



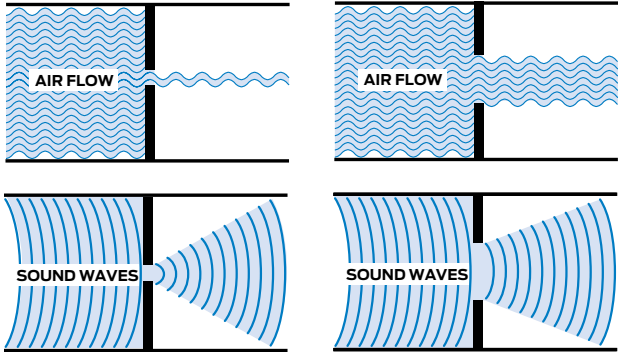
Sound control solutions

ZERO's SOUND TRAP sound control systems are solving sound problems in all types of facilities—including performing arts centers, recording studios, commercial offices, hospitals, schools, churches, hotels and apartment buildings, as well as industrial plants, embassies and government buildings.

Adjustable gasketing: key to our success

Nobody does sound control better than ZERO. Our sound seals and systems are built to withstand the stress of the installation process and perform reliably. We use advanced technology to master two critical challenges: creating an effective sound barrier at the perimeter of the door AND preventing gaps in that barrier for the life of the assembly.

Gaps in sound barriers are a major problem because sound travels through any opening with very little loss. While the amount of air flowing through a gap increases in proportion with the size of the gap, the size of the gap in a sound barrier does not matter. A small hole transmits almost as much sound as a much larger gap.



Because of this phenomenon, any unsealed gaps effectively cancel out the noise reduction benefits of even the highest-rated sound doors. To be effective, acoustical door assemblies require gasketing that provides a **complete, uninterrupted and air-tight** seal around head, jamb and sill. If all sides of the door are not sealed, the gasketing used will provide little or no sound-control value.

Imperfect alignment is a common cause of gaps even in newly installed gasketing. Problems can also surface later on as buildings shift and settle and doors cycle through changes in temperature and humidity. ZERO solves the problem efficiently with adjustable gasketing.

Models such as the **770 adjustable jamb-applied gasket** are designed to perform consistently over time. When clearances increase, a few turns of a screwdriver is all it takes to restore a sound-tight seal.

Proven solutions for sealing the gaps

Our featured SOUND TRAP gasketing systems can satisfy a wide range of commercial and industrial sound-control applications for single swinging doors – as well as provide privacy behind double doors for typical office applications.

Sound transmission class (STC) table

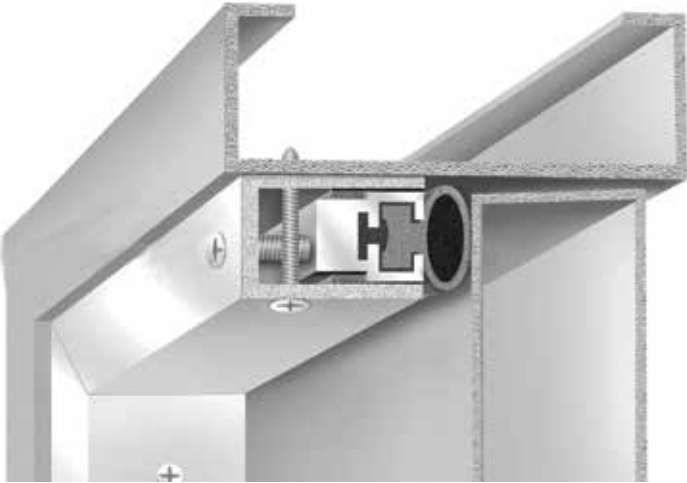
STC	Performance	Description
50 - 60	Excellent	Loud sounds heard faintly or not at all.
40 - 50	Very Good	Loud speech heard faintly but not understood.
35 - 40	Good	Loud speech heard but hardly intelligible.
30 - 35	Fair	Loud speech understood fairly well.
25 - 30	Poor	Normal speech understood easily and distinctly.
20 - 25	Very Poor	Low speech audible.

Sound Transmission Class (STC) ratings indicate the ability to prevent the transfer of sound from one area to another. For example, 12 inches of reinforced concrete would be rated at 56 STC, while 1/4" plate glass is 26 STC.

Zero sound trap systems high level rating

Gasketing system	Head & jamb	Threshold	Door bottom	STC Rating
STC 1	3708 & 119WB	564B	367	53 STC
STC 2	770 & 119WB	564B	367	52 STC
STC 3	770 & 119WB	656B	367	51 STC
STC 4	170 & 119WB	564B	367	51 STC
STC 5	485 & 119WB	565B	361	49 STC
STC 6	870 & 119WB	564B	365	49 STC

All systems tested with STC 55 Doors (rated as panels).

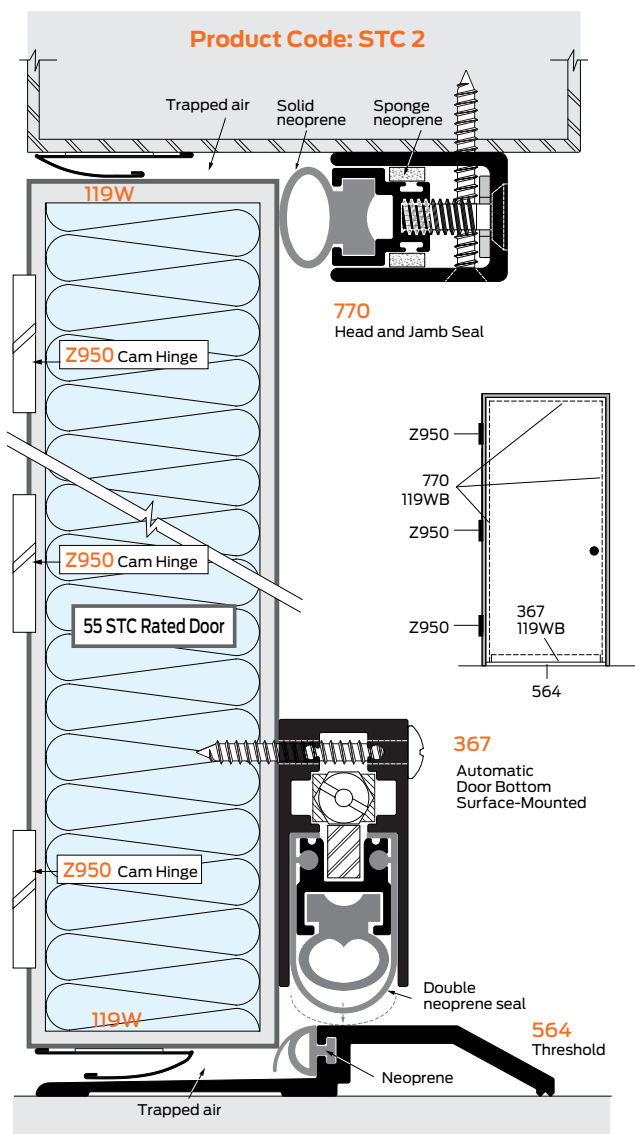


The integrity of the system, properly installed, is essential to its sound rating. ZERO guarantees the performance of SOUND TRAP systems in rated assemblies provided that other manufacturers' gasketing products are not combined with ZERO components.

Sound control solutions – single door

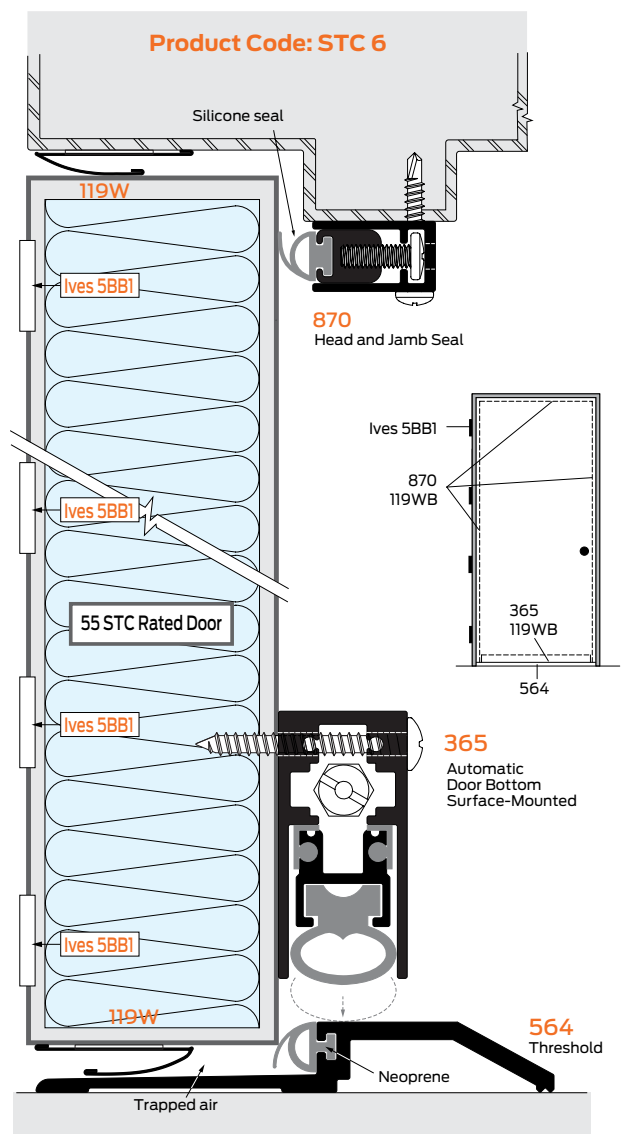
Sound trap 52 STC sealing system

Our SOUND TRAP 52 STC rated systems are designed for use with sound-rated single metal doors with a cased-opening frame. They provide an STC 52 rating when properly fitted with STC 55 or higher acoustical doors. That level of sound control means loud sounds will be heard only faintly, or not at all, on the opposite side of the door, which satisfies the typical needs of recording studios and performance halls. It is also suitable for office buildings and other commercial facilities that need to mute very loud noise originating from outside, such as the sound of aircraft overhead or heavy traffic nearby, as well as interior equipment noise. A metal frame **without a stop** is recommended in order to use the Model #770 adjustable head and jamb seal, which is an important component in this system.



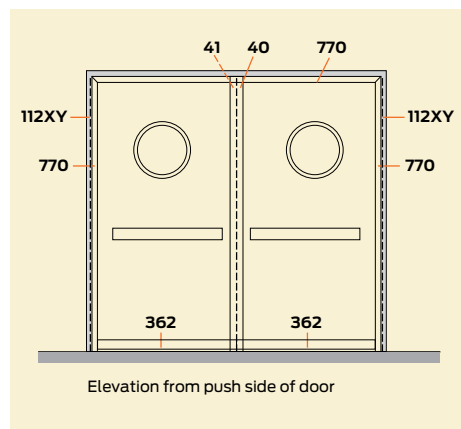
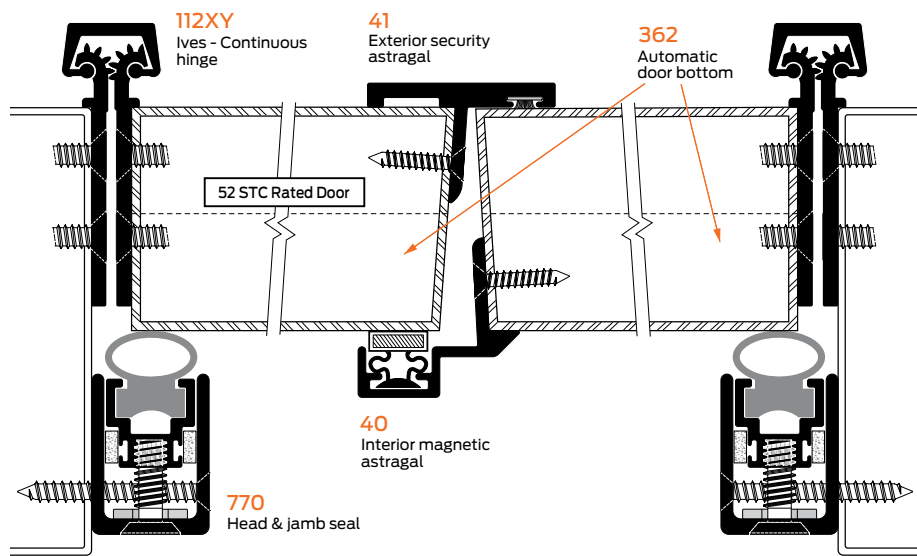
Sound trap 49 STC sealing system

SOUND TRAP 49 STC rated systems for single doors feature several alternative head and jamb seals designed for use with frame stops. The 49 STC value they provide means that loud speech will be heard only faintly and cannot be understood on the opposite side of the door. That level of acoustic performance provides very good sound control suitable for a variety of applications ranging from busy schools to multi-family residential buildings and any settings requiring private conversations, such as doctors' offices, counseling centers and churches. A metal frame **with a stop** is recommended.



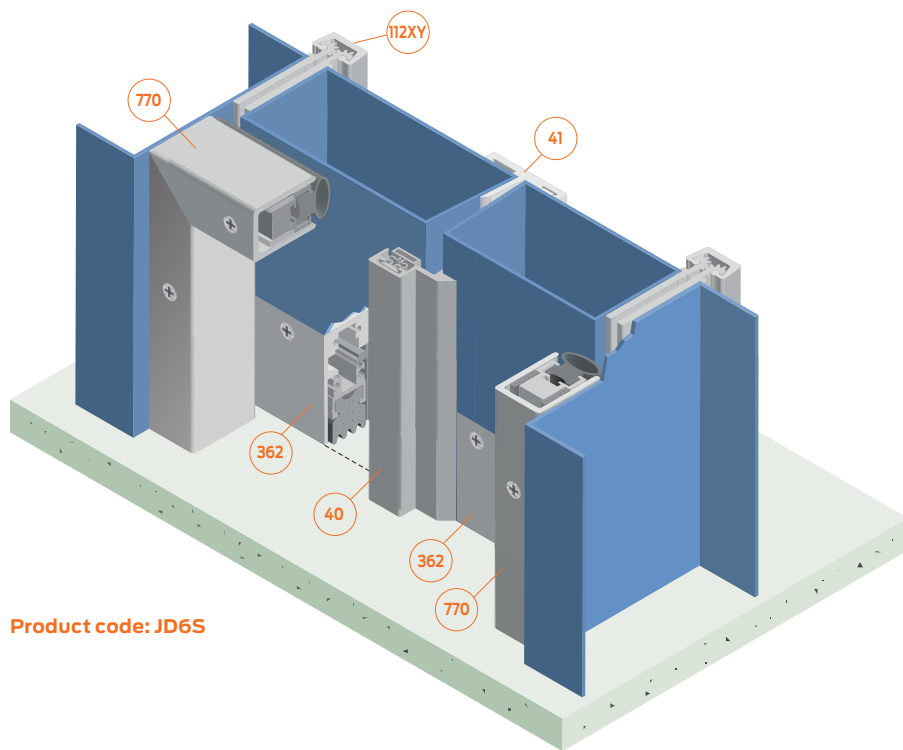


Sound control solutions - pairs systems



Sound trap system JD6S

Pairs of doors pose additional challenges for sound control because there are more openings to seal. The need for a meeting stile means there will always be relatively more sound leakage through pair assemblies than with single doors. Properly fitted with STC 52 or higher acoustical doors, ZERO's **SOUND TRAP-PAIRS** system for metal doors achieves an office-friendly estimated STC rating of 41 with an optimal configuration that balances those limitations with appropriate, cost-effective technology.



Product code: JD6S

Alternative seal option to 40/41

For a pairs configuration with suitable wood doors, you need Model #383 astragals for the meeting stile. #383 provides three sets of seals to block sound: the neoprene bulb with extra "lip" of neoprene in the primary seal at the meeting edge, plus another neoprene "finger" for added sound cushioning against the active door.

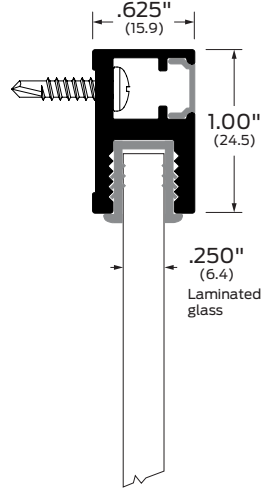
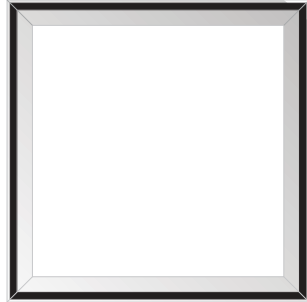


Sound control solutions

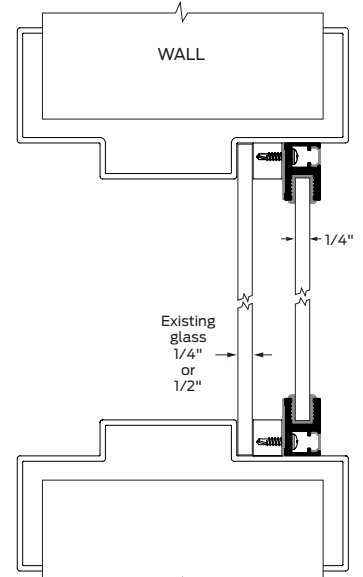
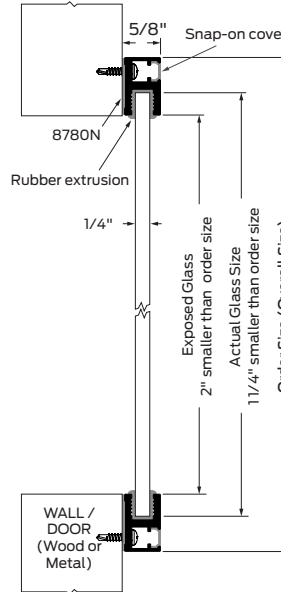
8880 - Vision Lite for doors, walls and acoustical windows

To increase sound rating for doors, walls and acoustical windows of any thickness. Used with 1/4" thick glass. (Glass sold separately.) Aluminum extrusion frame with concealed screws. Supplied with factory mitered corners.

8880



Finishes:
AA, BK, D, G



● APPLICATION ON DOOR
Surface mounted.

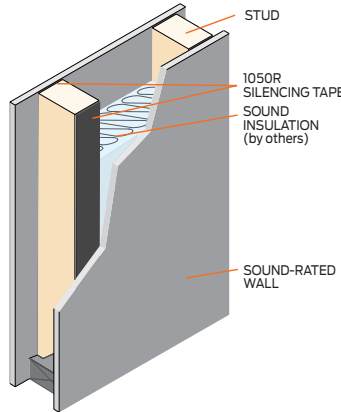
● APPLICATION ON WINDOW
Surface mounted on any edge of window frames.

Structural acoustics - floors and walls

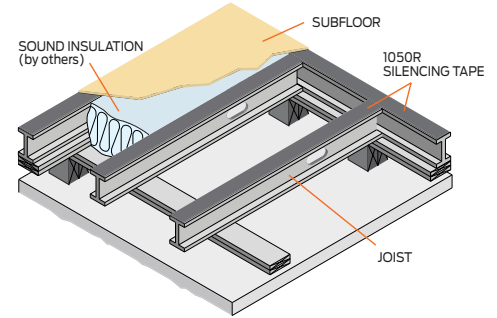
Sound-damping materials and products used to isolate or insulate structural elements in floors and walls perform a vital role in reducing vibrations to minimize sound transmission.

Structural silencing tape 1050R

- Extruded low-density, high-elasticity neoprene rubber, self-adhesive one side.
- Absorbs and dampens vibrations.
- Designed for application to floor joists and wall studs and install as usual.
- Supplied in 75-foot coils.

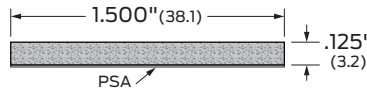


● APPLICATION ON WALL STUDS



● APPLICATION ON FLOOR JOISTS

1050R



Finishes:
Grey

Finishes:

- AA** Clear Anodized Aluminum
- BK** Black Anodized Aluminum
- D** Dark Bronze Anodized Aluminum
- G** Gold Anodized Aluminum

Sound control systems

ZERO has designed and tested its systems against air, light, smoke, fire and sound to demonstrate the effectiveness of these products and materials. By specifying a complete “Control System,” you are assured that the components installed for head, jamb and sill will perform properly together. All tests were performed in accordance with nationally accepted standards by independent laboratories.

Sound - single doors

System no.	Door rating	Type of door	Head & jamb	Door bottom	Threshold	STC
STC1	55	Metal	3708 + 119WB	367	564B	53
STC2	55	Metal	770 + 119WB	367	564B	52
STC3	55	Metal	770 + 119WB	367	656B	51
STC4	55	Metal	170 + 119WB	367	564B	51
STC5	55	Metal	485 + 119WB	361	565B	49
1T	52	Metal	770	367	564A	47
2T	52	Metal	870	361	565	44
2U	52	Metal	485	361	565	44
1R	51	Metal	770	361	565	44
4R	51	Metal	370	361	565	43
5S	52	Metal	328	361	565	42
5T	52	Metal	312	351	564	42
SU299	38	Wood	188S	None	564A	37
TR298	35	Wood	8144FS	253	1685R	35
LG302	36	Wood	188S	369	None	35

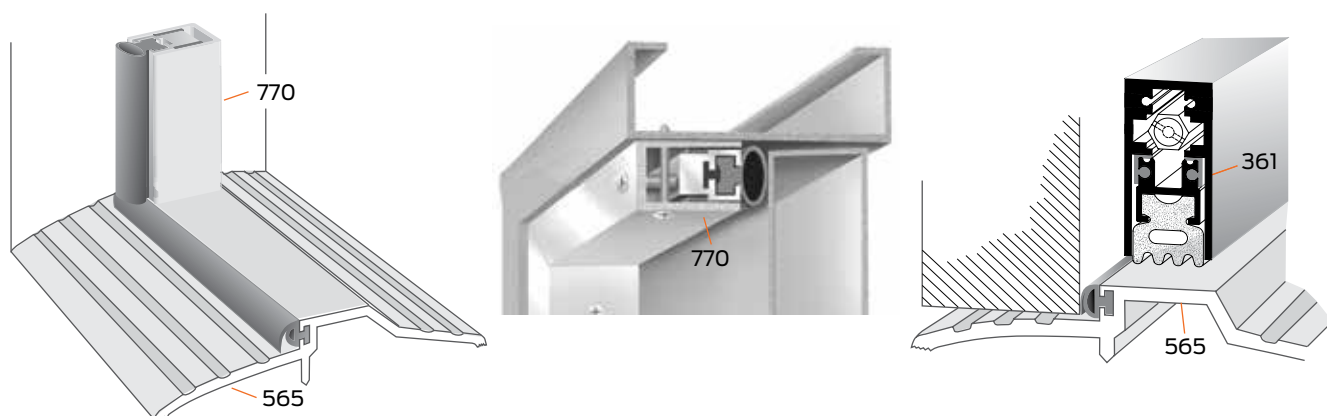
Sound - double doors

System no.	Door rating	Type of door	Head & jamb	Door bottom	Meeting stiles	STC
RM1	48	Metal	770	367	383/139/118B	47
JD6S		Metal	770	362	40	41
JD8S		Metal	475	362	156/56	36
AT4	37	Metal	188/119WB	564	383	36
AT5	37	Metal	485/119WB	564	383	35
AT7	37	Metal	485/119WB	839/544	383	35

Applications

All types of openings with a sound-reduction requirement, including:

- High-performance sound blocking, such as recording and broadcast studios, theaters and concert halls, commercial industrial factories.
- Privacy and security needs, such as doctors’ offices, corporate offices, school counseling offices, embassies and military.



System 1R