

CASE STUDY

New York School Construction Authority, TCU Program, NY - MBI 1st Place Winner 2007

Architectural Excellence:

This two classroom, two bathroom, 1,344 square foot facility was designed and engineered to be the prototype modular building for the entire NYC School District. The building design and specifications were approved by the NYC SCA and FID after a rigorous review and submittal process. M Space Holdings was awarded a two year exclusive vendor agreement to supply these units throughout the five boroughs of the NYC School system. M Space has provided fourteen (14) of these TCU's to date in both stand alone and back to back configurations. The building units are designed to provide additional classroom space for existing schools or to be clustered together to form stand alone schools. The open floor plan allows the SCA to convert the units to administrative space, nurse's offices, and any other type of area as needed by the different schools

Technical Innovation:

This facility was built to meet construction group 1-E non-combustible and the rigid NYC building codes, including mechanical and electrical equipment MEA certification. The buildings rest on M12 x W26 perimeter steel I-beam frames to increase rigidity, allowing for multiple relocations, and an increased lifespan. The floor is comprised of 16 gauge 8" steel joists under 1/2" fire rated plywood and 1/2" underlayment. Exterior walls are comprised of 18 gauge 3-5/8" steel joins, 1-1/2" 20 gauge steel desk, 5/8" Densdeck barrier, tapered polyiso insulation, and 1/2" Densdeck prime cover board. Anti-graffiti coating, 26 gauge 1-1/4" ribbed steel siding, HS-HC60 heavy commercial window guards, 16 gauge 1-3/4" galvanized and insulated doors also increase the durability of the units. Fully cantilevered 4' x 6' stainless steel canopies are positioned over each door for weather protection.

Cost Effectiveness and Energy Efficiencies:

Due to NYC shipping restrictions and security concerns, the modular buildings were delivered at night and set via crane utilizing spreader bar and straps as they arrived that same evening (typically double-wide modular buildings are landed and seamed weather tight by sunrise). The units HVAC system exceeds ASHRA requirement for sound. The Exterior walls include 3-1/2" sound attenuation blankets and all sheathing joints are taped and caulked with 2" 10 x 10 glass mesh joint tape. All steel siding and bottom board has continuous sealant at laps of panels to reduce moisture. The roof consists of .060 fully adhered EPDM, 1A/1-90 (Carlisle) rating with 20 ml. top coat. The entire building is insulated with mineral fiber with the following R values: floor R-22, walls R-13, and roof R-23.45. The attention to the material specifications makes this building a very energy efficient design.

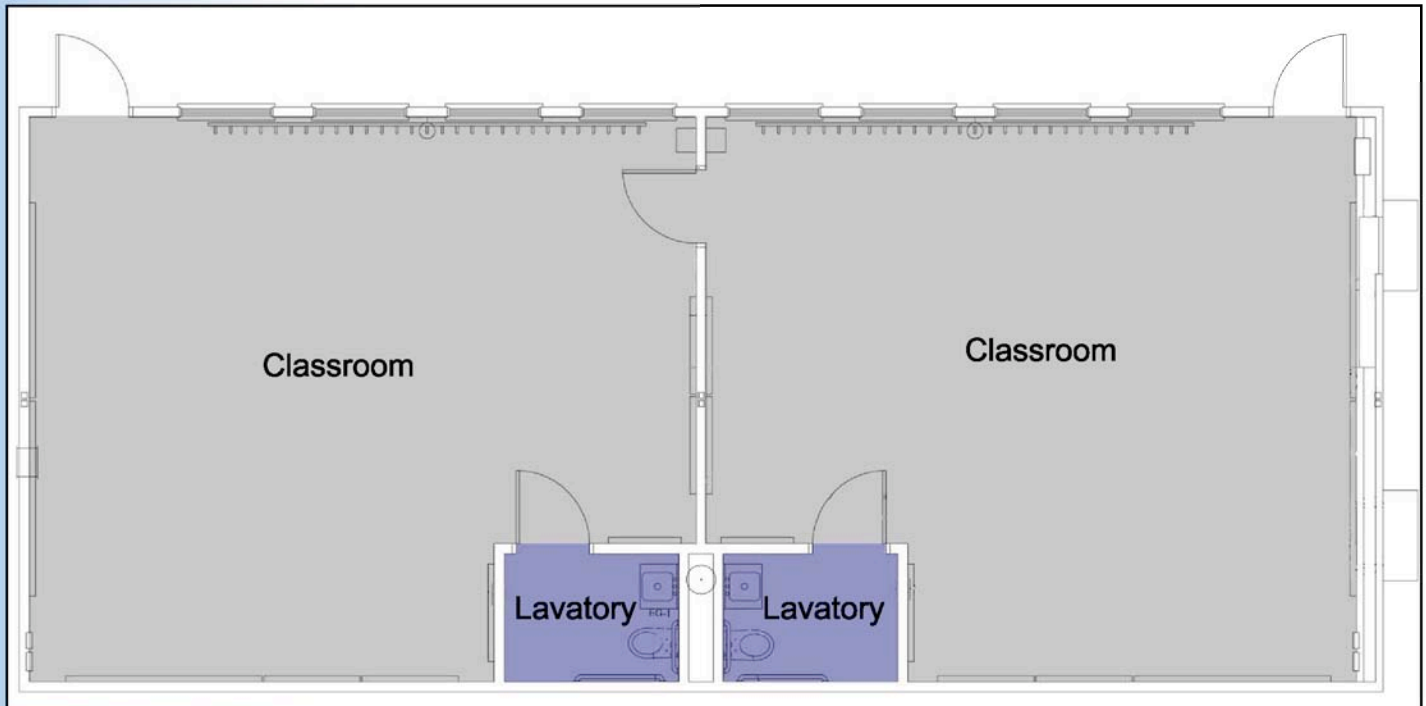




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FLOOR PLAN

Building Size: (8) 12' x 56'
Total Square Footage: 10,752
(1,344 per TCU)



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PROMISESM**

You'll receive more industry expertise,
more personal attention, and more
financing options from M Space
than from any other modular
space company.