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18/ENCO3/047

## CIVIL ENGINEERING

### Question

Highlight ten Civil Engineering materials, their uses and properties (in a tabular form)

Materials	Uses	Properties
1 Concrete	Widely used building material in the world, for the construction of buildings, bridges, roads etc.	<ul style="list-style-type: none"><li>• Durability</li><li>• Porosity</li><li>• Density</li><li>• Fire resistance</li></ul>
2 Wood	Production of wooden chairs and other decorative figures. Fencing and decoration	<ul style="list-style-type: none"><li>• Thermal conductivity</li><li>• macro-structure</li><li>• moisture</li><li>• Cracking</li></ul>
3 Steel	Reinforcements, decoration.	<ul style="list-style-type: none"><li>• Strength</li><li>• Ductility</li><li>• weldability</li></ul>
4 Plastic	Widely used and recycled in structural engineering for many purposes	<ul style="list-style-type: none"><li>• resistant to shock</li><li>• Electric/thermal insulator</li></ul>
5 Stone	Construction, manufacture of other submaterials	<ul style="list-style-type: none"><li>• Structure</li><li>• strength</li><li>• hardness</li></ul>
6 Textiles	Manufacture of load-bearing chairs, inflatable spales, fabric casting	<ul style="list-style-type: none"><li>• Flexibility</li><li>• softness</li><li>• dyeability</li></ul>
7 Glass	facade element in contemporary structural engineering	<ul style="list-style-type: none"><li>• Transparency</li><li>• Heat resistance</li><li>• Breakage resistance</li></ul>



8	Brick	Building Construction, Aesthetic designs	<ul style="list-style-type: none"> <li>- Shape</li> <li>- Water absorption</li> <li>- Compressive strength</li> </ul>
9	Bamboo	Building Construction, Support.	<ul style="list-style-type: none"> <li>• Flexible</li> <li>• Strong</li> </ul>
10	Earth	Under-floor/roof insulation, attracti- -ve internal finish	<ul style="list-style-type: none"> <li>• Granular matter</li> <li>• Completely inert</li> </ul>