

## Public test session report

# Thorwell Standard Wood PLA Wood Brown

MaterialID MAT0153



3DP Iceland Labs

Generated with 3DP Iceland Engineering Platform v60.0.6

WORKFLOW-RELIABILITY - Bug Fixes and Workflow

Reliability

2026-08-25 19:04:35

**Traceability boundary:** canonical per-module measured dates are shown below. Session identifier, time of day, operator, printer/slicer profile and environmental conditions are Not recorded and are never inferred.

## Measurement provenance

Canonical SQLite measured dates use ISO format; missing dates remain Not recorded.

| Module    | Measured date |
|-----------|---------------|
| Tensile   | Not recorded  |
| Impact    | Not recorded  |
| Stiffness | Not recorded  |

Status  
**Complete**

Result modules  
**3/3**

Specimen/result  
records  
**39**

Public details  
**Approved**

## Specimen and result quality

| Module  | Orientation | Average       | Std.<br>dev. | CV     | Specimens | Confidence | Validation |
|---------|-------------|---------------|--------------|--------|-----------|------------|------------|
| Tensile | Upright     | 2,576<br>MPa  | 0,929<br>MPa | 0,361% | 8         | 8/10       | OK         |
| Tensile | Flat        | 21,549<br>MPa | 4,34<br>MPa  | 0,201% | 10        | 10/10      | OK         |

| Module    | Orientation      | Average                   | Std. dev.                | CV     | Specimens | Confidence | Validation |
|-----------|------------------|---------------------------|--------------------------|--------|-----------|------------|------------|
| Impact    | Upright          | 175,902 kJ/m <sup>2</sup> | 21,632 kJ/m <sup>2</sup> | 0,123% | 10        | 10/10      | OK         |
| Impact    | Flat             | 248,028 kJ/m <sup>2</sup> | 28,304 kJ/m <sup>2</sup> | 0,114% | 10        | 10/10      | OK         |
| Stiffness | Three-point bend | 2493,408 MPa              | n/a                      | n/a    | 1         | Complete   | OK         |

## Recorded native inputs

| Module    | Input set                 | Recorded values                                                      |
|-----------|---------------------------|----------------------------------------------------------------------|
| Tensile   | Upright force inputs (N)  | 13, 14, 22, 22, 26, 17, 11, 9, ,                                     |
| Tensile   | Flat force inputs (N)     | 110, 179, 180, 123, 140, 174, 114, 140, 109, 132                     |
| Impact    | Upright needle inputs (%) | 11,00, 7,00, 10,00, 10,00, 11,00, 11,00, 11,00, 11,00, 11,00, 11,00  |
| Impact    | Flat needle inputs (%)    | 15,00, 16,00, 14,00, 17,00, 12,00, 12,00, 15,00, 15,00, 14,00, 16,00 |
| Stiffness | Revolutions / degrees     | 2 / 20                                                               |

## Approved test notes

## Method and equipment context

Purpose-built tensile, pendulum impact and three-point bend apparatus are used with the governed Settings Manager constants consumed by ResultsService. Results are comparative and do not claim accredited-laboratory equipment.

[Testing methodology](#) · [Engineering methodology whitepaper](#) · [Download PDF](#)

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