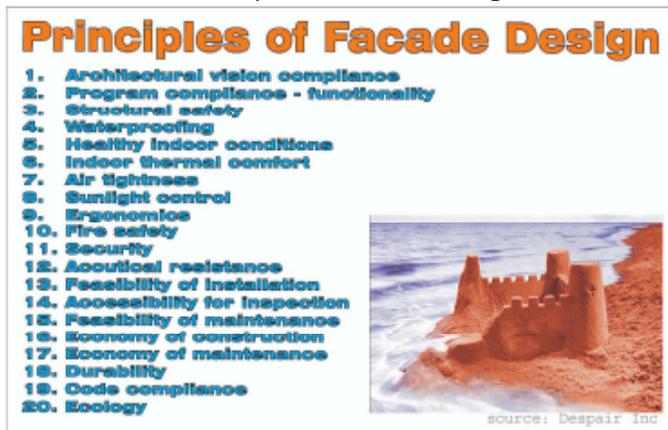


# Principles of Façade Design

The lecture titled "**Principles of façade design**" is generally recommended as a starter for the series. The lecture discusses design and engineering of building enclosures. Primary façade design principles are classified and demonstrated with emphasis on a structural safety and a holistic approach.

The lecture presents elementary concepts of façade engineering and focuses on areas typically overlooked by architects and engineers. A balanced, holistic approach to the facade design is emphasized. The lecture is intended to gauge a participants' understanding of 20 basic aspects governing the technical design of building envelopes and identify the topics that would need to be further expanded in following seminars.



Opening Slide of the Seminar.

## Learning objectives:

1. Understanding facade functions.
2. Ability to verify correctness of facade drawings.
3. Recognition of impact of building enclosures on energy expenditure - on basis of LEED system.
4. Familiarity with principles governing building enclosure design.
5. Practical application of facade principles.
6. Recognition of importance and prioritizing of facade functions.

## GENERAL DESCRIPTION:

The lectures focus on areas typically overlooked by architects and engineers in process of building envelope design. The topics are chosen on basis of observations derived from both forensic investigations of failed assemblies and peer reviews of architectural documentation.

The lectures are continually developed and updated as the author remains active in the field and adds new stories or replace the old ones in constant pursuit to better clarify the subject. Each lecture is intended as a discussion as opposed to a monologue. Participants are encouraged to ask questions and explore their respective areas of interest even at the risk of a lecture wandering off the main topic.

## ABOUT THE AUTHOR:

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## Following topics are included:

- Classification of Façade Functions,
- Definitions,
- Environmental Protection,
- Ergonomics,
- Access Provisions,
- Feasibility,
- General Explanation of Façade Design Principles,
- Structural Resistance,
- Waterproofing,
- Condensation Control,
- Snow and Icing,
- Thermal Insulation,
- Shading,
- Durability,
- Wildlife Proofing,
- Flood Proofing,
- Noise Mitigation,
- Security,
- Dirt Build-up Prevention,
- Fire and Smoke Proofing,
- Economy,
- Hints on Choosing Your Team,
- Sources of Information.