

4131WB WPS BITUBOND® SELF-STICK DAMP-PROOFING

1. GENERAL

This section relates to the application of **Waterproofing Systems Ltd** bituBOND® self adhesive damp-proof membrane.

1.1 RELATED WORK

Refer to ~ for ~

Documents

1.2 DOCUMENTS REFERRED TO

Refer to the general section 1233 REFERENCED DOCUMENTS. The following documents are specifically referred to in this section:

BRANZ BU 397 Waterproofing basements

Documents listed above and cited in the clauses that follow are part of this specification. However, this specification takes precedence in the event of it being at variance with the cited document.

1.3 MANUFACTURER/SUPPLIER DOCUMENTS

Waterproofing Systems Ltd documents relating to work in this section are:
bituBOND® Product Manual (3rd Edition August 2007)
Standard detailed drawings
[BRANZ Appraisal 558](#) - bituBOND

For copies of the above documents, or for technical assistance, contact your local **Waterproofing Systems Ltd** representative:

Northland, Auckland	021 - 917 773
Waikato, Bay of Plenty	021 - 457 953
Gisborne	021 - 457 953
Hawkes Bay, Manawatu	021 - 402 434
Wanganui, Taranaki	021 - 402 434
Wairarapa, Wellington	021 - 402 434
Marlborough, Nelson	027 - 544 5534
Christchurch, Dunedin	027 - 544 5534
Southland, Central Otago	027 - 544 5532

Web: www.waterproofing.co.nz
Telephone: 03 - 366 9495 (Head office) or 0508 (2WATER) 292837
Facsimile: 03 - 366 9496 (Head office)

Warranties

1.4 WARRANTY - INSTALLER/APPLICATOR

Installer's warranty for the system under normal environmental and use conditions against failure.

Execution warranty: 5 years

Provide this warranty on the installer's standard form.



- 1.5 WARRANTY - MANUFACTURER/SUPPLIER
Provide a materials warranty in the suppliers standard form.

Warranty period: 10 years materials
From: Date of completion of the application

Requirements

- 1.6 QUALIFICATIONS
Waterproofing work to be carried out by licensed applicators approved by **Waterproofing Systems Ltd**. Approved applicators may be found at:
Web: www.waterproofing.co.nz
Telephone: 03 - 366 9495 or 0508 (2WATER) 292837
- 1.7 NO SUBSTITUTIONS
Substitutions are not permitted to any specified **Waterproofing Systems Ltd** system, or associated components and products.
- 1.8 PROJECT REGISTRATION
Contact **Waterproofing Systems Ltd** to confirm that the project has been registered.
Web: <http://www.waterproofing.co.nz/project-registration.html>
Telephone: 03 - 366 9495 or 0508 (2WATER) 292837
If the project has not been registered, telephone and provide all required details.

Performance

- 1.9 PRE INSTALLATION MEETING
Convene a meeting between the applicator, contractor, all associated consultants and **Waterproofing Systems Ltd** to ensure all parties know what is required for effective performance of the system.
- 1.10 SPECIAL DETAILS
Where a standard detail does not exist, or if a standard detail cannot be applied, an approved alternative must be obtained from **Waterproofing Systems Ltd** before proceeding with the installation.
- 1.11 PRESSURE RATING
Obtain a written assurance from **Waterproofing Systems Ltd** that the waterproofing system, comprising membrane and jointing methods, is capable of sustaining the designated water pressure head. Refer to SELECTIONS for the designated water pressure head.
- 1.12 QUALITY ASSURANCE
Maintain quality necessary to assure that work is performed in accordance with this specification and the qualifying requirements of **Waterproofing Systems Ltd**.

Ensure that **Waterproofing Systems Ltd's** Quality Control sheets are completed fully and faithfully for each installation area.



2. PRODUCTS

Materials

- 2.1 SELF ADHESIVE TANKING MEMBRANE
bituBOND® SBS modified self adhesive membrane 1.6mm thick with cross laminated polyethylene carrier to the top side and an adhesive layer protected by siliconised release plastic to the underside all marked with the manufacturer's mark.

Accessories

- 2.2 BITUBOND PRIMER
BituBOND primer is a quick drying primer, pails marked with the manufacturer's mark, and used in accordance with **Waterproofing Systems Ltd** technical literature.
- 2.3 NON RIGID PROTECTION SHEET
Polystyrene protection boards minimum 20mm thick or 3mm plastic coreflute protection boards.

3. EXECUTION

Conditions

- 3.1 GENERALLY
Comply with the requirements and instructions of **Waterproofing Systems Ltd**.
- 3.2 LAYOUT
If not detailed on the drawings, confirm the layout to suit site conditions and **Waterproofing Systems Ltd** specifications. Pre-plan the work to keep the number of membrane laps to an absolute minimum.
- 3.3 DE-WATERING
Maintain water level minimum 300mm below the level of the work area during the progress of the tanking work and until protective loading coats and walls are complete and fully set.
- 3.4 DRAINAGE
Install certified drainage system to remove water from foundations. Ensure drain is protected with a geotextile cloth to prevent clogging with fines, and that it is correctly located 150mm away from foundation walls, and 200mm below the foundation/wall construction joint.
- 3.5 CHECK SUBSTRATE
Check that the substrate will allow work of the required standard. Complete any remedial work identified before commencing any work. Substrate to comply with performance requirements of the NZBC.

Preparation

- 3.6 STORAGE
Take delivery of rolls undamaged and include for site handling facilities where required. Stack on end, off the ground on a level surface, out of sunlight and above 5°C and with accessories. Do not allow rolls to become flat or to be crushed.
- 3.7 SUBSTRATE CONDITION
Ensure that the substrate is in a suitable condition to allow work of the required standard. Ensure all surfaces are smooth, clean, dry and free from dust and dirt with

no projections of sharp materials that will cause damage to the membrane or allow water to track behind the membrane. On concrete masonry and polystyrene substrates check that masonry mortar joints are pointed flush with the front face of the substrate.

3.8 SUBSTRATE PREPARATION

Bolster off any projections. Remove debris and leave the surface dust-free, oil-free and clean, with nothing that could diminish the adhesion of primers. Fill tie holes flush and smooth with mortar. Grind off steps or sharp protrusions caused by formwork joints.

3.9 CORNERS AND UPSTANDS

Use only masonry fillets.

- External corners to be chamfered and flashed.
- Internal corners are to be coved and flashed
- Upstands are to be coved and flashed.

3.10 CONSTRUCTION JOINTS

Underflash construction/movement joints to **Waterproofing Systems Ltd** installation specifications.

3.11 PRIME CONCRETE

Prime concrete and concrete masonry substrates thoroughly with bituPRIME or bituBOND[®] ensuring a good even coverage and penetration as recommended by **Waterproofing Systems Ltd**. Ensure substrate is sufficiently cured and dry to permit the intended performance of the primer.

3.12 PRIME POLYSTYRENE

Prime polystyrene substrates thoroughly with bituBOND[®] WB ensuring a good even coverage and penetration as recommended by **Waterproofing Systems Ltd**.

3.13 ALLOW PRIMER TO DRY

Allow the primer to dry as recommended by **Waterproofing Systems Ltd**. Do not prime more than can be covered in one working day. Prevent contamination of the primed surface prior to application of the membrane.

Installation

3.14 WEATHER CONDITIONS

Install bituBOND[®] membranes only in fair weather with air temperature above 5°C. Do not lay membrane in wet or misty conditions. In cooler temperatures use a hot air gun to warm the back of the rolls during installation.

3.15 LAYING OUT BITUBOND[®]

Lay out and allow the bituBOND[®] membrane to relax for 30 minutes prior to laying.

3.16 INSTALL BITUBOND[®]

Fully adhere bituBOND[®] membrane to the substrate to **Waterproofing Systems Ltd** installation specifications. Install bituBOND[®] by progressively peeling off the release plastic and firmly placing the membrane onto the substrate. Roll to ensure good adhesion.

3.17 BITUBOND[®] LAP JOINTS

Remove the selvedge release paper from the lap and lap the next roll 100mm over the last sheet. All side lap joints to be 100mm wide and end laps 150mm wide. To ensure full bonding ensure the lap area is kept free of foreign matter. Apply pressure to membrane and particularly lap areas.



- 3.18 BITUBOND® FLOOR TO WALL JUNCTION
Protrude the under slab membrane 150mm beyond the perimeter of the footing and protect this edge from damage. When wall is struck, install a 150mm wide underflashing across the floor -to - wall junction mortar fillet. Install the wall membrane down over the underflashing and dress out on to the perimeter footing membrane. Ensure the 150mm flap is adequately protected from damage during construction of the walls and that foreign matter is not able to contaminate this critical lap area.

Where DPC is the underslab waterproofing, install a 200mm wide underflashing centralised over the floor - to - wall junction, end laps 150mm. Install the wall membrane down over the top of the underflashing to the bottom of the footing. Dress the bottom edge to form a sound seal. Bring the DPC up the wall, over the top of the top of the bituBOND® membrane and tape to the face of the membrane.

- 3.19 PENETRATIONS
Dress penetrations in a tight cove to **Waterproofing Systems Ltd** specifications. Ensure penetrations are underflashed and overflashed to specification.
- 3.20 BITUBOND® PROTECTION
bituBOND® to be fully protected by a non rigid protection system prior to backfilling against the walls.
- 3.21 BACKFILL
Place the backfill once the vertical membrane is in place and adequately protected. Ensure the drainage system has been installed at the footing and the backfill is placed as recommended by **Waterproofing Systems Ltd**. Ensure the backfill is free of sharp objects that could damage the membrane.

Protection

- 3.22 PROTECT HORIZONTAL SURFACES
After laying is complete the membrane can be protected until the floor slab is poured by covering the tanking with a 50mm layer of 15 MPa blinding concrete or DPC sheets. This situation arises when there is an extended delay between the membrane installation and the placement of the floor slab or where vehicles and other construction machinery is being taken over the membrane.
- 3.23 INSTALL PROTECTION SHEETS
Neatly fit Polystyrene or Coreflute sheets, spot adhered to the vertical bituBOND tanking overlapped 50mm with joints taped to **Waterproofing Systems Ltd** requirements.

Completion

- 3.24 SECTIONAL COMPLETION
As sections of the tanking are completed, arrange for inspection of the work before covering with protective sheets, walls, or slabs. Complete the **Waterproofing Systems Ltd** Quality Control Sheets, and provide to them for issuing the Materials Warranty.
- 3.25 ACCEPTANCE
- Arrange for an inspection of the completed work.
 - Complete **Waterproofing Systems Ltd** Quality Control sheets and provide to them for the issuing of the Materials Warranty.
 - Protect the membrane until completion of the contract works.



- 3.26 CLEAN UP
Clean up as the work proceeds.
- 3.27 LEAVE
Leave this work in a sound condition, free of any defect.
- 3.28 REMOVE
Remove debris, unused materials and elements from the site.

4. SELECTIONS

Substitutions are not permitted to the following, unless stated otherwise.

- 4.1 PRESSURE RATING
Designated water pressure head: ~ metres

Membrane systems

- 4.2 BITUBOND® SELF ADHESIVE DAMP-PROOFING MEMBRANE
Location: ~
Manufacturer: **Waterproofing Systems Ltd**
Brand: bituBOND®

Protection

- 4.3 POLYSTYRENE OR COREFLUTE PROTECTION SHEET
Manufacturer: ~
Thickness: ~mm

5. DISCLAIMER

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

