Bildspec Series 100™ Acoustic Operable Walls

Bildspec
OPERABLE WALLS

Introduction

We have designed this brochure to assist you with your acoustic operable wall design and specification. All Bildspec products are built to last, have been tested and certified according to the latest acoustic standards and are designed to meet relevant BDA compliance requirements. Bildspec takes pride in delivering our products on-time and free of defects, always working with you to bring your operable wall project to a hassle-free completion.

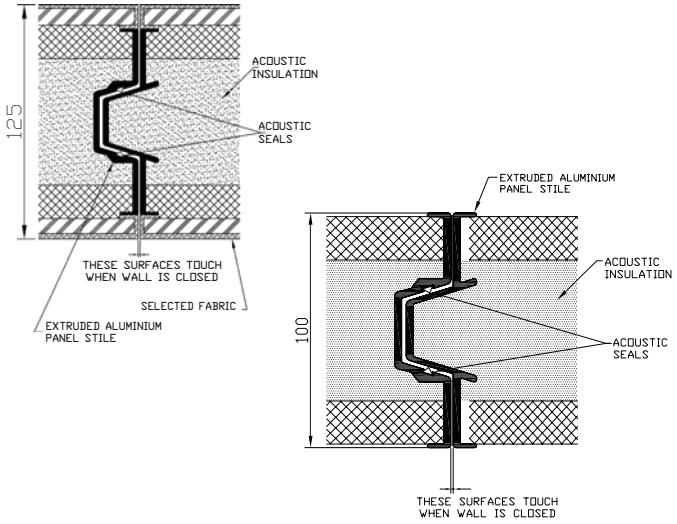
Bildspec is an Australian-owned and operated company, based at our purpose-built facility in Sydney. Designed, engineered, manufactured and tested in Australia to ensure robust quality and superior acoustic performance, all Bildspec products are covered by an industry-leading 2-year conditional warranty, with optional extended warranty/service agreements available.

How to Specify Bildspec Series 100™ Operable Walls

Step 1. Panel Section:

Bildspec Series 100 walls are available in two frame types:

1. Standard stile: (S) with a trim that consists of a 9mm wide perimeter frame around the 100mm thick panel.
2. Concealed Stile: (C) with no visible perimeter frame and a 125mm thick panel.



Step 2. Acoustic Performance (Rw):

This is the most important part of an operable wall specification. Please consider that selecting high acoustic ratings may not be necessary for your project or, that the surrounding structure (periphery) may not support it structurally or acoustically. Selecting higher than required acoustic ratings adds to project costs and adds weight to the overall system and components.

Bildspec's range has been tested to Australian Standard AS1191-2002 (R2016) and AS/NZ ISO 717-1 (20040). The following is a guide to selecting what is appropriate for your project from our range:

Rw45 Normal speaking voices somewhat intelligible, you can understand some words and tonality. Suited to applications like school classrooms (EFSG standard), smaller 4–6 people meeting rooms, church halls and aged care facilities. **At Rw45 Bildspec Series 100 weighs 34kg/sqm.**

Rw47 Normal speaking voices barely intelligible, suited to applications like 6 – 10 people meeting rooms, school halls, church halls and aged care facilities. **At Rw47 Bildspec Series 100 weighs 37kg/sqm.**

Rw49 Raised voices barely intelligible, suited to applications such as boardrooms, larger 8 – 12 people meeting spaces, smaller conference centres and hotel function rooms. **At Rw49 Bildspec Series 100 weighs 47kg/sqm.**

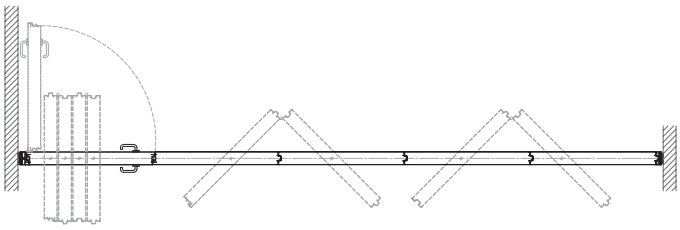
Rw52 Raised voices unintelligible, and amplified sound is controlled, at the high end of the frequency range this is used in large 12–20 people training rooms, board rooms, conference centres, hotel function rooms, lecture theatres, convention centres and spaces/rooms where a high level of sound attenuation is paramount. **At Rw52 Bildspec Series 100 weighs 54kg/sqm.**

Note: *Concealed stiles and/or certain finish types add to panel weight. Please check with Bildspec.*

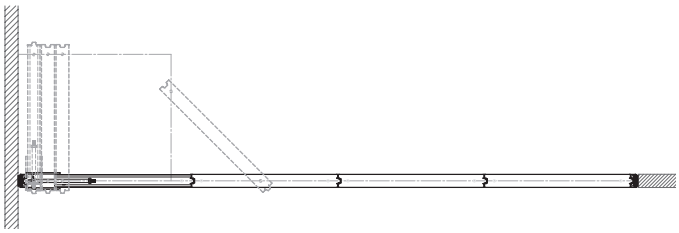
Step 3. Stacking Arrangement:

The next selection for your project is to choose how and to where the panels will stack away. There are 3 standard types to choose from **centre stack, side stack and remote stack:**

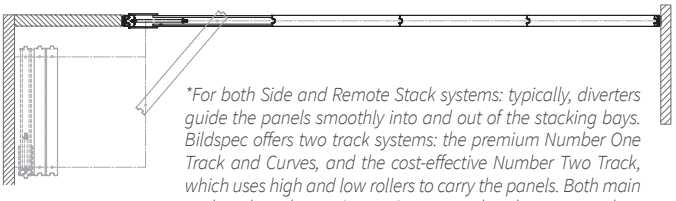
Centre Stack The simplest and most cost-effective stacking solution, featuring a single straight line of overhead track. Panels pivot perpendicular to the track as they fold and are typically hinged in pairs for added stability. Each panel is suspended from four bearing trolleys, allowing the operator to glide the panels into position and transform the space as needed. The carriers (trolleys) are centrally mounted, meaning 50% of each folded panel sits on either side of (and perpendicular to) the track's centreline. While folded panels can stack anywhere along the main track run, they are most commonly stacked at one or both ends. The head track requires continuous overhead support, such as a suitable concrete slab or steel beam.



Side Stack This configuration features a main straight line of track, with the stacking area located to one side of the track in an 'h'-shaped layout. Panels travel along the main track and turn perpendicular as they enter the stacking bay. The carriers (trolleys) move approximately 95% off the track's centreline, with only one carrier remaining on the main track run.*



Remote Stack Like Side Stack, the Remote Stack configuration also includes a main straight line of track, but with the stacking area positioned completely off to one side in a 'one-handed trident' or pitchfork-shaped layout. Panels travel along the main track and turn perpendicular as they enter the stacking bay with both carriers (trolleys) moving 100% off the track's centreline. Panels typically stack within a formed pocket or dedicated stacking bay.*



**For both Side and Remote Stack systems: typically, diverters guide the panels smoothly into and out of the stacking bays. Bildspec offers two track systems: the premium Number One Track and Curves, and the cost-effective Number Two Track, which uses high and low rollers to carry the panels. Both main and stack tracks require continuous overhead support, such as a suitable concrete slab or steel beam.*

Step 4. Closure Type:

An acoustic wall with interlocking stiles requires a gap to be created to stack the wall. We can create this gap in several ways depending on your project's requirements. Here are two examples:

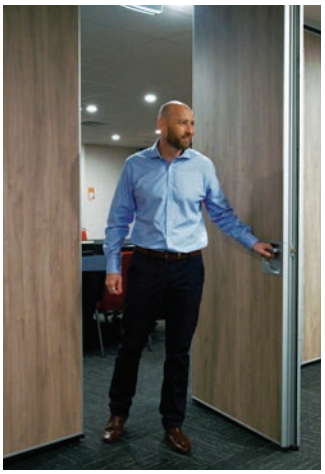
D DOOR FULL HEIGHT
X EXPANDING PANEL

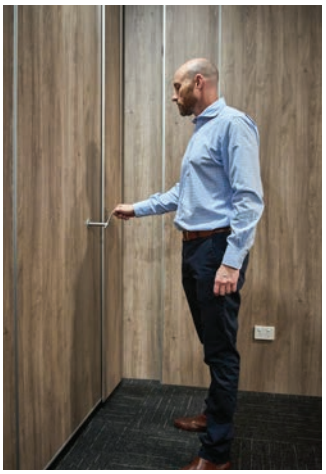
Full Height Door Panel *(Left image below)*

Generally hinged off the wall at the stacking end (but can be hinged from another panel), this closure type allows not only to "break" the wall down or close it off, but also allows pedestrian access through the wall. This access can be designed to provide DDA compliance. (Disability Discrimination Act requirement).

Expanding Panel *(Right image below)*

This method has a telescopic section that mechanically moves in and out, to "break" the wall down or close it off, however it does not allow for pedestrian access through the wall. This method has the best acoustic properties and adds extra rigidity to the wall system when it is in place. It is operated by a removable handle which means it cannot be operated by people without the required key.





Step 5. Seals – Top and Bottom:

Our systems incorporate a number of seal configurations dependant on the site conditions and the application.

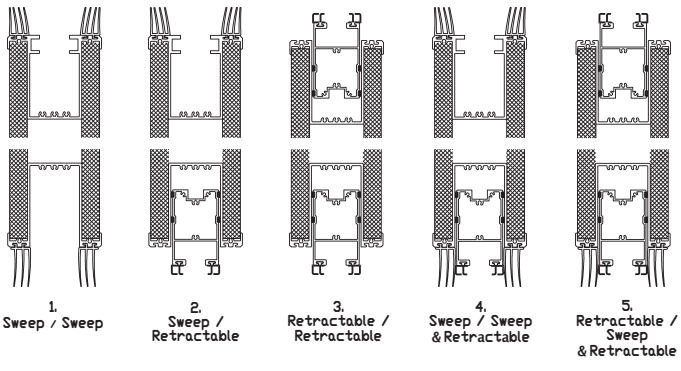
Type 1 Our basic offering being a dual line of fixed triple finger sweep seals top and bottom, which can be trimmed to the floor. These are a cost-effective option, however they can cause friction when the panels travel over the floor's high points which in turn makes the panels harder to move.

Type 2 Our recommended and standard offering of dual line fixed triple finger sweep seals at top and mechanical retractable bottom seals. This assists the friction free movement of the panel offered by the retracting bottom seal. Furthermore, with a seal travel of 35mm, panels are able to accommodate more inconsistencies in undulating floor levels.

Type 3 Where requested, Bildspec also offers mechanical retractable seals to both the top and bottom of the panels. Please note that acoustic testing has shown that this arrangement generally performs the same as Type 2, above.

Type 4 & 5 For higher acoustic applications (e.g. Rw49 and above), Bildspec suggests a combination of fixed dual line triple finger sweep seals plus mechanical retractable seals to the bottom with either fixed or retractable seals to the top. This arrangement combines the manoeuvrability benefits of retracting seals while providing a superior sound barrier.

1 Sweep / Sweep
2 Sweep / Retractable
3 Retractable / Retractable
4 Sweep / Sweep and Retractable
5 Retractable / Sweep and Retractable



System Safety

Bildspec puts a strong emphasis on safety and design with our robust track and trolley systems. Our engineers have calculated the SWL using factors of safety, and in conjunction with AS / NZS 1170.0 – 2002/ Amdt 2011 Structural Design Actions – Part: 0 General principles, and AS/ NZS 1170.1 – 2002/Amdt 2011 Structural Design Actions – Part: 1, Permanent, Imposed and Other Actions.

Bildspec completed this certification to make sure our systems are fit for purpose, and will perform correctly in the real world, every day of the year.

Step 6. Finishes:

It is time to add some personality to your operable walls by specifying your finishes.

Panel faces can be treated with a multitude of finishes. These can be bonded to the acoustically tested base board, and include, but are not limited to, fabrics, vinyls, laminates, timber veneers, pinboard materials, whiteboards, two-pac polyurethane paint, colour backed glass and more. You can even apply custom printed vinyl wraps. Panel trims, wall jambs and tracks can be either anodised or powder coated.

Bildspec's standard aluminium finishes are white powder coated head track (to match ceilings) with satin natural anodised panel frames and jambs. Other options are available, so please ask Bildpsec for more information.

Step 7. Accessories:

Bildspec operable walls can be further accessorised to add a higher level of functionality and to suit your aesthetic goals.

These include:

- Inset Whiteboards with/without pen pockets
- Kick rails or skirting
- Chair rails
- Inset veneer or fabric panels
- Vertical and horizontal, inset windows - small and large
- DDA compliant pass door hung off another panel, with or without emergency bars
- DDA compliant "L" inset pass doors for access while the wall is in place, with or without emergency bars
- DDA compliant double "L" inset pass doors with or without emergency bars

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Contact us today!

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