PCI Architectural Certification
WHAT IS PRECAST CONCRETE?

Precast concrete components that are manufactured off-site in a factory-controlled environment where all aspects of quality can be controlled. These components are then transported to the construction site and installed onto the building or structure.

For several decades, architects and designers have understood and appreciated precast concrete’s benefits as they have built projects in every market segment and in every architectural style. In addition to its structural and durability features, precast concrete panels can be produced in any shape, size, color, and/or texture. From the most basic warehouse to award-winning stadiums, museums and historical structures, architectural precast concrete is the construction market’s system of choice.

WHAT IS CERTIFICATION?

Certification is acknowledgement by an independent third party that an object, person, or organization has met stated requirements. For PCI’s plant certification program, these requirements include industry, national, and international standards.

Benefits of PCI Certification:
- Reduces risk
- Provides the highest probability of a successful project
- Enables prequalification of bidders
- Helps ensure the finished product meets expectations
- Requires less supervision and field inspection, saving time and money

PCI ARCHITECTURAL CERTIFICATION PROGRAM

The Precast/Prestressed Concrete Institute (PCI) has been administering its certification program for over 50 years and is the most comprehensive, thorough, and specified certification program in the industry. The program is developed, managed, and improved upon with input from over 160 plants in the U.S., Canada, and Mexico, the A/E/C community, and specifiers. This gives architects, designers, and owners the peace of mind to know that precast concrete products manufactured in PCI-certified plants meet the strictest quality standards.

PCI’s architectural precast certification program aligns each producer’s capabilities with the specific markets they serve. It establishes superior product quality, a third-party inspection mandate, and performance requirements for all certification categories. It also includes criteria for producers that have advanced complexity capabilities and sets more accurate aesthetic and tolerance criteria for structural and industrial applications.

We set, meet, and exceed expectations – PCI precast concrete producers are embracing technology and applying it to the plant-cast concrete delivery system. Classifying PCI precast concrete producers based on their demonstrated capabilities to produce products of varying complexity shown our commitment to improve and collaborate – and that is how precast builds.
Creating Categories

Each PCI-certified architectural precast concrete producer will be certified in one of five categories. All five certification categories require high levels of color and finish consistency. These categories define the producer’s manufacturing capabilities based on the type of architectural precast concrete products they typically produce.

Defining Capabilities

As part of the certification process, each producer must manufacture three mock-up panels to demonstrate their ability to meet specific category criteria for color consistency, finish quality, and forming capabilities. The required mock-up pieces for each category are shown.

PCI Benefits

Certification assures that the precast concrete components are manufactured by a company that adheres to nationally accepted standards, have comprehensive internal quality systems in place, and are audited to ensure compliance. It is imperative that design and construction professionals work with a PCI-certified precast concrete producer that is experienced in the product type best suited for their project.
Project Examples

CATEGORY AA

CATEGORY AB

CATEGORY AC

CATEGORY AD
# CATEGORY REQUIREMENTS

## Color & Finish
- More than one colored mixture and texture per panel (must include different texturing method)
- One colored mixture and texture per panel

## Embedded Material & Veneer
- Thin brick, tile, stone, terra cotta
- Thin brick

## Panel Geometry
- Flat panels
- Flat panels with sequential returns*
- Flat panels with single-pour returns
- 3-D form surface (buildups, liners, projections on face)
- 3-D form surface (reveals and liners only)
- 3-D panels and radius (concave, convex)

## Technology
- 3-D/BIM precast concrete submittals**

## Production Tolerances
- MNL 135 AA (modified MNL 117)
- MNL 135 (current MNL 117)
- MNL 135 (current MNL 116)

## Plant Audit Frequency
- Two audits per year

## Erection Tolerances
- MNL 135 erection tolerances (modified MNL 117)
- MNL 135 erection tolerances (current MNL 117)
- MNL 135 erection tolerances (current MNL 117 with modification for maximum jog)
- MNL 135 erection tolerances (current MNL 116)

## PCI-Certified Erector
- Required as of 07/01/2021

## Post-Occupancy Evaluation
- Surveys for all AA projects with one mandatory site evaluation***
- Surveys for all AB projects with site evaluations as required

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Notes: 3-D = three-dimensional  
BIM = building information modeling  
Solid boxes indicate the requirements that apply to that certification category  
*Two-part returns  
**Must demonstrate LOD 350 element modeling minimum  
***Customer feedback to be obtained per QSM requirements
Looking for more PCI information?

Other available resources:
- Architectural Certification Webpage
- FAQs
- Designer’s Notebooks
- About PCI Certification
- Find a PCI-Certified Plant
- PCI Website

The Precast/Prestressed Concrete Institute (PCI) is a technical institute for the precast concrete structures and systems industry. PCI develops, maintains, and disseminates the Body of Knowledge for the design, fabrication, and construction of precast concrete structures and systems.