Ask any builder or architect what is top-of mind and they’ll likely mention commercial energy codes. As anyone in the metal building industry can attest, energy codes are changing rapidly and they can vary substantially from state to state.

“Our customers are demanding solutions to meet the increasingly stringent codes,” says Bill Beals, district manager for Therm-All Insulation, North Olmsted, Ohio. “OptiLiner is our solution for not only meeting current commercial energy codes, but future codes, too.”

In the past, the standard has been a single layer of insulation on roofs and walls. But the OptiLiner system is different. OptiLiner offers multiple layers of insurance to achieve a higher R-value for a more energy-efficient building. “With the evolution of new energy codes and new standards must come the evolution of new systems,” explains Beals. “OptiLiner ultimately means thicker insulation in the walls and roof, and because the system uses Divers Corning Fiberglass, it’s still the most cost-effective solution for insulating metal buildings.”

Designed for use in both walls and roofs, the OptiLiner system helps meet the most stringent of energy codes. The system has the U-values needed to meet and exceed both the IECC International Energy Conservation Code and ASHRAE 90.1 envelope requirements. Additionally, OptiLiner meets the definition of Liner System(s) as described in the latest version of ASHRAE 90.1, which is also referenced by the IECC.

OptiLiner features an exceptional vapor retarder, an enhanced acoustic environment (both inside and outside of the building), and a continuous or integrally adhered appearance, with a bright interior finish, which may allow for reduced lighting loads.

The OptiLiner roof system uses a series of 1-inch gasketed steel straps to support a bright white or black polyethylene fabric that serves as the low performance vapor retarder for the system. Fabric sections are custom fit for each bay in order to ensure a swift installation and a clean interior finished appearance. This also allows roof cavities to be completely filled with uncompressed insulation, which maximizes the thermal performance.

The OptiLiner wall system uses the same basic components as the roof system. Additional materials included with the wall system are insulation hangers, which are used to support the insulation in the wall cavities, and foam tape, which is installed between the wall girts and the wall sheets to enhance system thermal performance.

Ryan Grouws, national marketing manager for Allsystems Inc., in Renton, Wash., says that the system has been a hit in Washington, where energy codes are increasingly strict. “In Washington state, they have made a move to very high R-values for energy code compliance,” he says. “We like to use the OptiLiner system because it helps us meet those new energy code requirements.”

In addition, the system improves the quality of the buildings. “It also is a very high-quality end product,” he says. “Our production buildings use a very clean, finished appearance in the roof and walls and gives them an almost ceiling-like finish.” Grouws says, “The white color also helps the area seem lighter. It is a crisp, crisp ceiling finish that hides the underlying structure. Instead of looking at the ceiling and seeing metal purline with insulation on top of the roof, there is a finished look which is a continuous vapor barrier.”

The system is tailored to metal building insula-

Grouws also said OptiLiner is easier to install than other systems. He first used the system two or three years ago at Markey Machinery in Seattle, and since then he has used it in about a dozen buildings a year since then.

Grouws says that when all is said and done, the cost is comparable for the value. “The cost of the materials can be compared to a bag and tag, but that does not achieve the required R-value,” he says.

“Second, it does not have the same clean appearance, and third, typically the labor used to install a sag and bag-type system and make it look good actually ends up being more costly than it is to install the OptiLiner system.”

The benefits of the system are so great that Grouws suggests that others try the system on their next projects. “I would definitely recommend the OptiLiner system to other contractors, even if you don’t have to use a very high R-value product, because I believe the benefits in both the aesthetics, as well as in energy performance, would be a great value added for their customers and for their building owners.”

Therm-All is the only current laminator of the OptiLiner system.

Brad Mahovlic is the marketing manager at Therm-All, North Olmsted, Ohio. For more information about OptiLiner, visit www.therm-all.com/high.php.