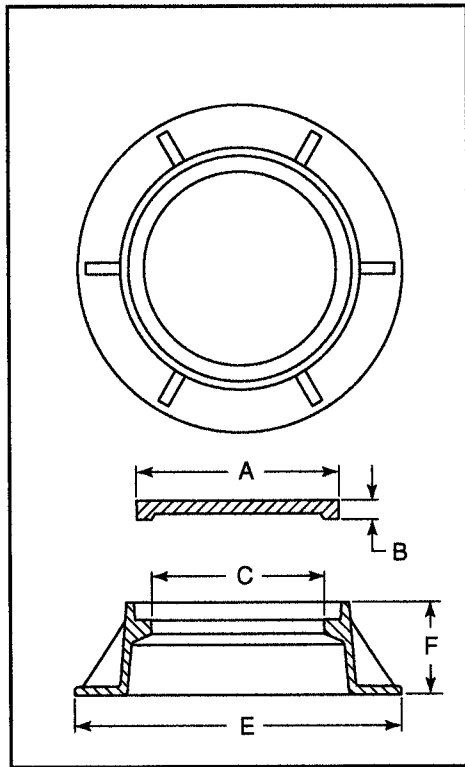


Manhole Frames and Lids

The following table summarizes many of the standard and special manhole frames and lids currently available. The table is organized by clear opening "C" to assist you in dimensional searching. All catalog items are organized numerically in the pages that follow.

Catalog No.	Dimensions in inches				
	A	B	C	E	F
R-1970	7	2 1/8	5 3/4	13 1/8	7
R-1971	8	3/4	6 1/2	10 1/2	10
R-1973-1	7 3/4	3/4	6 3/4	13 1/4	7
R-1973-A	8 7/8	11/16	7 3/4	15 3/4	8
R-1974-A	9	1	8	16	6 1/2
R-1792-AL	10 1/4	1 1/2	8 1/2	14 1/2	4
R-1975	9 1/2	1/2	8 1/2	20	11
R-1977	11 1/2	1 1/2	8 1/2	16	12
R-1975-A	9 7/8	7/8	9	15 1/2	6
R-1975-A2	10	1	9 1/4	16	8
R-1976	11 1/4	1 1/4	10	20	8
R-1791-A	12	1	11	19	4
R-1795-A	12 1/16	1	11	19 x 19	4
R-1914-A	12	1/2	11	20	4
R-1914-B	12	1/2	11	20	4
R-1916-A	12	1 1/8	11	19	4
R-1792-BL	13 1/4	1 1/2	11 1/2	17 1/2	4
R-1911-B	15	1	11 3/4	27 1/4	4
R-1748	13 3/8	3/8	12 1/2	16	4
R-1791-B	15 1/4	3/8	14 1/2	20 1/2	4 1/4
R-1792-CL	16 1/4	1 1/2	14 1/2	20 1/2	4
R-1910-E	15 1/4	3/8	14 1/2	20 1/2	4 3/4
R-1910-B	15 5/8	1 3/8	14 11/16	23	4 11/16
R-1791-C	15 5/8	1 3/8	14 3/4	21	4 3/4
R-1910-C	15 5/8	1 3/8	14 3/4	21	4 3/4
R-1795-B	15 5/8	1 3/8	15	23 x 23	5
R-1910-D	15 5/8	1 3/8	15	22	3
R-1891	16 9/16	1	15 1/8	21 3/4	4 3/8
R-1792-DL	18 1/4	1 1/2	16 1/2	22 1/2	4

Catalog No.	Dimensions in inches				
	A	B	C	E	F
R-1900-A	18	1 1/4	16 3/4	30	8
R-1791-E	18	1	17	25	4 1/2
R-1910-A	18	1	17	25	4 1/2
R-1916-B	18	1	17	25	4 1/2
R-1799-D	19 3/4	1	17 1/2	21 3/4	1 5/8
R-1795-C	19 1/2	1 1/2	17 3/4	29 1/2 x 29 1/2	5 1/2
R-1566	20	2 3/16	18	29	4
R-1755-B	23	1 1/2	18	36	9
R-1758-B	23	1 1/2	18	36	9
R-1791-F	20 1/2	5/8	18	30	5
R-1791-G	19 1/2	1 1/2	18	29	5 1/2
R-1796-B	19 1/2	1 1/2	18	29	5 1/2
R-1799-E	19 1/2	1 1/2	18	21 1/4	2
R-1892	20 1/16	1	18 5/8	29	5 3/8
R-1645-A	20 3/8	1 1/2	18 7/8	19 5/8	4
R-1551	21 1/8	1 3/8	19 1/2	37	9 5/8
R-1890	20 5/8	3/4	19 1/2	34	9
R-1920	21 3/4	1	19 3/4	32 1/4	8 3/4
R-1500	22	1 1/2	20	33	8
R-1510-A	22	1 1/2	20	32	6
R-1645	22 3/4	1 3/4	20	25	4 1/2
R-1700-A	22	1 1/2	20	36	6 1/2
R-1705	21 3/4	1 3/8	20	30	9 3/4
R-1707	22 1/2	1 1/2	20	34	9 1/2
R-1710	22	1 1/2	20	35	9
R-1755-C	24	1 1/2	20	35	7 1/2
R-1758-C	24	1 1/2	20	35	7 1/2
R-1755	22 1/4	1 1/2	20	32	8 3/4
R-1784	21 3/4	1 1/8	20	36	8 1/2
R-1795-D	22	1 1/2	20	32 x 32	6
R-1795-E	22	1 1/2	20	33 x 33	8
R-1796-C	22	1 1/2	20	32	6
R-1897	21 3/4	1 1/4	20	30 1/2 x 30 1/2	6 1/4
R-1915-S1	21 1/2	7/8	20 1/16	32	5
R-1661	22 3/4	1 1/2	20 3/32	37 13/32	9 27/32
R-1661-A	22 3/4	1 1/2	20 3/32	37 13/32	6
R-1570-A	22 7/8	1 1/4	20 1/8	32	7
R-1524-B	22 1/2	2 5/8	20 1/4	34 1/4	6 1/4
R-1799-G	22 1/4	1 1/2	20 3/8	24 3/8	2 1/4
R-1690	22	1 1/2	20 15/32	27 9/16	4
R-1580	22 1/2	1 3/4	20 1/2	36	6
R-1689	23	1 1/2	20 1/2	36	4
R-1690-A	22	1 1/2	20 1/2	28	4
R-1696	21 7/8	5/8	20 1/2	39	6
R-1711-A	22	1 1/2	20 1/2	30	6
R-1711-B	22	1 1/2	20 1/2	30	6
R-1761	22	1 1/2	20 1/2	28 1/4	6
R-1779	21 3/4	1	20 1/2	33	8 1/4
R-1792-EL	22 1/4	1 1/2	20 1/2	26 1/2	4
R-1799-H	22 3/4	1 3/4	20 1/2	25 1/2	3
R-1916-C1	24	1 3/8	20 5/8	31	6
R-1537	22 1/4	1	20 3/4	24 7/8	4
R-1919	22 3/4	1 3/4	20 3/4	32 3/8	5 1/2
R-1530	23	1 3/4	20 7/8	36	9
R-1540	23	1 1/2	21	36	9
R-1916-C	23	1 1/2	21	36	9
R-1550-LM	23	1 1/2	21	36	9
R-1672	22 3/4	1 3/4	21	31 1/8	14 1/2
R-1677-A	22 3/4	1 3/4	21	36	9
R-1680	22 5/8	2 1/4	21	32	7
R-1712	22 3/4	1 3/4	21	36	9
R-1713	22 3/4	1 3/4	21	34	9
R-1715	22 3/4	1 3/4	21	36	9
R-1737	22 1/4	1 1/8	21	24 7/8	4



Catalog No.	Dimensions in inches				
	A	B	C	E	F
R-1758-D	25	1 1/2	21	38	9
R-1762	22 1/4	1	21	30	9 3/4
R-1762-A	22 1/4	1	21	28 1/2	4 3/4
R-1772	22 3/4	1 3/4	21	34	7
R-1775	23 5/8	1 1/4	21	37 1/2	7 1/16
R-1788-A	23 3/4	3	21	31 3/4	7
R-1900-B	23	1 1/2	21	36	9
R-1911-A	26	1 1/2	21	30 1/2	5
R-1916-C2	24 1/4	1 3/4	21	36	9
R-1926	22 3/4	1 3/4	21	34	7
R-1927	22 3/4	1 3/4	21	34	9
R-1550	23	1 1/2	21 1/16	35 7/16	8 7/8
R-1550-A	23	1 1/2	21 1/16	35 7/16	8 7/8
R-1788-A1	23 13/16	3	21 1/16	31 1/2	7 1/16
R-1788-B	23 13/16	3	21 1/16	31 1/2	7 1/16
R-1774	23 3/8	3/4	21 1/8	34 1/4	4
R-1788-D	23 5/8	3	21 1/8	34 3/4	7
R-1960	22 3/4	1 3/4	21 1/8	29	6
R-1646	22 3/4	1 3/4	21 1/4	34	4 1/4
R-1647-A	22 3/4	1 3/4	21 1/4	34	4
R-1536-1	23 1/4	1 1/4	21 5/16	33 1/2	8 3/4
R-1536-B	23 1/4	1 1/4	21 3/8	34	9
R-1785	23 3/4	1	21 15/32	37 13/32	8 7/8
R-1654	23 1/4	7/8	21 1/2	36	7 3/4
R-1776	22 1/2	1 1/4	21 1/2	29	6
R-1917	28	1 1/2	21 1/2	38	5 1/4
R-1916-D	24	1 1/2	21 5/8	35	7 1/2
R-1664-A	23 3/4	1	21 21/32	37 13/32	7 3/32
R-1714	23 13/16	1 25/32	21 21/32	33 15/32	6 7/8
R-1799-K	24	3/4	21 3/4	26	1 1/4
R-1555	24	1 3/8	21 3/4	34	8
R-1678-A	23 3/4	1	21 3/4	35	7
R-1697	23 7/8	1 1/8	21 3/4	48	8
R-1789-B	23 1/4	1	21 3/4	32 1/4	6 5/8
R-1924	23 1/2	1 1/2	21 3/4	32 1/4	4 1/2
R-1925	24	1 1/8	21 7/8	36	8
R-1536	23 1/4	1 1/4	22	33 1/2	8 3/4
R-1538	23 1/4	1 1/4	22	34	3
R-1579	23 5/8	1	22	26	1 1/2
R-1585	24	1 1/2	22	31 3/4	4 1/2
R-1596	23 3/4	2 1/2	22	32	5
R-1656	23 3/4	1 3/4	22	36	8
R-1669-A1	24	1	22	34	7
R-1673-A	24	1 1/2	22	31	14 1/2
R-1676-A	23 1/2	1	22	33 1/2	8 1/2
R-1703	23 7/8	1 3/16	22	34	8 1/16
R-1736	23 1/4	1 1/4	22	34	9
R-1736-A	23 1/4	1 1/4	22	33 1/2	8 3/4
R-1755-E	26	1 1/2	22	38	7
R-1758-E	26	1 1/2	22	38	7
R-1771	23 3/4	1	22	37 1/2	9
R-1780-A	24	2	22	35	7
R-1795-F	24	1 1/2	22	35 x 35	7 1/2
R-1795-G	24 3/4	1 1/4	22	36 x 36	9
R-1797	23 1/4	1	22	33 1/2	8
R-1915-E	25 1/4	1	22	28 1/2	6
R-1915-E2	25 1/4	1	22	28 1/2	6
R-1921	23 3/4	1	22	33	5
R-1924-1	23 1/4	1	22	33	9
R-1940-A	24	1 1/2	22	35	6 1/4
R-1552	24	1 3/8	22 1/8	33	6
R-1706	23 7/8	1	22 1/8	34	7 1/2
R-1572	25 11/16	1 1/2	22 1/4	33	6
R-1598	23 3/4	1	22 1/4	32	6
R-1648	23 7/8	1 1/4	22 1/4	35	6
R-1649	23 7/8	1 1/4	22 1/4	35	8
R-1668	23 3/4	1 1/2	22 1/4	34	7
R-1670-A	24	1 1/2	22 1/4	34 21/32	7 15/32
R-1687	24	2 1/2	22 1/4	31	6
R-1694	23 1/2	1	22 1/4	27	4
R-1706-1	23 7/8	1	22 1/4	30	4

Catalog No.	Dimensions in inches				
	A	B	C	E	F
R-1726-A	24	1 1/2	22 1/4	34 21/32	7 15/32
R-1734-B	24 1/2	2	22 1/4	35 1/2	8
R-1764	24	1 1/2	22 1/4	37	7
R-1786	23 3/4	3/4	22 1/4	34	7
R-1796-D	24	1 1/2	22 1/4	34 21/32	7 15/32
R-1900-B1	24	1 1/2	22 1/4	35	7 1/2
R-1657-1	24	1	22 3/8	34	7
R-1688	24	2	22 3/8	30	5
R-1781	24	2	22 3/8	35	7
R-1553	24	1 3/8	22 1/2	31 3/4	3
R-1554	24	1 3/8	22 1/2	34	7
R-1923	24	1 1/2	22 1/2	35	6 1/2
R-1534-A	24 1/32	1 9/16	22 5/8	31 1/2	4 17/32
R-1535-A	24 1/32	1 9/16	22 5/8	34 1/16	9 1/16
R-1535-C	24 1/32	1 9/16	22 5/8	34 1/16	9 1/16
R-1671	24 3/4	1	22 5/8	36	7 1/4
R-1767	24 3/4	1	22 5/8	36	7 1/4
R-1767-4	24 3/4	1	22 5/8	29 1/2	4
R-1599-A	24	1 5/16	22 3/4	32	5 7/8
R-1658	24	1	22 3/4	36 3/4	9
R-1782	24	2	22 3/4	35	8
R-1787-A	23 3/4	1	22 13/16	31 1/4	4 5/8
R-1560	25 3/8	2	23	39	8
R-1590	25 3/4	7/8	23	30 1/2	7
R-1729	25 1/2	2	23	38	10 1/2
R-1760	25	1 1/2	23	38	9
R-1760-1	25	1 1/2	23	38	4
R-1760-A	25	1 1/2	23	38	9
R-1787	23 3/4	1	23	31 1/4	4 5/8
R-1889	25 3/8	1 1/4	23	38 1/2	7
R-1916-E	25	1 1/2	23	38	9
R-1955	25 3/4	7/8	23	35 1/2	11 1/2
R-1728-B	25 5/8	1	23 1/8	31 7/8	4
R-1915-G	25 3/4	1 1/2	23 1/8	36	7 1/2
R-1915-G2	25 3/4	1 1/2	23 1/8	30 3/4	7 1/2
R-1915-H	25 3/4	1	23 1/4	32	8
R-1915-H2	25 3/4	1	23 1/4	30 3/4	8
R-1573	24 7/8	1	23 5/16	34	6
R-1777	24 3/4	1	23 3/8	33 1/4	7
R-1723	26	1 7/8	23 1/2	35 3/4	8
R-1792-FL	25 1/4	1 1/2	23 1/2	29 1/2	4
R-1728	25 5/8	1	23 5/8	31 7/8	8
R-1574	25 1/4	1 1/2	23 13/16	31 5/8	4 3/16
R-1922	26 1/16	1 1/16	23 13/16	34 3/16	8
R-1653-D	26 3/4	1 5/8	23 7/8	40 1/2	8
R-1720	26	1 1/8	23 7/8	34 1/8	8 1/8
R-1556	25 3/4	1 3/8	24	34 1/2	8
R-1556-A	25 3/4	1 3/8	24	34 1/2	4
R-1559	25 3/4	1 3/8	24	38 1/4	8
R-1565	25 7/8	2 1/2	24	34	9
R-1565-A	25 7/8	2 1/2	24	34	4
R-1575	27 1/8	1 1/2	24	32 1/2	6
R-1593	25 3/4	1 1/8	24	32	4
R-1595	26 1/8	1 3/16	24	33 3/4	6
R-1597	25 3/4	2 1/4	24	28	2 3/4
R-1640-A	26	1 3/8	24	43	10
R-1642-A	26	1 1/2	24	34	5
R-1643	25 3/4	1 1/2	24	35	7 1/2
R-1653-A	26 5/8	1 3/8	24	39 1/4	6
R-1653-E	26 5/8	1 5/8	24	41	6
R-1653-F	26 5/8	1 5/8	24	46	9
R-1673-C	26 3/4	1 1/2	24	34 5/8	14 1/2
R-1684	25 1/2	2 1/2	24	36	7
R-1695	25 1/4	1 1/8	24	31 1/2	4 1/2
R-1720-A	26	1 1/8	24	34 1/2	8
R-1733	25 3/4	7/8	24	35 7/16	7
R-1733-1	25 3/4	7/8	24	35 7/16	4
R-1735	25 1/2	7/8	24	35	9
R-1750-A	26	1 3/8	24	43	10
R-1755-E1	30	1 1/2	24	39 3/16	6 1/2
R-1757-G	29	1 3/4	24	35	6

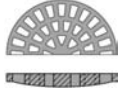
Catalog No.	Dimensions in inches				
	A	B	C	E	F
R-1769-A	25 1/4	1 1/2	24	35 1/4	8
R-1783-A	25 3/8	1 7/16	24	33 1/2	5 1/8
R-1794-J	26	1 1/8	24	34 x 34	4
R-1916-F	26	1 1/2	24	36	7
R-1960-A	26	1 1/2	24	32 1/2	6
R-1642-LM	26	1 1/2	24	35 7/8	7
R-1642	26	1 1/2	24 1/8	35 7/8	6 15/16
R-1796-E	26	1 1/2	24 1/8	35 7/8	6 15/16
R-1900-C	26	1 1/2	24 1/8	35 7/8	6 15/16
R-1650-LM	25 7/8	1 1/2	24 1/8	34	4
R-1733-A	25 3/4	7/8	24 1/8	35 1/2	8
R-1733-B	25 3/4	7/8	24 1/8	35 1/2	9
R-1733-C	25 3/4	7/8	24 1/8	35 1/2	10
R-1755-F2	28 3/4	1 3/8	25	37 1/4	7
R-1755-F2LM	28 3/4	1 3/8	25	37 1/4	7
R-1916-T	28	1	25	35	5
R-1683	27 1/2	2 7/16	25 1/8	35 7/8	7
R-1773	27 1/2	1	25 3/4	34 1/2	4
R-1773-A	27 1/2	1	25 3/4	34 1/2	4
R-1635	28	3	26	37 1/2	12
R-1682	27 7/8	1 3/8	26	38 1/4	4 3/8
R-1682-1	27 7/8	1 3/8	26	38 1/4	4 3/8
R-1792-GL	28 1/4	1 1/2	26 3/8	32 1/2	4
R-1576	30 1/8	1 1/2	27	35 1/2	6
R-1640-B	29	1 3/8	27	46	10
R-1640-B1	29	1 3/8	27	46	5 5/8
R-1750-B	29	1 3/8	27	46	10
R-1750-B1	29	1 3/8	27	46	5 5/8
R-1750-B2	29	1 3/8	27	46	3 1/2
R-1751-A	33 7/16	1 1/2	27	43 1/2	11
R-1753-B	28 3/4	1 3/8	27	37 1/4	3
R-1915-J	29	1 3/4	27	35	6
R-1915-J2	29	1 3/4	27	34	6
R-1753-A	28 3/4	1 3/8	27 1/8	37 1/4	7
R-1753-ALM	28 3/4	1 3/8	27 1/8	37 1/4	7
R-1581-A	31	1	27 1/2	37	2
R-1749-A	29 1/4	3/4	27 3/4	32	1 1/2
R-1564	30	1 3/8	28	41	8
R-1754-A	29 5/8	1 1/2	28	36	4
R-1755-G	32	1 1/2	28	46	7
R-1755-G1	32	1 1/2	28	40	6 1/2
R-1758-G	32	1 1/2	28	46	7
R-1798	30	1 1/4	28	37 1/2	8
R-1798-1	30	1 1/4	28	36	4
R-1563	30	1 1/2	28 1/4	40	6 1/2
R-1557	31 3/4	1 3/8	30	41	6 1/2
R-1557-A4	32	1 1/2	30	36	4
R-1558	31 3/4	1 3/8	30	41	8
R-1582	32 1/4	1 1/4	30	38	6
R-1582-A	32 1/4	1 1/4	30	38	6

Catalog No.	Dimensions in inches				
	A	B	C	E	F
R-1640-C	32	1 3/8	30	49	10
R-1640-C1	32	1 3/8	30	49	5 5/8
R-1640-C1S	32	1 3/8	30	46	5 5/8
R-1640-CS	32	1 3/8	30	46	10
R-1740-B	32	1 1/2	30	46	7
R-1743	31 3/4	1 3/4	30	39 1/4	6
R-1743-LM	31 3/4	1 1/2	30	39 1/4	6
R-1750-C	32	1 3/8	30	49	10
R-1750-C1	32	1 3/8	30	49	5 5/8
R-1750-C1S	32	1 3/8	30	46	5 5/8
R-1750-CS	32	1 3/8	30	46	10
R-1751-C	36 7/16	1 1/2	30	46 1/2	11
R-1795-K	32	1 1/2	30	46 x 46	7
R-1796-F	32	1 1/2	30	46	7
R-1799-O	32	1	30	34	2 1/4
R-1900-D	32	1 1/2	30	46	7
R-1900-D1	31 7/8	1 1/2	30	34	2 1/4
R-1916-H	32	1 1/2	30	46	7
R-1916-H1	31 3/4	1 3/4	30	39 1/4	6
R-1581	34 1/8	1	30 1/8	36	2
R-1557-A	32	1 1/2	30 9/32	40	6 1/2
R-1747	32 1/2	1 1/2	30 1/2	48	10
R-1749-B	32 1/4	3/4	30 3/4	35	1 1/2
R-1749-B1	32 1/4	3/4	30 3/4	40 1/2	1 1/2
R-1794-EB	34	1	32	40 1/2 x 40 1/2	3 1/2
R-1586	34 1/2	1 1/2	32 1/2	38 1/2	4
R-1740-C1	34 1/2	1 1/2	32 1/2	38 1/2	4
R-1792-HL	34 1/4	1 1/2	32 1/2	38 1/2	4
R-1794-M1	34	1	32 3/4	46 x 46	7 3/4
R-1752	36	1 1/2	34	45	8 5/8
R-1578	37 3/4	1 1/2	36	47 1/2	6
R-1640-D	38	1 1/2	36	49	10
R-1739-A	37 3/4	1 1/2	36	47 1/2	6
R-1740-D	38	1 1/2	36	49	10
R-1740-D2	38	1 1/2	36	49	10
R-1741-D	38	1 1/2	36	49	10
R-1795-M	38	1 1/2	36	47 x 47	10
R-1799-P	38	1 1/2	36	41	2 1/4
R-1900-E	38	1 1/2	36	49	10
R-1916-K	38	1 1/2	36	49	10
R-1742	38 3/4	1	37	47 3/4	6 1/2
R-1792-JL	40	1 1/2	38 1/2	44 1/2	4
R-1740-E	44	1 3/4	42	56	10
R-1740-E1	44	1 3/4	42	56	10
R-1741-E	44	1 3/4	42	62	10
R-1792-KL	46 1/8	1 1/2	44 1/2	50 1/2	4
R-1740-F	50	2	48	62	10
R-1741-F	50	2	48	62	10
R-1741-F1	50	2	48	62	6

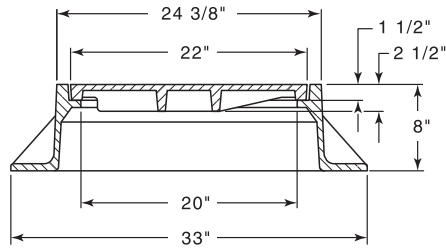
R-1500
Manhole Frame, Solid Lid

Heavy Duty

Non-Rocking feature available, see p. 12.



Available Grate: R-2100
(see Inlet Frames & Grates. R-2000 Series table)



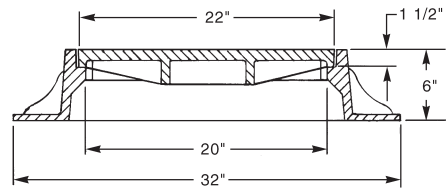
R-1510-A
Manhole Frame, Solid Lid

Heavy Duty

Non-Rocking feature available, see p. 12.



Available Grate: R-2110
(see Inlet Frames & Grates. R-2000 Series table)



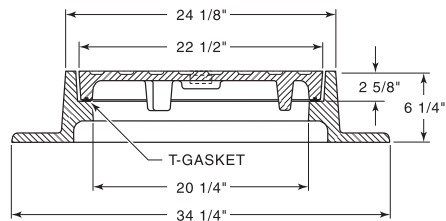
R-1524-B
**Manhole Frame,
Solid Gasketed Lid**

Heavy Duty

T-Seal gasket standard, see p. 12.



Available Grate: R-2424-A
(see Inlet Frames & Grates. R-2000 Series table)

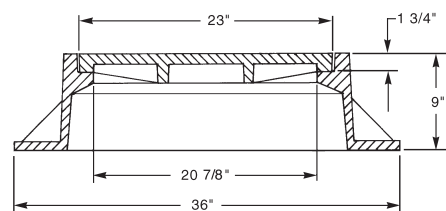


R-1530
Manhole Frame, Solid Lid

Heavy Duty



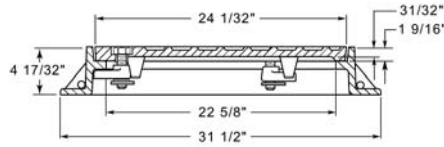
Available Grate: R-2030
(see Inlet Frames & Grates. R-2000 Series table)



R-1534-A
Manhole Frame, Solid Lid

Heavy Duty

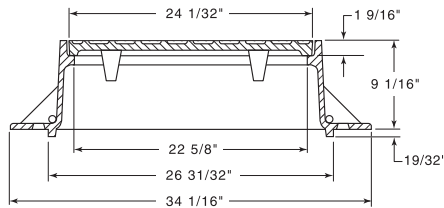
With cam lugs. Also available without cam lugs.



R-1535-A
Manhole Frame, Solid Lid

Heavy Duty

Furnished with four 1" anchor holes on 29-29/32" diameter bolt circle.

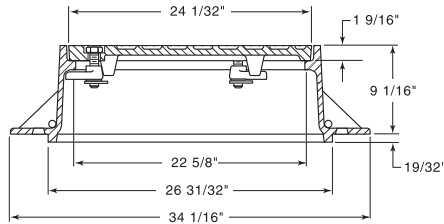


R-1535-C
Manhole Frame, Solid Lid

Heavy Duty

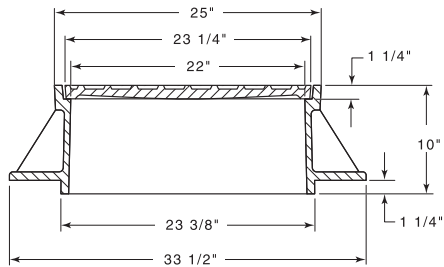
Furnished with four 1" anchor holes on 29-29/32" diameter bolt circle.

With cam lugs.



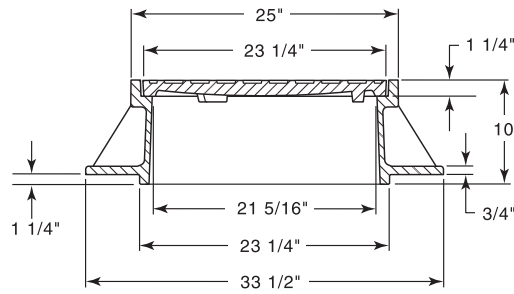
R-1536
Manhole Frame, Solid Lid

Heavy Duty



R-1536-1
Manhole Frame, Solid Lid

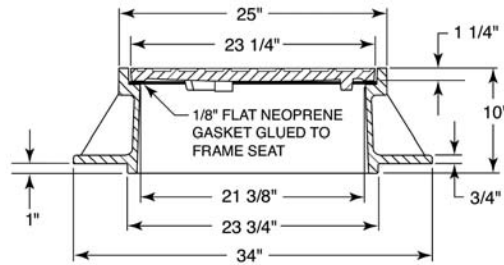
Heavy Duty



R-1536-B
Manhole Frame, Bolted/Gasketed Solid Lid

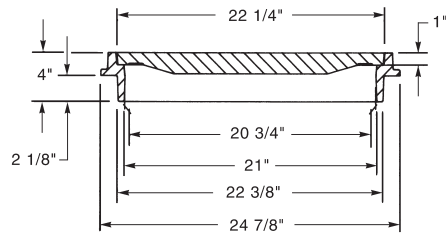
Heavy Duty

Furnished with six 3/4" anchor holes on 28" diameter bolt circle.



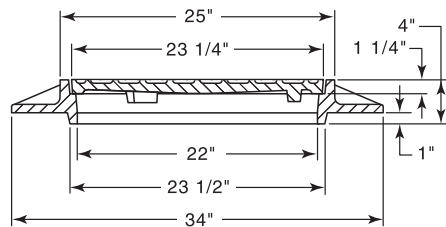
R-1537
Manhole Frame, Solid Lid

Heavy Duty



R-1538
Manhole Frame, Solid Lid

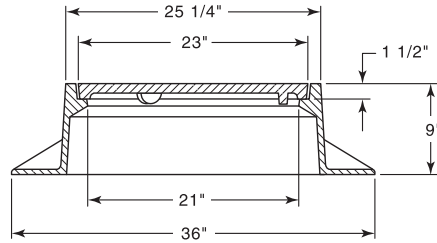
Heavy Duty



R-1540
**Non-Rock Manhole Frame,
Solid Lid**

Heavy Duty

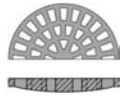
See p. 12 for Non-Rocking information.



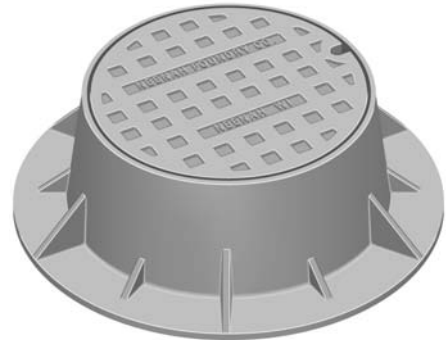
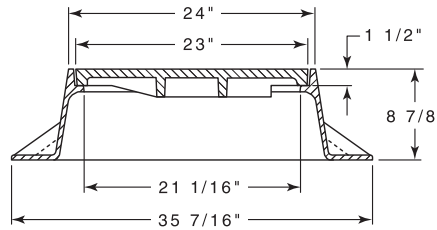
R-1550
Manhole Frame, Solid Lid

Heavy Duty

Non-Rocking feature available, see p. 12.



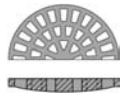
Available Grate: R-2578



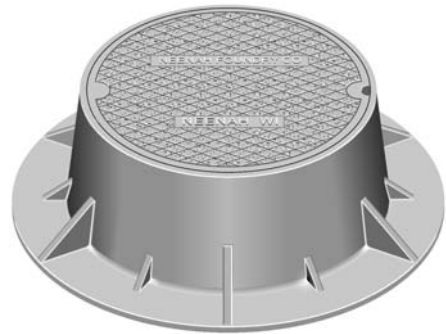
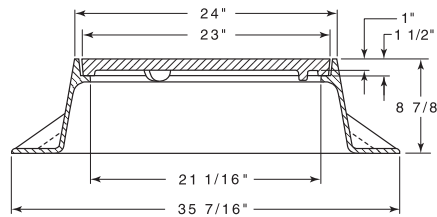
R-1550-A
Manhole Frame, Solid Lid

Heavy Duty

Non-Rocking feature available, see p. 12.



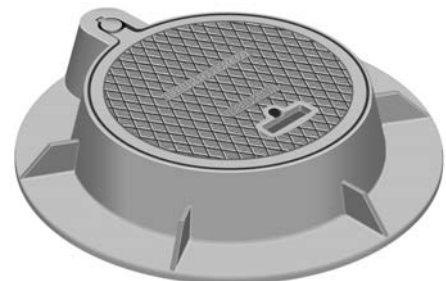
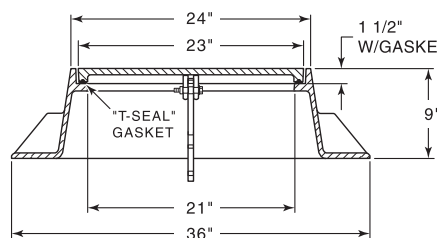
Available Grate: R-2578



R-1550-LM
**LiftMate Frame,
Solid Gasketed Lid**

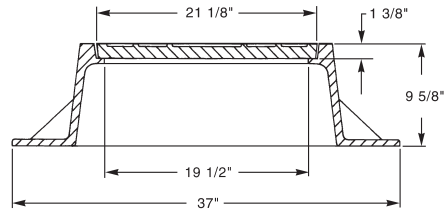
Heavy Duty

Hinge plug available for self-seal application.
See page 13 for LiftMate information.



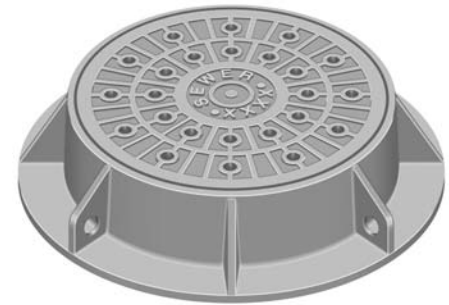
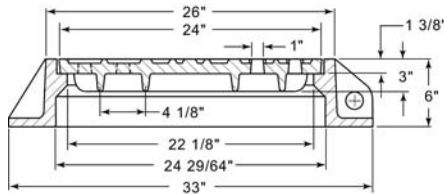
R-1551
Manhole Frame, Vented Lid

Heavy Duty



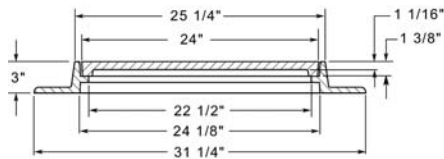
R-1552
Manhole Frame, Vented Lid

Heavy Duty



R-1553
Manhole Frame, Solid Lid

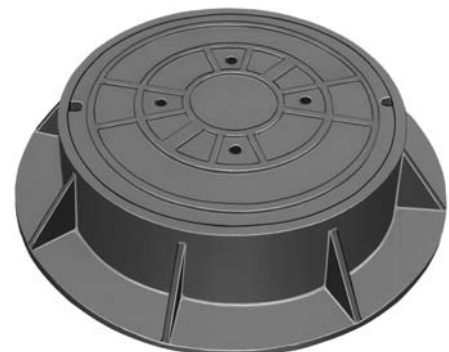
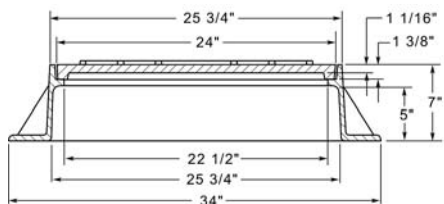
Heavy Duty



Available Grate: R-2553

R-1554
Manhole Frame, Vented Lid

Heavy Duty



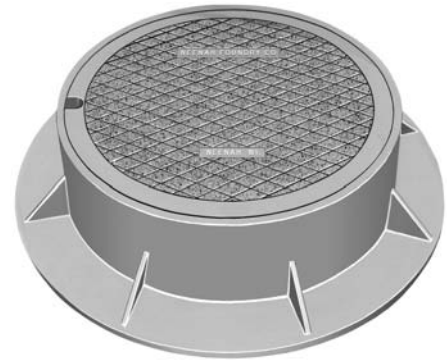
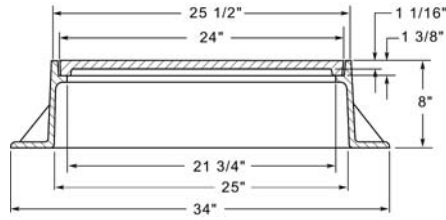
Available Grate: R-2554

R-1555
Manhole Frame, Solid Lid

Heavy Duty



Available Grate: R-2555

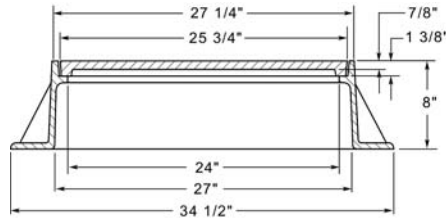


R-1556
Manhole Frame, Solid Lid

Heavy Duty



Available Grate: R-2556

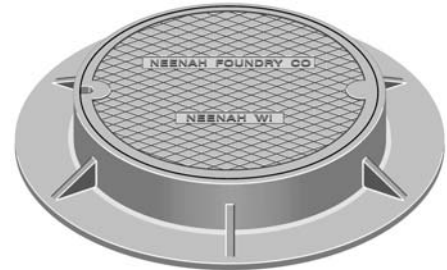
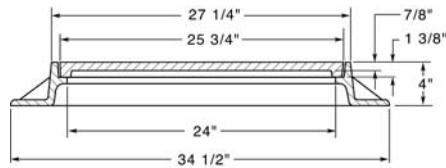


R-1556-A
Manhole Frame, Solid Lid

Heavy Duty



Available Grate: R-2556-A

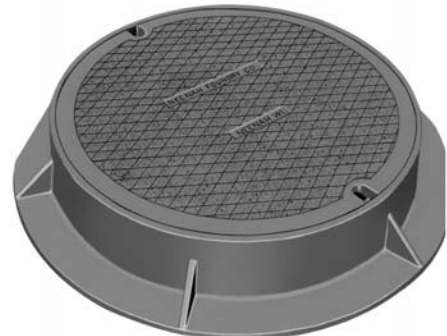
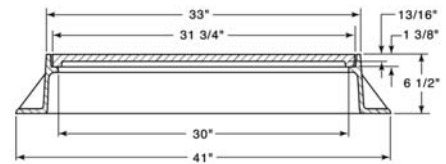


R-1557
Manhole Frame, Solid Lid

Heavy Duty



Available Grate: R-2557

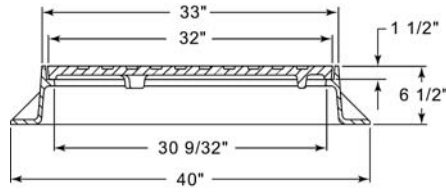


R-1557-A
Manhole Frame, Solid Lid

Heavy Duty



Available Grate: R-2557-A

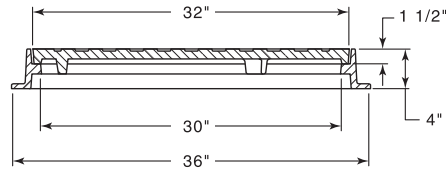


R-1557-A4
Manhole Frame, Solid Lid

Heavy Duty



Available Grate: R-2557-A4

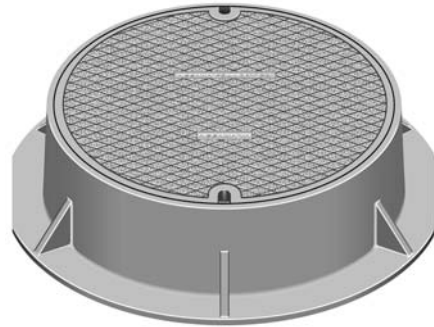
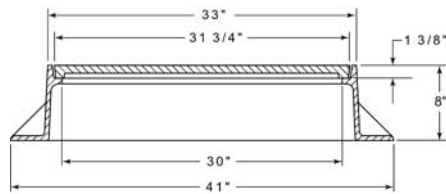


R-1558
Manhole Frame, Solid Lid

Heavy Duty



Available Grate: R-2558

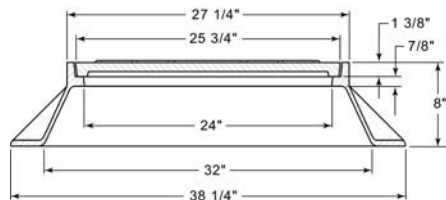


R-1559
Manhole Frame, Vented Lid

Heavy Duty

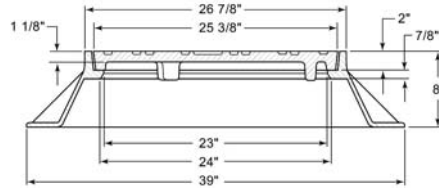


Available Grate: R-2559



R-1560
Manhole Frame, Solid Lid

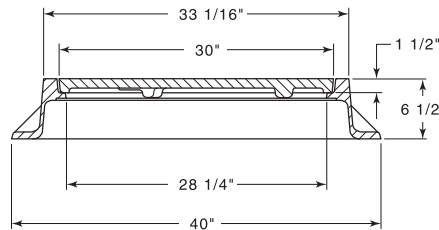
Heavy Duty



R-1563
Manhole Frame, Solid Lid

Heavy Duty

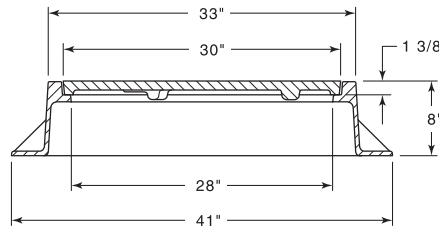
Furnished with four 1" x 2" anchor holes on 37" diameter bolt circle.



R-1564
Manhole Frame, Solid Lid

Heavy Duty

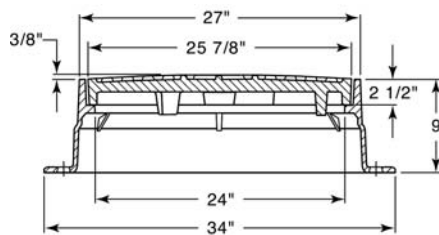
Furnished with four 1" x 2" anchor holes on 37" diameter bolt circle.



R-1565
Manhole Frame, Solid Lid

Heavy Duty

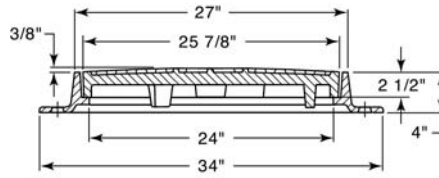
Furnished with four 1" anchor holes on 30-1/4" diameter bolt circle.



R-1565-A
Manhole Frame, Solid Lid

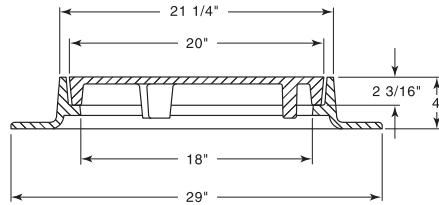
Heavy Duty

Furnished with four 1" anchor holes on 30-1/4" diameter bolt circle.



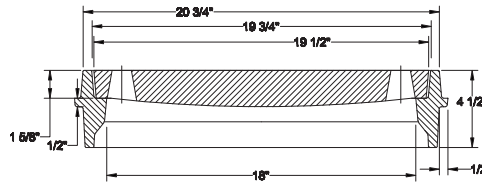
R-1566
Manhole Frame, Solid Lid

Heavy Duty



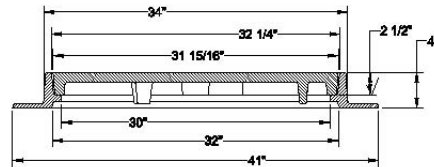
R-1567
Manhole Frame, Solid Lid

Heavy Duty



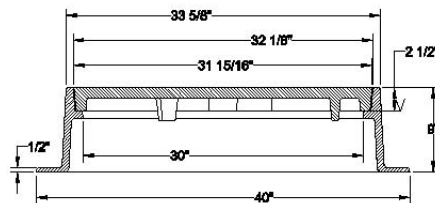
R-1568
Manhole Frame

Heavy Duty



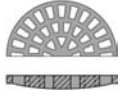
R-1569
Manhole Frame

Heavy Duty

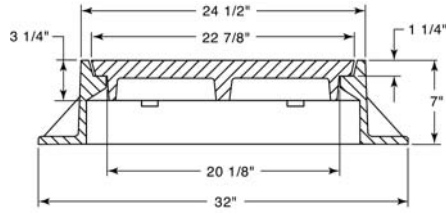


R-1570-A
Manhole Frame, Vented Lid

Heavy Duty

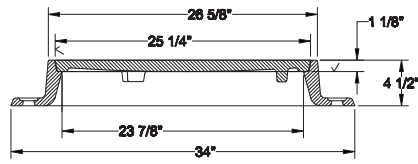


Available Grate: R-2534



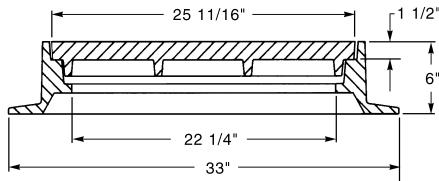
R-1571
Manhole Frame, Solid Lid

Heavy Duty



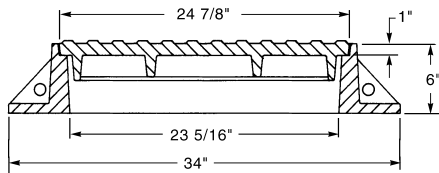
R-1572
Manhole Frame, Solid Lid

Heavy Duty



R-1573
Manhole Frame, Vented Lid

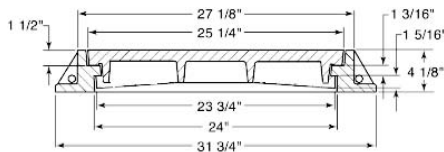
Heavy Duty



R-1574
Manhole Frame, Solid Lid

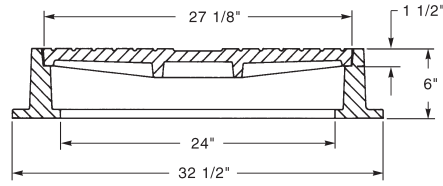
Heavy Duty

Cover locking lugs and frame lug guides are standard.



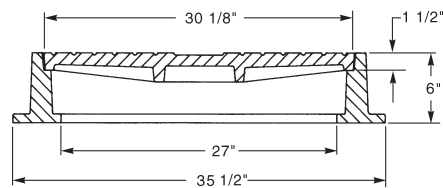
R-1575
Manhole Frame, Solid Lid

Heavy Duty



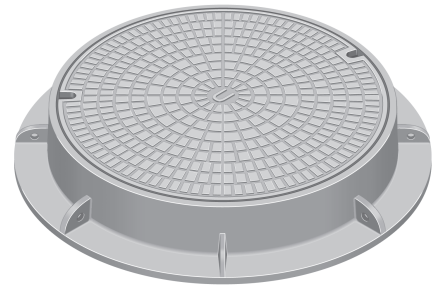
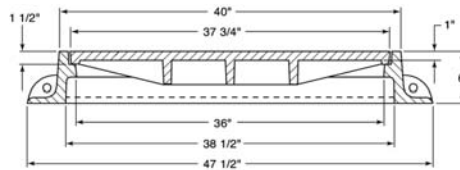
R-1576
Manhole Frame, Solid Lid

Heavy Duty



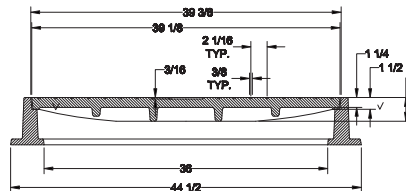
R-1578
Manhole Frame, Solid Lid

Heavy Duty



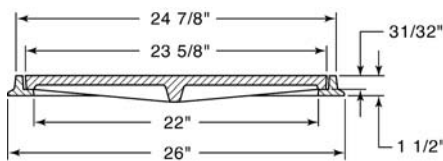
R-1578-A
Manhole Frame, Solid Lid

Heavy Duty



R-1579
Manhole Frame, Solid Lid

Heavy Duty



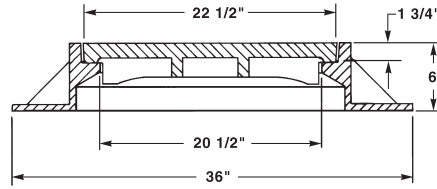
R-1580
Manhole Frame, Solid Lid

Heavy Duty

Non-Rocking feature available, see p. 12.
Also available w/38" diameter frame flange.



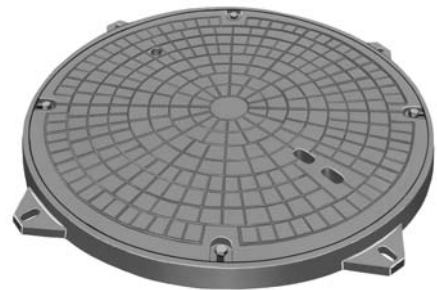
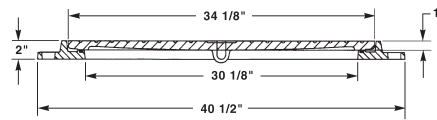
Available Grate: R-2080
(see Catch Basin Inlets, R-2000 Series table)



R-1581
Manhole Frame, Bolted Solid Lid

Heavy Duty

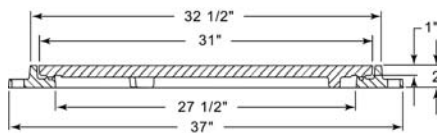
Gasket furnished if specified.



R-1581-A
Manhole Frame, Bolted Solid Lid

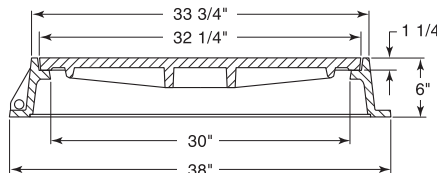
Heavy Duty

Gasket furnished if specified.



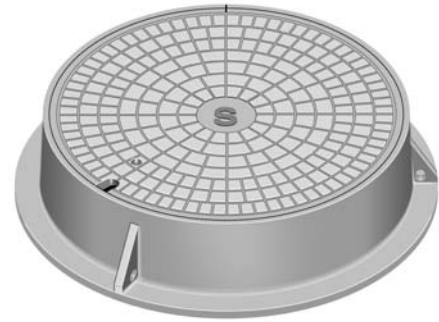
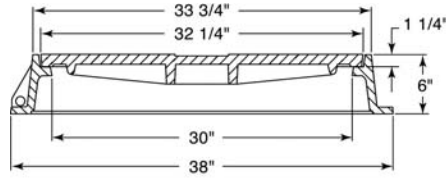
R-1582
Manhole Frame, Vented Lid

Heavy Duty



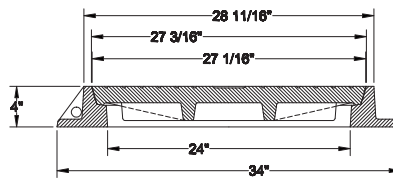
**R-1582-A
Manhole Frame, Solid Lid**

Heavy Duty



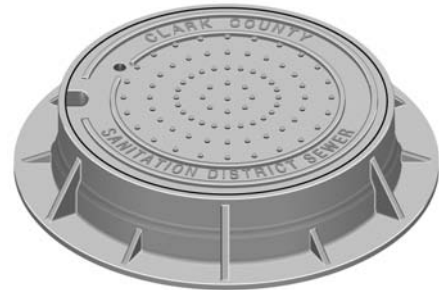
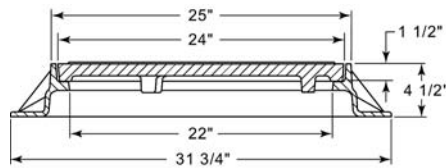
**R-1583
Manhole Frame, Solid Lid**

Heavy Duty



**R-1585
Manhole Frame, Vented Lid**

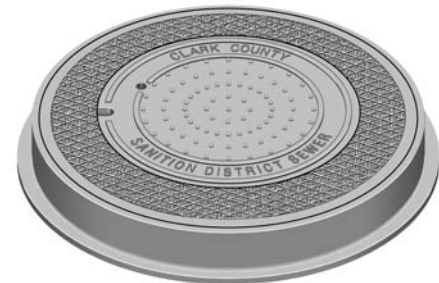
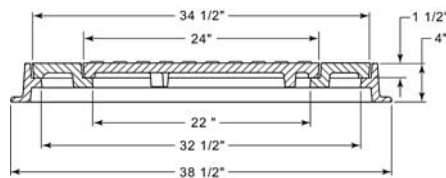
Heavy Duty



**R-1586
Manhole Frame,
Solid Lid with Vented Center Lid**

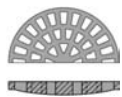
Heavy Duty

Frame is reversible for slab application with ground bearing surfaces.

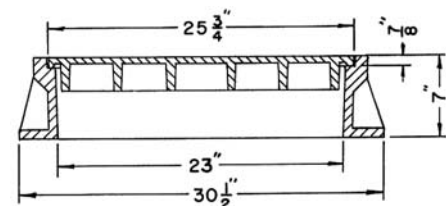


**R-1590
Manhole Frame, Solid Lid**

Heavy Duty



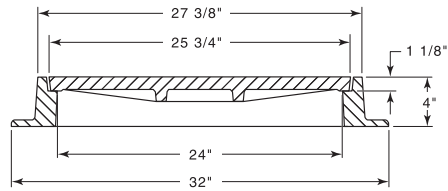
Available Grate: R-2390
(see Inlet Frames & Grates, R-2000 Series table)



R-1593
Manhole Frame, Solid Lid

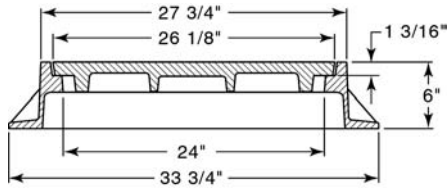
Heavy Duty

Also available bolted, or bolted and gasketed.



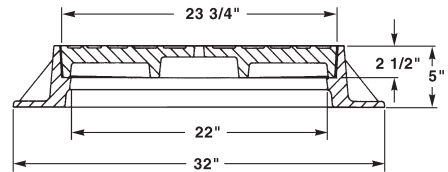
R-1595
Manhole Frame, Solid Lid

Heavy Duty



R-1596
Manhole Frame, Solid Lid

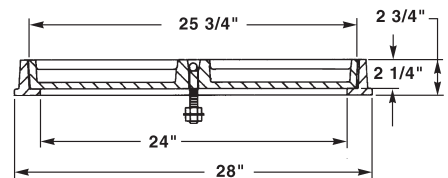
Heavy Duty



R-1597
Manhole Frame, Lid for Fill

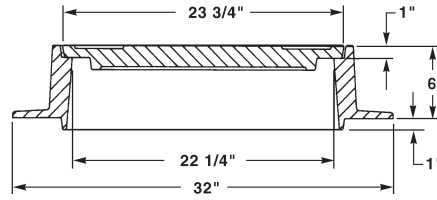
Light Duty

Only frames and lids furnished. Center filling material to be supplied by purchaser. Designed for concrete, asphalt or terazzo fill.



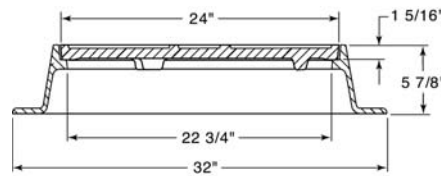
R-1598
Manhole Frame, Solid Lid

Heavy Duty



R-1599-A
Manhole Frame, Vented Lid

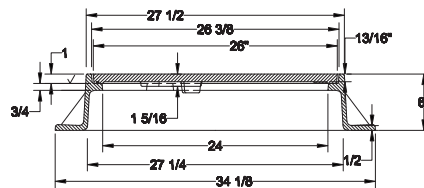
Heavy Duty



R-1600
Manhole Frame

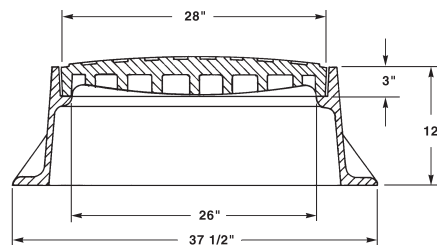
Heavy Duty

Available with 3 bolt option.



R-1635
Manhole Frame, Solid Lid

Heavy Duty

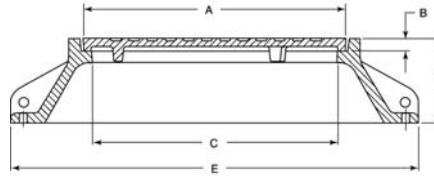


R-1640 Series
Manhole Frame, Solid Lid

Heavy Duty

U.S. GOVERNMENT Standard Designs. Standard for underground electric or telephone construction. Available with drop handles or open pickholes - please specify.

Security Bolting available, see **R-1750** series. Furnished with machined horizontal and vertical bearing surfaces (except R-1640-D, machined horizontal only).



Illustrating R-1640-C

Dimensions in inches

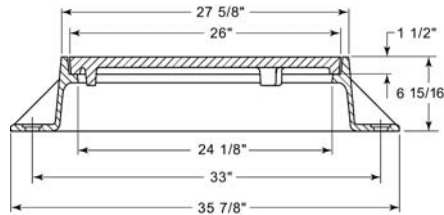
Catalog No.	A	B	C	E	F	Anchor Bolt Circle *	Grate Alt.
R-1640-A	26	1 3/8	24	43	10		R-2300
R-1640-B	29	1 3/8	27	46	10	43-1/2	R-2290
R-1640-B1	29	1 3/8	27	46	5 5/8	43-1/2	R-2290-A
R-1640-C	32	1 3/8	30	49	10	43-1/2	
R-1640-C1	32	1 3/8	30	49	5 5/8	43-1/2	
R-1640-C1S	32	1 3/8	30	46	5 5/8	43-1/2	R-2750
R-1640-CS	32	1 3/8	30	46	10	43-1/2	R-2255
R-1640-D	38	1 1/2	36	49	10	46	R-2580

* Four 1" diameter anchor holes

R-1642
Manhole Frame, Solid Lid

Heavy Duty

Non-Rocking feature available, see p. 12. Furnished with four 1" anchor holes on 33" diameter bolt circle.

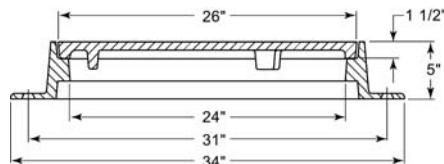


Available Grate: **R-2501**

R-1642-A
Manhole Frame, Solid Lid

Heavy Duty

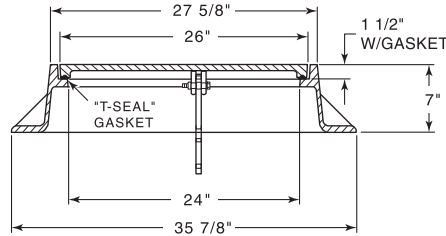
Furnished with four 3/4" anchor holes on 31" diameter bolt circle. Frame is reversible for slab application with ground bearing surfaces.



R-1642-LM
**LiftMate Frame,
 Solid Gasketed Lid**

Heavy Duty

Furnished with four 1" anchor holes on 33" diameter bolt circle.
 Hinge plug available for self-seal application.
 See page 13 for LiftMate information.

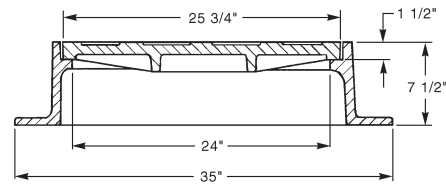


R-1643
Manhole Frame, Solid Lid

Heavy Duty



Available Grate: R-2371
 (see Inlet Frames & Grates, R-2000 Series table)



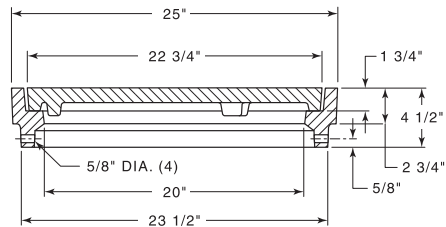
R-1645
Manhole Frame, Solid Lid

Heavy Duty

Furnished with four 5/8" holes in barrel of frame to fit in opening of 24" corrugated metal pipe.

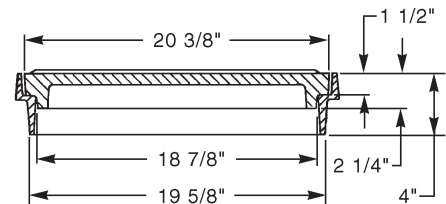


Available Grate: R-2549



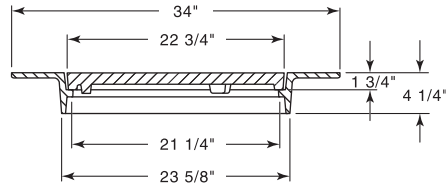
R-1645-A
Manhole Frame, Solid Lid

Heavy Duty



R-1646
Manhole Frame, Solid Lid

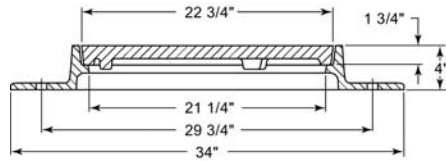
Heavy Duty



R-1647-A
Manhole Frame, Solid Lid

Heavy Duty

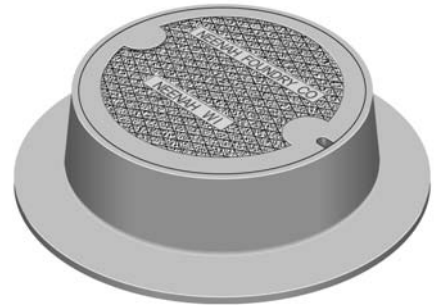
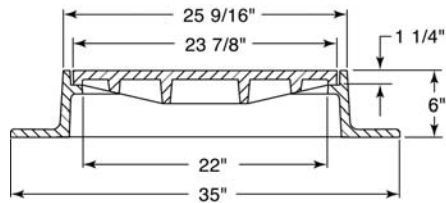
Furnished with six 3/4" anchor holes on 29-3/4" diameter bolt circle.



Available Grate: R-2595-A

R-1648
Manhole Frame, Solid Lid

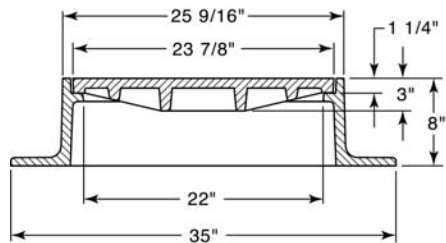
Heavy Duty



Available Grate: R-2412-A5
(see Inlet Frames & Grates, R-2000 Series table)

R-1649
Manhole Frame, Solid Lid

Heavy Duty

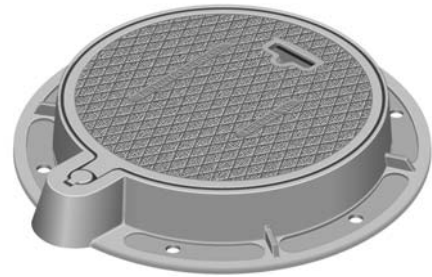
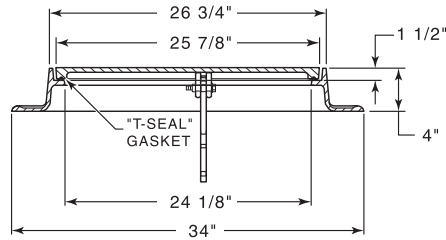


Available Grate: R-2412-A6
(see Inlet Frames & Grates, R-2000 Series table)

R-1650-LM
**LiftMate Frame,
 Solid Gasketed Lid**

Heavy Duty

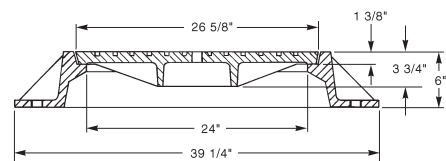
Furnished with six 1-1/8" anchor holes on 29-11/16" diameter bolt circle.
 Hinge plug available for self-seal application.
 See page 13 for LiftMate information.



R-1653-A
Manhole Frame, Solid Lid

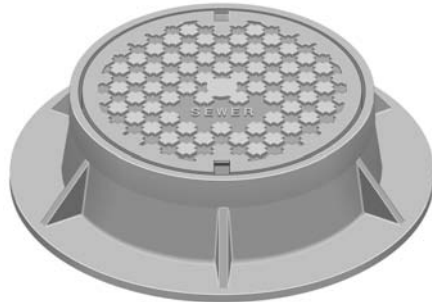
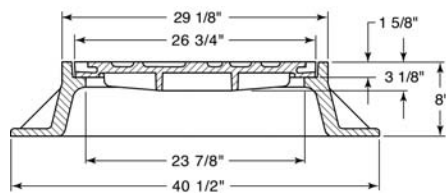
Heavy Duty

Furnished with two 7/8" anchor holes on 34" diameter bolt circle.



R-1653-D
Manhole Frame, Solid Lid

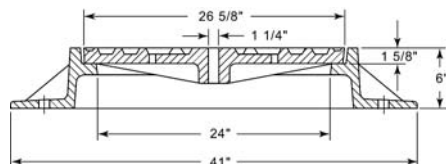
Heavy Duty



R-1653-E
Manhole Frame, Vented Lid

Heavy Duty

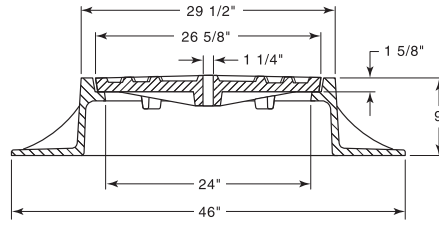
Furnished with two 1" anchor holes on 34-1/4" diameter bolt circle.



R-1653-F
Manhole Frame, Vented Lid

Heavy Duty

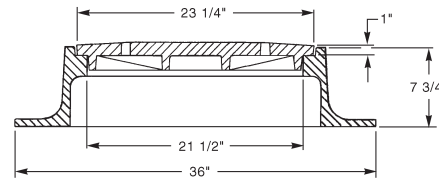
Furnished with two 1" anchor holes on 33-3/4" diameter bolt circle.



R-1654
Manhole Frame, Vented Lid

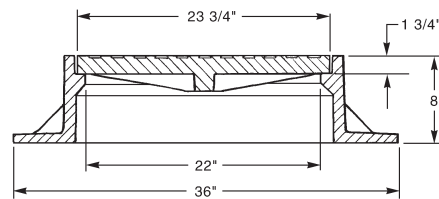
Heavy Duty

Specify solid lid if required.



R-1656
Manhole Frame, Solid Lid

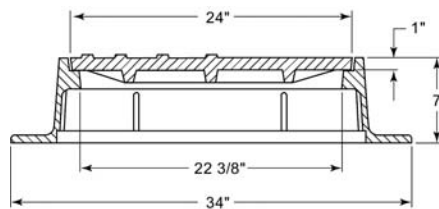
Heavy Duty



R-1657-1
Manhole Frame, Solid Lid

Heavy Duty

Lid has 1" diameter 1/4" raised knobs.

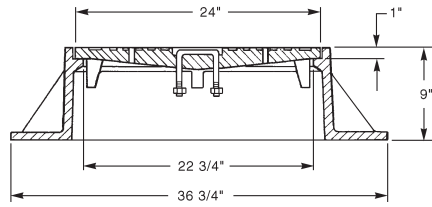


Available Grate: **R-2412-A3**
(see **Inlet Frames & Grates, R-2000 Series** table)

R-1658
Manhole Frame, Vented Lid

Heavy Duty

Furnished with twenty 1/2" diameter vent holes,
Type C drop handle and pickhole.
If vent holes not required, specify solid lid.

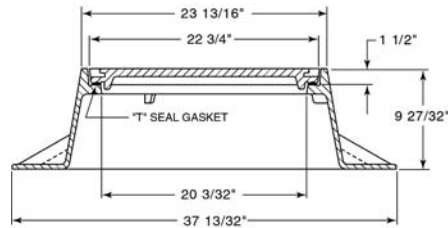


Available Grate: R-2412-A1
(see Inlet Frames & Grates, R-2000 Series table)

R-1661
Manhole Frame, Solid Gasketed Lid

Heavy Duty

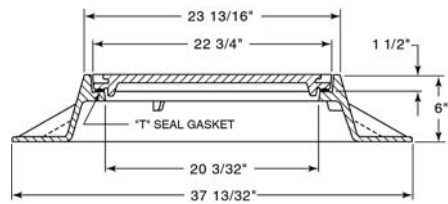
Non-Rocking feature available, see p. 12.



Available Grate: R-2471
(see Inlet Frames & Grates, R-2000 Series table)

R-1661-A
Manhole Frame, Solid Gasketed Lid

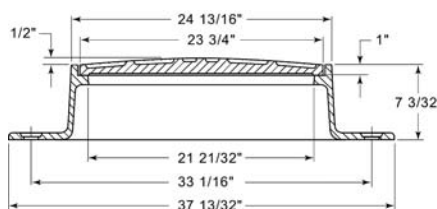
Heavy Duty



R-1664-A
Manhole Frame, Vented Lid

Heavy Duty

Furnished with four 1" anchor holes on 33-1/16" diameter bolt circle.
Specify solid lid if required.

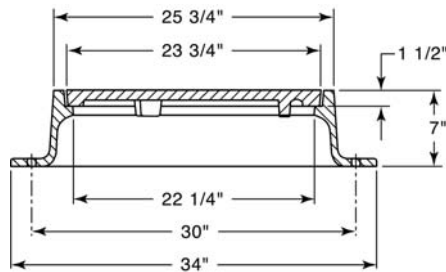
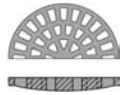


Available Grate: R-2680

R-1668
Manhole Frame, Vented Lid

Heavy Duty

Furnished with four 3/4" anchor holes on 30" diameter bolt circle.
Specify solid lid if required.

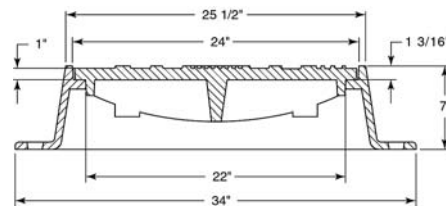


Available Grate: **R-2412-A4**
(see **Inlet Frames & Grates, R-2000 Series** table)

R-1669-A1
Manhole Frame, Solid Lid

Heavy Duty

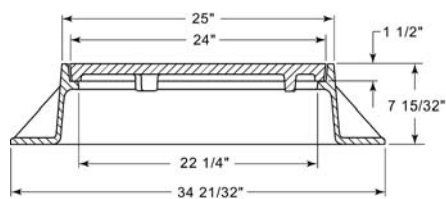
Furnished with two 1" anchor holes on 30-1/2" diameter bolt circle.



R-1670-A
Manhole Frame, Solid Lid

Heavy Duty

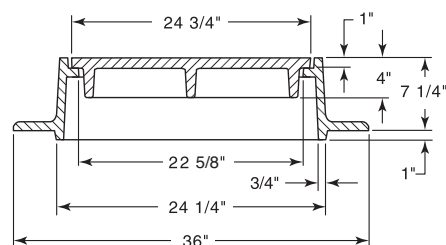
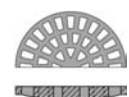
Non-Rocking feature available, see p. 12.



Available Grate: **R-2500**

R-1671
Manhole Frame, Solid Lid

Heavy Duty

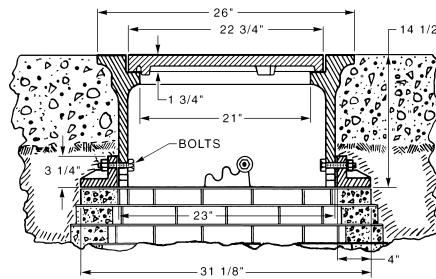


Available Grate: **R-2402**
(see **Inlet Frames & Grates, R-2000 Series** table)

R-1672
**Manhole Frame,
Flange, Solid Lid**

Heavy Duty

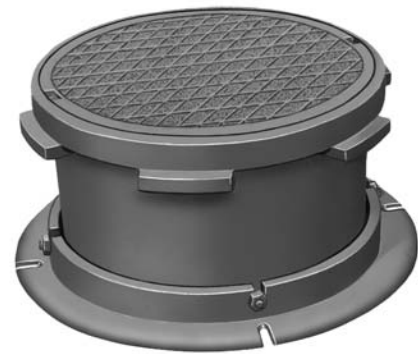
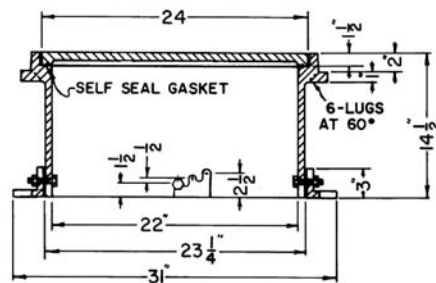
Manhole cover as shown in concrete pavement. Top flange lies flush with grade and prevents frame from settling below that level. Sleeve-ring construction allows frame to extend below slab, telescoping into base flange. Frame and pavement are not supported by manhole wall, and are free to move together.



R-1673-A
**Floating Manhole,
Self-Sealing Lid**

Heavy Duty

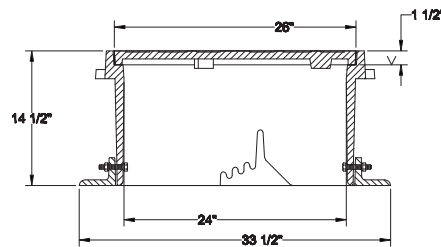
Specify if self-seal not required.
Bolted lid available, please specify.
Furnished with four 3/4" x 2" anchor slots on 28" diameter bolt circle.



R-1673-B
**Floating Manhole,
Solid Lid**

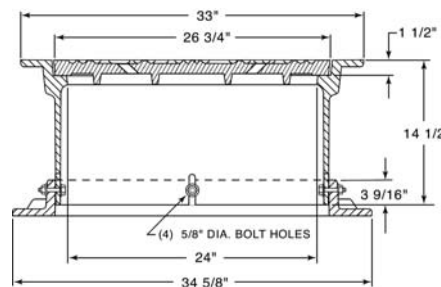
Heavy Duty

Lid bolted to frame is an option.



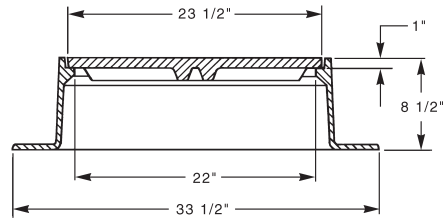
R-1673-C
Floating Manhole, Vented Lid

Heavy Duty



R-1676-A
Manhole Frame, Solid Lid

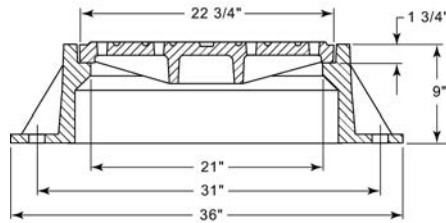
Heavy Duty



R-1677-A
Manhole Frame, Vented Lid

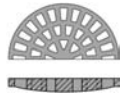
Heavy Duty

Furnished with twelve 1-1/2" anchor holes on 31" diameter bolt circle.
Specify solid lid if required.
Machined horizontal and verticle bearing surfaces.

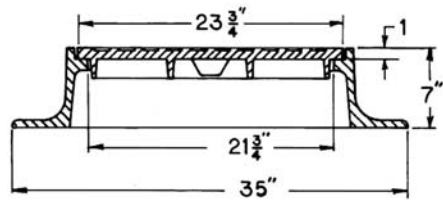


R-1678-A
Manhole Frame, Solid Lid

Heavy Duty

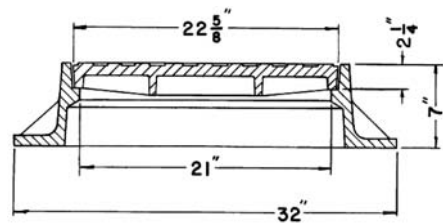


Available Grate: R-2422-A1
(see Inlet Frames & Grates, R-2000 Series table)



R-1680
Manhole Frame, Solid Lid

Heavy Duty



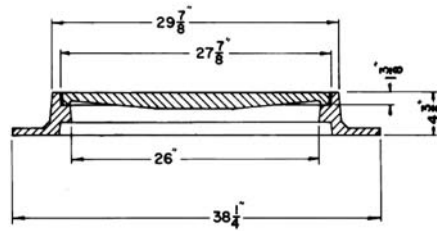
R-1682
Manhole Frame, Solid Lid

Heavy Duty

Frame is reversible for slab installation.



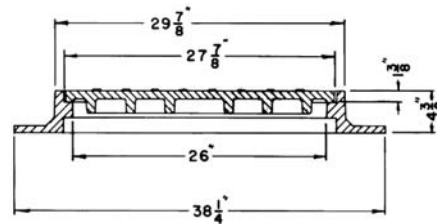
Available Grate: R-2682



R-1682-1
Manhole Frame, Solid Lid

Heavy Duty

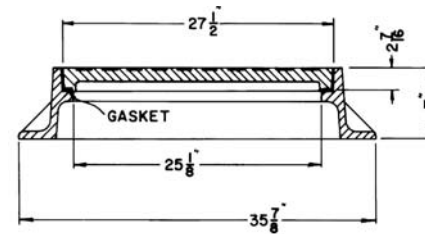
Frame is reversible for slab installation.
Specify solid or vented lid.



R-1683
**Manhole Frame,
Solid Gasketed Lid**

Heavy Duty

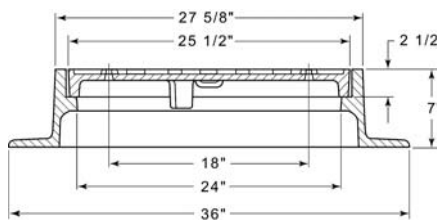
T-Seal gasket standard, see p. 14.



R-1684
Manhole Frame, Vented Lid

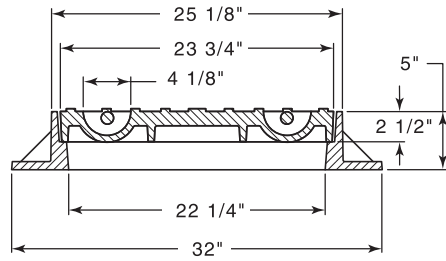
Heavy Duty

Furnished with two 3/4" lid vents
on 18" diameter circle.



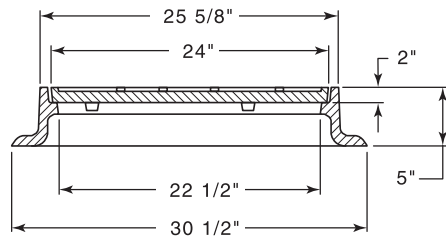
R-1687
Manhole Frame, Solid Lid

Heavy Duty



R-1688
Manhole Frame, Solid Lid

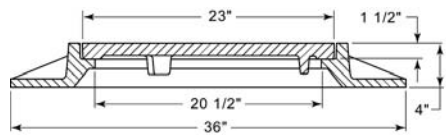
Heavy Duty



R-1689
Non-Rock Manhole Frame, Solid Lid

Heavy Duty

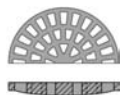
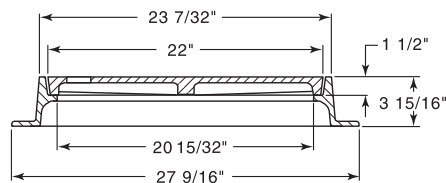
See p. 12 for Non-Rocking information.



Available Grate: R-2464
(see Inlet Frames & Grates, R-2000 Series table)

R-1690
Manhole Frame, Solid Lid

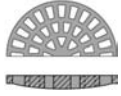
Light Duty



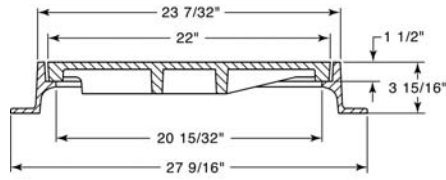
Available Grate: R-2510

R-1690-A
Manhole Frame, Solid Lid

Heavy Duty

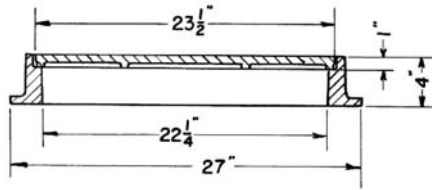


Available Grate: R-2510



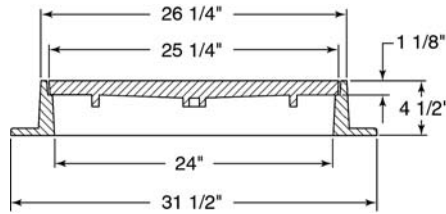
R-1694
Manhole Frame, Solid Lid

Light Duty



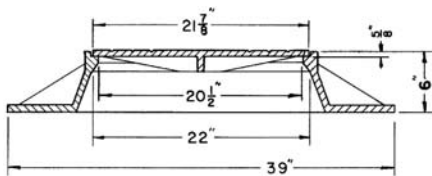
R-1695
Manhole Frame, Solid Lid

Heavy Duty



R-1696
Manhole Frame, Solid Lid

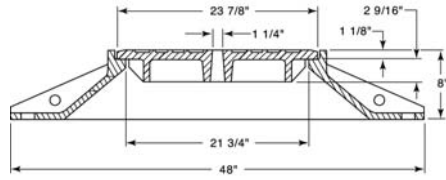
Light Duty



R-1697
Manhole Frame, Solid Lid

Heavy Duty

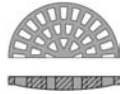
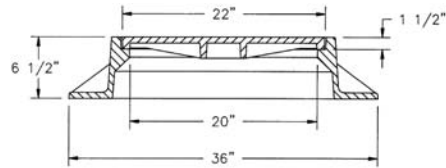
Furnished with eight 1-1/2" anchor holes on 42" diameter bolt circle.



R-1700-A
Manhole Frame, Solid Lid

Heavy Duty

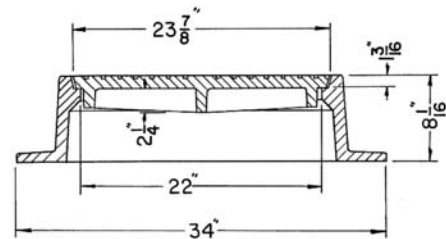
Non-Rocking feature available, see p. 12.



Available Grate: R-2060
(see Inlet Frames & Grates, R-2000 Series table)

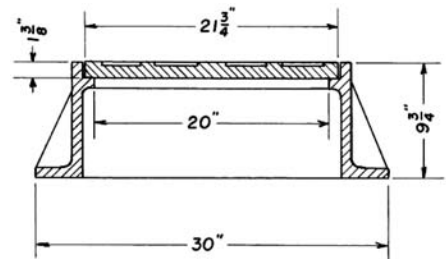
R-1703
Manhole Frame, Solid Lid

Heavy Duty



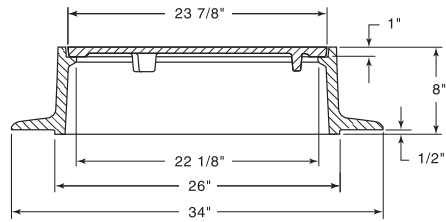
R-1705
Manhole Frame, Solid Lid

Heavy Duty



R-1706
Manhole Frame, Solid Lid

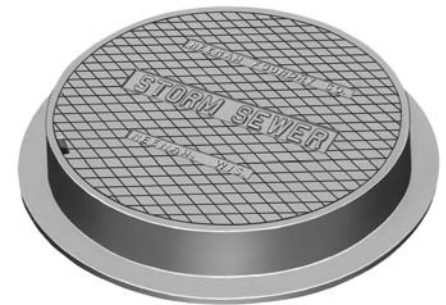
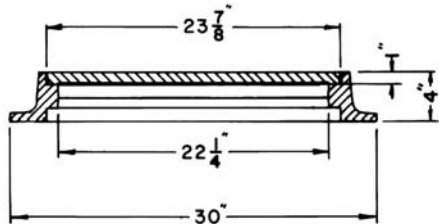
Heavy Duty



R-1706-1
Manhole Frame, Solid Lid

Heavy Duty

Reversible frame for Slab installation,
order as R-1706-1S.

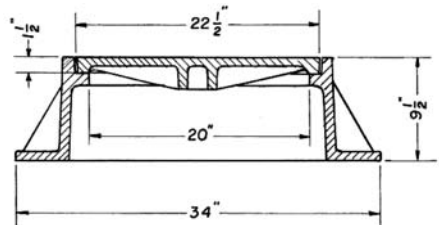


R-1707
Manhole Frame, Solid Lid

Heavy Duty



Available Grate: R-2471-B
(see Inlet Frames & Grates. R-2000 Series table)



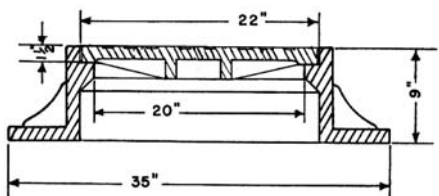
R-1710
Manhole Frame, Solid Lid

Heavy Duty

Non-Rocking feature available, see p. 12.

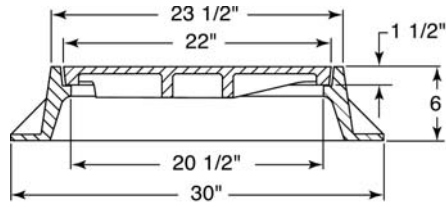
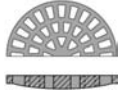


Available Grate: R-2533



R-1711-A
Manhole Frame, Solid Lid

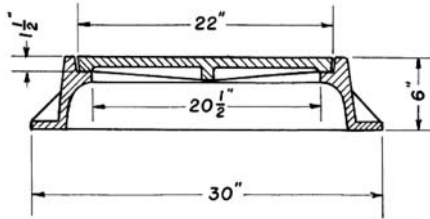
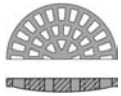
Heavy Duty



Available Grate: R-2461-A
(see Inlet Frames & Grates, R-2000 Series table)

R-1711-B
Manhole Frame, Solid Lid

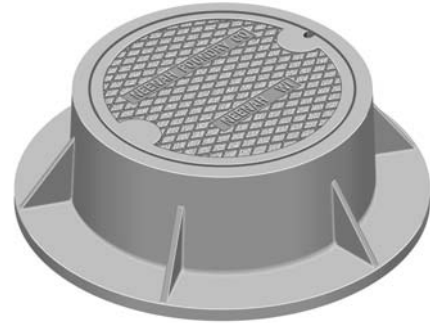
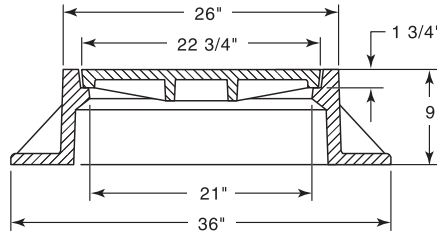
Light Duty



Available Grate: R-2461-A
(see Inlet Frames & Grates, R-2000 Series table)

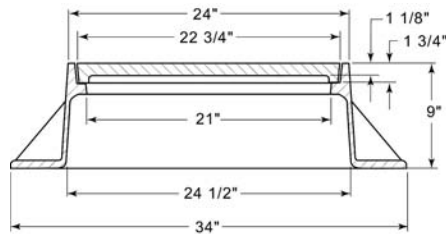
R-1712
Manhole Frame, Solid Lid

Heavy Duty



R-1713
Manhole Frame, Solid Lid

Heavy Duty

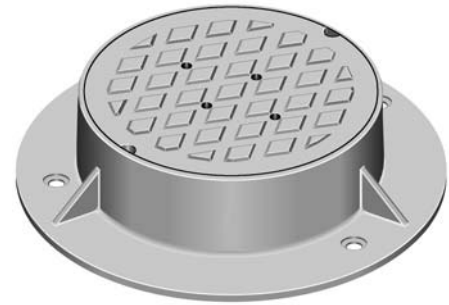
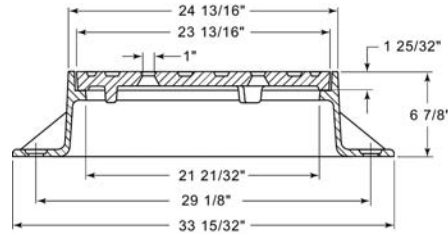


Available Grate: R-2504

R-1714
Manhole Frame, Vented Lid

Heavy Duty

Furnished with four 1" anchor holes on 29-1/8" diameter bolt circle.

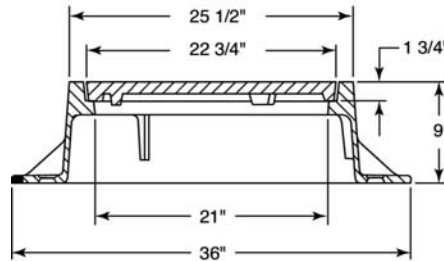


Available Grate: R-2552

R-1715
Non-Rock Manhole Frame, Solid Lid

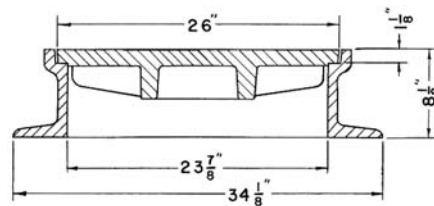
Heavy Duty

Furnished with three 1" anchor holes on 29-1/2" diameter bolt circle.



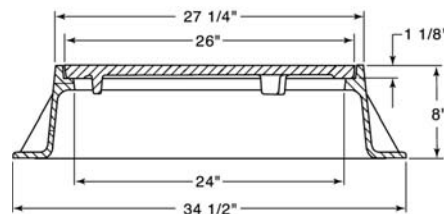
R-1720
Manhole Frame, Solid Lid

Heavy Duty



R-1720-A
Manhole Frame, Solid Lid

Heavy Duty

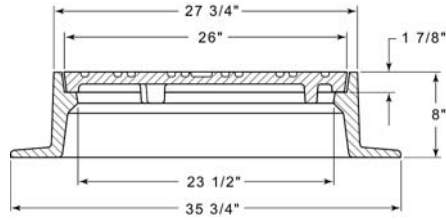


R-1723
Manhole Frame, Vented Lid

Heavy Duty



Available Grate: R-2401
(see Inlet Frames & Grates, R-2000 Series table)



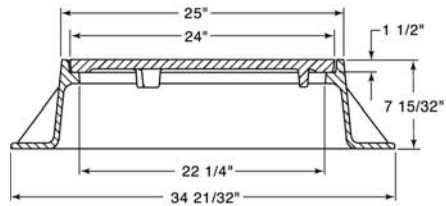
R-1726-A
Manhole Frame, Solid Lid

Heavy Duty

Non-Rocking feature available, see p. 12.



Available Grate: R-2500

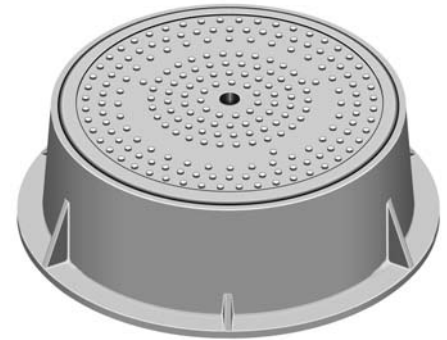
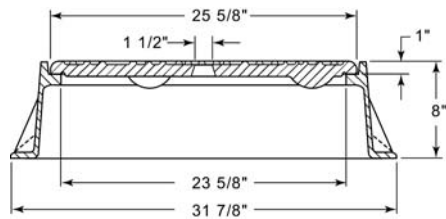


R-1728
Manhole Frame, Solid Lid

Heavy Duty

Specify solid or vented lid.

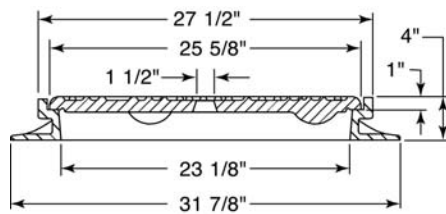
Available Vane Grate: R-2548



R-1728-B
Manhole Frame, Solid Lid

Heavy Duty

Specify solid or vented lid.



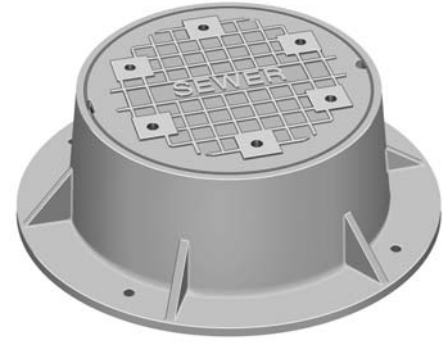
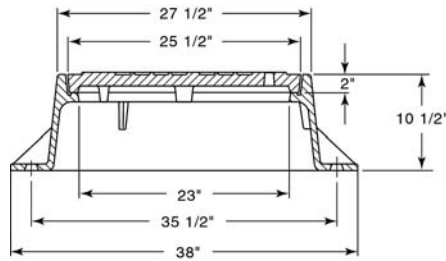
R-1729
Manhole Frame, Vented Lid

Heavy Duty

Furnished with four 1" anchor holes on 35-1/2" diameter bolt circle.



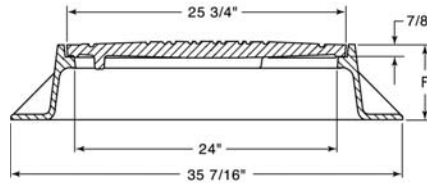
Available Grate: R-2650



R-1733 Series
Manhole Frame, Vented Lid

Heavy Duty

Specify solid lid with two lift holes, if required.

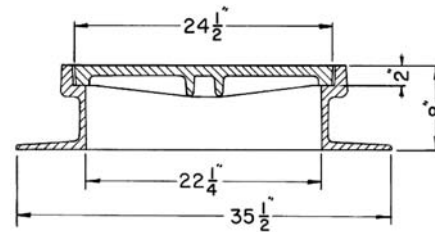


Catalog No.	F	Grate Alt.
R-1733	7"	R-2573
R-1733-1	4"	R-2573-1
R-1733-A	8"	R-2573-A
R-1733-B	9"	R-2573-B
R-1733-C	10"	R-2573-C

R-1734-B
Manhole Frame, Vented Lid

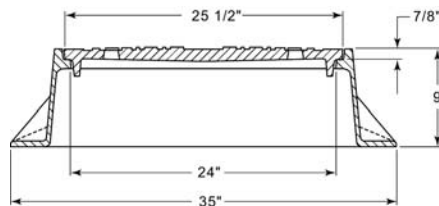
Heavy Duty

Specify solid lid, if required.



R-1735
Manhole Frame, Vented Lid

Heavy Duty

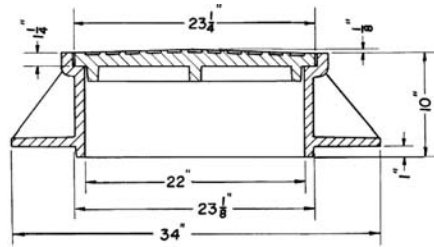


R-1736
Manhole Frame, Solid Lid

Heavy Duty

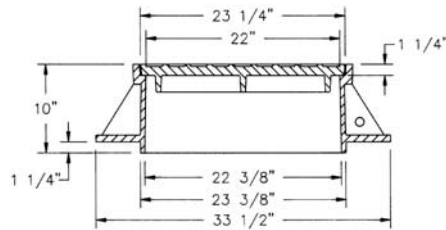


Available Grate: R-2421-A
(see Inlet Frames & Grates, R-2000 Series table)



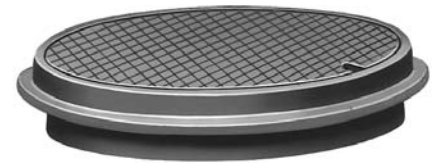
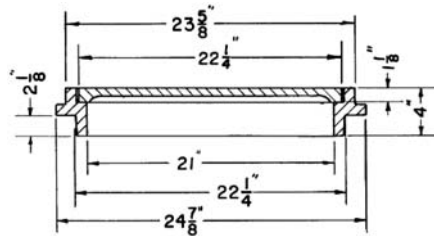
R-1736-A
Manhole Frame, Solid Lid

Heavy Duty



R-1737
Manhole Frame, Solid Lid

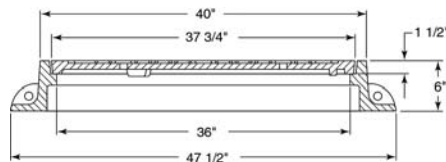
Light Duty



R-1739-A
Manhole Frame, Vented Lid

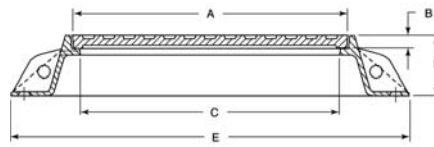
Heavy Duty

Furnished with machined horizontal and vertical bearing surfaces.
Specify solid lid, if required.



**R-1740 Series
Manhole Frame, Solid Lid**

Heavy Duty



Illustrating R-1740-B

Dimensions in inches

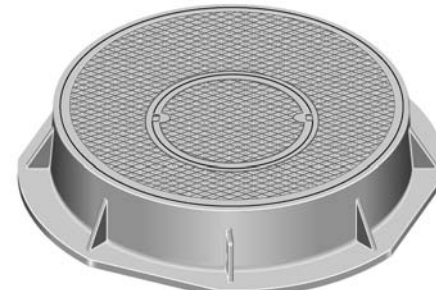
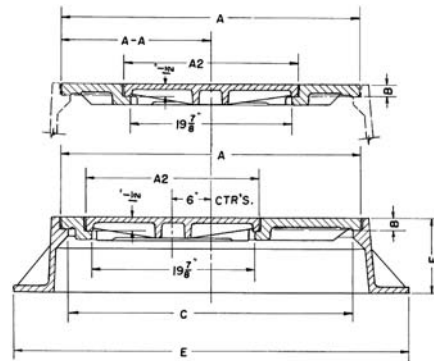
Catalog No.	A	B	C	E	F	Anchor Bolt Circle *	Grate Alt.
R-1740-B	32	1 1/2	30	46	7	43	R-2580-A
R-1740-D	38	1 1/2	36	49	10	46	R-2580-C

* Four 1" diameter anchor holes.

**R-1740 to R-1741 Series
Large Manhole Frame, Solid Lid
with Removable Center Lid**

Heavy Duty

Removable inner lid allows easy access to underground vault.



Illustrating R-1741-F1

Dimensions in inches

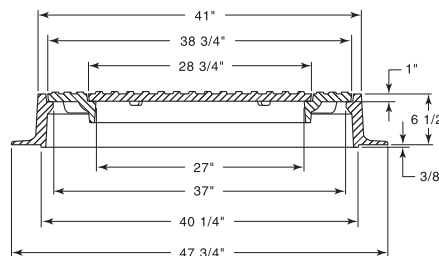
Catalog No.	A	AA	A2	B	C	E	F	Lid
R-1740-C1	34 1/2	17 1/4	24	1 1/2	32 1/2	38 1/2	4	Type C
R-1740-D2	38	19	22	1 1/2	36	49	10	Type B
R-1740-E	44	22	22	1 3/4	42	56	10	Type B
R-1740-E1	44	22	31 15/16	1 3/4	42	56	10	Type B
R-1740-F **	50	25	22	2	48	62	10	Type B
R-1741-D *	38	Offset	22	1 1/2	36	49	10	Type C
R-1741-E *	44	Offset	22	1 3/4	42	62	10	Type C
R-1741-F ***	50	Offset	22	2	48	62	10	Type C
R-1741-F1 *	50	Offset	23	2	48	62	6	Type C

* Center lid located 6" off center.

** Base flange (dimension E) is flattened to 59" at four quarter points.

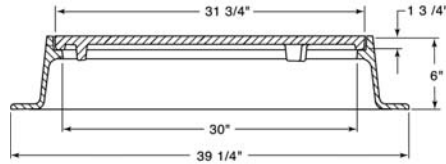
**R-1742
Large Manhole Frame, Solid Lid
with Removable Center Lid**

Heavy Duty



R-1743
Large Manhole Frame, Solid Lid

Heavy Duty

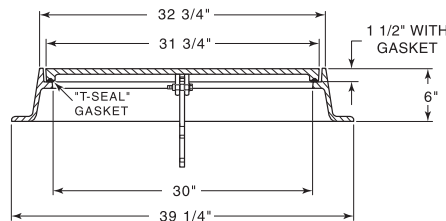


R-1743-LM
Liftmate Frame, Solid Gasketed Lid

Heavy Duty

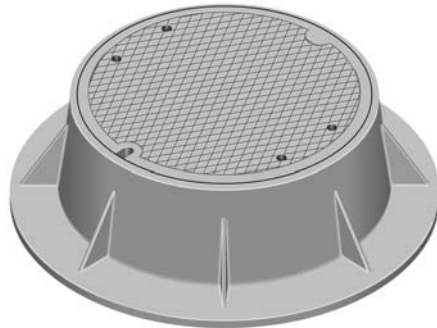
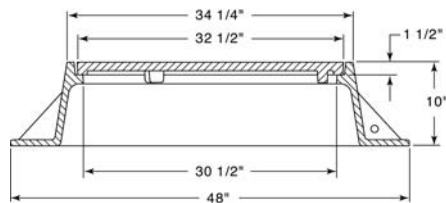
Furnished with four 1" anchor holes on 36-7/8" diameter bolt circle.

Hinge plug available for self-seal application.
See page 13 for LiftMate information.



R-1747
Large Manhole Frame, Vented Lid

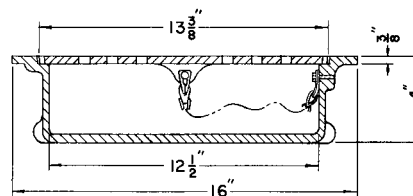
Heavy Duty



R-1748
Sump Frame, Vented Lid

Light Duty

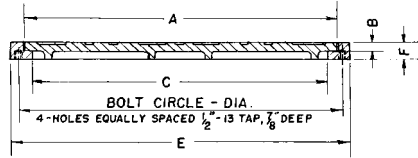
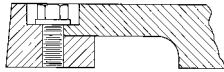
For use in electrical or telephone vaults to collect condensation or surface seepage. Cover is perforated to act as drain. Note attachment of cover to frame with vinyl coated galvanized aircraft strand.



R-1749 Series
Telephone Design Large
Manhole Frame, Solid Lid

Light Duty

Specify security bolting, if required. (2 per lid)



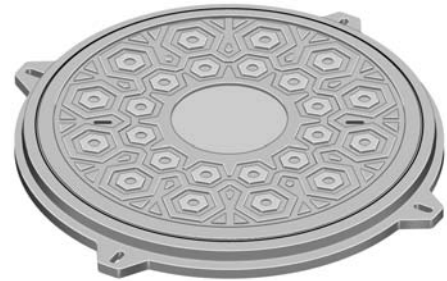
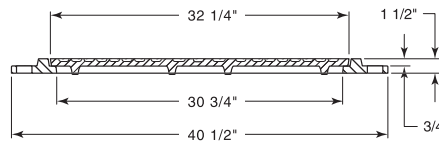
Dimensions in inches

Catalog No.	A	B	C	E	F	Anchor Bolt Circle
R-1749-A	29 1/4	3/4	27 3/4	32	1 1/2	30-1/2
R-1749-B	32 1/4	3/4	30 3/4	35	1 1/2	33-1/2

R-1749-B1
Manhole Frame, Solid Lid

Light Duty

Furnished with four 3/4" x 1" anchor slots on 37" diameter bolt circle.

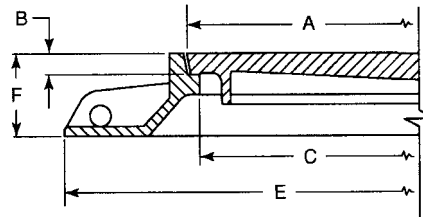


R-1750 Series
Telephone Design Large
Manhole Frame, Solid Lid

Heavy Duty

Furnished with machined horizontal and vertical bearing surfaces.

Covers can be bolted to frame with two pentagon head special monel security bolts upon request. Wrenches available to fit special bolt at extra cost. Advise quantity required.

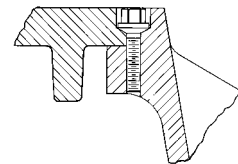


Illustrating R-1750-B

Dimensions in inches

Catalog No. Standard	Catalog No. Security Bolted	A	B	C	E	F	Anchor Bolt Circle*	Grate Alt.
R-1750-A	R-1750-AB	26	1 3/8	24	43	10		R-2300
R-1750-B	R-1750-BB	29	1 3/8	27	46	10	43-1/2	R-2290
R-1750-B1	R-1750-B1B	29	1 3/8	27	46	5 5/8	43-1/2	R-2290-A
R-1750-B2	R-1750-B2B	29	1 3/8	27	46	3 1/2	43-1/2	
R-1750-C	R-1750-CB	32	1 3/8	30	49	10	43-1/2	
R-1750-C1	R-1750-C1B	32	1 3/8	30	49	5 5/8	43-1/2	
R-1750-C1S	R-1750-C1SB	32	1 3/8	30	46	5 5/8	43-1/2	R-2750
R-1750-CS	R-1750-CSB	32	1 3/8	30	46	10	43-1/2	R-2255

* Furnished standard with four 1" diameter holes in base flange, equally spaced.



R-1751 Series
Telephone Design Large
Manhole Frame,
Solid Lid and Inner Lid

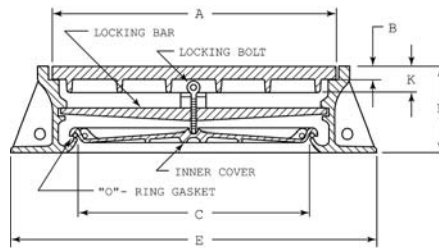
Heavy Duty

Inner lid with rubber gasket seal makes this series suitable for water-resistant construction. Note locking bar with tightening screw that can be locked in place preventing removal by unauthorized personnel.

Furnished standard with four 1" diameter anchor holes in base flange equally spaced 43 1/2" diameter bolt circle.

Note security saddle plate over eye bolt. When eye bolt is padlocked, saddle plate prevents bolt from being turned so lock bar cannot be removed.

Furnished with machined horizontal and vertical bearing surfaces.



Illustrating R-1751-A



Security Saddle Plate

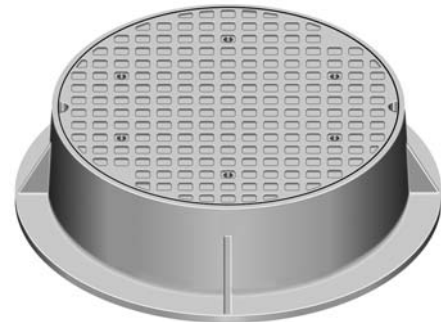
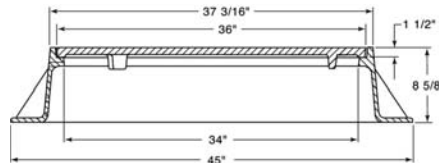
Catalog No.	Dimensions in inches					
	A	B	C	E	F	K
R-1751-A	33 7/16	1 1/2	27	43 1/2	11	3 1/2
R-1751-C	36 7/16	1 1/2	30	46 1/2	11	3 1/2

R-1752
Manhole Frame, Vented Lid

Heavy Duty



Available Grate: R-2251
(see Inlet Frames & Grates, R-2000 Series table)



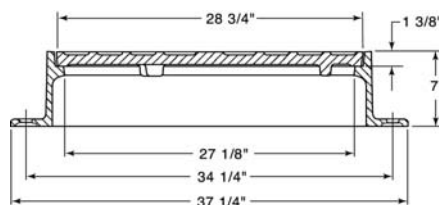
R-1753-A
Manhole Frame, Solid Lid

Heavy Duty

Furnished with four 7/8" anchor holes on 34-1/4" diameter bolt circle.



Available Grate: R-2290-B
(see Inlet Frames & Grates, R-2000 Series table)

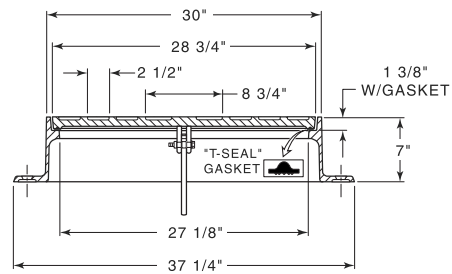


R-1753-ALM
LiftMate Frame,
Solid Gasketed Lid

Heavy Duty

Furnished with four 7/8" anchor holes on 34-1/4" diameter bolt circle.

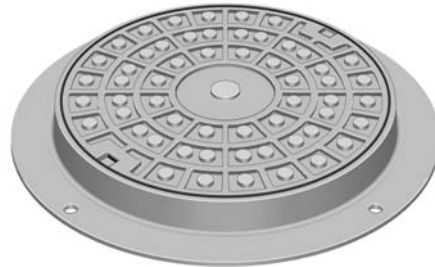
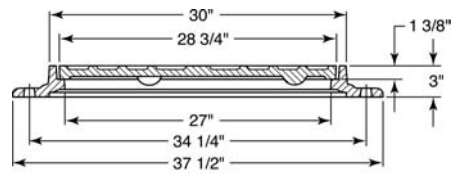
Hinge plug available for self-seal application.
See page 13 for LiftMate information.



R-1753-B
Manhole Frame, Solid Lid

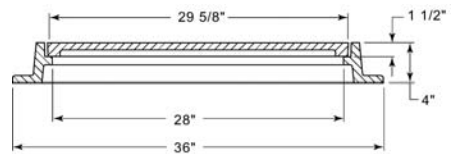
Heavy Duty

Furnished with four 1" anchor holes on 34-1/4" diameter bolt circle.



R-1754-A
Manhole Frame, Solid Lid

Heavy Duty

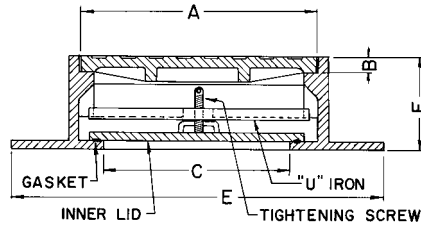


R-1755 Series
Gasket-sealed, Frost and
Water Resistant Frame,
Solid Lid and Inner Lid

Heavy Duty

All units furnished with neoprene gasket, tightening bolt, and locking bar. Lids are provided with Type F concealed watertight pickhole (see page 14 for details). Not suitable for use as a pressure manhole.

Security saddle plate available upon request. When eye bolt is padlocked, saddle plate prevents bolt from being turned so lock bar cannot be removed.

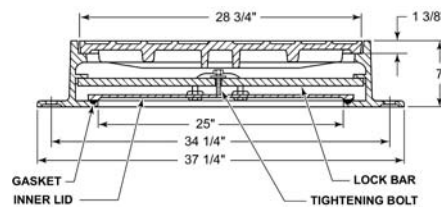


Security Saddle Plate

Catalog No.	Dimensions in inches					
	A	B	C	E	F	Lid
R-1755-B	23	1 1/2	18	36	9	Type B
R-1755-C	24	1 1/2	20	35	7 1/2	Type C
R-1755-E	26	1 1/2	22	38	7	Type C
R-1755-E1	30	1 1/2	24	39 3/16	6 1/2	Type C
R-1755-G	32	1 1/2	28	46	7	Type B
R-1755-G1	32	1 1/2	28	40	6 1/2	Type B

R-1755-F2
Frost/Water-tight Frame, Solid
and Inner Lid

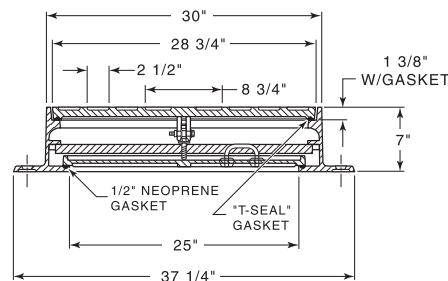
Heavy Duty



R-1755-F2LM
Frost/Water-tight LiftMate
Frame, Solid Gasketed Lid
and Inner Lid

Heavy Duty

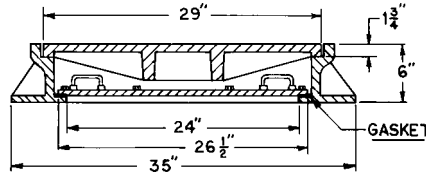
Hinge plug available for self-seal application. See page 13 for LiftMate information.



R-1757-G
**Gas/Water/Steam-tight Frame,
Solid Lid and Inner Lid**

Heavy Duty

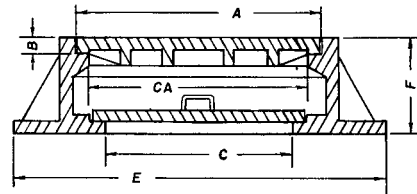
Furnished with stainless steel hex head cap screws and neoprene gasket. Lids are furnished with Type F concealed pickholes. Units are shipped assembled with gasket glued to frame.



R-1758 Series
**Frost-retardant Frame,
Solid Lid and Inner Lid**

Heavy Duty

Available with machined horizontal bearing surface on top lid, if requested.

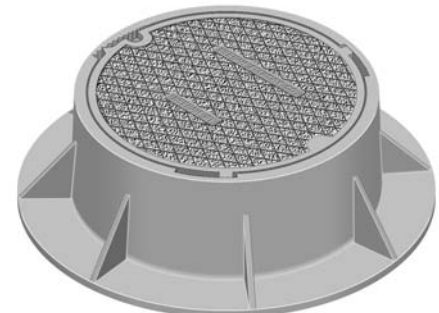
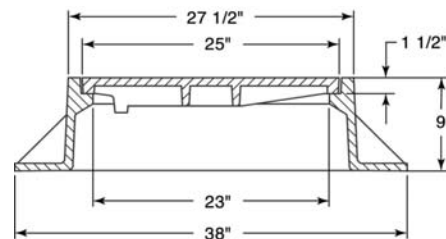


Dimensions in inches

Catalog No.	A	B	C	CA	E	F	Lid
R-1758-B	23	1 1/2	18	20 1/2	36	9	Type B
R-1758-C	24	1 1/2	20	22 1/2	35	7 1/2	Type C
R-1758-D	25	1 1/2	21	23	38	9	Type C
R-1758-E	26	1 1/2	22	24	38	7	Type C
R-1758-G	32	1 1/2	28	30 1/2	46	7	Type B

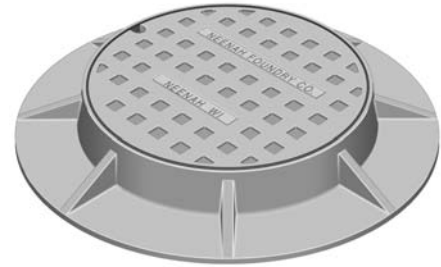
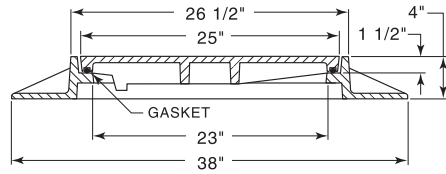
R-1760
**Non-Rock Manhole Frame,
Solid Lid**

Heavy Duty



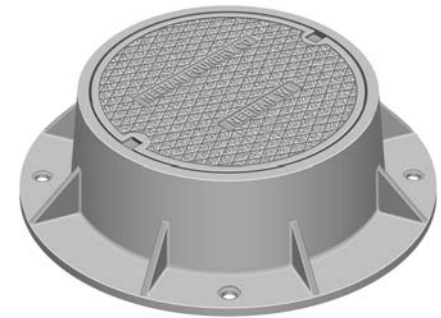
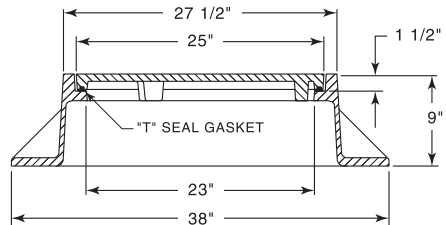
R-1760-1
Manhole Frame,
Solid Gasketed Lid

Heavy Duty



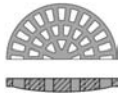
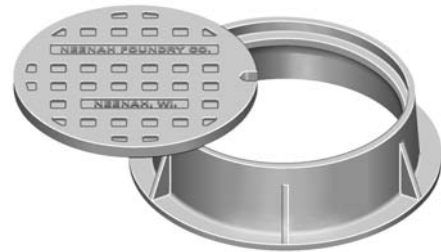
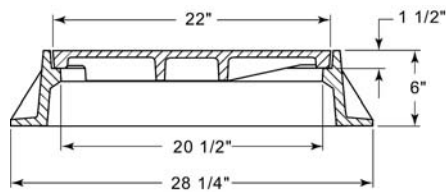
R-1760-A
Manhole Frame,
Solid Gasketed Lid

Heavy Duty



R-1761
Manhole Frame, Solid Lid

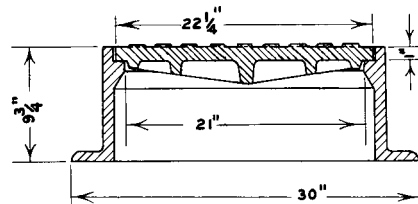
Heavy Duty



Available Grate: R-2112

R-1762
Manhole Frame, Solid Lid

Heavy Duty



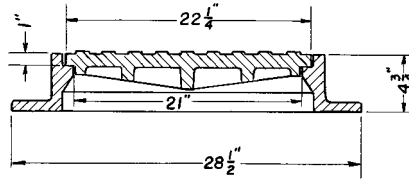
Available Grate: R-2435
(see Inlet Frames & Grates, R-2000 Series table)

R-1762-A
Manhole Frame, Solid Lid

Heavy Duty

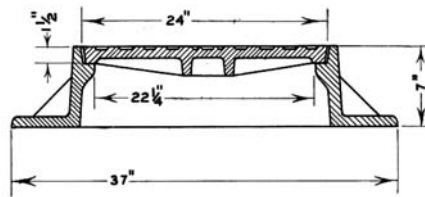


Available Grate: R-2437-B
(see Inlet Frames & Grates. R-2000 Series table)



R-1764
Manhole Frame, Solid Lid

Heavy Duty

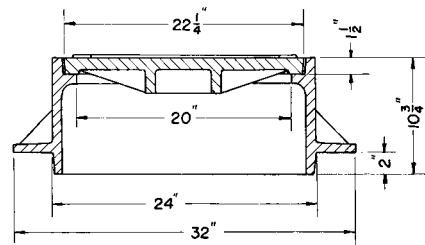


R-1765
Manhole Frame, Solid Lid

Heavy Duty



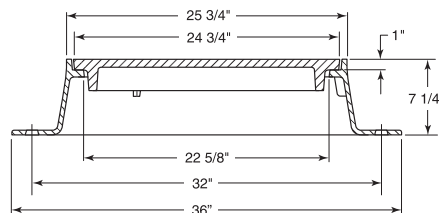
Available Grate: R-2466-A
(see Inlet Frames & Grates. R-2000 Series table)



R-1767
Manhole Frame, Vented Lid

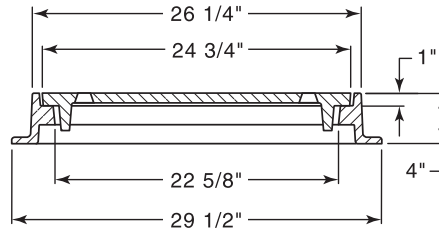
Heavy Duty

Furnished with four 1" anchor holes on 32" diameter bolt circle.
Specify solid lid if required.



R-1767-4
Manhole Frame, Vented Lid

Heavy Duty



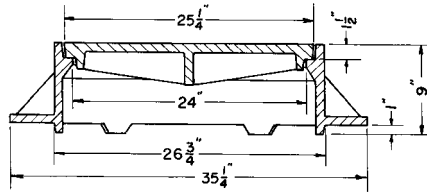
R-1769-A
Manhole Frame, Solid Lid

Heavy Duty

Bottom anchor lugs located at 60° intervals.



Available Grate: R-2395-1
(see Inlet Frames & Grates, R-2000 Series table)



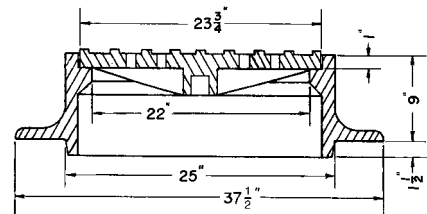
R-1771
Manhole Frame, Vented Lid

Heavy Duty

Specify if solid lid required.



Available Grate: R-2418
(see Inlet Frames & Grates, R-2000 Series table)



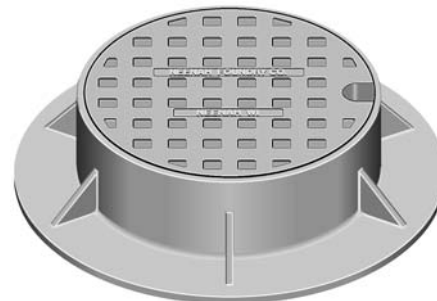
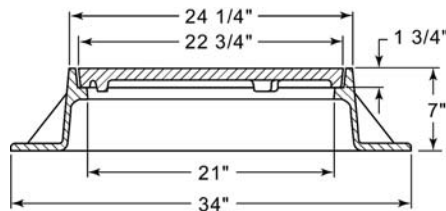
R-1772
Manhole Frame, Solid Lid

Heavy Duty

Non-Rocking feature available, see p. 12.



Available Grate: R-2502

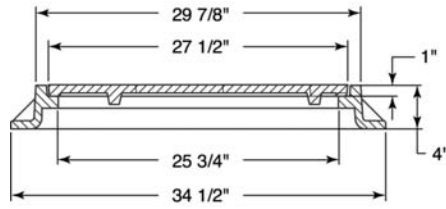


R-1773
Manhole Frame, Solid Lid

Light Duty

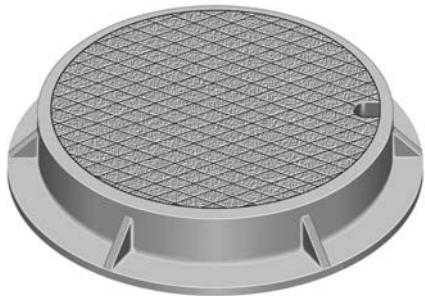
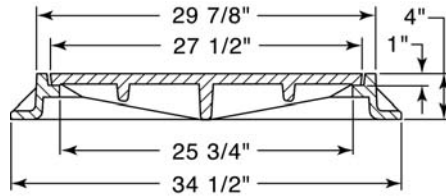


Available Grate: R-2510-2



R-1773-A
Manhole Frame, Solid Lid

Heavy Duty

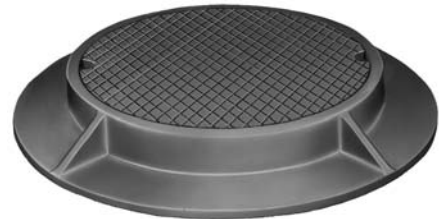
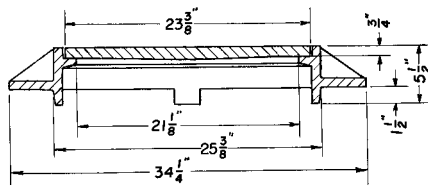


R-1774
Manhole Frame, Solid Lid

Heavy Duty



Available Grate: R-2425
(see Inlet Frames & Grates. R-2000 Series table)

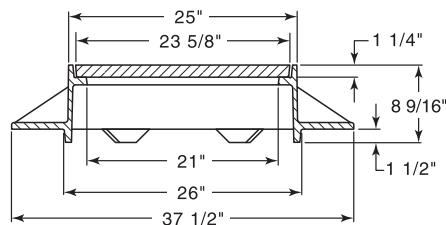


R-1775
Manhole Frame, Solid Lid

Heavy Duty



Available Grate: R-2427-A
(see Inlet Frames & Grates. R-2000 Series table)

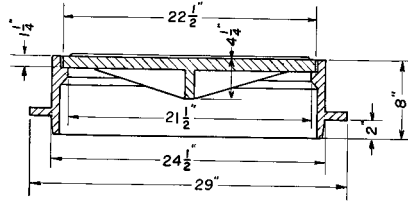


R-1776
Manhole Frame, Solid Lid

Heavy Duty



Available Grate: R-2420-B
(see Inlet Frames & Grates, R-2000 Series table)



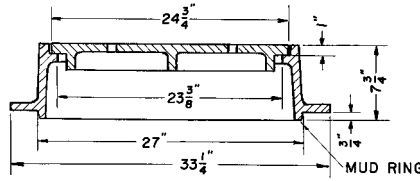
R-1777
Manhole Frame, Vented Lid

Heavy Duty

Specify if solid lid required.

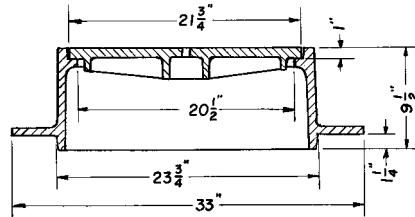


Available Grate: R-2401-A
(see Inlet Frames & Grates, R-2000 Series table)



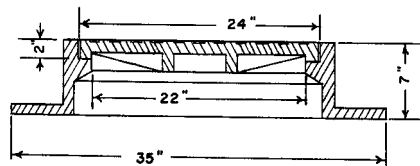
R-1779
Manhole Frame, Solid Lid

Heavy Duty



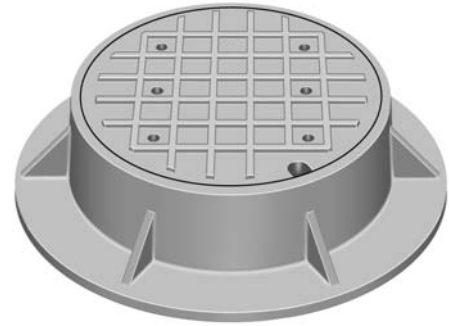
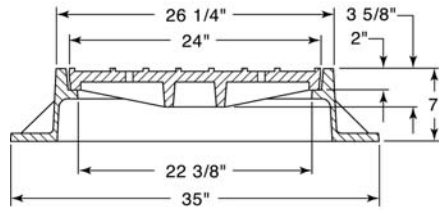
R-1780-A
Manhole Frame, Solid Lid

Heavy Duty



**R-1781
Manhole Frame, Vented Lid**

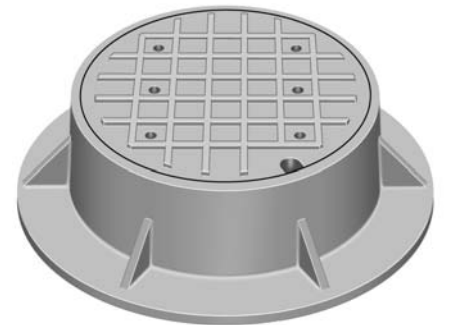
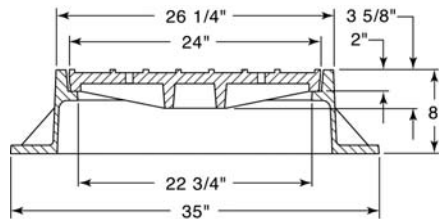
Heavy Duty



**R-1782
Manhole Frame, Vented Lid**

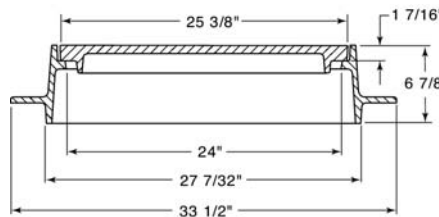
Heavy Duty

Specify if solid lid required.



**R-1783-A
Manhole Frame, Solid Lid**

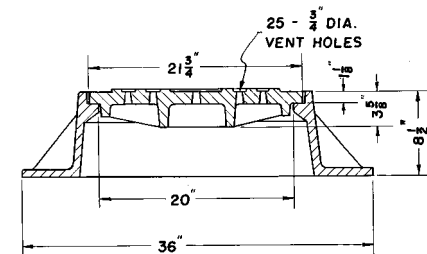
Heavy Duty



**R-1784
Manhole Frame, Vented Lid**

Heavy Duty

Specify if solid lid required.



Available Grate: R-2474
(see Inlet Frames & Grates, R-2000 Series table)

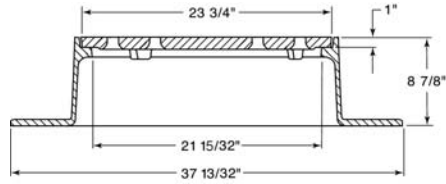
R-1785
Manhole Frame, Vented Lid

Heavy Duty

Furnished with four 1" anchor holes on 33" diameter bolt circle.
Specify if solid lid required.



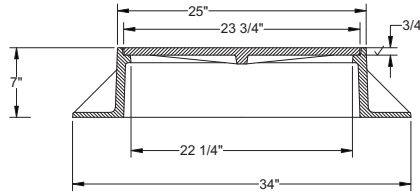
Available Grate: **R-2423**
(see **Inlet Frames & Grates, R-2000 Series** table)



R-1786
Manhole Frame, Solid Lid

Light Duty

Furnished with four 1" anchor holes on 30-1/2" diameter bolt circle.
Specify if vented lid required.



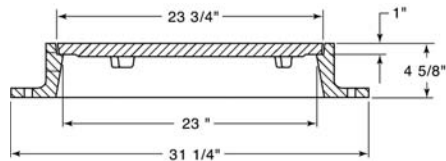
R-1787
Manhole Frame, Vented Lid

Heavy Duty

Furnished with four 1" anchor holes on 28-3/4" diameter bolt circle.
Specify if solid lid required.



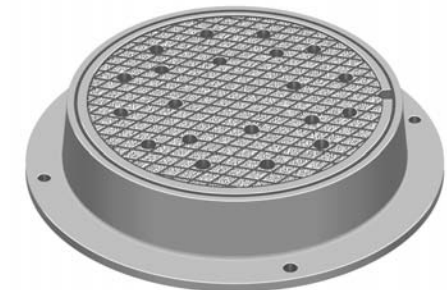
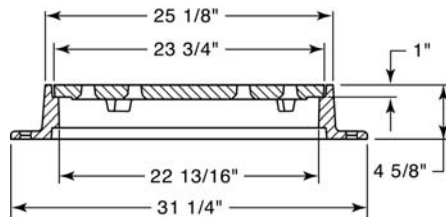
Available Grate: **R-2412-A**
(see **Inlet Frames & Grates, R-2000 Series** table)



R-1787-A
Manhole Frame, Vented Lid

Heavy Duty

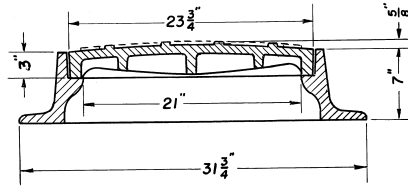
Furnished with four 1" anchor holes on 28-3/4" diameter bolt circle.



■ Note: When specifying/ordering grates, refer to "Choosing the proper inlet grate" on pages 117-118.
For a complete listing of FREE OPEN AREAS and WEIR PERIMETERS of all NEENAH grates, refer to pages 306-311.

R-1788-A
Manhole Frame, Solid Lid

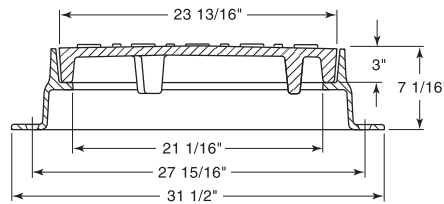
Heavy Duty



R-1788-A1
Manhole Frame, Solid Lid

Heavy Duty

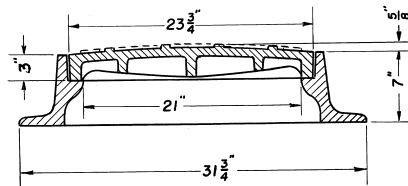
Furnished with four 7/8" anchor holes on 27-15/16" diameter bolt circle.
Available with integral cast stainless steel handles.



R-1788-B
Manhole Frame, Vented Lid

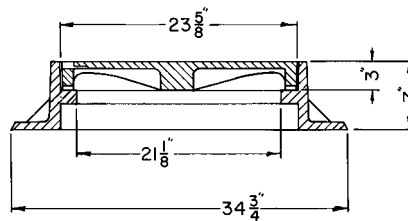
Heavy Duty

Lid has 12 slots, 1-5/8" x 4-7/8"



R-1788-D
Manhole Frame, Solid Lid

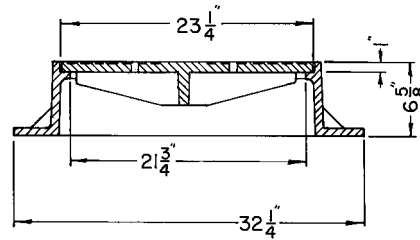
Heavy Duty



■ Note: When specifying/ordering grates, refer to "Choosing the proper inlet grate" on pages 117-118.
For a complete listing of FREE OPEN AREAS and WEIR PERIMETERS of all NEENAH grates, refer to pages 306-311.

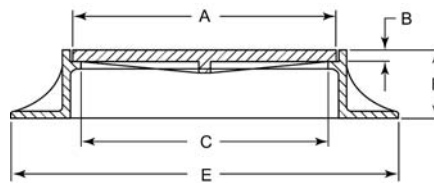
R-1789-B
Manhole Frame, Vented Lid

Heavy Duty



R-1791 Series
Small Manhole Frame, Solid Lid

Light Duty



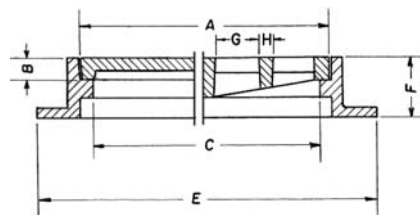
Illustrating R-1791-F

Catalog No.	Dimensions in inches					Grate Alt.
	A	B	C	E	F	
R-1791-A	12	1	11	19	4	R-2525-A
R-1791-B	15 1/4	3/8	14 1/2	20 1/2	4 1/4	
R-1791-C	15 5/8	1 3/8	14 3/4	21	4 3/4	R-2525-C
R-1791-E	18	1	17	25	4 1/2	R-2525-E
R-1791-F	20 1/2	5/8	18	30	5	R-2525-F
R-1791-G	19 1/2	1 1/2	18	29	5 1/2	R-2525-G

R-1792 Series
Manhole Frame, Grate or Lid

Heavy Duty

CATALOG NUMBER	GRATE TYPE	SQ. FT. OPEN	WEIR PERIMETER LINEAL FEET
R-1792-AG	G	0.2	2.7
R-1792-BG	G	0.3	3.5
R-1792-CG	G	0.5	4.3
R-1792-DG	G	0.7	4.8
R-1792-EG	G	1.0	5.8
R-1792-FG	G	1.7	6.6
R-1792-GG	G	2.0	7.4
R-1792-HG	G	2.7	9.0
R-1792-JG	G	3.7	10.5
R-1792-KG	G	4.8	12.1



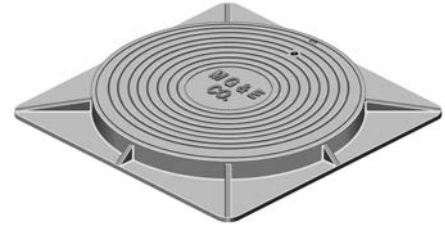
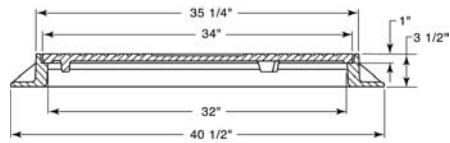
These units are reversible. See R-5900-1 Series for top flange.
For bolted units, see R-6461-2 Series.

Catalog No. Solid Lid	Catalog No. Open Grate	Dimensions in inches						
		A	B	C	E	F	G	H
R-1792-AL	R-1792-AG	10 1/4	1 1/2	8 1/2	14 1/2	4	1 x 3 3/4	7/8
R-1792-BL	R-1792-BG	13 1/4	1 1/2	11 1/2	17 1/2	4	1 x 5	1
R-1792-CL	R-1792-CG	16 1/4	1 1/2	14 1/2	20 1/2	4	1 x 6 3/4	7/8
R-1792-DL	R-1792-DG	18 1/4	1 1/2	16 1/2	22 1/2	4	1 1/8 x 7 1/8	1
R-1792-EL	R-1792-EG	22 1/4	1 1/2	20 1/2	26 1/2	4	1 1/8 x 4	1
R-1792-FL	R-1792-FG	25 1/4	1 1/2	23 1/2	29 1/2	4	1 1/8 x 4	3/4
R-1792-GL	R-1792-GG	28 1/4	1 1/2	26 3/8	32 1/2	4	1 x 5	7/8
R-1792-HL *	R-1792-HG	34 1/4	1 1/2	32 1/2	38 1/2	4	1 x 7	1
R-1792-JL	R-1792-JG	40	1 1/2	38 1/2	44 1/2	4	1 1/8 x 8 3/4	1
R-1792-KL	R-1792-KG	46 1/8	1 1/2	44 1/2	50 1/2	4	1 1/16 x 5 1/2	1

* Available with removable center lid, see R-1586.

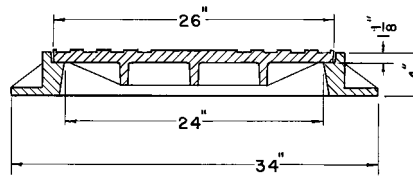
R-1794-EB
Manhole Frame,
Square Base, Solid Lid

Heavy Duty



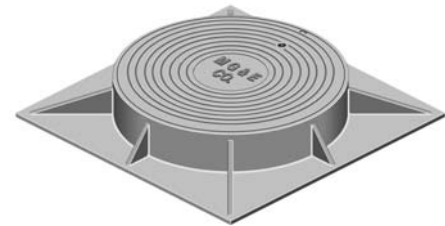
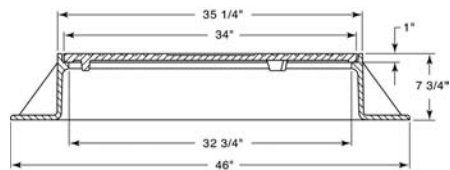
R-1794-J
Manhole Frame,
Square Base, Solid Lid

Heavy Duty



R-1794-M1
Manhole Frame,
Square Base, Solid Lid

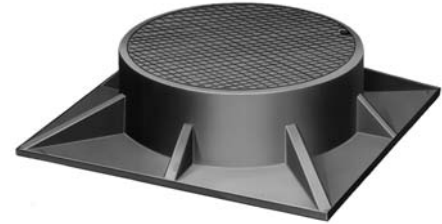
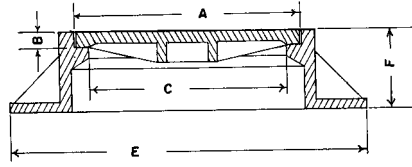
Heavy Duty



■ Note: When specifying/ordering grates, refer to "Choosing the proper inlet grate" on pages 117-118.
For a complete listing of FREE OPEN AREAS and WEIR PERIMETERS of all NEENAH grates, refer to pages 306-311.

R-1795 Series
Manhole Frame,
Square Base, Solid Lid

Heavy Duty



Illustrating R-1795-E

Dimensions in inches						
Catalog No.	A	B	C	E	F	Lid Grate Alt.
R-1795-A	12 1/16	1	11	19 x 19	4	C*
R-1795-B	15 5/8	1 3/8	15	23 x 23	5	C*
R-1795-C	19 1/2	1 1/2	17 3/4	29 1/2 x 29 1/2	5 1/2	C*
R-1795-D	22	1 1/2	20	32 x 32	6	B,C
R-1795-E	22	1 1/2	20	33 x 33	8	B,C
R-1795-F	24	1 1/2	22	35 x 35	7 1/2	SPEC
R-1795-G	24 3/4	1 1/4	22	36 x 36	9	SPEC
R-1795-K	32	1 1/2	30	46 x 46	7	B R-2580-A
R-1795-M	38	1 1/2	36	47 x 47	10	B R-2580-C

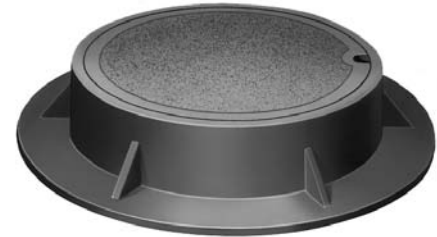
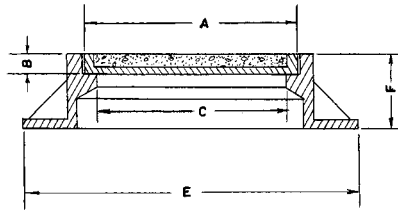
* Furnished with as cast bearing surfaces.

R-1796 Series
Manhole Frame, Lid for Fill

Light Duty

Only frames and lids furnished. Center filling material to be supplied by purchaser. Designed for concrete, asphalt or terazzo fill.

Most lids in this series have anchors cast into top surface to hold fill. If these would interfere with your type of fill application, advise when ordering.



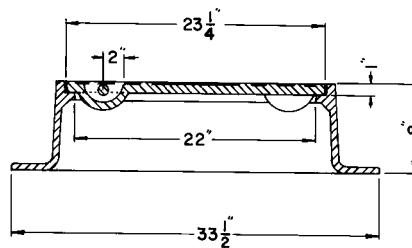
Illustrating R-1796-D

Dimensions in inches						
Catalog No.	A	B	C	E	F	Grate Alt.
R-1796-B	19 1/2	1 1/2	18	29	5 1/2	R-2525-G
R-1796-C	22	1 1/2	20	32	6	R-2535
R-1796-D	24	1 1/2	22 1/4	34 21/32	7 15/32	R-2500
R-1796-E	26	1 1/2	24 1/8	35 7/8	6 15/16	R-2501
R-1796-F*	32	1 1/2	30	46	7	R-2560-G

* Heavy Duty

R-1797
Manhole Frame, Solid Lid

Heavy Duty

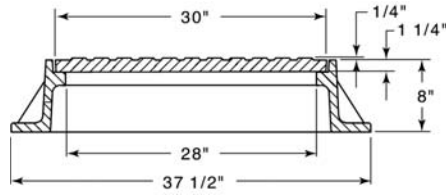


■ Note: When specifying/ordering grates, refer to “Choosing the proper inlet grate” on pages 117-118.
For a complete listing of FREE OPEN AREAS and WEIR PERIMETERS of all NEENAH grates, refer to pages 306-311.

R-1798
Manhole Frame, Solid Lid

Heavy Duty

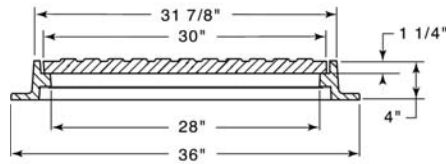
Available with self-seal gasket and concealed pickholes if required.



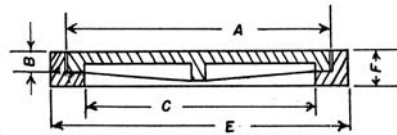
R-1798-1
Manhole Frame, Solid Lid

Heavy Duty

If application requires flange at top for slab-type installation, order as **R-1798-1S**.



R-1799 Series
Angle Frame, Solid Lid

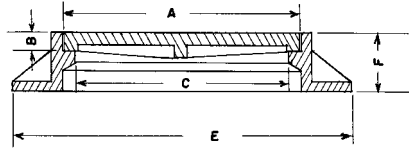


Dimensions in inches								
Catalog No.	Duty	A	B	C	E	F	Grate Alt.	Grate Duty
R-1799-D ***	Light	19 3/4	1	17 1/2	21 3/4	1 5/8	R-2586-D	Light
R-1799-E	Heavy	19 1/2	1 1/2	18	21 1/4	2	R-2586-E	Light
R-1799-G	Heavy	22 1/4	1 1/2	20 3/8	24 3/8	2 1/4	R-2586-G	Heavy
R-1799-H	Heavy	22 3/4	1 3/4	20 1/2	25 1/2	3	R-2586-H	Heavy
R-1799-K	Light	24	3/4	21 3/4	26	1 1/4	R-2586-K	Light
R-1799-O	Heavy	32	1	30	34	2 1/4	R-2586-O	Light
R-1799-P	Heavy	38	1 1/2	36	41	2 1/4	R-4370-27A	Heavy

* Furnished with Type G Handle.
** Furnished with cover Type B.

R-1800 to 1801 Series
Frame, Solid Lid

Heavy Duty



Illustrating R-1800-C with Square Base flange

Catalog No.	Dimensions in inches					Grate Alt.
	A	B	C	E	F	
Square						
R-1800-A *	20 x 20	1 3/4	18 x 18	31 x 31	5	R-3430
R-1800-B	23 1/2 x 23 1/2	1 1/2	22 x 22	28 x 28	4	R-1878-A5G
R-1800-C *	24 x 24	2	22 x 22	35 x 35	6	R-3210-A
R-1800-D +	32 x 32	1 1/2	30 x 30	36 x 36	6	
R-1800-E **	50 x 50	1 3/4	48 x 48	59 x 59	8	R-3438-A
Rectangular						
R-1801-A	11 1/2 x 14 3/4	1 1/4	10 x 13	19 x 22	4	
R-1801-B	14 1/2 x 21 1/2	2	13 x 20	23 x 30	5 1/2	R-3460-A
R-1801-C	18 x 30	2	16 x 28	26 x 38	8 1/2	
R-1801-D	18 x 36	2	16 x 34	28 x 46	7	
R-1801-E	23 1/2 x 35 1/2	2	22 x 33	34 x 46	6 1/4	R-3416
R-1801-F	23 7/8 x 35 3/4	1 3/4	22 x 34	36 x 48	9	R-3455-C
R-1801-G ***	36 x 48	1 3/4	33 x 45	42 x 54	5 1/2	R-3457-C2

* Furnished with round base flange if specified.

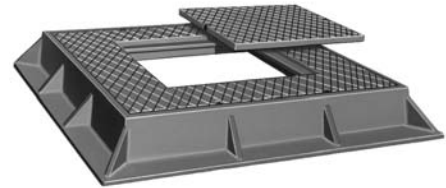
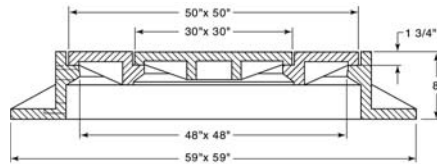
** Lid furnished in two pieces.

*** Lid in two pieces (also frame).

+ Built-up / Slab frame

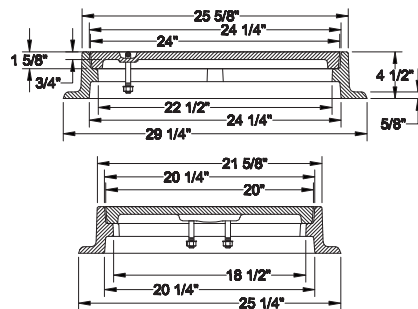
R-1860-A
Large Frame, Solid Lid with
Removable Center Lid

Heavy Duty



R-1863
Frame

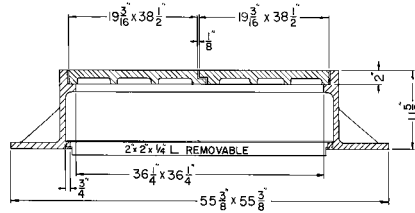
Heavy Duty



R-1868
Street Electric Vault Frame,
2-piece Top Lid

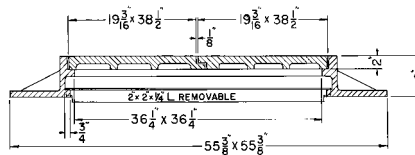
Heavy Duty

Specify lettering as shown,
special lettering or no lettering.



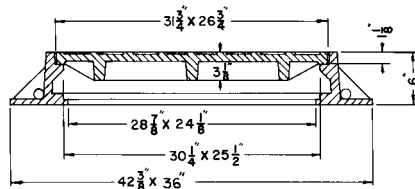
R-1869
Sidewalk Electric Vault Frame,
2-piece Top Lid

Heavy Duty



R-1870
Electric Vault Frame,
Vented Lid

Heavy Duty

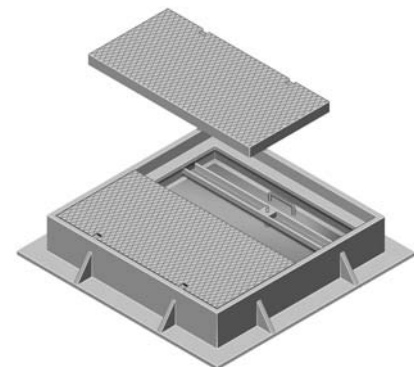
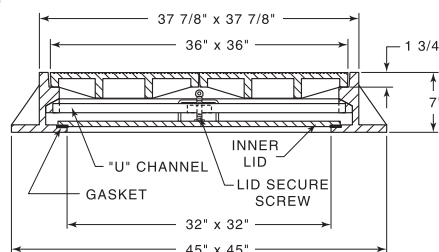


R-1871-D
Square Frame, 2-piece Outer Lid,
Inner Lid and Locking Bars

Heavy Duty

Inner lid with machined seat and gasket for
water-resistant function.

Security saddle plate available upon request.
When eye bolt is padlocked, saddle plate
prevents bolt from being turned so lock bar
cannot be removed.

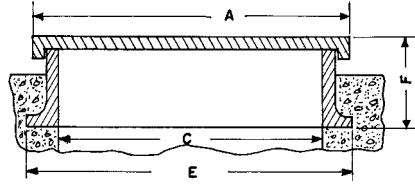


Security Saddle Plate

R-1872 Series
Tank Type Manhole Frame,
Solid Lid

Heavy Duty

Designed for reservoir or tank manholes. Lid caps frame, making manhole water repellant. Top of frame should extend several inches above slab to prevent surface water from entering pit. Lid can be secured to frame with four stainless steel bolts when specified.

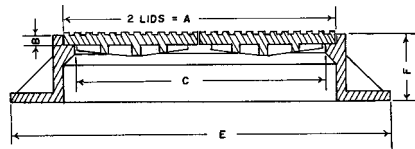


Catalog No.	Dimensions in inches			
	A	C	E	F
R-1872-BB	21 x 21	18 1/2 x 18 1/2	24 x 24	4
R-1872-CB	24 x 24	21 1/2 x 21 1/2	28 1/2 x 28 1/2	5
R-1872-DB	26 3/8 x 26 3/8	24 x 24	30 x 30	5
R-1872-EB	33 x 33	30 x 30	36 x 36	5
R-1872-FB	39 x 39	36 x 36	42 x 42	6

R-1877 Series
Rectangular Frame, Double Lid

Heavy Duty

Large rectangular frame with double lid allows easy access to valves, water meters, transformers, or conduit lines in street manholes.



Illustrating R-1877-EM

Catalog No.	Dimensions in inches					Grate Alt.
	A	B	C	E	F	
R-1877-E1 *	25 5/8 x 49 5/8	1 1/2	24 x 48	34 x 58	4	
R-1877-EM	23 x 58	1	21 x 56	35 x 70	8 1/2	R-3415
R-1877-ESM	23 x 58	1	21 x 56	35 x 70	4	

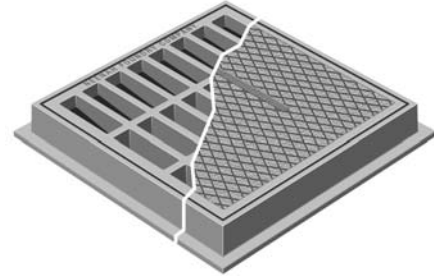
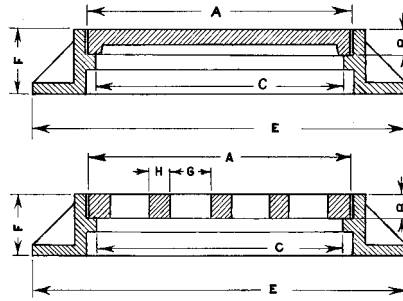
* Furnished with as cast bearing surfaces.

■ Note: When specifying/ordering grates, refer to "Choosing the proper inlet grate" on pages 117-118.
For a complete listing of FREE OPEN AREAS and WEIR PERIMETERS of all NEENAH grates, refer to pages 306-311.

R-1878 Series
Frame, Solid Lid/Grate

Heavy Duty

CATALOG NUMBER	GRATE TYPE	SQ. FT. OPEN	WEIR PERIMETER LINEAL FEET
R-1878-A1G	A or C	0.5	4.6
R-1878-A2G	A or C	0.8	6.0
R-1878-A3G	A or C	1.0	6.7
R-1878-A4G	A or C	1.1	7.3
R-1878-A5G	A or C	1.8	7.8
R-1878-A6G	A or C	2.7	8.6
R-1878-A7G	A or C	2.1	9.2
R-1878-A8G	A or C	2.3	9.8
R-1878-A9G	A or C	2.5	10.6
R-1878-A10G	A or C	3.0	12.3
R-1878-B1G	A	0.6	5.7
R-1878-B2G	A	0.9	6.5
R-1878-B3G	A	1.2	7.5
R-1878-B4G	A	2.1	8.5
R-1878-B5G	A	2.5	9.6
R-1878-B6G	C	2.6	9.5
R-1878-B7G	A	2.6	10.5
R-1878-B8G	A	3.7	12.6
R-1878-B9G	C	3.3	11.6
R-1878-B10G	C	4.9	13.5
R-1878-B11G	A	5.0	14.7



These shallow frames are suitable for use in thin or deep concrete slabs. All sizes of frames are reversible and can be installed with flange at base or top.

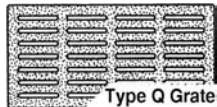
For additional selections, see R-6672-3 Series.

		Dimensions in inches							
Catalog No. Solid Lid	Catalog No. Open Grate	A	B	C	E	F	G	H	
Square									
R-1878-A1L	R-1878-A1G ***	13 3/4 x 13 3/4	1 1/2	12 x 12	18 x 18	4	1 x 5 1/2	1	
R-1878-A2L	R-1878-A2G	18 x 18	1 1/2	16 x 16	22 x 22	4	1 1/4 x 4 1/4	1	
R-1878-A3L	R-1878-A3G	20 x 20	1 1/2	18 x 18	24 x 24	4	1 15/16 x 3 3/8	1	
R-1878-A4L	R-1878-A4G	21 1/2 x 21 1/2	1 1/2	20 x 20	26 x 26	4	1 3/8 x 3 5/8	1	
R-1878-A5L	R-1878-A5G	23 1/2 x 23 1/2	1 1/2	22 x 22	28 x 28	4	1 1/2 x 6 3/8	1	
R-1878-A6L	R-1878-A6G **	25 3/4 x 25 3/4	1 1/2	24 x 24	30 x 30	4	2 3/8 x 7 1/4	3/4	
R-1878-A7L	R-1878-A7G	27 1/2 x 27 1/2	1 1/2	26 x 26	32 x 32	4	1 x 5	1	
R-1878-A8L	R-1878-A8G	29 1/2 x 29 1/2	1 1/2	28 x 28	34 x 34	4	1 1/8 x 5 1/2	1	
R-1878-A9L	R-1878-A9G **	31 3/4 x 31 3/4	1 1/2	30 x 30	36 x 36	4	1 x 6 3/8	1 1/8	
R-1878-A10L *	R-1878-A10G *	37 x 37	1 1/2	36 x 36	42 x 42	4	1 3/4 x 3 1/2	1 1/2	
Rectangular									
R-1878-B1L	R-1878-B1G	14 x 20	1 1/2	12 x 18	18 x 24	4	3/4 x 5 1/2	1	
R-1878-B2L	R-1878-B2G	13 1/2 x 25 1/2	1 1/2	12 x 24	18 x 30	4	1 x 4 1/2	1	
R-1878-B3L	R-1878-B3G	19 1/2 x 25 1/2	1 1/2	18 x 24	24 x 30	4	7/8 x 5	1	
R-1878-B4L	R-1878-B4G	19 1/2 x 31 1/2	1 1/2	18 x 30	24 x 36	4	2 x 5	1	
R-1878-B5L	R-1878-B5G	19 3/4 x 37 3/4	1 1/2	18 x 36	24 x 42	4	2 x 5	1	
R-1878-B6L	R-1878-B6G	25 1/2 x 31 1/2	1 1/2	24 x 30	30 x 36	4	1 3/8 x 5	1	
R-1878-B7L	R-1878-B7G	25 1/2 x 37 1/2	1 1/2	24 x 36	30 x 42	4	1 1/8 x 7 1/8	3/4	
R-1878-B8L *	R-1878-B8G *	25 3/4 x 49 3/4	1 1/2	24 x 48	30 x 54	4	1 5/16 x 6 13/16	1	
R-1878-B9L *	R-1878-B9G *	31 3/4 x 37 3/4	1 1/2	30 x 36	36 x 42	4	1 3/8 x 4 5/8	1	
R-1878-B10L *	R-1878-B10G *	31 1/2 x 49 1/2	1 1/2	30 x 48	36 x 54	4	1 1/2 x 4 3/4	1	
R-1878-B11L *	R-1878-B11G *	38 x 50	1 1/2	36 x 48	44 1/2 x 56 1/2	4	1 1/16 x 7 5/8	1	

* Cover/Grate in 2 pieces.

** Type Q grate available, 1/2" wide grate slots.

*** Type Q grate available, 3/8" wide grate slots.

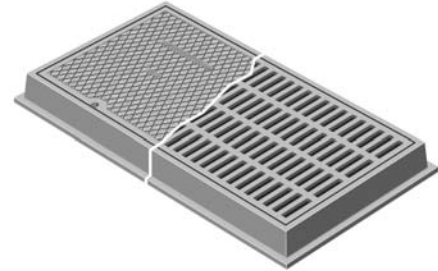
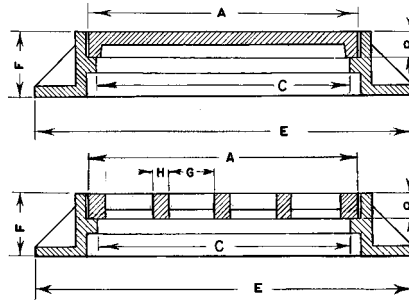


■ Note: When specifying/ordering grates, refer to "Choosing the proper inlet grate" on pages 117-118.
For a complete listing of FREE OPEN AREAS and WEIR PERIMETERS of all NEENAH grates, refer to pages 306-311.

R-1879 Series
Frame, Solid Lid/Grate

Light Duty

CATALOG NUMBER	GRATE TYPE	SQ. FT. OPEN	WEIR PERIMETER LINEAL FEET
R-1879-A1G	A or C	0.4	4.6
R-1879-A2G	A or C	0.8	6.0
R-1879-A3G	A or C	1.2	6.7
R-1879-A4G	A or C	1.4	7.3
R-1879-A5G	A or C	1.9	7.8
R-1879-A6G	A or C	2.0	8.6
R-1879-A7G	A or C	1.7	9.2
R-1879-A8G	A or C	2.2	9.8
R-1879-A9G	A or C	2.8	10.6
R-1879-A10G	A or C	3.7	12.3
R-1879-B1G	A	0.6	5.7
R-1879-B2G	C	0.9	6.5
R-1879-B3G	C	1.0	7.5
R-1879-B4G	A	1.4	8.5
R-1879-B5G	A	1.9	9.6
R-1879-B6G	A	2.4	9.5
R-1879-B7G	A	3.0	10.6
R-1879-B8G	A	3.2	12.6
R-1879-B9G	A	3.2	11.6
R-1879-B10G	C	4.2	13.5



These shallow frames are suitable for use in thin or deep concrete slabs. All sizes of frames are reversible and can be installed with flange at base or top.

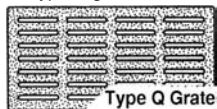
For additional selections, see R-6672-3 Series.

		Dimensions in inches							
Catalog No. Solid Lid	Catalog No. Open Grate	A	B	C	E	F	G	H	
Square									
R-1879-A1L	R-1879-A1G ***	13 3/4 x 13 3/4	1 1/2	12 x 12	18 x 18	4	1 x 3	1	
R-1879-A2L	R-1879-A2G	18 x 18	1 1/2	16 x 16	22 x 22	4	1 1/4 x 4 1/4	3/4	
R-1879-A3L	R-1879-A3G	20 x 20	1 1/2	18 x 18	24 x 24	4	3/4 x 5	3/4	
R-1879-A4L	R-1879-A4G	21 1/2 x 21 1/2	1 1/2	20 x 20	26 x 26	4	3/4 x 4	3/4	
R-1879-A5L	R-1879-A5G	23 1/2 x 23 1/2	1 1/2	22 x 22	28 x 28	4	3/4 x 6 1/2	3/4	
R-1879-A6L	R-1879-A6G **	25 3/4 x 25 3/4	1 1/2	24 x 24	30 x 30	4	1 x 5	3/4	
R-1879-A7L	R-1879-A7G	27 1/2 x 27 1/2	1 1/2	26 x 26	32 x 32	4	3/4 x 7 5/8	3/4	
R-1879-A8L	R-1879-A8G	29 1/2 x 29 1/2	1 1/2	28 x 28	34 x 34	4	1 1/8 x 5 7/16	1	
R-1879-A9L	R-1879-A9G **	31 3/4 x 31 3/4	1 1/2	30 x 30	36 x 36	4	1 x 4 1/4	3/4	
R-1879-A10L *	R-1879-A10G *	37 x 37	1 1/2	36 x 36	42 x 42	4	1 x 4 7/8	1	
Rectangular									
R-1879-B1L	R-1879-B1G	14 x 20	1 1/2	12 x 18	18 x 24	4	3/4 x 5 1/2	1	
R-1879-B2L	R-1879-B2G	13 1/2 x 25 1/2	1 1/2	12 x 24	18 x 30	4	3/4 x 4 1/2	1	
R-1879-B3L	R-1879-B3G	19 1/2 x 25 1/2	1 1/2	18 x 24	24 x 30	4	7/8 x 5 1/4	1	
R-1879-B4L	R-1879-B4G	19 1/2 x 31 1/2	1 1/2	18 x 30	24 x 36	4	3/4 x 5	1	
R-1879-B5L	R-1879-B5G	19 3/4 x 37 3/4	1 1/2	18 x 36	24 x 42	4	1 1/8 x 5	1	
R-1879-B6L	R-1879-B6G	25 1/2 x 31 1/2	1 1/2	24 x 30	30 x 36	4	1 x 5 1/8	3/4	
R-1879-B7L	R-1879-B7G	25 1/2 x 37 1/2	1 1/2	24 x 36	30 x 42	4	1 x 5 1/8	3/4	
R-1879-B8L *	R-1879-B8G *	25 3/4 x 49 3/4	1 1/2	24 x 48	30 x 54	4	3/4 x 5 1/8	1	
R-1879-B9L *	R-1879-B9G *	31 3/4 x 37 3/4	1 1/2	30 x 36	36 x 42	4	1 x 6 1/2	1	
R-1879-B10L *	R-1879-B10G *	31 1/2 x 49 1/2	1 1/2	30 x 48	36 x 54	4	1 x 5	1	

* Cover/Grate in 2 pieces

** Type Q grate available, 1/2" wide grate slots.

*** Type Q grate available, 3/8" wide grate slots.

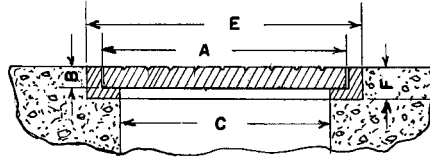


■ Note: When specifying/ordering grates, refer to "Choosing the proper inlet grate" on pages 117-118.
For a complete listing of FREE OPEN AREAS and WEIR PERIMETERS of all NEENAH grates, refer to pages 306-311.

R-1883 to R-1885 Series
Angle Frame, Lid

Heavy Duty

For angle frames with open grates, see the R-4400 Series.



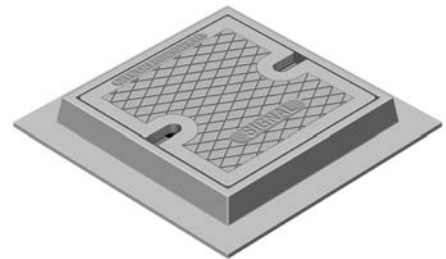
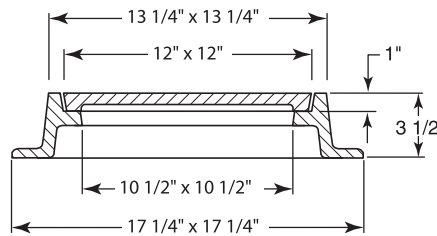
Illustrating R-1883-G1

Catalog No.	Dimensions in inches				
	A	B	C	E	F
Square					
R-1883-A	10 x 10	1	8 x 8	11 1/4 x 11 1/4	1 1/2
R-1883-B1	12 x 12	1	10 x 10	13 1/4 x 13 1/4	1 1/2
R-1883-C1	14 x 14	1	12 x 12	15 1/4 x 15 1/4	1 1/2
R-1883-D	18 x 18	1 1/2	16 x 16	19 1/2 x 19 1/2	2
R-1883-E1	20 x 20	1 3/4	18 x 18	21 1/2 x 21 1/2	2 1/4
R-1883-E2	20 x 20	1	18 3/4 x 18 3/4	21 1/4 x 21 1/4	1 1/2
R-1883-E4	22 x 22	1 3/4	20 x 20	23 1/2 x 23 1/2	2 1/4
R-1883-G1	24 x 24	2	22 x 22	25 1/2 x 25 1/2	2 1/2
R-1883-G4	26 1/4 x 26 1/4	1 1/8	24 x 24	27 1/8 x 27 1/8	1 5/8
R-1883-H1	27 x 27	2	24 x 24	28 1/2 x 28 1/2	2 1/2
R-1883-H3	27 1/2 x 27 1/2	1	25 5/8 x 25 5/8	29 x 29	1 7/16
R-1883-J1	30 x 30	2	28 x 28	31 1/2 x 31 1/2	2 1/2
R-1883-J2	32 3/8 x 32 3/8	1 1/2	30 x 30	34 x 34	2
R-1883-J3	34 x 34	2	31 3/4 x 31 3/4	35 1/4 x 35 1/4	2 1/2
R-1883-K *	36 x 36	2	34 x 34	38 x 38	2 1/2
Rectangular					
R-1885-D2	12 x 24	1	10 x 22	13 1/4 x 25 1/4	1 1/2
R-1885-D2B	12 x 30	2	10 x 28	13 1/2 x 31 1/2	2 1/2
R-1885-F1	14 x 28	1	12 x 26	15 1/4 x 29 1/4	1 1/2
R-1885-K1	18 x 36	1 1/2	16 x 34	19 1/2 x 37 1/2	2
R-1885-M1 *	20 x 40	1 3/4	18 x 38	21 1/2 x 41 1/2	2 1/4

* Lid in 2 pieces.

R-1883-B1MA
Square Angle Frame, Lid

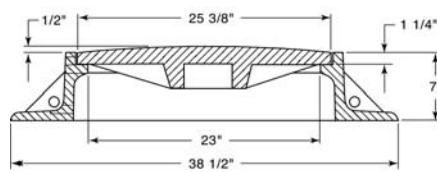
Heavy Duty



R-1889
Valve Manhole Frame, Vented Lid

Heavy Duty

Furnished with machined horizontal and vertical bearing surfaces.
Lid furnished with two 1" diameter vent holes.

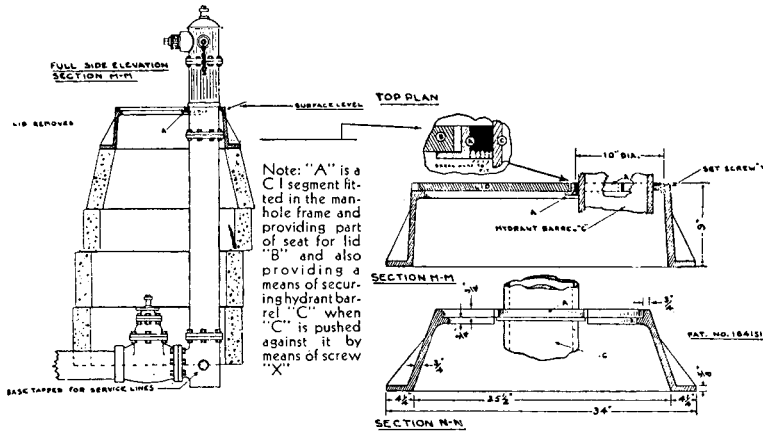


Available Grate: R-2411-A

R-1890
Hydrant Manhole Frame, Lid

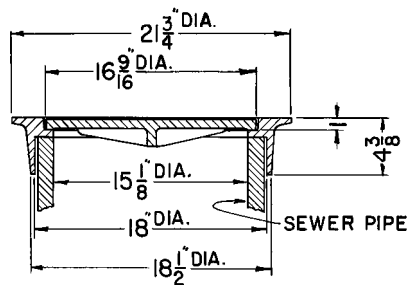
Light Duty

Set screw 1/2" x 1" used to tighten hydrant barrel.



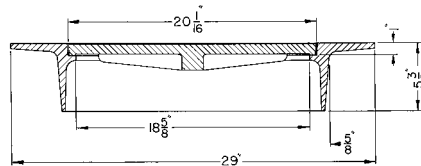
R-1891
Meter Frame, Solid Lid

Heavy Duty



R-1892
Meter Frame, Solid Lid

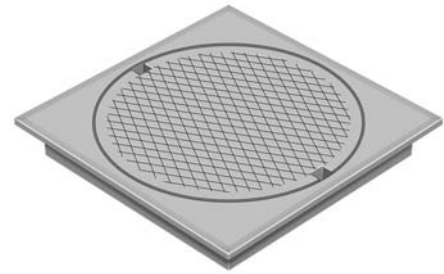
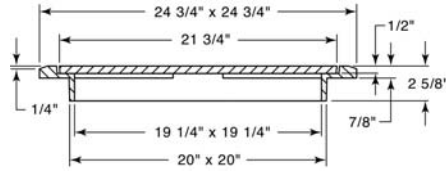
Heavy Duty



R-1896
Meter/Valve Box Frame,
Solid Lid

Light Duty

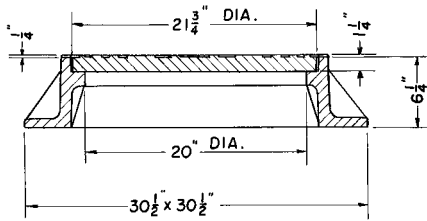
Locate outdoor meter vaults in terraces. Provides convenient servicing and reading of meters as well as privacy to consumers. 50# lid easily removed. To prevent unauthorized personnel from gaining access to vault, see Fastening Devices on page 16. Fastening devices available on special order.



R-1897
Valve Manhole Frame, Solid Lid

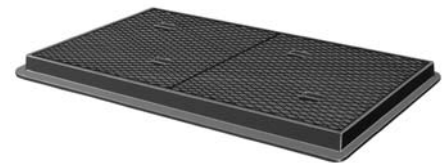
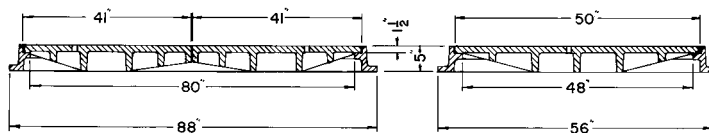
Heavy Duty

Furnished with machined horizontal and vertical bearing surfaces.



R-1899-1
Utility Access Frame with Double Lid

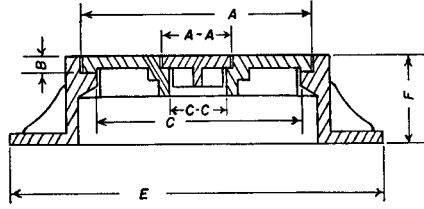
Heavy Duty



R-1900 Series
Valve Manhole Frame,
Solid Lid and Center Lid

Heavy Duty

Small inner lid permits easy access to valve without need of removing larger lid.



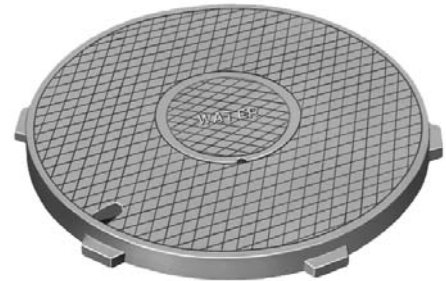
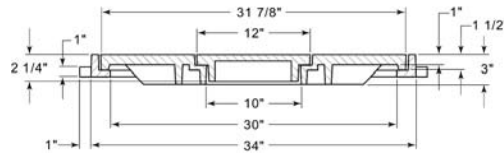
Dimensions in inches

Catalog No.	A	AA	B	C	CC	E	F
R-1900-A	18	7 1/4	1 1/4	16 3/4	6	30	8
R-1900-B	23	6	1 1/2	21	5	36	9
R-1900-B1	24	7 1/4	1 1/2	22 1/4	6 1/8	35	7 1/2
R-1900-C	26	9 3/4	1 1/2	24 1/8	8 1/2	35 7/8	6 15/16
R-1900-D	32	12	1 1/2	30	10	46	7
R-1900-E	38	12	1 1/2	36	10	49	10

R-1900-D1
Valve Manhole Frame,
Solid Lid and Center Lid

Heavy Duty

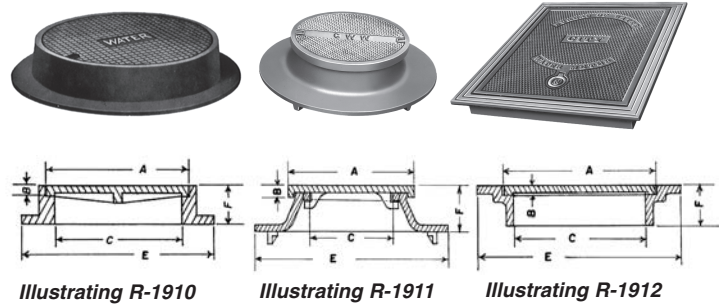
Small inner lid permits easy access to valve without need of removing larger lid.



R-1910 to R-1912 Series Water Meter Frame, Solid Lid

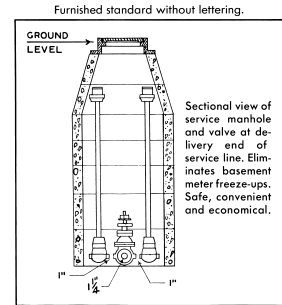
Light Duty

Outdoor location of water meters offers an advantage to the Water Department and to the consumer. Metering ahead of service lines records all water used, including leakage and wastage. Meter reading is simplified both as to time and accuracy. Meters can be changed without inconvenience, and an unauthorized person cannot gain access to a consumer's home by posing as a meter reader.



Catalog No.	Dimensions in inches					
	A	B	C	E	F	Grate Alt.
Round						
R-1910-A	18	1	17	25	4 1/2	R-2525-E
R-1910-B	15 5/8	1 3/8	14 11/16	23	4 11/16	R-2525-D
R-1910-C	15 5/8	1 3/8	14 3/4	21	4 3/4	R-2525-C
R-1910-D	15 5/8	1 3/8	15	22	3	R-2510-1
R-1910-E	15 1/4	3/8	14 1/2	20 1/2	4 3/4	
Round						
R-1911-A	26	1 1/2	21	30 1/2	5	
R-1911-B	15	1	11 3/4	27 1/4	4	
Square/Rectangular						
R-1912-1 *	49 1/2 x 25 1/2	3/4	48 x 24	54 x 30	4	
R-1912-A1	37 5/8 x 31 5/8	5/8	36 x 30	43 x 36	4	
R-1912-A2	38 x 26	5/8	36 x 24	42 x 30	4	
R-1912-B	32 x 32	3/4	30 x 30	36 x 36	4	
R-1912-B1	32 x 26	5/8	30 x 24	36 x 30	4	
R-1912-C	30 x 30	3/4	28 x 28	34 x 34	4	
R-1912-C1	26 x 14	3/4	24 x 12	30 x 18	4	
R-1912-D	25 1/2 x 25 1/2	3/4	24 x 24	30 x 30	4	
R-1912-D1	17 3/4 x 21 3/4	1/2	21 x 17	27 x 23	3	
R-1912-E	19 3/4 x 19 3/4	3/4	18 x 18	24 x 24	4	

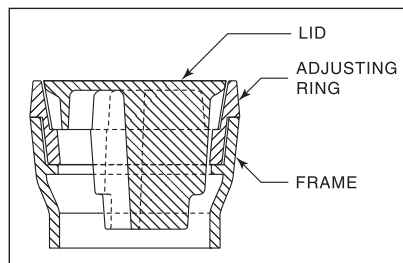
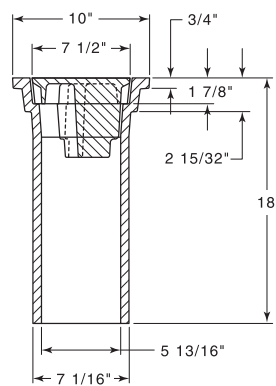
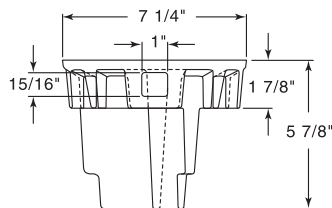
* Lid in two pieces.



R-1913 Water Meter Frame, Lid

Heavy Duty

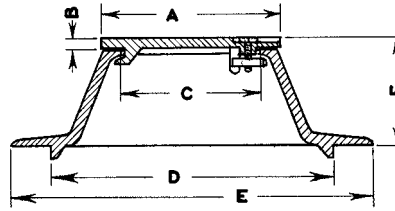
Adjusting rings available:
1", order 1913-7100
1-1/2", order 1913-7150



R-1914 Series
Water Meter Frame, Solid Lid

Light Duty

Note locked cover.



Dimensions in inches						
Catalog No.	A	B	C	D	E	F
R-1914-A	12	1/2	11	14 1/2	20	4
R-1914-B	12	1/2	11	17 1/2	20	4

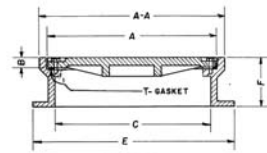
R-1915 Series
Watertight Manhole Frame, Bolted Lid

Heavy Duty

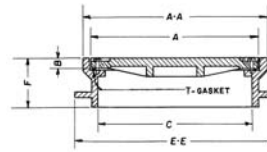
Suitable for watertight, low pressure gas or steamtight application up to 20 psi. For higher pressure application, please send specifications. Bearing surfaces are sealed with a gasket. Countersunk stainless steel hexagonal-head cap screws fasten lid to frame, making seal. Lids are furnished with concealed pickhole, Type "F" design. (see page 16) Anchor holes furnished only when specified. Anchor bolts not furnished.

Note: Bolting pads reduce effective clear opening (dimension C) by 2" to 3". If "C" dimension is critical, select larger size.

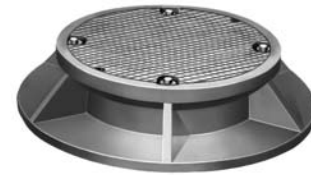
Units are shipped assembled with gasket glued to frame.



TYPE L



TYPE P



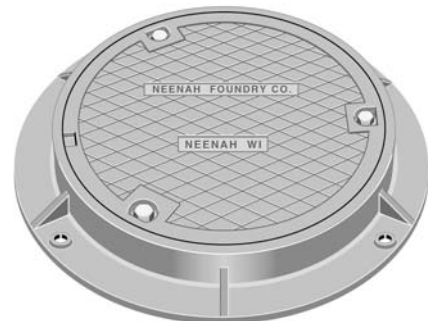
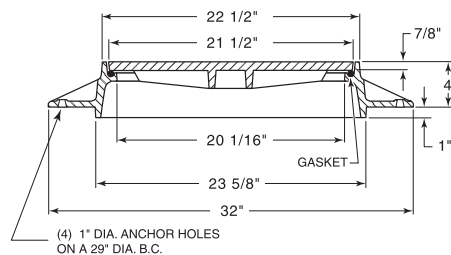
Dimensions in inches								Cover Bolt Quantity
Catalog No.	Frame Type	A	AA	B	C	E/EE	F	
R-1915-E	Type L	25 1/4	27	1	22	28 1/2	6	4
R-1915-E2	Type P	25 1/4	27	1	22	28 1/2	6	4
R-1915-G	Type L	25 3/4	28	1 1/2	23 1/8	36	7 1/2	4
R-1915-G2	Type P	25 3/4	28	1 1/2	23 1/8	30 3/4	7 1/2	4
R-1915-H	Type L	25 3/4	27 3/4	1	23 1/4	32	8	4
R-1915-H2	Type P	25 3/4	27 3/4	1	23 1/4	30 3/4	8	4
R-1915-J	Type L	29	31	1 3/4	27	35	6	6
R-1915-J2	Type P	29	31	1 3/4	27	34	6	6

R-1915-S1
Watertight Manhole Frame, Gasket, Bolted Lid

Heavy Duty

Units are shipped assembled with gasket glued to frame.

Note: Bolting pads reduce effective clear opening (dimension C) by 2" to 3".



R-1916 Series
Watertight Manhole Frame,
Bolted Lid

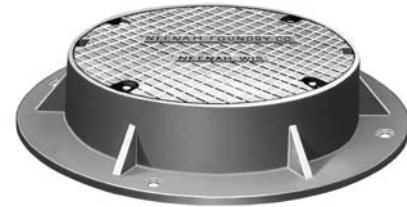
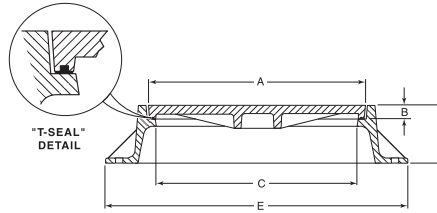
Heavy Duty

Gasket sealed and bolted lid (stainless steel bolts are standard) make this casting ideal for subaqueous installation. For built-up manholes only. Also suited for low pressure, gas or steamtight application up to 20 psi. For higher pressure application, please send specifications. Lids furnished with Type "F" concealed pickholes (see page 14). Units are furnished with four 1" anchor holes - anchor bolts not furnished.

Units are shipped assembled with T-gasket glued to lid, except **R-1916-A** and **R-1916-B** which have flat gasket.

Note: Bolting pads reduce effective clear opening (Dimension C) by 2" to 3". If "C" dimension is critical, select larger size.

See **R-6462** Series for more watertight units in 4" height.



Illustrating R-1916-F

Dimensions in inches

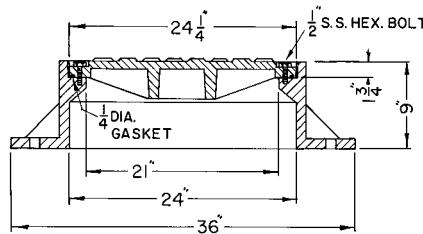
Catalog No.	A	B	C	E	F	Cover Bolt Quantity	Anchor Bolt Circle
R-1916-A	12	1 1/8	11	19	4	4	17
R-1916-B	18	1	17	25	4 1/2	4	22
R-1916-C	23	1 1/2	21	36	9	4	30
R-1916-C1	24	1 3/8	20 5/8	31	6	6	28
R-1916-D	24	1 1/2	21 5/8	35	7 1/2	4	31-3/4
R-1916-E	25	1 1/2	23	38	9	4	34
R-1916-F	26	1 1/2	24	36	7	4	33
R-1916-H	32	1 1/2	30	46	7	6	42
R-1916-H1	31 3/4	1 3/4	30	39 1/4	6	4	36-1/4
R-1916-K	38	1 1/2	36	49	10	6	46

R-1916-C2
Water-resistant Manhole Frame,
Bolted Lid

Heavy Duty

Standard frame is furnished with twelve 1-1/2" anchor holes on 31" diameter bolt circle.

Note: Frame is also available with four 1" anchor holes on 31" diameter bolt circle. Furnished only when specified.



R-1916-T
Water-resistant Manhole Frame,
Gasket, Bolted Lid

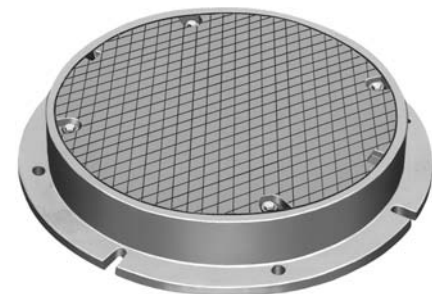
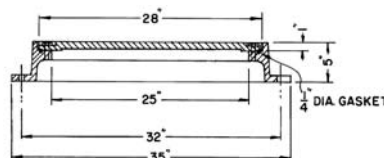
Heavy Duty

Furnished with four 1" anchor holes on 32" diameter bolt circle.

Four 1/2" radius slots for anchor bolts.

Furnished with machined horizontal and vertical bearing surfaces.

Units are shipped assembled with gasket glued to frame.



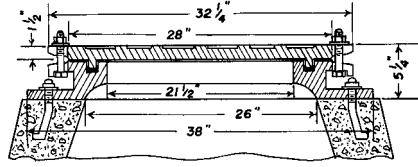
R-1917
**Watertight Ventilating Frame,
Lid**

Heavy Duty

Furnished with four 1" anchor holes on 33" diameter bolt circle.

Furnished with round neoprene or jute gasket in groove. If specified, can be furnished with pipe spacers and longer bolts to permit slight raising of cover when ventilation is required.

Units are shipped assembled with gasket glued to frame.



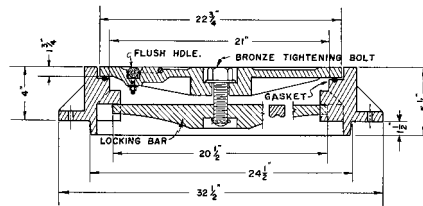
R-1919
**Water-resistant Manhole Frame,
Lid with Locking Bar**

Heavy Duty

Furnished with six 3/4" anchor holes on 29-1/2" diameter bolt circle.

Neoprene gasket seal makes casting water-resistant. Pentagon-head bolt and wrench are available on special order. Specify when required.

Units are shipped assembled with gasket glued to frame.

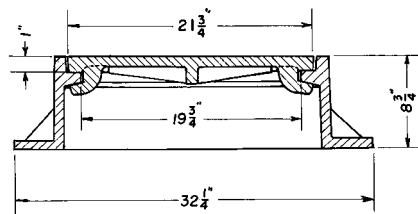


R-1920
**Manhole Frame,
Vented Lid with Type F Lock**

Heavy Duty

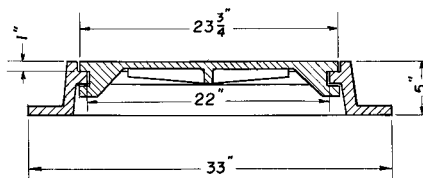


Available Grate: R-2481



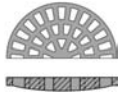
R-1921
**Manhole Frame,
Lid with Type F Lock**

Heavy Duty

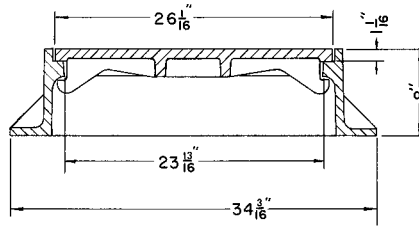


R-1922
Manhole Frame,
Lid with Type F Lock

Heavy Duty

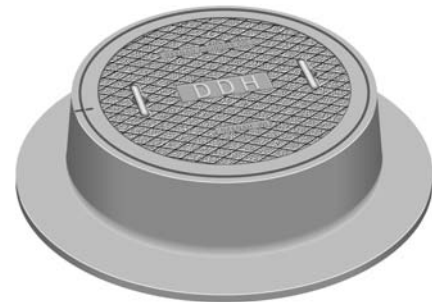
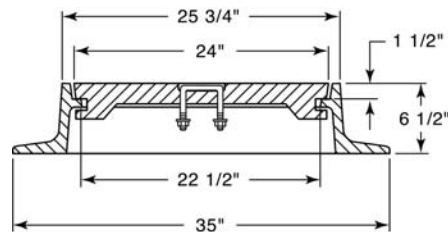


Available Grate: R-2373



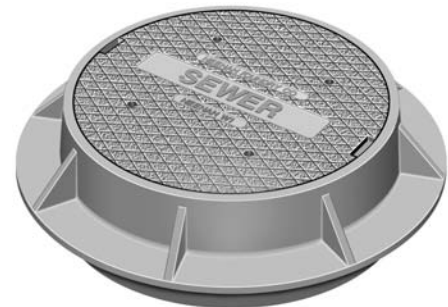
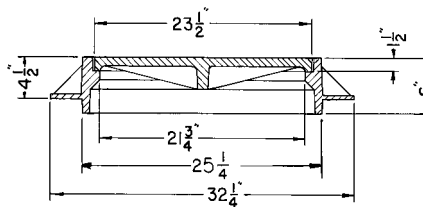
R-1923
Manhole Frame,
Lid with Type F Lock

Heavy Duty



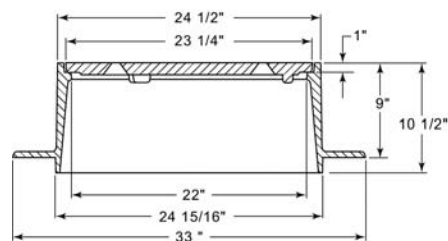
R-1924
Manhole Frame, Vented Lid

Heavy Duty



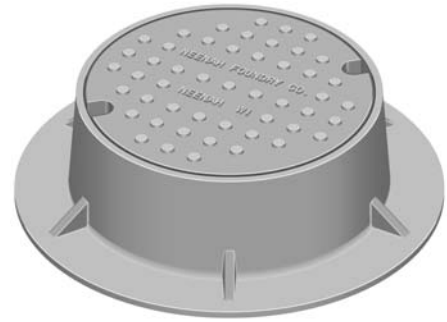
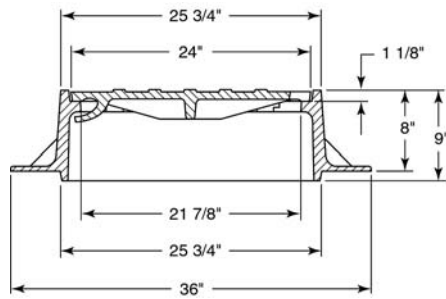
R-1924-1
Manhole Frame, Vented Lid

Heavy Duty



R-1925
Manhole Frame, Solid Lid

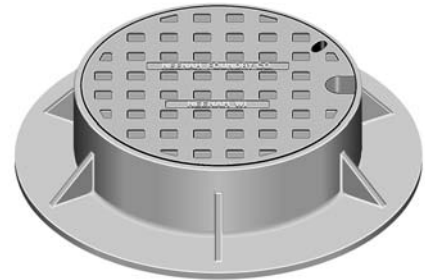
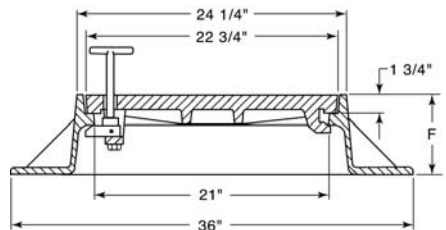
Heavy Duty



R-1926-7 Series
Manhole Frame,
Lid with Type J-"T" Handle,
Bar Lock

Heavy Duty

Specify number of "T" handles required.

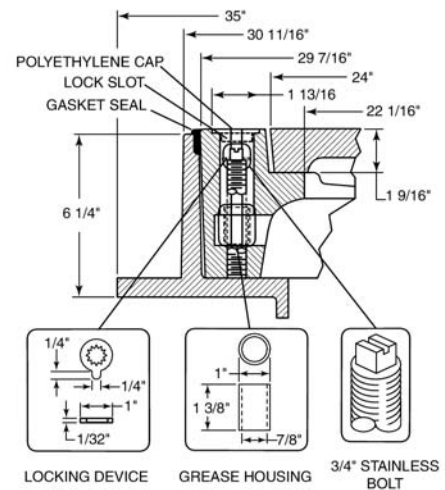
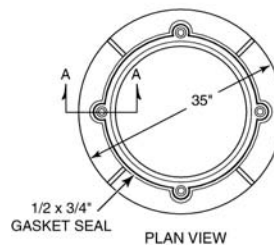


Catalog No.	F
R-1926	7"
R-1927	9"

R-1940-A
Adjustable Manhole Frame, Solid Lid

Heavy Duty

Use for new construction, replacement pavement, or jobs where resurfacing is anticipated. Set consists of barrier support frame, adjusting frame and lid. For new construction, barrier frame is positioned so that it will be slightly below finished road surface. Pave over top edge of barrier frame and gasket up to and flush with the top edge of the adjusting frame. When road is to be resurfaced, simply turn down the 4 adjusting screws and raise frame to desired grade. The lubricating grease cups around each bolt at the time of initial installation provide lubricant for adjustment. Then insert the lock nuts for the bolt heads, replace the bolt well polyethylene caps, reinstall the 1/2" x 3/4" sponge neoprene gasket and the installation is ready for paving. All adjustments accomplished in a matter of minutes. Illustrating adjustable frame tilted for crowned roadway. Maximum adjustment is 3".



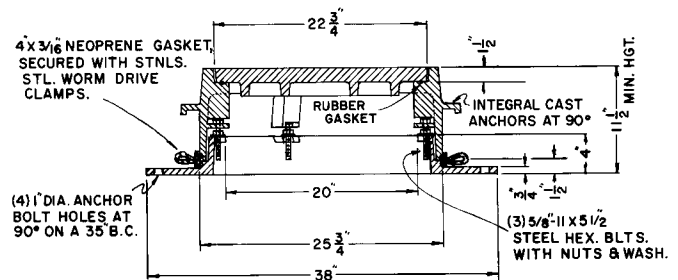
R-1955
Floating Manhole

Heavy Duty

The "Floating Manhole" now provides an effective way of eliminating the inflow of water at the junction of the cast iron frame and the concrete portion of the manhole. This is accomplished by utilizing a two-piece frame with a molded rubber gasket connecting the two halves and held in place with stainless steel bands. The upper half becomes an integral part of the pavement with the shear lugs transferring the wheel load to the concrete pavement. The lower halves of the frame becomes part of the manhole by imbedding threaded rods into the riser and bolting. This allows the manhole frame to "float" with the frost action and maintain the integrity of the manhole.

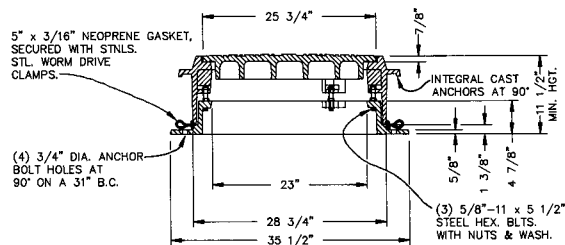


When installed at the lowest position, approximately 3 inches of rise can be handled effectively. The unit can be positioned to the correct grade at the time of installation by adjusting the three bolts. Additional advantages include the ability to tilt the upper half coinciding with the longitudinal and transverse slopes of the streets to provide a smooth uninterrupted driving surface. If resurfacing at a future time, adjustment can be accomplished by breaking the existing pavement around the top half of the frame and adjusting to the correct grade by using the three bolts and the R-1979 adjusting rings.



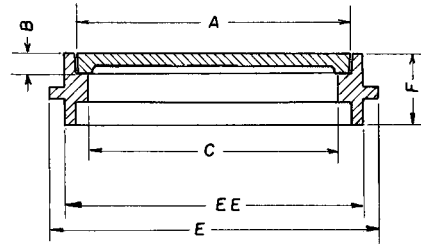
R-1955-1
Floating Manhole

Heavy Duty



**R-1960 Series
Frame, Solid Lid**

Heavy Duty



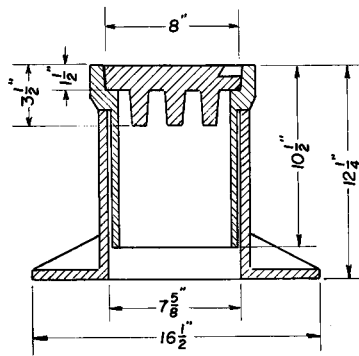
Illustrating R-1960

Dimensions in inches

Catalog No.	A	B	C	EE	E	F	Grate Alt.
R-1960	22 3/4	1 3/4	21 1/8	24	29	6	R-2438
R-1960-A	26	1 1/2	24	26 3/4	32 1/2	6	

**R-1968
Adjustable Monument Box,
Type 36-B**

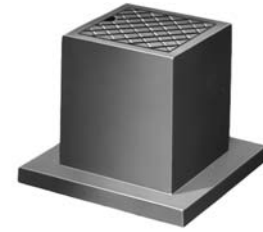
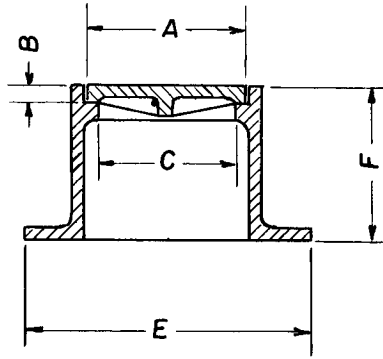
Heavy Duty



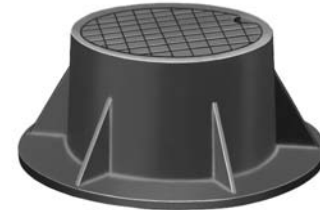
**R-1970 to R-1978 Series
Lamphole / Monument /
Inspection Frame, Solid Lid**

Heavy Duty

Furnished standard with as-cast bearing surfaces unless otherwise noted.



Illustrating R-1978



Illustrating R-1976

Catalog No.	Dimensions in inches				
	A	B	C	E	F
Round					
R-1970	7	2 1/8	5 3/4	13 1/8	7
R-1971 *	8	3/4	6 1/2	10 1/2	10
R-1973-1	7 3/4	3/4	6 3/4	13 1/4	7
R-1973-A	8 7/8	11/16	7 3/4	15 3/4	8
R-1974-A	9	1	8	16	6 1/2
R-1975	9 1/2	1/2	8 1/2	20	11
R-1975-A	9 7/8	7/8	9	15 5/8	6
R-1975-A2	10	1	9	16	8
R-1976	11 1/4	1 1/4	10	20	8
R-1977 ** ***	11 1/2	1 1/2	8 1/2	16	12
Square					
R-1978 **	6 7/8 x 6 7/8	1	5 x 5	13 x 13	10
R-1978-A3	7 7/8 x 7 7/8	7/8	6 1/2 x 6 1/2	16 1/2 x 16 1/2	6 7/8
R-1978-B	12 x 12	3/4	10 5/8 x 10 5/8	20 1/2 x 20 1/2	7 3/8

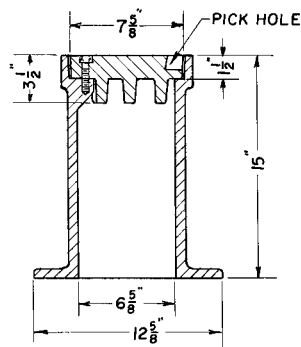
* Base consists of 4 bolting lugs for 1/2" bolt on 9-1/2" bolt circle instead of full flange.

** Furnished with machined horizontal bearing surfaces.

*** Lid bolted to frame.

**R-1978-A2
Lamphole / Monument /
Inspection Frame, Solid Lid**

Heavy Duty



R-1979 Series Manhole Adjusting Rings

Heavy Duty

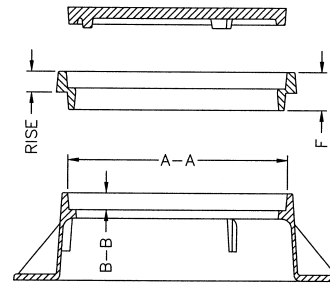
For raising manhole covers when pavement is resurfaced.



Adjusting Ring Installed

Adjusting rings (or extension rings, as they are sometimes called) eliminate the necessity of raising or replacing existing manhole frames on resurfacing projects. The cover recess is the same depth and diameter as the existing manhole frame. Amount of raise coincides with thickness of resurfacing material, thereby bringing the manhole lid to new position flush with refinished roadway surfaces.

Manhole adjusting rings can be placed rapidly and are a permanent installation. Use of adjusting rings may reduce raising costs to as little as 20% of digging up the old manhole frame and resetting it to new grade.



Cutaway View of Adjusting Ring Installation

CAUTION WHEN ORDERING

Be sure existing lid diameters are smaller than "AA" dimension in table. "AA" dimension in table is opening size in extension ring. Lid should measure 1/4" to 3/8" less in diameter than this dimension.

Ref. Number	Dimensions in inches			
	A-A	B-B	F	Rise
1913-7100	7 5/8	2	2 7/8	1
1913-7150	7 5/8	2	3 3/8	1 1/2
1979-0245	9 5/16	5/8	2 1/8	1 1/2
1979-0246	9 5/16	5/8	2 5/8	2
1979-0166	18 3/8	1	3	1 15/16
1979-0167	18 3/8	1	4	2 15/16
1979-0008	21 1/2	1	3	2
1979-0115	21 1/2	1	3 1/2	2 1/2
1979-0022	21 1/2	1	4	3
1915-7200 **	21 3/4	1	2 31/32	2
1692-7200	21 7/8	1 1/4	3 1/8	2
1979-0223	22 1/8	1 1/8	3 1/8	2
1500-7200	22 1/4	1 1/2	3 1/2	2
1979-0035 *	22 1/4	1 1/2	3 1/2	2
1500-7250	22 1/4	1 1/2	4	2 1/2
1979-0036 *	22 1/4	1 1/2	4	2 1/2
1500-7300	22 1/4	1 1/2	4 1/2	3
1979-0119 *	22 1/4	1 1/2	4 1/2	3
1979-0270 *	22 5/16	1 1/2	3	1 1/2
1979-0258	22 3/8	1	3	2
1762-7150	22 1/2	1	2 1/2	1 1/2
1979-0215	22 1/2	1	5	4
1979-0034	22 1/2	1 1/2	3 1/2	2
1979-0116	22 1/2	1 1/2	4 1/2	3

Ref. Number	Dimensions in inches			
	A-A	B-B	F	Rise
1979-0047	22 3/4	1 1/2	3 1/2	2
1979-0131	22 3/4	1 1/2	4	2 1/2
1979-0019	22 3/4	1 1/2	4 1/2	3
1580-7150	22 3/4	1 3/4	3 1/4	1 1/2
1979-0129 *	22 3/4	1 3/4	3 3/4	2
1979-0170 *	22 3/4	1 3/4	4 3/4	3
2424-7200	22 3/4	2 5/8	4 5/8	2
1661-7100	22 7/8	1 1/2	2 1/2	1
1661-7158 ***	22 7/8	1 1/2	3 1/8	1 9/16
1661-7200	23	1 1/2	3 1/2	2
1979-0004	23	1 1/2	4	2 1/2
1979-0005	23	1 1/2	4 1/2	3
1713-7101	23	1 3/4	2 3/4	1
1713-7150	23	1 3/4	3 1/4	1 1/2
1713-7200	23	1 3/4	3 3/4	2
1979-0177	23	1 3/4	4	2 3/16
1713-7250	23	1 3/4	4	2 1/2
1713-7300	23	1 3/4	4 3/4	2 15/16
1715-7176	23 1/16	1 3/4	3 1/2	1 3/4
1979-0139 *	23 1/8	1 3/4	4 1/4	2 1/2
1979-0146 *	23 1/8	1 3/4	4 3/4	3
1979-0023 *	23 7/32	1 1/2	4 1/2	3
1550-7150	23 1/4	1 1/2	3	1 1/2
1550-7151 *	23 1/4	1 1/2	3	1 1/2
1550-7200	23 1/4	1 1/2	3 1/2	2
1550-7201 *	23 1/4	1 1/2	3 1/2	2
1979-0010	23 1/4	1 1/2	4	2 1/2
1979-0106	23 1/4	1 1/2	4 1/2	3
1979-0128 *	23 3/8	1 1/2	4	2 1/2
1979-0181 *	23 3/8	1 3/4	3 3/4	2

* Adjusting ring is for Non-Rocking applications

** Gasketed for self seal application

*** Ring furnished in ductile iron

≠ 5 degree draft

≠ 10 degree draft

§ for R-1750-B only

Ref. Number	Dimensions in inches			
	A-A	B-B	F	Rise
1979-0006 *	23 7/16	1 1/2	3 1/2	2
1979-0180	23 1/2	1	2 5/8	1 1/2
1797-7300	23 1/2	1	4	3
1979-0024	23 1/2	1 1/2	3 1/2	2
1979-0025	23 1/2	1 1/2	4	2 1/2
1979-0026	23 1/2	1 1/2	4 1/2	3
1979-0275	23 3/4	1	2 5/8	1 5/8
1979-0150	23 3/4	1	3	2
1979-0265	24	1	2 1/2	1 7/16
1979-0253	24	1	2 1/2	1 1/2
0000-0034	24	1	2 9/16	1 1/2
1979-0065	24	1	2 5/8	1 5/8
1979-0264	24	1	3	1 15/16
0000-0545	24	1	3 1/16	2
0000-1309	24	1	3 9/16	2 1/2
0000-0814	24	1	4 1/16	3
1979-0273	24	1	4 1/4	2 1/2
1979-0254	24	1	4 1/2	2
1979-0012	24	1 1/2	3 1/2	2
1979-0042 *	24	1 1/2	3 1/2	2
1979-0046	24	1 3/4	4 1/4	2 1/2
1979-0044	24	1 3/4	4 3/4	3
1979-0145	24 3/16	1 1/8	2 9/16	1 7/16
1979-0143	24 1/4	1	3	2
1979-0033	24 1/2	1 1/2	3 1/2	2
1979-0040	24 1/2	1 3/4	4 1/4	2 1/2
1979-0041	24 1/2	1 3/4	4 3/4	3
1767-7100	25	1	2	1
1979-0160	25	1	2 1/2	1 1/2
1979-0171	25	1	3	2
1979-0272	25	1	3 1/2	2
1979-0058	25	1 1/2	3 1/2	2
1979-0134	25	1 3/4	4 1/4	2 1/2
1979-0144	25	1 3/4	4 3/4	3
1979-0271 *	25 5/16	1 1/2	3	1 1/2
1979-0266	25 1/2	1 1/4	3 1/2	2
1979-0158	25 1/2	1 1/4	3 3/4	2 3/8
1979-0037	25 1/2	1 1/2	3 1/2	2
1979-0118 *	25 1/2	1 1/2	3 3/4	2
1979-0117 *	25 1/2	1 1/2	4 3/4	3
1979-0137	25 1/2	1 3/4	4 1/4	2 1/2
1979-0124	25 1/2	1 3/4	4 3/4	3
1979-0074	25 7/8	7/8	3 3/8	2 1/2
1979-0076	25 7/8	7/8	4 3/8	3 1/2
1979-7200	25 15/16	1	3	2
4353-0019	26	7/8	2 3/8	1 1/2
4353-0017	26	7/8	2 7/8	2
4353-0013	26	7/8	3 7/8	3
1979-0278	26	1	2	1
1979-0279	26	1	2 1/2	1 3/8
1979-0280	26	1	3	1 7/8
1979-0055	26	1 3/8	3 3/8	1 15/16
1979-0102	26	1 3/8	3 7/8	2 1/2
1979-0051	26	1 3/8	4 3/8	2 15/16
1979-0176	26	1 1/2	3 1/2	1 15/16
1642-7150	26 1/8	1 1/2	3	1 1/2
1642-7200	26 1/4	1 1/2	3 1/2	2
1642-7250	26 1/4	1 1/2	4	2 1/2
1642-7300	26 1/4	1 1/2	4 1/2	3
1979-0062	27	1 3/8	3 3/8	2
1979-0263	28	1	2 1/2	1 7/16
1979-0250	28	1	3	1 15/16
1979-0251	28	1	4	3

Ref. Number	Dimensions in inches			
	A-A	B-B	F	Rise
1979-0091 §	28 1/4	1	3	2
1979-7190	28 1/4	1 3/8	3 3/8	1 7/8
1753-7200 ≠	29	1 3/8	3 3/8	1 15/16
1979-0054 ¥	29	1 3/8	3 3/8	1 15/16
1979-0043	29	1 3/8	3 13/16	2 1/2
1979-0015	29	1 3/8	4 3/8	2 15/16
6052-7218	29 3/8	1 3/4	4	2 3/16
6052-7293	29 3/8	1 3/4	4 3/4	2 15/16
1979-0203	30 3/8	1 1/2	4 1/2	3
1743-7200	31 15/16	1 3/4	3 3/4	2
1743-7300	31 15/16	1 3/4	4 3/4	3
1979-0052	32	1 3/8	4 3/8	2 15/16
1743-7150	32	1 3/4	3 1/4	1 1/2
1979-0053	32	1 3/8	3 3/8	1 15/16
1979-0057	33 1/2	1 1/2	3 1/2	1 15/16
1979-0049	33 1/2	1 1/2	4 1/2	2 15/16
1979-0092	35 1/2	2	4 1/2	2 1/2
1979-0268	36	1 1/4	2 1/4	1
1979-0269	36	1 1/4	2 3/4	1 1/2
1979-0056	36 1/2	1 1/2	3 1/2	1 15/16
1979-0050	36 1/2	1 1/2	4 1/2	2 15/16
1979-0093	38	1 1/2	3 1/2	2
1979-0136	38 1/4	1 1/2	3 1/2	2
1742-7200	39	1	3	2
1979-0252	40 1/16	3	4 1/2	3 3/4

Square/Rectangular

1978-0022	8 1/8 x 8 1/8	7/8	2 7/8	2
1979-0249	8 1/8 x 8 1/8	7/8	2 1/8	1 1/4
0000-1090	13 3/8 x 19 3/8	1 1/4	3 1/4	2
3278-7225	16 3/4 x 22 1/4	1 3/4	4	2 1/4
0000-1029	19 3/8 x 20 3/8	1 1/4	3 1/4	2
0000-1081	19 3/8 x 19 3/8	1 1/4	3 1/4	2
3278-0015	22 1/4 x 16 15/16	1 3/4	4 1/8	2 1/2
3287-7250	22 3/4 x 45 3/8	2	4 7/16	2 1/2

* Adjusting ring is for Non-Rocking applications

** Gasketed for self seal application

*** Ring furnished in ductile iron

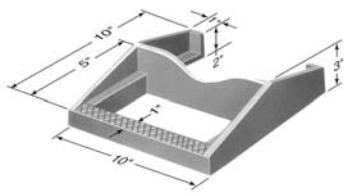
≠ 5 degree draft

¥ 10 degree draft

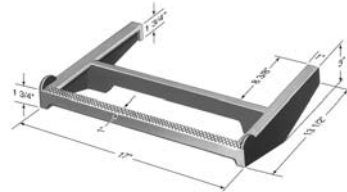
§ for R-1750-B only

R-1980-1-2 Series Manhole Steps

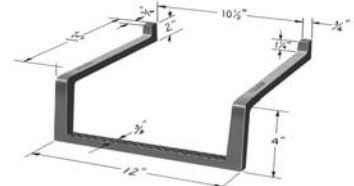
Manhole Steps shown in this series are for use in conical shaped sanitary sewer manholes equipped with standard cast iron frames and covers. Furnished in cast gray iron, except as noted.



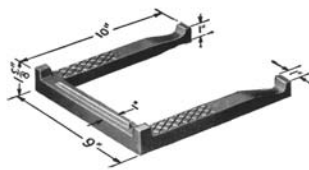
R-1980-E



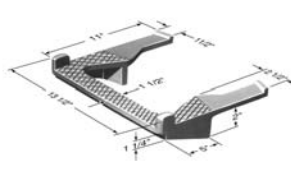
R-1980-M Wide Tread



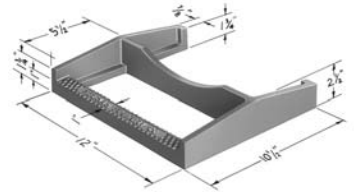
R-1981-W4 Ductile Iron
for Precast Manholes



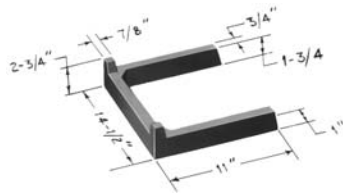
R-1980-C



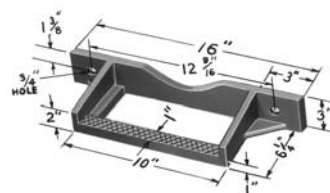
R-1980-I for Circular Walls



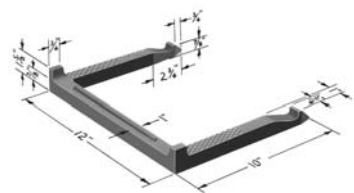
R-1981-Y for ALL Construction



R-1980-J Heavy Construction



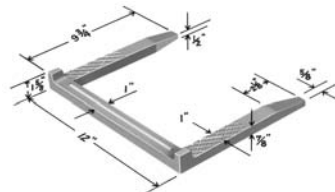
R-1980-T for Bolting



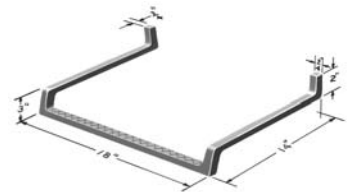
R-1982-F for Precast Manholes



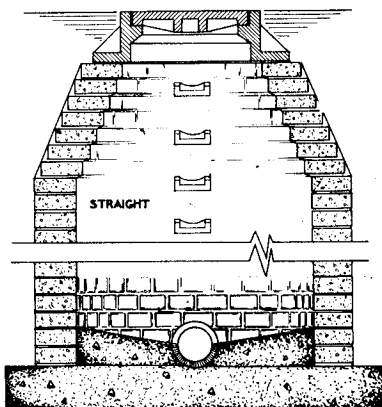
R-1981-J Wide Tread



R-1981-N for Precast Manholes

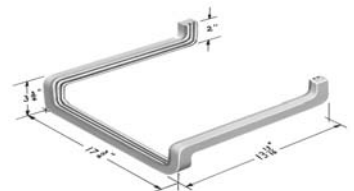


R-1982-J Ductile Iron



Steps should be installed in a vertical row on 16" centers.

Cast iron manhole steps are manufactured from high tensile iron which has a minimum **tensile strength of 35,000 lb. per square inch**. Actual load tests on castings have shown a generous safety factor. Cast iron steps with their inherent corrosion resistant qualities, are easily installed in concrete, brick or block manholes. The tread is scored to meet safety requirements.



R-1982-W Extruded Aluminum