Third Rail Cover Board

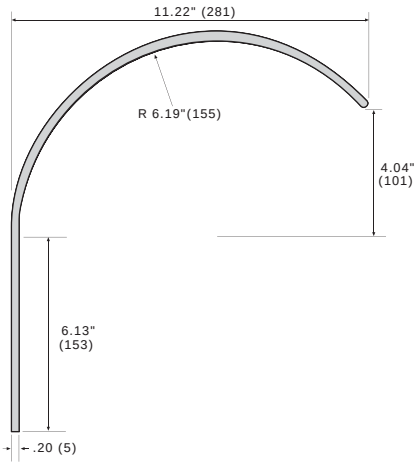
Non-Conductive Safety for Light Rail Application

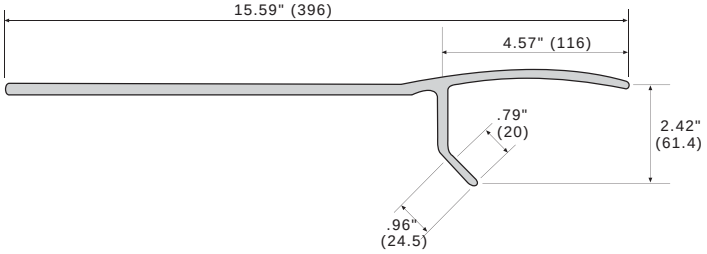
Enduro's Third Rail Cover Board Systems are custom designed to provide safety by shielding or insulating personnel from a rail that is "live" or may contain stray currents. Enduro cover boards are made of high performance, lightweight pultruded composites which, if necessary, can allow personnel or riders to more safely exit in an emergency.

Enduro has exceeded the most stringent of transportation safety tests utilizing our Halogen-Free Low Smoke Plus resin technology that provides the highly desired low smoke development and low smoke toxicity characteristics preferred by transportation safety authorities.

Enduro cover boards are installed by transit authorities around the world, and are designed to meet each customer's special requirements.

System Diagrams





Specification - Fiberglass Third Rail Cover Board

1.0 Fiberglass Third Rail Cover Board shall conform to the requirements included in this specification.

2.0 Standards

2.1 Fiberglass materials shall exhibit flame spread rating of 25 or less and smoke index of 100 or less per ASTM E-84.

2.2 Fiberglass materials shall exhibit these values per ASTM E-662.

Time (min.)	Smoke Development
1.4	10 or Less
4	25 or Less
Maximum	200

2.3 Fiberglass materials shall yield a rating of V0 per UL94.

2.4 Fiberglass materials shall yield these results per BSS 7239 or SMP 800-C.

Gas	Level	Gas	Level	Gas	Level
HCl	<10ppm	HF	<10ppm	CO	<3500ppm
HBr	<10ppm	NO2	<100ppm		
HCN	<10ppm	SO2	<100ppm		

2.5 Fiberglass materials shall be tested in accordance with the University of Pittsburgh rodent toxicity text for assessment of acute inhalation toxicity of combustion products. The detemined LC_{50} shall be greater than 35 grams.

2.6 Fiberglass materials shall have minimum dielectric breakdown of 30000 volts per ASTM D149.

2.7 Fiberglass materials shall have a minimum dielectric constant of: 5 at 60Hz; 4 at 1 MHz per ASTM D150.

2.8 Fiberglass materials shall have elapsed time to failure of 130 seconds minimum per ASTM D495.

2.9 Fiberglass materials shall have minimum impact strength of 30 ft-lb/in per ASTM D256.

2.10 Fiberglass materials shall have maximum water absorption of 0.33% per ASTM D570.

2.11 Fiberglass materials shall have minimum thermal expansion coefficient of 8.5e-6 per ASTM D696.

2.12 Fiberglass materials shall have minimum barcol hardness of 45 per ASTM D2583.

3.0 Materials

3.1 Glass fiber reinforcements in fiberglass material shall be minimum of 40 percent by weight.

3.2 Fiberglass material shall be fire retardant, non-toxic with low smoke characteristics.

3.3 Fiberglass material shall be UV stabilized.

enduro

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