

Technical Report

DATE: 12092025

Report number: 1362 (P -347)

Clever Choice Flooring

Verify Adhesion

- Clever Choice 14mm Timber Flooring
- Clever Choice 14mm Oak Earthlandia Timber Flooring
- Clever Choice 5mm Vinyl Plank
- Clever Choice 2.3mm Vinyl Plank

Report By:

Mojtaba Ahmadi

R&D Chemist-Flooring Division

Aim:

Samples of Clever Choice 14mm Timber Flooring, Clever Choice 14mm Oak Earthlandia Timber Flooring, Clever Choice 5mm Vinyl Plank, and Clever Choice 2.3mm Vinyl Planks were submitted to RLA with the purpose of RLA providing Clever Choice Flooring with adhesive recommendations for various applications.

Method:

Subjective adhesion and 90° Degree Peel testing was carried out with the following adhesive and products to verify adhesion.

- Clever Choice 14mm Timber Flooring
- Clever Choice 14mm Oak Earthlandia Timber Flooring
- Clever Choice 5mm Vinyl Plank
- Clever Choice 2.3mm Vinyl Plank

Peel strength testing is based on the German DIN Standard 16 860.
There is a minimum of 40N/ 40mm.

The following adhesives were applied.

- RLA X3 Timber Flooring Adhesive
- Roberts R2000 Universal Flooring Adhesive
- Roberts R200 Universal Vinyl Adhesive
- Roberts R280 HT Vinyl Plank & Tile Adhesive
- Roberts 555 Two Part Resilient Flooring Adhesive (Two-Part Flexible Polyurethane Compound)
- RLA 1000 SMP Hybrid Resilient Flooring Adhesive

V3 and V5 notched trowels were used for Timber flooring application.

V1 and or V2 notched trowels were used for Vinyl Plank application.

Samples were left for 7 days for conditioning, before Subjective adhesion and 90° Degree Peel testing were done, as shown in Figures 1 and 2.

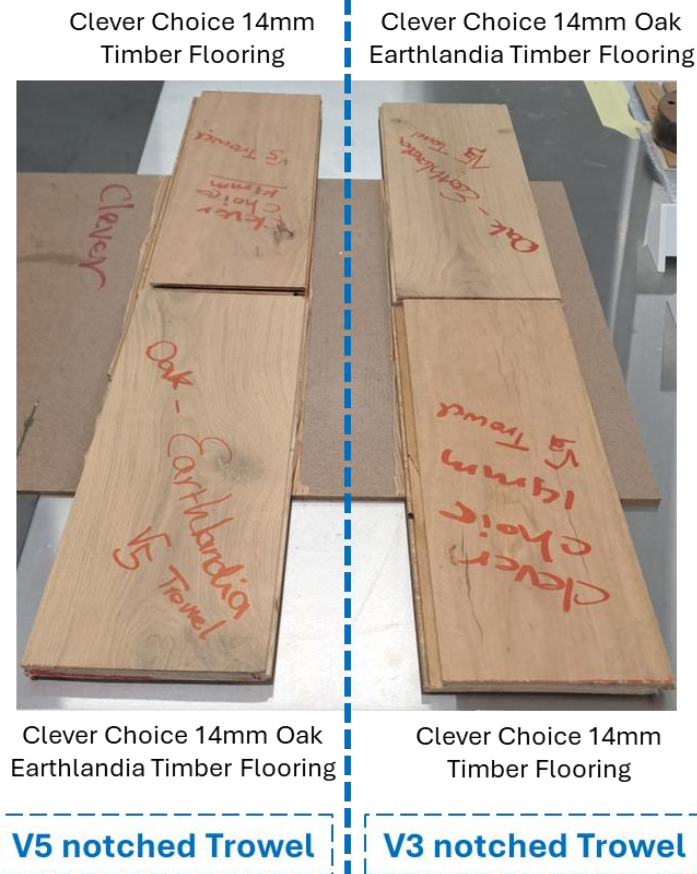


Figure 1. Images of the samples used for Timber flooring applications.

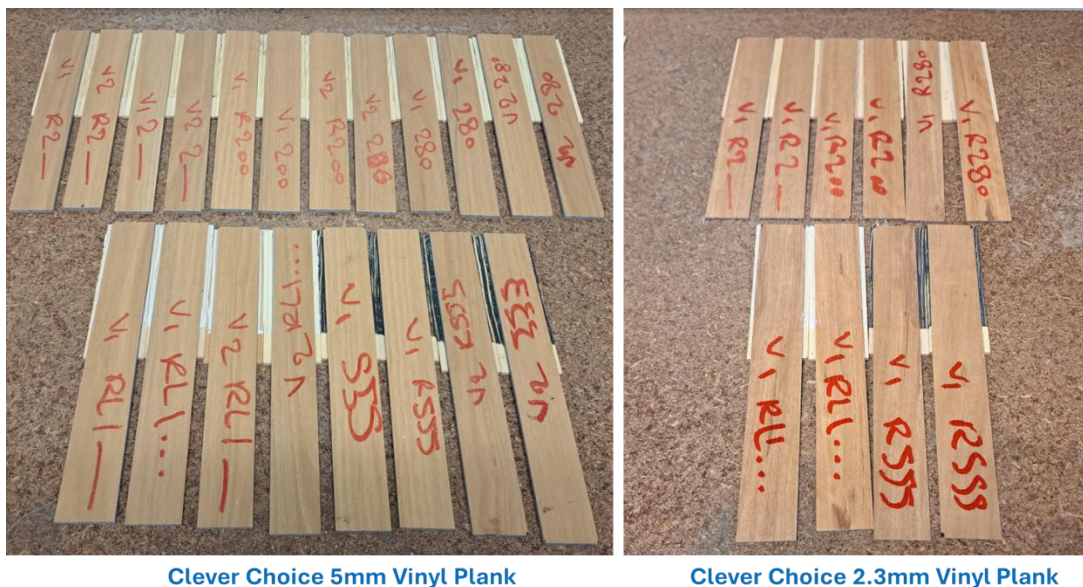


Figure 2. Images of the samples used for Vinyl flooring applications.

Results:

I. Subjective test results

RLA X3 Timber Flooring Adhesive	V3 notched Trowel	V5 notched Trowel
Clever Choice 14mm Timber Flooring	Good adhesion (Subfloor breakage)	Good adhesion (Subfloor breakage)
Clever Choice 14mm Oak Earthlandia Timber Flooring	Good adhesion (Subfloor breakage)	Good adhesion (Subfloor breakage)

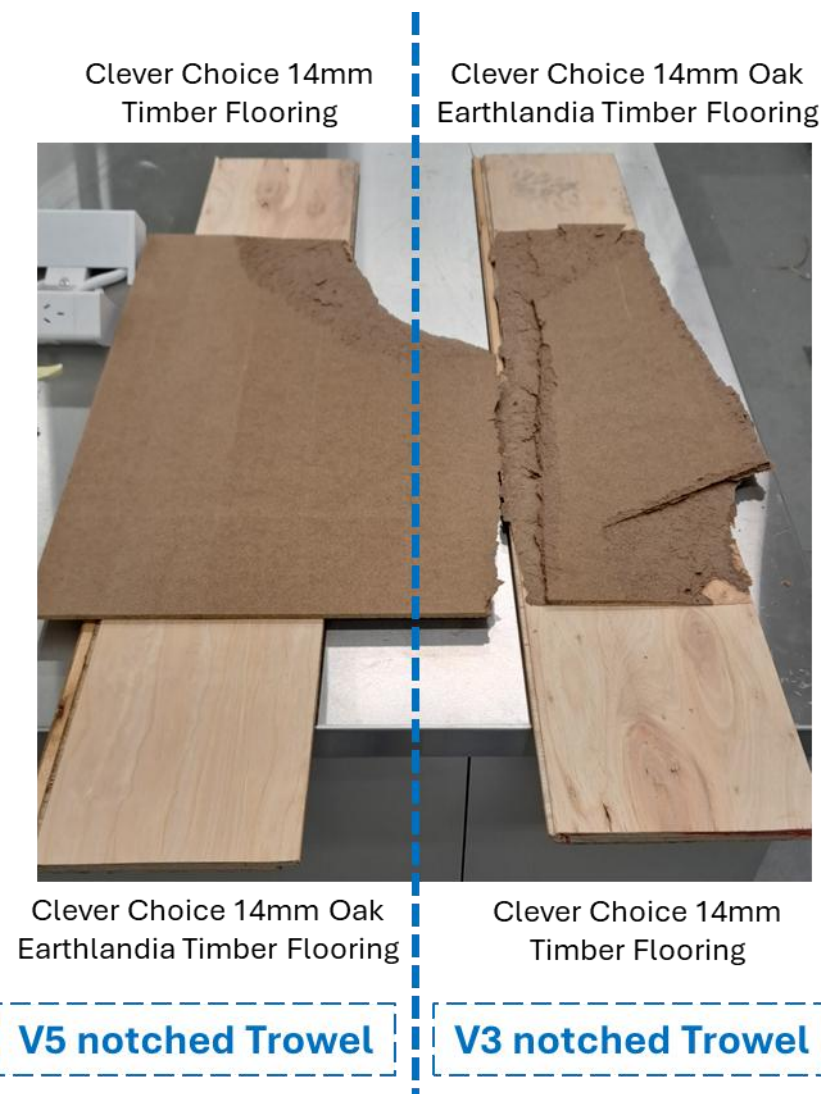


Figure 3. Images of the samples used for Timber flooring applications after Subjective tests.

II. Peel and shear test results:

Table 1. Peel test results for different Flooring applications

Table 1.1:

Clever Choice 5mm Vinyl Plank	Peel Test Results (N/40 mm)		
	V1 notched Trowel	V2 notched Trowel	Result
Roberts R2000 Universal Flooring Adhesive	49.91	79.21	Good adhesion
Roberts R200 Universal Vinyl Adhesive	63.49	77.50	Good adhesion
Roberts R280 HT Vinyl Plank & Tile Adhesive	53.49	76.28	Good adhesion
Roberts 555 Two Part Resilient Flooring Adhesive	>255 (Plank breakage)	>289 (Plank breakage)	Good adhesion
RLA 1000 SMP Hybrid Resilient Flooring Adhesive	89.27	96.31	Good adhesion

Table 1.2:

Clever Choice 2.3mm Vinyl Plank	Peel Test Results (N/40 mm)	
	V1 notched Trowel	Result
Roberts R2000 Universal Flooring Adhesive	107.56	Good adhesion
Roberts R200 Universal Vinyl Adhesive	112.81	Good adhesion
Roberts R280 HT Vinyl Plank & Tile Adhesive	89.74	Good adhesion
Roberts 555 Two Part Resilient Flooring Adhesive	>93.25 (Plank breakage)	Good adhesion
RLA 1000 SMP Hybrid Resilient Flooring Adhesive	93.76	Good adhesion

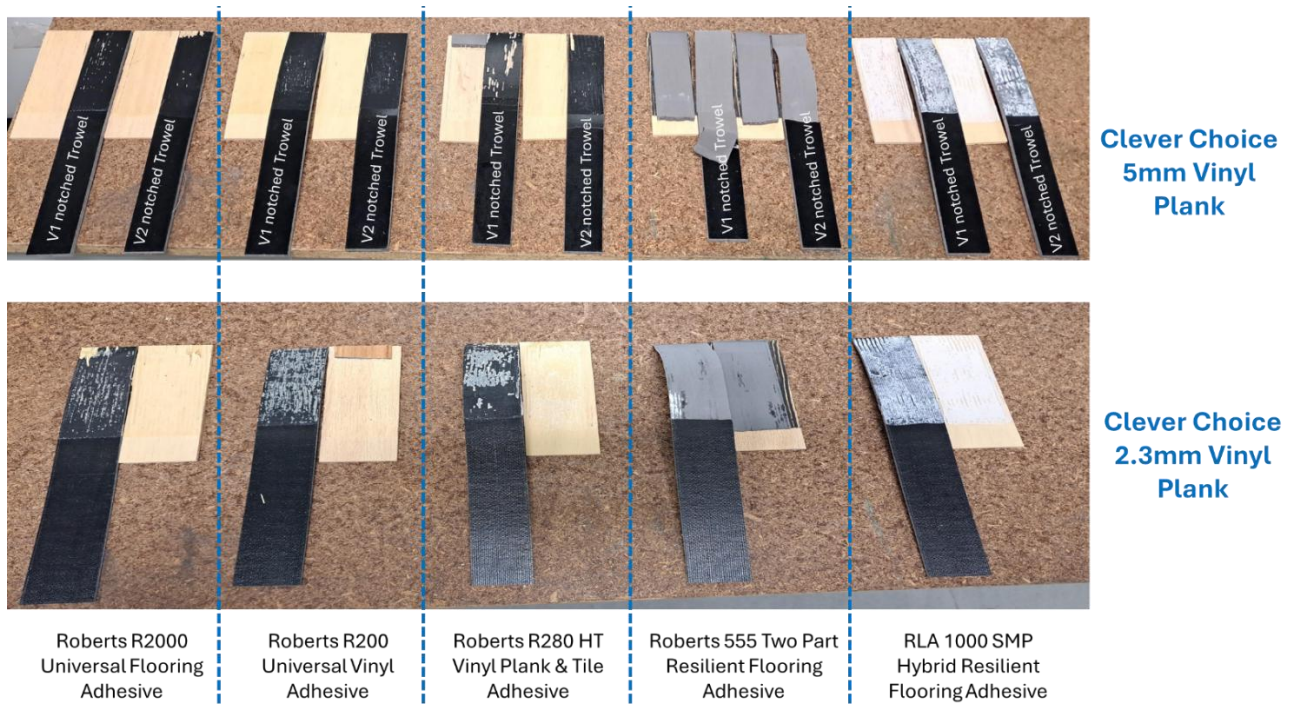


Figure 4. Images of the samples used for vinyl flooring applications after peel tests.

Conclusions and Recommendations:

- Clever Choice 14mm Timber Flooring

RLA X3 Timber Flooring Adhesive demonstrated good adhesion to Clever Choice 14mm Timber Flooring when applied using V3 or V5 notched trowels and is recommended for use.

- Clever Choice 14mm Oak Earthlandia Timber Flooring

RLA X3 Timber Flooring Adhesive demonstrated strong adhesion to Clever Choice 14mm Oak Earthlandia Timber Flooring when applied using V3 or V5 notched trowels and is recommended for use.

- Clever Choice 5mm Vinyl Plank

Roberts R2000 Universal Flooring Adhesive, Roberts R200 Universal Vinyl Adhesive, and Roberts R280 HT Vinyl Plank & Tile Adhesive displayed good adhesion and can be recommended for use when applied using V2 notched trowel.

Roberts 555 Two Part Resilient Flooring Adhesive and RLA 1000 SMP Hybrid Resilient Flooring Adhesive displayed good adhesion and can be recommended for use when applied using either V1 or V2 notched trowel.

- Clever Choice 2.3mm Vinyl Plank

All adhesives tested displayed good adhesion and can be recommended for use.