When it comes to hang-out space, most students aren't too picky. However, for high school students attending Monterrey Technical University (MTU) in Juarez, Mexico, finding a place to meet and talk in a dedicated area of campus was leaning toward ridiculous.

With security tight in the high-crime city, students at the high school (which teaches secondary and undergraduate students) are not allowed to leave the grounds during the school day. The students could only meet in the common areas of the classroom buildings. This worked if all students were on the same schedule but became a challenge when students on one side of the wall were trying to learn algebra while their friends on the other side were laughing out loud.

That dilemma persuaded the administration at MTU to redirect funds budgeted for classroom remodeling to a new student center. This building, the newest one on campus, was constructed from old shipping containers—14 of them, to be exact—to create a 7,000-sq-ft space where students could blow off steam without steaming their teachers.

With exposed metal making up 80% of the building’s structure, architect Ruben Escobar, a principal at Juarez-based firm Grupo ARKHOS, was looking to integrate a metal skin around the building’s entrance. He found his answer in Reynobond composite aluminum panels. In addition to presenting a uniform metallic look, the 4-mm panels from Alcoa Cladding Systems also provided durability to the building’s main entrance.

For Escobar, an MTU alumnus, the student center represented the latest in a long series of projects he has done for his beloved alma mater.

“The exterior of the building is all metallic, so we needed to continue with that look,” Escobar said. “That’s where we incorporated aluminum panels for covering all of the structure on the entry plaza. It could not be anything else. We needed something maintenance-free and [with] a

**CASE STUDY**

**SIZE**
7,000 sq ft

**DATE OF COMPLETION**
August 2011

**DESIGN ARCHITECT**
Grupo ARKHOS (Ruben Escobar and Ricardo Pacheco, Principals)

**METAL INSTALLER**
VW Ingeniera en Cristal

**OWNER**
Monterrey Technical University, Juarez Campus

**METAL MATERIALS SUPPLIER**
Metal Composite Material (MCM) Panels: Alcoa Cladding Systems
“It could not be anything else. We needed something maintenance-free and [with] a metallic look, so aluminum panels were the natural choice.”

“We are very pleased,” Escobar added. “We have not had to do anything to the building. It’s been a little more than a year now, and everything is holding up great.”

And not only is the building constructed mainly of recycled materials, but it also keeps cooling costs low in two ways. The first is an outdoor paint scheme that uses automotive paint mixed with ceramic nanospheres that help repel the desert sun’s rays. The second is a series of aluminum and glass garage doors that open up to provide natural ventilation about 8 months out of the year (the doors are closed during the winter months to keep heat in and dust out).

With the new building, students finally have their own place to relax. The containers are double-stacked in a way that creates open space on both levels—the structural strength of the container walls makes columns unnecessary—as well as mezzanine areas that overlook a central patio. The unique design has given students, teachers, and their families an unexpected perk: a great place to hold events like workshops, expositions, and graduation parties.

“The students love it, and the teachers, also,” Escobar said. “It’s a very practical building. Nothing’s fixed. You can do a classroom setting, and you have a huge central space with double height, so you can have people on both levels looking on the center of the stage. It has worked great for the student community.”