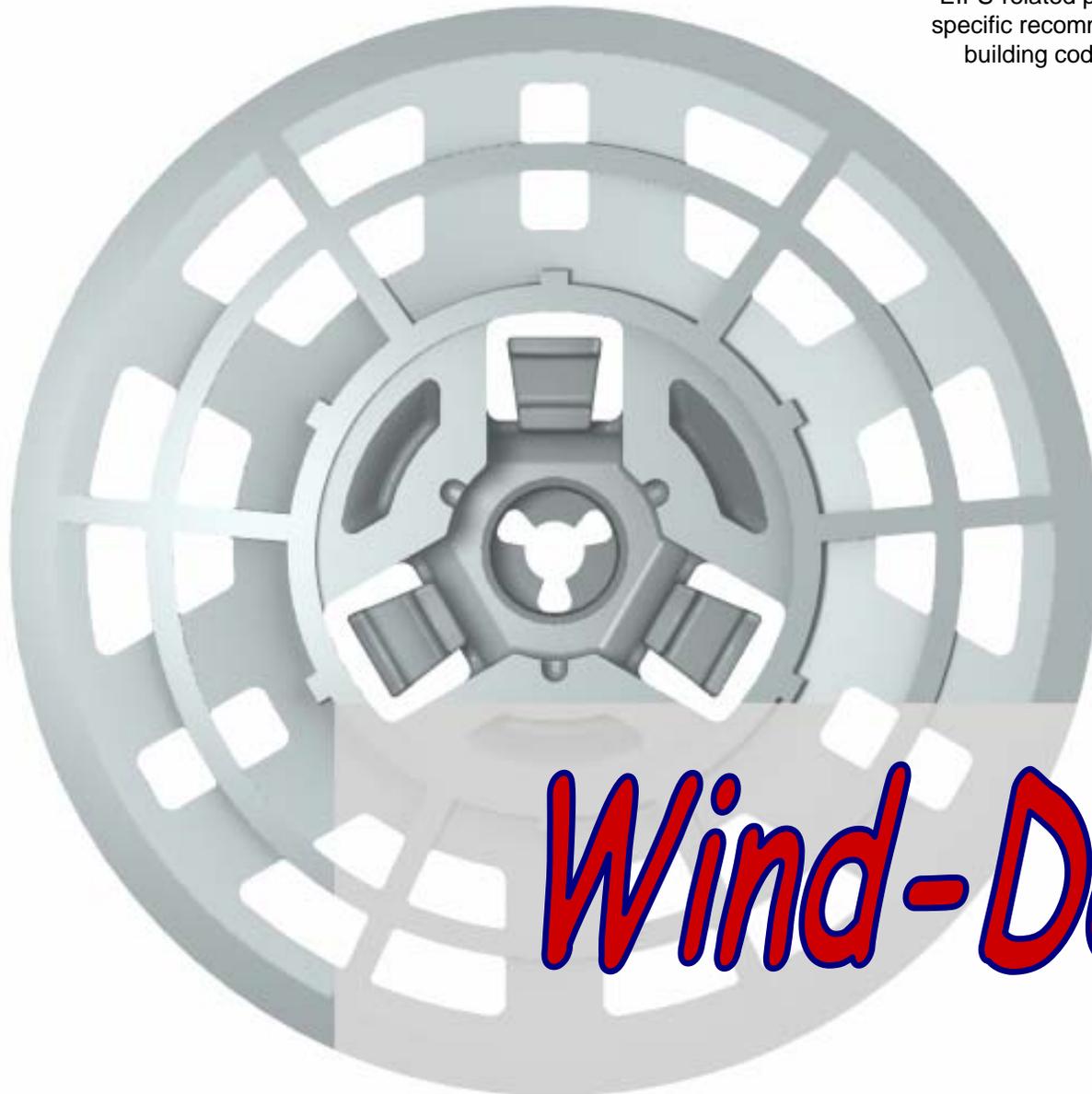


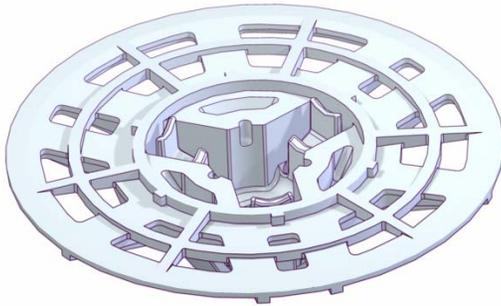
This presentation is for illustration purposes only, and should not be used as an instructional guide to the proper installation of this product. Always install Wind-Devil 2 fasteners, and all other EIFS-related products, according to the system manufacturer's specific recommendations, and in accordance with all applicable building codes and regulations, specifications, and details.



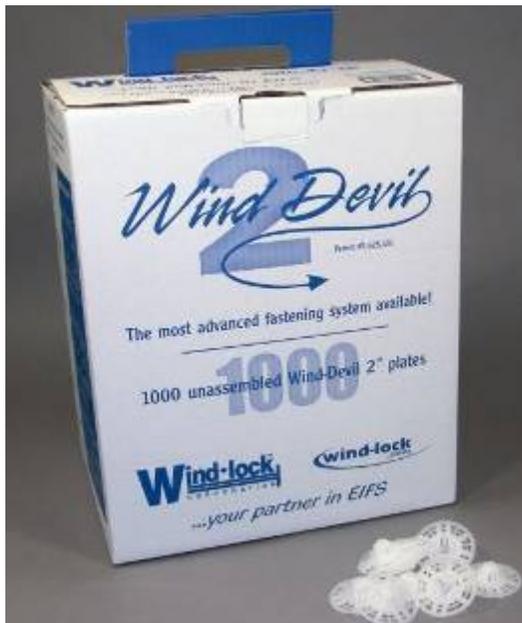
# *Wind-Devil 2*



# Mechanical fasteners for "PB" polymer based, (thin coat) EIFS systems.



*Wind-Devil 2™*



Long-locks



Wind-Devil





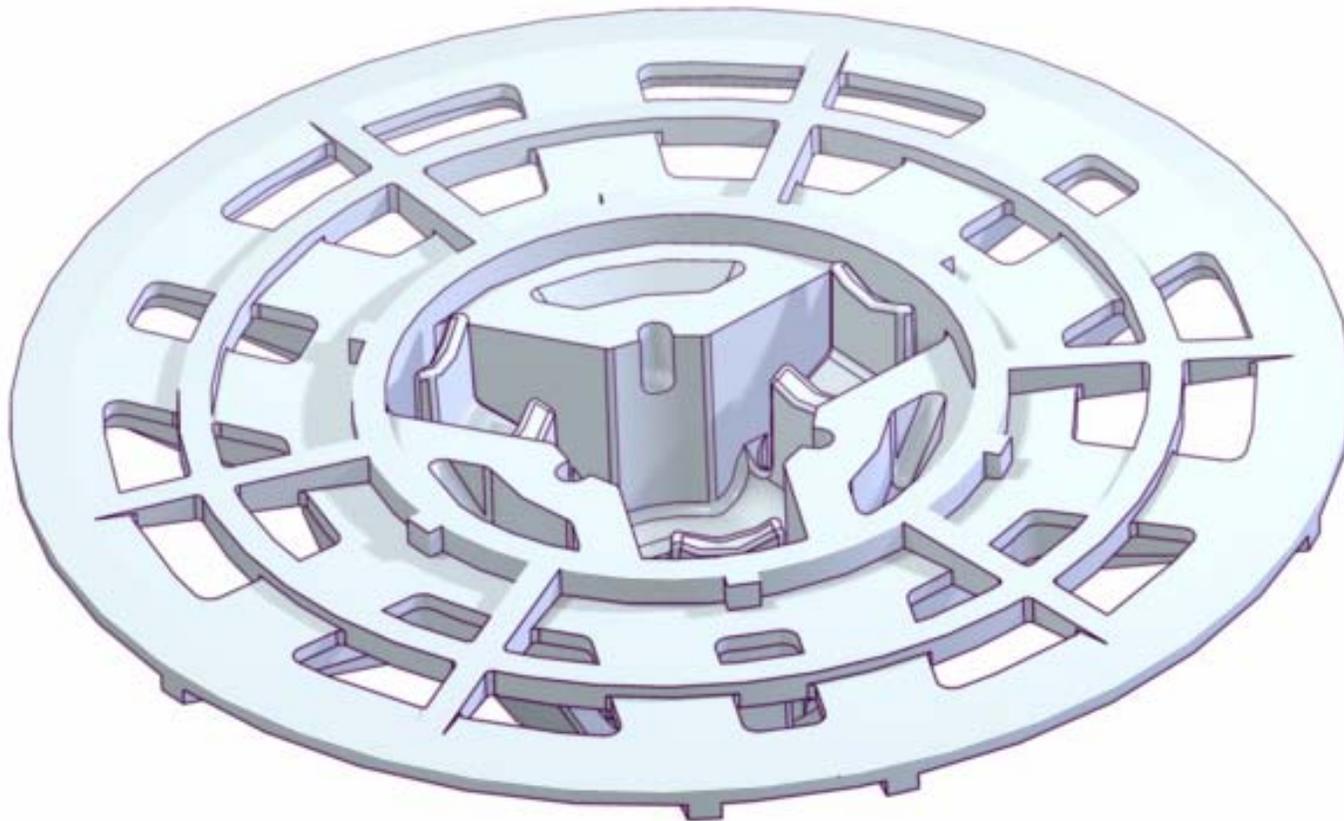
# *Why use Wind-Lock's fasteners.*

## • **PRODUCT FEATURES:**

- The original and best EIFS fastener since 1985
- ASTM E-330 tested for the highest quality assurance
- Pre assembled fasteners and plates for:
  - Wood, lite metal, steel and masonry
- Can be used on a variety of substrates where adhesives can't be used.
  - Reduces costly surface preparation:
    - Painted walls
    - Metal panels
    - Deteriorating stucco
    - Glazed tile or brick painted block
- Overhead applications
  - Soffits
  - Overhangs
- Starter Bands
  - Architectural details
- All weather application from - 20° F to +120°
  - All weather application it works when adhesives can't

# *Wind-Devil 2™*

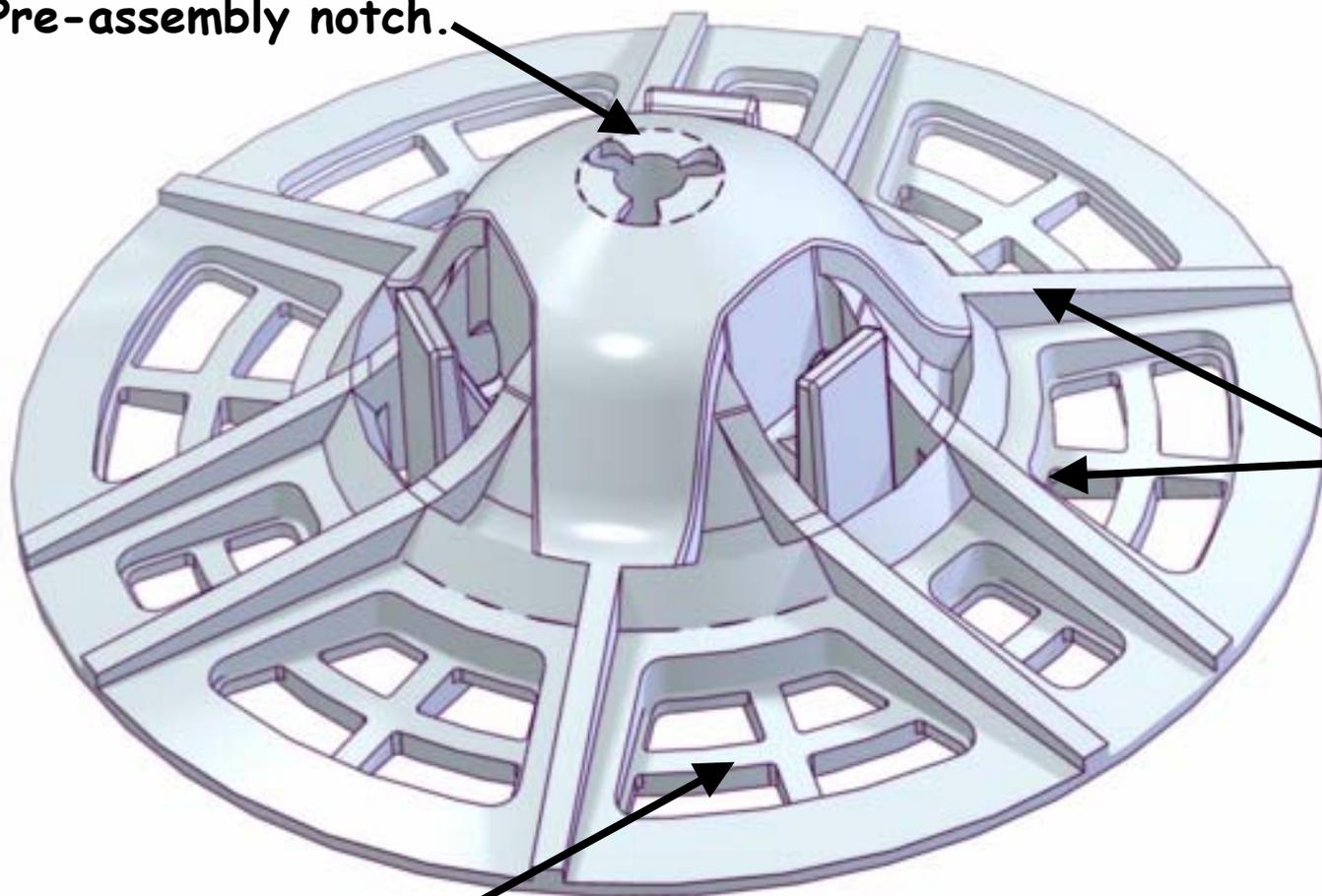
## *Engineered features:*





# Wind-Devil 2™

Pre-assembly notch.



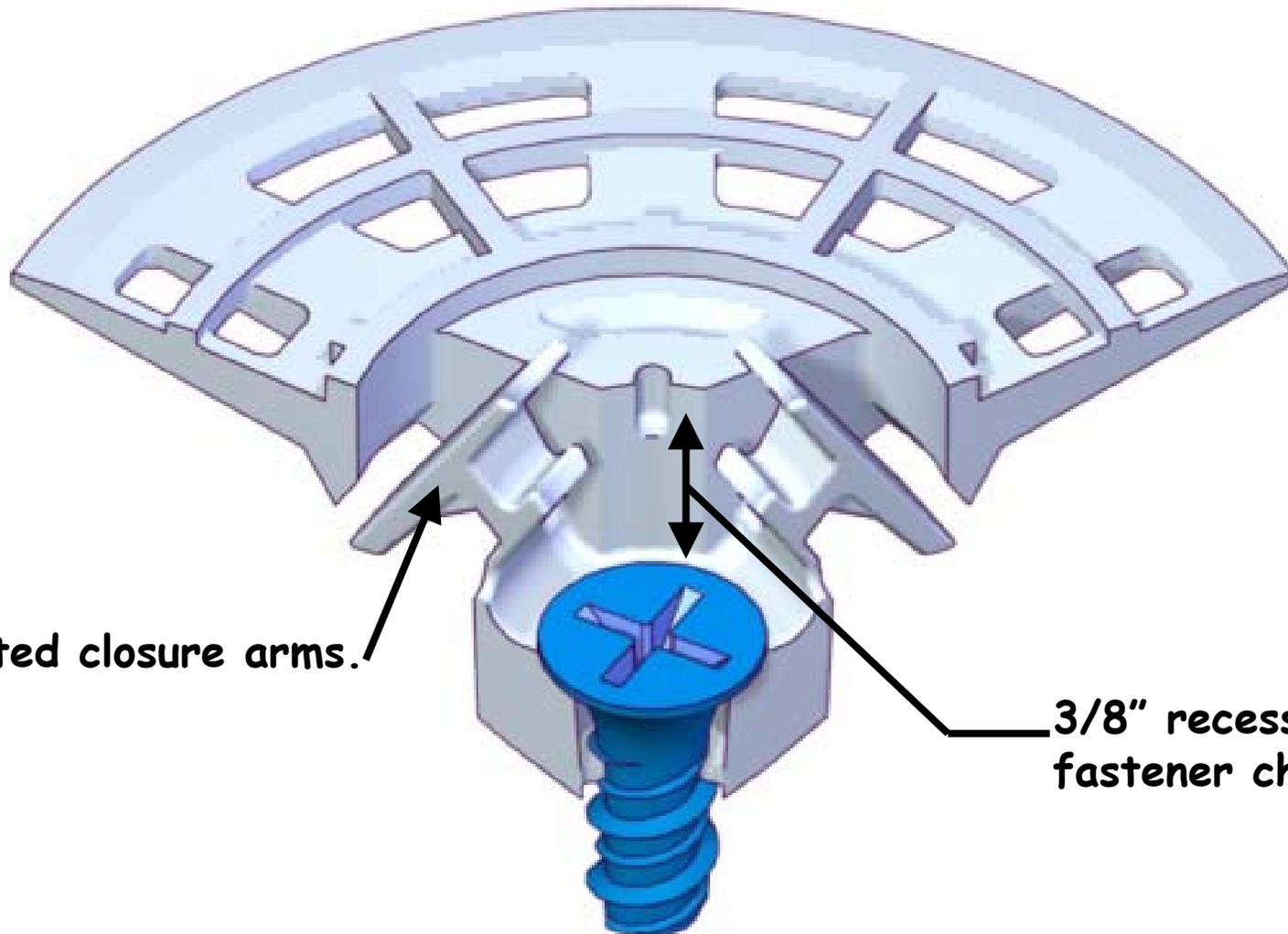
Ribs

Under cut recess





# Wind-Devil 2™



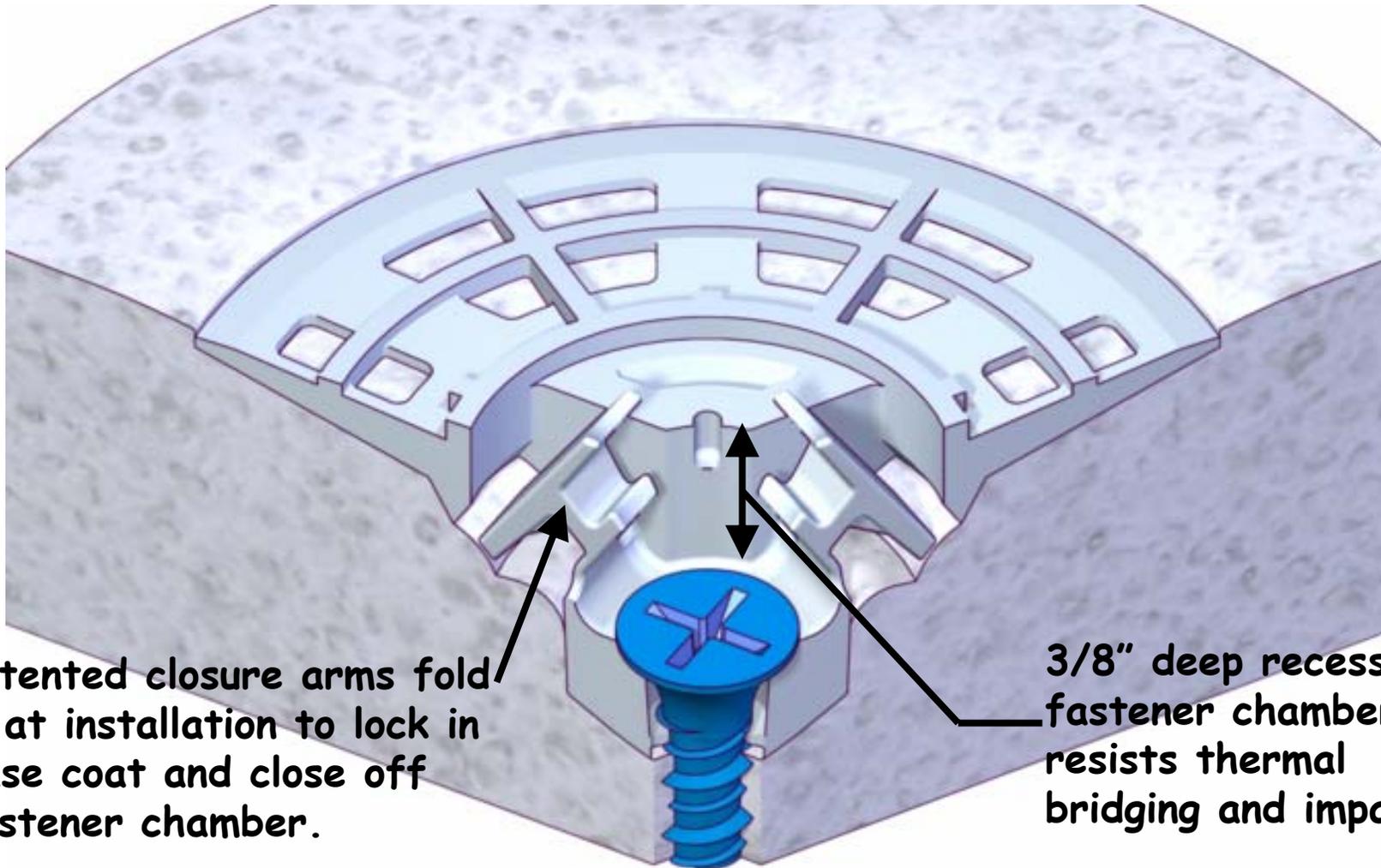
Patented closure arms.

3/8" recessed fastener chamber.





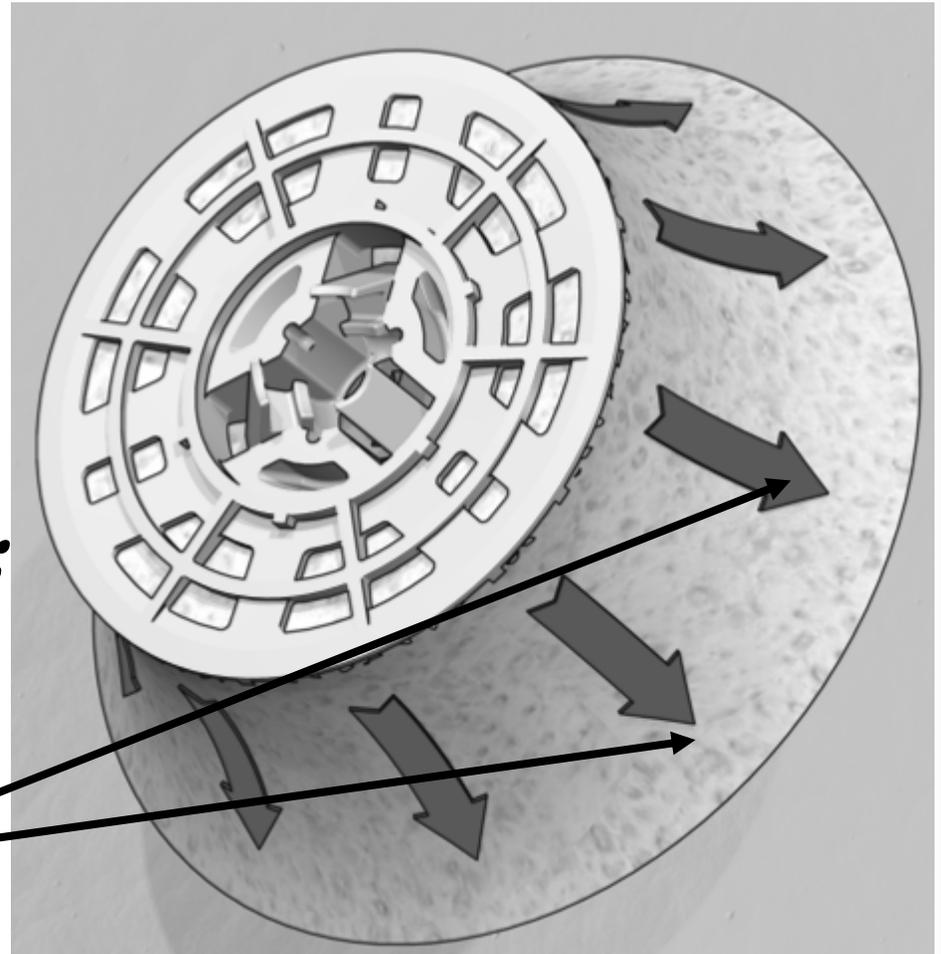
# Wind-Devil 2™



Patented closure arms fold in at installation to lock in base coat and close off fastener chamber.

3/8" deep recessed fastener chamber resists thermal bridging and impact.

# Wind-Devil 2™

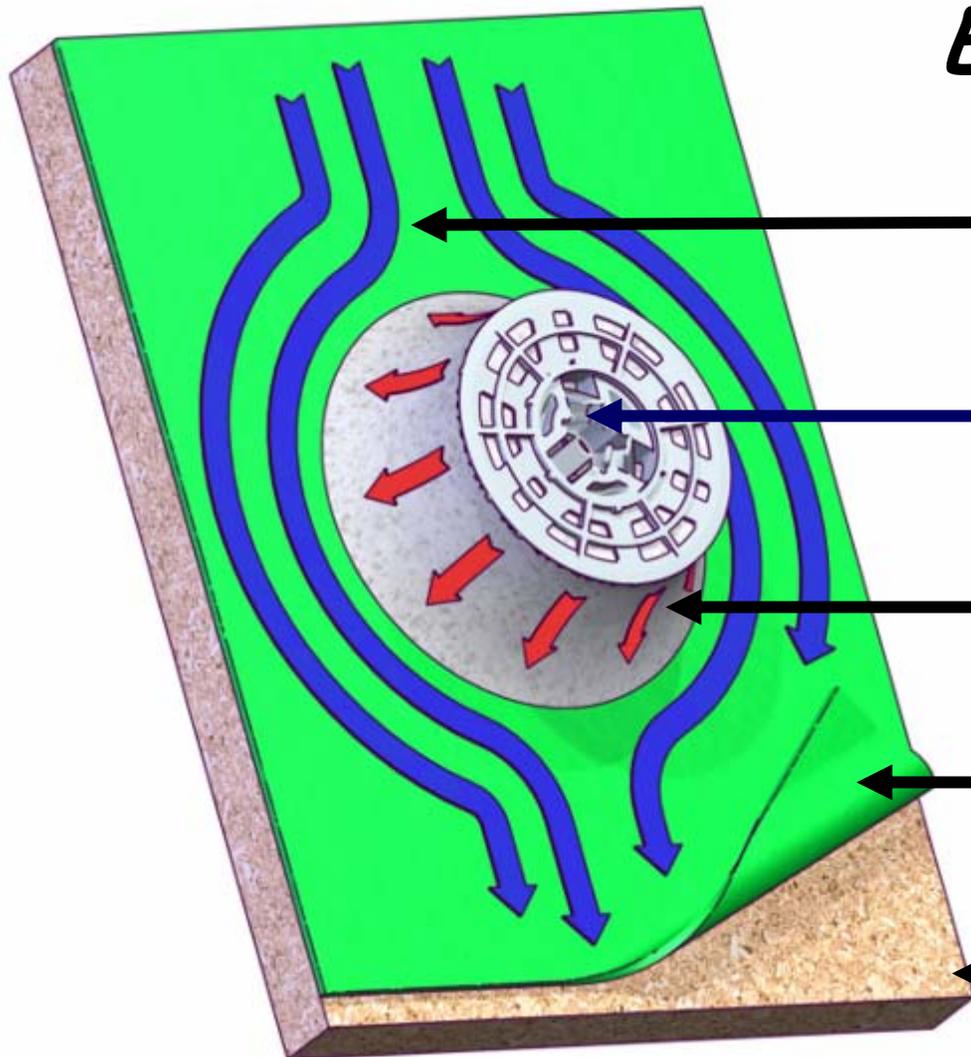


## *Engineered features:*

Installation of the *Wind-Devil 2™* compresses the foam forming a "gasket" under the washer.

# Wind-Devil 2™

## Engineered features:



● Moisture is diverted past the compressed area of insulation under the washer.

● *Wind-Devil 2™*

● Compressed foam insulation

● House Wrap

● Substrate





# Negative Wind Load

1. What is it?
2. How can we resist its effects?
  - a. Proper fastener selection
    1. Use the right screw for the job
    2. Use the Wind-devil 2
  - b. Correct fastener patterns
  - c. Good installation practices





*Negative Wind load testing:*

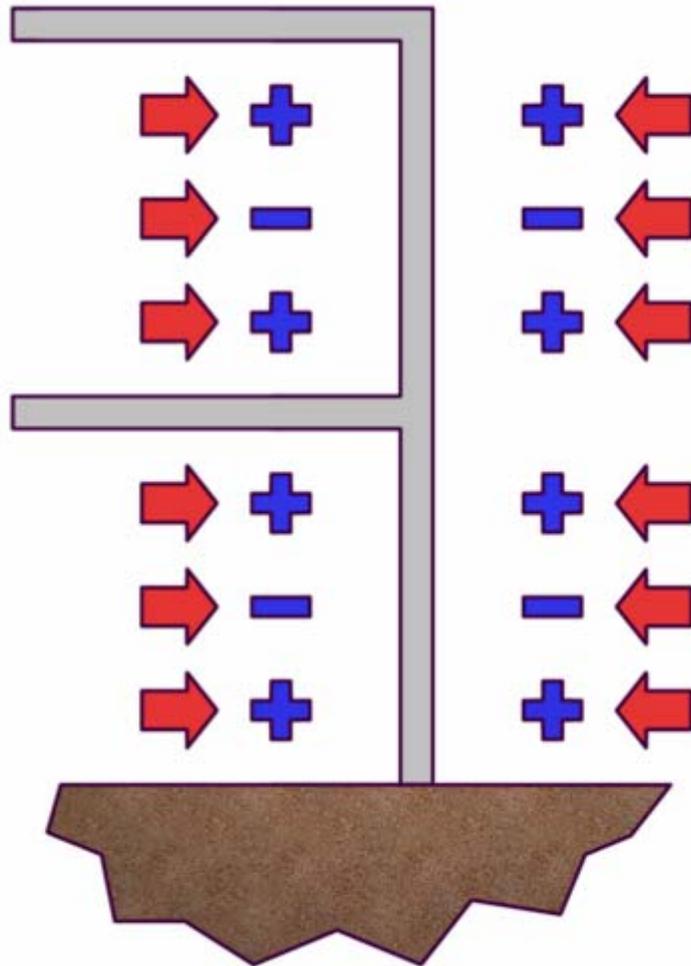


## *Negative Wind Loading*

Designing for proper wind load requirements can be a complex mechanism, a basic understanding, is helpful to illustrate how important proper fastener selection and installation can be for a successful EIFS job.

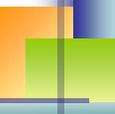
A full technical explanation of the dynamics involved is beyond the scope, of this document, always consult a local engineer for project specific wind load requirements in your geographical area.

# Negative Wind Load - What Is It?

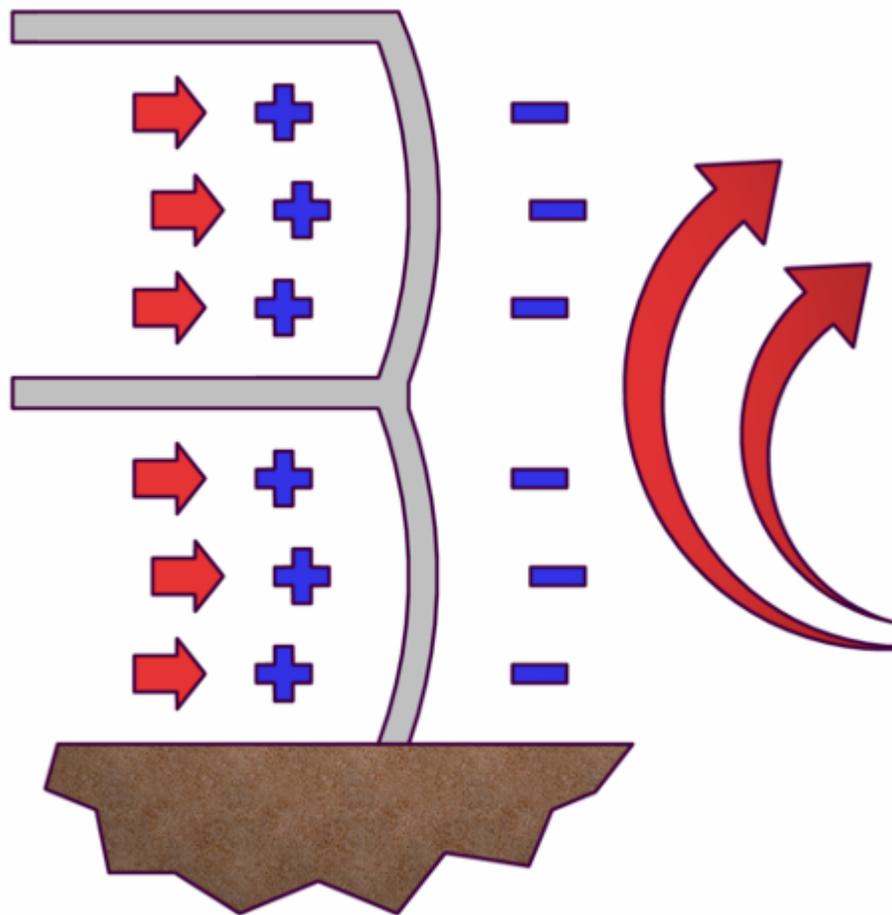


No Wind Loading

No Wind is present -  
Air pressure on the  
inside surface of the  
wall and the outside  
surface of the wall  
are essentially equal.



# Negative Wind Load - What Is It?

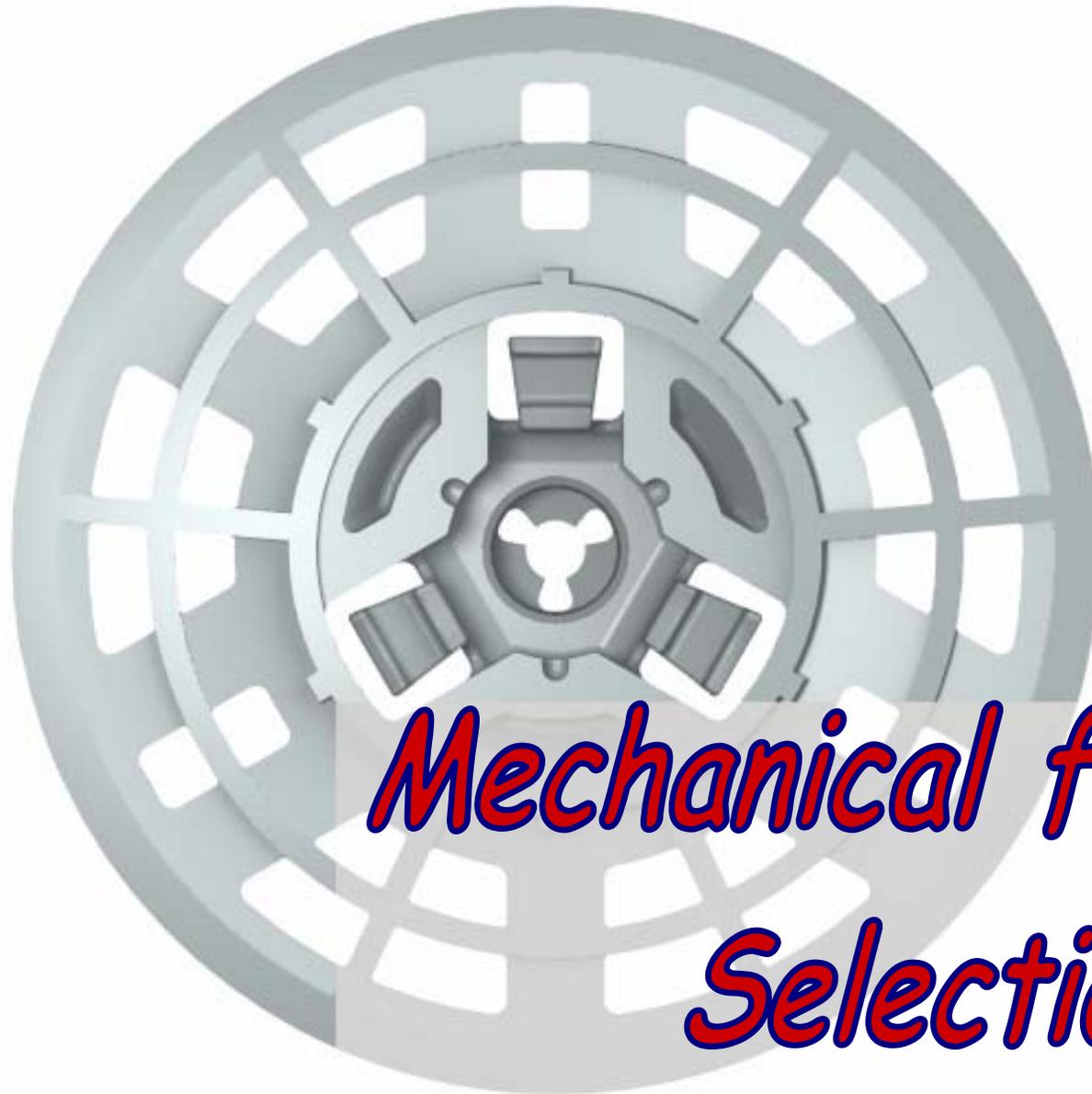


Windy Conditions

Windy conditions, air blows along the outside surface of a wall. This moving air lowers the air pressure outside the building. The higher pressure air inside the building tries to force its way through the wall system to the lower pressure on the outside.

Wall systems that are not securely fastened can be "pulled" off the building.





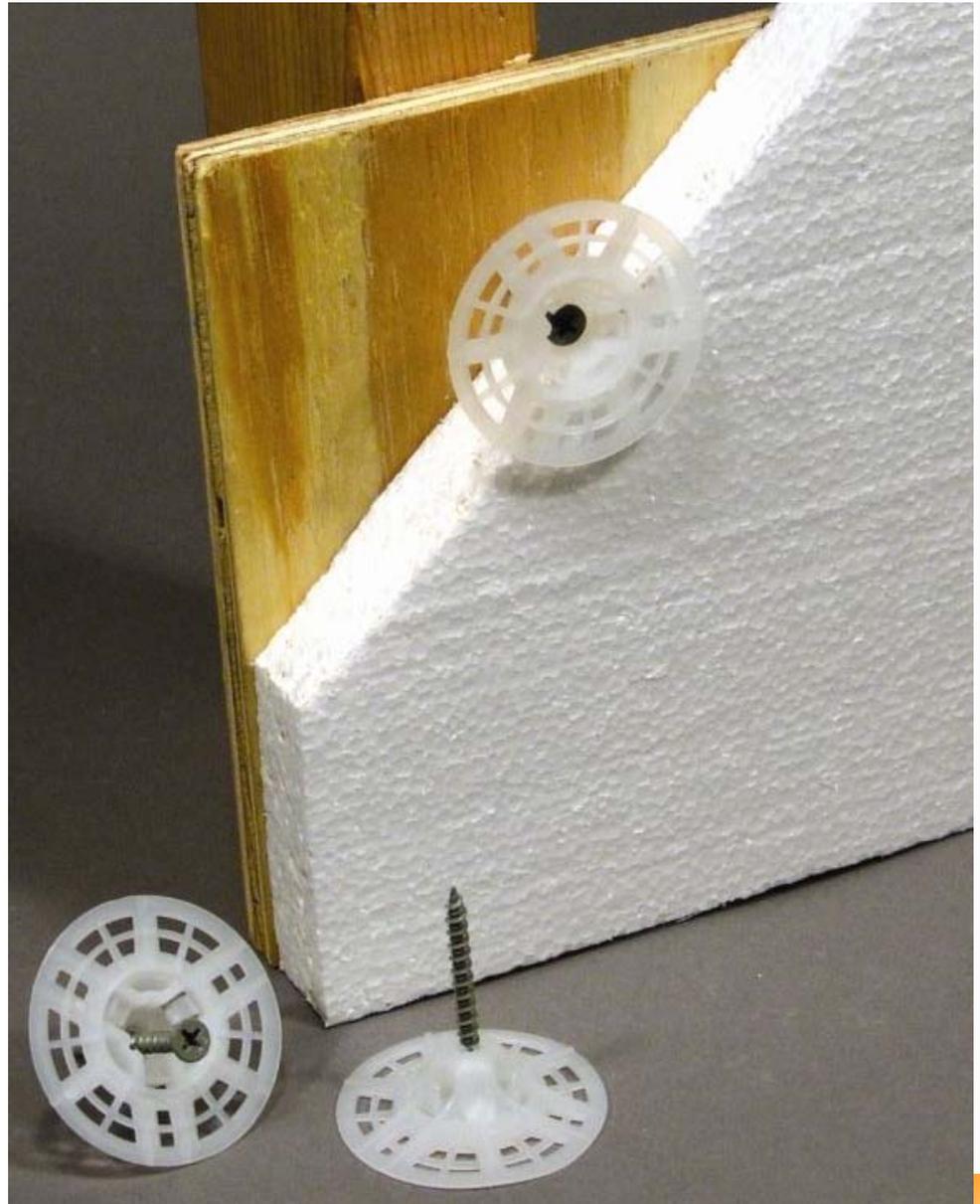
# *Mechanical fastener Selection:*



## *Wood and lite metal fasteners (W-LMT)*



- Rapid engaging single coarse threads
- Sharp point
- Semi drill point
- #2 Phillips bugle head
- For use with dimensional lumbers and plywood type sheathing
- ASTM B-117 salt spray test 750 hours or better



# Wood and lite metal fasteners (W-LMT)



Use the correct length screw. Fastener length must be sufficient to accommodate the insulation thickness, and proper penetration into the substrate to give you good pullout strength.

Minimum recommended penetration into lumber is 1"

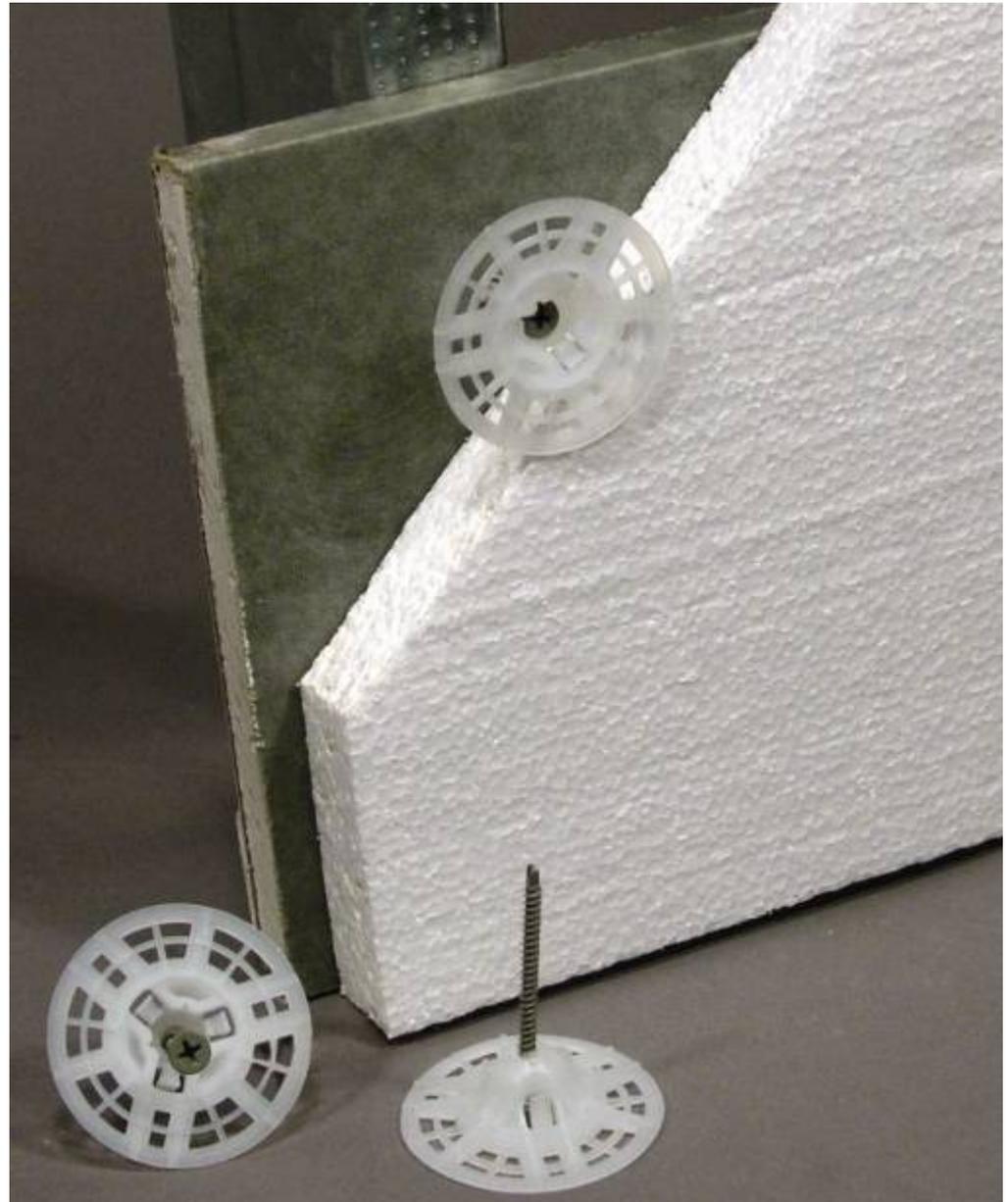
For sheathing materials, always select a fastener length that will go through the wall and stick out the back at least 3/8". this way you have a solid, full-thread engagement in the material.



**NOTE:** Use caution when penetrating sheathing and avoid choosing a fastener that is too long and would cause damage to the services that can be present in the stud cavity wall.

## *Steel screw fasteners (ST)*

- A 'self tapping' single thread configuration
- Full drill point
- #2 phillips bugle head
- For use with steel studs 12 to 20 gauge
- ASTM B-117 salt spray test 750 hours or better



**NOTE:** Use variable speed screw gun at lower RPM's when engaging heavier steel substrates.

# Steel screw fasteners (ST)

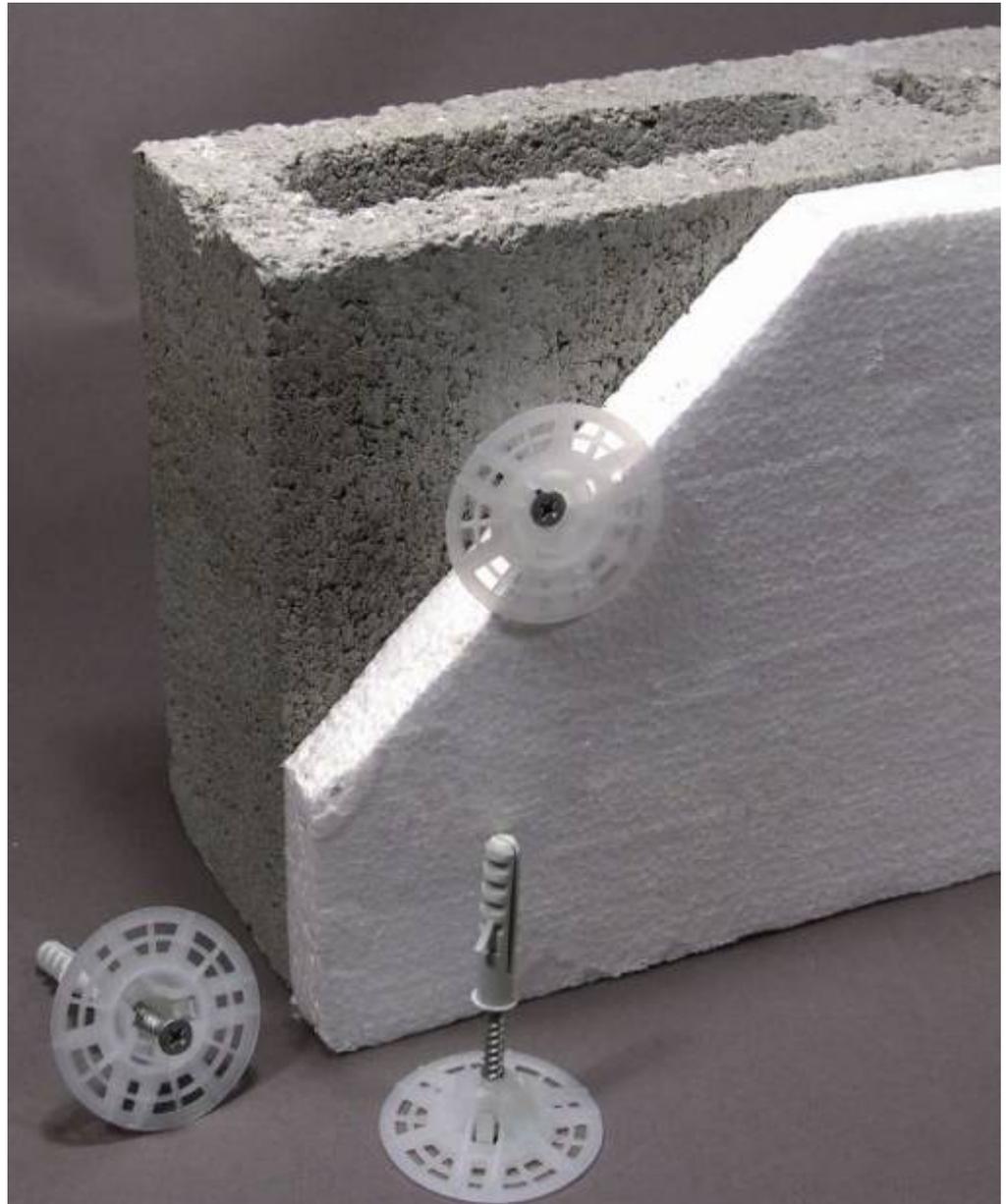
For metal or steel screws, be sure the fastener penetrates through the metal stud or panel at least  $\frac{1}{2}$ ". Most self-drilling screws are manufactured with a drill point at the tip of the fastener. This means that the threads up near the tip of the screw are not fully formed, and will not generate the same pullout resistance as the complete threads in the body of the fastener.



**NOTE:** Use variable speed screw gun at lower RPM's when engaging heavier steel substrates.

## *Masonry screw fasteners (MT & MET)*

- High and low hardened cutting threads with notches
- Pyramid-point
- #2 phillips bugle head
- For use with concrete block, concrete, and other unit masonry
- ASTM B-117 salt spray test 750 hours or better



**NOTE: A properly pre-drilled pilot hole is required for installation.**

# Masonry screw fasteners (MT & MET)



For masonry, pre-drill using the correct diameter bit. Always drill  $\frac{1}{2}$ " deeper than the screw will penetrate, as dust that remains in the hole could hinder a complete and secure penetration of the mechanical fastener into the substrate.



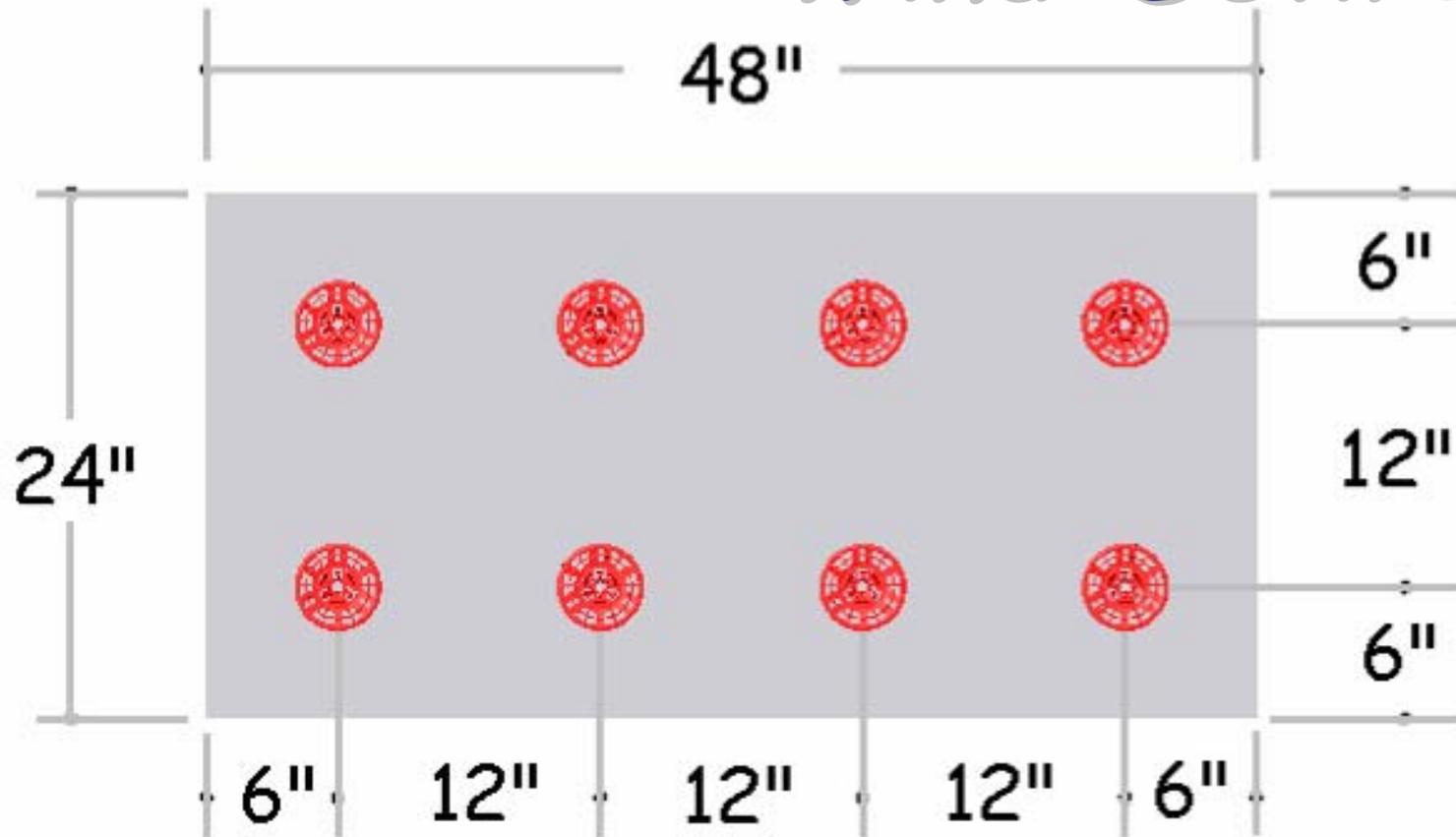


*Wind load fastener spacing:*





# Wind-Devil 2™



## Wind-load test data

EPS thickness	Negative load
1"	107
1 1/2"	130
2"	144

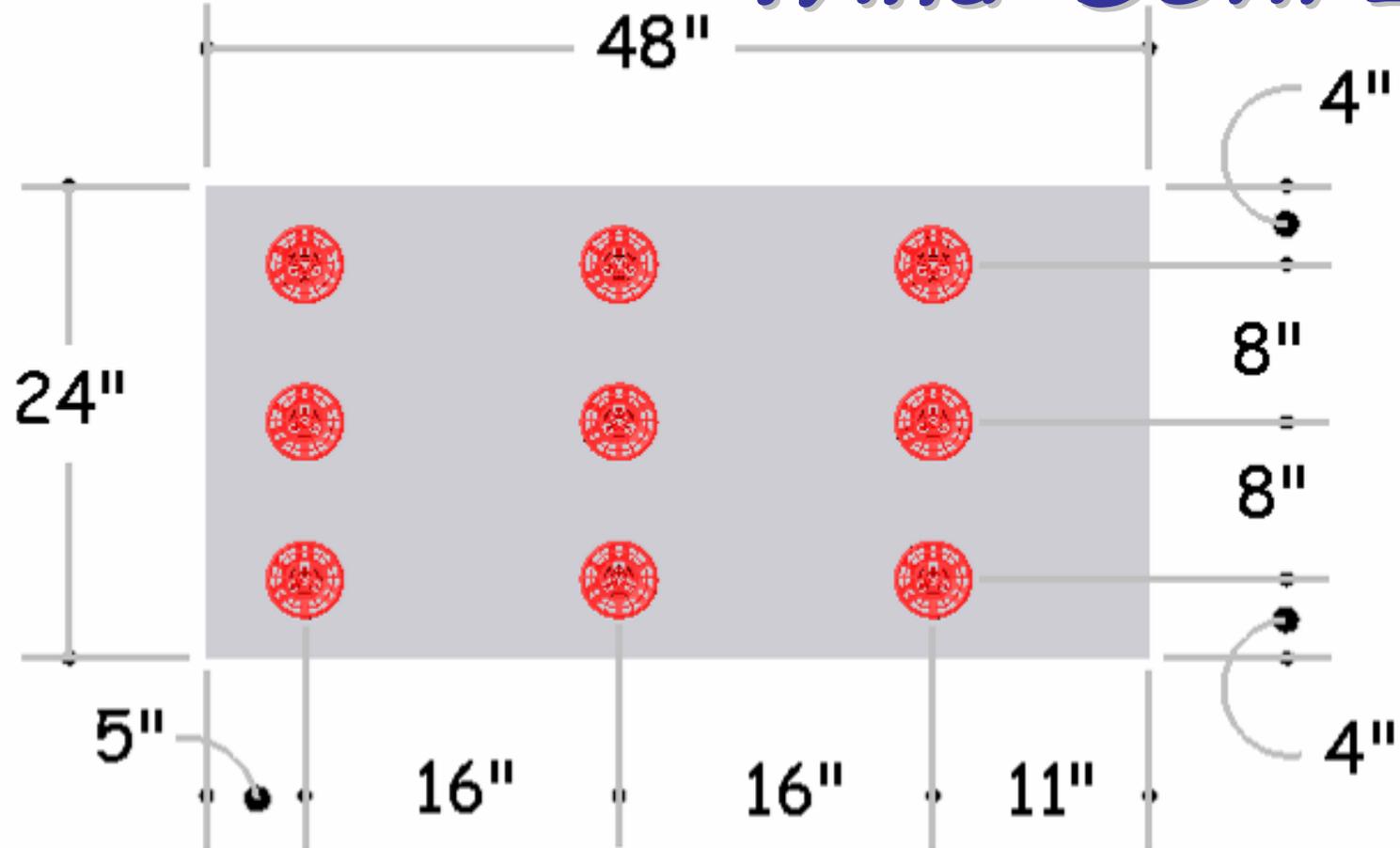
## Fastening pattern "A"

Wood sheathing, masonry, metal siding

*All measurements shown are pounds per square foot.*



# Wind-Devil 2™



## Wind-load test data

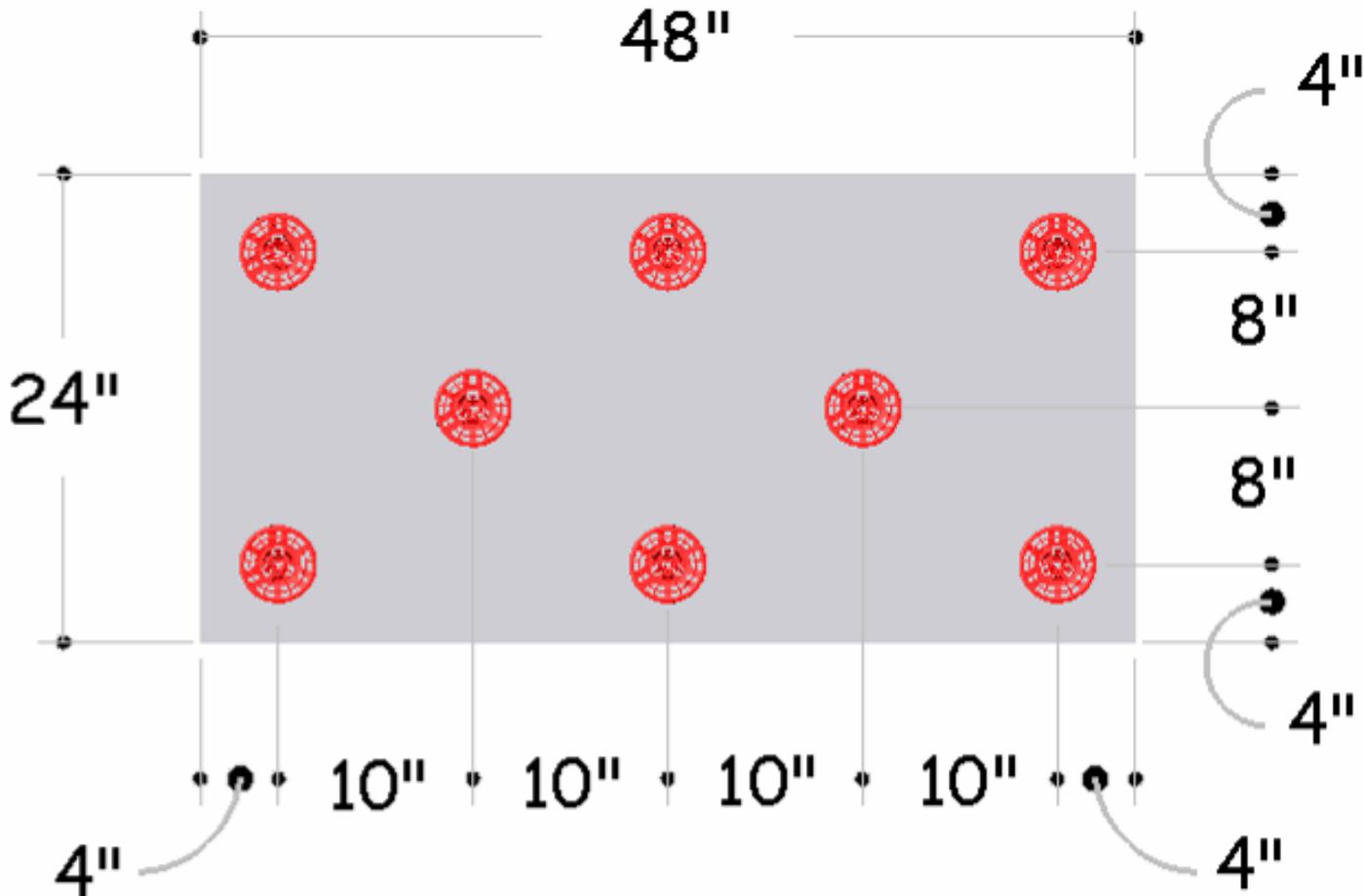
EPS thickness	Negative load
1"	88
1 1/2"	114
2"	129

## Fastening pattern "B"

Wood sheathing, masonry, metal siding

All measurements shown are pounds per square foot.

16" O.C. stud fastening pattern



## Wind-load test data

EPS thickness	Negative load
1"	85
1 1/2"	103
2"	124

## Fastening pattern "C"

Wood sheathing, masonry, some metal sidings

*All measurements shown are pounds per square foot.*





*Proper fastener application:*



# Installation tips:

- Minimum insulation thickness is 1"
- To avoid "shadowing", pre-spotting *Wind-Devil 2*'s with base coat may be necessary prior to mesh/ base coat application.
- Adhesives may be used in conjunction with *Wind-Devil 2* .
- *Wind-Devil 2* plates and ULP plates are NOT interchangeable.





# *Wind-Devil 2™* installation accessories

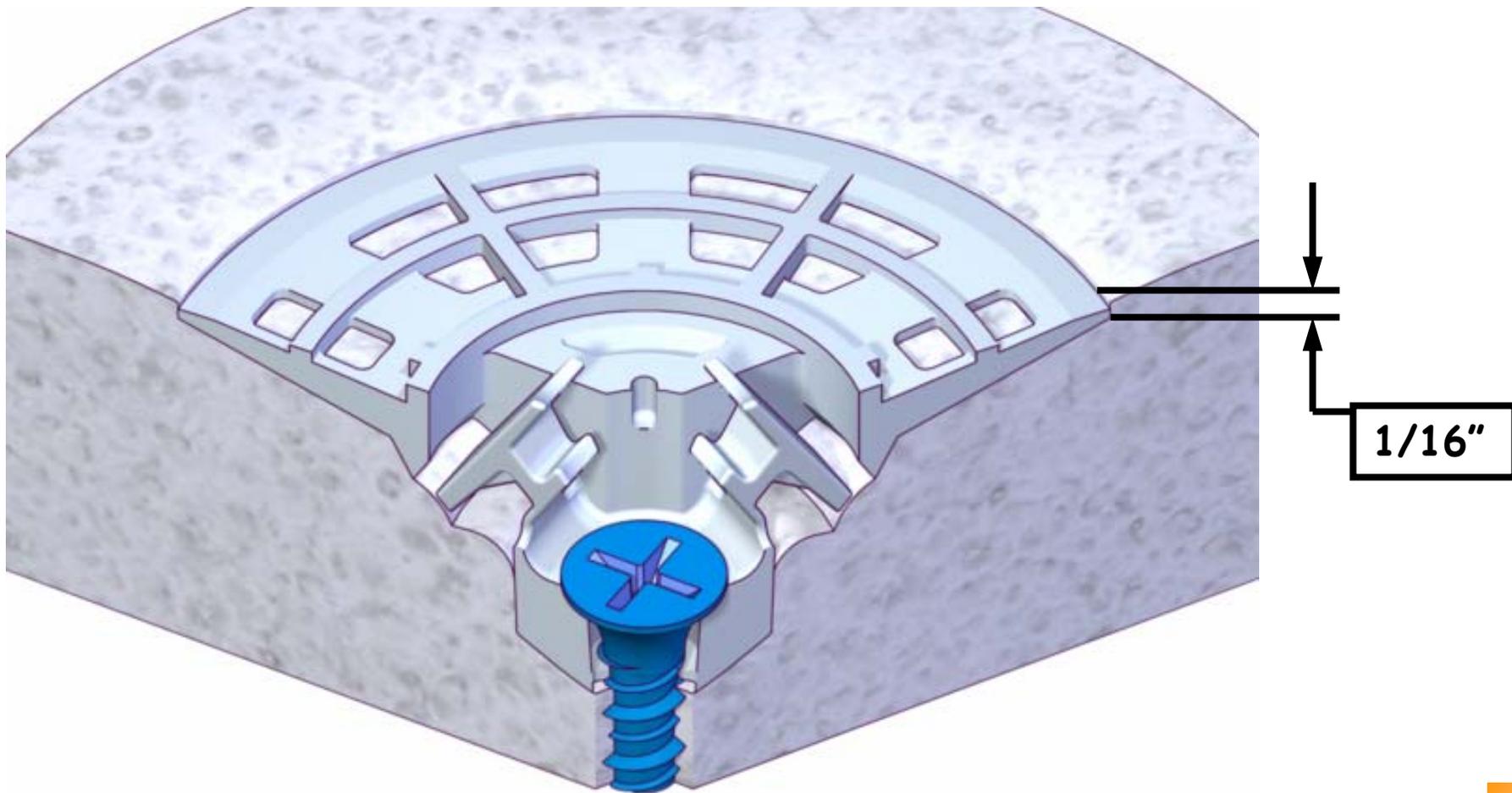


**Note:** For proper and consistent installation of mechanical fasteners, utilize a depth stop attachment on your screw gun.



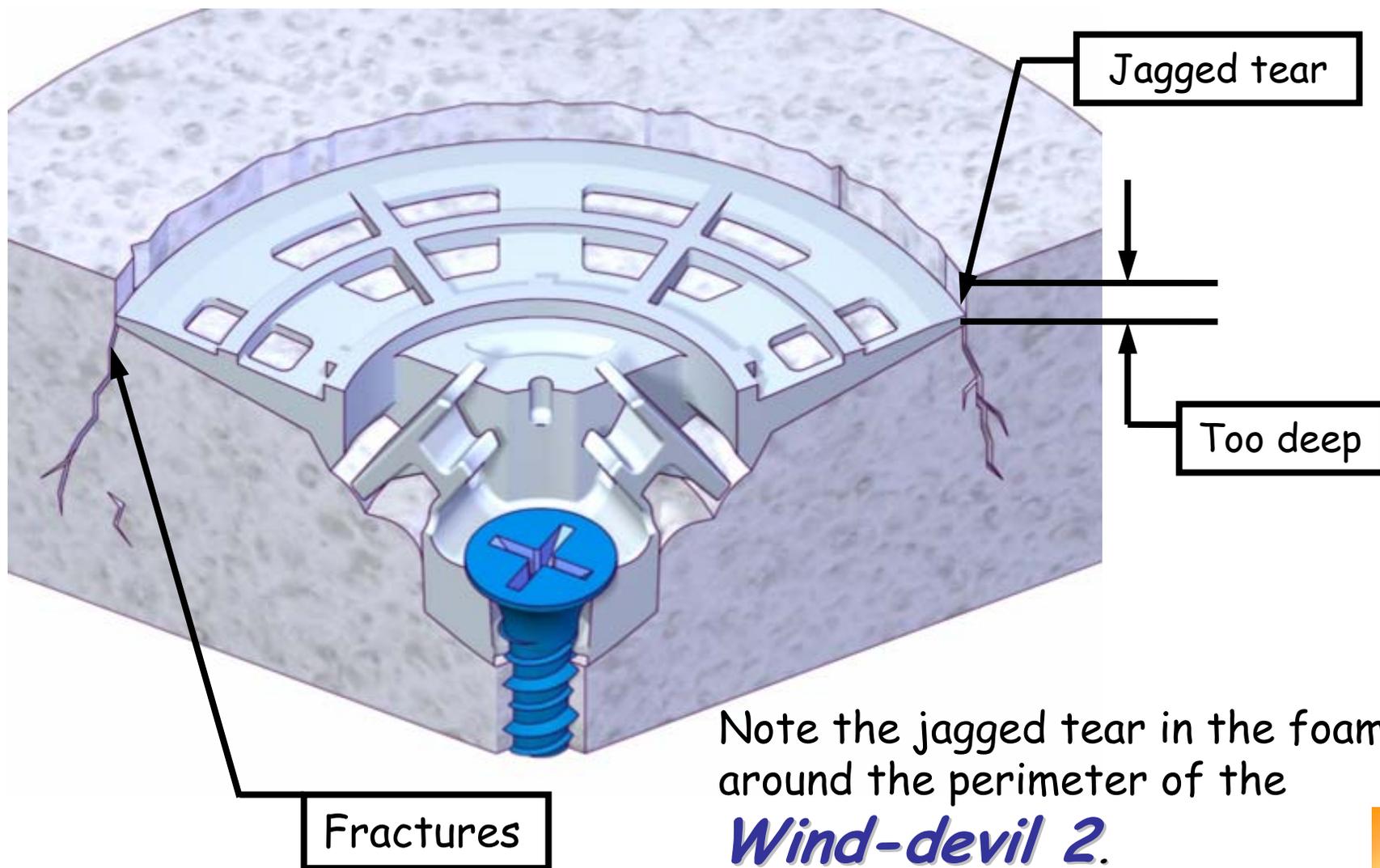
# Wind-Devil 2™

*Proper depth:*



# Wind-Devil 2™

*Proper depth:*





# Wind-Devil 2™

- Comprehensive witnessed testing!
- Over 20 years of proven performance!
- Significant negative wind-load resistance!
- EIFS manufacturers and industry approved!
- Recessed thermal chamber prevents thermal bridging!
- Patented closure arms allows for easy “backing” out!
- All weather application from -20° F to + 120° F!
- Unlimited shelf life and freeze thaw stable!
- *Wind-Devil 2* are light weight and are easy carry to the top of any scaffold!
- *Wind-Devil 2*'s saves a day of labor. Apply the base coat and mesh on the same day!
- 1 Box of *Wind-Devil 2*'s covers 1000 square feet of wall surface per box and weighs less than 20 lbs!
- Perfect for overhead applications like soffits, no waiting for adhesives to set. Fabric and base coat can be applied before you have to move the scaffold!