



**THOMAS S. DRANGER, Ph. D., P.E., S.E.**  
**Structural Engineer**

Dr. Dranger, a licensed Structural Engineer, has been directly responsible for engineering and consultation with public agencies, businesses, institutions and professional firms: Establishing priorities and goals. Advancing research, development, publication and innovation. Implementing quality control. Maintaining client contact, resolving sensitive and technically complex issues, and managing contracting and financial matters. Occasionally serving as expert witness. Has served for six years as visiting professor of engineering at the University of Illinois at Chicago.

EDUCATION

Ph.D. University of Illinois at Chicago.  
M.S. University of Illinois at Chicago.  
B.S.E. University of Illinois at Chicago.

PROFESSIONAL REGISTRATION

Structural Engineer, Illinois  
Professional Engineer, Michigan  
Professional Engineer, Wisconsin

OVERVIEW OF PROFESSIONAL EXPERIENCE

More than 25 years of professional experience in structural engineering in a broad spectrum of structural types, sustainable materials and systems favorable to the environment.. Qualified by education and experience in structural design of buildings, bridges and other structures realized in structural steel, light gauge metal, load bearing masonry, timber, light wood framing, plain, reinforced and pre-stressed cast-in-place and precast concrete.

Parking structures.

Commercial single-story, multi-level, major department stores and regional shopping centers.

Low and high-rise office buildings.

Banks, hospitals and medical and social service facilities.

Schools, gymnasiums, swimming pools, health clubs and libraries.

Single family homes, low and high-rise residential buildings.

Major distribution centers, warehouses, and transportation terminals.

Automated materials handling and storage systems.

Foundations and underground structures

Chemical processing plants.

Laboratories and pharmaceutical plants.

Freezer buildings, packing and canning plants.

Manufacturing plants, mill buildings and crane runways.

Railroad structures, conveyor bridges and structures for heavy industry.

Fixed, movable and complex highway bridges.

Earth retaining structures and recreational water resource facilities.

Sheeting, shoring, bracing and construction engineering

Value Engineering

Engineering Management Consultation

Knowledge in structural dynamics and stability, linear and non-linear systems, investigation, analysis, design, optimization, identification, computation theory and decision making for intractable problems.

PRIOR EXPERIENCE

Nelson Ostrom Baskin Berman and Associates in Chicago (acquired by Raymond Group), A. Epstein & Sons International in Chicago, U.S. Army Advanced Weapons Support Command, and others. Projects include buildings, bridges, and special structures.

SELECTED PUBLICATIONS

Yield Line Analysis of Bolted Hanging Connections, *Engineering Journal*, AISC, 3Q 1977.