ECOTHATCH

INSTALLATION GUIDE

Synthetic palm thatch

Step by step, from bare frame to finished roof.

Field panels · Hip pieces · Ridge pieces · Cone top



2026 Edition · Imperial and metric

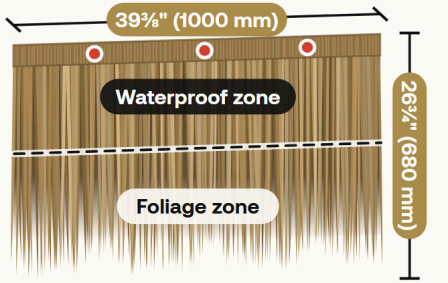
ecothatch.com

THE SYSTEM

Four parts. Every roof shape.

Field panels, hip pieces, and ridge pieces cover square and rectangular roofs. The cone top caps round ones.

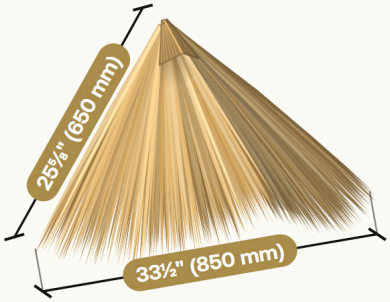
COMPONENTS Know your parts.



Field panel

Covers each slope in overlapping rows. The top is the waterproof zone: always screw there.

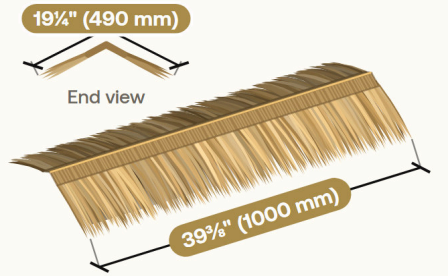
39⅜" × 26¾" (1000 × 680 mm)



Hip piece

Closes the diagonal joint between two slopes.

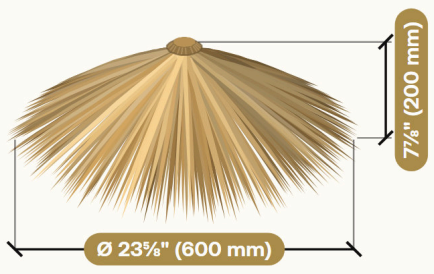
33½" × 25⅝" (850 × 650 mm)



Ridge piece

Caps the horizontal peak of the roof.

39⅜" × 19¼" (1000 × 490 mm)

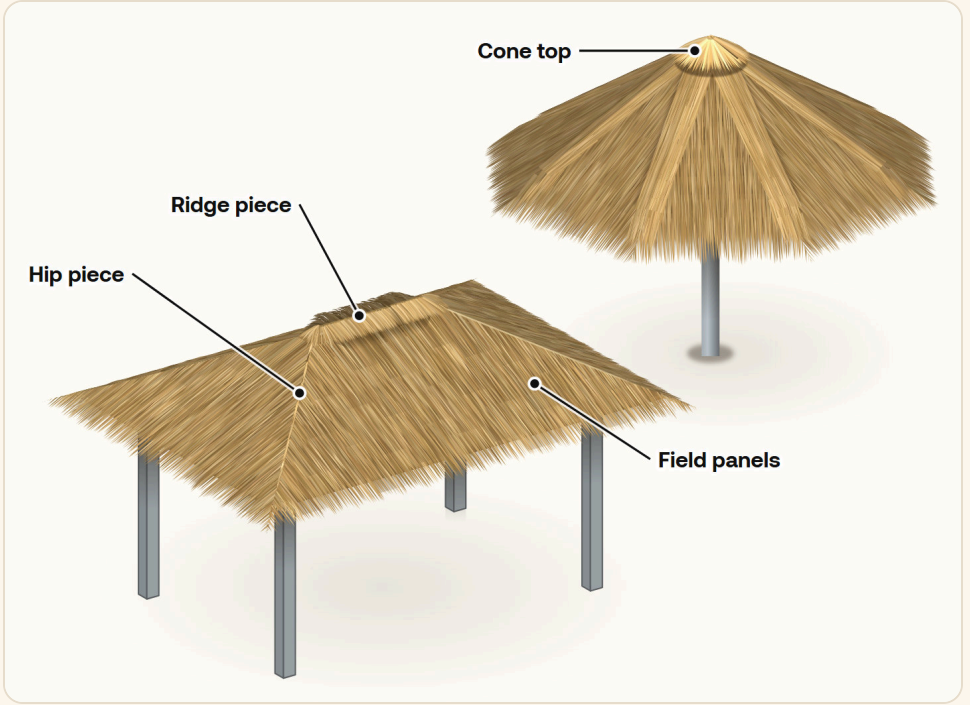


Cone top

Finishes the apex of round and octagonal roofs.

Ø 23⅝" × 7⅞" (Ø 600 × 200 mm)

ANATOMY Where each part goes.



- **Field panels**
  Cover every slope, row by row (pages 5–6).
- **Ridge pieces**
  Cap the peak of hip and gable roofs (page 8).
- **Hip pieces**
  Close the joints between slopes (page 7).
- **Cone top**
  Caps the apex of round roofs (page 10).

Gable ends and valleys: pages 8–9. Round roofs: pages 9–10.

READING THE DRAWINGS — Screw · Keep free · Cut line · Direction · 2" Dimension · B1 Batten / row number

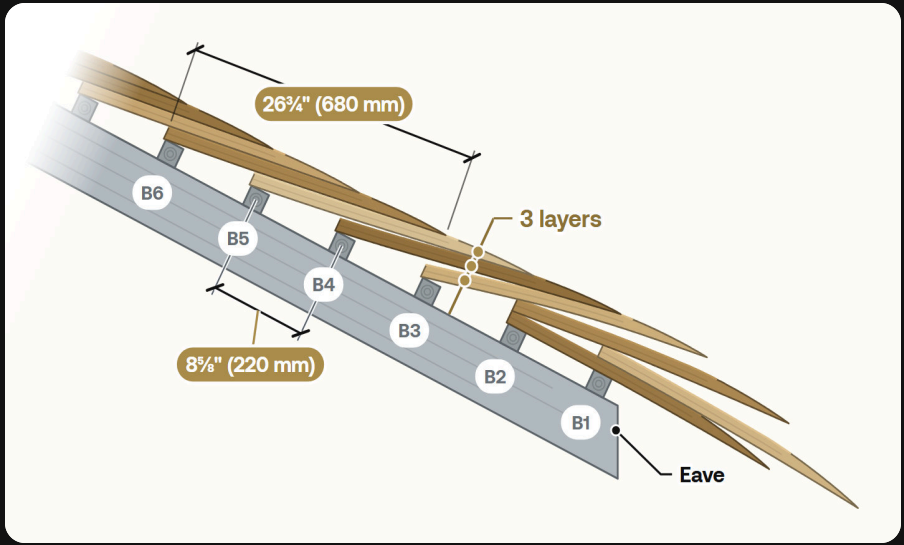
BEFORE YOU START

Understand it. Then frame it.

HOW IT WORKS

Three layers everywhere.

ECOTHATCH installs like shingles: each row hangs on the next batten up, so the leaves of the rows above cover the waterproof top of every panel. With battens 8⅝" (220 mm) apart and panels 26¾" (680 mm) long, every point of the roof gets about three layers of leaves. That overlap sheds the rain.



8⅝"
(220 mm)
Batten spacing, on center. One row per batten above the eave.

2"
(50 mm)
Minimum side overlap between two panels.

8"
(200 mm)
Minimum offset between the joints of two rows.

Plan your materials

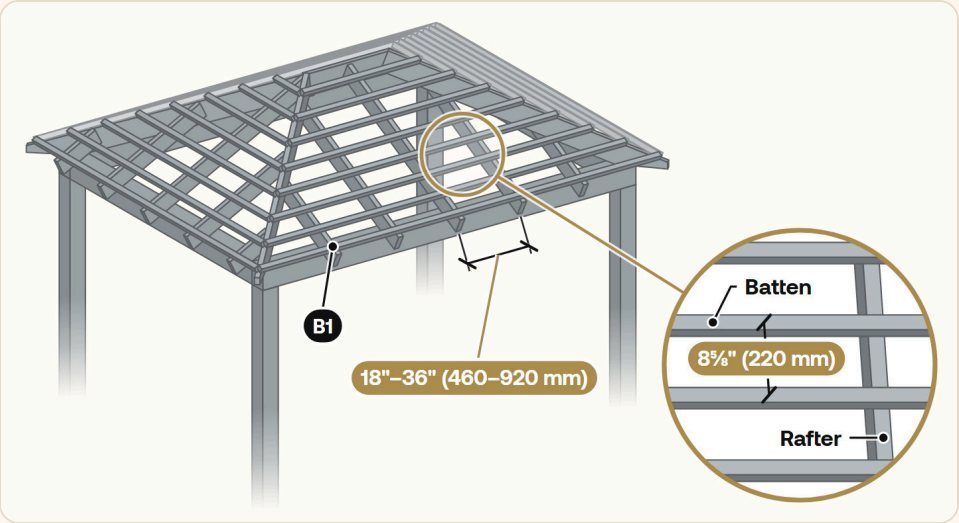
Use the roof calculator at shop.ecothatch.com, or e-mail your roof size and shape to contact@ecothatch.com, to get exact quantities of field panels, hip pieces, and ridge pieces. Order a few extra panels for cuts at hips and gables.

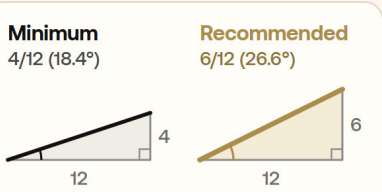
Start with a sound frame and one simple rule: three layers everywhere.

FRAME & SPACING

Build the frame first.

Use weather-resistant framing: eucalyptus, cypress, pressure-treated lumber, or metal. Set B1 at the eave edge and add a batten close to the peak on each side to take the ridge screws.





Rafter spacing	**18"–36" (460–920 mm)**
Batten spacing	**8⅝" (220 mm) on center**
Batten size	**1¼"–2¼" (32–57 mm)**
Minimum slope	**4/12 (18.4°)**
Recommended slope	**6/12 (26.6°) or steeper**

Have a qualified professional design the frame for local building codes and wind loads.

Work safely

Work from a stable ladder or scaffold with fall protection. Never stand on battens or on laid thatch. Keep grills, fire pits, and heaters away from the roof.

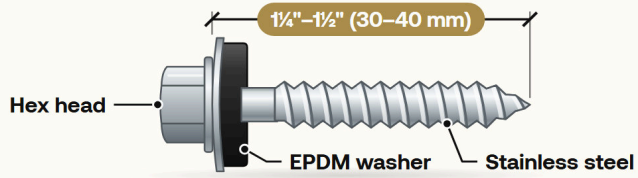
FASTENERS & TOOLS

Screw it right. Work in order.

One fastener, a few tools, and a fixed order: eave first, ridge last.

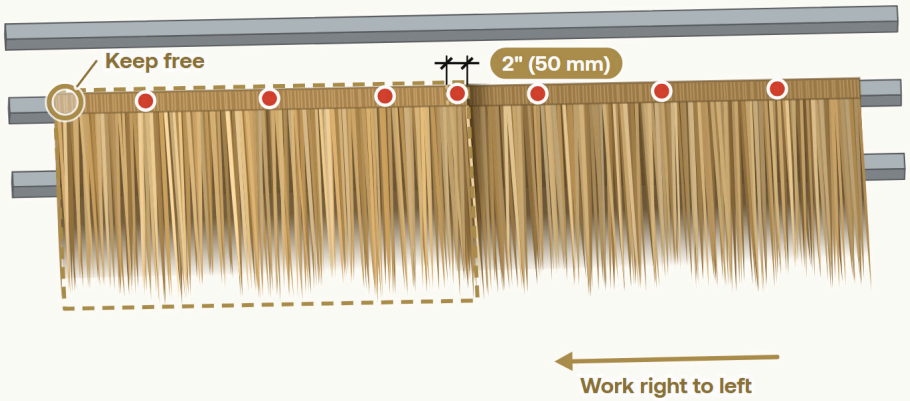
FASTENERS Through the top, into the batten.

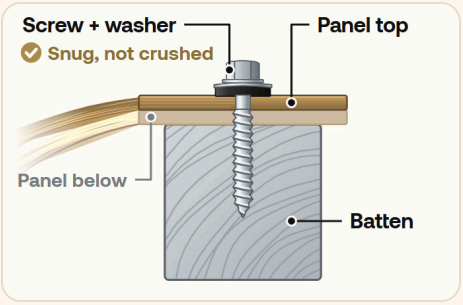
Use stainless-steel roofing screws, 1¼"–1½" (30–40 mm), with an EPDM washer, never nails. Use 1½" (40 mm) where layers stack and self-drilling screws on metal battens.



Where to screw

Drive at least 3 screws across the top of each panel, into the batten. Leave the left 2" (50 mm) free: the next panel laps over it, then one screw goes through both.





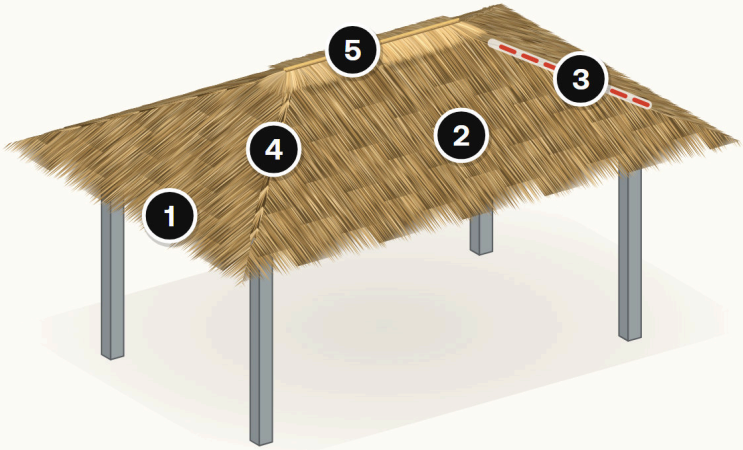
Drive each screw snug: the washer presses flat without crushing the plastic.

TOOLS What you need.



- Cordless drill/driver
- Tape measure and chalk line
- Heat gun
- Utility knife and spare blades
- Ladder or scaffold, fall protection
- Work gloves and safety glasses

Order of work



1 Start the eave page 5
2 Lay the field panels page 6
3 Trim hips and ridge page 7
4 Fit the hip pieces page 7
5 Cap the ridge page 8

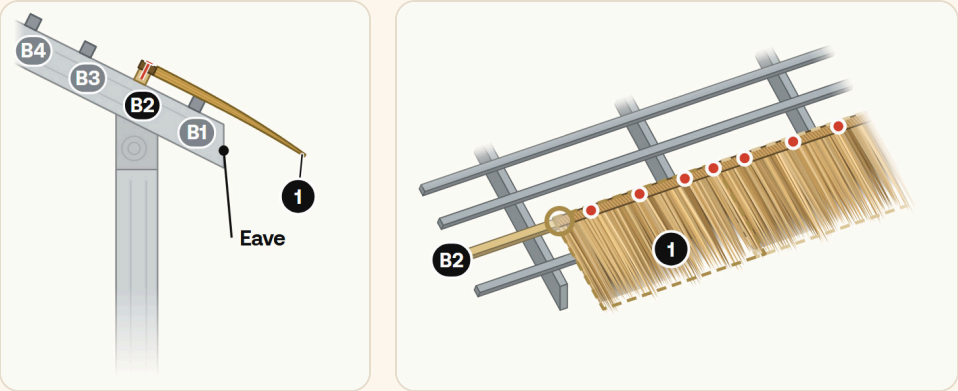
← **Work from the eave up and from right to left along each row, facing the slope from outside. On roofs with valleys, line the valleys first (page 9).**

EAVE START

Start with a triple-thick eave.

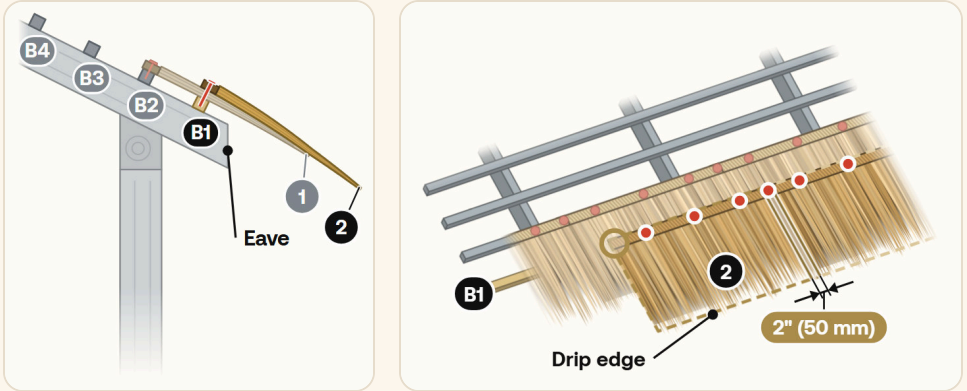
The first three rows build a dense, weatherproof edge. Number the battens from the eave: B1 is the lowest.

1 Row 1 on B2



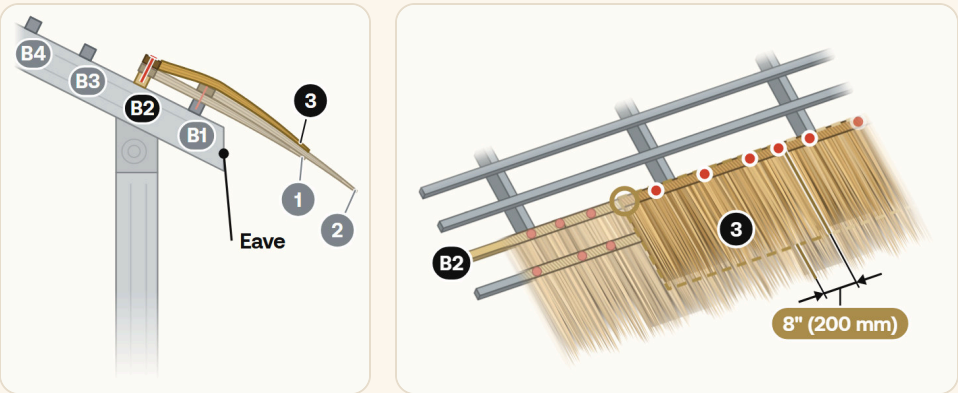
Screw row 1 to the second batten (B2), working right to left. Leave the left 2" (50 mm) at the top of each panel free for the overlap. On a hip roof, keep the last 3"–4" (75–100 mm) at each hip free.

2 Row 2 on B1



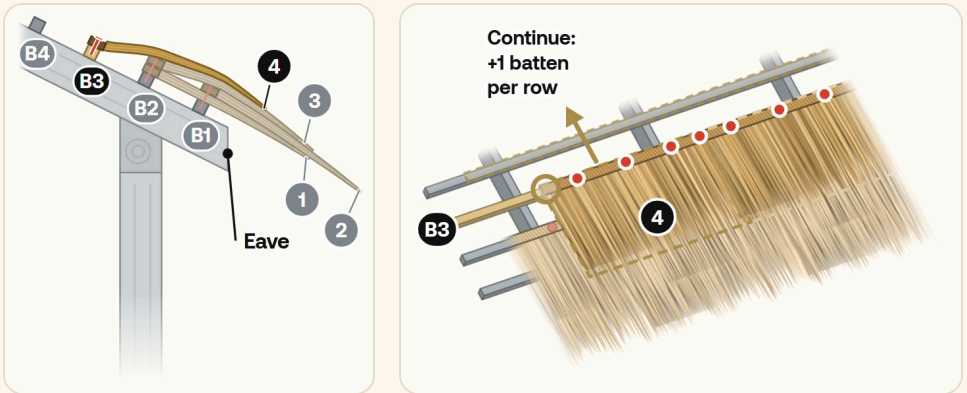
Screw row 2 to the lowest batten (B1), on top of row 1's leaves, to form the drip edge. Overlap the panels 2" (50 mm) and offset the joints at least 8" (200 mm) from row 1.

3 Row 3 back on B2



Screw row 3 to B2 again, over rows 1 and 2. Offset its joints at least 8" (200 mm) from both rows below.

4 Row 4 on B3, then one per batten



Screw row 4 to B3, with 2" (50 mm) overlaps and offset joints. Move each following row up one batten.

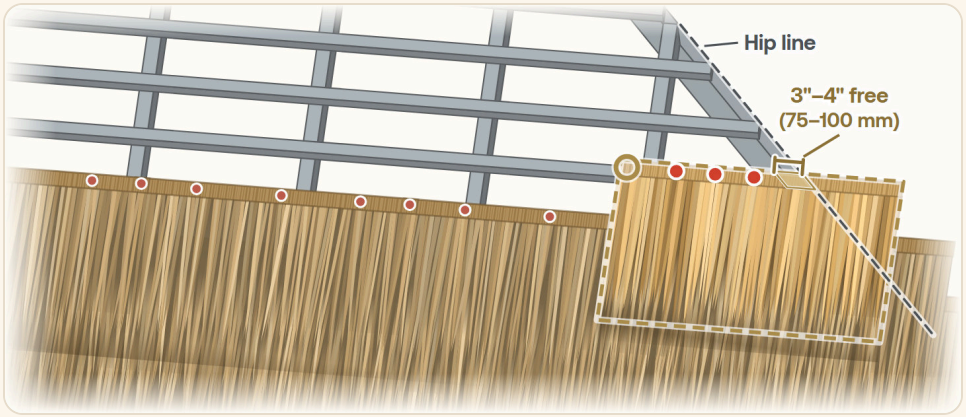
CHECKPOINT Before you move up: rows 1–3 sit on B2, B1, B2, and no joint lines up with a joint below.

FIELD PANELS

Overlap. Screw. Stagger.

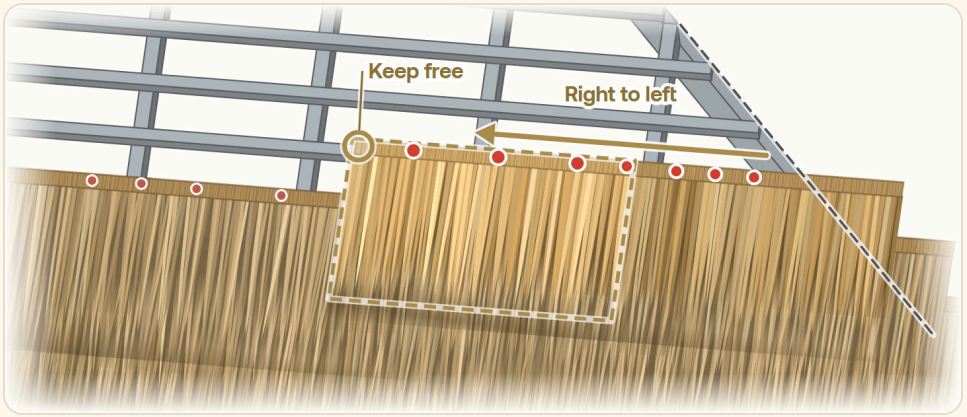
Cover each slope row by row, from the eave up, working right to left as you face the slope from outside.

1 Start at the right-hand hip



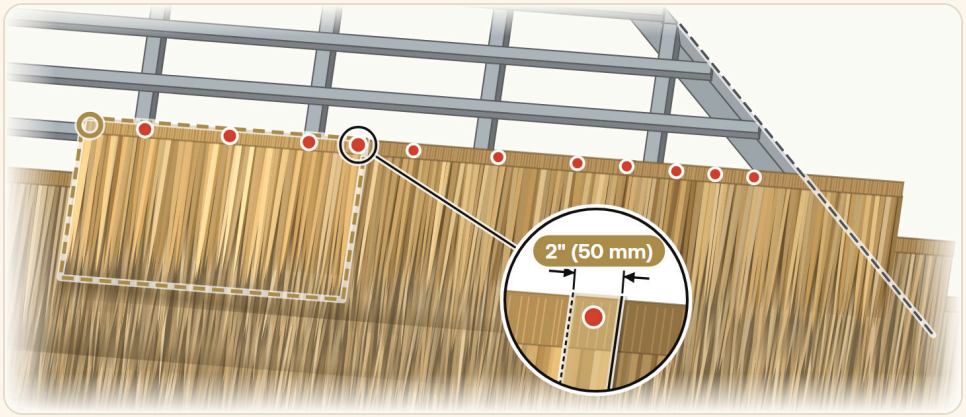
Let the first panel run past the hip line. Screw it to the batten, but leave the last 3"–4" (75–100 mm) next to the hip free for the hip pieces. Treat the last panel at the left-hand hip the same way.

2 Work right to left



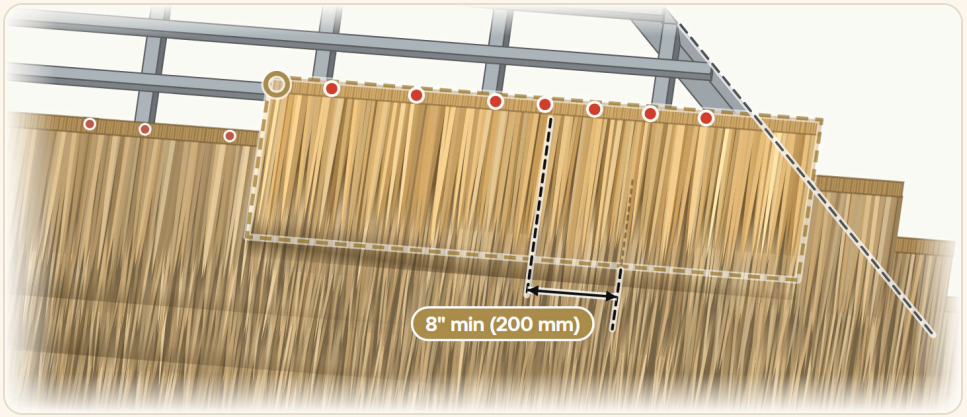
Lay the panels from right to left. Drive at least 3 screws across the top of each panel into the batten, and leave the left 2" (50 mm) free.

3 Overlap 2" (50 mm)



Lay the next panel to the left so its right edge laps the free corner by at least 2" (50 mm). Then drive one screw through both layers into the batten.

4 Stagger the joints



Offset the joints at least 8" (200 mm) from the row below. Shifting each row by a third of the laid width, about 12½" (317 mm), keeps joints from lining up over three rows.

CHECKPOINT At every hip, the last 3"–4" (75–100 mm) of each row stays free until the hip pieces are installed.

TRIM & HIPS

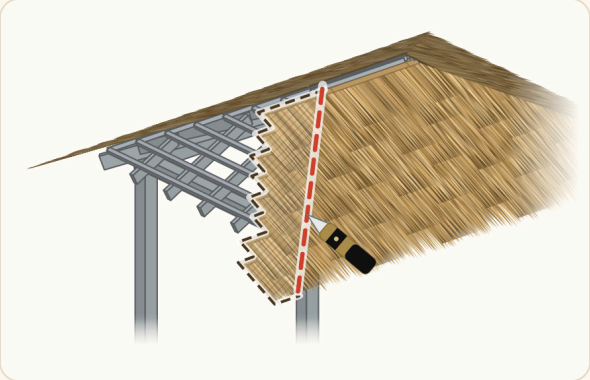
Cut clean. Close the hips.

Trim on the hip lines, then fit the hip pieces from the eave up.

TRIM Cut on the centerlines.

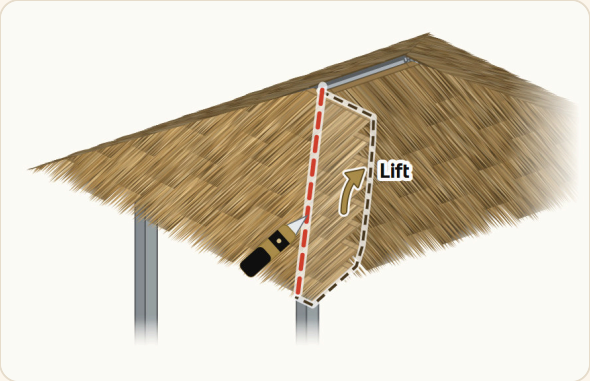
1 Cut on the hip line

With a utility knife, cut the overhanging panels exactly on the hip centerline.



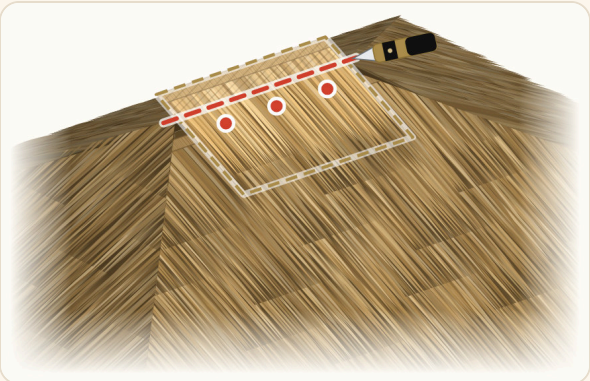
2 Cut the other slope

Cut the adjoining slope on the same centerline. Lift the panels as you cut so the blade does not nick the slope below.



3 Finish the top

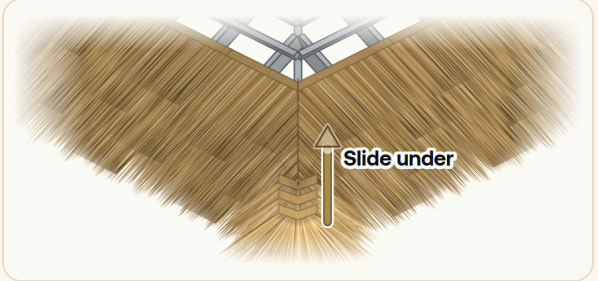
Lay one more field panel at the top of each slope to cover the top of the last row. Screw it to the top batten, then trim it on the ridge centerline.



HIPS Slide hip pieces under the field.

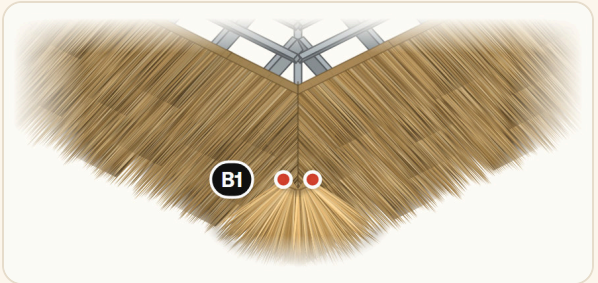
1 Start at the eave

Slide the first hip piece under the free field-panel corners at the eave, centered on the hip line.



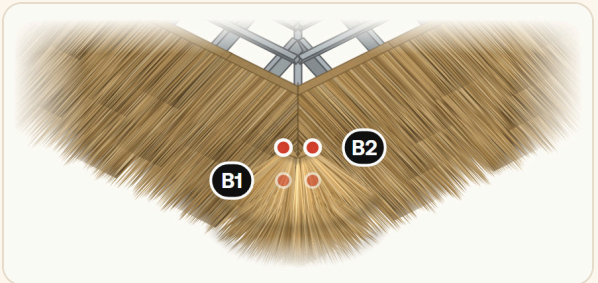
2 Screw to batten B1

Screw the first hip piece to batten B1, one screw on each side of the hip line.



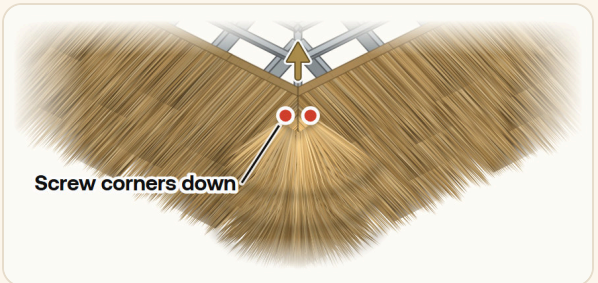
3 Work up batten by batten

Fit the next hip piece on B2, lapping over the first, then one hip piece per batten up the hip.



4 Close the corners

Screw the field-panel corners down through the hip piece into the batten, one screw per side, all the way to the ridge.



RIDGE & GABLES

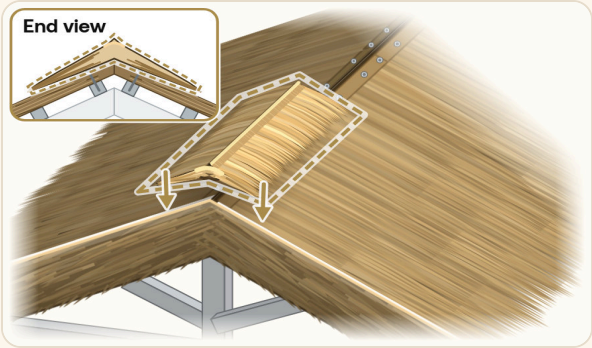
Cap the top. Wrap the edges.

Ridge pieces cap the peak. On gable roofs, the panels wrap the fascia for a thick, finished edge.

RIDGE Cap the ridge.

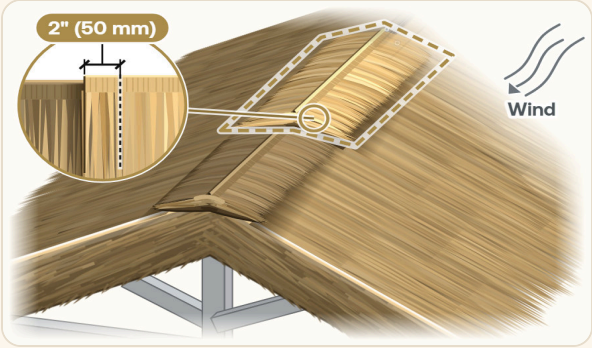
1 Straddle the peak

Lay the ridge pieces astride the peak, end to end. Each side must cover the top field row and its screws. On a hip roof, lap the end pieces over the top hip pieces.



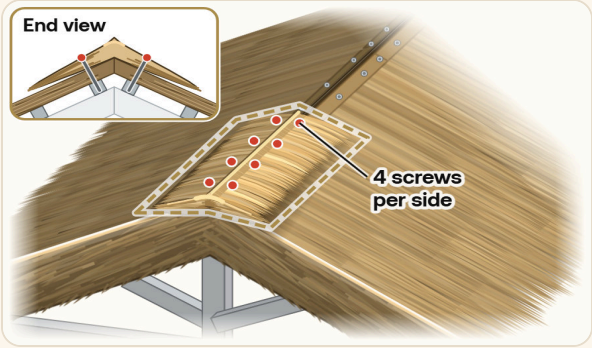
2 Overlap 2" (50 mm)

Start at the end away from the prevailing wind. Lap each ridge piece over the previous one by at least 2" (50 mm).



3 Screw both sides

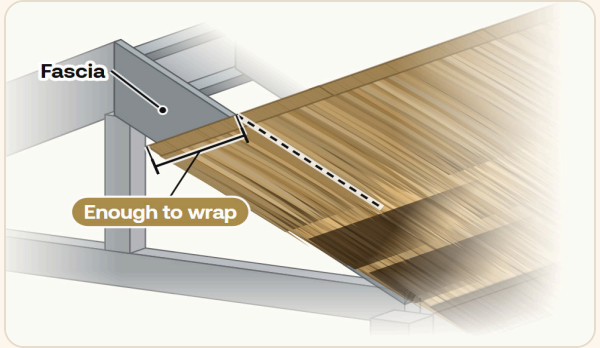
Drive at least 4 screws on each side of every ridge piece, into the top batten. The EPDM washers seal each hole.



GABLE END Wrap the fascia.

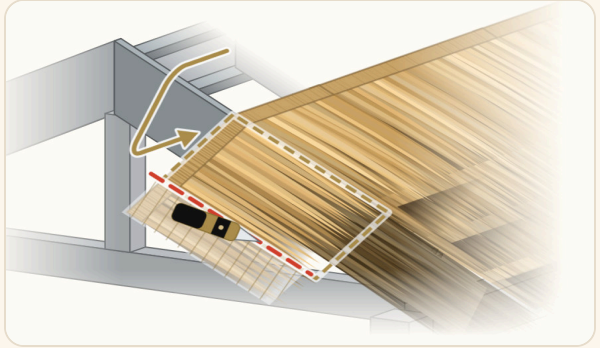
1 Let the rows run long

At a gable, let each row run past the edge, long enough to wrap fully around the fascia board.



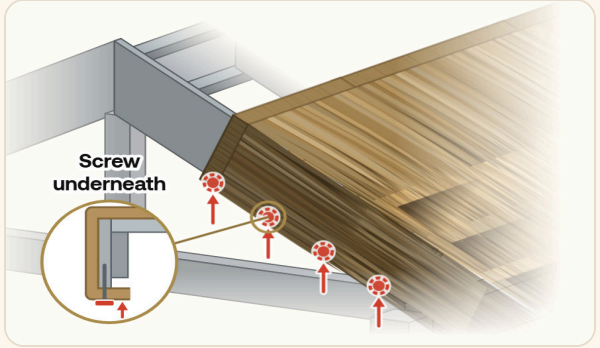
2 Wrap and trim

Fold the panels around the fascia to thicken the gable edge. Trim excess length, then cut and fold the leaf ends to shape.



3 Screw underneath

Screw the wrapped panels to the underside of the fascia.



Pro tip: heat gun Warm the plastic with a heat gun to help a panel bend around a corner or the fascia, or to make lifted leaves hang down. Use a low setting, keep the gun moving, and test on an offcut first.

VALLEYS & ROUND ROOFS

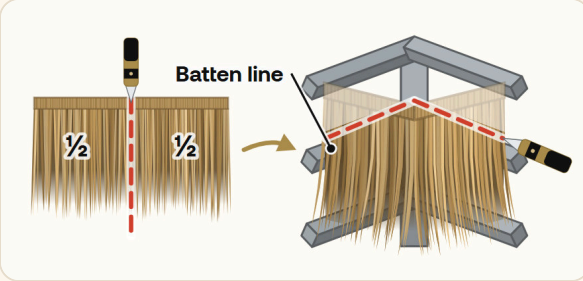
Special roofs, same method.

Valleys get a lining first; round roofs go one segment at a time.

VALLEY Line the valley first.

1 Cut half panels

Cut field panels in half, top to bottom. Fold each half into the valley's V and trim the top corners that rise above the batten lines.



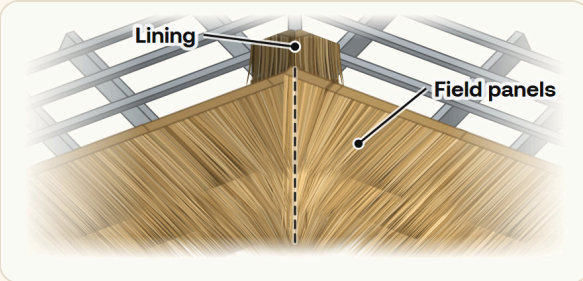
2 Line the valley

From the eave up, lay one half panel per row in the valley. Secure each with at least 2 screws per side.



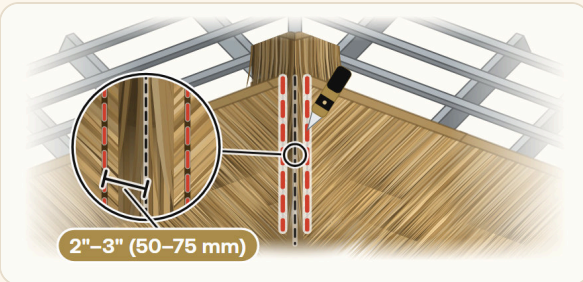
3 Cover the lining

Lay the field panels of both slopes over the lining, letting them run past the valley centerline.



4 Trim back the edges

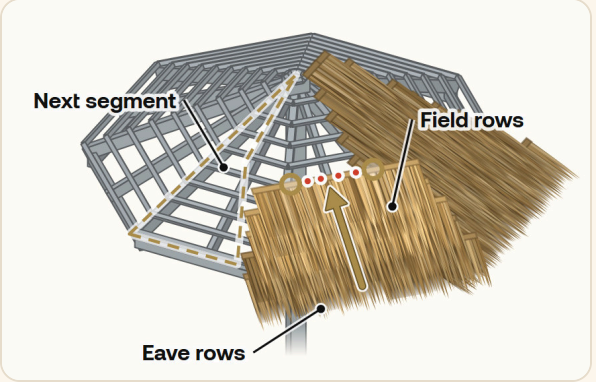
Trim the field panels 2"–3" (50–75 mm) back from the valley centerline.



ROUND & OCTAGONAL One segment at a time.

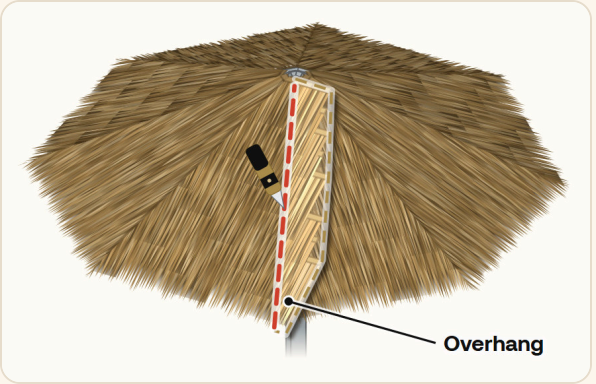
1 Start each segment

Treat each segment as a small slope: eave rows first, then field rows. Run the panels past the junction lines and keep 3"–4" (75–100 mm) next to each junction free.



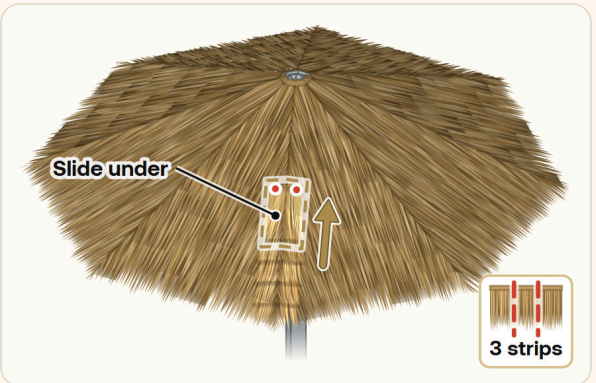
2 Trim on the junctions

Trim the panels exactly on the junction line between two segments.



3 Cover each junction

Cut field panels into 3 strips, about 13⅛" (333 mm) wide. Slide them under the free corners of each junction like hip pieces: one per row, one screw each side.



CONE TOP & FINAL CHECK

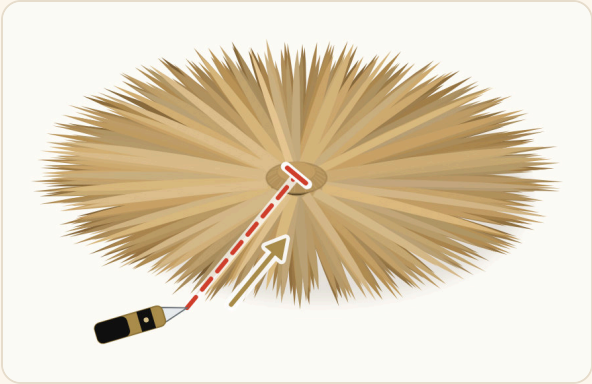
Finish the top. Check everything.

Cap round roofs with the cone top, then run the final check.

CONE TOP Finish the apex.

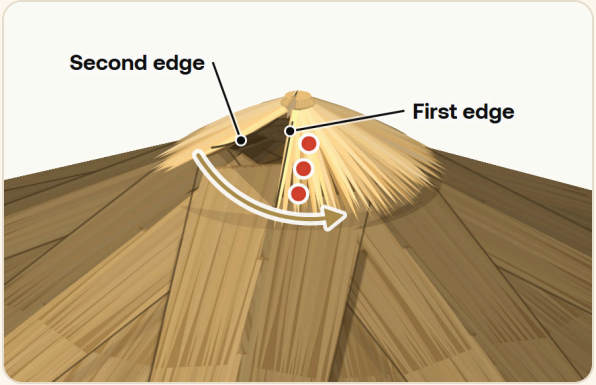
1 Make one radial cut

Cut the cone top once, from its outer edge to the center.



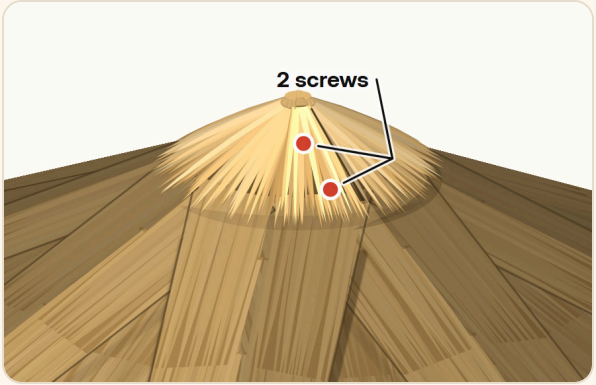
2 Form the cone

Fold the piece into a cone. Center it on the apex and screw the first cut edge down; leave the second edge loose.



3 Close the seam

Lap the second cut edge over the first to hide its screws. Secure it with 2 screws.



FINAL CHECK Before you sign off.

☐ **Frame**	Battens 8⅝" (220 mm) on center; slope 4/12 or steeper.
☐ **Eave**	Rows 1–3 on B2, B1, B2; then one row per batten.
☐ **Field panels**	At least 3 screws each + 1 through each overlap; 2" (50 mm) overlap; joints offset at least 8" (200 mm).
☐ **Hips**	One hip piece per batten, under the field corners; corners screwed down.
☐ **Ridge**	Covers the top rows end to end; 2" (50 mm) overlap; 4 screws per side.
☐ **Gables**	Panels wrapped around the fascia and screwed underneath.
☐ **Valleys**	Lined first; field panels trimmed 2"–3" (50–75 mm) back from the center.
☐ **Round roofs**	Junctions trimmed on the line and covered with strips, one per row.
☐ **Cone top**	Seam lapped over the first screws; 2 screws on the second edge.





Questions about your project?

Our team can help with layout, quantities, and kits for your roof.

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This guide shows the standard ECOTHATCH installation method. Have a qualified professional design the structure for local building codes and site wind loads. © 2026 ECOTHATCH. All rights reserved.

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