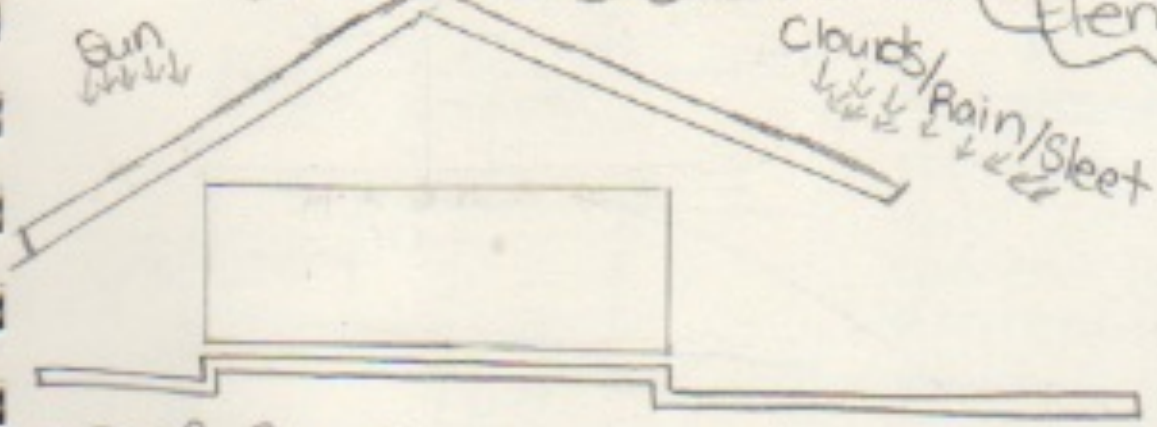


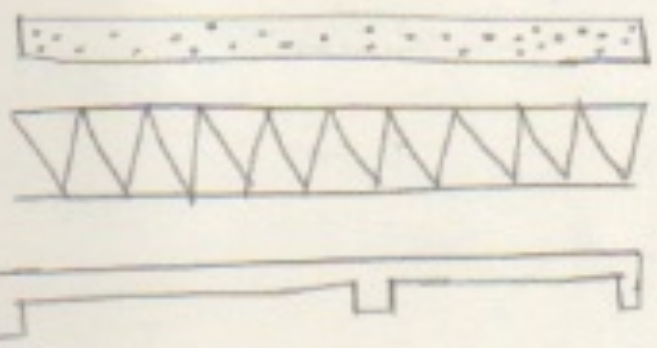
Structure/Envelope: Roof + Spanning Elements



- roof functions control moisture vapor infiltration of air and the flow of heat and solar radiation.

* Roof structure and assembly has to reduce the spread of fire. (Depending on Building code) *

- Form and slope is key for a roof. many types of roofing shingles, tiles or continuous membrane, drains, gutters and downspouts.



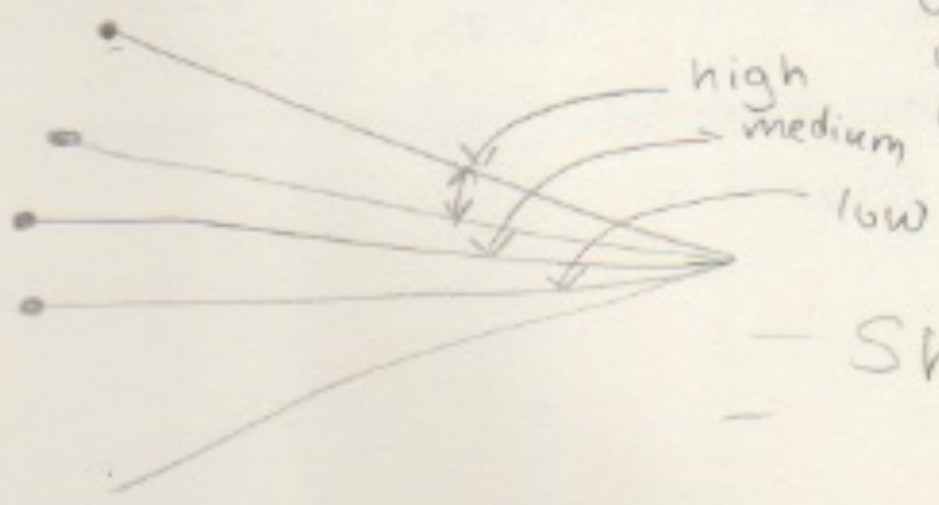
Flat Roofs

- require continuous membrane
- covers building of any horizontal
- Reinforced concrete Slabs

- Timber or steel beams and decking
- wood or steel joists and sheathing

sloping roof

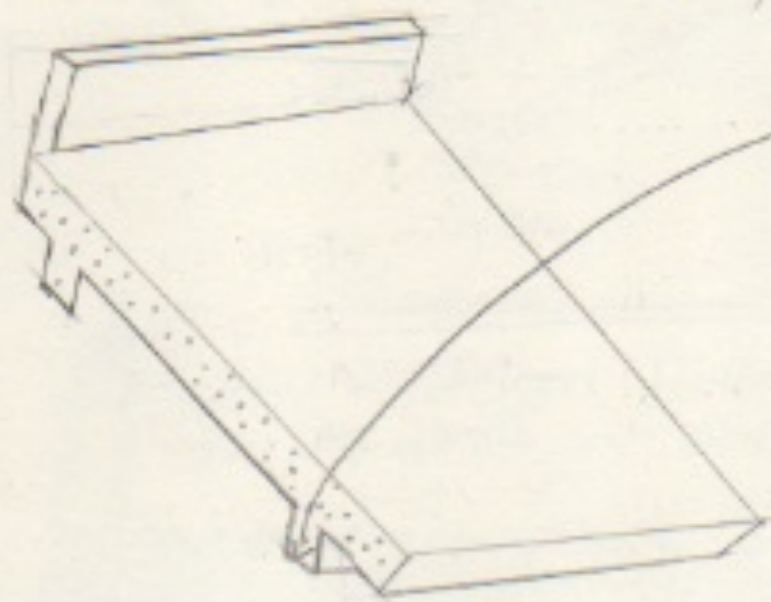
↳ The roof slope affects the type of material that can be use



Slope

- Shred rain Water easier.

Roof Slabs supported by supported reinforced concrete columns, frames and bearing walls



concrete or masonry

precast concrete roof

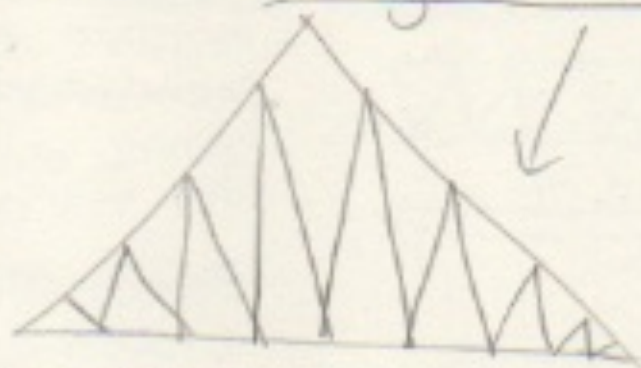
↳ weld

- Synthetic rubber

- pre cast structural tee

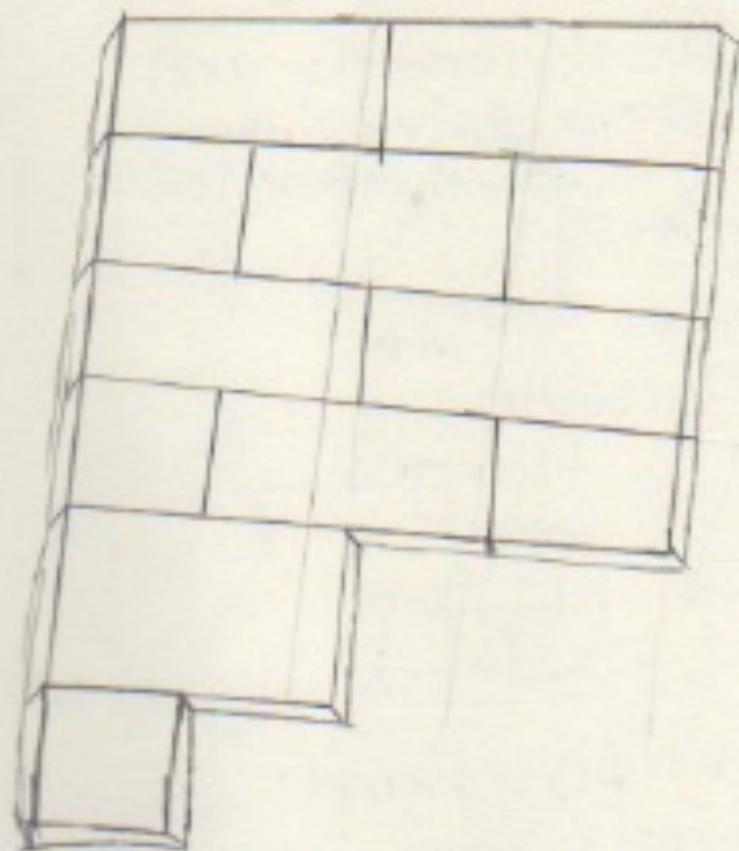
bearing part

Steel trusses are made by welding or bolting structural angles and tees forms a triangle framework



Flat trusses have parallel top and bottom chords not as efficient as pitched or bowstring truss.

Rigid Frames - Has resistance towards lateral forces in their planes.



Cementitious
 roof planks
 with portland
 cement light weight
 aggregate an
 aerating compound,
 and galvanized welded
 wire fabric reinforcement
 *might consist of wood
 fibers*

Truss - Δ - structural
 |
 steel
 wood
 Support

Envelop
 |
 -enclosures
 Protect Shelter

