

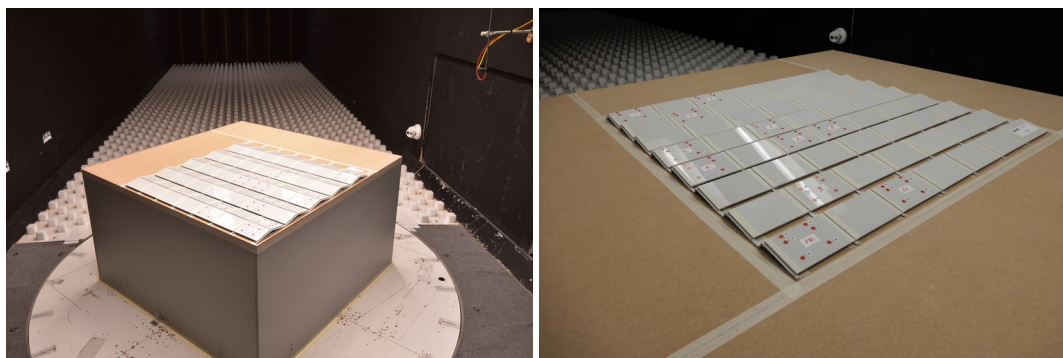
Certificate

subject: Wind tunnel studies into wind loading on PV panel supports on flat roofs
date: September 19th, 2024
reference: MvU/W 15616-4E-NO
from: ir. G.M. van Uffelen, Peutz bv
to: Metabuild Solar systems

For Metabuild Solar systems, wind tunnel studies have been performed by Peutz bv to determine the wind loading on their PV panel support system for flat roofs. The measurements have been performed in an atmospheric boundary layer wind tunnel upon using scale models for South facing and symmetrical East-West facing systems, where the pairs have been coupled. Several variants have been studied, with different roof layouts.

Metabuild Solar systems with Voxdale have performed lift tests to determine the coupling between neighbouring panels in a group conforming to appendix D.5 of NEN 7250:2021. The results of our wind tunnel studies and the lift tests have been implemented in their XLSX calculation tool, that was developed and checked by Voxdale.

The application and interpretation of our results by Metabuild Solar systems and Voxdale have been checked thoroughly by Peutz bv and match the assumption and findings as laid down in report W 15616-2E-RA-001 dated June 20th, 2024.



Conformity: CUR Recommendation 103: 2005
NEN 7250: 2021
NEN-EN 1990: 2019
NEN-EN 1991-1-4: 2019

Mook,

peutz bv, postbus 66, 6585 zh mook, +31 85 822 86 00, info@peutz.nl, www.peutz.nl kvk 12028033, conditions in accordance with DNR 2011, member NLingenieurs, btw NL.004933837B01, ISO-9001:2008