

# SUSTAINABLE for Coastal Weather



When he got the call to develop a major new shopping center project in Orange Beach, AL, Jerry Ingle, project manager for Halstead Construction, felt it was obvious that something special needed to happen. The 33-acre, 260,000-square-foot Palm Point Shopping Center is located at the high-traffic intersection of Canal Road and Beach Road.

“This is the main intersection in Orange Beach, and the center needed to make a statement. It’s the best piece of land that’s left in the world as far as shopping center development, so we knew when we got it that we had to do something different,” Ingle

said. “This is some place everyone coming into and out of Orange Beach is going to see, and we needed it to draw.”

In addition to being eye-catching and attractive, the new center would have to be durable. The building needed to be able to meet the stringent IBC (International Building Codes) regulation of withstanding 140-mile-an-hour wind loads, a standard that came out of Miami Beach and has crept northward all along the Gulf Coast in the wake of recent hurricanes that devastated both commercial and residential structures.



As if this wasn't enough, the project includes seven acres of reserved wetlands, and would need to meet a variety of environmental standards.

Where to find materials for so many needs? Yan Cowart, of Infinity Architecture turned to concrete block, selecting products including tough gray masonry, varied and beautiful architectural masonry, and ecologically friendly erosion control products like pervious/permeable pavers and retaining walls. "Concrete masonry provided us with an aesthetically pleasing material that also allowed us to meet the strict code requirements on the gulf coast," said Cowart.

Concrete masonry units add up to time and cost savings that benefit designers and their clients today. They also stand the test of time, easily taking the abuse of severe weather, heavy traffic and vandalism, and resisting fire and mold. Its thermal mass also yields lower utility bills for the structure, which is especially important in today's economy.

"We build on the theory that the center needs to have a 40-year lifespan," Ingle says. "But we also tried to build a center of almost zero maintenance. No paint—all products have a natural finish that will fade a bit, but will not have the upkeep of painting. That's why we used the masonry block and that sort of product.



When you own and maintain a center for 20 years and more, you don't want to spend all your money on maintenance." Cowart added, "Concrete masonry performs well in the beach and salt water environment."

To make the project visually striking while maintaining the desired low-maintenance qualities, Cowart chose architectural concrete masonry.

Architectural concrete masonry units typically are made from natural and manufactured aggregates, sand, limestone, gravel, cement and natural and synthetic coloring pigments. These are primarily products of nature varying in size, shape, texture and particle color. Although quality color consistency is a manufacturer's goal, some variations in color, texture and uniformity may be anticipated in the final product.

The finished appearance of a concrete masonry wall can be varied with the unit size and shape, color of units and mortar, bond pattern and surface finish of the units. The term "architectural concrete masonry units" typically is used to describe units displaying any one of several surface finishes that affects the texture of the unit, allowing the structural wall and finished surface to be installed in a single cost-savings step.

Architectural concrete masonry is a made up of various face designs known to the industry as split-face block, split-scored, fluted or ribbed and ground face masonry units. These units are manufactured under controlled conditions in a variety of colors and combinations. The economics of the products and the low labor factor makes it easy to achieve a pleasant aesthetic design for clients.

The units can be used in a combination of single color or a number of colors on the exterior and interior of buildings. Also, architectural concrete masonry is the only masonry product that can be manufactured with an integral water repellent system for a lifetime of moisture protection.

Architectural masonry concrete blocks can be manufactured in many colors, shapes, sizes and finishes to inspire endless design possibilities, and can even be made to mimic brick and natural stone. Contrasting colors and textures, coupled with interesting design elements and previously unattainable visual details, can now come together to create a facility with real personality.

The Palm Point center uses mixed split face block with stucco, stone veneer and stone caps. The center is not a shopping mall, but rather a "point of delivery shopping center," where customers will drive up to the point of entry for the shop they want to visit. Using architectural elements like towers to accent the multiple buildings and diversity of colors helps provide each rental tenant a unique spot within the building.

"These materials were all architecturally selected, and the architects spent a huge amount of time on color design. We've got more colors in use than I've ever seen on a single project before," Ingle said. "White split face columns, earth tone split face walls, split face block and stone—all these colors were conceived and then we started trying to find product to fit the color."

Two of the retail buildings have four-side exposure, meaning that all four sides are visible. This allowed the architects to do more colors in those areas, featuring multiple earth tones.

"In the whole center, we can mix and match colors better than with pre-finished block or paint," Ingle says.

In addition to the main structures, which will house a Publix grocery store, CVS pharmacy and the retail center, the project features 48,000 square yards of paving. As a combination of City building code, architectural design choices and environmental considerations, Ingle chose permeable/pervious pavers for this project. In Orange Beach, City code dictates that 25-35 percent of a paved area has to be pervious.

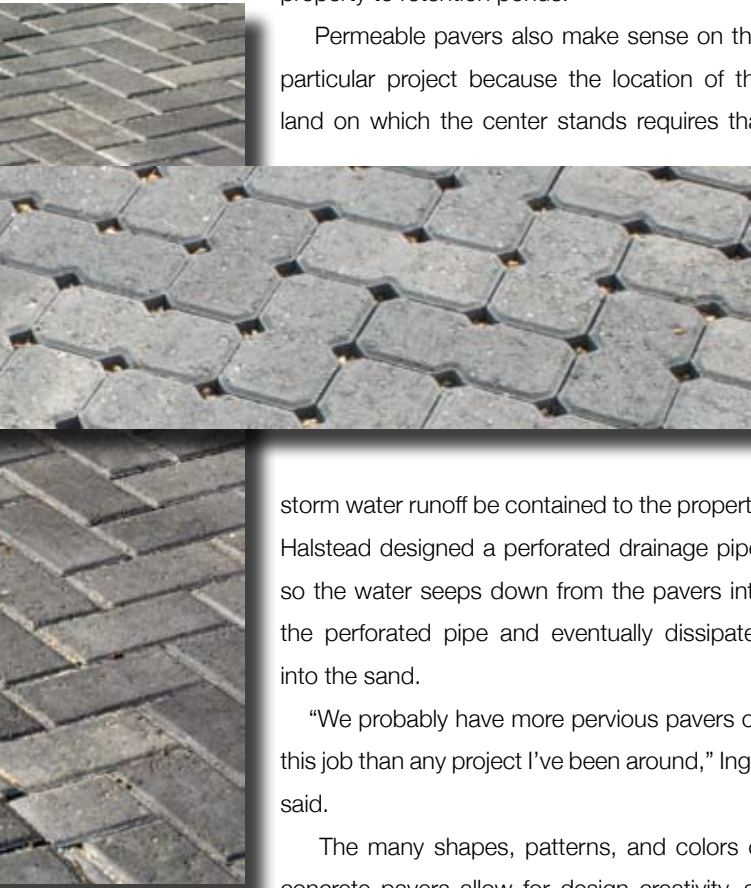
Permeable pavers are a paving alternative to more traditional types of hardscape flooring materials, like asphalt. This product allows water to filtrate through the surface to the underlying soils. Traditional pavers do not allow much water to infiltrate, particularly if they are mortared in place. Water would normally hit the surface and then flow down to the nearest drainage channel, and become stormwater



runoff. Permeable pavers permit rain water to be absorbed by the ground underneath, while still managing to provide a stable enough surface for vehicles.

There are voids when the contractor lays the pavers in the field due to the nature of the product, one inch square every four inches, provides a 12 percent opening that allows storm water to infiltrate and seep into the grade rather than running off into a pond or ditches. Using pavers also yields more usable space for the developer, because it can reduce size of retention ponds. That is important especially in the coastal market, where the price of real estate is high, and an owner does not want to devote expensive property to retention ponds.

Permeable pavers also make sense on this particular project because the location of the land on which the center stands requires that



storm water runoff be contained to the property. Halstead designed a perforated drainage pipe, so the water seeps down from the pavers into the perforated pipe and eventually dissipates into the sand.

“We probably have more pervious pavers on this job than any project I’ve been around,” Ingle said.

The many shapes, patterns, and colors of concrete pavers allow for design creativity, as well as delineation of pavement areas, such as parking lanes, cross walks and intersections. The beauty of pavers adds value and visual appeal to any property. By adding flexibility not possible with rigid pavement, pavers can flow with existing landscaping to deliver beauty to any property.

Concrete pavers also are extremely dense units that have exceptional strength and durability, superior stability under severe loads, and are unaffected by the extremes of heat and frost. A segmental paving system allows for expansion and contraction without producing surface cracks. The pavement system moves

in unison with the earth’s usual tendency to swell and contract over the long term, thus avoiding any serious damage. They can take more abuse and last for generations.

Concrete masonry is also used on the Palm Point property in the construction of the segmental retaining walls used for borders of stormwater retention ponds. Retention ponds are common requirements in most projects to handle overflow from rainwater not absorbed by the soil, even with pervious pavers. The use of the segmental retaining wall provides a clean look rather than just a sloped ditch or hole in the ground, and a neat border.

## Numbers Numbers Numbers Numbers Numbers...

- 33 acres of retail real estate
- 260,000 square feet of shopping center
- 7 acres of preserved wetlands
- 97,000 square feet of pavers
- 3,000 square feet of pedestrian walkways
- 10,000 segmented retaining wall units
- 10-14 ft. retaining walls
- More than 111,000 concrete masonry units used
- 4 different architectural set colored blocks

“Using pavers also yields **more usable space** for the developer, because it can reduce size of retention ponds.”



The Palm Point Center uses a tremendous amount of retaining walls, constructed in a modular style with brown pavers, for regular runoff as well as to border the three wetlands, which are edged with 10-14-foot retaining walls.

Halstead incorporated the wetlands as an attractive feature of the property, constructing patios around the main building to showcase the wetlands as an asset. They also constructed 3,000 feet of pedestrian walkways and bridges bordering Hwy 151 at the request of the City of Orange beach.

The Palm Point Shopping Center is on track to open this August. All buildings are up and most of the infrastructure is in place.

“This is really the king of shopping centers,” Ingle says. “It accomplishes everything I had hoped to do – it’s very attractive and the great variety of colors and textures really catches your eye. And, it’s durable – it accomplishes the 40-year goal, certainly. It’s a great project, all around, and one that people will enjoy for years to come.” ■ by Wendi Lewis

