Metal provides shelter and also educates students about the building’s structure in this fun addition to Stepping Stones Preschool. The preschool, located in Wynote, PA, is part of Ancillae-Assumpta Academy, a private Catholic school for students in preschool through 8th grade. Positioned on a campus with both new and renovated buildings, the Academy’s preschool was in need of a more inviting entrance to welcome parents, students, and visitors.

The school looked to John J. Di Benedetto Associates to design a formal entry that also served as a reception area and multipurpose room that would be a lobby, inclement-weather play area, and after-hours social gathering place for parents.

“This addition accomplished all those things as well as incorporating exit stairs from the adjacent building,” said John J. Di Benedetto.

In addition to its functional goals, the building was designed to provide a Dr. Seuss-like appearance on the outside with sloped walls and windows and reveal the building’s “bones and arteries” on the inside.

“I wanted to relate to the preschoolers,” Di Benedetto said. “If you give kids a crayon and paper and ask them to draw a building, they probably would draw it with crooked walls and crooked windows.”

ATAS International’s CastleTop (HCT160), diamond shingles were used to create a Dr. Seuss-like appearance on the outside with sloped walls and windows and reveal the building’s “bones and arteries” on the inside.

Di Benedetto said he and other architects choose metal for the creativity in design it allows. Materials can be used beyond the way they were intended. The first benefit to using metal is its durability. But I like using it as another tool in the palette of colors and textures. It really works well as a focal material.
colorful pattern on the exterior of the building.

“Because the product is an individual diamond-shaped shingle, you can create unique looks by using more than one color at a time,” said James Bush, vice president-sales at ATAS International.

Di Benedetto said the beige color marries well with the brick of the existing building and the blue accent shingle matches the school’s signature color. The metal shingles also add a graphic punch to the building.

“I’m fond of the CastleTop diamond shingles,” he said. “I like the texture, color, and rhythm that they provide.”

Inside, the building educates its occupants by demonstrating how the different components of a building fit together. The roof and structural steel are exposed and painted, representing the “bones” of the building. The light fixtures and air ducts are exposed and painted a different color, representing the “arteries” of the building. Rainwater conductors also are exposed in the building before they go underground. “The structure itself is a teaching lesson,” Di Benedetto said.

Metal was used exclusively on the exterior with the shingles. The windows and doors are aluminum and the interior features drywall and exposed steel. A specialty photography company also designed a huge 20-ft high by 30-ft long mural, which finished off the fun yet welcoming design of the Stepping Stones addition.

Di Benedetto said he had used the CastleTop shingles previously on two different roofs at the school, but this was his first time using them as wall cladding. “The roof shingles went on just like a wall cladding, and it worked out very well,” he said.

Bush said that although the shingles were originally designed for roofing, they are frequently used in wall applications. The shingles are available in 30 standard colors and can be custom colored as well.

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In addition to this project’s honorable mention for MCA’s 2013 Chairman’s Award, the Stepping Stones Preschool project has received other high honors. It won first place as the 2012 Project of the Year in the commercial wall category from ATAS. It also won a professional design award from the Pennsylvania Council Society of American Registered Architects.

Awards are commendable, but true achievement comes in meeting the goals of the project. “When parents arrive for the first time with their preschool children, this is the first image they get of the school,” Di Benedetto said. “Before, it was rather negative, and now it is positive.”

Architects regularly are faced with how to take a standard project with standard materials and turn it into something special. At Stepping Stones Preschool, metal turns what could have been a traditional building into a playful creation that welcomes parents to campus and facilitates student learning.