

TEST REPORT : N° 2012B COU 16242

REQUESTED BY : **AGC Glass Europe - R&D Centre**
2 rue de l'Aurore
B-6040 Jumet
Belgium

REFERENCE OF THE REQUEST : Email Yannick Sartenaer - 12/07/2012

CONCERNED MANUFACTURER: **AGC GLASS EUROPE**
Chaussée de la Hulpe, 166
1170 BRUXELLES
BELGIUM

NUMBER OF SAMPLES AND IDENTIFICATION : Planibel G Fast
See page 2

PURPOSE OF THE REQUESTED : **Initial Type Test**
Determination of the photo-energetic properties
according to EN 1096-1.*

SAMPLES RECEIVED ON : 13/07/2012

TESTING DATE : 13/07/2012

REMARKS : * Test under accreditation



Notified body (Id.N°1174)
according to ART.18 of the « Construction Products Directive » CPD 89/106/EEC

DESCRIPTION OF THE SAMPLES

| | | |
|---|---|--|
| Concerned manufacturer | : | AGC GLASS EUROPE Chaussée de la Hulpe, 166 1170 BRUXELLES BELGIUM |
| Production site | : | / |
| Commercial name of the product | : | Planibel G Fast |
| Customer's references | : | / |
| Internal reference | : | CCOU 16242 |
| Sampling | : | Under responsibility of the applicant |
| Sampling information | : | Traceability of the samples is under responsibility of the manufacturer. Date of production : 18/03/2012 |
| Class of Coating | : | / |
| Coating position | : | / |
| Low emissivity | : | yes |
| Glass Substrate | : | Clear Float Glass |
| Normal emissivity of clear glass (ϵ_n) | : | 0.89 |
| Samples | : | |
| Number of samples | : | 1 (100 * 100 mm) |
| Nominal Thickness | : | 4 mm |

PHOTO-ENERGETIC PROPERTIES - EN 1096-1

| | | |
|--------------------------------|--|--|
| Instruments Description | For emissivity | For optical properties |
| Spectrophotometer | PerkinElmer SPECTRUM 100 | PerkinElmer PE750 |
| Type | Single Beam (FTIR) | Double Beam |
| Reflectance accessory | PerkinElmer | |
| Type of references | SnO ₂ Coated Glass Gold Mirror | Primary surface Ag Mirrors Secondary surface Ag Mirrors |
| Measurement Responsible | DL | DL |

Notes : Uncertainty calculated on emissivity measurement is ± 0.01
Reproducibility on emissivity measurement is estimated to ± 0.005

16242 : 3.89 mm

| | | COATED GLASS (EN 1096-1) | |
|--|--------------|--------------------------|---|
| U.V. range (280 – 380 nm) | | | |
| • Transmission | τ_{uv} | 41.6 | % |
| Visible range (380 – 780 nm) – Ill D65/obs 2° | | | |
| • Transmission | τ_v | 82.2 | % |
| • Reflection coated side | ρ_v | 11.9 | % |
| • Reflection opposite side | ρ'_v | 11.1 | % |
| Solar range (300 – 2500 nm) | | | |
| • Transmission | τ_e | 72.0 | % |
| • Reflection coated side | ρ_e | 12.1 | % |
| • Reflection opposite side | ρ'_e | 10.9 | % |
| • Solar factor | g | 0.76 | |
| Thermal range (5000 – 50000 nm) | | | |
| • Emissivity | ϵ_n | 0.138 | |
| • Thermal coefficient | U_g | / | |



D. LIBERT
Head of Department

Glazing and Components - INISMa