Cyclone framing systems and mounting methods for close coupled thermosiphon solar hot water heaters and solar collectors for split solar hot water heaters

Background:

The Queensland Building and Construction Commission (QBCC) operates as an industry body, administered by the Queensland Government, working to protect public health and safety through Queensland's plumbing and drainage licensing system.

Local governments in C and D weather regions (see Attachment 1) within Queensland have identified the use of alternate, unauthorized and unapproved cyclone framing systems and mounting methods for close coupled thermosiphon solar hot water heaters and solar collectors for split solar hot water heaters.

Clarification:

It is the view of the QBCC as Queensland's regulator for plumbing and drainage that:

- The installation of a solar or heat-pump hot water system is classified as notifiable work, under schedule 2, item 7 of the *Standard Plumbing and Drainage Regulation 2003*. Notifiable work must be performed by a person with a valid QBCC occupational licence.
- The manufactured proprietary cyclone framing system and mounting method relevant to a particular make and model is part of the solar hot water system. This system must meet all relevant criteria of the Plumbing Code of Australia and its deemed-to-satisfy provisions. This framing system and mounting method is authorized by the manufacturer for use and for approval as part of the system sold.
- A plumber installing a manufactured proprietary cyclone framing system and mounting method, relevant to a particular make and model, that is part of the solar hot water system—is provided with the instruction, material and method of installation for the building work to be self-assessable.
- Adherence to Australian Standards is not only a benefit, it's also a requirement (specifically Section 6 of AS/NZS 3500.4:2003). The mounting system is part of the solar hot water heater system, and is also part of a building in the instance where roof-mounted installations form part or all of the system. If the mounting system installed doesn't comply with relevant standards, you run the risk of losing the system and your customers investment, and this can result in third-party damages. A mounting system complies with a standard only if it is installed according to the product's installation method.

Check that a mounting system is safe to use:

The supplier will provide a structural certificates for its product (these certificates demonstrate that a mounting system will help prevent damage to a solar hot water heater installation and safeguard it in the event of a wind-induced failure), which certify that the product is accredited to the latest wind code, Australian Standard AS1170.2. At a minimum, installation documents provided by a the

supplier for its mounting system will cover certain limits and parameters, and set out the maximum fixing centres and other specifics for a job; these should be carefully followed to ensure obligations are met.

Licensing requirements

Plumbers working as a contractor or as the employee of a contractor installing solar or heat pump hot water systems are required to hold a QBCC occupational plumber's licence and a current endorsement for installing solar and heat pump hot water systems.

I hope this information clarifies the requirements for cyclone framing systems and mounting methods for close coupled thermosiphon solar hot water heats and solar collectors for split solar hot water heaters. If you have any concerns please contact me on (07) 3613 3624 or send an email to peter.connors@qbcc.qld.gov.au.

Yours sincerely

Peter Connors

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Plumbing and Pools

Attachment 1 – Weather regions in AS/NZS 3500.4:2003

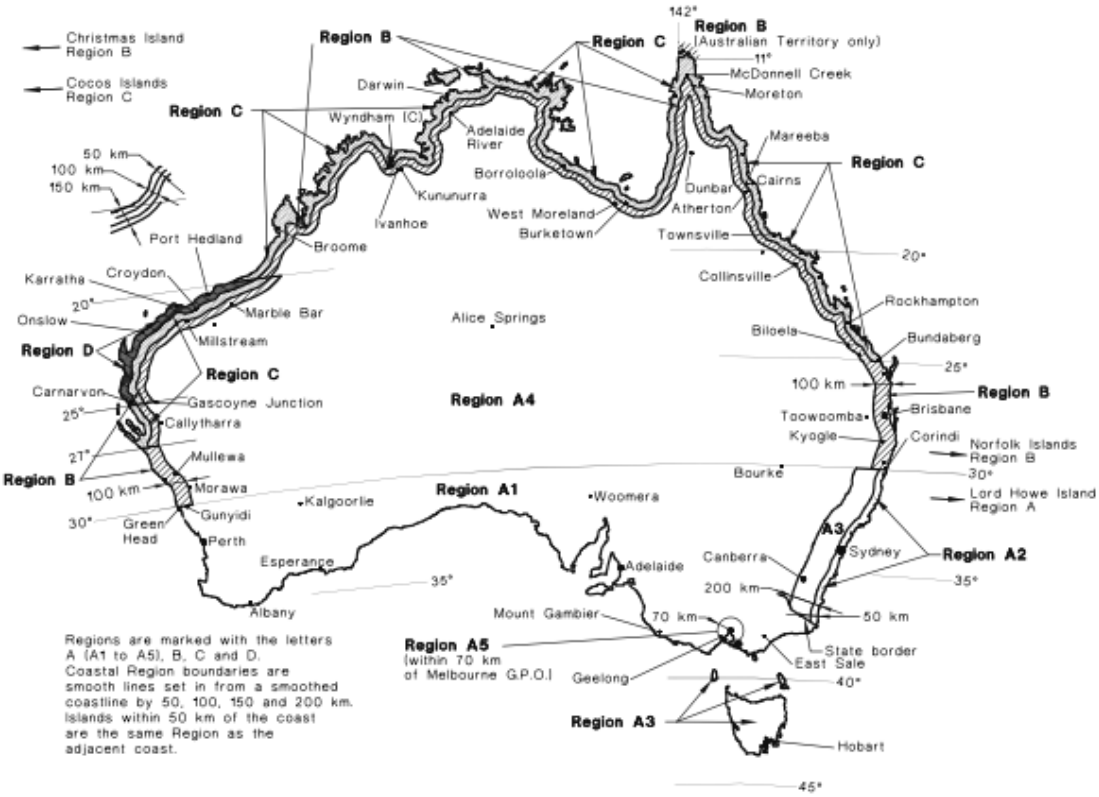
APPENDIX K

MAP OF REGIONAL BASIC DESIGN WIND SPEEDS

(Informative)

A2 Figures K1 and K2 are provided as a guide only to the nature of a locality with regard to basic wind speeds. For details of the design of structures to withstand these wind velocities, reference should be made to AS/NZS 1170.2. For details of the design of structures to withstand these wind velocities, reference should be made to AS 1170.2

A2



Regions	Wind velocity, m/s		
	V_s	V_p	V_u
A	38	41	50
B	38	49	60
C	45	57	70
D	50	69	85

A2

FIGURE K1 AUSTRALIA WIND AREAS