

# An Enticing Package

## The Many Benefits of Stone-Coated Steel Roofing

By Randy Franz

Stone-coated steel roofing is proving to be more useful than just covering a house. One recent application specified stone-coated steel panels to be used as siding. The owner of a landmark commercial building in Los Angeles wanted to close off a series of third-story windows adjacent to the building's brick façade.

A designer-consultant initially considered standing-seam metal, but the roofing contractor suggested stone-coated steel shingles because of their variety of color options and "a shingle effect similar to the brick that would blend in with the roof structure."

The results were pleasing to the building owner, designer-consultant and roofing contractor. Today, the Devon Storage building just off the Hollywood (101) Freeway in downtown Los Angeles beams with white stone-coated steel roofing panels protecting its sides.

### Growing Use

Increasingly, stone-coated steel panels are being incorporated into building envelopes in nontraditional uses:

- Mansards
- Awnings
- Siding
- Interior decorative façades
- Patio covers
- Gazebos
- Bus stops

Traditional use as a steep-slope roof covering also is on the rise. Designers love the fact that stone-coated steel can be used in more applications to suit a wider variety of needs than any other type of roofing, said Kory Frost, co-owner of Western Roofing Systems, the largest installer of stone-coated steel roofing among roofing contractors in California.

"Many architects tell me it's the finest product to use for new construction and reroof applications," Frost said. "We have reroofed a lot of architects' homes."

Contractors have installed stone-coated steel in nearly every type of construction scenario:

- Single-family residential, custom and tract housing
- Multi-unit residential housing
- Commercial buildings
- Schools
- Sports stadiums
- Restaurants/shopping centers
- Churches

### Telling Example

A few years ago, the main field office for the International Code Council (then known as the International Conference of Buildings Officials) needed a roof. The building in Bellevue, Wash.,





holds the people who develop the codes and evaluation reports for home and commercial construction, including roofing. The ICC choice for a roof system? Stone-coated steel.

### The Look

Manufacturers of stone-coated steel roofing generally form the panels into three profiles: shake, tile and shingle. In the past three years, new designs of tile on the market more closely mirror the classic Mediterranean clay barrel tile so popular in the West and Southeast.

"We have builders talking to us now who never would have talked with us before," said Pete Croft, director of sales and marketing for Oceanside, Calif.-based Metro Roof Products USA, which makes the popular Roman Tile panel.

"It matches everything in this area," said Jack Mullikin, a homeowners' association president at a Florida condominium complex that was reroofed with the Roman Tile after the 2004 hurricanes. "So many people are stopping by and asking about it because it looks so good."

In Minnesota, owners of a custom-built luxury home in 2004 were shocked when the builder told them they were roofing it with stone-coated steel in a shake profile. The results satisfied them—and those passing by.

"Everybody who has looked at it, they're pretty much in awe when they see it," homeowner Danny Tramm said. "Actually, they don't even know it's metal until you hand them a piece and tell them that's what is up there."

Mike Smithers, the roofing distributor for the project, saw interesting results, too. "I've had more architects and more general contractors call me in the past three months on this product than in the previous five years we've been carrying it," he said.

### The Performance

Durability and light weight are the two main benefits of stone-coated steel roofing. The systems

last 50 years or more. At less than 2 pounds (2 kg) per square foot installed, they require the minimum load and shear support. And the interlocking design yields high-wind resistance perfect for hurricane- and wildfire-prone regions.

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Plus, stone-coated steel offers solutions for unique challenges, such as:

- **Asbestos abatement:** The general manager of a golf country club in Victorville, Calif., encapsulated asbestos in the felt liner under the original shake roof on the main clubhouse by reroofing over it with stone-coated steel tile. The steel system saved general manager Bruce Zahn up to \$70,000 in possible abatement costs. The lightweight steel also saved the cost of hiring an engineering firm to determine the additional load on the building and how to reinforce it to hold concrete tile, the original choice.

"It saved us time and money and actually added a little bit more insulation for us," Zahn said of the stone-coated steel.

- **Foul balls:** A minor-league baseball stadium in Clearwater, Fla., changed from clay tile to stone-coated steel tile after two years because of damage from foul balls hit by the players. Broken tiles threatened to fall onto spectators. "I wanted something that looked like the barrel tile we put on but could handle being hit by baseballs," said Dale Fitzpatrick, maintenance supervisor of Brightman Stadium, a city-owned facility.

City officials tested stone-coated steel by throwing pitches at a test deck built by a local manufacturer. They threw as hard as they could and could not break the test panels. They reroofed with stone-coated steel in 2007.


"It's gorgeous," Fitzpatrick said. "Exactly what I needed."

### The Duration

Most roofing products look pristine initially after installation, but weather, use and foot traffic quickly take their toll. Stone-coated steel stands up well against the test of time.

"It looks and performs the same years down the track," said Jon Wilson, representative for RAM Metal Roof Supply in Placentia, Calif. "It keeps its aesthetic values over the life of the roof. It doesn't degrade, lift, delaminate or lose its looks."

He added one other benefit: Stone-coated steel roofing receives the optimum life-cycle values of reserve analysts.

In all, it's an enticing package for builders who face a variety of demands on their roof systems. 

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