

pouring of the slab mixture. The material is galvanized thoroughly before being welded, or is furnished plain. **ELECTRICALLY WELDED FABRIC** is also manufactured by the National Steel Fabric Co. of Pittsburgh, Pa., of No. 10 gauge to 3/8-in longitudinal wires and 16 gauge to 1 5/32-in transverse wires. Longitudinal wires are spaced 2, 3, 4, 6, 8, 9 or 12 in on centers and transverse wires 2, 3, 4, 6, 8, 9, 10, 12, 16 or 18 in on centers. It is furnished in rolls or sheets of any desired length and in widths of 2 ft to 11 ft 6 in. Stock lengths of rolls are 100 to 300 ft.

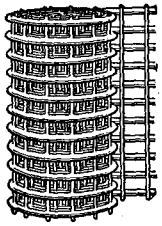


Fig. 90. Electrically Welded Wire Fabric Reinforcement

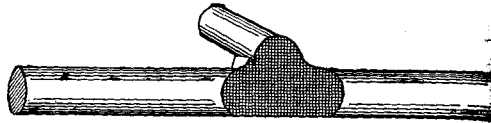


Fig. 91. Cross-section of Weld, Illustrating the Fusing Together of Longitudinal and Transverse Members

(b) **Expanded Mesh. Steelcrete.** Steelcrete reinforcing fabric is diamond mesh, cold-drawn from a solid steel plate by the Consolidated Expanded Metal Companies, Wheeling, W. Va. It possesses many of the properties of cold-drawn wire with a guaranteed theoretic elastic limit 60 per cent higher than commercial medium steel.* **STEELCRETE MESH** is free from mechanical and welded joints, and provides distribution of reinforcement in all directions. It is furnished in large, flat sheets and is much more

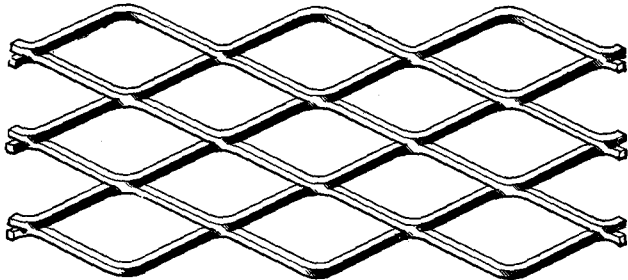


Fig. 92. Expanded Metal, Diamond Mesh

readily handled on the job than rolled wire fabric. Table XIX gives the sizes of sheets and the effective reinforcing area per foot of width of fabric. Expanded metal reinforcement is also furnished by the Genfire Steel Company, Youngstown, Ohio.

(c) **Self-Centering.** In addition to the laths noted in Article 13 as possessing the necessary characteristics and rigidity to serve as combined centering and reinforcement for concrete floor or roof slabs generally supported on top flanges of steel floor joists or light-weight structural beams, permanent centering or SELF-CENTERING is produced in special forms by many of the

* A. S. T. M. Spec. A15-30.

Table XIX. Standards for "Steelcrete" Expanded Metal

Designation of mesh	Effective sectional area sq in per ft width	Approx. weight per sq ft lb	Standard width of sheets, ft-in	Sq ft in a standard sheet of various lengths				Sheets in a standard bundle
				8 ft	10 ft	12 ft	16 ft	
3-13-075	.075	.25	6-4	50.67	63.33	76.00	101.33	10
3-13-10	.10	.34	7-0	56.00	70.00	84.00	112.00	7
3-13-125	.125	.42	5-8	45.33	56.67	68.00	90.67	7
3-9-15	.15	.51	7-0	56.00	70.00	84.00	112.00	5
3-9-175	.175	.60	6-0	48.00	60.00	72.00	96.00	5
3-9-20	.20	.68	5-3	42.00	52.50	63.00	84.00	5
3-9-25	.25	.85	4-2 1/2	33.67	42.08	50.50	67.33	5
3-9-30	.30	1.02	7-0	56.00	70.00	84.00	112.00	2
3-9-35	.35	1.19	6-0	48.00	60.00	72.00	96.00	2
3-4-40	.40	1.36	4-7	36.67	45.83	55.00	73.33	2
3-4-45	.45	1.53	4-1	32.67	40.83	49.00	65.33	2
3-4-50	.50	1.70	7-4	58.67	73.33	88.00	117.33	2
3-4-55	.55	1.87	6-8	53.33	66.67	80.00	106.67	2
3-4-60	.60	2.04	6-1 1/2	49.00	61.25	73.50	98.00	2

NOTE. All the above sizes are furnished in a standard diamond 8-in length and approximately 3-in width. All sizes are furnished in stock lengths 8, 12 and 16 ft. In addition, all sizes from 3-13-075 to 3-9-35, inclusive, are furnished in stock lengths of 10 ft.

lath manufacturers. These laths are furnished in either **FLAT** or **SEGMENTAL** sheets, pressed into a series of solid ribs, between which the metal is stamped, perforated, or deformed into an open mesh-work. The size of the mesh must not be large enough to permit fairly dry mixes of concrete to leak through. These laths are furnished painted or galvanized, and in open-hearth mild steel or in special copper-bearing or alloy steels.

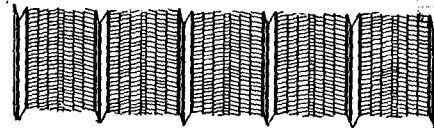


Fig. 93. Section of 3/4-in "Ribplex" Sheet

Ribplex, shown in Fig. 93, is manufactured by the Berger Manufacturing Co. of Canton, Ohio, with 3/4-in ribs spaced 4.8 in apart, with herringbone-mesh panels between the ribs, all formed cold from the same sheet of metal. The sizes of available sheets and the cross-section area of metal per foot of width of sheet are given in the following table. Under the weight of wet con-

Ribs are 3/8 in high spaced 4.8 on centers

Painted Steel 3/4-In Ribplex

Gauge No.	Weight per sq ft, lb	Total sect. area per ft, sq ft	Width of sheets, in	Length of sheets for all gauges, ft
28	.50	.1406	24	4, 5, 6, 7, 8, 9 10, 11, and 12
26	.60	.1688	24	
24	.75	.2250	24	