

EXTERIOR STAIRCASES AND GUARD RAILINGS

DEFINITION AND ROLE

A staircase is an assembled construction that is intended for the vertical passage of people. It consists of a series of steps and usually has a guardrail. It allows one to access one floor from another one or to move to a level with a significant difference in height in a more or less linear manner. The guardrail is generally a perforated partition that ensures the safety of the people who walk up or down the stairs. The upper handrail provides support for its users.

STRESSES

Located outside, a staircase exposed to bad weather supports occasional loads that are mobile and variable, depending on the intensity of each passage.

REQUIRED PROPERTIES

In principle, a staircase is an elevating work that must be resistant over time. The timber that is used must be of high durability and must demonstrate very high resistance in terms of its assemblies. The surface finish of the steps must be non-slip and non-slippery under all weather conditions. The timber must demonstrate proper hardness with respect to indentation and to the wear caused by friction (stemming from regular use).

PRINCIPLES OF IMPLEMENTATION

Stairs and guard railings are subject to strict and precise construction rules. The construction of assemblies must limit, and even eliminate, any risk of infiltration or trapped water. Assemblies by bolting are preferable. Drainage of horizontal surfaces, especially steps, must be effective and compatible with the anti-slip system. Elements at the base that are exposed in terms of "open

edges" must be equipped with a water evacuation system (such as a "water drop" system).

USAGE CLASS

All of the elements fall under the scope of usage class 4.

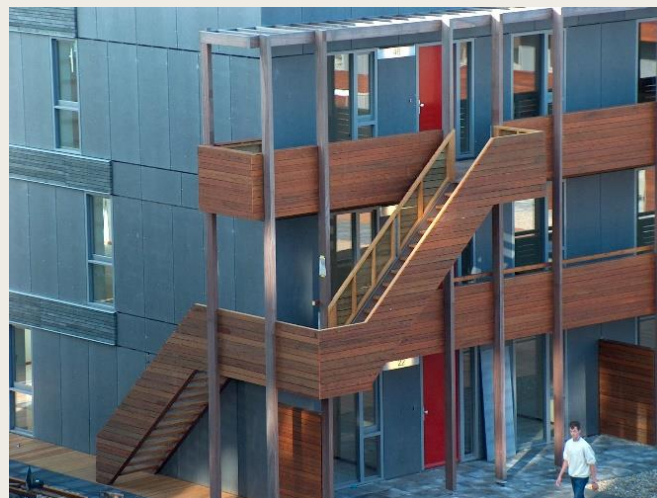


Photo : Exterior staircase© WIJMA