TAYLOR METAL PRODUCTS

4566 RIDGE DRIVE NE
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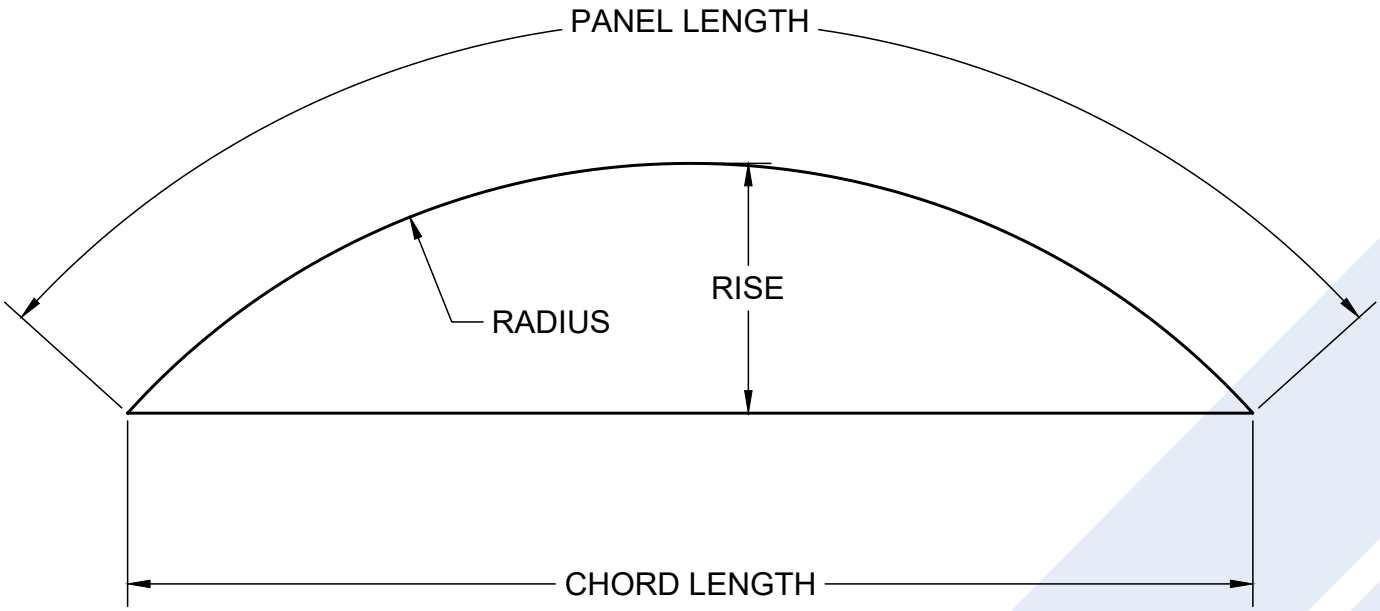
RADIUS (CONVEX) STANDING SEAM METAL ROOFING INSTALLATION GUIDELINES

Panel profiles that qualify for radius projects:

Profile: MS-100, MS-150, MS-200 and T-Panel
Gauge: 24ga through 22ga
Width: 12” through 18” (Contact TMP for standard widths)
Seam Type: 90° (180° seams will be problematic)
Minimum panel length: 5’
Minimum radius*:
24ga T-Panel 4’
22ga T-Panel 5’
24ga MS-100- 15’ no injected sealant option
22ga MS-100- 20’ no injected sealant option
24ga MS-150- 15’ no injected sealant option
22ga MS-150- 20’ no injected sealant option
24ga MS-200- 25’ no double down leg or injected sealant option
22ga MS-200- 30’ no double down leg or injected sealant option
**Note: minimum radius is based on a conservative estimate. Samples must be ordered to determine a tighter radius for approval. Additional set up charges apply. Tighter radiuses may show stress or distortion in the flat of the panel. Aluminum and Copper panels may be radiused. Contact TMP representative for more information.*

As noted above, MS-200 panels are ran with no down leg on the male side. Also, all MS panels will be fabricated without butyl sealant in the seam. Butyl caulking (non-skinning if the panel will NOT be installed immediately) will need to be added by the installer in the field. The panel clips have injected sealant so they should be installed PRIOR to adding sealant to the top of the male rib. Also, the first and last 12” to 18” of the panel will not be curved and will remain flat. This will need to be taken into consideration when providing the panel length for fabrication.

Measuring radius:



TMP will need to be provided the panel length and radius. This can be calculated by TMP if provided the chord length and rise.

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Radiusing of panel:

Panels can be radiused in the shop. This presents challenges for packaging and shipping. The preferred method is field radiusing of panels. It is the customer's responsibility to verify there is enough space onsite for radiusing of panels. This must occur prior to shipping the radius machine.

TMP Tolerances are 3/8" in 20' or ¾" in 40' or more.

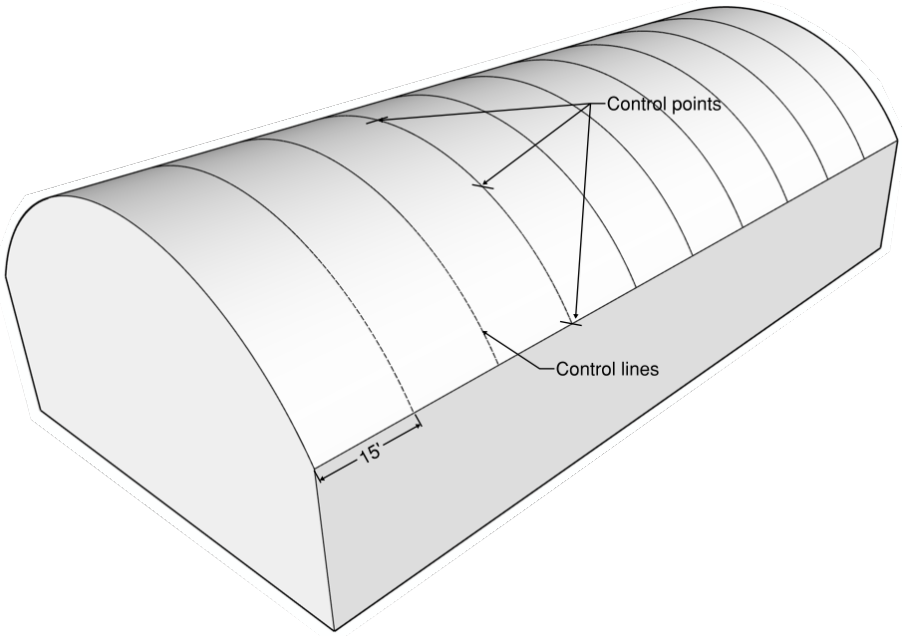
TMP will begin with a test panel (typically, the longer the test panel the better because the first and last 12" to 18" will not be curved). This test panel must be checked on the roof in multiple locations. Once first full-length panel is radiused, this too needs to be tested on roof in multiple locations. Customers must sign off on radiused test panels prior to starting the main panels.

Installation: (Note: 100% TMP Protect- HT Ice and Water Shield is required for projects specifying a manufacturer's weathertightness warranty, and recommended for non-warranted projects):
Use a laser or string line to verify the consistency of deck radius. This must be verified before panels are fabricated. Radius roofs at times will sag in the middle--creating a saddle look and the deck may bulge outward farther down slope as a result. If this occurs, do not force panels down. All voids between the panel and deck must be shimmed, or the deck will need to be repaired to eliminate the inconsistency. We understand there are no perfect roof decks, but abrupt changes in the radius will affect the panel's appearance, function, and structural integrity. Kinked or creased seams are not acceptable and may void the warranty.

Fixed clips should be installed at the apex of roof. Special consideration is required when pinning the clips to the male rib with rivets (contact TMP Technical Representative about proper application), and maintaining consistency in coverage (floating clips are thicker than fixed clips). The remaining clips must be floating clips to allow for the panel to expand and contract.

Every 15' draw control marks on the roof. These should be at a minimum of five locations. This will ensure panel alignment.

- Ridge
- Eave (both sides)
- Midpoint between ridge and eave (both sides)



NOTE: Splicing (end laps) standing seam metal roof panels is not necessary or recommended. For excessive panel lengths, contact TMP's Technical Rep. for options and guidance.

Fixed clip detail at top of radius.
One in the center, then one on either side 2'6" down from peak.