

Case Study — Church For All Nations WindClamp™ 2X

At-A-Glance Project Name

Church For All Nations

Location

Colorado Springs, CO

General Contractor

Church For All Nations

Construction Consultant

Rob Haddock, Director Metal Roof Advisory Group; (CEO & Founder of S-5!)

Mechanical Contractor

Heating and Plumbing Engineers

Roof Profile

Main Roof, 24-gauge Varco Pruden SSR, trapezoidal, double-folded standing seam metal roof; Porticos, 1-3/4" snap seam

The Situation

The church experienced partial roof damage due to a severe windstorm and needed a long-term solution to protect its roof from future high-wind events.

The Result

The **WindClamp™ 2X** significantly improves the roof's wind uplift performance by strengthening the seam area, protecting and preserving the church's roof for its lifetime. The non-penetrating clamps do not compromise the roof integrity and have eliminated the risk of voided roof warranties.

Industry

Religious

Project Stats

- Roof Measured: Main building 235" x 435"
- Roof Pitch: 4/12 on the main roof and porticos; 1/12 on additional side wings
- S-5! Products Supplied:
 - □ WindClampTM 2X (200)

The following products were also installed:

- ColorGard® (1,000 linear ft.)
- S-5-U Clamps (300)



The Project

Church For All Nations is a dynamic, growing, multi-cultural body of non-denominational Christian believers, with two campuses in Colorado Springs and mission outreach throughout the world.

The Northeast campus features a 49,000-square-foot, engineered Varco Pruden metal-clad building with a Varco Pruden SSR metal roof. Attached to the roof are various S-5! metal roof attachment solutions, including the **WindClamp™ 2X**, designed to increase wind uplift capacity on standing seam and other concealed-fastened metal roof profiles.

The Challenge

A severe windstorm of 90 mph gusts swept through the area, resulting in partial roof damage. The wind had lifted up the front edge of the roof, peeling back the roof on its gable ends.

With ever-increasing frequency and magnitude of wind events throughout the country, including Colorado, an existing roof is more likely to experience localized or total failure as wind forces try to tear the roof from its mountings. Church For All Nations needed a long-term solution to protect and preserve its roof.





Why Install WindClamps?

...to dramatically improve wind uplift strength and performance

...because design wind speeds and code requisites have now become more stringent

...to help your building meet current code compliance and wind standards

...to reduce the danger of wind damage or blow-off

...because it is the most cost-effective way to do it

...it's the right way® to preserve roof warranties

The Solution

The S-5! team recommended the WindClamp™ 2X – S-5!'s trademark brand of external seam clamp – to protect and preserve the roof against the area's strong winds.

Placed over the seam at designated intervals, WindClamps are specifically designed to prevent multiple modes of failure on standing seam and other concealed-fastened metal roofs, including male-to-female seam separation and/or total separation from its mounting clip.

WindClamps have proven to dramatically increase – and often double – the wind resistance capacity of the panel system and can easily be added to a metal roof specification. This retrofit enabled Church For All Nations to preserve its roof and gave them peace of mind that their roof will serve the church community for years to come.



Long-Term Outlook

The WindClamp 2X was easily retrofitted to the existing roof, bringing it into code compliance without costly structural changes, and the roof is ready to withstand the next extreme wind event.

The church can rest assured knowing the WindClamp will continue to protect and ensure the service life of the roof for years to come.



"The WindClamp was a much needed product after our roof sustained damages from a wind storm with 90mph winds. I was amazed that such a small clamp would strengthen our roof against future wind storms. It was strong and incredibly easy to install. S-5! has given us the peace of mind that our roof installation will serve our church for many years to come.

We've appreciated the partnership that we've had with the folks at S-5! over the past 20+ years. You not only get a quality product that stands the test of time, but you benefit from a relationship with a family and a team that stands behind their products."

-David Cowart, Operations Manager, Church For All Nations



