E-Mount Lag | QMSE - LAG

Elevated Water Seal Technology®

THIS EDGE TOWARDS ROOF RIDGE

ITEM NO.	DESCRIPTION	QTY./BOX
1	FLASHING, ROUNDED CORNERS, 9" X 12" X .040", 5052, MILL	1
2	QBLOCK, CLASSIC, A360 CAST AL, MILL	1
3	PLUG, SEALING, 5/16" X 7/8", EPDM / 18-8 SS	1
4	LAG SCREW, HEX HEAD, 5/16" x 5-1/2", 18-8 SS	1
5	WASHER, FENDER, 5/16" ID X 1-1/4" OD, 18-8 SS	1

RACKING COMPONENTS NOT INCLUDED

1.50

3.00

4.50

9.00

2.50

.040

1.29

(3.77)

AVAILABLE IN MILL, AND BLACK FINISHES

Quick Mount PV

TITLE:

QMSE-LAG: QMPV E-MOUNT WITH LAG BOLT

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± 1/8 TWO PLACE DECIMAL ±.19 THREE PLACE DECIMAL ±.094	SIZE A	DRAWN BY: RAD	REV 5
		DATE: 5/9/2017	
	SCALE: 1:3	WEIGHT: 0.91	SHEET 1 OF 1

DO NOT SCALE DRAWING

Lag pull-out (withdrawal) capacities (lbs) in typical lumber:

	Lag Bolt Specifications		
	Specific Gravity	5/16" shaft per 3" thread depth	5/16" shaft per 1" thread depth
Douglas Fir, Larch	.50	798	266
Douglas Fir, South	.46	705	235
Engelmann Spruce, Lodgepole Pine (MSR 1650 f & higher)	.46	705	235
Hem, Fir	.43	636	212
Hem, Fir (North)	.46	705	235
Southern Pine	.55	921	307
Spruce, Pine, Fir	.42	615	205
Spruce, Pine, Fir (E of 2 million psi and higher grades of MSR and MEL)	.50	798	266

Sources: American Wood Council, NDS 2005, Table 11.2 A, 11.3.2 A

Notes:

1) Thread must be embedded in a rafter or other structural roof member.
2) See NDS Table 11.5.1C for required edge distances.

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RESPECT THE ROOF

E-Mount Lag Installation Instructions

Installation Tools Required: tape measure, roofing bar, chalk line, stud finder, caulking gun, sealant compatible with roofing materials, drill with 7/32" long-style bit, drill or impact gun with 1/2" socket.

WARNING: Quick Mount PV products are NOT designed for and should NOT be used to anchor fall protection equipment.

1

Locate, choose, and mark centers of rafters to be mounted. Select the courses of shingles where mounts will be placed.

2

Carefully lift composition roof shingle with roofing bar, just above placement of mount. Remove nails as required. See "Proper Flashing Placement" on next page.

3

3rd course
2nd course
1st course
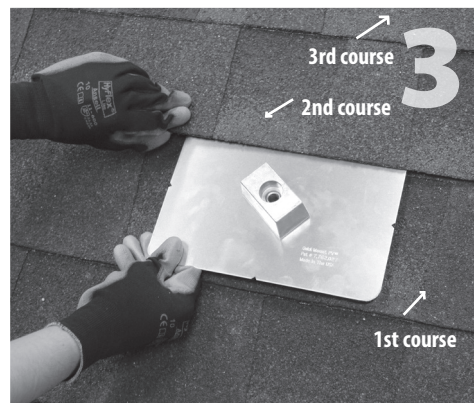
Insert flashing between 1st and 2nd course. Slide up so top edge of flashing is at least 3/4" higher than the butt-edge of the 3rd course and lower flashing edge is above the butt-edge of 1st course. Mark center for drilling.

4

Using drill with 7/32" bit, drill pilot hole into roof and rafter, taking care to drill square to the roof. Do not use mount as a drill guide. Drill should be 'long style bit', aka 'aircraft extension bit' to drill a 1¾" deep hole into rafter.
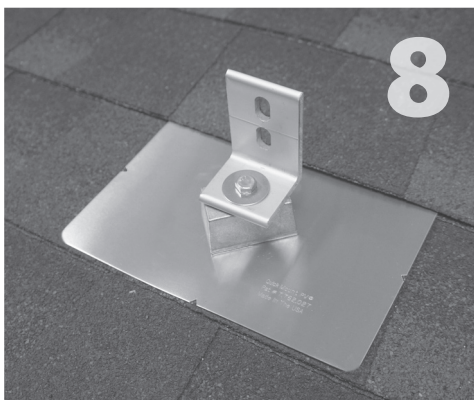
5

Clean off any sawdust, and fill hole with sealant compatible with roofing materials.

6

Slide the flashing into position. Insert the rubber plug into the QBlock cavity.
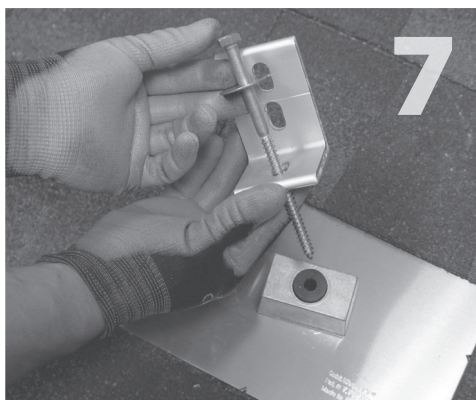
7

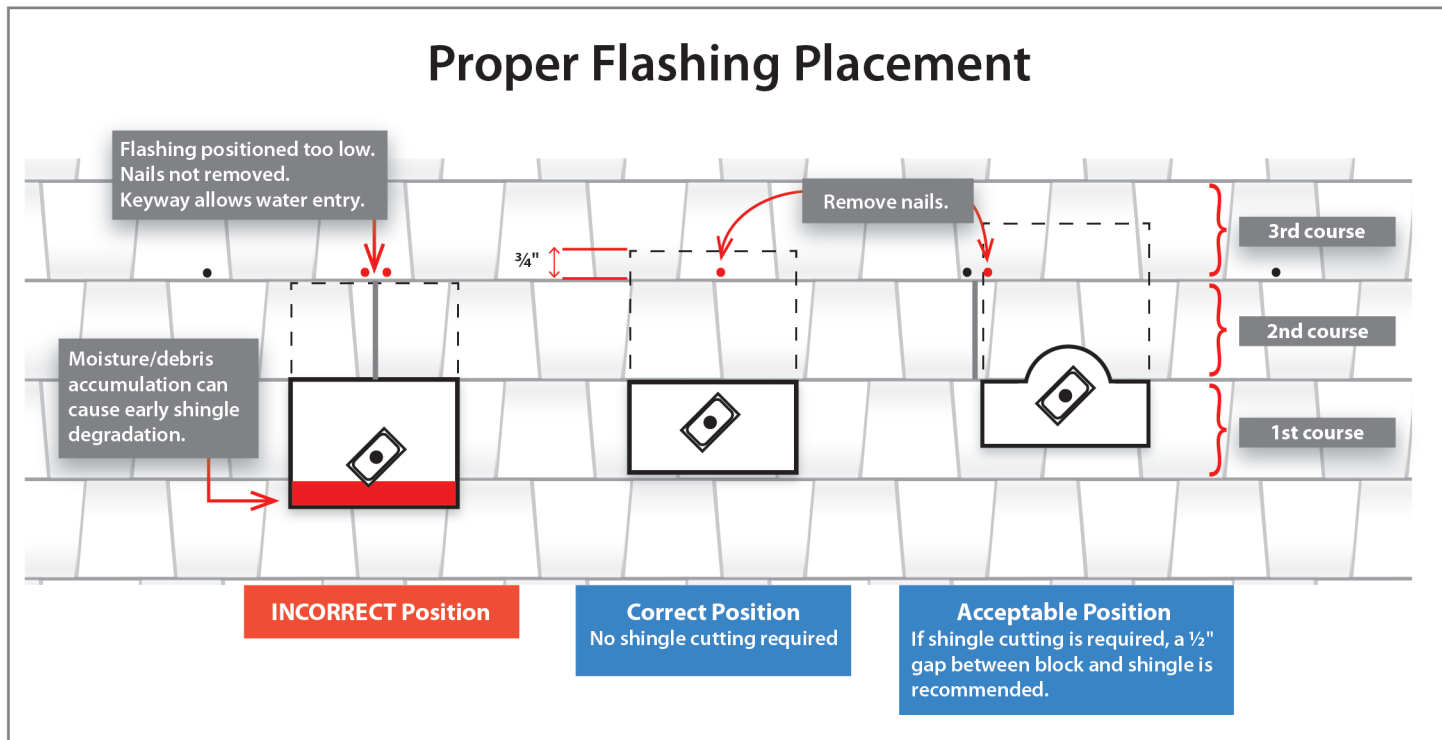Slide the washer and the L-foot (not included) onto the lag screw.

8

Using a 1/2 inch socket on an impact gun drive the lag screw until the QBlock stops rotating easily. **DO NOT over-torque.**

You are now ready for the rack of your choice. Follow all the directions of the rack manufacturer as well as the module manufacturer.

All roofing manufacturers' written instructions must also be followed by anyone modifying a roof system. Consult the roof manufacturer's specs and instructions prior to touching the roof.

Reference and Tips

Proper Flashing Placement

Flashing positioned too low.
Nails not removed.
Keyway allows water entry.

Remove nails.

¾"

3rd course

2nd course

Moisture/debris accumulation can cause early shingle degradation.

1st course

INCORRECT Position

Correct Position
No shingle cutting required

Acceptable Position
If shingle cutting is required, a ½" gap between block and shingle is recommended.

Additional tips and information for installing mounts:

- See Quick Tips videos on nail removal, and more at:
  http://www.quickmountpv.com/support/videos.html

- It is not necessary or advisable to use nails or other fasteners to secure the perimeter of the flashing.

- The E-Mount is made to work with standard and high-definition composition/asphalt and wood shingle roofs with 5" to 5-5/8" courses. If the exposed surface of the course exceeds this measurement you may need to use our Classic Shake Mount instead.

- Depending on the season and climate, size and location of seal tabs, and quality of the shingles, the seal tabs that adhere the shingle courses together may not effectively seal the shingles to the flashings. If this is the case, simply add several quarter-sized dabs of manufacturer accepted sealant or asphalt roofing cement, meeting ASTM D 4586 Type II, between the flashing and the shingle above.

- Mounts should not be installed in areas of the roof susceptible to ice damming. Water ponding under the shingles can reach the bolt penetration.

- Take care not to damage the roofing material while working on the roof. Removing stone granules and deforming the shingles in any way can shorten the lifespan of the roofing. The value of the solar array is directly affected by the condition of the roof it is attached to.

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RESPECT THE ROOF