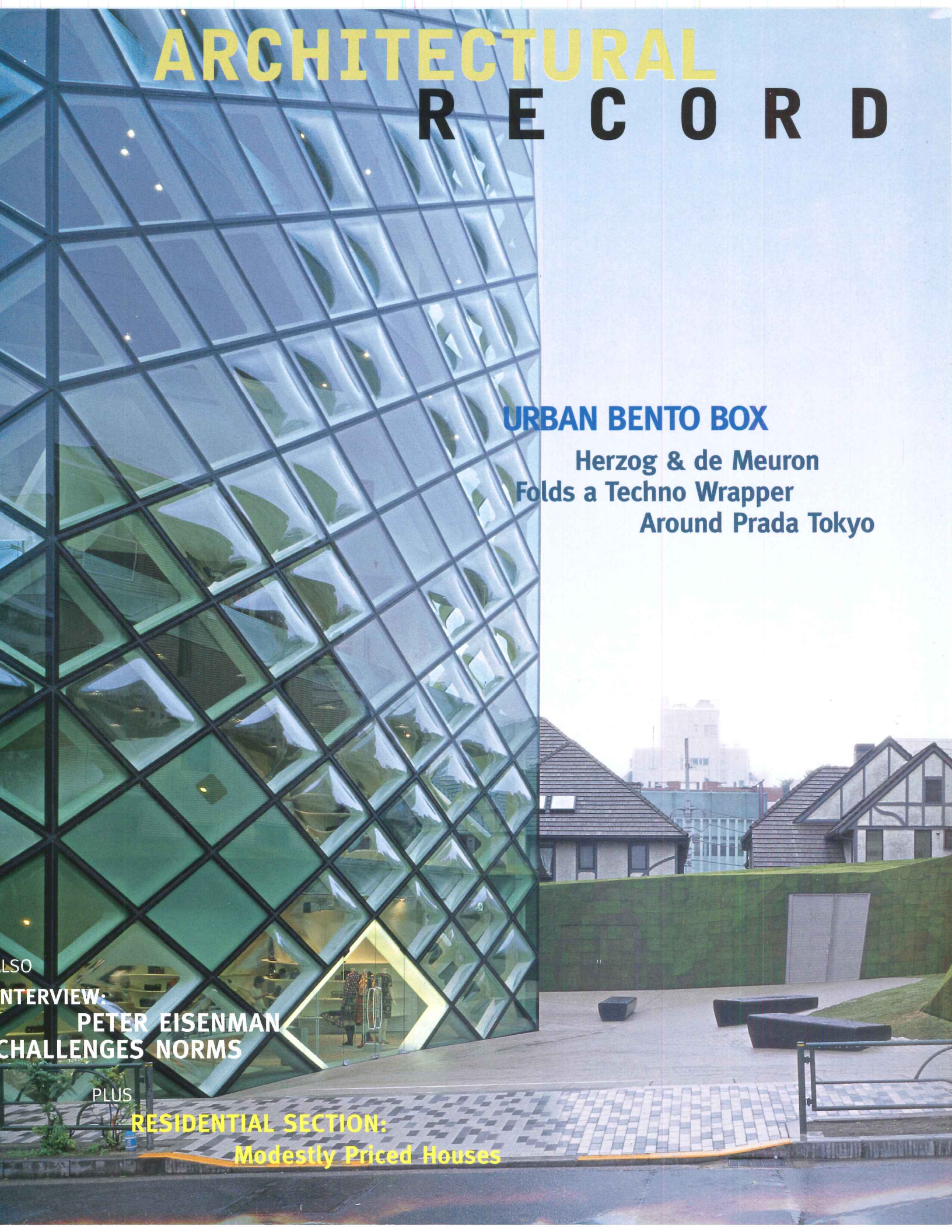
ARCHITECTURAL
RECORD



URBAN BENTO BOX

Herzog & de Meuron Folds a Techno Wrapper Around Prada Tokyo

LSO

NTERVIEW:
PETER EISENMAN
CHALLENGES NORMS

PLUS

RESIDENTIAL SECTION:
Modestly Priced Houses

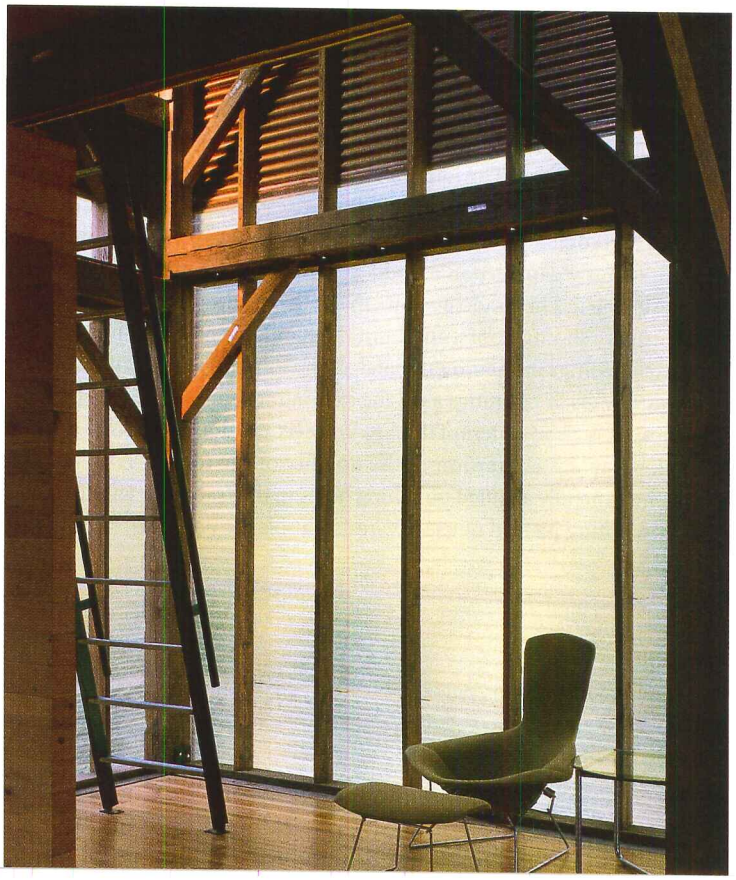
Ample light comes into the building through sheets of corrugated, UV-resistant plastic installed in the barn's roof and north end. The bathroom (behind the translucent wall corner in the center of the photo, right) is the only heated space in the building. This allows the building's timber frame to remain exposed on the inside.

The timber-framed **Willoughby Barn** by El Dorado sprouts fresh roots in Missouri tobacco country

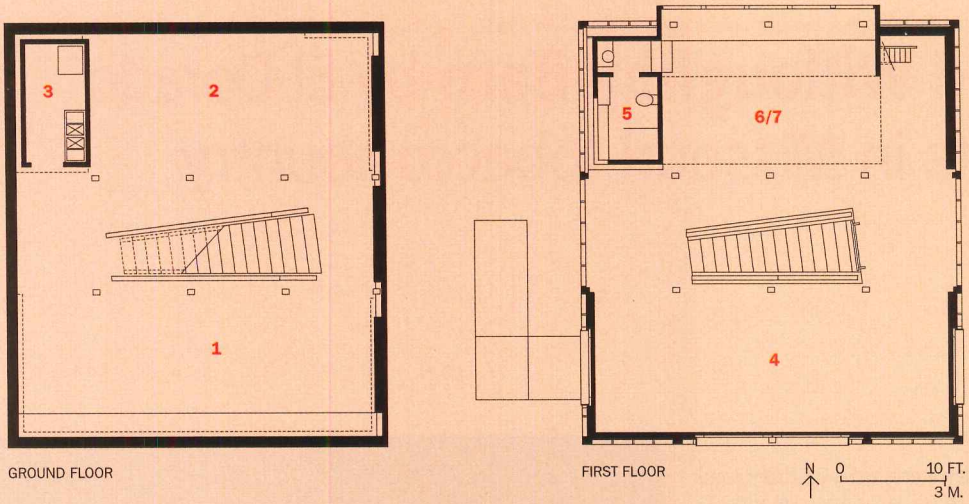
By Charles Linn, FAIA

To get to the Willoughby place, you drive east on a country road from the Missouri River bottomland, up through soft hills of loess—glacial dust blown here during the last Ice Age—past tobacco fields and the McCormick Distillery. You keep going southeast until you come to a gravel drive that splits off to the north; follow that drive through the gate and a brome pasture. The road twists a little to the east there and goes through a windbreak. Keep going. If it's spring, there'll be knee-high field corn on each side of the drive, which then bends back a little to the north. At the end, you'll see Ann Willoughby's pretty 1880s-vintage farmhouse. All of the land in sight slopes gently up to the house. The barn is set back from the house, slightly downhill, into a pocket of trees to reduce its apparent size. This view is pretty much the same as it has been for the past 120 years. Except that this barn is a recent addition. As a point of reference, farmhouses and barns on the Great Plains aren't connected by passageways as they are in New England. But they might just as well be. The activities that go on in one are essential to support life in the other. So when graphic artist Ann Willoughby told architect Dan Maginn, AIA, a partner in the Kansas City firm El Dorado, that she needed a barn, he understood that this was not just a place to park a tractor. The barn was an extension of her house and her work: a place for clients and professional colleagues to gather from all over the U.S. to meet and work—a dining hall, a conference center, and a bunkhouse.

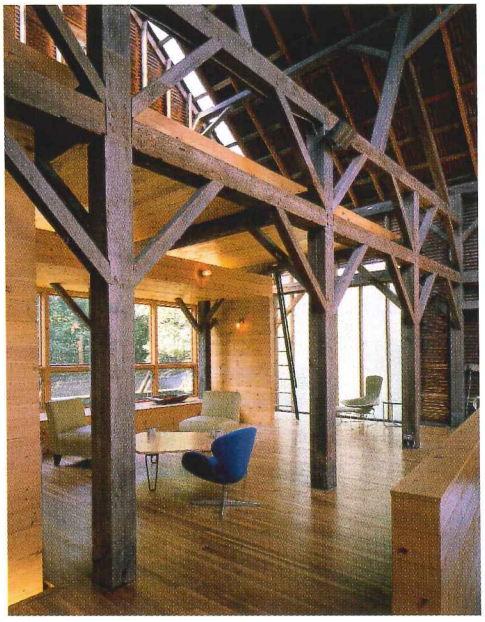
Maginn and Willoughby went to meet with some local carpenters, who proposed to build what Maginn describes as an "upscale pole barn." They were disappointed. Then they took a side trip to Red Barn Farm, a 1900s-era demonstration farm near Weston, Missouri, that is operated for tourists and school groups, to look for inspiration. On display was a model of a timber-framed barn used to show visitors how such structures had typically been built in the region. When Willoughby and Maginn learned the model was based on an existing barn frame that was about to be dismantled and sawed up for flooring, she opened her checkbook and bought it sight unseen for a modest amount. "*Now* we had a project," says Maginn—one with materials costing a pittance.



Project: *Willoughby Design Barn*
Location: *Weston, Missouri*
Owner: *Ann Willoughby*
Cost: *$62.50 per square foot*
Architect: *El Dorado—Dan Maginn, AIA; Josh Shelton, Chris Burk, Doug Hurt, Brady Neely*
Timber-frame reconstruction: *Red Barn Farm*



1. *Farm storage*
2. *Car parking*
3. *Mechanical*
4. *Entertaining*
5. *Bathroom*
6. *Studio*
7. *Sleeping loft above*



A pair of 8-foot-square sliding doors (far left) can be used to open up the south end of the barn. The reclaimed and relocated barn frame is finished in salvaged pine paneling and recycled gymnasium flooring (left and below).

The architects acted as the project's general contractors. Once a foundation was poured, the frame was reconstructed. Maginn originally intended to clad the frame in galvanized iron. But when ordering the material, he learned they could get 16-ounce corrugated copper for only $12,000 more, so copper it was. The interior is left unfinished so that the old timber frame and interior of the copper cladding are exposed. Only the bathroom is heated and cooled. Recycled gymnasium flooring, cypress, and pine paneling, previously damaged in a flood, completed the materials palette and kept costs down. El Dorado custom-made the hardware for the building's 8-foot-square sliding doors, and built the handrails and steel brackets for the metal awnings in their own metal shop. Maginn points out that none of the new walls or openings abut the existing columns, but pass them by. He notes, "It is always a temptation to 'connect the dots.' You don't want to do that, because it compromises the nobility of the frame." For the same reason, he generally avoided punching holes in the frame for windows and skylights, opting instead to use UV-resistant plastic panels. ■

Sources

Windows: *Pella Clad*

Tile: *Daltile*

Siding and roof: *Uniclad Copper*

Bathroom fixtures: *Duravit; Grohe*

Railings, hardware, casework, awnings: *El Dorado*

For more information on this project, go to Projects at **www.architecturalrecord.com**.