



MESH & WIRE PRODUCTS

**CONCRETE
REINFORCEMENT**

OUTSTANDING QUALITY PRODUCTS

Founded in 1927, Duchesne et Fils has become a North American symbol of excellence in the building material market. From product design to production, from packaging to shipping, Duchesne is dedicated to maintaining the highest standards of quality at every step of production. Manufactured in a state-of-the-art facility, Duchesne products meet and exceed the ASTM A1064 standards.

CONCRETE REINFORCEMENT PRODUCTS

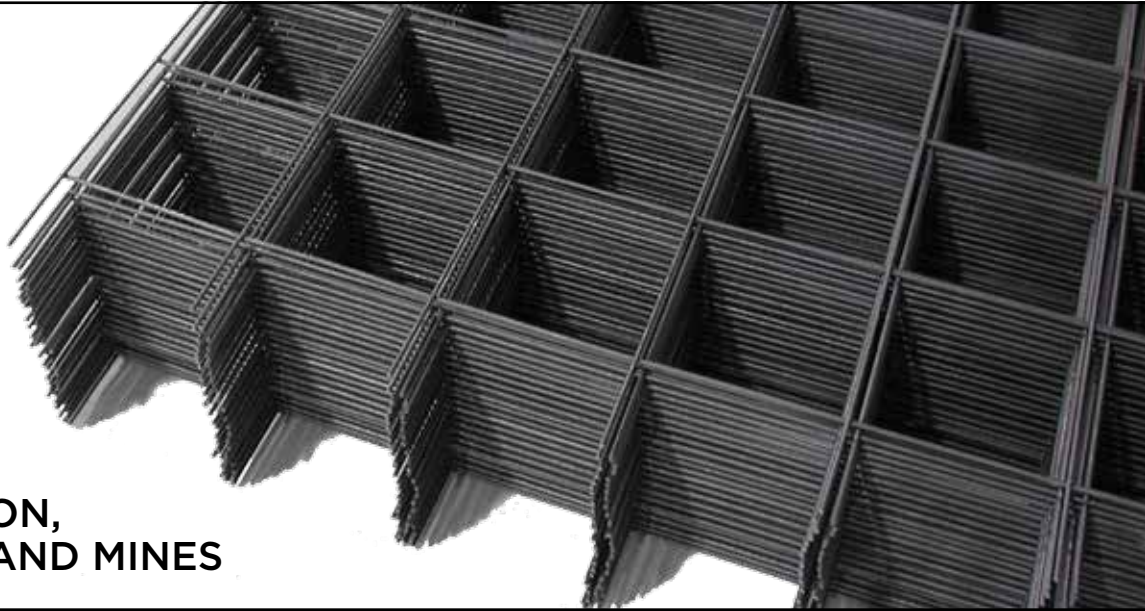
Solidly assembled, Duchesne offers a wide range of concrete reinforcement products for North American users.

- Construction Mesh
- Structural Welded Wire Reinforcement
- Mine Mesh
- Concrete Pipe Mesh
- Continuous High Chairs
- Reinforcing Bars
- Wire Coils

- National distribution and warehousing capabilities
- Strong relations with **major retailers across Canada**
- **North American manufacturer** that has built its reputation on trust, stability, simplicity and reliability



MESH PRODUCTS



FOR CONSTRUCTION, CONCRETE PIPES AND MINES

CONSTRUCTION MESH

- Sheets and rolls
- Natural or galvanized wire
- Standard wire gauge (10, 9, 8, 6, 4, 2, 0)
- Variable spacing
- Manufactured according to the ASTM A1064 standard
- Custom sheets and rolls upon request

Applications

- Concrete floors
- Driveways
- Septic tanks
- Manure pits
- Balconies

STRUCTURAL WELDED WIRE REINFORCEMENT

- Custom sheets for concrete reinforcement
- Up to 10' widths and to 20' lengths
- From 10ga to W/D13
- Natural or galvanized wire
- Variable spacing
- Bending of the sheets upon request
- Manufactured according to the ASTM A1064 standard

MINE MESH

- Sheets with a flush finish to avoid cuts
- Natural or galvanized wire
- Standard wire gauge (9, 6, 4, 0)
- Variable spacing
- Manufactured according to the ASTM A1064 standard
- Custom sheets upon request

Application

- Mine protective device attached to the vaults of tunnels. It ensures the safety of the miners while drilling and it retains the walls against falling rocks.

Applications

- Concrete floors
- Septic tanks
- Manure pits
- Civil applications (e.g. Bridge)
- Precast concrete

MESH PRODUCTS

CONCRETE PIPE MESH

- Rolls in lengths up to 1000'
- Variable spacing available
- From 10ga to W/D13 longitudinal wire
- From 10ga to W/D8 transversal wire
- Up to 3 convoluted wire
- Wind: regular or reverse
- Custom rolls upon request

Application

- Concrete pipe reinforcement

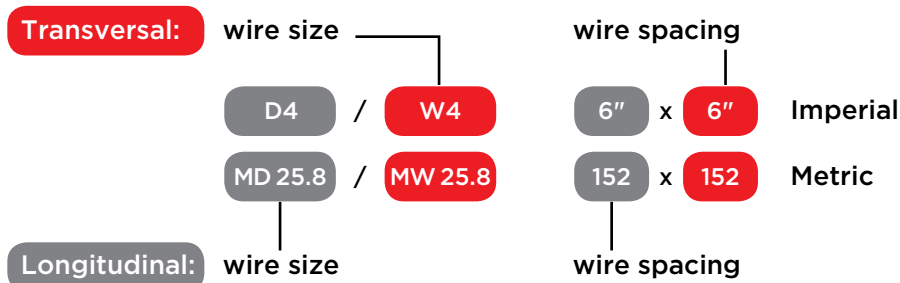


STANDARD CONSTRUCTION MESH

WIRE SIZE	SPACING	SHEETS						ROLLS			
		4' x 7'	4' x 8'	5' x 10'	8' x 12'	8' x 14'	8' x 20'	5' x 100'	5' x 200'	6' x 100'	6' x 200'
10/10	6" x 6"	x	x	x				x	x	x	x
9/9	6" x 6"		x		x		x			x	x
8/8	6" x 6"						x				
6/6	6" x 6"		x		x		x			x	x
6/6	4" x 4"				x		x				
4/4	6" x 6"				x		x				
4/4	4" x 4"				x		x				
2/2	6" x 6"				x						
0/0	6" x 6"				x		x				
D8/D8	8" x 8"						x				
W5.8/W5.8	12" x 12"						x				
W6.8/W6.1	4" x 6"						x				

Other gauges, spacing and formats available upon request

NOMENCLATURE



MESH PRODUCTS

STRUCTURAL WELDED WIRE REINFORCEMENT

IMPERIAL

WIRE SIZE	NOMINAL DIAMETER	NOMINAL AREA	NOMINAL MASS	CENTER TO CENTER SPACING (Area in in. ² /lin. ft)						
				2"	3"	4"	6"	8"	10"	12"
W/D0.5	0.080	0.005	0.017	0.030	0.020	0.015	0.010	0.008	0.006	0.005
W/D1.2	0.124	0.012	0.041	0.072	0.048	0.036	0.024	0.018	0.014	0.012
W/D1.4 (10ga)	0.134 (0.135)	0.014	0.049	0.084	0.056	0.042	0.028	0.021	0.017	0.014
W/D1.7 (9ga)	0.147 (0.148)	0.017	0.059	0.102	0.068	0.051	0.034	0.026	0.020	0.017
W/D2.1 (8ga)	0.164 (0.162)	0.021	0.070	0.126	0.084	0.063	0.042	0.032	0.025	0.021
W/D2.5 (7ga)	0.178	0.025	0.084	0.150	0.100	0.075	0.050	0.038	0.030	0.025
W/D2.9 (6ga)	0.192	0.029	0.098	0.174	0.116	0.087	0.058	0.044	0.035	0.029
W/D3	0.195	0.030	0.102	0.180	0.120	0.090	0.060	0.045	0.036	0.030
W/D3.5	0.211	0.035	0.119	0.210	0.140	0.105	0.070	0.053	0.042	0.035
W/D4 (4ga)	0.226	0.040	0.136	0.240	0.160	0.120	0.080	0.060	0.048	0.040
W/D4.5	0.239	0.045	0.153	0.270	0.180	0.135	0.090	0.068	0.054	0.045
W/D5	0.252	0.050	0.170	0.300	0.200	0.150	0.100	0.075	0.060	0.050
W/D5.5	0.265	0.055	0.187	0.330	0.220	0.165	0.110	0.083	0.066	0.055
W/D6	0.276	0.060	0.204	0.360	0.240	0.180	0.120	0.090	0.072	0.060
W/D6.5	0.288	0.065	0.221	0.390	0.260	0.195	0.130	0.098	0.078	0.065
W/D7	0.299	0.070	0.238	0.420	0.280	0.210	0.140	0.105	0.084	0.070
W/D7.5	0.309	0.075	0.255	0.450	0.300	0.225	0.150	0.113	0.090	0.075
W/D8	0.319	0.080	0.272	0.480	0.320	0.240	0.160	0.120	0.096	0.080
W/D8.5	0.329	0.085	0.289	0.510	0.340	0.255	0.170	0.128	0.102	0.085
W/D9	0.339	0.090	0.306	0.540	0.360	0.270	0.180	0.135	0.108	0.090
W/D9.5	0.348	0.095	0.323	0.570	0.380	0.285	0.190	0.143	0.114	0.095
W/D10	0.357	0.100	0.340	0.600	0.400	0.300	0.200	0.150	0.120	0.100
W/D10.5	0.366	0.105	0.357	0.630	0.420	0.315	0.210	0.158	0.126	0.105
W/D11	0.374	0.110	0.374	0.660	0.440	0.330	0.220	0.165	0.132	0.110
W/D12	0.391	0.120	0.408	0.720	0.480	0.360	0.240	0.180	0.144	0.120
W/D13	0.407	0.130	0.442	0.780	0.520	0.390	0.260	0.195	0.156	0.130

METRIC

WIRE SIZE	NOMINAL DIAMETER	NOMINAL AREA	NOMINAL MASS	CENTER TO CENTER SPACING (Area in mm ² /lin. ft)						
				51mm	76mm	102mm	152mm	203mm	254mm	305mm
MW/MD3.2	2.03	3.23	0.025	64	42	32	21	16	13	11
MW/MD7.7	3.14	7.74	0.061	152	102	76	51	38	30	25
MW/MD9 (10ga)	3.39	9.03	0.071	178	119	89	59	44	36	30
MW/MD11 (9ga)	3.74	10.97	0.086	216	144	108	72	54	43	36
MW/MD13.6 (8ga)	4.15	13.55	0.106	267	178	133	89	67	53	44
MW/MD16.1 (7ga)	4.53	16.13	0.127	318	212	159	106	79	64	53
MW/MD18.7 (6ga)	4.88	18.71	0.147	368	246	184	123	92	74	61
MW/MD19.4	4.96	19.36	0.152	381	254	191	127	95	76	64
MW/MD22.6	5.36	22.58	0.177	445	296	222	148	111	89	74
MW/MD25.8 (4ga)	5.73	25.81	0.203	508	339	254	169	127	102	85
MW/MD29	6.08	29.03	0.228	572	381	286	191	143	114	95
MW/MD32.3	6.41	32.26	0.253	635	423	318	212	159	127	106
MW/MD35.5	6.72	35.49	0.279	699	466	349	233	175	140	116
MW/MD38.7	7.02	38.71	0.304	762	508	381	254	191	152	127
MW/MD42	7.31	41.94	0.329	826	550	413	275	206	165	138
MW/MD45.2	7.58	45.16	0.354	889	593	445	296	222	178	148
MW/MD48.4	7.85	48.39	0.380	953	635	476	318	238	191	159
MW/MD51.6	8.11	51.62	0.405	1016	677	508	339	254	203	169
MW/MD54.8	8.36	54.84	0.430	1080	720	540	360	270	216	180
MW/MD58.1	8.60	58.07	0.456	1143	762	572	381	286	229	191
MW/MD61.3	8.83	61.29	0.481	1207	804	603	402	302	241	201
MW/MD64.5	9.06	64.52	0.506	1270	847	635	423	318	254	212
MW/MD67.8	9.29	67.75	0.532	1334	889	667	445	333	267	222
MW/MD71	9.51	70.97	0.557	1397	931	699	466	349	279	233
MW/MD77.4	9.93	77.42	0.608	1524	1016	762	508	381	305	254
MW/MD83.9	10.33	83.88	0.658	1651	1101	826	550	413	330	275

CONVERSION FACTORS

1 in. = 25,4 mm

1 ft = 0,3048 m

1 in.² = 645,2 mm²

1 in.²/lin. ft = 2116,7 mm²/m lin.

1 lb/100 ft² = 0,0488 kg/m²

1 lb = 0,4536 kg

1000 psi = 6,895 MPa

WIRE SIZE

Imperial wire sizes are designated by their sectional area in hundredths of a square inch.

Ex.: for W8, Area = 0.08 in.²

Metric wire sizes are designated by their sectional area in mm².

Ex.: for MW51.6, Area = 51.6 mm²

"W" denotes smooth wire ex.: W13

"D" denotes deformed wire ex.: D13

"M" denotes metric ex.: MW83.88 or MD83.88

MESH CONVERSION

Rebar Fy = 400 MPa
Deformed Mesh
Fy = 485 MPa, available up to 550 MPa

Example: Area reduction when converting Rebar Steel Area to Deformed Mesh, Fy = 500 MPa

For a saving of 20% of steel content Multiply by x 400/500 = 0.80

CONCRETE ACCESSORIES

CONTINUOUS HIGH CHAIRS

- From 1 1/2" to 8" high
- Available in 5' length
- Wire resistance superior to the ASTM A1064 standard

Applications

- Supports mesh and rebar during installation
- Concrete floors
- Balconies
- Precast concrete

FAST, EASY & ECONOMIC

Using continuous high chairs is a fast and easy way to install mesh and rebar. Greatly appreciated by the workers for being adjustable and light, the continuous high chairs are economic accessories for your concrete projects.



**CONCRETE
REINFORCEMENT**

WIRE PRODUCTS

FOR CONSTRUCTION, CONCRETE PIPES AND MINES



REINFORCING BARS

- Offered in 10M and 15M
- Available in various lengths (2', 4', 6', 10', 20')
- W-grade (weldable) product
- Manufactured according to the CAN/CSA-G30.18 standard
- Custom lengths upon request

This product is intended for specific applications in which any of the following conditions are required:

- Improved weldability
- Increased ductility
- Restricted mechanical properties
- Restricted chemical composition

The reinforcing bars are mainly used to reinforce concrete. A few **applications** are: Concrete floors, driveways, concrete pipes, septic tanks, manure pits, and balconies.

REINFORCING BARS SIZES

CANADA

10M = 100 mm²= 0.155 in.²

15M = 200 mm²= 0.31 in.²

American sizes available upon request.



WIRE COILS

- Available in 1000lb to 2000lb coils (standard is 1500lb)
- From W0.5 to W13 and D2.0 to D13 wire diameter
- Smooth or deformed wire
- Shipped on a tubular carrier
- Manufactured according to the ASTM A1064 standard
- Custom sizes and gauges available upon request

Application

- Concrete pipe precaster with a cage machine



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