

RESEARCH BRIEF

How to read EN 335 and EN 16449 declarations

A specifier's guide to translating EN 335 use classes and EN 16449 performance declarations into real project decisions. The brief highlights common misreadings and links each concept to the Wood Intelligence calculation trace.

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Key takeaways

- EN 335 use class 3 covers above-ground exterior exposure, but does not by itself specify service life in years.
- EN 16449 declarations report durability performance; they do not replace climate-specific design.
- The gap between declaration and site life is where orientation, exposure, maintenance and species resistance profile matter.

EN 335 use classes

EN 335 defines five use classes based on moisture exposure. Use class 1 is dry interior, use class 2 is humid interior, use class 3 is above-ground exterior, use class 4 is in-ground contact, and use class 5 is in-ground contact with severe exposure. Most facade cladding falls into use class 3. The class tells you which biological hazards to consider, not how many years the material will last.

EN 16449 declarations

EN 16449 provides a framework for declaring the biological durability performance of wood and wood-based products. A declaration may give a relative durability class or a performance rating against a specific hazard. It is a product property, not a building-site prediction. To get from declaration to design life, you still need climate, detail and maintenance.

Common misreadings

- Assuming that durability class 2 always outlasts class 4 in every climate and detail.
- Copying a reference service life from a standard without checking orientation and maintenance.
- Treating an EN 16449 declaration as a guaranteed years-of-service statement.

Sources

- EN 335:2013 Durability of wood and wood-based products — Use classes
- EN 16449:2014 Wood and wood-based products — Biological durability
- EN 350:2016 Wood durability — Guide to durability of wood and wood-based products
- Wood Intelligence method documentation

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