

Modular Wall
systems

Domestic Wall Specifications

General Overview Only

Wall Types: Contemporary, Traditional & Estate

Wall Heights: 900mm – 3000mm (for taller Walls see Barrier Wall Information)

This information is suitable for use in wind regions A, B & C of AS 1170.2-2002 SAA Loading Code. If you have any doubt about the wind region your wall will be in, get advice from your local building consent authority. It is the responsibility of the installer/owner to determine the wind region, terrain category and soil conditions. This publication is a guide only to help ascertain these factors and gain a general understanding of the different types of Modular Walls available.

Our Products

Contemporary: Available heights from 900mm – 2100mm

Contemporary walls have an overall panel thickness of 40mm and a 80mm top wall capping. Posts measure 150 (face) x 100mm (depth). Each standard section has an effective coverage of 2.5 or 2.8 meters, post centre to post centre. The contemporary wall is the most cost effective of the 3 styles and most commonly used in domestic boundary/screening wall applications. This style of wall will also supply great sound reduction qualities.



Wall Panel: 40mm thickness - Density of composite panel materials: 15.49kg m²

Posts: 150 (width) x 100 (depth) x 0.95 mm BMT G550 (Table 1)

Post centres: 2500mm & 2800mm

Traditional: Available heights from 900mm – 3000mm

Traditional walls have an overall panel thickness of 75mm and a 125mm top wall capping. Posts measure 250mm (face) x 150 mm (depth) and designed around a single brick in width. Each standard section has an effective coverage of 2.6, 2.9 or 3.2 meters, post centre to post centre. The Traditional wall is most commonly used where a true masonry wall look is desired or in a commercial security/sound wall application. The wall has superb sound reduction qualities (National Acoustic Laboratory tested).



Wall Panel: 75mm thickness - Density of composite panel materials: 15.49kg m²

Posts: 250 (width) x 150 (depth) x 0.95 mm BMT G550 (Table 2)

Post centres: 2600mm, 2900mm & 3200mm

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Estate: Available heights from 900mm – 3000mm

Estate walls have an overall panel thickness of 75mm and a 125mm top wall capping. Posts measure 350 (face) x 235 mm (depth). Each standard section has an effective coverage of 2.7, 3.0 or 3.3 meters, post centre to post centre. The Estate wall is most commonly used where a true 'Grand' masonry wall look is desired. The post face is equivalent to a brick & a half in width. The wall has superb sound reduction qualities (National Acoustic Laboratory tested)

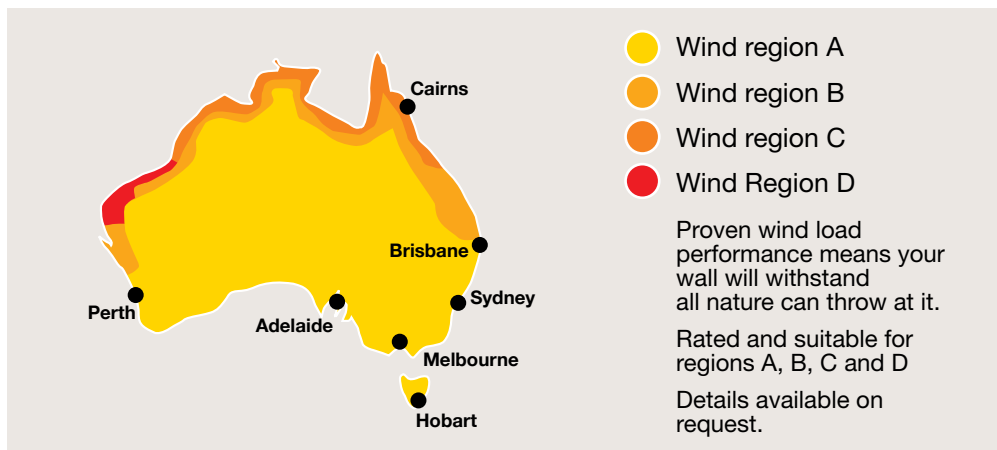


Wall Panel: 75mm thickness - Density of composite panel materials: 15.49kg m²

Posts: 350 (width) x 235 (depth) x 0.95 mm BMT G550 (Table 3)

Post centres: 2700mm, 3000mm & 3300mm

Wind Regions



Terrain Categories

Determine Your Terrain Category

Select the terrain category that best describes the area in which your wall will be. If you want to build on the top of a hill, adjacent to an escarpment, on a ridge, or in terrain category 1, you may need engineering advice beyond the scope of this publication.

- 3.1 Terrain Category 2 (TC 2):** Open terrain including sea coast areas, airfields, grassland with few well-scattered obstructions, such as isolated trees and uncut grass, having heights from 1.5 m to 10.0 m.
- 3.2 Terrain Category 2.5 (TC 2.5):** Terrain with few trees, isolated obstructions, such as agricultural land, cane fields or long grass, up to 600 mm high. This category is intermediate between TC 2 and TC 3 and represents the terrain in developing outer urban areas.
- 3.3 Terrain Category 3 (TC 3):** Terrain with numerous closely-spaced obstructions having the size of houses. The minimum density of houses and trees shall be equivalent of 10 house-size obstructions per hectare. Substantial well-established trees shall be considered as obstructions

Wind Region Installation TABLE 1: CONTEMPORARY WALLS

Wall Height (mm)	Terrain Category	Wind Region A	Wind Region B	Wind Region C (2.5 post centres only)
900 <small>*See notes below</small>	TC 2.0	Yes	Yes	Yes <small>*2.5m centre</small>
	TC 2.5	Yes	Yes	Yes <small>*2.5m centre</small>
	TC 3.0	Yes	Yes	Yes <small>*2.5m centre</small>
1200 <small>*See notes below</small>	TC 2.0	Yes	Yes	Yes <small>*2.5m centre</small>
	TC 2.5	Yes	Yes	Yes <small>*2.5m centre</small>
	TC 3.0	Yes	Yes	Yes <small>*2.5m centre</small>
1500 <small>*See notes below</small>	TC 2.0	Yes	Yes	Yes <small>*2.5m centre</small>
	TC 2.5	Yes	Yes	Yes <small>*2.5m centre</small>
	TC 3.0	Yes	Yes	Yes <small>*2.5m centre</small>
1800 <small>*See notes below</small>	TC 2.0	Yes	Yes	Yes <small>*2.5m centre</small>
	TC 2.5	Yes	Yes	Yes <small>*2.5m centre</small>
	TC 3.0	Yes	Yes	Yes <small>*2.5m centre</small>
2100	TC 2.0	Yes	Yes	No
	TC 2.5	Yes	Yes	No
	TC 3.0	Yes	Yes	No

* All contemporary posts in wind region C must be core filled to a minimum 100mm above nominal ground level – Consult MWS for detailed instructions

Wind Region Installation TABLE 2: TRADITIONAL WALLS

Wall Height (mm)	Terrain Category	Wind Region A	Wind Region B	Wind Region C (2.6 post centres only)
900	TC 2.0	Yes	Yes	Yes *2.6m centre
	TC 2.5	Yes	Yes	Yes *2.6m centre
	TC 3.0	Yes	Yes	Yes *2.6m centre
1200	TC 2.0	Yes	Yes	Yes *2.6m centre
	TC 2.5	Yes	Yes	Yes *2.6m centre
	TC 3.0	Yes	Yes	Yes *2.6m centre
1500	TC 2.0	Yes	Yes	Yes *2.6m centre
	TC 2.5	Yes	Yes	Yes *2.6m centre
	TC 3.0	Yes	Yes	Yes *2.6m centre
1800	TC 2.0	Yes	Yes	Yes *2.6m centre
	TC 2.5	Yes	Yes	Yes *2.6m centre
	TC 3.0	Yes	Yes	Yes *2.6m centre
2100	TC 2.0	Yes	Yes	Yes *2.6m centre
	TC 2.5	Yes	Yes	Yes *2.6m centre
	TC 3.0	Yes	Yes	Yes *2.6m centre
2400	TC 2.0	Yes	Yes	No
	TC 2.5	Yes	Yes	No
	TC 3.0	Yes	Yes	Yes *2.6m centre
2700	TC 2.0	Yes	Yes	No
	TC 2.5	Yes	Yes	No
	TC 3.0	Yes	Yes	No
3000*	TC 2.0	No	No	No
	TC 2.5	Yes	Yes	No
	TC 3.0	Yes	Yes	No

*Consult MWS for detailed and site specific 3000mm high wall specifications

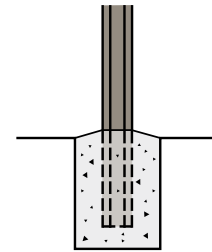
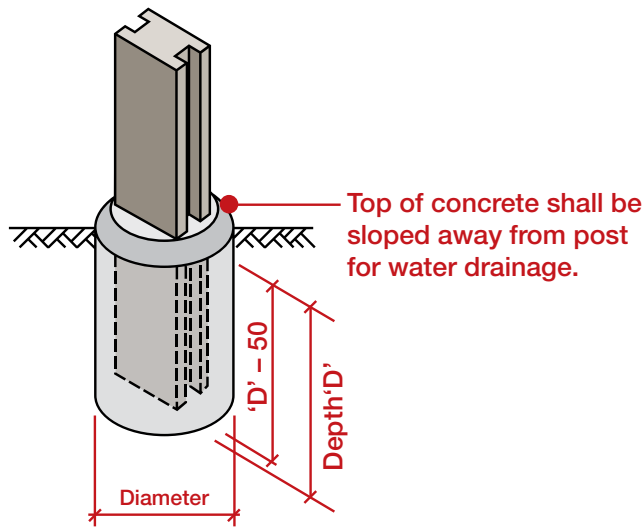
Wind Region Installation TABLE 3: ESTATE WALLS

Wall Height (mm)	Terrain Category	Wind Region A	Wind Region B	Wind Region C (2.7 post centres only)
900	TC 2.0	Yes	Yes	Yes *2.7m centre
	TC 2.5	Yes	Yes	Yes *2.7m centre
	TC 3.0	Yes	Yes	Yes *2.7m centre
1200	TC 2.0	Yes	Yes	Yes *2.7m centre
	TC 2.5	Yes	Yes	Yes *2.7m centre
	TC 3.0	Yes	Yes	Yes *2.7m centre
1500	TC 2.0	Yes	Yes	Yes *2.7m centre
	TC 2.5	Yes	Yes	Yes *2.7m centre
	TC 3.0	Yes	Yes	Yes *2.7m centre
1800	TC 2.0	Yes	Yes	Yes *2.7m centre
	TC 2.5	Yes	Yes	Yes *2.7m centre
	TC 3.0	Yes	Yes	Yes *2.7m centre
2100	TC 2.0	Yes	Yes	Yes *2.7m centre
	TC 2.5	Yes	Yes	Yes *2.7m centre
	TC 3.0	Yes	Yes	Yes *2.7m centre
2400	TC 2.0	Yes	Yes	Yes *2.7m centre
	TC 2.5	Yes	Yes	Yes *2.7m centre
	TC 3.0	Yes	Yes	Yes *2.7m centre
2700	TC 2.0	Yes	Yes	No
	TC 2.5	Yes	Yes	No
	TC 3.0	Yes	Yes	No
3000*	TC 2.0	No	No	No
	TC 2.5	Yes	Yes	No
	TC 3.0	Yes	Yes	No

*Consult MWS for detailed and site specific 3000mm high wall specifications

Footing Detail

This information is suitable for wind region A, B & C - terrain categories 2, 2.5 & 3

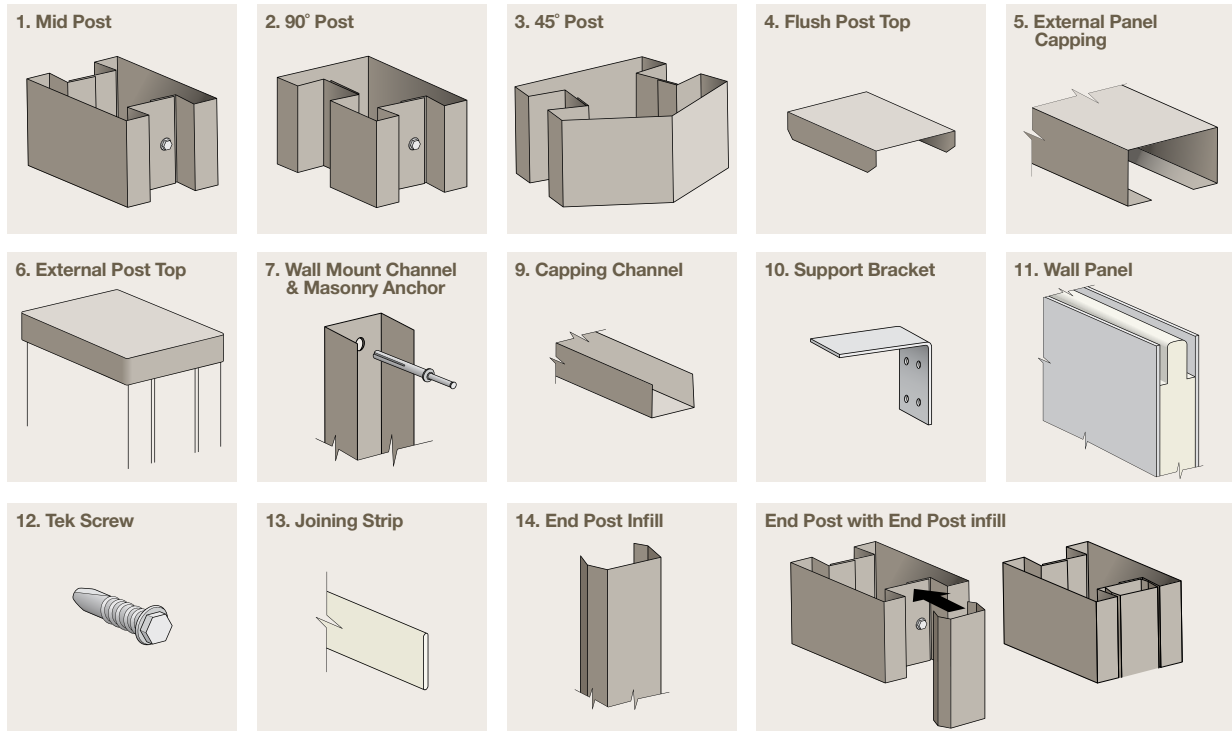


Schematic view of footing showing top of concrete sloping away from post

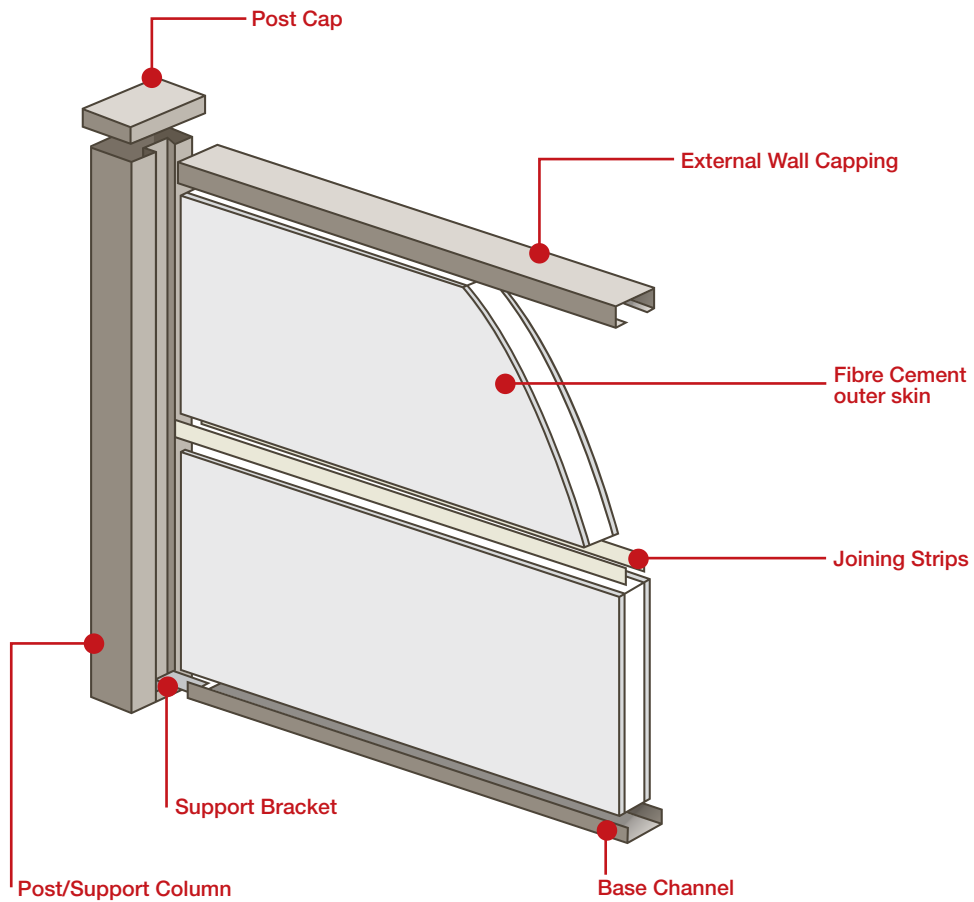
Wall Height	Hole Depth into firm earth or clay		Hole Depth into sand, soft clay or loose earth		Hole diameter
	Wind Region A&B	Wind Region C	Wind Region A&B	Wind Region C	
900mm	450mm	 You will need engineering advice beyond the scope of this publication. Please contact MWS directly for this information.	550mm	 You will need engineering advice beyond the scope of this publication. Please contact MWS directly for this information.	For all Wind regions the Post Hole diameter should be your post width plus 100mm Contemporary = 250mm min Traditional = 350mm min Estate = 450mm min
1200mm	550mm		650mm		
1500mm	600mm		700mm		
1800mm	650mm		800mm		
2100mm	700mm		900mm		
2400mm	800mm		1000mm		
2700mm	900mm		1100mm		
3000mm*	1000mm		1200mm		

* 3000mm high walls may not be suitable for all regions. Please consult MWS prior to the design stage so we can ascertain if additional materials are required example – Shortened free end spacing's, deeper footings, core filling of posts etc.

WALL COMPONENTS



TYPICAL WALL CONSTRUCTION



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