Classification of Slabs
- 1-way slabs
- 2-way slabs

Types of 2-way Slab Systems
- Flat plate
- Flat slab
- Waffle slab (Stratton Student Center, MIT)
- Two-way slabs with two-way beams (conventional framing)
- Two-way slabs with band beams

Characteristics of Selected Systems

➢ Flat Plate System
  a) 15 to 20 foot spans
  b) light gravity loads (e.g. apartment buildings)
  c) economical due to low-cost formwork

➢ Flat Slab System
  a) 20 to 30 foot spans
  b) higher gravity loads than flat plates (e.g. office buildings)
  c) use of drop panels to reduce shear stresses (both direct and moment induced) at column

➢ Waffle Slab System
  a) 20 to 35 foot spans
  b) high gravity loads (e.g. industrial buildings)
  c) high stiffness and small deflections
  d) expensive due to high-cost formwork

* band beams are wide and shallow so as to permit passage of services