

OKOPIDO UBONGABASI INI

18/ENGG3/045

CIVIL ENGINEERING

CVF 307

MATERIALS	USES	PROPERTIES
1 Brick	Used for constructing buildings and other engineering works where strength & durability are required. Used as an alternative for stones in civil engineering. Forms portrait of a building.	<ul style="list-style-type: none">They vary in sizes and shapesAbsorbs moisture.Relatively hard and strong.
2 wood	Used in construction of door frames, window frames, doors. Can also be used in building construction. They can also be used for casting and pouring. Also for timbering and shutting during foundationing.	<ul style="list-style-type: none">ShrinkageThey vary in texture and colorIt is a natural material gotten from trees.
3 Glass	They are used as transparent glazing material for decoration. They offer protection and security as well as resistance to thermal shock. Used in building envelope, as well as windows and screen walls.	<ul style="list-style-type: none">Usually transparentHeat and sound insulatorsGood resistors of thermal shockIt is 100% recyclable.
4 Stones	Mainly used as aggregate for making concrete. They can be used for decoration of buildings. Used for fencing, flooring, roofing, pavement, decoration, etc. Used in road making and interior decoration.	<ul style="list-style-type: none">Good absorbers of heat and moisture. They vary in texture and structure.Have high strength and are relatively hard.
5 Masonry	It is used for construction of buildings (just like the bricks) with mortar as a bonding material. They include stones, blocks, bricks, used for building.	<ul style="list-style-type: none">Structural strength. They are durable and resistant to heat and moist.They are flexible.

6. Steel	Steel is used in construction of industrial structures, high rise buildings. Used as building reinforcements in some cases.	It has a very high strength and is very durable. Can be hammered into shapes (ductility) and is weldable.
7. Cement	Used for binding materials in construction. Used for preparation of foundations, water-tight floors. Used as an aggregate in the making of concrete and mortar. It is basically used in all construction works in civil engineering.	Very good binding agent. Stronger when mixed with sand and other aggregate. It is workable and is resistant to moisture.
8. Metal	Used to bind together bricks, blocks or masonry during construction work. Used for flooring and plastering. Used to improve general appearance of a building. Used for strengthening and filling holes in walls.	It is a mixture of cement, sand and water. It is smooth unlike concrete. Has adhesive properties. It is highly durable.
9. Concrete	Most widely used material for building construction due to its sustainability. Used in plastering and paving of roads and fences. They are used for road finishing and flooring. Concrete is used where strength and durability is required.	Highly durable and strong. Has a very workability rate along side resistance to moisture. It is free from corrosion. Hardens with time.
10. Plastic	Used in the manufacturing of furniture. Used in waterproofing and wall coating. Used in wiring electrical appliances as they don't conduct heat. Used for decoration.	Durable. They can be hammered into shapes. Good resistors of heat and electricity.