

**Test Report** : **Green Wood Protect (Polychemie)**  
**Location** : Jepara, Central Java, Indonesia  
**Test Period** : August 2025 – February 2026 (6 months)



IN/CLT®

- From August 2025 until the end of February 2026, a six-month outdoor exposure test was conducted in Jepara, Indonesia, using **Green Wood Protect** from Polychemie.
- Two Cross-Laminated Timber (CLT) samples made from Javaanese Acacia Mangium wood were coated in accordance with the manufacturer's application guidelines. After curing, the samples were placed outdoors and fully exposed to natural weather conditions, including rain, UV radiation, dust and insects.
- Within the first month, surface greying became visible. This color change was expected due to UV exposure and did not form part of the primary evaluation criteria. The objective of the test was to assess how effectively the coating protected both the wooden surface and the structural integrity of the CLT core under tropical climate conditions.
- After six months of exposure, the results are positive. The coated samples show no significant moisture-related damage. There are no visible signs of excessive swelling, deformation, or structural movement.
- By comparison, uncoated CLT exposed to similar environmental conditions typically allows moisture ingress. This can result in dimensional changes (working, bending, deformation) and may negatively affect adhesive performance over time.
- The samples treated with Green Wood Protect demonstrate improved resistance to environmental exposure, confirming that the surface protection contributes positively to the durability of CLT under tropical outdoor conditions.
- Additionally, the samples were accessible to termites and other wood-destroying insects during the test period. However, no insect or termite activity was observed. Zero percent (0%) of the samples showed signs of attack from termites, woodworms, or other insects.
- Based on these initial findings, it is recommended to conduct a follow-up test on a larger surface area and over an extended exposure period to further validate long-term performance.

# Testing Green Wood Protector - Polychemie

Starting date : 6 Aug 2025

Ending date : 28 Feb 2026



# Testing Green Wood Protector - Polychemie

Application date: 6 Aug 2025



# Testing Green Wood Protector - Polychemie

Application date: 6 Aug 2025



Date: August 2025

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Date: September 2025

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Date: October 2025

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Date: November 2025

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Date: December 2025



Date: January 2026



Date: February 2026



**Date: 28 February 2026**  
**Left side = before sanding**

**Right side = after sanding**



This test report was made by:



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