MANHOLE FRAME AND COVER

SECTION

MANHOLE FRAME AND COVER

SYMMETRICAL ABOUT 

R = 20 1/8"
R = 16 11/16"
R = 16 9/16"
R = 12 1/2"
9 5/8"
3 1/2"

1/2" N.C. x 1" LONG CAP SCREW
WITH WASHER AND GASKET
(SEE EYEBOLT DETAIL HEREON)
(SEE NOTES 3 AND 6)

1/2" N.C. NUT
(TYP)

1/2" x 10" ANCHOR BOLT (TYP)
(2 REQUIRED)

SEE EYE BOLT DETAIL HERE ON

2 1/8" WIDE (MIN.) GASKET
(SEE NOTE 6)

1/2" CLASS B MORTAR (TYP)

3 - 4 1/4"

MANHOLE WALL
(CONCRETE, MORTAR,
OR OTHER MATERIAL)
(SEE NOTE 9)

1/16" HOLES (TYP)

SEE NOTE 4)

DETAIL OF FRAME

MACHINE FINISHED SURFACE

1/8"
2 1/4"
7/8"
5/8"
2 1/4"

5/32" 5/32"

1 1/2"

6 5/8"

1 1/4"

3/16"

1/8"

1/2" N.C. THREADS (TYP)

(SEE NOTE 4)

DETAIL OF BOLT HOLE SPACING IN FRAME

3/8" STEEL PRESSURE PLATE
(SEE NOTES 3 AND 6)

DRILL AND TAP FOR 1/2"
N.C. THREADS (TYP)

2" DIA. GASKET
(SEE NOTE 6)

1/2" N.C. THREADS (TYP)

3/8" STEEL PRESSURE PLATE

1/2" N.C. THREADS (TYP)

1/2" DIA. WASHER

1/4" MINIMUM

EYEBOLT DETAIL
(2 REQUIRED)

3/8" STEEL PRESSURE PLATE

P R E S S U R E P L A T E

3/8" STEEL PRESSURE PLATE

BUREAU OF ENGINEERING
DEPARTMENT OF PUBLIC WORKS
CITY OF LOS ANGELES

PRESSURE MANHOLE FRAME AND COVER

STANDARD PLAN

S-284-2

REVISIONS

SUPERSEDES

REFERENCES

VAULT INDEX NUMBER S-4050

SHEET 1 OF 2 SHEETS
NOTES:

1. Except as otherwise indicated hereon, the manhole frame and cover shall conform to Standard Plan S-283. Manhole frame and cover, 30 inch. The weight requirement for the frame indicated on Standard Plan S-283 shall not apply.

2. Manhole frame and cover shall be cast iron conforming to Section 206-3 of the Standard Specifications.

3. The pressure plate shall be steel conforming to ASTM A-36, and shall be galvanized after fabrication, but before installation of any hardware.

4. Cap screws and eyebolts, including washers and nuts attached thereto, shall be fabricated from any series 300 stainless steel.

5. Unless otherwise indicated, all steel hardware shall conform to Section 206-1.2 of the Standard Specifications.

6. All steel, except stainless steel, shall be galvanized in conformance with Section 210-3 of the Standard Specifications after fabrication.

7. All holes in cast iron shall be drilled after casting or plugged prior to casting. They shall not be punched.

8. All iron castings shall receive an asphaltic coating after fabrication, conforming to Section 206-3.6 of the Standard Specifications.

9. Gasket material shall be 1/16 inch thick neoprene, minimum meeting the requirements of Section 210-2.3.3 of the Standard Specifications. Pressure plate gasket shall be 2’-7-1/4” O.D.

10. All nuts and bolts shall be tightened to a minimum torque of 25 foot-pounds.

11. Manhole frame and cover and pressure plate assembly shall be tested for accurate fit prior to delivery to jobsite and marked in sets.