

August 15, 2024

## **NEx Request for Proposals Notice**

NEx encourages you to submit proposals focused on the topic described below:

**NEx RFP Id: SG25.03**

**Proposal Title: Develop material specifications for nonmetallic (NM) formwork**

### **Background**

Formwork is a crucial component in concrete construction, providing the necessary molds for concrete placement and shaping. Traditional formwork systems are typically made from materials such as timber, steel, and aluminum, which often pose challenges related to weight, durability, and environmental impact. Nonmetallic (NM) formwork, incorporating advanced composites, recycled plastics, and other innovative materials, offers advantages such as reduced weight, increased reusability, and a lower environmental footprint. However, the lack of standardized material specifications for NM formwork limits the effective and safe adoption of these technologies in construction.

### **Proposal Request**

The construction industry currently lacks comprehensive material specifications for NM formwork to support current design guidelines. Without standardized material guidelines, the adoption of NM formwork materials remains slow, and their potential benefits are not fully realized. This can lead to inconsistent performance, safety concerns, and hesitancy within the industry. Developing clear and comprehensive material specifications will provide the essential framework for engineers, builders, and manufacturers to effectively utilize NM formwork, ensuring safety, durability, and sustainability.

NEx is seeking proposals from qualified organizations or research teams to develop standardized material specifications for NM formwork. The goal is to create a set of specifications covering introduction to the current and NM materials used, design requirements, manufacturing, and materials performance that will drive the widespread adoption and effective use of NM formwork in concrete construction, improving performance, safety, and environmental outcomes.

### **References**

The details on how to develop specifications is given in the [ACI Technical Committee Manual \(TCM\)](#).

### **NEx Mission Statement**

Collaborate globally to expand and accelerate the use of nonmetallics in the built environment to drive innovation, research, education, awareness, adoption, and deployment.

NEx is committed to achieving its mission through Research and Development, Standards and Guidelines, Professional Development, and Advocacy and Awareness.

### **Funding Policy**

NEx will impose a limit of 15% on indirect costs (overhead) by project organizations for any project it funds. The organization must waive the remainder of the indirect costs.

### **Award Amount**

NEx does not impose any limit on the overall funding request; however, the anticipated budget for this project is to be around \$30,000 to \$50,000. Proposals with higher budget estimate will be accepted with information on budget spending relevant to the value added to the project scope. Co-funding and co-sponsoring proposals with other organizations are welcomed.

### **Proposal Evaluation**

NEx project proposals will be evaluated by the NEx Steering Committee. A winning proposal will be forwarded to the NEx Board of Directors with recommendations for funding.

Proposal evaluation criteria will include technical content, methodology, PI's relevant experience, potential impact/ industry adoption, budget and time, proposed deliverables, and outcome. Typically, NEx funded project duration ranges from 6 to 24 months.

### **Awarded Proposals**

The awarded proposal is expected to commence within the first quarter of 2025

- NEx will enter into a contract with the awarded entity. As part of the contract, it is mandated that the overhead or indirect return be set at no more than 15% of the direct cost of the project funding requested from NEx. Any overhead over the maximum allowed 15% that is waived by the awarded entity shall be considered as cost sharing and shall be indicated on the budget table as waived overhead, separate from other co-funding. Non-compliant proposals in this regard shall be returned without review.
- The schedule of payments contingent upon milestone deliverables will be contained in the contract and will include, at a minimum, a final report deliverable to NEx. Quarterly progress reports will be identified in the final contract.
- If principal investigators (PI) from two organizations are collaborating on the project, the award must be to a single organization, which will then subcontract with the second organization.
- NEx will only consider funding projects that involves the use of proprietary products if the goal of the project is to advance knowledge in a particular area of study and not solely on a proprietary product.
- In case of any co-funding arrangement with other organization(s), commitment letter(s) from co-funding organization(s) is required before funds are dispersed from NEx.
- The results of NEx-funded project will be owned by NEx, and possibly by other co-founding organization(s). PI should notify NEx before publishing any results.

### **Where and How to Submit Proposals**

Submitted proposals will be evaluated by the NEx Steering Committee and subject matter experts. Anyone who evaluates a proposal is required to agree and abide by NEx policies on confidentiality and conflict of interest.

Please email the proposal and supporting information to [info@nonmetallic.org](mailto:info@nonmetallic.org), by end of the day, **October 7, 2024**. The email subject line and file name shall include project ID (see top of page 1) and the name of the proposing organization (For example: "RD24.xx University of xyz").

If you have any questions regarding the proposal requirements or process, please contact NEx Technical Director, Aparna Deshmukh (aparna.deshmukh@nonmetallic.org).

Proposals submitted to NEx shall be provided in **one unprotected PDF** using [NEx provided template](#).