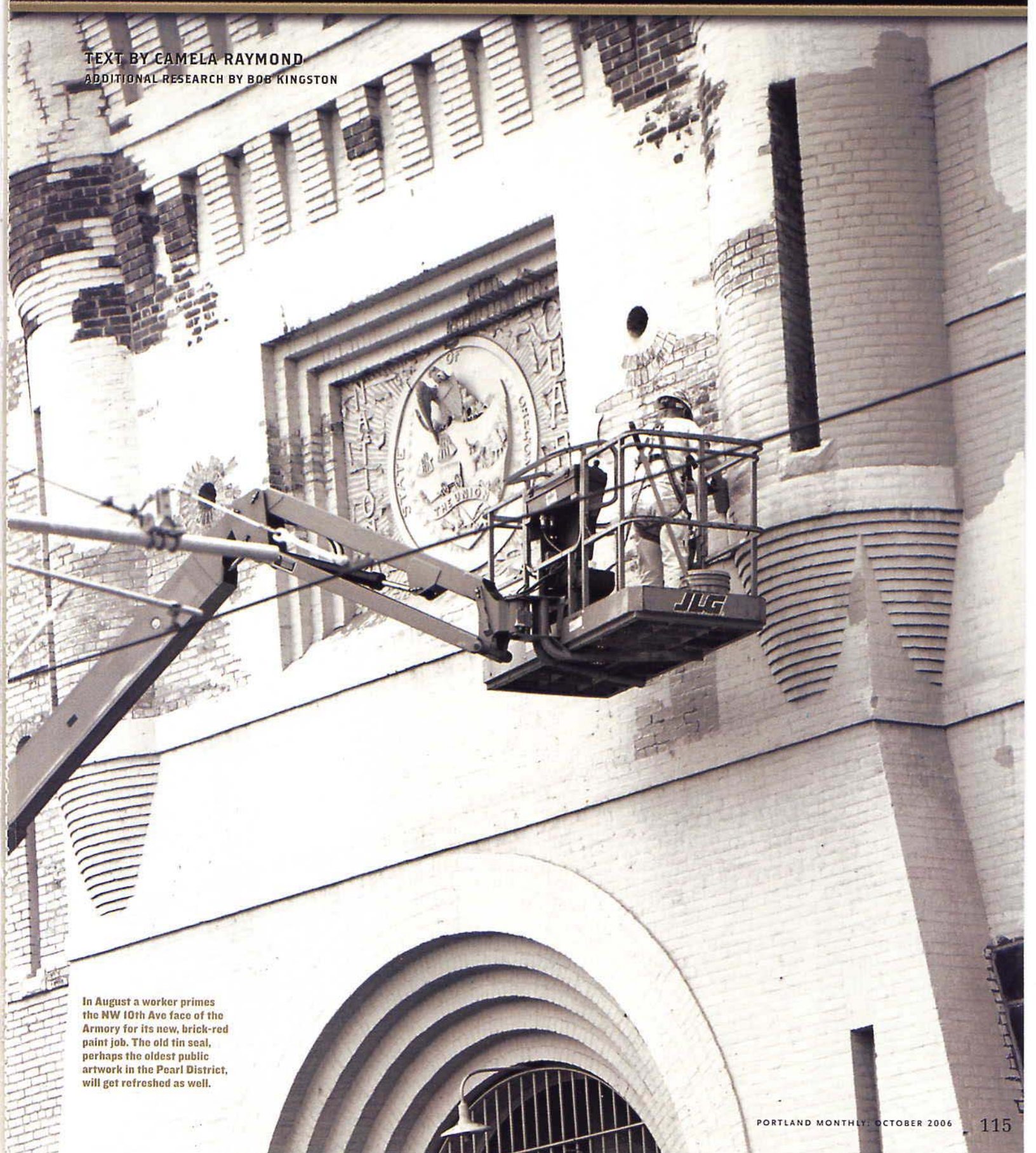


# HISTORY IN THE MAKING

Portland's 1891 Armory is reborn as the world's greenest theater • Photographs by Kurt Goetzinger

TEXT BY CAMELA RAYMOND  
ADDITIONAL RESEARCH BY BOB KINGSTON



In August a worker primes the NW 10th Ave face of the Armory for its new, brick-red paint job. The old tin seal, perhaps the oldest public artwork in the Pearl District, will get refreshed as well.



## A RECALL TO ARMS

Some readers will remember the interior of the Portland Armory, located on NW Davis St between 10th and 11th Aves, as the place where the stars of Portland Wrestling—heels and he-men such as Stan “Crusher” Stasiak and wood-chomping Lonnie “Moondog” Mayne—battled for the regional championship belt. A few longtime natives might even recall filling into the massive brick vault to watch closed-circuit telecasts of the Republican and Democratic National Conventions in 1952. And you’d have to be pushing 100 to have witnessed Teddy Roosevelt, William Howard Taft and Woodrow Wilson—former, present and future presidents—orate beneath its Douglas fir bow trusses in 1911.

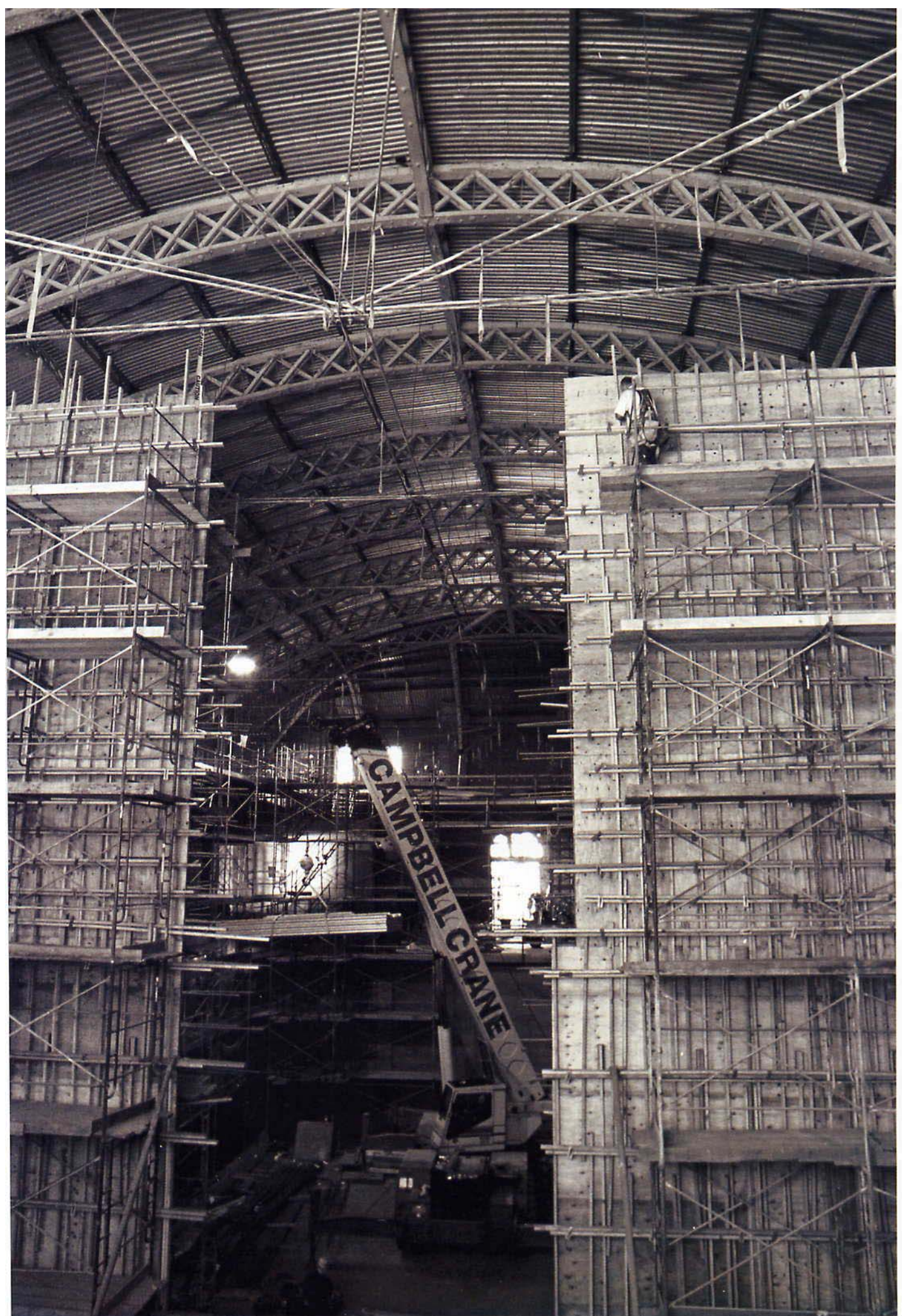
But the Armory was originally built to quell crowds, not assemble them. In 1887, after a two-decade-long wave of worker demonstrations, riots and strikes roiled the country, local anti-Chinese riots and more general xenophobic anxieties prompted Portland’s leaders to erect a turreted fortress where the local militia could conduct drilling exercises. The first facility proved too small, so four years later a new drill hall and firing range—the Annex seen here—was built just to its north, its massive girth spanned by some of the largest wooden trusses west of the Mississippi. To cover costs, the Armory’s owner rented it out for public events. In the early 20th century these ranged from a farm products convention to a concert featuring singer Nellie Melba and violinist Jan Kubelik, who charmed an audience of 3,000 in 1913.

In 1917, highbrow cultural events moved to the Public Auditorium, which was established on the current site of Keller Auditorium, replacing the Armory Annex as the city’s largest assembly hall. But despite being viewed as a fire trap by city leaders who periodically attempted to relocate it—“Our Armory is a joke” claimed a 1940 *Oregon Journal* editorial—the castle-like compound enmeshed itself more deeply into the city’s life. Besides accommodating guardsmen and groups such as the Women’s Auxiliary of the Elks and the Woodmen of the World, the Armory was the place where over 14,000 claimants a week collected their unemployment checks in 1938; where nearly 2,000 21-year-olds registered with the Selective Service System in 1941; and where residents displaced by the Vanport flood slept in 1948.

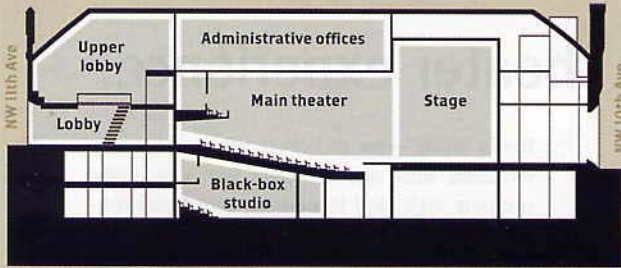
Ownership of the Armory transferred to the state in 1943, and in 1968 it left public hands altogether after the Oregon National Guard vacated it. The Armory’s neighbor and new owner, Blitz-Weinhard Brewing Company, demolished the 1887 building and used the Annex as a warehouse until 1999, when the entire brewery complex was bought by Gerding Edlen Development Company. As the local firm set about transforming the five-block parcel into a high-rise housing and retail district, the Armory was nearly reborn as a fitness center or a five-story condominium tower. Instead, company head Bob Gerding, a member of the Portland Center Stage board of directors, threw his weight behind a bolder vision: turning it into a cutting-edge venue for PCS in the heart of the city’s hottest new cultural district.







GERDING THEATER IN CROSS SECTION



**DEPTH CHARGE**

Once Gerding Edlen and Portland Center Stage had brokered the requisite deals to turn the Armory into a theater (these included the controversial use of New Markets tax credits earmarked for the low-income downtown census tract that envelops the wealthy Pearl District), the team had to overcome some daunting design hurdles.

The Armory's bellicose appearance, heavily protected by historic preservation codes, ran counter to the theater company's desire to present a casual and welcoming face to the public. And since those same codes proscribed enlarging the building's envelope, a 55,000-square-foot architectural program—which included a 599-seat auditorium, 200-seat black-box studio, administrative offices and rehearsal space—had to somehow be crammed into a footprint half that size, all without disturbing the Armory's less-than-seismically-sound 115-year-old masonry shell.

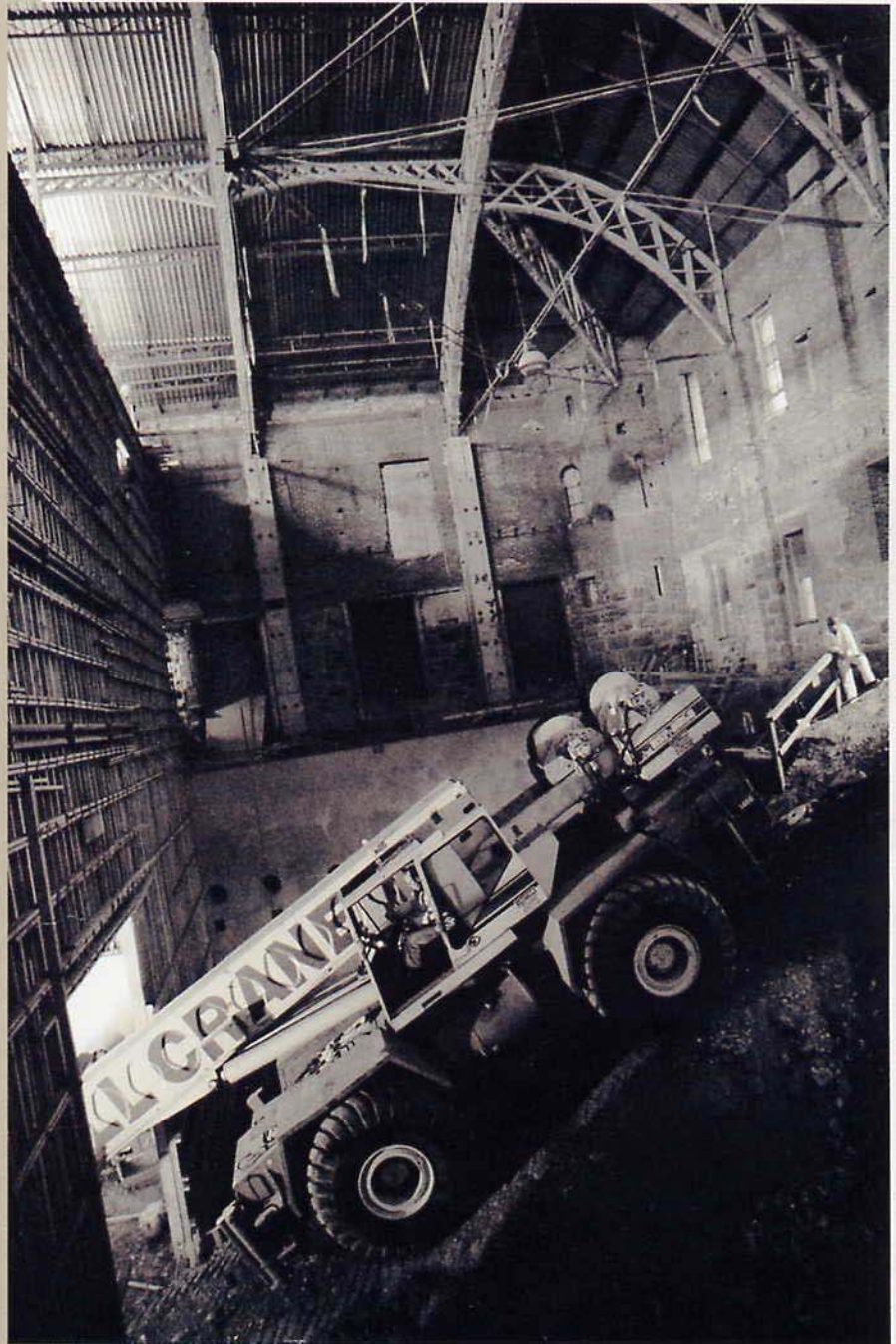
To offset the building's crenellated parapets and its slotted fenestrations for firing arms, PCS added a public WiFi café and a north-facing "sliver" park to the evolving sketches. Addressing the other issues, the design team at GBD Architects proposed a two-pronged solution: Dig down, embedding the two theater spaces below street grade; and engineer the building as a box within a box, a freestanding structure that would lend support to the Armory's brittle walls.

Complicating matters, Gerding Edlen and its client set themselves the lofty goal of achieving a "platinum" rating from the U.S. Green Building Council's Leadership in Energy & Environmental Design program, in what would become the world's first arts facility and the world's first historic building rehabilitation to attain such status. Everything from construction waste recycling to lighting efficiency would be scored on a strict scale.

And as if to test the wits of general contractor Hoffman Construction, Gerding Edlen set an even more curious challenge. For the developer to get a certificate of occupancy for the Henry condominium tower it was already building next door, it needed to cover the Armory's flammable wooden trusses with a new, \$3 million roof. Once on, the expensive rain hat could not be doffed; constructing the theater thus became akin to building a very large ship in a bottle.

Erecting a freestanding, three-level structure within the Armory's walls without removing its roof wasn't easy. Since heavy concrete framework was untenable, the team of architects, engineers and builders devised a lightweight concrete and shockcrete structural system for the "box within a box" pictured at left. But Hoffman Construction still faced the challenge of pushing and pulling all its equipment and materials—even 10-ton, 70-foot steel girders—through existing doors and windows. Moreover, the heavier equipment had to pass back out before everything was done. It took two trucks and a steep ramp to bring in the giant crane, pictured above and at left; the above photo shows it passing through a hole left in a concrete wall on its way to eventually exiting via the 14-by-14-foot main doorway to the building on NW 11th Ave.

*To keep the old walls and new roof intact, Hoffman Construction had to build a ship in a bottle.*





In the main auditorium, a traditional counterweight-and-pulley system ensures that backdrops fall to the stage and rise out of the audience's sight following a scene change. Since the auditorium's height was constrained by practical limits on excavation depth, the Mountain View, Calif.-based theater consultants Landry & Bogan designed a separate pit that would give the counterweights an adequate drop.

Inset: A hole cut in the auditorium wall enables beams and other large elements to pass through. Soon seats will be installed on the risers and vents underfoot. The theater will offset its high energy use (even the most efficient stage lighting greedily consumes electricity) with a quiet, efficient "fan wall" ventilation system that sends air up through multiple vents beneath the seats.

A series of 115-year-old wooden trusses supports a state-of-the-art roof. New skylights and restored windows bathe the interior with natural light.



## BALANCING ACT

The design team at GBD Architects assumed the difficult task of delivering on the project's three main goals—historic preservation, programmatic transformation and environmentally friendly design—while reconciling the inherent conflicts among them.

Before entering the darkened auditorium, theatergoers will pass through the lobby inside the NW 11th Ave main entrance, where they'll get a sense of the Armory's original materials and volume—all the way up to the ceiling trusses—through an elliptical opening in the mezzanine balcony, shown at left under construction. They'll also get a free history lesson: In addition to the box office and café, the lobby will house multimedia displays, developed by the Portland firm Second Story Interactive Studios, that will brief visitors on the Armory's past and its transformation into a green theater.

PCS staff get an even closer look at those trusses (almost too close for comfort, it appears from the photo above), as well as something those early militia members never saw from below: the sky. Extensive daylighting makes the building less historically pure, but adds points for energy efficiency. So does the recycled carpet and the air-conditioning system: cool water coursing through suspended "chilled beams." Other signal sustainability features in the building include an underground water storage tank that reuses roof runoff for toilets, a radiant heating system, and lights that brighten and dim in response to available daylight.

*The Armory stands poised to spring to life again as a public gathering place.*

### FINAL FLOURISH

Nearing completion, the auditorium awaits its occupants. And after nearly 40 years spent as a dormant warehouse, the Armory prepares to come to life again as a public gathering place. It's doubtful that Portlanders will ever again witness a wrestling match there (ticketholders to the opening production, *West Side Story*, will have to make do with a choreographed fight scene between the Sharks and the Jets), but much like the Armory's original owner, the resident theater company will rent out its black-box studio and meeting spaces during programming lulls, creating a potential spawning ground for new generations of artists and entertainers—and maybe even a revival of the Women's Auxiliary's annual Christmas bazaar. Gone is the Armory's open floor where crowds of thousands assembled, but its stalwart edifice reminds the city of those parts of history it might just as soon forget—the anti-immigrant frenzy that prompted its creation—and those it wouldn't mind reliving: like Lonnie Mayne, his T-shirt blazoned with the words "Love Oregon or Fight Me," tearing into a two-by-four with his teeth.

#### PHOTOGRAPHER KURT GOETZINGER

notes of his Armory images, "I enjoyed photographing perspectives that would never be seen again. I will never forget the shafts of light through the east windows. It was 'hand of God' stuff." His work can be viewed at [www.kurtg44.com](http://www.kurtg44.com).