

**Professional Services**

- + Roof consulting
- + Construction documentation and administration
- + Condition assessment reports
- + Leak investigations
- + Cost estimating
- + Hands-on surveys and test probes
- + Historic building restoration and rehabilitation
- + Facilities maintenance plans
- + Materials analysis and selection
- + Preservation planning

**Steep-Slope Roofing**

- + Slate
- + Wood shingles
- + Clay tile
- + Standing seam and batten seam copper
- + Asphalt shingles
- + Flashings
- + Rainwater conduction systems

**Low-Slope Roofing**

- + Flat seam copper
- + Built-up roofing
- + Modified bitumen systems
- + EPDM
- + Flashings
- + Roof drainage

**Building Envelope**

- + Exterior masonry
- + Windows and doors
- + Stained and leaded glass
- + Architectural woodwork
- + Ornamental ironwork
- + Steeples, parapets, and cornices

**Competence**

- + Expertise in roofing technology and building pathology
- + Holistic approach to identifying and treating deterioration
- + Hands-on, up-close surveys from ladders and high reach equipment
- + Principal involvement in all projects
- + Attention to detail
- + Close client collaboration
- + Frequent site visits during construction to ensure quality
- + Continuously refining our understanding of building technologies

**SOLUTIONS FOR THE ENTIRE BUILDING ENVELOPE**

**A Better Batten End Cap**

Detailed elements of a roof system are generally things which few people ever notice. It is the details, however, which 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 below).



*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 (above right).

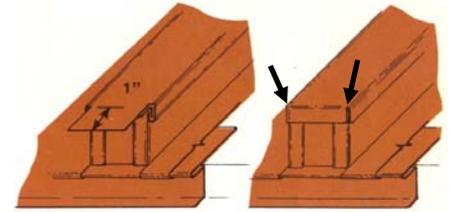
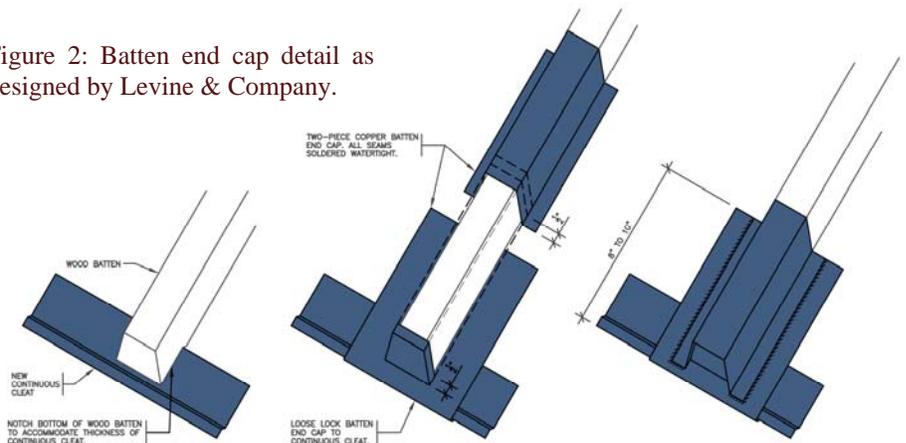


Figure 1: Batten end cap detail as illustrated in *Copper and Common Sense*. The black arrows indicate where small gaps exist in the finished cap.

A cover plate is installed over the end face of the batten. The adjacent roof pans and batten cover are loose locked to the outward-extending 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.

Levine & Company's 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, below). All seams in the end cap are fully soldered and the end plate is recessed 1/2" such that the adjacent batten seam pans and batten cover can still be loose locked to the projecting flanges. An 8" to 10" long 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: Batten end cap detail as designed by Levine & Company.



FIRST PLACE, 2011 RCI DOCUMENT COMPETITION

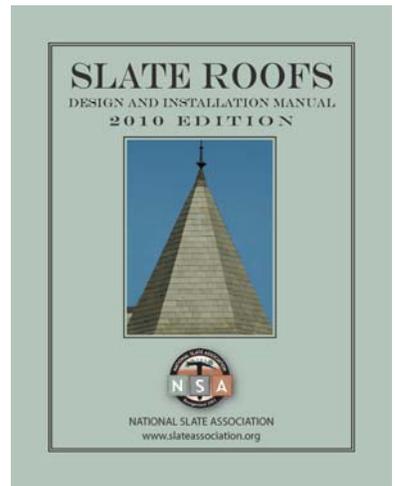
Earlier this year, Levine & Company was awarded First Place in the RCI, Inc. (The Institute of Roofing, Waterproofing, & Building Envelope Professionals) document competition! Construction documents prepared by Levine & Company for roof rehabilitation and gutter replacement at Thompson Library at Vassar College, Poughkeepsie, New York took First Place in the Small Projects category. The award was presented at RCI's 26<sup>th</sup> International Convention and Trade Show in Reno, Nevada in April. For more information about this project, visit Levine & Company's website at [www.levineco.net](http://www.levineco.net).



NATIONAL SLATE ASSOCIATION RELEASES NEW SLATE MANUAL

The National Slate Association's new publication, *Slate Roofs: Design and Installation Manual* is finished and in print. The Manual is the result of over five years of dedicated effort. Consisting of over 250 pages and 140 detail drawings, the Manual has undergone extensive peer review by respected members of the slate roofing industry. Contractors and Design Professionals alike will benefit from this book. Jeff Levine is co-chair of NSA's Manual Committee and editor of the new Manual.

For more information on the Manual and to view the table of contents, please visit the NSA's website at [www.slateassociation.org](http://www.slateassociation.org).



Ridgewalker News

  
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