

PRIMER

BY **JEFFREY S. LEVINE** Wiss, Janney, Elstner Associates, Inc.

Batten end caps can be a weak point in a roof system, failing prematurely and resulting in deterioration.

Location:

WJE Philadelphia 601 Walnut Street Suite 875W Philadelphia, PA 19106

Contact:

T: 215.567.0703 E: jlevine@wje.com

www.wje.com



A Better Batten End Cap

Detailed elements of a roof system are generally things that few people ever notice. It is the details, however, that are the most challenging aspect of roof design and installation and can make or break a roof system.

Batten end caps are one such complex detail. Not only are batten end caps tricky to fabricate, but they often occur within the zone of potential ice damming (i.e., where a batten seam roof terminates at a gutter or gusset). In these locations, it is especially important that the batten end caps be watertight and durable. All too often, however, batten end caps are a weak point in the system, failing prematurely and resulting in deterioration (photo to right).

Copper and Common Sense, published by Revere Copper Products, Inc., is one of the best-known guides for basic detailing of various types of copper roofing and roof components, including the fabrication method for a batten end cap illustrated in Figure 1.

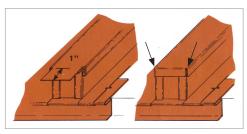


FIGURE 1

Batten end cap detail as illustrated in Copper and Common Sense. The black arrows indicate where small gaps exist in the finished cap.



A cover plate is installed over the end face of the batten. The adjacent roof pans and batten cover are loose locked to the outwardextending flanges of the end plate and the loose locks are then folded inward, tight to the end face of the batten. One problem with this method is that small gaps at the upper corners of the finished end cap may allow water to enter the roof and cause the wood batten to rot.

A better solution is to install a full cap rather than an end plate, extending up the sides and over the top of the batten (Figure 2). All seams

WJE

PRIMER

Batten End Cap (CONTINUED)

in the end cap are fully soldered and the end plate is recessed one half inch so that the adjacent batten seam pans and batten cover can still be loose locked to the projecting flanges. An eight- to ten-inchlong end cap is recommended in locations where ice damming may occur. The final product is watertight and will last the life of the roof system.

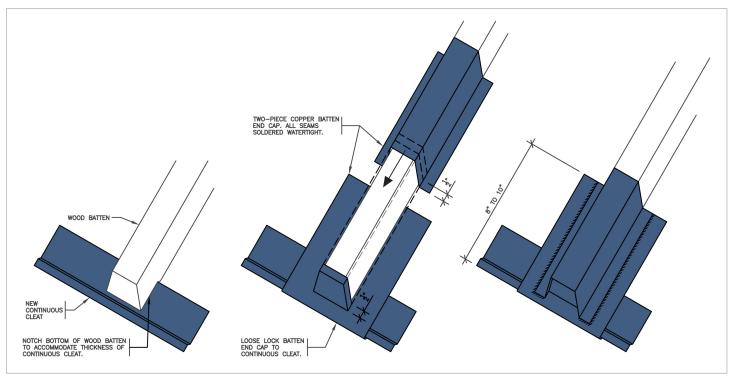


FIGURE 2 A better batten end cap detail.

www.wje.com

WJE ENGINEERS ARCHITECTS MATERIALS SCIENTISTS Wiss, Janney, Elstner Associates, Inc.

Location:

WJE Philadelphia 601 Walnut Street Suite 875W Philadelphia, PA 19106

Contact:

T: 215.567.0703 E: jlevine@wje.com W: www.wje.com