Factors common to collapses

- Building is unoccupied
- Roof failures and water intrusion
- The building is under construction
- Failure to recognize or inability to deal with warning signs

What actually causes collapses

- Wall or building collapses
  - Roof deterioration and subsequent water intrusion
  - Support settlement and subsequent overload
  - Deterioration of bedding mortar
  - Lateral loading (seismic or wind)
  - Serious overload
  - Structural movement
  - Construction
How we prevent collapse

Keep the water out of the building
Occupy the building or mothball it
Don’t overload the building
Watch for irregularities in the structural walls, particularly brick masonry walls
Keep the walls tied to the floor diaphragms... pattress plates and tie rods
Do the cyclical maintenance: inspection and repair
Look for the irregularities in the planes of the building
Understand the risks of making multiple changes to the structure
Be exceptionally careful during construction