DIVERSE APPLICATIONS IN STEEL FRAME BUILDINGS

Victoria Riffel,

Civil Engineering Department

Overview

- Introduction;
- The Choice of SidePlate™ Technology;
- Construction Applications;
- SidePlate™ Technology Practical Use;
- Projects Criteria;
- Projects of SidePlate™ Technology Inc.;
- Conclusions.

The Choice of SidePlate™ Technology

Figure 1. Blast and Progressive Collapse Mitigation

Figure 2. Attack on the Twin Towers of the World Shopping Center

The Choice of SidePlate™ Technology

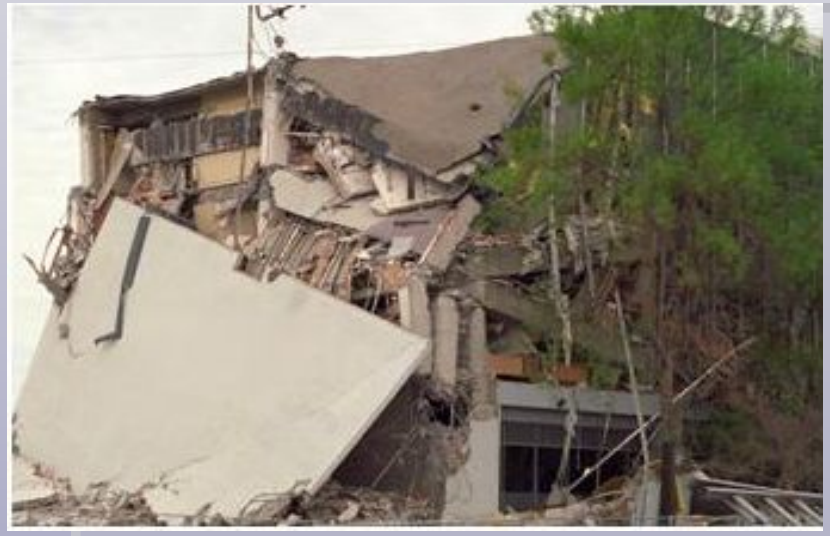
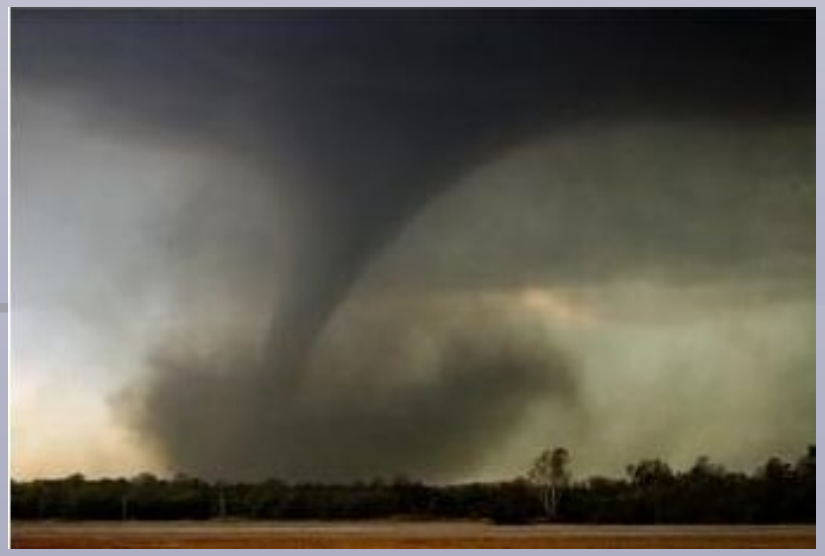


Figure 3. Earthquakes of All Magnitudes

Figure 4. Extreme Winds, Including Typhoons, Hurricanes and Tornados



Construction Applications

Institutional

- **HEALTHCARE**
- **GOVERNMENT**
- **EDUCATION**

Blast-Resistant Structures

- **STRATEGICALLY SENSITIVE GOVERNMENT FACILITIES**
- **HIGH-PROFILE PRIVATE BUSINESS OWNERS**

Commercial and Industrial

Residential

Figure 5. Frames For Straight, Curved and Skewed Uniaxial Frames

SidePlate™ Technology Practical Use

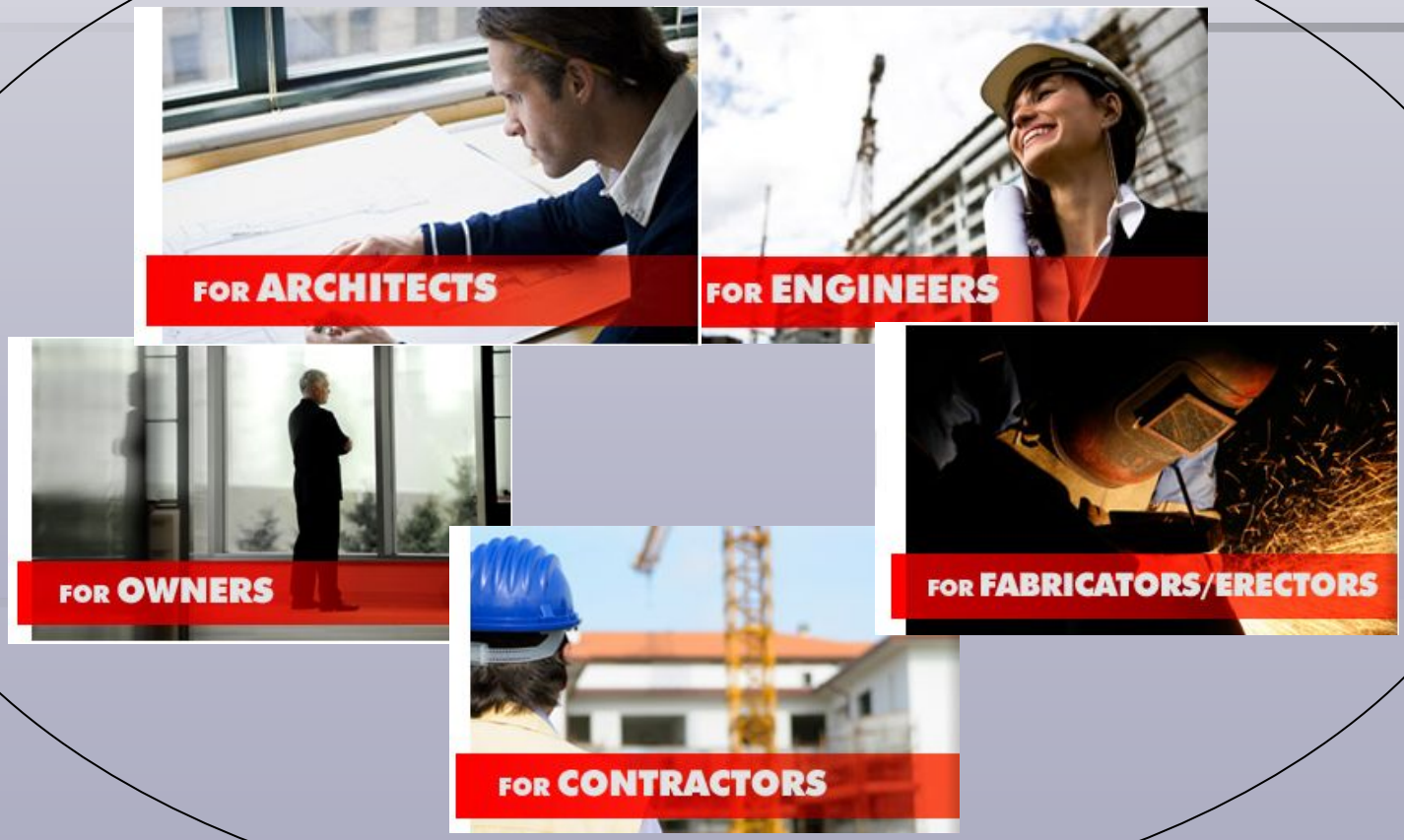


Figure 6. Versatility of SidePlate™

Projects Criteria:

- Maximum architectural freedom;
- Maximum usable or lease-able space;
- Future floor plan flexibility (no diagonal bracing);
- A shorter construction schedule or lower overall construction costs;
- Tall story heights or large bay widths;
- Bomb and progressive collapse mitigation.

Figure 7. Uniaxial Frame

Projects of SidePlate™ Technology Inc.

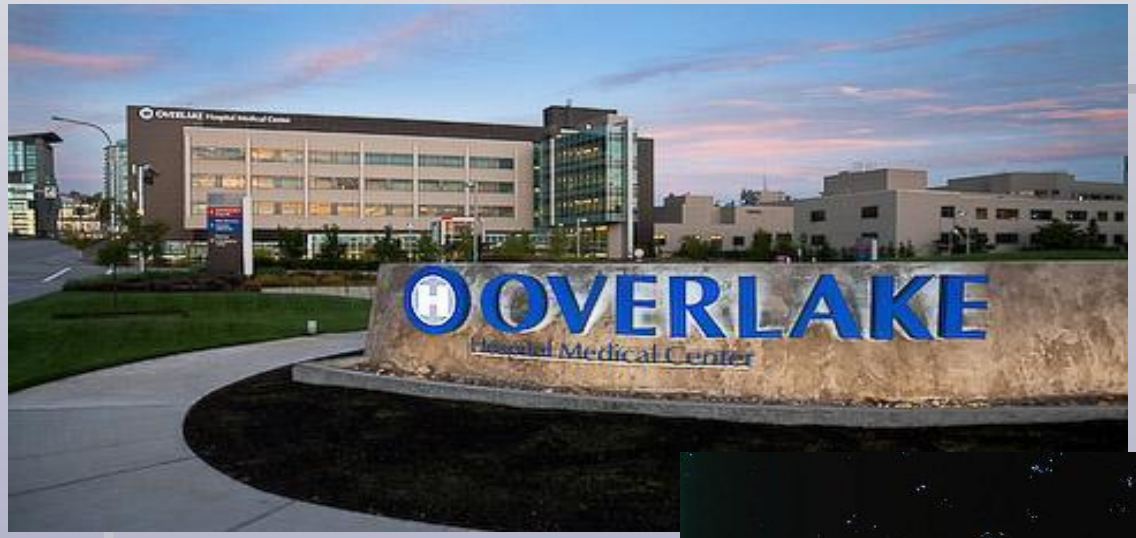


Figure 8. Overlake Hospital South Tower

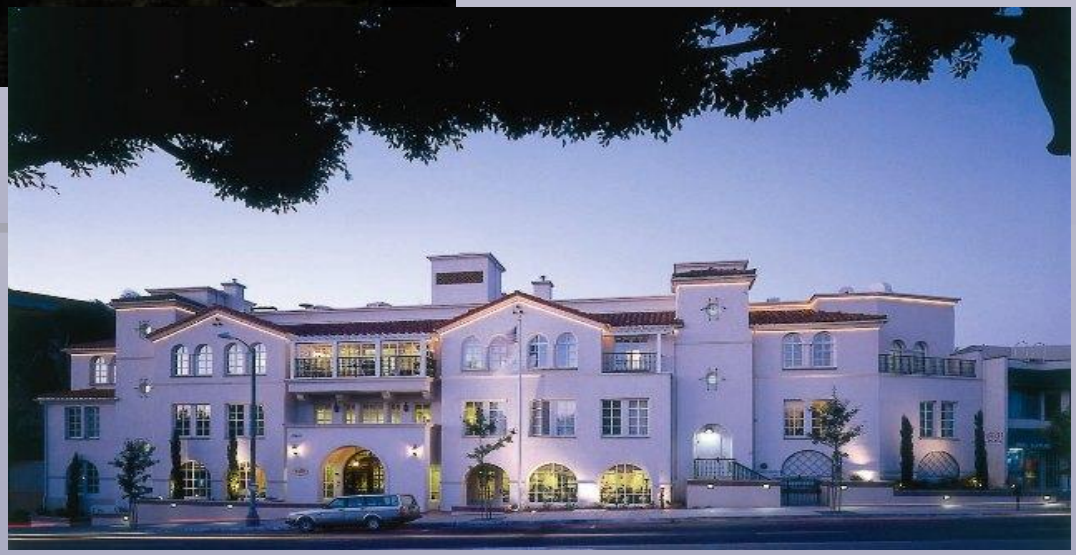


Figure 9. Sunrise Assisted Living of Pacific Palisades

Conclusions

Advantages:

- The Structural Integrity of Columns, Girders and Associated Connections;
- Terrorist Attack Protection;
- Fundamentally Different Geometry.

THANK YOU FOR ATTENTION

vika.riff@gmail.com