



## Technical Specifications for Highway Noise Abatement Panel

**I-Rock Composites**

### Purpose

Reduction of highway noise

### Composition

Highway Panel material selected must contain a minimum of 90% recycled material and must be 100% recyclable.

### Health & Safety

*For health and welfare panel material must*

- a. Contain no TVOC
- b. Meet state criteria for hazardous substances
- c. Must be insoluble in water
- d. *Be resistant to mold, mildew and fungus*
- e. *Be waterproof when installed*
- f. *Have a Class I fire rating*

### Technical

*Noise Abatement panels for this project must pass*

- a) Stress test indicating material will support a 35 psf wind load at height of 20'
- b) ASTM E413-87 under the following parameters

At Frequency (Hz) = Sound Transmission Loss (TL)

125	not less than 30
250	30
500	35
1000	35
2000	40
4000	50

- c) ASTM D792 with a specific gravity not less than 1.30
- d) ASTM D792 with a density (lb/ft<sup>3</sup>) not greater than 83
- e) ASTM D570 with a water absorption weight gain of less than 3%
- f) Taber Abrasion (Sartorius MCI) with a weight change of less than 1.0
- g) Izod Impact Strength at 70 degrees F with (ft\*lb/in) greater than 60
- h) Izod Impact Strength at -40 degrees C with (ft\*lb/in) greater than 50
- i) ASTM D638 with a Tensile strength greater than 0.3
- j) ASTM D790 under the following parameters:

At Thickness / Temperature = Displacement / Load / Stress (Not more than)

0.25	70°F	0.52	25.0	5,000
0.25	130°F	0.62	15.0	4,000
0.25	-40°F	0.22	54.0	10,000

k) ASTM D638 ext under the following parameters:

At Thickness / Temperature = Displacement / Load / Stress (Not more than)

0.25	70°F	0.40	330	2,500
0.25	130°F	1.00	220	2,000

### **Dimensional & Application**

*Highway Noise Abatement panels for this project must*

- a. Have a thickness of \*\*\*
- b. Have a maximum weight of less than 15 lb/sq. ft
- c. Cut easily with standard tools
- d. Contain an integrated water channel
- e. Contain an integrated lighting channel
- f. Stack vertically

### **Warranties & Certification**

Contact manufacturer.