



TOWN OF CHELMSFORD

Fire Station Living Quarters + Workspaces

CHALLENGE

- Integrate new, multi-story living quarters and workspace with remodeled/site-built apparatus bays
- Accelerate construction to minimize use of temporary living quarters and disruption to emergency services
- Comply with stringent 2017 Massachusetts Stretch Energy Code

SOLUTION

- Install exterior brick veneer at factory with soldier course at first and second mate lines to match modular units and existing apparatus bay
- 90% completion at factory using "Build Together" method to accelerate installation and completion

SUCCESS

- 2-story facility with locker & changing rooms, bathrooms with showers, kitchen, gym, maintenance shop, laundry & changing rooms, gear storage, gear storage, admin space, and eating area/lounge
- All 12 modules set in 1 day
- High-efficiency gas heating, LED lighting, occupancy sensors, high-efficiency windows, building insulation

SCHEDULE ACCELERATION

LEAST SITE IMPACT

COST CERTAINTY



Speed to occupancy was critical with this project as the emergency response team had to be housed in temporary living quarters during construction. Adding to the schedule pressures, asbestos abatement had to first be completed prior to demolition of the old building. Fortunately, close collaboration during pre-construction, use of Building Information Modeling (BIM), and MODLOGIQ's "Build Together" method achieved 90% completion at the plant, which helped accelerate manufacturing, installation, and completion.

The 12 modules containing personal locker and changing rooms, 3 bathrooms with showers, kitchen, gym,

maintenance shop, gear storage, laundry room, admin space, and eating area/lounge were installed in a single day. To match the exterior of the site-remodeled apparatus bay, factory-installed exterior brick veneer was combined with a soldier course at the first and second mate lines to tie the modular units and existing apparatus bay together seamlessly. This also helped speed completion, as significant exterior finishing work at the site was avoided.

Finally, high-efficiency rooftop gas furnace units, LED lighting with occupancy sensors, high-efficiency windows and building envelope insulation were employed to meet the stringent 2017 Massachusetts Stretch Energy Code.

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TIMELINE

198 days

SIZE

4,320 SF

LOCATION

Chelmsford, MA

PARTNERS

Triumph Modular

