

## BITUMEN ROOFING MEMBRANE SYSTEM

### QUALITY CONTROL SCHEDULE

(To be completed by Hitchins' Approved Applicator and Building Contractor of the Project)

Project Name:		
Project Address:		
Building Contractor:		
	Phone:	
Applicator:		
Commencement Date:		Completion Date: <span style="border: 1px solid black; width: 20%;"></span>

CONSTRUCTION BY BUILDER (SEE REVERSE SIDE)	SIGNATURE	DATE
1) Tanalised H3 plywood installed at correct thickness.		
2) Supporting timber framing suitable and at correct centres, both joists/purlins and noggins.		
3) Plywood installed (layout) and fixed correctly.		
4) Internal gutters adequate with sufficient outlets (size and number of) plus overflows.		
5) Tanalised cove to upstands, drip mould to conventional gutter and all vents/pipes with cowls.		
6) Other substrates (state ) installed and finished to a high standard.		
7) Falls provided are satisfactory with adequate outlets/overflows.		
8) That the structure design and construction must comply with the Building Code and local building Territorial Authority.		
HITCHINS' APPROVED GUNAC APPLICATOR		
1) All new or existing substrates checked and satisfactory, any repairs required carried out.		
2) Prime all surfaces with INDEX Indever Primer.		
3) Plan and install specified INDEX membrane system as per contract specification and Hitchins'/INDEX Installation Instructions.		
4) All upstands, ridges etc to have an under-flashing or double up over flashing installed.		
5) Where required install expansion joints, air-vents, flashings to pipes and vents, barge and fascia flashings as per INDEX/Hitchins' detailed drawings.		
6) Where required line gutter and install droppers, parapet outlets, overflows etc as per detailed drawing and instruction.		
7) Plywood sheathed substrate must involve a Double Layered reinforced Membrane system.		
8) Mineral finish left tidy, plain membranes coated with either Traffigard and Solaris Plus, or Allumasol.		
9) Project completed to satisfactory standard, warranty application and provided.		

# **INDEX BITUMEN ROOFING MEMBRANE SYSTEMS**

The following is provided by Hitchins New Zealand Limited to assist the building contractor to provide a substrate suitable for the installation of INDEX reinforced modified bitumen membranes. The contract documents, New Zealand Building Code and the plywood manufacturer's installation recommendations should be adhered to. If there is a conflict of instructions, the building contractor is to resolve with the architect or client, ensuring that Hitchins' recommendations (or improved standard) is adhered to as we know our product's capabilities and limitations. The application or installation process is to be carried out by an approved Gunac applicator. These terms are a pre-requisite to obtaining a Hitchins' Product Performance Warranty.

## **DESIGN AND CONSTRUCTION**

The deck or roof structure must be designed and built to comply with the building code E2/AS1, providing sound structure with minimum falls (1:30 = 2° roofs, 1:40 = 1.5° decks, 1:100 = 0.5° gutters) to ensure good drainage to adequate number of drains to shed water from the catchment areas in worst weather conditions. Finally the design and construction must comply with the local building Territorial Authorities requirements.

### **CONCRETE**

To be at least 28 days old, minimum falls of (1:30 = 2° roofs, 1:40 = 1.5° decks, 1:100 = 0.5° gutters) with no ponding, clean and dry. Large structures to have expansion joints incorporated. Uncured or damp concrete is to have an INDEX Tectene BV Vented Base Sheet installed to allow moisture vapour to dissipate out. This then requires an Index cap sheet. Concrete substrate can be waterproofed with an Index 4mm thick single layer membrane on a double layer Index membrane system.

### **PLYWOOD**

1. Plywood is to be tanalised H3 and of minimum CPD grade, arrive on site dry and kept dry until fixed.
2. All plywood primed with INDEX Indever Primer. Pre-priming recommended.
3. Supporting timber as per design documents in compliance with NZ Building Code, spacing to be at the following centres:-

17.5mm plywood at	600mm centres for roofs
17.5mm plywood at	400mm centres for decks
4. Centres being both ways, i.e. purlins and noggins (blocking) every third noggin to be full depth of purlin or any other construction system that ensures the purlins will not twist.
5. Hitchins' recommend that all decks and roofs structures incorporate diagonal bracing.
6. All plywood laid in one direction across the purlins (right angles) with grain in one direction as per the plywood manufacturer's instructions and the NZ Building Code.
7. Plywood laid in an offset brick like pattern. Vital!
8. Fixing by screws is to be at a minimum of 150mm centres at sheet perimeter and 200mm throughout the sheet.
9. Minimum length of screws to be three times the thickness of plywood e.g. 18mm requires 54mm or larger fixers.
10. For improved performance apply a bead of adhesive to supporting timber prior to installing plywood.
11. If Tongue and Groove plywood is used, for improved performance glue in the Tongue, critical.
12. All plywood sheet edges must be supported.
13. Plywood laid with approximately 2mm gap except on large roof structures where expansion joints must be designed and built in. See expansion joints.
14. Roofs to have a built in fall of minimum 1:30 = 2°, decks 1:40 = 1.5° and gutters 1:100 = 0.5°.
15. If the roof cavity is required to be vented, it must be designed and built to provide airflow to all cavities. See venting.
16. Expansion joints designed and constructed as per Hitchins' recommendations (see detailed drawings in mini manual) and as per plans and specifications.
17. Built in gutters, outlets and overflows to be adequate in size and number to shed water under all conditions.
18. All upstands to have tanalised timber fillets installed.
19. Barge ends, drip edge detail to gutter, etc to be installed.
20. All pipes, vents etc to have metal coves installed so that INDEX membranes are flushed up and under.
21. INDEX membrane flashing installed prior to wall lining installation, ditto skylights which then also have metal over-flashing.
22. Concrete, block or brick to provide a chase for INDEX membrane to be flashed into and sealed with bead of sealant.
23. If Tongue and Groove plywood is used where all plywood sheets are not supported, on timber / metal support centre greater than 600mm, Hitchins New Zealand Ltd must be consulted and our recommended procedural material adhered to.
24. In general, provide a sound substrate for the installation of INDEX membranes.
25. Install Hitchins' supplied INDEX membranes as specified over fresh Indever Primer as per manufacturer's recommended procedures and good sound trade practices, including double up flashings.
26. The Index membrane over plywood to be a double layer membrane system in keeping with the Code of Practice for Torch-on membranes.
27. If required install air-vents, within the INDEX membrane system on raised platform, well flashed and sealed. See Hitchins' details.
28. If required install balustrade post within the deck over raised platform, well finished and sealed. See Hitchins for details.
29. Finally, the Hitchins' supplied INDEX membranes are protected by the building contractors or client during the remaining construction period; then checked over at completion and any repairs or resurfacing carried out at their cost.