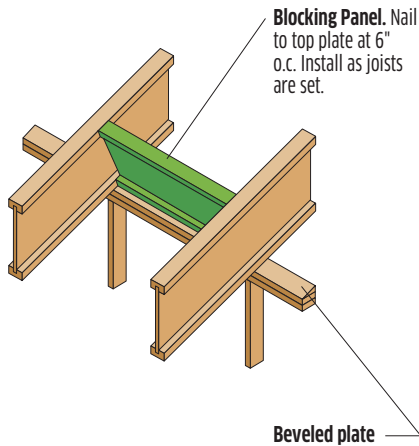


# Roof Details

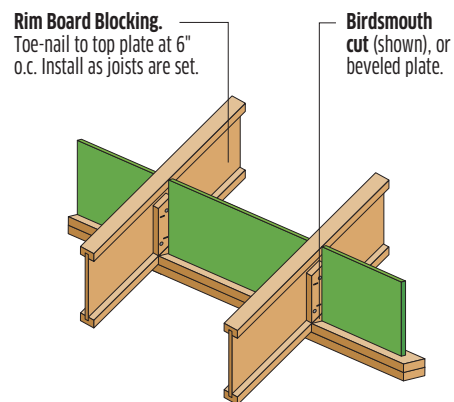
## ROOF NOTES:

1. Use minimum 2½" x 0.131" nails unless otherwise noted. Larger diameter nails might split flanges.
2. Fasten joists to top plate with at least two nails. Start nails at least 1½" from end to avoid splitting.
3. Engineered projects might require higher strength connections. Refer to designer's specifications.
4. 1¾" min. bearing at end supports. 3½" at intermediate and cantilever supports.
5. Framing lumber is assumed to be S-P-F unless otherwise noted.
6. See *Web Stiffener Requirements* on page 93.
7. Joists sloped more than ¼ in 12 must be birdsmouth-cut or set on sloped supports (e.g. beveled wall plates, sloped-seat hangers).
8. Birdsmouth cuts are allowed only at low end supports. Do not make birdsmouth cuts at high end supports or at intermediate supports.
9. Details apply to joists sloped up to 12 in 12.
10. Lateral support, to prevent lateral movement and rotation, is required at all supports.
11. Attach straps and hangers according to manufacturer's instructions.

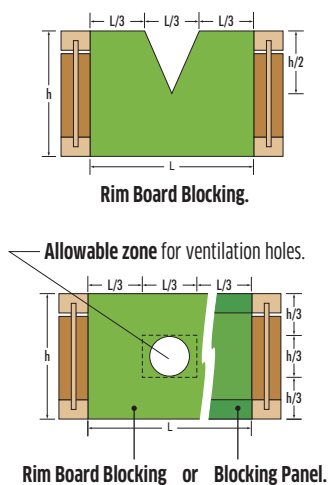
### R1 LATERAL SUPPORT



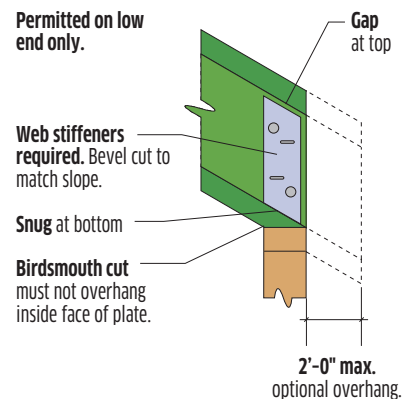
### R2 LATERAL SUPPORT



### R3 VENTILATION HOLES



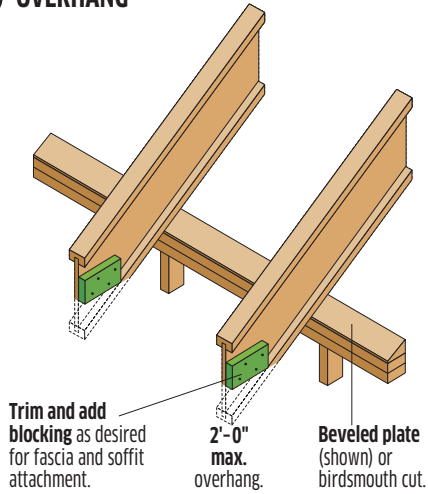
### R4 BIRDSMOUTH CUT



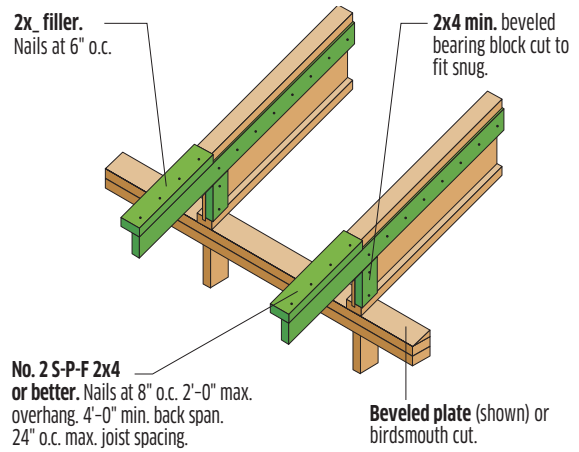
Details used by permission from APA.

# Roof Details

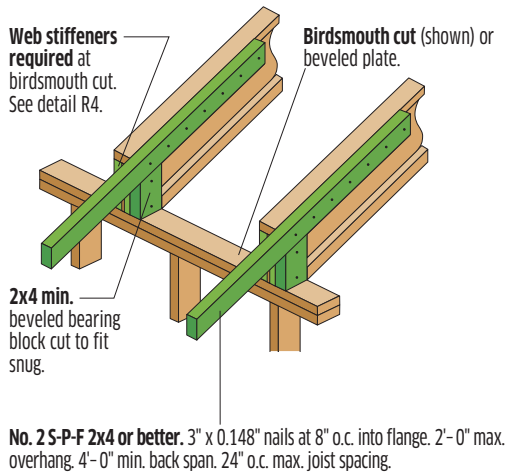
## R5 OVERHANG



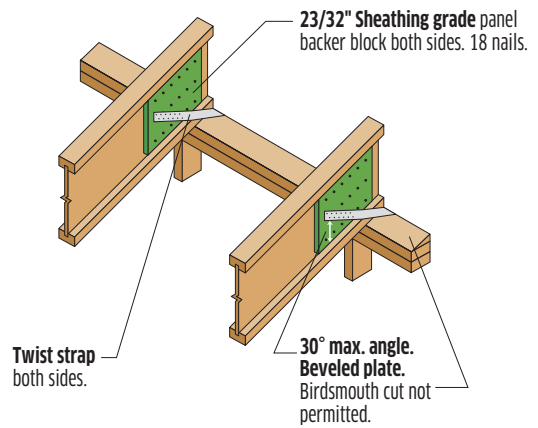
## R6 OVERHANG



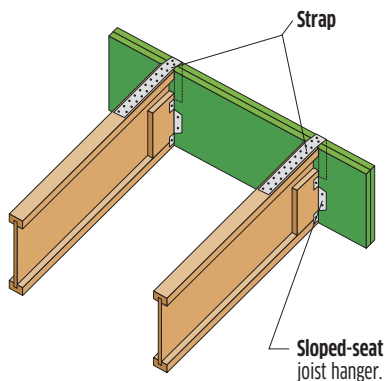
## R7 OVERHANG



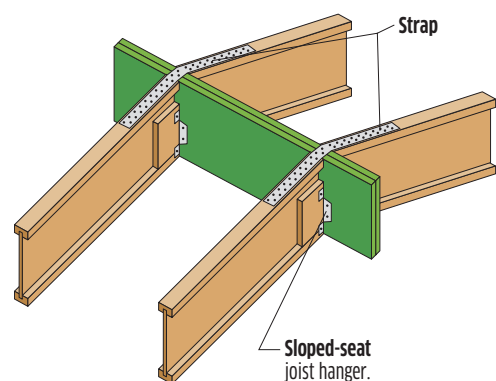
## R8 PEAK



## R9 PEAK

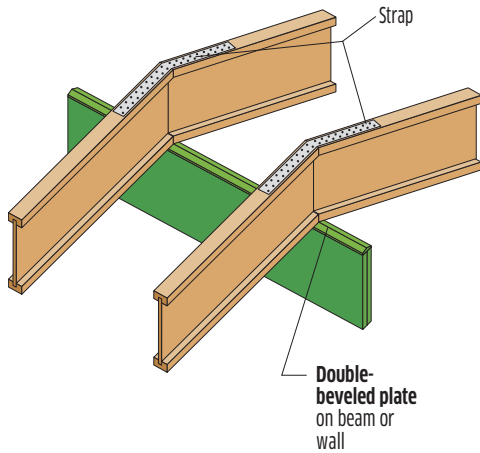


## R10 RIDGE

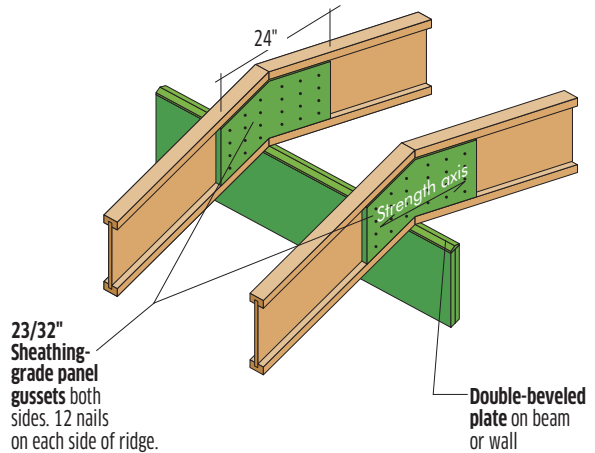


# Roof Details

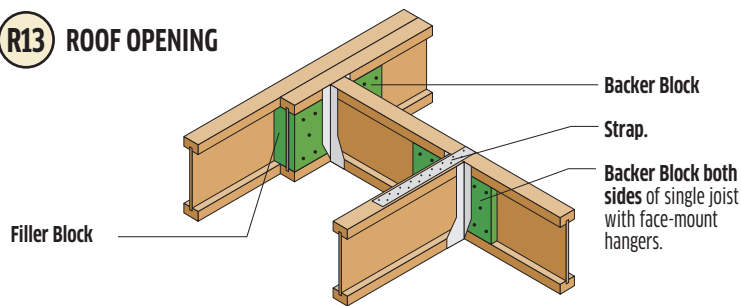
## R11 RIDGE



## R12 RIDGE



## R13 ROOF OPENING



Side Load	Backer Nails	Filler Nails
500 lb	8	4
750 lb	12	6
1000 lb	16	8
1250 lb	20	10
1500 lb	24	12
1750 lb	28	14
2000 lb	32	16

Joist Flange Width	Filler Block Nail Length	Filler Thickness	Backer Thickness
1½"	2½" min.	1½" or 1¼"	½" or ⅝"
1¾"	3" min.	1½"	¾"
2⅛"	3" min.	1¾"	⅞"
2⅜"	3¼" min.	2"	1"
2½"	3½" min.	2" or 2¼"	1" or 1½"
3½"	3" min. ea. side	3"	1½"

### Notes:

1. Side Load is the concentrated load transferred by a joist hanger.
2. Use min. 0.131" diameter nails. For backer blocks, use 2½" nails. For filler blocks, use length shown in table. Note that some joists require filler block nailing from each side.
3. Use Sheathing grade panels, Utility grade S-P-F lumber, or better. Thinner blocks may be combined to achieve specified thicknesses.
4. Size and position blocks to receive all nails, including hanger nails, without splitting.
5. Max. block depth is joist depth minus 3/8" to avoid an interference fit between flanges.
6. For top-mount hangers, install backer blocks snug to top flange.
7. Clinch nails when possible.
8. Attach hangers according to manufacturer's instructions.