

WINDOWS AND DOORS





#### Futureline Thermal Architectural

The Futureline thermally broken window and door suite offers stylish, architecturally designed glazing combined with the latest in energy efficient technology.

Utilising the structural and aesthetic benefits of aluminium, the Futureline suite features a thermal break built into the frames to meet the ever-increasing demands for improved thermal performance in buildings.

As with all Capral systems, the Futureline suite provides a high level of performance, style and function. It offers a versatile window and door range with an architectural aesthetic that will enhance any project.

The Futureline suite adds to its environmental credentials by being manufactured from Ecometal™ utilising up to 25% recycled aluminium.

The use of recycled aluminium in Futureline Ecometal™ products not only provides you with energy-efficient windows and doors, it also makes a quality contribution to the reduction of carbon emissions.

# WHAT IS A THERMAL BREAK?

Aluminium has many advantages such as strength, durability and corrosion resistance but it is a conductor of heat and cold.

The inclusion of a thermal break in an aluminium window or door frame creates a barrier to block the transfer of heat and cold, from entering or leaving the building.

Made from a material with low thermal conductivity the thermal break is inserted between the two parts of the frame, to reduce the transfer of heat and cold.

### WHY CHOOSE FUTURELINE?

Futureline Architectural window and door products incorporate a thermal break barrier between the internal and external sections of the aluminium frame.

This reduces the transfer of heat and cold, vastly improving insulation. This, in turn, reduces the energy costs required to heat or cool the building. In fact, Futureline products are up to 40% more thermally efficient than standard aluminium frames. When incorporated with high performance double glazing the frames become even more energy efficient.

### The benefits of a thermal break in high performance windows and doors:

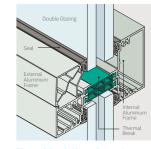
- 1. Lowers cooling energy costs by reducing temperature gains.
- 2. Lowers heating energy costs by reducing temperature losses.
- 3. Reduces the likelihood of condensation.
- 4. Can be an effective barrier for sound absorption in conjunction with double glazing.

### The efficiency of the thermal break.

The diagrams on the right help illustrate how a thermal break works in an aluminium product and the impact it has on the temperatures inside a building.

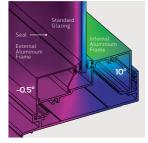
These models demonstrate the thermal transfer through a standard aluminium product (centre diagram) versus an aluminium product with a thermal barrier (bottom diagram) in a winter scenario.

The colour legend below references the temperatures associated with each colour.



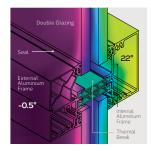
#### Thermal Break (Cross Section

The green section above is the thermal break acting as a barrier between the two aluminium sections of the window. With no contact between the aluminium frames, thermal and sound conductivity is reduced.

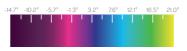


#### Standard Aluminium Product

This model shows a standard aluminium window with an external temperature of -0.5°C, which is transferring internally to a temperature of approximately 10°C.



Aluminium Product with Thermal Break In contrast, this model shows an aluminium product with an external temperature of -0.5°C. The barrier reduces the transfer so that the internal temperature remains at a warmer 22°C.





### FUTURELINE 440TB FRAMING SYSTEM

The Capral Futureline 440TB centre glazed framing system incorporates the glazing capacity to accommodate high performance double glazed units up to 34mm while retaining crisp, clean profiles typically associated with commercial glazing systems.

The use of the latest thermal break technology, consisting of double bar polyamide strips has been incorporated for excellent levels of thermal insulation. The Futureline 440TB framing system offers the best of both worlds; a strong architectural aesthetic with a level of thermal efficiency usually associated with narrower, less substantial framing systems.

#### FEATURES AND BENEFITS

- Centre glazed
- Excellent 'Uw' values down to 1.7
- 100mm x 62mm Centre Glazed Framing System
- Crisp, clean square profiles
- Capable of accommodating IGU's up to 34mm
- Thermally broken Sub Frames
- High Performance Glazing Bead System
- Made from Ecometal™
- Trickle Vent

#### PERFORMANCE

Serviceability Pressure	Up to 4500Pa	
Ultimate Pressure	Up to 8500Pa	
Water Penetration	Up to 900Pa	

#### FRAME SIZE

MAXIMUM RECOMN	MENDED SIZE
Height	62mm
Берит	10011111

# Mullion Height4000mmMullion Spacing2400mmTransom Width3000mm

# GLAZING CAPACITY

Double Glazed	22 - 34mm

#### ACOUSTICS (MAX)

Rw (C;Ctr)	41 (-2;-5

#### WINDOW ENERGY RATINGS

indow ID	Glazing	Uw	SHGC	Tvw	Air Inf
AP-113-01	6Clr/12/6Clr	2.8	0.63	0.70	0.05
AP-113-02	6Clr/12Ar/6Clr	2.7	0.64	0.70	0.05
AP-113-04	6ET/12Ar/6Clr	2.0	0.55	0.64	0.05
AP-113-06	6.38Sx/12/6Clr	2.8	0.61	0.70	0.05
AP-113-07	6.38Sx/12Ar/6Clr	2.7	0.61	0.70	0.05
AP-113-08	6.38CPClr/12/6Clr	2.2	0.54	0.65	0.05
AP-113-09	6.38CPClr/12Ar/6Clr	2.0	0.54	0.65	0.05
AP-113-52	AGG LowE Prime 6/12/6	2.0	0.48	0.60	0.05
AP-113-62	AGG LowE Plus 6/12/6	1.8	0.52	0.70	0.05
AP-113-70	AGG LowE Max 6/12/6	1.7	0.25	0.57	0.05

# FUTURELINE 419TB FRAMING SYSTEM

100mm Double Glaze

The Capral Futureline 419TB framing system incorporates the glazing capacity to accommodate high performance double glazed units up to 34mm while retaining the crisp, clean profiles typically associated with commercial glazing systems.

The use of the latest thermal break technology, consisting of double bar polyamide strips has been incorporated for excellent levels of thermal insulation. Mullions and transoms have been designed to accommodate common modular construction methods, allowing it to be fabricated in a similar manner to non-thermally broken framing systems.

#### FEATURES AND BENEFITS

- Front glazed
- Excellent 'Uw' values down to 1.8
- 100mm x 62mm Front Glazed Framing System
- Crisp, clean square profiles
- Modular frame construction
- Thermally broken sub frames
- Capable of accommodating IGU's up to 34mm
- Made from Ecometal™
- Trickle Vent

#### PERFORMANCE

Serviceability Pressure	Up to 4500Pa
Ultimate Pressure	Up to 10,000Pa
Water Penetration	Up to 900Pa

#### FRAME SIZE

Depth	100mm
Height	62mm

#### MAXIMUM RECOMMENDED SIZE

Mullion Height	4800mm
Mullion Spacing	2400mm
Transom Width	3000mm

#### GLAZING CAPACITY

Double Glazed 22 - 34mr	m
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#### ACOUSTICS (MAX)

Rw (C;Ctr)	41 (-1;-5)

#### WINDOW ENERGY RATINGS

Window ID	Glazing	Uw	SHGC	Tvw	Air Inf
CAP-158-01	6Clr/12/6Clr	2.9	0.62	0.67	0.33
CAP-158-02	6Clr/12Ar/6Clr	2.8	0.62	0.67	0.33
CAP-158-06	6ET/12Ar/6Clr	2.1	0.54	0.62	0.33
CAP-158-07	6.38Sx/12/6Clr	2.9	0.60	0.68	0.33
CAP-158-08	6.38Sx/12Ar/6Clr	2.8	0.60	0.68	0.33
CAP-158-09	6.38CPClr/12/6Clr	2.3	0.53	0.63	0.33
CAP-158-10	6.38CPClr/12Ar/6Clr	2.1	0.53	0.63	0.33
CAP-158-16	AGG LowE Prime 6/12/6	2.1	0.47	0.58	0.33
CAP-158-26	AGG LowE Plus 6/12/6	1.9	0.51	0.68	0.33
CAP-158-34	AGG LowE Max 6/12/6	1.8	0.24	0.55	0.33







# FUTURELINE 419TB FRAMING SYSTEM

150mm Double Glaz

The Capral Futureline 419TB framing system incorporates the glazing capacity to accommodate high performance double glazed units up to 34mm while retaining the crisp, clean profiles typically associated with commercial glazing systems.

The use of the latest thermal break technology, consisting of double bar polyamide strips has been incorporated for excellent levels of thermal insulation. Mullions and transoms have been designed to accommodate common modular construction methods, allowing it to be fabricated in a similar manner to non-thermally broken framing systems.

#### FEATURES AND BENEFITS

- Front glazed
- Excellent 'Uw' values down to 1.9
- 150mm x 62mm Front Glazed Framing System
- Crisp, clean square profiles
- Modular frame construction
- Thermally broken sub frames
- Capable of accommodating IGU's up to 34mm
- Made from Ecometal™
- Trickle Vent

# PERFORMANCE Serviceability Pressure Up to 4500Pa Ultimate Pressure Up to 12 500Pa

Ultimate Pressure Up to 12,500Pa
Water Penetration Up to 900Pa

#### FRAME SIZE

Depth	150mm
Height	62mm

## MAXIMUM RECOMMENDED SIZE

Mullion Height	5400mm
Mullion Spacing	2400mm
Transom Width	3000mm

#### GLAZING CAPACITY

Double Glazed	22 - 34mm

#### ACOUSTICS (MAX)

Rw (C;Ctr)	41 (-1;-5)
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#### WERS WINDOW ENERGY RATINGS

indow ID	Glazing	Uw	SHGC	Tvw	Air Inf
AP-141-01	6Clr/12/6Clr	3.0	0.62	0.67	0.17
AP-141-02	6Clr/12Ar/6Clr	2.9	0.62	0.67	0.17
AP-141-06	6ET/12Ar/6Clr	2.1	0.54	0.62	0.17
AP-141-07	6.38Sx/12/6Clr	3.0	0.60	0.68	0.17
AP-141-08	6.38Sx/12Ar/6Clr	2.8	0.60	0.68	0.17
AP-141-09	6.38CPClr/12/6Clr	2.3	0.53	0.63	0.17
AP-141-10	6.38CPClr/12Ar/6Clr	2.1	0.53	0.63	0.17
AP-141-25	AGG LowE Prime 6/12/6	2.2	0.47	0.58	0.17
AP-141-35	AGG LowE Plus 6/12/6	1.9	0.51	0.68	0.17
AP-141-43	AGG LowE Max 6/12/6	1.9	0.24	0.55	0.17

# FUTURELINE SLIDING DOOR & WINDOW

Utilising the latest in European thermal break technology, the Futureline Sliding Door and Window have been designed to compliment the full Futureline range with outstanding energy ratings, crisp and clean lines, and high quality hardware.

With the same frame and sash, the Sliding Door and Window only differs in the operational hardware, making it very versatile and adaptable system. As well as the outer frame, the 45mm deep sash incorporates double bar polyamide strips. The sliding door is also available in a Lift and Slide configuration with it's special hardware, a high end European system, that enables the lift and slide functionality.

#### FEATURES AND BENEFITS

- Excellent 'Uw' values down to 2.2
- Industry standard 100mm frame with strong 45mm deep panels
- 102mm sash 'face' gives a strong architectural aesthetic with an 84mm midrail available as an option
- Mitred frame and sash corner construction with high quality hardware
- Fixed-Slide (OX), Slide-Slide (XX) and Fixed-Slide-Fixed (OXXO) configurations with stacking option available on request
- Made from Ecometal™

#### PERFORMANCE

Serviceability Pressure	Up to 1200Pa
Ultimate Pressure	Up to 3000Pa
Water Penetration	Up to 450Pa

#### FRAME SIZE

Depth (Standard)	100mn
Height	47.5mn

# MAXIMUM RECOMMENDED SIZE

	DOOL	WIIIUOW
Panel Height	3000mm	2000mm
Panel Width	2400mm	2400mm
Panel Weight	200kg	200kg

#### GLAZING CAPACITY

Double Glazed	24 - 34mm

#### ACOUSTICS (MAX)

#### WERS WINDOW ENERGY RATINGS

Window ID	Glazing	Uw	SHGC	Tvw	Air Inf
Futureline S	liding Door & Window				
CAP-132-01	6Clr/12/6Clr	3.3	0.38	0.39	0.70
CAP-132-02	6ET/12/6Clr	2.9	0.33	0.36	0.70
CAP-132-20	AGG LowE Prime 6/12/6	2.5	0.37	0.45	0.70
CAP-132-30	AGG LowE Plus 6/12/6	2.3	0.41	0.53	0.70
CAP-132-38	AGG LowE Max 6/12/6	2.3	0.20	0.43	0.70
Futureline Li	ft & Slide Door				
CAP-133-01	6/12/6 Clr	3.1	0.47	0.50	0.67

CAP-133-01	6/12/6 Clr	3.1	0.47	0.50	0.67
CAP-133-02	6ET/12/6 Clr	2.6	0.41	0.46	0.67
CAP-133-26	AGG LowE Prime 6/12/6	2.4	0.38	0.46	0.67
CAP-133-36	AGG LowE Plus 6/12/6	2.3	0.41	0.53	0.67
CAP-133-44	AGG LowE Max 6/12/6	2.2	0.20	0.44	0.67







# FUTURELINE HINGED DOOR

The Futureline Hinged Door system integrates seamlessly into the Futureline 440TB and 419TB framing systems to provide a high quality, thermally broken hinged door option. The 46mm door panel has been designed with clean, flat faces and a choice of standard or tall door rail options for added design flexibility and finished with high quality hardware. Midrails are also available to create a segmented look or to align with adjacent transoms.

The door panel profiles incorporate the latest thermal break technology consisting of double bar polyamide strips for excellent levels of thermal insulation while a selection of glazing bead options accommodate double glazing up to a width of 32mm.

#### FEATURES AND BENEFITS

- Excellent 'Uw' values down to 2.5
- Industry standard 46mm door panel profile
- Two rail and midrail (standard and tall) options
- High quality hardware including thermally isolated hinges, heavy duty corner spigots and optional multi-point locks.
- Capable of accommodating IGU's up to 32mm
- Made from Ecometal™

#### PERFORMANCE

Serviceability Pressure	Up to 1500Pa
Jltimate Pressure	Up to 2500Pa
Water Penetration	Up to 600Pa

#### FRAME SIZE

Rail Depth	46mm
Rail Height	89 or 120mm

#### MAXIMUM RECOMMENDED SIZE

Panel Height	2700mm
Panel Width	1000mm
Panel Weight	115kg

#### GLAZING CAPACITY

Double Glazed 19 - 32mm
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#### ACOUSTICS (MAX)

#### WERS WINDOW ENERGY RATINGS

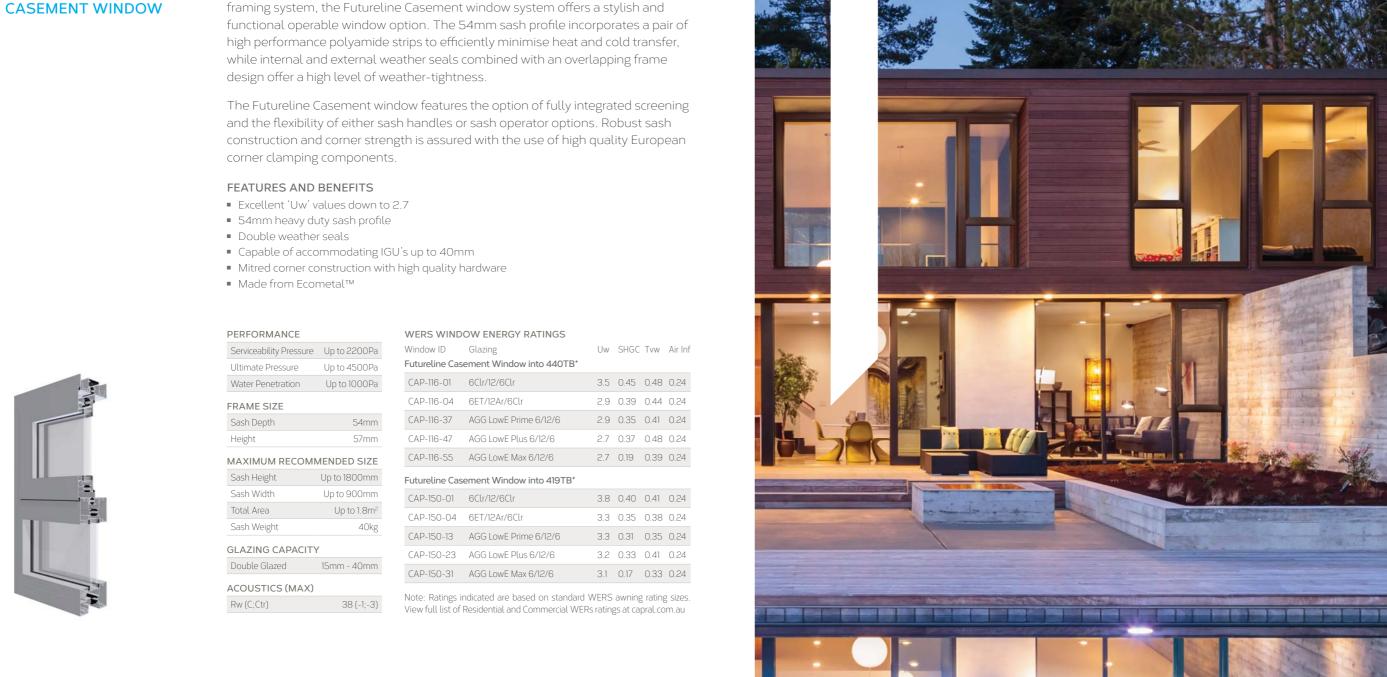
Window ID Futureline Hi	Glazing inged Door into 440TB	Uw	SHGC	Tvw	Air Inf
CAP-115-01	6Clr/12/6Clr	3.3	0.48	0.51	0.27
CAP-115-04	6ET/12Ar/6Clr	2.7	0.42	0.47	0.27
CAP-115-42	AGG LowE Prime 6/12/6	2.7	0.37	0.43	0.27
CAP-115-52	AGG LowE Plus 6/12/6	2.6	0.40	0.51	0.27
CAP-115-60	AGG LowE Max 6/12/6	2.5	0.20	0.41	0.27

#### Futureline Hinged Door into 419TB

CAP-149-01	6Clr/12/6Clr	3.5	0.45	0.47	0.27
CAP-149-04	6ET/12Ar/6Clr	3.0	0.39	0.44	0.27
CAP-149-12	AGG LowE Prime 6/12/6	3.0	0.34	0.40	0.27
CAP-149-22	AGG LowE Plus 6/12/6	2.9	0.37	0.47	0.27
CAP-149-30	AGG LowE Max 6/12/6	2.8	0.19	0.38	0.27

# **FUTURELINE**

Designed to complement the excellent thermal performance of the Futureline framing system, the Futureline Casement window system offers a stylish and





# **FUTURELINE AWNING WINDOW**

Designed to complement the excellent thermal performance of the Futureline framing system, the Futureline Awning window system offers a stylish and functional operable window option. The 54mm sash profile incorporates a pair of high performance polyamide strips to efficiently minimise heat and cold transfer, while internal and external weather seals combined with an overlapping frame design offer a high level of weather-tightness.

The Futureline Awning window features the option of fully integrated screening and the flexibility of either sash handles or sash operator options. Robust sash construction and corner strength is assured with the use of high quality European corner clamping components..

#### FEATURES AND BENEFITS

- Excellent 'Uw' values down to 2.7
- 54mm heavy duty sash profile
- Double weather seals
- Capable of accommodating IGU's up to 40mm
- Mitred corner construction with high quality hardware

54mm

57mm

■ Made from Ecometal™

PERFORMANCE

# Serviceability Pressure Up to 2200Pa Up to 4500Pa Ultimate Pressure Water Penetration Up to 1000Pa FRAME SIZE Sash Depth Height

MAXIMUM RECO	MMENDED SIZE
Sash Height	Up to 1800mm
Sash Width	Up to 1500mm
Total Area	Up to 1.8m <sup>2</sup>
Sash Weight	Up to 60kg

Double Glazed	15mm - 40mm
Double Glazed	13111111 - 40111111

ACOUSTICS (MAX)	
Rw (C;Ctr)	38 (-1;-3)

ERS WINDO	OW ENERGY RATINGS				
indow ID	Glazing	Uw	SHGC	Tvw	Air Inf
ıtureline Awn	ing Window into 440TB*				
AP-116-01	6Clr/12/6Clr	3.5	0.45	0.48	0.24
AP-116-04	6ET/12Ar/6Clr	2.9	0.39	0.44	0.24
AP-116-37	AGG LowE Prime 6/12/6	2.9	0.35	0.41	0.24
AP-116-47	AGG LowE Plus 6/12/6	2.7	0.37	0.48	0.24
AP-116-55	AGG LowE Max 6/12/6	2.7	0.19	0.39	0.24
ıtureline Awn	ing Window into 419TB*				
AP-150-01	6Clr/12/6Clr	3.8	0.40	0.41	0.24
AP-150-04	6ET/12Ar/6Clr	3.3	0.35	0.38	0.24
AP-150-13	AGG LowE Prime 6/12/6	3.3	0.31	0.35	0.24
AP-150-23	AGG LowE Plus 6/12/6	3.2	0.33	0.41	0.24

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3.1 0.17 0.33 0.24

CAP-150-31 AGG LowE Max 6/12/6

# FUTURELINE VERTICAL SASHLESS WINDOW



The Futureline Vertical Sashless Window is a sleek and modern take on the traditional double hung window. As the name suggests, the panes are sashless, allowing an almost uninterrupted view.

The Futureline Vertical Sashless Window is a high quality thermally broken sashless system utilising advanced Aneeta® technology, the leaders in sashless window design. Available in a range of configurations and compatible with Futureline's Framing Systems, it offers design flexibility.

#### FEATURES AND BENEFITS

- Excellent 'Uw' values down to 2.0
- 100mm window restrictors available to prevent falls
- Compatible with the complete range of Futureline Framing systems
- Counterbalance sashless panes
- Screens available
- Available in 100mm and 150mm frames
- Made from Ecometal™

#### PERFORMANCE

Serviceability Pressure	Up to 1200Pa
Ultimate Pressure	Up to 3000Pa
Water Penetration	Up to 300Pa

#### **INSERT SIZE**

Frame	33 - 38mm
Meeting Rail	19mm

# MAX. RECOMMENDED INSERT SIZE Insert Height 4000mm

II DETCTICIBLE	100011111
Insert Width	1598mn
Panel Weight	40k

#### GLAZING CAPACITY

#### WERS WINDOW ENERGY RATINGS

CAP-521-15 AGG LowE Plus 6/12/4

CAP-521-18 AGG LowE Max 6/12/4

Window ID Glazing

Futureune ver	tical Slider in 440TB				
CAP-522-02	6.38CPClr/12/4Clr	2.4	0.48	0.58	0.60
CAP-522-15	AGG LowE Plus 6/12/4	2.1	0.47	0.62	0.60
CAP-522-18	AGG LowE Max 6/12/4	2.0	0.22	0.51	0.60
Futureline Vertical Slider in 419TB 100mm					
615 500 00					
CAP-520-02	6.38CPClr/12/4Clr	2.6	0.45	0.54	0.60
	6.38CPClr/12/4Clr AGG LowE Plus 6/12/4		0.45		
CAP-520-15		2.3		0.57	0.60
CAP-520-15	AGG LowE Plus 6/12/4	2.3	0.43	0.57	0.60

View full list of Residential and Commercial WERs ratings at capral.com.au

Uw SHGC Tvw Air Inf

2.4 0.44 0.57 0.60

2.3 0.21 0.47 0.60





# FUTURELINE HORIZONTAL SASHLESS WINDOW



The Futureline Horizontal Sashless Window is a sleek and modern take on the traditional sliding window. As the name suggests, the panes are sashless, providing the clearest possible view.

The Futureline Horizontal Sashless Window is a high quality thermally broken sashless system utilising advanced Aneeta® technology, the leaders in sashless window design. Available in multiple configurations using 2 or 3 panels to suit your opening and compatible with Futureline's Framing Systems, it offers total design flexibility.

#### FEATURES AND BENEFITS

- Excellent 'Uw' values down to 2.2
- 100mm window restrictors available to prevent falls
- Compatible with the complete range of Futureline Framing systems
- Screens available
- Can be configured to suit a range of applications, including fixed panels
- Slide-Fixed (XO), Slide-Fixed-Slide (XOX) and Fixed-Slide (OX) configurations available
- Available in 100mm and 150mm frames
- Made from Ecometal™



#### PERFORMANCE

Ultimate Pressure	Up to 2000Pa
Water Penetration	Up to 300Pa

#### INSERT SIZE

Frame	34 - 56mm
Interlock	19mm

#### MAX. RECOMMENDED INSERT SIZE

Insert Height	1607mm
Insert Width	5000mm
Panel Weight	60kg

#### GLAZING CAPACITY

Double Glazed	22mm

#### WERS WINDOW ENERGY RATINGS

Window ID	Glazing	Uw	SHGC	Tvw	Air Inf
Futureline Horizontal Slider in 440TB					
CAP-525-02	6.38CPClr/12/4Clr	2.9	0.44	0.52	0.60
CAP-525-15	AGG LowE Plus 6/12/4	2.6	0.42	0.55	0.60
CAP-525-18	AGG LowE Max 6/12/4	2.6	0.20	0.46	0.60

#### Futureline Horizontal Slider in 419TB 100mm

CAP-523-02	6.38CPClr/12/4Clr	2.6	0.47	0.57	0.60
CAP-523-15	AGG LowE Plus 6/12/4	2.3	0.45	0.60	0.60
CAP-523-18	AGG LowE Max 6/12/4	2.2	0.22	0.49	0.60

#### Futureline Horizontal Slider in 419TB 150mm

CAP-524-02	6.38CPClr/12/4Clr	2.8	0.44	0.52	0.60
CAP-524-15	AGG LowE Plus 6/12/4	2.5	0.42	0.55	0.60
CAP-524-18	AGG LowE Max 6/12/4	2.4	0.20	0.45	0.60



