







33

MAPLEWOOD POLICE & COURT BUILDING

WWW.IMIWEB.ORG

2010 Number

MASONRY SOLUTION:

Security and Sustainability

A new police and municipal center offers the latest advantages while honoring the past.



Photos courtesy of Image Up Studio



WHEN IS A BUILDING more than just a building? For residents of Maplewood, New Jersey, their new Maplewood Police & Court Building is both a literal and symbolic anchor for their community and its promising future, and one in which masonry played a starring role.

Replacing a nondescript one-story industrial building, the handsome new structure sitting at a major crossroads brought a much-needed improvement to the town's streetscape, and now welcomes people to the business district. Using traditional masonry materials in creative new ways allowed the designers to pay respect to the town's collection of distinctive brick-clad buildings while adding a fresh new look.

MAPLEWOOD POLICE & COURT BUILDING

MAPLEWOOD, NEW JERSEY

Architects: The Goldstein Partnership Structural Engineer: Severud Associates

General/Masonry Contractor: Seacoast Builders Corp.

Craftworkers: BAC Administrative District Council

of New Jersey Local 4

New Construction: 42,000 square feet

The new facility also brings the town the distinction of having the first LEED-certified municipal building in the State of New Jersey (LEED Silver). Masonry contributed



eam international masonry institute

MAPLEWOOD POLICE & COURT BUILDING



to several LEED credits, including regional materials and daylighting, achieved by casting solid glass blocks into concrete panels in the lobby floor. The considerable thermal mass achieved through structural masonry keeps interior temperatures constant and occupants comfortable.

"The beauty of the finished
building is a testament to the
superior workmanship of the
project's highly skilled masons."

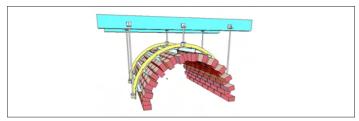
Then there are the building's primary functions. For the combination police station/courthouse, the concrete block backup for the brick veneer and interior partitions offers high levels of fire-resistance, acoustic isolation, durability and security.

All these objectives were handily met with masonry. "Masonry was the obvious choice for our security concerns, but it played an important role in achieving our sustainability goals as well," says Eli Goldstein of The Goldstein Partnership in Maplewood.

Justifiably proud of his firm's design, Goldstein saves his highest praise for the craftworkers who brought it to life. "The beauty of the finished building is a testament to the superior workmanship of the project's highly skilled masons," he says. He is not alone in that opinion: In 2009, the Maplewood Police & Court Building won New Jersey's IMI Golden Trowel Award/Green Category.

To reference the town's earlier buildings but also give the new building a distinctive identity, designers at The Goldstein Partnership developed a unique interpretation of Flemish bond that incorporated Roman bricks on every sixth course. A bright white mortar makes the pattern strikingly visible. Echoing the handsome arches at the windows of nearby Town Hall is a grand entrance vault, while smaller brick cross-vaults mark the emergency exits. The curve of the revolving door is echoed in the plaza's custom concrete pavers and stairs, "like the waves which radiate when a stone is dropped into water," says Goldstein, and descend to a multicolor streetscape of decorative concrete pavers.

To meet the stringent seismic requirements for emergency dispatch centers, the building's structural system has a diagonally-braced structural steel frame with composite floor slabs and concrete foundations. The masonry vault, which had to accommodate stress reversals, was reinforced by threading galvanized steel pencil rods through the cores of the voussoirs and through holes in the steel plates suspended from the overhead steel structure.



Courtesy of The Goldstein Partnership

THE MANY FACES OF MASONRY

The Maplewood building illustrates how many vital design roles masonry can play, offering both strength and beauty. Outside, brick veneer is the dominant exterior cladding material, chosen to visually unify the neighborhood. Inside, cast stone, multiple colors of ground-face block, and custom pilaster block impart style and substance to this important civic building.



INTERNATIONAL MASONRY INSTITUTE

©IMI 2010. All rights reserved

FECHNICAL SUPPORT: 1-800-IMI-0988

TRAINING: 1-800-JOBS-IMI

The International Masonry Institute is a labor/management cooperative serving the interests of the International Union of Bricklayers and Allied Craftworkers and the contractors who employ its members. IMI presents programs in four broad categories: apprenticeship and training, market development and technical services, research and development, and labor/management relations.