

# MATERIALS PERFORMANCE TESTING METHODOLOGIES

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The New Zealand Building Code is primarily performance-based: only for a few classes of materials, such as timber and concrete, do prescriptive 'deemed-to-satisfy' solutions exist. For other situations, the Code offers only the advice that suitable durability performance may be demonstrated through either laboratory testing, a documented history of use, or by analogy with the behaviour of similar building components. Little further guidance is provided concerning how these criteria might be satisfied in practice.

Materials and construction methods continue to evolve. The empirical knowledge derived from traditional building practice is often insufficient for predicting durability problems with emerging materials and construction techniques. Consequently the capability for robust durability assessment of new products and techniques is an essential platform for supporting an innovative, dynamic building industry.

In response, this paper describes the development of durability verification test techniques that will be used to avoid future issues resulting from changes to materials and construction methods. It is hoped that the methods developed will also serve to alleviate suspicion of 'new' products by developing appropriate, reliable and practical tests to assess them.

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