



CAST STONE INSTITUTE “OR EQUAL” GUIDELINES

At a minimum, ensure that a Producer meets the following criteria in order to be recognized as equal to a Certified Cast Stone Institute Producer.

**These requirements are based on the information included in ASTM C-1364
Standard Specification for Architectural Cast Stone:**

1. **Testing.**

The following two tests must be performed for every 500 cubic feet of cast stone produced and passing reports available annually for each method of cast stone manufactured at the plant. These tests should also be performed every six months by a qualified independent testing laboratory that has successfully passed the CSI Testing Technician Training Course.

- Compressive Strength must be at least 6,500 psi at 28 days (ASTM C1194).
- Absorption must be less than 6.0% at 28 days (ASTM C1195).

A passing Freeze Thaw test, ASTM C666, by a qualified independent testing laboratory should be available for each mix design. This test measures product weight loss after 300 cycles of rapid freezing and thawing in a wet environment with cumulative percentage mass loss less than 5% required for passing.

A linear shrinkage test, ASTM C426 for within the last 24 months for each production method.

- ### 2. **Plant Inspection** by the Cast Stone Institute designated qualified and trained agent with the reports then reviewed and approved by CSI.
- ### 3. **Warranty.**

Manufacturer shall provide a written 10 year warranty similar in scope to the Cast Stone Institute Limited Warranty. This document is available on the Cast Stone Institute website, www.caststone.org.

Other important checks:

1. Cast Stone should be reinforced in accordance with ASTM C1364 and shop drawings should show the size of all reinforcing. Reinforcing covered by less than 1.5” of cast stone must be corrosion resistant (galvanized or epoxy coated).
2. All aggregates should comply with applicable portions of ASTM C33 to ensure that organic contamination and Alkali-Silica Reaction (ASR) are avoided.
3. Aggregates should be sieve tested every month to ensure continuity of mix design.
4. All materials used should comply with ASTM C1364 and the documents referenced within it. For example, carbon black or other pigments that do not meet the testing requirements of ASTM C979 may result in weakening the cast stone or fading over time.
5. The manufacturer should submit a list of projects similar in scope and at least 3 years of age along with owner, architect and contractor references. Field visits are recommended.

To ensure that the product is completely equal, “Quality Control Procedures Required for Plant Certification” may be downloaded from the Cast Stone Institute’s website at <http://caststone.org/certify.htm>. This shows the inspection checklist for which all mandatory items must be satisfactory.