

TO BUILD TRUST & COMMITMENT TOGETHER



**AJIYA**<sup>®</sup>  
SAFETY GLASS

www.ajiya.com

# THE AJIYA STYLE



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To Build Trust and Commitment Together

# AJIYA

## GROUP OF COMPANIES

AJIYA BERHAD,  
an investment holding  
company based in  
Segamat, is listed on  
Bursa Malaysia,  
Malaysia.

The AJIYA group's activities include manufacturing and marketing of high-quality glass products, metal roofing, metal door & window frames, floor decks and other building materials.

AJIYA SAFETY GLASS SDN. BHD., a subsidiary of AJIYA Berhad, was formed in November 1995 and its principal activities are in the manufacturing of heat strengthened glass, tempered safety glass, insulating energy-saving safety glass, laminated safety glass, decorative coated safety glass, security safety glass and other high-quality glass products.

With modern production facilities, well-trained personnel and a dynamic management team, Ajiya is committed to provide high-quality glazing products, continuous innovation and outstanding service. Ajiya endeavours to be the best supplier of glass products and be the leader in the market in which it competes.

high quality glazing products

outstanding service

continuous innovation



## AJIYA FACTORIES



**AJIYA SAFETY GLASS SDN. BHD.**  
Puchong



**AJIYA SAFETY GLASS SDN. BHD.**  
Segamat



**AJIYA GLASS INDUSTRIES SDN. BHD.**  
Segamat



**ASIA ROOFING INDUSTRIES SDN. BHD.**  
Segamat LOT 29



**ASIA ROOFING INDUSTRIES SDN. BHD.**  
Segamat LOT 28



**ASIA ROOFING INDUSTRIES SDN. BHD.**  
Segamat LOT 152



**ASIA ROOFING INDUSTRIES SDN. BHD.**  
Segamat LOT 153



**ASIA ROOFING INDUSTRIES SDN. BHD.**  
Segamat LOT 142



**ARI UTARA SDN. BHD.**  
Sungai Petani, Kedah



**ARI TIMUR (KB) SDN. BHD.**  
Kota Bharu, Kelantan

### GROUP OF COMPANIES - PRODUCTS

#### **AJIYA SAFETY GLASS SDN. BHD.**

- Tempered Safety Glass
- Heat Strengthened Glass
- Curved Tempered Safety Glass
- Laminated Safety Glass
- Insulating Energy-Saving Safety Glass Unit
- Decorative Coated Safety Glass
- Intrusion Resistant Safety Glass
- Bullet Resistant Safety Glass
- Blast Resistant Safety Glass
- Hurricane Resistant Safety Glass
- Low-E Energy Saving Glass
- And Other High Performance Glass

#### **ASIA ROOFING INDUSTRIES SDN.BHD.**

- Metal Roofing
- Metal Cladding
- Metal Door Frames
- Metal Window Frames
- Structural Floor Decks

#### **AJIYA GLASS INDUSTRIES SDN.BHD.**

- Tempered Glass, Insulating Glass  
etc. for Industrial Applications



## *Heat Treated Glass*

- *Ajiya Tempered Safety Glass*
- *Ajiya Heat Strengthened Glass*
- *Ajiya Curved Tempered Safety Glass*



## Ajiya Tempered Safety Glass

### Product Description

Ajiya Tempered Safety Glass is a heat treated glass with a residual surface compression in excess of 10,000 psi or an edge compression in excess of 9,700 psi. It is manufactured by heating ordinary float glass to its softening point (about 700 °C) and then cooling the glass rapidly by quenching it with a uniform blast of air on both surfaces simultaneously. Ajiya Tempered Safety Glass, when broken, breaks into a multitude of small fragments, thus protecting against serious injuries.

### Product Features

#### Safety & Standards

Ajiya Tempered Safety Glass is a safety glazing material, conforming to the requirements of ASTM C 1048, ANSI 97.1, BS 6206, etc.

#### Strength

Ajiya Tempered Safety Glass is approximately 4 to 5 times stronger than ordinary annealed glass. It has a higher bending strength and is more resistant to impact.



*Breaking pattern of tempered safety glass*

#### Thermal Stress Resistant

Ajiya Tempered Safety Glass is more resistant to thermally induced stress and can, therefore, resist thermal shock which can cause ordinary annealed glass to crack.

#### Fabrication

Ajiya Tempered Safety Glass cannot be drilled, cut or edged after being heat treated. All dimensions and specifications must be determined before the glass is tempered.

#### Colour

In addition to clear glass, Ajiya Tempered Safety Glass also comes in various colours or tints, and can be reflective and Low-E as well.





## Special Heat Soaking

Ajiya also offers heat soaking for its tempered safety glass.

This process potentially reduces the risk of spontaneous breakage from nickel sulfide inclusions in tempered safety glass.

## Product Applications

- Curtain walls
- Balustrades
- Shop fronts
- Windows
- Frameless glass doors
- Greenhouses
- Showcases
- Escalator side panels

### AJIYA TEMPERED SAFETY GLASS

Production	Size (mm)	Thickness (mm)
Minimum	180x180	3.0
Maximum	6000x3000	19



## Ajiya Heat Strengthened Glass



### Product Description

Ajiya Heat Strengthened Glass is a heat treated glass with a residual surface compression greater than 3,500 psi and less than 10,000 psi, or edge compression greater than 5,500 psi and less than 9,700 psi. It is manufactured similarly to Ajiya Tempered Safety Glass, except this glass is cooled less rapidly. When broken, the break pattern will vary according to the surface compression.

### Product Applications

- Curtain walls
- Balustrades
- Windows

#### AJIYA HEAT STRENGTHENED GLASS

Production	Size (mm)	Thickness (mm)
Minimum	180x180	3.0
Maximum	6000x3000	10

### Product Features

#### Safety & Standards

Ajiya Heat Strengthened Glass conforms to the requirements of ASTM C 1048, MS 1498, etc.

#### Strength

Ajiya Heat Strengthened Glass is approximately 2 times stronger than ordinary annealed glass. It has a higher bending strength and is more resistant to impact when compared with ordinary annealed glass.

#### Thermal Stress Resistant

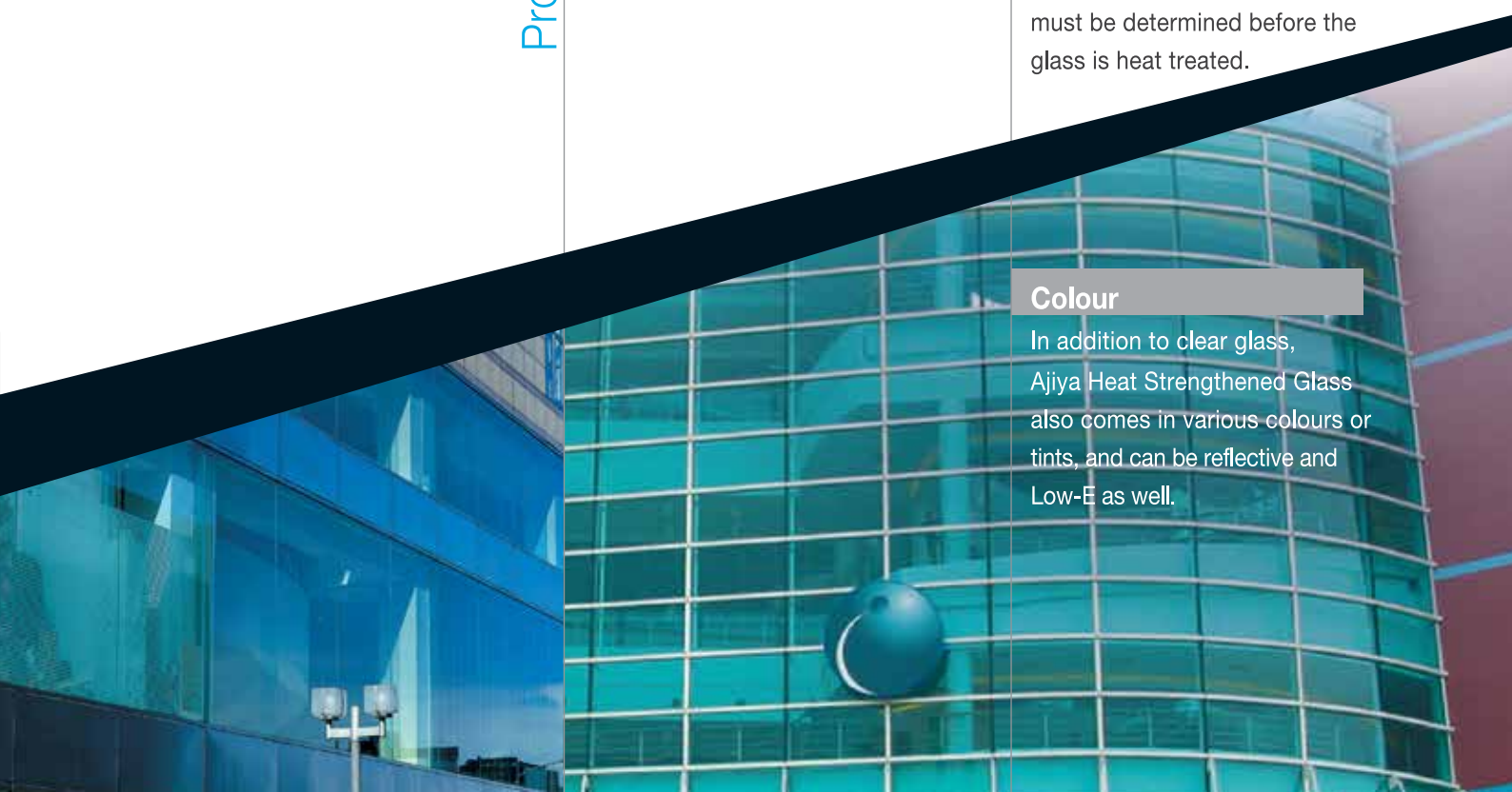
Ajiya Heat Strengthened Glass offers good resistance to thermal stress, although to a lesser degree than tempered glass.

#### Fabrication

Ajiya Heat Strengthened Glass cannot be drilled, cut or edged after being heat treated. All dimensions and specifications must be determined before the glass is heat treated.

#### Colour

In addition to clear glass, Ajiya Heat Strengthened Glass also comes in various colours or tints, and can be reflective and Low-E as well.



## Ajiya Curved Tempered Safety Glass

### Product Description

Ajiya Curved Tempered Safety Glass is manufactured by heating the glass to its softening point and then forming the required shape in a special mould before being subjected to rapid cooling. This rapid cooling will result in the formation of high residual surface compression on the glass surfaces.

- Curtain walls
- Skylights
- Corner windows
- Curved shower screens
- Display windows
- Display showcases

AJIYA CURVED TEMPERED SAFETY GLASS

Production	b	l
Minimum	650	300
Maximum	2200	2800

### Product Applications

### Product Features

#### Safety

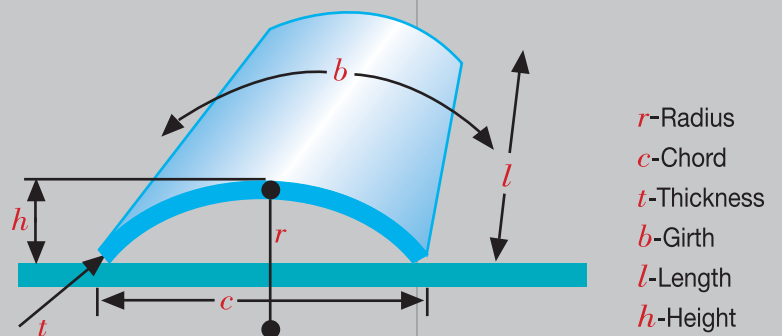
If broken, Ajiya Curved Tempered Safety Glass will break into a multitude of small fragments, thus preventing serious injuries.

#### Strength

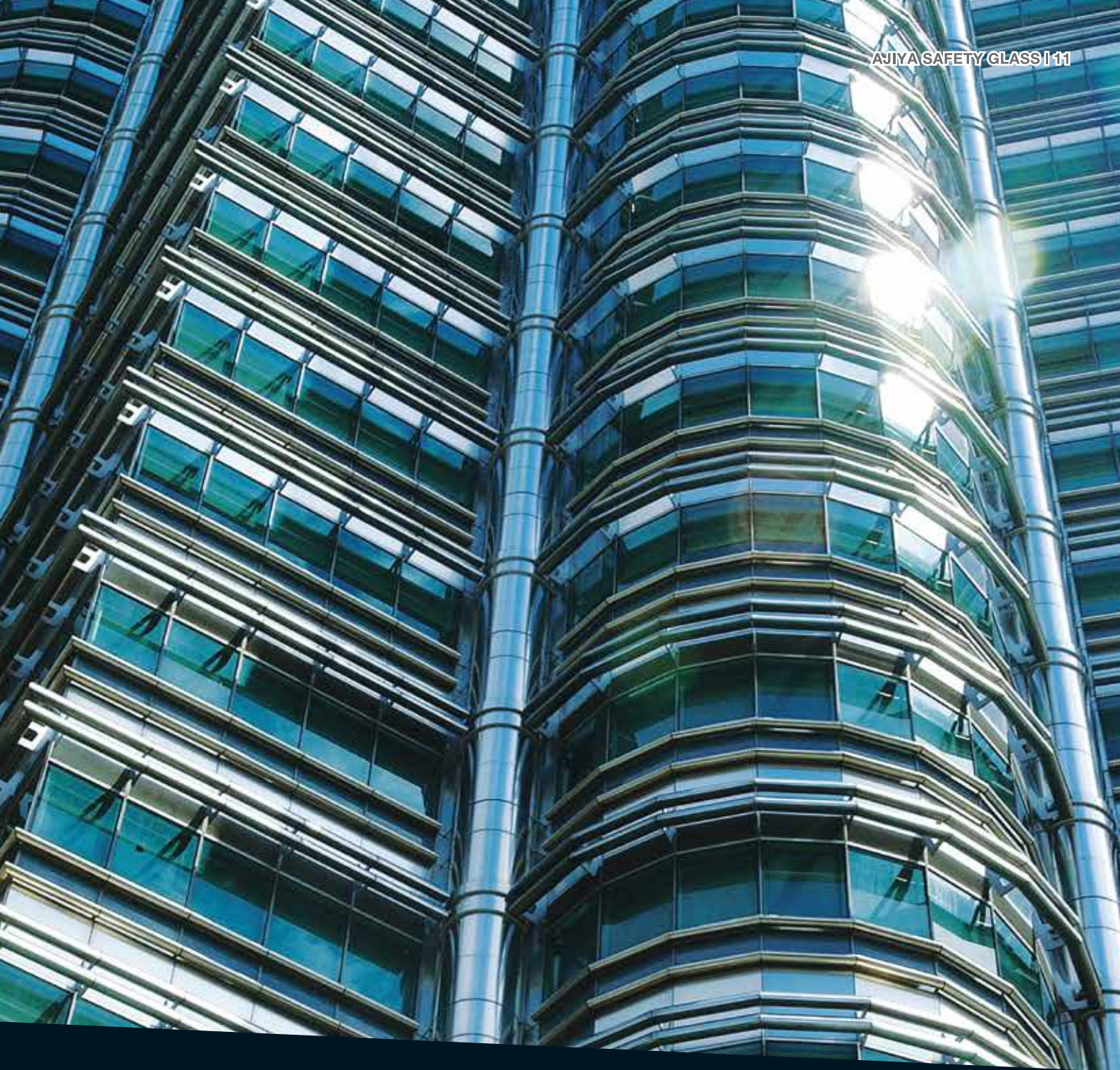
Ajiya Curved Tempered Safety Glass is stronger and more resistant to impact when compared with ordinary annealed glass.

#### Thermal Stress Resistant

Ajiya Curved Tempered Safety Glass is more resistant to thermally induced stress when compared with ordinary annealed glass.







***Laminated Glass***

*- Ajiya Laminated Safety Glass*







## Ajiya Laminated Safety Glass

### Product Description

Ajiya Laminated Safety Glass is produced by permanently bonding two or more sheets of glass with one or more sheets of tough polyvinyl butyral (PVB) interlayer under heat and pressure. When broken, the glass fragments will adhere to the plastic interlayer and will continue to provide protection. Ajiya Laminated Safety Glass is available in a wide variety of design options, depending on the tint and thickness of both the glass and interlayers, and on the types of glass used.

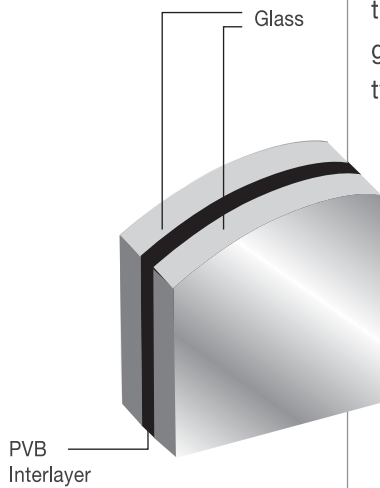


Diagram of a laminated safety glass

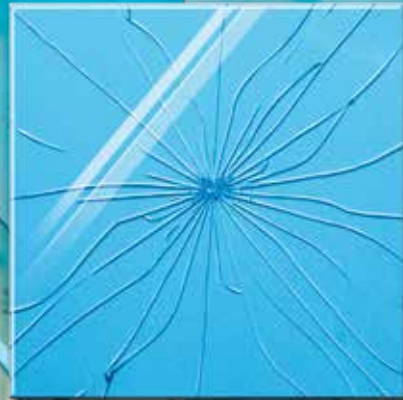
### Product Features

#### Safety & Standards

Ajiya Laminated Safety Glass is a safety glazing material, conforming to the requirements of MS 1498, BS 6206, ANSI Z 97.1, etc.

#### Impact Performance

Under impact, Ajiya Laminated Safety Glass will resist penetration and will absorb the energy of the impact. The glass will remain intact when broken, with the glass fragments remaining firmly bonded to the interlayer, thus minimising the risk of injuries from sharp edges and falling glass.



Breaking pattern of laminated safety glass



### Security

If broken, laminated safety glass will remain intact in its frame and will continue to safeguard the building until the glass is replaced. Due to the tough PVB interlayer used, it will continue to provide protection and resistance to entry after the glazing is broken.

### Sound Reduction

The viscoelastic properties of the PVB interlayer used in Ajiya Laminated Safety Glass provide a dampening effect on the transmission of sound, thus reducing unwanted noise.

### Solar Energy Control

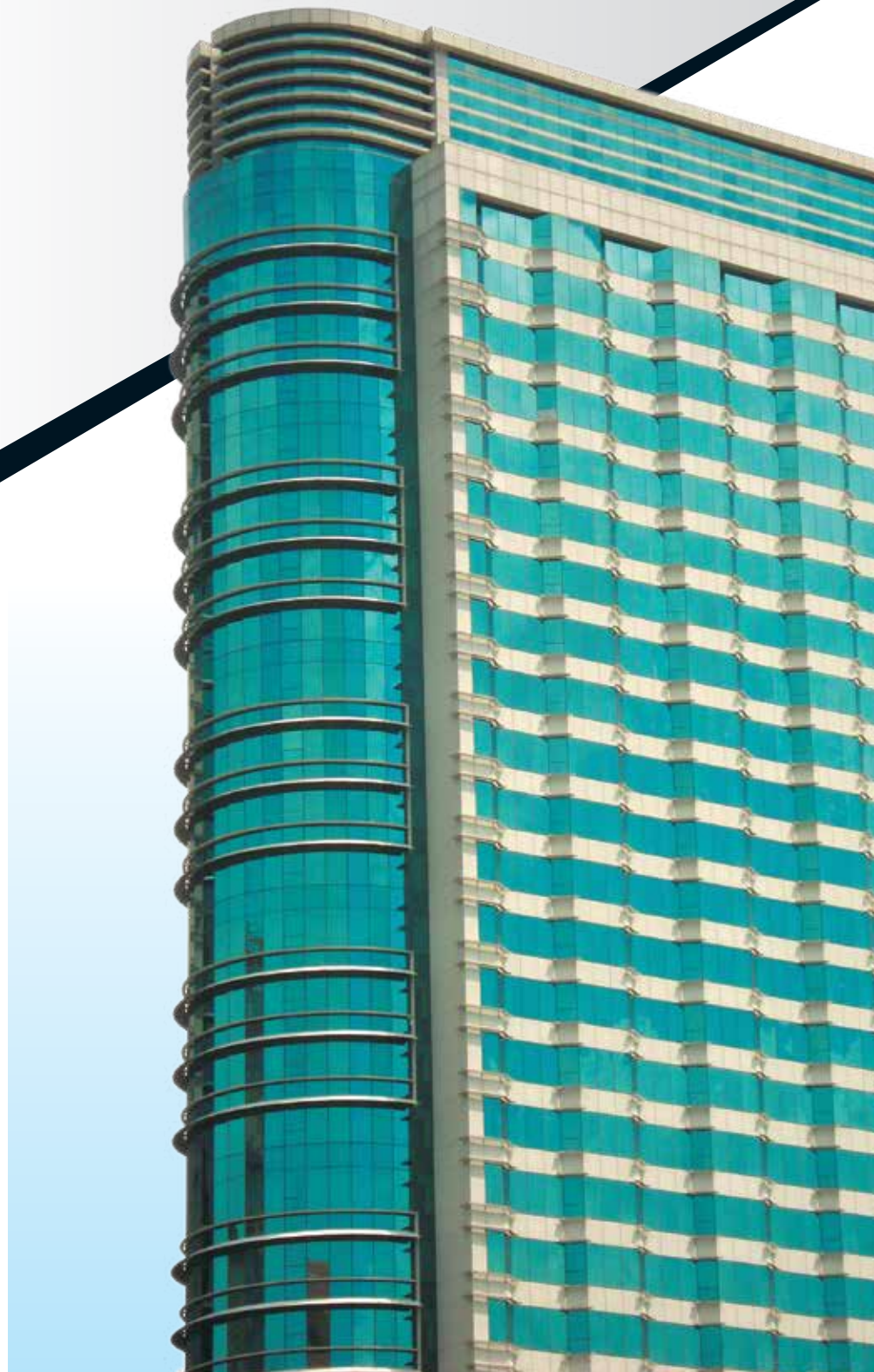
Laminated safety glass using tinted, reflective or Low-E glass can provide a wide range of aesthetic and solar performance options. In addition to reducing solar heat gain and glare, it can also enhance the appearance of buildings and meet energy management needs.

### Design Versatility

Ajiya Laminated Safety Glass is available in a wide variety of design options and may be made with a variety of glass types, including annealed, tempered, heat strengthened, tinted, decorative ceramic coated reflective and Low-E glass.

### UV Control

The UV absorbing additives in the PVB interlayer used by Ajiya Laminated Safety Glass can screen out almost all of the sun's damaging UV rays, thus providing protection against discolouration and damage to fabrics, furniture, wall coverings, furnishings, artworks, etc.







## Product Features

### Durability

Ajiya Laminated Safety Glass will maintain its colour and strength for the life of the building.

### Fire Retardancy

While standard laminated safety glass does not meet code requirements as a fire-resistant glass when exposed to flames and heat, it does not disintegrate easily like ordinary annealed glass, thus confining the fire longer, and giving more time for detection, evacuation and extinguishing.

### Installation Versatility

Ajiya Laminated Safety Glass using annealed glass can be cut to size on site and can also be drilled or notched.

### Low Visible Distortion

Sharp reflected images are possible with curtain walls constructed from laminated safety glass using annealed glass.

## Product Applications

- Curtain walls
- Balustrades
- Spandrel glass
- Skylights
- Slope glazing
- Greenhouses

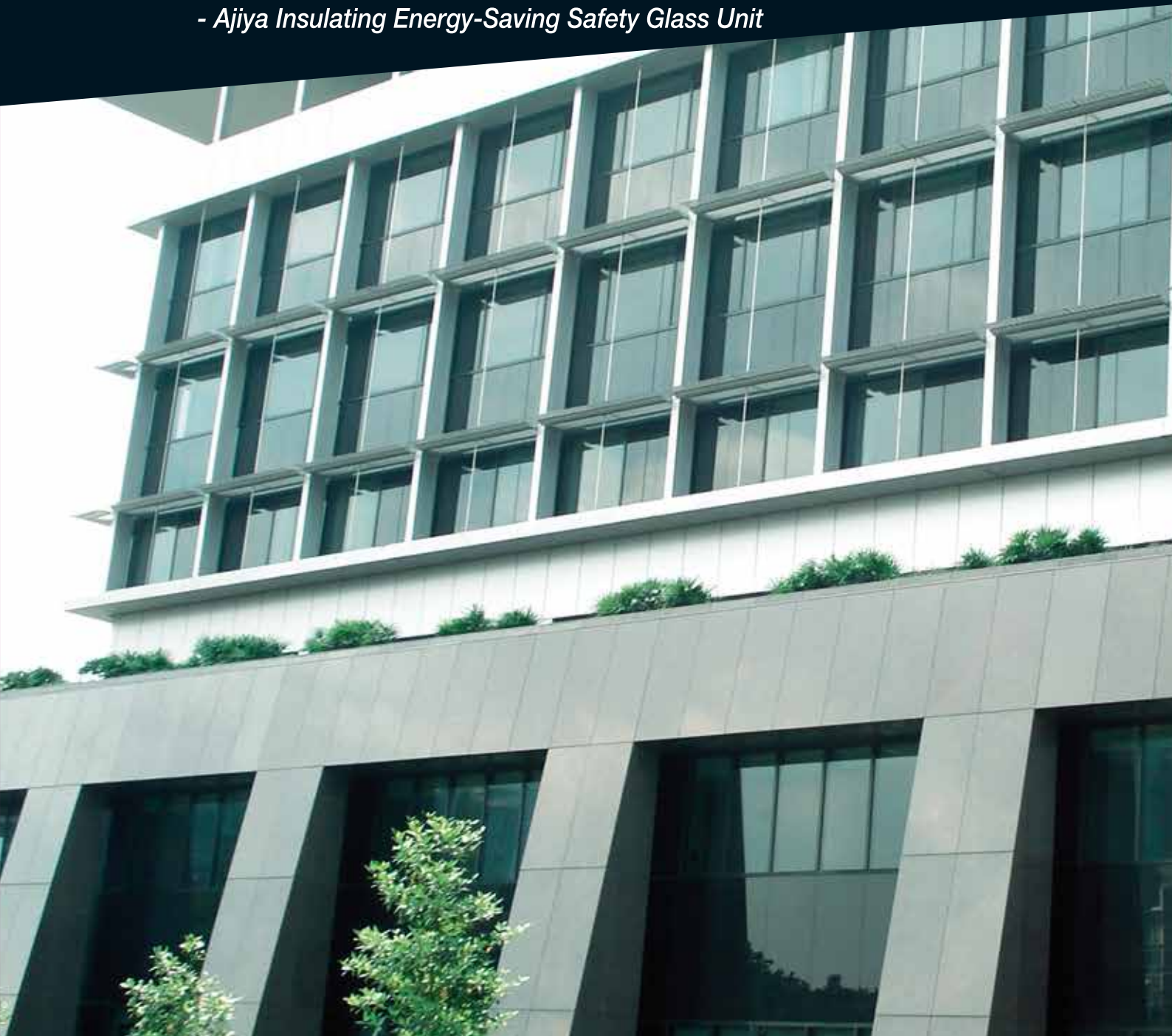
### AJIYA LAMINATED SAFETY GLASS

Production	Size (mm)	Thickness (mm)
Minimum	300x300	4.38
Maximum	5000x2250 4500x2400	80 80



## *Insulating Glass*

*- Ajiya Insulating Energy-Saving Safety Glass Unit*



# Ajiya Insulating Energy-Saving Safety Glass Unit



## Product Description

Ajiya Insulating Energy-Saving Safety Glass Unit is constructed from two or more plies of glass, separated by a desiccant-filled spacer and sealed with sealant. Ajiya Insulating Energy-Saving Safety Glass Unit can be constructed from a wide variety of combination options, depending on the tint and thickness of the glass, and the types of glass used.

- Curtain walls
- Windows

### AJIYA INSULATING ENERGY-SAVING SAFETY GLASS UNIT

Production	Size (mm)	Thickness (mm)
Minimum	250x150	10
Maximum	3600x2400	52

## Product Applications

## Product Features

### Thermal & Sound Insulation

The enclosed layer of air in the insulating unit will improve the thermal and sound insulation capability of the insulating unit when compared with that of monolithic glass.

### Prevention of Condensation

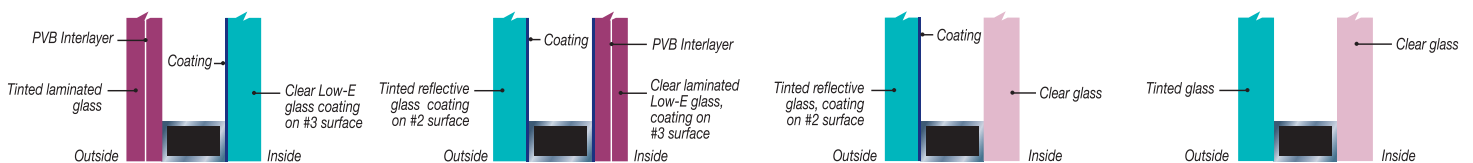
The insulating unit prevents dew condensation on the hot air side, thus ensuring perfect transparency.

### Safety & Standards

Ajiya Insulating Energy-Saving Safety-Saving Safety Glass Unit conforms to the requirement of MS 2666.



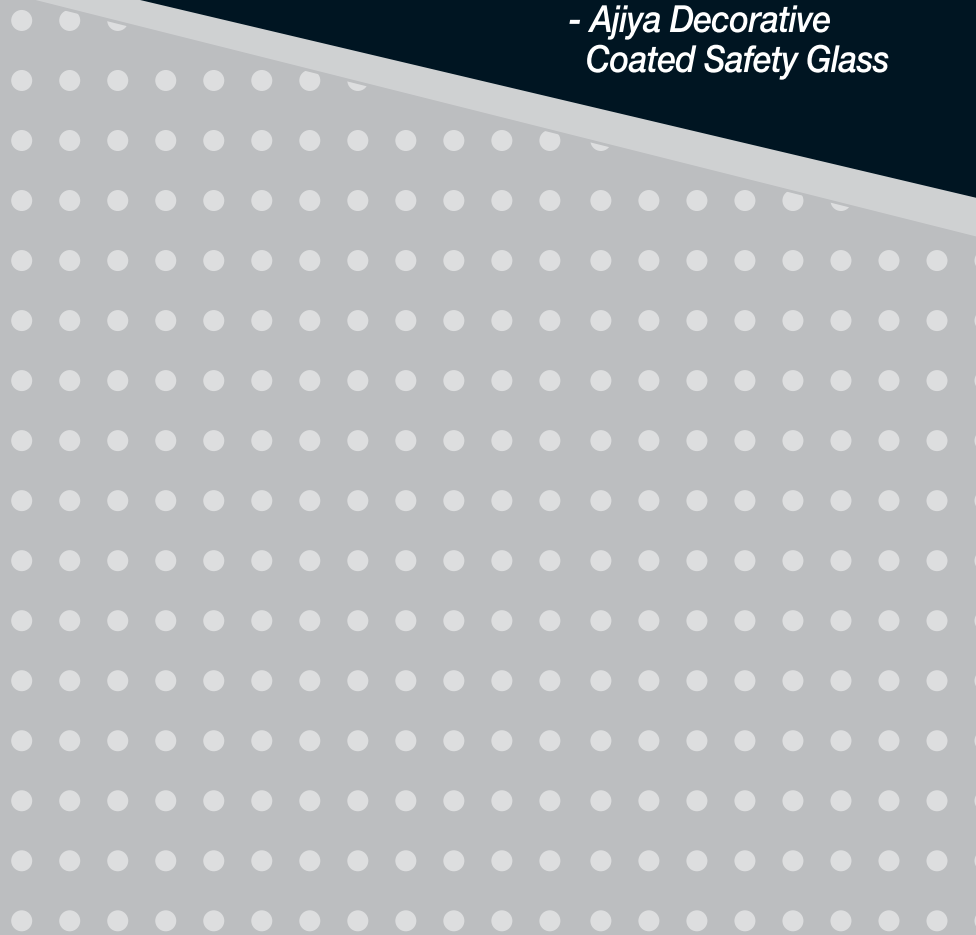
### EXAMPLES OF IGU CONFIGURATION





*Decorative Glass*

*- Ajiya Decorative  
Coated Safety Glass*





## Ajiya Decorative Coated Safety Glass

### Product Description

Ajiya Decorative Coated Safety Glass is produced by applying ceramic or enamel paint onto the glass surface before being heat treated in a tempering furnace. A full range of decorative designs and colours can be created to suit every need. It can be used monolithically, laminated or double glazed.

### Product Applications

- Curtain walls
- Windows
- Shower screens
- Canopies
- Privacy screens
- Doors
- Partitions
- Spandrel glass

### Product Features

#### Scratch Resistant

After curing, the coating is fused to the glass and cannot be scratched off.

#### Fade Resistant

The colour of the coating is highly durable and will not fade even in harsh climates.

#### Reduce Glare

The patterned glass can be designed to reduce glare.

#### Reduce Solar Transmission

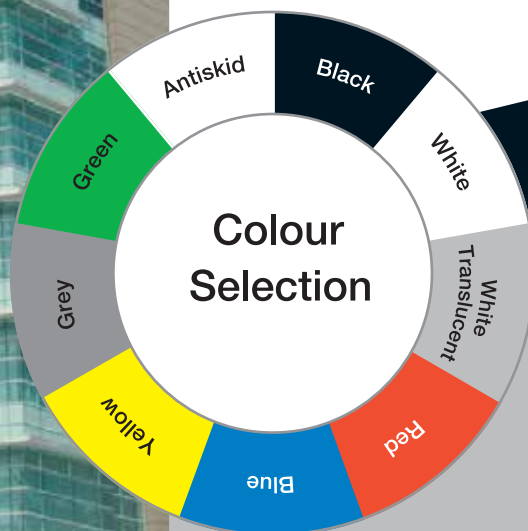
The patterned glass can also be designed to reduce solar transmission.

#### Wide Range of Colours

A wide range of standard colours are available. Custom colour is available upon special request.

#### Wide Range of Patterns

A wide range of standard patterns are available. Custom pattern is available upon special request.





Square



Polka-dot



Polka-dot



Lines



Lines



Solid Colours







**Security, Safety &  
Storm Protection Glass**

- *Ajiya Bullet Resistant Safety Glass*

- *Ajiya Intrusion Resistant Safety Glass*

- *Ajiya Blast Resistant Safety Glass*

- *Ajiya Hurricane Resistant Safety Glass*



## Ajiya Bullet Resistant Safety Glass

### Product Description

Ajiya Bullet Resistant Safety Glass range is designed to stop bullets and prevent spalling on the opposite side of the impact, while maintaining complete visibility and light transmission.

Ajiya Bullet Resistant Safety Glass is a high-quality composite that combines the properties of Structural Interlayer/ Structural PVB with the abrasion resistance of glass. These laminated glass vary in thickness and composition according to the type of weapon and ammunition protected against, and the degree of protection required.

### Product Features

#### Non-Spalling

The Structural Interlayer at the back face of the panel will provide anti-spalling protection.

#### Anti-Lacerative

Due to Structural Interlayer, a person impacting the glass on the protected side will not be lacerated by broken glass.

#### UV Protection

Nearly all the sun's damaging UV rays will be filtered out by the panel, thus providing protection against discolouration and damage to fabrics, furniture, wall coverings, furnishings, artworks, etc.

#### Thinner Panel

Ajiya Bullet Resistant Safety Glass is currently one of the thinnest bullet resistant glass in the market for the respective protection levels.

### Product Applications

- Banks
- Cash counters
- Jewellery stores

CLASSIFICATION OF PANEL	TYPE OF WEAPON	CALIBRE	AMMUNITION	RANGE	NUMBER OF STRIKES	PANEL THICKNESS (mm)
G0	9mm Handgun	9mm Parabellum	8.0g FMJ	3m	3	16.78
G1	0.357 Magnum Handgun	0.357 Magnum	10.2gJSP	3m	3	25.06
R1	5.56 Rifle	5.56mm x 45	M193 3.6g	10m	3	37.06
R2	7.62 Rifle	7.62mm x 51	Nato Standard 9.3g	10m	3	48.34

Notes : The above protection levels are based in part on the Australian Standards AS/NZS2343-1997. Due to research and development, the above specifications are subject to change.

Abbreviations : FMJ - Full Metal Jacket, JSP - Jacketed Soft Point, SWC - Semi Wadcutter



## Ajiya Blast Resistant Safety Glass

### Introduction

Bomb blasts can kill and injure many people. It can destroy properties and cause massive damage. A small explosion can cause glass breakage in buildings several hundred feet away. Due to the ease in which an explosive device can be built, there has been an increase in bomb attacks world-wide.

### Product Applications

- Embassies
- Police stations
- Military installations

### Product Description

Ajiya has developed a range of blast resistant window systems to counter this threat. This system will consist of a multilaminated glazing comprising several layers of glass and Structural Interlayer/Ionoplast Interlayer, backed up by a special window muntin system. This entire blast resistant window system is designed to sustain large elastic deformation prior to failure and will provide a safe and cost-effective solution.

Ajiya can advise on your requirements and conduct tests according to your specifications.



## Ajiya Intrusion Resistant Safety Glass



### Product Description

Ajiya Intrusion Resistant Safety Glass range is designed to protect against forced entry and physical attack.

Ajiya Intrusion Resistant Safety Glass is a high-quality composite that combines the properties of Structural Interlayer with the abrasion resistance of glass. The thickness and composition of the glass will depend on the degree of protection required. It can withstand prolonged attack from heavy objects, axes, crow bars and other hand tools.

### Product Applications

- Airports
- Hotels
- Homes
- Museums
- Retail outlets
- Prisons

### Product Features

#### Non-Spalling

The Spallshield® at the back face of the panel will provide anti-spalling protection.

#### Anti-Lacerative

Due to Spallshield®, a person impacting the glass on the protected side will not be lacerated by broken glass.

#### UV Protection

Nearly all the sun's damaging UV rays will be filtered out by the panel, thus providing protection against discolouration and damage to fabrics, wall coverings, furnishings, artworks, etc.





## Ajiya Hurricane Resistant Safety Glass

### Product Description

Ajiya Hurricane Resistant Safety Glass is designed specifically for hurricane-prone areas. It is a high-quality composite that combines the extremely tough properties of Structural Interlayer with the abrasion resistance of glass. It is a product that offers glass on both the exterior and interior surfaces.

### Product Applications

- Airports
- Hotels
- Homes
- Hospitals

### Product Features

#### UV Protection

Nearly all the sun's damaging UV rays will be filtered out by the panel, thus providing protection against discolouration and damage to fabrics, furniture, wall coverings, furnishings, artworks, etc.

#### Withstand High Cyclic Pressures

Ajiya Hurricane Resistant Safety Glass can withstand the high cyclic wind pressures of a hurricane.

## *Technical Data*

- *General Properties*
- *Bending Strength*
- *Wind Pressure Resistance*
- *Sound Transmission*
- *Light And Heat Control*



## Technical Data

### General Properties of Glass

Refractive Index	1.52
Hardness	6.0 - 6.5° (Mohs' scale)
Specific Heat	0.18 - 0.20 Kcal/kg°C (0 - 50°C)
Softening Temperature	720 - 730°C
Thermal Conductivity	0.65 - 0.68 Kcal/mh°C
Coefficient of Linear Expansion	8.5 - 8.9 x 10 <sup>-6</sup> /°C
Specific Gravity	2.5
Average Breaking Stress	500 kg/cm <sup>2</sup>
Poisson's Ratio	0.23 - 0.25
Young's Modulus	720,000 - 730,000 kg/cm <sup>2</sup>
Weather Resistance	Excellent

### Bending Strength of Glass

Unit: kg/cm<sup>2</sup>

Glass Type	Thickness (mm)	Average Breaking Stress		Allowable Stress			
				Short Term		Long Term	
		Surface (σ <sub>c</sub> )	Surface (σ <sub>e</sub> )	Surface (σ <sub>ac</sub> )	Surface (σ <sub>ae</sub> )	Surface (σ <sub>ac</sub> )	Surface (σ <sub>ae</sub> )
Float	3, 5, 6, 8	500	360	250	180	100	70
	10	450	360	250	180	100	70
	12, 15, 19	375	360	200	180	80	70
Heat Strengthened	6, 8, 10	800	720	450	360	300	250
Tempered	4, 5, 6, 8, 10, 12, 15, 19	1500	1100	750	500	500	350

Note: Glass must be clean cut for applicability of table values.

## Wind Pressure Resistance of Glass

Glass Type	Thickness (mm)	Average Failure Load (kg)	Allowable Load (kg)
Float	3	450	180
	4	650	260
	5	900	360
	6	1100	440
	8	2000	800
	10	2500	1000
	12	3000	1200
Tempered	4	1950	780
	5	2700	1080
	6	3300	1320
	8	6000	2400
	10	7500	3000
	12	9000	3600
	15	12750	5100
Annealed Laminated	3+3	625	250
	5+5	1350	540
	6+6	1800	720
	8+8	2875	1150
	10+10	4200	1680
	12+12	5750	2300
	15+15	8550	3420

Note: Allowable Failure Load = Average wind pressure (kg/m<sup>2</sup>) x Area of glass (m<sup>2</sup>) , Allowable Load = Allowable wind pressure (kg/m<sup>2</sup>) x Area of glass

## Terms and Definitions

### Relative Heat Gain (RHG)

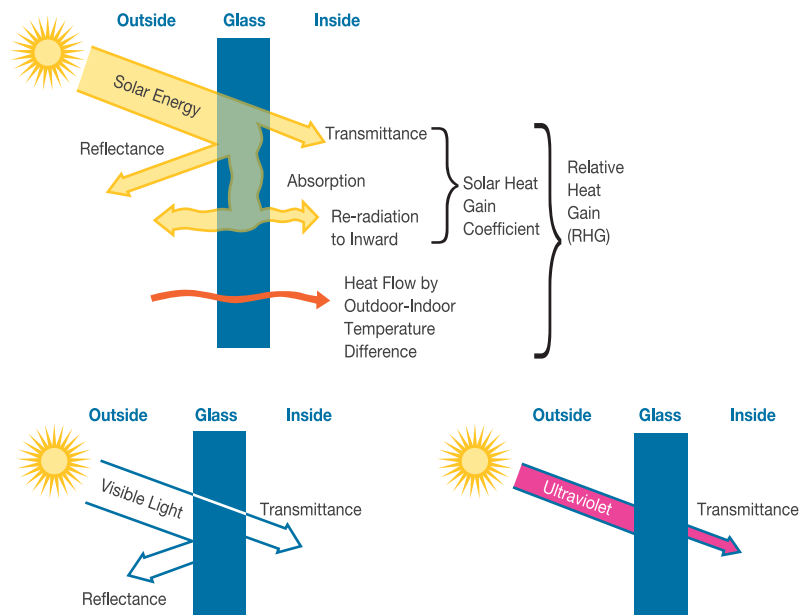
The amount of heat gained through glass taking into consideration U-value and shading coefficient. Using the ASHRAE standard, relative heat gain is calculated as follows:

$$RHG = \text{Summer U-value} \times 7.8 + \text{shading coefficient} \times 630$$

### Shading coefficient

Shading coefficient is the ratio of solar heat gain coefficient of a specific type of glass to the solar heat gain coefficient of a 1/8" (3mm) clear glass. (=0.87)

$$\text{Shading coefficient} = \frac{\text{solar heat gain coefficient}}{0.87}$$





# Technical Data

## Sound Transmission Loss (TL) Measurements of Glass

Glass Type	Thick-ness (mm)	Frequency (Hertz)																	STC (dB)
		100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	

### Monolithic

3mm	3	10	20	19	19	20	22	23	25	26	28	30	31	32	33	34	32	22	26	26
6mm	6	15	25	24	24	25	27	28	30	32	33	34	34	33	27	28	30	34	37	31
10mm	10	19	28	28	28	29	30	33	34	35	35	33	29	32	34	38	40	44	47	33
12mm	12	21	30	29	30	29	32	33	34	35	34	29	32	36	38	40	43	47	50	34

### Laminated - 2 Ply

3/0.38/3	6.38	15	25	24	24	25	26	28	29	32	33	35	34	33	29	30	32	37	41	32
3/0.76/3	6.76	14	25	25	24	25	27	28	29	32	33	34	34	33	30	31	33	38	42	32
4/0.38/4	8.38	20	27	27	27	28	31	32	34	36	37	36	35	32	34	34	39	44	46	35
6/0.38/6	12.38	23	30	30	30	31	33	35	35	36	36	33	35	36	39	43	45	48	50	37
6/0.76/6	12.76	23	30	30	30	31	33	35	35	36	36	33	35	37	40	49	45	48	50	37

### Laminated - 3 Ply

3/0.76/6 0.76/4	14.52	24	32	31	31	32	35	35	35	35	33	35	37	41	46	46	48	50	52	38
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### Insulating Glass Unit (IGU)

3+A12+3	18	15	23	23	18	17	16	17	21	24	29	34	37	40	39	40	37	26	34	26
6+A12+6	24	19	27	26	19	22	23	27	30	35	37	40	41	40	31	33	38	43	49	33

### Single Laminated (IGU)

3/.76/3+ A12+6	24.76	22	27	27	22	23	24	28	31	36	38	41	43	41	34	35	40	46	53	34
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Note: The above data are based on tested samples or calculated estimation.

## Light & Heat Control Characteristics of Glass

Glass Type	Thickness (mm)	Visible Light		Solar Energy			Relative Heat Gain (W/m <sup>2</sup> )	Shading Coefficient	U-value (W/m <sup>2</sup> k)
		Trn (%)	Ref (%)	Trn (%)	Ref (%)	Abs (%)			

### Monolithic Clear

3mm	3	91	8	88	8	4	681	1.01	5.82
6mm	6	89	8	80	7	13	651	0.96	5.79
10mm	10	87	8	73	7	20	612	0.90	5.70
12mm	12	86	8	70	7	23	595	0.87	5.66

### Monolithic Tinted

6mm Bronze	6	48	6	50	6	44	498	0.71	6.14
6mm Dark Grey	6	13	4	31	5	64	404	0.56	6.31

### Laminated - 2 Ply (Clear Glass with Clear PVB)

3/0.38/3	6.38	89	8	78	8	14	637	0.94	5.73
5/0.38/5	10.38	86	8	72	7	22	599	0.88	5.66
6/0.38/6	12.38	86	8	67	7	16	580	0.85	5.62

### Laminated - 2 Ply (Clear Glass with Tinted PVB)

3/0.38/3 A.Blue	6.38	76	7	68	7	25	589	0.86	5.86
3/0.38/3 Bronze	6.38	52	6	50	6	44	498	0.71	6.07
3/0.38/3 T.White	6.38	66	13	58	9	32	532	0.77	5.95

### Clear Insulating Glass Unit (IGU)

6+A12+6	24	80	14	64	11	24	549	0.83	3.11
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Based on the following conditions	Solar Intensity	Outside Air Temperature	Inside Air Temperature
	782 W/m <sup>2</sup>	32°C	24°C

**Notes:**

- The above tables contain just some of the glass being offered by Ajiya. Please contact Ajiya's Technical Services Department for performance information of glass not listed above.
- The value and performance shown in the above tables are typical values only. Individual measurements may vary slightly from these values.

## Double Glazed

Description of Glass	Visible Light (%)			Solar Energy (%)			American U-value (W/m <sup>2</sup> k)	Shading Coefficient
	Transmittance	Reflectance		Transmittance	Reflectance	Absorption	Summer Daylight	
		Outdoor	Indoor					
Double glazed glass consisting of: 8mm ASG Blue Float with 30% ceramic coverage on surface #2 + 12mm Airspace + 8mm ASG Clear Low E#3	24.18	9.89	21.01	13.74	7.50	78.76	2.59	0.32
Double glazed glass consisting of: 8mm ASG Green Float with 30% ceramic coverage on surface #2 + 12mm Airspace + 8mm ASG Clear Low E#3	30.19	13.40	21.66	12.12	7.24	80.64	2.62	0.28
Double glazed glass consisting of: 8mm ASG Green Float with 100% ceramic coverage on surface #2 + 12mm Airspace + 8mm ASG Clear Float	0.22	23.00	74.45	0.10	10.32	89.58	3.30	0.15
Double glazed glass consisting of: 8mm ASG Solar Control Green #2 + 12mm Airspace + 8mm ASG Green Float	19.41	16.37	19.05	7.04	8.07	84.89	3.33	0.26
Double glazed glass consisting of: 8mm ASG Green Float with 30% coverage ceramic printing on surface #2 + 12mm Airspace + 8mm ASG Clear Low E Float #3	33.35	12.65	22.09	11.85	7.31	80.84	1.92	0.21

Glass Reference	Visible Light Transmittance (%)	Visible Light Reflectance (%)	Solar Direct Transmittance (%)	Solar Direct Reflectance (%)	Solar Direct Absorption (%)	U factor (W/m <sup>2</sup> .°C)	Shading Coefficient
8mm ASG Solar Control Green #2 + 1.52 mm Clear PVB + 8mm ASG Green Low-E #4	18.94	12.96	6.84	7.16	86.00	3.84	0.25



# Quality Assurance

Ajiya is committed to producing products of the highest quality and has been awarded the following certifications :



**CERTIFICATE**

SIRIM QAS International Sdn. Bhd. hereby notifies that

**AJIYA SAFETY GLASS SDN. BHD.**  
 LOT 575, 1 KM  
 LEBUH RAYA SEGAMAT - KUANTAN  
 85000 SEGAMAT  
 JOHOR DARUL TAKZIM  
 MALAYSIA

has implemented a Quality Management System complying with

**ISO 9001 : 2015**  
 Quality Management System - Requirements

Scope of Certification

**MANUFACTURE OF HEAT TREATED GLASS, LAMINATED SAFETY GLASS, INSULATED GLAZING UNITS AND CERAMIC PRT COATED AND HEAT TREATED SAFETY GLASS FOR VARIOUS INDUSTRIES SUCH AS BUILDING, MARINE, FURNITURE AND HOME APPLIANCES.**

Issue Date : 04 February 2020  
 Original certification date : 21 January 2019  
 Expiry date : 20 January 2023  
 Certificate no. : QMS 00963

*Nur Fadhilah binti Muhammad*  
 Nur Fadhilah binti Muhammad  
 Ketua Pegawai Eksekutif  
 Chief Executive Officer  
 SIRIM QAS International Sdn. Bhd.

No Lesen : PC011185  
 Licence No :

**LESEN PENSIJILAN BARANGAN**  
*Product Certification Licence*

**SIRIM QAS International Sdn. Bhd.**, dengan ini menganugerahkan kepada SIRIM QAS International Sdn. Bhd. hereby grants to

**AJIYA SAFETY GLASS SDN. BHD.**  
 LOT 575, 1 KM  
 LEBUH RAYA SEGAMAT-KUANTAN  
 85000 SEGAMAT  
 JOHOR, MALAYSIA

Lesen untuk menggunakan Tanda Pensijilan di atas barangan  
*a licence to use the Certification Mark on*

**INSULATING GLASS UNIT (IGU)**  
 Please refer to detail in the SCHEDULE

sebagai mematuhi keperluan  
*as complying with*

**MS 2666 : 2016**

*Nur Fadhilah binti Muhammad*  
 Nur Fadhilah binti Muhammad  
 Ketua Pegawai Eksekutif  
 Chief Executive Officer  
 SIRIM QAS International Sdn. Bhd.

Tarikh Mula Pensijilan : 08 August 2021  
 Certified Since : 08 August 2023  
 Sah Sehingga : 08 August 2023  
 Valid Until : 08 August 2023

Tarikh Dikeluarkan : 08 August 2022  
 Issue Date : 08 August 2022  
 No Siri : 076648  
 Serial No :

No Lesen : PC011185  
 Licence No :

**LESEN PENSIJILAN BARANGAN**  
*Product Certification Licence*

**SIRIM QAS International Sdn. Bhd.**, dengan ini menganugerahkan kepada SIRIM QAS International Sdn. Bhd. hereby grants to

**AJIYA SAFETY GLASS SDN. BHD.**  
 LOT 575, 1 KM  
 LEBUH RAYA SEGAMAT-KUANTAN  
 85000 SEGAMAT  
 JOHOR, MALAYSIA

Lesen untuk menggunakan Tanda Pensijilan di atas barangan  
*a licence to use the Certification Mark on*

**INSULATING GLASS UNIT (IGU)**  
 Please refer to detail in the SCHEDULE

sebagai mematuhi keperluan  
*as complying with*

**MS 2666 : 2016**

*Nur Fadhilah binti Muhammad*  
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 Ketua Pegawai Eksekutif  
 Chief Executive Officer  
 SIRIM QAS International Sdn. Bhd.

Tarikh Mula Pensijilan : 08 August 2021  
 Certified Since : 08 August 2023  
 Sah Sehingga : 08 August 2023  
 Valid Until : 08 August 2023

Tarikh Dikeluarkan : 08 August 2022  
 Issue Date : 08 August 2022  
 No Siri : 076648  
 Serial No :

No Lesen : PC002957  
 Licence No :

**LESEN PENSIJILAN BARANGAN**  
*Product Certification Licence*

**SIRIM QAS International Sdn. Bhd.**, dengan ini menganugerahkan kepada SIRIM QAS International Sdn. Bhd. hereby grants to

**AJIYA SAFETY GLASS SDN. BHD.**  
 LOT 575, 1 KM  
 LEBUH RAYA SEGAMAT-KUANTAN  
 85000 SEGAMAT  
 JOHOR, MALAYSIA

Lesen untuk menggunakan Tanda Pensijilan di atas barangan  
*a licence to use the Certification Mark on*

**LAMINATED SAFETY GLASS IN BUILDING**  
 Please refer to detail in the SCHEDULE

sebagai mematuhi keperluan  
*as complying with*

**MS 1498 : 2017**

*Nur Fadhilah binti Muhammad*  
 Nur Fadhilah binti Muhammad  
 Ketua Pegawai Eksekutif  
 Chief Executive Officer  
 SIRIM QAS International Sdn. Bhd.

Tarikh Mula Pensijilan : 14 October 2016  
 Certified Since : 14 October 2023  
 Sah Sehingga : 14 October 2023  
 Valid Until : 14 October 2023

Tarikh Dikeluarkan : 03 October 2022  
 Issue Date : 03 October 2022  
 No Siri : 076460  
 Serial No :

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