

## **ABOUT THE PROJECT:**

In a highly unusual collaborative design process with Massachusetts College of Art and Design students, professors, staff, alumni, and trustees, ADD Inc has created a new landmark in the Boston skyline. The 20 story "Tree House" Residence Hall for 493 freshmen includes a café and living room, a health center, communal kitchen, game room, laundry room, fitness center, and 17



floors suites with a lounge and work Inspired rooms. by Gustav Klimt's 1909, 'Tree of Life' painting, the building is clad in over 5000 composite aluminum panels The "Tree House" Residence Hall is striving to become **LEED Gold Cer**tified.



#### PROJECT TEAM LIST:

OWNER: Massachusetts State College Building Authority

ARCHITECT: ADD Inc

CONSTRUCTION MANAGER: Suffolk Construction

LANDSCAPE ARCHITECT:
Ground Inc

STRUCTURAL ENGINEER: Odeh Engineers, Inc

MEP/FP ENGINEERS: WSP Flack + Kurtz





MASSACHUSETTS COLLEGE
OF ART AND DESIGN

SUSTAINABLE

#### SITE

The project is located in a dense urban environment with access to many basic services and several modes of public transportation; it is within two main subway lines, green line and orange line, with six available subway stations and several bus stops.



The site is classified as a Brownfield, and the redevelopment and remediation of the site is in compliance with the Massachusetts Voluntary Cleanup Program.

The project reduces pollution from automobiles by having a fuel-efficient and hybrid vehicle sharing program through an agreement with zipcar using MassART's parking spaces on Vancouver Street.



The site provides 49.46% of open space with pedestrian-oriented hardscape and vegetation.

The site decreases the stormwater runoff by 33.16% from the predevelopment site, and limits the pollution of natural water bodies by capturing and treating the stormwater

 $with\ its\ recharge\ systems,\ drywells,\ and\ storm ceptors.$ 

## **ENERGY**

The project's proposed energy cost usage is 22.83% more efficient than the baseline case (ASHRAE 90.1-2007). This is achieved with a high performance thermal envelope, efficient mechanical equipment, and an efficient lighting design.

# **ENERGY** (CONT.)

Enhanced commissioning of the building systems reduces energy use and operating costs by ensuring that all of the systems are operating properly and efficiently.

The project is offsetting 70% of the project's electricity usage for two years with renewable energy technologies by using renewable energy credits.

The building teaches occupants about the optimal use of operable windows with an instructional green light bulb on every residential floor; when the light is on, occupants can open their windows because the outdoor temperature will not create extra loads on the building systems.



## WATER

The project reduces the amount of potable water used for landscape irrigation by 76.66% with efficient drip irrigation and native and adapted vegetation.

The project reduces the amount of potable water used for plumbing fixtures by 33.17% in com-



parison to a baseline standard by using low-flow water closets, lavatories, kitchen sinks, and showers.

To eliminate the use of plastic water bottles, the project has a filtered water bottle filling station in the community kitchen on level three for the occupant's use.

### **MATERIALS**



The project's construction team reduced the amount of waste sent to a landfill by recycling and salvaging 90.03% of the total construction waste generated by the project.

To reduce the environmental impact and the waste created in the trans-

portation process, the project has regional materials that are extracted and manufactured within 500 miles of the project site for 20.79% of the total materials cost.

To reduce the impact on virgin materials, the project has recycled materials for 49.61% of the total materials cost.

The project's indoor air quality management plan protects the materials and equipment during construction from pollutants, and is followed by indoor air testing prior to occupancy to ensure that contaminant levels

are very low for occupant health.

To encourage responsible forestry, the project has FSC-certified wood for 88.80% of the total new wood material cost.

Mass ART Community Kitchen

All adhesives, sealants, paints, and flooring

systems in the project contain zero to very low voc limits for a better indoor air quality.

#### **IMAGE CREDITS:**

Peter Vanderwalker; Lucy Chen; Chuck Choi