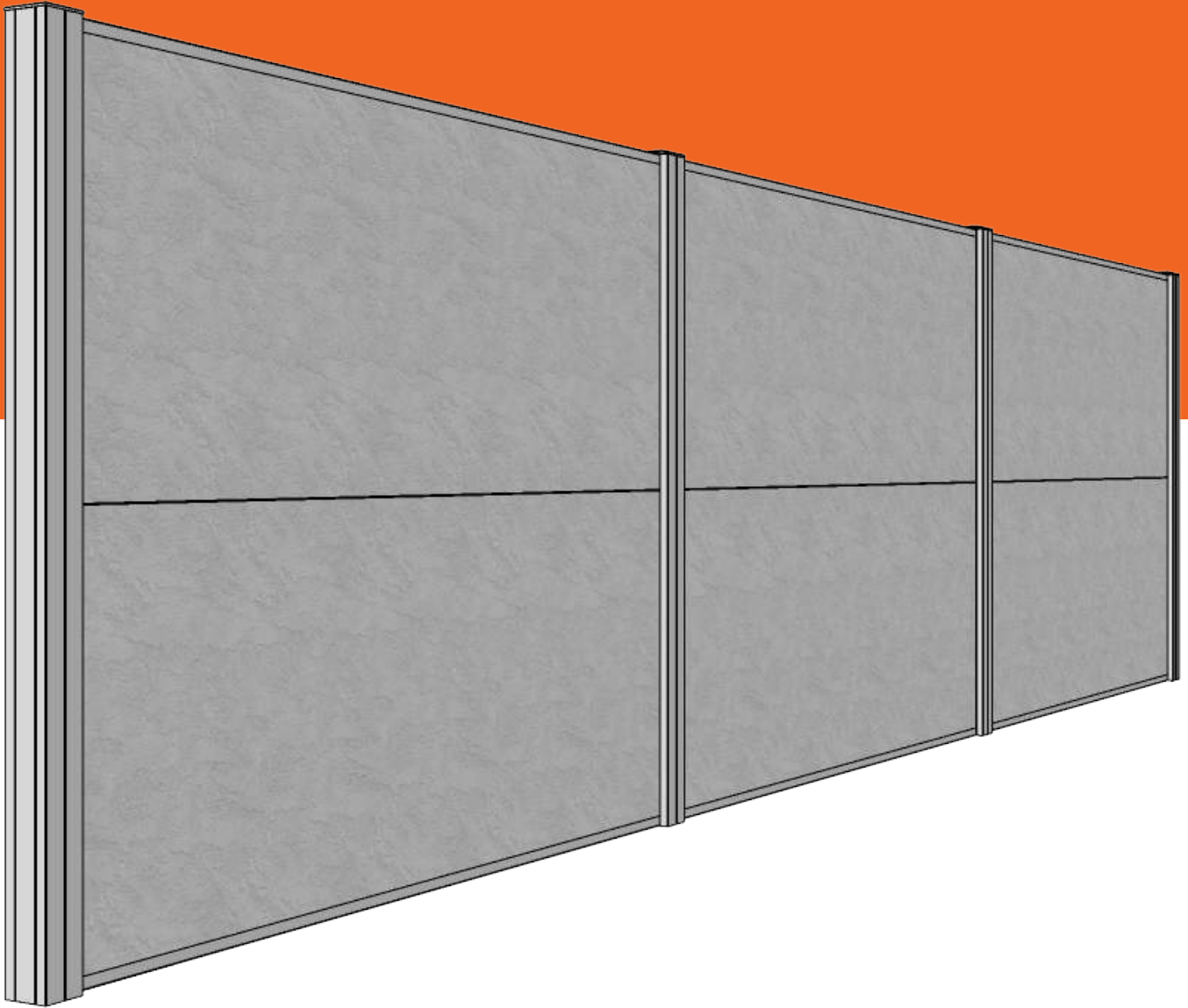



Installation Guide




Techniko
Modular Panel Fence

1300 925 563



The Techniko wall will provide you with many years of trouble-free protection if installed in accordance with our directions.

Safety

- It is the installers responsibility for site safety
- The installer must wear/use appropriate safety equipment at all times
- No person should lift a wall panel alone
- Care should be taken at all times when using power tools to prevent severe injury
- Extra caution should be taken at all times when handling any posts, wall capping, insert panels or slats, as the metal edges are sharp and will cut
- This includes the assembly of the wall panels and the exposure to the unprotected post tops
- Holes in the ground should never be left uncovered

Panels

- The edges of the wall panels are fragile until assembled – care should be taken not to drop or bump the panel edges.

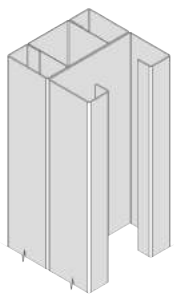
Installation

- Techniko will take no responsibility for the incorrect information supplied by the customer
- The customer takes responsibility for all information on the installation drawings used
- The posts must be installed and concreted correctly in accordance with the engineering specifications supplied by Techniko. Failure to comply will void any and all warranties offered by Techniko
- If/where a panel cut width is specified on the installation drawing, the installer will accurately measure between the posts and check the measurement before cutting the panel

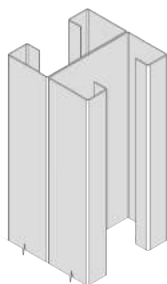
Specifications

Factor	Value
Wall Height	Up to 3000mm
Post Size	Overall 100mm x 100mm
Post Material	Folded Steel
Panel thickness	50mm
Panel Length	2400mm
Fence Heights	900mm 1200mm 1800mm 2100mm 2400mm 3000mm

Components



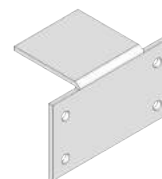
End Post



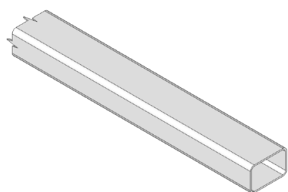
Middle Post



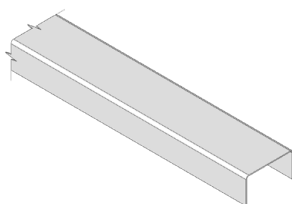
Cap



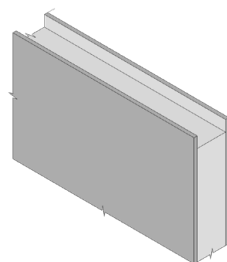
Wall Support Bracket



Joining Profile



Capping Channel

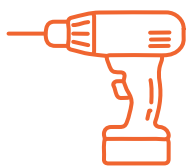


Panel

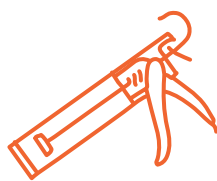


Screws

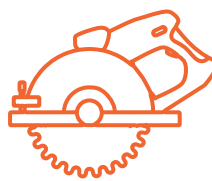
Tools



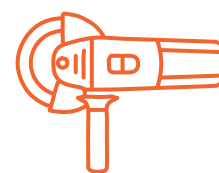
Drill



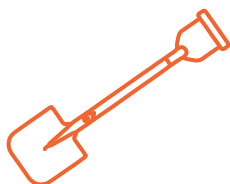
Liquid Nails
& Silicon



Circular Saw



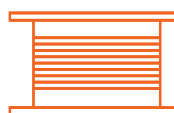
Angle Grinder



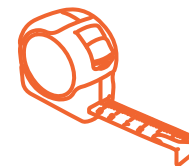
Shovel



Spirit Level



String Line



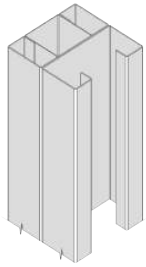
Tape Measure

Step 1

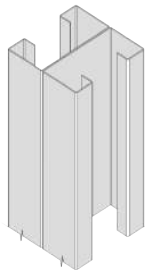
Measure all post positions out accurately and mark with florescent paint. Drill or dig the holes in accordance with our drawing specification.

Note

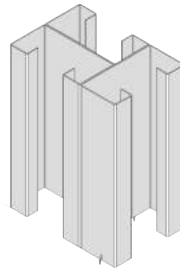
Our site measure guide and template can be downloaded from the website.



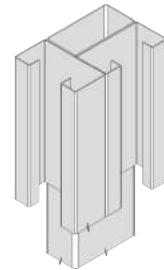
End Post



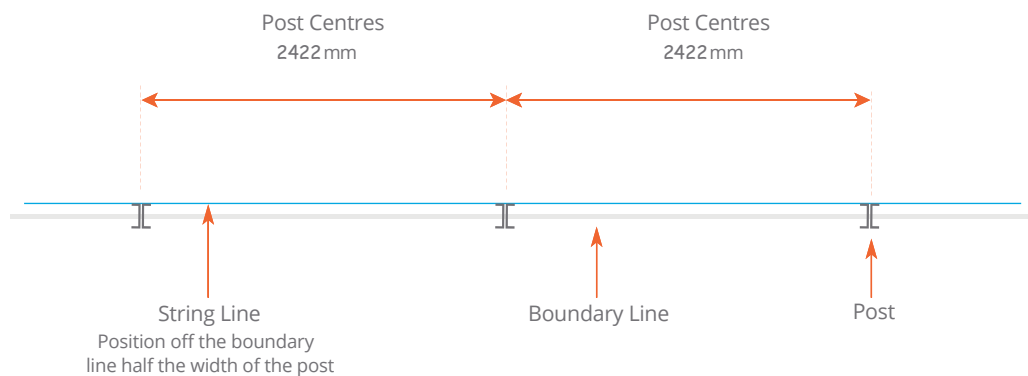
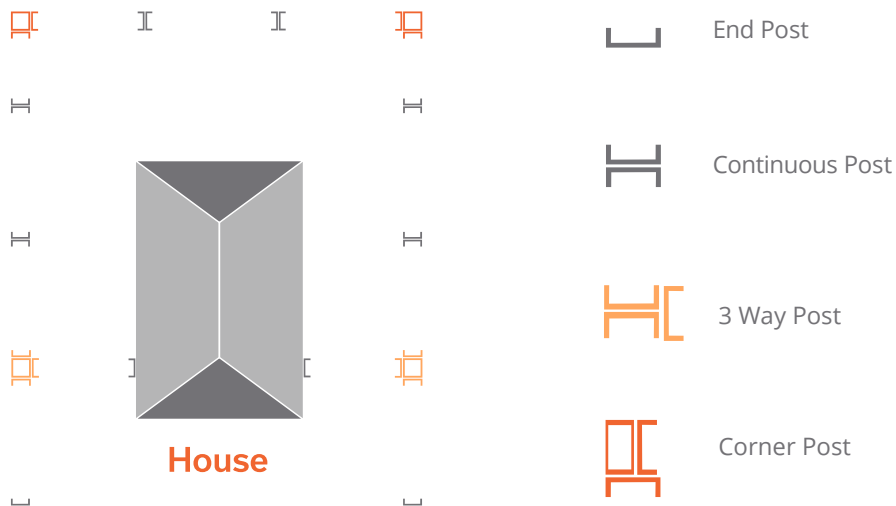
Continuous Post



3 Way Post



Corner Post

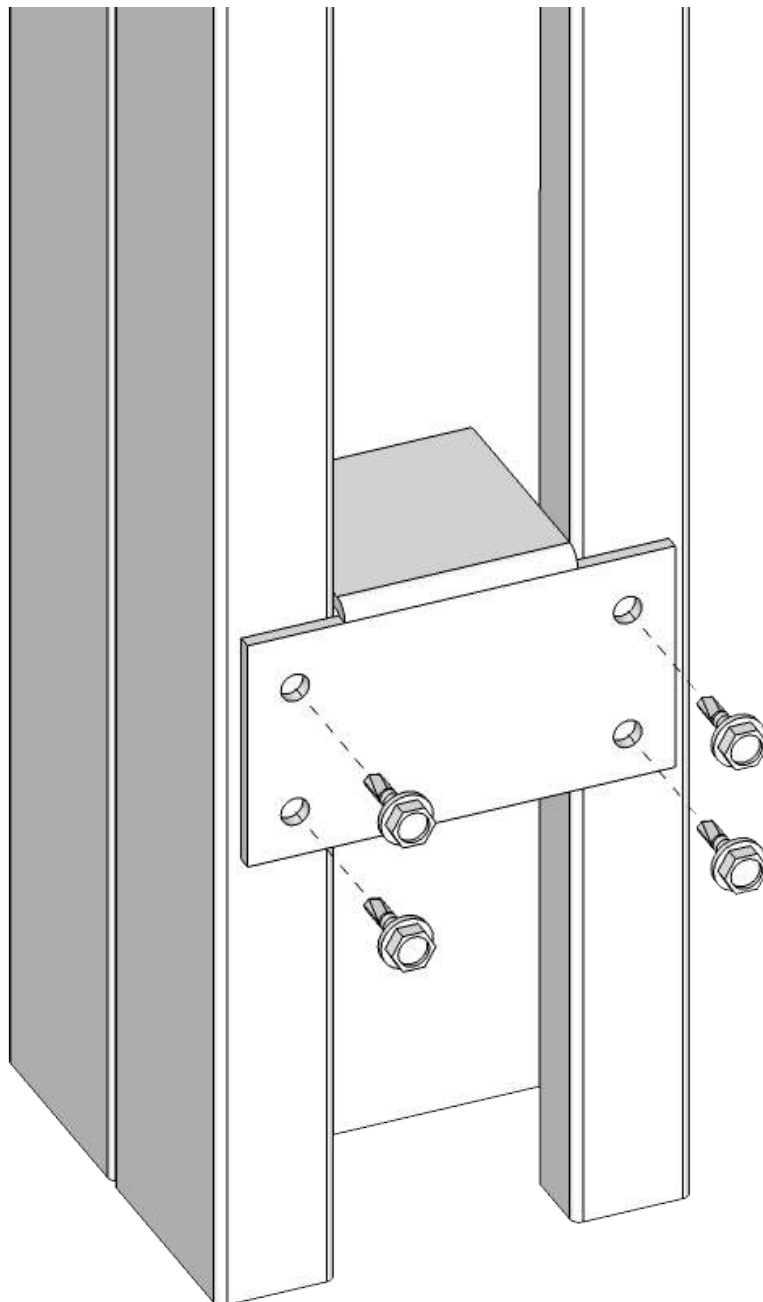


Step 2

Measure accurately and mark the bottom angle bracket position on both sides of the post – screw brackets on. (These are used to support the wall panels).

Note

Remember to allow for any stepping or raking of the fence panels to accommodate landfalls.

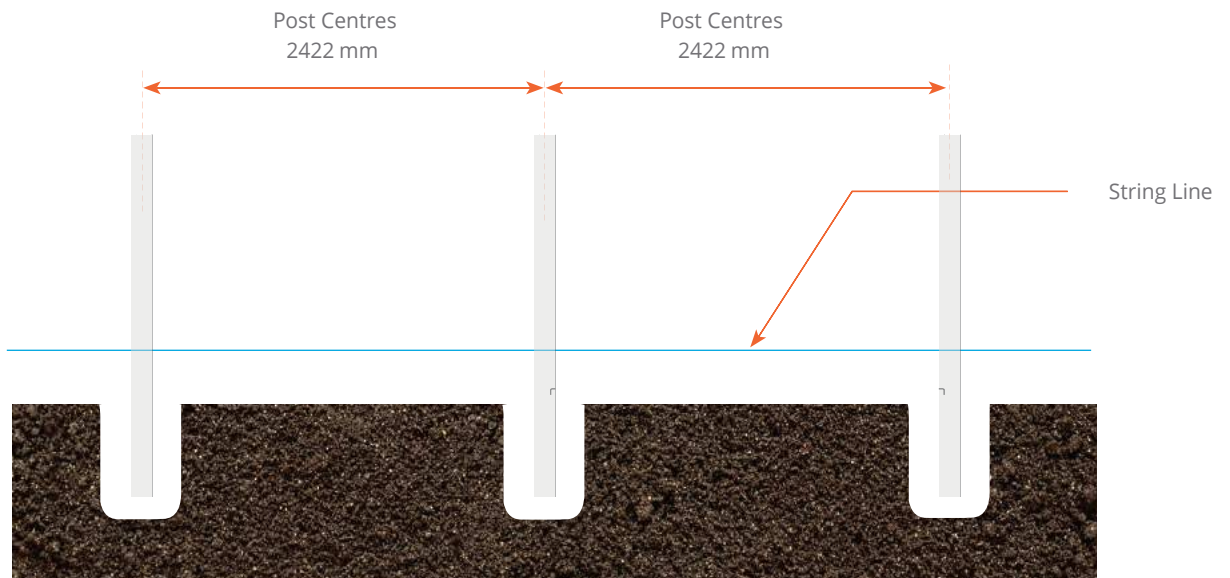


Step 3

Install a string line in the position you require the post faces to be in. Place the posts in the holes and layout the bottom channels base down between the posts to help determine the post spacing and levels whilst concreting.

Note

Allow minimum 10mm clearance between channel and post at each end to facilitate ease of panel installation later on.

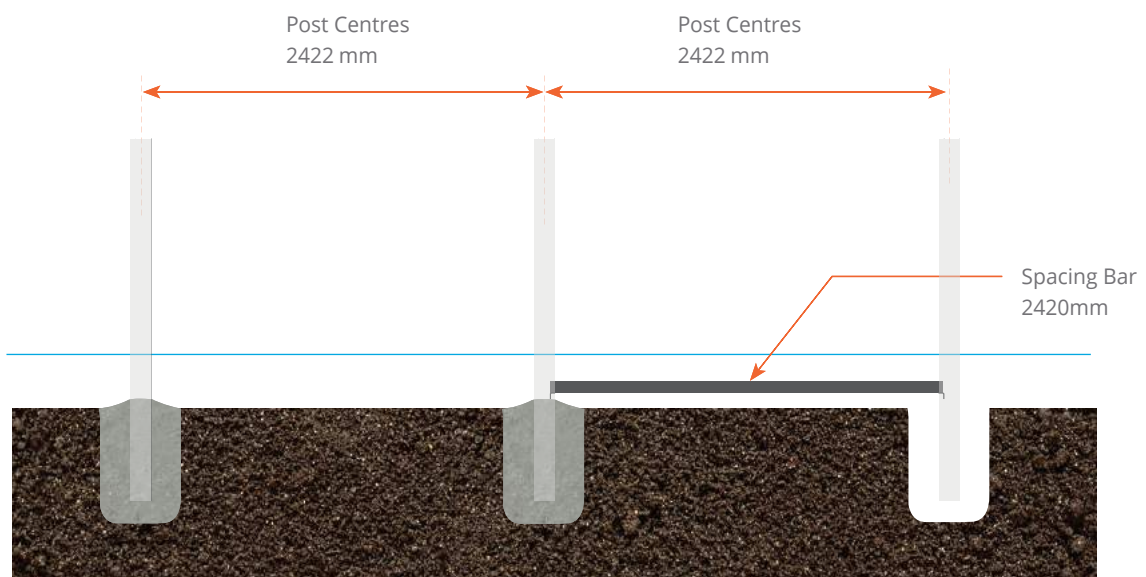


Step 4

Pour concrete around each post and set as you go. Critical points to check are; post alignment (with other posts), post height and post plumb. Allow for the concrete to set overnight.

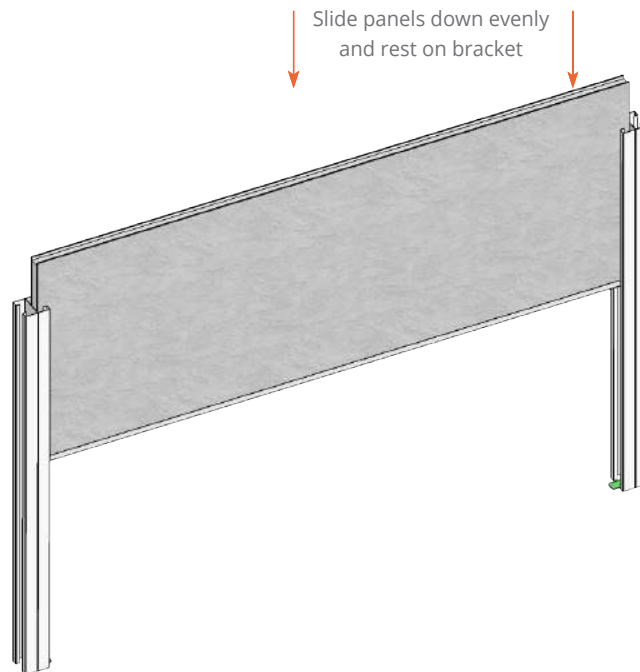
Note

We do not recommend the use of fast curing concrete, due to its inferior properties over standard concrete.



Step 5

Install the lower wall panel, ensuring the bottom channel fits correctly. Insert the panel joining tube (if the wall is higher than 900mm) and then install next panel. Snap in any post groove infill's, if required.

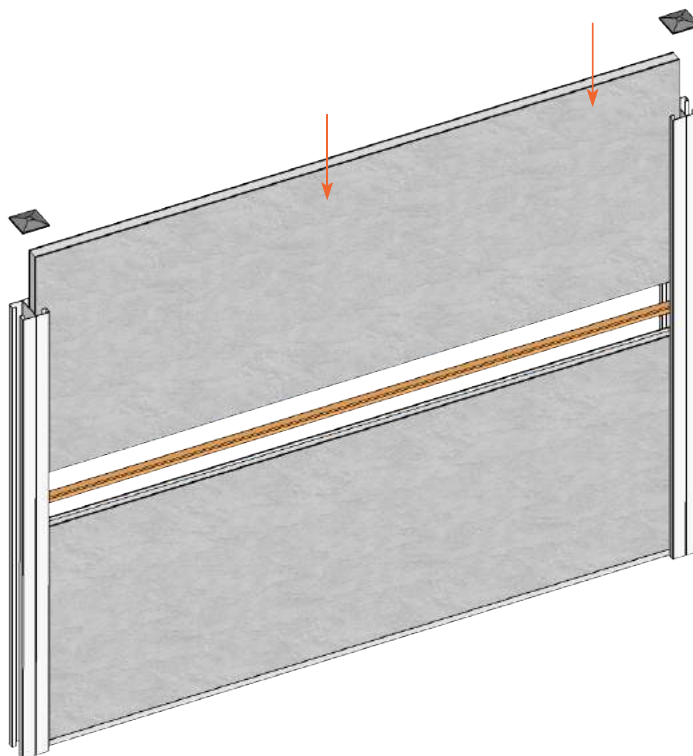


Step 6

Glue firstly the wall capping followed by the post caps, using construction adhesive.

Note

If you have any variation to a solid wall (metal fence insets or slats), fix the panels in using the mounting options supplied.





Structural Certification

As a professional engineer, qualified and experienced in engineering design, I certify that the Techniko wall system information attached has been prepared in accordance with soundly based and widely recognised engineering principles.

Design loading for each application were obtained in accordance with AS1170.1, AS1170.2 and AS4055 as appropriate.

Structural design has been performed in accordance with AS4100 and AS/NZS 1664.1. Techniko posts have been physically tested to determine ultimate load capacities.

When installed in accordance with the specifications, details and limitations in this brochure, Wallmark walls will comply with the requirements of the Building Code of Australia.

References:

1. AS1170.1 – 2002 Loading Code Part 1 Permanent; Imposed and Other Actions
2. AS1170.2 – 2011 Loading Code Part 2 Wind Loads
3. AS4055 – 2006 Wind Loads for Housing
4. AS4100 – Steel Structures Code
5. BCA Volume One and Two – Building Code of Australia
6. AS3600 – 2009 Concrete Structures
7. AS/NZS 4600 – 2005 Cold Formed Steel Structures

Mary Holmes, BE, EIE Aust, EC 26471, REPQ 3786

Registered Building Practitioner

For and on behalf of Holmes McLeod Consulting Engineers Pty Ltd

Date: 26 September 2019



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www.holmesmcleod.com.au



Page:	1
Date:	26/9/19
Job No:	V19-036
Checked by:	WPE
Design by:	GM

Reference Drawings:	Wallmark.
Part of Structure:	Techniko Post Design.

Design Table for 100mm Techniko Wall System:

Maximum Post Height and Wind Speeds:

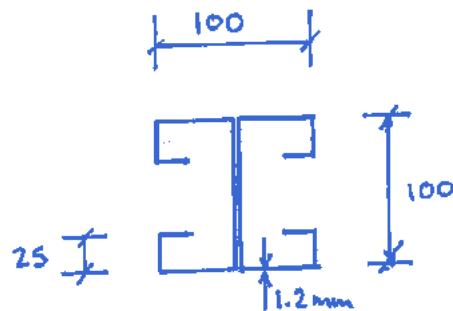
Panel Length	Wall Height			
	1800	2100	2400	3000
2400	50m/s	40m/s	34m/s	29m/s

Techniko Engineering						
Minimum Footing depths for 2400mm Panels						
Wind Speed:	Wall Height (mm)					
	1200	1500	1800	2100	2400	3000
29m/s	600	600	600	600	600	700
34m/s (N1)	600	600	600	600	700	-
40m/s (N2)	600	600	600	700	-	-
50m/s (N3/C1)	600	600	700	-	-	-

Note: Design assumes there is firmly compacted soil at surface around footings.

Corner and Angle Post Footing Diameter must be a minimum of 400mm.

Std footings 300mm dia.



100mm Techniko Post Detail.

WALLMARK PTY LTD (trading as Techniko) warrants that for a period of ten (10) years from the date of construction of any wall panel that the panels will not:-

- Delaminate due to faulty glue; and
- Will maintain their structural integrity.

Techniko warrant that they will resupply wall panels for any area that is proven to the satisfaction of Techniko to have failed to comply with the terms of the above warranty provided that the warranty shall not apply if:-

- Techniko's directions and specifications in relation to the use, application and construction of the wall panel surface has not been followed strictly;
- The default is of minor cosmetic nature only such as fading, crazing or discoloration;
- The failure of structural integrity or delamination is as a result of normal wear and tear, vandalism, negligence, third party acts, improper installation with engineering specifications, chemical abrasion, chemical contamination, explosion, pest, fire, act of God or circumstances reasonably beyond the control of Wallmark;
- The products have been tampered with or altered or modified by a person not approved by Techniko or have been installed contrary to specifications;
- The product is used in an area where it is exposed to salt or other elements contrary to the specifications provided by Techniko;
- The purchaser did not, within fourteen (14) days of discovery of the defect or defects give written notice to the Techniko supplier and provide proof of purchase including but not limited to product serial number or original invoice and facilitate Wallmark or their authorised officer attending at the property to inspect the damage.

Techniko will, in accordance with the warranty provided herein, at their sole election replace or repair part or parts of the material within their sole discretion to be found to be defective provided that there shall be no obligation upon Techniko to pay the costs of removal or installation of the defective parts nor pay the transportation costs related with the return of the defective part or parts.



Call **1300 925 563** to talk
to your nearest Techniko supplier

www.techniko.com.au