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## Double & Single Glass Partition

## Overview

The DSG system embodies the latest innovation in design from ALLOY Partitioning System, presenting Asia's first full-height, dual-layer glass partition system that flawlessly integrates maximum transparency with the adaptability of a fully demountable, high-performance partition system.

The DSG wall system is customizable to meet the client's requirements, whether it be solid walls, glass walls, or door systems. Additionally, it is equipped with soundproofing features.





## DSG. Glass Wall partitioning.

The DSG Double-Glazed Partition System is available in three models, differentiated by frame size and glass thickness compatibility:

- DSG.80 system: Features a frame width of 80 mm and a frame height of 30 mm, supporting glass thicknesses from 10 mm to 12 mm.
- DSG.100 system: Features a frame width of 100 mm and a frame height of 30 mm, supporting glass thicknesses from 10 mm to 12 mm.
- DSG.25 system: Features a frame width of 100 mm and a frame height of 25 mm, supporting glass thicknesses from 10 mm to 16 mm.

DSG.80 & DSG.100 systems are available in two configurations:

- A completely flush, single-glazed frontline for a minimalist appearance.
- A performance-oriented, double-glazed configuration enhances soundproofing efficiency.

Additionally, **Auto Venetian slim blinds** are available as an optional feature. The **type of glass is** a crucial consideration. It is recommended to use **laminated glass** as it enhances **sound insulation performance**, thereby improving the overall acoustic efficiency of the system.



Frontline

Double-Glazed

DSG. 80

- Compatible Glass Thickness: 8 mm 12 mm
- Frame Dimensions: Width 80 mm x Height 30 mm
- Maximum Panel Height: 2.8 meters
- Maximum Panel Width: 1.2 meters



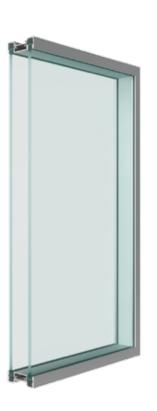
Double-Glazed

Frontline

DSG. 100

- Compatible Glass Thickness: 8 mm 12 mm
- Frame Dimensions: Width 100 mm x Height 30 mm
- Maximum Panel Height: 2.8 meters
- Maximum Panel Width: 1.2 meters

Aluminium Strip for Corner.

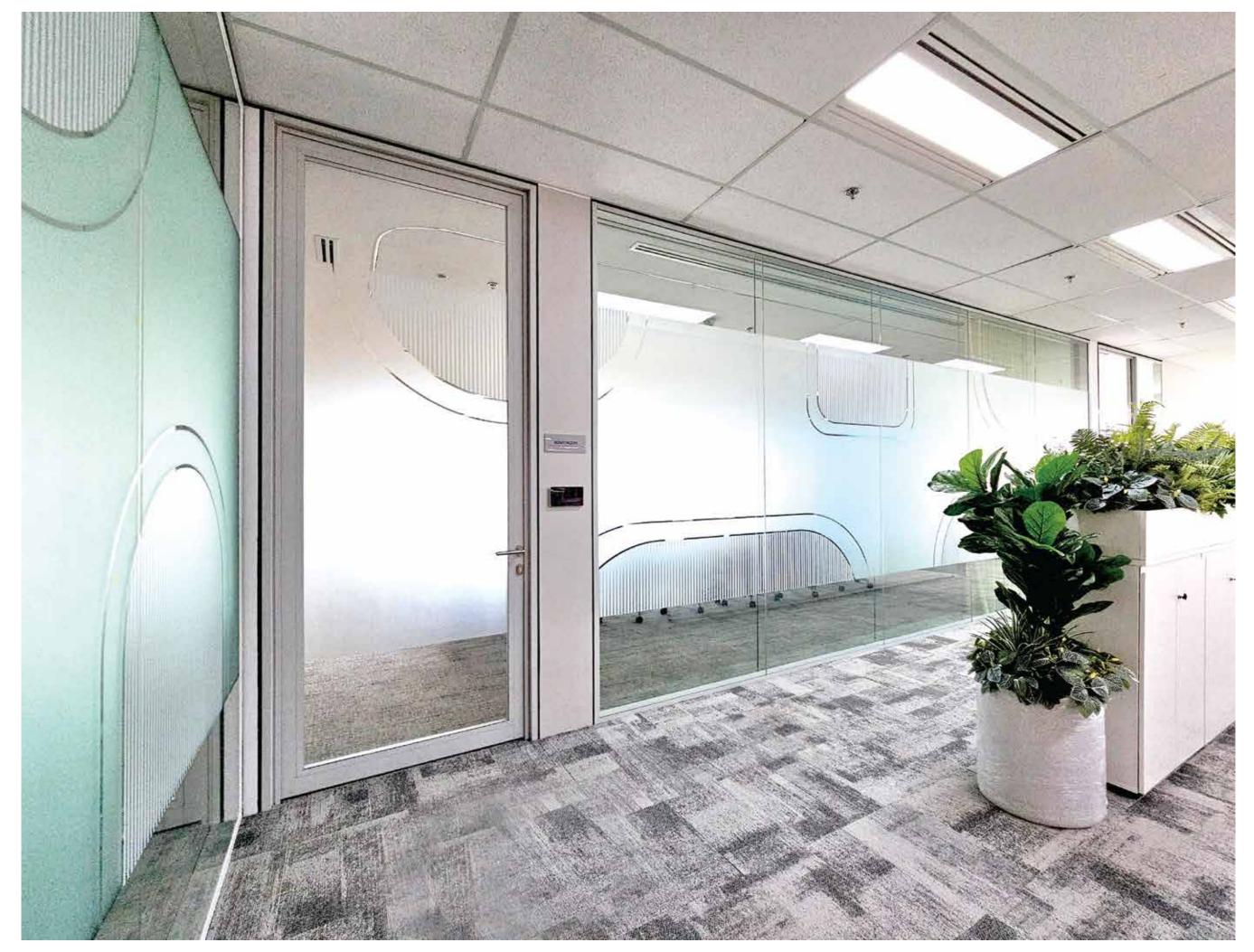


Double-Glazed

DSG. 25

- Compatible Glass Thickness: 8 mm 16 mm
- Frame Dimensions: Width 100 mm x Height 25 mm
- Maximum Panel Height: 2.5 meters
- Maximum Panel Width: 1 meter

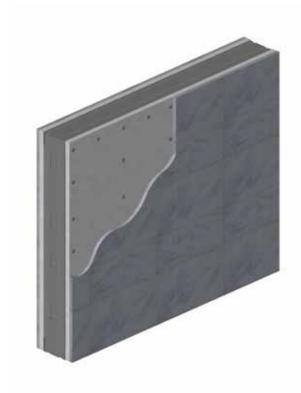




## Solid Wall for DSG Solid Wall

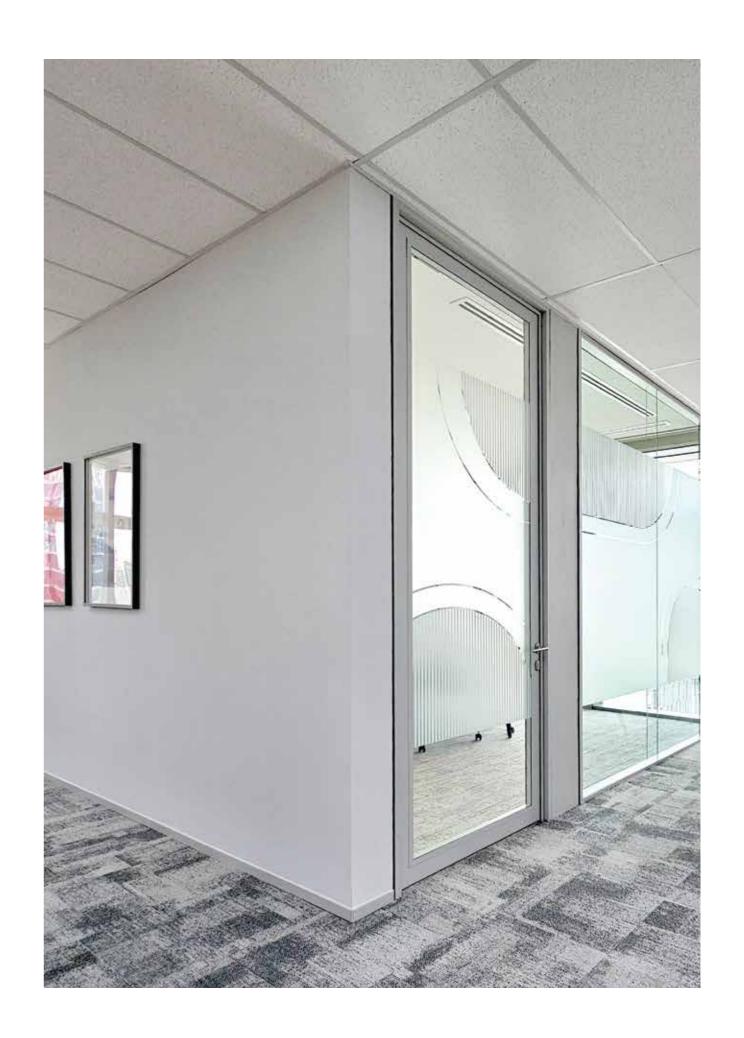
We recommend the **Ecolife Wall Solutions**, a solid wall system with internal insulation that enhances soundproofing capabilities (STC 45 -57). Once installed, the wall has a total thickness of 100 mm, allowing seamless integration with the DSG glass partition system, which also features a 100 mm thickness.

The finishing board is Wall Board: 8 mm thick, made from bamboo charcoal, available in a variety of patterns and color tones for aesthetic versatility.



## **Performance Detail**

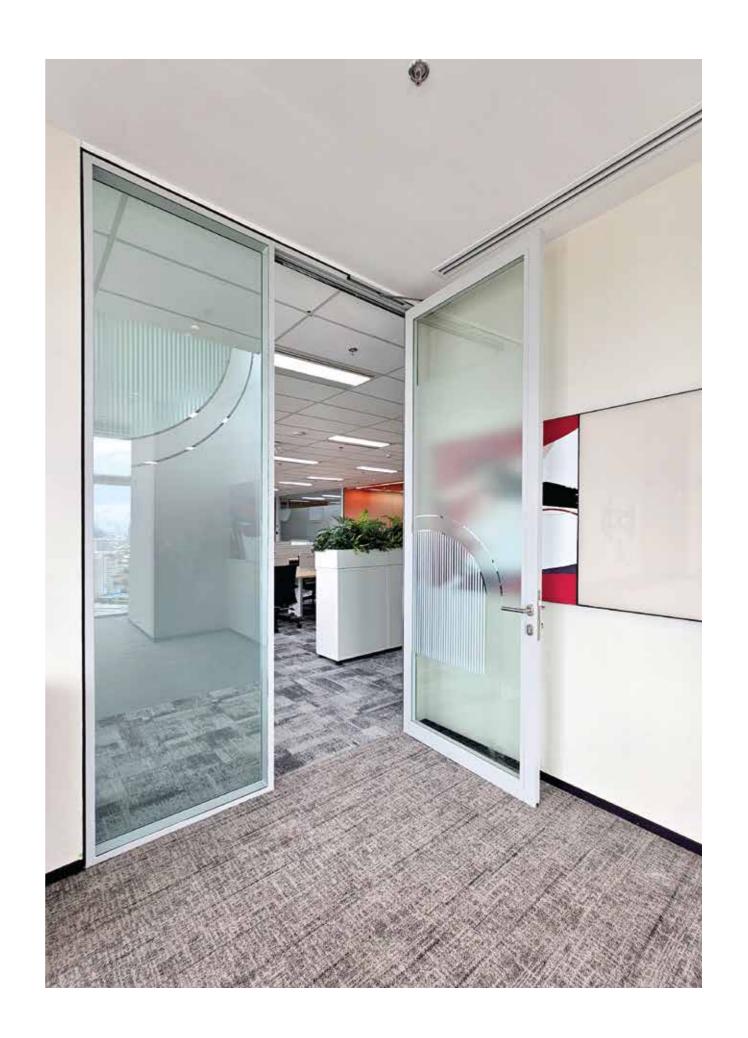
Characteristic	Performance
Wall Thinkness (mm.)	100
Estimated Fire Rate (Min.)	30
Estimated Acoustic (STC)	45
Estimate Max. Height (m.)	3.2

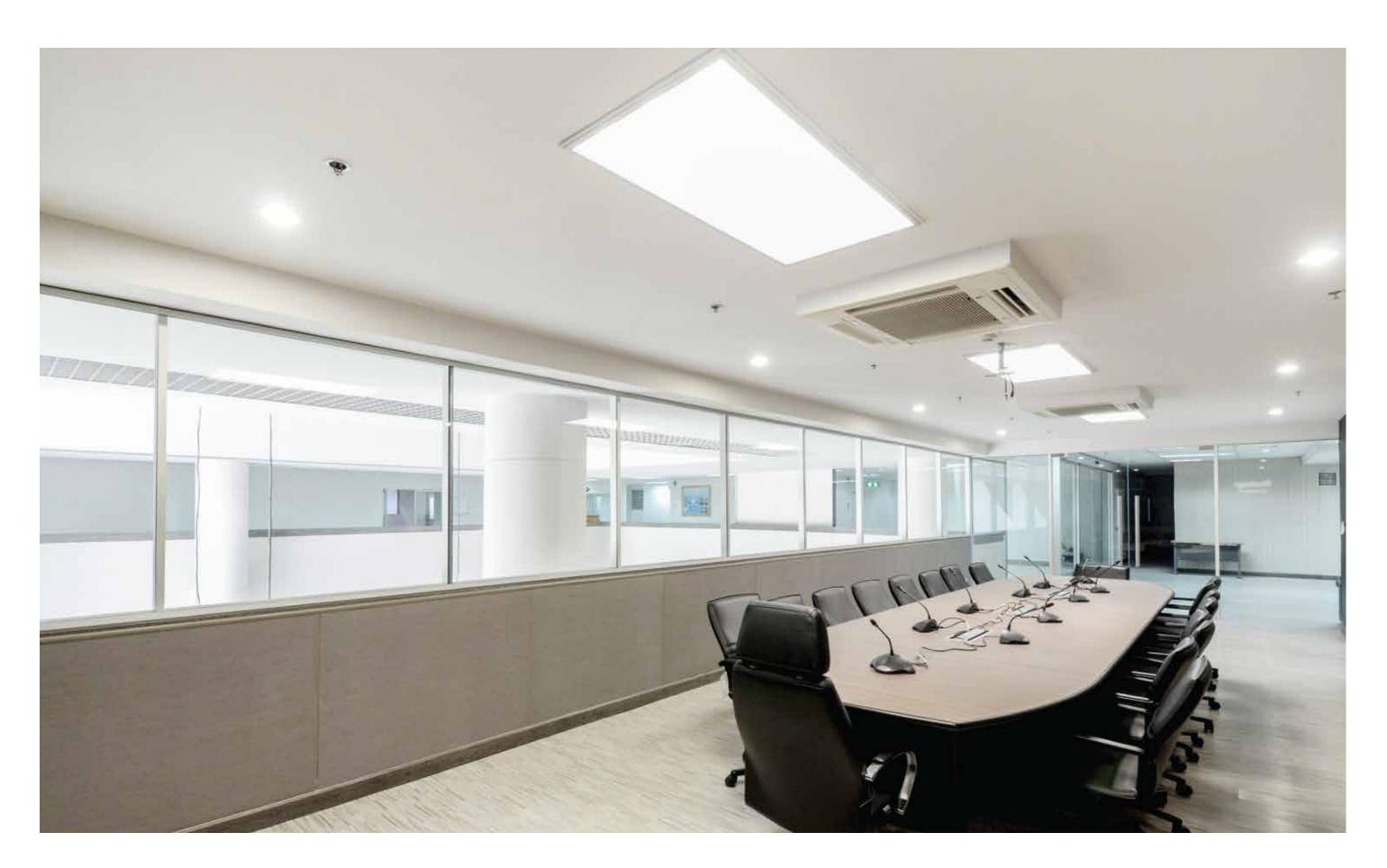


## DSG Double-Glazed Glass Door System

The DSG system comes with a specially designed 45mm thick double-glazed glass door, accommodating two layers of 6mm glass to enhance sound insulation, creating a quieter and more comfortable environment. Alternatively, it can be fitted with a wooden door ranging from 35mm to 45mm in thickness.







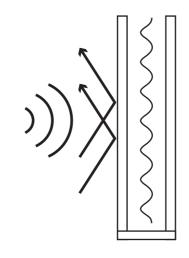


# The Advantages of DSG Double Glazed Glass Partition Systems for Office Spaces



DSG double glazed glass partition systems provide a sophisticated, functional, and energy -efficient solution for dividing office spaces. They enhance workplace aesthetics while offering superior soundproofing, thermal insulation, and security. Unlike traditional single-glass partitions, DSG double glazed systems feature two panes of glass separated by an air gap, significantly improving performance. Here are eight key advantages of using DSG double glazed glass partitions in office environments:







## Sustainability

The ALLOY DSG system is the preferred choice for organizations committed to environmental responsibility. Manufactured using clean production practices, DSG is engineered to significantly contribute to the successful completion of LEED-certified projects through:

- 1. Recycled Content The aluminium components of the DSG system utilize proprietary Recycled Technology, achieving over 70% post-consumer recycled content. Additionally, the panel, insulation, and metal channels incorporate a high percentage of recycled materials.
- 2. Rapidly Renewable Materials DSG panels utilize Eco-One Ultra MDF, which is certified to contain 100% rapidly renewable materials in its production process.
- 3. Regionally Sourced Materials Depending on the project's location, the DSG system can contribute points toward localized manufacturing compliance.

### Why Choose DSG Double Glazed Glass Partitions?

With a combination of acoustic control, energy efficiency, modern aesthetics, and customization, DSG double glazed glass partitions offer a high-performance and stylish solution for office spaces. They provide an optimal balance between openness and functionality, ensuring that workplaces remain productive, comfortable, and visually appealing.

If you're looking for a smart, energy-efficient, and aesthetically refined way to divide office spaces, DSG double glazed glass partitions are a premium investment that enhances both workplace efficiency and design.

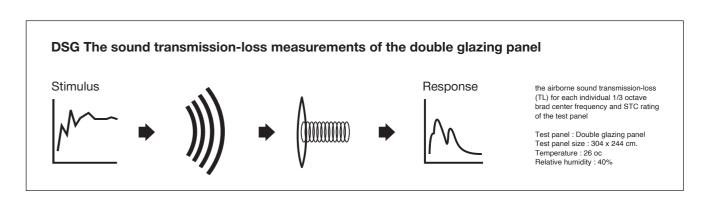
### 1. Exceptional Soundproofing

One of the standout benefits of DSG double glazed glass partitions is their ability to significantly reduce noise transmission. The air gap between the two panes acts as an effective sound barrier, absorbing and minimizing noise transfer between office areas. This is essential for open-plan offices, meeting rooms, and private spaces, ensuring minimal distractions and enhanced concentration. The wider the gap and the more panels used, the stronger the soundproofing effect.

### **Acoustic Performance**

Acoustics play an important role in the design of an effective workspace. ALLOY DSG is engineered to allow specialist consultants to effectively manage sound absorption and transmission characteristics of a particular workspace using a combination of sound absorption and reflective paneling affixed to DSG universal framework.

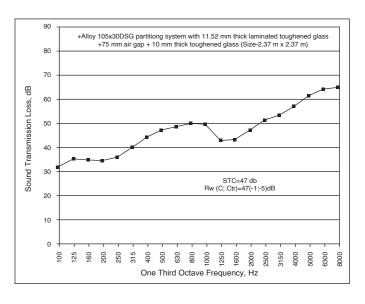
DSG system also meets stringent sound transmission tests, achieving an impressive 45 dB – 47 dB rating for the performance double glazed paneling, and an STC performance exceeding 45 dB for the solid panel system. A qualified expert in ALLOY should always be consulted when designing your acoustic requirements for your office workspace.



#### NVH/3100005228/2019-20/741

Table 1 and Figure 2: Values and plot for Sound Transmission Loss of Alloy 105x30 DSG partition system with 11.52 mm thick laminated glass + 75 mm air gap + 10 mm thick toughened glass (Size-2.37 m x 2.37 m) at one third octave frequencies

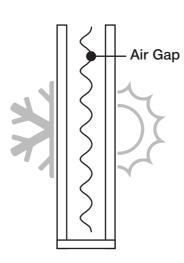
One Third Octave Frequency, Hz	Sound Transmission Loss, dB	STDEV
100	31.7	0.7
125	35.0	0.3
160	34.6	0.7
200	34.2	0.7
250	35.9	0.6
315	40.0	0.9
400	43.8	0.6
500	46.9	0.2
630	48.4	0.3
800	49.8	0.3
1000	49.7	0.1
1250	42.8	0.4
1600	43.2	0.3
2000	47.1	0.3
2500	51.3	0.6
3150	53.3	0.5
4000	56.9	0.1
5000	61.4	0.5
6300	64.3	0.3
8000	65.2	0.5
STC	47	-
Rw (C; Ctr)	47(-1;-5)	-

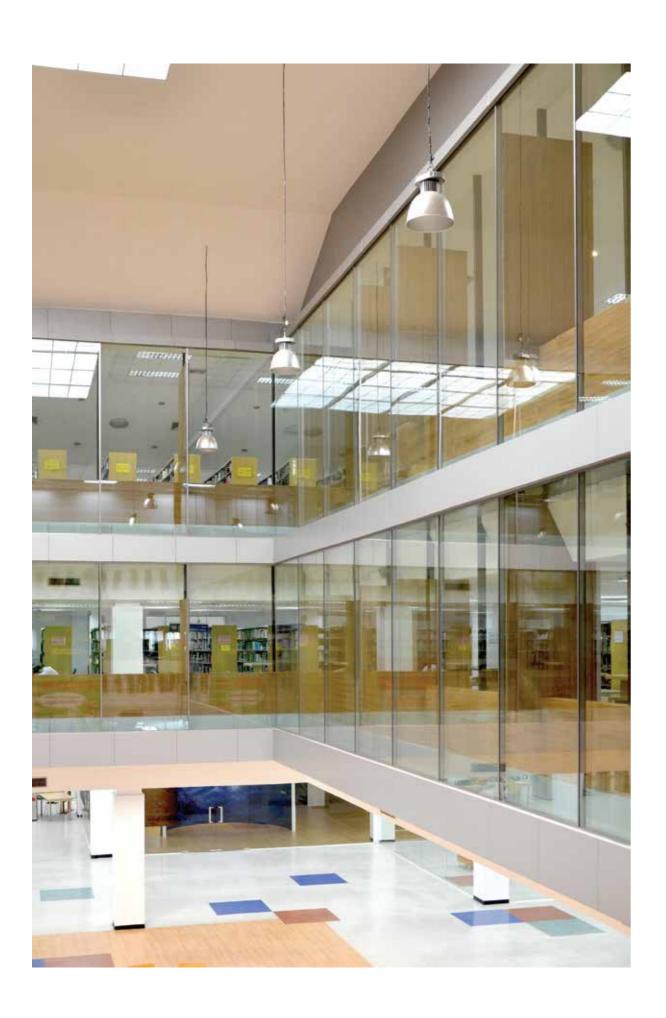




## 2. Superior Thermal Insulation

DSG double glazed glass partitions help regulate indoor temperatures by reducing heat transfer between office spaces. The air gap between the panes acts as a thermal buffer, maintaining a stable indoor climate. This means that offices stay cooler in summer and warmer in winter, reducing reliance on heating and cooling systems. The result is lower energy costs and improved environmental efficiency. The greater the air gap and 2 layers of glass, the better the insulation.

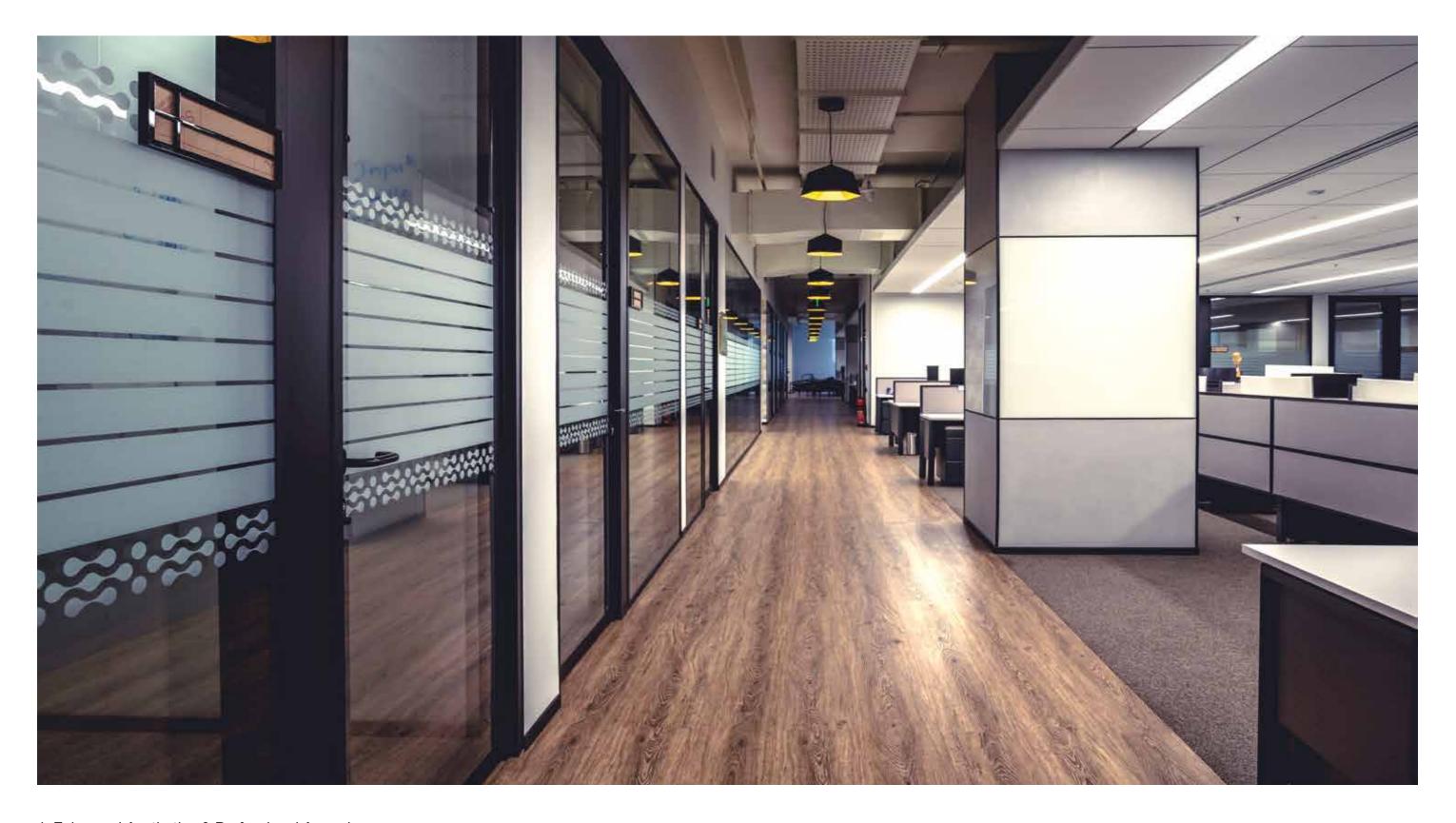




## 3. Maximized Natural Light Flow

Unlike solid partitions that create dark and enclosed spaces, DSG double glazed glass partitions allow natural light to pass through freely, maintaining brightness while providing separation. Research shows that access to natural light improves employee well-being, focus, and productivity. Additionally, increased daylight reduces the need for artificial lighting, leading to lower electricity costs.





## 4. Enhanced Aesthetics & Professional Appeal

DSG double glazed glass partitions bring a modern and sophisticated look to any office space. Their sleek, minimalist design enhances the visual appeal of workplaces while maintaining an open and collaborative atmosphere. Frameless and slim-framed options further enhance aesthetics, making office interiors look more spacious and refined.

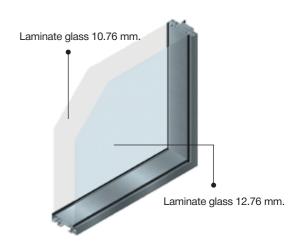
The DSG aluminum frame system is available with a range of electroplated color finishes (Anodizing color), offering the opportunity to enhance the elegance and sophistication of any space.



## 6. Improved Safety & Security

Modern DSG double glazed glass partitions use tempered or laminated glass, making them highly impact-resistant and shatter-proof. This ensures added safety in the workplace, reducing the risk of injuries in case of accidental impacts.

Additionally, lockable options and smart glass technology offer enhanced security for confidential areas and executive offices.



## 5. Low Maintenance & High Durability

Constructed with impact-resistant and reinforced glass, DSG double glazed partitions are built to withstand daily wear and tear. Unlike drywall or traditional partition materials, glass does not degrade over time and is resistant to scratches, stains, and moisture. Additionally, cleaning is simple, requiring only routine maintenance with standard glass cleaners to keep them looking pristine.



## 7. Greater Flexibility & Customization Options

DSG double glazed systems provide a high degree of customization to suit different office needs.

## **Options include:**

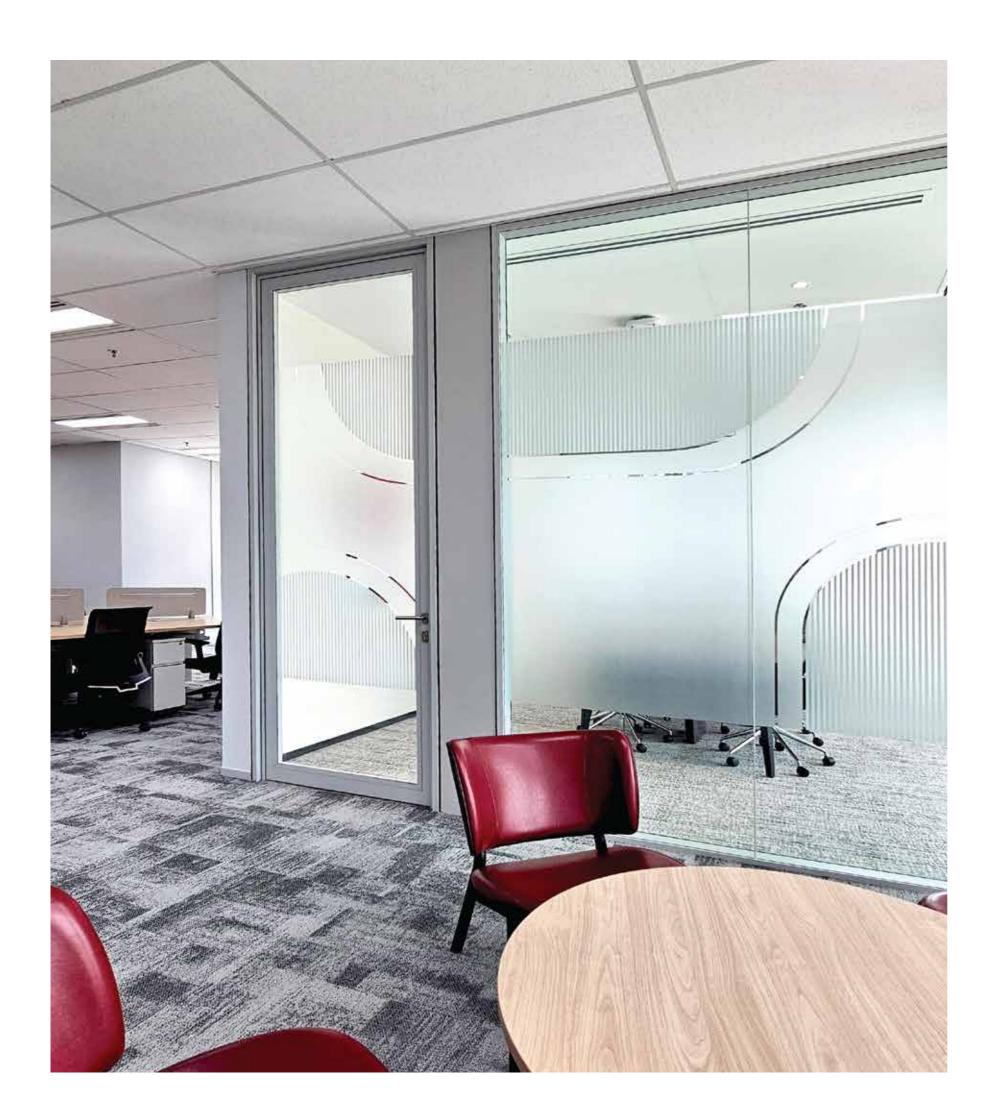
Frosted or tinted glass for enhanced privacy. Integrated blinds for adjustable transparency. Switchable smart glass that transforms from clear to opaque at the press of a button Various frame styles and finishes to match corporate branding and aesthetics.

This level of flexibility allows businesses to create office partitions that align with both design and functional needs.

## 8. Sustainable & Eco-Friendly Solution

As businesses focus on sustainability and green building solutions, DSG double glazed glass partitions offer an eco-friendly alternative. Their energy efficiency reduces carbon footprints, while their recyclable materials make them a sustainable choice for modern office spaces. Additionally, glass partitions support LEED and green building certifications, making them ideal for companies committed to environmental responsibility.





## ALLOY Project References

## **Corporate Offices**

ABB Q HOUSE TOWER Anderson Mori & Tomotsune Astrazeneca (Thailand) BBN Airlines (Thailand)

Begonia (BNA) True Digital Park

BMW Calbee Chubb

CP North Park DLA Piper

East West Seed

Electrolux ExxonMobil

FWD

Glowfish Siam Patumwan

Graphene Factory Gucci Bkk Office

GULF Huawei J Design

J. Walter Thompson

Johnson & Johnson KGI One Bangkok

LG ELECTRONICS (CBRE)

L'Oreal Microsoft

Siemens Healthineers

Standard Chartered Bank Head Office

Starbuck Telenor

Tetra Pak

### Banking, Finance & Insurance

AIA International Chanel Central Chidlom

Citibank IC21

**HSBC** 

ING Life Insurance
JP Morgan Chase Bank

KTB

Merrill Lynch

Thanachat Insurance

UOB

#### Healthcare

Bumrungrad Hospital

Inz Hospital

Medical Complex Ramintra Samitivej Sriracha Hospital

Sukhumvit Hospital

Synphaet Hospital (Nakornpathom)

Thonburi 2 Hospital

### Institution & Government

Australian Embrassy School KIS International School NIST International UN ESCAP (Bangkok)

