

**TECHNICAL ALERT No. 08/1**

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## Extension of Deadline for the Introduction of the Low-High-Low Standardized Cyclic Test Method for Cyclonic Areas

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**Introduction**

In relation to the Cyclone Testing Station's previous Technical Alert No. 07/2 on the Low-High-Low standardised cyclic test method for cyclonic areas, the Northern Territory, Queensland and Western Australia have extended the transitional period for the phasing in of the new Low-High-Low (LHL) test method by 12 months, to 30 April 2009.

The LHL test method applies to metal roof cladding, its connections and immediate supporting members in cyclonic areas.

**Background and Summary of the Low-High-Low Test**

In May 2006, the Building Code of Australia introduced in Specification B1.2, a requirement that all metal roofing systems (metal roof cladding, its connections and immediate supporting members) used in cyclonic regions shall demonstrate performance to a new standardised cyclic test method. This method is known as the Low- High-Low (LHL) test method, based on the low, then high, then low pressure sequence, used to simulate the wind loads resulting from the passage of a severe tropical cyclone, across a building.

The LHL test method is considered to better represent a typical cyclic regime on metal roof assemblies than the DABM test method currently used in the Northern Territory and the Australian Standard AS4040.3:1992 test method currently used in Queensland and Western Australia. One key advantage of the LHL test method for metal roof assemblies is that it will replace the two different cyclic test methods discussed above. The existence of one new method means that building components and systems can be tested once, for the whole of Australia, thus saving costs.

**Scope of Test**

Metal roof claddings in cyclonic areas are certainly subjected to fluctuating wind loads and should be tested using the LHL method. They should also be tested with their immediate supports as part of the system. Typically, this means that the test setup should include the cladding, its fasteners, battens and its support fasteners.

**Recommended Action**

Cladding and batten manufacturers need to demonstrate that their metal roofing assemblies specified for cyclonic areas of Australia have been tested using the LHL test method, prior to the extended deadline of 30 April 2009.

For further information, please contact the CTS Manager at the address above.