



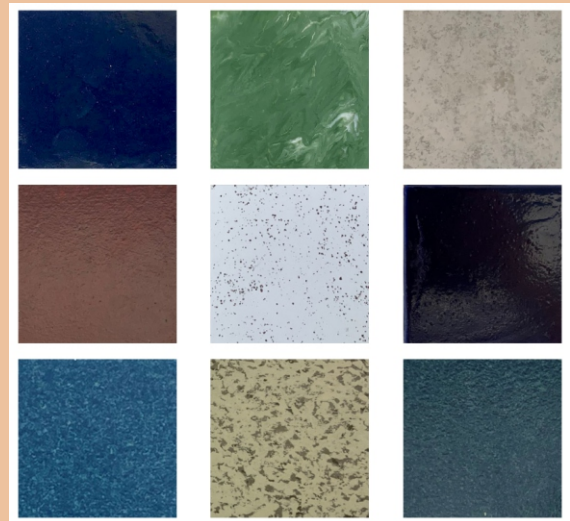
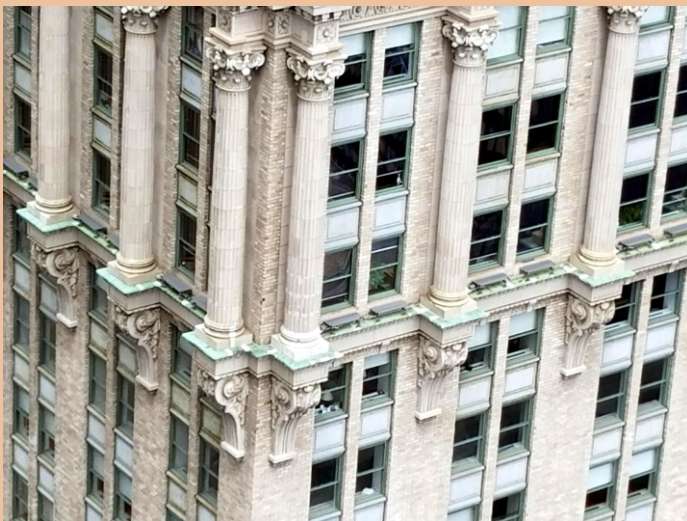
CastCotta™

TERRA COTTA ALTERNATIVE



CastCotta Replica
of hand-carved,
weathered historic
terra cotta unit.
*Courtesy of
Works In Stone, Inc.*

CastCotta™ is an advanced Terra Cotta alternative that matches original terra cotta in form and function. Produced from Edison Coatings Custom System 45 Type CC mortar and Aquathane UA210-Series coatings, it is a system with decades of successful performance history on historic restoration projects. With no adhesion problems for mortars or sealants, an unlimited glaze library and a delivery time of only 6 to 8 weeks, CastCotta™ is the perfect choice for your next Terra Cotta project, whether for full or partial replacement.



SYSTEM OVERVIEW:

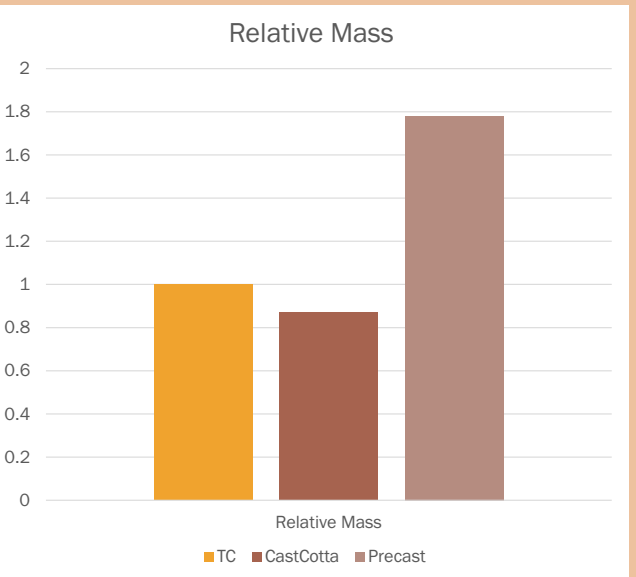
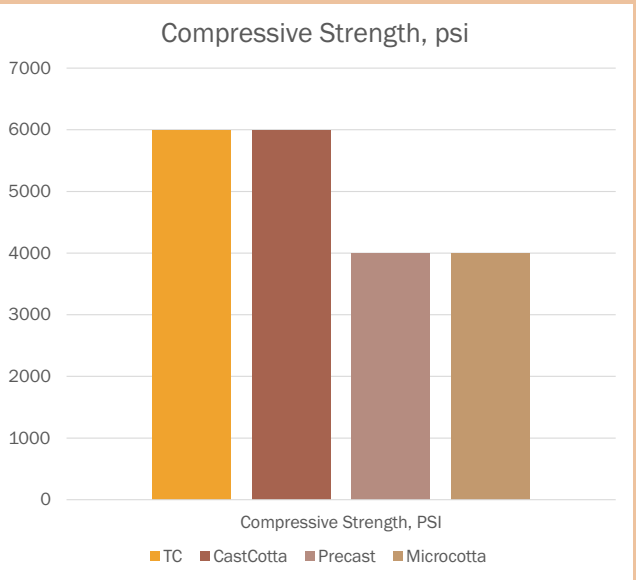
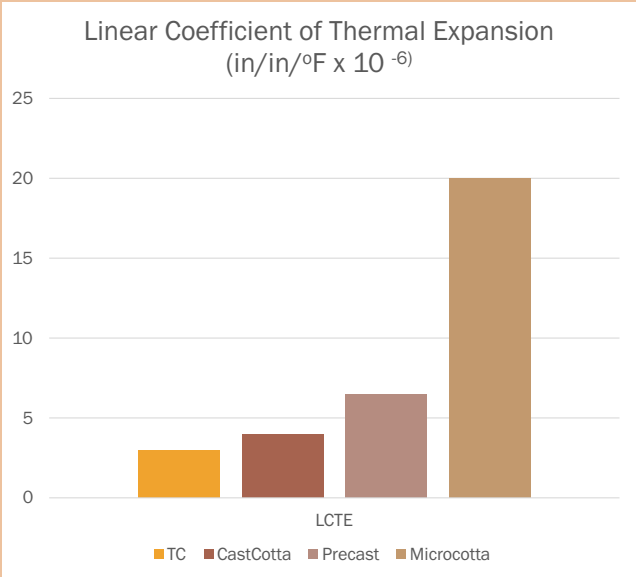
CastCotta™ is a system of custom-manufactured masonry units that is equivalent in appearance, form and function to terra cotta for use in repair and replacement applications. CastCotta™ can be produced in both glazed and unglazed formats, to match the original terra cotta materials on any project. Custom System 45 Type CC™ from Edison Coatings, Inc., is part of a proprietary cementitious restoration mortar system with a successful performance history spanning 40 years. It is used to produce CastCotta™ replacement units for terra cotta. Formulations for reproducing natural stone elements are also available.

When used to produce substitute unglazed units, Custom System 45 Type CC is custom color-matched to the existing clay masonry. To produce substitutes for glazed units, the castings are coated with compatible, custom-matched breathable finishes from Edison Coatings. Depending on original unit appearance, the coatings utilized may include Elastowall 351, Aquathane UA210 and/or AquaSpex 220. Finishes are produced in levels of gloss ranging from High Gloss to Extra Flat as required to match original materials.

Because Custom System 45 Type CC is strong and tough enough to perform in thin sections, it can be cast as hollow units with 1" wall thickness. Coupled with the material's low density, the units are significantly lighter in weight than precast concrete or stone. The cast units do not require incorporation of steel reinforcement, thus eliminating the potential for corrosion and spalling.

Linear Coefficient of Thermal Expansion is similar to terra cotta, allowing even the largest units and assemblies to function compatibly with existing terra cotta without the need for sealant joints or modification to mortar joint dimensions.

The cementitious castings do not support combustion.



GENERAL INSTRUCTIONS:

A. Matching:

Best results are obtained when cleaned samples, accurately representing the range of required colors, are sent to the Edison Coatings laboratory for custom-matching. Alternatively, any color reference may be used, whether a paint swatch or brush-out, a fan deck color from a major paint manufacturer, or a physical sample of any other material.

B. Profiles and Measurements:

A number of approaches are applicable for measuring and recreating existing units and their profiles. Ideally, full-size units should be sent to Works In Stone, Inc. for reproduction, but alternative methods such as laser measurement, 3D printing, or production of brushed-on rubber molds may also be applicable. How this portion of the project will be handled and by whom, whether by Works In Stone or by others, should be discussed with Works In Stone at the outset.

C. Mockups and Shop Drawings:

Edison Coatings will produce small quantities of custom color-matched materials as required for Works In Stone to produce mockup panels for evaluation. Works In Stone will also provide shop drawings as required.

D. Color Blending:

On masonry exhibiting unit-to-unit color variations, more than one custom color may be needed to achieve inconspicuous repairs. Generally, varied blends of finish colors are less conspicuous than a single, uniform repair color.

E. Option for On-Site Production:

For on-site production of CastCotta™ units, system components may be purchased by trained installers.

F. Training:

Training workshops are held annually, or may be scheduled on demand, either on-site or virtually. For additional information, contact Edison Coatings, Inc.



CastCotta can be used in both full-depth and partial-depth replacements.



Custom System 45 Castings replaced the vertical bands of rectangular quoins on this Historic Register building in New Haven, CT in 1982. 40 years later, they remain in excellent condition.

PERFORMANCE

Castings:

PROPERTY	RESULT	COMMENTS
Compressive Strength, psi ASTM C109/109M	6000 psi min.	Note: Terra cotta units are non-structural
Density, lbs./cu. Ft.	130	Lightweight compared to terra cotta, limestone and cast stone
Linear Coefficient of Thermal Expansion	Approx. 4×10^{-6} in/in/°F	Better thermal compatibility with terra cotta than cast stone
Freeze-Thaw Resistance ASTM C666, 50 cycles	No scaling	Excellent freeze-thaw resistance
Salt Scaling Resistance ASTM C672, 50 cycles	1	Excellent resistance to scaling when subjected to repeated freezing and thawing in the presence of ponded salt solution
Absorption, 1-hour boil ASTM C67	<1%	Suitable for severe weather exposures
Drying Shrinkage	<0.05%	Low Shrinkage

Finishes:

PROPERTY	ELASTOWALL 351	AQUATHANE UA210E	AQUASPEX 220
Binder Chemistry	Internally-plasticized self-crosslinking 100% acrylic elastomer	Self-crosslinking aliphatic polyurethane elastomer	Self-crosslinking aliphatic polyurethane elastomer
Dry Film Thickness	5-12 mils	2-5 mils	2-25 mils (Formula Dependent)
Appearance	Opaque, custom color, matte finish	Clear, custom-color, translucent or opaque; Gloss, Satin, Flat, Extra Flat finishes	Speckled; color flakes in clear film; Gloss, Satin, Flat, Extra Flat finishes
% Elongation	Approx. 160%	Approx. 300%	Up to 300% (Formula Dependent)
Moisture Vapor Permeance, ASTM E96	30.8 perms (2-coat application)	1 coat: 41 perms 2 coats: 36 perms	Up to 41 perms (Formula Dependent)
Tensile Strength	Approx. 400 psi	Approx. 4000 psi	Approx. 4000 psi
Performance History in Combination with Custom System 45 substrates	>35 years	>30 years	>18 years

For complete information and specifications, visit

www.CastCotta.com

ConSpec Associates, Inc.

**203-467-4426
917-209-5363 cell**

Although information and advice supplied in this publication are believed to be reliable, they do not represent performance specifications and no obligation or liability is assumed for advice given or results obtained. Product formulations and performance characteristics are subject to change without notice. Other conditions and limitations may be imposed at time of sale.

**12 Batt Lane
East Haven, Connecticut 06513**