

product are the makers of concrete blocks. Probably in no other branch of the concrete industry has there been such an insistent demand for more ornate effects than in the concrete block business. The ordinary concrete block made out of the ordinary Portland cement and the ordinary sand does not make a very beautiful appearance, and there is no one that will deny this. The business of making these blocks has appealed to men in every community because of the demand for a cheap building material. When properly made the blocks have merit, because they make a good, warm building in winter and a cool building in summer, and the cost of the blocks is in reach of the mass of the people. The conservative architect is slowly taking up the concrete block, and the white cement has appealed particularly to the larger companies manufacturing concrete blocks that have had in their employ architects. The white cement is mostly used on facing the blocks, the ordinary Portland concrete being used for the base. It is necessary, of course, to watch the manufacture of the cement very closely because of the necessity to make the product conform from a quality standpoint with the ordinary high-grade Portland. While the cement has gone into the facing of thousands of concrete blocks made by hundreds of different users, it has been found that without exception the bond between the white Portland concrete face and the ordinary concrete base has been perfect. We know this to be a fact, because the user of a new product, if he does not get the results that he feels he ought to get, does not, as a rule, when reporting it handle the subject in the politest language. One of the largest users of the white cement manufacturing concrete blocks is located in Lincoln, Neb. This company is managed by an engineer, and during the last year has used about 1,000 barrels of the cement, almost all of which went into the facing of concrete blocks. This company believes in not how cheaply they can make the blocks, but how good they can make them, and as a result they have done much in overcoming the prejudice against concrete blocks in their neighborhood. The National Association of Cement Users, of which Mr. Humphrey is the president, will no doubt at its convention at Buffalo next week take necessary steps towards regulating the manufacturing of concrete building blocks, and will recommend to the different municipalities standard methods for controlling their manufacture. The concrete block has a place as a material of construction, and the proper steps are being taken to overcome the prejudice now existing. The white Portland cement is assisting very materially to overcome this prejudice, because of the fact that a block faced with this material is pleasing to the eye.

Another use for the white cement has been in exterior plaster work. In many of the cities of the country cement plaster houses are being built, and very artistic and beautiful effects are being obtained. Here, again, the architect and the builder have been seeking for a more artistic effect than that possible by using ordinary Portland, and here again the white cement has found a place. One of the large users of the white cement uses the ordinary Portland cement concrete for first and second coat on the metal lath and the white cement concrete for the surface coat. This customer has placed the cement in no less than fifty different houses during the last year, giving the building not only the white effect, but also any desired color by treating the white cement with mineral colors. This form of building is receiving a great impetus through the more general knowledge of the people in Portland cement and its wonderful adaptability as a building material. Here again the white cement is doing its little mite towards improving from an artistic standpoint this form of building.

Another use for the cement has been for non-staining purposes. The cement analyzes less than one-half of 1 per cent. of the oxide of iron, and as a result can be used with perfect safety in laying up marble,

Bedford stone, pressed brick, etc. The imported Puz-zolan cements have been and are being used for this purpose, but they are not altogether satisfactory, as their tensile strengths are low, and they also stain more or less. The Government is slowly being convinced of the quality of the white cement, and as a result the cement is beginning to be used in Government work mostly for non-staining purposes. The cement is also being used in a number of court house jobs in different parts of the country, and is universally giving results.

Another use for the cement is in porch work, for making ornamental pillars, caps, etc., and also for the porch floors, treads, etc.

So far as I know the cement has not been used in reinforced concrete construction for the body of the work. The price of the cement is about twice that of the ordinary Portland, and for this reason it is not used in work where strength is required rather than beauty. The cement is being used, however, for a veneer in connection with the reinforced concrete, and this is a use which will grow as the product becomes better known.

It may be of interest to give a few tests of the cement extending over a year, in order to show how it compares with the ordinary Portland. These tests are an average of the daily tests of the cement made during the first fifteen days in January, 1907:—

Fineness, 100-mesh	98.1
Fineness, 200-mesh	85.4

Setting time: Initial set, 2 hours and 15 minutes; final set, 6 hours. Boiling test O.K. Specific gravity, 3.14.

Tensile strength.

Neat cement.	Pounds.
24 hours	350
7 days	765
28 days	806
3 months	820
6 months	892
1 year	915

One part cement, three parts Garden City 20.0 sand:—

7 days	324
28 days	367
3 months	420
6 months	490
1 year	510

These tests show that the cement is fully up to the requirements of any specifications, and compare favorably with the results obtained in testing the very best of the ordinary Portlands. The sand tests are somewhat high, but the reason for this is because of the extreme fineness to which the cement is ground.

BUILDING PERMITS ISSUED DURING THE FIRST SEVEN MONTHS OF 1908 IN WINNIPEG ARE AS FOLLOWS:

Month.	Permits.	Buildings.	Cost.
January	31	32	\$ 16,550
February	21	21	10,050
March	64	73	113,900
April	191	221	640,550
May	211	231	649,800
June	196	229	782,050
July	169	215	1,385,850
Total	883	1,022	\$3,578,750

During the corresponding months of 1907, 2,542 permits for 2,408 buildings value at \$5,261,550 were issued.