

GEORGIA
Sparkling Crystalline
MARBLE

The selection of over 27,000 cubic feet of Georgia Crystalline Marble for extensive replacement and repair work on St. Patrick's Cathedral, Fifth Avenue, New York City, is another tribute to the versatility and beauty of this time-tested construction material. This is the first major renovation or restoration on the Cathedral since its dedication in 1879.

Georgia Marble was selected for two reasons: first because its interlocking crystalline structure was such that it most closely resembled the marble originally furnished and secondly, because it was felt that Georgia Marble would be the most weather-resistant marble that could be obtained in this country.

A wide variety of pictorial examples of Georgia Crystalline Marble will be found on the following pages.

St. Patrick's Cathedral (restoration)
George A. Fuller Company, General Contractors.
Maginnis and Walsh, Architects.



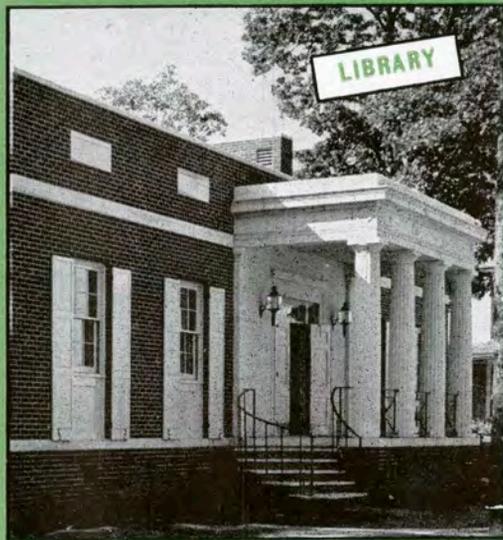
ART MUSEUM

JOSLYN ART MUSEUM, OMAHA, NEB.
John and Alan McDonald, Omaha, Neb., Architects
Etowah Pink Georgia Crystalline Marble



GOVERNMENT BUILDING

PAN AMERICAN BUILDING, WASHINGTON, D. C.
Albert Kelsey and Paul P. Cret, Architects
White Georgia Crystalline Marble



LIBRARY

IDA WILLIAMS LIBRARY, BUCKHEAD, GA.
George H. Bond, Atlanta, Ga., Architect
White Georgia Crystalline Marble



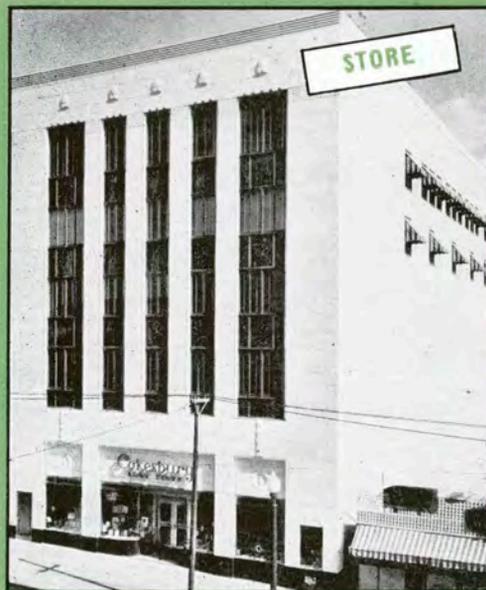
MEMORIAL

HORACE H. RACKHAM EDUCATIONAL MEMORIAL, DETROIT, MICH.
Harley & Ellington, Detroit, Mich., Architects
White Georgia Crystalline Marble



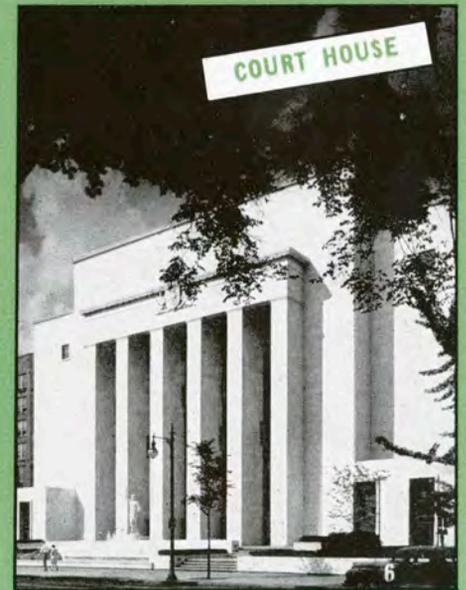
TRUST COMPANY

MANUFACTURER'S TRUST CO. BLDG., N. Y. C.
Cross and Cross, New York City, Architects
White Georgia Crystalline Marble



STORE

COKEBURY BOOK STORE, DALLAS, TEXAS
Mark Lemmon, Dallas, Texas, Architect
White Georgia Crystalline Marble



COURT HOUSE

DAUPHIN COUNTY COURT HOUSE,
HARRISBURG, PENNSYLVANIA
Lawrie & Green, Harrisburg, Pa., Architects
Light Cherokee Georgia Crystalline Marble



POST OFFICE

U. S. POST OFFICE, CHATTANOOGA, TENN.
R. H. Hunt Co., Chattanooga, Tenn., Architects
Shreve, Lamb & Harmon, New York, Consultants
Light Cherokee Georgia Crystalline Marble

from our files

Here is a collection of ten pictures taken from record files which, down through the decades, have held thousands of pictures of distinguished structures in world famous Georgia Crystalline Marble.

These ten pictures presume to indicate variety—to point that size, large or small, presents no problem to us. Georgia Crystalline Marble facilities are huge. The resources of our many fine quarries will last through the centuries. Installations of fifty years ago, or fifty years from now, can be matched in color and texture, for Georgia Crystalline Marble which is distinguished by its sparkling crystal endures in its uniform, changeless beauty.

Will you permit our nearest Sales and Service Office to supply you with a special selection of pictures and data in connection with your next project, whether it be—a theater—a Government building—a store front—a museum—an office building—a post office—a bank—a courthouse—a residence—a memorial—or for interior work—shower stalls—stairways—wainscoting—floors—trim, etc.

On page 8, you will find a list of our Sales and Service Offices. On pages 6 and 7 adequate technical data in connection with the most widely used varieties of Georgia Crystalline Marble which are now in production at our four plants will be found.



RESIDENCE

DEVERAUX RESIDENCE, THOMASVILLE, GA.
Thomas & Company, Architect
White Georgia Crystalline Marble
(Trim - steps - coping - window sills - door sills - corner quoins - key stones)



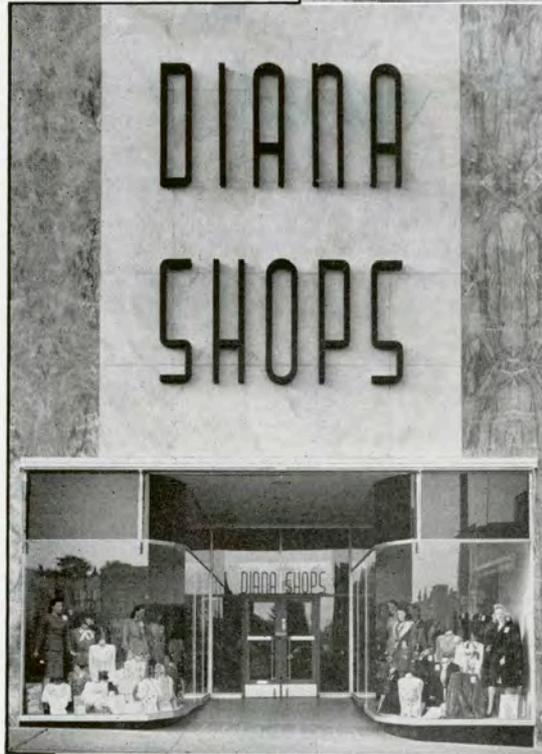
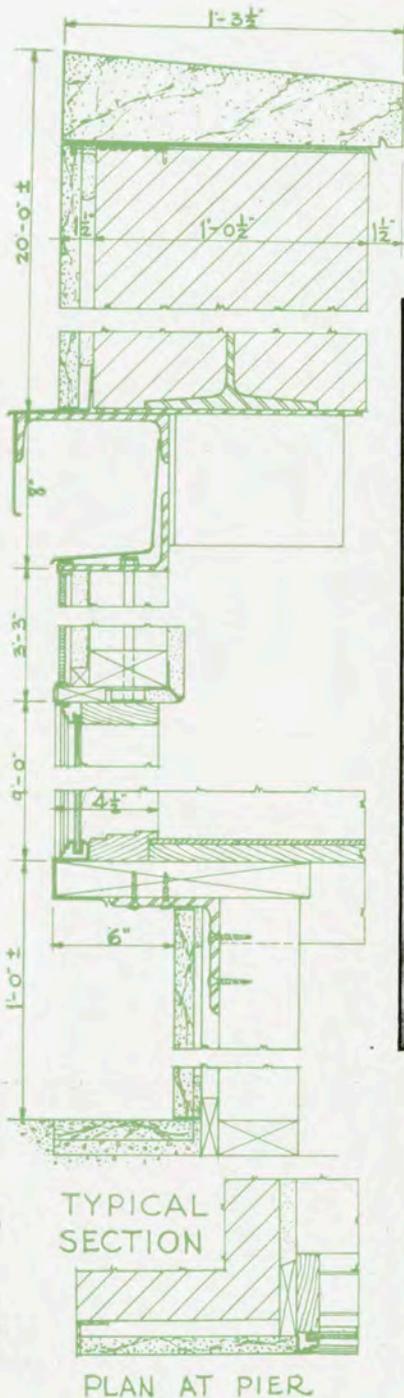
POST OFFICE

U. S. POST OFFICE, ATLANTA, GA.
A. Ten Eyck Brown, Atlanta, Ga., Architect
Cherokee Georgia Crystalline Marble

GEORGIA
Sparkling Crystalline
MARBLE

Pictured are 3 of 23 Store Fronts produced for one firm. These Store Fronts, which cover installations from New Mexico to Florida and from Indiana to Virginia, have been produced over a period of 5 years. (More jobs are now in production).

Satisfaction in service and material is emphasized as is the fact that no job is too large or too small to receive good attention.

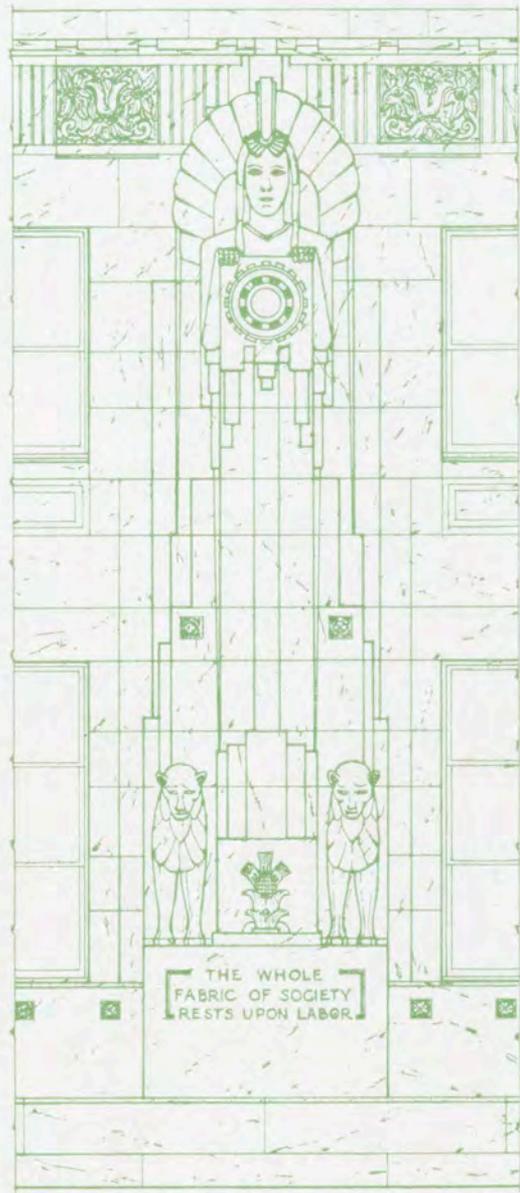


With the exception of the name panel, Etawah Pink Georgia Crystalline Marble has been used on these 23 Store Fronts. Sydney H. Morris & Associates, Chicago, Illinois, are the architects.

Top—Peggy Hale Shop, Macon, Georgia.
Center—Diana Shop, Bedford, Indiana.
Bottom—Diana Shop, Jacksonville, Florida.

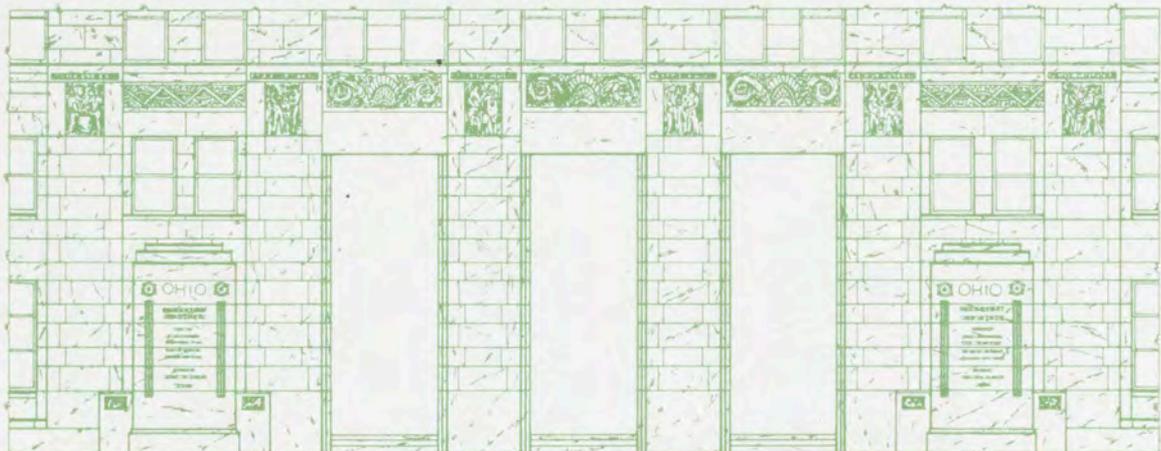


GEORGIA *Sparkling Crystalline* MARBLE

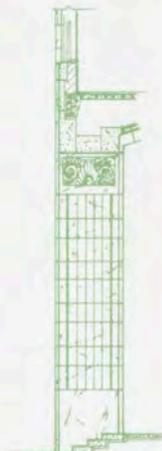


STATE OFFICE BUILDING, COLUMBUS, OHIO
Harry Hake, Cincinnati, Ohio, Architect
White Cherokee Georgia Crystalline Marble

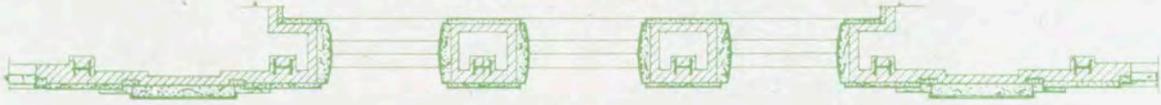
• DETAIL OF A DECORATIVE FEATURE •



• ENTRANCE DETAIL •



• SECTION •



• PLAN •

Specific Information

The Georgia Marble Company, operating one of the finest known deposits of crystalline marble on this continent, has met the varying needs of Architects for over 50 years. Prominent monuments, public and private buildings of all types and description, where sparkling beauty and enduring qualities are paramount, are built with this crystalline marble.

The Architect is interested not only in the crystalline marble and whether it meets the requirements of the proposed structure—but in the company back of the product.

KIND OF MARBLE

A beautiful, durable marble featured by a sparkling crystal. It is suitable for exteriors, interiors, monuments, statues, etc., available in several colors of uniform grade, and recommended for either exterior or interior use in any climate.

Samples. All figured crystalline marbles show considerable natural variation. Any sample must be taken simply as an average specimen of the whole work.

Georgia Crystalline Marble occurs in enormous solid deposits. Each grade is produced from a special quarry, and is extremely uniform through the years. It may be confidently ordered by name, without recourse to samples, when haste is imperative.

VARIETIES

White Georgia is white, with a slight amount of veining and clouding.

Cherokee has gray veining and clouding on a generally white background. The average quarry run is classified as Light Cherokee; lightest and darkest stock is graded as White or Gray Cherokee, respectively.

Creole shows a profusion of blue-black veining on a white background.

Mezzotint has a gray body with dark gray, wavy veins.

Etowah, or Pink Georgia, varies from old rose to light pink tones, with greenish-black and gray veinings.

Verde Antique is an all-over green in light and medium tones, with dark veining. It is usually polished or honed, to display the full color.

FINISHES

All varieties of Georgia Crystalline Marble are adaptable to smooth sand-rubbed, honed or polished finishes. In addition, we have found by long years of experience that the extreme hardness and the crystalline character of Georgia Marble lends itself admirably to texture finishes.

A variety of texture finishes has been used for important Georgia Crystalline Marble buildings. Texture finishes tend to lighten the color of the marble and soften the veining, whereas the smoother finishes emphasize the veining.

Sand-rubbed, axed and bush-hammered finishes are best for exterior facings.

Sand-Rubbed work is dressed down with fine abrasives to a smooth, non-reflective surface. It is the most economical finish, and reveals the veining more clearly than axed or bushed surfaces.

Axed work is an all-over finish of short, close, parallel lines, usually vertical, made by vibrating a sharp chisel across the surface. It softens the veining and evens up the dominant color of the crystalline marble.

Can the particular crystalline marble be furnished in sufficient quantities and will it be delivered on time? If the building should require an extension, can the crystalline marble be matched accurately 30 or even 50 years from now?

These questions are readily answered when it is known that The Georgia Marble Company can produce upwards of 1,000,000 cu. ft. of crystalline marble annually, that large reserve stocks are constantly on hand and that the supply of unquarried crystalline marble will require many centuries to exhaust. In specifying Georgia Crystalline Marble, the Architect can feel confident that when it becomes necessary even after 50 years or more to add to the building, there will be no difficulty in obtaining Georgia Crystalline Marble which will match the crystalline marble selected.

Bushed work has the surface lightly but thoroughly roughened with a bushing tool, giving a sparkling texture which almost obliterates veining color and blends the whole into a soft monotone. It is particularly effective in Georgia Crystalline Marble.

Highly colored crystalline marbles are often honed or polished to bring out their full beauty, or for contrast. Over a period of years, however, these finishes will not weather quite as well as the coarser ones already described.

Honed finish is satiny-smooth, with just a suggestion of lustre. When buffed with putty powder and acid it takes on the clear, high gloss or POLISH which reveals all the natural color of the stone. These finishes are generally used for interior work.

FOR INTERIOR WORK

Sand-rubbed finish is commonly used for walkway surfaces such as floors, thresholds, stair-treads and platforms.

Hone and Polish finishes are generally used for vertical standing material as preferred by the architect.

GENERAL INFORMATION

Crystalline marble is supplied either in the rough or in finished form for both exteriors and interiors to be set by the contractor or builder as specified by the architect.

PRELIMINARY CONSULTATIONS

Very often, before the architect is ready to issue final specifications, questions will arise concerning details and price of crystalline marble work. This company maintains service offices in various parts of the country, and our representatives will gladly co-operate during this earlier stage of the work, giving necessary information.

FACILITIES

Quarries—Eight to ten quarries, capable of producing upwards of 1,000,000 cu. ft. of crystalline marble per year, are operated by The Georgia Marble Company. Due to the equable climate, quarrying operations are carried on throughout the entire year.

Plants—The work of The Georgia Marble Company is divided into three main branches: Exterior Building Work, Interior Building Work, and Monumental Work, with large, completely equipped plants for each. Plants are located at Tate, Nelson, Canton, and Marble Hill, Georgia.

Sales and Service Offices—For list and addresses, see page 8.

PHYSICAL PROPERTIES OF GEORGIA CRYSTALLINE MARBLE

Giving in brief, excerpts of a few of many tests of Georgia Crystalline Marble, made by authoritative sources. (Com-

plete tests cheerfully supplied on request.)

The interlocking crystalline formation of Georgia Marble not only gives to the material great strength, great moisture and water resistance, but also contributes a high degree of beauty, for the clear crystals have the diamond-like quality of refracting light.

As a result, with Georgia Crystalline Marble construction, in large masses where there is the play of light and shade, a degree of beauty is added that is not found in other building materials.

What Factors Prove Building Stone Quality? In addition to beauty, the primary reason for using stone for building is permanence. All building stones should meet the following conditions:

- (1) **Strength**—a requirement met by practically all stones.
- (2) **Water resistance**—to avoid weathering and deterioration through freezing.
- (3) **Acid resistance**—to remain unaffected by the one, big deteriorant of city air, the carbonic acid gas in smoke filled atmosphere.
- (4) **Maintenance of color**—to retain the beauty of the freshly cut stone.

The purpose of any test would be to prove the characteristics of the stone in regard to these conditions. The following excerpts from tests made by familiar and prominent authorities answer conclusively the questions which any architect might ask concerning the physical properties of Georgia Crystalline Marble.

STRENGTH

The following are excerpts from tests made by the Robert H. Hunt Company, Engineers, File No. 8295-2, Order No. B-21983.

To prove the ultimate strength, 5 cubes of each type of Georgia Crystalline Marble, each approximately 4 in. in size, were put to a crushing test. The average loads which these cubes withstood are as follows:

Name of Crystalline Marble	Average Crushing Load Per Sq.
	In., Lbs.
White Georgia.....	12,486
Etowah.....	13,590
Light Cherokee.....	10,356
Creole.....	11,274
Mezzotint.....	10,338

Georgia Crystalline Marble together with many other marbles and granites possesses structural strength far in excess of that required for building purposes. Theoretically, a stone with a compressive strength of 6,000 lbs. per square inch, weighing 170 lbs. per cubic foot, could be built into a tower over 5,000 feet high before the lower course would fall through crushing.

The value, however, of the crushing strength test is in proving the inherent relationship between similar materials, invariably showing Georgia Crystalline Marble to be a superior stone.

Water Resistance. Since absorption of moisture is the chief destroying agent of building materials, the selection of stone with the lowest possible porosity insures the greatest permanence. To prove the unusually low absorption of Georgia Crystalline Marble, the Washington University Testing Laboratory made tests for comparative porosity against four well-known granites. The results were :

Amount of water absorbed per 100 lbs.:	
Granite No. 1.....	0.470
Granite No. 2.....	0.420
Granite No. 3.....	0.340
Granite No. 4.....	0.294
Georgia Crystalline Marble.....	0.028

This is the reason why each rain washes the surface of

Georgia Crystalline Marble clean and does not permanently stain or mar its beauty.

In this test Georgia Crystalline Marble proved itself to be 90% less absorptive than the best granite sample examined. A comparison of this second with the first test shows a variation of from 3/100 of 1% to 1/100 of 1% and it is probably fair to assume in the light of other tests that this is average. Such low absorption entirely fulfills any claims of permanence and non-porosity. It can be said that over any period of time it is almost impossible to disintegrate or decompose Georgia Crystalline Marble in any climate.

ACID RESISTANCE

It has been learned that the smoke-laden air of a city contains small quantities of acid. Rain falling through this acid-bearing atmosphere takes a portion of this acid into solution, which is injurious over a period of years to those stones which do not have a very low absorption. The following reports by George P. Merrill, on the effect of carbonic acid on marbles are taken from the Proceedings of the United States National Museum, volume 49, pages 347 to 349, show that at the end of three months of intense testing that four samples of Georgia Crystalline Marble treated lost .0165, .017, .015 and .016% by weight, respectively—an average of slightly more than .0161%. At this time the surfaces were slightly roughened but no granulation was noted.

The reaction of Georgia Crystalline Marble to the continuous stream of carbonic acid gas employed in the tests proves that the crystalline nature of the material is protection against acid-laden rain water.

MAINTENANCE OF COLOR

The most noteworthy test, more significant than that of any laboratory, is that of nature over an estimated period of many thousands of years, as evidenced by the natural outcroppings of the unquarried crystalline marble in Georgia. Here the rough crystalline marble can occasionally be seen at the surface in solid mass, with no nearby boulders, chips or small stones. A hammer can be used to strike off small spalls and in no instance does the stain, created over great periods of time and usually a faint brown tone on Georgia White, penetrate more than paper thickness to the uniform character and color of the crystalline marble immediately beneath.

Rain has a noted tendency to wash Georgia Crystalline Marble clean instead of soiling it and this is particularly true of the rough, axed and hammered finishes.

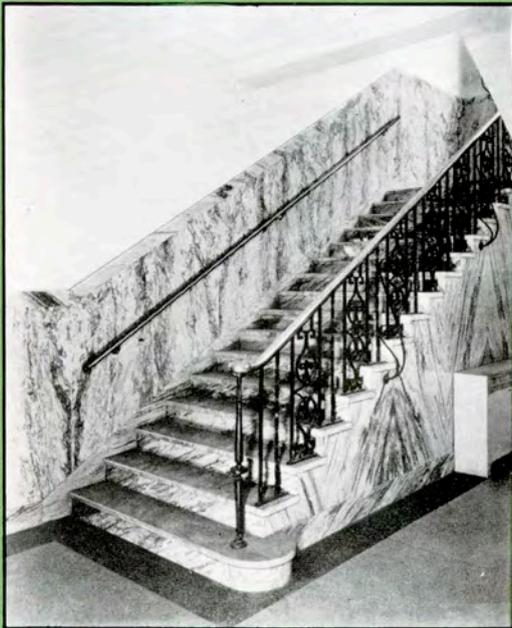
Considerable evidence, in the form of testimonials about buildings erected many years ago, can be had on this point if desired.

OTHER TESTS

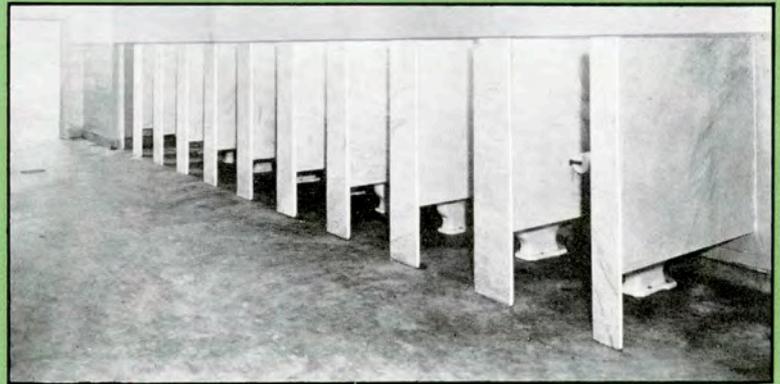
Other tests supporting and amplifying the information given above may be yours upon request. Among the laboratories and institutions which have tested Georgia Crystalline Marble are the following:

- United States Bureau of Standards
- United States National Museum, George P. Merrill
- United States Geologic Survey
- Ordnance Department, United States Government
- University of Wisconsin, Prof. E. B. Hall, Department of Geology
- Robert W. Hunt Company, Engineers
- Watertown Arsenal, Major Ord

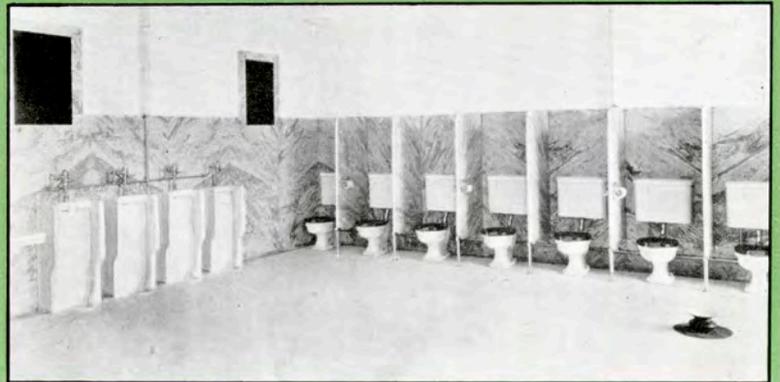
A folder of this nature must necessarily be condensed and generalized. Architects and contractors are invited to submit specific problems of detail or specification on which we may be able to offer suggestions. Any of our offices will gladly cooperate.



HALL COUNTY COURT HOUSE, GAINESVILLE, GA.
Daniell & Beutell, Atlanta, Ga., Architects
Mezzotint Georgia Crystalline Marble



BELL AIRCRAFT AND ASSEMBLY PLANT, MARIETTA, GA.
Robert & Co., Associates, Atlanta, Ga., Architects
Cherokee Georgia Crystalline Marble



U. S. POST OFFICE—ADDITION, TAMPA, FLA.
U. S. Treasury Department, Architects
Mezzotint Georgia Crystalline Marble

For Interior Use

Our several varieties of crystalline marble are adaptable for use in all types of interior work and particularly for toilet and shower work where its extreme hardness and imperviousness to moisture make it especially desirable.

It is interesting to note that in the Bell Aircraft Plant, Marietta, Georgia, where the famous B-29's,

which bombed Tokyo, were built, eight hundred and ninety-five stalls were built.

The wearing qualities of Georgia Crystalline Marble for stairways and floors have long been recognized by the building profession.

GEORGIA *Sparkling Crystalline* MARBLE

Produced by THE GEORGIA MARBLE COMPANY of Tate, Georgia

QUARRIES

Tate, Ga. Marble Hill, Ga. Holly Springs, Ga.

MILLS

Tate, Ga. Nelson, Ga. Canton, Ga. Marble Hill, Ga.

SALES and SERVICE OFFICES

Atlanta 3, Ga. 613 Bona Allen Building	Brighton 35, Mass. 300 North Beacon Street	Cleveland 15, Ohio 1570 Hanna Building	New York 16, New York 419 Fourth Avenue
Philadelphia 2, Pa. 1256 Commercial Trust Bldg.	Rochester, New York 120 Village Lane	Washington 5, D. C. 410 Bond Building	