



GRATE LATCH DETAIL - TYPICAL
(SEE NOTE 9)

GRATE UNITS

NOTES:

- TYPE B GRATES SHALL BE USED IN AREAS SUBJECT TO PEDESTRIAN AND BICYCLE TRAFFIC.
- IN AREAS SUBJECT TO BICYCLE TRAFFIC, BARS SHALL BE ORIENTED AT 90° TO THE DIRECTION OF TRAFFIC.
- MAX. LOADING - EACH GRATE UNIT WILL SUPPORT A 150 kN LOAD.
- GRATE FRAME SHALL BE CONSTRUCTED FROM 75x50x5 MS ANGLE. CORNER JOINTS SHALL BE WELDED ON UNDERSIDE OF HORIZONTAL LEG AND ON THE INSIDE OF THE VERTICAL LEG WITH SIZE 5 FILLETS.
- GRATE UNITS SHALL BE MADE FROM 75x20x1035 MS BARS. THE TOP AND BOTTOM EDGES OF THE BAR ENDS SHALL BE CHAMFERED 5mm x 5mm BEFORE CONTINUOUSLY WELDING ALL AROUND AND GROUND FLUSH BEFORE GALVANIZING.
- BOTH GRATE AND GRATE FRAME SHALL BE HOT DIP GALVANIZED TO AS/NZS 4680 UNLESS SPECIFIED OTHERWISE.
- ANCHOR SPACING SHALL NOT EXCEED 400 mm.
- EXPOSED CONCRETE EDGES SHALL HAVE 10x10 CHAMFERS.
- THE LATCH SHALL BE INSTALLED SO THAT THE TONGUE ENGAGES THE SUPPORTING ANGLE WHEN THE SPRING IS COMPRESSED TO 50 % OF ITS LENGTH.
- CONCRETE SHALL BE NORMAL-CLASS N32 STANDARD STRENGTH GRADE OR HIGHER COMPLYING WITH THE REQUIREMENTS OF AS 1379. EXPOSURE CLASSIFICATIONS UP TO AND INCLUDING B1.

PIT, FRAME AND GRATE DETAILS

PIT TYPE	PIT TOP INTERNAL DIM		FRAME LENGTH	NUMBER OF GRATE UNITS	
	LENGTH	WIDTH		TYPE A	TYPE B
1	750	1000	750	3	6
2	1000	1000	1000	4	8
3	1500	1000	1500	6	12
4	2000	1000	2000	8	16
5	2500	1000	2500	10	20

ISSUE	APP'D	DATE	AMENDMENT
E	J.B.	1/8/02	AMENDMENT TO NOTE 6 AS/NZS 4680
D	J.B.	OCT'98	GRATE LATCH DETAILS AMENDED
C	J.C.	1.2.98	AMENDMENT TO NOTE 10, CONCRETE STRENGTH GRADES.
B	J.C.	1.7.95	STRENGTH & LENGTH OF ANCHOR BARS, MAX LOADING OF GRATE
A	J.C.	1.9.94	GENERAL NOTE 5, NOTES 6, 9 & 10, GRATE LATCH & INVERT DEPTH.

GENERAL NOTES
1. STANDARD PITS DIMENSIONING AND SETTING OUT DETAILS
2. UNHAUNCHED PITS
3. HAUNCHED PITS
4. STEP IRONS
5. ALL DIMENSIONS ARE IN MILLIMETRES

DESIGNED PRINCIPAL ROAD DESIGN ENGINEER SD 1001 SD 1011 APPROVED SD 1021 SD 1041 <i>Russ Green</i> 16.9.94
CATALOG: PRED PROJECT: sddgnnew

FILE NO.	CONTRACT NO.	SHEET NO.	DRAWING NO.	ISSUE
			SD 1431	E

STANDARD DRAWING
GRATED PIT
FLUSH STEEL GRATE