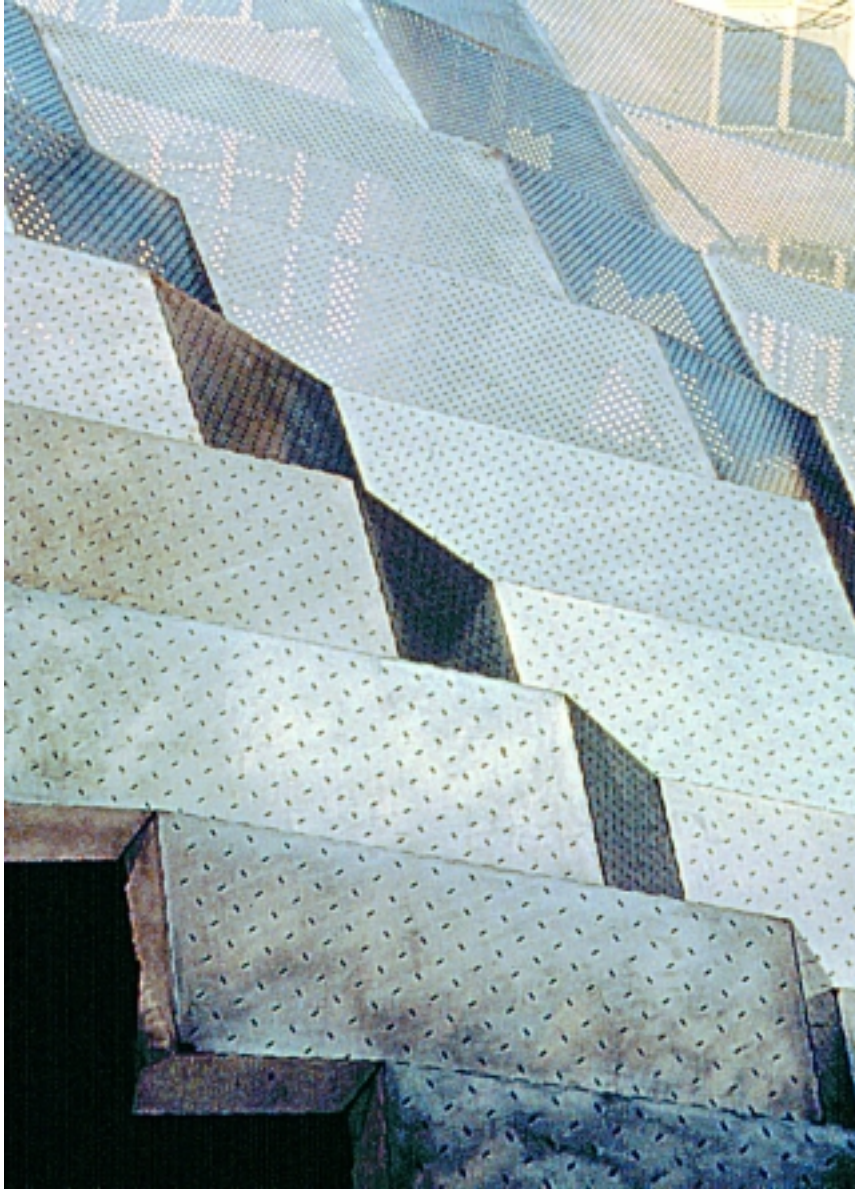


Poetry and

Construction



A recent exhibition at the Museum of Modern Art in New York City explored the process of "making".

One unique project, "Fabrications", explores the limits of steel plate through bending and punching, creating in the process a view of the world that changes from every angle.

It's almost unheard of to hear the words "poetry" and "construction" spoken in the same breath, but that was the case at a recent exhibit held simultaneously at the Museum of Modern Art in New York City, the San Francisco Museum of Modern Art and the Wexner Center for the Arts at Ohio State University. Titled "Fabrications", the exhibit

featured 12 full-scale architectural sculptures, four at each venue, produced by separate designers under the general rubric of exploring tectonic issues. All of the designs were intended to express the "poetry of construction and the process of making."

Monica Ponce De Leon and

Nader Tehrani of the Office dA in Boston designed one of the most intriguing of the sculptures. Made from sheet steel that has been folded and perforated, the piece resembles a geometric staircase and also serves as a canopy. Installed diagonally to the ground along the north wall of the museum's sculpture garden, the piece,



titled “Fabricating Coincidences”, was fabricated off-site.

The sculpture is designed to reflect the complex and sometimes divergent definitions of the word “fabrication”, ranging from manufacturing/ building to weaving to forgery/fiction. Thus, the installation utilizes folded steel plate as a way of blurring the traditional distinctions between structure and skin, supporting and supported building elements. The geometry also is developed on optical and anamorphic principles, yielding particular spatial readings from different points of view.

The form of the installation and its relationship with the Museum wall are furthermore designed to suggest different uses: stair, canopy, bleacher or shelter—not to mention sculpture or even painting. Ambiguous differences are fur-

ther magnified by the changes in surface, such as the variations of density of the perforations that lighten the steel structure as it unfolds upward, allowing the gradual passage of light to the space beneath.

While steel construction is customarily predicated on a trabeated system of structural members such as wide flange and angles, this installation devises an alternative system where steel is stretched and stitched like fabric. Warps, creases and folds in a continuous structural surface substitute for traditional beam and column construction and effectively accommodate for different load and support conditions.

While the project was initially conceived and drafted manually, its development towards fabrication depended on the use CNC equipment in the manufacturing process. Perforating, laser cut-

ting and “stitching” were all translated directly from computer files. The perforation involved a punching process that calibrated precisely the gradation of density throughout the steel surface. The outline of each steel piece was finely laser-cut so as to minimize the usual tolerance required in a construction process. The folds were achieved through a process the designers and fabricators termed “stitching”, an almost unheard of technique for a project of this scale and gauge of metal. Instead of bending plates or welding different pieces of steel together—which would have resulted in far less precision or a larger radius on each bend—the pieces of steel are scored by laser in an offset pattern. The outcome is a continuous twisted seam at the fold of each plate, producing the illusion of a stitch between two pieces of fabric.