Service Life Expectancy for Prysmian Handrails

Like many products we use daily, handrails on escalators and moving walks are largely misunderstood. Handrails are designed to meet both original equipment manufacturer and international safety standards and are manufactured in a controlled environment.

One of the major challenges with handrails is ensuring that they operate safely and efficiently in all corners of the world.

Prysmian handrails are designed to retain their dimensional stability and structural integrity under the stresses of day-to-day operation. To accomplish this requires our products to be flexible enough to bend through a range of diameters, both forward and backwards, while being strong enough to withstand the opposing forces acting on them from both escalator passengers and the units themselves.

THE ADVANTAGES OF TPU (THERMOPLASTIC POLYURETHANE) AND STYRENE-BUTADIENE RUBBER (SBR) HANDRAILS

Historically escalator handrails have been manufactured using thermoset rubber. In the early 2000s, Prysmian patented a new handrail that uses thermoplastic elastomer instead of rubber. **Both handrail products are designed for an operational life of 40,000 hours.** When installed and set up on a properly configured and maintained escalator customers can expect a handrail life of up to 10 years.

Handrails typically enjoy an optimal service life running in ambient temperature range of 10°C and 30°C, either indoors or out. Running a handrail outside the operational range of -20°C to +50°C may lead to premature failure.

NOTE: ENVIRONMENTAL FACTORS CAN CONTRIBUTE TO A SHORTER SERVICE LIFESPAN

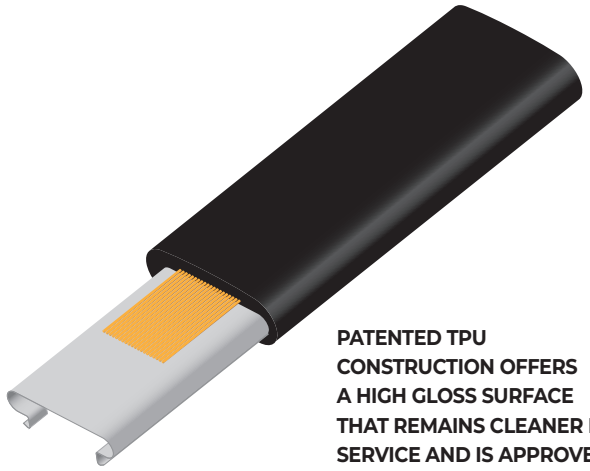
Outdoors, handrail life will be directly influenced by variables such as direct sunlight/UV exposure, ozone, precipitation, and other pollutants. Together these elements can, over prolonged periods, reduce the handrails life expectancy. Each geographical location is unique, as are the operational conditions and frequency of maintenance, which makes it very difficult to predict average life accurately.

Thanks to developments in materials science, Prysmian can now offer custom solutions which will improve handrail operation life in even in extreme temperature and environmental conditions.

Purchasing the right handrail product for your escalator and following the prescribed setup guidelines is essential to enjoying a long and trouble-free service life.

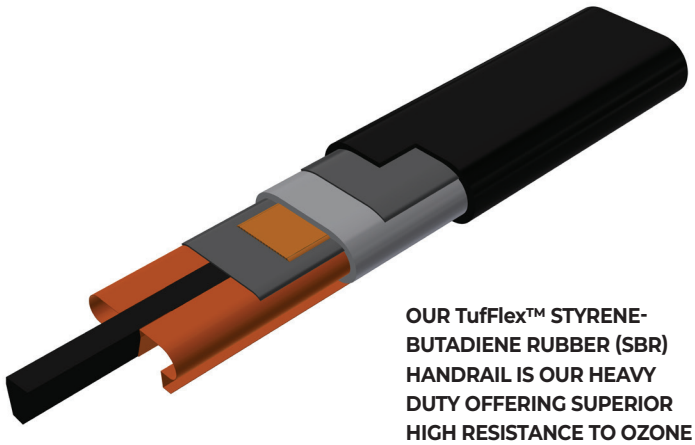
The Prysmian team is always ready to assist our customers in matching the best handrail with your project requirements.

THERMOPLASTIC POLYURETHANE (TPU)



PATENTED TPU CONSTRUCTION OFFERS A HIGH GLOSS SURFACE THAT REMAINS CLEANER IN SERVICE AND IS APPROVED BY ALL ESCALATOR MANUFACTURERS

STYRENE-BUTADIENE RUBBER (SBR)



OUR TufFlex™ STYRENE-BUTADIENE RUBBER (SBR) HANDRAIL IS OUR HEAVY DUTY OFFERING SUPERIOR HIGH RESISTANCE TO OZONE

ITS CONSTRUCTION FEATURES OUR MOST WEAR-RESISTANT TEXTILE SLIDING LAYER

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