



## Measurement Report

Conducted by the  
National and Kapodistrian University of Athens  
Physics Department

According to the contract, signed between the **Institute of Accelerating Systems and Applications of National and Kapodistrian University of Athens** and **NEOTEX S.A.**, on 7/6/2018, 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 x 7cm.

**Product Code:** Neoproof<sup>®</sup> PU W

The laboratory of the Group Building Environmental Studies, of the Physics Department of NKUA hereby reports that on the 3/7/2018 the above mentioned tested samples have been successfully measured to have the values of solar reflectance and infrared emittance as shown in Table 1.

Product code	Solar Reflectance SR (%)	Infrared Emittance $\epsilon$ (error $\pm 0.02$ )	Solar Reflectance Index SRI
Neoproof <sup>®</sup> PU W	84	0.89	106

Table 1. The values of solar reflectance, infrared emittance and solar reflectance index of the sample submitted by NEOTEX S.A.

The measurements for the solar reflectance were conducted according to the ASTM Standard E903-12 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 C1371-04a, by using the Emissometer Model AE (Devices & Services).

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

Assimakopoulos M.

Associate Professor

11/7/2018

Signed on:

