

Clear Track Hallway Fiber Pathway Technical Report Summary

Introduction

This report is a summary of all the testing used to evaluate the performance and predict long-term reliability of the Corning® Clear Track Hallway Fiber Pathway. The product has been subjected to a series of tests conducted in accordance with Telcordia GR-3155 "Generic Requirements for Microducts for Fiber Optic Cables" test requirements. Testing of the Clear Track Hallway Fiber Pathway and fiber products was performed in our laboratory in Austin, Texas.

In addition, flammability testing was performed in accordance with UL 2024: UL Standard for Safety — Cable Routing Assemblies and Communications Raceways. CSA C22.2 NO 262: Optical Fiber and Communication Cable Raceway Systems. This testing was performed at Intertek Testing Services in San Antonio, Texas.

Detailed below is an outline or executive summary of the products tested, tests performed, report numbers and analysis criteria.

Corning Part Number	Description
80611622780	Clear Track Hallway, 125 ft (38 m) spool
80611623051	12 fiber 1.8 mm micromodule , 750 ft (230 m) spool
80611623077	Clear Track Hallway Cover, 1 m each, 1000 ft (305 m) tube

Pathway and Fiber Test Results

Test Plan/GR or IEC Section	Requirement and Objective Summary	Results	Comments	Test Report Reference
GR-3155 Section 4.6	Compression			
	There shall be no evidence of wall cracking, crazing, delamination or rupture during visual inspection after testing. The Clear Track Pathway shall show no more than 15% deformation after 75 lbf compressive load.	Conforms		TC11737
GR-3155 Section 8.15	Adhesion			
	There shall be no slippage of the adhesive while under 250 g load for 48 hours at 50°C and 85% RH.	Conforms		TC11737
GR-3155 Section 5.3	Thermal Aging			
	Thermal aging at 75°C for 7 days. The Clear Track Pathway shall show no significant change in color, surface appearance and mechanical robustness.	Conforms		TC11737

Pathway and Fiber Test Results (continued)

Test Plan/GR or IEC Section	Requirement and Objective Summary	Results	Comments	Test Report Reference		
GR-3155 Section 5.4	Temperature and Humidity Cycling					
	Clear Track Pathway tested to indoor 30-day temperature cycle -5°C to 50°C. For temperatures between 10°C and 30°C the humidity level was maintained at 90%. For temperatures above 30°C the humidity level was maintained at 15%. Below 10°C the humidity was uncontrolled. Insertion loss was monitored at 1310, 1490, 1550, and 1625 nm.	Conforms		TC11737		
GR-3155 Section 5.7	UV					
	Clear Track Hallway and 12-fiber 1.8-mm micromodule conforms to indoor requirements per ASTM G 154, Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials. 1000 hrs., UV-A 351 nm	Conforms		TC11737		
GR-3155 Section 5.8	Flammability					
	Clear Track Pathway intended for intra-building use shall be rated and identified as flame resistant.	Conforms ETL Listed to UL2024 and CSA C22.2 NO 262. Control No. 4002037	Tested with micro module in the in the Clear Track, both with and w/o covers	TC11737		
IEC 60794-1	Crush					
	Force: 500N/300N Plate Length: 100 mm Loading time at max. force: 1 min/15 min Measurement Wavelength: 1310 nm/1550 nm No change in attenuation during the operational test and after the installation test There shall be no visible damage to the cable elements	Conforms		ATX WR8529		
IEC 60794-1	Impact					
	Energy: 1J Hammer Radius: 12.5 mm Number of Impacts: 3 Measurement Wavelength: 1310 nm/1550 nm No fiber break.	Conforms		ATX WR8529		

Conclusion

Results of the testing conducted indicate that the Corning® Clear Track Hallway Fiber Pathway is well suited for the intended applications.

