



Premiere

FINISHING + COATING, LLC

Desired Dimensional Specifications for Prefinishing of Hardwood Flooring

Explanation

When manufacturing hardwood flooring the best piece of flooring would have zero (0.0) tolerances. Because wood is a “breathing, changing” material this is not always possible. It is however, possible with proper set-up and machining practices to achieve the dimensions as defined on the attached drawing.

Glossary of Terms

O. A. W.	Overall Width
O. A. T.	Overall Thickness
Bevel Depth	The distance from the face to the bottom of the bevel cut as measured in true vertical or the distance from the plank edge to the top of the bevel cut as measured in true horizontal, <u>not</u> the diagonal of the bevel.
Face to Tongue Measurements	The distance from the face to the top of the tongue as measured in true vertical.
Face to Groove Measurements	The distance from the face to the top of the groove as measured in true vertical.
Tongue Dimension	Thickness of the tongue.
Groove Dimension	Width of the groove.

Although our manufacturing process incorporates calibration sanding of the back and the face, we are including these specifications to ensure that you and your end customer receive the best quality product available on the market. Consistent linear bevels and no “stair-stepping” or “overwood” are our goals.

Dimensional consistency is critical and must be monitored closely to achieve these goals. In example, referring to the attached drawing, we recommend that the face to tongue and face to groove dimensions be held to +/- .004” (.1 mm). This may seem stringent but, if

one part is plus .004" (.1 mm) and one part is minus .004" (.1 mm) and they are laid up side-by-side they would then have an overwood state of .008" (.2 mm) which borders on the maximum accepted by the flooring industry.

It is also desirable for the tongue to groove clearance to be 0.0" - .003" (0 - .08 mm). Interference fit (the tongue is thicker than the groove width) causes installation problems and can cause overwood conditions by flaring the groove opening.

The opposite condition is an extremely loose fit (greater than .004" (.1 mm)). This can cause squeaky floors and overwood conditions.

Obviously, overall width consistency will prevent cracks and gaps in the floor joints and maintain a consistent bevel.

In our production process, we perform the following before we apply the finishing materials.

- Back calibration sanding, removal of .010" (.25 mm)
- Face calibration sanding, removal of .010" (.25 mm)
- Face - finish sanding , removal of .010" (.25 mm)
 - Total Face - .020" (.5 mm)

The total face material reduction of .020" (.5 mm) requires that the machined bevel be .020" (.5 mm) larger than the desired finish bevel.

In example:

- If your customer prefers the micro-bevel .010" (.25 mm), the machined bevel would have to be .03" (.75 mm).
- **If your customer prefers the standard bevel .030" (.75 mm), the machined bevel would have to be .05" (1.3 mm). Recommended!**
- If your customer prefers the full bevel .060" (1.5 mm), the machined bevel would have to be .08" (2.0 mm).
 - **Because of the milling tolerances we have seen over the years, we recommend a minimum of .05" (1.25mm)**

As you can see in each example the difference between the machined bevel and the sanded preferred bevel is .02" (.5 mm).

Should you have any questions or need further explanation of these specifications and explanations do not hesitate to call.