

POWER DEPARTMENT

SPECIFICATION NUMBER PD-808

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Rail Protection For 150lb Rail

Spec. No. PD-808 INSULATING RAIL COVER, SPLICE COVERS  
AND BRACKET COVERS

METRO-NORTH COMMUTER RAILROAD

POWER DEPARTMENT

SPECIFICATION NO. PD-808

INSULATING RAIL COVER, SPLICE COVERS  
AND BRACKET COVERS

PART 1 - SCOPE  
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- 1.1 This Specification covers the manufacture, testing and delivery of covers for third rail, splices and brackets.

PART 2 - GENERAL  
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- 2.1 Semi-flexible snap-on covers will be applied to exposed surfaces above the contact surface of third rail, end approaches, splices, brackets.
- 2.2 The following Standard Plans show the contours and dimensions of the various covers to which this Specification applies: (dimensions after installation)

<u>Type of Cover</u>	<u>Standard Plan</u>
Third Rail Cover	SP -601
End Approach Cover No. 2	SP -601
End Approach Cover No. 3	SP -601
Splice Cover	SP -602
Bracket Cover Type 1	SP-603, SP-604

PART 3 - MATERIALS AND WORKMANSHIP  
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- 3.1 Material. The covers shall be molded of black polymer 0.090 inch minimum thickness, and shall meet the following requirements:

A. <u>Physical Properties</u>	ASTM	Value
Specific Gravity, 73 degrees F	D792	1.06
Water Absorption, %, 24 hrs @ 73 degrees F	D570	0.07
Tensile Strength, psi @ 73 degrees F	D638	6500
Flexural Strength, psi @ 73 degrees F	D790	8000
Flexural Modulus, psi @ 73 degrees F x 10 (to the 3rd power)	D790	340
Izod Impact Strength ft-lbs/in. notch @ 73 degrees F	D256	7.0
@ 40 degrees F		3.0
Rockwell Hardness	D785	R113
B. <u>Thermal Properties</u>	ASTM	Value
Heat Deflection Temperature (264 psi), degree F	D648	185
Coefficient of Thermal Expansion in./in./degree F (-20 degrees F to 150 degrees F) x 10 (to the negative 5th power)	D695	4.1
C. <u>Electrical Properties</u>	ASTM	Value
Dielectric Constant (50% RH, 73 degrees F @ 60 Hz)	D150	2.80
Dissipation Factor (50% RH, 73 degrees F @ 60 Hz)	D150	0.0004
Volume Resistivity, dry ohm, cm 73 degrees F	D257	10 (to the 15th power)
Surface Resistivity, ohm per sq	D257	10 (to the 15th power)
Dielectric Strength (18 inch sample) volts/mil	D149	630
UL subject @ .060 inch		94 V-1
@ .090 inch		94 V-1
@ .125 inch		94 V-0
Radiant panel @ .125 inch	E62	50
Steiner Tunnel @ .160 inch	E84	170

3.2 Cover for straight third rail shall be supplied in 11'-0" lengths with imprinted warning as shown on Standard Plan SP-601. The imprinted warning shall be bright yellow, weather-resistant, with letters 1-3/4 inches high.

3.3 Other types of covers shall be identified by the type designations on the Standard Plans, by means of molded indented characters inside each cover.

PART 4 - SUBMITTALS  
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4.1 In advance of quantity manufacture, the Vendor shall submit, for approval of the Railroad, two (2) complete sets consisting of one sample of each of the types shown on the Standard Plans. Quantity production shall begin only after authorization based on approval of the Railroad.

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