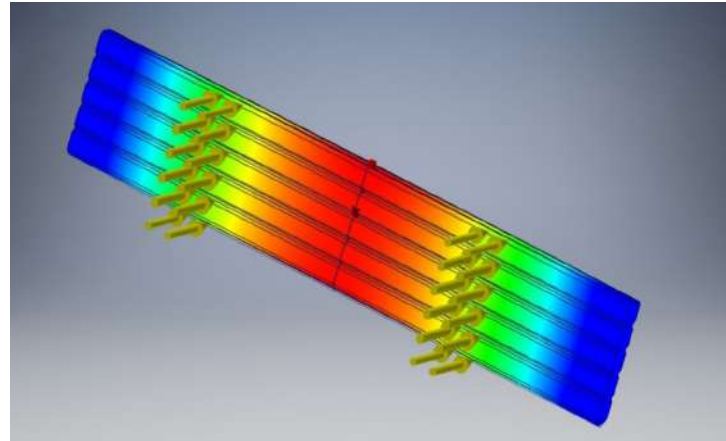
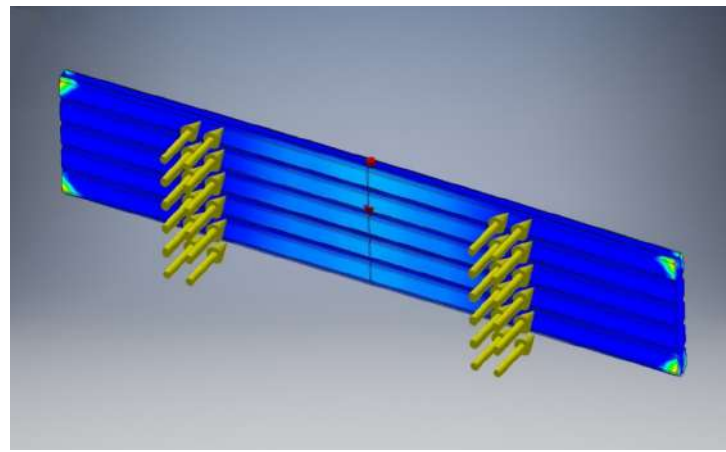
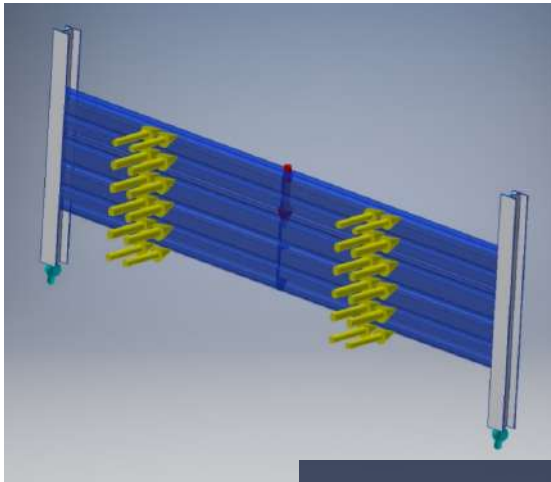


HD ECO-WALL TEST RESULTS

The wind,
noise and
fire element
analysis.

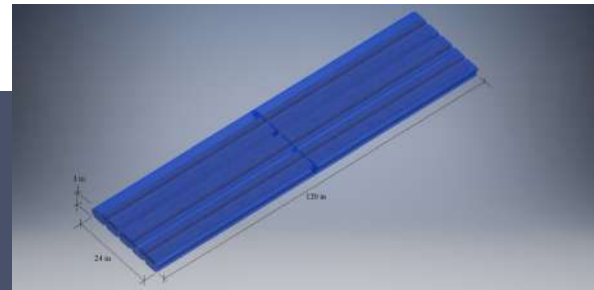


Stress in
Thermoplastic
Resin /
Deflection



Finite element
analysis (FEA)

HD Eco-Wall panels will
sufficiently resist wind load
of 90 MPH / 144 km/h.



3 inch mat assembly - complete

Acoustic Properties

According to the original request by Eco-Flex, the main purposes of this acoustic study is to 1) discover if a current 3 inch mat will be sufficient for utilization as a sound barrier and 2) to compare transmission loss (TL) of a mat to common sound barriers constructed from concrete, wood, steel and other materials. This study was not to concentrate on the actual physical height of sound barrier, but rather concentrate only on the ability of the mat to reflect and absorb sound energy.

One of the most important parameters of the sound barrier is the transmission loss. When sound is striking a sound barrier, it will be partially reflected, and also partially absorbed. The remaining sound energy will then be transmitted through. The goal is to minimize or completely remove this transmission component.

ASTM E162

Surface flammability flame spread index 110 at average temperature rise of 157.7 C. Material meets ANSI Z124.1 and Z124.2 Appendix III requirement for an average DM of 450 or less. Self-extinguished.

ASTM E84-19A

Flame spread index - 185. Smoke developed index - 2050.

CAN/ULC S102.2-18

Flame spread rating - 110. Smoke developed classification - 535.

WIND LOADING & DIRECT LOAD

90 mph / 144 km/h. 350 lbs / 158 kg

TRANSMISSION LOST

35+ dB.

SOUND TRANSMISSION CLASS (STC)

41.

SURFACE DENSITY

58.59 kg/m² - 12.00 lbs/ft².