## STRUCTURAL INTEGRITY OF STEEL GRAVITY FRAMING SYSTEMS

U. Washington - Connection Component Tests

U. Illinois Urbana-Champaign – System Tests

Purdue – Slab Component Tests

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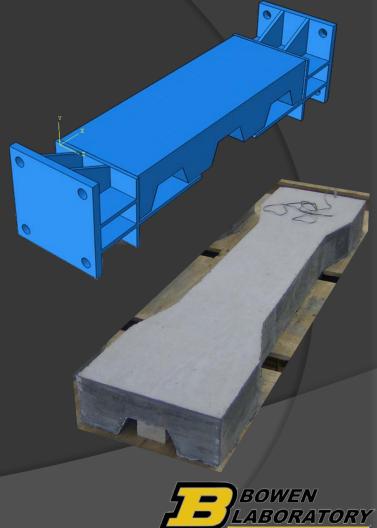
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## Research Objectives

- Composite Slab-On-Metal-Deck <u>Tests</u>
  - Determine slab response to:
    - Tension and compression perpendicular and parallel to deck ribs
    - Tension and shear over metal deck sidelaps
  - Use resulting experimental data to update and validate system models (steel frame buildings)



## Research Findings

Parallel to deck ribs



Perpendicular to deck ribs



Sidelap tension



