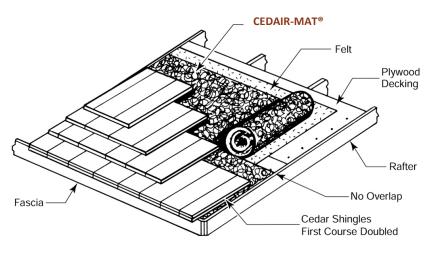


ROOF DRAINAGE AND VENTILATION MAT INSTALLATION GUIDE

ADVANCEDBUILDINGPRODUCTS.COM



Note: Recommended on a 3/12 roof slope or greater. Shingle installation can be used with 3-ply tapersawn shake application.

1. Install plywood decking onto roof rafters.

 Install roofing felt over the entire roof deck, and make sure that it extends 1/4" beyond the edge of the roof deck.
 Overlap layers at least 4" working toward the ridge.

3. Tack or nail down CedAir-Mat[®] in place every 3 square feet. CedAir-Mat[®] can be installed with either side up. Some installers prefer the flat side up to provide a better nailing surface, but the product will work as intended either way.

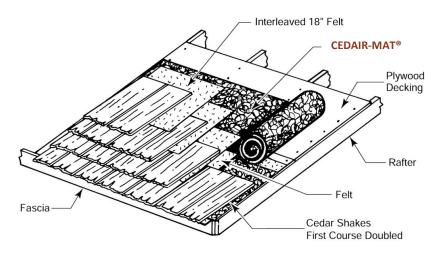
Do not overlap the CedAir-Mat[®] material. Butt each course tightly against the previous course and at vertical seams.

To avoid walking directly on CedAir-Mat[®], work from the fascia to the ridge while installing shingles. Note: The surfaces may be slippery, especially when wet.

4. Install cedar shingles per manufacturer's instructions. Utilize a nail length that will allow for 3/4" penetration into sheathing or completely through sheathing. Allow 3/8" for the additional thickness of the CedAir-Mat[®] material.

Best Practice Tip: We recommend installing CedAir-Mat[®] with a ridge vent product. This continuous ventilation from the roof edge to the peak will maximize the effects of CedAir-Mat[®] and increase drying potential of the shingles or shakes, even without cutting a slot for ridge ventilation.

CedAir-Mat[®] installation under cedar shakes



Note: Recommended on a 4/12 roof slope or greater.

1. Install plywood decking onto roof rafters.

2. For eave protection, install 36" of roofing felt, and make sure that it extends 1/4" beyond edge of roof deck.

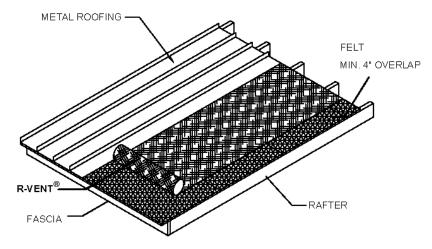
3. Tack or nail down CedAir-Mat[®] in place every 3 square feet. CedAir-Mat[®] can be installed with either side up. Some installers prefer the flat side up to provide a better nailing surface, but the product will work as intended either way. Do not overlap the CedAir-Mat[®] material. Butt each course tightly against the previous course and at vertical seams. To avoid walking directly on CedAir-Mat[®], work from the fascia to the ridge while installing shingles. Note: The surfaces may be slippery, especially when wet.

4. An 18" wide strip of #30 roofing felt should be laid over the top portion of the shakes and extend onto the CedAir-Mat[®] material.

Position the bottom edge of the felt above the butt of the shake at a distance equal to twice the weather exposure per manufacturer's installation instructions.

Utilize a nail length that will allow for 3/4" penetration into sheathing or completely through sheathing. Allow 3/8" for the additional thickness of the CedAir-Mat[®] material.

Best Practice Tip: We recommend installing CedAir-Mat[®] with a ridge vent product. This continuous ventilation from the roof edge to the peak will maximize the effects of CedAir-Mat[®] and increase drying potential of the shingles or shakes, even without cutting a slot for ridge ventilation.



1. Install plywood decking onto roof rafters.

 Install roofing felt over the entire roof deck, and make sure that it extends 1/4" beyond the edge of the roof deck.
 Overlap layers at least 4" working toward the ridge.

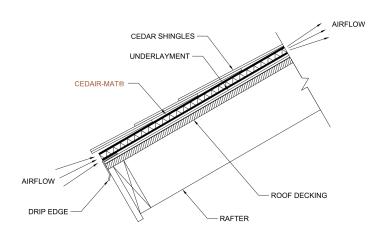
3. Tack or nail down R-Vent[®] in place every 3 square feet. R-Vent[®] can be installed with either side up. Some installers prefer the flat side up to provide a better nailing surface, but the product will work as intended either way.

Do not overlap the R-Vent[®] material. Butt each course tightly against the previous course and at vertical seams.

To avoid walking directly on R-Vent[®], work from the fascia to the ridge while installing metal roofing panels. Note: The surfaces may be slippery, especially when wet.

4. Install metal roofing materials per manufacturer's instructions. Utilize a nail length that will allow for 3/4" penetration into sheathing or completely through sheathing. Allow 3/8" for the additional thickness of the R-Vent[®] material.

Best Practice Tip: We recommend installing R-Vent[®] with a ridge vent product. This continuous ventilation from the roof edge to the peak will maximize the effects of R-Vent[®] and increase drying potential of the metal roofing panels, even without cutting a slot for ridge ventilation.



*Installation Note: The felt must overhang the fascia board by a minimum of 1/2" if a drip edge is not being installed. When using a rake edge cap or drip edge, install edging pieces on top of the deck.

1. Install prepainted aluminum or galvanized rake edge cap or drip edge above the deck.

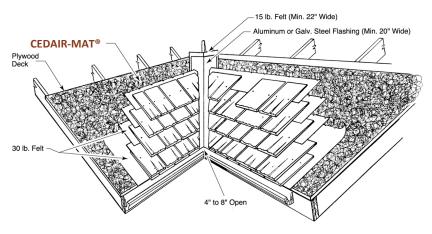
2. Install felt first and then install CedAir-Mat[®] on top of the roof deck, per instructions.

3. Install cedar shingles or shakes per manufacturer's instructions.

Best Practice Tip: We recommend installing CedAir-Mat[®] with a ridge vent product. This continuous ventilation from the roof edge to the peak will maximize the effects of CedAir-Mat[®] and increase drying potential of the shingles or shakes, even without cutting a slot for ridge ventilation.

Alternative installation: If you are concerned with severe wind driven rain, CedAir-Mat[®] can be installed held off the rake edge by up to 1". Cedar shingles or shakes can be nailed tightly to the roof deck at the rake edges to provide additional protection. Air flow will occur through the spaces between the cedar shingles and shakes, but will not be maximized when the rake is restricted.

CedAir-Mat[®] valley flashing detail



*Shingle Installation Shown

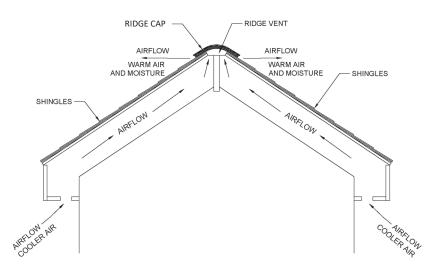
Installation Note: When flashing a valley on a cedar roof utilizing CedAir-Mat[®], apply the flashing underneath the shingle or shake/interleaved felt and on top of the CedAir-Mat[®] and felt.

1. At valley, install a 24" wide strip of #30 roofing felt on top of the CedAir-Mat $^{\rm \tiny ®}$ material.

2. Install a center-crimped metal valley flashing that is 22" wide (8" min. each side for shingles, 11" min. each side for shakes), and made of aluminum or galvanized steel.

3. Leave an open valley width of 4" to 8" depending on anticipated water volume when installing cedar shingles or shakes. Make sure that they are not applied with the grain parallel to the valley centerline, and that those areas extending into the valley should be cut at the correct angle. Joints between shingles or shakes must not break into the valley.

CedAir-Mat[®] integration with ridge vent



At each eave, install with continuous soffit ventilation equivalent to 9 sq. in. per linear foot.

Cedar cap must overhang ridge vent by a minimum of 1/2" on each side. The ridge cap must overhang ridge vent material by a minimum of 1" at each gable end.

When installing cedar shingles, apply #30 roofing felt onto roof decking followed by CedAir-Mat[®] and shingles.

When installing cedar shakes, apply CedAir-Mat[®] directly onto plywood and apply felt per shake-manufacturer's installation instructions.



Suggested Applications:

Cedar Roofing

Core Design

1. Nylon 6 core mesh with a dimpled configuration. This creates the pressure equalized airspace between the cedar roofing material and the sheathing below.

Benefits

- Provides space for continuous drainage and air flow between the solid roof deck and the shingles or shakes.
- Maintains a thermal break between roofing and sheathing that prevents thermal cupping and warping, and reduces potential rotting.
- Lightweight and easy for installers to handle. Bends and conforms to any type of contoured roof.
- Prolongs life of membrane and roof structure by allowing the underside of shingles or shakes to dry, eliminating excess moisture. Helps prevent damage to felt as well.
- 75% greater air flow compared to competitive products.

PHYSICAL DATA	CedAir-Ma	t®	
Core Material	Nylon 6		
Thickness	0.407 in. (10.35 mm)		
Roll Weight	14 lbs. (6.35 kg)		
Length	61.5 ft. (18.75 m)		
Width	39 in. (99.06 cm)		
Coverage Area	200 sq. ft. (18.58 sq. m) = 2 Squares		
Rolls per Pallet	12		
TECHNICAL DATA			
Mass / Unit Area	ASTM D 5261	8.66 oz / sq. yd.	
Tensile Strength	ASTM 5035 mod.	MD 100 lbs. / sq. ft. TD 68.8 lbs. / sq. ft.	
Elongation	ASTM 5035 mod.	MD 60% TD 53%	
Surface Burning	ASTM E 84	Class A	
Flow Rate	ASTM D 4716	5.1 Cu.Ft./Min./Ft width	

MD = Machine Direction / TD = Transverse Direction

* All measurements are nominal



Suggested Applications:

Metal Roofing

Core Design

1. Nylon 6 core mesh with a random configuration. This creates the pressure equalized airspace between the metal roofing material and the sheathing below.

Benefits

- Provides space for continuous drainage and air flow between the solid roof deck and the metal roofing materials.
- Reduces sound transmission through panels.
- Lightweight and easy for installers to handle. Bends and conforms to any type of contoured roof.
- Maintains a thermal break between roofing & sheathing.
- Prolongs life of membrane and roof structure by allowing the underside of the metal roofing material to dry, eliminating excess moisture. Helps prevent damage to felt as well.

PHYSICAL DATA	R-Vent®
Core Material	Nylon 6
Thickness	0.361 in. (9.16 mm)
Roll Weight	12.0 lbs. (5.44 kg)
Length	61.5 ft. (18.75 m)
Width	39.0 in. (99.06 cm)
Coverage Area	200 sq. ft. (18.58 sq. m)
Rolls per Pallet	18

TECHNICAL DATA

Mass / Unit Area	ASTM D 5261	8.66 oz / sq. yd.
Tensile Strength	ASTM 5035 mod.	MD 100.0 lbs. / sq. ft. TD 68.8 lbs. / sq. ft.
Elongation	ASTM 5035 mod.	MD 60% TD 53%

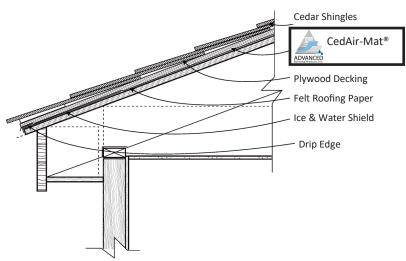
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Frequently Asked Questions



- What # felt should be used? The Cedar Shake & Shingle Bureau recommends #30 felt as an underlayment allowing for better protection to decking.
- What is the difference between shingles and shakes? Shingles are sawn and have a smooth finish, providing uniformity and smooth appearance. Shakes are hand split and have a rough finish. They do not have a uniform thickness or width.
- What is the minimum pitch that CedAir-Mat[®] can be applied?
 2/12".
- Nail Length? Add 1/2" to the Cedar Shake & Shingle Bureau recommended nail length, See Page 12 of the Bureau New Roof Construction Manual. Nail should penetrate 3/4" into deck sheathing.
- Nail Installation—Hand Nailed vs. Nail Gun-able? Preferred method is Hand Nailed so you can control the pressure and prevent overdriving and/ or splitting the shake or shingle.
- Can I use synthetic roof underlayment or ice & water on the entire Roof Deck?
 The Cedar Shake & Shingle Bureau does not recommend this building practice. Always contact the Cedar Shake & Shingle Bureau to confirm your installation meets recommended requirements for wood shingles or shakes.



Compression is key. Among the many benefits CedAir-Mat[®] boast, the most important one is the fact that our product creates 75% greater air flow compared to other competitive roof ventilation products currently on the market.

How have we attained this? It simply comes down to our manufacturing process. Our ability to conform and adjust compression strengths provide us with a great advantage that will give contractors and homeowners peace of mind for years to come.

CedAir-Mat[®] (10mm)



Competitive Product (6mm)



For information on our Mortairvent[®] and Watairvent[®] Furring Strip products, please see the ENGINEERED RAINSCREEN PRODUCT INSTALLATION GUIDE

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