



chosen metal roof will not be cost effective. "Select a roof with more-than-adequate testing results, performance characteristics and history."

From his industry experience and via working at NRCA, Ribble says the biggest waste of money in metal roof system installations occurs when the roof is very "cut up." He acknowledges that this is stating the obvious, but unlike other types of roof coverings, metal roofing rarely allows for the use of cut-off pieces in other parts of the roof. "Informed customers need to understand the nuance of installing a metal roof system, while also understanding the very high-performance characteristics metal roofing brings to them," he adds. "Costs always need to be weighed against life expectancy and performance. Metal roofing, even with waste, often becomes a less-expensive roof system than other options, when its life span is taken into account."

And trained and well-educated metal roofers will help minimize costs. Doyle says effective, hands on training helps get installation sequencing firmly in place. "Most of today's high-end roof or reroof trim only allow a specific way of assembling a given detail," he says. "Once it is incorrectly assembled, it is impossible to correct the errors. A similar thread runs through roof accessories. Skylights and roof curbs are particularly field-installation-sequence sensitive and again, once assembled incorrectly, are very difficult to correct. Written certification is a well-worthwhile process, especially on reroof fieldwork with a high degree of difficulty. It also helps build brand loyalty and reinforces brand quality. Manufacturers need to schedule training by their expert specialists on a regular basis."

Even after the metal roofing installation is finished, to further control costs, Johnson advises being diligent about protecting your metal roof projects. He recommends taking hundreds of pictures of all panels, trim, details, etc., to show how it all looked when it was completed. "Email them all in

a folder to your general contractor when you are done to prove the timeline of completion," he says. "Other subcontractors on your project and even your general contractor as well, will never treat your roof with kid gloves. Do your utmost to protect what has been installed, be clear to the other crews on-site that the finishes are delicate, and document everything to help ensure that you don't get stuck replacing panels or trim at your own expense that someone else damaged."

## Cape Cod Roofing & Siding Controls Costs

To save costs, know what the customer wants to achieve. Once we know the application, then we can find out what type of panel to use and the installation method.

- Structural panel versus architectural panel: One is used for all-inclusive roof metal/ceilings and the other functionally decorative. Installation methods vary greatly.
- Profile: Understand the correct starting procedure. Some panels are lay-over, some are snap on and others are mechanically fastened by automatic hemming. All have different warranties.
- Job start: Know your panel. If not, have
  a representative from the manufacturer help
  you start the project. The learning curve for
  metal roofing is enormous and should NOT
  be undertaken by unfamiliar contractors.
   Starting certain roof sections is key to access
  to others later.
- **Finish:** Always protect the factory finish whether it is aluminum or steel.
- Always: Think one step ahead as panels interlock with one another. On a completely hemmed roof, this is crucial to limiting mistakes which show up as huge losses of time and money.
- **Tip of the day:** Know your workers. Right-handed or left by majority. If the majority of your mechanics are right-handed, install panels right to left across the roof.

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