Group of Buildings
&
Environmental Studies

University of Athens
Dept of Environmental
Physics & Meteorology
Faculty of Physics

Measurement Report

Conducted by the
National and Kapodistrian University of Athens
Physics Department

According to the contract, signed between the **Institute of Accelarating Systems and Applications of National and Kapodistrian University of Athens** and **Neotex AEBE,** on 27/06/2023, 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

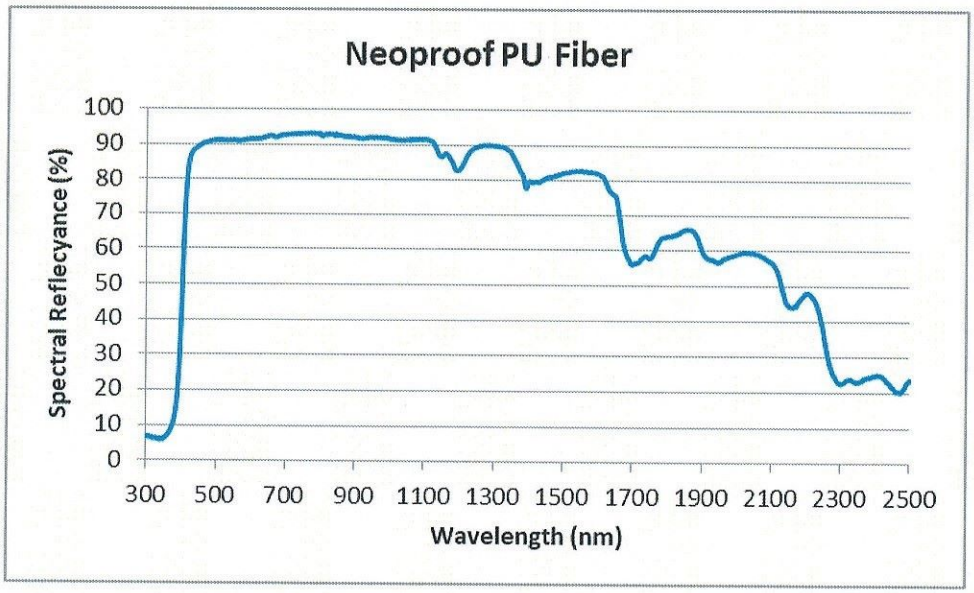
have been carried out by the laboratory of the Group Building Environmental Studies, of the Physics Department, of the National and Kapodistrian University of Athens (NKUA).
The following specimens have been submitted for testing:

Specimen 1: Sample of white color paint (RAL 9003) and dimensions: 7 cm x 7 cm.
Product Code: Neoproof PU Fiber

The laboratory of the Group Building Environmental Studies, of the Physics Department of NKUA hereby reports that on the 11/07/2023 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 and Table 2.

Product Description	SR	SRuv	SRvis	SRnir
Neoproof PU Fiber	84	7	90	84

Table 1. The values of solar reflectance of the sample submitted



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Product Description	Infrared Emmitance (e ± 0,02)
Neoproof PU Fiber	0,87

Table 2. The values of infrared emmitance of the sample submitted

Product Description	Solar Reflectance Index (SRI)
Neoproof PU Fiber	105

Table 3. The values of Solar Reflectance Index of the sample submitted

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.

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14/07/2023

Signed on:

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