Escalator Investigations

The experts at Robson Forensic are regularly retained to investigate construction, maintenance, and injury claims related to escalators. Discussing these investigations with our clients, regardless of their nature, is often met with the same common hurdle – industry terminology. Few people outside of the industry are familiar with the anatomy of an escalator; for that reason we have provided the diagram below. We hope that this diagram will be a helpful tool for discussing the technical aspects of your case.

Safety Equipment

Depending on the age and jurisdictional location of the escalator in your case, some of the equipment or safety devices represented may not be applicable to the subject escalator. Our experts can help to determine if specific safety equipment is required based on the details of your case.

Step Demarcation Lights - Used to create a visual warning for riders accessing or egressing the escalator

Skirt Deflector Brushes - Provides a subtle warning for riders who are near the edge of the step

Step Demarcation Strips - Used to create a visual warning at the side and rear of each step

Comb Impact Device - Safety switch used to shut down the escalator when something becomes entrapped between the steps and the comb plate

Comb Tooth Segments - Part with teeth that mesh with the grooves in the step, preventing objects from entering the escalator’s internal components

Emergency Stop Switch

Handrail

Escalator Step

Skirt

Balustrade

Handrail Drive Assembly

Returning Stairs

Electric Motor

Upper Landing

Landing Plate

Handrail Entry

Step Rollers

Step Chain

Step Turnaround

Safety Switches

Pit

Lower Landing

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Shawn has over 30 years of industry experience, which includes working with some of the largest companies in the industry, in both business and service roles. Shawn is a member of the National Association of Elevator Safety Authorities and the American Society of Mechanical Engineers. He is a Certified Elevator Inspector and a licensed state elevator inspector for multiple states.

Dennis W. Olson, C.E.I. (dolson@robsonforensic.com)

Dennis has worked for both large and small elevator companies and performed his work internationally. He is a Certified Elevator Inspector and is also a Certified Mechanic by the National Elevator Industry Educational Program. He has completed various training programs through OSHA and ASME and is a member of the National Association of Elevator Safety Authorities.