

# Heat-Forming

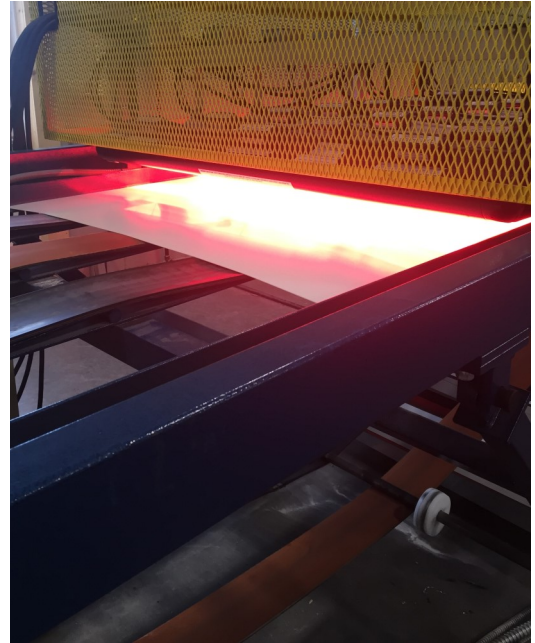
## Why did we install a heat box?

### What is a heat box?

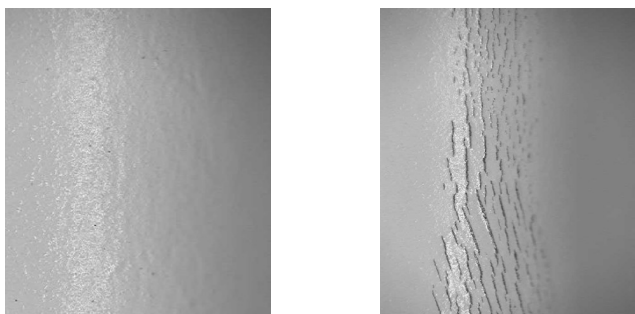
A heat box is an extra step in the roll-forming process that comes before the flat sheets go through the roll forming die.

### What does the heat box do?

A heat box brings the flat sheets to a higher temperature, which softens the paint and allows it to bend and adapt as it goes through the roll former.



## Heated vs. Cold Formed Panel



*Magnification of the Major Rib*

US Steel Corporation, Research and Technology Center, Technical Bulletin Construction, TBP 2012.12

## Why heat form?

Heat forming eliminates paint cracking over the ribs of the panel. Once the paint cracks, it is an invitation for rust. A heat-formed panel adds to the longevity of your paint system and the life of your roof.

# Roll Forming

## How are your panels made?

### How do panels start?

When our steel arrives, it is in a 10,000 pound pre-painted coil. The coil is put on an uncoiler that feeds the flat sheets through a shear, which cuts them to your specified lengths.



*steel on the uncoiler*



*roll former dies*

### How does the panel get its ridges?

Once the panels are cut to length, they are sent through a series of die rollers that shape the ribs. Normally, companies use 14 dies in their roll former. We use 18 dies, which make smaller adjustments at each pass, allowing less stress on the panel and paint system.

### What makes our profile different?

The Aspect panel profile has sharper bends and steeper ridges than most other 9" rib profiles. This creates a stiffer, more durable panel. It is especially beneficial during installation, as the panels are easier to handle, bear the weight of roofers better, and are more resistant to the elements.

