4th February 2020

TECHNICAL REPORT No: LR 5356

Adhesives for the installation of Rubber Tiles

A. Background

A request has been received from iRubber for a suitable adhesive for the installation of their rubber tiles. The tiles are usually installed over concrete, particleboard, or plywood.

B. Bostik laboratory testing

Strips were cut from the tiles for testing. These were adhered to substrates listed above with the strip over hanging the edge. These were left to cure for seven days before manually testing the peel adhesion strength.

1. Bostik Test Results

Peel Adhesion Test			
	Plywood	**Particleboard**	**Concrete**
Bostik 4709	Weak bond. AF-T	Weak bond. AF-T	Moderate bond. AF-T
Ultraset SF	Strong bond. CF-A	Strong bond. CF-A	Strong bond. CF-A
Anchor-Weld UF1	Strong bond. Mix of AF-T & CF-A	Strong bond. CF-A	Strong bond. CF-A
Synthetic Grass Adhesive	Moderate Bond CF-A	Moderate Bond CF-A	Moderate Bond CF-A

Notes:

CF-A Cohesive failure within the adhesive.

AF-T Adhesive failure between the tile and the adhesive.

When peeling the tile from the substrate, 'legginess' was observed with those samples showing cohesive failure. This indicates that the bond to the two surfaces was stronger than the internal strength of the adhesive.

Ultraset SF and Anchor-Weld UF1 had more resistance when pulling the tile from the substrate. These two products would be the preferred products to use for these applications.

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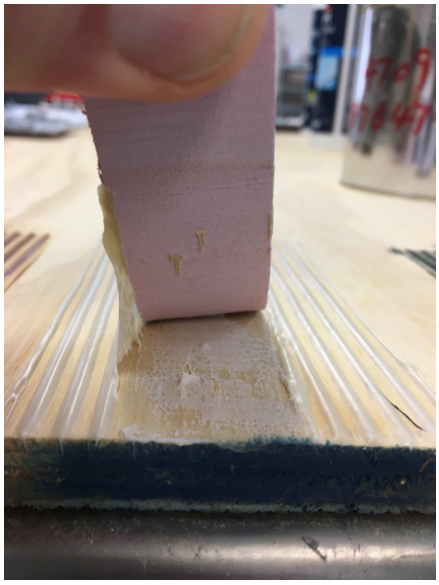
Ultraset SF on Plywood

Picture 1:

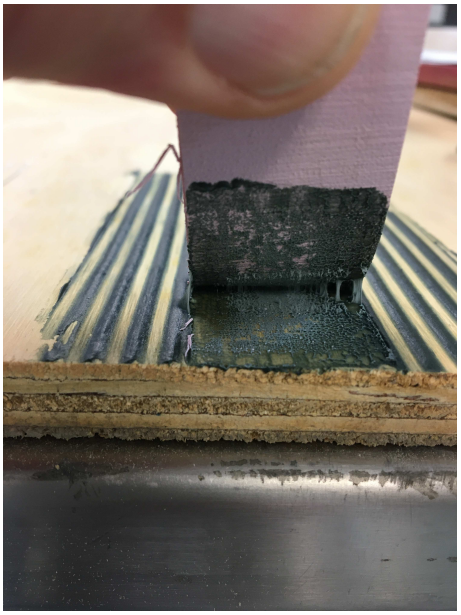
Anchor-Weld UF1 on plywood

Picture 2:



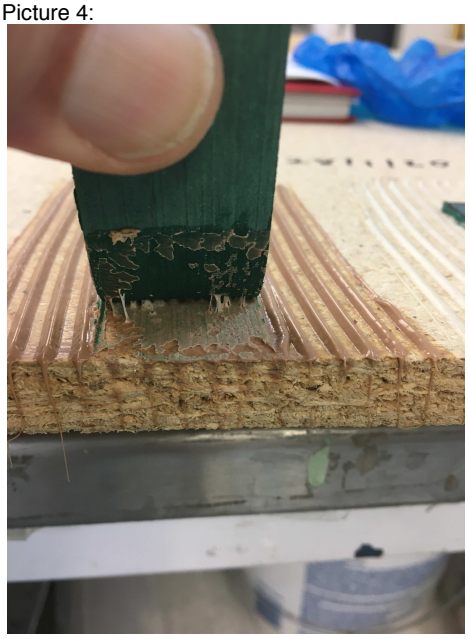
Synthetic Grass Adhesive on Plywood.

Picture 3:



Ultraset SF on Particleboard.

Picture 4:



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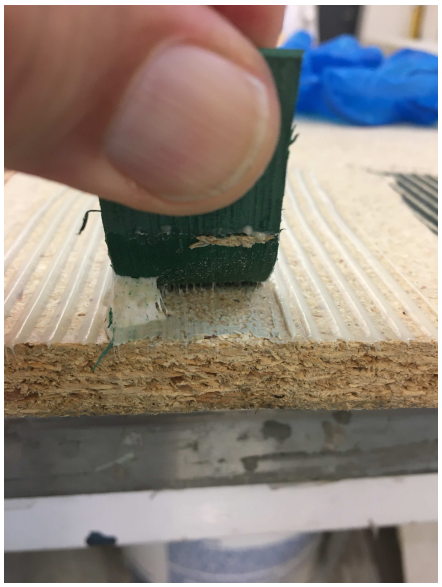
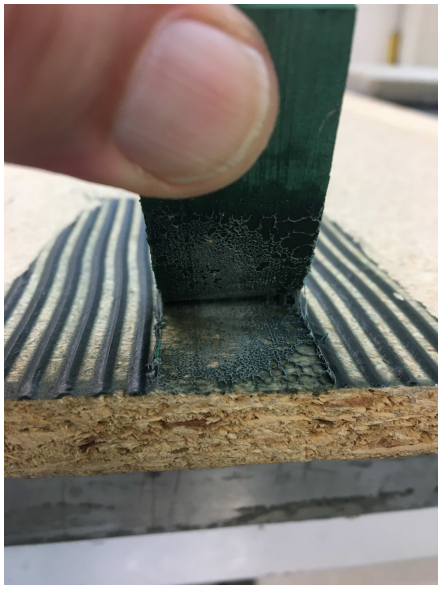
Anchor-Weld UF1 on Particleboard.

Picture 5:



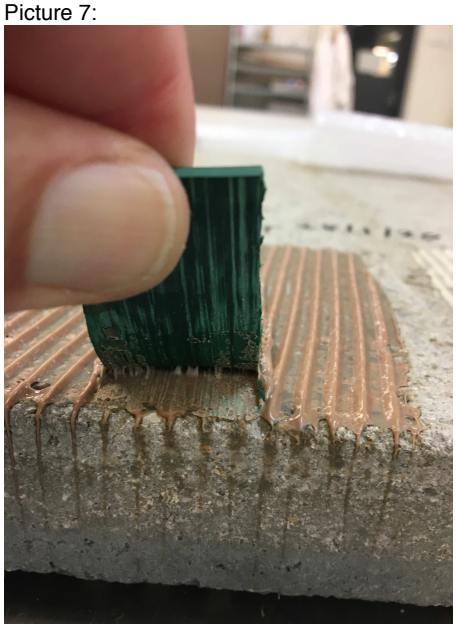
Synthetic Grass Adhesive on Particleboard.

Picture 6:



Ultraset SF on concrete.

Picture 7:



Anchor-Weld UF1 on concrete.

Picture 8:

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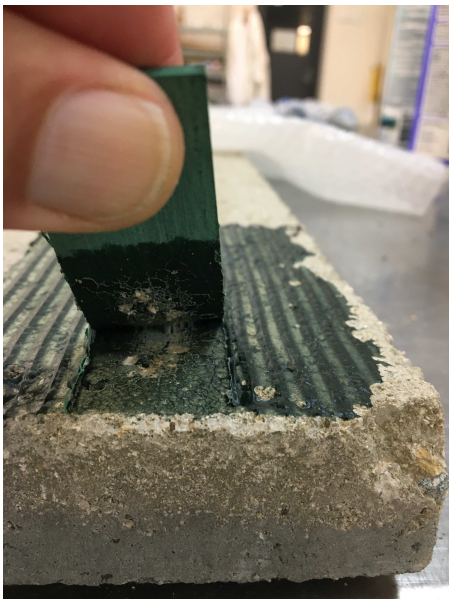
Synthetic Grass Adhesive on concrete.

Picture 9:



C. Summary

From the test results obtained, both **Bostik Ultraset SF** and **Anchor-Weld UF1** adhesives could be used to bond the tiles to the substrates tested.

For and on behalf of

Bostik Australia Pty Ltd

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