

ORDINANCE NO. 510, FOURTH SERIES.

AN ORDINANCE AMENDING SECTIONS 2604 AND 2704 OF ORDINANCE NO. 316, FOURTH SERIES, PASSED JANUARY 13, 1927, AND ENTITLED: "AN ORDINANCE REGULATING THE ERECTION, CONSTRUCTION, ENLARGEMENT, ALTERATION, REPAIR, MOVING, REMOVAL, DEMOLITION, CONVERSION, OCCUPANCY OF BUILDINGS OR STRUCTURES IN THE CITY OF SACRAMENTO, PROVIDING FOR THE ISSUANCE OF PERMITS AND COLLECTION OF FEES THEREFOR, PROVIDING PENALTIES FOR THE VIOLATION THEREOF, AND REPEALING ORDINANCE NO. 389, THIRD SERIES, PASSED JUNE 17, 1919, ORDINANCE NO. 12, FOURTH SERIES, PASSED SEPTEMBER 8, 1921, ORDINANCE NO. 122, FOURTH SERIES, PASSED JULY 26, 1923, SECTION 8 OF ORDINANCE NO. 117, FOURTH SERIES, PASSED APRIL 9, 1923, ORDINANCE NO. 648 OLD SERIES, PASSED APRIL 11, 1904, ORDINANCE NO. 256 OLD SERIES, PASSED APRIL 14, 1890, AND ALL OTHER ORDINANCES, OR PARTS OF ORDINANCES, IN CONFLICT HEREWITH.

BE IT ENACTED BY THE COUNCIL OF THE CITY OF SACRAMENTO:

SECTION 1. Section 2604 of Ordinance No. 316, Fourth Series, passed January 13, 1927, is hereby amended to read as follows:

Section 2604. Monolithic concrete construction containing not more than two-tenths (2/10) of one (1) per cent of reinforcement shall be classed as plain concrete.

Materials for bearing walls and piers of plain concrete shall be mixed in proportions of one (1) part of Portland cement to not more than three (3) parts of sand and five (5) parts of coarse aggregate, by volume, or a mixture of fine and coarse aggregates giving an equivalent strength and density.

Coarse aggregate shall consist of crushed stone, washed gravel, or crushed slag, eighty-five (85) per cent of which is retained in a No. 4 screen, and shall be graded in size from small to large particles. The particles shall be clean, hard, durable and free from deleterious materials.

Cement for plain concrete shall conform to the requirements of the Standard Specifications and Tests for Portland Cement of the American Society for Testing Materials (Serial Designation C9-21).

Fine aggregate shall consist of washed sand, washed stone screenings or other similar inert materials, or a combination thereof, having clean, hard durable uncoated grains and free from injurious amounts of dust, lumps, soft or flaky particles, shale, alkali, organic matter, loam, or other deleterious substances; and shall range from fine to coarse. Not less than ninety-five (95) per cent shall pass a No. 4 sieve, and not more than thirty (30) per cent shall pass a No. 50 sieve, when tested according to current standard practice prescribed by the American Society for Testing Materials.

One to three mortar briquettes made from the washed sand should develop the same strength at 28 days as one to three mortar briquettes made from Standard Ottawa sand at 28 days, when the mortar in both sets of briquettes is of the same consistency and cured under like conditions.

Concrete Mix, viz, washed sand and washed gravel premixed before delivery; shall be composed of fine aggregate which shall conform to the specification for fine aggregate under paragraph 5 of this section and coarse aggregate which shall conform to the specification for coarse aggregate under paragraph 3 of this section; the fine and the coarse aggregates to be mixed in such proportion that 60% of the ultimate dry mix shall be coarse aggregate.

The strength of monolithic concrete if "concrete mix" is used as the aggregate shall be not less than 1500 pounds per square inch at the age of 28 days. The proportion of "concrete mix" to cement, by volume, shall be not more than six parts of concrete mix to one part of cement.

SECTION 2. Section 2704 of Ordinance No. 316, Fourth Series, passed January 13, 1927, is hereby amended to read as follows:

Section 2704. (a) Portland Cement. Portland cement shall conform to the Standard Specifications and Tests of Portland Cement (Serial Designation C9-21) of the American Society for Testing Materials.

(b) Concrete Aggregates. Concrete aggregates shall consist of washed sands, washed gravels, crushed rock, air-cooled blast-furnace slag, or other inert materials having clean, strong durable, uncoated particles and shall meet the approval of the Building Inspector. Aggregates containing soft, friable, thin, flaky, elongated or laminated particles totaling more than three (3) per cent by weight, or containing shale in excess of one and one-half ($1\frac{1}{2}$) per cent, or silt and crusher dust finer than the No. 100 standard sieve in excess of two (2) per cent shall not be used. The percentages shall be based on the weight of the combined aggregate as used in the concrete. When all three groups of these injurious materials are present in the aggregates, the combined amounts shall not exceed 5 per cent by weight, of the combined aggregate. Aggregates shall not contain strong alkali, or organic material which gives a color darker than the standard color when tested in accordance with the standard colorimetric test of the American Society for Testing Materials.

The maximum size of the aggregates shall be not larger than one-fifth ($1/5$) of the narrowest dimension between forms of the member for which the concrete is to be used nor larger than three-fourths ($3/4$) of the minimum clear spacing between reinforcing bars, or between bars and forms. Maximum size of aggregate is defined as the clear space between the sides of the smallest square opening through which ninety-five (95) per cent, by weight, of the material can be passed.

(c) Water. Water used in mixing concrete shall be clean and free from injurious amounts of oil, acid, alkali, organic matter or other harmful substances.

(d) Metal Reinforcement. Metal reinforcement shall conform to the requirements of the Standard Specifications for


Billet-Steel Concrete Reinforcement Bars of structural or intermediate grade (Serial Designation A15-14) of the American Society for Testing Materials. Hard grade billet-steel meeting the requirements of the above specification (A15-14) requirements of the Standard Specifications of the American Society for Testing Materials, may be used for bars three-fourth (3/4) inch in size and smaller, or for larger sizes where no bending is required. The provision in the above mentioned specifications for machining deformed bars before testing shall be eliminated.

Metal reinforcement, to receive the rating of "deformed Bars" which permits the use of higher bond stresses than for plain bars, shall show a bond strength twenty-five (25) per cent greater than that shown by plain bars of equivalent cross-sectional area.

(e) Storage of Materials. Cement and aggregates shall be stored at the work in a manner to prevent deterioration or the intrusion of foreign matter. Any material which has been damaged shall be immediately and completely removed from the work.

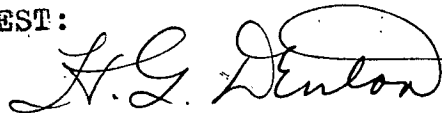
PASSED: May 14th, 1931

EFFECTIVE: June 13th, 1931



Mayor

ATTEST:



City Clerk.