Size on Wire Gauge	Diameter in Inches	Weight per Foot of One Wire	Tensile Strength of One Wire	Tensile strength of longitudinal wires in one foot of the width of wire reinforcing, when spaced as follows:— 2 Inch Centres	2½ Inch Centres	3 Inch Centres	3½ Inch Centres	4 Inch Centres
3	.252	.164	3990	23940	19152	15960	13685	11970
4	.232	.139	3381	20286	16228	13524	11597	10143
5	.212	.116	2824	16944	13555	11209	9686	8472
6	.192	.095	2476	14856	11885	9904	8493	7428
7	.176	.080	2136	12816	10253	8544	7326	6408
8	.160	.066	1813	10878	8702	7252	6219	5439
9	.144	.054	1507	9042	7234	6028	5169	4521
10	.128	.045	1233	7398	5918	4932	4229	3699
11	.116	.035	1010	6060	4848	4040	3464	3030
12	.104	.028	810	4860	3888	3240	2778	2430

	Weight per square foot of longitudinal wires when spaced as follows:— 2" Centres	2½" Centres	3" Centres	3½" Centres	4" Centres	Weight per square foot of transverse wires when spaced as follows:— 2½" Centres	4" Centres	5½" Centres	7" Centres	8½" Centres
3	1.1100	.9000	.7500	.6600	.5400	.9000	.5400	.4200	.3300	.2700
4	.9455	.7666	.6389	.5622	.4600	.7666	.4600	.3577	.2811	.2300
5	.7811	.6333	.5277	.4644	.3800	.6333	.3800	.2955	.2322	
6	.6372	.5166	.4305	.3789	.3100	.5166	.3100	.2411	.1894	
7	.5344	.4333	.3611	.3178	.2600	.4333	.2600	.2022		
8	.4522	.3666	.3055	.2689	.2200	.3666	.2200	.1711		
9	.3700	.3000	.2500	.2200		.3000	.1800			
10	.2877	.2333	.1944			.2333	.1400			
11	.2261	.1833				.1833				
12	.1831					.1500				

EXAMPLES—The longitudinal wires No. 4 gauge spaced on centres of 2½ inch weigh .7666 of pound to square foot, and the transverse wires No. 4 gauge spaced on centres of 5½ in. weigh .3577 of pound to square foot. Therefore a reinforcing 2½ in. x 5½ in. of No. 4 wire would weigh approximately 1 lb. 2 oz. per square foot of reinforcing.

The longitudinal wires No. 8 gauge spaced on centres of 3½ in. weigh .2689 of pound to square foot, and the transverse wires No. 8 gauge spaced on centres of 5½ in. weigh .1711 of pound to square foot, therefore a reinforcing 3½ x 5½ in. centres of No. 8 gauge wire would weigh .44 pounds to square foot.

Longitudinal wires may be spaced on centres of two or more inches in steps of ½ inch. Transverse wires may be spaced on centres of 2½ or more inches in steps of 1½ inches as per above table. We can supply the reinforcing in any of these meshes as wide as 120 inches, and in any length desired, excepting those fabrics that are too stiff and heavy to be made into a roll.

Select a mesh and size of wire suitable to your requirements, giving quantity, and we shall be pleased to quote you prices.

It is considered good practice to use a reinforcing sufficiently strong to carry the desired weight without reference to the added strength of the concrete.

A factor of safety of ten should be observed.

A generally accepted mixture is that of cement 1, sand 2½, stone 5.

The stone should be broken so as to go through a ¾ or 1 inch diameter ring.

The nearer the reinforcing is to the underside of cement slab the more effective it becomes to carry the load.

WE HAVE SUPPLIED REINFORCING TO THE FOLLOWING FIRMS:

Barnett & McQueen Co., Port Arthur, Ont., for Atikokan Iron Co., 2½" x 4" x No. 6 Gauge Wire; J. B. Smith & Sons, Callendar, Ont., for roof of Saw Mill, 3½" x 4" x No. 10 Gauge Wire; J. H. Tromanhouser, Goderich, Ont., for Elevator, 2½" x 4" x No. 10 Gauge Wire; City of Winnipeg, 4" x 4" x No. 8 Gauge Wire; R. Forbes Co., Hespeler, Ont., for Woolen Mill, 2" x 5½" x No. 7 Gauge Wire; Town of Orillia, for Dam. Otis-Fenson Elevator Co., Hamilton, Ont., for Roof of Works, 2" x 8" x No. 8 Gauge Wire; Jos. Crevier, St. Annes De Bellevue, Que., 4" x 2" x No. 3 Gauge Wire; for Bank of Montreal; Christie Bros., Owen Sound, Ont., 2" x 4" x 3-16 Gauge Wire; Hamilton Bridge Co., for Bridge Flooring, 2" x 4" x No. 6 Gauge Wire; Township of Trafalgar, Oakville, Ont., 2" x 4" x No. 6 Gauge Wire, for Bridge Flooring.