

Self-compensating



Performance at the reality level

Z-Articulating Cap Sill

The world is not square or true, level or plumb—but the Z-Series Articulating Cap Sill is. The self-compensating Z-AC counteracts variations in door assembly or installation to deliver a perfect seal.





STOP SCREW

The Z-AC can articulate up or down across the full length of the sill.

Creating and maintaining a consistent, w the sill is critical to door unit performance. In practice, this rarely happens. Z-Articula

When others fail, Z-AC works.

Tight margins demand rigor in the shop, and eliminate the flexibility needed for variations in door lengths and other factors. You can't control the rough opening, poor installation, lack of adjustment or what happens over time. Tight doors, shredded door bottoms, leaks and drafts mean service calls. With Z-AC, no adjustment is needed, ever. Z-AC delivers a perfect seal, smooth door operation and high performance—no matter what.

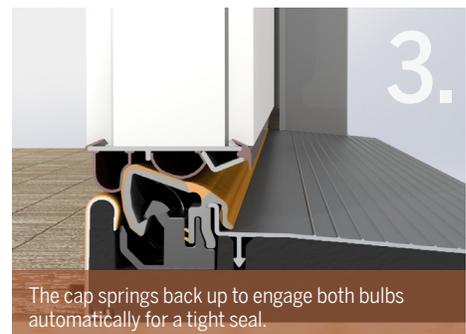
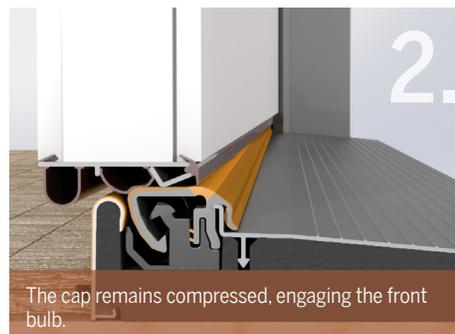
Forget about zero tolerance.

Until now, eliminating air and water infiltration meant building tight doors with exacting margins. But you don't have to be haunted by unforgiving specs anymore. No more torn-off door bottoms from tight margins. No more leaks or drafts from loose margins. No more callbacks. The Z-AC compensates automatically for a range of margins. Build doors that open and close easily yet still deliver a tight seal—that's the beauty of self-compensation.

Installation that's forgiving.

You're not in charge of the job site—whether the subsurface is level or the door is plumb and square. Sills must be properly adjusted to ensure a tight weather seal and smooth door operation. But practically speaking, who adjusts the sill? That's where the Z-AC comes in. It self-compensates up to +/- 1/8" —up or down—independently across the full length of the cap. The Z-AC adjusts perfectly to create a consistent working seal in any condition.

The Z-Articulating System



ING AROUND.

Working seal between the door bottom and frame. Precise adjustment of the sill is required. Z-Articulating Cap Sill. **No adjustment required. Ever.**

Keeps working over time.

It's a fact. Perfection doesn't last long, even with a perfectly installed door. Over time, houses settle, doors sag and door bottoms tear—all of which result in problems with door operation, performance and—worst of all—a callback. Not with the Z-AC. It automatically compensates as conditions change, so the door operates smoothly and a tight weather seal is maintained. That's one phone call you won't mind missing.

Modularity to infinity.

With its unique modular construction, the Z-Series sill offers limitless ability to fit almost any application. The newest addition to the Z-Series product line, the Z-Articulating Cap works with any Z-Series platform, including your current Z-Series inventory and installed product. You get the protection, performance and modularity of the Z-Series platform, plus new performance and upgrade opportunities from the Z-AC.

Solve problems with a retrofit.

Modular doesn't just mean convenient. If you've got a seal problem on any installed Z-series adjustable sill, fix it with Z-AC. Solve major headaches in the field and head off problems before they start. Retrofitting a Z-AC is simple and easy. Just replace the existing Z-series cap and door bottom with the Z-AC and Z-AC door bottom. Add a Tight Margin™ Base Plug for even more forgiveness. Make sales calls instead of service calls.

Inside the Z-Articulating System

Z-AC Dual Bulb Door Bottom

Specifically profiled to mate with the Z-AC. The rigid leading edge [a] initiates articulation of the cap when the door is closed. The flexible bulbs [b] and [c] collapse against the cap, creating a protective thermal barrier when the door is fully closed and providing a lasting, consistent seal across the length of the sill.

Z-Articulating Cap

A tri-extrusion process combines an integral spring with a durable PVC base and a long-lasting cap finish, resulting in a cap that moves up and down across its entire length. The Z-AC automatically compensates for variations in margins up or down, with an overall travel range of ¼".

Elastomeric Spring

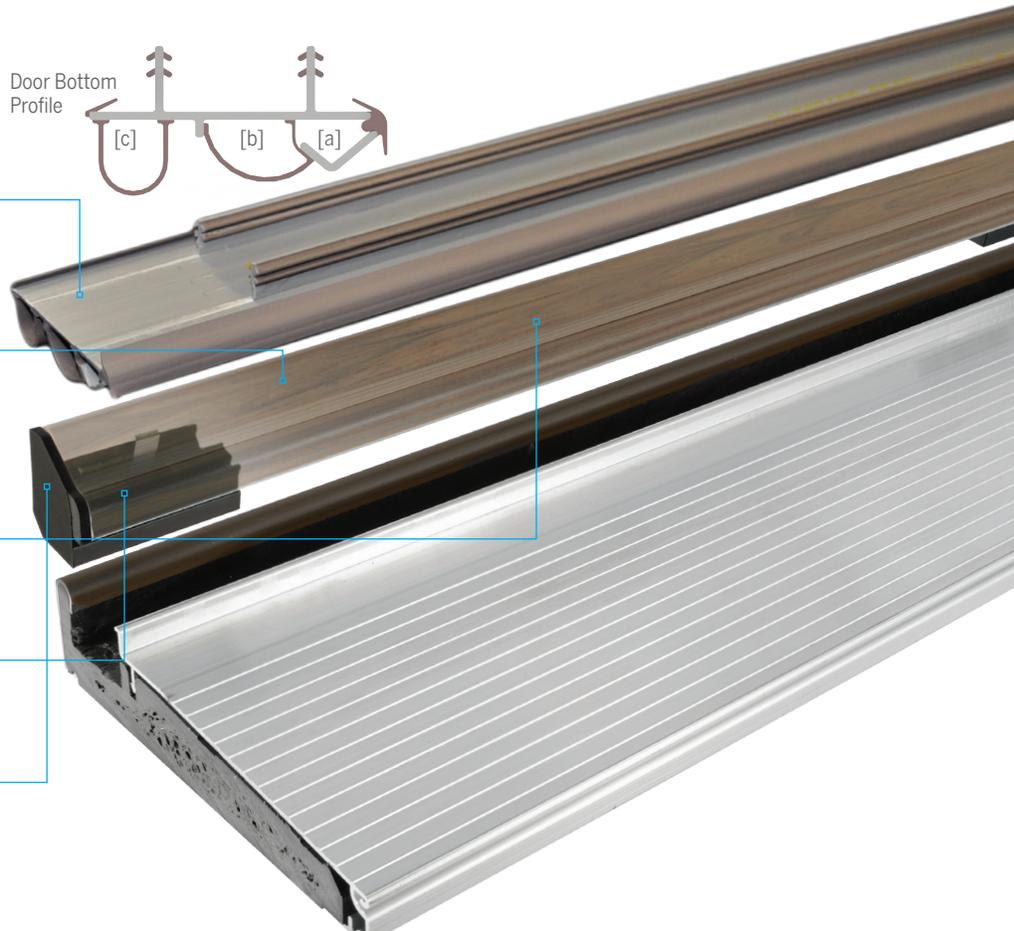
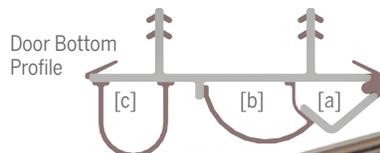
Integral elastomeric spring provides a consistent spring load that compensates for variances in compression/margin along the length of the sill.

Base Plug

4 base plugs maintain a consistent range of travel for the cap, providing consistent and long lasting loading of the cap through an integrated leaf-spring.

End Seal

Sealing against both the cap face and the frame, the Z-AC end seal maintains a proper seal through the articulating cap's entire range of travel.



SILL CROWNED IN CENTER

performance at the reality level

[UNDER-COMPRESSION]

[OVER-COMPRESSION]

[UNDER-COMPRESSION]



STANDARD ADJUSTABLE SILL



Z-ARTICULATING CAP SILL



Over compression. Under compression.
Z-AC still works.

Z-AC does things no adjustable sill can to deliver real performance at the reality level. Adjustable sills are great as long as they are adjusted. But, who is going to adjust them? The installer? The homeowner? Not likely. That leaves you. On a service call. What if they need to be adjusted down? Adjustable Sills can only be adjusted in one direction. With the Z-AC, those questions don't matter. The Z-AC is a spring-loaded problem solver. It automatically compensates for over-compression (cap lowers) or under-compression (cap raises). It works like independent suspension across the length of the sill to ensure even margins and smooth door operation. No torn door bottoms. No air infiltration or water leaks. No service calls.

Build and sell a French door with confidence.

French doors present some of the greatest challenges with respect to initial installation and ongoing performance. Uneven sub-surfaces, door unit racking and failure to adjust the sill can compromise the operation of even the best built French door. Additional issues develop over the life of the door unit—the house settles, margins change and performance deteriorates.

The Z-AC recognizes and solves these problems. Unique to Z-AC, French door sills feature independently-operating articulating caps for each door panel, with an Astragal Bolt Receiver positioned between the caps. As a result, the two Z- Articulating Caps conform to irregularities across both individual panels and the length of the rough opening to deliver a continuous seal for the entire door unit. The bolt receiver seat works with any Endura Ultimate or Ultimate Multi-Point Astragal. The French doors you build work and keep working.



Astragal Bolt Receiver is available in structural and non-structural versions.



Retrofit a Z-AC—solve problems.

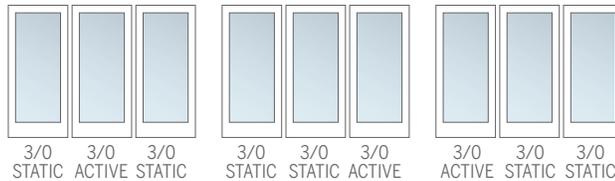
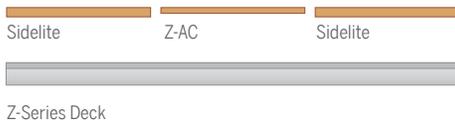
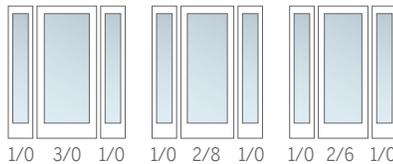
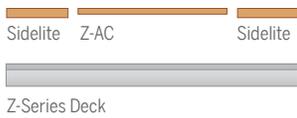
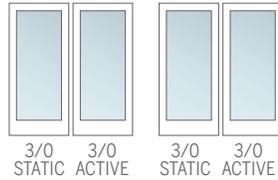
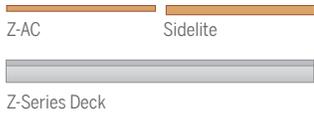
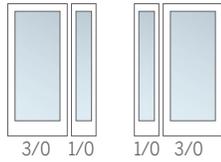


Problems in the field? Fix them. Retrofitting the Z-AC to any installed Z-Series inswing sill is simple. Remove the door and change out the existing door bottom for a Z-AC door bottom. Pop out the existing adjustable cap and replace it with the Z-AC. Self-compensation means no more torn bottoms or leaks. Problem solved.

Poor margins are just opportunities.

When the house settles, margins can become uneven or worse. Z-AC delivers margin correction up to 9/16"—or even 11/16" if a 9/16" Z-AC door bottom is used. Even if the door sags, the Tight Margin™ Base Plug allows the Z-AC to work properly by limiting the spring return on the cap. Tight Margin Base Plugs work on issues where the bottom margin is as tight as 3/16".

Any door system up to 12' can be built using modular Z-Series Sills. Start with the Z-Series Platform.



Modularity for your door system. Z-Series.

Upgrade to the problem-solving, margin-correcting, self-compensating Z-Articulating Cap Sill by adding the Z-AC and Z-AC Door Bottom to your existing Z-Series inventory. By taking advantage of Z-Series modular design, you can exchange any Z-series adjustable inswing cap for a Z-AC.

Using one continuous sill, you can reposition the active and sidelite caps to create a wide variety of door unit configurations for almost any application. That means you can hold your inventory count down, but deliver a sill for just about every conceivable application upgraded to the Z-AC.

Z-Series Sills

Z-Lineal Sill

The classic version of a full continuous extruded substrate for ultimate flexibility and custom fabrication. Length up to 12'-10". Sidelite up to 18" or 36" for full panels.

Z-Plus Sill

A full wide substrate for a full caulking surface and thermal breaks. Length up to 9'-0", subject to availability. Sidelite up to 14".

Z-Full Narrow (FN)

Featuring a cost-effective full narrow substrate with full support, aesthetic decorative nosing and a wide range of sizes for a uniform look in all entries. Length up to 6'-0". Sidelite up to 14".

Z-Full Exposed Nose (FEN)

With an extruded cap and integral nosing, the FEN offers the ultimate cost-effective solution and still provides a full caulking surface. Length up to 3'-0".



performance
+15%



Z-AC. Results.

Self-compensating is important only if it stops infiltration of wind and water. There is only one way to know for sure. Continuous testing and innovation enable Endura to deliver proven results. That's performance standard.

In the Lab

Comprehensive Independently Certified Testing has shown that the Design Pressure (DP) ratings of door units that utilize the Z-AC are improved by an average of 20% over systems which use standard sills, sometimes even doubling the DP rating depending on the panel and other components. Furthermore, testing of typically problematic French door applications revealed improved results by up to 15%. All French door systems tested in conjunction with the Endura Ultimate Multi-Point Astragal achieved a rating of DP40 or higher.

In the Field

Perfect conditions for performance? They don't exist in actual field installations. But unlike typical sill systems, Z-AC doesn't depend on sill adjustments and "tweaking" to perform in properly installed units. That's results!

Single Door, Standard Lock and Deadbolt					DP Rating (Water)		
Manufacturer	Panel Type	Glass	Config	Height	Z-AC	Z-Adjustable	
Masonite	Fiberglass	Flush	X	8/0	35	35	
			XX	6/8	30	25	
	Fiberglass	Insert	X	8/0	35	30	
			XX	6/8	40	15	
	Steel, Steel Edge	Insert	XX	6/8	35	30	
				8/0	25	25	
	Steel, Wood Edge	Insert	XX	6/8	30	30	
PlastPro	Fiberglass	Flush	X	6/8	50	30	
			XX	6/8	30	25	
	Fiberglass	Insert	XX	6/8	25	20	
				8/0	20	20	
ThermaTru	Fiberglass	Flush	X	6/8	45	35	
			X	8/0	30	30	
		XX	6/8	30	25		
French Doors with Ultimate Multi-Point Astragal							
Masonite	Fiberglass	Insert	XX	6/8	45	35	
				8/0	40	35	
			Flush	XX	6/8	45	40
					8/0	40	35
PlastPro	Fiberglass	Insert	XX	6/8	40	40	
				8/0	45	35	
			Flush	XX	6/8	40	40
					8/0	40	35
ThermaTru	Fiberglass	Flush	XX	6/8	45	40	
				8/0	50	40	

PRODUCT OFFERING AND AVAILABILITY

Availability

Z-AC sill solutions are available for single, French, sidelite and hinged patio applications, and may also be used with existing Z-series sill inventory and retrofitted into previously-installed door units.

Note: Z-AC systems for French door applications are only compatible with Endura Ultimate Astragals (MPA, Flip Lever, Ultimate or Lite).

Size	FEN Platform	FN Platform	Z Plus Platform	Z Lineal Platform
3 11/16"		●		
3 3/4"				●
4 9/16"	●	●	●	●
5 5/8"	●	●	●	●
5 13/16"			●	●
7 13/16"	●	●	●	●

Z-AC Kits and Accessories

Door Bottoms

Cartons of 10 or 25 each. 2'-6" or 3'-0" Long
 Kerfed 7/16" & 9/16" reach
 Staple On 7/16" reach

Z-AC Field Replacement Kits

Packages of 1 or 10

+ Single Door Replacement Kit

(1) 3/0 cap, (1) Kerfed and (1) Staple-On Door Bottom, (1) Standard Right End Base (loose), (1) each Tight Base and Simple Solution® Corner Pads

+ French Door Replacement Kit:

(2) 3/0 Caps, (2) Kerfed and (2) Staple-On Door Bottoms, (2) Standard Center End Bases, (2) each Tight Base and Simple Solution® Corner Pads, Astragal Bolt Receiver (Nylon non-structural or Zinc structural) and either a structural or non-structural screw

Z-AC Caps-and-Plugs Package

Package of 10

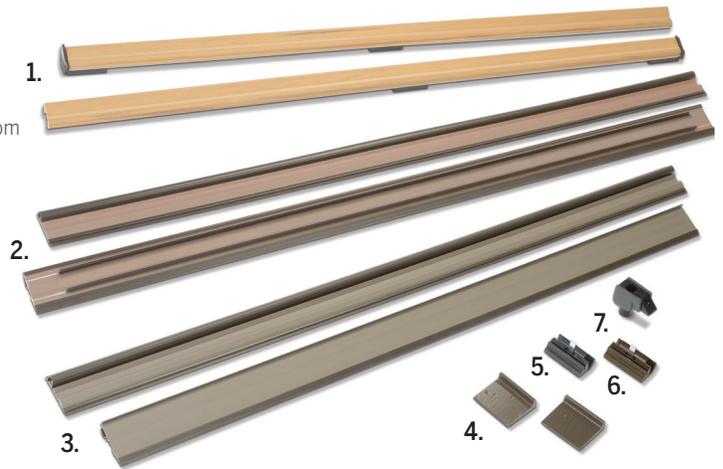
- + Loose 3/0 Articulating Caps without Right Base
- + Loose Right Base End Plugs

Z-AC End Plugs and Receivers

Package of 10

- + Standard Left, Center, or Right Bases
- + Tight Left, Center or Right Bases
- + Nylon or Zinc Bolt Receivers

1. Z-Articulating Cap
2. Kerfed Door Bottom
3. Staple-On Door Bottom
4. Simple Solution Corner Pad
5. Standard Base
6. Tight Base
7. Bolt Receiver



Z-AC Sill Covers

Packages of 10 or 25 Sill Covers
 Available for 4-9/16", 5-5/8", 7-13/16" sills



8817 W. Market St., Colfax, NC 27235
1.800.334.2006 www.enduraproducts.com

U.S. Patents: 6,789,368; 7,350,336; 8,522,483; D638,958; D139,250 and U.S. Patents Pending

The information contained in this document is the confidential and proprietary information and trade secrets of Endura Products, Inc. Any disclosure, use or dissemination of such information without the express written permission of Endura Products, Inc. is strictly prohibited. Endura Products, Inc. also owns any and all intellectual property rights embodied in such information, including patent rights, copyrights, and trademark rights, and no license of any intellectual property right is intended, nor should any license be implied, as a result of the receipt of this document.