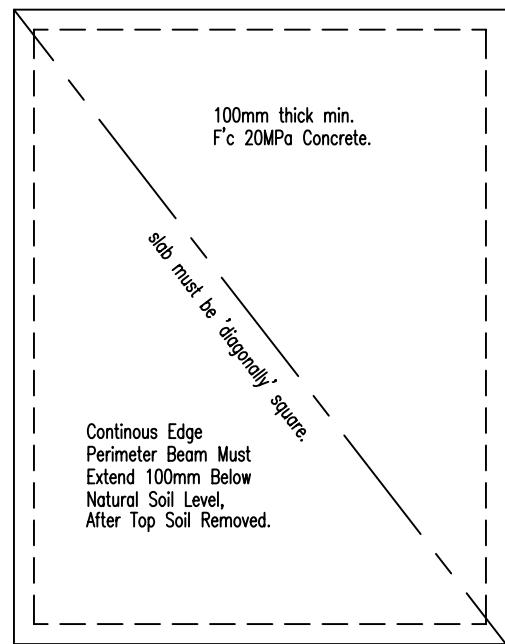
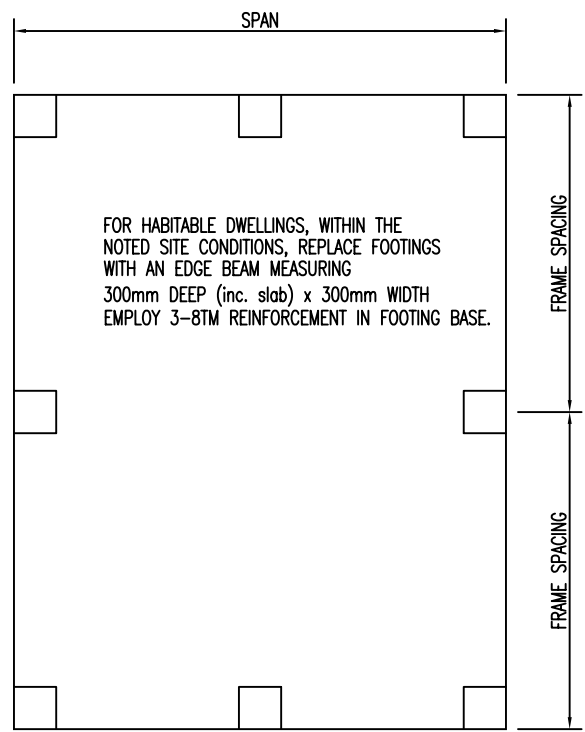


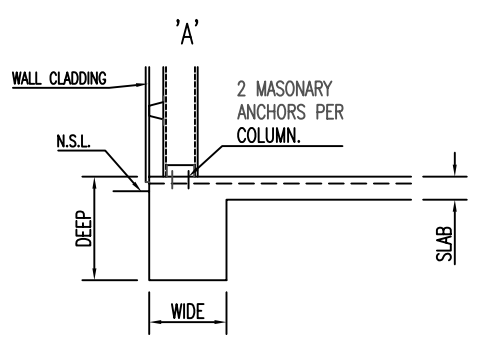
GENERAL ARRANGEMENT FOUNDATION OPTIONS FOR ALL FRAME TYPES.



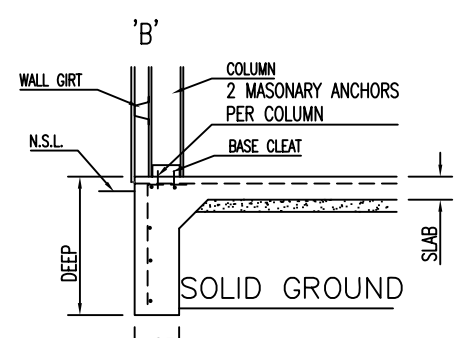
PLAN (Option 1)
SLAB PLUS EDGE BEAM.



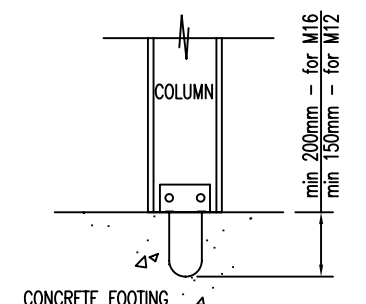
PLAN (Option 2)
SLAB & INTEGRATED MASS CONCRETE
FOOTINGS UNDER COLUMNS
(Edge Beam NOT Required)



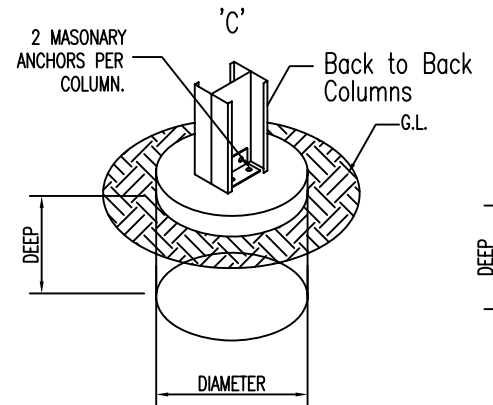
(Option 2)
SLAB PLUS FOOTING



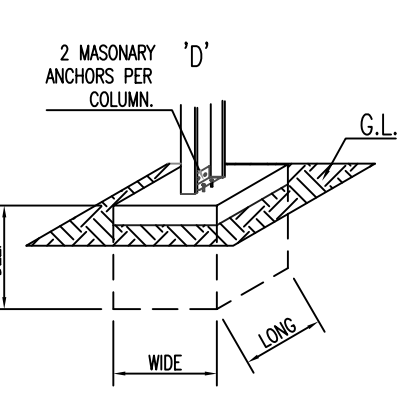
(Option 1)
RETAINING WALL



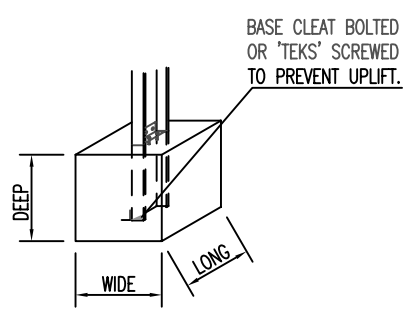
(Option 6)
'U' BOLT EMBEDMENT



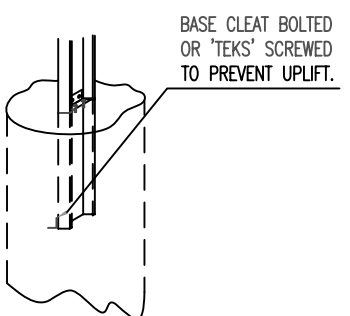
BORED FOOTING (Option 3)



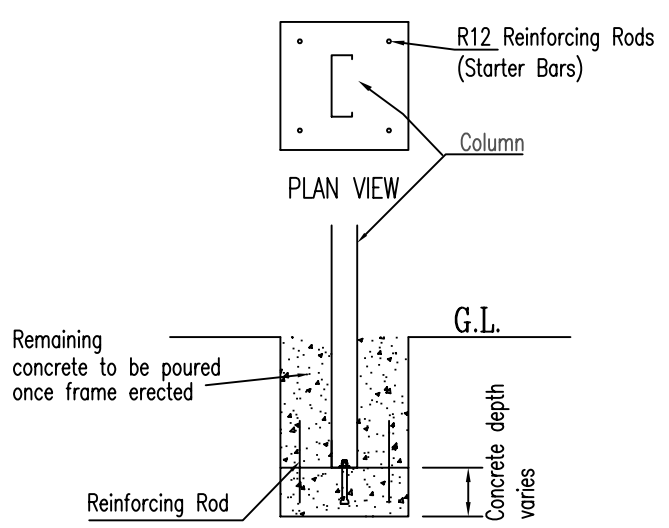
MASS CONCRETE FOOTING



MASS CONCRETE FOOTING
EMBED IN CONCRETE (Option 4)



BORED FOOTING
EMBED IN CONCRETE



'MASONRY ANCHORS' & EMBEDDED IN CONCRETE.
SECTIONAL VIEW (Option 5)

CODES:
Footings have been designed in accordance with BS8103-1:1995, BS8004:1986, Building Regulations 1991 (UK), and Approved Document A Structure.

SITE CLASSIFICATION:
The site is to have a 150 kPa Ultimate Bearing Capacity, with 100 kPa Safe Bearing Capacity. Other Site conditions, including those subject to high ground movement due to moisture changes, to be referred to a Registered Structural Engineer.

FOOTING OPTIONS:
The following footing options are available:
1. Slab plus edge beam combination.
2. Slab and mass concrete footing below columns.
3. Mass concrete footings only.
4. Columns embedded in concrete.
5. Extended columns 'Sleeve Anchored' to a variable depth mass concrete footing, with remaining concrete poured once framework is standing.
6. 'U' Bolt Embedment.

FOUNDING MATERIAL:
Edge beams, mass concrete footings and R.C. slabs to be founded on naturally occurring ground having an S.B.V. of 100kPa min and U.B.V. of 150kPa min. Rolled or compacted fill may be used under the slab. Fill must be compacted in layers of 150mm to a maximum depth of 900mm.

CONCRETE AND REINFORCING FABRIC:
To be in accordance with BS5328-1:1997. Fabric Mesh to comply with BS4483:1998, Reinforcing bars to comply with BS4449:1997. The 28 day strength of all concrete to be 20MPa and the concrete will be kept moist either by watering or covering with a plastic membrane for 7 days following slab pour. Slump 80mm±15mm, Max aggregate size 20mm, Cement Type A.

REINFORCEMENT FABRIC:
F72 reinforcing mesh with 30mm(min) top concrete cover. All Reinforcing Bars to have 30mm(min) top and bottom concrete cover. Buildings may be erected on slab after 7 days, with due care taken not to over tighten dyna bolts.

FRAME SIZE	MASS CONCRETE FOOTINGS		BORED FOOTINGS (mm)	RETAINING WALL EDGE BEAM (mm)	RETAINING WALL EDGE BEAM (mm)
	PLUS SLAB COMBINATION incl 100mm slab thickness length x width x depth (mm)	MASS CONCRETE FOOTINGS (mm) length x width x depth			
C10010,15&19	200 x 200 x 200	300 x 300 x 300	300 x 320	200 x 1000	Retaining wall must be poured with slab
C15012/2C10010,15&19	300 x 300 x 300	450 x 450 x 450	450 x 500	200 x 1000	using Y12 Reinf. Rods at 350mm c/c vertically and 250mm c/c horizontally. All Reinf. fabric laid, lapped and tied to AS 3600.
C15015	300 x 300 x 400	450 x 450 x 450	450 x 500	200 x 1000	Concrete to be F'c 20 MPa minimum.
C15019	300 x 300 x 400	500 x 500 x 500	450 x 550	200 x 1000	See note below.
C15024/2C15012&15	350 x 350 x 400	600 x 600 x 600	450 x 650	200 x 1000	
2C15019&24/C20015	350 x 350 x 400	600 x 600 x 600	600 x 650	250 x 1000	
2C15024/C20019	400 x 400 x 400	650 x 650 x 650	600 x 700	250 x 1000	
C25015&19/C20024	450 x 450 x 450	700 x 700 x 700	600 x 750	250 x 1000	
C25024,2C20015,19&24	500 x 500 x 500	750 x 750 x 750	600 x 800	250 x 1000	
2C25019&24/C30024&30	600 x 600 x 600	1000 x 1000 x 1000	600 x 3000 or 750 x 2000	300 x 1000	
2C30024/C40024	600 x 600 x 600	1100 x 1100 x 1100	750 x 2500	300 x 1000	
2C30030/C40030	600 x 600 x 750	1200 x 1200 x 1200	750 x 3300	300 x 1000	
2C40024&30	700 x 700 x 750	1200 x 1200 x 1300	750 x 3600 or 900 x 2500	300 x 1000	

EDGE BEAMS AND RETAINING WALLS OVER 1000mm DEEP REQUIRE APPROVAL OF A PRACTISING STRUCTURAL ENGINEER.

Note: Where column(s) to be embedded in mass concrete, minimum embedment depth to be:

FRAME SIZE:	MIN. EMBEDMENT DEPTH (mm)
C100, C150, 2C100	300
C200, 2C150	400
C250, C300	500
C400, 2C250, 2C300, 2C400	600

Masonry Anchors may be: Sleeve Anchors, Power Bolts, Excalibur Screwbolts Through Bolts or Chemical Anchors.
C100 & C150 & C200 Frames: Anchors to be 12mm diameter.
C250, C300 & C400 Frames: Anchors to be 16mm diameter.