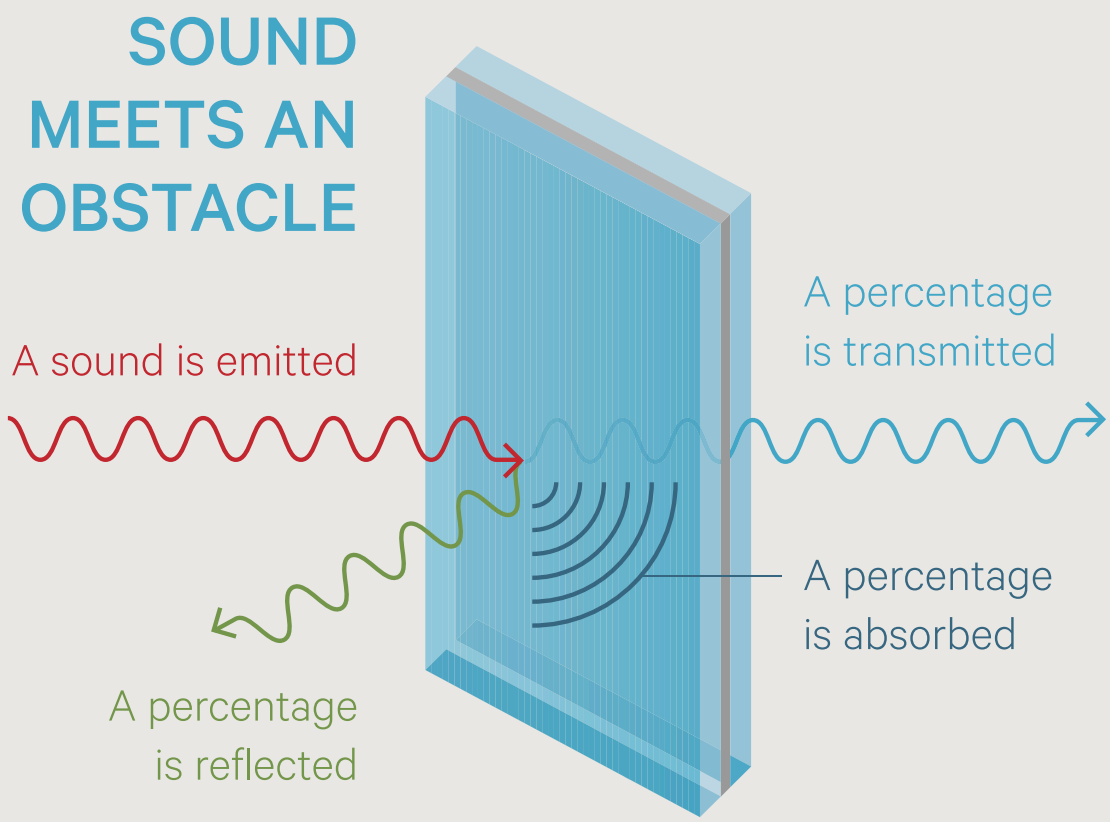
STC AND NANAWALL OPENING GLASS WALLS

NanaWall®
Engineering the Exceptional

WHAT IS STC?

STC is an acronym for sound transmission class. Sound transmission class is a rating assigned to a particular material or product based on its ability to attenuate sound.

A high STC rating requires good sound transmission loss (STL). STL measures how effective a given barrier (e.g. a wall or pane of glass) is at preventing a sound from moving from one side of a barrier to the other.

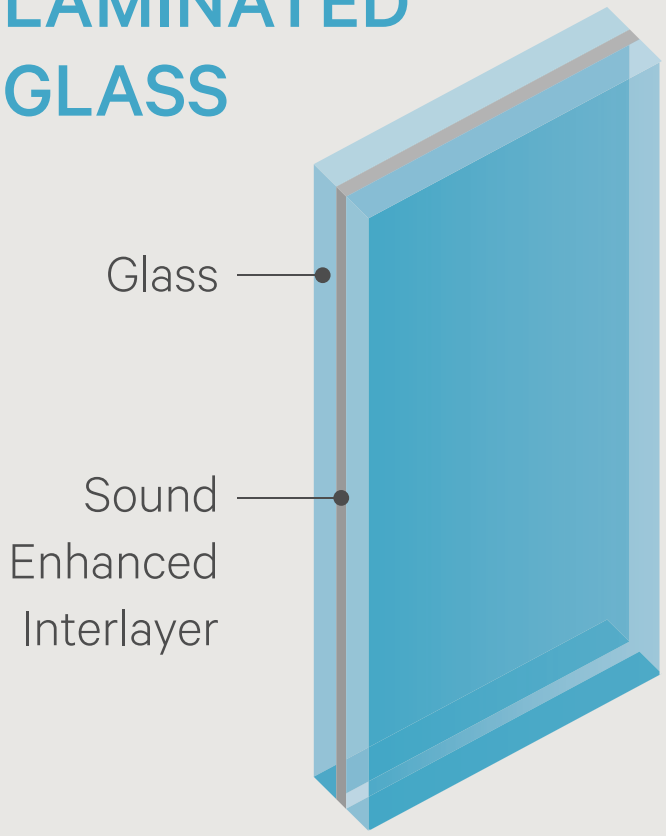


SOUND ATTENUATION

The sound attenuation of a material is dependent upon mass, damping (ability to dissipate vibrational energy), and stiffness.

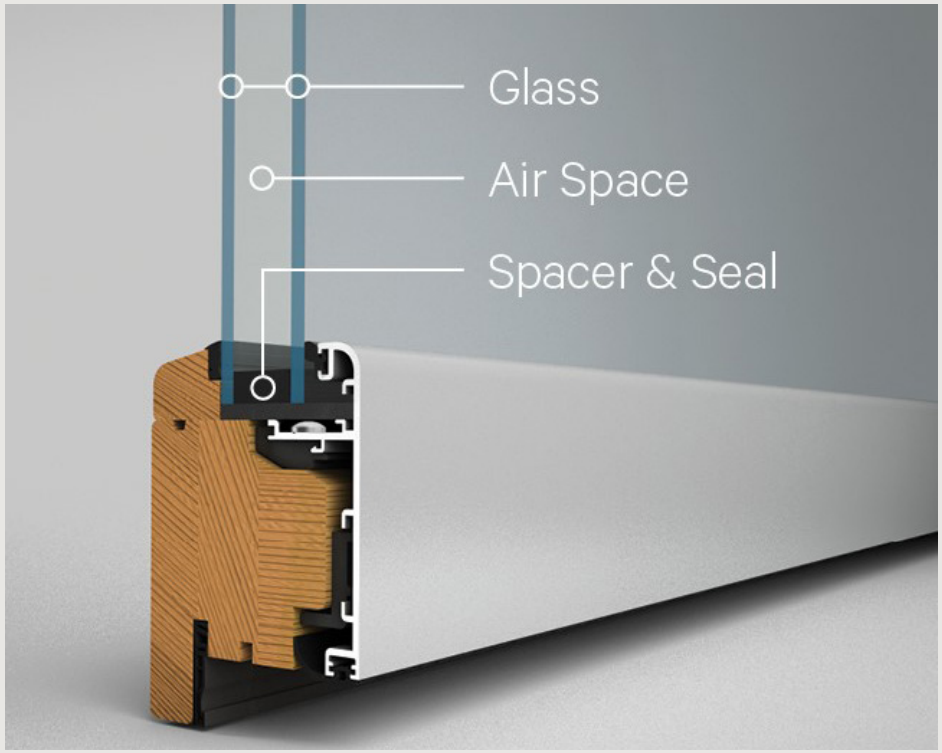
Greater mass can be achieved by increasing glazing thickness. Utilizing laminated glass is a method of sound dampening.
To create laminated glass, one or more plastic interlayers are sandwiched between two panes of glass, which are all then bonded together at high heat to create a single pane.

LAMINATED GLASS



INCREASING STC

Using additional panes of glass is also a method of increasing STC. The most valuable part of utilizing double paned glass is actually the distance between the two panes; as the air space between the panes in a piece of sealed double-glazed fenestration increases, more of the vibrational sound energy is lost, thus increasing the STC.



HOW THE PIECES FIT

The STC rating of a complete piece of fenestration depends not only on the STC of its glass, but all of the other materials with which it is produced as well. Since most fenestration materials are more limited in their ability to produce STL than glass, the rating of the fenestration as a whole will likely be lower than or equal to that of the glass with which it was made.

APPLIED STC

According to our graph, speech spoken at a normal volume can be clearly understood through materials rated at STC values of between 25 and 30. Products with a rating of 30 to 35 STC can reduce the volume of normal speech to a quiet murmur. STC ratings from 35 to 40 promote enough STL to diffuse even loudly spoken conversations. By the time products reach the STC 42 to 45 range, even loud speech fades to a soft, mostly unintelligible murmur.

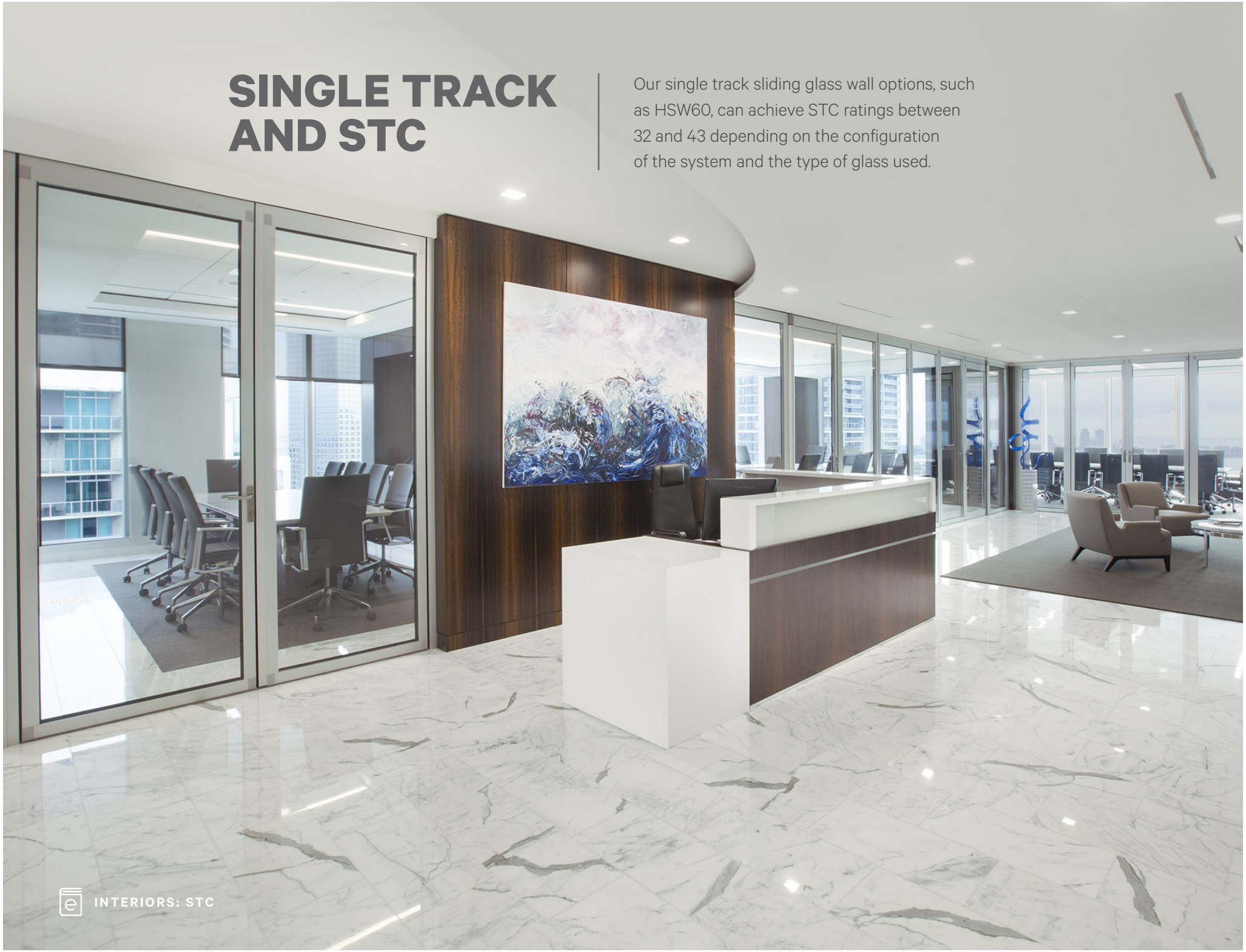
STC	WHAT CAN BE HEARD
25	Normal speech is easily understood
30	Normal speech is audible but not understood
35	Loud speech is understood
40	Loud speech is audible but not clearly understood
45	Loud speech somewhat audible, but infrequently understood
50	Loud speech is barely audible
55	Shouting is audible if straining to listen

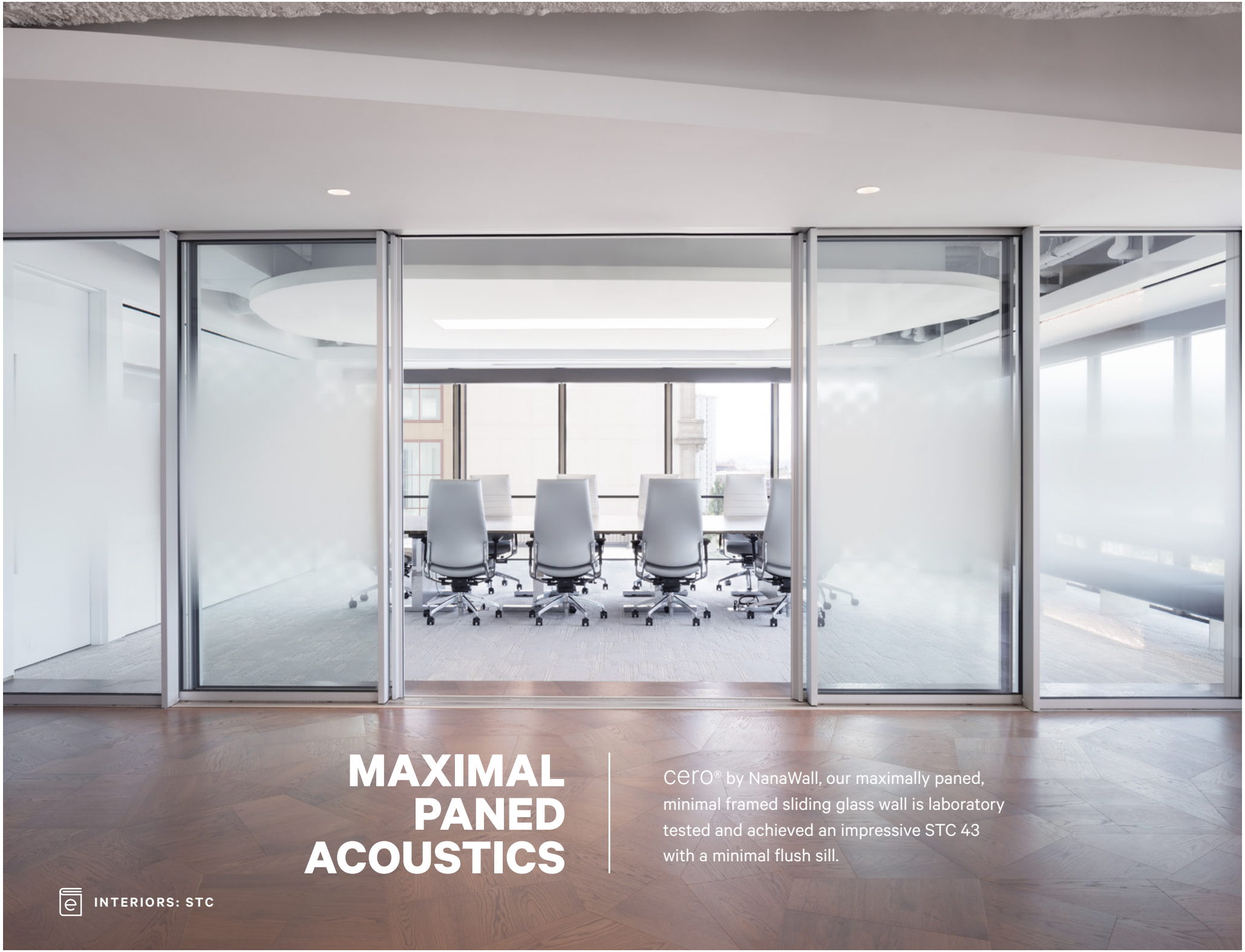
THE ACOUSTICS OF FOLDING

- SL70/73 with insulated tempered glass or laminated STC47 glass, which can achieve STCs 32 and 45 respectively.
- SL45 with STC 40 laminated glass has an STC of 36.
- SL60 with STC 38 laminated glass provides an overall STC of 36.
- SL80/81 has an STC rating of 38 when using double insulated laminated STC 38 glass, and a rating of 45 when using double laminated STC 45 glass.
- WD65 with STC 38 laminated glass has an STC of 36.
- WD66 with STC 38 laminated glass has an STC of 37.

SINGLE TRACK AND STC

Our single track sliding glass wall options, such as HSW60, can achieve STC ratings between 32 and 43 depending on the configuration of the system and the type of glass used.





MAXIMAL PANED ACOUSTICS

cero® by NanaWall, our maximally paned, minimal framed sliding glass wall is laboratory tested and achieved an impressive STC 43 with a minimal flush sill.

INTERIORS: STC

FRAMELESSLY FORTIFIED STC

Last but certainly not least, we even have a frameless opening glass wall option! PrivaSEE is the only all glass single track sliding system specifically engineered for enhanced acoustical separation. PrivaSEE has a STC rating of 36.

Our opening glass walls are engineered to perfection and built to last. Performance matters to us; our products provide exceptional acoustic isolation and are built to withstand the everyday commercial grind.

Whether you're looking to outfit a school, office, restaurant, or other commercial building, NanaWall has an abundance of sound solutions that are sure to meet the needs of any project.

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nanawall.com | 800 873 5673 | info@nanawall.com