



The ASM International complex in Russell Township, listed on the National Register of Historic places, will soon undergo restoration

By Steven Litt, The Plain Dealer

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Courtesy ASM International

The ASM International complex in Russell Township, which includes a geodesic dome designed by Buckminster Fuller and an office building designed by John Terence Kelly, has been listed on the National Register of Historic Places.

Nothing dates quicker than yesterday's vision of the future. But that's part of the charm of the headquarters of **ASM International**, the Materials Information Society, located along Ohio 87 in the countryside of Russell Township, about 20 miles east of Cleveland in Geauga County.

Completed in 1959, the complex is dominated by a gigantic geodesic dome designed by the visionary architect and futurist **R. Buckminster Fuller**, who coined the term "Spaceship Earth" and whose metal-clad Dymaxion House, a prototype for mass-produced housing, resembled a "Buck Rogers" spaceship.

The complex includes a very fine modernist building at the base of the dome, designed by Cleveland architect **John Terence Kelly**, that houses the offices of ASM, a global clearinghouse for technical information on the science of materials.

With a staff of roughly 85, ASM collects and publishes technical information on materials, including metals, plastics and ceramics, making it a key source of specialized data for 36,000 members in scores of industries worldwide.

Given its rather obscure location, the complex is pretty much out of sight and out of mind for many Clevelanders.

Lately, though, ASM's building has made architectural news. Late last year, the complex received a valuable 50th-birthday present from Uncle Sam: It was listed on the **National Register of Historic Places**, a designation that helped it qualify for \$2.4 million in federal and state historic-preservation tax credits.

The credits will help pay for a \$6 million renovation that's about to be performed by the **Chesler Group** of Cleveland, a company specializing in renovation of historic buildings.

National Register designations are relatively rare for buildings of ASM's vintage. The program, administered by the National Park Service, requires buildings younger than 50 years to be "exceptionally important" to be considered eligible.

Given that ASM was exactly 50 in the year it was approved, it didn't have to meet the "exceptionally important" test, said Barbara Powers, head of inventory and registration for the Historic Preservation Office of the Ohio Historical Society.



The Chesler Group

Aluminum sunshades on the ASM International building will be gently cleaned and refurbished in an upcoming restoration project, financed partially with federal and state tax credits.

But she said the building is one of the few in Ohio designated at or under 50 years of age to represent the modernist movement in architecture on the National Register.

Other examples include four houses designed by Frank Lloyd Wright; the U.S. Coast Guard station at the mouth of the Cuyahoga River, designed by J. Milton Dyer; and the Ameritrust Tower in downtown Cleveland, designed by Marcel Breuer.

Powers said the "period of significance" for the Ameritrust complex, which includes the Cleveland Trust Rotunda Building (1908, designed by George Browne Post) was recently expanded to include the Breuer building, completed in 1971.

It's easy to feel enthusiastic about the ASM complex. Taken together, the Kelly office building and the Fuller dome are a flashback to the can-do spirit of the Sputnik era. They also embody the liberal idealism that accompanied the introduction of modernist architecture in the United States.

The building is closed to visitors, but the grounds, which include a mineral garden with 70 ore samples, are open daily from 8:30 a.m. to 10 p.m.

Visiting the site, you can almost hear the voice of a newsreel announcer declaiming that science and technology, wedded with modern design, will help mankind conquer poverty, political conflict and unequal distribution of natural

resources.

Of course, we know better now. Modernist architecture, despite the thrilling structures produced by some of its practitioners, has been blamed for everything from the failure of public housing to the sterilization of downtowns in American cities.

Yet the allure of a place like ASM is undeniable. For television viewers of a certain age, a glimpse of the ASM complex will bring to mind instant associations with "The Jetsons," Expo 67 in Montreal, the Apollo missions and other flashbacks to the Space Age.

ASM was established in 1920 in Cleveland but moved to its present location after William Hunt Eisenman, the organization's director from 1918 to 1958, donated 100 acres of farmland for the headquarters. ASM subsequently bought hundreds of acres of surrounding land, which it later sold to the Geauga Park District. Now protected, the acreage is known as West Woods.

The ASM headquarters, known as Materials Park, occupies 24 acres on the south side of Ohio 87, two miles east of Ohio 306.

As you pull in the main entrance, you follow the S-curve of the driveway past sculpted mounds of earth whose contours echo those of Fuller's dome.

The three-story ASM building, which burrows partially into a hillside, swings around the base of the dome in a 178-degree arc of glass, aluminum and concrete.

It frames the dome and tethers it to earth, while also suggesting that the thinking inside the building is as open-ended and sky-high as the dome itself.

In form and structure, the building is simplicity itself. Framed by free-standing concrete columns, its facades consist of floor-to-ceiling panels of plate glass.

Hot water circulated through waist-high metal tubes, which are screened by narrow wood panels next to the windows, keeps the interiors warm and the glass free of frost and condensation, even on a bitterly cold winter day.

Custom-designed aluminum sun screens, which wrap the second-story windows on the west and south sides of the building, shield the offices from sun and minimize solar heat gain during warmer months.

Predictably, the interiors have become a hodgepodge of ad-hoc alterations and partitions. They'll be cleaned up and renewed with new furnishings.

The renovation also will include complete replacement of the building's mechanical systems, a gentle cleaning and refurbishment of the aluminum sun screens, installation of new gaskets and seals for the plate-glass windows, and repairs for leaks that have infiltrated the building's lowest level, housed under a green roof.

Interestingly, the plate-glass windows are considered "original material" under the National Register designation and cannot be replaced with contemporary thermal pane windows, said Michael Chesler, whose company will perform the renovation.

Fuller's dome, which is in excellent condition, doesn't need attention, he said.

Chesler, who has specialized so far in renovation of 19th-century buildings made of stone, bricks and wood, plans to begin work early this year, and says the project could take a year to 18 months.

Chesler is excited by the challenges of renovating a modern building.

His enthusiasm is understandable, not just because of the high quality of the ASM complex, but because it is a harbinger. In coming decades, midcentury modernist buildings across the country will need updating and renovating. Once again, the ASM complex is on the leading edge.

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