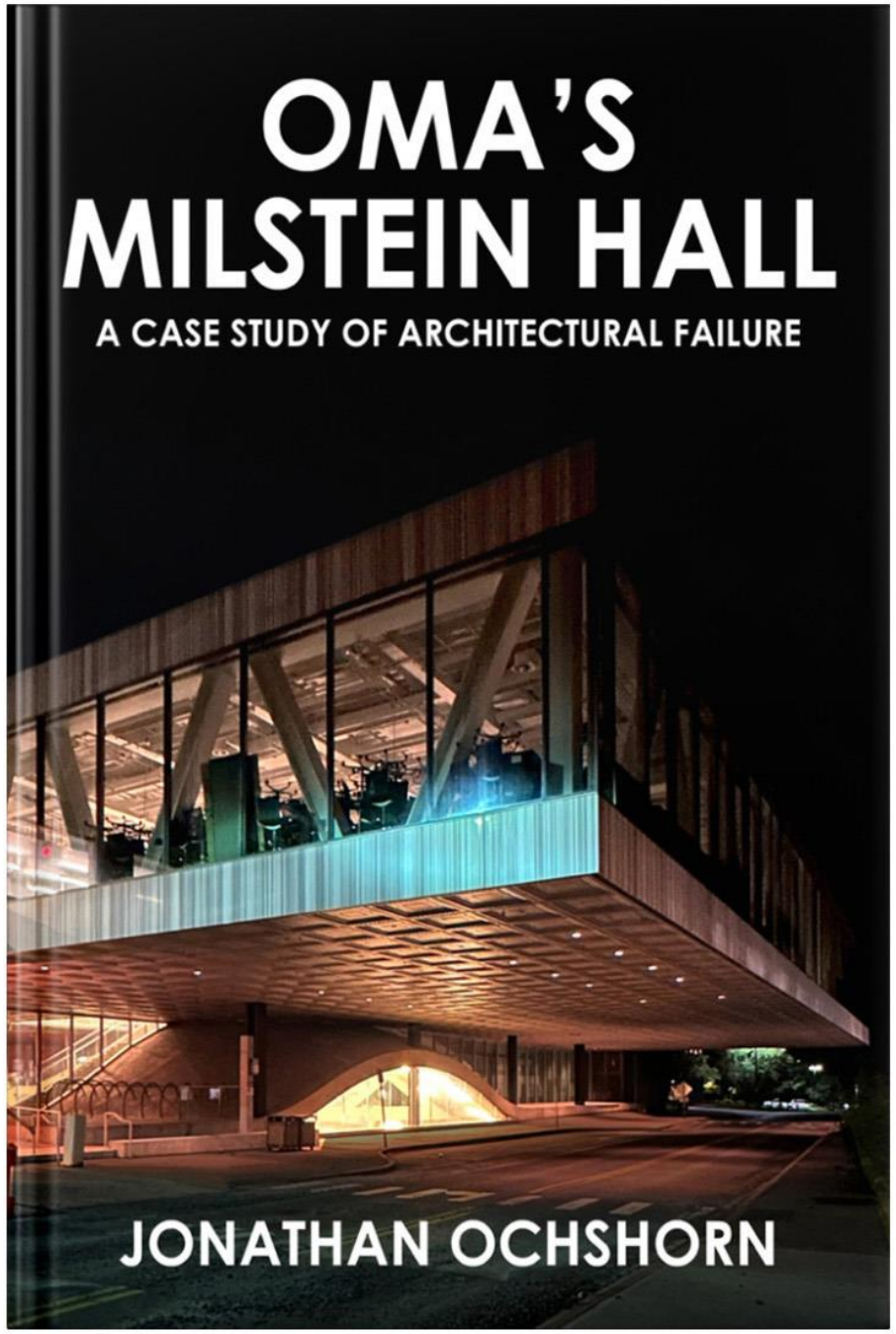
OMA's Milstein Hall

Jonathan Ochshorn

Prof. Mardelle Shepley
Design Accountability: Evaluation of the Physical Environment
Nov. 13, 2024



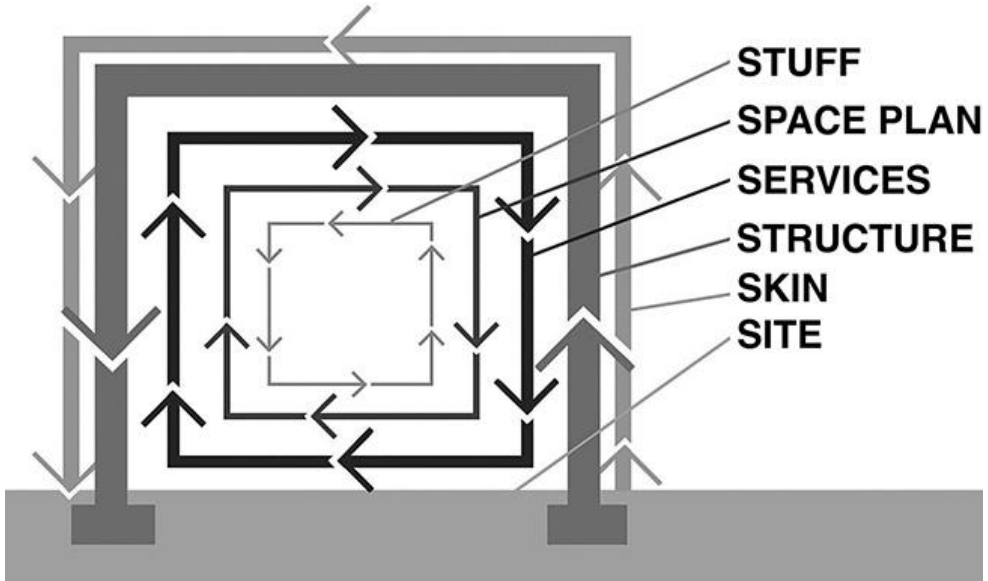
Contents:

https://jonochshorn.com/

My method:

1. Study building programs (owner's project requirements)
2. Examine schematic, design development, and working drawings
3. Obtain permission to document construction on site; take photos, make videos, talk with contractors, workers, project managers, code enforcement officials
4. Check life- and fire-safety requirements in building codes
5. Think about different modes of architectural failure: **dysfunction + inflexibility; nonstructural failure; fire hazard; and unsustainable design**

Missing from my method:
Surveys, air quality measurements, interviews with actual building users



"Shearing layers" (*OMA's Milstein Hall*, Chapter 2)

Figure 2.1. Stewart Brand's revised diagram of time-based building systems, based on Frank Duffy's categories, but with two more S's and some changed names ("site, structure, skin, services, space plan, and stuff"), each with its own characteristic time-frame for repair, maintenance, or replacement.
Stewart brand, *How Buildings Learn*

OMA’s Milstein Hall

1. What were they thinking
When this design was made
No one's eating and no one's drinking
Inside the arcade
Cause it's cold and dark and dismal
sitting in the shade

Acoustic issues unaddressed
Sound goes everywhere
While windows facing to the west
Create annoying glare
Good luck, professor, if you have to give a lecture there

In OMA's Milstein Hall
Trapped inside a curtainwall
It's neither atrium nor mall
But it's got a junkspace pedigree
With shimmering mirrors, hybrid trusses, spatial continuity

2. Unrestricted heat flow
Causes heat loss and heat gain
Thermal bridges melt the snow
But nothing stops the rain
The green roof can't absorb it so it courses down the drain

In OMA's Milstein Hall
Just when you think you've seen it all
There's a paranoid-critical toilet stall
To be deliriously enjoyed
But no water-saving strategies are seriously employed

3. Cracking everywhere that matters
Everywhere you face
A glass guard shatters
Metal trim falls out of place
Protruding objects threaten people walking in the space

In OMA's Milstein Hall
They say pride comes before a fall
So they rip it up and reinstall
The things that broke apart
In terms of architectural failure it's state-of-the-art

4. The crit room needs another fire door
For the occupancy load
While the size of the second floor
Exceeds limits in the code
All these life- and fire-safety issues are just waiting to explode

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They never built a fire wall
Yet architecture critics remain in thrall
They don't see the mess
Dangerous, dysfunctional—this building's in distress

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Its purpose is to help forestall
Making buildings that are bad
To promote health, safety, and welfare; and resist the latest fad

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OMA's Milstein Hall

1. What were they thinking
When this design was made
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Cause it's cold and dark and dismal
sitting in the shade

Figure 6.7. Campus circulation in the vicinity of Milstein Hall: Path "A" is the Duane and Dalia Stiller Arcade; paths "B" and "C" connect North Campus dormitories with the Arts Quad and the rest of campus.

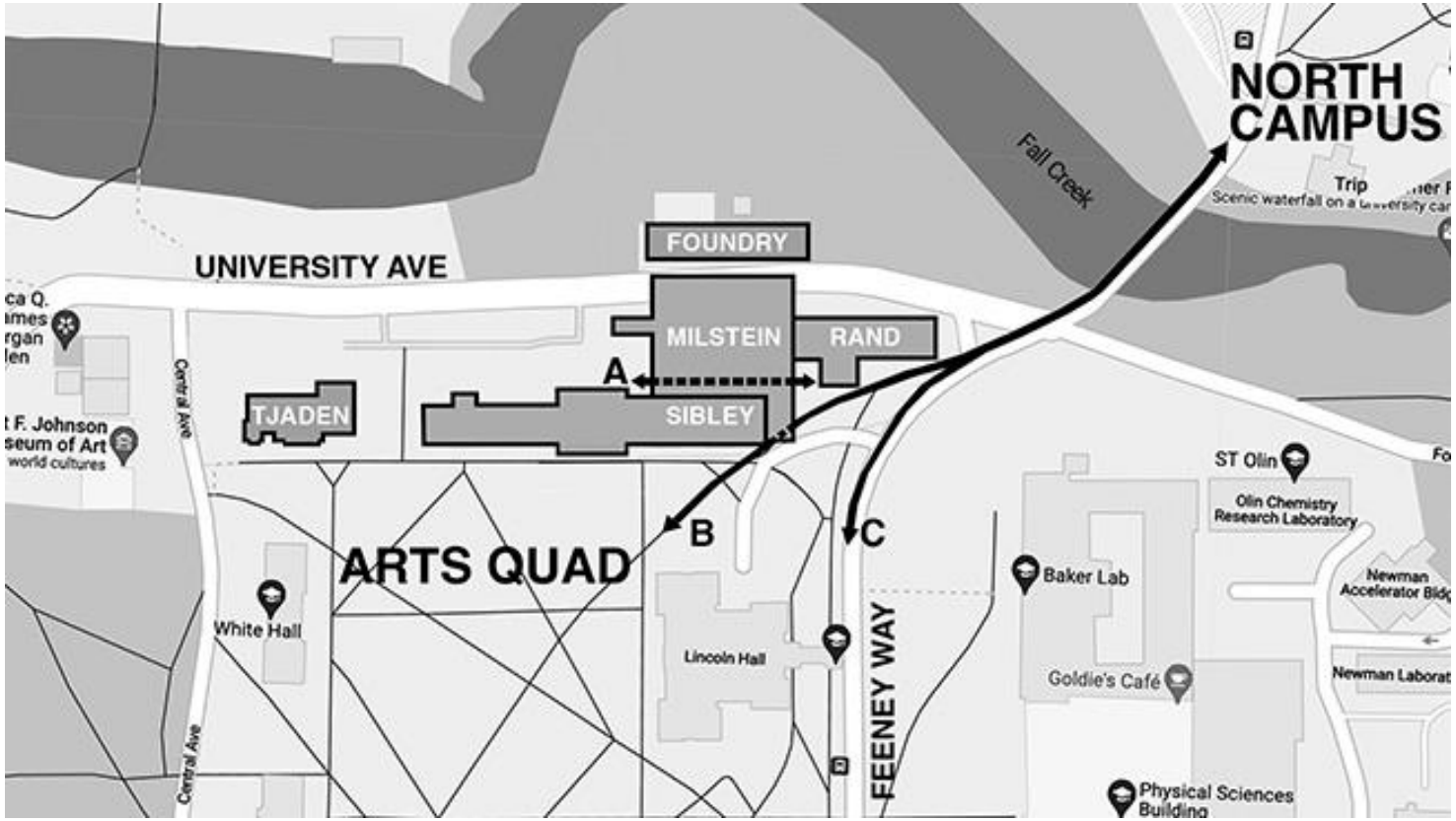

Figure 4.4. Milstein's arcade, viewed from the Milstein plaza (right) and from outside Rand Hall (left), remains dark and uninviting, even with soffit lights and integral curtain wall mullion fixtures turned on.

Figure 4.5. Some of the custom-designed LED lighting fixtures in the arcade that have been integrated into sloping curtain wall mullions turn themselves off for mysterious reasons, even after visits by puzzled electricians.

See, for example: William H. Whyte's "Social Life of Small Urban Spaces" or Project for Public Spaces

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Acoustic issues unaddressed
Sound goes everywhere

Figure 4.12. A Guastavino vault in Grand Central Station in New York City (left) acts as a "whispering gallery" in front of the Oyster Bar restaurant; the same effect makes conversation difficult in Milstein Hall's Crit Room (right), which was designed below a domical concrete surface.

OMA’s Milstein Hall

Acoustic issues unaddressed
Sound goes everywhere

Figure 4.14. Glass doors provide no acoustic isolation for the auditorium. From top-left, clockwise: glass door from entry-level bridge; glass door from second-floor studios; glass doors into adjacent crit room; and glass door to corridor.

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Acoustic issues unaddressed
Sound goes everywhere

Figure 4.15. The "stepped auditorium" in Milstein Hall at Cornell University has no actual seats, and is neither visually nor acoustically separated from adjacent studio spaces.

OMA’s Milstein Hall

Acoustic issues unaddressed
Sound goes everywhere

Figure 4.16. Lobby-Crit Room-studio interpenetration: The spatial excitement of interconnected spaces at three levels results in acoustical conflicts between circulation (over the trussed bridge at the entry level), second-floor studio spaces, and the Crit Room below.

OMA’s Milstein Hall

Words and music © Jonathan Ochshorn 2024

While windows facing to the west
Create annoying glare
Good luck, professor, if you have to give a lecture there

Figure 4.8. The special wood floor assembly area in Milstein Hall becomes uncomfortable and dysfunctional in late afternoon and early evenings as the western sun penetrates through the floor-to-ceiling glazing, even with curtains drawn and ad hoc barriers placed in front of the curtains. Students at this "Living Room" event held on April 19, 2023, with Nancy Lin and Curt Gambetta, shield their eyes (*top*) against the sun and its glare (*bottom*).

OMA’s Milstein Hall

In OMA's Milstein Hall
Trapped inside a curtainwall
It's neither atrium nor mall
But it's got a junkspace pedigree
With shimmering mirrors, hybrid trusses,
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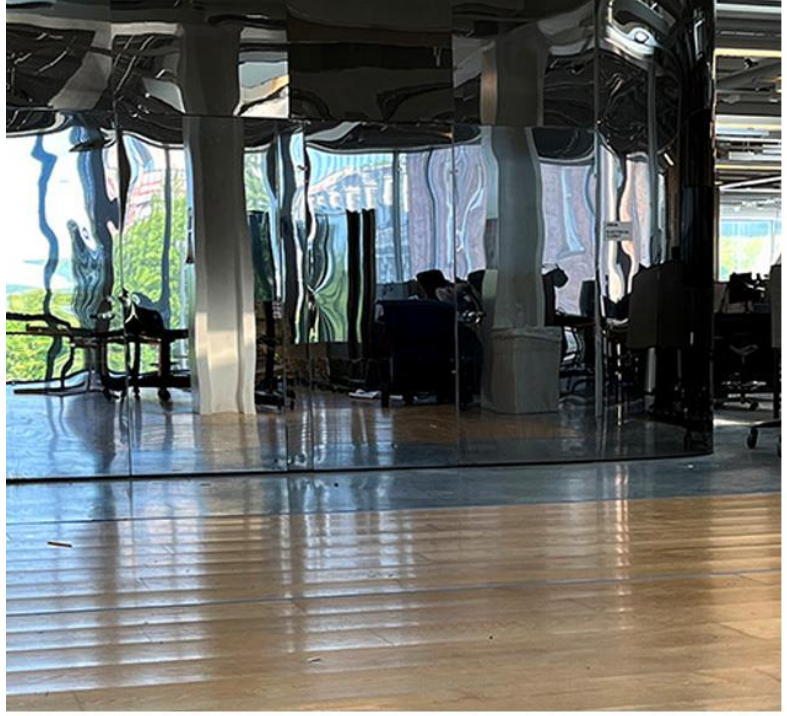
“Junkspace seems an aberration, but it is the essence, the main thing… the product of an encounter between escalator and air-conditioning, conceived in an incubator of Sheetrock (all three missing from the history books). Continuity is the essence of Junkspace; it exploits any invention that enables expansion, deploys the infrastructure of seamlessness: escalator, air-conditioning, sprinkler, fire shutter, hot-air curtain… It is always interior, so extensive that you rarely perceive limits; it promotes disorientation by any means (mirror, polish, echo)…

There are no walls, only partitions, shimmering membranes frequently covered in mirror or gold. Structure groans invisibly underneath decoration, or worse, has become ornamental; small, shiny, space frames support nominal loads, or huge beams deliver cyclopic burdens to unsuspecting destinations.”

Rem Koolhaas, “Junkspace,” *October*, Vol. 100, Obsolescence (Spring 2002), 175–190.



OMA’s Milstein Hall

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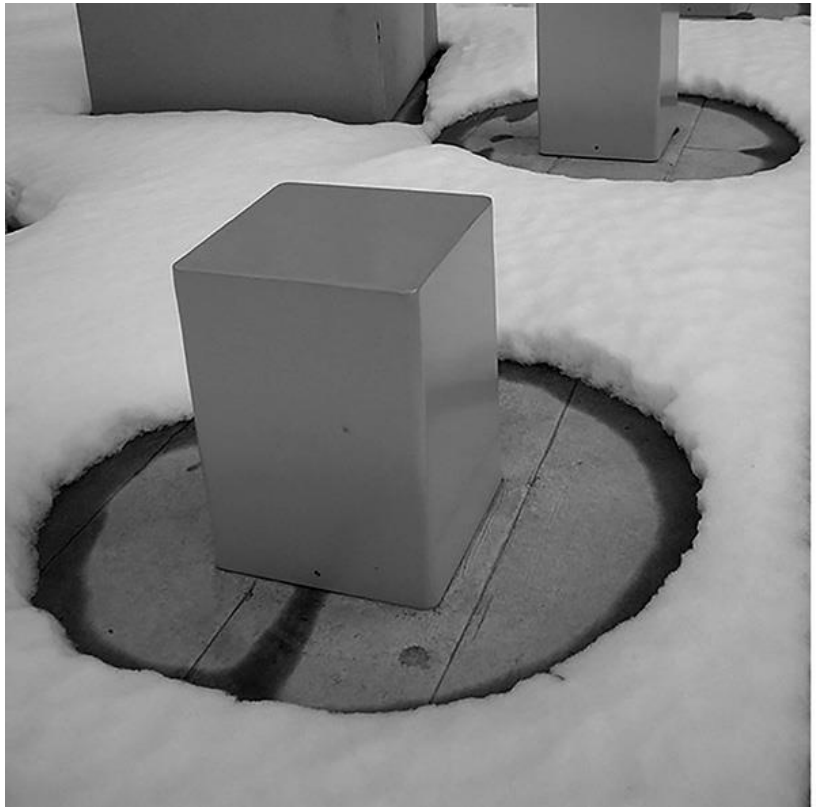
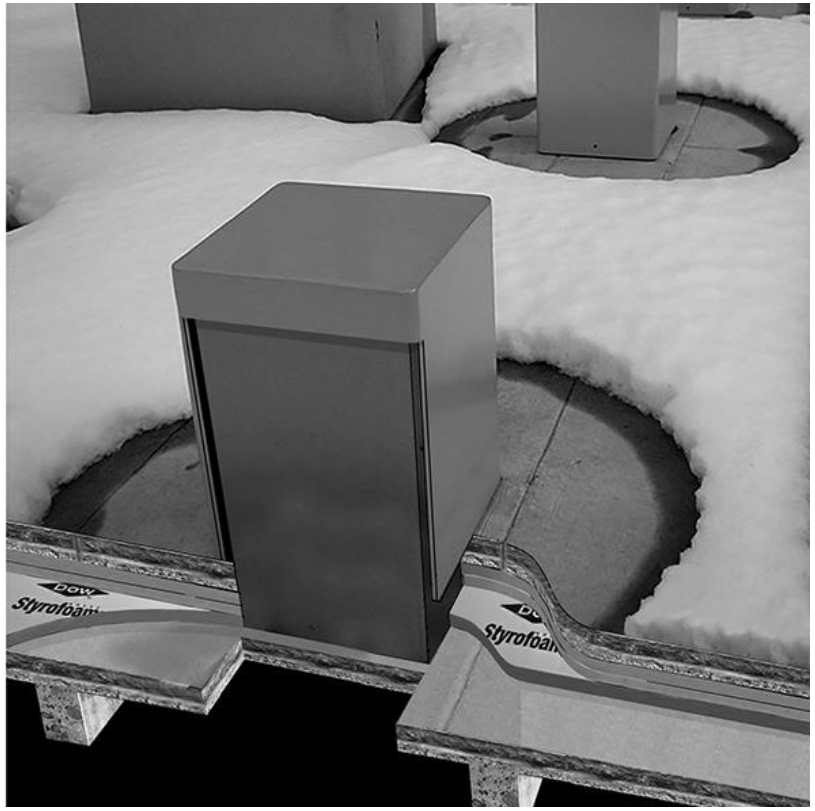
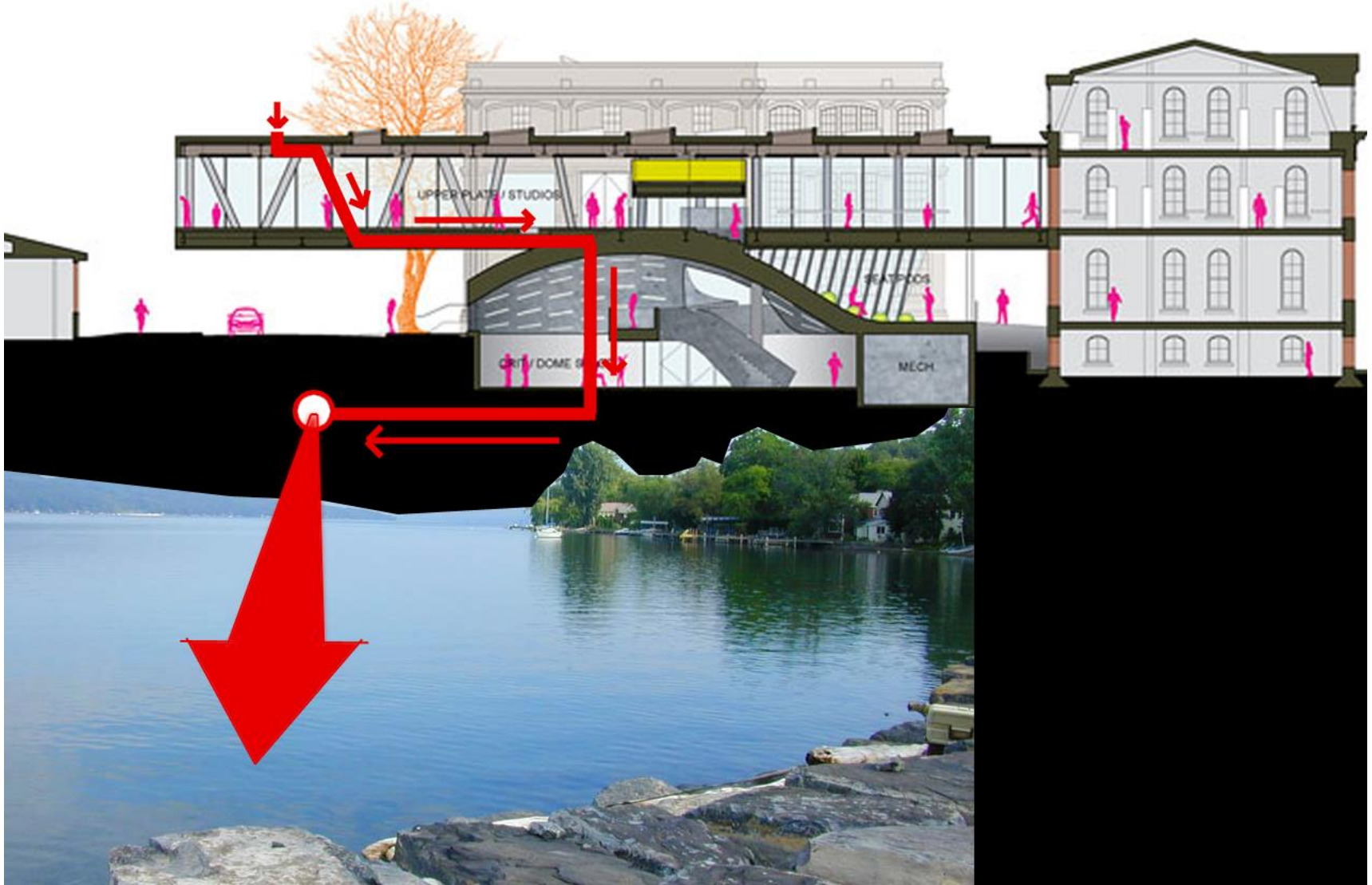




OMA’s Milstein Hall

But nothing stops the rain
The green roof can't absorb it so it
courses down the drain



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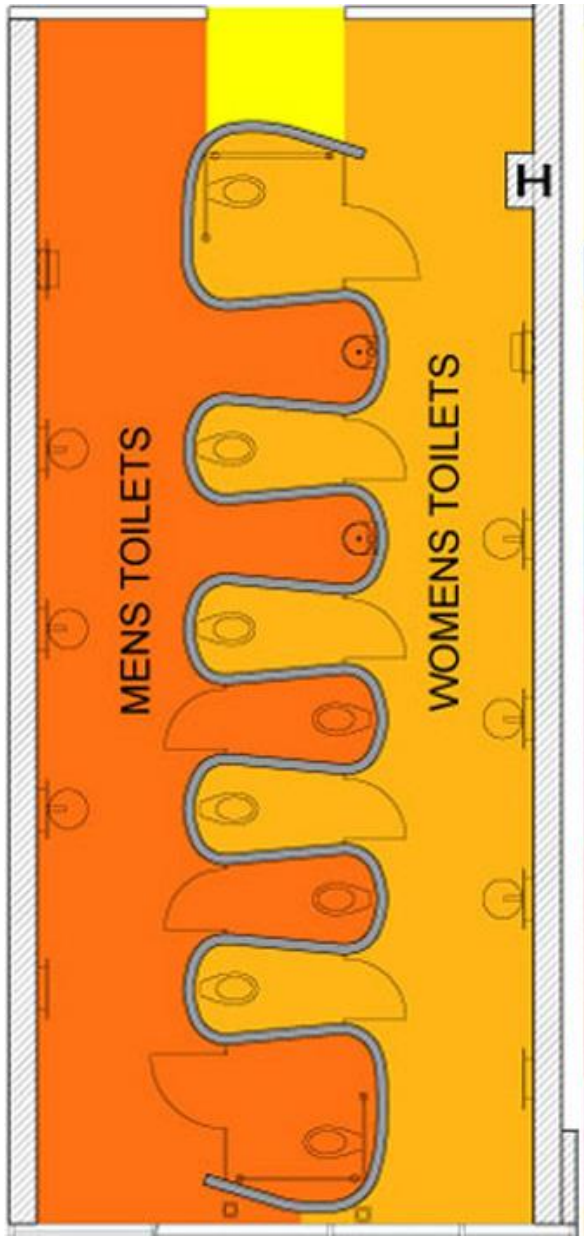


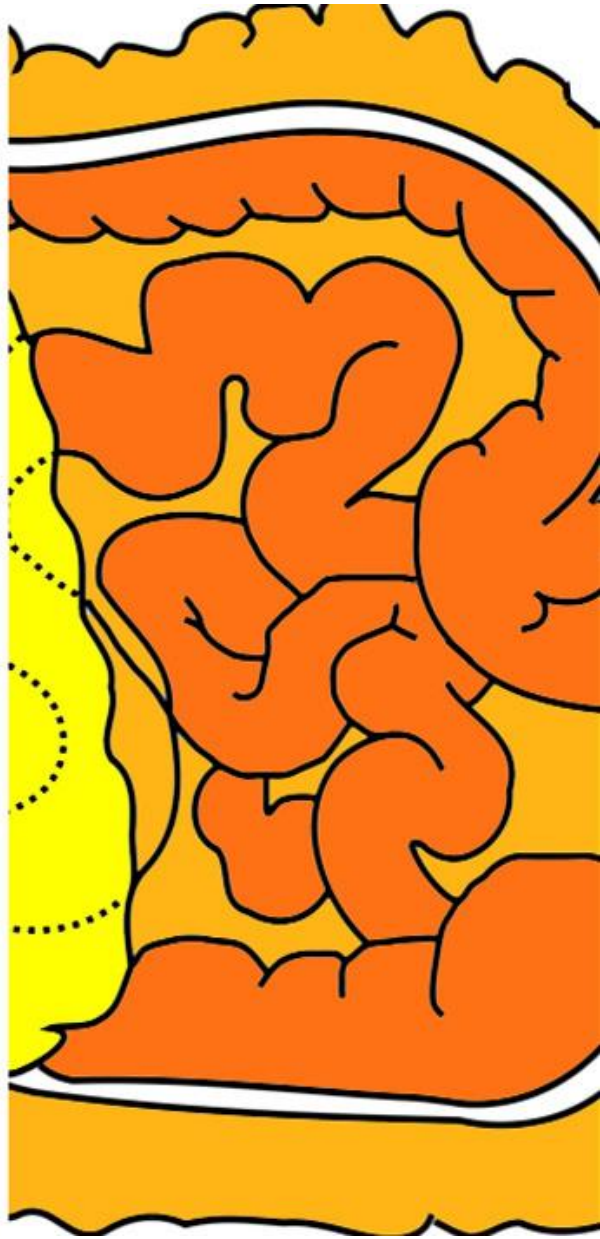


Figure 21.1. Toilets and urinals for Milstein Hall are defined by a curving stainless steel wall (a) reminiscent of the paintings of Wassily Kandinsky (b), or the interlocking geometry of the small intestine (c).

OMA’s Milstein Hall

3. Cracking everywhere that matters
Everywhere you face
A glass guard shatters
Metal trim falls out of place

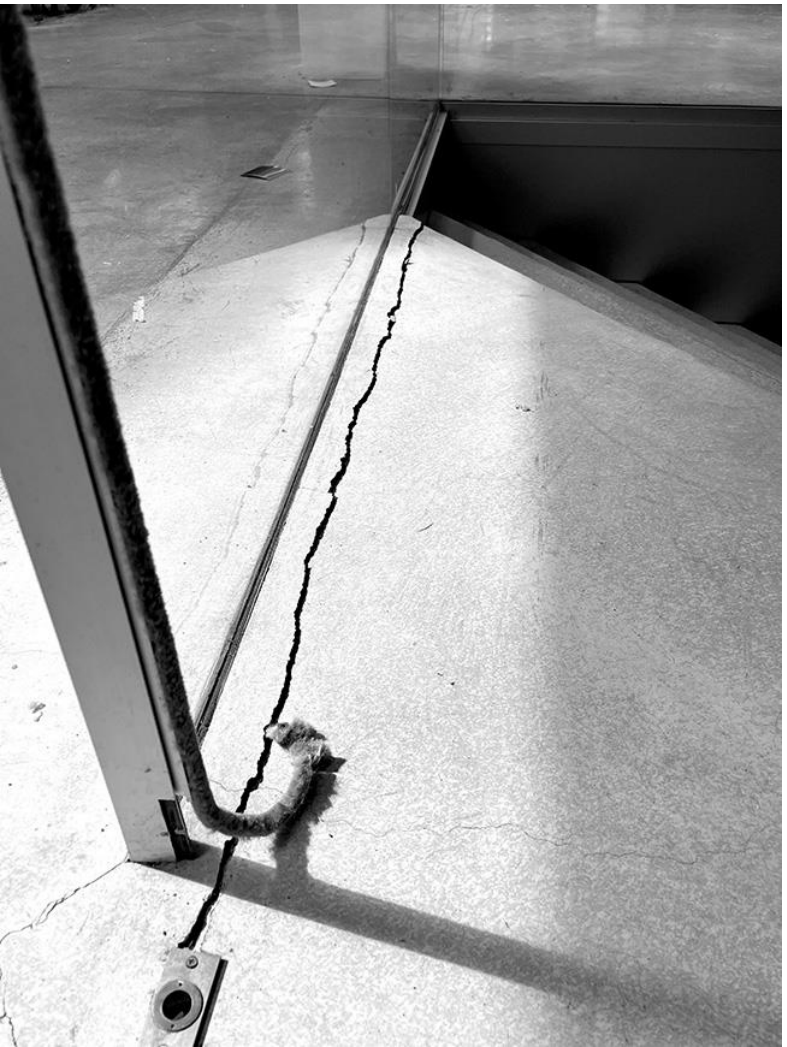


Figure 11.6. Curtain wall sill cover plates have partially or completely detached at the north side of Milstein Hall's lobby

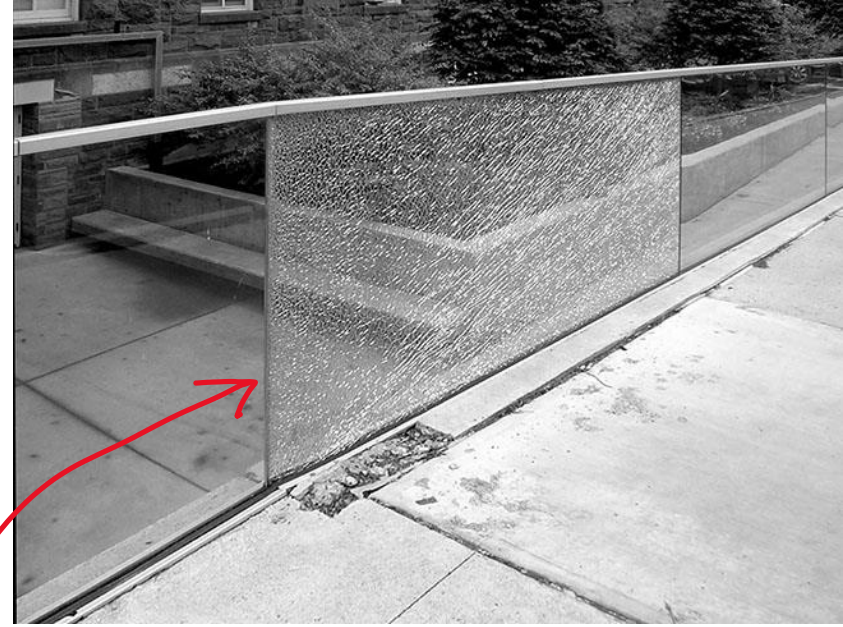
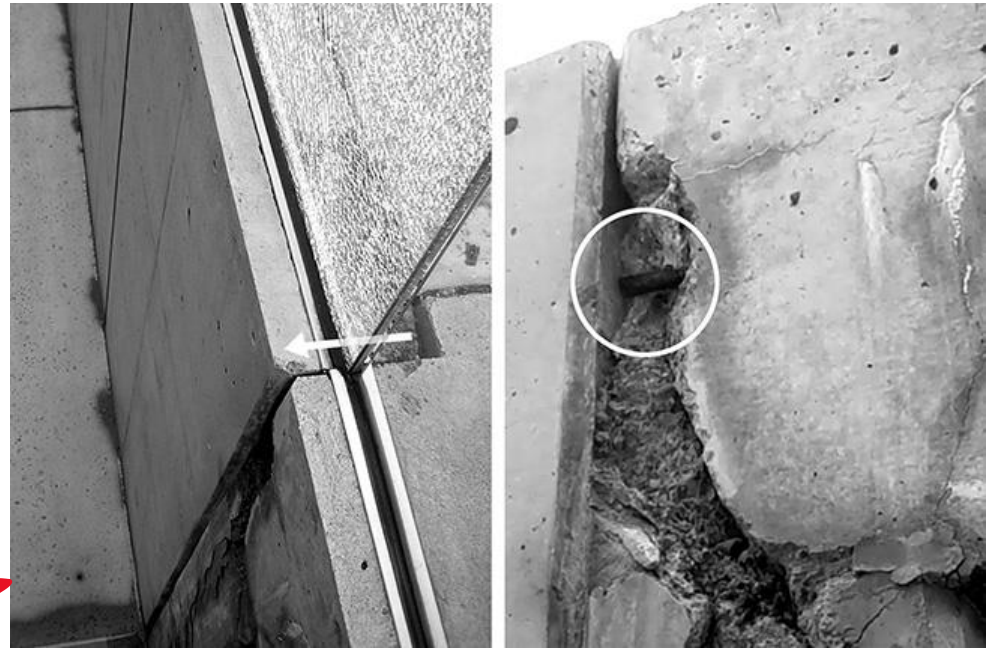


Figure 11.16. A glass guard separating Milstein Hall's loading area from an accessible ramp shattered in 2015.

Figure 11.18. The glass guard panel between Milstein Hall's loading area and the accessible ramp from the parking lot (left), shown here in 2015, can be seen spanning over the joint between the displaced retaining wall and the building; spalling of the concrete could also have been triggered by corrosion of reinforcement, visible in the highlighted circle, placed between the retaining wall and the building (right).



OMA's Milstein Hall

Protruding objects threaten people walking in the space

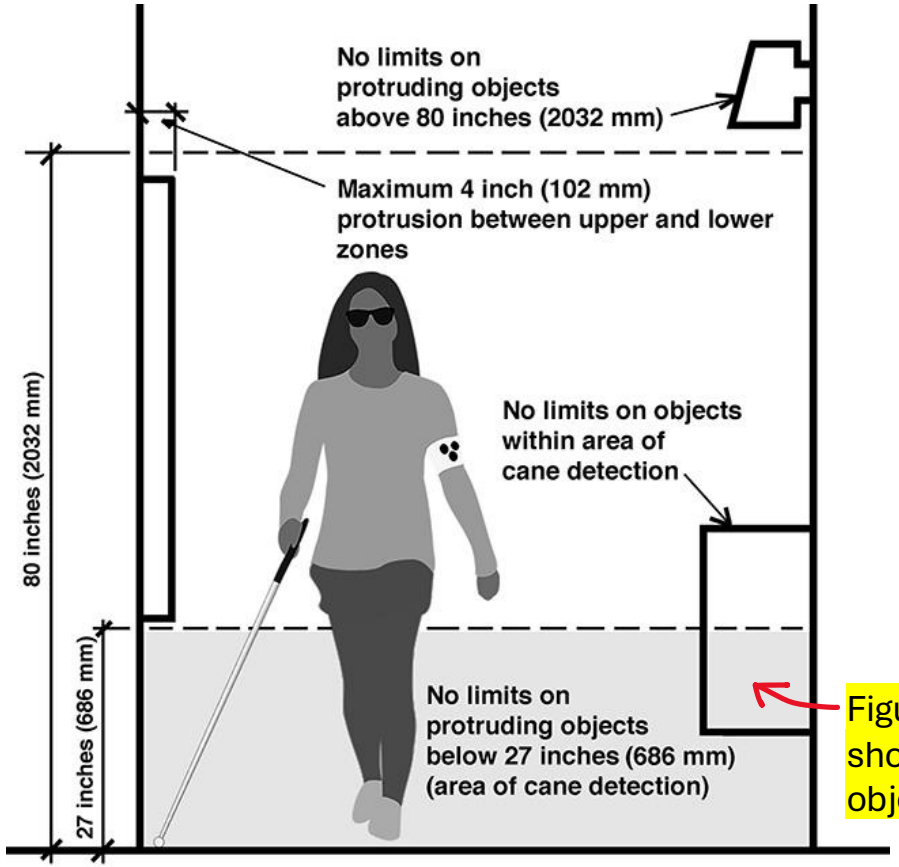
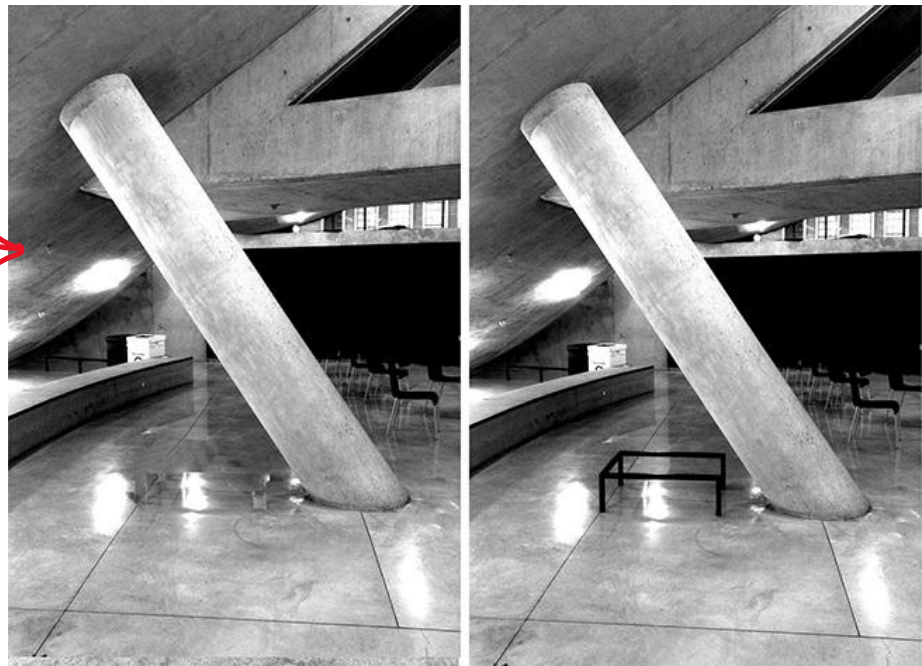


Figure 6.19. Graphic illustration showing limits of protruding objects.

Figure 6.21. Cane protection guards are consistently missing at inclined elements of the hybrid trusses on the second floor of Milstein Hall that are adjacent to curtain walls or, as illustrated here, are close to the brick walls of Rand and Sibley Halls (left); other inclined elements have inadequate cane-detection guards, as illustrated in this image (right) where the guard only protects people to a height of 64 inches (1626 mm) instead of the required 80 inches (2032 mm).

Figure 6.24. Cane-detection guards were added to the inclined reinforced concrete column in the Crit Room: before, simulated (left and after (right).



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In OMA's Milstein Hall
They say pride comes before a fall
So they rip it up and reinstall
The things that broke apart
In terms of architectural failure it's
state-of-the-art

Figure 10.22. Leaks continued in 2015 (top right), triggering a major roof repair that lasted for at least two years.

Figure 10.15. Workers remove most of the concrete fascia of Milstein Hall's Bibliowicz Gallery.

OMA's Milstein Hall

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For the occupancy load
While the size of the second floor
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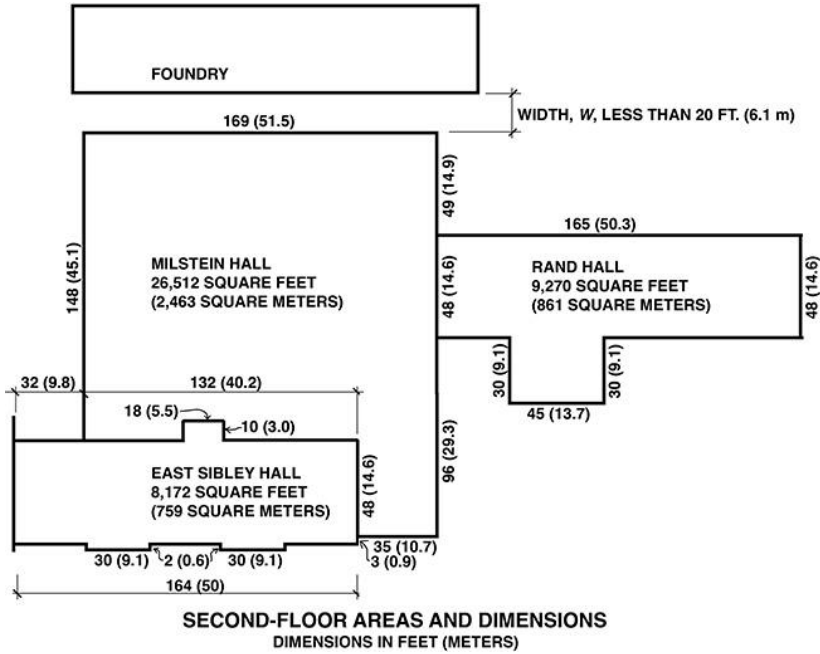
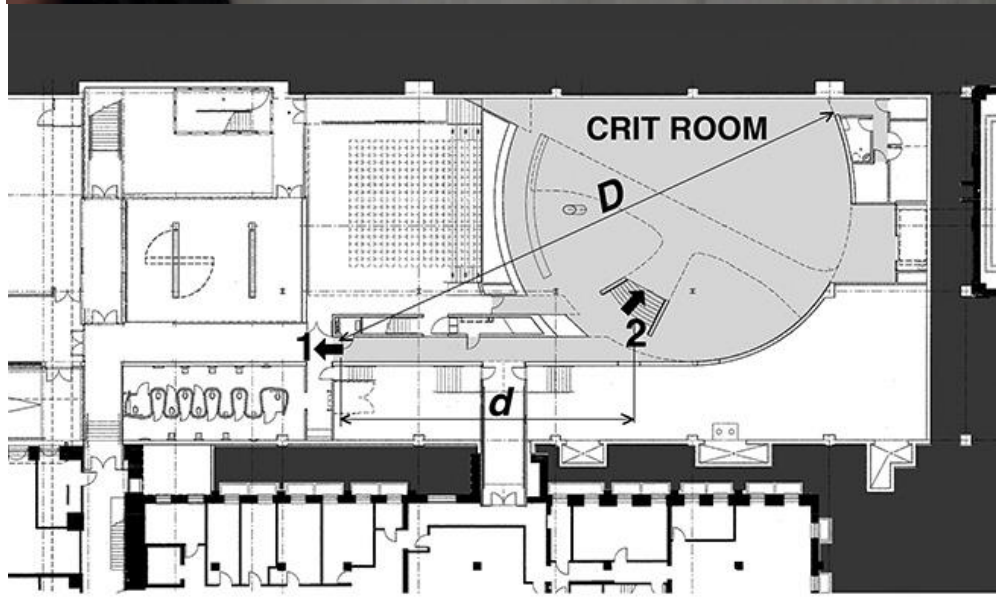


Table 1: Calculation of allowable second-floor area for A-3 occupancies.

	Milstein only	Milstein, Sibley, and Rand	Milstein and Sibley	Milstein and Rand
Construction type	IIB	VB	VB	IIB
Occupancy group	A-3	A-3	A-3	A-3
Allowable area, A_a (sq. ft.)	30,305	21,420	21,780	32,490
Actual area (sq. ft.)	26,512	43,954	34,684	35,782



(b) Fictitious Crit Room exit separation

OMA's Milstein Hall

In OMA's Milstein Hall
They never built a fire wall
Yet architecture critics remain in thrall
They don't see the mess
Dangerous, dysfunctional—this
building's in distress

CORNELL CHRONICLE

Milstein Hall receives top architecture honor

By Sherrie Negrea

January 25, 2013

Milstein Hall has received one of the highest recognitions in the architecture profession – an Institute Honor Award for Architecture from the American Institute of Architects (AIA).

The 47,000-square-foot building, designed by OMA as an addition to the College of Architecture, Art and Planning (AAP), was one of 11 buildings in the United States and Canada to receive the award this year.

Brad Feinknopf

With floor-to-ceiling glass facades, Milstein Hall was cited for its "emphasis on transparency" by an American Institute of Architects jury.

The jury commented that Milstein Hall, with its floor-to-ceiling glass facades, has made AAP "far more visually accessible" on the Cornell campus, and that the building's "emphasis on transparency places the entire design school on display to the campus in largely successful ways."

The connection Milstein has created between Sibley and Rand halls, along with the relocation of the Fine Arts Library, "have enhanced communication between student cohorts within the college," the jury noted. Judges also praised "the exposed systems and relaxed ambience" of the studio space in the building's cantilevered section, including "the creative clutter created by the students."

OMA’s Milstein Hall

5. It's been leaking when it rains
From the roof to the foundation

OMA’s Milstein Hall

They built a plaza with no drains
An inexplicable aberration
Inviting litigation
Defying gravitation
Causing efflorescent encrustation

Figure 10.17. Puddles still form, and remain, on the Milstein Hall plaza because the slope caused by the slab's unintended deflection does not create a consistent low point that aligns with the position of the linear drain that was added later, visible in the middle of the image.

Figure 10.5. Efflorescence can still be seen on the soffit and fascia of the concrete deck supporting the loading area at Milstein Hall, more than a decade after its construction (image taken May 2023). Stalactites, possibly caused by dissolved cement stone, are an indication of a potential structural problem.

Figure 10.9. The Bibliowicz Gallery windows at Milstein Hall were covered in efflorescence due to water leaking through the plaza deck above (March 2015).

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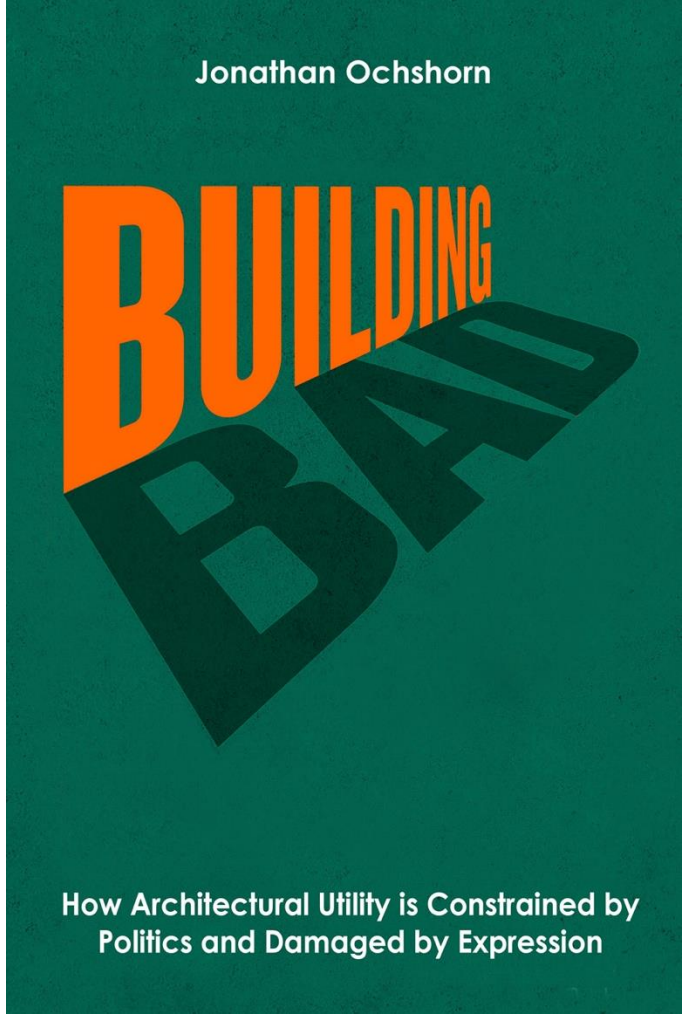

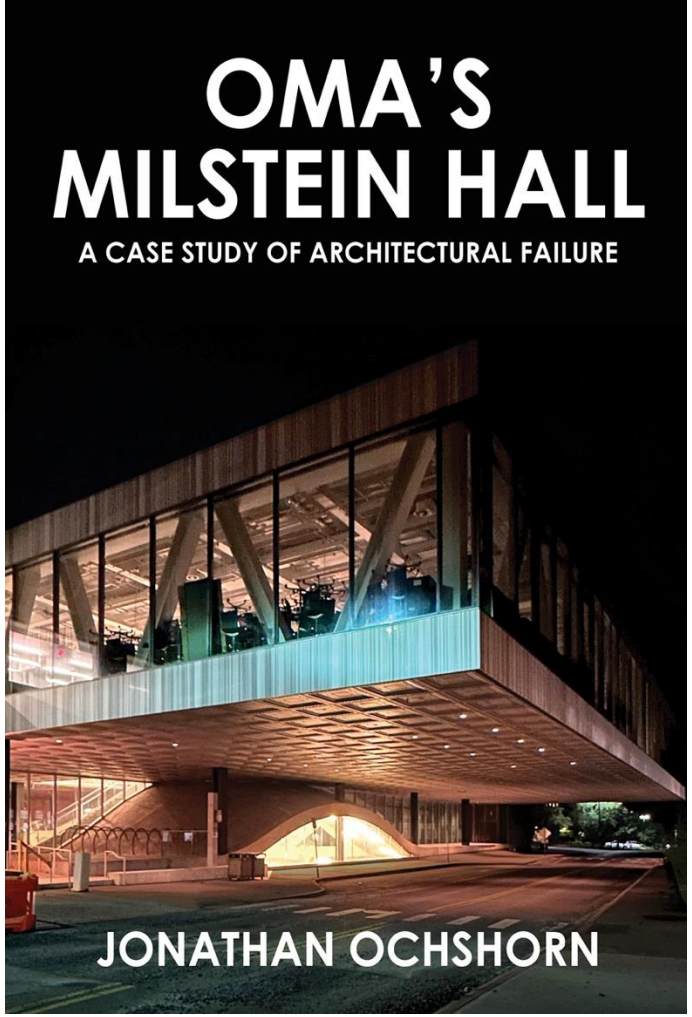

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