Test report

Test report relating to a glass product according to European standard EN 12898, emissivity, concerning the product with trade mark: Tempered Prismatic Solar Glass, type: Thermally Thoughened, manufacturer: Gujarat Borosil Limited

Report number	10603R-10.30048
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1 Introduction

1.1 Purpose

The tests have been performed in order to establish whether or not the product meets the requirements of the European standard EN 12898 [1].

1.2 Description of the samples

General

Name of the manufacturer	Gujarat Borosil Limited
Address of the manufacturer	Village Govali Tehsil Jhagadia District Bharuch 392001 State Gujarat India
Production plant of the samples	Village Govali Tehsil Jhagadia District Bharuch 392001 State Gujarat India
Line ID where the samples are made	-
Production date	-
Sampling date	-
Trade mark of the product	Tempered Prismatic Solar Glass
Type name and/or type number of the glass	Thermally Thoughened
System description, file number	-
Dimensions of the samples	300 x 300 mm

Specific

Number of panes in the glazing	1
Nominal thickness of the panes	4 mm

1.3 Sampling procedure

The samples have been submitted by the manufacturer. The test house has had no influence on the selection of the samples.

1.4 Application

The request for testing was submitted by the manufacturer on 15 September 2010. Assignment Form number: 10.A330.

1.5 Method of testing

All applicable tests have been performed according to the European standard EN 12898 [1].

1.6 Put out to contract

No tests were performed at third parties.

1.7 Privacy statement

Due to privacy reasons, the names of involved personnel that executed the tests, are not disclosed in the report. However, this information is available on internal work sheets, test forms etc. in the project file.

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1.8 Notifications and accreditations

TÜV Rheinland Nederland B.V. has been notified by the Dutch Ministry of VROM as Notified Test Body (number 1750) and Notified Certification Body (number 0336) for the European Construction Products Directive 89/106/EEC.

TÜV Rheinland Nederland B.V. has been accredited by the Dutch Accreditation Council (RvA) as ISO 17025 Test Laboratory (accreditation number L 484) and EN 45011 Certification Body (accreditation number C058).

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2 Test results

Test results after performing all applicable tests according to European standard EN 12898 [1].

EN 12898, Annex A (normative), Table A.1 - 30 selected wavelengths for determining total normal reflectance at 283 K

Ordinal number (i)	Wavelength (µm)	Reflectance (*R*)	Ordinal number (i)	Wavelength (µm)	Reflectance (*R*)
1	5.5	0	16	14.8	0.01
2	6.7	0	17	15.6	0.01
3	7.4	0	18	16.3	0.01
4	8.1	0	19	17.2	0
5	8.6	0.02	20	18.1	0
6	9.2	0.03	21	19.2	0.01
7	9.7	0.03	22	20.3	0.03
8	10.2	0.03	23	21.7	0.03
9	10.7	0.02	24	23.3	0.03
10	11.3	0.01	25	25.2	0.02
11	11.8	0..01	26	27.7	0.02
12	12.4	0.01	27	30.9	0.01
13	12.9	0.01	28	35.7	0.01
14	13.5	0.01	29	43.9	0.02
15	14.2	0.01	30	50.0	0.01

Characteristic	Symbol	Value
Total normal reflectance	R_n	0
Total normal emissivity	ε_n	0.99
Total corrected emissivity	ε	0.92
Total normal transmittance, where applicable	T_n	not applicable

Instrument description:

Manufacturer and model/type of the spectrophotometer	Perkin Elmer, 983 IR
Type of spectrophotometer	Double beam; spectral range 180 cm^{-1} – 5000 cm^{-1}; Interfaced to a computer.
Operating conditions during scan	22 ± 2 °C 45 ± 5% RH
Manufacturer and model of reflectance accessory and angle of incidence	Perkin Elmer 186-0373 6.5°
Type of reference mirror and source of calibration	Bare gold mirror NPL 99000156 Relative calibration, ref. E002090312/A

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3 Conclusion

This report is just a presentation of the test results. Because the standard does not contain requirements, there cannot be a comparison between requirements and test results and therefore a conclusion cannot be made.

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4 References

1 European standard EN 12898:2001 (E),
Glass in building – Determination of the emissivity,
European Committee for Standardization, January 2001.

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5 Signatures

Author	Signature
Mrs. L. van der Ven, B.Sc. Specialist	
Peer review	Signature
Mr. M.J.R. Luppens Specialist	
Approved by	Signature
Mr. A.J. Piers, B.Sc. Manager Industrial Services	

(This is the end of this report).