

EPD Fire resistant glass, Summary

Environmental Product Declaration
in accordance with DIN ISO 14025 and prEN 15804

Contraflam – Fire resistant glass (Company EPD)

Vetrotech Saint-Gobain International AG



Declaration code
EPD-BGCF-4.0

January 2012

Environmental Product Declaration in accordance with ISO 14025 and prEN 15804 Summary



Contraflam – fire resistant glass

Programme operator	ift Rosenheim GmbH Theodor-Gietl-Strasse 7-9 D-83026 Rosenheim	
Holder of the declaration	VETROTECH Saint Gobain International AG Bernstraße 43 CH-3175 Flamatt	
Declaration code	EPD-BGCF-4.0	
Designation of declared product	Contraflam, Contraflam Lite and Contraflam Structure – fire resistant glass	
Scope	VETROTECH Contraflam fire resistant glass as laminated safety glass designed for use in internal areas or, in combination with insulating glass units in external areas for roof and sloped applications or walkable glazing, for use in doors as decorative glass or as curved glass for industrial, commercial as well as residential applications.	

Basis

- ISO 14025:2006
- prEN 15804:2011

Allgemeiner Leitfaden zur Erstellung von Typ III Umweltproduktdeklarationen (Guidance on preparing Type III Environmental Product Declarations)

The Declaration is based on the PCR Document "Flachglas im Bauwesen" (Glass in Building) PCR-FG-1.0 : 2011

Validity

This verified Environmental Product Declaration applies solely to the specified products and is valid for a period of 5 years from the date of issue. The declaration holder assumes full liability for the underlying data, certificates and verifications.

Date of issue:
01 January 2012

Next revision:
01 January 2017

LCA basis

The LCA was prepared in accordance with EN ISO 14040 and EN ISO 14044. The data base includes the data gathered from the production sites of VETROTECH Saint-Gobain International AG as well as the generic data derived from the "GaBi 4.4" data base. LCA calculations were based on the "cradle to grave" life cycle including all upstream processes (e.g. raw material extraction, etc.).

Notes on publication

The "Conditions and Guidance on the Use of ift Test Documents" apply.

LCA results per m ² glass area and per mm glass thickness for insulating glass units (IGU)		Manufacture A1 – A5	Use B1 – B7	End-of-life C1 – C4	Recycling potential D
Primary energy - non-renewable (PE _{n renw}) in MJ		127.64	127.64	0.11	-20.05
Primary energy - renewable (PE _{renw}) in MJ		4.66	4.66	1.00 x 10 ⁻⁴	-0.43
Global warming potential (GWP 100) in kg CO ₂ equiv.		6.98	6.98	0.068	-0.83
Ozone depletion potential (ODP) in kg R11 equiv.		4.02 x 10 ⁻⁷	4.02 x 10 ⁻⁷	1.82 x 10 ⁻⁹	-8.01 x 10 ⁻⁷
Acidification potential (AP) in kg SO ₂ equiv.		0.029	0.029	3.99 x 10 ⁻⁴	-6.49 x 10 ⁻³
Eutrophication potential (EP) in kg PO ₄ ³⁻ equiv.		3.12 x 10 ⁻³	3.12 x 10 ⁻³	2.14 x 10 ⁻⁵	-1.99 x 10 ⁻⁴
Photochemical ozone creation potential (POCP) in kg C ₂ H ₄ equiv.		1.84 x 10 ⁻³	1.84 x 10 ⁻³	2.15 x 10 ⁻⁵	-1.09 x 10 ⁻³
Abiotic resources depletion potential - (elements) (ADP _{el.}) in kg Sb equiv.		Not available	Not available	Not available	Not available
Abiotic resources depletion potential (fossil) (ADP _{fos}) in MJ		Not available	Not available	Not available	Not available



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LCA results per m ² glass area and per mm glass thickness for toughened safety glass and laminated safety glass		Manufacture A1 – A5	Use B1 – B7	End-of-life C1 – C4	Recycling potential D
Primary energy - non-renewable (PE _{n renw}) in MJ		127.30	U → 0	0.11	-20.05
Primary energy - renewable (PE _{renw}) in MJ		4.61	U → 0	1.00 x 10 ⁻⁴	-0.43
Global warming potential (GWP 100) in kg CO ₂ equiv.		6.96	U → 0	0.068	-0.83
Ozone depletion potential (ODP) in kg R11 equiv.		4.01 x 10 ⁻⁷	U → 0	1.82 x 10 ⁻⁹	-8.01 x 10 ⁻⁷
Acidification potential (AP) in kg SO ₂ equiv.		0.029	U → 0	3.99 x 10 ⁻⁴	-6.49 x 10 ⁻³
Eutrophication potential (EP) in kg PO ₄ ³⁻ equiv.		3.12 x 10 ⁻³	U → 0	2.14 x 10 ⁻⁵	-1.99 x 10 ⁻⁴
Photochemical. ozone creation potential (POCP) in kg C ₂ H ₄ equiv.		1.83 x 10 ⁻³	U → 0	2.15 x 10 ⁻⁵	-1.09 x 10 ⁻³
Abiotic resources depletion potential (elements) (ADP _{el.}) in kg Sb equiv.		Not available	U → 0	Not available	Not available
Abiotic resources depletion potential (fossil) (ADP _{fos}) in MJ		Not available	U → 0	Not available	Not available

*U: Use

Ulrich Sieberath

Signature of Director of Institute,
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Notes

This EPD is mainly based on the work and findings of the Institut für Fenstertechnik e.V., Rosenheim (ift Rosenheim) and specifically on the ift-Richtlinie NA-01/1 Allgemeiner Leitfaden zur Erstellung von Typ III Umweltproduktdeklarationen. (Guideline NA.01/1 – Guidance on the Preparation of Type III Environmental Product Declarations).

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