

SUMMERMORE Pty Ltd ABN 42 108 898 433

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Thursday, 27 October 2022

Manor Homes NSW Pty Ltd  
5 Sunny Bank Road,  
Lisarow,  
NSW, 2250.

**GENERIC STRUCTURAL DESIGN CERTIFICATION (22-28180)  
GENERIC FOOTING DESIGN FOR VARIOUS SOIL CLASSIFICATIONS.**

We, Summermore Pty Ltd, being Registered Structural and Civil Engineers, hereby certify the design of the mass concrete footings for Manor Homes NSW Pty Ltd as detailed in the attached drawing. The footings are designed in accordance with widely accepted engineering principles and the referenced codes of practice for wind classifications up to and including N3.

NCC:2019	Building Code of Australia
AS/NZS 1170.0:2002	Structural Design Actions Part 0—General Principles
AS/NZS 1170.1:2002	Structural Design Actions Part 1—Permanent, Imposed & Other Actions
AS4055:2012	Wind Loads for Housing
AS1170.4:2007	Structural Design Actions Part 4—Earthquake Actions
AS4100:2020	Steel Structures Code
AS2870:2010	Residential Slabs and Footings
AS3600:2018	Concrete Structures

This certification is limited to the documentation supplied and compliance with the requirements of the published codes of practice listed and should not be used for any other purpose. Summermore Pty Ltd accepts no responsibility for information that has not been expressly identified as part of this assessment. This assessment can only be relied upon by the addressee and cannot be relied upon by any third party. Summermore Pty Ltd accepts no responsibility for any third party that seeks to rely upon this assessment.

If we can be of any further assistance in this matter, please do not hesitate to contact this office.

Yours Faithfully

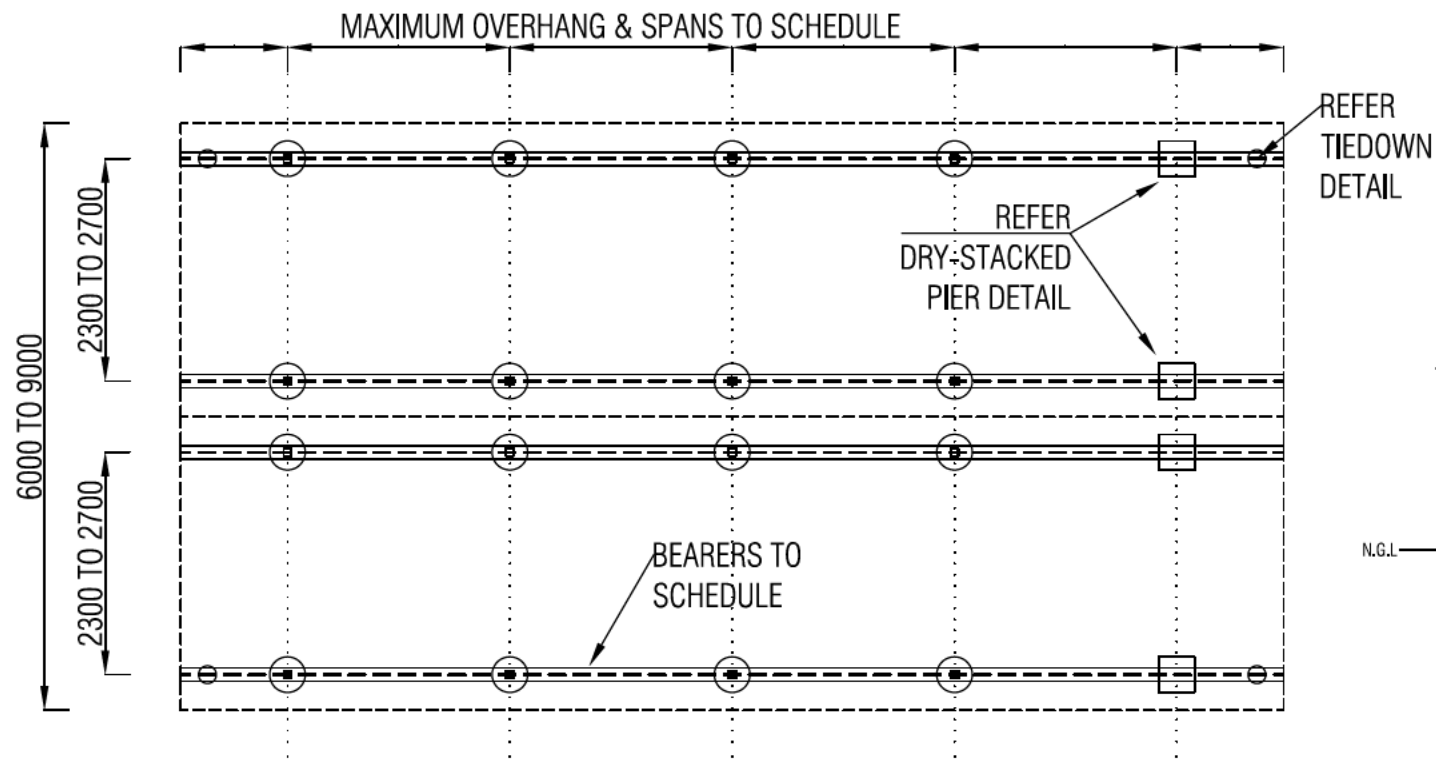


Ronald Bell  
FIEAust (891940), CPEng, NER, APEC Engineer, IntPE(Aus), Registered Engineer Structural NSW (BDC04601).  
Director  
Summermore Pty Ltd



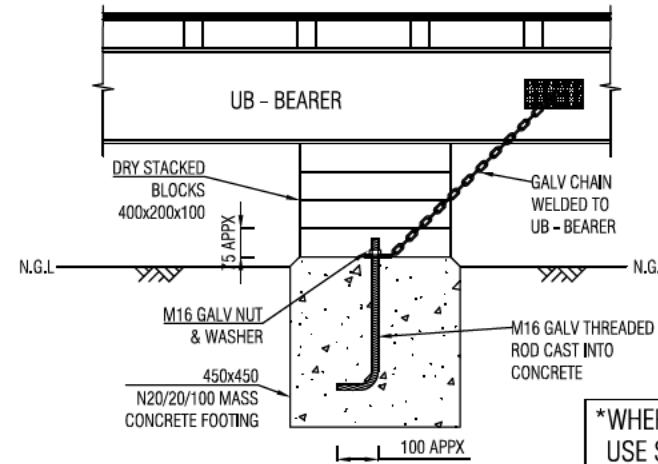
ENGINEERS  
AUSTRALIA





## BEAM & FOOTING LAYOUT

N.T.S



## DRY-STACKED PIER & TIEDOWN DETAIL

N.T.S

### ENGINEERS NOTES:

- THIS SET OF DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS.
- ALL SET OUT DIMENSIONS ARE TO BE OBTAINED FROM THE ARCHITECTURAL DRAWINGS UNLESS SPECIFIC DIMENSIONS ARE GIVEN ON THE ENGINEERING DRAWINGS.
- THESE DRAWINGS SHOULD NOT BE SCALED.
- ALL MATERIALS AND WORKMANSHIP ARE TO BE OF THE HIGHEST STANDARD AND IN ACCORDANCE WITH ANY RELEVANT SAI GLOBAL CODES RELATING TO THEIR APPLICATION. CERTIFICATES TO THIS EFFECT FROM A NATA APPROVED TESTING LABORATORY SHALL BE FURNISHED ON REQUEST.
- DETAILS SUITABLE FOR 'N3' WIND CLASSIFICATION TO AS1170.2 (TERRAIN CATEGORY 2).
- USE ADJUSTABLE POST HEADS FOR 'H' AND/OR 'P' CLASS SITES.
- ANT CAPS ARE NOT REQUIRED FOR THIS DETAIL.
- WHERE SOUND ROCK IS ENCOUNTERED AT OR NEAR GROUND LEVEL, TIEDOWN IS TO BE ACHIEVED BY EPOXY-GROUTING 1/M12 THREADED ROD (300mm EMBED) INTO SOUND ROCK AND ATTACHING THROUGH THE FLANGE OF THE CHASSIS BEAM.
- WHERE THE FOOTING OF AN ISOLATED COLUMN CANNOT REACH THE SPECIFIED DEPTH DUE TO ROCK STRATA, THE SIZE OF THAT FOOTING MAY BE INCREASED TO PROVIDE THE EQUIVALENT VOLUME OF CONCRETE. THESE FOOTING DETAILS COMPLY WITH ALL THE REQUIREMENTS OF AS2870 'RESIDENTIAL SLABS AND FOOTINGS'.

\*WHERE PIER DEPTH HEIGHT EXCEEDS 1000mm, USE STEEL COLUMNS OR AS APPROVED

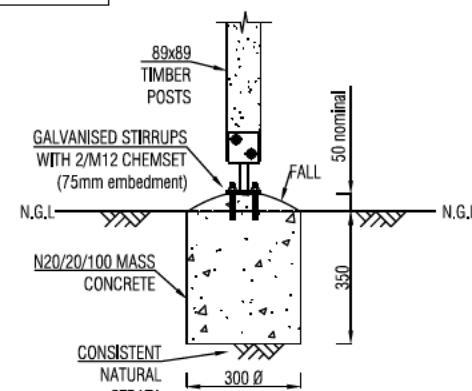
\*DETAIL FOR SOIL CLASS 'S' & 'M' SITES.

\*FOR SOIL CLASS 'H' SITES, PROVIDE FOOTING USING 20MPa MASS CONCRETE - 450x450x1000 DEEP.

BEARER SPAN TABLE				
LENGTH OF BUILDING (max)	BEARER SECTION	STEEL COLUMNS (GALV)		NUMBER OF TIEDOWNS EACH BEARER
		SPAN (max)	OVERHANG (max)	
12.6m	200 UB 22	3.40m	1.2m	3
12.6m - 15.0m	250 UB 25	3.75m	1.5m	4
15.0m - 18.0m	250 UB 31	3.75m	1.5m	5

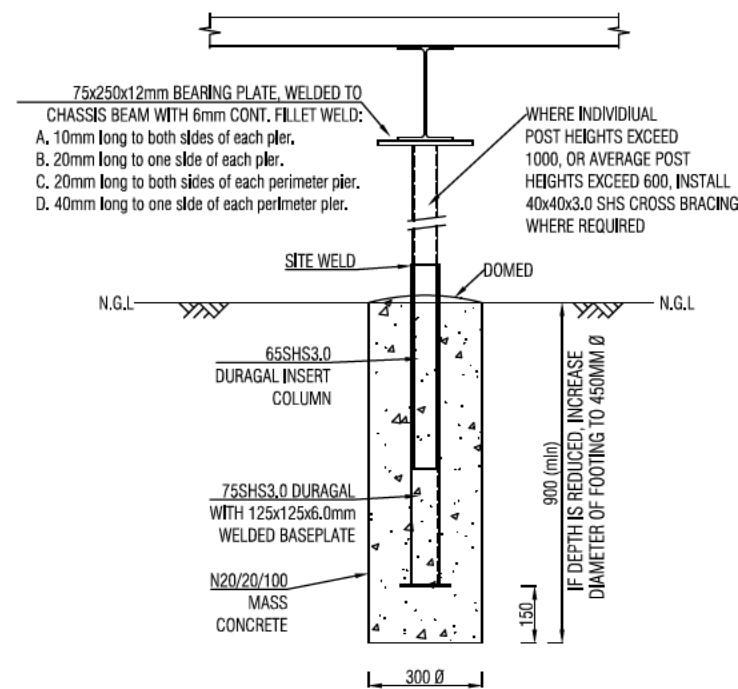
300Ø PIER REINFORCEMENT TABLE			
SITE CLASSIFICATION	PIER DEPTH (mm)		
	0 - 2000	2000 - 3000	3000 - 4000
S - M	N/A	N/A	2/N12
H1	N/A	N/A	3/N12
H2	N/A	N/A	4/N12
P - E	N/A	N/A	6/N12

IF PIER DEPTH EXCEEDS 4000, THE ENGINEER OR BUILDING SUPERVISOR IS TO BE CONTACTED IMMEDIATELY.



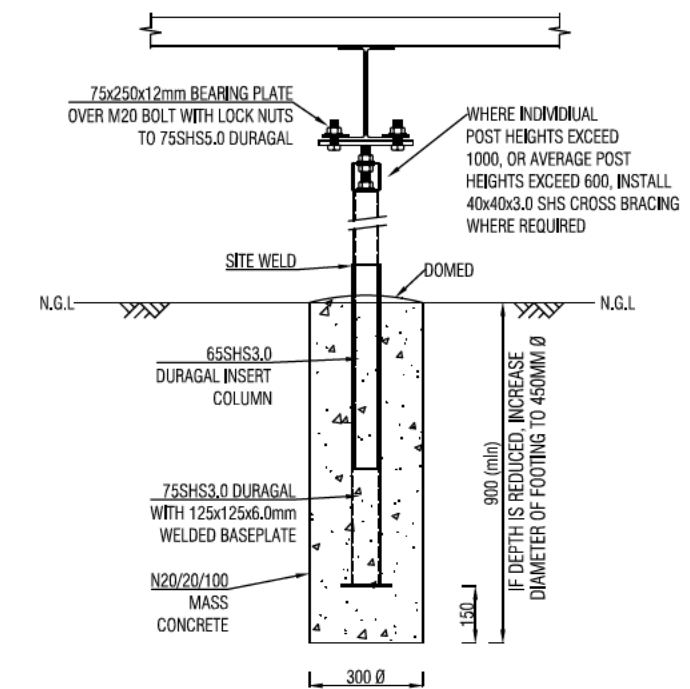
## PAD FOOTING DETAIL

N.T.S



## STEEL POST DETAIL

N.T.S



## ADJUSTABLE STEEL POST DETAIL

N.T.S

DRAWING REVISIONS		REFERENCE DRAWINGS		COPYRIGHT		SIGNATURE		CLIENT		PROJECT	
REV	DESCRIPTION	BY	DATE	DRAWING NAME	TITLE	APPROVED	DATE	CLIENT	PROJECT	TITLE	REV
-	PRELIMINARY FOR CLIENTS APPROVAL	GAB	OCT 2022					Summermore Pty Ltd	Proposed Residence - Generic	Typical Beam & Footing Layout with Details	-
								Consulting Engineers			
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								ABN: 42 108 898 433			
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