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PROCESS MAINTENANCE ADVICE:

TRAFFIGARD MEMBRANE

Traffigard is a reinforced liquid membrane installed onsite in a multi-layered system to provide a continuous monolithic layer with no overlap seams. Being liquid applied Traffigard forms to all substrate shapes and adheres to all surfaces.

Traffigard is manufactured and marketed by Hitchins New Zealand Limited and installed throughout New Zealand by an approved experienced Gunac applicator.

Traffigard membrane was developed by Hitchins in 1970 and installed on thousands of buildings throughout New Zealand, Australia, Pacific Islands and Asia.

Traffigard membrane system has a CSIRO Appraisal No 247 and a Joyce Group Verification Report confirming that it complies with E2 and B2 Requirements under the New Zealand Building Code.

Traffigard membrane when installed has certain natural characteristics, such as:-

- A. Slight profile surface due to the incorporation of the glass mat.
- B. Slight ridging on plywood sheet joints through thermal stress.
- C. Slight wrinkling at upstands through differential structure movement.

Traffigard membrane system can be installed over well prepared, sound substrates that comply with the Building Code to roofs, gutters, decks and balconies as a finish.

In keeping with the Code of Practice for Liquid Membranes, Hitchins New Zealand Limited provided not a only a schedule for maintenance servicing, but what is required by the Property Owner to ensure that the Traffigard reinforced membrane performs satisfactorily.

Hitchins New Zealand Limited covers maintenance requirements briefly under their Product Performance Warranty (when issued) and this document covers this vital matter in greater detail.

Hitchins provides this document, as maintenance of the Traffigard membrane is important for its long term performance and appearance. Copies should be given to the main contractor and most importantly, the Property Owner. Plus a copy should also be given to the installation staff so that they are aware of what is required of them when carrying out this maintenance work.

1. Preventative Maintenance

The long-term performance of the Traffigard membrane system installed on any building is reliant on the Property Owner implementing and maintaining a good housekeeping or preventative maintenance programme.

The following are some of the requirements (though not necessarily all). Others are covered under various headings throughout the Code of Practice for Liquid Membranes or in an Inspection Check List provided by the Main Contractor or Traffigard installer.

1.1. Checking

During and after other trades personnel work has been carried out on the building, to ensure no damage to the membrane or any potential water entry created. Call on the services of the membrane installer if required.

1.2. Clearing

Check gutters, sumps, drains, over-flows and corners for accumulated rubbish, leaves, branches, silt and plant-growth, then remove anything that can cause blockage of drain outlets, overflows and water build-up, ponding or flooding.

1.3. Cleaning

Recommended that the membrane surface be scrubbed with a detergent solution and washed down yearly at low pressure, to not only clean the surface but enable thorough inspection of the Traffigard membrane. Atmospheric pollution build-up is harmful to the coating.

1.4. Treating

Should any moss, mould or lichen infestation appear, treat with Hitchins' recommended solution and wash down at low pressure. Vital, if left the infestation would destroy the Traffigard membrane.

1.5. Inspecting

The complete membrane surface, including gutters, sumps, drains outlets, overflows, flashings, penetrations, up-stands, etc to be thoroughly inspected at least yearly, any areas of concern noted and rectification work carried out.

1.6. Recoating

To ensure the Traffigard reinforced membrane performs as required, clean, prepare and recoat every 5 years or at signs that the existing coating is deteriorating. To extend the performance of the membrane beyond 15-years, engage the Applicator to check, carry out any repairs that maybe required and resurface as per Clause 4.

2. Notification Work

The Property Owner, or their agent, is required to notify the membrane Applicator or Supplier if they become aware of any of the following situations:-

2.1. Faults found in the membrane.

2.2. Mechanical damage by building occupier, visitors or other trades personnel.

2.3. Subsequent installation work, such as TV aerials, vents, air condition units, etc.

2.4. Building alterations or extensions.

Prompt notification is vital to not only rectify the problem, but to reduce any subsequent water ingress problems.

3. Maintenance Servicing

During the course of regular maintenance inspections the complete roof, gutter or deck surface should be systematically checked and any areas requiring attention should be noted. The following check-list could be used:

- 3.1. Surface condition - Check for accumulated rubbish, silt, leaves, branches and plant growth, including moss, mould or lichen infestation and the over-all condition of the membrane.
- 3.2. Treat any moss or mould infected area with Hitchins' Moss and Mould Killer Solution, leave for 2 days and wash off thoroughly (low water blasting pressure) to acquire a clean surface.
- 3.3. Surface Inspection - thoroughly inspect the complete Traffigard membrane including flashings, gutter linings etc.
- 3.4. Flashings - Check all flashing are intact, fully adhered, not ruptured and functioning as required.
- 3.5. Up-stands - Check all up-stands are intact, fully adhered, adequately protected and functioning as required.
- 3.6. Penetrations - Inspect the membrane around each penetration to ensure that the flashings are intact, not ruptured, adhering and performing as required.
- 3.7. Edge Trim - Check for suspect movement or stress areas, ruptures, delaminating or displacement at junction places or adjacent surfaces.
- 3.8. Abutting construction - Check parapet wall and other adjacent structures flashing and/or linings for damage or areas of distress and cracking.
- 3.9. Expansion Joints - Check movement or expansion joint up-stands, flashing or capping to ensure they are functioning as required.
- 3.10. Roof fixtures - Check all roof fixtures, fittings, flashings, collars etc are sound, not loose or suspect.
- 3.11. Substrate - Check for depressions and ponding created by deflection in substrate and investigate the cause.
- 3.12. Drainage - Check all gutters, sumps, drain outlets, overflows and any rainwater discharge points to ensure they are clear of rubbish or build up of silk, dirt or vegetation, then remove and clean.
- 3.13. Sealants - Inspect all sealants to ensure they are not faulty and performing as required. Note any areas of concern.

- 3.14. General surface - Examine the whole of the general roof, deck and gutter area and note any areas of stress, bubbling or blistering, de-lamination from the substrate or within the Traffigard membrane system and note the extent and type of defects.
- 3.15. Inside building - Check the interior of the building for any staining or dampness signs that would indicate moisture ingress or condensation.

The inspection must be thorough, any areas of concern recorded and the installation Applicator or membrane Supplier; Hitchins New Zealand Limited is to be advised promptly. It is recommended that an experienced membrane Applicator be used if required, as they will know how to carry out a thorough inspection and the potential problem areas to look for.

The original Applicator or another qualified and experienced Applicator should be engaged to carry out the required repair work in keeping with good sound trade practices and Hitchins' recommended procedures.

4. Resurfacing

- 4.1. The Traffigard membrane should be prepared and resurfaced every 5 years. You are advised to employ an approved experienced Gunac applicator.
- 4.2. The complete surface treated with Hitchins' Moss and Mould Killer Solution, leave for 2 days and wash off thoroughly (low water blasting pressure) to acquire a clean surface.
- 4.3. Remove (if any) suspect areas of the membrane; flush out and reinstate. Bring the existing membrane up to a high standard.
- 4.4. Apply two full coats of Hitchins' Traffigard Topcoat, colour of your selection.
- 4.5. After 15 years carry out Clauses 4.2 and 4.3, then re-laminate with 200 gram Chopped Strand Fibreglass Mat and Hitchins' Traffigard resin. Finish off with two full coats of Traffigard topcoat, colour of your selection.

NOTE

Preventative maintenance is good house-keeping and is very important to ensure your building retains its decorative appearance and performs as required.

It is the Property Owner's responsibility to monitor and ensure preventative maintenance procedures are carried out fully. Leasing or subletting of the building does not diminish this responsibility.

Hitchins New Zealand Limited recommends engaging qualified firms under Maintenance Service Contract to carry out the above.

This maintenance advice covers the Traffigard membrane finish left exposed and issued accordingly. The Traffigard membrane must not be over sheathed or tiled over without the approval of Hitchins New Zealand Limited and the following of strict preparation, product systems, specifications and installation

procedures.

Finally, New Zealand Limited recommends that upon the sale of the property, this Traffigard Maintenance Advice notice be given to the new owners, thus ensuring they too are aware of the importance of good in-house maintenance.

This maintenance advice document has been regularly updated since 1992.