002 | www.rehau.com | Germany 09131 92 5362 |
| Semperit | Dry EPDM 2631 and 2610 | 10.10.2006 | www.semperit.at | Germany 0991 27020; Austria 02630 310 214; France 01 30 25 87 25; Italy 0425 410 680 (Roiter); Sweden 08 88 04 20; Netherlands 033 245 8324; UK 0118 921 4801 |
| Trelleborg | Trelleborg Extruded Gasket | 01.09.2002 | www.trelleborg.com/industria lprofiles | Sweden 0370 48191; UK 0121 352 3873; Norway 0648 66160; Finland 03314 30900; Denmark 075 64 72 52; France 0556 70 25 95; Belgium 055 20 67 64; Germany 0626 192350; Poland 042 613 6322; export from Sweden +46 381 60519 |
| Tremco | Peroxide EPDM 65 | 09.01.2003 | www.tremcoeuropa.com | UK 01753 691696; Germany 02405 426662; Netherlands 055 533 6062; Sweden 031 57 00 10; Finland 095 499 4500; France 01 34 58 57 00; Italy 02 98 281854; Norway 02 32 71 70 |
| | 70 Duro EPDM | 09.01.2003 | | |
| | 60 Duro EPDM | 09.01.2003 | | |
| | SCR 900-70 | 09.01.2003 | | |
| Veka Ltd | VEKA Extruded EPDM | 15.01.2003 | www.vekauk.com | UK 01282 716611 |
| Wilfried Becker GmbH | 04150136, 04150138 and 04150145 | 1.5.2007 | www.baulager.de | Germany 02131758100 |

1.4 Dry TPE Gaskets

| Supplier | Product Name | Date Tested | Website | Telephone |
|--------------------------|----------------------------|-------------|--|---|
| Euroseal | Euroseal Blue Label Gasket | 10.06.2003 | www.euroseal.co.uk | UK 0121 344 4100 |
| FinnProfiles Oy | TPE 57SHA | 13.11.2002 | | Finland 08 817 6090 |
| Linear | TPE 4100-101 | 02.09.2002 | | UK 01325 375126 |
| | TPE 4058-101 | 02.09.2002 | | |
| Profile 22 | TPE Dry | 15.01.2003 | www.profile22.co.uk | UK 01952 290910 |
| Reddiglaze | Reddiglaze TPR | 02.09.2002 | www.reddiglaze.com | UK 01905 795432 (also export into Europe) |
| Slottseal Extrusions Ltd | Slottseal Gasket | 01.11.2002 | | UK 01604 759535 |

1.5 Other Dry Gaskets

| Supplier | Product Name | Date Tested | Website | Telephone |
|--|--|-------------|---------------------------|--|
| BIW Isolierstoffe GmbH | Silicon P60 | - | www.biw.de | Germany 02333 83080 |
| Deflex-Dichtsysteme | Dry silicone gasket | 01.12.2002 | www.deflex.de | Germany 0203 31808-0 |
| Eurocell | Eurocell E Gasket | 15.5.2006 | - | UK +44 (0) 01246 205577 |
| FinnProfiles Oy | Silicone 65 SHA extruded or baked silicone versions | 13.11.2002 | | Finland 08 817 6090 |
| Hermann Gutmann Werke AG | Silicone gasket 750010 + 750011 | Q2 08 | www.gutmann.de | + 49 9141 9 92 - 0 |
| Hydro Polymers | VA 2010 | 27.09.2004 | www.hydro.com | Norway +47 22 53 81 00 |
| Leeser GmbH | dry foamed rubber | Q2 08 | www.leeser.de | Tel +49 2433 4508 – 247 |
| Metal Technology | CA26 SD36 VS123/BK CA27 SD37 CA28 SD115 CA29 SD134 058 CW12 063 HR5059 066 HR50120 | 1.12.07 | www.metaltechnology.com | UK 02894 487777 (Fax 02894 487878) |
| M+S Silicone GmbH | | 01.01.2006 | www.ms-silicon.de | Germany +49 231967890-0 |
| PAL Glazing | PAL glazing not lubricated | 24.01.2003 | www.palgroup.co.uk | UK 0121 526 4048 |
| Ravenscroft Plastics | Sapa C4169 | 07.03.2003 | www.ravenscroft.co.uk | UK (01684) 292272/299669 |
| Reddiglaze | Reddiglaze PVC Dry Vinyl | 02.09.2002 | www.reddiglaze.com | UK 01905 795432 (also export into Europe) |
| Rehau AG | Dry silicone gasket | 13.12.2002 | www.rehau.com | Germany 09131 92 5362 |
| Schlegel | Q-Lon Dry Foam | 18.12.2001 | www.schlegel.co.uk | UK 01462 815500; Germany 0407 33290; Italy 0221 36115; Belgium 059 270300 |
| Senior Aluminium Systems | SMRTB4, SCG24, SW4G, SWFS, SWW6, SWDG, SWRG, SWDG02, SPGRG, SW4ATH, SRA35311, SMRG2, SRG10, SRA34025, SCWG, SWRG3, SWW4, SRG6, SSG201, SW3B, SW27G, SRA353111, SWW8, SW4C2, SW4B | April 2008 | www.senioraluminium.co.uk | UK 01790 772600, Fax 01709 772601 |
| Silex GmbH | Tempered Silicone Gasket | 01.11.2005 | www.Silex-silikon.de | Germany +49 2323 98644-0 |
| | Silicone foam | Q2 08 | | |
| Sipro (Saint Gobain Performance Plastics SIPRO GmbH) | Silproslide Type A black dry silicone gasket | 01.12.2002 | www.sipro.de | Germany 0611 92813-0 |

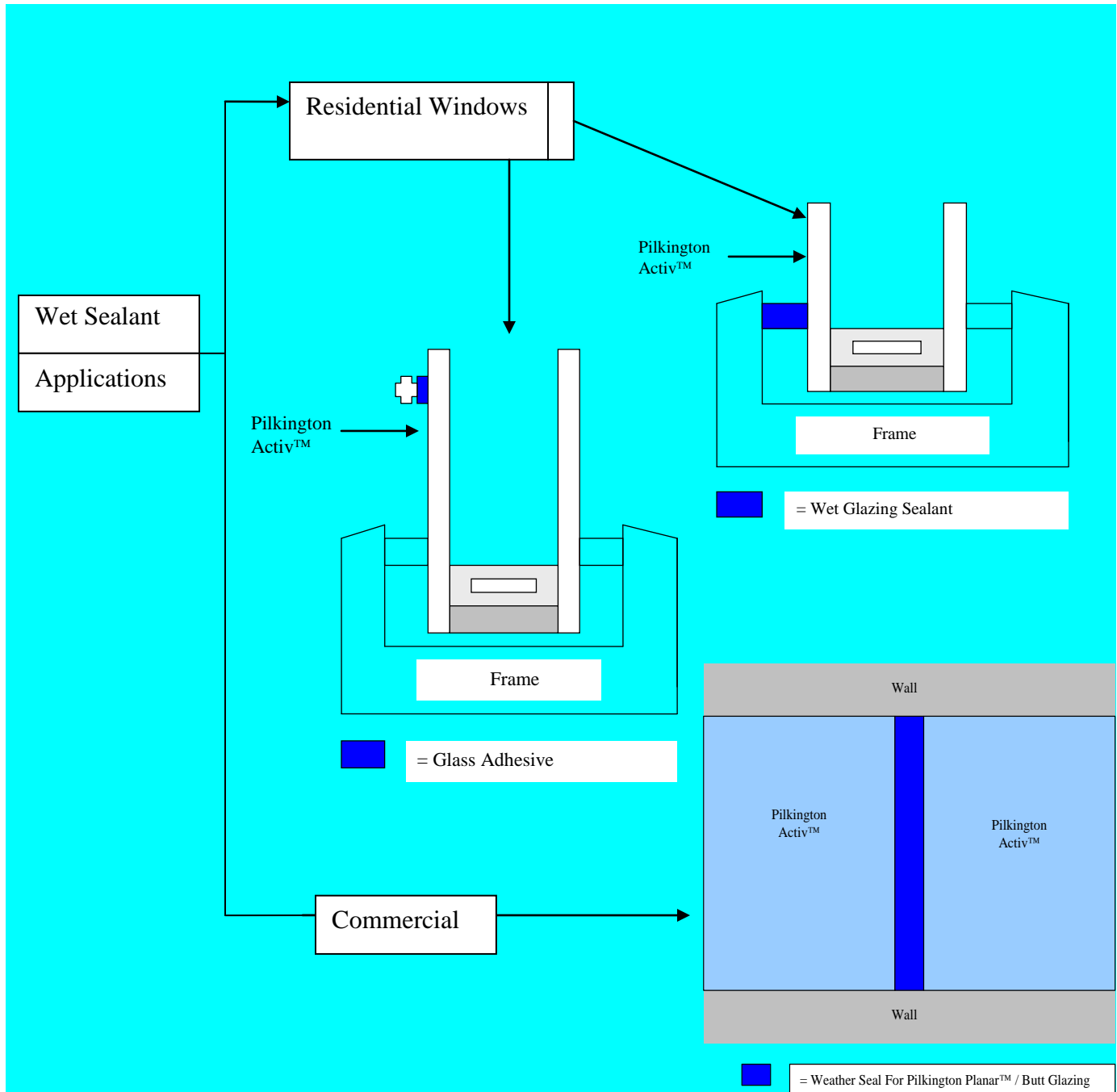
1.6 Glazing Tape / Material Systems

| Supplier | Product Name | Date Tested | Website | Telephone |
|--|--|-------------|-----------------------------|------------------------------------|
| 3M | Acrylic Foam 4941 P | 14.05.2003 | www.mmm.com | Global +1-888-364-3577 |
| | Acrylic Foam 4613 | 14.05.2003 | | |
| | Pressure Sensitive Tape-5952F | 14.05.2003 | | |
| | 4408 A-30 | 01.02.2005 | | |
| Adshead Ratcliffe | glazing tape | 26.03.2003 | www.arbo.co.uk | UK 01773 821215 |
| | sponge glazing tape | 26.03.2003 | | |
| Biolink - from UK Industrial Tapes Ltd | ProLink 1500R, FoamLink 1603H | 17.04.2003 | www.ukindustrialtapes.co.uk | UK +44 (0)191 487 3255 |
| Hodgson Sealants | Profile Tape 8x4 | 01.12.2002 | www.hodgson-sealants.co.uk | UK 01482 868321 |
| | Foam Sekure XD (for upvc or timber) | 01.12.2002 | | |
| | Flexi Bond 15x3 | 01.12.2002 | | |
| | Flexi Strip 15x5 | 01.12.2002 | | |
| | Colourglaze Putty | 10.2006 | | |
| | Butyl Glazing compound | | | |
| | Rapid Set Putty | | | |
| | Linseed Oil Putty (Check Application Compatibility) | | | |
| Multipurpose Putty | | | | |
| Illbruck Sealant Systems Uk | Alfas Glasket (Glazing Tape) | 10.06.2003 | www.illbruck.com | UK +44 (0)191 419 0505 |
| | Alfas SGT PVC - DSX (Security Glazing Tape) | 10.06.2003 | | |
| | Alfas SGT PVC - DST (Security Glazing Tape) | 10.06.2003 | | |
| | Alfas SGT PE - DSP (Security Glazing Tape) | 10.06.2003 | | |
| | Alfas SGT Super (Security Glazing Tape) | 10.06.2003 | | |
| Kawo | KAWO Vorlegeband (Art.Nr.4060905) | 01.08.2004 | www.kawo.de | Germany +49 (0) 5121 76 1935 |
| | KAWO Vorlegeband (Art.Nr.4060905) | 01.08.2004 | | |
| Metal Technology | Butyl backed foil tape – HR5064 | 06/2008 | www.metalttechnology.com | UK 02894 487777 (Fax 02894 487878) |
| Scmid Baukunststoffe | Butyl Tape | 01.01.2005 | www.scmid-baukunststoffe.de | Germany +49 (0) 35341 10 000 |

1.6 Glazing Tape / Material Systems

| Supplier | Product Name | Date Tested | Website | Telephone |
|---------------------|---|-------------|--|---|
| Shand Higson | 5189/4 (Security Glazing Tape) | 17.04.2003 | www.shandhigson.co.uk | UK +44 (0)151 207 5661 |
| Tremco | Tremco 440 | 02.09.2003 | www.tremcoeuropa.com | UK 01753 691696; Germany 02405 426662; Netherlands 055 533 6062; Sweden 031 57 00 10; Finland 095 499 4500; France 01 34 58 57 00; Italy 02 98 281854; Norway 02 32 71 70 |
| | Tremco SST-800 | | | |
| | Tremco NS tape | | | |
| | Tremco Butyl Tape | | | |
| | EPDM and Neoprene sponges | | | |
| | Polyshim | | | |
| Tesa AG | Tesaband 50560 | 10.2006 | www.tesa.de | Germany +49 40 4909 3400 |
| | Tesaband 50030 PVO | | | |
| | Tesaband 50550-60 Träger 7/06 | | | |
| UK Industrial Tapes | ProLink 1500R | 17.04.2003 | www.ukindustrialtapes.co.uk | UK +44 (0)191 487 3255 |
| | FoamLink 1603H | 17.04.2003 | | |
| Venture Tape | VG132, VG116, VG108, VG1316 (Security Glazing Tape) | 22.04.2003 | www.venturetape.com | UK +44 (0) 1327 876555 |

2. Wet Glazing System Materials - Residential and Commercial Applications



Please Note: If there is a straightforward pathway for water run-off between the caulking and the Pilkington Activ™ surface, the caulking material used should NOT be silicone. Alternatives include Silicone hybrids, MS Polymers and polyurethanes.

2.1 Wet Glazing Sealants – SCG TEC

SCG-TEC based sealants have been specifically developed for use with Self Cleaning Glass. These products offer improved UV resistance and durability compared with MS Polymer based sealants and are certified to external standards (e.g. ISO 11600, further details are available from the individual sealant suppliers).

As with all approved sealants these materials have been tested for compatibility with Pilkington Activ™. These sealants are suitable for both residential and commercial applications. As with all sealant applications, checks with the sealant supplier that the material is suitable for the intended application should be undertaken.

| Use | Supplier | Product Name | Date Tested | Website | Telephone |
|----------------------------------|---------------------|-----------------|-------------|--|---|
| Residential / Commercial Sealant | Dow | Dow Corning 757 | 1.12.2007 | www.dow.com | <p>UK – Contact UK Distributor Geocel Tel. 01752 202060 - www.geocel.co.uk</p> <p>Austria, Germany, Poland, Switzerland & Eastern Europe DOW CORNING GmbH Tel: +49(0)611 237 906 Fax: +49(0)611 237 603</p> <p>France and North Africa DOW CORNING France S.A. Tel: +33(0)4 72 84 13 60 Fax: +33(0)4 72 84 13 79</p> <p>Italy & Eastern Mediterranean Countries DOW CORNING S.p.A. Tel: 39 02 98832 1 Fax: 39 02 9880483</p> <p>Russland, CIS DOW CORNING Representation Office Tel.: +7 495 783 6648 Fax: +7 495 783 6652</p> <p>Spain and Portugal DOW CORNING Iberica S.A. Tel: +34(0)93 405 12 15 Fax: +34(0)93 405 38 94</p> <p>Turkey Dow Corning Liaison Office Turkey Tel: +90.216.4677645 (211) Fax: + 90.216.4673909</p> <p>All other countries Please contact the Dow Corning Technical Information Center on: Tel. +49 611 237 778 eutech.info@dowcorning.com</p> |
| Residential / Commercial Sealant | Merz and Benteli AG | Gomastit VG27 | 10.10.2006 | www.merz-benteli.ch | Tel.: +41 (0)31 980 48 48 Fax: +41 (0)31 980 48 49 |
| Residential / Commercial Sealant | ATE Distribution | Sealclean | 1.11.2008 | | Tel. +33 145 60 43 14 |
| Residential/ Commercial Sealant | Soudal | SMX 505 | 31.05.2005 | www.soudal.com | UK +44 1827 261092 |
| Residential/ Commercial Sealant | Dana Lim | SCG Sealer 521 | 26.11.2008 | http://www.danalim.dk | Contact via website |

Please note, Henkel have withdrawn their SCG TEC sealant which is no longer commercially available

2.2 Wet Glazing Sealants – MS Technology

MS polymer based sealants have been tested for compatibility with Pilkington Activ™. Suitability of these sealants for the intended application must be discussed with the individual manufacturer to ensure the sealant is applicable for the intended application.

| Use | Supplier | Product Name | Date Tested | Website | Telephone |
|---------------------|-------------------------------|---|-------------|-------------------------------------|---|
| Residential Sealant | Soudal | Soudaseal 4 all paint | 01.01.2005 | www.soudal.com | UK +44 1827 261092 |
| Residential Sealant | Den Braven | Hybriseal 2PS (also known as Hercuseal 305). NB - coloured versions (white, black, grey and brown) only | 03.01.2003 | www.denbraven.nl | Netherlands 0162 49 1000, Belgium 02 358 3556; Germany 05481 941510; Poland 0618 143504; Greece 1 765 1365; Austria 0043 263 341 399; Italy 0461 534 388; UK (Siraflex) 01226 771600; France 03 44 91 68 68; Denmark 0755 81230; Finland 0201 980610 |
| Residential Sealant | Fenotherm | Fenotherm MS Sealant | 1.11.2008 | | Fa. Fenoplast Fügtechnik GmbH |
| Residential Sealant | KENT (Premier Industrial Ltd) | KENT Rotabond 2000 with KENT MS Prep Primer | 01.05.2001 | www.kenturope.com | Belgium +32 (0)2 725 93 93; Denmark +45 4917 7888; France +33 1 30 95 40 60; Germany +49 02154 956736; Italy Free on 800 011 780 or +39 011 64 77 311; Netherlands +31 (0) 499 331919; Spain +34 91 883 50 54; Sweden +46 (0)44 700 51; UK +44 (0) 1403 213349 KENT Distributors: Austria (Hubert Pokorny GmbH-) +43 2236 64939; Croatia (Pobus d.o.o) +385 513 323906; Estonia (Ou Kevamer Av) + 372 44 25 892; Finland (Jasper Oy) +35 833 450 580; Norway (C Frimann-Dahl AS) +47 22 51 17 00; Poland (Luna Polska Z.o.o) + 48 32 208 6541; Slovenia (AT Team D.o.o) +386 15193333; Switzerland (Halco Trade) +41 14 348040 |
| Residential Sealant | Tremco | Mono 321 | 15.11.2002 | www.tremcoeuropa.com | UK 01753 691696; Germany 02405 426662; Netherlands 055 533 6062; Sweden 031 57 00 10; Finland 095 499 4500; France 01 34 58 57 00; Italy 02 98 281854; Norway 02 32 71 70 |
| Residential Sealant | EGO | EGO MS808 | 1.7.2006 | www.ego.de | EGO Dichtstoffwerke GmbH & Co. KG, Lilienthalstrasse 7,82205 Gilching Germany +49 08105 217-0 |
| Residential Sealant | Adolf Würth GmbH & Co. KG | Würth Sabesto Aktivglas Dichtstoff | 10.10.2006 | - | Adolf Würth GmbH & Co. KG. Künzelsau Germany |
| Residential Sealant | Ramsauer GmbH | Glasdicht 300 | 06/2008 | www.ramsauer.at | Tel +43 6135 8205 - 0 |
| Residential Sealant | Ultraframe | ADV007 | 06/2008 | www.ultraframe-conservatories.co.uk | Tel (+44) 01200 443311 Fax:- (+44) 0870 414020 |

2.3 Tapes and Adhesives

| Use | Supplier | Product Name | Date Tested | Website | Telephone |
|-------------------|-----------------------------|--------------------------------|-------------|-----------------------|---|
| Georgian Bar Tape | Illbruck Sealant Systems Uk | Alfas GBT General Bonding Tape | 10.06.2003 | www.illbruck.com | UK +44 (0)191 419 0505 |
| | | Alfas FAT Foamed Acrylic Tape | 10.06.2003 | | |
| Tape | Kent Industrial | Butyl HT Ivory | 10.10.2006 | www.kenteurope.com | Belgium +32 (0)2 725 93 93; Denmark +45 4917 7888; France +33 1 30 95 40 60; Germany +49 02154 956736; Italy Free on 800 011 780 ; Netherlands +31 (0) 499 331919; Spain +34 91 883 50 54; Sweden +46 (0)44 700 51; UK +44 (0) 1403 213349 |
| Georgian Bar Tape | Technibond | Technibond double sided tape | 27.06.2002 | www.technibond.co.uk | UK 01628 642800 |
| Georgian Bar Tape | Shand Higson | 5300 | 17.04.2003 | www.shandhigson.co.uk | UK +44 (0)151 207 5661 |
| Glass Adhesives | Sika | Sikaflex 11FC | 25.02.2003 | www.sika.co.uk | 01707 39 44 44 |
| | | Sikafast 5215 | 24.02.2003 | | |
| Glass Adhesives | Bostik | Bostik Hybrid 2640 | 25.02.2003 | www.bostik.com | Austria 05425 801-0; Belgium 2 370 20 62; Denmark +45 448 41 500; France 01 64 42 12 12; Germany 069 8900 10; Ireland 01840 14 61; Italy 02 24 10 93 1; Netherlands 165 590 590; Spain 34(93)586 0203; Switzerland 05425 801-0; UK 0116 251 0015 |
| | | Bostik Hybrid 2620 | 04.05.2004 | | |
| | | Uretan 2637 | 25.02.2003 | | |
| | | Glasil Super | 04.05.2004 | | |
| Glass Adhesives | Würth | Zebra MS Polymer Adhesive | 25.02.2003 | www.wurth.com | Austria +43 2743 70700; Belgium +32 14 445566; Denmark +45 79 323232; Finland +358 19 7701; France +33 3 88645300; Germany +49 7940 15-0; Ireland +353 61 412911; Italy +39 0471 828111; Netherlands +31 73 6291911; Norway +47 67 062500; Poland +48 22 8119041; Sweden +46 19 351000; Switzerland +41 61 7059111; UK +44 (0)1483 412800 |

Note - Glass adhesives are not a glazing sealant

2.4 Caulking Materials

Please Note: If there is a straightforward pathway for water run-off between the silicone caulking and the Pilkington Activ™ surface, the caulking material should NOT be silicone. Alternatives include MS Polymers and polyurethanes. The product listed below has been tested and is compatible with Pilkington Activ™ as a sealant to be used between window frame and brickwork, concrete or cladding material. To mount the glass into a window frame, other sealant types are available. Further details on application suitability is available from the supplier.

| Product Type | Supplier | Product Name | Date Tested | Website | Telephone |
|--------------|---------------|-----------------|-------------|---------------|-------------------------|
| MS Polymer | Soudal | Soudaseal 215LM | 11.03.2004 | www.soudal.be | Belgium +32 14 42 42 31 |
| MS Polymer | Würth Denmark | MS20 Multifuge | 1.7.2007 | www.wuerth.dk | +45 79 323 242 |

3. Commercial Glazing Systems

| Supplier | Gasket Name | System Name | Date Tested | Website | Telephone |
|----------|---------------------------------|---|-------------|----------------|--|
| Schüco | 224 063 (with yellow stripe) | Window systems: Royal S 45, 50, 50N, 65, 65AK, 70B and 70BS | 07.03.2003 | www.schueco.de | Germany 0049 5 21 7830; UK 01908 282 111 |
| | 224 606 | Curtain Walling systems: FW50 ⁺ , FW60 ⁺ , FW50 ⁺ .1, FW60 ⁺ .1 | 07.03.2003 | | |

Schüco can offer alternative lubricants with their systems. To avoid misunderstandings please note on your order that you want to use Pilkington Activ™.

| | | | | | |
|------------------|--------------------------------------|--|------------|-------------------------|-----------------|
| Heywood Williams | 1 broad, 1 narrow, Aluminium gaskets | Series 23 Commercial Window Systems, Series 24 Commercial Window Systems, Series 48 Curtain Walling Systems. Modular 70 Sloping Roof Glazing System. | 07.03.2003 | www.heywoodwilliams.com | UK 01484 487200 |
| Technal Viking | FX607G | Fxi Casement Window Suite: FXi 46, FXi 52, FXi 65 | 07.03.2003 | www.technal.co.uk | UK 0113 2961400 |
| | MC6906 | MC Curtain Wall range (fully framed systems) | 07.03.2003 | | |

| Supplier | Gasket Name | System Name | Date Tested | Website | Telephone |
|------------|--|---|-------------|--------------------------------------|---|
| Rehau | Rehau Weldable dry gasket (possibly known as Rauprene) | | 07.03.2003 | www.rehau.com | Benelux, Denmark, Finland, Norway, Sweden: 09131 925 392; Switzerland: 09131 925 483; France: 0033 38 70 55 807; UK: 0044 19 89 762641; Poland: 0048 618 49 8451 |
| Santoprene | 691-62W221 (beige) | For aluminium and wooden windows | 22.05.2003 | www.santoprene.com | France +33-1-41-45-77-20; Germany +49-221-74907-0; Italy +39 02 8803452; Poland +48 22 6063972; Spain +34 936 002 150; Sweden +46-31-63-82-90; UK + 44 1162 896122 |
| | 8691-58W805 (range of light colours) | | 22.05.2003 | | |
| | 8221-60 (white) | | 22.05.2003 | | |
| | 8221-70 (white) | | 22.05.2003 | | |
| DRL | Grey Silicone Gasket | DRL Curtain Wall | 23.05.2003 | www.oskomera.nl/DR | UK (0)1684 853500 |
| Kawneer | 953-272 (R5961) | 1202 curtain wall, 1203 Slope glazing, and 1612 curtain wall systems. | 20.03.2003 | www.kawneereurope.com www.alcoa.com | France + 33 (4)67 87 77 55; Germany + 49 2374 936 0; Ireland + 353 1 450 8809; Netherlands + 31 (0)341 464611; UK + 44 (0)1928 502500; USA +1 770 449-5555 |
| | 271-921 | | 01.04.2005 | | |
| | 953-273 (R5960) | | 20.03.2003 | | |
| Sapa | TPE non-lubricated gasket | W274E | 01.04.2005 | www.sapagroup.com/uk/buildingsystems | |
| | TPE non - Lubricated | 105/87, 105/88, 105/89, 105/90, 105/91, 105/135. 105/140, 105/166 | 01.08.2005 | | |
| | TPR | Gasket ref. RG110 | 10/2006 | | |

All of the lubricated gaskets have been tested for compatibility with Pilkington Activ™ in the vertical orientation. Some of the gaskets that are lubricated with a silicone emulsion have occasionally shown very low levels of leaching (<2cm). However, due to the longer residence time of water on the gasket, there is the potential for an increased level of leaching if these same gaskets used in sloped glazing.

Under no circumstances should extra lubricant be used during installation.

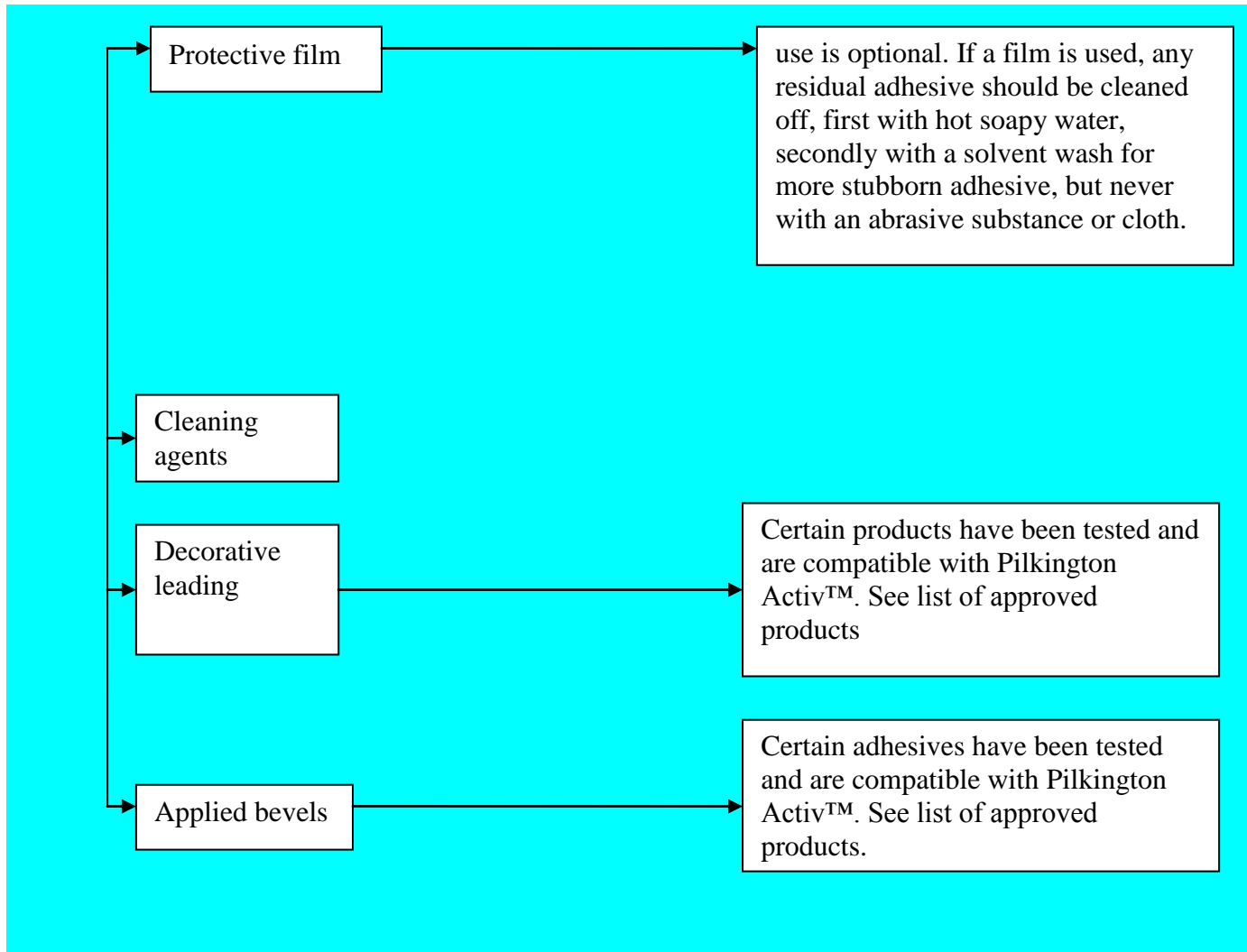
Please check with your supplier to ensure gaskets lubricated with silicone emulsion are NOT used in sloped installations.

In addition to the above specific systems, there are a number of suppliers who can supply non-silicone based gaskets, if they are specifically requested. This service is available from the German offices but can be discussed with your local representative. Please put on the order "Non-silicone gaskets required for use with Pilkington Activ™."

These suppliers are listed below, along with their contact phone number in Germany.

| Supplier | Website | Telephone |
|-----------------------------------|--|--|
| Aluplast | www.aluplast.de | +49 (0) 7243 7742421 |
| Brüggmann | www.brueggmann.de | +49 (0) 8245 520 |
| Gealan | www.gealan.com | +49 (0) 9286 774130 |
| Gutmann | www.gutmann-aluminium.de | +49 (0) 9141 992621 +49 (0) 9194 992622 |
| Heroal | www.heroal.de | +49 (0) 5246 507238 |
| Hueck/Hartmann | www.eduard-hueck.de | +49 (0) 2351 1510 |
| Klima Flex | www.klimaflex.de | +49 (0) 7171-97614-59 |
| Kömmerling, KBE, Trocal (Profine) | www.profine-group.com | +49 (0) 6331 562598 |
| Raico | www.raico.de | +49 (0) 8265-911-0 |
| Rehau | www.rehau.com | +49 (0) 9131 925628 |
| Reynaers | www.reynaers.com | +49 (0) 2043 96400 |
| Salamander | www.brueggmann.de | +49 (0) 8245 520 |
| Schüco | www.schueco.de | +49 (0) 521 783864 |
| Solarlux | www.solarlux.com/ | +49 (0) 5402-400-0 |
| Sykon | www.sykon.de | +49 (0) 5223-9818-18 |
| TS Aluminium | www.ts-alu.de/ | +49 (0) 4943-9191-1 |
| Veka | www.veka.de | +49 (0) 2526 294690 +49 (0) 2526 294620 |
| Wicona | www.wicona.de | +49 (0) 731 3984174 |

4. Miscellaneous



4.1 Protective Films

| Supplier | Product Name | Date Tested | Website | Telephone |
|-------------------------|---------------------------|-------------|--|-----------------------------------|
| Nava Center Oy | Navaflex 15-1 | 01.12.2002 | www.navacenter.com | Finland +358 (0)8 443 596 |
| Nitto | AP4058RL | 01.12.2002 | www.nittoeurope.com | France 0297 46 92 00 (MEI) |
| Novacel | 4331 | 01.03.2005 | www.novacel.fr | UK +44 (0)1582 583294 |
| Shand Higson | 2903 | 17.04.2003 | www.shandhigson.co.uk | UK +44 (0)151 207 5661 |
| Spraylat | Glasstrip UV Resist PC100 | 01.12.2004 | www.spraylat.co.uk | UK +44 (0)1536 408409 |
| | Glasstrip 785-3 | 01.01.2006 | | |
| White Mango Enterprises | PAW 55 | 01.06.2003 | www.whitemango.com | UK +44 (0) 20 8861 9486 |

Many have been tested, and in general any film with an acrylic adhesive should be compatible.

4.2 Leading / Bevels

| Supplier | Product Name | Date Tested | Website | Telephone |
|--------------|---|-------------|--------------------|---|
| Regalead | Natural 9mm Oval Antique 9mm Oval | 26.02.2003 | www.regalead.co.uk | UK 0161 946 1164 |
| Decra Led | any lead applied with the adhesives listed below | 01.03.2004 | www.decraled.co.uk | Poland +48 (0 prefix 55) 235 19 25; UK 0161 368 4491; USA +1 608 742 8386 |
| | Premium Lead Strip Adhesive | 01.03.2004 | | |
| | Alpha Lead Strip Adhesive | 01.03.2004 | | |
| | Hi-Tac Lead Strip Adhesive | 01.03.2004 | | |
| Regalead | RB 334 bevel. Applied by UVTek 410 Visible Light Curing | 26.02.2003 | www.regalead.co.uk | UK 0161 946 1164 |
| | RB 334 bevel. Applied by UVTek FC 700 UV Curing | 26.02.2003 | | |
| | RB 334 bevel applied by UVTek 116 UV Curing | 26.02.2003 | | |
| Decra Led | Permabond | 01.03.2004 | www.decraled.co.uk | Poland +48 (0 prefix 55) 235 19 25; UK 0161 368 4491; USA +1 608 742 8386 |
| Remco Chemie | Remcolin Siebreiniger Screen Print Cleaner | 01.12.2002 | | Germany 062 216 4850 |

4.3 Specialist Processing

| Product Type | Supplier | Contact | Website | Telephone |
|--|------------|--|---------------------|--|
| Curved Toughened, Concave & convex, Single & IGU | Toughglass | emmanuelb@toughglass.com | www.toughglass.com | UK + 44 (0)28 4176 0918; ROI + 353 (0)1 466 2560; Export + 353 (0) 86 386 2366 |
| Sag Bending, toughened | Novaglaze | sales@novaglaze.co.uk | www.novaglaze.co.uk | UK +44 (0)845-850-2363 |
| Sag Bending, annealed | Jean Gobba | jean.gobba@gobba.com | www.gobba.com | France +33 4 74 05 98 00 |

4.4 List of Approved Cleaning Agents

| | | |
|---|---|--|
| Ajax 3-Fach Aktiv | Kent Glas Kleen 40-1 Superkonzentrat | Windowlene Spray (Original) |
| Ajax Antistatic | Kent Glas Kleen Netoie Vitres | Windowlene Wipes For Glass and Shiny Surface |
| Ajax Citrofrisch | Kent Rotanium Soft Surface Cleaner (article No. 83950) | Zack Glasreiniger |
| Ajax Fete Des Fleurs | Kent Surface Cleaner (article No: 83926) | Wurth Cleaners Available from:- Winzer Würth Industrial Ltd, Catteshall Lane, Godalming, Surrey, GU7 1NP Tel; 01483 412800 Fax; 01483 412805 E-mail; sales@winzerwurth.co.uk |
| Ajax Glass Universal Double Action | Kristall Fenster | |
| Ajax Glasrein Zitro-Frisch | Mr Muscle Window Cleaner | Active glass cleaner (No. 890.25) |
| Ajax Kristall | Nationwide Glass Cleaner | Ready diluted glass cleaner (No. 892.332.840) |
| Ajax Streak Free Professional Glass Cleaner | Nova Window Cleaner | Cleaner Type 10 (No. 892.100.10) |
| Ajax Tip-Top | Ritec Glass Cleaner | Cleaner Type 20 (No. 892.100.11) |
| Ajax Window Cleaner | <u>Brand names of Sidolin cleaners from Henkel:</u> | |
| Bohle Glasreiniger BO 5107800 | ~ Sidolin 2 Phasen (DE) | |
| CIF Window Wipes | ~ Sidolin Streifenfrei Aktivschaum (DE) | |
| Cleani Glass Universal | ~ Sidolin Streifenfrei Cristal (DE) | |
| Cosmofen 10 and 20 (with water rinse) | ~ Sidolin Streifenfrei Zitrus-Frisch (DE) | |
| Decra Clean | ~ Instanet Ruiten / Instanet Ruiten Citron (B, NL) | |
| Denk Mit Glasreiniger | ~ Clin Windows / Clin Universal (Austria, Eastern Europe) | |
| Domol Glasklar | ~ Bref Vitre / Bref Vitre Citron (F) | |
| Elite Force 2000 UPVC Cleaner | ~ Bref Multiuso (IT) | |
| Elite Force Extra Strength | ~ Tenn Crystales e Superficies / Tenn Multiusos (S) | |
| Ettore Squeegee Off (concentrate) | ~ Sonasol Vidros / Sonasol Vidos e Superficies (Pt) | |
| Fenosol S10 (For PVC) | ~ Sidolin Christal | |
| Frosch Spiritus Glas-Reiniger | ~ Sidolin Zitrus | |
| Graffiti Wipes (Ritec International) | Safeway Vecta Window Cleaner | |
| Gunge Wipes (Ritec International) | Spontex Glass Wipes | |
| HG glazenwasser, HG le lave vitre des Pros | Spray Clean Glass Universal | |
| HG window cleaner, HG Fensterputzer | UVTek Professtional Glass Cleaner Wilko Window Cleaner | |

IMPORTANT NOTICE

The use of silicone removers / abrasive cleaners on Pilkington Activ™ is considered as a remedial action which should only be undertaken after consultation with the Pilkington Technical Advisory Service. Due to the nature of these materials, work should only be undertaken after reading the manufacturers' relevant safety literature. Pilkington cannot guarantee the effectiveness of the treatment or the effect the treatment will have on the coating as this will be severely affected by factors outside Pilkington's control, for example the nature and amount of the deposit.

The use of silicone eaters will not solve the problem if the original source of contamination is still present.

Di Aqua Forte Silicone Eater

Radora Brillant Fensterglanz – Slightly Abrasive -Contact: Klaus Messmer + 497531 7 71 36

5. Available Products with Pilkington Activ™

5.1 Pilkington Activ™ Products

Pilkington Activ™ Clear – **4mm, 6mm, 8mm, 10mm**

Pilkington Activ™ Blue - **4mm, 6mm, 10mm**

Pilkington Activ Suncool 40/22 - **6mm, 8mm, 10mm**

Pilkington **Activ Suncool™** Blue 50/27 - **6mm, 8mm, 10mm**

Pilkington Activ Suncool 30/17 - **6mm, 8mm, 10mm**

Pilkington Activ Suncool™ Silver 50/30 - **6mm, 8mm, 10mm**

Pilkington Activ Suncool™ 70/35 - **6mm, 8mm, 10mm**

Pilkington Activ Suncool™ 70/40 - **6mm, 8mm, 10mm**

Pilkington Activ™ Neutral - **4mm, 6mm**

Pilkington Activ Optitherm™ S3 - **various thicknesses and interlayers from 6.4 – 12.8**

Pilkington Activ Optilam™ - **various thicknesses and interlayers from 8.8 – 12.8**

Pilkington Activ Optilam Suncool™ (coatings and thicknesses as above)

Pilkington Activ Optilam Therm™ S3 - **various thicknesses and interlayers from 8.8 – 12.8**

Pilkington Activ Optilam™ Phon - **various thicknesses and interlayers from 8.8 – 12.8**

Pilkington Activ Optilam™ K - **various thicknesses and interlayers from 8.8 – 12.8**

5.2 Possible Combinations

It is possible to combine Pilkington Activ™ with other products to obtain additional benefits. Please contact your IGU supplier.

