"To advance the science of structural engineering; to assist the public in obtaining dependable structural engineering services; to encourage engineering education; to maintain the honor and dignity of the profession and to enlighten the public with regard to the province of the structural engineer."

- Structural Engineers Association of Southern California

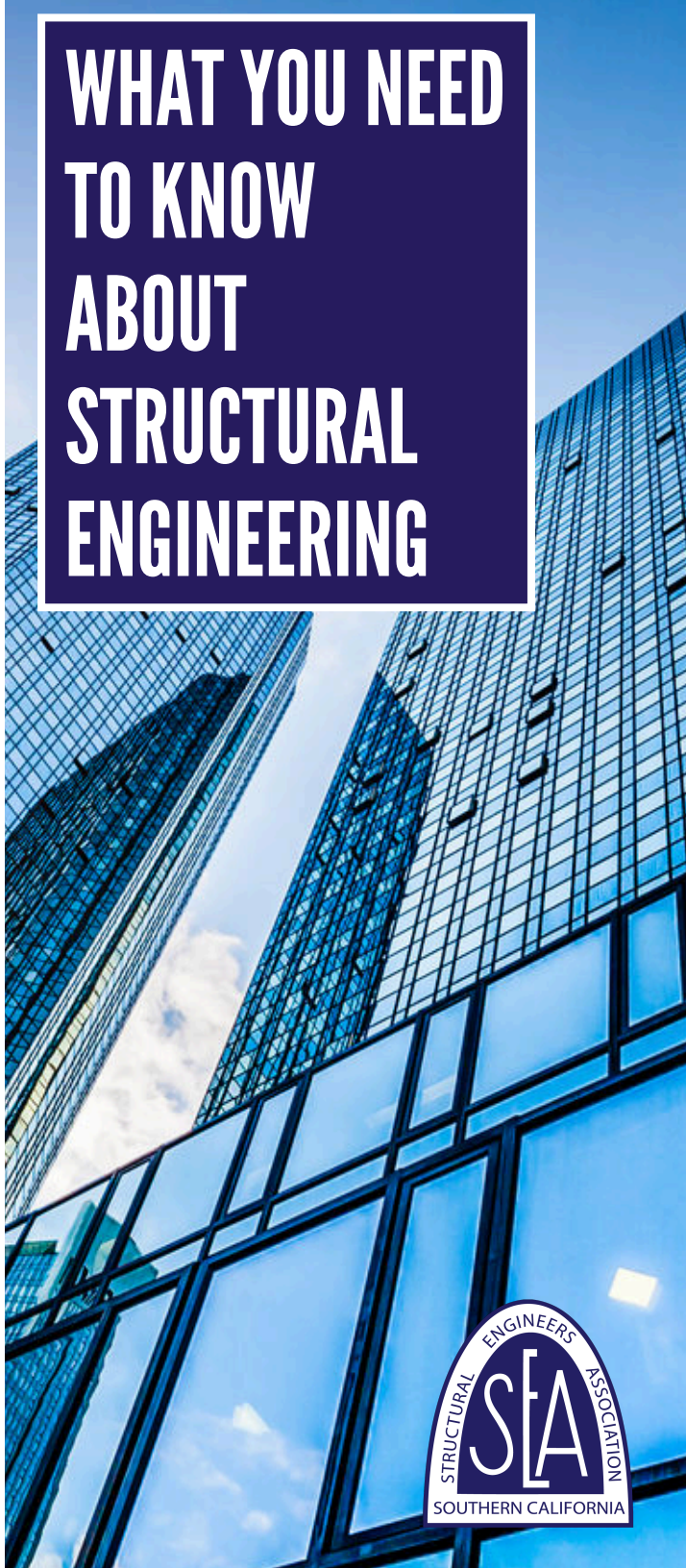
ABOUT SEAOSC

The Structural Engineers Association of Southern California (SEAOSC) is the oldest structural engineering association in the world, and is one of four regional structural engineering associations (known as Member Organizations) of the Structural Engineers Association of California (SEAOC). The individual members of each regional association are automatically members of SEAOC. SEAOSC members are civil and structural engineers regularly engaged in the practice of structural engineering. SEAOSC also draws membership from related fields involved in design, plan review and construction, including academia (professors and students), contractors, architects, code officials, geotechnical engineers and representatives from industry and government.

SEAOSC is incorporated as a California not-for-profit, tax exempt, trade association under Internal Revenue Code Section 501c(6). Member Organizations operate autonomously, each having their own staffs, Boards of Directors, budgets, and member programs and services independent of SEAOC. SEAOSC is governed by a Board of Directors, which is composed of representatives of different regions in Southern California.

www.seaosc.org
seaosc@seaosc.org
(562) 908-6131

WHAT YOU NEED TO KNOW ABOUT STRUCTURAL ENGINEERING



WHAT IS STRUCTURAL ENGINEERING?

Structural Engineering is a specialty within Civil Engineering which deals with the design, construction and maintenance of our surrounding infrastructure, such as buildings, bridges and tunnels. Contrary to popular belief, a structural engineer is not an architect. Rather, a structural engineer takes the vision of the architect, building owner, or project leader and creates a structural system, or "skeleton" to physically support the intended loads. The end goal of the structural design is to resist loads such as gravity, seismic, and wind loads.

WHAT DOES A STRUCTURAL ENGINEER DO?

A Structural Engineer designs the physical elements that allow a building to exist, provide shelter, and safely resist forces. These elements are designed to meet the requirements of the governing building codes. The day-to-day tasks of a structural engineer entail creating construction documents, performing calculations and evaluations, as well as coordinating with a general contractor before and while in construction phase.

WHY DO I NEED A STRUCTURAL ENGINEER?

A structural engineer possesses the specialized education and experience needed to design and evaluate a structure that is safe for its intended use. The design of every structure is particular to the environment it is in, and a properly licensed engineer is equipped to analyze structures founded in different soil conditions, as well as subject to various gravity, seismic, and wind loads. A structural engineer is also a technical resource who can discuss with you the various options for retrofitting your building and advantages and disadvantages of each.

An engineer's stamp and signature is required on contract documents, permitted by the authority having jurisdiction, for the following applications:

- New Building Construction
- Existing Building Renovation
- Existing Building Seismic Retrofit

WHAT IS A LICENSED ENGINEER?

Within structural engineering, there are two levels of licensing provided by the Board for Professional Engineers, Land Surveyors, and Geologists (BPELSG) in the state of California. The first level of licensing is the Civil Engineer license, which requires 6 years of qualifying work experience or education and the passing of an examination. The second level of licensing is the Structural Engineer license which is obtained after the Civil Engineer license. This requires an additional 3 years of qualifying work experience under the supervision of a licensed Structural Engineer and the passing of an additional examination.

HOW DO I FIND A LICENSED ENGINEER?

- Ask your friends, architects or contractors for recommendations.
- SEAOSC has provided a webpage to help facilitate your search. Visit http://www.seaosc.org/find-an-engineer