Whitepaper 3

Durability of SIPs Under Moisture Exposure: Myths vs. Proven Performance

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Executive Summary

Testing confirms SIPs maintain structural integrity after moisture exposure, drying, and even simulated flooding.

The Challenge: Moisture During Construction

Exposure to rain or humidity during installation raises questions about durability.

The Solution: SIP Durability Validated by Testing

APA tested SIPs under transverse, lateral, and axial loads after moisture cycling. Results showed no loss of strength.

Evidence

Moisture cycled SIPs retained 97–106% of dry specimen strength across tests.

Relevant Standards (NEN/EN/ISO)

• NEN-EN ISO 12572 – Water vapour permeability • NEN 1068 – Thermal insulation requirements • NEN-EN 1995-1-1 – Timber structures • NEN-EN 14509 – Sandwich panels durability

Conclusion

SIPs are highly durable against moisture exposure, retaining strength after drying.

Call to Action

Contact Quacent B.V. for SIP durability data at www.quacent.eu or info@quacent.eu.