

## Design/Build Services

The benefits of the Design/Build approach in commercial construction are well-known in the industry. Faster delivery, better coordination and efficiency, enhanced quality and reduced cost are the cornerstones of successful Design/Build teams that include owners, architects and the construction manager.

The same is true when project teams are integrated and inclusive of the contractor(s) providing the construction of mechanical, HVAC, fire protection and other building systems. The engineering team at TP Mechanical serves as a contributor to project design, delivering innovative solutions, driving down costs, shortening construction schedules and producing more efficient and cost-effective building systems.

### DESIGN/BUILD ADVANTAGES:

- Faster Delivery
- Cost Savings
- Improved Quality
- Singular Responsibility & Accountability
- Enhanced Owner-driven Needs
- Minimized Project Risk

### CONTRACTOR INCLUSION OFFERS INNOVATION & EXCELLENCE

TP Mechanical has the capability, expertise and, experience to deliver design/build, design/assist and other pre-construction design services. The TP Mechanical engineering team includes licensed, degreed staff with a history of tackling the most complex mechanical systems, from a standard rooftop unit zoning approach to a variable box and DDC control system design.

With direct contact between the client, architect, construction manager and TP Mechanical, our team can provide alternatives and recommendations for mechanical systems that not only reduce the costs associated with construction, but also with the client's long-term operation of the building. When involved at this stage, the TP Mechanical team can incorporate BIM, pre-fabrication techniques and LEED principles to accomplish multiple construction objectives.

As a customer-driven, solutions-oriented organization, we are committed to not just fulfilling the specifications and requirements for your project. We use innovation and creative problem-solving to protect your interests and overcome your challenges and obstacles. The end result is a functioning building that delivers top performance for our customers throughout the construction process and in day-to-day operations.

### VALUE ENGINEERING PROTECTS YOUR LONG-TERM INVESTMENT

The operation of HVAC constitutes between 40% and 60% of energy and water use in most commercial buildings. Mechanical systems and plumbing can be the cause of costly ongoing operations or maintenance if not properly configured. Our team is able to value-engineer reliable systems that meet performance requirements and fit project budgets, while minimizing energy and maintenance costs.

**"I would like to take this opportunity to express my appreciation to you and your Design Assist Team for your efforts on this project over the past six months. Your team provided Accurate Detailed Estimates, along with Value Engineering and Constructability Reviews that have helped Skanska Shook and our client keep this project within budget, and just as important, on schedule."**

**Scott Hansma,  
MEP Superintendent, Skanska Shook**

### ENGINEERING SERVICES FOR:

- System Lifecycle Cost Analysis
- HVAC Design Heat Load Calculations
- HVAC System Design
- Plumbing System Design and Layout
- Fire Sprinkler Design & Layout
- Duct and Piping Sizing and Layout
- Equipment Selection
- Energy Usage Analysis
- Industrial Ventilation
- Control Sequence Operations
- Specifications

### OUR BRAND PROMISE

TP Mechanical delivers end-to-end solutions for you, from pre-construction expertise through contracting and fabrication to service and maintenance for piping, plumbing, HVAC/R and fire protection. We do this as a relationship-focused organization that leverages six decades of experience delivering innovative solutions with excellence that will drive down your costs, enhance safety on the job, increase value for your bottom line and enable speed-to-occupancy.