



# **Blue Barrier - Product Technical Installation Manual**

Revision 3.1 Jan 2017

# Air, Moisture & Mould Defence



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The information contained herein and any other advice are given in good faith based on ABEP's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with ABEP's recommendations. The information only applies to the application(s) and product(s) expressly referred to herein. In case of changes in the parameters of the application, such as changes in substrates etc, or in case of a different application, consult ABEP's Technical Service prior to using ABEP products. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. All orders are subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Technical Data Sheet for the product concerned, copies of which will be supplied.

		Table of Contents	
1.	Produ	ict Description	4
	1.1 E	Blue Barrier: Uses	4
2.	New Z	Zealand Building Code Compliance	5
	2.1	Clause B1 - Structural/Mechanical	5
	2.2	Clause B2 – Durability	5
	2.3	Clause E2 - External Moisture	5
	2.4	Clause F2 - Hazardous Building Materials	5
	2.5	Blue Barriers Advantages and Characteristics	5
3.	Manu	facturer Details	6
	3.1	Packaging	6
	3.2	Appearance	6
	3.3	Odour	6
	3.4	Mixing	6
	3.5	Storage & Shelf Life	6
	3.6	Curing Times	6
4.	Manu	facturer's Technical Data	7
5.	Austr	alian/New Zealand Standards – AS/NZS	8
	5.1	Blue Barrier Liquid Wrap	8
	5.2	Blue Barrier Flash 'N Wrap	9
	5.3	Blue Barrier Liquid Flashing	9
	5.4	Blue Barrier Joint Filler	9
6.	Adhes	sion to Substrates (AS/NZS 1580.405)	10
	6.1	Approved Substrates	10
	6.2	Substrate Inspection	10
7.	Produ	ct Management & Quality Control	11
8.	Traini	ng, General Prep & Application Guide	11
	8.1	Applicator Training	11
	8.2	Spray Application Training.	11
9.	Subst	rate Preparation	12

# **Table of Contents**

	9.1	Step 1 - Inspect	12
	9.2	Step 2 - Clean	12
	9.3	Substrate Condition Inspection	12
	9.4	Wooden Substrates	13
	9.5	Metal Substrates	13
	9.6	Cementitious Substrates	13
	9.7	Paints and Existing Coatings	13
	9.8	Control Joints	13
10.	Applica	ation Preparation	14
	10.1	Repairs and Preparation	14
	10.2	System Application	14
11.	Applica	ation Tools & Procedure	14
	11.1	Joint Filler	15
	11.2	Liquid Flashing	15
	11.3	Liquid Wrap	15
	11.4	Flash 'N Wrap	15
12.	Blue B	arrier BEP® Product Consumption Rates	15
13	Blue B	arrier Diagrams	16
	13.1	Diagram 01 - Typical Sill Detail	16
	13.2	Diagram 02 - Typical Head Detail	17
	13.3	Diagram 03 - Typical Jamb Detail	18
	13.4	Diagram 04 - Typical Joint Detail	19
	13.5	Diagram 05 - Typical Penetration Detail	20
	13.6	Diagram 06 - Typical Foundation Detail	21
	13.7	Diagram 07 - Typical Rebated Foundation Detail	22
	13.8	Diagram 08 - Typical Control Joint Detail	23
	13.9	Diagram 09 - Typical Control Joint Function	24
	13.10	Diagram 10 - Typical Flashing Opening	25
	13.11 11 - P	F Rod Control Joint Detail	Diagram 26
	13.12	Diagram 12 - Masonry Control Joint Detail	27 v 3.1 .lan 2017

Table of Contents	
14. Health and Safety Information	28
14.1 Personal Protection	28
14.2 Site Safety Information	29
15. System Warranty Information	29
16. System Limitations & Safety Information	29
17. Disposal Of Materials	30
18. Technical Manual Information/Disclaimer	30

ABEP - Blue Barrier Product Technical Installation Manual

# **<u>1. Product Description</u>**

Blue Barrier is a family of Liquid Applied Flashings/Adhesive/Sealant Products, for Air, Moisture & Mould Protection. Used for window & door installation flashing, joint & crack filling, building penetration/protrusion sealing and total building envelope air and moisture protection.

### 1.1 Blue Barrier: Uses

### The use and application of the building envelope wrap system is reserved for Blue Barrier Accredited & Fully Trained Applicators only.

- Highly Suitable for waterproofing solutions in both new construction and refurbishment projects.
- For applications over a variety of approved substrates see product information. **Note:** Contact ABEP regarding suitability of any substrate not approved already.
- For complex substrate details with limited accessibility.
- Blue Barrier Products are flexible and are especially suited to applications where surface movement may cause more rigid systems to crack or fail.



Blue Barrier - Liquid Flashing



Blue Barrier - Joint Filler



Blue Barrier - Liquid Wrap



Blue Barrier - Flash'N Wrap

# 2. New Zealand Building Code Compliance

### **2.1** Clause B1 - Structural/Mechanical

The Blue Barrier moisture proof membrane system, when installed according to the manufacturer's instructions will meet performance clauses B1.3.2 of the New Zealand Building Code, (NZBC)

### **2.2** Clause B2 – Durability

50 years. The Blue Barrier moisture proof membrane system, when installed according to the manufacturer's instructions will meet performance clauses B2.3.1 (a) of the New Zealand Building Code, (NZBC)

### 2.3 Clause E2 - External Moisture

The Blue Barrier moisture proof membrane system when installed according to the manufacturer's instructions complies with performance clause E2.3.2 of the New Zealand Building Code, (NZBC)

### **2.4** Clause F2 - Hazardous Building Materials

The Blue Barrier moisture proof membrane system when installed according to the manufacturer's instructions complies with performance clause F2.3.1 of the New Zealand Building Code, (NZBC)

### 2.5 Blue Barriers Advantages and Characteristics

- Immediately waterproof on application. (Also creates an immediate seal under water)
- Creates Durable, Energy Efficient, Fully Adhered Seamless Membrane
- More Resilient to Inclement Weather During Construction (Exposure) Phase
- Provides Air/Moisture and Mould Protection
- Weather Resistant, Durable and Vapour Permeable
- Used for Multiple Construction Applications
- Wet & Dry Surface Application
- Environmentally Friendly (non toxic to sea life) Marinco Bioassay Laboratory Inc, using WET method no. 2007.0
- Strong Adhesion
- <u>CodeMark Certificate of Conformity</u> BSC-130214-CMNZ, issued 01 April 2014.



# 3. Manufacturer Details

**Dominus® Innovations,** 2022 N. West Shore Blvd. Suite 200 Tampa ,Florida 33607, U.S.A Tel +1-813-279-1902. Email : www.bepproducts.com

### 3.1 Packaging

- Supplied in 5 US Gallon/18.9 Litre (Liquid Wrap) Containers (23 Kg)
- 2 US Gallon/7.6 litre (Roller Grade) Tins (12Kg)
- 50 Gallon/189 litre (Liquid Wrap) Drum (230Kg approximately)
- 20 oz (590 ml) Sausage

### 3.2 Appearance

• Gloss/Bright Blue – Liquid

### 3.3 Odour

• Weak odour

### 3.4 Mixing

- No mixing is required for Blue Barrier Flashing, Joint Filler or Flash 'N Wrap
- Spray applied Liquid Wrap Stir by hand, with plastic or wooden paddle to ensure pail contents has an even consistency.

### 3.5 Storage & Shelf Life

- Do not store above 27°C. Blue Barrier is fit for use for up to 24 Months from the date of production when stored in the original, unopened & undamaged packaging.
- Higher storage temperatures may reduce the shelf life of Blue Barrier.
- Opened units may begin to solidify within a few days.

### 3.6 Curing Times

(Approximate when exposed to UV or Moisture)

- Tack Free 45 minutes
- Complete System Cure 3.1mm 16hours

# 4. Manufacturer's Technical Data

## Elongation (Tested ASTM D412)

• Joint Filler 220	%
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- Liquid Flashing 300%
- Liquid Wrap 290%
- Flash 'N Wrap 250%

# **Solids Content**

- Liquid Wrap 90% Solids (10% solvent base for spray application)
- Joint Filler, Liquid Flashing, Flash'N Wrap 100% Solids (No VOC)

## Tear Strength (Tested to D-1424)

- Liquid Wrap 338 kPa (49 PSI)
- Flash'N Wrap 310 kPa (45 PSI)

## Shore Hardness (Tested to ASTM C-661)

<ul> <li>Joint Filler</li> </ul>	A 70
<ul> <li>Liquid Flashing</li> </ul>	A 55-60
<ul> <li>Liquid Wrap</li> </ul>	A 45
• Flash 'N Wrap	A 55-60

### Water Vapour Transmission (Tested to ASTM E-96-10, Desiccant method)

• 23-24 perms

### Tensile Strength (Tested to ASTM D -2370)

- Joint Filler 1,779 kPa (258 PSI)
- Liquid Flashing 1,999 kPa (290 PSI)
- Liquid Wrap 634 kPa (92 PSI)
- Flash 'N Wrap 2,268 kPa (329 PSI)

**VOC** - Joint Filler, Liquid Flashing and Flash 'N Wrap <30g/L (Tested to E.P.A Method 24) Liquid Wrap < 0 g/L (VOC exempt list)

Class A Surface Burning - Flame spread and smoke development (Tested to ASTM E-84)

U.V Exposure - Up to 90 Days (see Sec 16 - Limitations) (Tested to ASTM G154)

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**Water Penetration** (Tested to ASTM E 331 & AS/NZS 4284, E2VM & BEAL Certification Services Ltd, RAB weather tightness testing

Air Leakage (Tested to ASTM E 283-04, E 2357-11)

Water Infiltration (Tested to AAMA 501.2-94)

Air Penetration (Tested to ASTM 2178)

Low Temp Crack Bridging - (Tested to ASTM C 1305 & AS/NZS 4850.2000, Cycle Joint Movement)

Peel Strength - (Tested to ASTM D 903)

Hardness (Tested to ASTM D 2240)

Adhesion to Approved Substrates - (Tested to AS/NZS 1580.4085)

# 5. Australian/New Zealand Standards – AS/NZS

All products were tested to joint Australian/New Zealand Standards (AS/NZS) **Note** : Copies of these test results are the ownership of ABEP Ltd and are available on request but at the discretion of ABEP Ltd.

## 5.1 Blue Barrier Liquid Wrap

- Tensile Strength (Tested to ASTM D412)
- Freeze-thaw resistance (Tested by BEAL Testing Services Ltd, Porirua, NZ. TP -20 $^{\circ}$ C to +70 $^{\circ}$ C)
- Adhesion to nominated substrates (Tested to ASTM C794)
- Cold temperature resistance (Tested to ASTM C1305)
- Resistance to UV for 90 days (see Sec 16 Limitations) (Tested by NZ Product Accelerator, University of Auckland, TP based on ASTM G154)
- Water Penetration Resistance (Tested to ASTM ESS1 & BTS TP based on E2/VM1)
- Water Vapour Resistance (Tested to ASTM E96)
- Air Leakage of Rigid Air Barrier Board (Tested to ASTM E283)
- Low VOC  $\langle og/L \rangle$

### **5.2 Blue Barrier Flash 'N Wrap**

- Tensile Strength (Tested to ASTM D412)
- Freeze-thaw resistance (Tested by BEAL Testing Services Ltd, Porirua, NZ. TP -20°C to +70°C)
- Adhesion to nominated substrates (Tested to ASTM C794)
- Cold temperature resistance (Tested to ASTM C1305)
- Resistance to UV for 90 days (see Sec 16 Limitations) (Tested by NZ Product Accelerator, University of Auckland, TP based on ASTM G154)
- Water Penetration Resistance (Tested to ASTM ESS1 & BTS TP based on E2/VM1)
- Water Vapour Resistance (Tested to ASTM E96)
- Air Leakage of Rigid Air Barrier Board (Tested to ASTM E283)
- Low VOC <30g

# 5.3 Blue Barrier Liquid Flashing

- Tensile Strength (Tested to ASTM D412)
- Freeze-thaw resistance (BTS TP from -20°C to +70°C)
- Adhesion to nominated substrates (Tested to ASTM C794)
- Crack Bridging & Cyclic Movement (Tested to ASTM C1305 & AS4654.1-B)
- Cold temperature resistance (Tested to ASTM C1305)
- Water Penetration Resistance (AS/NZS 4201.4) acceptable
- Low VOC <30g/L

### 5.4 Blue Barrier Joint Filler

- Tensile Strength (Tested to ASTM D412)
- Freeze-thaw resistance (BTS TP from -20°C to +70°C)
- Adhesion to nominated substrates (Tested to ASTM C794)
- Crack Bridging & Cyclic Movement (Tested to ASTM C1305 & AS4654.1-B)
- Cold temperature resistance (Tested to ASTM C1305)
- Water Penetration Resistance (Tested to AS/NZS 4201.4)
- Low VOC <30g/L

# 6. Adhesion to Substrates (AS/NZS 1580.405)

### 6.1 Approved Substrates

- Treated Plywood (CCA treated)
- Treated structural framing timber (CCA or Borate treated)
- Aluminium
- Stainless Steel
- Powder Coating
- PVC (light sand required before application)
- Concrete (precast)
- Concrete (CMU)
- James Hardie 
  (fibre cement board)
- MagRoc <sup>™</sup> (RAB panels and boards)
- Magnum <sup>™</sup> Board (RAB panels and boards)
- Galvanised Metals
- Steel
- Glass

Note : Blue Barrier products can equally be applied in dry and wet conditions.

### 6.2 Substrate Inspection

Whenever Blue Barrier is to be applied over an old or existing substrate, an ABEP Ltd 'certified applicator' must carry out a survey that includes an inspection and testing procedure. The inspection needs to include all substrates intended to be coated and should identify the need for:

a) Any repair work required.

b) The cleaning and preparation work required as described in section 9. (Substrate preparation)

All instances of repair work required needs to be recorded and photographed so that they can be used in developing a 'scope of work'. If during the inspection of the substrates, it is noted that there are potential or existing structural deficiencies, such as weak timber framing under the substrate, a detailed record including photographs should be made so that all relevant information may be passed on to a consultant engineer for an opinion on the area of concern. This may require the consultant engineer to carry out his/her own site inspection to verify the condition of the structure under the substrate.

The survey must also address and verify the condition of the uppermost substrate on which Blue Barrier is to be applied. For further information and recommendations on testing procedures, please contact ABEP Technical Services.

# 7. Product Management & Quality Control

ABEP Ltd monitor and maintain records and reports of importing, distribution and the application of Blue Barrier products in accordance with a Building Product Quality Plan, BPQP.

- Manufacturer's quality control check-list
- Records of batch numbers and manufacturing dates
- Records of batch number distribution
- Pre-check and job completion checklist.

# 8. Training, General Prep & Application Guide

# 8.1 Applicator Training

Applicator training is important to ensure a high standard and quality application of Blue Barrier Products. Please contact ABEP for training requirements.

All applicators are required to observe and demonstrate a high degree of Health & Safety awareness and practices in accordance with local legislation and regulations.

A typical ABEP basic training session takes around 60 mins and is all that is required to obtain an 'approved applicators' certification for the application of Joint Filler, Liquid Flash and Flash 'N Wrap. (Spray application requires additional training, see section 8.2)

## 8.2 Spray Application Training.

This method of application requires additional training in order to ensure the applicator is able to :

- Setup and maintain the spray pump.
- Manage the spray area to eliminate overspray and identify possible hazards
- Successfully apply the required thickness of product.
- Properly clean equipment

Contact ABEP for access to additional training and applicators resources.

# 9. Substrate Preparation

For all existing substrates the following cleaning process must be followed to ensure that a high quality application is obtained.

### 9.1 Step 1 - Inspect

Inspect all areas to be coated to determine condition of materials and sub-structure.

Specifically note the following:

- 1. Structural integrity and viability and any structural areas to be repaired.
- 2. Type and condition of substrates and materials and identify original material manufacturer if possible.
- 3. Areas affected by foreign materials.
- 4. Areas to be removed, repaired, or capped prior to applying a Blue Barrier coating.
- 5. Items to be removed.
- 6. Cleaning to be carried out.

### 9.2 Step 2 - Clean

Perform initial cleaning and prepare the surface appropriately for coating.

Preparation may require sanding, scraping, etc.

The use of a biodegradable cleaner/wash solution may be used to enhance the quality of the cleaning process on substrates that are heavily soiled, but this <u>must be thoroughly rinsed off prior</u> to the application process to avoid potential adhesion issues. (Contact ABEP for further information).

Surface preparation shall always, be in accordance with the highest standards of good trade practice to eliminate the possibility of product failure due to applicator error and resulting in a warranty claim.

### 9.3 Substrate Condition Inspection

Where any inspection raises concern regarding the structural soundness of a particular system or substrate, an opinion from a qualified structural engineer should be sought prior to any work being carried out.

**Note:** All mould must be remediated before the application of Blue Barrier Products. There are numerous commercial products available for this purpose and once the treatment is complete any residual mould killer should be rinsed from the substrate.

### 9.4 Wooden Substrates

All wooden-based panels are to be in a structurally sound condition. Plywood and all panel/sheeted wooden materials must be firmly adhered (Glued and or screwed only) in accordance with standard trade practice prior to application.

**NOTE :** Nails have a tendency, over time with temperature cycling, of moving outward which may puncture the waterproofing membrane..

### 9.5 Metal Substrates

Metals must be free of mill-scale, oils, surface impurities and any loose/friable materials. Acetone may be used to clean most metal substrates however if unsure, please contact ABEP for assistance. Smooth metals to be scuffed to help create a mechanical bond. 100 grit sandpaper is to be used when required (scuffing increases surface area of adhesion).

### 9.6 Cementitious Substrates

New concrete shall have a minimum of 28 days curing time prior to be coated with any Blue Barrier product.

All concrete (new or old), must be inspected & tested for suitability by either hammer testing achieving >15MPa or pull-off adhesion testing achieving >0.8 Mpa Concrete must be suitably finished by means of wood float or steel pan. The surface finish must be uniform and free from defects such as laitance, voids or honeycombing. Any defects should be repaired using Blue Barrier Joint Filler as described in application guide.

### 9.7 Paints and Existing Coatings

Any coatings must be clean and free from loose, degraded materials. Painted surfaces should be inspected for any delaminated materials, ensuring that any loose materials are removed prior to Blue Barrier application. All paints and coatings must be inspected and tested for suitability by way of pull-off adhesion testing achieving >0.8 Mpa.

### 9.8 Control Joints

For Control Joints that have high movement (floor to wall junction) use ABEP specified tape (50mm wide BOPP Film Tape) applied over the joint and apply Blue Barrier Liquid Flashing or Flash 'N Wrap over the tape, covering at least 25mm of substrate either side of tape. Liquid Wrap can then be applied over entire substrate. This will allow the joint to have high elongation and remain waterproof. \*Refer to Diagram 08 – Typical Control Joint Detail.

PF backing rods may be used instead of tape where the control joint dimensions are similar in depth and width. \*Refer to Diagram 11 – PF Rod Control Joint Detail.

# **10.** Application Preparation

### **10.1 Repairs and Preparation**

Using the Blue Barrier Joint Filler, repair all cracks and imperfections, including apertures, voids or stress points. All large voids must be filled with Blue Barrier Joint Filler. To avoid slumping the void should be first filled with a PF packing rod/rods of large enough diameter so that it can be friction fitted. In any event Blue Barrier Joint filler should not be applied in a thickness greater than 19mm (<sup>3</sup>/<sub>4</sub> of in inch)

Ensure sufficient numbers of screws and the correct application of the same to ensure the substrate is held fast to prevent movement.

#### Do not rely on the Blue Barrier System to secure fastenings or loose substrates.

### **10.2 System Application**

Before the Liquid Wrap system is applied to the field area of the substrate, the Joint Filler and Liquid Flash should be first applied to all penetrations, openings, joints in substrate or substrate edges and extend 50 mm onto all surrounding surfaces. Seal with joint filler and then apply liquid flashing around all protrusions such as pipes, air conditioners and any other penetrations etc to ensure that a full waterproof encasement of the protrusion is made.

Once all areas as above have been completed, the predetermined Blue Barrier Wrap system can be applied to the field area of the substrate system using the manufacturer's guidelines.

**NOTE Fixing Fasteners** : <u>Under no circumstances should a pilot hole be drilled through a Blue</u> <u>Barrier membrane</u>, nor should self-drilling screws be used. These actions will create a breach of the membrane where moisture could penetrate. An example of this is when fixing air cavity batons to a wall. Fasteners and pointed nails that simply pierce the membrane without removing part of it will allow the Blue Barrier membrane to self-seal around the fixing.

**Note :** Nails must not be driven by hand to avoid spalling, a powered activated nail gun must be used.

# **11.** Application Tools & Procedure

**Note:** When applying Blue Barrier products to each other, if the initial application was applied any more than 24 hours earlier, <u>it is important to reactivate</u> the underlying layer with one of the following solvents : **(Mineral spirits or Isopropyl Alcohol).** Use a clean cloth or a light mist spray bottle to return product to a tacky consistency . **Note :** Appropriate protection to be worn when handling all solvents.

### 11.1 Joint Filler

When bonding to surfaces, ensure the surfaces are sound and clean from both dust and debris. All large voids/joints need to be filled with Joint Filler using a sausage gun with a tip cut to size to achieve a desired bead of Blue Barrier Joint Filler as outlined in Subsection 10.1 above. All large voids and joints should be filled with Blue Barrier Joint filler before applying Blue Barrier Flashing or Blue Barrier Liquid Wrap. (Note : This does not apply to control joints where bond breaker tape or PF packing rods are used)

Use a plastic, wooden or soft edge spatula or flat edge plasterer's knife to level out Joint filler where necessary.

## **11.2 Liquid Flashing**

Use a sausage gun to apply Blue Barrier Liquid Flashing to a minimum thickness of 0.4mm and use a 'wet film gauge' to confirm.

Use plastic, wooden or soft edge spatula or flat edge plasterer's knife to level out the Liquid Flashing where necessary (otherwise use a short-haired paint brush).

Note: Blue Barrier Products do not lend themselves to having any type of flashing 'tapes' applied to them. If you would like advice relating to alternative flashings please contact your ABEP representative.

### 11.3 Liquid Wrap

Airless sprayers with a tip size of 629 should be used to apply Liquid Wrap. ABEP Ltd can recommend the following manufacturer's pumps as they meet the minimum pump size requirement : Titan Speeflo 12000, Wagner 960 and Graco GH833.

#### NOTE: Do not spray Liquid Wrap in temperatures <4°C or >38°C.

Power roller and/or apply with standard roller or brush.

A 'wet film gauge' is necessary to check the application thickness for a permeable coating which should be between 0.3mm to 0.4mm.

### 11.4 Flash 'N Wrap

Apply using a 10mm pile length/nap roller or standard paint brush. Note : During application the ambient temperature must be between -3°C and 38°C.

## **12.** Blue Barrier BEP® Product Consumption Rates

	Liquid Wrap	Flash 'N Wrap
<u>Cure Rate</u>	2 Hours	2 Hours
<u>Total Dry Film</u>	~ 0.3mm	~ 0.3mm
<u>Thickness</u>	(300 microns)	(300 microns)
Total Consumption	≥4 Litres/11.6m <sup>2</sup>	$\geq$ 4 Litres/9.3m <sup>2</sup>

• 1 + 47

Liquid Flashing & Joint Filler 3.1 mm - 16 Hours

13 Blue Barrier Diagrams

# 13.1 Diagram 01 - Typical Sill Detail

ABEP - BLUE BARRIER SYST 01 - TYPICAL SILL DETAIL	EM
SCALE 1:2	
	BLUE BARRIER JOINT FILLER APPLIED TO ANY CRACKS OR VOIDS PRIOR TO INSTALLATION OF BLUE BARRIER LIQUID FLASH
	— WINDOW BY OTHERS INSTALLED AS PER MANUFACTURERS DETAILS WITH AN AIR SEAL INSTALLED AS PER E2/AS1
	<ul> <li>JOINERY SUPPORT BAR WHERE</li> <li>REQUIRED</li> <li>BY OTHERS</li> <li>BLUE BARRIER LIQUID WRAP OR</li> <li>FLASHnWRAP OVERLAPS LIQUID FLASH</li> <li>50mm MIN.</li> </ul>
	— NZBC COMPLIANT CLADDING SYSTEM BY OTHERS INSTALLED AS PER MANUFACTURERS DETAILS
	BLUE BARRIER LIQUID WRAP OR     FLASHnWRAP
	APPROVED RIGID SHEET SUBSTRATE
	FRAMING AND INSULATION
	INTERIOR LINING

NOTE: ALL FLASHINGS USED IN CONJUNCTION WITH THE BLUE BARRIER SYSTEM MUST BE OVERFLASHED WITH BLUE BARRIER LIQUID FLASH. FLEXIBLE FLASHING TAPES MUST NOT BE USED TO OVER FLASH FLASHINGS TO THE BLUE BARRIER PRODUCTS.

### 13.2 Diagram 02 - Typical Head Detail



### 13.3 Diagram 03 - Typical Jamb Detail



#### NOTE: ALL FLASHINGS USED IN CONJUNCTION WITH THE BLUE BARRIER SYSTEM MUST BE OVERFLASHED WITH BLUE BARRIER LIQUID FLASH. FLEXIBLE FLASHING TAPES MUST NOT BE USED TO OVER FLASH FLASHINGS TO THE BLUE BARRIER PRODUCTS.

### 13.4 Diagram 04 - Typical Joint Detail

# ABEP - BLUE BARRIER SYSTEM 04 - TYPICAL CONTROL JOINT DETAIL

SCALE 1:2



### **13.5 Diagram 05 - Typical Penetration Detail**



### 13.6 Diagram 06 - Typical Foundation Detail



### **13.7** Diagram 07 - Typical Rebated Foundation Detail



### 13.8 Diagram 08 - Typical Control Joint Detail



### 13.9 Diagram 09 - Typical Control Joint Function

# ABEP - BLUE BARRIER SYSTEM 09 - CONTROL JOINT FUNCTION

SCALE 1:2



#### 12mm CONTROL JOINT

A

THE 12mm GAP BETWEEN SUBSTRATE EDGES IS BRIDGED BY BOND BREAKING TAPE AND COATED WITH BLUE BARRIER FLASH FOLLOWED BY WRAP.

#### B 12mm ELONGATION

THE DIAGRAM ILLUSTRATES THE 12mm CONTROL JOINT ELONGATING 12mm. THE BLUE BARRIER RELEASES BOND FROM THE BOND BREAKER TAPE AND ELONGATES ELASTICALLY 100%. THE BOND BREAKER TAPE FRACTURES UNDER LOW TENSILE FORCES ALLOWING FREE MOVEMENT OF THE JOINT.

#### C 12mm COMPRESSION

THE DIAGRAM ILLUSTRATES THE 12mm CONTROL JOINT COMPRESSING 12mm. THE BLUE BARRIER RELEASES BOND FROM THE BOND BREAKER TAPE AND FLEXES AWAY FROM THE JOINT AS SHOWN. THE BOND BREAKER TAPE EITHER FLEXES OUT AWAY FROM THE JOINT ALSO OR IF FRACTURED FROM ELONGATION OVERLAPS ITSELF AS SHOWN.

## 13.10 Diagram 10 - Typical Flashing Opening

# ABEP - BLUE BARRIER SYSTEM 07 - TYPICAL FLASHING OF OPENING



SCALE: NOT TO SCALE

### 13.11 Diagram 11 - PF Rod Control Joint Detail



### 13.12 Diagram 12 - Masonry Control Joint Detail



# 14. Health and Safety Information

### **14.1 Personal Protection**

The following protective equipment is essential for anyone working with Blue Barrier Products.

Gloves, Safety Glasses, Breathing Mask, Overalls. (All these are obtainable from NZ and Australian Safety Retailers and most Trade Supply Outlets).

In addition to protective clothing, it is recommended the use of a barrier cream on the skin as Blue Barrier is will adhere to un-protected skin. The cream acts as a release compound as well as a skin protection. Barrier creams are useful, effective, inexpensive and convenient. They protect well if they are not frequently flushed with solvents. Note : Barrier creams are only a supplement to, and not a replacement for, protective gloves, <u>so always wear gloves</u>. Whilst ABEP recommends single use of protective gloves if they are to be re-used please ensure the inside of the gloves are not contaminated.

If any Blue Barrier products do come into contact with your skin, <u>wash immediately with soap and</u> <u>water</u> after removing as much material as possible with a dry cloth. In any event it is recommended you wash your exposed skin occasionally during the workday as matter of course. Avoid using solvents to clean yourself with as they can help liquid material penetrate the skin, and the solvents themselves are aggressive and can be harmful to skin. If water is unavailable or in short supply, clean the contamination with sand instead. Certain hand cleaners also work without harmful effects but check the label for safety information before using. Citrus skin cleaners, for example, are effective and mild. Soap and water takes time, but will eventually work for small areas.

One of the best ways to protect yourself is of course to avoid skin contact, in addition to protective clothing, keeping tools and equipment clean are also best practice.

No Blue Barrier application should ever proceed without sufficient water being on hand for cleaning and a professional eye wash kit for the treatment of eye contaminations.

If adequate clean water is not available <u>then the project should not commence</u>, no matter what the urgency. If a professional eyewash kit is not available, then at the very minimum a specifically designated one litre container of clean water must be present for the purpose of treating an eye contamination. The water can be in a pail, plastic jug or via a hose pipe.

All applicators must be aware of local Health and Safety regulations and best practices relating to first aid and cleaning issues and these must be followed and given priority over of any ABEP recommendations.

Safety glasses or other eye protection obviously help those doing the work, but they can also create a false sense of security. Do not take risks with yours or anyone's health and safety!

In the event of any spillage or any eye contamination, always seek medical advice immediately after rinsing and cleaning the eyes with the clean water.

Ensure sufficient ventilation during application in closed or confined spaces. The wearing of a respiratory mask is recommended and applicators should be aware of and observe all relevant local regulations relating to working in confined spaces.

### 14.2 Site Safety Information

For information and advice on safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data. The information provided in our MSDS should be followed but followed in conjunction with all national & local body laws regarding safe work practices. A copy of our MSDS can be obtained from a link on the home page of our website <u>www.abep.co.nz</u> or <u>www.abep.com.au</u> or by contacting an ABEP representative.

# **15.** System Warranty Information

Warranties of up to 10 years on the Blue Barrier systems may be available, depending on the nature of the project, and strictly by system specification only. Typical terms of warranty are provided on request from ABEP.

Please contact your ABEP representative for warranty details applicable to your project.

# 16. System Limitations & Safety Information

Blue Barrier has relatively few limitations. These limitations are listed below:

- Do not apply over oil/grease saturated surfaces or substrates
- The Blue Barrier products must be protected from UV with any building material that is certified as an external cladding. <u>This must be done no later than 90 days from application of the product</u>. If unforeseen delays in the project prevent this, please contact your ABEP representative as soon as possible to discuss the options.
- Must be applied to approved substrates (contact ABEP if the substrate you wish to cover is not included).
- Flashing 'tapes' are not compatible for use over Blue Barrier Products. Consult your ABEP representative to discuss alternatives.
- Blue Barrier Products are not suitable for use over flexible building wraps.

# 17. Disposal Of Materials

The only Blue Barrier product that is designated a hazardous chemical is the Liquid Wrap due its solvent content.

### 1. Un-cured residual product.

The disposal of any residual product in containers marked as 'hazardous chemicals' must be undertaken in strict accordance with local and national regulations and as a result require special disposal considerations. The disposer is responsible for ensuring compliance.

### 2. Cured residual product.

Liquid Wrap is considered cured when it have achieved a solid state and is no longer releasing vapour. When this is the case the hazardous chemical labelling can be removed from the container to allow the disposal of it as general waste.

**IMPORTANT :** Where residual material <u>has not cured or a skin has formed on the surface</u>, the product/container must be disposed of as hazardous waste, and any markings on the container denoting hazards must remain.

The person disposing of containers of residual cured product is responsible for and must ensure, so far as is reasonably practicable, that the container/s are free of the hazardous chemicals.

# **18. Technical Manual Information/Disclaimer**

The information as set forth in the technical data contained herein has been developed from tests and evaluations made by Dominus® Innovations and ABEP Ltd for standard coating applications. We believe this information is the best currently available on the subject. Any experimentation you may care to undertake will be at your own risk.

Application guidelines must be followed to ensure validity of any warranty.