



Measurement Report

Conducted by the

National and Kapodistrian University of Athens Physics Department

According to the contract, signed between the **National and Kapodistrian University of Athens** and **NEOTEX AEBEE**, on 10/1/2011, measurements for the assessment of the:

- solar reflectance (SR) at the UV-VIS-NIR spectrum (300 to 2500nm),
- infrared emittance at the wide IR spectrum

have been carried out by the laboratory of the Group Building Environmental Studies, of the Physics Department, of the National and Kapodistrian University of Athens (NKUA).

The following specimens have been submitted for testing:

Specimen 1: Coating sample of white color and dimensions: 7cm (w) x 7cm. Product Code: NEOTHERM

Specimen 1: Coating sample of white color and dimensions: 7cm (w) x 7cm. **Product Code: NEOROOF**Specimen 1: Coating sample of white color and dimensions: 7cm (w) x 7cm. **Product Code: SILATEX REFLECT**

The laboratory of the Group Building Environmental Studies, of the Physics Department of NKUA hereby reports that on the 8/2/2011 the above mentioned tested samples have been successfully measured to have the values of solar reflectance and infrared emittance that are shown in Table 1.

Product code	SR (%)	ε (±0.02)	SRI
NEOTHERM	88	0.86	111
NEOROOF	88	0.86	111
SILATEX REFLECT	88	0.86	111

Table 1. The values of solar reflectance, infrared emittance and solar reflectance index of the samples submitted by NEOTEX AEBEE.

The measurements for the solar reflectance were conducted according to the ASTM Standard E903-96 and ASTM Standard G159-98 by using a UV/VIS/NIR (Varian, Carry 5000) fitted with a 150mm diameter, integrating sphere (Labsphere, DRA 2500). The reference standard reflectance material used for the measurement was a PTFE plate (Labsphere).

The measurements for the infrared emittance were conducted according to the ASTM Standard E408-71 by using the Emissometer Model AE (Devices & Services).

The calculation for the solar reflectance index was performed according to the ASTM standard E1980-01.

Professor:/

Mat Santamouris

9/02/2011

Signed on:

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