The experts at EcoSteel show how their steel building systems are a smart alternative to materials like wood.

By Laura Rote

When clients turn to California-based EcoSteel, it’s because they want something extraordinary. The company’s modern, prefabricated steel building systems are not only designed with architects to look beautiful—they stand up to nearly any condition imaginable and save owners time, money, and energy.

Working with EcoSteel starts early, as the team makes a 3D model of the entire building system and works with the building owner and architects to identify needs and challenges early on. Using superior BIM technology, EcoSteel designs to meet or exceed local building codes while resisting earthquakes, hurricanes, floods, and wildfires. They then produce a prefabricated kit of parts that quickly and efficiently assembles onsite.

“EcoSteel has stood the test of time by offering an alternative to traditional wood and building with architects, developers, contractors, real estate brokers, and property owners to create a value-driven approval to steel construction.”

ENDLESS POSSIBILITY

In both the commercial and residential sectors, people increasingly look to steel to make their design dreams come true, says Dave Scott, operations manager for EcoSteel. Architects may seek out EcoSteel because they want an exposed, industrial-chic look for their clients. Scott says, or homeowners may look to the company for solutions that offer pristine views while maintaining an energy-efficient space. EcoSteel offers the design flexibility they need—from cantilevers to large, clear spans for wide, open spaces that allow you to bring the outdoors in and preserve that connection to nature.

“People don’t always understand what we can do with steel,” Scott says. From unique designs to varied finishes and colors, EcoSteel has made its mark on countless standout projects—elaborate homes, modern breweries, Class A office buildings, and more.

WITHSTANDS NATURAL DISASTERS

It’s no secret that steel lasts. But not only are EcoSteel’s systems durable; they resist mold, mites, and even fire while also standing up to severe storms. Developers often turn to EcoSteel as a way to be proactive, especially in California where, in 2017, the state’s wildfires destroyed 7,500 buildings. Prefab steel buildings go up quicker than if you were to use traditional building materials, as they arrive pre-cut and prorated, eliminating the need for a host of traditional subcontractors and saving both time and money.

Commercial real estate developers and brothers Brian and Kevin Dueck know the need all too well. After their 20,000-square-foot retail property in Santa Cruz was destroyed by fire, they turned to EcoSteel for a fire-resistant building that was building- and energy-code compliant and modern. EcoSteel’s prefab buildings saved them time and money when rebuilding, as they could be designed and assembled faster than traditional methods. Now the Duecks have a successful 10,300-square-foot steel property—complete with gastropub, salon, and gym—with two fire-rated panels and roof. “EcoSteel gave us a sweetheart of a deal and helped us design a retail space with a modern and open look that is also fireproof,” Brian Dueck says. “It has been a huge hit and has brought a lot of economic vitality to the area.”

In South Carolina, hurricanes are a real challenge for buildings. When Jenn Beatty and her husband chose to build along South Carolina’s coastal barrier island, they were adamant about steel, even when no local architects could do it. “We wanted steel—something that was environmental- ly green and had high recycled content and wind stability in hurricane weather,” Beatty says. “My husband found EcoSteel and had a conversation with Joss about what we wanted to build and they got right to it. Working with their design team and engineers, our dream quickly became a reality.”

The result is a house with nearly 70% imp- act windows. It’s built on concrete pilings to keep it above water, while 12-foot ceilings and exposed steel beams support the wind beam and bridge winds without interruption. The 1,900-square-foot main house, 680-square-foot guest house, and 900-square-foot shop were all built on eight-and-a-half acres of riverfront property. “Our main idea was to make sure what we created was something that made you feel like you were outside when you were inside,” Beatty says. The family of five moved in just days before Hur- rricane Florence hit. They chose to shelter in place, and their modern EcoSteel prefabricated home came through unscathed.

KEY SUSTAINABLE FEATURES

EcoSteel systems are made with 76% recycled steel, and pre-engineered steel is made up of 85% recycled material. In general, sustainable materials like glass and steel offer a long life cycle while maintaining exceptional energy performance, reducing heating and cooling costs, and meeting building code requirements for zero net energy compliance. Steel also won’t rot, warp, or decompose like wood, so it’s not only durable—it’s low maintenance and environmentally friendly.

Scott says many clients seek out EcoSteel for their energy-efficient insulated panels. Originally invented for the commercial refrigeration industry, they could withstand temperatures below 50 degrees. EcoSteel’s panels achieve the highest insulation values available, with no thermal gaps or bridging. Their buildings are solar-ready, too. “If you’re someone who’s looking to own your building for a long time, using our insulated panels is key because you’re going to cut down your operating costs ex- tensively,” he says.

As builders and suppliers must continue to find ways to keep up with new building codes and standards, EcoSteel building materials stay ahead of the curve. “People are looking for an alternative to wood and other traditional building materials for a variety of reasons, and we can offer that with steel,” Hudson says. gbd