

TECHNICAL BULLETIN – TB232

SUMMARY OF APPLIED SYSTEMS FOR LOW DENSITY FIBRE-CEMENT SHEET FLOORING

Date, Tuesday, 10 July 2018

INTRODUCTION & SCOPE

Testing was performed on the three types of low density – light weight thick flooring sheets manufactured by James Hardie Australia. CSR-Cemintel and BGC-Innova, to confirm suitable waterproofing and tiling systems. This bulletin provides a reference summary for these systems, and refers to the following products only;

- a. James Hardie Scyon™ Secura™
- b. CSR Cemintel - Constructafloor™
- c. BGC-Innova Durafloor™

In cases it is absolutely imperative that sheet design and installation rules are taken into consideration before installing these systems.

APPLICATION

This document is for ARDEX internal reference purposes only as it contains information supplied to certain manufacturers as part of testing in commercial confidence.

Table 1. Scyon Secura system designs from Technical Bulletin TB215.002

Application	Creation of falls to waste	Priming direct to surface	Waterproof Membrane	Tile adhesive
Method 1) Water resistant external deck which does not require waterproofing	<i>Created by deck design and construction at 1:100 minimum</i>	ARDEX WPM300	N.A.	ARDEX-Aba Abaflex ARDEX X77 ± ARDEX E90 ARDEX X18 ± ARDEX E90 ARDEX STS8W+ARDEX E90 ARDEX Optima
Method 2) Water proofed external deck – tiles directly bonded to liquid membrane	<i>Created by deck design and construction at 1:100 minimum</i>	ARDEX WPM300 (ARDEX WPM265)	ARDEX WPM001, ARDEX WPM002, ARDEX WPM155	ARDEX-Aba Abaflex ARDEX X77 ± ARDEX E90 ARDEX X18 ± ARDEX E90 ARDEX STS8W+ARDEX E90 ARDEX Optima
Method 3) Waterproofed external deck – tiles directly bonded to sheet membrane	<i>Created by deck design and construction at 1:100 minimum</i>	ARDEX WPM300	ARDEX WA98 adhesive for all Butynol ARDEX WPM750 or ARDEX WPM1000 (fleecy Butynol)	ARDEX X77 ± ARDEX E90 ARDEX X18 ± ARDEX E90

			ARDEX Butynol sheet membrane (black)	ARDEX Optima
Method 4) Internal wet areas with screeds creating falls to waste	Sand-cement screed with ARDEX Abacrete Falls at 1:60 to 1:80 for showers and 1:100 for floors	Less than 7 days screed drying – WPM300 More than 7 days screed drying – WPM265	ARDEX WPM001, ARDEX WPM002, ARDEX WPM155	ARDEX-Aba Abaflex ARDEX X77 ± ARDEX E90 ARDEX X18 ± ARDEX E90 ARDEX STS8W+ARDEX E90

Application	Creation of falls to waste	Waterproofing	Screed		Tile adhesive
Method 5) Waterproofed external deck – tiles bonded to a floating screed	<i>Created by deck design</i> and construction at 1:100 minimum	Priming ARDEX WPM265 Waterproofing ARDEX WPM001, ARDEX WPM002, ARDEX WPM155	Heavy duty plastic sheeting	Sand-cement screed with ARDEX Abacrete* ARDEX A38 or ARDEX A48 engineered screed	Priming ARDEX Multiprime Adhesives ARDEX-Aba Abaflex ARDEX X77 ± ARDEX E90 ARDEX X18 ± ARDEX E90 ARDEX STS8W+ARDEX E90

* Screeds can also be used to adjust falls as required where deck design has been incorrectly done and falls are not present or are incorrect.

☞ Note: If the Scyon™ Secura™ sheets are damp at the time of installation, for example having been rained on in an external environment, it is recommended that the primer WPM265 is replaced by WPM300 in Methods 2 and 5. WPM300 can be applied over damp surfaces.

Table 2. BGC Durasheet system designs from Test Report TSD554-2012

(with revisions based on later products, deemed to comply by ARDEX)

Internal installations in dry areas. All floor joints to be treated as movement joints where tiles applied directly to the surface.	DIRECT APPLICATION OF TILES
	1) WPM300 primer + sand seeding with any of X56 / STS8+E90 / ARDEX-Aba Abaflex, ARDEX X77 ± ARDEX E90, ARDEX X18 ± ARDEX E90 tile adhesives 2) Multiprime + STS8W / E90 or Abaflex adhesives
	FLOOR SMOOTHING
	1) P82 Primer + Arditex NA (sheet joints may develop cracks) 2) WPM300 primer + sand seeding / Arditex NA (sheet joints may develop cracks) <i>*Cracking at joints can be minimised by installing a strip of renders fibreglass mesh (10mm mesh size) 200mm wide over each sheet joint.</i>

<p>Internal installations in wet areas with correct falls to waste. All floor joints to be treated as movement joints where membranes and tiles applied directly to the surface.</p>	<p style="text-align: center;">DIRECT APPLICATION OF WATERPROOFING</p> <p>1) WPM265 primer + WPM001 or WPM002 membranes 2) WPM300 primer + WPM001 or WPM002 membranes 3) WA98 primer + Butynol membrane or WPM750 / WPM1000</p> <p style="text-align: center;">APPLICATION OF TILES TO THE MEMBRANE</p> <p>1) Standard ARDEX adhesives to provide adhesion to WPM001 or WPM002 and WPM750/1000 include: Abaflex, STSW8+E90, X77±E90, X18±E90, MPP, X56, X78±E90, X52, Quickbond+Abalastic and Optima 2) ARDEX tile adhesives to provide adhesion to black Butynol— Optima</p>
<p>External installations with correct falls to drainage. All floor joints to be treated as movement joints where membranes and tiles applied directly to the surface.</p>	<p style="text-align: center;">DIRECT APPLICATION OF WATERPROOFING</p> <p>1) WPM265 primer + WPM001 or WPM002 membranes 2) WPM300 primer + WPM001 or WPM002 membranes 3) WA98 primer + Butynol membrane or WPM750 / WPM1000</p> <p style="text-align: center;">APPLICATION OF TILES TO THE MEMBRANE</p> <p>1) Standard ARDEX adhesives to provide adhesion to WPM001 or WPM002 and WPM750/1000 include: Abaflex, STS8W+E90, X77±E90, X18±E90, X78±E90, Quickbond+Abalastic and Optima 2) ARDEX tile adhesives to provide adhesion to black Butynol— Optima</p> <p style="text-align: center;">LIGHT TRAFFIC WALKABLE MEMBRANE</p> <p>WPM300 + WPM908</p>
<p>Grouts</p>	<p>ARDEX grouts recommended for all applications are; FG8, FSDD and WJ50 all mixed with Grout Booster</p>

Table 3. CSR Cemintel Wet Area Constructafloor system designs from Test Report TSD580-2012

(with revisions based on later products, deemed to comply by ARDEX)

<p>Internal installations in dry areas. Joints to comply with CSR cemintel Recommendations and AS3958</p>	<p style="text-align: center;">DIRECT APPLICATION OF TILES</p> <p>1) WPM300 primer + sand seeding with any of X56 / STS8W+E90 / X77±E90, X18±E90 / Abaflex tile adhesives 2) Multiprime + Abaflex or X52 adhesives</p> <p style="text-align: center;">FLOOR SMOOTHING</p> <p>1) P82 Primer + Arditex NA (sheet joints may develop cracks) 2) WPM300 primer + sand seeding / Arditex NA (sheet joints may develop cracks)</p> <p><i>*Cracking at joints can be minimised by installing a strip of renders fibreglass mesh (10mm mesh size) 200mm wide over each sheet joint.</i></p>
<p>Internal installations in wet areas with correct falls to waste. Joints to comply with CSR cemintel Recommendations and AS3958</p>	<p style="text-align: center;">DIRECT APPLICATION OF WATERPROOFING</p> <p>1) WPM265 primer + WPM002 membrane 2) WPM300 primer + WPM001 or WPM002 membranes 3) WA98 primer + Butynol membrane or WPM750 / WPM1000</p> <p style="text-align: center;">APPLICATION OF TILES TO THE MEMBRANE</p> <p>1) Standard ARDEX adhesives to provide adhesion to WPM001 or WPM002 and WPM750/1000 include: Abaflex, STS8W+E90, X77±E90, X18±E90, MPP, X56, X78±E90, X52, Quickbond+Abalastic and Optima 2) ARDEX tile adhesives to provide adhesion to black Butynol— Optima.</p>

<p>External installations with correct falls to drainage. Joints to comply with CSR cemintel Recommendations and AS3958</p>	<p style="text-align: center;">DIRECT APPLICATION OF WATERPROOFING</p> <p>1) WPM265 primer + WPM002 membrane 2) WPM300 primer + WPM001 or WPM002 membranes 3) WA98 primer + Butynol membrane or WPM750 / WPM1000</p> <p style="text-align: center;">APPLICATION OF TILES TO THE MEMBRANE</p> <p>1) Standard ARDEX adhesives to provide adhesion to WPM001 or WPM002 and WPM750/1000 include: Abaflex, STS8W+E90, X77±E90, X18±E90, MPP, X56, X78±E90, X52, Quickbond+Abalastic and Optima. 2) ARDEX tile adhesives to provide adhesion to black Butynol—Optima.</p> <p style="text-align: center;">LIGHT TRAFFIC WALKABLE MEMBRANE</p> <p>WPM300 + WPM908</p>
<p>Grouts</p>	<p>ARDEX grouts recommended for all applications are; FG8, FSDD and WJ50 all mixed with Grout Booster</p>

IMPORTANT

This Technical Bulletin provides guideline information only and is not intended to be interpreted as a general specification for the application/installation of the products described. Since each project potentially differs in exposure/condition specific recommendations may vary from the information contained herein. For recommendations for specific applications/installations contact your nearest ARDEX Australia Office.

DISCLAIMER

The information presented in this Technical Bulletin is to the best of our knowledge true and accurate. No warranty is implied or given as to its completeness or accuracy in describing the performance or suitability of a product for a particular application. Users are asked to check that the literature in their possession is the latest issue.

REASON FOR REVISION - ISSUER

Revisions to included deemed to product X18, WPM750 and WPM1000

DOCUMENT REVIEW REQUIRED

24 months from issue

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