# **Modular a Boon for Mid-Market Housing**

BY ARTHUR KLIPFEL OSTON — With Boston Mayor Martin J. Walsh calling for an increase in construction of mid-market housing to support not only the influx of millennials driving economic growth in the region but also for working families, it is time to consider a more innovative approach to the construction process. Boston is a city of innovation in the midst of one of its largest multifamily construction booms in recent memory, but that innovative spirit has not found its way into the multifamily housing construction process. To ease the

### **REAL IDEAS**



burden of those seeking reasonably priced middle income housing in decent neighborhoods, fundamental changes in the way we build must be implemented.

ARTHUR KLIPFEL Modular construction is one method that has proven to significantly accelerate

project timelines while increasing quality, incorporating green practices and lowering costs. In order to efficiently provide housing for middle income workers such as police, firefighters, nurses, administrative workers and teachers as well as young professionals struggling with college debt, families with day care needs and seniors with limited incomes, incorporating a comprehensive modular construction strategy should be strongly considered.

While modular construction for the 6,430-unit Pacific Park Brooklyn (formerly Atlantic Yards) project has garnered much negative press, practitioners of lower-scale modular construction (three or four floors of wood frame over a steel podium platform reserved for parking or ground floor retail) are generating an enthusiastic response from developers and owners alike. This particular type of modular construction is ideally suited to efficiently create 40- to 80-unit developments in outlying neighborhoods such as Allston-Brighton, Dorchester, East Boston, Hyde Park, Jamaica Plain, Roslindale and Roxbury, as well as the transit-accessible inner suburbs



30 Haven, Reading MA

like Dedham, Malden, Medford, Revere, Somerville and Watertown.

Oaktree Development recently teamed with other developers using the patented GreenStaxx System to deliver a pair of prime examples of how modular construction can fully deliver on its promise. The

first, 30 Haven in Reading, is a 40R mixedused development with 53 apartment units sitting atop 22,000 sf of retail. Completed in just 13 months, the project was recently selected as one of five national finalists for the Urban Land Institute's Jack Kemp Excellence in Affordable and Workforce Housing Award which recog-

nizes "exemplary developments that demonstrate creativity in expanding housing opportunities for America's working families." The second, Chelsea Place in Chelsea, is a LEED Silver, 56-unit apartment complex that sits on a grade-level parking garage.

Designed for owner Federal Realty Investment Trust, the project broke ground in November 2012 and received a certificate of occupancy in just nine months.

Similarly successful projects can be found in urban and suburban markets from

coast to coast, and last year New York City unveiled its first all modular apartment building, The Stack. The seven-story, 22unit building sits on 4,000 sf of retail and was constructed on a difficult 50-foot-by-50-foot site in only 10 months. The project exemplifies how modular construction can

> be especially well-suited for projects in tight urban sites.

The benefits of modular construction are numerous and well-documented, but it bears re-iterating the elements that work particularly well solving the mid-market housing problem facing Boston and its surrounding municipalities:

**Time Savings** – The undisputed advantage of modular versus stick-built construction is reduction in project completion times by a conservative estimate of 25 to 35 percent. Simultaneous site preparation and factory production significantly reduce construction time while also minimizing disruption to local businesses and neighbors. There are no weather delays, and because the units must be inspected before they leave the factory, there is a significant reduction in change orders and punch lists.

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**COST** – Time equals money, and a significant cost saving is delivered via reduction in the interest carry on the financing. The timetable from start of a project to generating cash flow when the units are occupied is greatly accelerated. Labor costs are also reduced dramatically given fabrication speed on an assembly line and lower labor rates for factory production work. Design costs are also reduced, as detailed plans can be replicated if more sophisticated modular systems (such as GreenStaxx) are employed. Operating costs for the completed building can also be reduced by incorporating energy saving windows, mechanicals and appliances into the modular design.

**QUALITY** – Because the units are built off-site in a controlled environment, materials are not subject to weather conditions that lead to moisture issues and are assembled to meet stringent standards. Structurally, modular buildings are generally stronger than conventional construction because each module is engineered to independently withstand the rigors of transportation and craning onto foundations. In the aftermath of Hurricane Andrew in Florida. FEMA concluded that modular and masonry homes fared best compared to other construction. Replication of unit designs and fabrication systems also justifies additional time for R&D related to establishing well vetted supply chains.

**SUSTAINABILITY** – Modular construction is not only "green" during the construction process, but also during the building's operational life cycle. From the outset, modular generates a lot less onsite waste, as materials are recycled and re-purposed at the factory. Due to the superior insulation ratings typically achieved, there is greater energy efficiency which provides long term economic benefits for ownership.

Are there perceived drawbacks to modular? Of course, particularly when construction firms are unfamiliar with the process and unable to manage it in an efficient manner. There is also a lingering stig-

## **Synergy Recruits**

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release, adding, "I look forward to utilizing my diverse skills and management capabilities to further the success of the firm." One area of expertise she brings is on the multifamily front as a Certified Apartment Portfolio Supervisor and five-year active member of the National Apartment Association and 10 years with the National Multi-Housing Council.

McAllister had been heretofore on the acquisitions team at AEW Capital Management, assisting in the financial evaluation and negotiation of core CRE in the \$15 million to \$150 million range, and at which he handled the underwriting and acquisition of more than \$200 million throughout New England. Enhancing that experience, McAllister served as Director of Business Development at Vanguard Health Systems.

Terming his hiring "part of our plan for strategic growth," Moffatt predicts that "Aengus will be a vital asset to our team as we continue to expand our portfolio and provide the highest level of service to more than 400 tenants." McAllister will be working alongside Senior Director of Leasing James Grady while he focuses on all asset and tenant functions relating to the firm's growing portfolio. Among other duties, McAllister will be responsible for solidifying Synergy's tenant base, coordinating lease transactions and maintaining key broker relationships.

Calling it "one of Boston's most innovative and well-respected real estate investment firms," McAllister says in the release he was "attracted by Synergy's talented leadership, deep market knowledge and ma attached (from its pre-fab days) that modular produces a poorly constructed product, which is a gross misconception, due to rapid advances in the production process, particularly in the last decade.

If the city of Boston and surrounding municipalities are seeking an innovative solution to its housing crisis, implementing modular construction would be a huge step in the right direction.

Arthur Klipfel is an award-winning architect, Founding Partner at Oaktree Development, and developer of the patented GreenStaxx modular construction system.

distinguished portfolio" in making it his newest career choice. "I look forward to working alongside an industry leader like Jim Grady, maintaining Synergy's high level of tenant retention and contributing my unique skill set to the firm," says McAllister, who holds a Bachelor of Science Degree in Economics from Iona College and Master of Business Administration from Babson College.

Both Adamian and McAllister are active in various charitable and civic pursuits, with Adamian an active participant in her community of Arlington whereas McAllister holds seats on the Young Leader Boards of the American Ireland Fund and Self Help Africa. Also, notes the release, he is an accomplished golfer, having represented Ireland and Leinster from 1998 to 2006, finishing fourth in 2006 in the World Universities Golf Championships in Italy.