No.55089

National and Kapodistrian University of Athens

Department of Physics, Sector of Applications Physics

Built Environment Studies Group

Physics Building 5, 15784 Campus, Athens

Tel: +30 2107276947, Fax: +30 2107295282

msantam@phys.uoa.gr http://grbes.phys.uoa.gr

## Reflectance Measurement and Emittance Coefficient Report by the Department of Physics of the University of Athens

The laboratory of the Built Environment Studies Group, Department of Physics, University of Athens, has carried out reflectance measurements in the 300-2309nm spectrum and emittance coefficient in infrared radiation for the company **NEOTEX SA**, on the basis of a contract signed between the National and Kapodistrian University of Athens – Special Research Fund Account and NEOTEX SA on 10 January 2011. The measured samples were applied on 7cm x 7 cm aluminum tiles and had the following features:

- White-coloured sample under the trade name: NEOTHERM
- White-coloured sample under the trade name: NEOROOF
- White-coloured sample under the trade name: SILATEX REFLECT

  The laboratory of the Built Environment Studies Group certifies that on 8

  February 2011 the samples were found to have:

Sample	Solar reflectance SR (%)	Infrared emittance coefficient e (±0.02)	Solar reflectance index SRI
NEOTHERM	88	0.86	111
NEOROOF	88	0.86	111
SILATEX REFLECT	88	0.86	111

The measurements were taken on the basis of the international standards ASTM E903-96 and ASTMG159-98 for reflectance, while a UV/VIS/NIR

## EIIIΣΗΜΗ ΜΕΤΑΦΡΑΣΗ TRADUCTION OFFICIELLE OFFICIAL TRANSLATION

(Carry 5000) spectrophotometer was used, which was equipped with a labsphere, and ASTM Standard E408-71 for the emittance coefficient, while a special measurement instrument was used for infrared emittance coefficient, Emissometer Model AE (Devices & Services).

Date: 9 February 2011

Signature

Professor Mattheos Santamouris

Seal: National and Kapodistrian University of Athens, Sector of

**Environment Physics-Meteorology** 

True copy certified on 4 May 2011 by Alexandra Koultouki, clerk of the Citizen Service Centre (KEP) of the Municipality of Athens

Athens, 9 May 2011 True translation from Greek The translator Eleni Dimitriou

RIPUBLIQUE HELLENIQUE MINISTERE DES AFFALSES ETRANGERES Vu pour legalisation de la la materia dessus du Traducteur du Ministère des Affaires Etrangères ayant traduit le texte ci-annexé.

Athènes le, 1 2 MAY 2011

PAR DELEGATION DU MNISTRE Le Directe pm.

> ARGYROU TUNI Fonctionnaire domin