APA CASE STUDY

Engineered Wood Shaves Time off the Schedule

Look around. You see new banks popping up everywhere. One day there is a vacant lot on the corner or an abandoned building. Then – seemingly just weeks later – a full-service bank stands proudly in its place.

We're amazed at how fast these buildings are completed, but give little thought to the people responsible for getting them constructed so quickly. That's not the case with Ed Hohmann, AIA, LEED AP, and vice president of Feinknopf Macioce Schappa Architects in Columbus, Ohio. Thinking about how to get his projects completed on time keeps him up nights.

One such project is JP Morgan Chase's new location in New Albany, Ohio, a fast-track freestanding bank branch that was scheduled for completion in just 120 days in early 2007. Thanks in part to engineered wood, that schedule was met.

"We work with a number of clients that have multiple fast-track projects underway at the same time," Hohmann notes. With so many fast-track projects on the docket and so little time to complete them without sacrificing quality, Hohmann is careful to choose products that will reduce the timeline, not add to it. Engineered wood was among the timesaving products Hohmann used to put and keep the Chase-New Albany project on the fast track.

"The hybrid design we use with JP Morgan Chase combines engineered wood with light-gauge metal framing to produce a shell system that is durable, sound, economical, rapid to build and capable of supporting a wide variety of client finish options," Hohmann explains.

The 4,400-square-foot retail-banking center was built to meet the requirements of the Ohio Building Code. At the top, cranes were used to hoist wood trusses and engineered I-joists with engineered wood sheathing to the roof. The 5/8-inch plywood roof and oriented strand board (OSB) panels were covered with shingles, while a cupola provided the finishing touch. Soffits and ridge vents were added for ventilation.

Project Summary:

PROJECT:
JP Morgan Chase
new bank branch

LOCATION:
New Albany, Ohio

OWNER:
JP Morgan Chase

STRUCTURAL ENGINEER:
M Engineering

ARCHITECT:
Feinknopf Macioce
Schappa Architects

OWNER:
JP Morgan Chase, NA

GENERAL CONTRACTOR:
The Quandel Group, Inc.

ROOF ERECTION CONTRACTOR:
Carter Lumber

COMPLETION DATE:
Early 2007

The 4,400-square-foot bank branch took 120 days from start to finish.

APA

The building is considered a hybrid design because it also incorporates exterior steel frame walls, covered with a masonry veneer and insulated with fiberglass batt. However, neither steel nor natural timber was considered a viable option for the roof. This part of the project went to wood instead.

"Plywood and OSB are very consistent products and allow more efficient spanning than natural wood," explains Hohmann, who is well-versed in the material, having specified it on several projects over the years. "Wood I-joists allowed the depth of the structure to be minimized with some cost-effectiveness, as compared with steel, in this application."

To achieve a low-profile roof line the design team incorporated wood I-joists and pre-engineered wood trusses.

The project used light-gauge metal framing and plywood sheathing for the exterior walls.

Other important factors in the choice of engineered wood for this fast-tracked construction project were its "speed of construction, efficiency and ease of handling," says Hohmann. In fact, nothing was allowed to slow down this project, not even the wintry Ohio weather, which posed the biggest challenge. With no room in the schedule to close down the jobsite for inclement conditions, workers had to persevere, which "added risk and urgency to getting the building shell enclosed," Hohmann adds.

Four months after startup, the project stood completed, but Hohmann had just a moment to reflect before embarking on his next fast-track venture. "Engineered wood is extremely fast, flexible and economical to install versus other options. It was a natural fit for this project, where schedule was more critical than usual, due to winter construction."

Hohmann also gives engineered wood high marks for lower labor costs, which is why he specifies it for projects "whenever it makes sense." Wood is generally a forgiving material to work with, allowing for rapid field adjustments for final fit.

"Its ready availability, ease of handling, versatility and speed of construction," he concludes, "make engineered wood a natural fit with other building systems when hitting a client's opening date really matters."

Plywood and OSB walls are favored by Feinknopf Macioce Schappa Architects for the ability to support a range of finishing options.

We have field representatives in many major U.S. cities and in Canada who can help answer questions involving APA and *APA EWS* trademarked products. For additional assistance in specifying engineered wood products, contact us:

APA HEADQUARTERS
7011 So. 19th St.
Tacoma, Washington 98466
(253) 565-6600 ▪ Fax: (253) 565-7265

www.apawood.org

PRODUCT SUPPORT HELP DESK
(253) 620-7400
E-mail Address: help@apawood.org

Form No. J110
Issued March 2008/0050

APA