Choosing wood in commercial construction

WHEN IT COMES to commercial building, contractors often turn to steel, concrete, and other alternate materials. The misconception that wood isn’t for commercial use is a strong one... and it’s also a wrong one.

The team at Main Line Fence in Cumberland, Me., knew they had a problem: Their existing 1970s-era workshop, originally built as a warehouse for industrial chain link fittings and where much of their fence-building takes place, wasn’t working. The building was too small, it was metal, uninsulated, and there was zero room for expansion.

During the mild Maine summers, temperatures inside the workshop would frequently top out at 15 degrees hotter than the actual temperature. Wintertime would see the inside reach levels of cold in which building became impossible (unless you were an Arctic penguin.)

Ryan Cianchette, project manager, Main Line Fence, realized it was time for a change. The solution? A brand-new building, designed specifically for their needs, offering room to grow, and with an unmatched level of energy efficiency.

The new building offers 4,000 sq. ft. of workshop space primarily used for fence construction teams. Of special note: interior and exterior sheathing was provided by 1x10 rough-sawn eastern pine boards.

Why Eastern White Pine?

“Bottom line: it’s locally grown, it’s energy efficient, and it insulates incredibly well,” says builder Bob Vail, owner of Vail General Contracting, Cumberland Center, Me. “I love it, and work with it every chance I get!” Vail’s company was called upon by Cianchette to help solve their growth challenges.

While the interior of the building features pine boards installed in the traditional horizontal method, it’s the exterior that caught everyone’s attention: the 1x10 rough-sawn eastern white pine boards were installed shiplapped, on the diagonal. Vail chose the diagonal exterior installation because it results in a much stronger, more energy-efficient structure. Among the results he’s experienced over the years: Wall rigidity starts at the sill plate, lending greater strength to the walls, and the entire structure stands up to weather better because of the natural insulating nature of the wood. The eastern white pine boards are twice as thick as OSB, the traditional sheathing choice, which results in greater abilities to cool and heat the interior of the structure. This equals less heating and cooling costs for the budget-conscious company.

“One of the biggest problems with the old building was we didn’t have a workable interior,” said Cianchette. “All we had to work with was the metal framing of the building and the backside of the exterior metal wall sheathing. We needed something different and useful for the new building. You can’t lean anything up against drywall without causing damage. We needed something strong, durable, and natural. The EWP is so strong—we can hang things on it, and it stands up to the sections of wood frequently leaned against it as we’re building fences.”

Another reason Vail chooses eastern pine? Sustainability. “In Maine, eastern white pine is locally grown and easily available,” continues Vail. “It’s been a traditional building product in New England since Columbus came over, and it lasts for hundreds of years. Bottom line: you can’t get any greener than a renewable wood board.”

Using natural, easy-to-work-with wood will allow Main Line Fence to grow over time; as the company grows, the building can be adapted and expanded easily to grow with it.

Traditionally, eastern white pine is used in residential applications: flooring, paneling and the like—you typical appearance-grade opportunities. For the product to be used in a commercial build with such overwhelming success is not only exciting, it opens up a whole new world for builders.

“We’ve been in business since 1948 and have continuously adapted to the times and the market—when the original metal building was built, we never thought we would be building residential wood fences,” concluded Cianchette. “Who knows what we’ll be doing in another 30-40 years; but now we have a building that can adapt right along with us. There’s nowhere to go but up.”

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