



An ACI Center of Excellence for  
Nonmetallic Building Materials

# NEX Strategic Plan





An ACI Center of Excellence for  
Nonmetallic Building Materials

## OUR FUTURE | VISION

The Center envisions a future where everyone has the knowledge needed to use nonmetallic materials and products (nonmetallics) in the built environment effectively to meet the demands of an evolving world.

NEx envisions becoming a global leader in advancing nonmetallics to enhance sustainability, lower carbon footprint, and improve durability.





## OUR BUSINESS | MISSION

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

## OUR PARTNERS | WHO WE SERVE

- Manufacturers of Nonmetallics,
- Material Suppliers,
- Standards Bodies,
- Specifying Agencies,
- Technical Societies/Institutes,
- Universities/Research Centers,
- Training Centers,
- Project Owners,
- Engineers, Designers, Project Specifiers, and
- Construction Companies and Developers.



## OUR VALUE PROPOSITION | VALUE ADDED

Center Partners will gain a thorough understanding of the performance of nonmetallics with respect to *improved*:

- Sustainability,
- Carbon footprint,
- Durability,
- Productivity,
- Constructability, and
- Life cycle costs.

## CENTER SCOPE

The Center of Excellence will serve as a catalyst for the use of nonmetallics in all construction applications including but not limited to:

- Fiber-reinforced polymer reinforcement,
- Polymer concrete,
- Structural members,
- Construction chemicals,
- Building components and systems,
- Soil and foundation material beneficiation,
- Additive manufacturing, and
- Public and private infrastructure.



# OUR STRATEGIC GOALS AND OBJECTIVES

## STANDARDS AND SPECIFICATIONS

*NEx will identify and facilitate development and adoption of design and construction codes and specifications.*

### OUTCOME

The necessary standards and specifications for nonmetallics in construction will be widely available, understood, and utilized.

### OBJECTIVES

- NEx will identify areas of need and facilitate the development of standards in the form of building codes; construction specifications; test methods; and material specifications.
- NEx will coordinate with ACI and other standards developing organizations (SDOs) worldwide to assist in the development of needed standards and specifications. The center will assist other SDOs by:
  - Cooperating with existing committees,
  - Identifying gaps in technical knowledge and bringing them to the attention of relevant SDOs,
  - Developing draft standards, test methods, and specifications for consideration by SDOs, and
  - Advocating and supporting the adoption and use of relevant codes and standards by regulatory agencies.

## EDUCATION AND TECHNOLOGY TRANSFER

*NEx will supply or facilitate the creation of the knowledge needed for designers, contractors, and owners to utilize nonmetallics in their structures.*

### OUTCOME

The construction community will have the knowledge needed to use nonmetallics effectively.

### OBJECTIVES

- Develop technical courses or certificate programs,
- Convene symposiums or participate in other programs for technology transfer,
- Create and distribute publications such as handbooks or guides on the use of specific nonmetallics, and
- Create model curricula and the needed support materials for educational institutions.



## QUALITY AND COMPETENCY

*NEx will help the industry in assuring the manufacturing quality of nonmetallics and of the competent installation, testing, and inspection of those products.*

### OUTCOME

Designers, constructors, owners, and the public will view nonmetallics as desirable for a variety of uses in building projects.

### OBJECTIVES

- Develop programs to certify/audit manufacturers of nonmetallics, and
- Develop programs to certify personnel who install, test, and inspect nonmetallics.

## RESEARCH AND DEVELOPMENT

*NEx will support and facilitate research needed for new technologies in nonmetallics to resolve challenges with effective solutions.*

### OUTCOME

Development of new materials and products for the construction industry.

Provide standards developers with the information needed to develop comprehensive codes and specifications for various nonmetallics.

### OBJECTIVES

- Identify knowledge gaps requiring research,
- Collaborate with material suppliers, manufacturers, universities, and institutes to support technology and research,
- Facilitate development of new or more effective products, and
- Understand the environmental impact and provide recommendations.



## OUTREACH

*NEx will work with material suppliers, manufacturers, designers, owners, government agencies, and standards developers to bring nonmetallics into wider use in construction.*

### OUTCOME

Nonmetallics will be recognized as a solution to many types of construction scenarios.

### OBJECTIVES

- Conduct awareness workshops,
- Showcase technologies and products,
- Conduct and participate in seminars and conferences,
- Participate in technical committees,
- Develop publications and articles,
- Develop educational and advocacy campaigns,
- Establish relationships with regulatory authorities to advance adoption,
- Engage material suppliers to raise awareness of opportunities in the construction sector, and
- Outreach to academic institutions.





An ACI Center of Excellence for  
Nonmetallic Building Materials

38800 Country Club Drive  
Farmington Hills, MI  
48331-3439 USA

+1.248.848.3170  
[nonmetallic.org](http://nonmetallic.org)  
[info@nonmetallic.org](mailto:info@nonmetallic.org)



American Concrete Institute

Founded in 2021 by the American Concrete Institute and Aramco