



SNBuilding Uses Rosboro Glue Laminated Decking To Provide Distinctive Look

Executive Summary

For a unique bank / basketball court project, the owners were faced with choosing between either a SIP roof with a separate expensive veneer wood plank ceiling, or a cheap but uninspiring acoustical tile drop ceiling. Then architecture firm Hoke Ley was approached with a third option: a roof of architectural glue laminated decking exposed from below.

Despite its 11th-hour substitution, with the help of Texas Timber Frames, Rosboro's glue laminated decking was installed in only one week. The result is a distinctive, warm look with greater architectural impact.

This is a hybrid structure between steel and conventional framing, so Rosboro's mass timber was chosen for use in main communal areas where the architect wanted some wow factor. ”

Michael Ratliff
Director of Business Dev.
Texas Timber Frames

About the Project

Located in Wayne, Nebraska, the SNBuilding built for State Nebraska Bank & Trust is a truly unique project. The 15,300 square foot structure combines an indoor basketball / pickleball court with a full service bank and several office spaces. This is to help draw Wayne State College students, as any bank customers are able to use the court.

The bank's ties to the community are strong. State Nebraska Bank & Trust has been held by the same family for five generations since its founding in 1892. As a result, the owners wanted a showpiece building that could serve as a community hub.



Challenges:

The owner and architects were facing two choices for the roof and ceiling, neither of which was particularly attractive:

- a SIP roof (Structural Insulated Panels composed of OSB and foam) with an unattractive drop ceiling of acoustical tiles
- a SIP roof with an expensive veneer of composite ceiling planks on the underside

The composite veneer planks, while visually striking, were quickly discarded as too expensive of an option, negating any savings from a SIP roof.

The acoustical tile drop ceiling was the only apparent option, despite its uninspiring appearance, but neither the owner nor the architect were enthused by the choice.

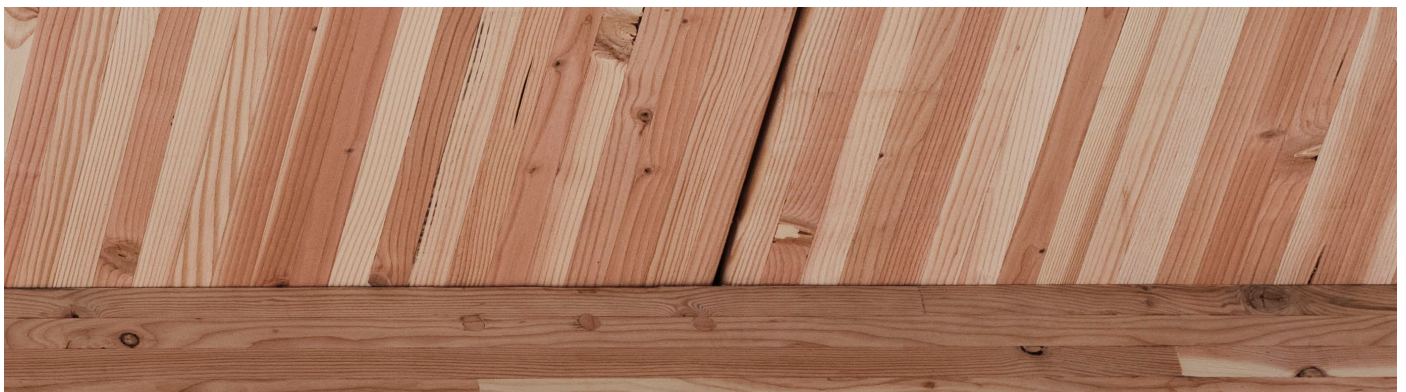
To install the roof, local builder Otte Construction chose Texas Timber Frames, a subcontractor specializing in heavy timber and mass timber detailing, structural drawings, and prefabrication with its own erection teams. During the project, Texas Timber Frames suggested substituting in an exposed wood roof.

After examining a few options, including CLT (Cross-Laminated Timber), the owners and architecture firm Hoke Ley chose Rosboro's GLD (Glue Laminated Decking) for its superior appearance. Said project architect Roy Ley, AIA, LEED AP, Principal & Owner of Hoke Ley Architecture and Design:

"The center of the building had already been designed and engineered to be glulam columns and beams. I was excited about the availability of mass timber products, and I'd never heard of glulam decking. The price was more economical compared to the cross-laminated alternative. It also had a nicer appearance, like you see on glulam beams."

Everything was exposed on the inside - so aesthetic value, in addition to structural integrity, was important. Rosboro gives both structure and the finished look with a single product. ”

Michael Ratliff
Director of Business Dev.
Texas Timber Frames



How Rosboro Helped:

Rosboro's engineering department partnered with Texas Timber Frames to reevaluate the roof structure. Their team provided structural design assistance, project sequencing, and construction consultation to keep the project on budget and schedule. Subsequently, Rosboro supplied the materials for a roofed area of just over 3,300 square feet. In all, the project used 900 lineal feet of Rosboro's Glue Laminate Decking product, which is an alternative to CLT in Mass Timber structures. GLD was chosen over CLT since it:

- Requires fewer supporting beams because GLD is oriented in a single direction
- has a better appearance with only slight gaps, as opposed to CLT, which is laid flatways and can have up to $\frac{3}{4}$ inch of visual checking
- is easier to install, with a 4' width (compared to 8')
- can be produced faster for larger projects where supplier capacity is a concern
- Provided a uniform aesthetic when paired with Doug fir glulam beams and columns

The structure also heavily features Rosboro custom glulam columns and beams used as the support structure for the decking.



Results:

Despite the 11th hour substitution, the project didn't experience any delays. Texas Timber Frames provided design development assistance with some of the drawing and detail changes to accommodate the switch. They also ran a preconstruction exercise to make sure the project would still hit budget and timeline goals using Rosboro's Glue Laminated Decking

The owner saw the value in the GLD due to its warmth compared to acoustical tile. The roof turned out really nice, with a really rich, warm look. ”

Roy Ley, AIA, LEED AP
Principal & Owner
Hoke Ley Architecture and
Design

The roof framing went smoothly, with the entire roof installed in a single week. Texas Timber Frames' Ratliff said "We were in and out much quicker than the original design would have taken." This was largely due to the pre-planning that went into the manufacturing, rather than relying on jobsite adjustments. "We were able to see all the slots, joints, and connections before actual construction," said Ratliff. "In the end it went very quickly, and everyone was really happy."



Conclusion

With an 11th hour substitution, a community centerpiece of a 5th generation family owned bank went from uninspiring acoustical tiles to a unique and visually distinctive wooden exposed wood roof using Rosboro's Glue Laminated Decking. At the same time, it eliminated the need for a separate ceiling and reduced the total time needed to erect that portion of the project.



Call (866) 755-9501 to contact an
engineered wood expert today!