Installation Guide: Tuff Span FRP Gravity Ridge Vents – 12” Thru 18”

Manufacturer’s Assistance
These instructions are intended for Tuff Span FRP ridge ventilators. For further assistance, please contact:

Enduro Tel: 713-358-4000
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Material Handling
1. Inspect materials upon delivery. If damage is found, promptly advise both freight carrier and Enduro. Note damage on carrier’s receiving ticket.
2. When lifting materials, use spreader bars. Do not use wire slings unless materials are protected.
3. Protect materials from surface cuts, impacts, and abrasions.
4. ***FRP materials cannot be reshaped by use of external force such as hammering or extreme bending.***
5. Use abrasive cutting tools or fine-toothed saws to cut FRP materials.

Material Storage
1. Store crated units off the ground high enough to allow air circulation under the material and to be above standing water. Elevate one end of the unit for water drainage.
2. Do not stack or store other building materials on top of unprotected units.

Installation
1. Cut roofing panels as needed to clear ridge vent throat.
2. Position vent unit and drill pilot holes in base flashing for attachment to support members. Correct drilling of pilot holes is critical to the installation. Refer to the Drill Bit Selection Chart for correct Drill Bit size.
a. ***Dill pilot holes through unit and structural support at very slow speed*** using a sharp carbide-tipped sheeter’s bit. High-speed drilling hardens inside of holes, making it difficult for fastener threads to bite (thread rolling) and causing drill bits to burn-up faster than normal. Using a lubricant may extend life span of bits.
3. Fasten ridge vent units to supports at correct spacing with proper fasteners and washers. See Selecting Fasteners. *Tuff Span ridge vent units must be properly fastened to underlying support members – not just to the roofing panels.* Attachment should be through high ribs of the roofing panel into the structure with fastener spacing no more than 8.4”.
a. Drive all screws at 500 rpm or less. To avoid excessive speed and heat build-up, “trigger” the drill motor (turn it on and off). If thread rolling occurs, lubricate screws with a drill bit lubricant. *Thread rolling may occur when driving 316 stainless or monel fasteners into hard steel. If this happens, use a heat-treated Type B carbon steel screw to tap the hole before installing Type A or B stainless steel or monel fasteners.*
b. Tighten screws until the sealing washer extrudes slightly beyond the metal washer (see diagram*).* ***DO NOT OVER TIGHTEN*** screws as this can damage materials.
4. Insert closure strips and secure them with fasteners or adhesive caulk (if condition is not suitable for fasteners).
5. Apply sealant tape and caulk where specified or shown on drawings. Surfaces must be clean and dry before application.

Cleaning and Repair
1. Clean materials with soap and water first. If this does not work, some solvents can be used to clean spills or stains on Tuff Span. However, solvents should be used sparingly and only if absolutely necessary. *Some solvents like acetone may remove the acrylic polymer surface coating on coated materials.*
2. Minor damage to deck or flashing can be patched with a Tuff Span repair kit. Materials with other damage should be replaced.

Selecting Fasteners
1. Type A Point screws (3/8” hex head): Used for fastening to wood structure, light gage metal (14 gage or lighter) and Tuff Span FRP structural members.
2. Type B Point screws (3/8” hex head): Used for fastening to steel members, 12 gage up to 1/2” thick.
- Type A and B fasteners are available in 300 and 316 stainless steel or monel. These metals are softer than carbon steel; so extra care must be taken for installation.
3. Through Bolts (sized as required): Suitable for fastening to any material. Seal washer under bolt head on exterior is required.

Correct Fastener Installation

Visual Inspection

Correct Tightness!
Note slight circle of sealant extrusion.

Too Tight!
Metal backing of washer starts to turn up.

Too Loose!
Sealant is not compressed to form seal.

Drill Bit Selection Chart

Structural Fastener	Member Gage	Drill Bit Size
#14 Type B	14 up to 10 ga.	No. 8 or 13/64”
	10 ga. Up to 3/16”	No. 4 or 7/32”
	3/16” to 3/8”	No. 1 or 15/64”
	3/8” to 1/2”	A Size or 15/64”
# 14 Type A	Wood, all depths	5/32”
	16 to 14 ga. Metal	No. 8 or 13/64”
	18 ga. Metal	No. 10 or 13/64”
	Tuff Span FRP	No. 22 or 11/64”
Through Bolt	Any support	For pilot hole to just clear bolt threads