

HLS HAUSER HALL, BASEMENT OFFICES
 1575 MASSACHUSETTS AVENUE, CAMBRIDGE, MA
PROJECT PROFILE
LEED FOR COMMERCIAL INTERIORS v.2009
PLATINUM CERTIFICATION
2012

The Harvard Law School (HLS) Hauser Hall Basement Office renovation project is the renovation of approximately 4,000 SF within an existing building to accommodate the HLS Finance and Human Resources departments relocating from another Harvard owned building in Cambridge. Hauser Hall was constructed in 1994 as part of the Law School's Campus.

The Finance suite contains five individual offices and an open workspace with four workstations and open meeting area. The Human Resources suite contains eight individual offices, a conference room and reception area. A shared kitchenette is located at the end of the common corridor with a small sink, under-counter refrigerator, microwave and water filter.

General Sustainability Goals - A strong emphasis was placed on not only meeting, but also exceeding both the Harvard University Green Building Standards for Fit-outs and LEED-CI v2009 Certification requirements. The project team carried out extensive research to identify materials with sustainable attributes, whether recycled content, purchased locally, or simply re-used.

In a below-grade space that receives little daylight, the project team worked to balance efficiency, function and comfort by utilizing various lighting types (LEDs, high efficiency linear fluorescents, task lights, etc), as well as interior partitions with transparent glazing to maximize light transmission through the spaces.



HLS Financial Office, Finance Workroom
 Photo: Elaine Construction, 2012.

PROJECT HIGHLIGHTS

LEED® Facts

Harvard Law School
 Hauser Hall, Basement Offices
 2012 Renovation



Location.....1557 Mass. Ave, Cambridge, MA 02138
 Rating System.....LEED-CI v2009
 Certification Level.....PLATINUM
 Total Points Awarded.....86/110

Sustainable Sites.....19/21
 Water Efficiency.....8/11
 Energy and Atmosphere.....28/37
 Materials and Resources.....12/14
 Indoor Environmental Quality.....9/17
 Innovation and Design.....6/6
 Regional Priority.....4/4

38% **Water Use Reduction** when compared to EPAAct 1992 baseline

37% **Lighting Power Reduction** when compared to ASHRAE 90.1-2007 baseline

18% **Reused materials** value as a percentage of total materials value.

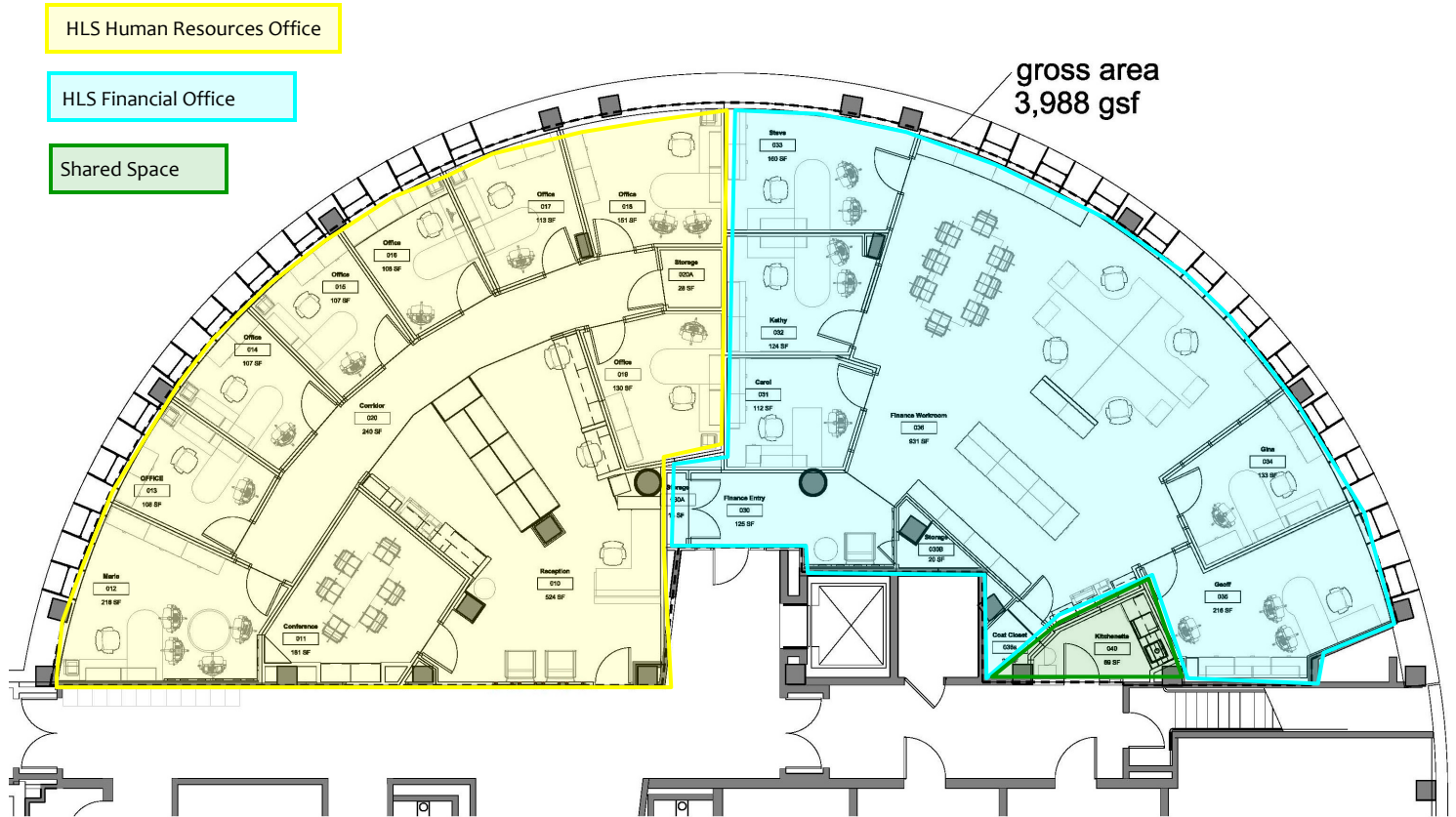
56% **Regional materials** (manufactured within 500 miles) value as a percentage of total materials value.

26% **Recycled content** value as a percentage of total materials value.



PROJECT OVERVIEW

HAUSER HALL BASEMENT OFFICES - FLOOR PLANS



LEED Floor Areas and Boundaries
Austin Architects LLC



HLS Human Resources Office - Reception
Photo: Kathryn Cosgrove, Harvard Office for Sustainability, 2012.

PROJECT TEAM

Owner	Harvard Law School
Architect	Austin Architects LLC
Contractor	Elaine Construction
MEP Engineer	AHA Consulting Engineers
Commissioning Authority	MAW Consulting
Sustainability Consultant	Harvard Green Building Services



ENERGY EFFICIENCY

Hauser Hall has committed, along with Harvard University as a whole, to reduce greenhouse gas emissions 30% below 2006 levels by 2016, inclusive of growth. Therefore, energy efficiency guided the selection of lighting and fan coil units installed as part of the project.

MECHANICAL SYSTEMS

ECM 1: Demand Control Ventilation—CO₂

Volume of outside air supplied to the conference room is controlled by a CO₂ sensor. The CO₂ sensor increases ventilation rates as it senses an increase in CO₂ levels, which occurs as more people occupy the room.

ECM 2: Occupancy Sensors

Occupancy controls for Fan Coil Units with temperature set-point setback. Occupancy sensors are installed in all spaces to turn the fan coil units (FCU) on, or off, based on actual occupancy. Occupancy Sensor time delay is set at 60 minutes to shut-off FCUs.

ECM 3: Scheduling

The Hauser Hall HVAC system operating schedule is 6a.m. to 7p.m, seven days a week. HVAC must be manually turned on via override at all other times if the space is in use.

ELECTRICAL SYSTEMS

ECM 1: Occupancy Sensors:

Occupancy sensors are installed in all spaces to turn the lights on, or off, based on actual occupancy. Occupancy Sensor time delay is set at 10 minutes to shut-off lights.

ECM 2: Reduction in Lighting Power Density





36.53% reduction in Lighting Power Density (watts/square foot) when compared to ASHRAE 90.1-2007 baseline.

ECM 3: Task Lights—Bulb Swap

To minimize the energy use of task lights brought into the space by the occupants, Harvard Law School has provided 20-Watt Compact Fluorescent Lamps (CFLs) in exchange for the 60 Watt incandescent bulbs.

INDOOR ENVIRONMENTAL QUALITY

Harvard Law School is committed to providing a healthy indoor environment for all occupants. The project team was careful to maintain healthy indoor air quality during construction and to also ensure the space promotes healthy indoor air quality during occupancy. To maintain good indoor air quality, the Hauser Hall Basement Offices Renovation only used low VOC products.

Product Category	Product & Manufacturer	VOC Content (g/l)	VOC Limit (g/l)	Standard
Paints & Coatings	> EcoSpec, Interior Flat Primer / Benjamin Moore 	0	50	Green Seal GS-11, 1993
	> EcoSpec, Interior Semi-Gloss Paint / Benjamin Moor 	0	150	Green Seal GS-11, 1993
Adhesives & Sealants	> Proform Joint Compound Drywall and Panel Adhesives National Gypsum 	2	50	SCAQMD 1168, 2005
	> Polyseamseal, Tub & Tile Adhesive Caulk OSI Sealants Inc. 	2	250	SCAQMD 1168, 2005

WATER EFFICIENCY

38.48% REDUCTION = 13,950 GAL/YEAR

WHEN COMPARED TO EPACT 1992 BASELINE



SLOAN Uppercut Dual-Flush Flushometer WES-115
1.1 gpf and 1.6 gpf



**Bathroom Sinks:
SLOAN EAF-275**
0.35 gpm



SLOAN Waterfree Urinal (WES-1000)
0.0 gpf flush rate



**Kitchenette Sink:
NEOPERL Faucet Aerator**
0.5 gpm flow rate



DELTA Showerhead #8
1.6 gpm

MATERIALS

UltraTouch Denim Insulation, by Bonded Logic

- 90% Post-Consumer Recycled Content
- 70% Rapidly Renewable (cotton)
- Energy Star Qualified (seal & insulate)
- R-Value = 13 (insulation effectiveness)



Wheatboard, by Kirei

- 90% Rapidly Renewable (non-edible portion of wheat stalks)
- 90% Post-Consumer Recycled Content
- No Added Urea Formaldehyde
- VOC Free



Architectural Wood Door #5502A, by VT Industries

- 90% Pre-Consumer Recycled Content
- 9.7% FSC Wood
- No Added Urea Formaldehyde



Meridian File Cabinets, by Herman Miller

- 24% Post-Consumer Recycled Content
- 5% Pre-Consumer Recycled Content



Eames Meeting Table, by Herman Miller

- 3% Post-Consumer Recycled Content
- 67% Pre-Consumer Recycled Content



Caper Stacking Chair, by Herman Miller

- 18% Post-Consumer Recycled Content
- 7% Pre-Consumer Recycled Content
- GREENGUARD Certified & No VOCs
- MBDC Silver Cradle to Cradle certified



ADDITIONAL RESOURCES

- > Harvard Law School: <http://www.law.harvard.edu/index.html>
- > Harvard Law School Sustainability: <http://www.law.harvard.edu/about/administration/facilities/energy/index.html>
- > Harvard - Green Building Services: <http://green.harvard.edu/green-building-services>
- > Harvard - Green Building Resource: <http://green.harvard.edu/theresource>
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