Vertical Grain Fir Material Specifications

Product Description
For versatility and beauty, few woods in the world match the magnificence of Vertical Grain Douglas Fir. Douglas Fir's bright white to light rosy color is set off by its remarkably straight and handsome grain pattern. Windsor is proud to use only the highest quality Vertical Grain Douglas Fir material as specified by WCLIB grading rules for #2 Clear and Better. This grade is exceptionally clear grained, containing a minimum of 6 growth rings per inch, with few characteristics limited to solid knots under 2" predominantly showing on reverse face and corresponding half edges, pitch pockets to 6" in length and slight seasonal checking.

VG Fir Characteristics
Solid Materials
Standard pine grading criteria apply to Vertical Grain Fir with respect to dings, dents, burn, bow, warp, twist, crook and other machining and wood characteristics. Exceptions to the standard pine criteria are:

- Material must conform to "No.2 Clear and Better" grading rules as specified by the West Coast Lumber Inspection Bureau (WCLIB) and the following specifications
- 3 irregularities permitted on primary surface
- Material must be Vertical Grain (VG) with a minimum of 6 growth rings per inch as measured from either end and maximum grain slope of 1" in 6".
- Light hit or miss is allowed
- Sap – Bright, ¼ face area
- Pitch pockets/blisters – approximately 4" long.
- Knots – sound knots up to 1" in diameter acceptable on secondary or reverse surfaces.
- Grain profile must not vary more than 45 degrees from defined cross-cut orientation.
- Natural color variations within the species allowed (eg. sapwood, heartwood).

Veneered & Edge Banded Materials
- Light brown stain allowed in occasional (10%) pieces.
- Slight blue stain is allowed in occasional pieces.
- Natural color variations within the species allowed (eg. sapwood, heartwood).
- Light pitch, or scattered light pitch streaks up to 1/8" x 3" allowed (must be dry, not sticky to the touch).
- Vertical Grain (VG) veneers and edge bands must be a minimum of 6 growth rings per inch.
- Edge defects up to 1/16" in from either edge are allowed.
- Solid burls, birdseye allowed. Black centers allowed to 1/8".
- Bark Pockets are not a defect; any number and size are allowed for wrap veneer so long as there are no open (void) areas. In Lamination veneer void areas not greater than 1/16" x 1" are acceptable. Bark pockets are openings between growth rings that contain bark.
- Leaf Scar is not a defect, and is allowed with the same 1/16" x 1" void limitation as a Bark Pocket. Leaf Scar is the dark line following the grain of wood often an extension of a bark pocket.
- Light cross grain allowed.
- Either surface of the veneer may contain rough grain with grain pull not exceeding .010" in veneers up to .070" thick; .020" in veneers up to .100" thick. Rough grain up to .030" deep is allowed on edge bands.
- Veneers & edge bands must be structurally sound; must be free of decay.
- No knots allowed.
- No pitch pockets allowed.
- Occasionally, well scattered, barely perceptible, hairline surface seasoning or slicing checks not exceeding 1/64" in width and 1" in length are allowed. No through checks are allowed.
- Occasionally, well scattered, worm holes less than 1/8" in diameter are allowed.
- No voids, including knotholes, etc. allowed; with exceptions as noted above.
- For veneers one edge splice allowed in material under 6" wide and two are allowed in veneer wider than 6". The splice line must be tight, with grain and color reasonably matched (Book match when possible).
- MINOR CHARACTERISTICS NOT DESCRIBED ABOVE THAT DO NOT VISUALLY DETRACT FROM THE OVERALL APPEARANCE OF THE VENEER OR EDGE BAND ARE ALLOWED.