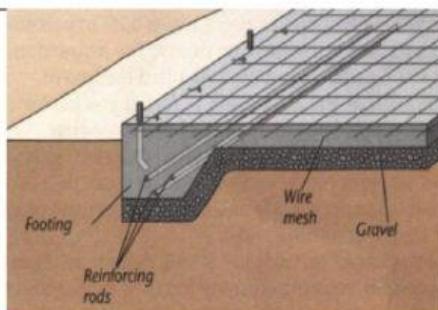


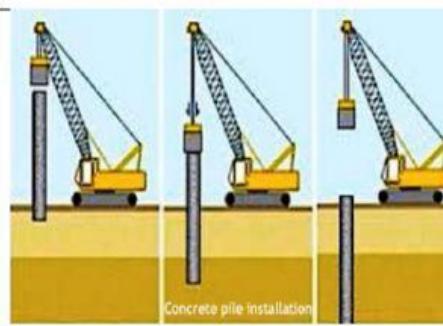
Architects must understand the physical limitations of their medium. Without an understanding of **construction**, architects cannot understand a building's possibilities and limitations. There are several features that all buildings have in common. Among them are **foundations**, **roofs**, **walls**, and **openings**.

Every building begins with a solid foundation. Most buildings have either a **slab-on-grade** or **pile-driven foundation**. From here, the structure of the building begins to take shape. There are two main types of building structure. In **solid construction**, the walls **support** the building. In **framework construction**, a light **framework** holds the building together. This framework may be made of wood, metal, or even concrete.

Architects must know the difference between different types of walls. **Load-bearing walls** are integral to the structures of the building. Architects must plan in advance for openings like doors and windows. Non-load-bearing walls provide much greater design flexibility. **Curtain walls** are exterior non-load bearing walls. Curtain walls allow an immense range of creative freedom.



Slab-on-grade foundation



pile-driven foundations

It's very important for the architects to know and understand the elements of construction. Every single building has something in common. Each has **foundations** (основи), **walls**(стени) , **roofs**(покриви), **beams**(греби), **openings**(отвори за врати)

Solid construction(масивното строителство) can use **slab-on-grade foundation** (плочи) or **pile-driven foundations** (пилотна основа)

Framework construction (немасивно строителство)relies on a light **framework** (рамка) .

Architects must make a difference between a **load-bearing wall** (носеща стена) and **curtain walls**(интериорни стени), also known as non-load bearing walls

## HOME HOW-TO

### Load-bearing Wall

A load-bearing wall gives a building structural integrity. It carries and distributes weight from the roof and top floors down to the foundation. The safest way to identify one is to hire a professional structural engineer.



Source: www.homeimprovementtips4paper.com/

Creators.com/Bob Kael

## Ex.1

Match the words and phrases with the definitions (A-I).

foundation solid construction framework construction construction roof structure opening framework support

**A** to bear weight or prevent something from collapsing

**B** the base of a building that touches the ground

**C** a skeleton-like internal structural system

**D** a basic system that holds something together

**E** a building process in which the walls support weight

**F** the external protective structure at the top of a building

**G** a building process in which a skeleton-like structure supports weight

**H** the process of assembling a building

**I** an empty space that people or things can move through

## Ex2

Read the sentence pairs. Choose which phrase best fits each blank.

slab-on-grade pile-driven foundation

**1 A)** A  is built into the ground.

**B)** A  is built on top of the ground.

load-bearing wall curtain wall

**2 A)** If you remove a , the building will fall down.

**B)** Removing a  does not damage the building's structure.

### Ex.3 Listening

 Listen to a conversation between an architect and a contractor. Mark the following statements as *True* or *False*.

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- 1 The woman made an error on a building plan.
- 2 The woman believes that a load-bearing wall will not be strong enough.
- 3 The man will check with the structural engineer about the changes.

**True**  **False**

**True**  **False**

**True**  **False**

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