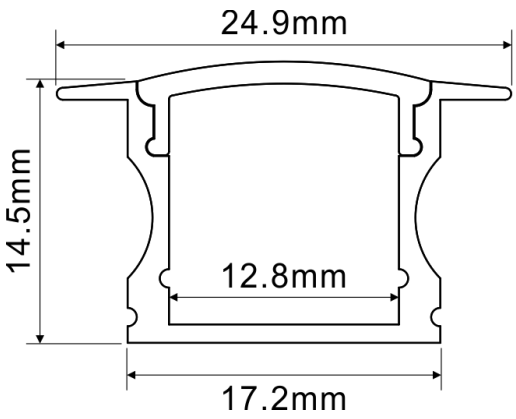
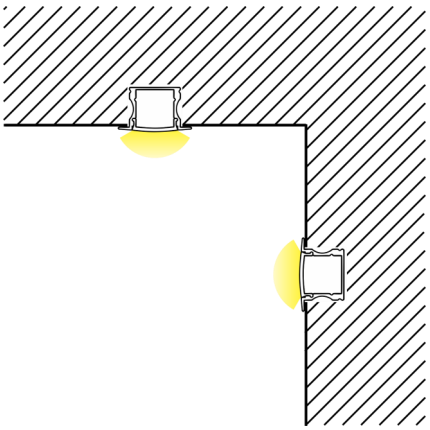
XD 2515R.MB





- 6063 matt black aluminium LED profile 2500mm
- Opal PC diffuser with 91.09% light emittance
- Sold in kits of 6 or as single pieces
- Available in a large range of LED strip options

Lightrail PO Box 360 Avoca Beach NSW 2251 +612 4381 2244 FX: +612 4381 2233 sales@lightrail.net.au

Aluminum 6063-T5

Component	Wt. %	Component	Wt. %	Component	Wt. %
Al	Max 97.5	Mg	0.45 - 0.9	Si	0.2 - 0.6
Cr	Max 0.1	Mn	Max 0.1	Ti	Max 0.1
Cu	Max 0.1	Other, each	Max 0.05	Zn	Max 0.1
Fe	Max 0.35	Other, total	Max 0.15		

Physical Properties	Metric	English	Comments
Density	2.7 g/cc	0.0975 lb/in³	AA; Typical
Mechanical Properties			
Hardness, Brinell	60	60	AA; Typical; 500 g load; 10 mm ball
Ultimate Tensile Strength	186 MPa	27000 psi	AA; Typical
Tensile Yield Strength	145 MPa	21000 psi	AA; Typical
Elongation at Break	12 %	12 %	AA; Typical; 1/16 in. (1.6 mm) Thickness
Modulus of Elasticity	68.9 GPa	10000 ksi	AA; Typical; Average of tension and compression. Compression modulus is about 2% greater than tensile modulus.
Poisson's Ratio	0.33	0.33	
Fatigue Strength	68.9 MPa	10000 psi	AA; 500,000,000 cycles completely reversed stress; RR Moore machine/specimen
Shear Modulus	25.8 GPa	3740 ksi	
Shear Strength	117 MPa	17000 psi	AA; Typical
Electrical Properties			
Electrical Resistivity	3.16e-006 ohm-cm	3.49e-006 ohm-cm	AA; Typical at 68°F
Thermal Properties			
CTE, linear 68°F	23.4 µm/m-°C	13 µin/in-°F	AA; Typical; Average over 68-212°F range.
CTE, linear 250°C	25.6 µm/m-°C	14.2 µin/in-°F	Average over the range 20-300ºC
Heat Capacity	0.9 J/g-°C	0.215 BTU/lb-°F	
Thermal Conductivity	209 W/m-K	1450 BTU-in/hr-ft²-°F	AA; Typical at 77°F
Melting Point	616 - 654 °C	1140 - 1210 °F	AA; Typical range based on typical composition for wrought products 1/4 inch thickness or greater
Solidus	616 °C	1140 °F	AA; Typical
Liquidus	654 °C	1210 °F	AA; Typical
Processing Properties			
Annealing Temperature	413 °C	775 °F	hold at temperature for 2 to 3 hr; cool at 50 °F per hour from 775 to 500 °F
Solution Temperature	521 °C	970 °F	
Aging Temperature	182 °C	360 °F	hold at temperature for 1 hr

Lightrail PO Box 360 Avoca Beach NSW 2251 +612 4381 2244 FX: +612 4381 2233 sales@lightrail.net.au

XD 2515R

Polycarbonate (PC), pellets

(f1) - Suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.
(f2) - Subjected to one or more of the following tests: Ultraviolet Light, Water Exposure or Immersion in accordance with UL 746C, where the acceptability for outdoor use is to be determined by UL.
(z) - Material designation and color code may be followed by up to three letters and/or three numbers (does not include grades which are separately recognized with above material designation and suffix)
+ - Material designations may be followed by a six digit numerical code denoting color.

Flammability	Value	Test Method
Flame Rating		
1.50 mm, ALL	HB	UL 94
3.00 mm, ALL	HB	UL 94
6.00 mm, ALL	HB	UL 94
0.750 to 1.40 mm, ALL	V-2	UL 94 IEC 60695-11-10, -20
3.00 mm, ALL	HB40	IEC 60695-11-10, -20
6.00 mm, ALL	HB40	IEC 60695-11-10, -20
1.50 mm, ALL	HB75	IEC 60695-11-10, -20
Electrical	**Value**	**Test Method**
Hot-wire Ignition (HWI)		UL 746
1.50 mm	PLC 3	
3.00 mm	PLC 2	
6.00 mm	PLC 0	
High Amp Arc Ignition (HAI)		UL 746
1.50 mm	PLC 0	
3.00 mm	PLC 0	
6.00 mm	PLC 0	
Comparative Tracking Index (CTI)	PLC 2	UL 746
Dielectric Strength	23 kV/mm	ASTM D149 IEC 60243-1
High Voltage Arc Tracking Rate (HVTR)	PLC 0	UL 746
Volume Resistivity	1.0E+16 ohms-cm	ASTM D257 IEC 60093
Arc Resistance	PLC 6	ASTM D495
Thermal	**Value**	**Test Method**
RTI Elec		UL 746
1.50 mm	125 °C	
3.00 mm	125 °C	
6.00 mm	125 °C	
RTI Imp		UL 746
1.50 mm	115 °C	
3.00 mm	115 °C	
6.00 mm	115 °C	

Thermal	Value	Test Method
RTI Str		UL 746
1.50 mm	125 °C	
3.00 mm	125 °C	
6.00 mm	125 °C	
Physical	**Value**	**Test Method**
Dimensional Stability	0.0 %	ASTM D1042 ISO 2796
Outdoor Suitability	f2, f1	UL 746C

Lightrail PO Box 360 Avoca Beach NSW 2251 +612 4381 2244 FX: +612 4381 2233 sales@lightrail.net.au