

## 7272 Wisconsin Ave Residential – LEED Case Study

### Project Description

- The 7272 Wisconsin Ave Residential project is a 456-unit building located in Bethesda, Maryland.
- The building will consist of residential floors above a parking podium. Parking will be provided in a garage with 397 spaces.
- The project is designed to LEED for New Construction v2009 standards.



## Sustainable Sites

- Site is located in a densely developed area with access to numerous community services.
- Transit access is a unique feature of the building since a new Metro Rail station is being built in the project's adjacent plaza which will be integral to the overall site.
- Open space, including landscaped area and pedestrian hardscape, is 66% of the total site area. Open space includes pedestrian areas and vegetated area.



# Sustainable Sites

- The project has a 12,967 sf green roof which provides open space, contributes to tenant amenities and natural habitat.
- Parking is entirely under cover in a garage which together with the green roof contribute to reducing the heat island effect.
- The stormwater management plan, which combines both green roof, and onsite bioretention, results in a 37% reduction in post-development runoff for the 2-yr 24 hr storm.

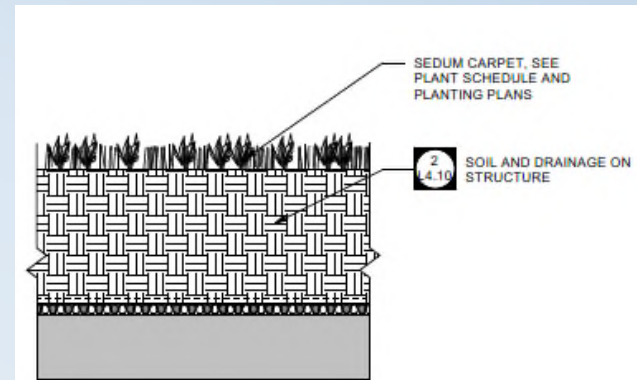


Image: Green Roof Detail

# Water Efficiency

- Landscaping is irrigated with a drip irrigation system, which helps to reduce water use by 83% compared to the LEED baseline. Green roof areas aren't irrigated.
- Plumbing fixture flow rates result in 38% water savings compared to the LEED baseline. This is achieved with the below flow rates.
  - Lav faucets: 1 gpm
  - Toilets: 1.28 gpf
  - Urinals: 0.125 gpf
  - Showerheads: 1.5 gpm
  - Kitchen faucets: 1.5 gpm
- The above fixture flow rates result in approximately 7,874,262 gallons of anticipated water savings per year.



## Energy and Atmosphere

- The project's energy model demonstrated 23% in energy cost savings compared to the ASHRAE 90.1-2007 baseline.
- Savings are due to the following energy efficiency measures:
  - Efficient lighting design in parking garage is 0.10 W/sf.
  - Variable speed hydronic heating pumps
  - Variable speed cooling tower pumps
  - EER 14.4-17 water source heat pumps
  - ENERGY STAR appliances
  - Low flow plumbing fixtures
  - Condensing boilers with 94% rated efficiency

## Materials and Resources

- Construction waste recycling resulted in 95% of construction waste either recycled or otherwise diverted from disposal. The project recycled or diverted 6,939 tons of construction material.
- Recycled content materials total over 10% of materials, by cost.
- Regional content materials constitute over 30% of all materials, by cost.



## Indoor Environmental Quality

- The project implemented a Construction IAQ Management Plan during construction. Absorptive materials were wrapped to prevent moisture damage during construction.
- Low VOC paints, coatings, adhesives, sealants and flooring were installed during construction.
- MERV 13 filters have been specified for DOAS units serving the building.

