

Nearly every architecture firm makes models. Hastily assembled of cardboard and foam rubber, the models are rarely beautiful and usually destined for dusty storage closets. But Richard Meier, the Manhattan architect, is known for the pristine perfectionism of his buildings, which include some of the world's most beautiful museums. And he expects the models that represent those buildings to be just as carefully constructed. For that reason, every young architect who comes to work for Meier starts out in the firm's model shop, constructing wooden models by hand before graduating to full-scale buildings.

Not only does Meier invest resources in spectacular models, he also holds onto them. "I tell my clients, 'You keep the building; I keep the model,'" he says. That means that over the 50 years of his career he has acquired hundreds of specimens, from tiny "study" models (six or seven inches high) to full-size mock-ups of key details such as stairways. But unlike architectural drawings, models can't be stored in files or reduced to digital form. So Meier found a warehouse space in Long Island City (about four miles east of his Manhattan studio) where, for the past 15 years, dozens of his models have been kept and cared for. Occasionally, he would allow visitors to see the models. Then four years ago he decided to open the warehouse to the public, creating a "model museum" that recently became a member of the prestigious International Confederation of Architectural Museums.

The space allows visitors to tour a world of Meier buildings in an afternoon. Here is a sleek apartment tower for the west side of Manhattan; there his snow-white Royal Dutch Paper Mills Headquarters in Hilversum, the Netherlands. Soon there will be models of City Green Court, an elegant office building rising in Prague, and

Manhattan office busy.

"When you come through this space, you see not only Richard's love of architecture but also his love of the model-making process," says Laura Galvanek, Meier's archivist and manager of exhibitions. "People will say, 'Don't you have quick sketch models?'" Galvanek explains, but, she insists, "We would never give Richard a model that wasn't beautifully made." And though some of Meier's models are paper or plastic, many are made of basswood or Malaysian birch, which give the miniature buildings a warm, natural glow. But using largely wood means that most of the models aren't white (unlike nearly all of Meier's buildings). "Believe me, if I found a white wood, we would use it," Meier says.

Meier is concerned about how the models are presented and he has made sure that they are viewed as works of art, not merely



a pair of planned hotels in Mexico, which are keeping Meier's utilitarian objects, by surrounding them with sculptures and collages. He has produced both in prodigious numbers over the decades (and they themselves have been the subject of museum exhibitions). The collages, which are made of ephemera collected by the architect on his travels, together with the sculptures and the models, form a visual diary of Meier's career.

> But unlike the collages and the sculptures, which are pure expressions of Meier's artistic temperament, the models have a function: some are made to help win commissions; others to win clients over to the architect's point of view. Models convey the spatial qualities of buildings better than drawings, says Meier, who adds, of his clients, "Even if they say they know how to read drawings, they may not." Other models are made for the internal use of the firm, changing as its ideas for a building change. (One advantage of using wood, Meier says, is that you can rework some

> > parts of a model while keeping other parts intact.) In an age when other architects are using 3-D printers to create entire models electronically, Meier's models are all assembled by hand, without so much as a nail or screw holding the blocks of wood together.

Michael Gruber, who ran Meier's model shop during the years he was working on the Getty Center, says that "making them by hand, you really get to know the building." The Getty, a hilltop complex in west Los Angeles, is sometimes described











as the American Acropolis. Given the scale of the project (well over 1,000,000 square feet) and the complexity of its organization (it includes facilities for the J. Paul Getty Museum, the Getty Research Institute, the Getty Conservation Institute, the Getty Foundation, and the J. Paul Getty Trust), Meier ordered up countless models. One, a facsimile at a scale of a quarter of an inch to one foot, is as large as a living room. The model took a year and a half, and about ten people to build, says Gruber, and proved "extremely useful for the construction team." Another Getty model is a mock-up used to help determine how much natural light would be allowed to enter the museum galleries. Meier and the Getty curators would climb into the room-sized model, which had been transported to the museum site, and see how the diffused light fell on miniature "paintings" on its walls.

When the Getty was completed in 1997, Meier left Los Angeles to return to New York, and the models came with him, landing in the top floor of the Long Island City building. (Some were so big, they had to be lowered in through an opening in the ceiling.) Those models sit on carefully built platforms; other models, depicting individual building details, hang on the walls. Several of those smaller models resemble abstract sculptures, even suggesting Picasso guitars (thanks to the curves present in nearly every Meier building).

A number of the models were made by Meier himself in the early days of his career; one depicts the Smith House, on a hill in Darien, Connecticut, completed in 1967. It was made, Meier says, modestly, "to show the massing of the building on the site and the relationship of the house to its context." Perhaps, but it also shows an intricate and dazzling sculpture; the house quickly became an icon of modernist architecture.

Eventually, Meier stopped building models himself, but he spent time in the model studio "whenever he could," says Gruber (now a senior associate at the firm). And the maestro continued working with model parts, taking pieces he found in the throwaway pile – a

staircase here, a window detail there - and forming them into jagged sculptures. (After building them, he had them cast in stainless steel at the foundry used by his friend Frank Stella, the renowned painter and sculptor.)

The sculptures, once they've been cast in metal, look something like watch movements, which should come as no surprise. Meier is a disciple of Le Corbusier, perhaps the greatest of modernist architects, who grew up in the Swiss watchmaking town of La Chaux-de-Fonds. Le Corbusier dubbed his houses "machines for living," and it is no coincidence that the buildings' interlocking parts seem to suggest gears and levers.

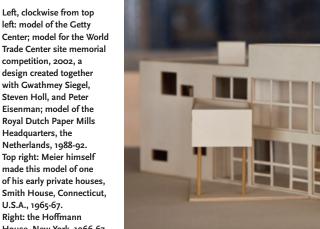
Meier, who grew up in Newark, New Jersey, is known for taking Corbusian forms to new levels of complexity. And like his mentor, Meier makes sure nothing stands in the way of appreciating those forms; that's why he avoids colored or patterned surfaces. White is the only color Meier needs; in his Pritzker Prize acceptance speech in 1984, he said that when he looks at white, he can see all the colors of the rainbow.

When Meier walks around the model museum, as he does from time to time, there are wistful moments. Some of the models are for projects that were never built, including one scheme for rebuilding Avery Fisher Hall, an auditorium at New York's Lincoln Center, and another for student housing at his alma mater, Cornell University. Then there's the Robert Irwin garden: in the 1990s, the Getty trustees rejected Meier's plan for a garden on the hilltop site in favor of one by the California-based conceptual artist Irwin.

> The struggle between the two men is recounted in the 1997 film Concert of Wills, which is perhaps the best documentary about architecture ever made.

Meier lost the fight. So when he built a final model of the Getty Center, it included the Irwin garden rather than his own. "I was making the model for a client," he says. "If I was making the model for me, it would have shown my garden."

But there is an outside chance that someday that could change. "If I ever get to do my garden, we'll update the model, too," says Meier. Then the architect, a vigorous 77, adds, "I should live so long." *



House, New York, 1966-67