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LABORATORY :

Energy Characteristics
 (Lab EN)

STUDY REPORT

N° DE : 632xB874
 N° Labo : ENa465/c
 N° Sample : -

REQUESTED BY : AGC Flat Glass Europe

Chaussée de la Hulpe 166
 B-1170 Bruxelles

Contact persons :

- Client -

Mr. D. Raymaekers

- BBRI -

Mr. G. Flamant

Study : SUMMARY OF PRODUCT PERFORMANCES – “PLANIBEL” FLOAT GLASS

References : EN 410 (1998), EN 673 (1997)

Date and reference of the request : 2010.11.08
Date of receipt of the sample(s) : -
Date of the study : 2010.12.13
Drafting date of the report : 2010.12.13

This report contains 3 pages, numbered from 1/3 to 3/3; it may only be reproduced in its entirety. Each page of the original report has been stamped (in red) by the laboratory and initialled by the head of laboratory.

The results and findings are only valid for the tested samples.

- No sample
- Sample(s) submitted to a destructive test
- Sample(s) to be removed from our laboratories 60 calendar days after sending of the report, unless a written request is received from the client

Head of laboratory



G. Flamant, ir.

Technical assistance : -

1. SUBJECT

The declared photometric and thermal properties of PLANIBEL float glass summarized on page 3 of this document have been attested by the BBRI (Belgian Building Research Institute) according to the specifications of the EN 1096-1 standard.

2. STANDARDS

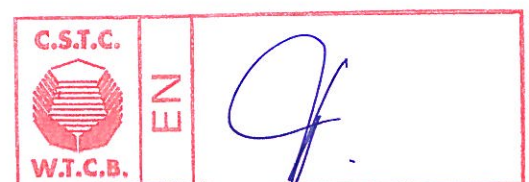
- EN 410 (1998) : Glass in building – Determination of luminous and solar characteristics of glazing
- EN 673 (1997) + A1 (2000) + A2 (2002): Glass in building – Determination of thermal transmittance (U-value) – calculation method

3. PHOTOMETRIC AND THERMAL PROPERTIES

The UV, light and solar properties are calculated according to the standard EN 410.
The thermal transmittance (U-value) is calculated according to the standard EN 673.

The following properties are given :

- τ_{UV} : UV transmittance [-]
- τ_v : light transmittance [-]
- ρ_v : light reflectance
- τ_e : solar transmittance [-]
- ρ_e : solar reflectance [-]
- g : solar factor (total solar energy transmittance or g-value) [-]
- SC : shading coefficient ($SC=g/0.87$) [-]
- U : thermal transmittance [W/m^2K]



Product name	Nominal thickness (mm)	UV range (EN410)	Visible range (EN410)		Solar range (EN410)			Thermal range (EN673)	Glass substrate
		τ_{uv}	τ_v	ρ_v	τ_e	ρ_e	g	SC	
Planibel Clearvision	6	0.81	0.91	0.08	0.90	0.08	0.91	1.05	EN 572-2
Planibel Clear	6	0.51	0.88	0.08	0.81	0.07	0.84	0.96	EN 572-2
Planibel Linea Azzurra	6	0.63	0.88	0.08	0.77	0.07	0.81	0.93	EN 572-2
Planibel Green	6	0.15	0.73	0.07	0.44	0.05	0.57	0.65	EN 572-2
Planibel Azur	6	0.27	0.73	0.07	0.50	0.06	0.61	0.70	EN 572-2
Planibel Dark Blue	6	0.24	0.58	0.06	0.41	0.05	0.55	0.63	EN 572-2
Planibel Bronze	6	0.14	0.50	0.05	0.50	0.05	0.61	0.70	EN 572-2
Planibel Grey	6	0.16	0.43	0.05	0.46	0.05	0.58	0.67	EN 572-2
Planibel Privablu	6	0.13	0.34	0.05	0.20	0.05	0.39	0.45	EN 572-2
Planibel Dark Grey	6	0.01	0.08	0.04	0.08	0.04	0.31	0.36	EN572-2

Table 1 : photometric and thermal properties