



01

MATERIALS

BUILDINGS ARE MADE OF MATERIALS THAT ARE:



- **STRONG**

to last



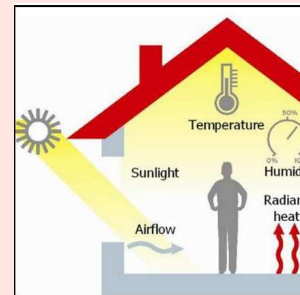
- **SAFE**

to protect people



- **AVAILABLE**

found nearby



- **COMFORTABLE**

for the weather

CLIMATE CHANGES EVERYTHING!

IN HOT AND DRY PLACES:



- Better to use thick walls made of mud brick or clay
- These materials keep the inside cool.

IN TROPICAL/RAINY PLACES:



- Recommended to use bamboo, palm leaves, or light wood
- Roofs are steep so rain slides off quickly



- Traditional houses in Yazd, Iran use mud bricks and wind towers



- Thatched houses in Southeast Asia use palm or grass roofs

SUSTAINABLE BUILDINGS (GREEN BUILDINGS)

These are buildings designed to be good for the environment and save resources like water, energy, and materials.



What's special about them?

- Use **solar panels** to get power from the sun
- Made from **recycled** or **natural materials** (like bamboo or wood)
- Have **green roofs** (plants growing on rooftops!)
- Use **rainwater** collection to water plants or flush toilets
- Designed to stay **warm** or **cool** without needing too much electricity





The Edge



Amsterdam



one of the greenest
office buildings in
the world





Bosco Verticale



Italy



one of the greenest
office buildings in
the world

SMART BUILDINGS

These buildings use technology and Artificial
Intelligence to make life easier, safer, and more
energy efficient.



What's special about them?

- **Automatic lights** that turn off when no one is in the room
- Smart **thermostats** that change the temperature based on weather or time of day
- **Sensors** that check air quality, light levels, or motion
- **Security cameras** and alarms that are connected to phones
- Can be controlled with apps or voice commands

