



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

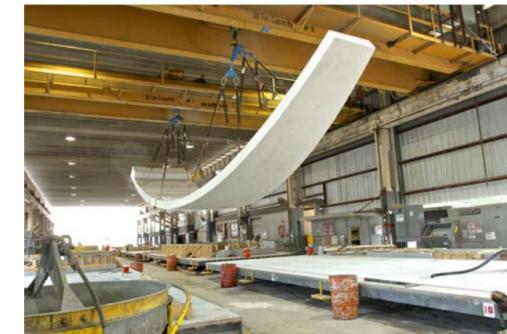
The Precast/Prestressed Concrete Institute (PCI) has been administering its certification program for over 50 years and is the most comprehensive, thorough, and specified certification program in the industry. The program is developed, managed, and improved upon with input from over 160 plants in the 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 shows our commitment to improve and collaborate – and that is *how precast builds*.



PRODUCTION

INSTALLATION



COMPLETION

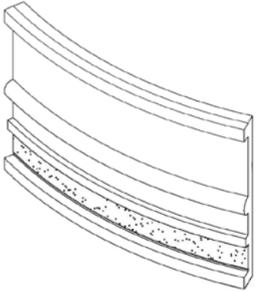
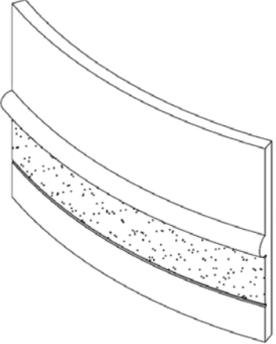
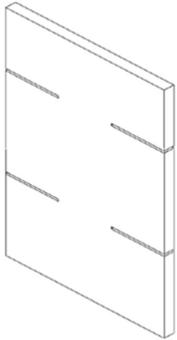
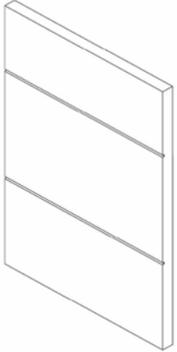
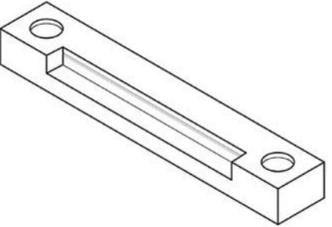
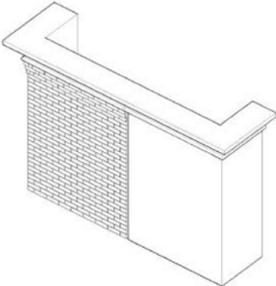
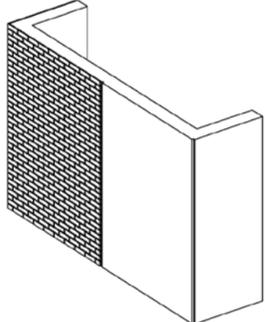
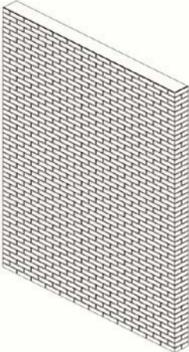
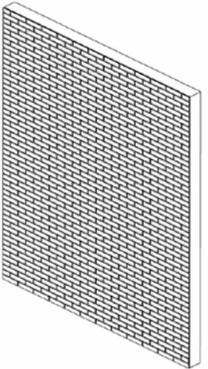
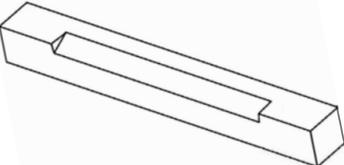
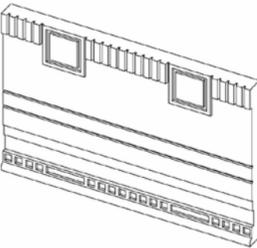
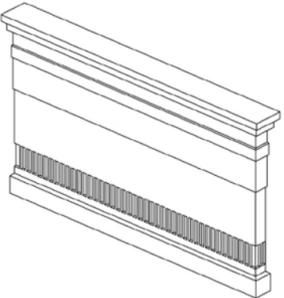
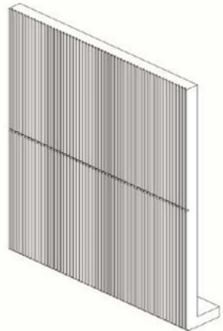
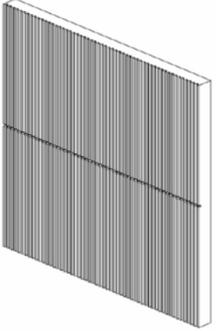


Creating Categories

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.

AA	AB	AC	AD	AT
				
				
				

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

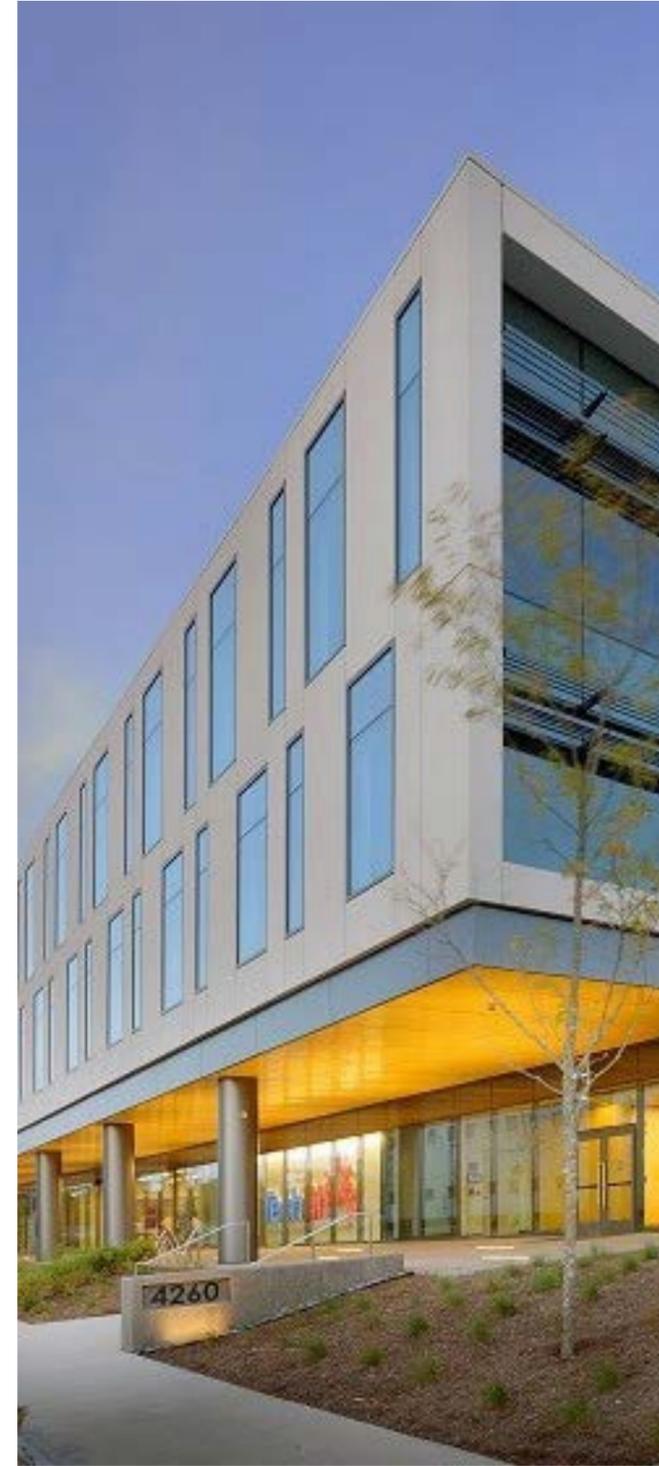
CATEGORY AA



CATEGORY AB



CATEGORY AC



CATEGORY AD



CATEGORY REQUIREMENTS

Color & Finish	More than one colored mixture and texture per panel (must include different texturing method)	AA AB AC AD AT
	One colored mixture and texture per panel	AA AB AC AD AT

Embedded Material & Veneer	Thin brick, tile, stone, terra cotta	AA AB AC AD AT
	Thin brick	AA AB AC AD AT

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

Technology	3-D/BIM precast concrete submittals**	AA AB AC AD AT
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Key Feature Evaluation During Plant Audit Cycle		AA AB AC AD AT
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Production Tolerances	MNL 135 AA (modified MNL 117)	AA AB AC AD AT
	MNL 135 (current MNL 117)	AA AB AC AD AT
	MNL 135 (current MNL 116)	AA AB AC AD AT

Plant Audit Frequency	Two audits per year	AA AB AC AD AT
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Erection Tolerances	MNL 135 erection tolerances (modified MNL 117)	AA AB AC AD AT
	MNL 135 erection tolerances (current MNL 117)	AA AB AC AD AT
	MNL 135 erection tolerances (current MNL 117 with modification for maximum jog)	AA AB AC AD AT
	MNL 135 erection tolerances (current MNL 116)	AA AB AC AD AT

PCI-Certified Erector	Required as of 07/01/2021	AA AB AC AD AT
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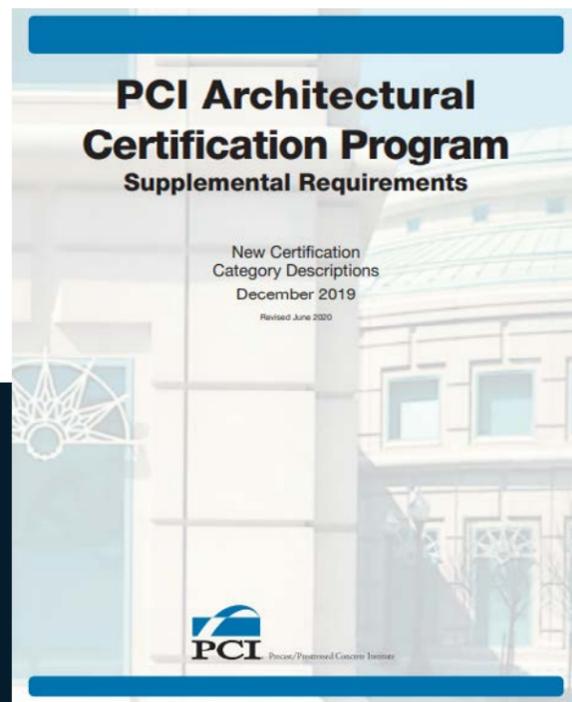
Post-Occupancy Evaluation	Surveys for all AA projects with one mandatory site evaluation***	AA AB AC AD AT
	Surveys for all AB projects with site evaluations as required	AA AB AC AD AT

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?

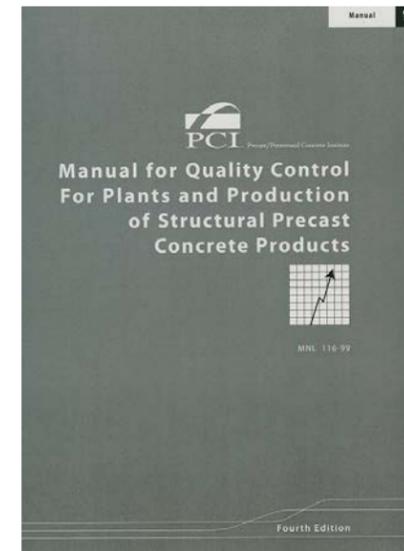
Other available resources:

- [Architectural Certification Webpage](#)
- [FAQs](#)
- [Designer's Notebooks](#)
- [About PCI Certification](#)
- [Find a PCI-Certified Plant](#)
- [PCI Website](#)

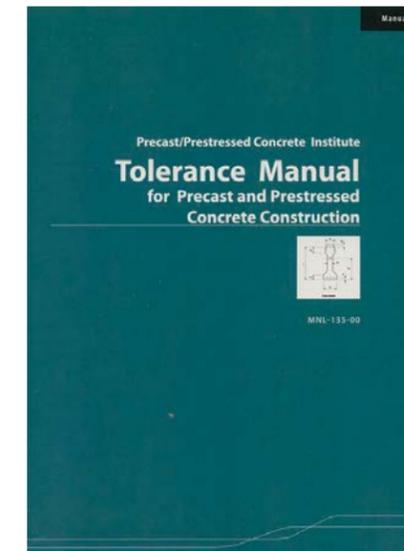


- [PCI Architectural Certification Program Supplemental Requirements](#)

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.



- [PCI MNL 116](#) - QC Manual for Structural Precast Concrete Products



- [PCI MNL 135](#) - Manual for Tolerances for Precast and Prestressed Concrete Construction



- [PCI MNL 117](#)- QC Manual for Architectural Precast Concrete Products

