

Thornton Tomasetti

Building Solutions

Building Structure



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Our structural engineers collaborate with architects, owners and builders to design elegant solutions for projects of all sizes, types and levels of complexity. From designing the world's tallest buildings and longest spans, to engineering inventive small-scale "jewel-box" structures, we continually seek the best balance between the demands of form, function, sustainability, constructability, schedule and budget.

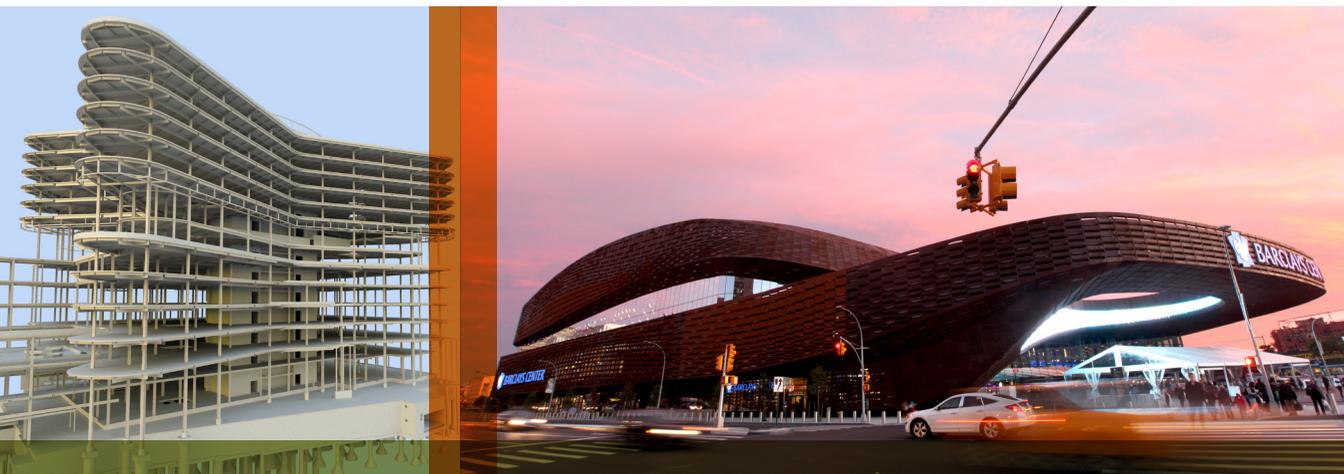
We have worked on projects of every type and size, in more than 50 countries. Our breadth of experience and deep bench of seasoned professionals allow us to provide clients with the talent and expertise they need to meet the varied challenges posed by building design and construction.

We've learned that close collaboration is the key to successful projects. This means we don't limit our focus to just our scope of work. We look beyond the obvious and explore alternatives, searching for the unique approach best suited to each project. We consider the ways each discipline's work will intersect our own, and we look for

innovative ways to integrate them all for the overall benefit of the project and its stakeholders.

At Thornton Tomasetti, we develop and implement sophisticated methods to conceptualize, model and deliver our designs to benefit owners, designers and construction teams. We have used building information modeling (BIM) to produce our projects for more than 20 years, and are leading the way in the development, integration and use of advanced computational modeling tools. These innovative tools enhance the creative process, promote effective collaboration and coordination, and improve visualization and communication during design and construction.

Our engineers get involved early and focus on setting each project on a path to success. We work smart, providing fast, appropriate responses to questions posed within the project team or by the owner. And we volunteer ideas for saving time and money. Our emphasis on open communication among all project stakeholders is a reflection of our genuine desire to make every project a great project.



From left: Revit model of the Rush University Medical Center, Chicago, Ill.; Barclays Center, Brooklyn, N.Y.

Buildings

New Design
Modifications & Alterations
Feasibility Studies
Peer Review
Value Engineering

Supertall Buildings

New Design
Feasibility Studies
Peer Review
Value Engineering

Long-Span Structures

New Design
Feasibility Studies
Peer Review
Value Engineering

Special Structures

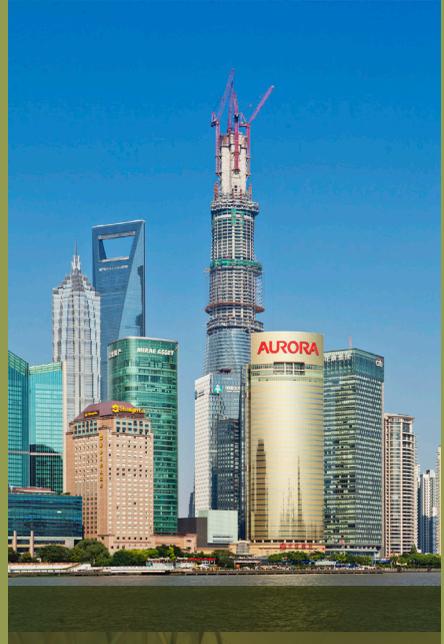
Temporary Structures
Sculptures & Artwork
Movable Structures

Specialty Analysis

Performance-Based Design
Vulnerability Analysis
Vibration Analysis
Nonlinear Dynamic Analysis

Project Delivery

Design Delivery Strategy
BIM
Automation
Advanced Detailing
Animations & Renderings



From top: Pennsylvania State University Millennium Science Complex, State College, Pa. (courtesy High Concrete Group LLC); Transbay Transit Center, San Francisco, Calif. (courtesy Transbay Joint Powers Authority); Shanghai Tower, Shanghai, China (© Gensler); Brookfield Place Entry Pavilion, New York, N.Y.

Firm Overview

Practices

Building Structure

Building Skin

Building Performance

Property Loss Consulting

Construction Support Services

Building Sustainability

Thornton Tomasetti provides engineering, design, investigation and analysis services to clients worldwide on projects of every size and level of complexity. Our six integrated practices address the full life cycle of structures.

Founded in 1956, Thornton Tomasetti today is an 800-person organization of engineers, architects and other professionals collaborating from offices across the United States and in Asia-Pacific, Europe, Latin America and the Middle East.

To learn more about our Building Structure services:

http://www.thorntontomasetti.com/services/building_structure

Contact:

Building.Structure@thorntontomasetti.com

Cover, from left: The podium of the 240-meter-tall Federation of Korean Industries Headquarters Building in Seoul, South Korea features a sculptural curved form (© Adrian Smith + Gordon Gill Architecture/photograph by Namgoong Sun). Slated to be the world's tallest building upon completion, Kingdom Tower is under construction in Jeddah, Saudi Arabia (© Jeddah Economic Company/Adrian Smith + Gordon Gill Architecture).

