PRODUCTION

Reference Project

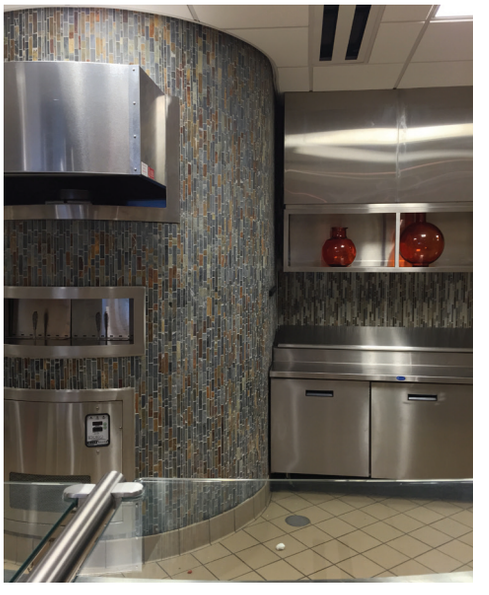
CenturyLink Technology Center of Excellence – Monroe, LA, USA

Project overview

MAPEI supplied a variety of mortars and grouts to install different types of tile for a new technology center at the headquarters of a large communications and data services provider. *Kerapoxy® IEG CQ* was used to grout the quarry tiles in the kitchen areas, while *Ultracolor® Plus* grout was used for both glass and large-format tile installations.

Project information

Project category:	Production – Office building
Period of construction:	2015
Year of MAPEI involvement:	2015
MAPEI coordinator:	Wilbert Adams, Jr.
Project owner:	CenturyLink, Inc.
MAPEI distributor:	C&C Wholesale Distributors – New Orleans, LA, USA
Architect:	Moody Nolan
General contractor:	Yates Construction
Tile and stone installer:	CraftCroswell – Ridgeland, MS, USA
Project manager:	Craig Miller
Photographer:	Craig Miller
Project size:	72,000 sq. ft. (6 689 m^2)



MAPEI products used

- *Mapelastic® AquaDefense*
- *Fiberglass Mesh*
- *Adesilex™ P10*
- *Ultraflex™ LFT™*
- *Ultraflex 2*
- *Kerapoxy 410*
- *Kerapoxy IEG CQ*
- *Ultracolor Plus*

CenturyLink Technology Center of Excellence – Monroe, LA, USA

New headquarters building communicates strength and beauty with tile

Starting out as the Louisiana-based Oak Ridge Telephone Company, with 75 paid subscribers in 1930, CenturyLink today serves millions of customers in 37 states and is the third largest telecommunications company in the United States. Management of the company is divided into five regions, with a regional president heading up each region and reporting to the CEO at the CenturyLink headquarters in Monroe, Louisiana.

The headquarters building originally sat alone on 77 acres (311 608 m^2) in the midst of a pecan grove just outside of Monroe. Today, that building has been joined by a new Technology Center of Excellence (TCE) – a 300,000-sq.-ft. (27 871-m^2), three-story facility with a five-story parking structure. The TCE was planned by Moody Nolan, an entrepreneurial architectural group that designs structures to respond to the needs of its clients. On this project, Moody Nolan brought CenturyLink a striking curved design that sits amidst a 2.2-acre (8 903-m^2) park-like courtyard that connects employees with their environment.

According to Moody Nolan's portfolio on the project, "The building was strategically located and shaped to save as many of the pecan trees as possible. Those that were removed were harvested for use in the design. From this supply of material, the design team worked with a local mill to produce veneer paneling and flooring, as well as solid material for coffee bar countertops throughout the facility. The building also incorporates a substantial quantity of electro chromic glass primarily along the south facing atrium wall. This innovative product increases or decreases its opacity based on input from an array of photocells mounted on the roof parapet, and reduces lighting, heating, and cooling loads by up to 20%. . . . The full length of [the structure] is capped by a vegetated roof.1"

The focal point of the new building's interior is a three-story atrium with floor-to-ceiling glass windows and a monumental stair structure that carries the tile design in the lobby to the upper floors. Glass tiles on vertical surfaces throughout the TCE reflect the desire of CenturyLink to combine beauty and durability in a sustainable setting.

Craig Miller, the CraftCroswell project manager for the CenturyLink project, led multiple crews in the horizontal and vertical placement of nearly 72,000 sq. ft. (6 689 m^2) of tile. "Everyone was working together to maintain the very tight schedule," Miller said. "When working on projects like this, safety is a number one priority. Our corporate Safety Plan was strictly followed, including the use of hard hats, safety glasses and high-visibility safety vests at all times. A Tool Box safety talk was given each day, at which time tools were checked to ensure proper working order so that no injuries would occur as a result of use."

MAPEI products at work on the jobsite

Surface preparation began with the application of 47,300 sq. ft. (4 394 m^2) of ***Mapelastic AquaDefense*** waterproofing and crack-isolation membrane on floors and in the bathrooms. ***Fiberglass Mesh*** was used to reinforce and enhance the performance of *Mapelastic AquaDefense* when applied over cracks, coves and corners and around drains.

Over 40,000 sq. ft. (3 716 m^2) of imported large-format Picasso travertine stone tile (18 ft. x 36" x 1/2" [5,49 m x 91 cm x 12 mm]) from The Hamilton Parker Company was installed on the floors in the curved atrium, lobby, cafeteria and serving areas, using ***Ultraflex LFT*** medium-bed and thin-set mortar for large-format and heavy tile and stone. This mortar is formulated with MAPEI's Easy Glide Technology™ for ease of application. The stone tile was laid out off of the center line of the main entry and flowed throughout the spaces uninterrupted. The joints of the stone tile were grouted with ***Ultracolor Plus***.

Ultracolor Plus is a fast-setting, polymer-modified, color-consistent, nonshrinking, efflorescence-free grout for joint widths from 1/16" to 1" (1,5 mm to 2,5 cm). *Ultracolor Plus* is specially formulated with MAPEI's High-Hydrated Cement Technology (HCT™) to eliminate the common problems related to Portland-cement grout, such as color consistency and efflorescence.

The teams worked a tough schedule because all of the other work around them was running behind and was not finished when the tile installation began. "The travertine stone tiles were not too heavy," Miller said. "All the guys are getting used to the larger-format tiles. The biggest challenge with these tiles is that we have to get enough mortar under each one, or it takes two people to pull it out so that the tile doesn't break in half. We addressed this problem by using large-notched trowels and back-buttering each tile." The nonsag and nonslump properties of *Ultraflex LFT* also contributed to a sound installation.

The landings of the three-story travertine monumental staircase followed the same layout as the atrium floor. The upper-story landings were laid out in the exact same direction as the lobby floor, creating something of an optical illusion when looking down from the third floor to the atrium.

Each tread was pie-shaped, circling up the stairwell. The treads were cut by hand to fit, and then trimmed out with stainless-steel Schluter nosings. Once the CraftCroswell team developed a pattern, the setting became easier. The stairwell and landings were treated with *Mapelastic AquaDefense* for crack isolation; then, the tiles were set with *Ultraflex LFT* and grouted with *Ultracolor Plus*.

The restrooms have floors of Daltile Cortona porcelain tile that mimic the travertine stone tile in the cafeteria and lobby. After waterproofing and crack isolation with *Mapelastic AquaDefense*, these tiles were set with *Ultraflex LFT* and grouted with *Ultracolor Plus*. A total of 3,500 sq. ft. (325 m^2) of Daltile mosaics – featuring a blend of stone, glass and metal tile – were set on the bathroom walls with ***Adesilex P10***. *Adesilex P10* is a premium-grade, bright white thin-set mortar designed for glass tile, glass mosaic and marble mosaic, and is ideal for light translucent natural stone. The CraftCroswell teams liked *Adesilex P10* because of its nonsag properties and brilliant white color, which helps highlight the tiles' qualities and color. The mosaic tiles in the restrooms were grouted with *Ultracolor Plus*.

The 8" x 8" (20 x 20 cm) quarry tile used in the kitchen flowed from the kitchen out to the serving line. This tile was set with ***Ultraflex 2*** mortar, while ***Kerapoxy 410*** mortar was used to install the quarry tile in the kitchen coolers. Both areas were grouted with ***Kerapoxy IEG CQ***.

Kerapoxy IEG CQ is a water-cleanable, 100%-solids epoxy grout with high chemical and stain resistance. In addition, it has high temperature resistance and can be steam-cleaned. Color-coated quartz dramatically improves *Kerapoxy IEG CQ*'s cleanability, so that the product leaves very little film residue during cleanup of excess grout with a grout float. The color-coated quartz also eliminates pigment bleed, so tiles are not stained during installation.

The pizza oven was wrapped in Daltile's Olympus Slate mosaic tile in random lengths. The 10-ft. (3,05-m)-high vertical installation of the tile was set with white *Ultraflex LFT* and grouted with *Ultracolor Plus*.

Porcelain, glass and stone mosaic tile was used to line the walls to a height of 10 ft. (3,05 m) in the serving area around the kitchen. This tile from Vine Street Studios was set with *Adesilex P10* and grouted with *Ultracolor Plus*. The multiple coffee bar backsplashes were also installed with *Adesilex P10* and *Ultracolor Plus*, and featured Serenade and Tiger Eye glass mosaic tiles from Daltile as well as American Olean's Visionaire glass mosaic tiles.

Miller summed up the project by saying, "The challenges with this project came from a combination of the different makeup and texture of the materials – glass, porcelain, metal and stone – and the various surface sizes. There could have been so many problems, but we met all challenges with the right materials being used by experienced installers."

1 *Source: Moody Nolan Website – project portfolio (http://moodynolan.com/portfolio/technology-center-of-excellence/)*

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