

Illinois Department of Transportation
Bureau of Bridges and Structures

Prequalified Structural System (PQSS) List
PRECAST MODULAR RETAINING WALL SYSTEMS
February 16, 2024

This list supersedes the **March 11, 2022** list.
Standard Specifications for Road and Bridge Construction, Section 522

For information regarding new system submittals, see pages 2 and 3.

<p><u>Reinforced Earth Co, Inc.</u> Main Office: 45610 Woodland Rd. #200 Sterling, VA 20166 Local Office:1444 N. Farnsworth Ave. #505 Aurora, IL 60505 Date Approved: Contact Name: Alex Abraham Phone Number: 703-547-8797 (Main) 630-898-3334 (Local) Systems: "TWALL" "TechWall"</p>	<p><u>United Concrete products, Inc</u> 173 Church Street Yalesville, CT 06492 Date Approved: 1994 Contact Name: Phone Number: 800-234-3119 Systems: "Doublewal"</p>
<p><u>Stone Strong, LLC</u> 3701 Union Drive, Suite 101 Lincoln, NE 68516 Date Approved: Feb 3, 2006 Contact Name: Phone Number: 877-501-5652 Systems: "Stone Strong"</p>	<p><u>ReCon Wall Systems, Inc.</u> 7600 W. 27th Street #229 St. Louis Park, MN 55426 Date Approved: Contact Name: Phone Number: 952-922-0027 Systems: "Recon Wall System"</p>
<p><u>Redi-Rock International, LLC</u> US 31 South Charlevoix, MI 49720 Date Approved: Contact Name: Scott Mathie Phone Number: 414-412-7888 Systems: "Redi-Rock Wall"</p>	<p><u>Elevate Infrastructure, LLC</u> 2495 W Bungalow Rd Morris, IL 60450 Date Approved: Dec 2015 Contact Name: Matt Austin Phone Number: 636-346-9245 Systems: "Precast Concrete Counterfort Wall System"</p>
<p><u>Earth Wall Products</u> 1349 Old 41 Highway, Suite 135 Marietta, GA 30060 Date Approved: 2018 Contact Name: Evan Martin Contact Number: 678-594-3451 Systems:"Gravix Earth Retaining System"</p>	

Domestic Steel Act Applies:

All iron and steel products, which are to be incorporated into state projects shall be domestically manufactured or produced and fabricated. The Contractor shall obtain from the iron or steel producer and/or fabricator, in addition to the mill analysis, a certification that all iron or steel materials meet these domestic source requirements. The application of all coatings, epoxy, galvanizing, painting, etc., to metal products shall be domestically applied.

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Submittal Requirements for Evaluation and Pre-Qualification

A. Scope

Before a Precast Modular Retaining (PMR) wall system can be used on a Department project, the system shall be reviewed and prequalified for general use, and the manufacturer/supplier shall have a producer/supplier number assigned to their facility (see approval procedures at <https://idot.illinois.gov/doing-business/material-approvals/producer-and-supplier-approval.html>). The following guidelines are provided to clarify the submittal requirements and expedite the process.

B. Procedure

Companies interested in being considered pre-qualified to supply a PMR wall system as specified in the Standard Specification Section 522 for Precast Modular Retaining Wall shall provide [an electronic copy of a system review package to the Department at DOT.Bridge.ProductEvaluations@illinois.gov](mailto:DOT.Bridge.ProductEvaluations@illinois.gov) for review and evaluation. As a minimum, the system review package should contain the following:

1. Acknowledgement by Company Form [BMPR 101](#) (locate the form [here](#), right-click and "Save link as..." to download a working copy and open in a separate PDF editor). If your company does not already have a product included on an IDOT PQSS, please submit a signed copy of the company acknowledgement form with your product submittal.
2. Wall System name and company name to be listed on the specification and other contact/address information.
3. Any independent evaluation information or other supporting research if available.
4. A list of past projects which used your company wall system, including owner's name and phone number.
5. Typical shop drawings, notes and plan details including:
 - a. All Modular Unit types and details.
 - b. All soil reinforcement types and details (if applicable).
 - c. Connection details between precast units.
 - d. Connection details for soil reinforcement to the precast units (if applicable).
 - e. Select Reinforced Backfill Requirements (if applicable).
 - f. Any Drainage system requirements.
 - g. Details for typical leveling pads (if applicable).
 - h. Typical concrete coping details and traffic barrier connection details.
 - i. Typical details of soil reinforcement placement around appurtenances located behind, on top of, or passing through the soil reinforced wall volume (if applicable).
 - j. Acute corner unit and reinforcement details.
 - k. Details for PMR walls supporting abutments founded on spread footings, piles (integral and stub), and drilled shafts.
6. Design Standards and computations: All example computations for the wall design and the soil reinforcement embed/facing unit connections (if applicable), shall be sealed by an Illinois Licensed Structural Engineer and shall be according to the latest AASHTO LRFD Bridge Design Specifications and the Standard Specifications for Precast Modular Retaining Wall Systems. As a minimum, the following should be addressed:
 - a. Corrosion reduction calculations or Geosynthetic reductions (if applicable).
 - b. Pullout capacity calculations for all soil reinforcement types (if applicable).
 - c. If a computer program will be provided calculations, explanation of how each value is determined must be provided with an example computer printout.

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- d. Reinforcement max stress calculations (if applicable).
 - e. Overturning & eccentricity calculations at each level.
 - f. Bearing pressure calculations.
 - g. Any design limitations such as maximum wall height, maximum unit size, etc.
7. Any test data or research to support the computations and use of specific values.
 8. Indicate all materials specifications and design stresses.
 9. A Construction Manual with erection sequence guidance required for proper alignment and wall performance.
 10. Any design manuals, case histories, and brochures should be included to provide insight into the system and applications.
 11. To complete your pre-qualification process, the [material code you propose to utilize at the fabrication plant\(s\) supplying your precast product](#) needs to be approved by the Bureau of Materials and Physical Research. Please click [here](#) for the for the approval procedure and [here](#) for a list of plants that are currently approved to do this work (H3 designation).

If you have any questions concerning the specification or the requested information, please contact the Policies, Standards and [Final Plan Control](#) Unit at DOT.Bridge.ProductEvaluations@Illinois.gov.

C. Recertification

There is no renewal process or reapplication process to stay on this list; however, the Department reserves the right to remove any system based on past performance. In addition, it is the responsibility of the manufacturer/supplier to inform the Department of any changes in design or component information, contact information, etc. If it is discovered that changes have been made without informing the Department, the Department reserves the right, depending on the severity of the omission, to remove that system from the prequalified list.

Presence on this list does not exempt the manufacturer/supplier from meeting all the job specific submittal requirements and all the material requirements specified including component testing and/or material certifications as applicable.