

2009-2026 Accomplishments

100,000,000

gallons

Waste water reclaimed

1,481,444

lbs.

Carbon dioxide (CO2) saved

871,336

kWh.

Energy produced via solar panels

67,500

people

Took an OCSL building tour

Net Zero

kWh.

Energy used from the grid

Building Sq. Ft.

6,250

Site Acreage

4.5

Water Reclamation Capacity

52,000

Maximum Design Flow

38,000

Measured Maximum Flow

gallons per day (GPD)

Estimated annual flow 5 million gallons

Sustainability Metrics

The project is certified as LEED Platinum and has earned 'living' status in Living Building Challenge™ 1.3.

Embodied CO2

-1,387

metric tons (+/- 25%)

(Estimated using buildcarbonneutral.com)

Embodied carbon is the carbon released when a product is manufactured, shipped to a project site and installed. The new wetlands plant area greatly offset the embodied CO₂ of the construction project, which resulted in a negative number.

The Construction Carbon Calculator estimates embodied carbon. This calculator looks at an entire project and takes into account the site disturbance, landscape and ecosystem installation or restoration, building size, and base materials of construction.

Rainwater Use for Toilet Flushing

40

gallons. Average Daily Demand

1,800

gallon cistern stores enough water for 45 days

Generation Capacity (Electricity)

2,830

sq. ft. of photovoltaic panels,
211 panels in
3 arrays

134.2

Kw/day
(48.53 Kw/hour max output)

Electricity Demand

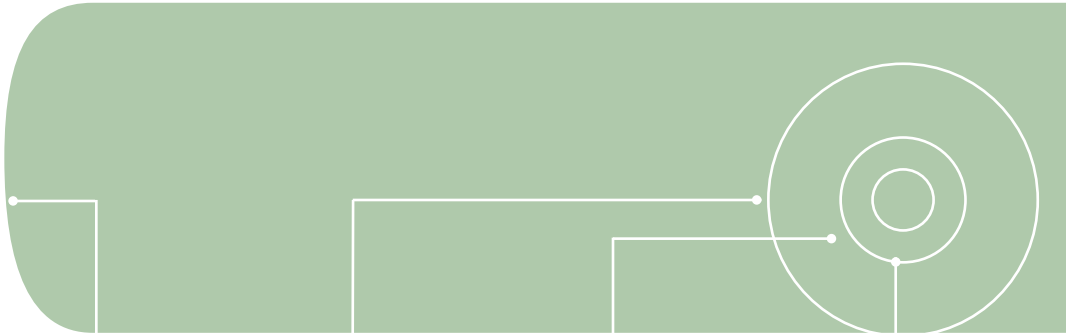
132.77

Kw/day (average)

Electricity Usage

-1.43

Kw/day (average) - the building is designed to generate more electricity than it uses

Material Sourcing (based on Living Building Challenge)More info at: eOmega.org/ocsl & issuu.com/bnim/docs/bnim_flow

9,000

miles
Renewable Energy
Technologies (PV
systems)

1,000

miles
Lightweight
Materials (insulation,
carpet, fabrics)

500

miles
Medium Weight
Materials (wood
products)

250

miles
Heavy Materials
(brick, stone,
concrete)Wood Sourcing

All wood is either from FSC Certified Forest sources or reclaimed sources. Plywood roof and wall sheathing was reclaimed from the 2009 Presidential Inaugural Stage. Framing lumber was reclaimed from several deconstructed buildings in New York State.

Reclaimed Wood

1,198 cu. ft. Volume
52,703 lbs. Weight (plywood, framing lumber, siding, doors, trim, paneling)

Construction Waste Recycling and Diversion (from landfill)

99%

of metal
scraps
recycled

99%

of cardboard
scraps and
waste
recycled

99%

of rigid
foam waste
was reused
elsewhere or
recycled

99%

of wood
waste was
shredded
for mulch or
stored for
future use

100%

of food
waste was
composted

100%

of glass
waste, paper,
and plastic
packaging
waste was
recycled.FSC Certified Wood

111 cu. ft. Volume
3660 lbs. Weight (windows,
exterior doors, glu-lam
structure, roof sheathing)

Red Materials Avoided (based on list from the Living Building Challenge)

Cadmium, Chlorinated Polyethylene and Chlorosulfonated Polyethylene, Chlorofluorocarbons (CFCs), Chloroprene (Neoprene), Formaldehyde (added), Halogenated Flame Retardants, Hydrochlorofluorocarbons (HCFCs), Lead, Mercury, Petrochemical Fertilizers and Pesticides, Phthalates, Polyvinyl Chloride (PVC), Wood Treatments containing Creosote, Arsenic or Pentachlorophenol

Project Team*Owner:* Omega Institute*Architect:* BNIM Architects, Steve McDowell, Laura Lesniewski, Brad Clark, Sarah Hirsch, Ramana Koti*Civil Engineer:* Chazen Companies, Jim Beninati*Construction:* David Sember Construction, David Sember*Ecological Design:* John Todd Ecological Design, Dr. John Todd, Chloe Starr, Conor Lally, Kim Robinson, Jonathan Todd*Landscape Architect:* Conservation Design Forum, David Yocca, Tom Price, Gerould Wilhelm, Trish Beckjord, Jason Addington*Mechanical/Electrical/Plumbing Engineer:* BGR Engineers, Katrina Gerber, Erin Zirjacks, Jim Basquette*Structural Engineer:* Tipping Mar + associates, David Mar, Marc Steyer*Water Systems Engineer:* Natural Systems International, Michael Ogden, Erin English, Pete Munoz, Olin Christy, Rachel Arrieta