

MUNICIPAL DEPARTMENT

SPECIFICATIONS FOR CEMENT- CONCRETE WALKS.

(Continued from last week.)

9. Before the aforesaid layer of concrete has set, and while it is still adhesive, there shall be laid upon it a wearing surface one inch in thickness. It shall be composed of one part by measure of Portland cement, and two parts by measure of clean sharp sand. The cement and sand shall be mixed dry, water then added to moisten sufficiently, the whole again thoroughly manipulated and mixed in a water-tight box or floor and immediately put in place. The layer shall then be thoroughly worked to a true and even surface. Over this shall be sifted a layer of Portland cement, the whole to be neatly levelled to a perfectly smooth surface, and rolled with a tooth roller to make a surface that will not be slippery. This surface layer shall be cut into sections, the joints to correspond exactly with those of the first described layer of concrete, the edges of the walk to be rounded, and the whole finished in a neat and workmanlike manner.

10. Before any concrete is placed in the walk, temporary curbs, of 2 x 6 pine, with edges dressed so as to be perfectly straight, shall be firmly and accurately placed along the outer edges of the walk, to be removed after the walk has hardened, these curbs to be furnished by, and remain the property of the contractor. When the curb is removed, the vacant space must be filled with good soil, and any sodding disturbed in so doing must be carefully restored.

11. The total thickness of the walk, including foundation layer, concrete layer, and the wearing surface, shall be uniform throughout, and shall have

a slope towards the roadway of 1-4 inch to the foot, unless otherwise required by the engineer.

12. All cement used in the work must be of some well and favorably known brand, and shall be approved by the engineer. It shall be delivered in barrels or equally tight receptacles, and must be protected from the weather by storing in a tight building or by suitable covering, the packages to be placed on boards or flooring raised above the ground. All cement rejected by the engineer shall be conspicuously marked "Condemned," and shall be immediately removed from the site of the work. Should any cement so rejected be thereafter used in the walk, such sections as may be required by the engineer, shall be immediately torn up by the contractor, and replaced with cement of proper quality, without extra compensation. The supply of cement must be so gauged that a sufficient quantity will be kept on hand to allow ample time for testing and examination by the engineer, without delay to the work of construction; the cement to conform to the following tests, and such others as the engineer may require:—

(a) At least 90 per cent. shall pass through a sieve having 10,000 holes to the square inch.

(b) Pats made of neat cement, with thin edges, on pieces of glass, covered with a damp cloth, and allowed to set in air; then placed in boiling water 48 hours, must not

show expansion cracks, distortion nor curling of the thin edges

(c) Samples of cement shall be made into the consistency of a stiff mortar, pressed firmly into moulds and covered with a damp cloth, then allowed to set in air 24 hours, then in water three, and seven days. When in water three days, six samples shall show an average tensile strength of 300 pounds per square inch; when in water seven days, six samples shall show an average tensile strength of 450 pounds per square inch.

13. The stone and sand shall at all times be subject to the approval of the engineer, the sand to be clean, sharp and silicious.

14. At street crossings, lanes and private driveways, the walk shall be so rounded, placed, and at such an elevation as to give a convenient passage for vehicles, to the satisfaction of the engineer. The surface layer of concrete shall be 1-2 inches thick, composed of equal parts by measure of cement and sand, and marked with diamond shaped blocks by lines crossing the walk diagonally six inches apart. The edges shall be rounded, and faced to the bottom of the concrete with the cement mortar used for surfacing the walk. At all street crossings, and elsewhere if so desired by the engineer, the edges of the walk shall be protected by a curbing of cedar, placed in a permanent and durable manner, flush with the surface of the walk.

(To be continued.)

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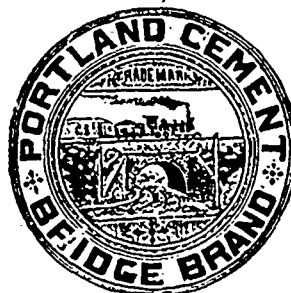
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