Table S4. Comparison of conventional materials and their equivalent bio-based alternatives that can potentially replace them.

Conventional Material	Equivalent Bio-Material	Serial No.
Aluminium profiles, timber beams	• Natural fibre-reinforced epoxy composites – sisal and cotton, • Fiber pultruded profiles, • Densified Aligned Bamboo Fibre Composite, • Rattan- and date palm fibre-reinforced polyester resin composite, • Natural fiber-reinforced epoxy composite (NFC), • Water Lily Fibre-reinforced • polyester composite, • Multi-layer Geopolymer • Composites, • Hybrid jute and basalt fibre-reinforced polimer, • Hybrid timber-cardboard sandwich beams (TCS)	29, 30, 32, 37, 39, 46, 47, 48, 50
Fiberboard	• Pine Wood-based particleboard, • Bio-based particleboard, • Bio-composite particleboards	10, 17, 22, 27
Screed concrete	• Lightweight self-compacting concrete, • Plaster composites enhanced with paddy husk, • Natural fiber-reinforced epoxy composite (NFC)	5, 11, 39
Bricks, soft concrete	• Polypropylene-based composite with modified natural fillers, • Limestone-based composites • with oat husks as bio-aggregates, • Compressed Earth Block , • Fibre-reinforced cob materials, • Hybrid timber-cardboard sandwich columns (TCS)	15, 18, 28, 45, 49
Mortar	• Glass foam, • Natural lime-cork mortar, • Metakaolin lime mortar reinforced with Spanish broom fibres	13, 19, 42
Plaster, tiles, interior finishing materials	• SLP-reinforced unsaturated polyester composite, • Natural fibre-reinforced • Composite, • Plaster composites enhanced with paddy husk, • PLA-linoleum composite, • Lignocellulosic fibre composite, • Natural fiber-reinforced epoxy composite (NFC), • Natural fibre-reinforced	7, 9, 11, 12, 24, 39, 40, 41

	• Composite, • Hemp-fibre reinforced gypsum composite	
Tiles, decking, outdoor finishing floor and wall material	• Consolidated Cork Planks	21
Mineral wool, expanded polistyren (EPS)	• Bio-based open-cell spray • polyurethane foams, • Natural fibre-reinforced • composite, • Biobased aerogel, • Natural fibre-reinforced • insulating materials, • Rice husk fibre insulation • panels, • Insulation panels, • Cork–polyurethane-based foams, • Straw-based thermal insulation material, • Insulative fibre foam, • Rice husk-based thermal insula-tion panels, • Natural fibre-reinforced epoxy composites – wool, • Bio-composite sheep wool and soy protein isolate, • Natural fibre-reinforced epoxy composites – coir, • Fruit stone-based composite panels, • Insulation Panels, • Hemp-fibre reinforced gypsum composite, • Earth-straw composite panels, • Hemp-Silica Xerogel Nanocomposite	1, 3, 4, 6, 8, 14, 20, 23, 25, 26, 31, 33, 34, 35, 36, 39, 41, 43, 44
Tiles, interior ceiling finishing layer	• Bio-epoxy resins and wood composites, • Rice Husk Fibres and Recycled • Polyethylene composite, • Rattan- and date palm fi-bre-reinforced polyester resin composite, • Natural fibre-reinforced composite	2, 16, 37, 38
Extruded polystyrene (XPS)	• Bio-based open-cell spray • polyurethane foams, • Natural fibre-reinforced composite	1, 38
PUR foam, PIR foam	• Bio-based open-cell spray • polyurethane foams, • Biobased aerogel, • Cork–polyurethane-based foams, • Insulative fibre foam, • Rice husk-based thermal insula-tion panels	1, 14, 20, 25, 26
Aggregate (sand or gravel)	• Glass Foam	13