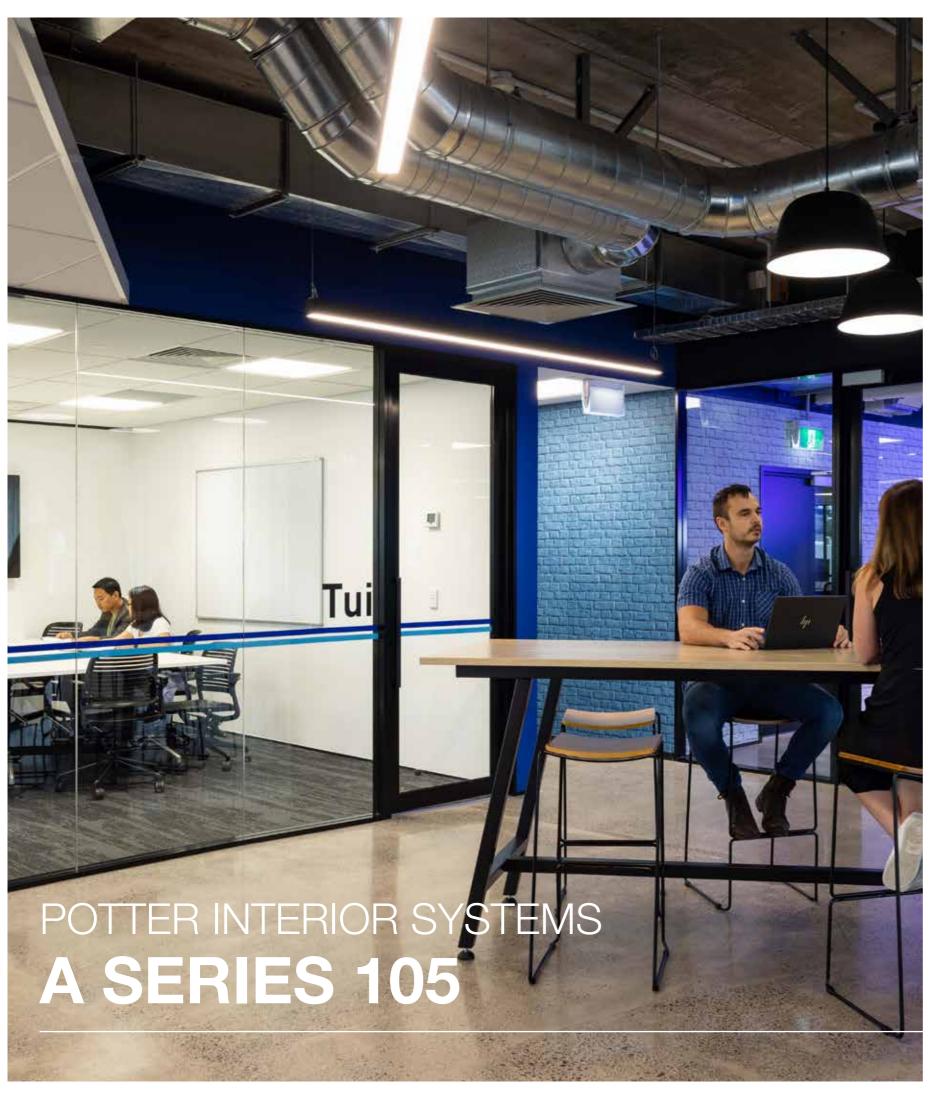


# **ALUMINIUM SYSTEMS**

**SUITE OVERVIEW 2025** 







# A SERIES 105

Discover the versatility and functionality of the A Series 105. With its central line glazing, wide range of configurations, and design options, this partition system is the perfect choice for both plasterboard and glazing applications.

#### The A Series 105 boasts an impressive array of features, including:

- Standard Profile Sizes: Choose from three standard profile sizes to suit your specific needs: 105mm x 25mm, 105mm x 35mm, or 105mm x 50mm.
- Wall Compatibility: Our partitions are designed to seamlessly integrate with various wall structures.
  The standard wall size is based on a 64mm steel stud, with the option of using either a single or double layer of 13mm plasterboard on each side. This flexibility allows for easy installation and adaptability to different construction requirements.
- Glass Thickness Options: Whether you prefer a thinner or thicker glazing solution, the A Series 105 can
  accommodate glass thicknesses ranging from 6mm to 13mm. This versatility enables you to achieve your
  desired aesthetic and performance goals.
- **Door Compatibility:** Our partition system is designed to accommodate a wide range of door thicknesses. You can select thickness between 38mm and 50mm, ensuring compatibility with your preferred door design.
- Optional Shadowline Details: Enhance the visual appeal of your partitions with optional shadowline details.
   These sleek and refined touches add a touch of sophistication to any space, elevating the overall aesthetic and creating a modern and seamless look.

#### **DESIGN GUIDELINES FOR GLAZED INTERNAL PARTITIONS**

#### Partition Frame Design

- 1. Removable Beads and Adequate Pocket Depth: Many partition systems have removable beads and sufficient pocket depth to accommodate both the edge cover and edge clearance required.
- 2. Shuffle Glazing for Fixed Pocket Systems: In some partition systems with fixed pockets on two or more sides, "shuffle" glazing is necessary. For these systems, the edge clearance must be increased to install the glass. However, this often reduces the edge cover below the allowable limits of the glass thickness.

#### **Glass Size Calculation:**

**Glass Size Limitation:** The glass size should not exceed the sight size plus the depth of one rebate, minus a glazing clearance of 2mm-4mm (depending on glass thickness, type, frame straightness, and squareness). This ensures proper installation.

Centering the Glass: Once installed, the glass should be centered within the frame.

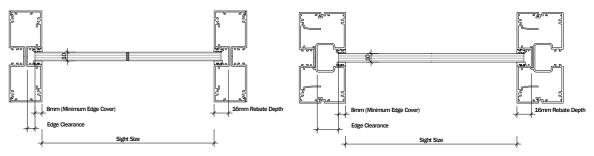
#### **Maximum Edge Cover Calculation:**

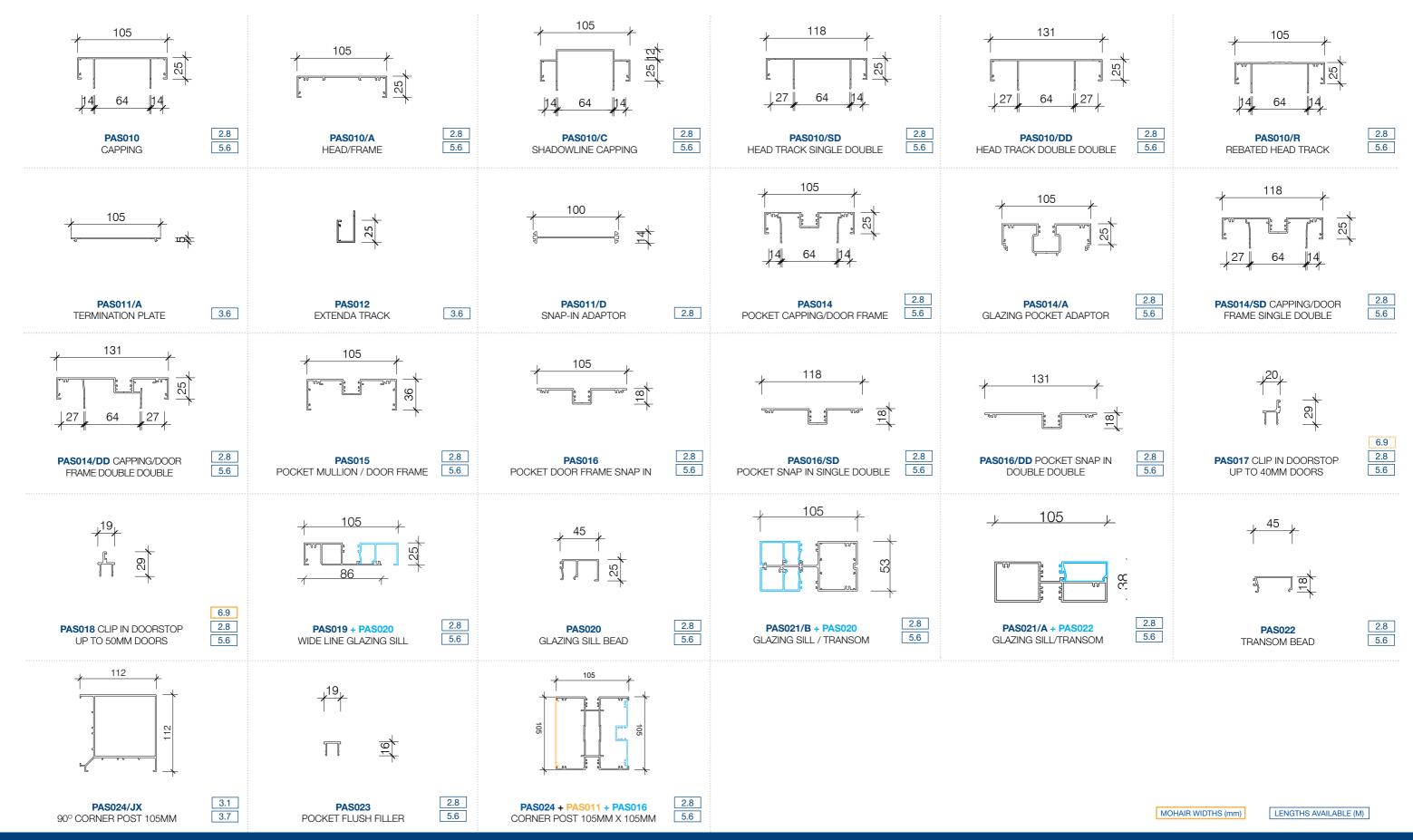
**Limitations with an 18mm Rebate:** An 18mm rebate allows for a maximum edge cover of 7mm or 8mm. This calculation is derived from half the rebate depth minus half of the clearance.

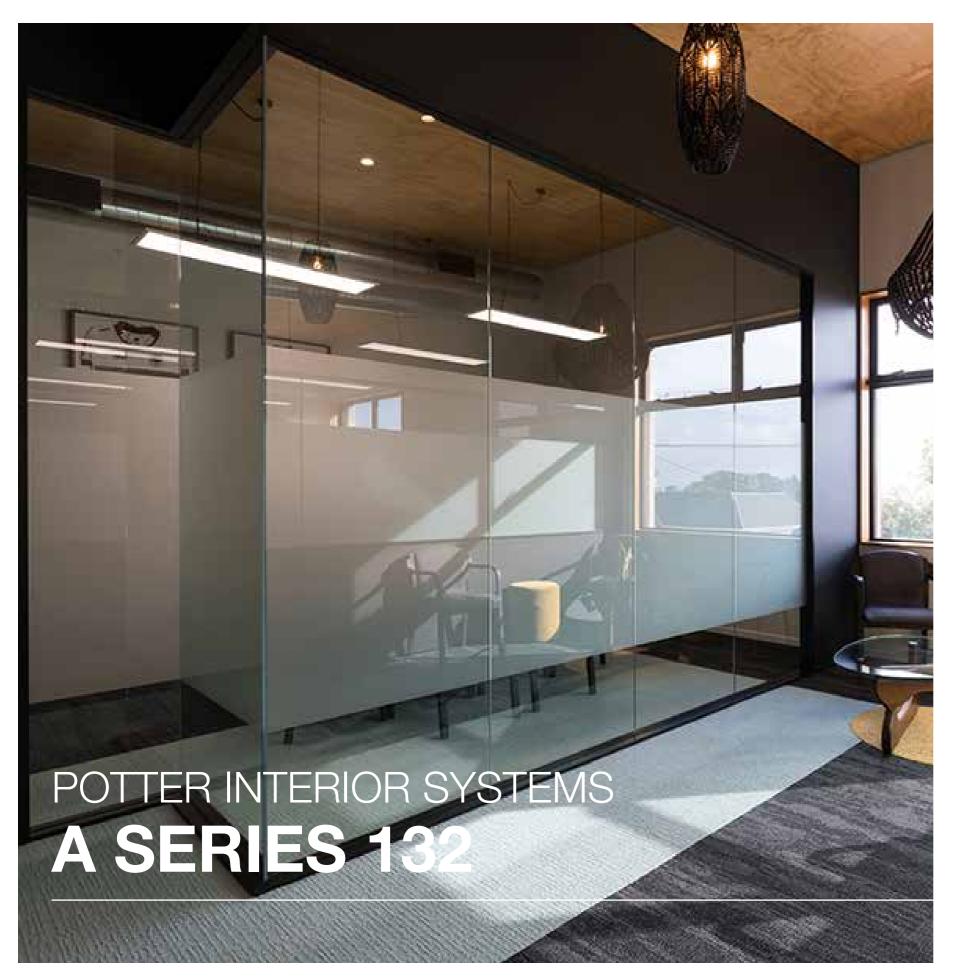
\*Reference Table: Refer to Table 1 on A Series 132 page to determine the maximum glass thickness allowed. For further details and specific measurements, please consult Table 1 on A Series 132 page.

**Detail 1. Shuffle Glazing Tolerances** 

**Detail 2. Shuffle Glazing Tolerances** 







### A SERIES 132

With its central line glazing, wide range of configurations, and design options, this innovative solution provides a complete partition system for both plasterboard and glazing applications.

#### The A Series 132 boasts the following exceptional features:

**Standard Profile Sizes:** Choose from three standard profile sizes - 132mm x 25mm, 132mm x 35mm, or 132mm x 50mm. These profiles ensure strength and durability while maintaining an elegant, modern appearance.

**Wall Compatibility:** Our partition system seamlessly integrates with various wall structures. The standard wall size is based on a 92mm steel stud, offering robustness and stability. Whether you require a single or double layer of 13mm plasterboard on each side, the A Series 132 accommodates your construction needs effortlessly.

**Glass Thickness Options:** The A Series 132 can accommodate glass thicknesses ranging from 6mm to 13mm, allowing you to select the ideal thickness to suit your preferences and requirements.

**Door Compatibility:** Designed to accommodate a wide range of door thicknesses. With compatibility ranging from 35mm to 50mm, you can seamlessly integrate various door styles and designs.

**Optional Shadowline Details:** Enhance the visual appeal of your partitions with optional shadowline details. These sleek and refined touches add a touch of sophistication, creating a seamless and contemporary look that elevates the overall aesthetic of any space.

#### DESIGN GUIDELINES FOR GLAZED INTERNAL PARTITIONS

Internal partitions are specialised framing systems incorporating a range of infills such as glass. Most systems use aluminium extrusions, which can incorporate gaskets, wedges and blocking similar to exterior aluminium joinery, but without the concerns of weather-tightness. Some have unique features suitable for interior design, which normally involves supporting the glass under low internal pressures and human impact.

#### Glass standards and requirements

The New Zealand Building Code references Glazing in Buildings NZS 4223: Part 1:1985 - Glass Selection and Glazing, and Part 3:1999 Human Impact Safety Requirements, as the acceptable solution compliance documents (AS1).

#### Glass design

Glass design for internal partitions is covered in NZS 4223 Part 3:1999, Clause 311.

This clause defines: area and glass thickness tables for:

- Four edge support in both doors and side panels
- Four edge support in other areas
- Top edge unframed
- Side edges unframed or silicone butt jointed up to 3 metres in height
- Manifestation requirements

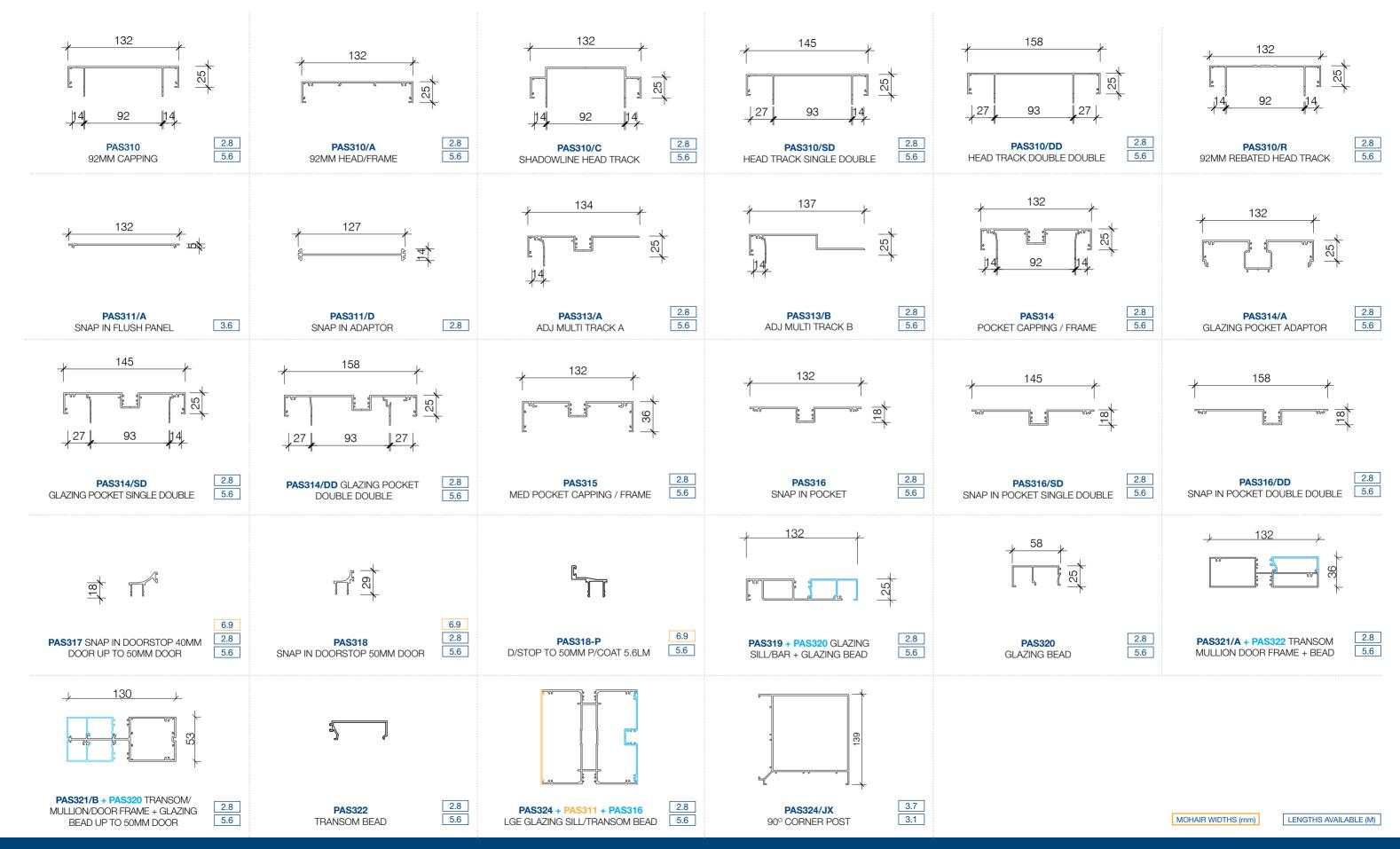
WGANZ members can advise on the effect on glass thickness, type and cost of various framing types + spacing.

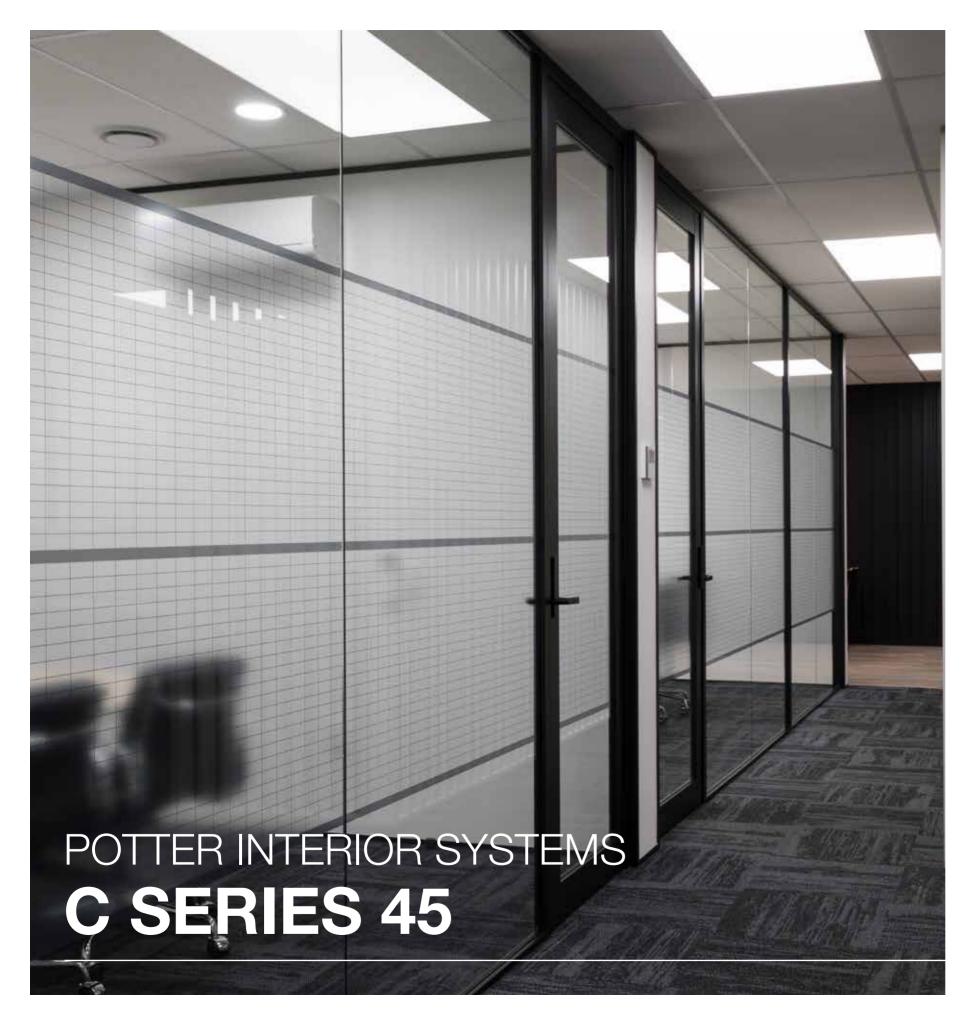
#### Framing

NZS 4223 Part 3:1999 defines containment of glass in 303.2 and requires glass to be installed to meet the edge cover requirements of table 25 and 27 of Part 1:1985. For glass to be considered as framed minimum framing rigidity requirements are set out in Appendix 3.C. NZS 4223:Part 1:2008 provides minimum glazing dimensions and minimum edge cover, the key data is abridged in Table 1.

Table 1

Glass thickness (mm)	Minimum edge cover	Minimum edge clearance	Total rebate depth (mm)
6	6	4	10
8	8	5	13
10	8	5	13
12	9	6	15





# C SERIES 45

When budget considerations come into play without compromising quality and functionality, the C Series 45 is the ideal choice. This commodity system offers an affordable solution while still allowing the option to integrate it into the sleeker A Series for a more streamlined aesthetic.

#### Key Features of the C Series 45:

**Standard Glazing Profile:** The system features a 45mm wide x 25mm high standard glazing profile. This profile size strikes a balance between durability and cost-effectiveness, making it suitable for various applications.

**Wall Compatibility:** Designed to fit seamlessly with standard wall structures, the C Series 45 is based on a 64mm steel stud. You have the flexibility to choose between a single or double layer of 13mm plasterboard on each side.

**Glass Thickness Options:** The C Series 45 can accommodate glass thicknesses ranging from 6mm to 13mm. Allowing the appropriate thickness for your desired level of transparency, privacy, and acoustic performance.

**Door Compatibility:** With door thickness options ranging from 35mm to 50mm, the C Series 45 offers versatility when integrating doors into your partition system.

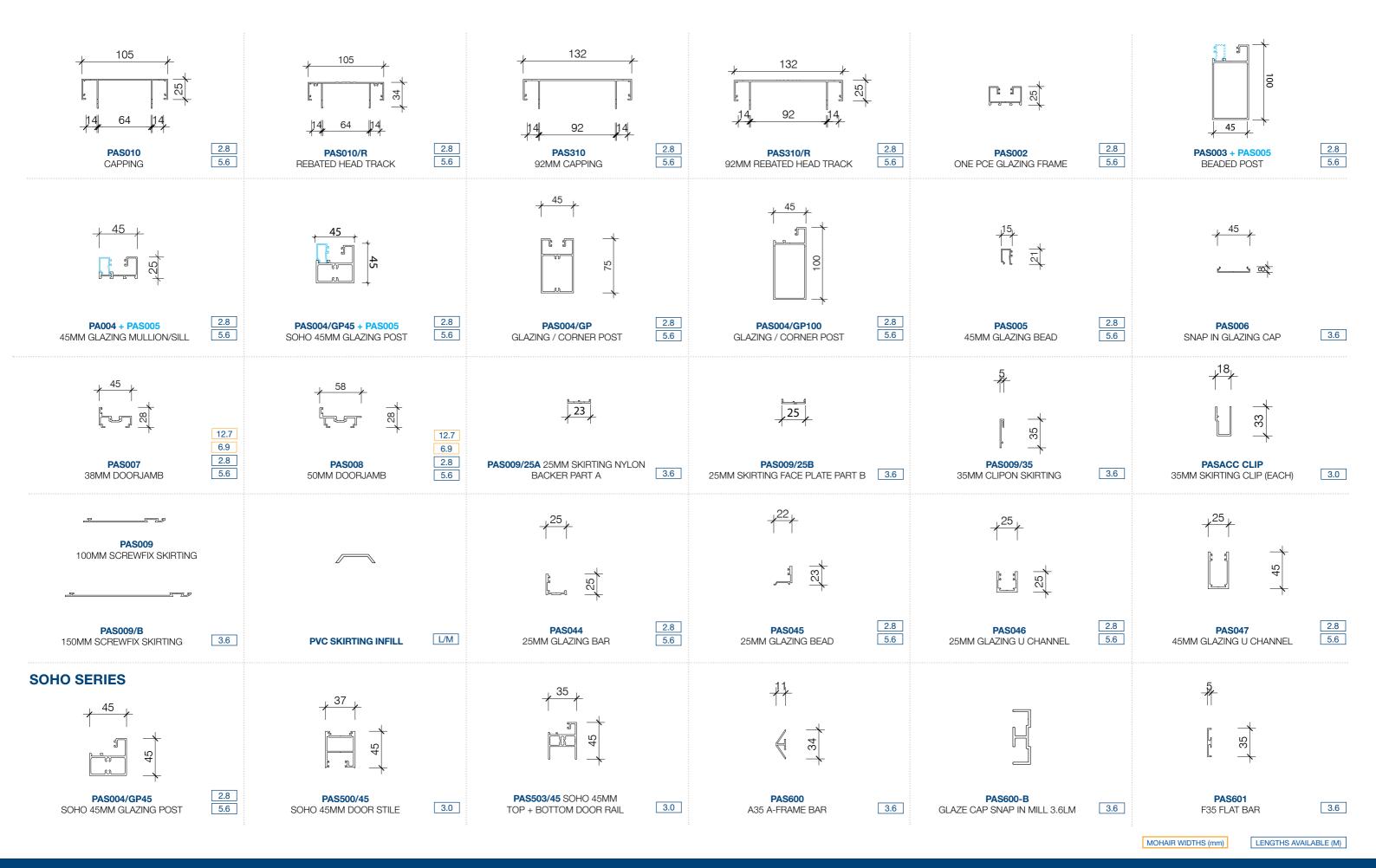
**Flexible Installation:** Easily fixed to standard openings, providing a hassle-free installation process. Additionally, it can be integrated with the 105 or 132 series head/sill track, allowing for greater design flexibility.

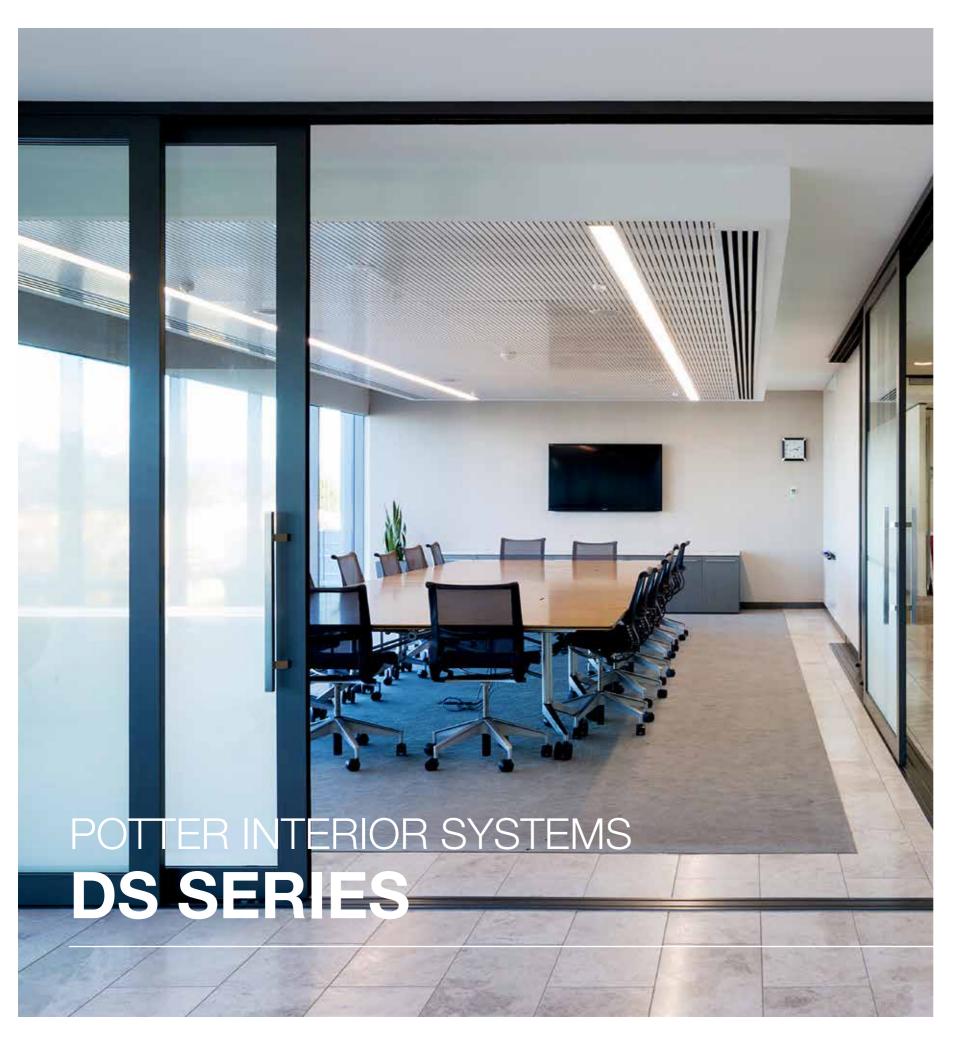
#### **DESIGN GUIDELINES FOR GLAZED INTERNAL PARTITIONS**

Table A - Internal glazing including partitions and shopfronts with unframed side edges

Max height of glass (span) (mm)	Type of glass	Unlimited number of vertical sealed joints, glass panes, and pane width. Minimum glass thickness (mm)	Three-edge support with one vertical sealed joing, maximum pane width of 1200mm. Minimum glass thickness (mm)
1600	Annealed	8	6
	Toughened	6	6
	Laminated	8	6
2400	Annealed	10	8
	Toughened	10	8
	Laminated	10	8
2600	Annealed	12	10
	Toughened	10	10
	Laminated	12	10
3000	Annealed	12	10
	Toughened	12	10
	Laminated	12	10
3200	Annealed	N/A	N/A
	Toughened	12	10
	Laminated	16	10
3600	Annealed	N/A	N/A
	Toughened	15	12
	Laminated	16	12
4000	Annealed	N/A	N/A
	Toughened	15	12
	Laminated	20	12

- Use specific design for heights above 4000mm
- . Adequate edge cover is required to retain the glass under load (Refer to section 4 of NZS 4223.1)
- 3. Glass design is based on ULS and SLS internal design wind pressures of 0.50 kPa and 0.36kPA respectively
- 4. Maximum deflection at SLS pressure is restriced to span/60 and 30mm for three-edge support
- For design loads exceeding those in note 3, table 5 may be used up to its limits
- Joints between glass panes are to be sealed with silicone
  For toughened laminated glass use the thoughened glass limits





## **DS SERIES DOORS**

Expertly designed to seamlessly integrate with Potters Aluminium Partition Systems our doors are available in 35mm thickness to ensure durability and reliability in various applications.

#### Key Features of the DS Series Doors:

**Stile Sizes:** Choose from a range of stile sizes to achieve the desired design and structural integrity. The DS Series Doors offer stile sizes of 45mm, 75mm, 100mm, and 120mm, allowing for customization based on your specific requirements.

Rail Sizes: Offering fexibility in rail sizes to accommodate different design preferences and load-bearing needs. Choose from 45mm, 75mm, 80mm, 100mm, 120mm, 150mm, ensuring optimal performance and aesthetics.

**Glass Compatibility:** Designed to accommodate 13mm thick laminated glass. This glass thickness option provides both security and visual appeal while maintaining safety standards.

**DS Series Sliders:** In addition to the DS Series Doors, we also offer DS Series Sliders, designed to seamlessly integrate with Potter Aluminium Systems. Available in various configurations, all based on the 35mm door series. When you choose the DS Series Doors or DS Series Sliders, you can trust that you are selecting a high-quality solution that perfectly complements Potter Aluminium Systems.

#### Safety Glazing Maximum Area and Thickness

Type of glass	Thickness Grade A	Maximum area m <sup>2</sup>	System type
Toughened safety glass	6mm	4.0	75mm
Toughened safety glass	8mm	6.0	100mm
Toughened safety glass	10mm	8.0	120mm / 100-D
Toughened safety glass	12mm	10.0	120mm / 100-D
Laminated safety glass	6mm	3.0	75mm
Laminated safety glass	8mm	5.0	100mm
Laminated safety glass	10mm	7.0	120mm / 100-D
Laminated safety glass	12mm	9.0	120mm / 100-D

#### **GLASS INFORMATION**

For more information on all glass types consult with a glass manufacturer or the New Zealand Window and Glass Association (WGANZ) wganz.org.nz

#### Glass thickness

Typical to all Potter aluminium systems the glass thickness range the suites can accommodate is 6mm - 13mm maximum for laminated glass.

For more information on glass thickness and compliance with the New Zealand Building Code requirements, refer to the "Human Impact Safety

Requirements NZS4223: Part3:2016" found on the GANZ website.

#### Glass weight

Generally 2mm Glass thickness per  $m^2 = 5kg$ , ie 6mm glass =  $15kg/m^2$ 

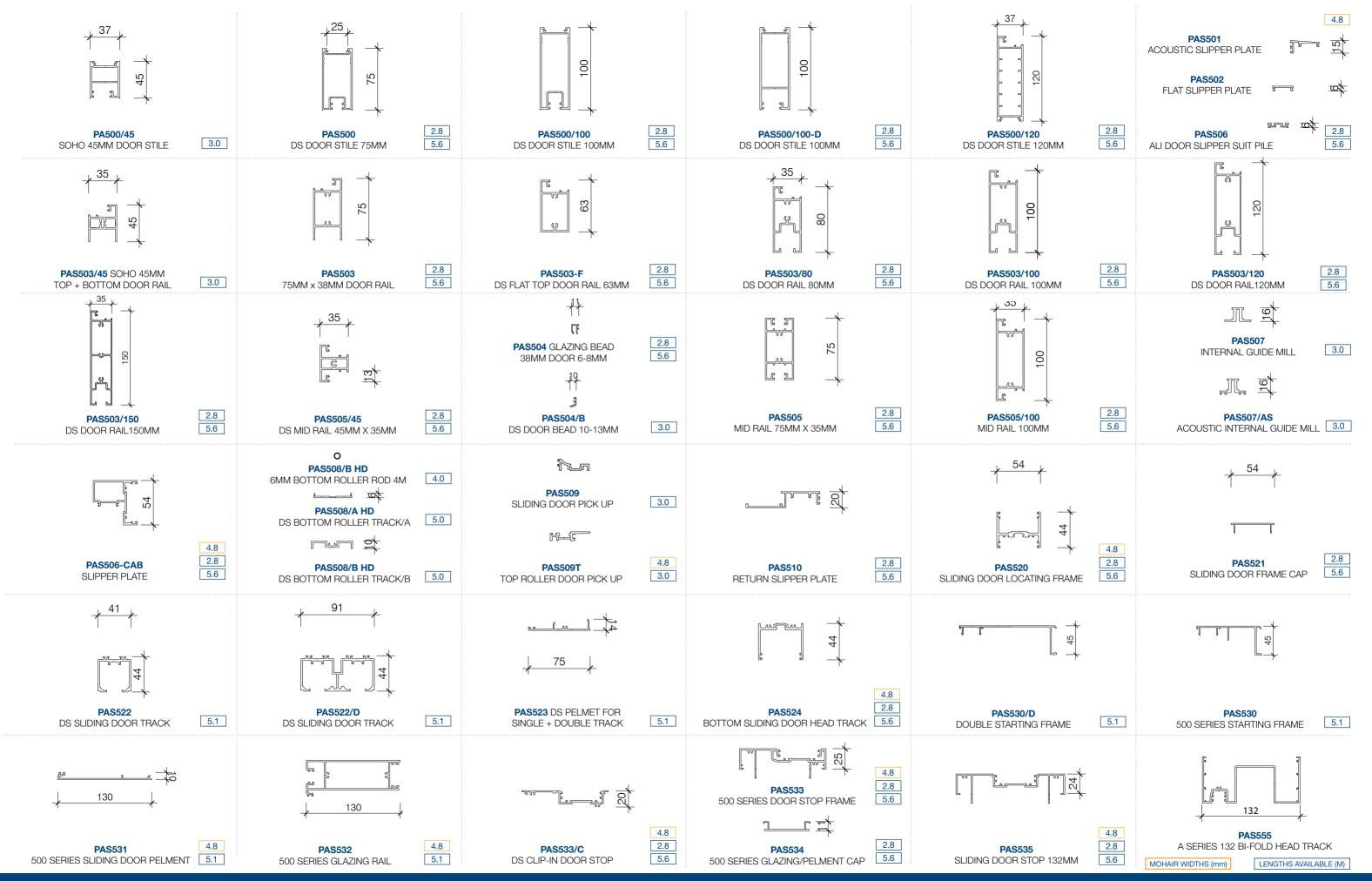
#### STC points

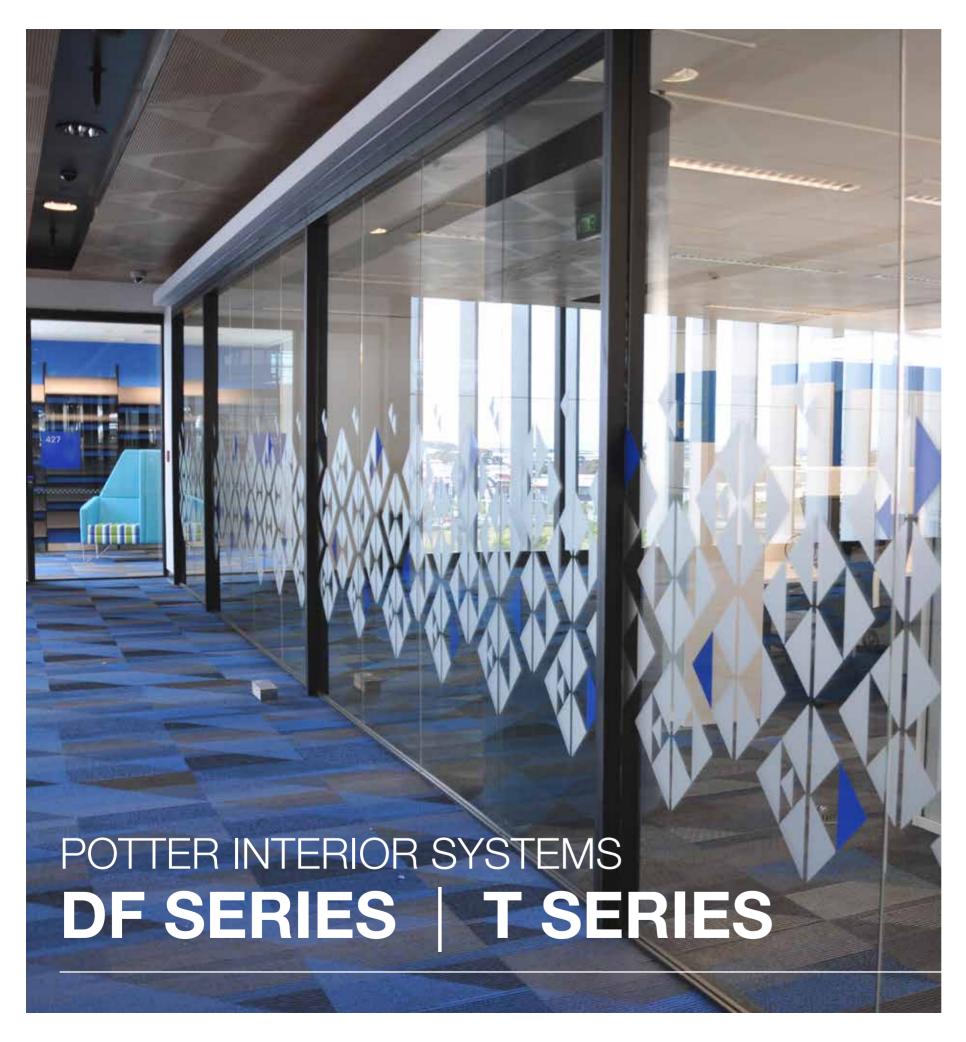
Refer to your glass manufacturer for testing information.

#### GLASS-TO-METAL CONTACT

Glass should be installed without glass-to-metal contact, as thermal movement created by different coefficients of expansion between glass and metal can cause breakage, particularly in annealed and laminated glass.

Potter aluminium systems provide for backing seals or glazing tapes. Where present these gaskets should be pre-installed as while some systems can be double wedged, this is a more costly glazing procedure, and not normally recommended by gasket and wedge suppliers or glass companies.





# **DF SERIES**

Specifically designed to address the challenges posed by modern office designs that often lack traditional panel ceilings. A practical solution for creating exposed full height aluminium partitions while offering the necessary structural support and flexibility.

#### Key Features of the DF Series:

**Exposed Full Height Design:** Tailored to meet the requirements of exposed full height aluminium partitions while providing functionality and durability.

**Live Load Support:** Engineered to handle live loads, ensuring stability and safety in the modern office environment.

**Deflection Capability:** Built to accommodate movement and deflection. With a deflection capability of +/- 25mm, they can adapt to the changing conditions and mitigate the potential risks associated with structural stresses.

**Base Build Wall Starter:** Extremely versatile it can also be used as a base build wall starter, allowing for movement between existing structures and internal partitions. This ensures a seamless integration of the DF Series into various construction scenarios.

**Multiple Stud Variants:** Available in two stud variants the DF Series 105 utilizes a 64mm steel stud, while the DF Series 132 comes in a 92mm steel stud. This selection enables you to choose the appropriate stud size based on the desired strength and structural integrity for your specific application.

# **T SERIES**

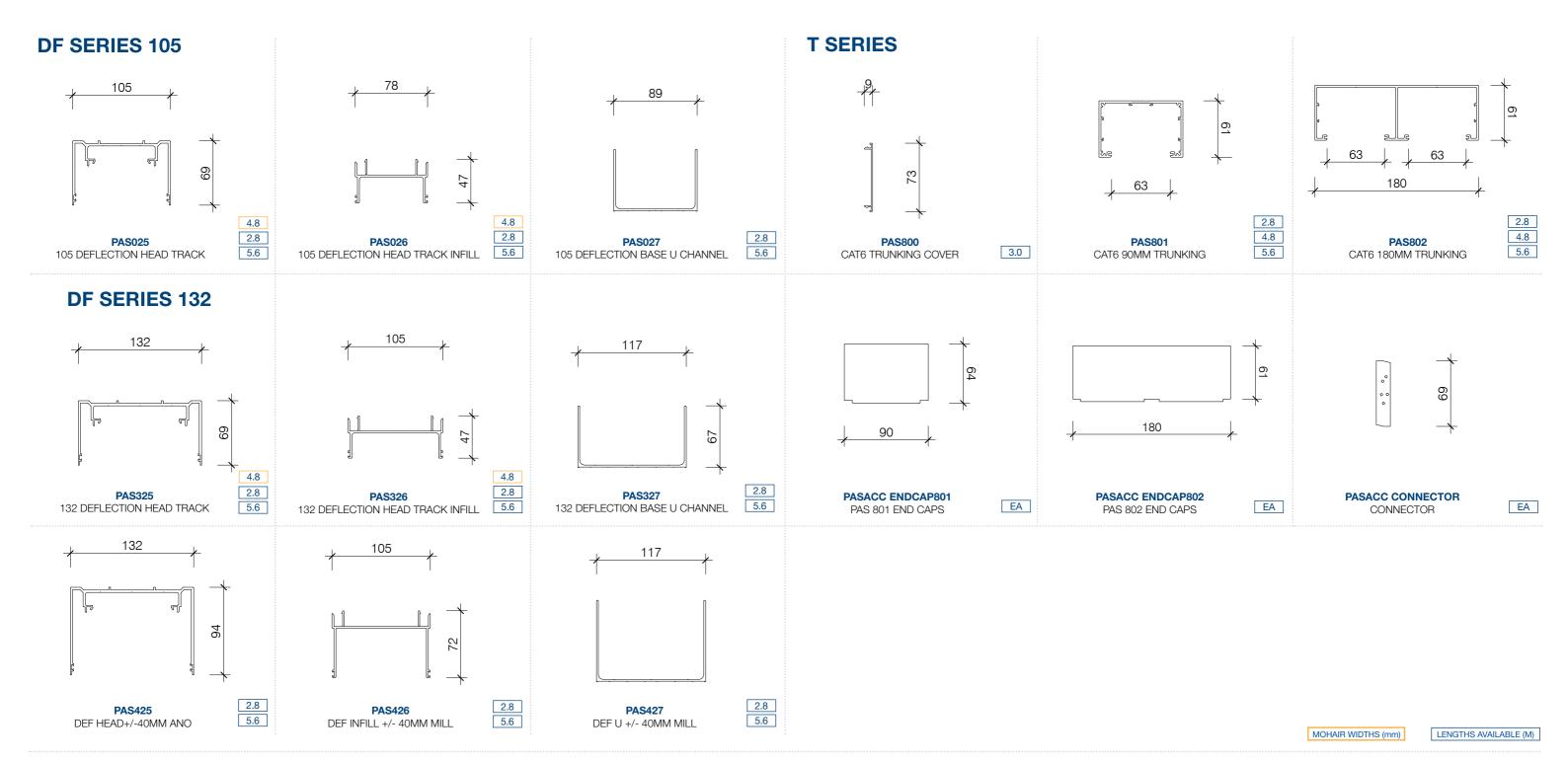
Offering a comprehensive selection of aluminium profiles that provide designers with the ability to integrate cable trunking into internal partition walls. Designed specifically for this purpose to ensure efficient and organized installation of CAT6 cabling.

#### Key Features of the T Series:

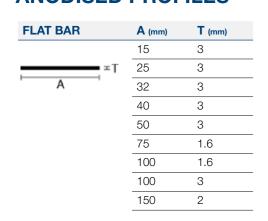
**Cable Trunking Integration:** Allows for the organized routing and management of cables within internal partition walls. This integration promotes a clean and clutter-free environment while supporting the seamless operation of essential data and communication systems.

**CAT6 Cabling Compatibility:** The aluminium cable trunking provided is specifically designed to meet the requirements of CAT6 cabling. This ensures optimal performance and reliability for high-speed data transmission, meeting the demands of modern communication networks.

**Back-to-Back Installation:** By installing the T Series profiles back to back, they can form the base of a 92mm wall. This width is designed to seamlessly integrate with other Potter Aluminium Systems, providing a cohesive partition solution.



# **ANODISED PROFILES**

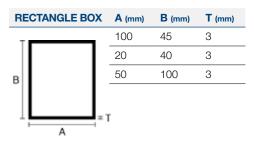


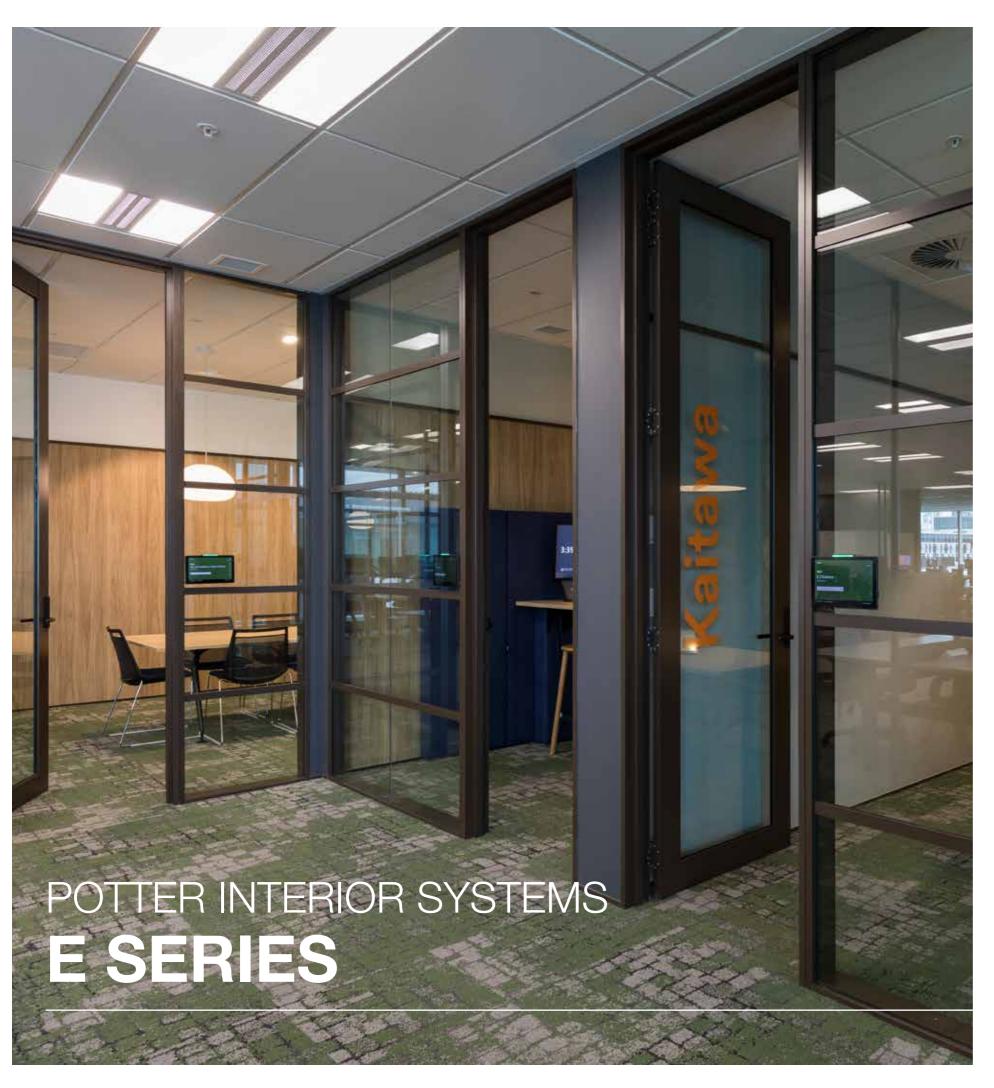
SQU	ARE BOX		AB (mm)	T (mm)
-			25	3
			40	3
A			45	1.8
			100	3
T	А	I≖ T		

ι	J CHANNEL		A (mm)	B (mm)	T (mm)
-			25	25	3
	1		25	50	3
в	1		25	25	1.6
	1		80	25	3
		≖ T	100	25	3
	Α	4			

EQUAL ANGLE	AB (mm)	T (mm)
I	25	3
	20	1.6
A	20	3
	25	1.6
⊥ T	40	1.6
^	40	3
	60	3
	100	3

<b>UNEQUAL ANGLE</b>	A (mm)	B (mm)	T (mm)
T.I.	12	20	1.6
- 11	20	25	3
В	20	32	1.5
	25	32	3
⊥тт	19	38	1.8
Α	20	40	1.6
	20	50	1.6
	25	50	3
	25	75	3
	50	100	3





#### E SERIES 105

Offering a modern and sophisticated partition solution with its edgeline glazing and double glazing design. With clean lines and a sleek aesthetic, it adds a touch of elegance to any space while maintaining functionality.

#### Key Features of the E Series 105:

**Standard Detail Options:** Provides standard detail options to suit your specific design preferences. Choose from profile sizes of 105mm x 25mm, 105mm x 35mm, or 105mm x 50mm, allowing you to customize the look and feel of your partition system.

**Glass Compatibility:** This series is designed to accommodate glass thicknesses ranging from 6mm to 13mm. Whether you prefer a thinner or thicker glazing solution, the E Series 105 can seamlessly integrate it into the partition system, providing versatility and design flexibility.

**Door Compatibility:** The E Series 105 is compatible with door thicknesses ranging from 35mm to 50mm. This allows you to select the appropriate door thickness for your specific needs, ensuring a cohesive and harmonious appearance throughout the partition system.

**Standard Wall Size:** The E Series 105 is based on a standard wall size built around a 64mm steel stud. With one layer of plasterboard on each side, it offers a robust and reliable partition system that meets construction requirements while maintaining the desired aesthetic appeal.

#### E SERIES 132

Experience the sleek elegance of the E Series 132 and elevate the visual appeal of your partition system while enjoying its functional benefits. Its edgeline glazing and twin-glazing design, combined with its versatile features, make it an ideal choice for various applications.

#### Key Features of the E Series 132:

**Standard Detail Options:** Provides standard detail options to suit your specific preferences. Choose from profile sizes of 132mm x 25mm, 132mm x 35mm, or 132mm x 50mm, allowing you to customize the look and feel of your partition system.

**Glass Compatibility:** This series is designed to accommodate glass thicknesses ranging from 6mm to 13mm. Whether you prefer a thinner or thicker glazing solution, the E Series 132 can seamlessly integrate it into the partition system, offering versatility and design flexibility.

**Door Compatibility:** Compatible with door thicknesses ranging from 35mm to 45mm. This allows you to select the appropriate door thickness for your specific needs, ensuring a seamless and harmonious integration within the partition system.

**Standard Wall Size:** Based on a standard wall size built around a 92mm steel stud. With one layer of 13mm plasterboard on each side, it provides a robust and reliable partition system that meets construction requirements while offering a clean and contemporary look.

#### SUSTAINABILITY

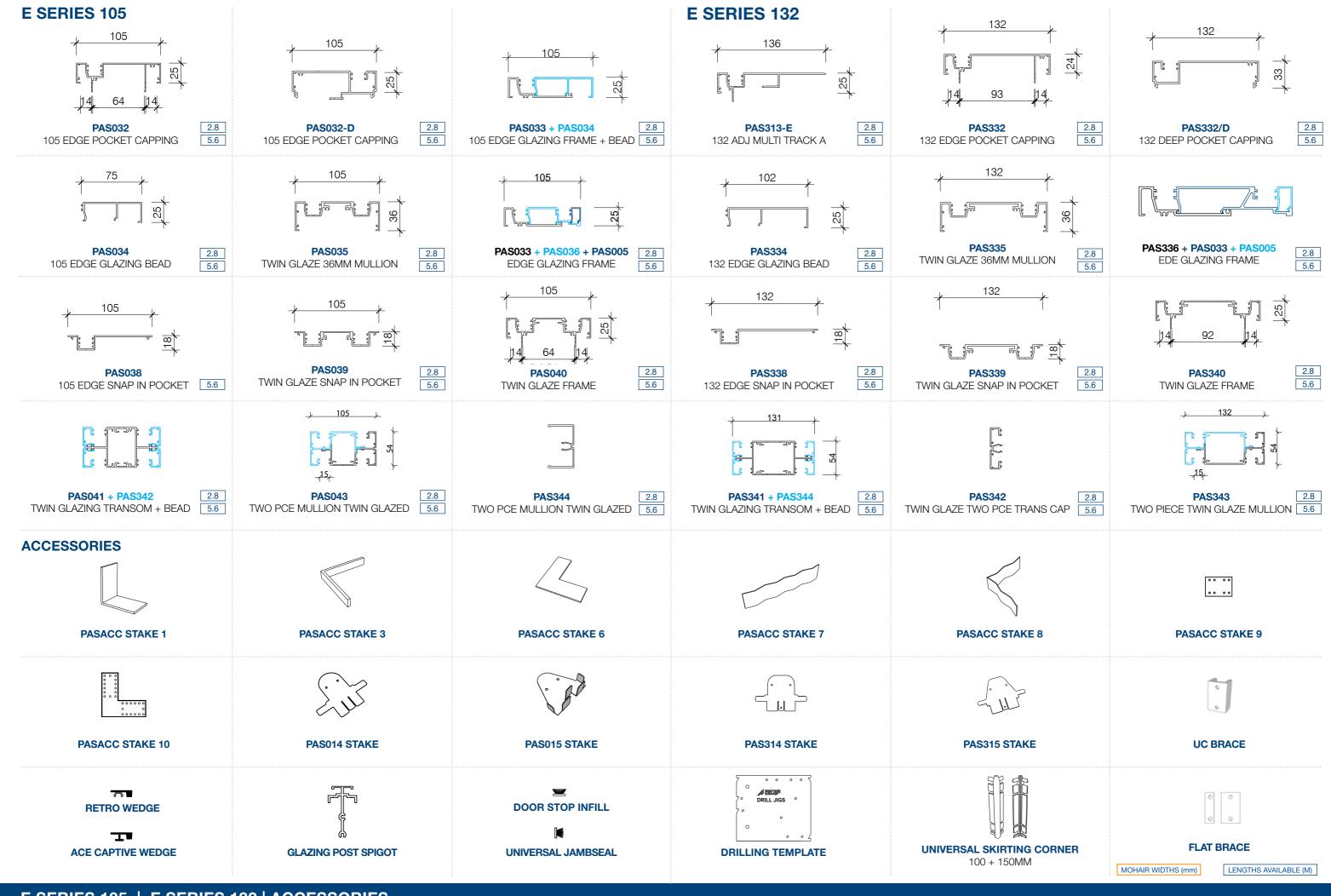
A core value at Potter Interior Systems, we are committed to providing environmentally responsible solutions for the building industry.

**Declare Label:** All our Aluminium Partition suites proudly carry the Declare label. This label serves as a nutrient label for the building industry, providing consumers with comprehensive information about the products they purchase. It specifies the product's origin, presence of any red list chemicals, end-of-life options, and assures customers of non-toxicity and safety.

**New Zealand Green Building Council (NZGBC):** Potter Interior Systems has been a member of the New Zealand Green Building Council since 2013. As active members, we contribute to the development of sustainable building initiatives and promote green building practices throughout New Zealand. Our membership reflects our commitment to supporting and advancing sustainable construction practices.











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