STRUCTURES AND BRIDGES IN CONTACT WITH SOIL OR FRESH WATER

DEFINITION AND ROLE

Bridges and footbridges enable communication between two zones separated by an obstacle, a watercourse or a depression.

STRESSES

Structures located outside that are not sheltered and located in wet areas that are near or in contact with the ground.

REQUIRED PROPERTIES

The timber must be highly resistant to biological degradation agents, especially rot fungi and termites in affected areas. Depending on the mechanical performances that are sought, the timber that is used must meet the project's requirements.

PRINCIPLES OF IMPLEMENTATION

Permanent or prolonged contact with the ground or a source of humidity should be considered in terms of a targeted performance regarding the lifetime of the structure. To this end, measures can be taken to limit the risk of degradation development: improved drainage, minimal cuts to avoid water migration at the tips of the timber and a limited number of holes or assemblies that could become water retention or infiltration points.

Many species have the durability, hardness and mechanical strength characteristics that are recognised for this type of use.

USAGE CLASS

All species eligible for use in contact with soil or freshwater that fall under usage class 4 may be associated with the service life defined by the nature of the work.



Photo: Bridge@ WIJMA



Photo: River embankment@WIJMA

