WOOD PANELIZATION

BIM + Panelization = Building Better Together

INSTALLATION OF WOOD WALL PANELS ON-SITE AT LARGE HOUSING PROJECT

High Quality - Rapid Schedule - Tight Budget: Is there a way to accomplish all three of these objectives in a building project?

Doing so begins with simple methods made possible by advanced technology. Putting together a project is better, faster, and less expensive when all the parts are created to exact specifications and ready to go, just like building blocks. This is **wood panelization**.

Precision and Quality

With wood panelization, building wall panels, floor trusses, and roof trusses are assembled off-site in a climate-controlled facility, ensuring a high level of manufacturing precision. The Building Information Modeling (BIM) model drives Computer Numerical Control (CNC) machines that cut, label, and even nail the lumber together, ensuring that cuts and nailing patterns are precise. Each panel is numbered and shipped to the construction site, ready to be arranged and erected into place.

Reduced Construction Schedule and Budget

In several recent large housing projects, including one in which the entire construction schedule was just 22 months, the Passero Design Team determined that panelization was a must. Creating the wall panels off-site meant that the labor and time required on-site was significantly reduced. For public projects, the prevailing wage rule would not apply to work performed off-site, presenting additional potential labor cost savings.

Fabrication Led by Design

Each wall panel must be modeled prior to construction. These panel drawings are then submitted for review by the design team for compliance with the drawings. This can mean thousands of wall panel shop drawings showing every stud, every piece of blocking, shear wall sheathing, and header. Recent advancements in BIM have made this type of design production possible by allowing project architects to shape the model with panelization factors using laser guided assembly platforms, creating precise panel drawings.

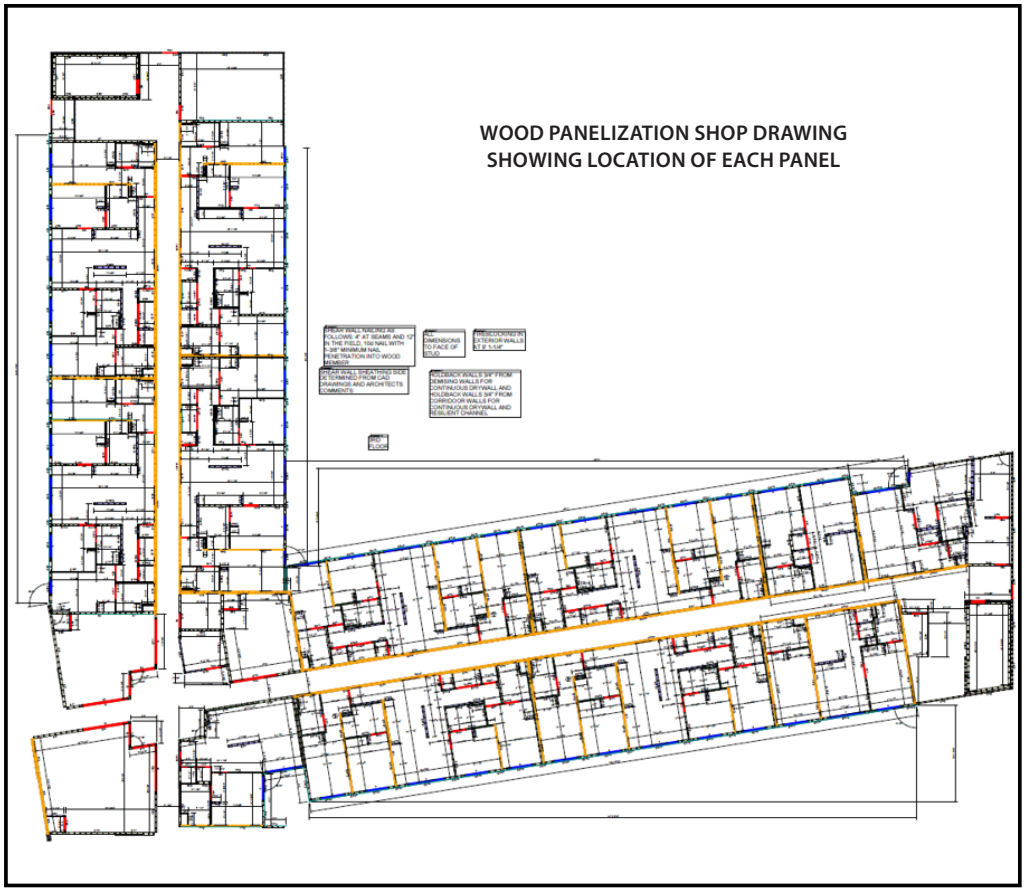
Larger Buildings, More Housing, Quicker

Wood panelization accommodates more floor area and ceiling height, in compliance with building codes. More buildings of higher quality can be built, at a reduced cost and in a shorter timeframe. This is of critical importance during this time of increased need for affordable housing.

CONTACT PETER WEHNER, AIA, VP AND ARCHITECTURE DIRECTOR
Passero Associates / 585-325-1000 / pwehner@passero.com

PA

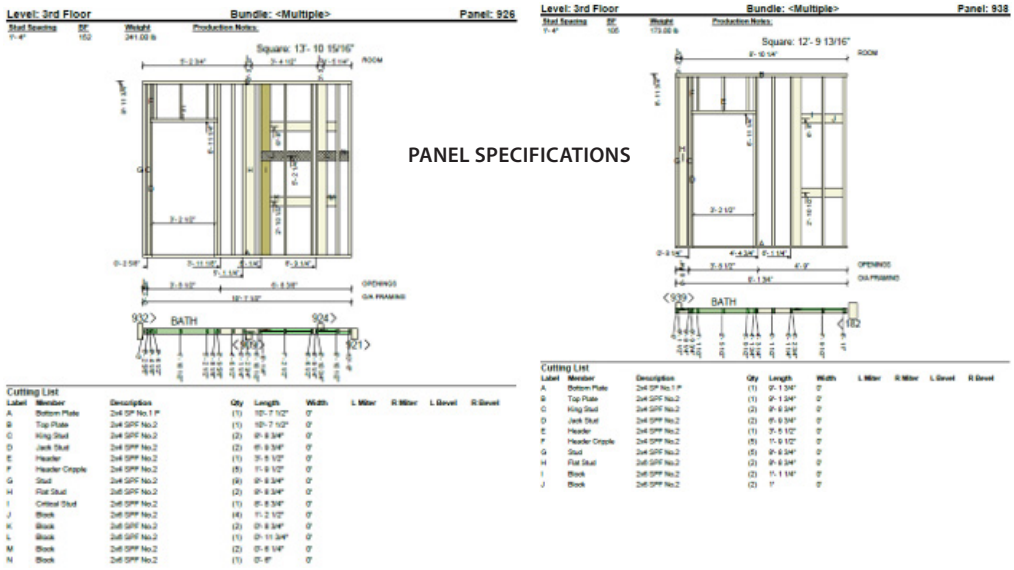
Streamlining the build with higher quality and reduced cost.



WOOD PANELIZATION SHOP DRAWING
SHOWING LOCATION OF EACH PANEL

Process Advantages

- Sharing the building model with the fabricator, expediting penalization engineering.
- Reduced shop drawing review with BIM integration.
- More sustainable solution with less waste.
- Designs integrate standard lumber lengths.



PANEL SPECIFICATIONS

Manufacturing Partner: NextGen

The Passero Design Team toured the NextGen Building Components, Inc. factory, saw the manufacture of the wood panels, and gained insight on the design process to ensure seamless collaboration from BIM model to fabrication.

"Working with NextGen and our construction partners, we have been able to streamline the design and construction of our largest projects, while increasing quality and reducing costs." - Passero Associates Senior Project Architect Mira Mejibovsky, AIA

Katherine Morse of NextGen reports, "Partnering with Passero Associates and local developers enables us to achieve increased efficiency both in our shop and for the field crews, through design geared toward the manufacturing process."

The Architects and Engineers at Passero Associates are ready to bring their expertise to work in meeting design and construction challenges, helping to determine cost-effective solutions that will transform our communities.

CONTACT PETER WEHNER, AIA, VP AND ARCHITECTURE DIRECTOR
Passero Associates / 585-325-1000 / pwehner@passero.com