

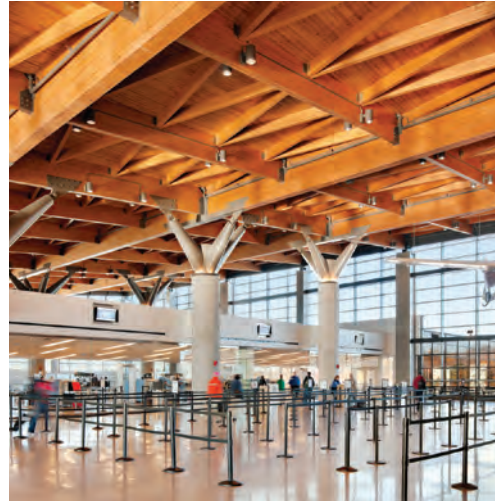


WOOD: CLEARED FOR TAKEOFF

LEED Gold Certification is not the only distinction that marks Maine's 160,000-square foot **Portland International Jetport**. The Jetport's context-sensitive design memorably supports Maine's storied brand by incorporating symbols of the state's magnificent woodland beauty.



The monumental stairs reflects the ceiling's biophilia aesthetic. The prominent use of wood helps evoke a sense of place and emotional connection, helping to indelibly brand Maine's renown woodland heritage and the Portland area's celebrated seafaring culture to all who visit.



The design team explored the use of native wood species, like spruce and fir. But southern pine's denser, stronger physical characteristics better met the structural requirements.



The metal seats are part of a tree column assembly that support the glulam spans. The final assembly by crane was performed without a problem.

The owner's challenge was direct: A blindfolded airline passenger coming off the jet bridge should be able to remove his or her blindfold and instantly know they're in Maine.

"Wood was selected for many reasons in order to accomplish this goal," says Gensler architect Jim Stanislaski, AIA, LEED AP. The Gensler Washington D.C. office embraced a context-sensitive design approach. "We wanted the terminal to represent the surrounding location," Stanislaski explains. "There is a real tactile and visual warmth to wood that we liked. Creating an atmosphere where people can connect with the natural environment, a biophilia dimension, is a major advantage in designing with wood."

The 40,000-square foot ceiling of the jetport—an array of southern pine glulam girders, beams, purlins, and a roof deck of tongue-in-groove planks supported by massive metal-seated tree columns—is the airport's signature design element.

Glulam (glued laminated timber) was chosen because it has greater strength and stiffness than comparable dimensional lumber. That's why glulam beams can span long distances with minimal need for intermediate supports.

Glulam's inherent strength offers designers nearly unlimited design flexibility when specifying long spans and distances for an airport terminal or other commercial or non-residential applications.

"We could have selected a substitute product that looked like wood, but it was important to the design team that we maintain the authenticity of wood," Stanislaski says. Southern pine was selected for its denser, more robust physical characteristics.

Gensler also applied a similar design approach for the Jackson Hole Airport, another award-winning design that dramatically integrates wood in an airport terminal setting. "You expect to see wood in smaller airports like Aspen or Nantucket. The scale in Portland is unique and unexpected," Stanislaski observes.

"Wood is a major design consideration for the reasons I've mentioned. But wood also lowers the carbon footprint, it's renewable, recyclable, and can be repurposed from other structures."

Architect: Jim Stanislaski, AIA, LEED, Gensler

Architect Office: Gensler—Washington D.C.

Owner: City of Portland

Structural Engineer: Oest Associates

Timber Engineer: DeStafano & Chamberlain

Contractor: Turner Construction

Photographer: Robert Benson Photography

Awards: 2012 Environmental Achievement Award (Environmental Management)