

engineering in natural hardwood

INFORMATION SHEET BRIDGE MAINTENANCE

SHS designs, supplies and installs bridges and structures, which are either constructed totally in hardwood or in a composite of steel and hardwood. Although hardwood requires little maintenance, we do recommend that the following actions should be carried out within 12 months of installation and at less frequent intervals there-after, as part of a normal inspection programme.

FIXINGS

All bolted connections should be checked for tightness in order to take up any slack developed, due to the natural shrinkage of the timber sections during the stabilising seasoning process (hardwood structures are constructed in the 'green' state). This may be most effective if carried out after a period of dry weather. Dowel connections require no maintenance.



TIMBER QUALITY

Some movement or distortion should be anticipated as a natural feature of hardwood timber. Early shrinkage and movement of timber parts should be complete within 12-18 months of the structures life and an inspection at this stage will identify any components that may require attention. Generally this should be restricted to small section size members. It is normally possible to rework affected components in situ.

APPEARANCE

It is recognised that no preservative or oil treatment is either effective or necessary for the majority of hardwoods, given their natural durability and high density. All will eventually weather to a silver grey over a period of months and which is common to all hardwoods. If required, stain treatments or micro porous paint systems can be applied to hardwoods when new and at the discretion of the owner but they will require regular re-application, if the appearance is to be maintained.

WALKWAY

The walkway decking will generally be supplied with machined grooves or smooth profile in the top surface and laid with gaps between boards to allow free drainage. Decking may also include anti-slip resin bonded aggregate inserts or a resin bonded coating. Deck surfaces should be checked regularly to ensure that the surface is free of mud, leaves or accumulation of any other detritus, which may reduce slip resistance.

The decking and anti-slip treatment will through the volume and nature of traffic, be the subject of wear.

STEELWORK PROTECTION

Where included, steel supporting main beams and cross beam members are supplied using standard rolled sections, which can be provided with optional protective systems:

- Galvanised only
- Galvanised and painted
- Painted only

Paint systems are usually customer chosen or specified in order to meet specific maintenance requirements and periods, which will vary, dependant on the access and environmental conditions. In all cases the paint system will need to be inspected and maintained in accordance with the paint system manufacturer's instructions.

HARDWOOD

- Excellent environmental resistance
- No preservative treatment necessary
- Good fire retardant
- Good vandal resistant properties