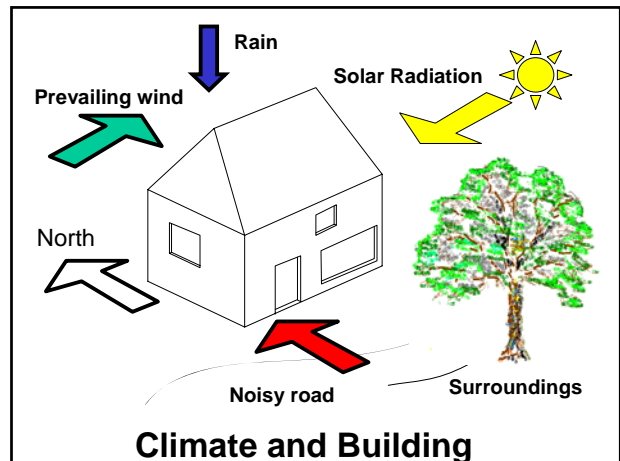


Building Environment 1

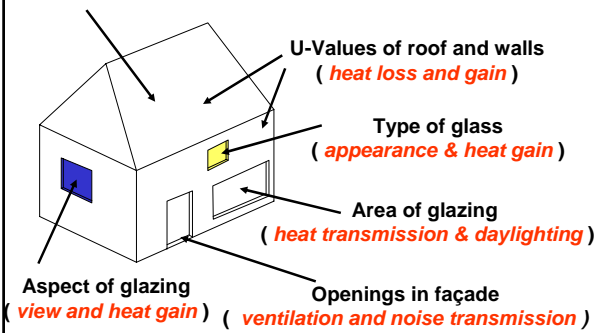
Passive design The building itself acts to modify the external climate in order to provide comfortable conditions within a building.

Basic theory

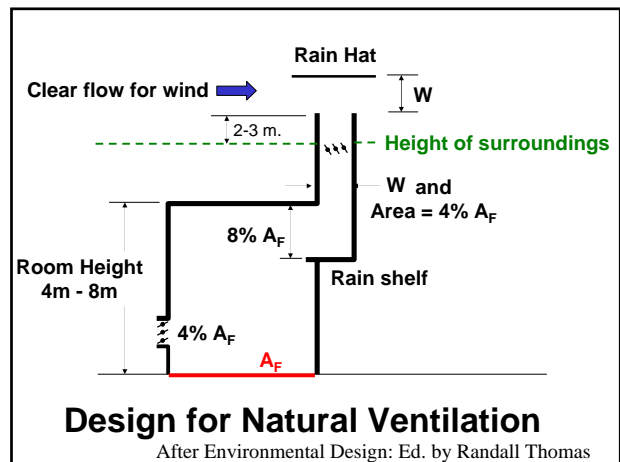
- Climate
- Comfort
- Sunlight
- Heat gain
- Heat loss
- Daylight
- Acoustics



Lightweight or heavyweight structure (*thermal capacity*)



Building form and construction





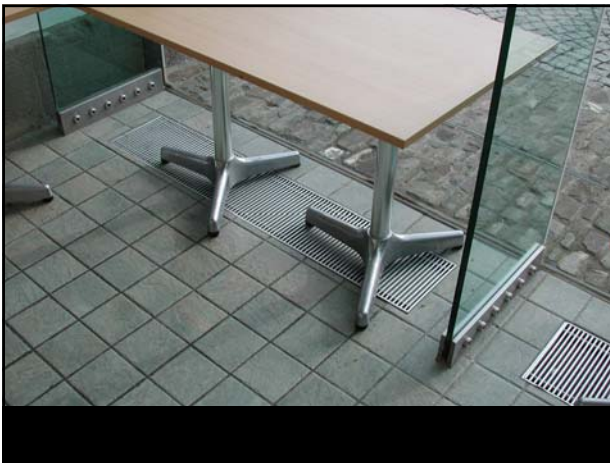
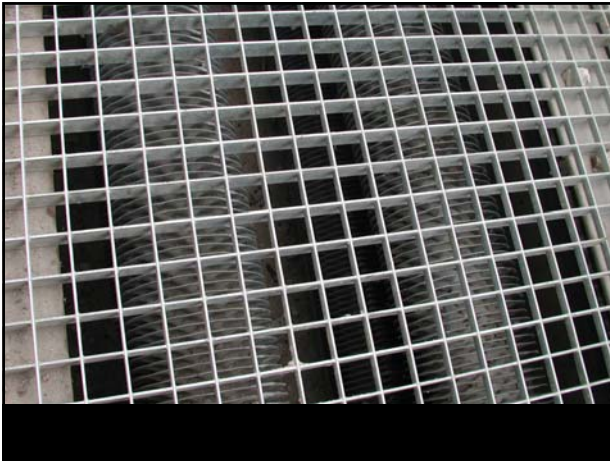


Building Environment 2 - AR20004

Active systems in buildings are used to provide the 4 **A**'s

- A**menity - Health, safe movement
- A**ctivity - Efficiently and effectively undertake tasks
- A**ffective - Create comfort and well being
- A**ltruistic - Be kind to the environment and other species





Building Services

1. Gas
2. Electricity
3. Water supply
4. Rainwater, Waste & Foul water drainage
5. Heating, Mechanical ventilation, Air conditioning
6. Electric lighting
7. Electronic sound systems
8. Telephones, Data communications
9. Lifts, escalators, paternosters
10. Fire safety systems, alarms, sprinklers
11. Security systems, surveillance
12. Building Energy Management systems

