



Aluminium is a soft, durable, lightweight, malleable metal with appearance ranging from silvery to gray, depending on the surface roughness. Aluminium is nonmagnetic and nonsparking. Aluminium has about one-third the density and stiffness of steel. It is ductile, and easily machined, cast, and extruded.

Corrosion resistance is excellent due to a thin surface layer of aluminium oxide that forms when the metal is exposed to air, effectively preventing further oxidation. Aluminum slats can be anodized to produce colour variations. In the case of using donation or remembrance slats in the Soheil Mosun Limited Riverbench, bronze, silver and gold colours can be produced dependent upon the donation level requested.

Douglas-fir is the common name applied to coniferous trees of the genus *Pseudotsuga* in the family Pinaceae. There are five species, two in western North America, one in Mexico and two in eastern Asia. Douglas-fir wood is used for structural applications that are required to withstand high loads. It is used extensively in the construction industry.

Teak, is a genus of tropical hardwood trees in the family Verbenaceae, native to the south and southeast of Asia, and is commonly found as a component of monsoon forest vegetation. They are large trees, growing to 30-40 m tall, deciduous in the dry season. The timber is used in the manufacture of outdoor furniture, boat decks, and other articles where weather resistance is desired. It is also used for indoor flooring and as a veneer for indoor furnishings. Teak is easily worked and has natural oils that make it suitable for use in exposed locations, where it is durable even when not treated with oil or varnish. Teak cut from old trees grown slowly in natural forests is more durable and harder; teak from young trees grown in plantations is more prone to splitting and water damage, however kiln drying allows for sustainable, plantation-grown teak to perform nearly on par with old-growth teak.

Bamboo, when treated, forms a very hard wood which is both lightweight and exceptionally durable, with an excellent tensile strength (~15,000 psi, ~100 MPa[12]). In warmer climates it is used in elements of house construction, construction scaffolding, as a substitute for steel reinforcing rods in concrete construction. It is durable and strong as well as aesthetically pleasing.

Ipe trees are important as timber trees. The wood is used for furniture, decking, and other outdoor uses. It has a fire rating of A1 (the highest possible, the same as concrete), and is denser than water (it sinks). It is increasingly popular as a decking material due to its insect resistance and durability. By 2007, FSC-certified ipe wood had become readily available on the market.

White oak is relatively rot resistant. It was a signature wood used in mission oak furniture by Gustav Stickley in the Craftsman style in the Arts and Crafts movement. White Oaks have cellular structures called tyloses. Tyloses give the wood a closed cellular structure, which does not allow water to pass. Tyloses are cell ingrowths of living wood parenchyma into the cavities of xylem conducting cells. The white oaks, with tyloses, are used in making wine and whiskey barrels as well as outdoor furniture.

Plastic is also available for the Soheil Mosun Limited Riverbench. 100% recyclable material is used. This plastic is high density long life that can be custom coloured. It also comes in a variety of 8 standard colours. With a tensile strength of (PSI): ASTM D638 4500, Screw holding strength of (lbs): ASTM D1761 787 and Izod impact strength of (ft-lbs/in²): ASTM D256 3.6 and a relatively light weight, this is an environmentally good choice. With super high strength and durability, the use of recyclable high density plastics will ensure that the Riverbench has a very long life while retaining good aesthetic quality.

For standard colour selections, see next page.

