

August 15, 2024

## **NEx Request for Proposals Notice**

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

**NEx RFP Id: SG25.07**

**Proposal Title: Develop design guidelines for gratings and handrails.**

### **Background**

Gratings and handrails are critical components in various construction and infrastructure projects, providing essential support and safety features. Traditional gratings and handrails are often constructed from materials like steel and aluminium, which, while robust, can present challenges such as weight, corrosion, and maintenance requirements. The use of advanced materials, including nonmetallic options such as fiber-reinforced polymers (FRP) and other composites, offers potential benefits including reduced weight, improved durability, and enhanced corrosion resistance. Developing standardized design guidelines for gratings and handrails that incorporate these innovative materials will help optimize their performance and application, ensuring safety and efficiency across different environments.

### **Proposal Request**

The current industry lacks comprehensive design guidelines for gratings and handrails that incorporate advanced materials. Without standardized guidelines, the integration of these materials into construction projects can be inconsistent, leading to potential safety issues, performance inefficiencies, and reluctance in material adoption. Developing detailed design guidelines will provide engineers, architects, and builders with the necessary framework to effectively utilize advanced materials in gratings and handrails, ensuring improved safety, durability, and overall performance.

NEx is seeking proposals from qualified organizations or research teams to develop standardized design guidelines for gratings and handrails, with a focus on incorporating advanced materials such as FRP and composites. The goal is to create a comprehensive set of guidelines that will facilitate the effective use of these materials in various construction and infrastructure applications, enhancing safety, performance, and sustainability.

### **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](#).