44% WATER REDUCTION

The use of high-efficiency plumbing fixtures provides water-use reduction with an estimated savings of 1,842,158 gallons of water per year.

30% BETTER THAN ASHRAE Std 90.1-2007

The building envelops thermal properties, mechanical cooling/heating systems, and lighting systems have been designed to perform 30% better than the governing (ASHP) energy codes (ASHP Std 62.1-2007).

CONDENSING BOILERS

Condensing boilers are water heaters, which, are approximately 10-15% more efficient than non-condensing units, are used to heat building domestic water and to generate hot water for the building heating requirements.

730
PREFABRICATED BATHROOMS TOTAL UNITS

327 SHEETS OF WALL BOARD
15,042 SQUARE FEET OF METAL TRACK AND STUD
19,088 GALLONS OF WATER SAVED

MATERIALS SAVED

DELIVERY OF PRE-CUT MATERIALS & PRODUCTS

- Proprietary floor system, gypsum wall board, metal studs and track all pre-cut by manufacturer or treated to specified code reducing on-site waste and delivery costs.

3
ASSEMBLY OF PANELS & COMPONENTS INTO BATHROOM

- Installation of plumbing, electrical, and mechanical systems in the shop, utilizing precut lengths of copper has reduced the waste of copper by an estimated 65%.

2
FABRICATION OF INDIVIDUAL PANELS & COMPONENTS

- Precut materials minimizes labor and construction time during assembly.
- Wall panels assembled using trestles and then moved down the assembly line for wallboard.

4
INSTALLATION OF FINISHES

- Final production sequence included installation of shower floor drains, wall tile, painting, vent, cabinets, basec, fixtures, mirrors and hardware in an efficient and consistent manner.

5
BARCODE & TESTING FOR DELIVERY

- Water used for pressure testing of the system was recycled and not sent to the factory, thus reducing the impact to the environment.
- Over 200,000 barcodes are scanned in tracking assembly, inspections, corrections, delivery and final installation.

6
TRANSPORT & INSTALLATION

- Completed modules were transported 5 miles to the site where they were immediately inserted into the building at their designated floor.
- Close proximity of factory reduced labor costs and emissions from that of other potential manufacturers thousands of miles away.

ACTIVE CHILLED BEAMS

Each interior bedroom is equipped with a chilled beam to provide individual heating and cooling control to each occupant. The primary benefits of the chilled beams are:
- Good temperature uniformity, very quiet operation, and low energy consumption.

ENERGY RECOVERY UNIT (ERU’s)

ERU’s provide required outdoor air to each apartment. Instead of being discharged into the air to reduce the energy costs of heating the building, the ERU’s capture energy from exhaust air to preheat the outdoor air during the winter to keep the indoor air temperature higher.

SUSTAINABLE LANDSCAPE

The use of rain gardens and permeable paving reduces the drainage volume and is a rooftop terrace with sustainable vegetation, seating areas and a jogging track. Munger Graduate Residences features in all of its exterior areas.

ALTERNATIVE TRANSPORTATION

Munger Graduate Residences is located off the main road which eliminates the need for a large parking structure. Dedicated on-street parking was not provided in order to promote use of alternative transportation sources.

EASY BUS STOP ACCESS

There is a local bus stop accessible on a 1/4 mile walking distance including one stop right outside of the building.

BICYCLE STORAGE

There is a dedicated area for bike storage located on the first floor, which includes a dedicated area for bike storage located on the first floor.

RAIN GARDEN & PERMEABLE PAVEMENT:

This planted depressor, at the south edge of the site, receives and slowly absorbs rainwater runoff from the roof and garage areas. This runoff was routed by stormwater to soak into the ground as opposed to flowing into storm drain systems and surface waters which creates erosion, water pollution, flooding, and diminished groundwater. Permeable paver walkways surrounding the site also aid in stormwater treatment by mitigating runoff.