Masonry

- Baker House at MIT
Masonry

- Masonry materials
  - Stone
  - Clay
  - Calcium silicate
  - Cement

Precast lightweight concrete blocks in Storer Residence (*Textile block* house), Hollywood (F.L. Wright, 1923)

Fired clay bricks in Sarabhai house, India (Le Corbusier, 1955)

Photographs removed due to copyright restrictions.
- Masonry components
  - Bed joint and perpend
  - Stretcher and header
  - Course
  - Bond and bonding dimension

Photos of Masonry components have been removed due to copyright restrictions.

Monadnock Building, Chicago (Burnham and Root, 1984-91)

Images by MIT OCW.
Masonry bonds

- Dimensional coordination
- Offsetting of perpends on successive courses
- Priority to stretcher courses
- ...
Masonry bonds

- Stretcher bond
- Header bond
- English bond
- English cross-bond

Image by MIT OCW.
Masonry bonds

- Flemish bond
- Monk bond
- Dutch bond
Masonry structure

- Double-leaf walls
- Appearance
- Ornamentation

Images by MIT OCW.
Masonry structure

- Openings

Images by MIT OCW.
Masonry

- Masonry structure
  - Thermal insulation
  - Rationalization with prefabrication
Masonry

- Main reference for lecture contents:
  - “Constructing Architecture” by Deplazes: pp. 23-55

- Additional readings relevant to lecture topics:
  - "How Buildings Work" by Allen: Chap. 18
  - "Fundamentals of Building Construction" by Allen: Chap. ...
  - "Building Construction Illustrated" by Ching & Adams: Chap ...