

### Optimized. Minimized. Simplified.



SidePlate is driven by design efficiency: we use SidePlate patented moment frame design technology to put steel where it is most effective. Buildings utilizing our designs are erected faster and safer, and our process makes life easier for everyone on the job. The SidePlate team stays involved from design through construction to ensure a simple and successful project.

## SidePlate Design Optimization Process



### **Optimized:**

Our design optimization process starts with a simple phone call or email to a SidePlate Regional Engineer. At that point, the talented SidePlate engineering team, with a combined 270 years of experience, will take a look at your project and use our technology to design a completely optimized lateral system. We act as an extension of your team, providing valuable support aimed at implementing SidePlate design technology to resist wind, seismic, or progressive collapse. The earlier this process starts the

better--but it is never too late. With SidePlate on your project, there are virtually no limits to the design that can be achieved.

### Minimized:

The SidePlate design process minimizes the inherent complexities in the construction industry. SidePlate technology utilizes stiffer moment frames in the design, typically reducing the number of moment connections by 20-30% compared to conventional moment frame buildings. Additionally, the increased stiffness allows the design team to minimize beam and column weight by 15-25% of the lateral steel tonnage. SidePlate



Simplified:

design technology is bolted--eliminating expensive and time consuming welding--which minimizes erection times significantly. By eliminating complete joint penetration welding, inspection time and costs associated with those welds disappear.



SidePlate is all about simplifying the building process during the design and construction phases of the project. We provide all of the connection drawings and calculations, which are incorporated directly into the construction documents, eliminating the need for deferred submittals. Buildings designed with SidePlate can be fabricated and erected by any contractor the team chooses. While our design process is technical, fabrication is simple and can be done at any qualified fabrication shop with no special or proprietary tooling required. In addition

to the drawings and calculations, SidePlate provides software tools and data aimed at simplifying the estimating, detailing and coordination process through Excel material takeoff files, Tekla/SDS2 components, and Revit families.



# Benefits To:



#### Fabricator

- Fully designed joints allow more accurate bidding
- Simple plates and angles
- Fabricate everything in your shop with no proprietary parts or tooling required
- Increased detailing accuracy with Tekla/SDS2 components
- Faster and more accurate estimating with provided estimate files

#### Engineer

- Ability to meet client desire for open layouts without increased conventional frame costs
- Increase schedule efficiency through field-bolted connection
- Develop efficient steel buildings while reducing steel tonnage and number of connections
- Decrease plan review time by using a proven design technology
- Increase your design team size by partnering with SidePlate

#### Erector

- Fast field-bolted construction minimizes crane time
- No welding equals no weather delays
- No preheating required
- Fewer connections speed up the erection process
- No UT inspections on site

#### Owner

- Increased design flexibility by eliminating structural braces
- Increased usable square footage by eliminating structural walls
- Increased savings from reduced overall steel package price
- Decreased repair cost, and time, by increased structural resiliency
- Decreased erection time by eliminating field welding

#### **General Contractor**

- Decrease risk by including SidePlate in the design and construction coordination
- Reduce connection RFIs thanks to complete and coordinated connection drawings
- Decrease schedule by eliminating field welding and minimizing connections
- No decrease in bidding pool as SidePlate can be done by any fabricator or erector
- Decrease steel package costs with efficient steel designs and documentation

### Structural Framing Division POWERED BY MITEK



Near and dear to our hearts is the NC State engineering building. Built to stand four stories tall and encompass 240,000 sq ft, this state-of-the-art facility was built to put engineering on display including the SidePlate bolted connection design. The facility is home to the civil and environmental engineering programs and rounds out the Centennial Campus Engineering Quad. General Contractor Skanska and Clark Nexsen set the tone for a terrific project.

"Working with SidePlate on the Fitts-Woolard Hall Engineering Building at NC State University provided a real benefit to the project. The efficiency gained from the ease of installation helped the structure top out ahead of schedule. Additionally, with SidePlate the connections fit together extremely well." Greg Cooper, Skanska, Durham, NC



Pfizer built their new facility to incorporate flexible laboratory layouts, utility spaces, scientific casework and an open office design to make the best use of all 295,000 sq ft. Employing more than 450 scientists, the facility was built with LEED sustainability certification and, of course, SidePlate field-bolted connections. EwingCole was the Engineer of Record for this very exciting project.

"SidePlate was so easy to build and the shop enjoyed fabricating the components. We really saw how easy it would go together in the field." Steven Tillery, Steel Service, Jackson, MS



Franciscan St. Anthony Health-Michigan City was an answer to a lot of needs in the area when it was conceived. The world-class medical center features up to 120 private patient rooms, outpatient services and a medical office building. The five-story, 427,000 sq ft facility features SidePlate field-bolted connection designs that were fabricated by Wilson Iron Works and erected by Danny's Construction *Company. Also involved in the project were CannonDesign and Tonn & Blank Construction.* 

*"SidePlate was excellent to work with. Our bolting numbers were spectacular and because of that we kept a flow going through the whole project."* Dave Wiggins, Danny's Construction Company, Shakopee, MN



San Jose International Airport is the gateway to the fabled Silicon Valley in California. With a 10-year expansion plan in place, a fast-turn four-gate addition was built quickly using SidePlate bolted connection designs. By utilizing a bolted system, no welding at the airport was required which minimized the obvious safety hazard that it could pose. With a team built of Hensel Phelps Construction Co., Walter P. Moore and Fentress Architects, this was a fast moving project.

"The SidePlate PLUS system and collaborative partnership was essential to the design-build team's ability to complete structural steel erection on this \$58 million interim terminal facility at Mineta San Jose Airport just 150 days after contract award." Bill Andrews, Walter P. Moore, San Francisco, CA



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