



THP is a one-stop structural and architectural engineering firm focused on solving clients' building envelope problems, delivering innovative and economical solutions, and providing exemplary client service. We are team-based, both internally and with our clients and partners.

BUILDING ENVELOPE

As trusted advisors, we are committed to the highest standards and progressive practices that help clients navigate their built environments' current and future states. Our creative approach to design and achieving clients' goals has earned THP a reputation for exceptional quality and reliability; we pursue meaningful solutions and are committed to doing things right.



Experience & Creativity Deliver the Best Solutions

THP's Building Envelope team specializes in condition assessments of components that show effects of weathering, water infiltration, maintenance issues, and problems with structural elements. We are a trusted partner for the assessment and repair of envelopes, whether a public or private process is involved. Investigating and identifying relevant issues, we know the questions to ask and which details to pinpoint.

During the last decade, THP has assessed, rehabilitated, and designed over four million square feet of building envelopes. These include masonry, stone, curtain wall, EIFS, metal panel and skylight elements. Projects range from repairing historic landmarks to complete skin replacements throughout the United States.

Maximizing Return on Investment

THP excels at protecting your investment by extending your building envelope's useful life. We see the big picture, interview your personnel to learn instances of failure so we can identify root causes, and communicate fully with you to prioritize repairs that are in the best interest of your budget and schedule. Your infrastructure must be maintained, so we provide solutions that keep you in business when things begin to fail. As good stewards of resources, we recommend addressing issues where they occur. In addition, we partner with your team, training them to perform routine maintenance to minimize future problems.

*tailored solutions
to meet your
goals and budget*

BUILDING ENVELOPE



SERVICES

- Assessments & investigations
- Building envelope consulting/ peer review
- Comprehensive phasing plans
- Construction administration
- Construction documents
- Cost analysis & control
- Development of durable design options
- Facilitation of water & air tests
- Historic masonry preservation & repair
- Maintenance master planning
- Rappelling to review building façades
- Report development
- Roof repair & replacement design

THP Technique Enables Better Decisions

For close-up building inspection, THP's team, which includes several members who are certified Society of Professional Rope Access Technicians (SPRAT), is trained on aerial work platforms, swing stages, and rope access. SPRAT is a professional organization dedicated to work-at-heights training.

Using appropriate equipment, we provide a more comprehensive assessment/ inspection of building envelopes and special structures. THP can assess high-rise buildings, towers, utility stacks, stadiums, skylights, and more. Rope access provides the building owner with an expedient, cost-effective, low operational impact way to know their envelope's condition. The building owner can verify whether facade components are intact and performing as intended. THP identifies conditions that could otherwise unknowingly undermine a building envelope's integrity.

Collaboration for the Win

Internal

While THP's building envelope professionals are highly specialized, we also benefit from an "open door" policy that facilitates the transfer of knowledge and expertise within the firm. We train team members to be proficient and empowered to make decisions that are in your best interests. Through internal collaboration, we develop efficient processes with dedicated team members on each design project. We know each team member's expertise and go directly to the subject expert, enhancing productivity.

Project Team

Working closely with the client, manufacturers, and contractors enables the THP team to make optimal, informed decisions. We identify problems, create solutions, and manage construction for the correct installation. If indicated, we bring in outside consultants when it is in the client's best interest. Senior engineers have a structural background and know the history of buildings. Our design team provides a single integrated source for the entire construction administration site presence — from principal to project engineer — so we can answer contractor questions as they arise. This increases efficiency and ensures full value for your investment.

We communicate the problem, solution, and progress to the client, as well as feedback to the contractor; we answer questions thoroughly. Our relationships with contractors employ a partnership/team approach; we work through potential solutions jointly. Contractors appreciate our thorough documents and our concise and understandable reports that clearly communicate expectations. We listen to contractors in the field and engage in a constant back-and-forth interchange with them. Additionally, having strong contractor relationships provides us with a great pool of candidate firms to choose from when making recommendations.

THP's on-site presence during construction administration is unparalleled. We ensure the repair is performed to the design intent. Our experts' regular site visits provide another set of eyes, further enhancing quality assurance.

Benefits

Besides producing an optimal solution, THP's Building Envelope team offers these benefits to clients:

- We focus on protecting client's investment.
- We have a better grasp of client goals, so we deliver better results.
- THP thoroughly understands the differences between public and private project processes – We know how to save money, and that a public bid can actually add cost. We communicate in layperson terms so our clients can better communicate to the public, users, and the press.

BUILDING ENVELOPE



INDUSTRIES SERVED

- Commercial
- Healthcare
- Higher Education
- Industrial/Manufacturing
- Public Facilities



- Same team from start to finish – Unknowns are not as much of a surprise, we understand decisions that were made earlier, and resolutions are quicker.
- We ensure continuity in front of the client.
- THP offers an accurate budgets at the outset – no surprises.
- We are a team of skilled educators.
- We create buy-in of PM's/CM's and their managers, making their jobs easier.
- THP's jobs run smoothly – We are proactive about bringing problems/solutions to the forefront.
- We minimize complaints from the public and users by minimizing inconvenience and headaches – Factors such as egress points and noise can cause issues, so we thoroughly communicate what the project will entail and things they should avoid. This minimizes problems related to soft costs and factors outside the project scope.
- We continually research solutions and materials.



Why THP is Your Best Choice

Our Building Envelope team has a high level of expertise and experience; members spend their careers specializing in this aspect of buildings. Several team members have master's degrees, as well as PE or AIA designations. Senior engineers know the history of buildings and how they were built. The team consults as needed with other internal teams. Two other factors that make THP your best choice are passion and necessity.

Passion

- Passion compels us to do things that many competitors do not: Our rope access technicians provide the building owner with an expedient, cost-effective, low operational impact way to know their envelope's condition close-up through rope access. We can get to places that swing stage cannot; people are shocked as we use this hands-on, more effective, and economical technique that is less damaging and invasive to property than manlifts.
- Our passion fuels our commitment to professional and personal growth that enables us to develop unique solutions to unique problems.
- We really enjoy what we do: Our team has a "backstage pass" to see behind the scenes of buildings that people take for granted. We investigate, understand how components are built, and know why things were put together in certain ways. Additionally, we get to work on incredible buildings – some that have been designed by famous architects. We help keep 100+ year-old buildings viable and occupied.

BUILDING ENVELOPE

Necessity

With extensive structural expertise and a commitment to doing what the client needs, THP focuses on:

- Safety: We follow industry and governmental standards to keep stakeholders safe.
- Maximum functionality: We maintain structures through waterproofing to protect interior users and functions.
- Maximum structure longevity: We protect the client's investment.
- Repair or replacement to add considerable value: Windows that are leaking or drafty may not be an immediate structural issue, but they may degrade occupants' comfort and experience.
- Enabling each potential client to make the best initial decision:
 - If they engage THP instead of only a contractor, they save on fees.
 - If they do not engage THP, they risk paying for a fix that does not solve the problem and can cause other problems.
 - If they engage no one, they risk failure of a system that prevents water from getting into areas that structurally matter; a compromised structure can lead to collapse, serviceability issues, and increased repair costs down the road.

Broad Spectrum of Materials

Systems

- Curtain wall
- EIFS
- Gasketed systems
- Metal panel systems
- Point-supported glass systems

Masonry façade

- Brick
- Concrete masonry units
- Historic masonry
- Hollow clay tile
- Mass masonry
- Terra cotta
- Stone

Roofing

- Built-up
- Copper
- EPDM
- Modified bitumen
- PVC
- Slate
- Standing Seam Metal
- TPO

Skylights

- Acrylic glazed systems
- Insulated glass glazing systems



PRIMARY LOCATIONS

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SATELLITE LOCATION

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