



Ekki (*Lophira alata*)

Also known as Azobe, Bongossi and Red Ironwood Ekki is native to tropical West Africa with large quantities being exported from Gabon and Cameroon.

Description: The sapwood is pale pink and sharply defined from the heartwood, which is red brown to dark brown containing small white deposits in the pores. The grain is usually interlocked producing a coarse texture. The timber has a high breaking strength and can withstand tremendous pressures. Due to its great strength and durability Ekki is ideally suited for use in marine constructions exposed to wind and weather i.e. Lock Gates, Fenders, Piers, Bridges, Railway Sleepers and Bridge Decks, It has a high electrical resistance and is perhaps the most acid resistant commercial timber available. The tree can grow to a height of 40 - 50 metres with a maximum diameter of 1.8 - 2.0 metres. The trunks are usually free of branches up to 25 - 30 metres, which makes it an ideal timber for producing long lengths of large sections, Net weight (kg/m³)-1100-1300

Durability - **very resistant to decay and marine borers. Class 1 Very durable.**
Working Qualities - difficult with hand tools but takes a good machine finish. Nailing and screwing - drilling beforehand is necessary. Treatment - a very dense timber and extremely difficult to impregnate with liquids, not regarded as a timber that requires treatment. Strength - suitable for grading to HS - Strength Class D60. Certification.

Timber Application:

Ekki & Opepe Used In Lock Gates Bridges and Walkways.



Please note: 'Bridges designed and manufactured by CTS Ltd, Huddersfield. Ekki is the ideal hardwood for building bridges because of its superior strength and natural durability, also much less wood is required than alternative timbers, which in turn means that by using Ekki reduces the pressure on the forests of the world As an active conservation measure imposed by the Governments of exporting countries Ekki trees are selectively logged and only the logging of mature, large diameter trees is permitted. Small diameter Ekki trees have no commercial value, therefore many more trees will grow to maturity and sustain the species. More trees remain in the forest than are removed. Some bridges are manufactured in kit form from Ekki timber, these are ideal for spanning small streams and gullies in the open countryside. When in contact with the earth Ekki hardwood can last for over 25 years The beauty of Ekki hardwood is that it requires no preservative treatment and is therefore environmentally friendly, and at the end of its life does not cause a disposal problem because of any outside treatment. Ekki is also ideal for the building of forest walkways and pedestrian footbridges, this is because of its long service life and extremely slow natural decay, with immunity to many types Railway Bridge Crossing Ekki timber is so versatile in the construction industry, here are some examples of it being used for spanning the full length of a railway bridge in sections of up to eight metres in length. The timber should remain maintenance free for up to 25 years and beyond. No chemical wood preservatives Of increasing concern are the long term effects of chemical wood preservatives like (creosote, ACA, ACC, Etc.) on the environment and public health. With ever increasing laws this can lead to civil actions for pollution to the environment. Ekki hardwood does not need preservatives and is therefore benign to the local environment, the workforce and the general public. Ekki hardwood grain is interlocked and irregular, it has a course and uneven texture, this in turn gives Ekki a high bending tensile strength and stiffness, with a high resistance to shock and crushing. The timber is used when great strength is required, combined with the need for heavy wear. Marine and Lock Gates Meerdink have for many years manufactured timber Lock Gates and lock gate sections at their Mill in Holland. Ekki and Opepe have been the timbers used for this work as both are quality timbers and have a superior grade and life span. The products have a high breaking strength and can withstand tremendous pressures and are stronger than

Oak. The Lock Gates pictured are in Ekki and were manufactured and installed by Rochdale Canal Workshop for the Drifffield and Pocklington canals. Ekki and Opepe are qualified timbers which are maintenance free and aesthetically and environmentally pleasing. In spite of their hardness these timbers can be machined to a fine accurate finish so essential to Lock Gate manufacture. The greater use of waterways and the increase in Marinas has proved another outlet for Ekki and Opepe for stagings and pontoons. The qualities of these timbers make them very suitable when both in & out of water.