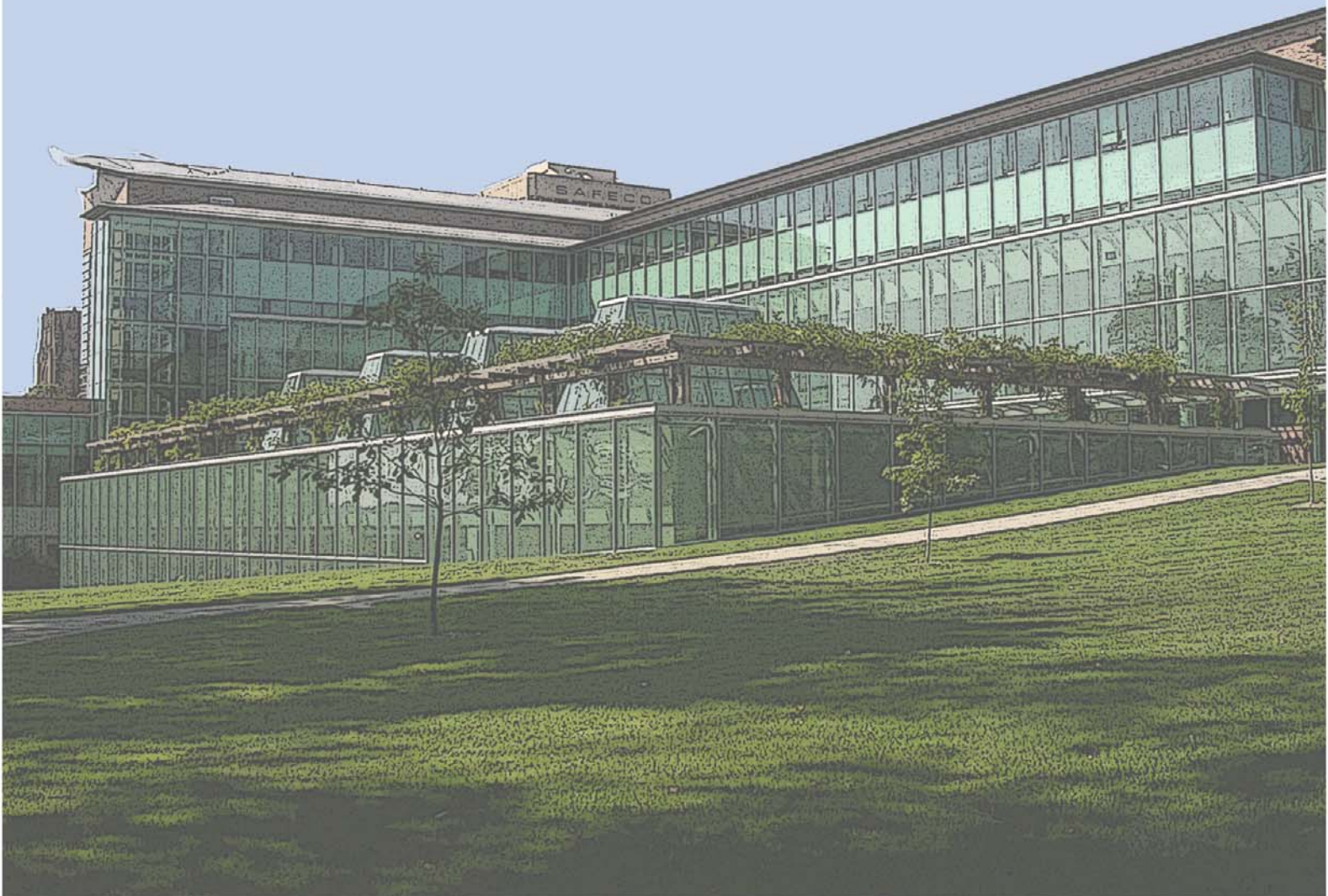
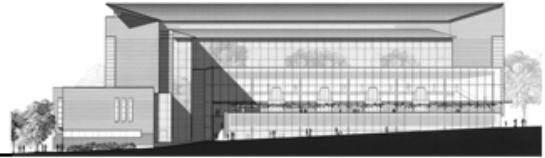


Introduction, Background & Building Overview





Introduction & Background

William H. Gates Hall provides a new state of the art facility for the University of Washington School of Law. Named after alumnus, Bill Gates, Sr., the building was designed and constructed to bring the law school facility back onto campus and provide students and faculty with a home that would meet and exceed all of their educational needs. With construction completed in September 2003, William H. Gates Hall is one of the new buildings on campus, and boasts several features that set it apart from any other building on campus. William H. Gates Hall is also home to the Marion Gould Gallagher Law Library, the largest public law library in the northwest.

General Building Overview

Building Name: William H. Gates Hall

Location & Site: University of Washington
Northeast 43rd St & 15th Ave NE
Seattle, WA

Building Occupant Name: UW School of Law

Occupancy or Function Types: Educational

Size: 196,000 sq. ft.

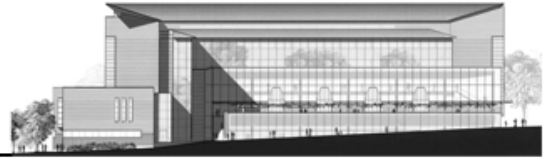
Number of Stories:

- Above Grade: 4
- Total Levels: 6

Primary Project Team:

- *Owner:* University of Washington, Seattle [www.washington.edu]
- *General Contractor:* Lease Crutcher Lewis, Seattle [www.lewisbuilds.com]
- *Construction Manager:* Lease Crutcher Lewis, Seattle [www.lewisbuilds.com]
- *Executive Architect:* Mahlum Architects, Seattle [www.mahlum.com]
- *Design Architect:* Kohn Pedersen Fox, New York [www.kpf.com]
- *Structural/Civil Engineer:* Magnusson Klemencic Associates, Seattle [www.mka.com]
- *Mechanical Engineer:* CBG Consulting Engineers, Portland
- *Electrical Engineer:* Sparling, Seattle [www.sparling.com]
- *Lighting Designer:* Candela, Seattle [www.candela.com]
- *Landscape Architect:* Murase Associates, Seattle [www.murase.com]
- *Acoustical Engineer:* The Greenbusch Group, Seattle [www.greenbusch.com]
- *Testing & Inspections:* Mayes Testing Engineers, Everett [www.mayestesting.com]
- *Geotechnical Engineer:* GeoEngineers, Seattle [www.geoengineers.com]





Dates Of Construction: July 30, 2001 – July 18, 2003

Actual Cost Information:

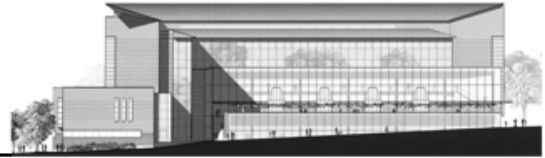
- Total Project Cost: \$82,679,787
 - o Consultant Services: \$8,166,212
 - o Construction: \$63,432,789
 - o Equipment: \$8,202,506
 - o Project Management: \$1,807,112
 - o Other: \$1,071,166

Project Delivery Method: Design-Bid-Build

Architecture:

Located on the northwest corner of the campus, the William H. Gates Hall provides a new home for the UW School of Law, bringing all the faculty and students under one roof for the first time in twenty years. Built on what previously was a parking lot, Gates Hall creates a strong presence at the 43rd St pedestrian corridor, linking to the campus' main entrance at Memorial Drive. The 196,000 square foot building houses offices, lecture halls, classrooms, courtrooms, student commons and the Northwest's finest law library. Four soaring architectural skylights in the southwest plaza provide daylight to the law library and puncture onto the outdoor terrace that sits atop the library, giving the law school a distinguishing appearance.

William H. Gates Hall is designed and centered around the Marian Gould Gallagher Law Library, which is symbolically located at the "foundation" of the building. Providing 40,000 square feet of book stacks and 10,000 square feet of reading room, the Marian Gould Gallagher Law Library sits two floors below grade and is encapsulated by the terrace above and the main L-shaped structure on its north and west sides. With the four trapezoidal sky lights connecting the library to the outside world, the central terrace provides an outdoor gathering place for students and faculty. Linking the main structure and the terrace is a glazed two-story galleria, which serves as the main circulation corridor for building. The daylight infused Brotman Galleria provides access to classrooms and seminar rooms on the first and second floors. The main entrance of the building is located at the east end of the building, along Memorial drive and feeds into a double-height lobby. The modest "grand" staircase in the lobby provides access to the library below and the pro-bono law offices above. While the first two levels of the building primarily house courtrooms, classrooms and seminar rooms, the upper two levels accommodate mostly faculty and administrative offices.



Major Nation Model Codes:

- 1997 Uniform Building Code with City of Seattle Amendments
- National Fire Protection Association Codes
- National Electric Code (NFPA 70, 1996)

Local Codes

- 1997 Seattle Building Code
- 1997 Washington State Building Code
- 1997 Washington State Energy Code
- Washington State Electrical Code
- Seattle Electrical Code

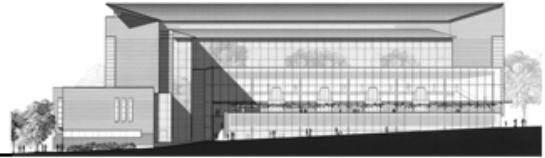
Building Envelope

The exterior walls of William H. Gates Hall are predominantly brick and glazed aluminum. The north and west facades of the building are mostly laid-in-place brick veneer over CMU backing wall, following the standard University of Washington barrier wall system. A Norman 2-3/4 by 12 brick module is used in a combination of colors to complement the campus' existing brick color palette. The South and East facades, including the entry lobby, gallery overlooking the terrace, and the perimeter walls of the library utilize a glazed aluminum curtain wall system. The stair wells and upper levels of the South facing perimeters use a glazed aluminum curtain wall with a different mullion pattern. Standard glazing throughout the building is insulated glazing units with low-E performance glass.

The main roofing system consist of standing seam roofing over insulation, supported on a 3" metal roof deck, which spans horizontally between steel beams that are parallel to the ridge. The lower, flat roof levels consist of gravel ballast over waterproofing membrane and insulation, also supported on 3" metal roof deck, supported by steel beams and girders.

Construction

Construction of William H. Gates Hall began in July 2001. Following a dedication ceremony, the building was opened to the public on September 12, 2003. The general contractor/construction manager (GC/CM) for the project was Lease Crutcher Lewis. By using GC/CM contracting approach for this job, Lewis was brought aboard early in design and helped provide a detailed analysis at every step of the project.



Electrical

William H. Gates Hall utilizes a radial system, in which the service is brought to the building through two 13.8 kV primary feeders tapped from the main campus distribution system. These two feeders enter the building in the Main Electric Room on level L2 and are connected to the three-bay primary switchgear. This then feeds a single-ended interior substation and the primary switch, which is rated at 15KV, 600 amperes, 500MVA short circuit duty, serves a 2500/3333 KVA fan cooled, dry type transformer. The secondary serving voltage for the building is a 480Y/277 volts, 3 phase, 4 wire grounded Wye system. The majority of the building's mechanical system and lighting loads are served at these voltages, and 120 and 208 volt loads are served through additional step-down transformers. The 4000 ampere bus in the main power center is protected by a 4000 ampere main circuit breaker. This power center further feeds two 215 KW chillers, a 400 A automatic transfer switch for emergency power, a 400 A elevator distribution panel, a 1600 A distribution panel, and five 480:208Y/120 volt dry type transformers.

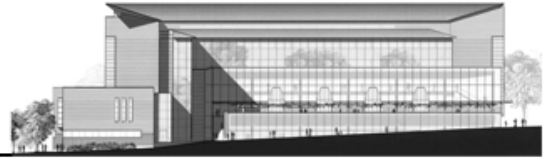
Lighting

In efforts to achieve desired design goals, the lighting throughout William H. Gales Hall primarily utilizes fluorescent lighting. Classrooms and seminar rooms make use of suspended indirect/direct fluorescent luminaires, as do the majority of the offices spaces, while the courtroom spaces uses primarily compact fluorescent downlighting. The circulation corridors also take advantage of compact fluorescent downlighting, as well as linear fluorescent wallwashers. Several areas make use of metal halide luminaires, primarily in the form of track fixtures and downlights.

Daylighting is utilized in several of the spaces, most noticeable the galleria corridor which runs through the heart of the building. The two story galleria is lined on one side by a two story glazed curtain wall. Daylighting is also incorporated in the library by four large skylights which protrude through to the terrace above.

Structural

The primary floor structural system consists of 34'6" by 34'6" composite bays with 3 ½" concrete slab on 3"metal decking and steel beams and girders. The foundation system is composed of spread footings with 1'-4" foundation walls. The system is supported laterally by concrete shear walls, varying between 12" to 14" thick, with two layers of reinforcement.



Mechanical

The University of Washington is served by a network of underground utilities, from which low pressure steam is extended to the building. The steam, steam condensate and compressed air enter William H. Gates Hall at Level L2 in the northeast corner of the building. Both domestic hot water and space heating are provided from this steam throughout the entire building.

Located on the top level (Level 4) in the fan room are nine air handling units with capacities ranging between 10,080 and 29,940 cfm. Air is distributed throughout the building by means of fan-powered terminal boxes with water source reheat coils.

The cooling utility is provided throughout the building by means of two 275 ton centrifugal chillers and two 59,850 cfm cooling towers.

Fire Protection

William H. Gates Hall is fully sprinklered and utilizes a multiplexed, analog addressable, annunciate, electrically supervised fire alarm system. Complying with University of Washington Facility Design Information Standards, as well as the Seattle Fire Code and ADA, the building contains all necessary fire alarm equipment and controls, including smoke detection in many public areas and HVAC supply and return plenums, pull stations, combination speaker/visual fire alarm devices, door releases, sprinkler system flow switches and fan shutdown circuitry.

Telecommunications

A complete voice, data, and multimedia communications infrastructure system is provided throughout William H. Gates Hall. Student seating areas in classrooms are provided with underfloor raceway stub-ups and connections to multi-outlet assemblies for future use. In addition to this, flush floor junction boxes are placed at selected locations in the floor for access from podiums and future fixed arrangements.

There are various communications systems and related equipment located throughout the building. These include, but are not limited to: wireless access points mounted in the ceilings of all classrooms, seminar rooms and court rooms; communications receptacle outlets all throughout the building for phone and data connections; several cable television outlets; and data/video projector and recorder outlets.