

Differences in Wood Quality

We'd like to explain the difference between free of heart and boxed heart timbers and between kiln dried and green wood. They are critical elements which make the difference between average quality and great quality timbers to use in your project.



Boxed heart wood includes the centre of the tree – this means that the beams will start to twist and crack quite quickly, especially when the building gets heated. Whilst cracks are a natural feature of timbers, you can expect quite unsightly and very deep cracking with such boxed heart wood.

Free-of-heart timbers are cut away from the centre of the log – you still get the lovely natural features of real wood but with minor twisting and cracking. Technically speaking, free of heart timbers check, warp, and twist less because the edge grain shrinks less than face grain on boxed heart.

In the picture above you can see how the cracks in the boxed heart are visible from the outside of the post running to the heart. The free of heart timber will dry more equally and show minimal visible signs of checking when stood upright.

Green timbers are cut from freshly felled logs. These timbers can be saturated with moisture. As a result once installed in your home they will shrink, twist and deform as they dry. Even if the joinery fit

is perfectly tight on installation, the joints will become loose and show gaps depending on how quickly the wood dries. This will not have any structural implications however you may dislike the rather untidy finish as the wood dries.

Kiln dried timbers are dried after cutting so that initial shrinkage and deformation has occurred. After drying the timbers are resawn and planed to square sizes required. This ensures that any joinery stays visually the same as on the day of installation.

In terms of budget from lowest to highest the wood you would choose will be:

- Green boxed heart
- Green free of heart
- Kiln dried boxed heart
- Kiln dried free of heart

Of course in terms of quality from lowest to highest the order is the same.

These clearly visible differences may affect your appreciation and enjoyment of your timber structure. We believe you should be aware of these differences when making your decision. We strongly believe that the investment in a timberframe should not compromise on quality, therefore we recommend the use of free of heart kiln dried material. However we are happy to provide a solution that fits the requirements and budget you have.