

Prolam[®] Verandah/Carport Bracing Post

1. Earthquake zone 3 - Soil Class E
2. Post to bearer fixing is for lateral loads. Vertical bearing loads may require additional capacity.
3. Footing depth is into Good Ground. Footing is sized for resisting bracing loads only.
4. Requirements for resisting uplift will need to be calculated separately - Section 9 in NZS3604:2011 gives tables for the uplift force and volume of concrete required for posts.

Post selection Steps:

1- Calculate total plan and face areas of the verandah roof:

$$\text{Total Plan area: TPA} = W \times L$$

$$\text{Total Face area: TFA} = H \times L$$

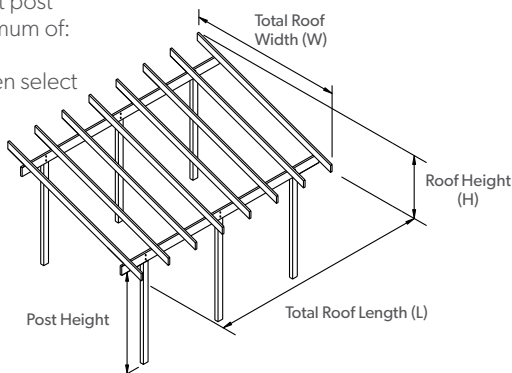
2- Select the post size desired and the post height

3- Read off the maximum areas AP and AF for that post

4- Number of posts required will equal the maximum of:

$$\text{TPA/AP or TFA/AF}$$

5- If the number of posts is more than desired then select a larger post size and repeat the calculations.



Example (PL8 Bracing Post Supporting Free Standing Verandah/Carport - Table 12a):

Roof Length = 6 Roof Width = 4 Roof Height = 1.2

$$\text{TPA} = 24$$

$$\text{TFA} = 7.2$$

Post size = 180x180 Post height = 2.1

$$\text{AP} = 6.3 \quad \text{AF} = 2.6$$

$$\text{TPA/AP} = 3.8 \quad \text{TFA/AF} = 2.8$$

Number of posts required = 4 (3.8 rounded up)

These span tables apply only to Prolam products