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Renovations Outpace New Construction Activity

Metal cladding plays an important role in renovation activity

An interesting shift is occurring in the construction landscape. While renovations have traditionally played a significant role in construction activity, new construction projects have almost always dominated the market.

However, this is now changing. Renovations typically account for 30% of all construction, but for the first time in 20 years, the American Institute of Architect's (AIA) May Architectural Billings Index reported reconstruction projects billings exceeding new construction.

Confirming that this is not a one-time data anomaly, AIA Chief Economist Kermit Baker, Hon. AIA, Ph.D., forecasts, "We are going to move toward an increased share in reconstruction and a decreased share in new construction."

In a similar vein, a recent Metal Construction Association (MCA) and FMI Corp. Market Outlook and Trends survey reported that residential roofing projects between 2020 and 2024 are expected to account for 88% of the total available roof area, as compared to just 12% new construction.

Of course, this begs the question: what is driving this interesting trend and how can metal roof and wall retrofits contribute?

1. It's more environmentally friendly to retrofit an existing building versus constructing a new building.

Outdated mechanical systems and underperforming envelopes are large contributors to the building industry's carbon emissions, which account for nearly 40% of total global greenhouse gas emissions, according to the Global Alliance for Building and Construction. Further, constructing a new building from the ground up is more energy and carbon intensive than retrofitting an existing building.

In a recent GB&C magazine article, Keith Hempel, design director, LPA Inc., Irvine, Calif., said, "The old phrase, 'the greenest building is the one already built' is truer now than ever. If we're really going to affect climate change, we need to address the existing stock of buildings. That starts with recalibrating how we analyze and evaluate older buildings, ensuring we are maximizing the life cycle and value before tearing it down."

Similarly, Gensler's recent Climate Action by Design report states that developers can decrease the amount of carbon associated with new materials and reduce construction waste by renovating existing buildings.

2. It is typically less expensive to renovate an existing building.

With significant increases in the cost of land, building materials and labor, the economic case for renovations is quite strong. In addition, cost overruns and change orders are more frequent with new construction versus reconstruction.

Financial and tax incentives are often available to building owners looking to upgrade their properties. Such incentives can significantly reduce the cost of a project or accelerate depreciation timelines, allowing owners to quickly offset the cost of the renovation.

3. Retrofits are usually faster than new construction.

For standard conversions, this is a no brainer. But even with significant upgrades, renovated projects can usually be delivered in a shorter time frame, enabling businesses to occupy these new spaces that contribute to the bottom line much quicker.

4. Architects and owners are more educated about the advantages of reconstruction.

Thanks to organizations like the AIA, the U.S. Green Building Council, MCA and building manufacturers, there has been an explosion of literature educating the industry on the benefits of renovating existing building stock. Through resources such as white papers, webinars, articles, research and blogs, renovations are a hot topic, and building teams are much more aware of the products, systems and strategies available to efficiently deliver these projects.

Retrofitting with Metal

Amidst this reconstruction activity, metal wall and roof panels are playing a significant role as their longevity, energy efficiency and affordability fits well with building owners' and developers' needs.

To boost an existing building's energy efficiencies, building enclosure upgrades are key. When replacing the roof and/or cladding systems, insulation is usually added. For example, a pre-existing thermal value of R-4 to R-5 can jump all of the way up to R-50 with high-performance insulation installed in between the old and new roof. Metal roofs are also highly compatible with the installation of photovoltaics, solar thermal and hot water systems.

In addition, cool roof coatings deflect a significant percentage of solar heat gain, keeping the interior cooler and reducing HVAC loads. The Cool Roof Rating Council also recently extended its product rating program to include walls.

(MCA is currently involved with U.S. Department of Energy-sponsored research focused on the development of building envelope systems designed to improve building performance and efficiency.)

Metal roof and cladding replacements enable the building to remain occupied during construction. And when compared to other exterior building upgrades and other interior work, metal buildings are low maintenance and long lasting, ultimately delivering a favorable life cycle assessment for owners.

A Growing Market

As noted, construction is evolving and renovations are now sharing the spotlight with new construction. "While the reconstruction share of building activity will continue to ebb and flow, in general, we'll continue to move toward an increased share of building activity for reconstruction and a decreased share for new construction," stated Baker.

Consequently, it behooves metal building manufacturers and organizations to focus on this sector by actively promoting the benefits of metal roof and wall retrofits. 

Jeff Henry, MBA, CAE, is the executive director of the Metal Construction Association. He leads MCA's staff in supporting industry members and elevating the use of metal in construction. For more information, go to www.metalconstruction.org.