Durability Evaluation

Altech Systems Ltd

General

Altech System series exhibits very high levels of durability when exposed to the weather elements. It is composed of principally aluminium, glass and stainless steel, which are very stable and durable materials.

The powdercoating or anodising coating systems to the aluminium are internationally recognised as very durable systems.

Length of Service

Aluminium has been extensively used as a building material for exterior applications worldwide for several decades. It has a proven track record, particularly within the joinery industry, where it demonstrates outstanding durability exceeding 40 years.

This longevity is further enhanced by surface treatments such as anodising or powder coating. Modern powder coating systems are of such high quality that manufacturers and applicators often offer warranties of 15 years or more.

Environmental Suitability

Altech Systems series are designed for use in a range of environmental conditions, including coastal, geothermal, and industrial areas. It is suitable for sheltered locations such as under eaves and can tolerate damp or wet conditions resulting from surrounding ground moisture, provided it is not in direct contact with the ground. Many of the series are also appropriate for internal applications.

Intended Use

Altech Systems products are engineered for medium to high usage intensity and are suitable for installation in residential, commercial, and common areas of multi-tenancy buildings, where specified and installed in accordance with the relevant Altech Systems product requirements.

Compatibility with Adjacent Materials

Altech Systems products are designed to be compatible with adjacent building materials. Standard installation details incorporate appropriate separation methods, such as powder coating, plastic packers, isolation tapes, gaskets, or other suitable barriers where required, to minimise the risk of adverse material interactions and galvanic corrosion.

Performance Limitations

Altech Systems products are suitable for use across a range of occupancy classifications, subject to the specific product design, intended application, and compliance with the New Zealand Building Code and relevant standards. Where products are proposed for high-risk or non-standard applications, a project-specific design assessment may be required. Special consideration must be given to glazing specifications where applicable, particularly in high-traffic areas or where overhead glazing is incorporated.

Maintenance Requirements

Routine maintenance involves a low-pressure wash using mild soapy water every six months, accompanied by a visual inspection. In coastal environments, cleaning should be conducted every three months to ensure longevity and optimal performance. Refer to Altech Systems “Care and Maintenance Guide” for further information.

Similar Materials

Altech Systems products are comparable to other premium architectural aluminium systems available in the New Zealand market. Their durability performance is supported by established aluminium design principles, recognised industry standards, and the proven long-term performance of aluminium building products used throughout the construction industry.