

Informational Topic May 8, 2014

Rock-faced concrete blocks

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Formed concrete blocks with the surface texture of rough stone were widely used for building construction, mostly in the first quarter of the twentieth century. By the beginning of the depression, the trend was over. The common names for this building material include ornamental, rock-faced, mold-formed and rusticated concrete blocks. The latter being the most frequently used. A more recent name given is "Architectural CMU" (Concrete Masonry Unit). With the decreasing lumber supply and increase in cost of "real" masonry at the time, it was an economical alternative building material.



Rock-faced blocks in residential construction

In residential construction, they were used to build some Cape and Bungalow style homes and many [American Foursquares](#)--all popular styles when these blocks were being used. These blocks were also used for foundations under frame and brick constructed homes as well. During this period, the automobile, now affordable to the general public, appeared in front of homes throughout the country. Many owners of

older homes added detached garages built with these affordable blocks to shelter their Model Ts. Many service stations and automotive repair shops sprang up during this period and are most commonly either built of structural terra cotta or these rusticated blocks. It was also a popular building material for farm buildings. The blocks were also used for other commercial buildings built during this period, including small apartment buildings, banks, schools and churches.

The ornamental blocks for many of these buildings were actually manufactured on-site. There were block making "machines" that were quite portable. They were available in mail-order catalogs, including Sears, Roebuck and Co. These machines had interchangeable face plates to create the surface textures. In addition to the common rock-face, there were also plates to cast blocks with scrolls, wreaths and faceted edges.



The practice of creating rock-faced blocks

Concrete, made of Portland cement, sand and gravel was hand mixed dry and then water was added. The damp mixture was than tamped into the form and pressed into a block. The best blocks were cured for 5 days while being kept slightly damp. They should then have been aged for 3-4 weeks before installation.

The practice of blocks being cast on-site has no method for quality control. Improper proportions in the concrete mix, not thoroughly mixing the ingredients, too much or too little water and inadequate curing or aging has resulted in some significant failures of the face of the blocks. Individual blocks can be repaired by an experienced mason but the color will not likely be an exact match. If there is significant deterioration to individual blocks, beyond minor cracks, pitting or small spots of disintegration, then replacement may be needed. It can be a major effort to find salvaged blocks with the same pattern. There are some limited reproductions available but an exact match may not be possible.

If there has been deterioration to many of the blocks in large areas, the most common treatment has been to coat the whole exterior of the building with cement mortar. A stucco finish or the cement coating that imitates brickwork has been used extensively over the last 80 years or so. I've found so many that have been obscured by this method

that I can't imagine how many more of these decorative block homes have been concealed.



Views of rock-faced blocks

Having read several books and other publications from the period, I've found there to be considerable contempt for these "artificial" cast stone blocks among several architects. Comments include: "It is an eyesore and very objectionable art" and "... has been sufficient to band the architectural profession together as a unit in protest and condemnation".

I have also found some current architects giving little respect to the material when designing alterations and additions. The thousands of buildings I have seen, that still retain the original character of the rock-faced blocks, has proven that one of the few hand-made building materials in the 20th century doesn't deserve the disrespect of these "design professionals". I have found it to add some sophistication to otherwise modest and mundane buildings. I've also seen grand buildings combining the rusticated blocks with other highly decorative cast stone details, like columns of porches and entrances or pediments over windows and doors.

About the Author

William Kibbel III is a home inspector and restoration consultant specializing in historic residential and commercial buildings. He is vice president of [Tri-County Inspection Company](#) serving Southeastern Pennsylvania and Central New Jersey.