

NOTES:

1. THE CAST IRON USED SHALL CONFORM WITH ASTM A-48 CLASS 35B.
2. THE FRAME AND COVER SHALL BE COATED WITH ASPHALTUM OR BITUMINOUS PAINT AFTER TESTING AND INSPECTION.
3. ALL LETTERS SHALL BE FLUSH WITH THE FINISHED SURFACE OF THE COVER.
4. COVERS AND FRAMES SHALL BE MANUFACTURED IN THE UNITED STATES.
5. FOUNDRY IDENTIFYING MARK, HEAT AND DATE SHALL BE CAST ON THE BOTTOM OF THE COVER AND ON THE INSIDE OF THE FRAME.
6. WEIGHT OF FRAME AND COVER SHALL BE 430 POUNDS. ACTUAL WEIGHTS SHALL BE WITHING A RANGE OF 95% TO 110%.
7. THE MANHOLE FRAME AND COVER SHALL BE INSPECTED BY THE ENGINEER PRIOR TO SHIPMENT TO THE JOB SITE. ACCEPTANCE WILL BE INDICATED BY THE AGENCY'S MARK.
8. THE PROOF-LOAD FOR TEST METHOD B OF THE STANDARD SPECIFICATIONS IS 51,100 POUNDS.
9. COVERS FOR MANHOLES SHALL BE PROVIDED WITH SOCKET SET SCREW LOCKING DEVICES. DRILL AND TAP TWO HOLES TO A DEPTH OF ONE INCH AT 90 DEGREES TO PICK HOLE AND INSTALL 3/4" X 3/4" STAINLESS STEEL SOCKET SET SCREWS WITH 3/8" RECESSED HEX HEAD. ALL THREADS SHALL BE N.C.
10. IF SUBJECT TO CONTAINER EQUIPMENT LOADING DESIGN SHALL BE FOR 100 KIP WHEEL LOADS PLUS 25 KIP IMPACT LOADS. NEENAH FOUNDRY R-3492-A OR EQUAL.
11. ALHAMBRA FOUNDRY A-1252-6 TRAFFIC LOADING.

30" MANHOLE SHAFT

THE PORT OF LONG BEACH ENGINEERING DIVISION

REVISIONS		MANHOLE FRAME AND COVER	STANDARD PLAN
NO.	DATE		SS-10
△		APPROVED BY: _____ CHIEF HARBOR ENGINEER R.E. NO.: _____ DATE: _____	2 OF 5
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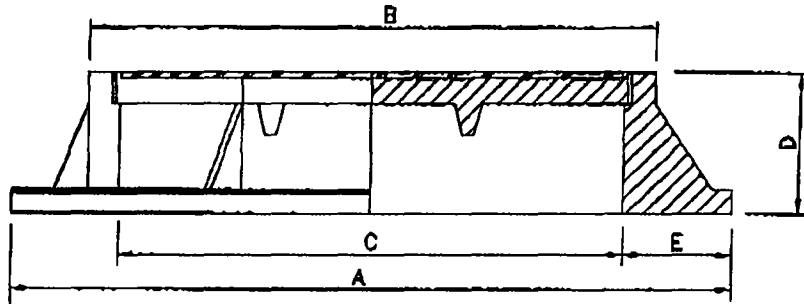
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5. FOUNDRY IDENTIFYING MARK, HEAT AND DATE SHALL BE CAST ON THE BOTTOM OF THE COVER AND ON THE INSIDE OF THE FRAME.
6. WEIGHT OF FRAME AND COVER SHALL BE 675 POUNDS. ACTUAL WEIGHTS SHALL BE WITHING A RANGE OF 95% TO 110%.
7. THE MANHOLE FRAME AND COVER SHALL BE INSPECTED BY THE ENGINEER PRIOR TO SHIPMENT TO THE JOB SITE. ACCEPTANCE WILL BE INDICATED BY THE AGENCY'S MARK.
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10. IF SUBJECT TO CONTAINER EQUIPMENT LOADING, DESIGN SHALL BE FOR 100 KIP WHEEL LOADS PLUS 25 KIP IMPACT LOADS. NEENAH FOUNDRY R-3492-A OR EQUAL.
11. ALHAMBRA FOUNDRY A-1251 TRAFFIC LOADING.

36" MANHOLE SHAFT

THE PORT OF LONG BEACH ENGINEERING DIVISION

REVISIONS		MANHOLE FRAME AND COVER	STANDARD PLAN
NO.	DATE		SS-10
△			
△			
△			
APPROVED BY: _____		R.E. NO.: _____	DATE: _____
CHIEF HARBOR ENGINEER			4 OF 5



SIZE	30	36
A	38	44
B	33	39
C	30	36
D	6	6
E	4	4

SIZE	LONG BEACH IRON WORKS	ALHAMBRA FOUNDRY	NEENAH FOUNDRY	SOUTH BAY FOUNDRY	PONT-A- MOUSSON
30"	X-163	A-1252-6	R-1582	SBF 1252-6	CLASS 400
36"	X-106A	A-1251	R-1739-A	SBF 1251-6	N.A.

1. 48" & 60" MANHOLES SHALL HAVE 30" COVERS. 72" MANHOLES SHALL HAVE 36" COVERS.
2. WHERE FRAME AND COVER ARE SET 18" ABOVE GRADE, 4½" DIA. INSERTS FOR ADJUSTABLE STUDS SHALL BE CAST IN TOP GRADE RING, ALIGNED AS DETAILED ABOVE. FRAME SHALL BE BOLTED TO GRADE RING.
3. IF SUBJECT TO CONTAINER EQUIPMENT LOADING, DESIGN SHALL BE 100 KIP WHEEL LOADS PLUS 25 KIP IMPACT LOADS.

THE PORT OF LONG BEACH ENGINEERING DIVISION

REVISIONS		MANHOLE FRAME AND COVER	STANDARD PLAN
NO.	DATE		SS-10
▲		APPROVED BY: _____ CHIEF HARBOR ENGINEER R.E. NO.: _____ DATE: _____	5 OF 5
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