

**IART 044**  
**Evaluation of Pennsylvania and Eastern US Pre-cast Diaphragm Connection Details**

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**Abstract**

This research will evaluate the current connections used by High Concrete Structures to determine if they perform adequately. Recommendations on improvements will be made if necessary. The proposed PITA connection research will be the best opportunity to examine the behavior of the common connectors in PA and develop a comprehensive understanding of their performances. In compliance with the actual requirements, the research will aim at developing an efficient, comprehensive, and economical design methodology for pre-cast panel-to-panel connections. It is expected to address the shortcomings in current design practice and standardize the pre-cast floor diaphragm connection design for the Pennsylvania pre-cast industry. Partner companies include High Concrete Structures (PA).