

DuPont™ RainVent™ Batten

A Durable, Waterproof Alternative to Wood Furring Strips

Description

DuPont™ RainVent™ Batten furring strips are made for durable performance and compatibility with DuPont™ Tyvek® WRBs, as well as other water-resistive barriers (WRBs). The unique ventilated design of DuPont™ RainVent™ Batten furring strips helps prevent water damage and mold behind typical residential claddings, such as siding, stucco, adhered masonry, and other exteriors.

When installed over a WRB, **DuPont™ RainVent™ Batten** furring strips create an intentional ventilated airspace between the cladding and the sheathing to improve drying and help reduce the chances of moisture damage and mold.

How It Works

In typical wood-framed wall construction, a WRB is installed over sheathing. **DuPont™ RainVent™ Batten** furring strips are then installed over the DuPont™ Tyvek® WRB. Polypropylene construction makes them more durable and less susceptible to water damage than wood furring strips.

The ventilated air space created between exterior cladding and wall sheathing allows air circulation vertically and horizontally to help ventilate the air space to enhance drying and form a capillary break from sheathing.

Features and Benefits

DuPont™ RainVent™ Batten furring strips offer many advantages, including:

- Allows air circulation behind wood, stucco, or adhered masonry, vinyl, panel siding, and fiber cement cladding types
- Provides a vertically and horizontally ventilated cavity to enhance drying and a capillary break from sheathing
- Moisture dissipates quickly, helping preserve wall sheathing and framing
- Can reduce risk of mold growth and water damage
- Polypropylene construction ensures more durability and less susceptibility to water damage than wood furring strips
- Light-weight and easy to install
- · Helps reduce degradation of exterior cladding
- Eliminates the use of furring strips made with pressure-treated material
- Stapled installation means no more expensive stainless-steel fasteners
- Meets or exceeds applicable US Building Codes, National Building Code of Canada capillary break requirement for high moisture index, and Oregon Residential Specialty Code

TESTING - 3-COAT STUCCO WALL SYSTEM

TABLE 1: Negative Wind Pressure

Negative Wind Pressure						
			Allowable Wind Velocity (MPH)			
Configuration	Ultimate Pressure (PSF)	Allowable Pressure (PSF)	Exp. B	Exp. C		
Stucco	177	44.3	136	120		

TABLE 2: Gravity Loads

	Gravity Loads	
Configuration	Ultimate Pressure (PSF)	Allowable Gravity Load (psf)
WSA	2500	44.3

TABLE 3: Siding Wall System

Wall System A (WS-A) – System with staples and without continuous exterior insulation Wall System B (WS-B) – System with nails and with continuous exterior insulation

Negative Wind Pressure					
		Allowable Wind Velocity (MPH)			
Configuration	Ultimate Pressure (PSF)	Allowable Pressure (PSF)	Exp. B	Exp. C	
WS-A	163	52.23	147	130	
WS-B	198	63.4	162	143	

Configuration	Ultimate Pressure (PSF)	Allowable Gravity Load (psf)	
		Lbs/wood plank	psf
WS-A	163	147	130
WS-B	198	162	143

Applications

- The polypropylene construction makes a durable alternative to the wood furring strip that is widely used in today's industry
- In a typical wood framed wall construction, a water-resistive barrier (WRB) is installed over sheathing and the window is installed and flashed at the sheathing interface
- Ventilation behind the cladding is enhanced by DuPont™
 RainVent™ Batten furring strips which are installed over the DuPont™ Tyvek® WRB
- For optimal drying performance, ventilation opening should be included at the top and bottom of the wall to allow airflow

See complete installation guidelines found on building.dupont.com.

Shelf Life and Storage

- When stored between 32°F and 100°F, DuPont™ RainVent™
 Batten furring strips have a shelf life of 180 days
- While palletized until use, cover to protect from the elements to preserve the integrity of the product

Approvals and Specifications

DuPont™ **RainVent**™ **Batten** furring strips meet the requirements of these industry specifications and standards.

- Compliant with Oregon Residential Specialty Code R703.1
- Meets National Building Code of Canada capillary break requirements for high moisture index
- Meets or exceeds applicable US Building Codes

Packaging

- **DuPont**[™] **RainVent**[™] **Batten** furring strips come in convenient 40-piece bundles, (320 lf) weighing 17.76 lbs
- Each bundle size is 4" x 6.5"x 8'
- 77 bundles per pallet
- Pallets are wrapped in plastic during transport
- Pallet weight is 1,367 lbs net wt, gross weight 1,460 lbs

Specifications

- 3/8" thick x 1-5/8" wide x 8' long
- 10 mm polypropylene fluted construction
- Cuts easily with a utility knife or scissors

Limitations

Should **not** be used as:

- Roof batten
- Structural support or cladding
- Not approved for use with steel framed commercial structures



DuPont™ RainVent™ Batten

To improve the ventilation and draining space behind a cladding system or 3-coat stucco system in residential construction

SYSTEM OVERVIEW

The **DuPont**™ **RainVent**™ **Batten** is intended for use on stud walls with studs spaced at 16" or less and OSB or plywood sheathing.

Battens:

The **DuPont™ RainVent™ Batten** is a polypropylene corrugated batten product with flow through ventilation channels installed between the control layer and the siding/stucco system. The battens are 3/8" thick, 1-5/8" wide and 8' long.

Wall Preparation:

For proper installation of DuPont[™] Tyvek[®] Water-Resistive Barriers (WRBs) refer to the applicable installation guidelines found on <u>building.dupont.com</u>.

Where DuPont™ Styrofoam™ Brand Extruded Polystyrene Insulation or other exterior continuous insulation is provided on the exterior face of the OSB/plywood sheathing, a maximum of 1″ thick code compliant insulation board shall be used and it shall be installed in accordance with the manufacturers recommendations. It is recommended to use DuPont™ Tyvek® DrainWrap® between foam and sheathing.

DuPont™ RainVent™ Batten Installation:

Installations over 1/2" OSB or plywood intended for wood or cement cladding (Diagram 1)

 Place the battens over Tyvek® WRB at 16" on center and align with the wall studs. Secure DuPont™ RainVent™ Batten furring strips in place with 1" crown, 1-1/4" long staples at 16" on center or other approved fasteners capable of penetrating the studs by 1/2".

Installations over 1" insulation intended for wood or cement cladding (Diagram 2)

 Place DuPont[™] Tyvek[®] DrainWrap[™] between sheathing and foam. Place battens on foam, and install siding. Installations over 1" insulation intended for stucco (Diagram 3)

- Place the DuPont™ RainVent™ Battens over Tyvek® WRB at 8" on center with every other batten aligned with the wall studs.
 Secure battens in place with 2" x 0.120" shank diameter galvanized roofing nails at 16" on center.
- Install a layer of DuPont™ Tyvek® HomeWrap® over the DuPont™
 RainVent™ Battens and secure with staples or other approved
 fasteners. (This will prevent the scratch coat from blocking the
 drainage space created by the battens. It is not critical to
 secure the cover sheet to the sheathing aggressively as the
 lath will be secured through all layers to the sheathing).

Siding Installation:

Wood or cement cladding (Diagram 1 and 2)

Wood siding or cement cladding shall be installed in accordance with the manufacturer's recommendations.

Note – Engineered values are based on 8" wide HardiePlank™ lap siding (ESR-2290) with 8d nails used for systems without insulation and 16d nails used for systems with insulation. All nails were installed using predrilled holes in the siding. Nails were installed at the "overlap" and spaced at 16" on center horizontally.

Stucco Siding (Diagram 3)

Prior to installation of stucco, a self furred expanded metal lath (2.5 lbs/yd) shall be attached to the studs using 3" long x 0.120" shank diameter galvanized roofing nails (head diameter of 0.4") at 6" on center.

3-coat stucco system shall be installed in accordance with manufacturer's recommendations and the requirements of ASTM C-926.

Note – Engineered values are based on a system consisting of 3 parts sand to 1 part cement and a water to cement ratio of 0.3.

Windows and Trim

- Secure additional **DuPont**[™] **RainVent**[™] **Batten** furring strips behind corner trim, and vertical window trim.
- Attach battens one inch away from window frame for air/water channel behind trim.
- Integrate an insect screen behind the horizontal window trim pieces by attaching a 6 inch wide strip of galvanized or fiberglass insect screen along both the top and bottom length of the window.
- Secure a length of a **DuPont**[™] **RainVent**[™] **Batten** over the insect screen one inch away from the window.
- Fold the insect screen up and over the batten and staple up.
- Trim windows and doors as specified by manufacturer.

Base of Wall

Integrate an insect screen, following manufacturer's instructions, to help prevent insects or wind-driven debris from entering the venting cavity.

- Snap a line 2-1/2 inches above the bottom edge of the siding and attach a 6 inch strip of galvanized or fiberglass insect screen.
- Secure a length of DuPont[™] RainVent[™] Batten to base of wall running horizontally, along the top of the line, over-laying the insect screen.
- Fold the insect screen up and over the entire base assembly and staple up.
- When applying lap siding, place a second DuPont™ RainVent™ Batten over the first.
- This second layer is a furring layer to give the siding proper slope for the bottom course.
- Siding should overlap the entire base assembly by 1/2".

Top of Wall

Integrate an insect screen, following manufacturer's instructions, to help prevent insects or wind-driven debris from entering the venting cavity.

Diagram 1: DuPont™ RainVent™ Batten with 1/2" OSB or Plywood

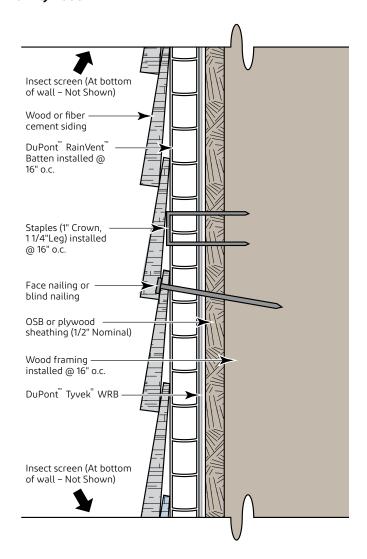


Diagram 2: DuPont™ RainVent™ Batten to 1/2" OSB or Plywood with Foam Sheathing

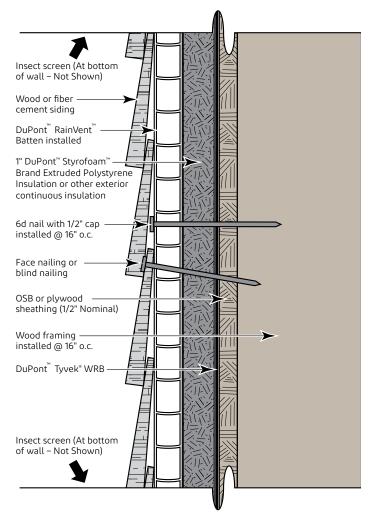


Diagram 3: DuPont™ RainVent™ Batten to 1/2" OSB or Plywood with Foam Sheathing and 3-Coat Stucco System

