

Douglas Fir – Solid Wood Industry Accepted Appearance and Performance

February 10, 2011

Natural Solid Wood has characteristics that make each piece unique in its beauty and service. No two pieces will ever be identical, this only adds to the beauty and character of your pergola.

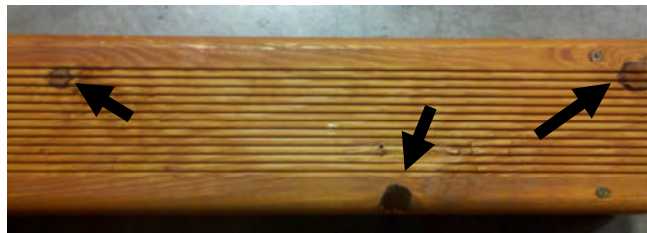
Common terms and expectations for solid wood vary with their intended use. In The Outdoor GreatRoom Company's use for pergolas we anticipate a number of things that are acceptable and can be expected to be found on your pergola in limited appearance. These are related to the natural appearance of Douglas Fir.

OGC uses and specifies- Kiln Dried Appearance Grade Douglas Fir.

This means the cuts are chosen primarily for their appearance. Douglas fir in general is excellent for its structural strength and meets the engineering requirements for its use in exposed pergola construction.

Common terms in defining expectations for solid wood are, Splits, Cracks, Checking, Knots, and Sap. Some or all may be visible in part of your pergola. We take the time to ensure, in the processing of the material for a pergola, that certain materials displaying excessive or potential structural issues are separated out, or cut out, prior to manufacturing the parts to make a complete pergola.

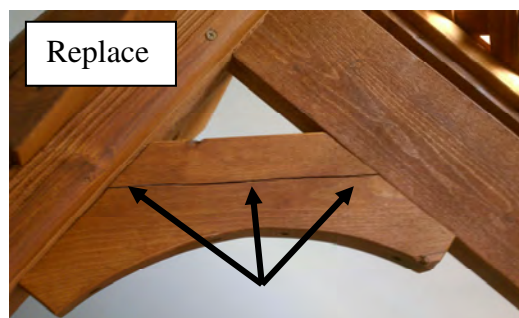
Knots are inspected and graded based on quantity, size, and location. Because of the grade we have selected, this is not an issue in determining for the majority of the wood. During production if we come across any knots that have fallen out, or knots in a location that could weaken the actual part, these parts are cut out or removed prior to use. Examples of natural acceptable knots are shown below:



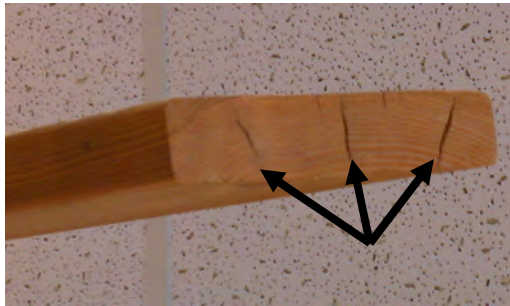
Sap (Pitch Pockets) can sometimes be seen coming out of the wood. This can present itself early after drying or may appear after a pergola has been in the field for some time. The amount of sap can vary from none at all, to enough to cause a run that may extend several inches. This can be removed by a number of methods such as simply pulling the sap after it dries, to gently cutting it off with a sharp knife (being careful to not touch the wood grain itself). It can also be cleaned off using a mild cleaner such as rubbing alcohol or Murphy Oil Soap (available at most hardware stores). This may require some touch up staining to return the area to a color match. Below are examples of naturally occurring sap.



Cracks can appear after extended periods of use. This will depend on the region of country the unit is installed in and may also be affected by the time of year. As the climate becomes drier and colder, wood tends to shrink in size making cracks appear larger. This can also cause ends to split open and come loose. We look for cracks like this in production to either cut them off or not use the board at all. Some cracks may appear in the field after a unit has set for some time. In the event the unit was in inventory for an extended period, some boards may have end cracks on them prior to assembly. If a crack is significant enough to cause material to fall completely from the unit or split a board apart, it should be replaced before assembly. Below are examples of acceptable and unacceptable cracking. Parts showing unacceptable cracking should be replaced before assembly.



Checking is a characteristic of Douglas Fir that is typically not seen. When it is dry the material will not show checking or raised grains. An example of typical non-harmful checking is shown below.



Splits can occur on the ends of the pergola boards. This is a natural occurrence that will appear at varying amounts based on the type of wood and its age. These splits should only extend a matter of an inch or so and should not create or cause pieces to fall off. If splitting is extensive enough to cause pieces to fall off or cause structural instability, affected pieces should be removed and replaced prior to assembly. Typical splitting is pictured below.

