→ Modular Towers & Columns Foundations & Installation Methods

BASE

630 630

630

630

630

SERVICE

140×140

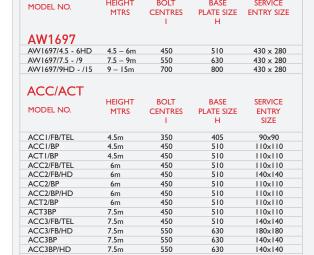
140×140

180×180

140×140

140×140

180×180



550

550

550

550

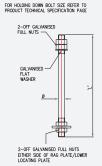
BOLT

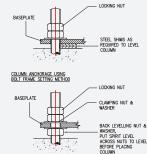
HEIGHT

BOLT PROJECTION P P in mn

FB/TEL/AW1697 Service entry point (In centre of base plate)

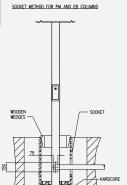




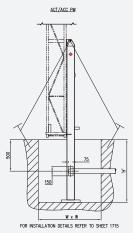


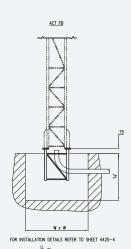
COLUMN ANCHORAGE USING TEMPLATE SETTING METHOD





FOR INSTALLATION DETAILS REFER TO SHEET 4047-2 EB





Installation method for FB & BP - Base plate models

7.5m 9m

9m

9m

10-15m

I. Excavate as per recommended area and depth.

ACT3BP/HD ACC4/FB

ACC4/FB/HD

ACT4/BP/HD

ACC4/BP

ACC15BP

- 2. Shutter off top edge level and place ducting ensure that all shuttering is supported.
- 3. Assemble bolts through template and screw nuts on so that recommended thread is protruding through template (see table for measurement).
- 4. If using bolt frame, ensure that 30mm of thread is showing above top nut

 5. Pour concrete level with top of shuttering tamp down and level surface.
- Push bolts/bolt frame down into concrete so that template is flat on concrete and nuts are against template with bolts vertical (template method), or that template is level and nuts below template are just clear of concrete (bolt frame method).
- 7. Ensure that cable duct end is through entry point in template by 50mm min.
- 8. Allow 72 hours for concrete to cure before placing pole/column
- 9. Remove template before placing pole.

 Note: Where back nuts are used to level pole/column it is essential that a load bearing grout is used to fill the void between base plate and concrete. Failure to do this may cause excessive deflection in pole.

FOUNDATION SIZES FOR THE UK

COLUMN/TOWER COUNTRY LOCATION				TOWN LOCATION		
HEIGHT M	AREA A	AREA B	AREA C	AREA A	AREA B	AREA C
4	0.9×0.9×0.45	0.9×0.9×0.5	l×l×0.5	0.8x0.8x0.4	0.9×0.9×0.45	0.9x0.9x0.5
5	1×1×0.5	1×1×0.5	1×1×0.75	0.9×0.9×0.5	1×1×0.5	lxlx0.5
6	l×1×0.75	1×1×0.75	1.1×1.1×0.75	1×1×0.5	1×1×0.75	1.1x1.1x0.7
8	1.1×1.1×0.75	1.25×1.25×0.75	1.4×1.4×0.75	1.1×1.1×0.75	1.25×1.25×0.75	1.4x1.4x0.7
9	1.25×1.25×0.75	1.4×1.4×0.75	1.5×1.5×0.75	1.1×1.1×0.75	1.25×1.25×0.75	1.4x1.4x0.7
10	1.4x1.4x0.75	1.5×1.5×0.75	1.6x1.6x0.8	1.25×1.25×0.75	1.4x1.4x0.75	1.5×1.5×0.7
П	1.4×1.4×0.75	1.5×1.5×0.75	1.6x1.6x0.8	1.25×1.25×0.75	1.4×1.4×0.75	1.5×1.5×0.7
12	1.5×1.5×0.75	1.6x1.6x0.8	1.7x1.7x0.9	1.4x1.4x0.75	1.5×1.5×0.75	1.6×1.6×0.8
13	1.6x1.6x0.8	1.7×1.7×0.9	1.8x1.8x1	1.5×1.5×0.75	1.6×1.6×0.8	1.8×1.8×0.9
14	1.7×1.7×0.9	1.8x1.8x1	2×2×1	1.6x1.6x0.8	1.7×1.7×0.9	1.8x1.8x1
15	1.8x1.8x0.9	2x2x1	2.1x2.1x1.1	1.7x1.7x0.9	1.8x1.8x0.9	2×2×1

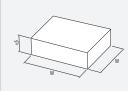
Foundations sizes are W x W x D

NOTE FOR INTERMEDIATE POLE/TOWER HEIGHTS, ROUND-UP TO THE NEXT FOR INTERNIED TO THE NEXT HEIGHTS, ROUND-OF TO THE NEXT HEIGHT - I.E. FOR 4.5M USE 5M.
FOR PM MODELS - MINIMUM FOUNDATION DEPTH 1.0M, USE THE SAME WIDTH DETAILS SHOWN

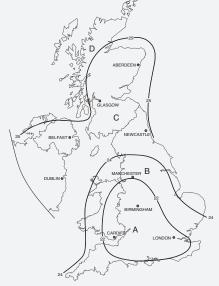
FOR FOUNDATION SIZES:- A MINIMUM SOIL BEARING PRESSURE OF $75 \mathrm{kN/m^2}$ IS ASSUMED

Minimum concrete Grade C35 Allow 72 hours after pouring concrete before installing pole or tower

Please note that foundation sizes shown in the table above are in accordance with recommended headload andwindload capacities shown in technical specification tables For increased headloads - foundations may need to increase in size - please contact us for revised foundation sizes for specific installations.



*D= 1000 on PM and buried flange/embedded base models



- WIND SPEED AREAS 22m/s, 24m/s, 25m/s TAKEN FROM FIG 6 BS6399 BASIC WINDSPEEDS Vb.
- SITE MEAN WNDSPEEDS (Vs) FOR AREAS A, B & C ARE:-A= 24.2m/s(100m ASL) B=26.4m/s(100m ASL) C=28.8m/s(150m ASL)
- ACTUAL WIND VELOCITY FOR THESE WINDSPEEDS (Ve) ARE:
- A=41.8m/s(93mph) B=45.6m/s(102mph) C=50m/s(111mph)
- FOR AREA 'D' PLEASE CONTACT ALTRON FOR FOUNDATION SPECIFICATION

For ANCT towers bolt centres and sizes are shown in ANCT technical specification on page 15