SHUTTERS AND CLOSURES

DEFINITION AND ROLE

Shutters and closures are movable closure elements that protect the bay windows of a façade. Timber shutters generally come in two varieties: with solid boards or with louvered boards. Shutters complete the exterior joinery of building façades. They provide security by providing protection from entry and by blocking the view from outside the building. Shutters also enable one to regulate aeration, ventilation and light. Due to their external position on bays, they also protect joinery.

STRESSES

Shutters are subject to both moisture and drying on their faces in both an uneven and alternating manner, depending on the orientation of the façades as well as the positioning of the shutters. The shutters should not deform under their own weight.

REQUIRED PROPERTIES

The shutters must be resistant in order to fulfil their protective function. They must be able to protect joinery from bad weather without the risk of deformation. Shrinkage and swelling phenomena must be kept under control. The timber must not be too dense, for reasons involving convenience and resistance to the use of fastening and rotating elements.

PRINCIPLES OF IMPLEMENTATION

The timber used to make the boards is shaped so as to ensure a leak-tight assembly that is capable of handling the dual phenomena of shrinkage and swelling. The rigidity and squareness of the panels must be perfect in order to avoid collapses. Runoff water on the façades must not result in infiltrations, so the upper part of the shutters must be protected by an effective system or type of assembly. Mounting based on mounts and rails, or bars and sashes, must ensure that the flaps remain both rigid and even. The timber can be protected using a finish and with regular care.

USAGE CLASS

Usage class 3 is representative of these structures, which, due to their position, are exposed to bad weather but have the possibility of drying between two successive occurrences of moisture.

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