



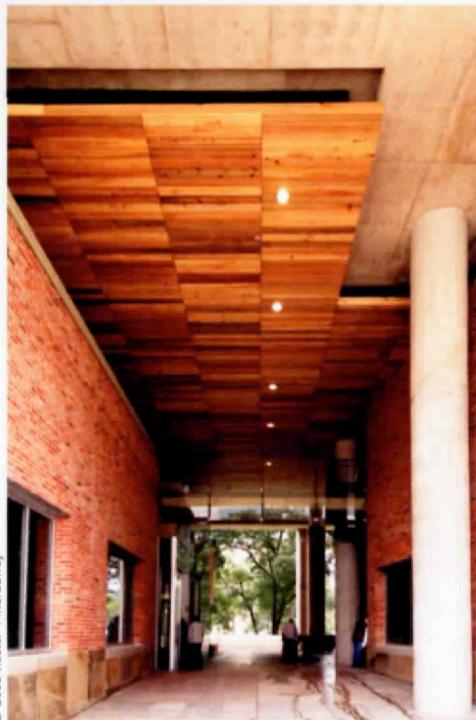
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Presenting a different façade: At the UT School of Nursing Building, a combination of cypress siding, aluminum cladding, and canvas shades provides a sharp contrast to the rest of the buildings in the Texas Medical Center.

A Natural Pleasure

Seeking Ecological Balance at the University of Texas School of Nursing Building

BY MARK OBERHOLZER



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The view through the ground floor breezeway.

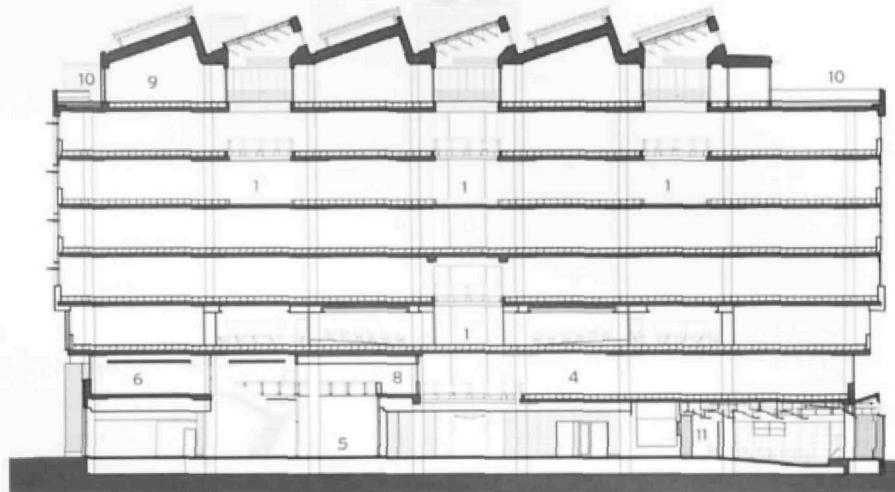


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One of the School of Nursing Building's most striking features is its interior atria, which allow daylight to filter deep inside.

- 1 Atrium
- 2 Offices
- 3 Lounge / kitchen
- 4 Study lounge
- 5 Breezeway
- 6 Bookstore
- 7 Classroom
- 8 Terrace
- 9 Deans Office
- 10 Roof Garden
- 11 Auditorium

0 5 10 20



Courtesy BNIM

Longitudinal section through the UT School of Nursing Building, showing location of roof garden and three interior atria.

THE UNIVERSITY OF TEXAS School of Nursing and Student Community Center is a building unlike any of its contemporaries in the Texas Medical Center. It's relatively small in size and scale, its exterior materials are obviously natural rather than synthetic, and it makes little if any accommodation to the automobile. Sandwiched between M. D. Anderson's new Ambulatory Clinical Building and Grant Fay Park, a small park alongside traffic-choked Holcombe Boulevard, the School of Nursing Building manages to be at once both modest and startlingly assertive.

In addition to housing the School of Nursing and the student center, the structure was charged with being a model of ecologically balanced institutional building. The idea that a school that teaches health should reside inside something that itself encourages health is a premise that led the School of Nursing Building's designers (BNIM with Lake/Flato) to engage technologies that are not often found in institutional settings, especially medical buildings.

The only way to enter the School of Nursing Building is to walk up to it—there is no sweeping drive or towering lobby, common characteristics of new clinical buildings (which require areas for patient drop-off and pick-up) in the Medical Center. Although academic institutions abound in the Texas Medical Center, the complex has only a few places that actually have the feel of a college campus. The School of Nursing Building, with its pedestrian-friendly aesthetic, connects with and continues the academic atmosphere of some of the older parts of the Texas Medical Center, even though it is physically isolated from those areas.

Materials

While many modern buildings are conceived of in terms of formal operations—extruding, folding, warping, and so on—the School of Nursing Building strongly asserts its materials. The variety and nature of the building's materials give it an appealing tactile quality.

The first three floors of the building, which house most of the communal spaces, are clad in materials that have an explicitly “natural” character. At ground level, handmade brick from a 125-year-old San Antonio warehouse wraps around the articulated circular volume of the auditorium and through the entry breezeway, where it is accented with rough-hewn Texas granite.

Above the brick are cypress logs recovered from riverbeds and milled into horizontal siding, which is punctuated by the circular concrete columns of the building's structural frame. While each of these materials meets sustainability criteria, Lake/Flato's trademark Texas-industrial-agricultural aesthetic lends the School of Nursing Building a strong sense of identity very different from most buildings in the Texas Medical Center. The addition of a hitching post and a horse or two would not seem out of place.

Above the third floor, the materials take a turn towards a more industrial aesthetic. The upper five floors are clad in an aluminum wall system that skims just

outside of the concrete frame, completely enclosing it and rendering the upper floors as a bronze-colored box sitting atop volumes of brick and cypress. Each of the façades reveals a careful study of the position of the sun during the day, evidenced in the amount of glazing and how it is shaded.

The east side of the building offers views into the dark shadows of the trees in an adjacent park. Operable windows fitted with screens occur at regular intervals along the length of the building. Outside the windows, a system of projecting vertical canvas shades tensioned with stainless steel cables helps reduce early morning glare and acts as a textural counterpoint to the metal siding.

The west side of the building attempts to avoid late afternoon glare and heat gain by limiting the use of windows. Small, deeply recessed windows provide occasional views from both sitting and standing heights, but most of the west-facing rooms have little glazing. The plan of the building reflects the idea that the west side is the least preferred side of the build-



Perforated metal siding adds depth and shading to the School of Nursing Building's west side.



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ing—most of the building's main spaces and offices face north, south, and east. With few windows, the west wall is comprised primarily of exuberantly perforated aluminum cladding with a strong horizontal corrugation that runs across the central interior stair and wraps around twin exterior fire escape stairs, creating zones of intriguing transparency at night.

With its diversity of engaging and contrasting materials, the School of Nursing Building has the effect of making material qualities—rather than form—the primary way in which the building is experienced.

Technologies

In essence, the typical contemporary multistory building is an architectural wrapper over a standardized system of structure and services that provides an adaptable but neutral interior. The School of Nursing Building attempts to subvert this convention with the employment of a number of ecological technologies that strongly characterize the interior of the structure.

The most striking features of the interior are the three large atria that bring natural light deep into the building. Translucent glass admits a soft, muted light into the three interior spaces. In addition to providing natural light, these atria allow building occupants to have a sense of where they are within the entire building—an antidote to the confusion experienced by visitors to the many mazelike, windowless corridors found throughout the Texas Medical Center. Similarly, the main stair above the building's entry is glazed on both outside and inside walls, creating a light-filled alternative to the elevators.

Most typical non-residential buildings utilize a suspended ceiling on each floor to provide a convenient space to run mechanical and electrical systems. In contrast, the School of Nursing Building uses a raised floor system above each structural floor—cabling, electrical, and air conditioning run underneath the floor. Because all of the building services except lighting are beneath the floors, a suspended ceiling isn't necessary in some

areas, and the concrete structure remains exposed. These occasional glimpses of the concrete structure give the building a strong material presence, avoiding the neutral, immaterial interiors of typical office buildings. In some places, however, poor execution gives the building an oddly unfinished feel—exposed insulation and miscellaneous wiring is visible, but not to any designed effect. Rather than an aesthetic choice, this seems to be a misstep.

The Ecological Question

The School of Nursing Building attempts an interesting experiment—how well can a demanding institutional program on a small urban site aspire to be a model of ecological design?

The idea of building for future flexibility is an interesting case in point. One of the risks of designing a building that can adapt to many possible futures is that it may mean the building is not perfectly attuned to its current users. Despite the constantly changing needs of

most institutions and businesses, contemporary architectural design almost always begins with an analysis of program leading to a specific building.

Virtually all steel or concrete frame buildings are inherently flexible and adaptable because interior partitions are not load bearing. However, with the use of modular demountable partitions rather than steel stud walls encased in gypsum board, the School of Nursing Building anticipates future adaptability without the mountains of accompanying waste that result from typical office renovations.

This focus on how the building will perform from an ecological standpoint over the long term is an important intellectual idea. No longer can buildings be thought of with respect only to their physical form without considering the attendant use of long-term resources. The question isn't what an ecological building should look like, but what it should look toward. ■



A small outdoor walkway connects the two sides of the School of Nursing Building through a breezeway, and provides a view of Grant Fay Park.



Portions of the School of Nursing Building's roof are planted to reduce rainwater runoff and to keep adjacent areas and the roof itself cooler.

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Meeting the LEED™ Standard

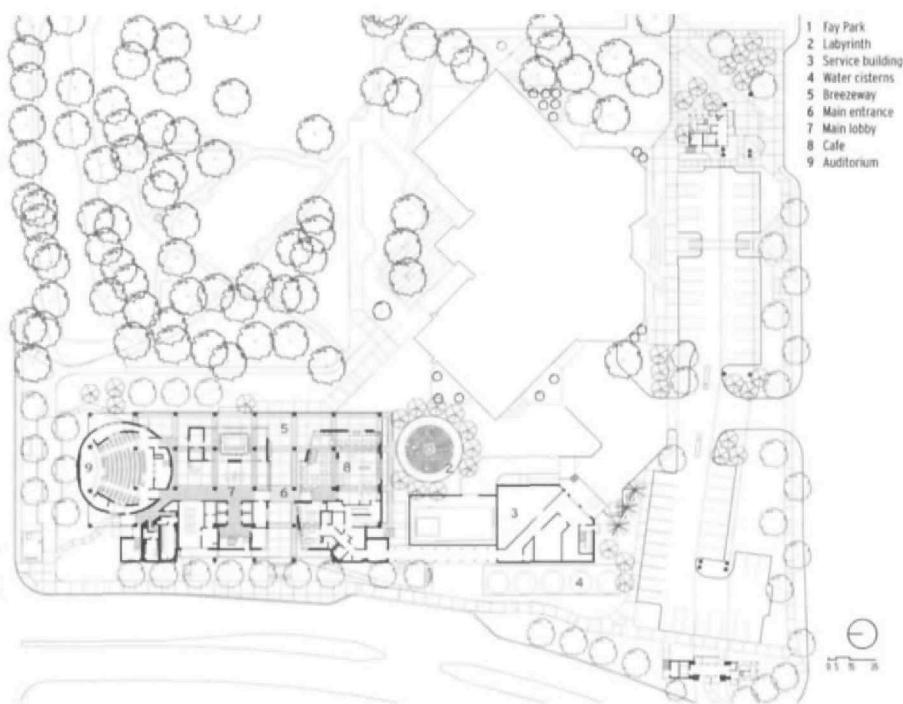
The University of Texas School of Nursing and Student Community Center was designed to conform to a standard known as LEED (Leadership in Energy and Environmental Design). This system of credits was developed by the United States Green Building Council as a way of rating sustainable aspects of buildings in a standardized way, addressing concerns in the 1990s that the term "green building" had effectively lost any useful meaning due to lack of benchmarks.

The LEED NC (new construction) system attempts to evaluate a building's design and performance in a way that includes site and urban issues as well as environmental and technological means that reduce a building's ecological footprint. In addition, the LEED system takes into account how the health and sustainability of the building's occupants is encouraged.

The School of Nursing Building is attempting to achieve a "gold" rating in the LEED NC system. At the scale of the city, the building

gains credits for providing bike racks and shower facilities for building users as well as being located near public transportation. Inside the building, LEED credits are earned through aspects such as rainwater harvesting (for non-potable water uses), materials with recycled content, waterless urinals, and lighting controls.

One of the most interesting aspects of the LEED certification process is the "commissioning" of the building, which entails verification that ensures the building's systems (such as air conditioning) are working as efficiently as predicted. This requirement has the effect of encouraging long-term sustainable practices in the operation of buildings. Over the life of a building, the maintenance and energy costs can far outstrip the initial construction costs. — Mark Oberholzer



Site plan of UT School of Nursing Building.

Courtesy BMM