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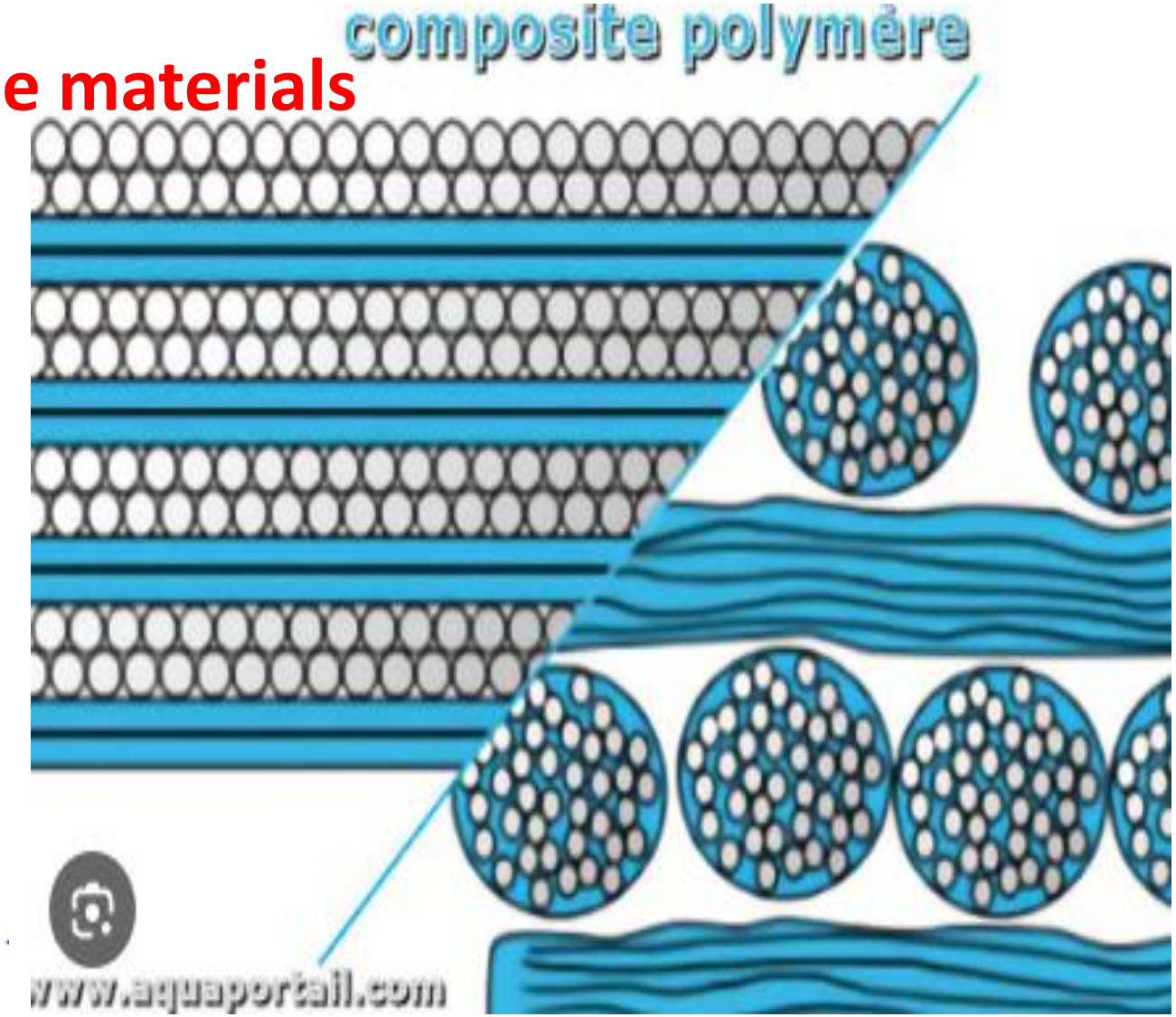
Durable materials

Summary



Durable materials

Durable materials are materials designed, extracted, processed, and used in a way that minimizes their impact on the environment throughout their lifecycle. These materials are often chosen for their low ecological footprint and their ability to promote long-term sustainability. Here are some examples of durable materials:

- FSC-certified Wood: Wood sourced from sustainably managed forests and certified by the Forest Stewardship Council (FSC) ensures responsible forest resource management.
- Recycled Concrete: Concrete made from recycled aggregates from construction and demolition waste reduces the demand for new materials and helps reduce waste.

Durable materials

- Fired Clay Bricks: Bricks made from natural materials and fired at high temperatures are durable, resistant, and recyclable.
- Recycled Steel: Steel recycled from scrap retains the properties of the original material while reducing the demand for virgin iron ore.
- Recycled Glass: Recycled glass used in the production of glass products reduces the amount of waste sent to landfills and saves energy compared to producing glass from virgin raw materials.
- Plant-based Composite Materials: Composite materials made from natural fibers such as flax, hemp, or bamboo and biodegradable resins offer a sustainable alternative to traditional plastics.

Durable materials

- Ecological Insulation: Ecological insulation materials, such as sheep's wool, recycled cellulose, expanded cork, or hemp, provide effective thermal insulation while being environmentally friendly.

By using durable materials in construction and manufacturing, it is possible to reduce the ecological footprint of buildings and products, thereby contributing to the preservation of natural resources and the fight against climate change.

Durable materials

1- New Materials (Biobased, etc.): New sustainable materials encompass a variety of substances derived from renewable or recycled sources. Among these are:

- **Biobased:**

  These materials are derived from natural resources such as plants, algae, or fungi. For example, bamboo is used in furniture and flooring manufacturing due to its rapid growth and durability.

- **Recycled:**

  Recycled materials are obtained from waste recovery and processing, such as recycled plastic, recycled glass, or recycled steel. These materials reduce reliance on virgin resources and contribute to waste reduction.

Durable materials

2- Traditional Materials:

Traditional materials can also be sustainable, especially if extracted, manufactured, and used responsibly. Some examples include:

- **Certified Wood:** Wood from sustainably managed forests is a renewable resource that can be used in construction and furniture manufacturing.
- **Natural Stone:** Natural stone like granite or marble can be responsibly extracted and used in construction for its durability and aesthetic appeal.
- **Terracotta:** Terracotta bricks and tiles are durable materials often used in construction for their longevity and ability to regulate temperature.
- **Clay:** Clay is an abundant natural material used in the manufacturing of ceramics and building materials like bricks or tiles.

The use of these new materials and the adoption of sustainable manufacturing and construction practices contribute to reducing the environmental footprint of projects while promoting long-term sustainability.