



BRANZ Appraised
Appraisal No.695 [2010]

CI/SfB

APRIL 2011



Thermakraft

WATERGATE^{PLUS}



FLAMMABILITY INDEX OF ≤5
AS1530: PART 2: 1993

THE ULTIMATE WRAP

FIRE RETARDANT ABSORBENT BREATHABLE
COMPOSITE NON WOVEN WALL UNDERLAY

CAN BE USED WITH:



ABSORBENT / NON ABSORBENT



METAL / NON METAL



STEEL FRAME / TIMBER FRAME

APPLICATION AND INSTALLATION

Product Description **WATERGATE^{PLUS}** Fire Retardant Absorbent Breathable Composite Non Woven Wall Underlay is a coated, non woven polyolefin, specifically designed as a wall underlay behind exterior wall claddings.

Product Advantage **WATERGATE^{PLUS}** can be used as a wall underlay on timber and steel framed buildings with absorbent and non-absorbent wall claddings direct fixed to framing.



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® **WATERGATE^{PLUS}** can be used as a wall underlay on timber and steel framed buildings with absorbent and non-absorbent wall claddings installed over an 18mm minimum drained cavity.

NOTE: WATERGATE^{PLUS} MUST NOT BE USED AS A ROOF UNDERLAY

WATERGATE^{PLUS} can be used as an **Air Barrier** where walls are not lined e.g. attic spaces at gable ends, and is suitable for use in all Building Wind Zones of NZS 3604 up to, and including, "Very High".

WATERGATE^{PLUS} will provide temporary weather protection during construction. Translucency of the underlay will enable work to proceed during inclement weather.

WATERGATE^{PLUS} can be used as a non-rigid backing material for Stucco Plaster in accordance with the requirements of NZBC Acceptable Solution E2/AS1 Paragraph 9.3.5.1. The Underlay must be supported with 75mm galvanized mesh, or **Thermakraft Stud Strap**, or wire at 150mm centres run across cavity battens to limit deflection to a maximum of 5mm in accordance with the requirements of NZBC Acceptable Solution E2/AS1, Paragraph 9.3.5.2.

WATERGATE^{PLUS} may also be used as a slip layer over rigid backing for Stucco Plaster in accordance with the requirements of NZBC E2/AS1 Paragraph 9.3.3(b).

WATERGATE^{PLUS} is unaffected by LOSP treated timber.

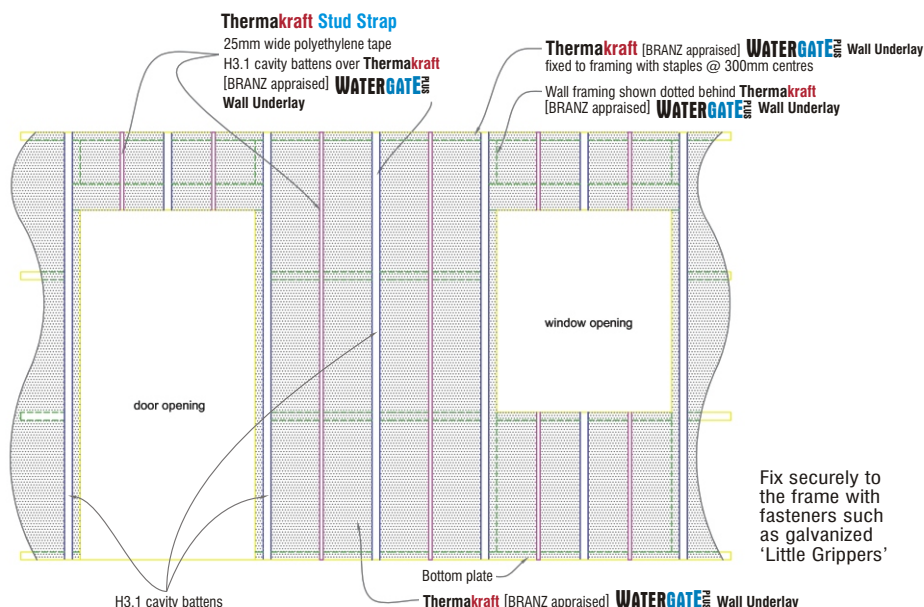
FLAMMABILITY

WATERGATE^{PLUS} has a AS1530:Part 2 Flammability Index of ≤ 5 and meets the requirements of NZBC Acceptable Solutions C/AS1 Part 6 Table 6.2 surface finish requirements for suspended flexible fabrics.

Application

WATERGATE^{PLUS} must be fixed with printed side out and the non-printed side to the frame.

1. WATERGATE^{PLUS} is applied to all exterior walls from below bearers to the top plate. Fix securely to the frame with fasteners such as galvanized Little Grippers, 6mm-8mm staples or 20mm large head galvanized clouts at 300mm centres horizontally and vertically. Additional fasteners should be used around each opening to be cut out.





**FIRE RETARDANT ABSORBENT BREATHABLE
COMPOSITE NON WOVEN WALL UNDERLAY**

APPLICATION AND INSTALLATION . . . contd

Application - continued ...

NOTE: Fastenings behind Brick Veneer Cladding must have an equivalent service life to that of Brick Veneer (50 years). Refer to NZBC E2/AS1 Table 20.

IMPORTANT NOTE: Drained Cavity System; In accordance with NZBC Acceptable Solution E2/AS1 Paragraph 9.1.8.5, where stud spacings are greater than 450mm centres, an intermediate means of restraining the building underlay and insulation from bulging into the drained cavity shall be installed. An acceptable means of achieving this is **Thermakraft Stud Strap** fixed horizontally at 300mm centres.

2. WATERGATE^{Plus} if using either 2740mm or 1370mm width, a minimum of 150mm lap is required at joins and all vertical laps must be made over studs. Make good repairs on any forced tears with **Thermakraft PVC Tape** or **Thermakraft ALUBAND** Window Sealing Tape.

3. WATERGATE^{Plus} is wide enough to cover the height of a standard wall from below the bottom plate to the top plate. Initially, cover all windows and door openings. Use extra fastenings around each window or door opening to be cut out. It is recommended that the wall underlay is not cut and prepared for window installation until the arrival of the windows.



Fix securely to the frame with fasteners such as galvanized Little Grippers



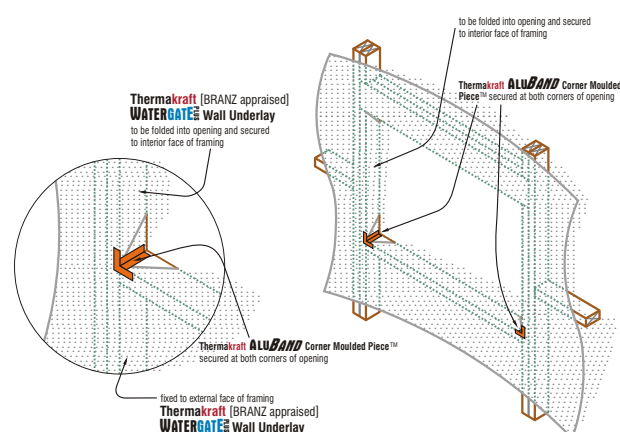
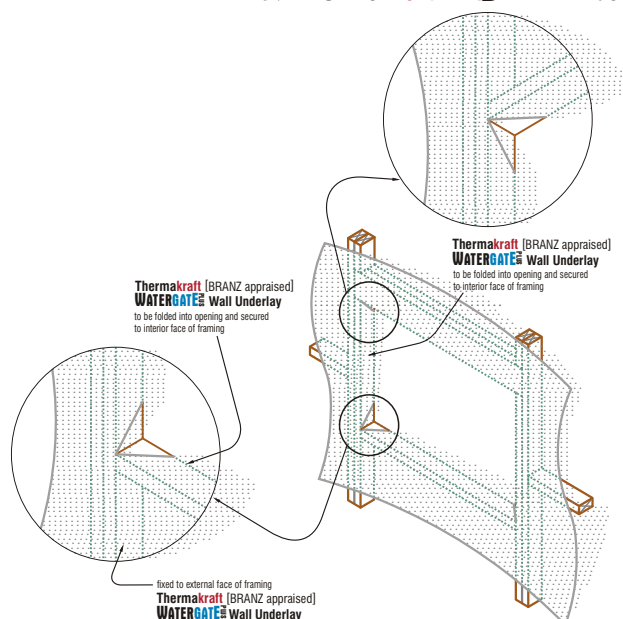
On arrival of doors and windows, cut the **WATERGATE^{Plus}** at each opening on a 45° angle away from each corner. Pull the **WATERGATE^{Plus}** flaps inside and fasten to inside of frame.



Application of **Thermakraft Stud Strap** for cavity construction where studs spaced >450mm.



4. Thermakraft ALUBAND Window Sealing System is applied prior to fitting windows.



Storage

WATERGATE^{Plus} must be stored in clean dry conditions and not in an area with direct sunlight.

Roll Dimensions

2740mm x 30m = 82m²

1370mm x 37m = 50m²

1370mm x 18.5m = 25m²

For more information regarding **Thermakraft ALUBAND** Window Sealing System ([BRANZ no.614 \(2008\)](#)) refer to the "APPLICATION and INSTALLATION GUIDELINES" or contact **Thermakraft Customer Services** on **0800 806 595**.



**FIRE RETARDANT ABSORBENT BREATHABLE
COMPOSITE NON WOVEN WALL UNDERLAY**

TECHNICAL SPECIFICATIONS

WATERGATE^{plus} Fire Retardant Absorbent Breathable Composite Non Woven Wall Underlay can be used as a wall underlay on timber framed buildings within the following scope:

- the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1; and,
- with absorbent wall and non-absorbent wall claddings directly fixed to framing; and,
- with absorbent and non-absorbent wall claddings installed over an 18mm minimum drained cavity; and,
- with masonry veneer in accordance with NZS 3604; and,
- situated in NZS3604 Building Wind Zones up to, and including 'Very High'.

WATERGATE^{plus} can be used as a wall underlay on steel framed buildings within the following scope:-

- the scope limitations of NZBC Acceptable Solution E2/AS1, Paragraph 1.1; and,
- with absorbent and non-absorbent wall claddings; and,
- with masonry veneer in accordance with NZS 3604; and,
- situated in NZS3604 Building Wind Zones up to, and including 'Very High'.

WATERGATE^{plus} has an AS1530: Part 2 Flammability Index of ≤ 5 and meets the requirements of NZBC Acceptable Solution C/AS1 Part 6 Table 6.2 surface finish requirements for suspended flexible fabrics.

NZBC E2/AS1 TABLE 23 AS A WALL UNDERLAY REQUIREMENTS

NZBC E2/AS1 TABLE 23 WALL UNDERLAY PROPERTIES	PROPERTY PERFORMANCE REQUIREMENTS	PROPERTY PERFORMANCE
Absorbency	≥ 100 gsm	Pass
Vapour Resistance	≤ 7 MN.s/g	Pass
pH of Extract	≥ 6 and ≤ 9	Pass
Shrinkage	$\leq 0.5\%$	Pass
Water Resistance	≥ 20 mm	Pass
Air Resistance	≥ 0.1 MN.s/m ³	Pass Watergate Plus can be used as an air barrier

Durability

WATERGATE^{plus} meets the Performance Requirements of NZBC Clauses B2 Durability B2.3.1(a) 50 years, B2.3.1(b) 15 years and B2.3.2, C/AS1 Part 6 Table 6.2 Flammability ≤ 5 , E2 External Moisture, and F2 Hazardous Building Materials F2.3.1., providing:

- it is not damaged
- installed in accordance to the "APPLICATION and INSTALLATION GUIDELINES"
- it is not left exposed for more than 60 days
- installed by or under guidance of Licensed Building Practitioners
- is compatible with cladding system used

NOTE: WATERGATE^{plus} MUST NOT BE USED AS A ROOF UNDERLAY

The recommendations contained in **Thermakraft's** literature are based on good building practice, but are not an exhaustive statement of all relevant information and are subject to any conditions contained in the Warranty. All product dimensions and performance claims are subject to any variation caused by normal manufacturing process and tolerances. Furthermore, as the successful performance of the relevant system depends on numerous factors outside the control of **Thermakraft** (for example quality of workmanship and design), **Thermakraft** shall not be liable for the recommendations in that literature and the performance of the Product, including its suitability for any purpose or ability to satisfy the relevant provisions of the Building Code, regulations and standards.



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