

August 15, 2024

NEx Request for Proposals Notice

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

NEx RFP Id: SG25.04

Proposal Title: Develop material specifications for nonmetallic (NM) scaffolding

Background

Scaffolding is a critical element in construction, providing temporary support structures for workers and materials. Traditional scaffolding systems are typically made from materials like steel and aluminum, which, although effective, pose challenges related to weight, corrosion, and environmental sustainability. Nonmetallic (NM) scaffolding materials, such as advanced composites and fiber-reinforced polymers (FRP), offer significant advantages, including reduced weight, enhanced durability, and improved resistance to environmental factors. In particular, replacing traditional planks with NM planks can greatly enhance the performance and safety of scaffolding systems. However, the development of standardized material specifications is essential to ensure consistent quality, safety, and reliability in the use of NM scaffolding systems.

Proposal Request

The construction industry currently lacks comprehensive material specifications for NM scaffolding. Without standardized material guidelines, the adoption of NM scaffolding solutions remains limited, and their potential advantages are not fully leveraged. This can lead to inconsistent product performance, safety risks, and hesitation within the industry to transition to NM scaffolding systems. Developing clear and detailed material specifications, including for FRP planks, is critical to providing a standardized framework that can be adopted across the industry.

NEx is seeking proposals from qualified organizations or research teams to develop standardized material specifications for NM scaffolding, with particular emphasis on FRP components such as planks. The objective is to support current design guidelines, build understanding of materials behavior, and application by creating a robust specification document that facilitates the widespread adoption and effective use of NM scaffolding in construction, thereby 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, 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](#).