Insulating Glass Units - System Description

The components and manufacturing process described in the following sections provide a detailed reference of the base insulating glass unit tested to Part 2 of EN 1279.

Unique Product Reference Number 🕮	Clayton glass Number 6

Inner sealant (if used)

Manufacturer 🕮	Material Type	Type Reference 🕮	Updated
Kommerling Naftotherm	Butyl	BU-S	06.05.11
Bostik	Butyl	2000	06.05.11
Fenzi	Butyl	Butylver	06.05.11
Equipment used for application: Butyl Extruder Allowable defects: 🕮 Absolute Limit(s):- 1.2 to 2.8gms per metre per side with minimal breaks in the seal dependant on outer seal. Action Limit(s):- 1.2 to 2.8gms per metre per side with minimal breaks in the seal dependant on outer seal.			

Outer sealant

Manufacturer 🕮	Material Type	Type Reference 🕮	Updated
LJF	2 part polyurethane Sealant	3189/2	06.05.11
Fenzi	2 part Polysulphide	Thiover	06.05.11
Tremco	2 part Polyurethane	JS442	06.05.11
Fenzi	Hotmelt	Hotver 2000	06.05.11
European chemical Industries	2 part polyurethane Sealant	Emcepren 200	06.05.11
Bostik	Hotmelt	5000	06.05.11
Bostik	Hotmelt	P5125	06.05.11
Den Braven	Hotmelt	Hottix	06.05.11
Dow Corning	IG silicone Sealant	3540	06.05.11
Seal properties report reference and date: - refer to sealant manufacturers specifications. Equipment used for application: - Robot guns and hand held guns. Allowable defects: 🕮 Absolute Limit(s):- 3 gaps in sealant of 3mm in diameter / per metre of unit. Action Limit(s):- 3 gaps in sealant of 3mm in diameter / per metre of unit.			

🕮 See notes on page 6

Desiccant

Manufacturer 🕮	Material Type	Type Reference 🕮	Moisture absorption capacity 🕮	No. of sides used	Updated
Grace	Phonosorb	551 – 3A	16.5%	2 or 4 sides	06.05.11
Grace	Phonosorb	551F – 3A	20%	2 or 4 sides	06.05.11
UOP	DS2000	3A/13X	21%	2 or 4 sides	06.05.11
Galaxy	Glasmol	3A	20%	2 or 4 sides	06.05.11
Zeochem	Isomol	3A	20%	2 or 4 sides	06.05.11
Eurosive	Ex-mini	3A	19%	2 or 4 sides	06.05.11
Nedex	Zoelan	3A	20%	2 or 4 sides	06.05.11

Edge tape (if used)

Manufacturer 🕮	Material Type	Type Reference 🕮	Updated

Spacer

Manufacturer 🕮	Material Type	Type Reference 🕮	Updated
Profilglass	Aluminium	Bendable	06.05.11
Alu-pro	Aluminium	Bendable	06.05.11
Swiss	Plastic	Warm Edge / Gas Fill	06.05.11
Thermobar	Plastic	Warm Edge / Gas Fill	06.05.11
Edgetech	Super Spacer	Warm Edge	06.05.11
TGI	Stainless steel / Plastic polypropylene	Bendable / Warm Edge	06.05.11
EWS	Steel	Cut Spacer Bar	06.05.11
Thermix	Stainless Steel / Plastic TX	Bendable / Warm Edge	06.05.11
Allowable defects: 🕮	Absolute Limit(s):- +1mm / -0.5mm Action Limit(s):- +1mm / -0.5mm		

🕮 See notes on page 6

Corner pieces and connectors (if used)

Manufacturer 🕮	Material Type	Type Reference 🕮	Updated
Profilglass	Polypropylene	Corner Keys	06.05.11
Kronenberg	Steel	Connectors	06.05.11
Cera	Plastic	Connectors	06.05.11
Profilglass	Steel	Corner Keys	06.05.11

Lead tape

Manufacturer 🕮	Material Type	Type Reference 🕮	Updated
Rega	Adhesive lead	Various thickness and Specification	06.05.11
Decra	Adhesive lead	Various Thickness and Specification	06.05.11

Georgian bars

Manufacturer 🕮	Material Type	Type Reference 🕮	Updated
Profilglass	Aluminium bar	Various Sizes	06.05.11
Alu-pro	Aluminium bar	Various Sizes	06.05.11
Ashton	Classic	Various sizes	06.05.11

Coloured film

Manufacturer 🕮	Material Type	Type Reference 🕮	Updated
Rega	Adhesive backed colour film	Various Specifications	06.05.11
Decra	Adhesive backed Colour film	Various Specification	06.05.11

🕮 See notes on page 6

Gas filling

Gas type	1) Argon	2) Krypton	3)
Normal filling concentration	1) 88% -5% / +10%	2) 88% -5% / +10%	3)
Position and dimensions of filling holes	Lisec gas press		
Position and dimensions of filling holes	Corner key method 6.5mm / 5.0mm	Corner key method 6.5mm / 5.0mm	
Position and dimensions of filling holes	Puncture method using Edge-tech	Puncture method using Edge-tech	
Filling holes closure method	Corner key plugs	Corner key plugs	
Type of filling equipment used	Lisec gas press	Inagas filling equipment	

Declared U value (W/m^2K)	Plain	Leaded	Georgian	Film	Lead + Film
Please see data sheet supplied - Table of U-Values					

Glass

Manufacturer 🕮	Type Reference 🕮	Surface Coating	Thickness (mm)	Number of panes
• Manufacturer - any approved supplier of glass ie: Pilkington / Saint-Gobain / Guardian / Glaverbel. • Type reference – refer to the manufacturer's information (Annealed / patterned / laminated / toughened / coated glasses). • Surface coatings – refer to the manufacturer's information regarding various coated glass such as hardcoat and softcoat. • Thickness – refer to the glass manufacturers for various thicknesses. • Number of panes – 2 normally but on occasions 3.				
Allowable defects: 🕮 height	Absolute Limit(s):- size tolerance +2mm / -2mm width &			
	Action Limit(s):- GGF visual limits 2 – 3 metre inspection			
	Seal depth – normal seal depth of 3.5mm +1mm / -0.5mm			
	Seal depth – Super Spacer depth of 7mm +2mm / -2mm			

🕮 See notes on page 6

DIAGRAMS

Diagram 1) Details of the spacer bar cross section
Diagram 2) Details of the edge seal dimension
Diagram 3) Details of the Georgian bars

Please supply these on separate sheets.

This product system description is an accurate record of the product submitted for test and is representative of normal production. Any change to this description will be communicated to BSI Product Services.

Signed By

On behalf of CLAYTON GLASS

Date 16.05.11

Notes

General – The purpose of the System Description is to fully define the base product covered by the test report. It must be detailed in every aspect such that there is no doubt about the products and components used in its manufacturer.

Unique product reference No – This is a unique reference number associated with this product description document. It is used as the defining reference for the product and will be quoted in test reports and certificates where applicable.

Manufacturer – This is the name of the company that manufactured the product not the supplier that you purchased the product from.

Type reference – This is the name and product identifier given by the manufacturer.

Allowable defects – These are separated into two limits:

Absolute limit – This is the limit at which you reject units. All units outside this limit must be disposed of. For example the seal depth may be described as 5mm minimum however you may wish to allow a seal depth of between 5mm and 4mm for a maximum of 25mm per metre of unit perimeter. Any unit where there is more than 25mm of seal depth between 4 and 5 mm must be rejected. You may also wish to allow 3 air cavities up to 3 mm in diameter per metre of unit perimeter. Likewise, if 4 air cavities are present or the diameter of any air cavity id greater than 3 mm then the unit is rejected.

Action limit – This is the limit at which you take action to improve the relevant parameter. For example you may wish to set an action limit of 10 mm for the length of seal with a depth below 5 mm. If, during inspection, this limit is observed then you will need to take action to reduce or eliminate the undersized seal depth.

See notes on page 6