



CONDUCTION PIPE

(Black, varnished or galvanized).

Lasts more years.
A true fact.

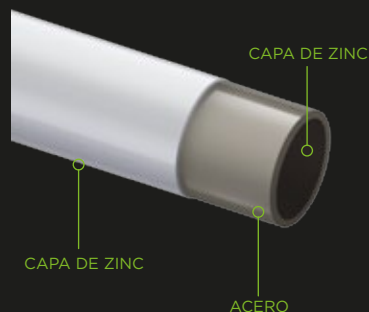


CP-1143-2012
CP-1144-2012

CONDUCTION PIPE

(Black, varnished or galvanized).

Lasts more years.
A true fact.



Liquid and gas conduction pipe in black, varnished and hot-dip galvanized presentations.

Highly resistant to corrosion having been subjected to various tests in order to guarantee its quality.

Its diameters go from ½" to 4" in galvanized pipe, and from ½" to 6" in varnished pipe.

In Villacero we use the cold formed process to manufacture conduction pipe. All our processes are made under strict quality norms to assure a wide margin compliance with national and international norms and standards.



DATA SHEET

CONDUCTION PIPE FOR WATER, GAS AND AIR DIMENSIONS AND CHARACTERISTICS
 NMX 177 (ASTM-A-53), CERTIMEX CP-1144-2012, CP-1143-2012 CERTIFICATION

DIAMETER	GAUGE	NOMINAL OUTSIDE DIAMETER		THICKNESS		HYDROSTATIC PRESSURE				WEIGHT			PACKAGE
		inches	inch	mm	inch	mm	lb/in ²	kg/cm ²	lb/ft	kg/m	kg x 6.40 m	lb x 21 ft	Kg per package
1/2	40	0.840	21.34	0.109	2.77	700	49	0.85	1.27	8.11	17.887	1030.36	127
	80	0.840	21.34	0.147	3.73	850	60	1.09	1.62	10.37	22.869	1317.33	127
3/4	40	1.050	26.67	0.113	2.87	700	49	1.13	1.68	10.78	23.769	1369.19	127
	80	1.050	26.67	0.154	3.91	850	60	1.48	2.20	14.05	30.976	1784.32	127
1	40	1.315	33.40	0.133	3.38	700	49	1.68	2.50	16.01	35.291	1456.64	91
	80	1.315	33.40	0.179	4.55	850	60	2.17	3.24	20.70	45.649	1884.14	91
1 1/4	40	1.660	42.16	0.140	3.56	1200	84	2.27	3.39	21.67	47.771	1971.76	91
	80	1.660	42.16	0.191	4.85	1800	126	3.00	4.46	28.57	62.987	1742.71	61
1 1/2	40	1.900	48.26	0.145	3.68	1200	84	2.72	4.05	25.91	57.127	2357.91	91
	80	1.900	48.26	0.200	5.08	1800	126	3.63	5.41	34.62	76.327	2111.78	61
2	40	2.375	60.33	0.154	3.91	2300	162	3.66	5.44	34.83	76.783	2124.42	61
	80	2.375	60.33	0.218	5.54	2500	176	5.03	7.48	47.88	105.561	1771.53	37
2 1/2	40	2.875	73.03	0.156	3.96	2500	176	4.53	6.75	43.19	95.221	1598.00	37
	NX	2.875	73.03	0.203	5.16	1950	137	5.80	8.63	55.23	121.767	2043.50	37
3	40	3.500	88.90	0.216	5.49	2200	155	7.58	11.29	72.23	159.241	1372.31	19
	NX	3.500	88.90	0.170	4.32	1930	136	6.05	9.01	57.64	127.084	1095.18	19
4	40	4.500	114.30	0.237	6.02	1900	134	10.80	16.07	102.87	226.809	1954.60	19
	NX	4.500	114.30	0.188	4.78	1500	105	8.67	12.90	82.54	181.984	1568.31	19
6	40	6.625	168.28	0.280	7.11	1500	105	18.99	28.27	180.90	398.829	1808.96	10
		6.625	168.28	0.219	5.56	1190	84	15.00	22.32	142.85	314.940	1428.47	10

Note: Outside diameter and thickness tolerances have been based from the corresponding norm.

CHEMICAL AND PHYSICAL REQUIREMENTS FOR CONDUCTION PIPE NORMS

REQUIREMENTS	ASTM-A53 NMX-B-177	
	GRADE A	GRADE B
MIN. TENSION RESISTANCE kg/cm ² (lb/in ²)	3375(48,000)	4219(60,000)
MIN. FLUENCY LIMIT, kg/cm ² (lb/in ²)	2109(30,000)	2461(35,000)
% OF ELONGATION IN 2" MIN.	25	25

MAX. CHEMICAL COMPOSITION IN %

	GRADE A	GRADE B
CARBON	0.250	0.300
MANGANESE	0.950	1.200
PHOSPHORUS	0.050	0.050
SULFUR	0.045	0.045
COPPER	0.400	0.400
NICKEL	0.400	0.400
CHROME	0.400	0.400
MOLYBDENUM	0.150	0.150
VANADIUM	0.080	0.080

COUPLING PIPE ASTM A-865 DIMENSIONS AND CHARACTERISTICS

DIMENSIONS	OUTSIDE DIAMETER		THICKNESS		PRESSURE HYDROSTATIC				WEIGHT			PACKAGE
	inch	inch	mm	inch	mm	lb/in ²	kg/cm ²	lb/ft	km/m	kg x 6.40m	kg x 21 ft	Kg per package
1/2	1.050	26.67	0.172	4.37	910	64	1.61	2.40	15.38	33.902	1399.28	91
3/4	1.315	33.40	0.205	5.21	952	67	2.43	3.62	23.17	51.083	2108.43	91
1	1.576	40.03	0.210	5.33	952	67	3.07	4.56	29.21	64.397	1781.72	61
1 1/4	1.900	48.26	0.215	5.46	1849	130	3.87	5.76	36.89	81.327	1364.84	37
1 1/2	2.200	55.88	0.245	6.22	1949	137	5.12	7.62	48.77	107.525	1755.72	36
2	2.875	73.02	0.344	8.73	2503	176	9.31	13.86	88.755	195.71	1775.10	20

NORMS

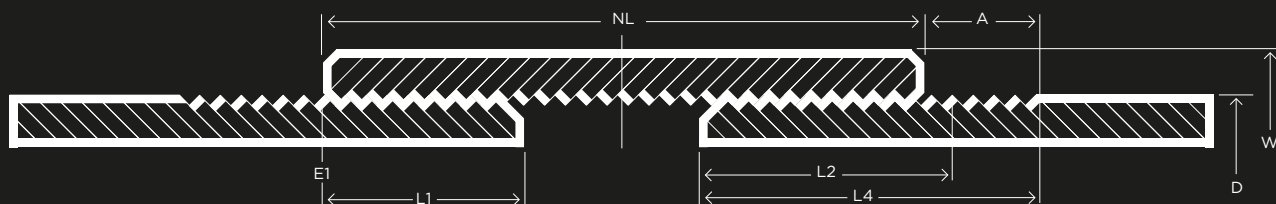
SPECIFICATIONS		DESCRIPTION	DIMENSIONS				USES
USA ASTM	MEXICO NMX		DIAMETER		THICKNESS		
			MÍN.	MÁX.	MÍN.	MÁX.	
A-53	B-177 TIPO E	Carbon steel pipe with seam, hot dip galvanized for common uses.	1/2"	6"	40 GAUGE 0.237"	0.280"	Conduction of liquids, air, gas and vapor.
			1/2"	2"	COUPLING 0.172"	0.291"	
			1/2"	2"	80 GAUGE 0.147"	0.218"	
			2 1/2"	4"	NORMAX 0.160"	0.188"	

DIMENSIONS AND CHARACTERISTICS FOR STANDARD AND COUPLING PIPE (ANSI B1.20.1)

PIPE			THREADS								COUPLING					
NPS DESIGNATION	OUTSIDE DIAMETER D		THREADS	PIPE'S END HAND TIGHTENED L1		EFFECTIVE LENGTH L2		TOTAL LENGTH L4		PASSAGE DIAMETER HAND TIGHTENED E1		OUTSIDE DIAMETER W		LENGTH NL		NUMBER OF THREADS HAND TIGHTENED
	inch	mm		inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	
1/2	21.34	0.840	14	8.13	0.320	13.56	0.534	19.85	0.782	19.77	0.778	27.00	1.063	38.50	1 1/2	5
3/4	26.67	1.050	14	8.61	0.339	13.86	0.546	20.15	0.794	25.12	0.989	33.35	1.313	39.66	1 9/16	5
1	33.40	1.315	1 1/2	10.16	0.400	17.34	0.683	25.01	0.985	31.46	1.239	40.03	1.576	49.20	1 15/16	5
1 1/4	42.16	1.660	1 1/2	10.67	0.420	17.95	0.707	25.62	1.009	40.22	1.583	48.26	1.900	50.80	2	5
1 1/2	48.26	1.900	1 1/2	10.67	0.420	18.38	0.724	26.04	1.025	46.29	1.822	55.88	2.200	50.80	2	5 1/2
2	60.33	2.375	1 1/2	11.07	0.436	19.22	0.757	26.88	1.058	58.33	2.296	69.85	2.750	52.06	2 1/16	5 1/2
2 1/2	73.03	2.875	8	17.32	0.682	28.89	1.138	39.91	1.571	70.16	2.762	82.55	3.250	77.80	3 1/16	5 1/2
3	88.90	3.500	8	19.46	0.766	30.48	1.200	41.50	1.634	86.07	3.389	101.60	4.000	79.12	3 1/8	5 1/2
4	114.30	4.500	8	21.44	0.844	33.02	1.300	44.04	1.733	111.43	4.387	127.00	5.000	87.43	3 7/16	5

THREAD GRAPHIC

NOMENCLATURE OF SPECIFICATIONS CORRESPONDING TO THE ABOVE TABLES.



ADVANTAGES



GALVANIZED FREE LEAD

Maintains water safe and reliable for drinking.



DURABILITY

Can last up to 30 years thanks to its Zinc layer.



HIGH RESISTANCE TO ELONGATION

Endures structural movements.

COMBINATION OF IDEAL RESISTANCE AND MALLEABILITY

Easily molded.

MAINTENANCE FREE

MEETS OR EXCEEDS NORMS

NMX-B-199, NMX-B-200, NMX-B-485,
ASTM-A-500, ASTM-A-501, ASTM-A-513.

SOME APPLICATIONS



LIQUIDS AND GAS CONDUCTION



RESIDENTIAL AND INDUSTRIAL CONSTRUCTIONS



DAMS



WAREHOUSES, BUILDINGS, BRIDGES



DRAINS



HOSPITALS



RESTAURANTS

FOUNDRIES

AMONG OTHERS



SALES REPRESENTATIVES
THROUGHOUT THE MEXICAN REPUBLIC

T 01 800 220 4040
info@villacero.com
WWW.VILLACERO.COM

MONTERREY, N.L.
TORRE VILLACERO
AVE. OCAMPO 250 PTE
ZONA CENTRO C.P. 64000
T (81) 8989 8989
F (81) 8989 8988

MÉXICO, D.F.
PONIENTE 128 NO. 672
FRACC. INDUSTRIAL VALLEJO
C.P. 02300
T (55) 3000 6000
F (55) 3000 6091

GUADALAJARA, JAL.
PROLONGACIÓN COLÓN NO. 4700
COL. PARQUES DE COLÓN
C.P. 45608
T (33) 3881 1070

CÓRDOBA, VER.
KM 10 CARRETERA FEDERAL
CÓRDOBA-VERACRUZ
AMATLÁN DE LOS REYES
C.P. 94946
T (271) 716 6595



ISO 9001 : 2008
FM 354351