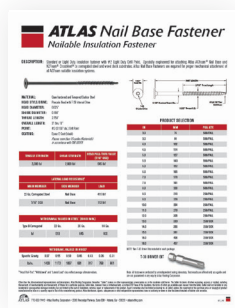


# NAILABLE INSULATION FASTENING

## Atlas Nail Base Fasteners are required for proper mechanical attachment of all Atlas ACFoam® Nailable Insulation Systems.

### ATLAS NAILABLE INSULATION FIELD AND PERIMETER FASTENING PATTERNS

- Tested by an independent 3rd party testing laboratory
- Verified by a 3rd party engineering firm
- Meet the FM 1-60, 1-75, 1-90 and 1-105 Windstorm Classifications
- Accomodate FM 1-29 prescriptive enhancement options for corners with one fastener per sq ft (min. 32 fasteners per 4' x 8' board)
- Meet ASCE 7-10 requirements (available upon request)



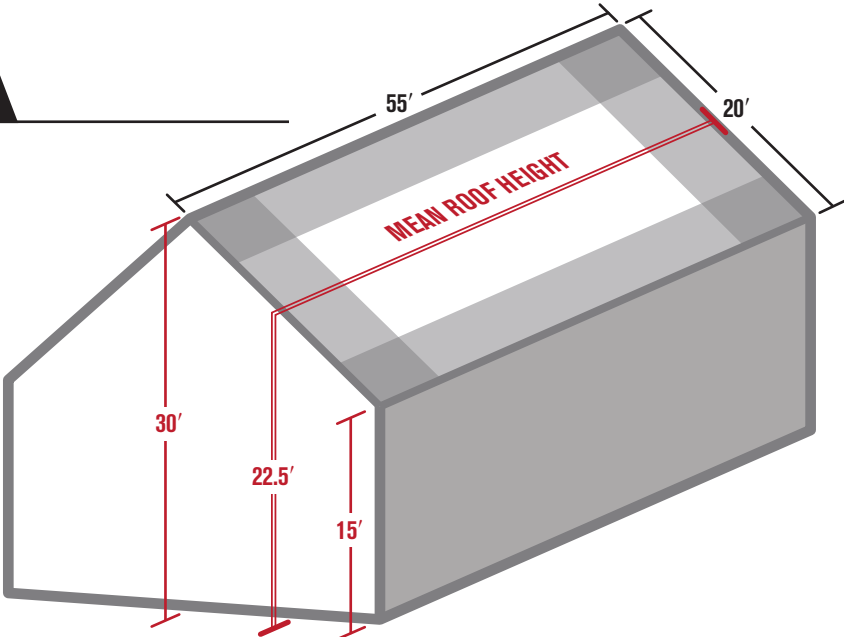
For more information, visit our website to download a copy of the ACFoam® Nail Base Fastener data sheet.

### ROOF PERIMETER AREA DEFINITION

A band equal in width to 10% of the lesser roof plan dimension or 40% of the mean roof height, whichever is less (minimum band width is 4.0').

Note: Perimeter area includes corners and overhangs.

CALCULATIONS	LESSER DIMENSION	20.0' × 10% = 2.0'
	MEAN HEIGHT	22.5' × 40% = 9.0'
RESULT	PERIMETER BAND WIDTH	4.0'



# ATLAS ACFOAM® NAILABLE ROOF INSULATION FASTENING REQUIREMENTS

**ROOF PITCH TABLE 1**

APPROVED DECK	ROOF AREA	3:12/6:12							7:12/12:12							14:12/24:12							
		10-30	40	50	60	70	80	90	10-30	40	50	60	70	80	90	10-30	40	50	60	70	80	90	
SNOW LOAD +10 PSF DEAD LOAD TOTAL LOAD PSF																							
18-22 GA. STEEL	FIELD	15	15	15	15	15	15	20	15	20	20	20	25	25	30	20	25	30	30	35	35	40	
	PERIMETER	25	25	25	20	20	20	20	20	20	25	25	25	25	30	20	30	30	30	30	35	40	40
1" WOOD PLANK OR STRUCTURAL CONCRETE	FIELD	15	15	15	15	15	15	15	15	15	20	20	20	25	25	15	25	30	30	30	35	35	
	PERIMETER	20	20	20	20	20	20	20	15	20	20	20	25	25	25	15	25	25	30	30	35	35	
19/32" PLYWOOD MINIMUM	FIELD	15	15	15	20	20	25	25	15	25	25	25	30	35	40	20	30	35	40	45	45	50	
	PERIMETER	25	25	25	25	25	25	25	20	25	30	30	30	35	40	20	35	35	40	45	45	50	

- Table 1 applies to roofs in areas of wind velocity not exceeding 110mph, Exposure C, Importance Factor I = 1.15, and a maximum mean roof height of 60ft.
- Table 1 is valid only for use with Atlas ACFoam® Nailable Roof Insulation and Atlas Nail Base Fasteners.
- Refer to Atlas ACFoam® & Nailable Roof Insulation Fastening Pattern Guide or Atlas Nailable Insulation Guide for appropriate fastening patterns.

- When plywood is used as the top surface of the ACFoam® nailable insulation, additional fastening is required. See Atlas Technical Bulletin: TB-1.
- Perimeter area includes corners and overhangs.

**ROOF PITCH TABLE 2**

APPROVED DECK	ROOF AREA	3:12	4:12	5:12	6:12	7:12	8:12	9:12	10:12	11:12	12:12	14:12	15:12	16:12	17:12	18:12	20:12	22:12	24:12
		18-22 GA. STEEL	FIELD	25	25	25	25	30	30	30	30	30	30	30	30	30	30	30	30
PERIMETER	45		45	45	45	35	35	35	35	35	35	35	35	35	35	35	35	35	35
1" WOOD PLANK OR STRUCTURAL CONCRETE	FIELD	20	20	20	20	20	20	20	20	20	20	25	25	25	25	25	25	25	25
	PERIMETER	35	35	35	35	25	25	25	25	25	25	25	25	25	25	25	25	25	25
19/32" PLYWOOD MINIMUM	FIELD	20	20	20	20	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	PERIMETER	40	40	40	40	30	30	30	30	30	30	30	30	30	30	30	30	30	30

- Table 2 applies to roofs with no snow load and a wind velocity over 110mph, but not exceeding 146mph, in combination with 10psf Dead Load, Exposure C, Importance Factor I = 1.15, and a maximum mean roof height of 60ft.
- Table 1 is valid only for use with Atlas ACFoam® Nailable Roof Insulation and Atlas Nail Base Fasteners.
- Refer to Atlas ACFoam® & Nailable Roof Insulation Fastening Pattern Guide or Atlas Nailable Insulation Guide for appropriate fastening patterns.

- When plywood is used as the top surface of the ACFoam® nailable insulation, additional fastening is required. See Atlas Technical Bulletin: TB-1.
- Perimeter area includes corners and overhangs.

**APPROVED DECKS**

- 18-22 ga. Steel Deck (3/4" through deck [top flange])
- Structural Concrete (2500 psi min.) 3/16" pre-drilled pilot hole required (1" penetration into deck)
- 1" minimum Wood Plank and T&G (1" penetration into deck)
- 19/32" minimum Plywood (1/2" through deck)
- FM 1-60, 1-90, 1-105:15 Fasteners (min.) for ACFoam® CrossVent® and ACFoam® Nail Base insulation (Steel Deck and Structural Concrete)
- For projects requiring FM wind rating, FM approved assembly, including deck and covering, is required

**ATLAS NAIL BASE FASTENER INSTALLATION RECOMMENDATIONS**

- The fasteners should be installed using an 1800-2500 RPM (max.) screw gun with a hardened drive bit. Standard electric drill guns are not recommended for installation of Atlas Nail Base Fasteners.
- Steel decks are acceptable deck types provided they are between 18 ga. (max) and 22 ga. (min). Be sure to determine the gauge of the deck. For 16 ga. or heavier, consult the Atlas Technical Department.

