Scan Roof ®

Installation Guide

Top View
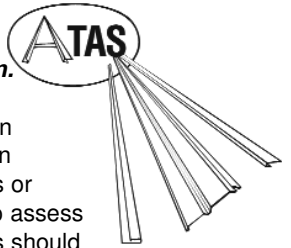
21 Modules - 13'-10" (nom.) overall length

Lap Area

20 Modules - 13'-2" (nom.) Coverage

16-1/2" ref.

21"

7-7/8"

Lap Area

SCANROOF panels are always installed from lower right of any roof section to upper left. Each fully applied panel affords 18.1 square feet of coverage and each square (100 square feet - 5.52 panels) of SCANROOF weighs approximately 145 pounds.
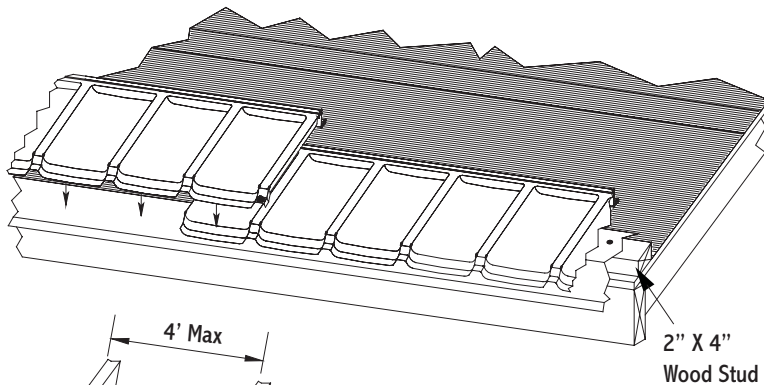
Minimum roof slope - 3:12.

Side View

SWR8XX Stitch Screws

1"

16-1/2" (nom.) coverage

Panel Overlap

Intergral "Z" Purlin

2" Nom.

21" Nom.

Appropriate Anchor Screw

Solid Substrate

2" X 4" Wood Stud

4' Max

1-1/2" Hat Channel
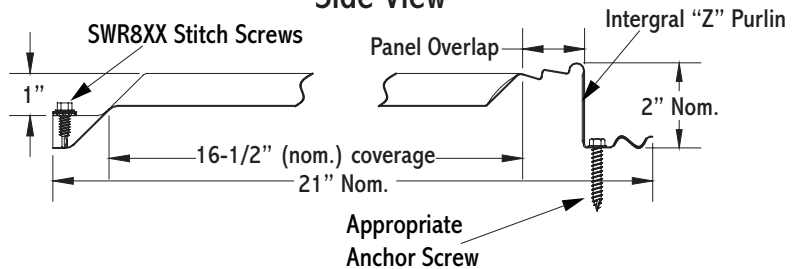
Open Framing
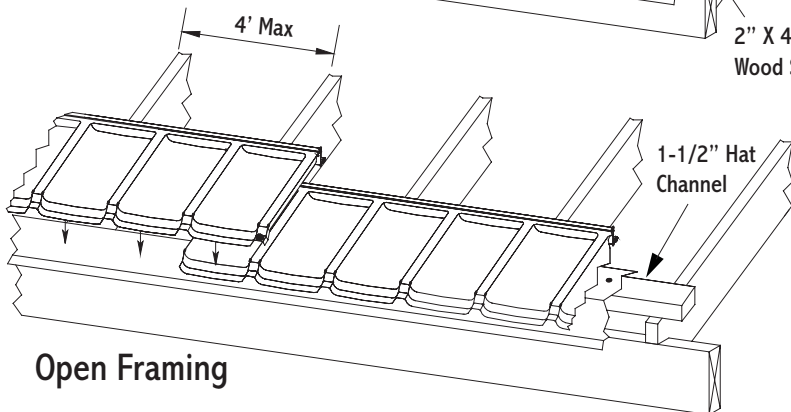
FASTENER REQUIREMENTS

SWR8XX - "Stitch Screws" 10 per panel
SWR9XX - 10 for each panel installed at eave
RSS014 or SWR970 - Anchor Screws 8 per panel
(Use RSS014 for attachment to metal and SWR970 for attachment to wood.)
For basic wind speeds of 100 mph - Panels can obtain 140 mph winds
Consult ATAS for more information.

HORIZONTAL LAP

Scan Roof Panel

SWR8XX Stitch Screws

Intergral "Z" Purlin

Substrate Line

Scan Roof Panel

Appropriate Anchor Screw
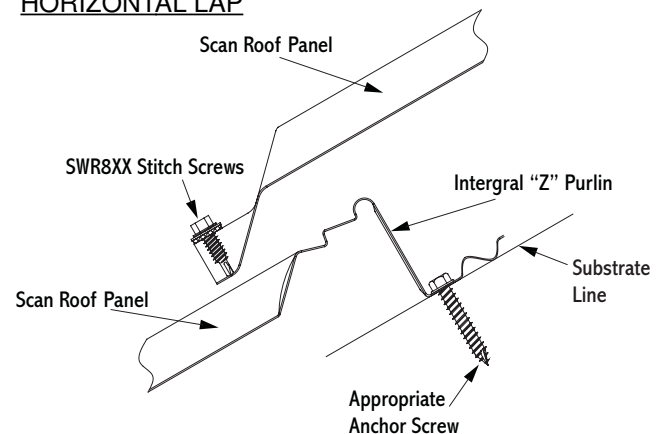
Eave Detail

1. In re-roofing applications: cut back and remove the existing shingles and drip edge to be flush with the eave and gable lines, or as required to install underlayment.

2. In all applications: Apply ATA-Shield** along eave and up the roof to point at lead 24" beyond outside face of exterior wall.

3. Install 2 x 4 blocking along eave edge. (Hat channel can also be used.)

4. Install drip edge on top blocking and against fascia trim. Space fasteners at a maximum of 12" o.c. Overlap sides of drip edge fasten with SWR9XX anchor screws.

5. Install panel at eave. Fasten through wood or metal blocking with anchor screws every 16" o.c.

SWR8XX Stitch Screws
Scan Roof Panel
ATA-Guard
2" x 4" Blocking
SCA175 Eave Trim
Appropriate Anchor Screw
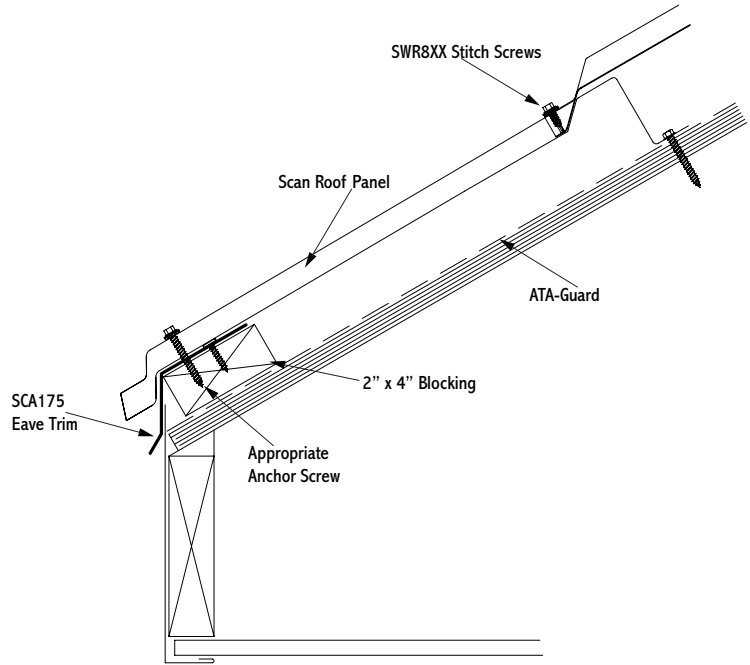
Gable Detail

1. Install Starter "J" at gable end. Fasten at 12" o.c.

2. Place panel into Starter "J".

3. Seal using Side Neoprene Closure between panel and Starter "J".

4. Using stitch screws, fasten Gable Trim to top of Starter "J" at 24" o.c.

SWR8XX Stitch Screws
SCA277 Gable Trim
Scan Roof Panel
SCA270 Starter "J"
Side Neoprene Closure
ATA-Guard
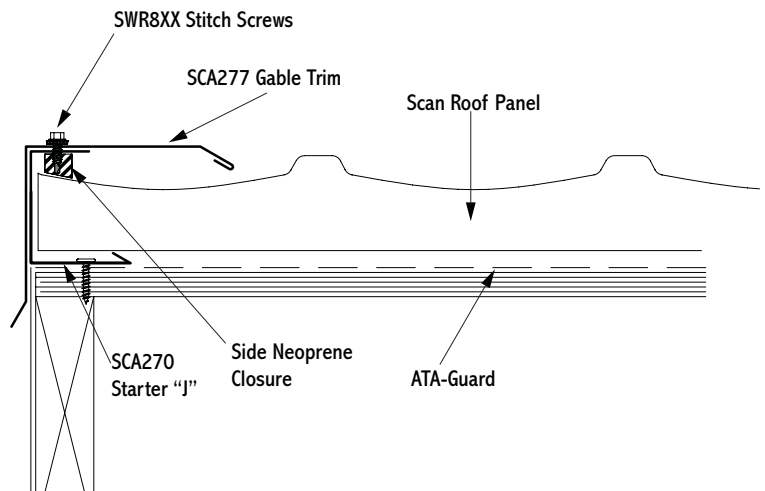
Valley Detail

1. Install ATA Shield** 18" up both sides of the valley line.

2. Install 2 x 4 blocking at valley as shown.

3. Fasten valley to blocking using wafer head screws.

4. Cut panel to size and angle. Remove "Z" purlins to allow panel to overlap the valley pan 8".

Scan Roof Panel
SCA800 Valley Pan
3" - 4"
Appropriate Anchor Screw
#12 x 1" Wafer Head Screws
2" x 4" Blocking
ATA-Shield
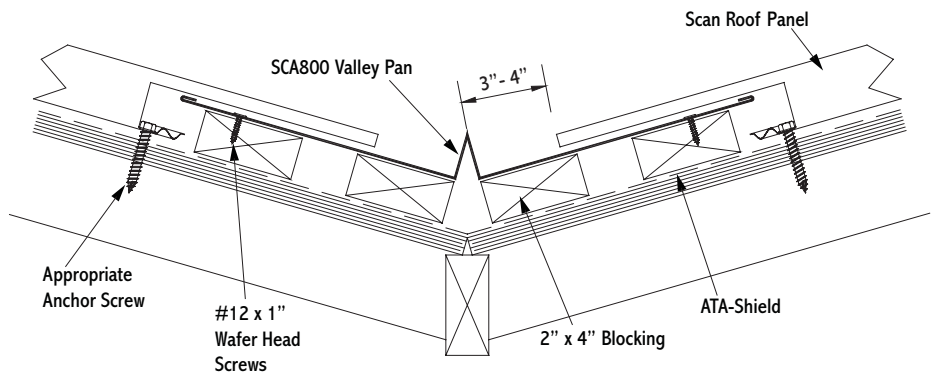
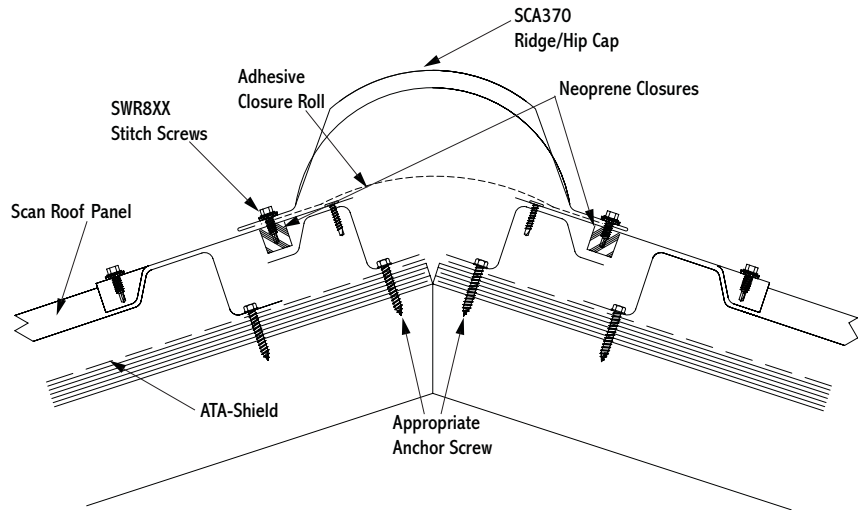Underlayments: ATA-Guard* is a polyolefin based, 100% asphalt free, high strength reinforced roofing underlayment for use beneath metal roofing on steep slope applications. 1000 sq. ft. per roll at 48" wide.

Underlayments: ATA-Shield** is the recommended self adhesive underlayment for eaves, sidewall and any critical areas exposed to ice damming and extensive water run off.
Available in 65'-8" x 39-3/8" rolls (200 sq. ft. per roll).
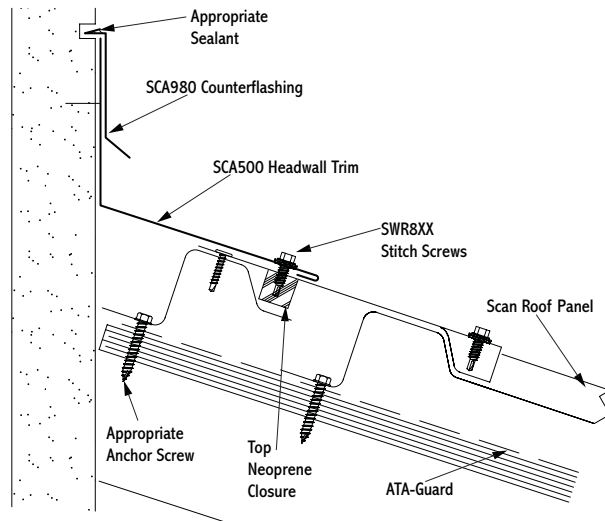
Hip & Ridge Detail ——————

Hip and ridge applications are handled in the same manner.

1. Install panel to hip/ridge line. Cut panel to size. Install "Z" purlin at ridge of roof. Overlap and fasten cut panel section to "Z".

2. Seal panels at hip/ridge line using Adhesive Closure Roll between panels.

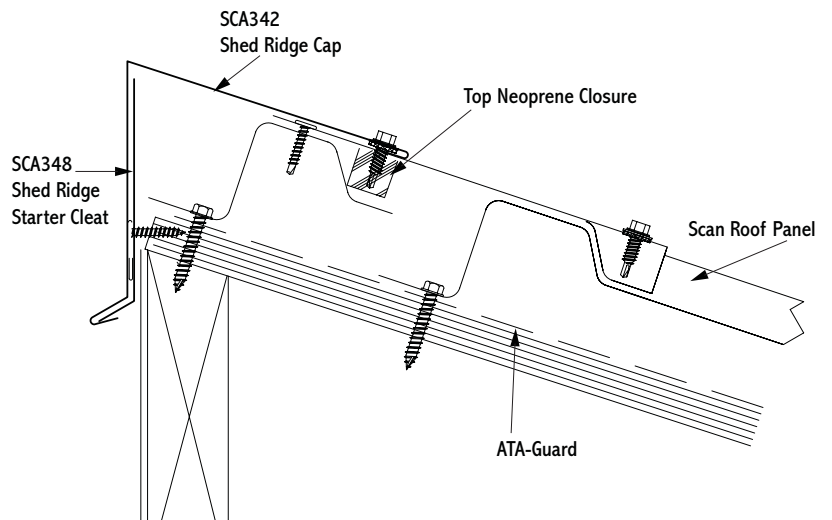3. Attach Ridge/Hip Cap to panels with Stitch screws at 15 3/4" o.c. Fasten the side of ridge.

SCA370
Ridge/Hip Cap

Adhesive
Closure Roll

Neoprene Closures

SWR8XX
Stitch Screws

Scan Roof Panel

ATA-Shield

Appropriate
Anchor Screw

Headwall Detail ——————

1. Install panels to headwall area. Cut panel to size. Install "Z" purlin at wall. Overlap and fasten cut panel section to "Z". Lap is required to allow proper fastening of "Z" purlin at top panel.

2. Seal top with neoprene closure to panel, set in sealant. Be sure headwall trim will cover neoprene.

3. Place headwall trim to wall. Stitch fasten to top of panel at 15 3/4" o.c.

4. Install counter flashing into reglet over headwall transition. Seal into reglet with appropriate sealant or place wall treatment over headwall trim.

Appropriate
Sealant

SCA980 Counterflashing

SCA500 Headwall Trim

SWR8XX
Stitch Screws

Scan Roof Panel

Appropriate
Anchor Screw

Top
Neoprene
Closure

ATA-Guard

Shed Ridge Detail ——————

1. Install panels to peak. Cut panel to size. Install "Z" purlin at wall. Overlap and fasten cut panel section to "Z". Lap as required to allow proper fastening of "Z" purlin at top panel.

2. Seal top neoprene closure to panel. Be sure shed ridge cap will cover neoprene.

3. Fasten Starter Cleat at peak. Fastener spacing to be 12" o.c.

4. Place shed ridge cap to wall. Stitch fasten to top panel at 16" o.c.

SCA342
Shed Ridge Cap

Top Neoprene Closure

SCA348
Shed Ridge
Starter Cleat

Scan Roof Panel

ATA-Guard

Sidewall Detail

Appropriate Sealant

SCA980 Counterflashing

Sidewall Trim

Scan Roof Panel

SCA270
Starter "J"

Step Flashing

2" x 4" Blocking
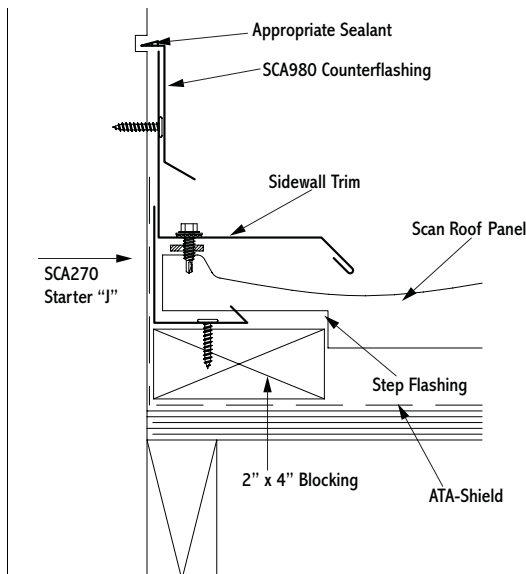
ATA-Shield

1. Install ATA-Shield (self adhesive underlayment) along roof plane and up sidewall.

2. Install a 2 x 4 flat on roof plane and tight against entire length of sidewall.

3. Cut panel to desired length leaving 1/4" to 1/2" space away from sidewall to allow for thermal expansion.

4. The built-in purlin must be notched 1-1/2" in height and 3-1/2" in length in order for the top surface of the panel to rest on top of the 2 x 4.

5. Install step flashing to each panel tight against sidewall and on top of 2 x 4 making sure step flashing is on top of lower panel for proper draining.

Note Regarding Trim Details

The application of flashing and trim requires a detailed approach. Consideration should be given to the roof's geometry and the course it creates for water run-off. Location of gutters and the use of snow retention systems should also be considered. Proper planning regarding the sequence of material overlap is critical. Sealants, such as butyl tapes and tripolymers, should be used at overlapping trim edges, in conjunction with exposed fasteners, and to seal flashing. All fasteners should be properly tightened, over tightening creates a dimple in the material, which becomes a collection point for standing water and damage the weather seal on the fastener.

Pipe Detail

Step 1	**Step 2**	**Step 3**	**Step 4**	**Step 5**
Cut on the proper pipe diameter marked on the flashing.	Position over pipe and slide down the pipe.	Apply polyurethane sealant to the bottom of the base.	Mold the flexible base to the panel contours.	Fasten with 1/4" x 1-1/8" drilling fastener every 1-1/2" around the base.

Pipe drawings provided by Triangle Fasteners

Tools and Rules:

Basic Equipment Required:
Tie-off ropes, safety harness, long level, ladders, scaffolding with approved planking, extension cords with approved ground plugs and services.

Additional Tools:
Metal folding tool, hammer, chalk line, measuring tape, metal cutting tools - nibblers, drills, hacksaw, utility knife, pop-rivet gun, caulking guns, layout and combination square, C clamps, sheet metal shears (including RH, LH, straight and overhand). Power driven screw gun with proper bits, depth-setting nosepiece, variable speed.
Choose the correct equipment and tools to do the job in a safe manner. Wear safety gear and follow OHSA requirements.

Follow these simple rules:
1. Never cut the panels with an abrasive cut-off wheel or torch, as this will damage the finish.
2. Do not weld the trim or panels.
3. Remove any small burrs left by cutting, screwing or drilling.
4. Remove protective masking immediately after trim is installed.
5. Caution should be taken when unloading the panels to prevent damage.
6. Use appropriate screws for the type of underlayment and long enough to fully penetrate and secure the panel.
7. The stored materials should be kept dry.
8. Do not cut on finished roof. Remove all drill spirals, chips and dust immediately.
9. Seal neoprene closures and soft cell foam by applying appropriate sealant to both surfaces.
10. Put appropriate sealant/butyl tape between overlapping trims.
11. Overlap trims in a manner not to impede the flow of water.

For further information or assistance, contact our Residential Product Support at 800-468-1441

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