

A photograph of a modern, multi-story glass skyscraper at dusk. The building's interior lights are on, and the sky is a mix of blue and purple. The word "BOX" is overlaid in large, white, semi-transparent letters on the left side of the image.

BOX

StructureTec[®]

COMPLETE COMMISSIONING

PROTECT YOUR NEW CONSTRUCTION INVESTMENTS

COMMISSIONING SERVICES

For the last 30 years, StructureTec has been the leader in building envelope systems technology. Surprisingly, close to 40% of StructureTec's remedial work is taking place on buildings less than 5 years old. This figure highlights the need for process improvement. Our industry experience coupled with our aptitude for understanding and deciphering the complexities between system configurations, field conditions, and resulting specifications enables StructureTec to provide comprehensive solutions for clients. StructureTec's commissioning service provides essential perspective into the design, installation, integration, and testing of the building envelope system as it aligns with the owners requirements and best interest.

WHY WORK WITH US?

- > 30 Years of Proven Results
- > Professional Engineers
- > Professional Liability Insurance
- > Total Building Envelope Expertise
- > Industry Regulation Compliance Experts
- > Innovative Technologies

WHO WE WORK WITH

- > Corporate
- > Higher Education
- > Supply Chain
- > Industrial
- > K-12 Schools
- > Logistics
- > Municipalities
- > Healthcare

COMMISSIONING SERVICES

- > New Commissioning
- > Retro-commissioning
- > Recommissioning

AREAS OF EXPERTISE

- > Roof Systems
- > Wall Systems
- > Parking Structures
- > Pavement Systems
- > Plaza Decks
- > Unique Systems

BUILDING OWNERS SEE AN
AVERAGE SAVINGS OF \$4
FOR EVERY \$1 INVESTED IN
COMMISSIONING



VALUE ADDED

SYSTEM PERFORMANCE

The process of new construction is highly complex with each sequential step being critical to the next. All building systems are interdependent; the way each system is designed and installed affects the others integrated with it. StructureTec's team of professional engineers and architects review design, specified products, and installation plans to ensure that the end project meets the expectations of the owner, operates as intended, and provides the lowest annual cost of ownership.

COST SAVINGS

StructureTec's team evaluates every aspect of the project to proactively identify opportunities for improvement, risk mitigation, and increased system efficiency and longevity. Recognizing these factors early on allows the owner to avoid project delays and expensive mitigation efforts later in the construction process. In a study completed by the Building Owners and Managers Association, the data collected indicates that commissioned buildings see an annual maintenance savings of 15%-35%. Within the first 5 years, building owners see an average savings of \$4 for every dollar invested in commissioning, according to research from the Whole Building Design Guide.

PROJECT COMPLEXITY

Strictly regulated operations such as pharmaceutical manufacturing, healthcare services, academic laboratories, and food manufacturing have the highest demand for building commissioning. StructureTec has successfully served these industries for nearly 30 years by continuing to stay informed on the regulations and guidelines critical to the performance and operation of these highly sensitive facilities. The support provided through StructureTec's commissioning team ensures that the end project meets the high expectation for control and performance, while eliminating risk to occupant/ product safety, liabilities, and operational loss.

INCREASED VALUE

Building owners see the greatest return on investment from their project when engaging StructureTec's commissioning services. As a partner to the building owner, StructureTec monitors all service providers and trades on the project from beginning to end, ensuring effective collaboration throughout. Recommendations and updates are proactively provided to the owner enabling them to make educated decisions on opportunities for cost savings, improved quality, and risk mitigation. StructureTec helps manage the construction process, testing the system performance and compliance at critical milestones. StructureTec's team provides information on system life span expectancy, preventative maintenance recommendations, and budget forecast to help owners prepare for future reinvestments, and mitigate operational disruptions.



LOWER OPERATING COST



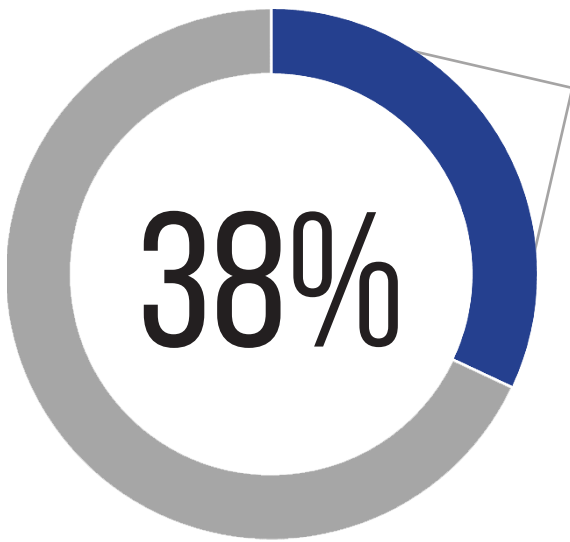
HIGHER EFFICIENCY



LOWER MAINTENANCE COST

**Annual averages compared to non-commissioned buildings. Data collected by Portland Energy Conservation, Inc.

INDUSTRY FIGURES



- **BUILDINGS LESS THAN 5 YEARS OLD** ACCOUNT FOR **THIRTY-EIGHT PERCENT** OF STRUCTURETEC'S REMEDIAL WORK ON AN ANNUAL AVERAGE.



Over the last year, StructureTec has been involved in just over **\$59.5 MILLION DOLLARS** worth of remediation projects for buildings less than 5 years old.



143 CASES of leaks and structural defects derived from flaws in original design or construction were investigated and remediated by StructureTec.



Remediation of these buildings cost organizations an average of **\$427,602 PER OCCURRENCE**.

IMPACT TO THE ORGANIZATION

IS NOT LIMITED TO THE COST OF THE BUILDING REMEDIATION. ORGANIZATIONS ALSO FACE LITIGATION, PRODUCT CONTAMINATION, REGULATORY VIOLATION PENALTIES, PRODUCTIVITY LOSS, CUSTOMER ATTRITION, AND REDUCED EMPLOYEE MORALE AS A RESULT OF CONSTRUCTION DEFECTS.



PROVEN PROCESS

StructureTec's commissioning process has been carefully designed to confirm and document that a facility meets the functionality and performance requirements of the building owner, occupants, and operations. Our team validates adherence to those requirements through every step of design, bidding, construction, initial period of operation, and continues to safeguard the future of the investment with our Warranty Audit Program.

1 SPECIFICATION REVIEW

Our unique process begins with a thorough analysis of the plans, specifications, budgets, and other information relative to the construction of the project.

- Verify material recommendations and detailing
- Review installation plans and expense budget
- Detail areas of efficiency concerns
- Review project schedule

2 BIDDING & NEGOTIATION

The bidding and negotiation phase of our approach has been specifically designed to protect the owners best interest and maximize the efficiency of all stakeholders in the bidding process.

- Review all bid documents
- Verify qualified contractors for invitation
- Field questions and collaborate with project team
- Attend pre-bid and bid events & perform post-bid vetting

3 CONSTRUCTION QA/QC

Every aspect of the construction will be fully monitored by the StructureTec team to ensure adherence to specifications. Our field quality control process mitigates risk by immediately discerning errors or areas of concern, allowing for timely correction.

- Validate all materials, installation, and workmanship
- Verify contractor and manufacturer warranties
- Develop & certify completion of final punchlist

4 WARRANTY AUDIT PROGRAM

As part of the project, a 12 month and 24 month post-construction audit will be performed by StructureTec to ensure that any warrantable items are identified and addressed before they become serious and costly issues.

- Perform evaluation of project area
- Ensure warrantable items are remediated
- Review findings with owner and responsible manufacturer

DEMONSTRATED RESULTS

THE LEADER IN BUILDING ENVELOPE SYSTEM TECHNOLOGY



WHIRLPOOL

Cleveland, TN

\$220 MILLION
450,000 SQ. FT.



GRAINGER

Louisville, KY

\$273 MILLION
106,008 SQ. FT.



ROCHESTER PUBLIC SCHOOLS

Rochester High School

\$127 MILLION
62,003 SQ. FT.



WHIRLPOOL

Riverview Administration Center

\$155 MILLION
213,822 SQ. FT.

\$26,475,815 IN SAVINGS

DELIVERED BY STRUCTURETEC WITHIN THE FIRST 5 YEARS OF OPERATION



DIGIKEY

Thief River Falls, MN

\$300 MILLION
2.2 MILLION SQ. FT.



SPECTRUM HEALTH

Helen DeVos Children's Hospital

\$286 MILLION
440,000 SQ. FT.



DOW CHEMICAL

Business Service Center

\$100 MILLION
205,000 SQ. FT.



WHIRLPOOL

Mechanicsburg, PA

\$500 MILLION
1.1 MILLION SQ. FT.



StructureTec® Group

www.structuretec.com

(800) 745-7832