



SPECIFICATION:

Jaydex Single Sheet Membrane System for Buried Concrete Walls/Floors

TANKING SOLUTION

NOVA201c

AUG 2010

INTRODUCTION

This specification includes the preparation and application of the **Jaydex Novater** 3mm single layer membrane system (ISO9001) rated to in-situ concrete and / or concrete block and / or Precast concrete substructure areas. This system is composed of a plain membrane torch applied direct to a Concrete / Concrete block / Tilt Slab external wall. This vertical application can then lap on to a plain membrane that has already been horizontally applied onto a concrete tidy slab (situated on the excavated ground areas). The subsequent backfill application to ground level creates a tanked subterranean structure. In some instances the roof of the subterranean structure is also buried with excavated back fill necessitating a 3mm plain membrane being applied over its concrete roof that laps over onto the installed wall membrane.

Please Note: The **Jaydex Novater** consists of a non woven polyester mat, impregnated and coated with blown bitumen and selected inert fillers, the material is coated with fine sand.

NOTE: The **Jaydex Novater** membrane acts not only as a reliable barrier against water ingress but also as a reliable barrier against subterranean hydrogen sulphide gas emissions.

PREPARATION

Horizontal Ground Area Under Floor Slab

It is preferable that a concrete tidy slab 50mm minimum thickness is laid down on to the compacted excavation invert to act as a base for the horizontal application of membrane that will be sandwiched under a subsequent concrete floor slab. This is not a mandatory requirement – please see Jaydex notes below. All pipe and elbow protrusions through the tidy slab must be in place prior to membrane applications. The tidy slab will finish 0.3m (minimum) beyond the outside line of all subsequent external walls. Under each wall line the tidy slab will run through an excavated depression that will subsequently create the ground beam wall foundation.

Note: In the event that a concrete Tidy slab is not provided and because of its high mechanical strength the **Jaydex Novater** can be laid over compacted hard fill with sand binding in lieu of a concrete tidy slab. A 50 mm concrete working slab is not required when the floor slab is situated on or just below natural ground level say 500mm or less. This is conditional upon the excavated surface being smooth and free of sharp projections. All of excavated surfaces which are rough and contain sharp protrusions are to be covered over with a sufficiently thick sand bed that any sharp object dropped on it will sink rather than puncture the membrane under the subsequent concrete slab loading.

Roof Areas – if applicable

The concrete is to be free of sharp protrusions and cavities and cured for the prescribed period. See Substrate Preparation for concrete preparation. In the event the roof is composed of Plywood see substrate preparation for on plywood.

Vertical Concrete Wall Areas

New Concrete Block surfaces shall be clean and denibbed. Existing Concrete Block surfaces may require moss killing and or high pressure waterblasting to remove any existing mould dirt and paint.

New Concrete Insitu surfaces should be finished to NZ3114 1980 U2 or U3 and be only bull or wood floated. It is to be cured for the prescribed period and cleaned of dust or surface contaminants, such as curing compound residues. Existing Concrete surfaces may require moss killing and water blasting to remove existing mould dirt or paint.

New Concrete Precast Panel surfaces shall be cleaned to remove any loose contaminants. The vertical gaps between concrete panels are to be filled with proprietary systems such as compressible PE foam rod combined with a joint sealant.

All Concrete surfaces shall be free of dags nibs and cavaties and all horizontal to vertical transitions shall have a 50 x 50 concrete or timber fillets.

APPLICATION OF MEMBRANE SYSTEM

Primer

One coat of **Bitumen Primer** is applied to all applicable concrete surfaces at a spreading rate of approx. 8sqm/L, by brush or roller and allowed to dry.

Membrane Application To Horizontal Tidy Slab – if applicable

Torch the **Jaydex Novater** polyester reinforced membrane over the entire concrete tidy slab or compacted formation ground level. All protrusions to be sealed around with **Jaydex Easygum** reinforced with C.S.M after the membrane sheet laying process is complete.

Note: Where lift pits are countersunk into the floor slab, double sheet applications of **Jaydex Novater** are required externally for full encapsulation of same, with an application of 2 coats of Jaydex Novapoxy WB to the internal walls of the lift pit.

Membrane Application to Vertical Wall

All internal and external corners and vertical to horizontal transitions shall have plain membrane, gusset patches and strips applied before the main membrane is applied over the whole wall area.

Note: Where the horizontal membrane or damproofing sheet laps to the vertical membrane see applicable detail drawing.

Membrane Application to Roof – if applicable

If applicable **Novater** membrane is applied over the future buried roof and would be overlapped down over the already applied wall membrane.

PROTECTION

To Horizontally Laid membrane on Excavated Floor Levels – if applicable

The applied **Jaydex Novater** membrane can be protected with 4.5 compressed sheet close butted or Fluteboard sheeting prior to any other sub trade activity taking place over the laid membrane such as a reinforcing mesh system installation. This protection is not mandatory and would only be used in large excavations involving extensive sub trade activity over and around the laid membrane. Prudent judgement is required for each Project. Please contact Jaydex.

To Vertically Laid Membrane on Concrete Block Walls

The applied **Jaydex Novater** membrane is to be protected against subsequent drainage backfill with 30mm (minimum) thickness of polystyrene sheets close butted and adhered direct to membrane face with **Jaydex Easygum**. Where the **Jaydex Novater** is to be left exposed above ground level, a Jaydex coating system of **Jaydex Colour – It** (barrier coat), followed by 2 coats of **Jaydex Aquaseal** is to be applied over the exposed strip of **Jaydex Novater**. In the event a plaster coat comes down over the exposed **Novater** then the **Jaydex Colour It** barrier coat only is required to accept the plaster coating.

WARRANTY

When Jaydex Licensed Contractors apply this membrane system in accordance with the specification, a standard warranty will be issued for up to twenty five (25) years.

JAYDEXADDRESS: P.O. BOX 100000, NSMC, AUCKLAND, NEW ZEALAND, PHONE: (09) 4441751, FAX: (09) 444 0132 The Information contained In this Specification Is based on our experience and testing and represents the latest Information available at the date of production. No responsibility is taken for uses to which this information may be put, but we advise that where application of products and processes is in complete conformity with this specification an appropriate warranty may be available. We reserve the right to update information parameters and formulations at any time without prior notice. **Visit www.jaydex.com**