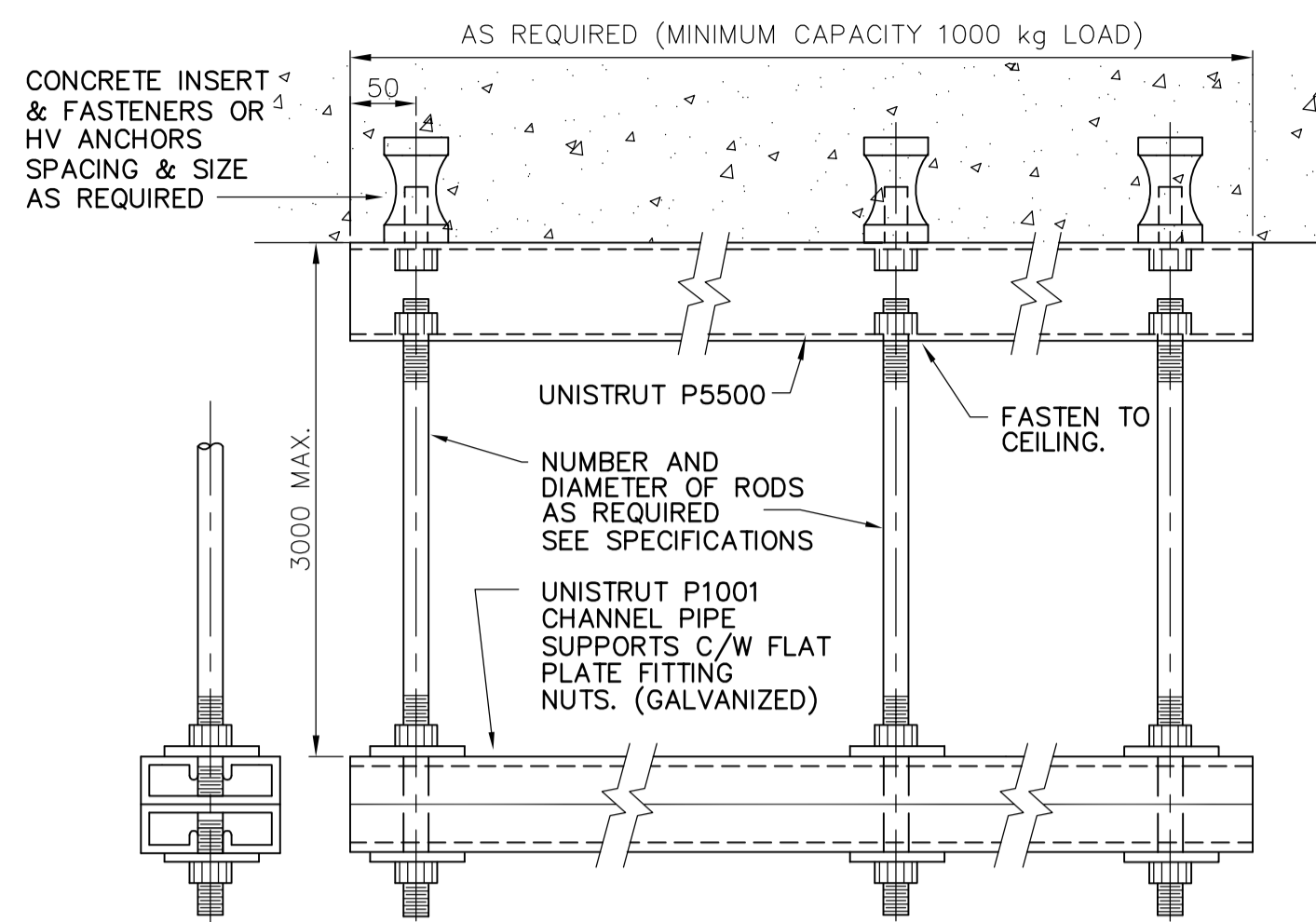


PIPE SIZE (mm)	ROD SIZE (mm)	MAX LOAD (kg)
25	9.4	280
50	9.4	280
75	12.0	510
100	16.0	800
150	20.0	1230
200	22.0	1710
250	25.0	2250
300	25.0	2250
350	25.0	2250
400	25.0	2250
450	25.0	2250
500	32.0	3630
600	32.0	3630

GRINNELL OR SIMILAR

SAFETY FACTOR = 5

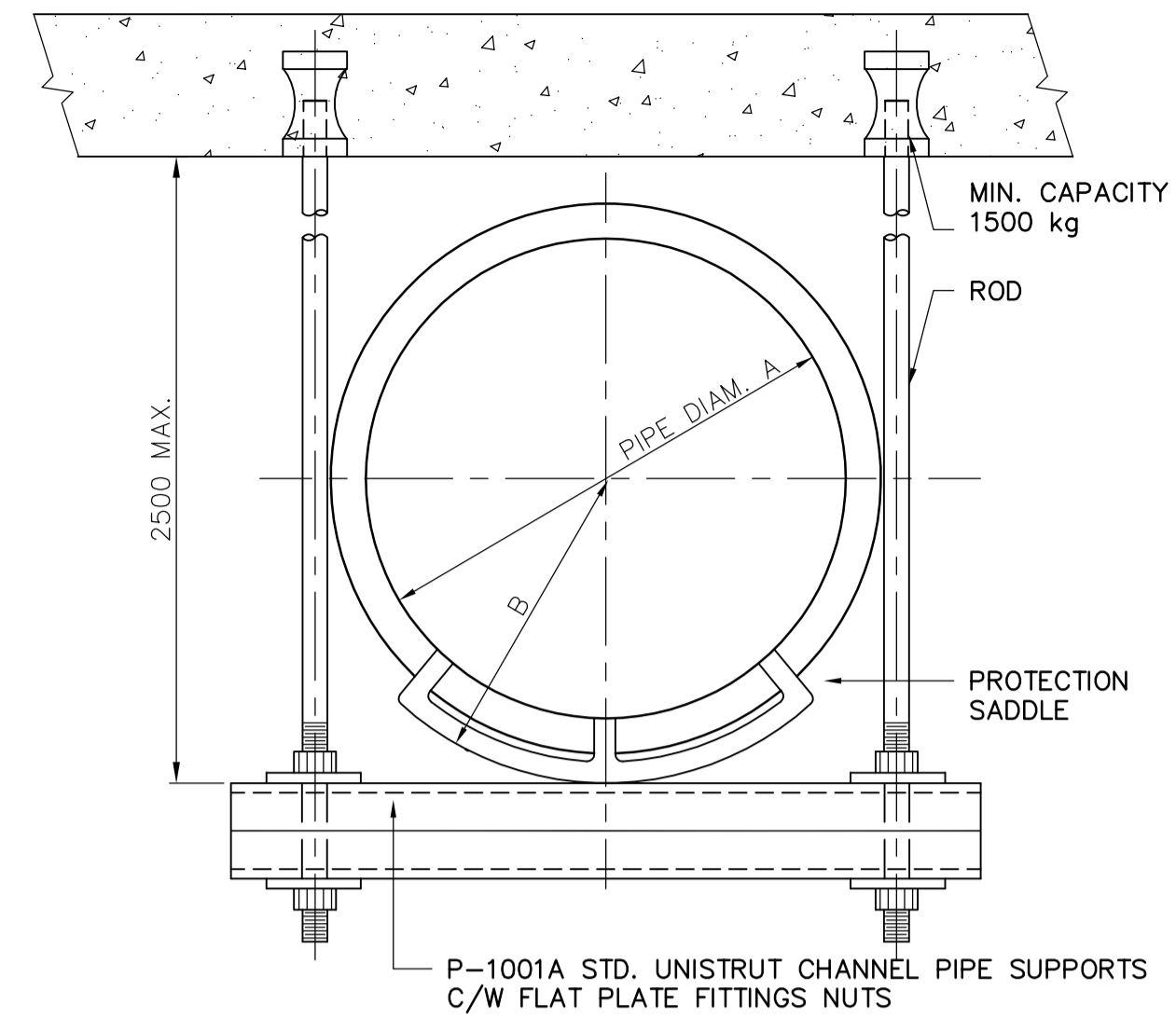
STD 208 SINGLE PIPE HANGER



PIPE SIZES ON RACK	ROD SIZE REQUIRED
600mm SPACING 150mm AND SMALLER 300mm AND SMALLER	9mm 12mm
900mm SPACING 100mm AND SMALLER 200mm AND SMALLER 300mm AND SMALLER	9mm 12mm 19mm
1200mm SPACING 75mm AND SMALLER 150mm AND SMALLER 200mm AND SMALLER 300mm AND SMALLER	9mm 12mm 16mm 19mm

NOTE: 1. MAXIMUM SPACING = 1200mm 2. MINIMUM SAFETY FACTOR = 3

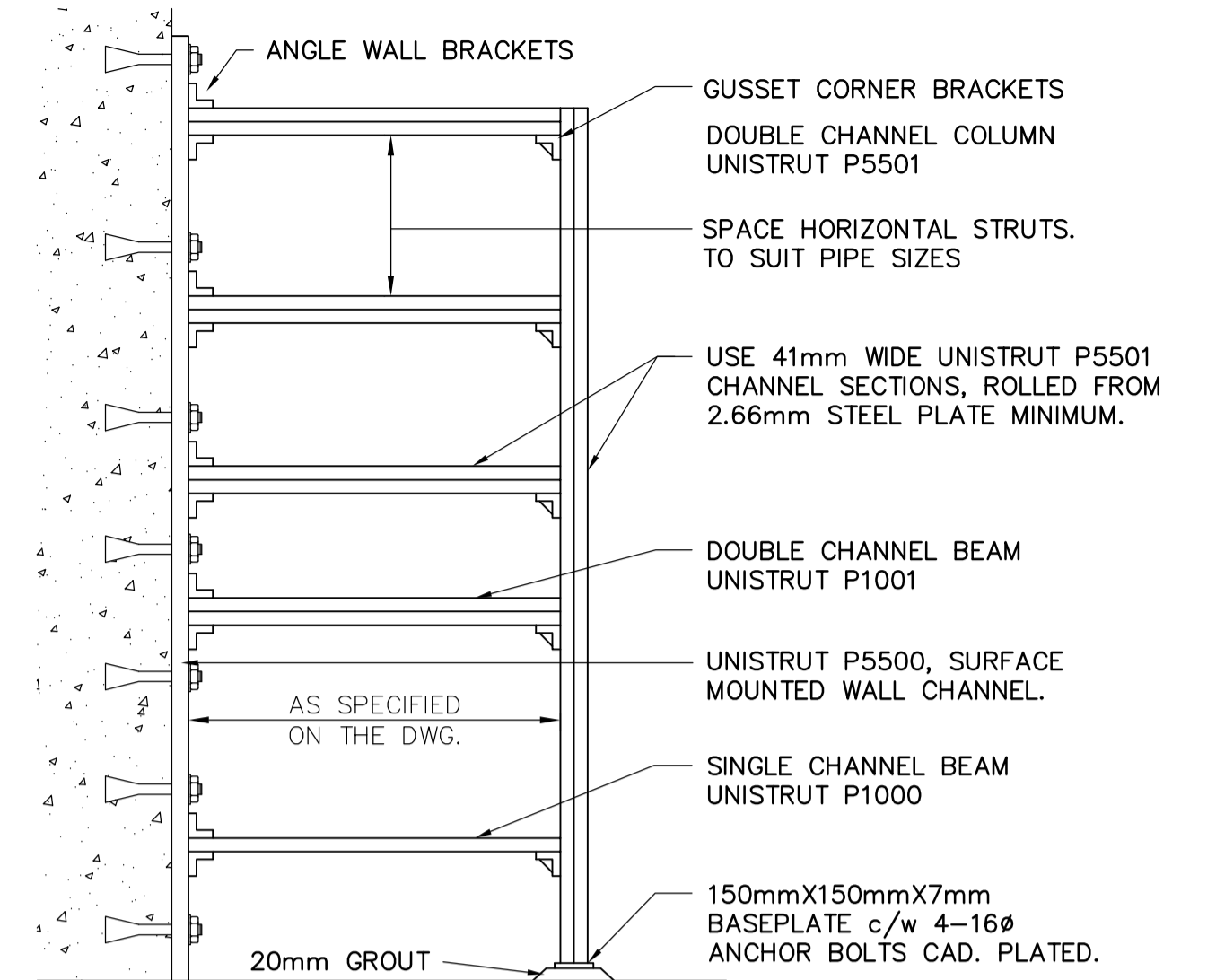
STD 209 MULTI-PIPE HANGER



PIPE DIAM. A (mm)	B	ROD Ø (mm)	MAX. REC. LOAD (kg)
300	216	12.5	2660
450	262	12.5	2660
750	445	12.5	2660
900	532	12.5	2660

MINIMUM SAFETY FACTOR = 3

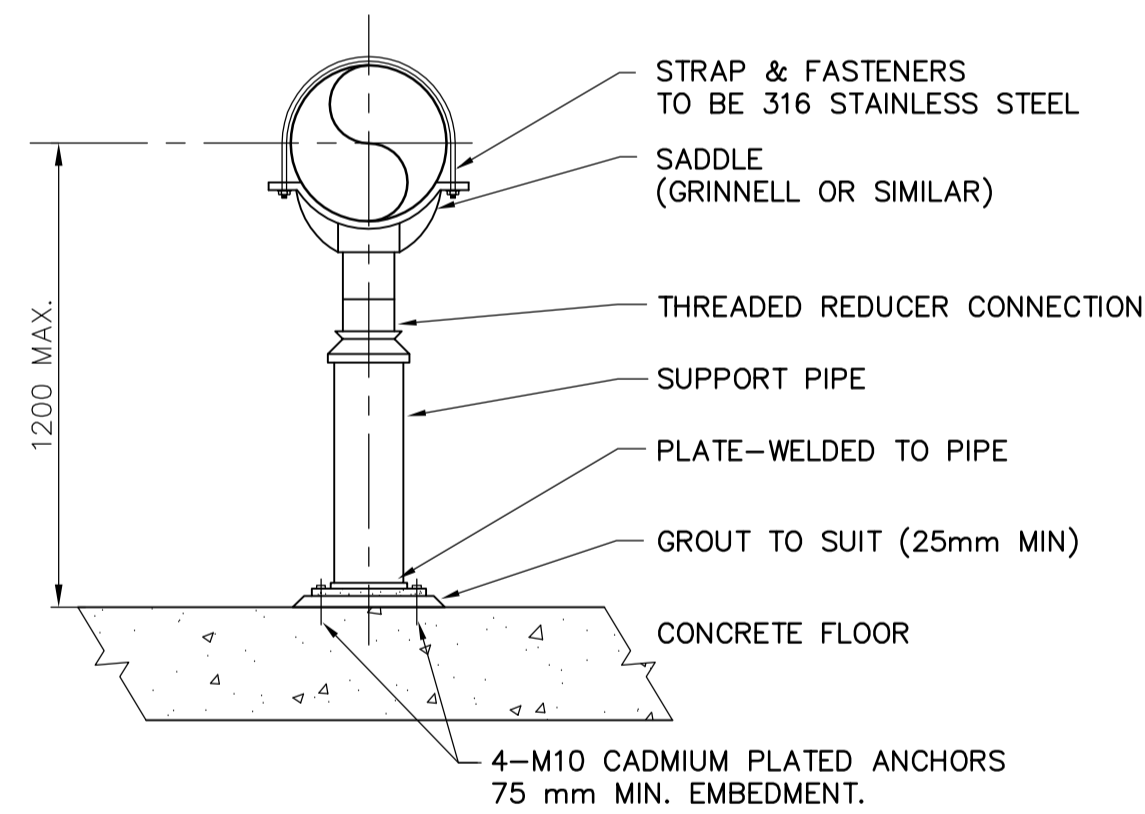
STD 210 PROTECTION SADDLE FOR PIPE HANGERS



BEAM WIDTH (mm)	MAXIMUM LOAD SINGLE CHANNEL UNISTRUT P1000 (kg)	MAXIMUM LOAD DOUBLE CHANNEL UNISTRUT P1001 (kg)	MAXIMUM LOAD COLUMN UNISTRUT P5501 (kg)	MAXIMUM LOAD DOUBLE CHANNEL UNISTRUT P5501 (kg)
600	770	1125	8400	1680
900	510	1125	8260	1680
1200	390	1080	7990	1680

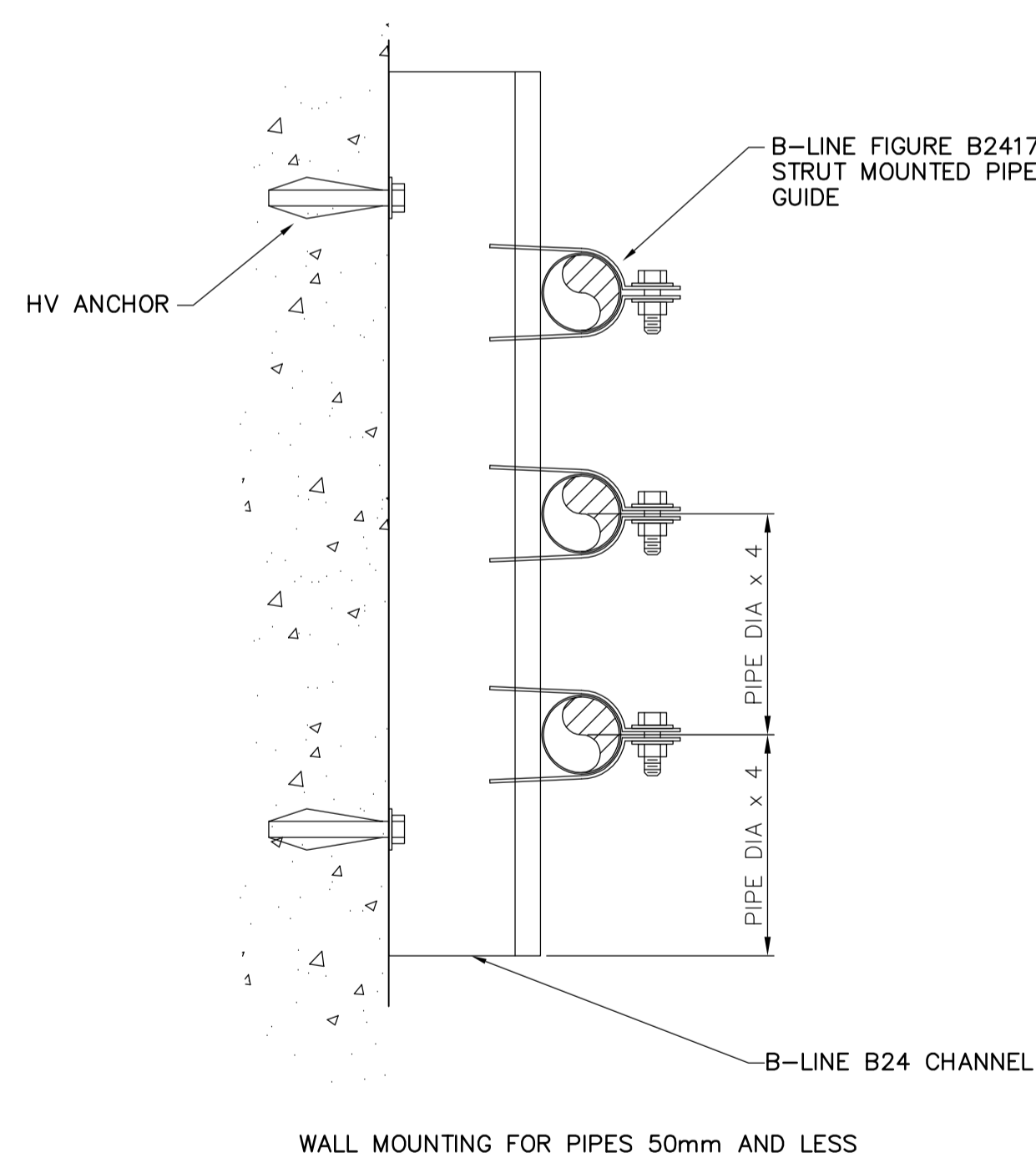
MINIMUM SAFETY FACTOR = 3

STD 211 PIPE RACK



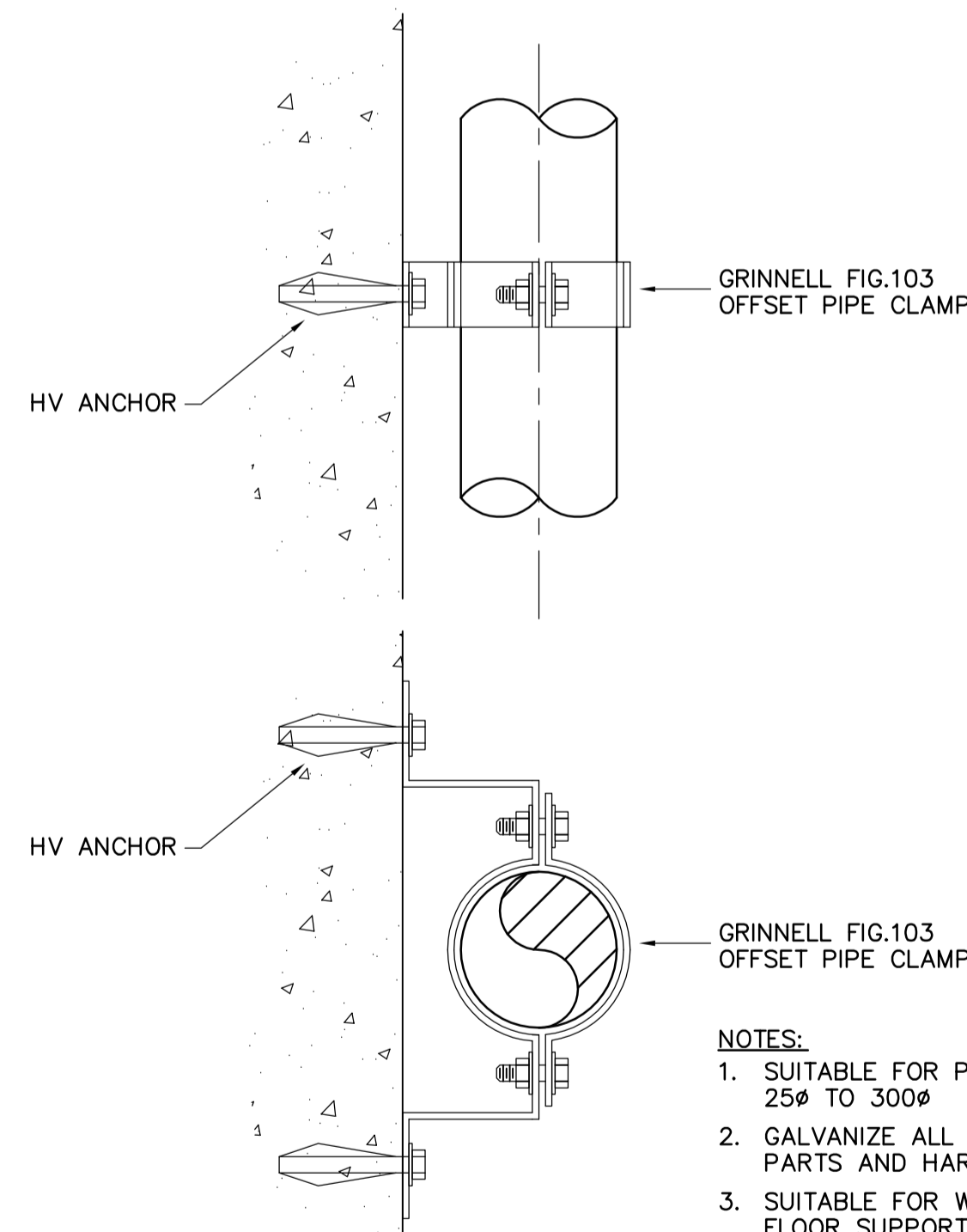
PIPE SIZE (mm)	SUPPORT PIPE (mm)	PLATE SIZE (mm)
50	38	150 X 150 X 9.5
75	50	250 X 250 X 9.5
100	75	250 X 250 X 9.5
150	100	250 X 250 X 9.5
200	150	250 X 250 X 9.5
250	200	300 X 300 X 9.5

STD 213 ADJUSTABLE PIPE SUPPORT



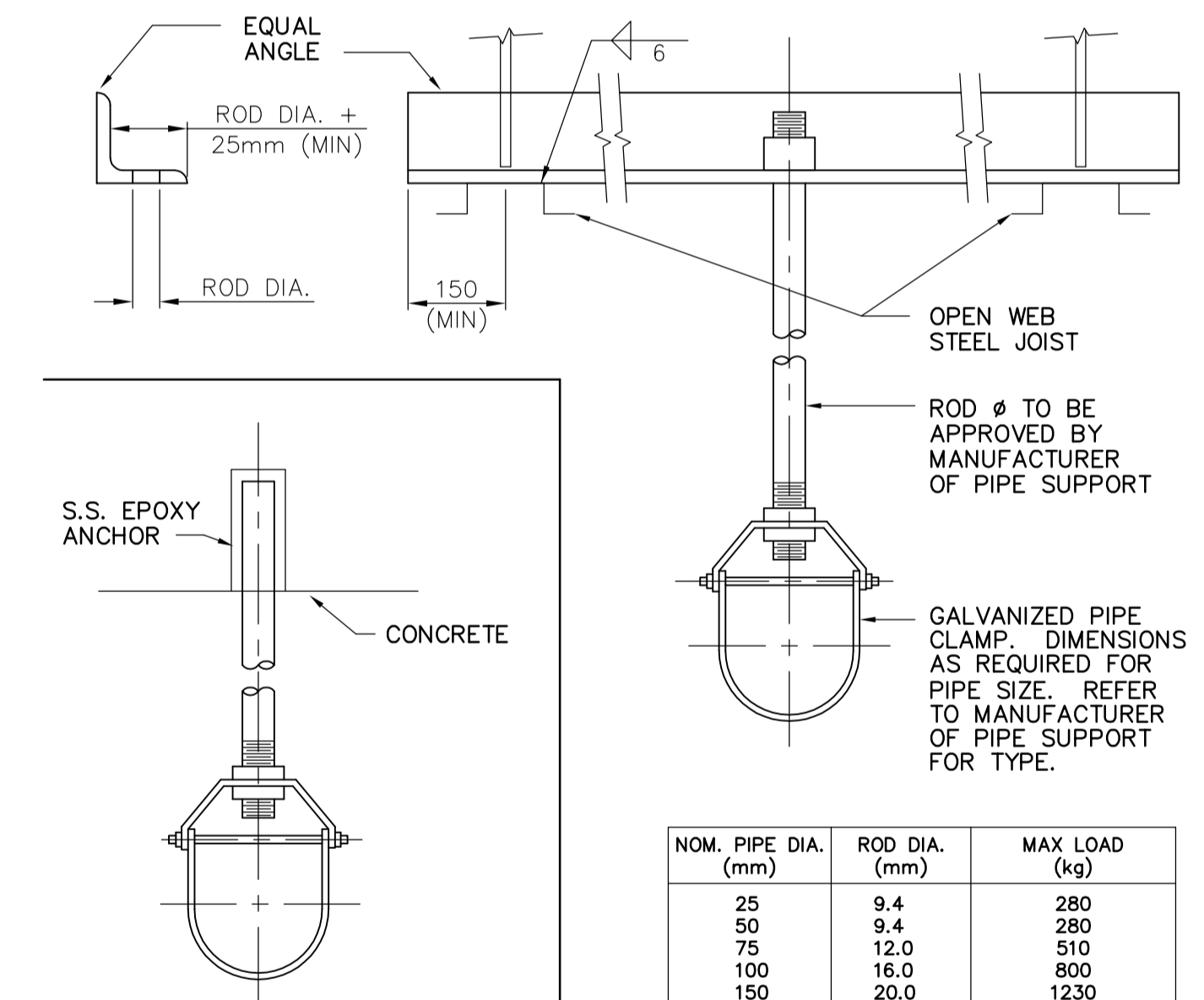
WALL MOUNTING FOR PIPES 50mm AND LESS

STD 214 SMALL PIPING WALL MOUNTED SUPPORT



NOTES:
1. SUITABLE FOR PIPES 25Ø TO 300Ø
2. GALVANIZE ALL METAL PARTS AND HARDWARE
3. SUITABLE FOR WALL OR FLOOR SUPPORTED PIPE

STD 215 OFFSET PIPE SUPPORT



NOM. PIPE DIA. (mm)	ROD DIA. (mm)	MAX LOAD (kg)
25	9.4	280
50	9.4	280
75	12.0	510
100	16.0	800
150	20.0	1230
200	22.0	1710
250	25.0	2250
300	25.0	2250
350	25.0	2250
450	25.0	2250
500	32.0	3630
600	32.0	3630

FOR PIPE HANGER SUPPORTED FROM UNDERSIDE OF CONC. SLAB/BREAM
NOTE: ALL PIPE HANGER MATERIAL IN RESERVOIR TO BE 316 SS
PROVIDE PIPE SUPPORT WITH SAFETY FACTOR = 5 GRINNELL OR SIMILAR

STD 217 PIPE HANGER



B.M. ELEV.	 A Tyco International Ltd. Company		ENGINEER'S SEAL	 THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING DIVISION	
	DESIGNED BY CL	CHECKED BY KM	ORIGINAL SIGNED BY J.E. HUTCHISON	WEWPCB BIOLOGICAL NUTRIENT REMOVAL UPGRADE CONTRACT 3	
	DRAWN BY PJY	APPROVED BY JEH	2006/04/26	CITY FILE NUMBER	
	HOR. SCALE: NONE	RELEASED FOR CONSTRUCTION BY: J. VEILLEUX	CONSULTANT DRAWING NO. LP2.02	SHEET OF	
00 ISSUED FOR TENDER	06/04/26	SRP		CITY DRAWING NUMBER	
NO. REVISIONS	DATE	BY	DATE 2005/10/06	PROCESS AREA L - GENERAL & SITWORKS STANDARD DETAILS	
			DATE 2006/04/26		