



Precast/Prestressed Concrete Institute (PCI)

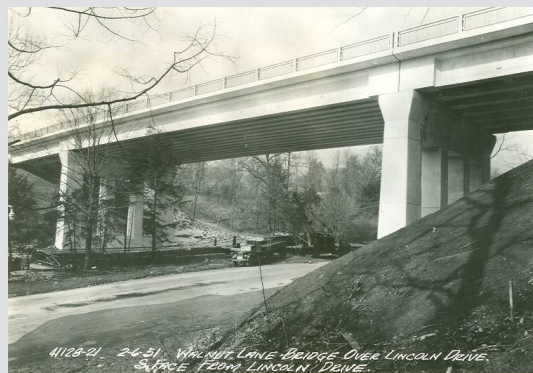
**Caltrans – Oakland, CA
November 12, 2008**

Dean A. Frank, P.E.
Director, Quality Programs

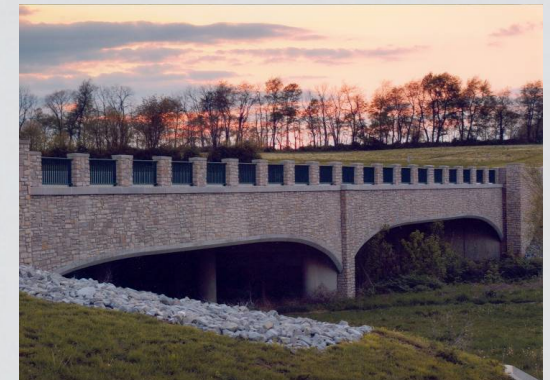
William Nickas, P.E.
Director, Transportation Systems

Precast/Prestressed Concrete Institute
Chicago, IL

- PCI is an international trade association and Technical Institute
 - Promotes technical understanding and use of high-quality precast and prestressed concrete
 - Full staff of technical and marketing specialists



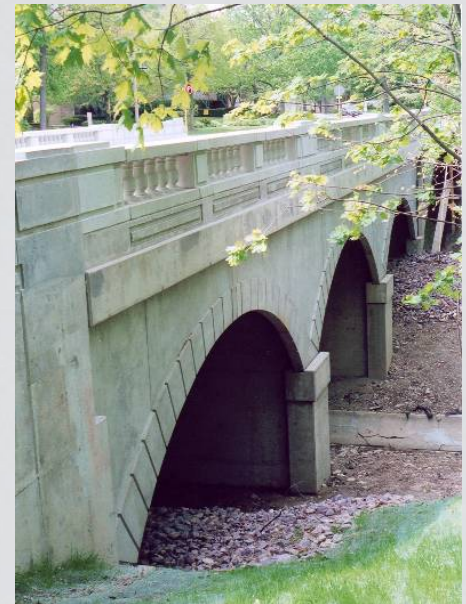
- Over 350 Producer Member plants
 - Architectural, structural, and specialty precast concrete products and structures
 - Every PCI Producer Member plant must be PCI Certified
 - PCI Membership is not required to be PCI Certified
 - Over 50 Technical Committees





About PCI

- Approximately 200 Supplier Associate Members
- 100 Erector Associate Members
 - PCI Qualified/Certified Erector Program
- Over 1,300 Professional Members
 - Academics, design professionals, and other industry stakeholders
 - Provide much of the technical knowledge contained in PCI design guides and other technical publications

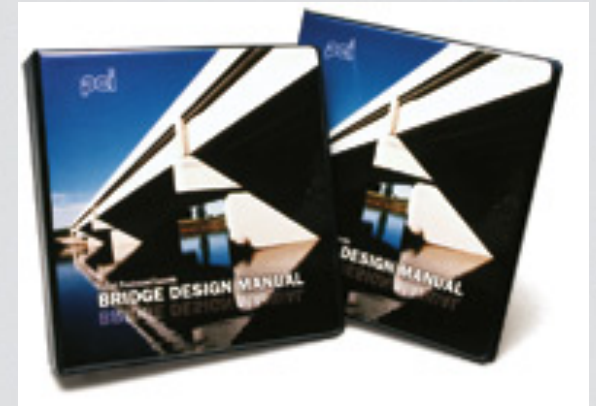




About PCI

PCI Publications

- Design Manuals and Guidelines
- Quality Control Manual
- PCI Journal, Ascent, and Aspire Magazines



- Codes and Standards

- PCI works very closely with code bodies, such as ACI, ICC, ASTM, AASHTO, etc.



- Industry Events

- PCI works with FHWA in producing the National Bridge Conference



- Research & Development
 - DSDM Seismic Project
 - FHWA Precast Pavement Project



- PCI Regional Representation
 - 11 Regional Associations Affiliated with PCI
 - Precast/Prestressed Concrete Manufacturers Associates of California (PCMAC)





PCI Certification Programs

PCI has 3 Different Certification Programs:

- Plant Certification Program – 1967
- Personnel Training & Certification – 1985
- Erector Qualification and Certification - 1999





PCI Plant Certification



Program History:

- Plant Certification Program established in 1967
- Began with 36 Plants
- Voluntary membership until 1991
- Mandatory for PCI Producer Members after 1991 – PCI Membership is not required
- Approximately 300 Plants Currently Certified
- Many new and exciting changes are under development



PCI Plant Certification



Program History:

- First Architectural Quality Control Manual in 1968
- Refined in 1970 to specifically and separately address architectural precast and structural precast
- Glass fiber reinforced concrete (GFRC) requirements introduced in 1991
- Additional supporting guidelines added



PCI Plant Certification



Purpose:

- Provide a means for project owners/specifiers to select producers who demonstrate compliance to nationally recognized standards of engineering, production and quality control
- To permit certified producers to distinguish themselves from non-compliant/non-participating producers





PCI Plant Certification



Product Groups and Categories:

- A — Architectural Products (MNL-117)
- B — Bridge Products (MNL-116)
- C — Commercial (Structural) Products (MNL-116)
- G — Glass Fiber Reinforced Concrete (GFRC) Products (MNL-130)



PCI Plant Certification



Product Groups and Categories:

- New Certification Category for Non-Prestressed, Non-Architectural Products
- MNL-118 will be released and program launched in 2009





PCI Plant Certification



Program Recognition




- AIA MASTERSPEC
- Unified Facilities Guide Specifications (UFGS)
 - A joint effort of the U.S. Army Corps of Engineers (USACE), the Naval Facilities Engineering Command (NAVFAC), the Air Force Civil Engineer Support Agency (AFCESA) and the National Aeronautics and Space Administration (NASA)
- US Department of Agriculture – FSIS
- US Department of the Interior - Bureau of Reclamations



PCI Plant Certification



Program Recognition

- US Department of Transportation - Federal Aviation Agency (FAA) 
- Federal Bureau of Prisons
- General Services Administration (GSA) 
- Federal Highway Administration 
- 31 state Departments of Transportation
- Houston, Las Vegas, Phoenix, Seattle, and Portland



PCI Plant Certification

State DOT-Specific Certification

- PCI Working with other DOTs in developing programs specifically tailored to their needs
- Auditors will provide a special report specifically addressing DOT-specified criteria
- IL DOT, TX DOT, Mass Highways



TEXAS DEPARTMENT OF TRANSPORTATION



PCI Plant Certification

Plants and Products

- 300 Certified plants
 - 187 w/ DOT products
 - 40 in Zone 4
- Founded on building and bridge requirements
- Both Structural and Architectural Products covered





PCI Plant Certification

QC Criteria

- Detailed quality control and audit criteria
- Drawings and Calculations Reviewed
- Comprehensive Tolerance Manual
- Detailed Quality System Manual (QSM) must be approved by PCI





PCI Plant Certification

Program Oversight

- Overseen by a diverse and balanced Quality Assurance committee
 - design professionals, consultants, producers, and materials suppliers.
- Further oversight provided by PCI Technical Activities Committee
 - Similar balance



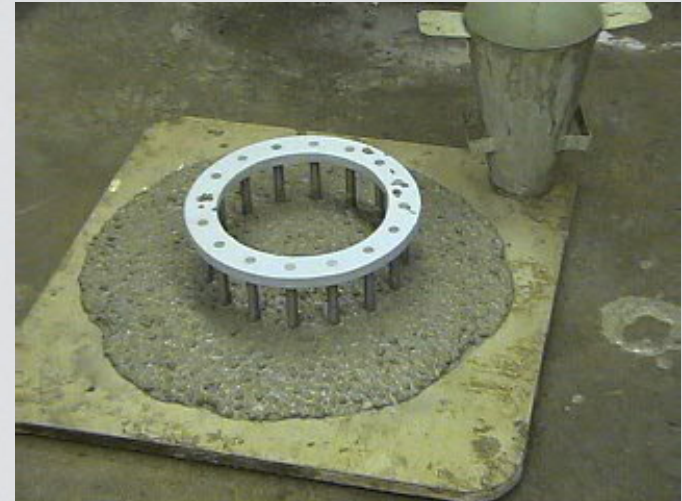


PCI Plant Certification

Audits and Auditor Qualification

2-day, twice per year audits

- All audits unannounced
- IAS Accredited
- Audit firm has over 40 years of experience





- PCI wrote the book
- PCI has 40+ year track record for precast / prestressed quality control and quality assurance programs
- PCI will work with Caltrans to tailor the program to Caltrans' needs





Thank you!
Precast/Prestressed Concrete Institute

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