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VETROTECH

001/012

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<b>PAGINA'S</b>	Pagina 1 van 12	<b>WEERT</b>	23.02.07

Betreft: Doorvalveiligheid Contraflam Lite

Geachte heer Zaman,

In vervolg op het persoonlijk onderhoud d.d. 22 februari 2007 sturen wij u het schrijven betreffende de doorvalveiligheid van de Contraflam Lite.

In vertrouwen u voldoende te hebben geïnformeerd, verblijven wij.

Met vriendelijke groet,

VETROTECH SAINT-GOBAIN EUROPE B.V.

VETROTECH SAINT-GOBAIN EUROPE B.V.

 Graafschap Hornelaan 196 • NL-6004 HT Weert • Postbus 15 • NL-6000 AA Weert NEDERLAND  
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VETROTECH SAINT-GOBAIN Benelux  
t.a.v. de heer A. Sirag

Veenendaal, 29 juni 2001

Betreft: Contraflam-lite en NEN 3569

Geachte heer,

In aansluiting op ons telefonisch onderhoud het volgende:

De NEN 3569 kent twee typen veiligheidsbeglazing:

Type B: Glas waarbij de scherven bij elkaar worden gehouden bij breuk

Type C: Glas waar bij breuk volledige desintegratie in vele kleine korrels plaats vindt.

SGG CONTRAFLAM-LITE bestaat uit twee ruiten thermisch voorgespannen veiligheidsglas. De tussenlaag heeft een brandwerende functie en heeft geen functie om bij breuk de scherven bij elkaar te houden. Hieruit mag worden geconcludeerd dat dit type glas een Type C veiligheidsbeglazing is.

Een derde mogelijkheid om een gelijkwaardige veiligheid te bieden aan de in de NEN 3569 genoemde Type B beglazing, die noodzakelijk is bij o.m. doorvalveilige toepassingen is de samenstelling zwaar bovengedimensioneerd uit te voeren, zodat de breukkans van een blad van de gelaagde samenstelling gering is en de kans op breuk van beide glasbladen nihil.

Mijn voorstel is de samenstellingen die worden toegepast in de situatie waar Type B wordt voorgeschreven uit te voeren met minimaal twee bladen 5 mm thermisch voorgespannen veiligheidsglas (5 mm SGG SECURIT voldoet aan klasse 1).

In het vertrouwen u hiermee van dienst te zijn geweest, verblijven wij,

Met vriendelijke groet,



R. Ottens

SAINT-GOBAIN GLASS NEDERLAND

Koninklijke Saint-Roch Veromco nv, Wageningselaan 42, Postbus 507, 3900 AM Veenendaal. Telefoon 0318 - 53 13 11, Fax 0318 - 51 40 52  
Bankrelatie: ABN-AMRO, rek.nr. 49.55.07.431, Handelsregister K.v.K. Utrecht nr. 30129925

**TNO Science and Industry**

Nederlandse Organisatie voor  
toegepast-natuurwetenschappelijk  
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for Applied Scientific Research



Testing & Consultancy  
De Rondom 1  
P.O. Box 6235  
5600 HE Eindhoven  
The Netherlands

**TNO report**

**TC-RAP-05-13556/eja**

**EN 12600 Pendulum Test - Impact test method and  
classification for flat glass**

**SGG CONTRAFLAM® CF Lite EW60**

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Date	August 8, 2005
Author(s)	J. van der Zwan, B.Sc.
Assignor	Vetrotech Saint-Gobain International AG Attn: Mr U Gelderie Glasstrasse 1 D-52134 Herzogenrath Germany
Project number	008.06227/01.01
Classification report	Revised version of TNO Report TC-RAP-05-12059/gge
Number of pages	9 (incl. appendices)

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TNO report | TC-RAP-05-13556/ga |  
SGG CONTRAFILM® CF LHA EM60

### Contents

1	Producer .....	3
2	Product description & results .....	4
3	Signature .....	9

TNO report | TC-RAP-05-13556/eja |  
SGG CONTRAFLAM® CF Lite EW60

3/9

## 1 Producer

KINON-Aachen GmbH  
Jülicher Strasse 495  
D-52070 Aachen  
Germany

Under licence of:

Vetrotech Saint-Gobain International AG  
Staffacherstrasse 128  
CH-3000 Bern  
Switzerland.

TNO report | TC-RAP-05-13556/ejs |  
 SGG CONTRAFLAM® CF Lite EW60

4/9

## 2 Product description & results

Commercial product name (k) : Contraflam® CF Lite EW60  
 Product (a) : See annex 1  
 Glass substrate(s) (j) : float glass conforms to EN 572  
 Intermediate layer (i) : 4 mm Alkali-silicate  
 Nominal thickness of tested glass test specimens (a) : 14 mm  
 (actual 13.98, 14.06, 13.75  
 14.87 mm)  
 Dimensions of tested glass test specimens (b) : 876 ± 5 mm by 1938 ± 5 mm  
 Application of adhesive foils (f) : none  
 Date (i) : 23-03-2005  
 Results (c):

\* substrate float glass conforms to applicable standards from selected manufacturer or supplier

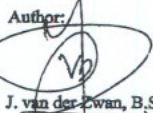
Height (mm)	Sample 1	Sample 2	Sample 3	Sample 4
190	no breakage	no breakage	no breakage	no breakage
450	no breakage	no breakage	no breakage	no breakage
1200	no breakage	no breakage	no breakage	no breakage

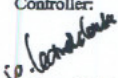
Classification (d): 1(B)1


Result (only when asymmetrical composition) (l) : not applicable

In case of changes that may influence the validity of this ITT, the producer will take the appropriate actions.

Calibration of test ridge (e) : September 2004  
 Test Laboratory (g) : TNO Testing and Consultancy  
 5600 AN Eindhoven (NL)  
 Notification number test Laboratory (89/106/EEG) (h): Lab number 1154  
 Accreditation number Raad voor Accreditatie (NL) : L 436

Author:  
  
 J. van der Zwan, B.Sc.

Controller:  
  
 A. Piers, B.Sc.

Authorisation:  
  
 Dipl. Ing. K.K. Pahnke

TNO report | TC-RAP-05-13556/9a |  
SGG CONTRAFLAM® CF Lite EW60

5/9

TNO Testing and Consultancy  
Postbus 595  
5600 AN Eindhoven  
Nederland.

Datum: 04-05-2005

EN 12600

Klant: KINON-Aschen GmbH  
Jülicher Straße 495  
D-52070 Aschen  
Deutschland

Product:

SGG CONTRAFLAM® CF Lite EW 60



De geteste monsters voldoen aan de gestelde eisen in de EN 12600.

Ondertekening:  
Ing. J. van der Zwan

Dipl. Ing. K.K. Pahnke

**TNO Science and Industry**

Nederlandse Organisatie voor  
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5600 HE Eindhoven  
The Netherlands

**TNO report**

**TC-RAP-05-13554/eja**

**EN 12600 Pendulum Test - Impact test method and  
classification for flat glass**

**SGG CONTRAFLAM® CF Lite EW 30**

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Date	August 8th, 2005
Author(s)	J. van der Zwan, B.Sc.
Assignor	Vetrotech Saint-Gobain International AG Attn: Mr U Gelderie Glasstrasse 1 D-52134 Herzogenrath Germany
Project number	008.06227/01.01
Classification report	Revised version of TNO Report TC-RAP-05-12049/ggo
Number of pages	9 (incl. appendices)

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TNO report | TC-RAP-05-13554/01a |  
SGG CONTRAFILAM® CP Line EW 30

### Contents

1	Producer.....	3
2	Product description & results.....	4
3	Signature.....	9

TNO report | TC-RAP-05-13554/eja |  
SGG CONTRAFLAM® CF Lite EW 30

3/9

## 1 Producer

KINON-Aachen GmbH  
Jülicher Strasse 495  
D-52070 Aachen  
Germany

Under licence of:

Vetrotech Saint-Gobain International AG  
Staffacherstrasse 128  
CH-3000 Bern  
Switzerland.

TNO report | TC-RAP-05-13554/eja |  
 SGG CONTRAFLAM® CF Lite EW 30

4/9

## 2 Product description & results

Commercial product name (k) : Contraflam® CF Lite EW 30  
 Product (a) : See annex 1  
 Glass substrate(s) (j) : float glass conforms to EN 572  
 Intermediate layer (i) : 3 mm Alkali-silicate  
 Nominal thickness of tested glass test specimens (a) : 13 mm  
 (actual 12.88, 13.18, 12.75,  
 12.78 mm)  
 Dimensions of tested glass test specimens (b) : 876 ± 5 mm by 1938 ± 5 mm  
 Application of adhesive foils (f) : none  
 Date (i) : 22-03-2005  
 Results (c):  
 \* substrate float glass conforms to applicable standards from selected manufacturer or supplier


Height (mm)	Sample 1	Sample 2	Sample 3	Sample 4
190	no breakage	no breakage	no breakage	no breakage
450	no breakage	no breakage	no breakage	no breakage
1200	no breakage	no breakage	no breakage	no breakage

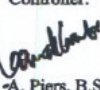
Classification (d): 1(B)1


Result (only when asymmetrical composition) (l) : not applicable

In case of changes that may influence the validity of this ITT, the producer will take the appropriate actions.

Calibration of test ridge (e) : September 2004  
 Test Laboratory (g) : TNO Testing and Consultancy  
 5600 AN Eindhoven (NL)  
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Author:   
 J. van der Veen, B.Sc.

Controller:   
 A. Piers, B.Sc.

Authorisation:   
 Dipl. Ing. K.K. Pahnke

TNO report | TC-RAP-05-13554/ja |  
SGG CONTRAFILAM® CF Lite EW 30

5 / 9

TNO Testing and Consultancy

Postbus 595

5600 AN Eindhoven

Nederland.

**Datum: 04-05-2005**

EN 12600



De geteste monsters voldoen aan de gestelde eisen in de EN 12600.

Ondertekening:

Ing. K. van der Zwan

Dipl. Ing. K.K. Palmke

[Handwritten signature]