

Plastic Architecture

BRICK-TYPE ARCHITECTURAL COMPONENT MADE FROM UPCYCLED RECYCLED HDPE WITH ENVIRONMENTAL FUNCTIONS

KEY WORDS

UPCYCLING,
HDPE,
SUSTAINABLE
ARCHITECTURE

DESCRIPTION

Brick-type architectural component manufactured from upcycled recycled HDPE, aimed at construction applications with added environmental value. Through experimental design and manufacturing processes, the component integrates functions such as ventilation, acoustic absorption, or environmental interaction, promoting the use of plastic waste as a construction resource and fostering circular economy models in architecture.

POTENTIAL BENEFITS OR IMPACTS

Valorization of plastic waste;
Reduction of environmental footprint in construction;
Development of new sustainable building systems

TECHNOLOGY MATURITY LEVEL (TRL)

TRL 4: laboratory validation

AREA OF APPLICATION

Plastics
Construction
Architecture

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