

Varennes, December 19th, 2022

Ms. Maude Lévesque Soprema Inc. 1688 Jean-Berchmans-Michaud Drummondville, Qc, J2C 8E9

Subject: Wind resistance test of vegetated roof assemblies

Reference: AS-01551-A

Ms. Lévesque,

As per your request, *UL Laboratory Canada Inc.* conducted a wind resistance test of three « built-in-place » vegetated roof assemblies as per CSA A123.24:21. The tests were performed on November 2nd, 2021. The test was carried out in accordance with CSA A123.24:21 *Standard test Method for wind resistance of vegetated roof assembly.* The wind flow resistance testing report written as per CSA A123.24:21 is available from *Soprema Inc.*.

The build in place vegetated roof assembly is described in the table below:

Components	System
Root Barrier	SOPRABARRIER 20
Drainage Layer	SOPRADRAIN ECO-VENT
Filter Cloth	SOPRAFILTRE
Water Retention Layer	SOPRARETENTION MAT
Growing medium	Sopraflor X
Edging	Aluminum edging
System density	1.4 kg/m³ (0.087 lb/ft³)
System nominal thickness	152 mm (6 in)

E: BuildingEnvelope@ul.com

The systems failed at an average wind speed of 170 km/h (105.6 mph). As per CSA A123.24:21, the wind flow resistance was calculated to be 127 km/h. These calculations were performed as per CSA A123.24:21– Annex A and are available in report AS-01551-A.

Please refer to report AS-01551-A for the roofing system details as well as full installation and testing procedures.

We trust the above is satisfactory. Should you have any questions, please do not hesitate to contact the undersigned.

Yours truly,

Samuel Lortie, CEP.

Project manager, Materials and Systems Testing

UL Laboratory Canada Inc.