



SINGAPORE BUILDING ENVELOPE SOLUTIONS

THE ARCHITECTURAL ENVELOPE COLLECTION

WINDOWS / DOORS / CURTAIN WALLS
ARCHITECTURAL GLASS

SBES + HUNAN GREENSEE

GLOBAL EXPERIENCE. CONNECTED EXPERTISE.

Engineering, manufacturing and Singapore project coordination.



HUNAN GREENSEE
GLOBAL VISION BUILT TOGETHER

SBES and Hunan Greensee combine architectural aluminium experience with a shared focus on the finished building envelope.

Founded in 2001, Hunan Greensee contributes 25 years of system engineering and manufacturing experience. SBES connects this foundation with Singapore project coordination, from system selection and shop drawings to site interfaces.



HUNAN GREENSEE / MANUFACTURING

25 YEARS

2001 - 2026

System engineering and manufacturing experience.

Connected with Singapore project coordination.

SYSTEM ENGINEERING / MANUFACTURING / DESIGN COORDINATION

GLOBAL PROJECT EXPERIENCE



ASIA-PACIFIC



AUSTRALIA / CANADA / CHINA / EUROPE

ITALY / JAPAN / MALAYSIA

MIDDLE EAST / SINGAPORE / UNITED STATES

EXPERIENCE IN ARCHITECTURAL SYSTEMS

ARCHITECTURAL APPLICATIONS

An established understanding of how glass and aluminium contribute to the character, comfort and performance of buildings.



RESIDENTIAL ARCHITECTURE

Framed daylight, outdoor connection and refined openings.



GLAZED BUILDING ENVELOPES

Transparent architecture and coherent façade expression.



ENGINEERED OPENINGS

Profiles, hardware and glazing meet at the architectural edge.

TEN PRODUCT FAMILIES / ONE ARCHITECTURAL LANGUAGE

DESIGNED AROUND THE WAY SPACES ARE LIVED.

Explore a collection spanning considered openings, beautifully connected living spaces and architectural glazing.

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SBES / WINDOW SYSTEMS



AIRFRAME

Natural ventilation. Considered comfort.

Casement and top-hung windows bring controlled ventilation to refined interiors, with opening upper sashes and fixed lower glazing.

DAYLIGHT / VENTILATION / COMFORT

THE AIRFRAME COLLECTION

AirFrame

Casement and top-hung window systems with carefully proportioned frames, opening sashes and fixed lower glazing.



TOP-HUNG / OUTWARD OPENING

Opening upper sash with fixed lower glazing.

SELECTED SUBSERIES

AirFrame Renew

Casement window family

AirFrame Swift

Outward-opening window family

AirFrame South Breeze

Casement window family

AirFrame Slim Out

Narrow-frame outward opening

AirFrame Concealed Sash

Concealed-sash appearance

AirFrame Outward 108

108-series outward opening

AirFrame Low Energy 85

85-series low-energy window

AirFrame Passive

Passive-window family

SYSTEM SELECTION BY ARCHITECTURAL
APPLICATION

ARCHITECTURAL & TECHNICAL CONSIDERATIONS

OPENING SYSTEM

Side-hung casement or top-hung operation, selected by the underlying system.

DESIGN LANGUAGE

Slim sightlines, concealed-sash options and architectural proportions.

SYSTEM PERFORMANCE

Glazing, seals and exposure requirements selected by project.

SBES / WINDOW SYSTEMS



GLIDESPAN

Smooth movement. Refined living.

A space-conscious opening for contemporary homes. Clean lines and considered operation create a calm connection with daylight and exterior views.

SLIDING MOTION / SLIM SIGHTLINES / CONVENIENCE

THE GLIDESPAN COLLECTION

GlideSpan

Floating sliding windows with a flush frame-and-sash appearance and concealed track detailing.



SLIDING WINDOW

SELECTED SUBSERIES

GlideSpan Float 126

Frame-and-sash alignment
Concealed track design
126 mm frame depth

Smooth horizontal travel.
Generous opening for ventilation.

FLOATING SLIDE / CONCEALED TRACK



SASH INTERLOCK



TRACK DETAIL

ARCHITECTURAL & TECHNICAL CONSIDERATIONS

OPERATION

Floating sliding sash, concealed track and flush closed alignment.

WEATHER DETAILING

Sills, drainage paths and weather seals coordinated with exposure.

SAFETY

Suitable restrictors, maintenance access and fall-prevention details.

SBES / WINDOW SYSTEMS



VIEWSPAN

A calmer outlook, beautifully framed.

Full-height panoramic glazing brings the landscape into the room. Generous glass areas and considered sightlines create a quiet connection with the outdoors.

VIEWS / LIGHT / PROPORTION

THE VIEWSPAN COLLECTION

ViewSpan

Panoramic glazing for balconies and generous residential openings, with broad fixed vision areas and separate opening sashes.



VIEWSPAN BALCONY



VIEWSPAN GRAND



CORNER DETAIL

SELECTED SUBSERIES

ViewSpan Balcony

Fixed vision glass with opening side sashes.

ViewSpan Grand

Large-format panoramic glazing.

ARCHITECTURAL & TECHNICAL CONSIDERATIONS

PANORAMIC DESIGN

Large vision areas with considered frame and mullion proportions.

GLAZING

Glass composition selected for safety, solar comfort and acoustics.

APPLICATION

Framing and support designed for the relevant opening and exposure.

SBES / DOOR SYSTEMS



PATIOSPAN

Open space. Elevated living.

Generous sliding doors connect interiors with balconies, terraces and landscaped outdoor spaces, bringing flexibility to the way a home is experienced.

OPENING WIDTH / INDOOR-OUTDOOR / EASE OF USE

THE PATIOSPAN COLLECTION

PatioSpan

A coordinated sliding-door family from narrow-frame sliders to lift-and-slide and heavy-duty systems.



OPEN TERRACE



COURTYARD CONNECTION



EVENING GATHERING

SELECTED SUBSERIES

PatioSpan Slim Pro

Slim-frame sliding

PatioSpan Slim Max

Multi-panel sliding layout

PatioSpan Lift 130

Lift-and-slide operation

PatioSpan Heavy 170

Heavy sliding system

LIFT 130 / PUBLISHED REFERENCE
THERMAL 2.0 W/m²K / SOUND 35 dB
WATER 300 Pa / WIND 2.5 kPa

ARCHITECTURAL & TECHNICAL CONSIDERATIONS

OPERATING OPTIONS

Conventional sliding and lift-and-slide mechanisms are distinct systems.

THRESHOLD

Sill, drainage and accessibility interfaces planned with the project.

CONFIGURATION

Panel dimensions, weight and glazing selected by the underlying system.

SBES / DOOR SYSTEMS



ENTRYFRAME

A grand welcome

A strong first impression begins at the threshold.
Full-height glass and refined aluminium profiles bring light and presence to the entrance.

ARRIVAL / DETAIL / PRESENCE

THE ENTRYFRAME COLLECTION

EntryFrame

Hinged, flush and glass pivot entrances combine considered profiles with hardware suited to each opening.



HINGED ENTRANCE



GLASS PIVOT ENTRANCE

SELECTED SUBSERIES

EntryFrame Hinged 65C

Side-hinged entrance

EntryFrame Flush 75

Flush entrance expression

EntryFrame Pivot

Glass pivot entrance

HINGED 65C / PUBLISHED REFERENCE
THERMAL 1.8 W/m²K / SOUND 35 dB
WATER 700 Pa / WIND 3.5 kPa



65C HINGE DETAIL

ARCHITECTURAL & TECHNICAL CONSIDERATIONS

SYSTEM CHOICE

Hinge and pivot arrangements specified independently.

HARDWARE

Locksets, handles, access-control provisions and operating clearances.

INTEGRATION

Threshold detailing, anchorage, weather seals and finish consistency.

SBES / DOOR SYSTEMS



FOLDSPAN

Space, unfolded beautifully.

Fold-and-stack panels transform the relationship between inside and outside, bringing flexibility to entertainment spaces, terraces and private gardens.

FLEXIBLE SPACE / FOLD & STACK / CONNECTION

THE FOLDSPAN COLLECTION

FoldSpan

Fold-and-stack doors connect dining pavilions, garden rooms and private studios with generous outdoor spaces.



SELECTED SUBSERIES

FoldSpan Folding

Folded panel stacking
Track and roller hardware
Opening layout by configuration

FOLDING OPENING



DINING PAVILION



ROLLER ASSEMBLY

DINING PAVILIONS / GARDEN STUDIOS

ARCHITECTURAL & TECHNICAL CONSIDERATIONS

PANEL LAYOUT

Leaf count, traffic panel and stacking direction by configuration.

MOVEMENT

Rollers, hinges and locking components coordinated for operation.

THRESHOLD

Drainage, weather sealing and interface design selected to suit location.



SBES / THE ARCHITECTURAL ENVELOPE COLLECTION

THE BUILDING ENVELOPE

The architectural expression of glass and aluminium.

CURTAIN WALLS / BALUSTRADES / SUNROOMS / SCREENS

SBES / ARCHITECTURAL ENVELOPE



GLAZWAL

Clarity at an architectural scale.

Glass and aluminium define elegant transparent boundaries, creating a consistent architectural language between interior and exterior.

FACADES / DAYLIGHT / STRUCTURAL RHYTHM

THE GLAZWAL COLLECTION

GLAZWAL

Residential curtain walls create a continuous glazed envelope, with mullions, transoms and building interfaces engineered for the project.



RESIDENTIAL CURTAIN WALL

SELECTED SUBSERIES

GLAZWAL Residential

Framing layout
Glazing build-up
Building interfaces

FRAMING / GLAZING / INTERFACES



GLAZING INSTALLATION



GLAZING INTERFACE

ARCHITECTURAL & TECHNICAL CONSIDERATIONS

FRAMEWORK

Mullion, transom and perimeter framing approach.

ENVELOPE PERFORMANCE

Wind, air, water, solar and movement requirements by configuration.

INTERFACES

Anchorage, fire-stopping and maintenance coordination as applicable.

SBES / ARCHITECTURAL ENVELOPE



VIEWEDGE

Protection without compromise to the view.

Refined glass barriers allow the architecture, the landscape and the surrounding city to remain the focus.

CLEAR VIEWS / MINIMAL DETAIL / EDGE DESIGN

THE VIEWEDGE COLLECTION

ViewEdge

Frameless glass balustrades are engineered as guarding systems, independently from glazed curtain walls.



BALCONY GUARDING

SELECTED SUBSERIES

ViewEdge Frameless

Clear glass edges
Base-channel support
Coordinated fixings

GLASS / SUPPORT / EDGE DETAIL



STAIR GUARDING



BASE CHANNEL DETAIL

ARCHITECTURAL & TECHNICAL CONSIDERATIONS

GLASS DESIGN

Suitable safety-glass composition and post-breakage behaviour.

SUPPORT

Base channel, anchorage and loading arrangements.

DETAILING

Edge protection, drainage and relevant guarding requirements.

SBES / ARCHITECTURAL ENVELOPE



DAYSPAN

A brighter way to inhabit space.

Daylight-filled glazed enclosures create a considered transition between sheltered rooms, gardens and the wider landscape.

NATURAL LIGHT / SHELTER / LIVING SPACE

THE DAYSPAN COLLECTION

DaySpan

Glazed rooms and telescopic enclosures combine shelter with daylight and a closer connection to the outdoors.



DAYSPAN SUNROOM



ROOF GLAZING

SELECTED SUBSERIES

DaySpan Sunroom

Fixed glazed enclosure

DayGlide

Retracting roof and enclosure

DAYSPAN / FIXED
DAYGLIDE / TELESCOPIC



DAYGLIDE / SEE PAGE 25

ARCHITECTURAL & TECHNICAL CONSIDERATIONS

ROOF & GLAZING

Glass roof geometry, shading and environmental comfort.

WATER MANAGEMENT

Roof drainage and weatherproofing at adjoining construction.

ARCHITECTURAL FIT

Planning, ventilation, structural support and material coordination.

THE DAYSPAN COLLECTION

DayGlide

Open your space to the sky. The DayGlide roof and glazed enclosure glide back together, creating an inviting open-air lounge for sunset drinks and evenings shared beneath the stars.

OPEN-AIR



EXTENDED



SBES / ARCHITECTURAL ENVELOPE



FINESCREEN

Fresh air, discreetly refined.

Fine screening complements everyday openings, allowing ventilation while keeping the visual language of a room clean and understated.



FINE MESH, CLOSE UP

An enlarged view of the screen weave.
At room scale, the garden remains in view.

AIRFLOW / DISCRETION / DAILY COMFORT

THE FINESCREEN COLLECTION

FineScreen

Fine-mesh screens coordinated with window frames, handles and access for cleaning.



MESH & FRAME

SELECTED SUBSERIES

FineScreen Concealed

Fine mesh weave
Clear daylight views
Coordinated framing

MESH / FRAME / WINDOW INTEGRATION



SCREEN PANEL



FRAME INTEGRATION

ARCHITECTURAL & TECHNICAL CONSIDERATIONS

MESH

Screen material, visibility and airflow characteristics.

OPERATION

Opening, guidance and frame interfaces selected to match the window system.

COMPATIBILITY

Frame integration, maintenance and access for cleaning.

FROM ARCHITECTURAL INTENT TO BUILDABLE SYSTEMS

ENGINEERED AROUND THE PROJECT.

SBES supports project teams with system selection, specification coordination and the interface between architectural design and manufactured products.



SYSTEM DETAIL



GLAZING INSTALLATION

01 SYSTEM SELECTION

Opening schedule, suitable families and agreed design intent.

02 ENVELOPE REQUIREMENTS

Performance criteria for glazing, weather exposure and acoustics.

03 DESIGN COORDINATION

Shop drawings, interface reviews and material samples.

04 QUALITY & DELIVERY

Production reviews, delivery sequencing and installation coordination.

SELECTED PRODUCT REFERENCE DATA

PERFORMANCE, CONSIDERED.

Reference figures published for selected door configurations. Final project performance is established by system, glazing, dimensions and the relevant test evidence.

LIFT-AND-SLIDE DOOR

PatioSpan Lift 130

THERMAL K-VALUE	SOUND INSULATION	WATER RESISTANCE	WIND RESISTANCE
2.0 W/m2K	35 dB	300 Pa	2.5 kPa

HINGED ENTRANCE DOOR

EntryFrame Hinged 65C

THERMAL K-VALUE	SOUND INSULATION	WATER RESISTANCE	WIND RESISTANCE
1.8 W/m2K	35 dB	700 Pa	3.5 kPa

Published system reference figures - not a universal rating for all product sizes or variants. Higher-performance configurations are evaluated separately.

INTEGRATED ARCHITECTURAL PRODUCT DELIVERY

FROM DESIGN INTENT TO COORDINATED EXECUTION.

A connected workflow spanning selection, technical alignment, engineering and site integration.

- | | | |
|----|----------------------------|---|
| 01 | DESIGN BRIEF | Opening schedule, design priorities and performance requirements. |
| 02 | SYSTEM PROPOSAL | Selected systems, glazing options and interface strategy. |
| 03 | TECHNICAL REVIEW | Shop drawings, samples and configuration-specific supporting data. |
| 04 | PRODUCTION PLANNING | Approved details, quality checkpoints and delivery sequence. |
| 05 | SITE COORDINATION | Installation interfaces, inspection records and handover information. |

ENGINEERING DETAIL. DESIGN CLARITY. COORDINATED DELIVERY.



SBES / SINGAPORE BUILDING ENVELOPE SOLUTIONS

THE NEXT VIEW STARTS HERE.

Architectural visualisations illustrate applications.
Final system configurations are project-specific.

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