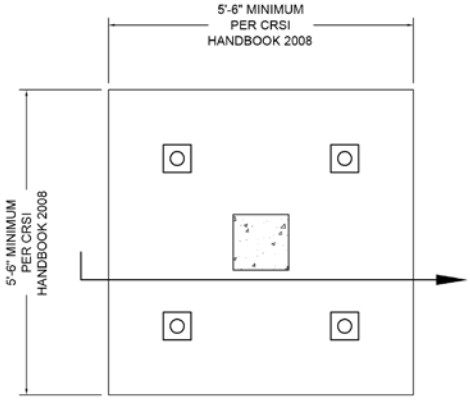
MAGNUM® Bearing Plate Cap Application Guide for Pile Cap Punching Shear

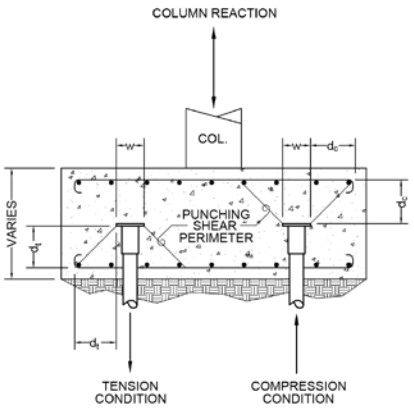
Reinforced Concrete

Minimum Concrete Cover to Obtain Rated Capacities for MAGNUM® Bearing Plate Caps[2]				
Bearing Plate Cap	2500 psi Concrete		4000 psi Concrete	
	d_c (in)	d_t (in)	d_c (in)	d_t (in)
MHC1000-3B	9	7	8	6
MHC1000-3BR2	9	9	8	8
MSC1300-15ML55B	7	7	6	6
MSC1300-175O6565B	9	7	8	6
MHC1300-2K55B	7	7	5	5
MHC1300-3K55B	7	5	6	4
MHC1300-3M66BR1	9	9	8	6
MHC1300-3M6565BR2	9	9	7	7
MHC1300-35L66BR	6	5	5	5
MHC1300-4N88B1	11	8	9	7
MHC1300-4N88B2	11	11	9	9
MHC1300-5O99B1	14	10	12	9
MHC1300-5O99B3	14	14	12	12
MHC1300-5R1111B1	19	10	17	9
MHC1300-5R1111B3	19	14	17	12
MHC1300-6M8585B1	11	9	10	7
MHC1300-6M8585B3	11	11	10	10
MHC1300-6O1010B1	13	8	11	7
MHC1300-6O1010B3	13	12	11	10
MHC1300-6O1111B1	12	9	11	8
MHC1300-6O1111B3	12	12	11	11
MHC1300-8N1212B1	15	7	12	6
MHC1300-9O1313B1	19	9	17	8
MHC1300-9O1313B3	19	17	17	15
MHC1300-13O1616B1	16	8	13	6
MHC1300-13O1616B3	16	14	13	12

Notes:
[1] Code minimum per IBC chapter 18.
[2] Design all concrete pile caps and reinforcing in accordance to the CRSI Design Handbook, 2008. Per CRSI, minimum edge distance (de) is 15 inches up to 60 ton piles and 21 inches up to 120 ton piles. Punching shear area is based upon dimensions (dc and dt) on all four sides of pile caps. Per IBC Chapter 18 pile cap shall extend at least 4 inches beyond edges of plate cap.



TYPICAL PILE CAP
4-PILE ARRANGEMENT SHOWN



TYPICAL SECTION
4-PILE ARRANGEMENT SHOWN