

**S/n CIVIL  
ENGINEERING  
MATERIAL**

**USES**

**PROPERTIES**

1	Timber	This is used in the framework design and also been used as a design element interior and exterior	Resist compression, workable and visually appealing, the property of wood depends really on the type of wood
2	Glass	Glass is used as Interior design in furniture element like mirrors, balustrades, tables, partitions, etc. they are also used as insulators and are found in windows and doors	Glass have various properties namely weather resistance, insulation, transparency etc.
3	Cement	A cement is a binder, a substance used for construction that sets, hardens, and adheres to other materials to bind them together.	Cement has both physical and chemical properties namely Soundness, consistency, Strength
4	Steel	Steel is environment-friendly & sustainable. It possesses great durability. Mild steel is used for building construction. It is also a highly favored building frame material.	These are some of the properties of steel high strength, low weight, durability, ductility and corrosive resistance.
5	Asphalt	The primary use (70%) of asphalt is in road construction, where it is used as the glue or binder mixed with aggregate particles to create asphalt concrete.	Asphalt has the following properties namely stability, durability,
6	Concrete	Concrete is used to withstand compressive forces in a structure and allow loads to be placed or moved around	Concrete has relatively high compressive strength (it doesn't crack underweight), but significantly lower tensile strength (it cracks when being pulled).
7	Bricks	A brick is a type of block used to build walls, pavements and other elements in masonry construction.	These properties of bricks include shape, size, color, and density of a brick.
8	Bamboo	Bamboo as a building material has high compressive strength and low weight has been one of the most used building material as support for concrete, especially in those locations where it is found in abundance.	Bamboo is an anisotropic material, that is to say that the properties in the longitudinal direction are completely different than those in the transverse direction. The longitudinal direction is made from bamboo cellulose fibers which are strong and stiff.
9	Clay	Many natural building techniques use clay as a primary material. Adobe, cob, cordwood, and rammed earth structures all use clay as well as building elements such as wattle and daub, clay plaster, clay render, clay floors and clay paints and ceramic building materials.	Clay Properties. Minerals in clay particles strongly attract water, causing particles to expand and contract in response to wet and dry conditions and temperature changes. When particles become hydrated in wet conditions, they can double in size.
10	Plastics	Uses of Plastics in Building Construction Plastics are manufactured in different forms such as molding pipes, sheets and films. They are formed or expanded to produce materials of low density. Dissolved in solvents or dispersed as emulsions, they are used in paints, varnishes and adhesives.	Plastic has various properties namely fire resistance, ductility, stability, electric insulation, dimensional stability etc.