

## Adhesives for the installation of Vinyl Plank

### A. Background

A request has been received from ECO Flooring for a suitable adhesive for the installation of their new vinyl plank flooring product. Their intention is to glue down the perimeter planks and loose lay the rest of the floor. This is to allow for easy removal as it may be required. The weight of the plank is supposed to hold itself in place, along with the perimeter gluing. The intended substrates are timber, and possibly concrete.

The plank itself is a laminated product, with what appears to be a rubber core layer. Their preferred option is for a pressure sensitive adhesive.

### B. Bostik laboratory testing

Strips were cut from the plank for testing. These were adhered to timber flooring, tile underlay, and concrete with the strip over hanging the edge. These were left to cure for seven days before manually testing shear strength and peel strength.

#### 1. Bostik Test Results

Both adhesives produced good shear bond strength as there was no movement when a strong, manual, shear force was applied.

Peel Adhesion Test			
Substrate	Tile underlay	Timber	Concrete
<b>Laybond Pressure Sensitive</b>	Strong adhesive failure between adhesive & vinyl	Strong adhesive failure between adhesive & vinyl	Strong adhesive failure between adhesive & vinyl
<b>Laybond Vinyl</b>	Strong adhesive failure between adhesive & vinyl	Strong adhesive failure between adhesive & vinyl	Strong adhesive failure between adhesive & vinyl

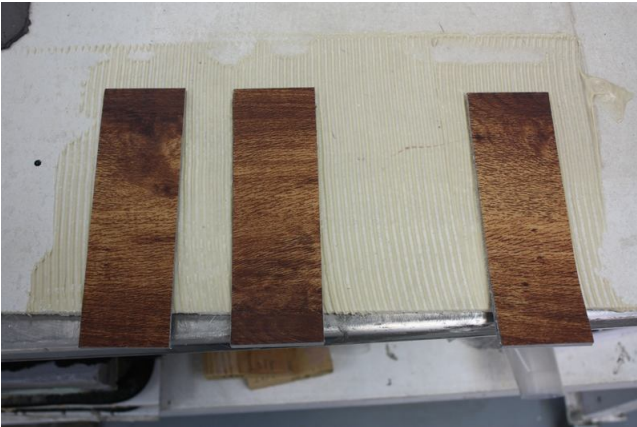
**Note:** Both adhesives produced a bond sufficient to hold the plank in place, yet would allow for removal with no or minimal damage if required.

The results are tested on standard laboratory conditions and may not replicate the actual site conditions and other unforeseen variables that can arise during and after the application. It is important that the customer must perform additional test to ensure suitability of the product. This report must not be reproduced or provided to external parties without written approval from Bostik Technical Department.

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Laybond Pressure Sensitive on tile underlay

Picture 1:



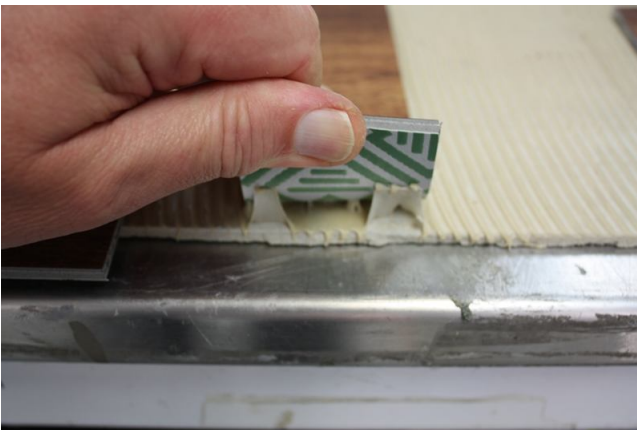
Laybond Pressure Sensitive on tile underlay

Picture 2:



Laybond Pressure Sensitive on tile underlay

Picture 3:



Laybond PS & Vinyl on timber

Picture 4:



Laybond Vinyl on timber

Picture 5:



Laybond PS on Timber

Picture 6:



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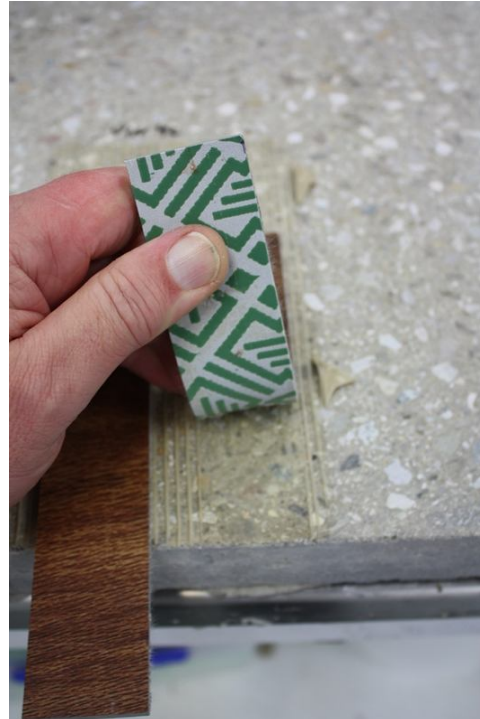
Laybond Vinyl on concrete

Picture 7:



Laybond Vinyl on concrete

Picture 8:



Laybond PS on concrete

Picture 9:



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C. Summary

From the test results obtained both **Bostik Laybond Pressure Sensitive** and **Bostik Laybond Vinyl** adhesives could be used to hold the planks in place.

For and on behalf of

**Bostik Australia Pty Ltd**



**Mark Boughton**

TECHNICAL SERVICE CHEMIST



**Emmark Eroles**

TECHNOLOGY MANAGER

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