



Building Element Assessment Laboratory

25 May 2007

**Asphalt Shingle Roofing New Zealand Ltd
Auckland.**

BEAL Review of Product Technical Data

BEAL has, subject to the limitations described below, carried out a second review of an asphalt shingle roof system incorporating “PABCO Asphalt Roof Shingles” and is of the opinion that a correctly installed system will meet Clauses B2, C3, E2 and F2 of the New Zealand Building Code.

Building Product: PABCO Asphalt Roofing Shingle

Proprietor: Asphalt Shingle Roofing (NZ) Limited. (ASRNZ).

Manufacturer: PABCO Roofing Products, Tacoma, Washington.

Q.C. of Manufacturer: Underwriters Laboratories Inc., ICC plus an in-house programme.

Technical Manual: A New Zealand Technical and Installation Manual dated May 2007 has been produced.

Training of Installers Required: Yes

Previous Testing or Evaluations: The product has been subject to considerable testing by Underwriters Laboratories Inc. and ICC Evaluation Services against UL fire and wind standards UL 790 & UL 997, ASTM D 3462 general performance standards, as well as CSA coating weatherability standards. 3M stringently manage the quality of the application of the active material preventing algae growth.

BEAL has examined and reviewed for a second time the technical information provided by the New Zealand agent and carried out site inspections of installed PABCO Asphalt Roofing Shingles to assess compliance with the relevant clauses of the New Zealand Building Code and relevant AS/NZ Standards. The asphalt shingle roof system is well thought out and reliable. There are few risk areas and the product has an excellent history of use in the USA for over 90 years. This low risk is reflected with a service history showing in excess of 5,000 PABCO roofs installed in New Zealand.

A New Zealand version of the US Technical and Installation manual, which is being endorsed by PABCO, has been produced. The New Zealand manual provides a number of illustrations to explain the methods for correctly installing an asphalt shingle roof using local building materials and practices. It covers ventilation, fixings, materials, various junctions, changes in slope and penetrations such as vent pipes and chimneys.

A key improvement to the performance of the PABCO shingles is the 20 year warranty for the prevention of algae growth, achieved through the incorporation of a quality controlled active material supplied and underwritten by 3M. Refer to the web site <http://pabcoroofing.com> and click on the heading ‘WHAT IS SCOTCHGARD?’.

This **BEAL** Review of Technical Data is based on the experience and expertise of **BEAL** staff and its associates. It is based on an evaluation of the scope and limitations of the asphalt shingle roof system, together with the specifications, drawings and details provided by the New Zealand agent.

This review is subject to any corrective action requests that may be required to ensure the system meets all the requirements of the New Zealand Building Code as a result of any new information about the system or its components, or any laboratory testing or field assessment work that may arise in the future.

BEAL is an independent building testing laboratory using the ISO 9001 quality management system while specialising in the testing and assessment of roofing, cladding, window and deck membrane systems for the building industry.

Authorised Signatory,

25 May 2007

A handwritten signature in blue ink, appearing to read 'C. R. Prouse', is written over a light blue rectangular background.

C R Prouse – Building Technologist

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