



Guide to Selecting Sealing Solutions

Choosing sealing products is an essential part of designing a door opening that maintains its performance, safety and aesthetic integrity over time. This brief guide highlights key information to gather and discuss with your Allegion architectural services consultant, who can help translate operational needs into compliant, functional openings.

1. Codes and Standards

Before selecting door sealing products, it's important to determine which codes, standards and sustainability goals apply to the opening. It is crucial to review this at an assembly level, since sealing products can impact many things, including fire door compliance, sound, smoke control, threshold height, accessibility, door operation and building certification requirements (such as Leadership in Energy and Environmental Design [LEED]).



Quick Survey

- Determine whether the opening is part of a fire-rated or smoke-labeled assembly.
- Confirm whether the project requires products that support smoke and draft control requirements.
- Review accessibility and operational considerations (ADA, etc.), especially where thresholds and seals may affect maneuverability, opening force, or the latching force required to securely close and latch the door.
- Sustainability: Does the project require environmental product declarations (EPDs) or other reporting to meet LEED or other green building standards?
- Verify that selected products are appropriate for the full opening assembly, not just the individual component.

2. Performance Goals

Sealing solutions can support a range of performance goals depending on the needs of the opening. Some are selected to help limit smoke or draft transfer, others to mitigate sound leakage, improve comfort or reduce the movement of air, light, dust and weather through the opening. Privacy protection may also guide selection relative to sound and light reduction. Because one opening may need to address several of these conditions at once, it is important to define the desired performance early so the right combination of sealing products can be considered.



Quick Survey

- What is the main performance goal for the opening: smoke and draft control, sound reduction, weather protection or general air and light sealing?
- If sound control is a factor, is there a required or target sound transmission class (STC) for the opening?
- Is the opening expected to address one performance need or several at the same time?
- Is occupant comfort or reduction of air movement a priority for this opening?
- Is the opening located where sound, smoke, light or draft transfer would be especially noticeable or disruptive to building function?



3. Type of Opening

Sealing solutions are selected based on the opening configuration and the part of the opening that needs to be sealed. Perimeter gasketing is used at the head and jambs, door bottoms, sweeps, shoes and automatic door bottoms are used at the bottom of the door, thresholds are used at the floor to provide a sealing surface and transition, and astragals or meeting stile seals are used between leaves on pairs of doors. Understanding the door type and where sealing is needed helps identify which product categories should be considered.



Quick Survey

- Is the opening a single door or a pair of doors?
- For pairs: Are they same-swing or double-egress?
- What are the door and frame made of, such as wood, hollow metal, aluminum or glass?
- What is the frame stop type (such as integral stop, applied stop, double rabbet or terminated stop) and how much flat, usable space is available on the frame stop or rabbet to mount the seal housing?
- Where does the opening need to be sealed: at the head and jambs, bottom of the door, floor, between meeting stiles or a combination of these?

4. Opening Conditions

Usage and environmental conditions should help guide sealing product selection. Some openings need products built for frequent operation, abuse or changing conditions, while others only require sealing for routine interior use. Zero® offers options for different service levels, including Zero Preferred™ for high-use or high-abuse openings and Zero Everyday™ for light- to medium-duty applications. Understanding these factors helps determine the right level of durability for the opening.



Quick Survey

- Will the opening experience light, medium or heavy daily use?
- Is the opening likely to be subject to abuse, impact, or frequent contact (e.g., carts or heavy equipment)?
- Is the opening in a controlled interior setting, or will it face any corrosive environments (moisture or chemicals)?
- Temperature and UV: Will the gasket face extreme UV or sub-zero temperatures? Is a light- to medium-duty solution sufficient, or is a higher-durability option needed?



Zero Preferred



Zero Everyday

5. Installation and Retrofit

Assessing the installation and retrofit condition of an opening is important because field conditions often determine which sealing products can be used and how well they will perform. Existing doors and frames may have limited clearances, uneven surfaces, worn components, or other constraints that affect whether a seal can be surface mounted, mortised, adjusted, or paired with other products. Considerations for accompanying hardware, such as clearance for closers, exit devices, strikes, flushbolts, coordinators and levers are also important to incorporate into product selection. Reviewing these conditions early helps avoid conflicts during installation and supports a better fit between the sealing solution and the opening.



Quick Survey

- Is this a new opening or a retrofit to an existing door and frame?
- Are there existing conditions, such as limited clearances or uneven surfaces, that could affect installation?
- Can the opening accommodate surface-applied products, or does it require a more integrated solution (i.e., full-mortise or semi-mortise)?
- Will field adjustment be needed to account for tolerances or wear?

6. Material Properties and Aesthetic Considerations

Zero sealing solutions are available in a range of materials to suit different opening conditions, including gasket inserts such as silicone, synthetic rubber blend and brush, as well as metal components in aluminum, bronze and stainless steel. Material selection affects how the seal performs over time, including its flexibility, wear resistance, suitability for interior or exterior use and overall appearance. When choosing a material, it is important to consider the opening environment, expected level of use, desired durability and any finish or aesthetic preferences so the sealing solution is appropriate for both function and design. This may also include the mounting method of perimeter seals or automatic door bottoms. There are also perimeter seal solutions available which include a snap-on cover which hides mounting screws from view and provides a cleaner, tamper-resistant finish.



Quick Survey

- What type of material is best suited to the opening conditions: silicone, synthetic rubber blend, brush or another option?
- Will the opening require a metal component in aluminum, bronze or stainless steel?
- Is long-term durability or wear resistance a major consideration?
- Does the project require a specific finish or appearance for exposed sealing products or mounting hardware?

Allegion's security consultants are available to partner with you to discuss and review your unique needs and simplify the customization of solutions for you with consultative services every step of the way from planning to specification, installation and beyond.