

Carlisle SynTec
P.O. Box 7000
Carlisle, PA 17013
800-4-SYNTEC
Fax: 717-245-7053
www.carlisle-syntec.com



METAL ROOF EDGE Pre-Manufactured or Shop-Fabricated?

When specifying and purchasing metal roof edge many specifiers and contractors struggle with the decision whether to use a pre-manufactured roof edge system such as one produced by the W.P. Hickman Company or to use a shop-fabricated product made by the roofing contractor or local sheet metal shop.

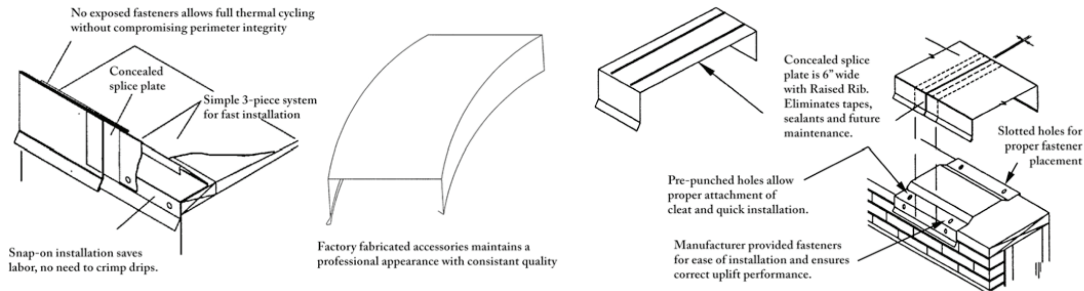
Two reasons frequently stated for using shop-fabricated roof edges in lieu of pre-manufactured products are quicker lead times and lower cost. Most sheet metal shops and roofing contractors can create some type of roof edge in only a couple of days after field checking the job, so indeed they do have a quick lead time. However, lead times for pre-manufactured systems continue to decrease and most manufacturers can ship product in a week or two after receipt of field measurements. The design of pre-manufactured systems typically allows for more variance in field conditions, therefore the job can be field measured sooner, and the reality is that the lead time for a remanufactured roof edge is frequently shorter than the time it takes for the roof to be installed to the point where the edge metals are needed.

Although the cost of a shop fabricated roof edge may be less than that of a pre-manufactured system, the value of the pre-manufactured system is typically much higher. Pre-manufactured systems have tested performance that is backed by a reputable manufacturer's warranty. Plus a pre-manufactured edge system is more easily and quickly installed than a shop-fabricated product. When you consider all the information, the installed cost of a pre-manufactured system often is lower than the installed cost of shop-fabricated.

Metal roof edge has a far greater function than merely providing an aesthetic trim at the top of the building—it holds the roof in place! The Roofing Industry Committee on Weather Issues (RICOWI) found roof edges to be number 2 out of a list of 20 roofing issues that needed improvement. Factory Mutual Research Corporation and others have found that over 80% of all roof failures can be attributed directly or indirectly to failure of the roof edge. It is clear that specifying and installing a roof edge that holds the roof membrane in place as well as looks good is critical to the performance of a building's roof system.

The performance of pre-manufactured roof edge systems is generally well recognized. Most of these systems are well engineered with covers, which tightly snap onto mated cleats or chairs with pre-punched, slotted fastening holes that assure proper attachment to the roof edge while still allowing for thermal movement. Most of the pre-manufactured systems are tested per ANSI/SPRI ES-1 criteria (now part of International Building Code) to assure that they resist the calculated wind loads for the project on which they will be used. Additionally, many pre-manufactured roof edge systems are also tested and approved by Factory Mutual to further assure their performance.

Charles Thompson, specification writer for Fanning/Howey Associates sums it up best when describing the difference in pre-manufactured versus shop-fabricated edge metals. He says, "Remember the old adage: "You get what you pay for"."



Comparison of Pre-manufactured to Shop Fabricated Roof Edges

Following is a list comparing the roof edge products produced by a pre-manufactured roof edge company to those that would typically be fabricated by local sheet metal shop or roofing contractor:

Pre-Manufactured

Known high quality that is consistent each time and available nationwide

Snap-on details with no exposed fasteners for a clean look without leaks

Pre-punched slotted fastener holes to assure proper fastener location and to allow for thermal movement

Concealed internal splice plates for smooth, maintenance free joints

Factory fabricated and finished miters, end caps and accessories provide clean professional appearance

Radius sections are welded to fit the project's actual conditions providing a smooth finished look

ANSI/SPRI ES-1 tested for wind resistance per International Construction Code as is now required in many States

Independently tested and granted a FM approval rating by the Factory Mutual Insurance Company

Guaranteed up to 25 years against failure due to winds and weather

Shop Fabricated

Unknown, possibly poor quality, that will vary by contractor and location

Exposed fasteners that can rust, leak, and prohibit required thermal movement

Fasteners driven through the roof edge in the field may be spaced improperly and do not allow for thermal movement as required

Frequently use exterior "band aid" splices that are unsightly and require maintenance

Miters, end caps and accessories are field fabricated often yielding a cobbled together appearance

Segmented straight lengths, or riveted or seamed radius give a rough unprofessional appearance

No testing and may not meet local building codes

No testing or FM approval

Little or no warranty protection provided by companies with varying, unknown levels of experience