

A Site Specific Technical Opinion

from



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A technical opinion about the compliance with Clauses B2, E2 and Clause F2

of the New Zealand Building Code

for the

WATERPROOFING SYSTEMS

Dek-Master Pro Vinyl Roofing System

Supplied by

Waterproofing Systems Ltd

Waltham, Christchurch

A Technical Opinion

Product Description

The WATERPROOFING SYSTEMS Dek-Master Pro Vinyl Roofing System is a 1.5mm thick PVC sheet membrane designed for use on decks and flat roofs for residential and commercial buildings alike.

The system consists of Ducan RUBBER FILL-IT, Ducan Dek-Master (Exterior Contact) Adhesive, Ducan Overlap Cement, and Dek-Master Pro Vinyl sheet.

WATERPROOFING SYSTEMS Ltd., has submitted technical information, NZ installation information, photos and a statement of compliance with the New Zealand Building Code, which this technical opinion is limited to. In addition information from the manufacturer covering the authorised installer, maintenance and a New Zealand Warranty of 15 years, has been submitted.

An assessment of the test data supplied by the manufacturer has been carried out by BEAL experts and found satisfactory.

Specific Performance Requirements of the NZ Building Code

Clause B2 - Durability

Based on the limits of this technical opinion and the information provided, the Dek-Master Vinyl Roofing System will meet the performance requirements of Clause B2.

Clause E2 - External Moisture

Based on the limits of this technical opinion and the information provided, roofs and decks that comply with E2/AS1 except where noted here, incorporating the Dek-Master Vinyl Roofing System, will meet the performance requirements of Clause E2.

Clause F2 - Hazardous Materials

Based on the limits of this technical opinion and the information provided, the Dek-Master Vinyl Roofing System will meet the performance requirements of Clause F2.

Basis of the Opinion

Clause B2 - Durability

Compliance with the performance requirements of Clause B2.3.2 (b) 15 years, was based on the test data supplied for the Dek-Master Vinyl Roofing System covering -

- Tensile strength
- Tear strength
- Adhesion to a substrate
- Burst resistance
- Low temperature flexibility
- UV resistance
- Mildew resistance
- Abrasion resistance
- Chemical/Stain resistance

Clause E2 - External Moisture

Use of 'in-service history' and supplied test roofs were the

basis for the opinion that, where roofs and decks incorporating the Dek-Master Pro Vinyl Roofing System, comply with E2/AS1 except where noted here, will meet the performance requirements of Clause E2

Though water vapour resistance is often required, this product is virtually a moisture barrier and as such utilises vents placed every 40 sq.m to allow for any moisture build-up to egress, Another often required assessment is the heat aging result. PVC is known from long term in-service history to be a stable product with little expansion/contraction.

Clause F2 - Hazardous Materials

Based on the limits of this technical opinion and the information provided, the Dek-Master Pro Vinyl Roofing System will meet the performance requirements of Clause F2.

Installation Skill Requirement

Installation of the Dek-Master Pro Vinyl Roofing System must be completed by Waterproofing Systems Ltd. approved and trained applicators who have experience in the application of deck and roofing PVC sheet and knowledge of waterproofing principles.

Installation of the substrates must be completed by a suitably skilled tradesperson with an understanding of floors and walls construction in decks and roofs, in accordance with instructions given within The Dek-Master Pro Vinyl Roofing System Technical Literature.

Reference Information

Manufacturer's test data covering testing according to ASTM test methods

Manufacturer's 15 Year Warranty Certificate for coverage in New Zealand

Compliance Document for New Zealand Building Code External Moisture Clause E2, Department of Building and Housing

New Zealand Building Code Handbook and Approved Documents, Building industry Authority, 1992.

The Building Regulations 1992, up to, and including October 2004 Amendment.

NOTE: This Technical Opinion is based solely on the limited test data and trade literature supplied by the manufacturer and intended for use until a more comprehensive assessment and verification of compliance has been completed

Authorised Signatory -



C R Prouse - Principal Building Scientist

25 June 2011

Date of Issue