



PRODUCT  
**BIFOLD DOOR**  
SYSTEM RT7050





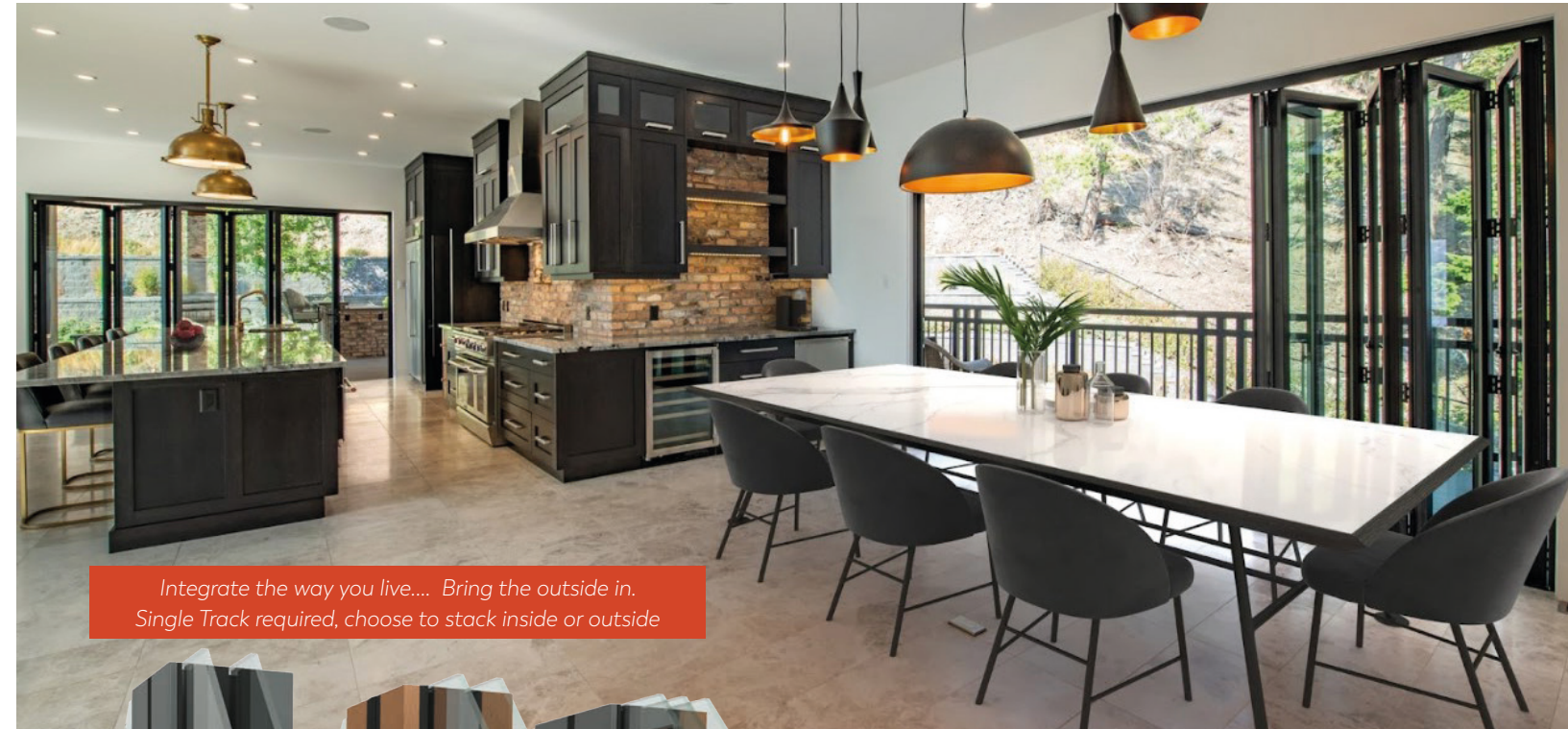
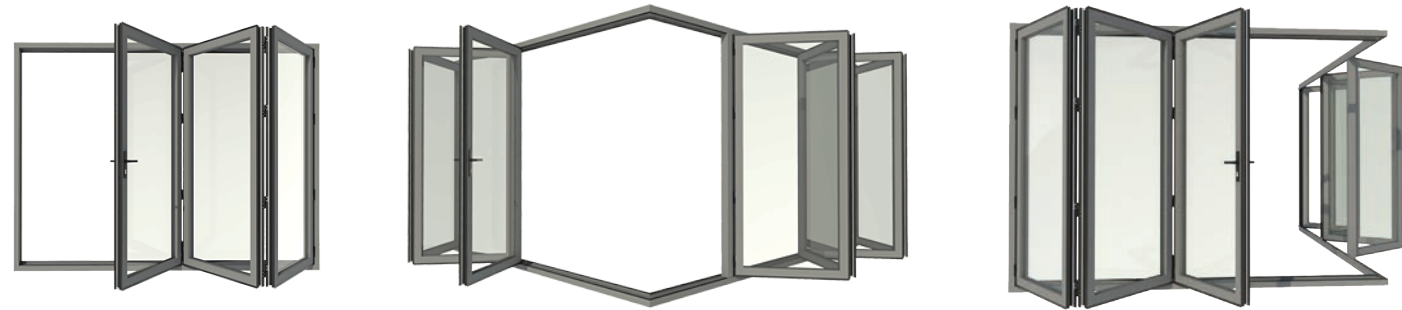
# BIFOLD DOOR

System RT7050



Choosing a Bifold Door from Rhino Windows gives you choice, with fantastic thermal efficiency in whichever system or material you choose. Designed to allow for a seamless access between the inside and outside, bifold doors provide 90% or MORE of clear access to any opening, without the need for multiple tracks or pockets. The main advantages of bifold doors include large opening apertures, maximising natural light, ventilation, views and accessibility while creating a seamless transition between indoor and outdoor spaces.

Bifold doors are also available as corner sets, for both internal and external corners.



## THERMAL PERFORMANCE

Rhino Window's Bifold Door range, in conjunction with the correct glass specification (and optional foam filling), is designed to achieve (and vastly surpass in some cases) compliance with the latest thermal requirements of the current building regulations. All Bifold Door include **Winsul8 Insulated Core Technology** to minimise heat transfer across the profiles. This innovative and advanced thermal core provides the basis of all **Rhinotrusion** systems thermal success. .

## WINSUL8 TECHNOLOGY - INSULATED CORE SYSTEM

A **GFRC THERMALLY INSULATED CORE** IS LOCATED AT THE VERY CENTRE OF ALL THE RT SYSTEMS, ENABLING FANTASTIC U-VALUES AND STRENGTH. **ECOTRUSION & ULTRA-ECOTRUSION** SYSTEMS TAKE THIS A STEP FURTHER BEING COMPLETELY CONSTRUCTED FROM GFRC.

Thermal performance is further gained if opting to choose for the profiles to be foam filled. The foam insulation reduces radiation heat loss across the air cavities within the door profiles to provide additional thermal enhancement.

### Triple Glazed Bifold Doors

Transmission Coefficient (U-Value/U-Factor) ..... **0.9-1.1** w/m2k / **0.15-0.19** Btu/h·ft<sup>2</sup>·°F  
 Glass Centre pane (U-Value/U-Factor) ..... **0.87** w/m2k / **0.15** Btu/h·ft<sup>2</sup>·°F

### Double Glazed Bifold Doors

Transmission Coefficient (U-Value/U-Factor) ..... **1.1-1.4** w/m2k / **0.19-0.24** Btu/h·ft<sup>2</sup>·°F  
 Glass Centre pane (U-Value/U-Factor) ..... **1.07** w/m2k / **0.19** Btu/h·ft<sup>2</sup>·°F

*At the time of publication the RT7550, RT9050, RT7540 & 9040 systems were pending thermal test results.*



**Winsul8 Insulated Core**  
 GFRC; warmer, larger, thermal breaks within all profiles  
*Foam filled option*

**Foam Filled Cavities**  
 Option of adding insulating foam to cavities (frame, sash & thermal core) for Improved thermal efficiency of @9%



# BIFOLD DOOR

System RT7050



## RT7050 Classic *Ideal 70mm replacement system*

Material options: Aluminium (AA), Hardwood (WW) & Aluminium/Hardwood (AW).

The RT7050 system offers Bifold Doors in 3 material options, all include Winsul8 Technology, produce great thermal values, and have matching profiles across both Bifolds and Sliding Doors.



RT7550 AA  
ALUMINIUM



RT7550 WW  
WOOD



RT7550 AW  
ALUMINIUM & WOOD



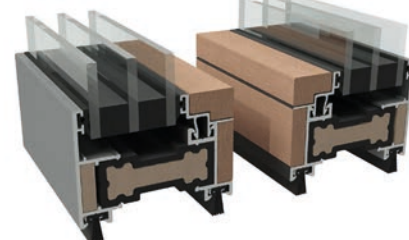
U-Value  
**1.38**  
W/m<sup>2</sup>k, double glazed

U-Factor  
**0.24**  
Btu/h-ft<sup>2</sup>-°F, double glazed



U-Value  
**1.31**  
W/m<sup>2</sup>k, double glazed

U-Factor  
**0.23**  
Btu/h-ft<sup>2</sup>-°F, double glazed



U-Value  
**1.08**  
W/m<sup>2</sup>k, triple glazed

U-Factor  
**0.19**  
Btu/h-ft<sup>2</sup>-°F, triple glazed

**Features:** 70mm deep, 50mm slim frame (sight-line). Great thermal values, Ideal replacement system. Includes **Winsul8 Technology** (GFRC Insulated 51mm core) to profiles and aluminium tracks. 3 material options. Interlocking Panels, Finger Safe Gaskets, Fully adjustable rollers, Security hinges. Can be top hanging or bottom rolling (or both). Flush external aluminium face. Secure Multipoint locking. Hardwood can be used within Conservation and Heritage Areas.

**Track options:** **Classic** track. **Winsul8** track; available with encapsulated or non-encapsulated rollers.

**Threshold options:** Flush (compliant Part M, UK / ADA, USA) or Raised. With or without cills.

**Further options:** Rebates. Cill (75mm projection). Internal Blinds. Transoms. Glass options.

### Profile specification:

Frame + Sash Depth ..... **70mm / 2 3/4 in**  
Sash Width ..... **50mm / 1 31/32 in**

Frame Width ..... **35mm / 1 3/8 in**  
Sight line ..... **110mm / 4 21/64 in**



### Security

Multipoint locking  
Secure roller system  
High security cylinders  
Security tested  
Toughened glass



U-Value  
**1.31**  
W/m<sup>2</sup>k, double glazed

U-Factor  
**0.23**  
Btu/h-ft<sup>2</sup>-°F, double glazed

### Thermally efficient

U-value 1.31 / U-factor 0.23  
(Double Glazed)  
Low e glass /  
Super Spacer®  
Winsul8 Technology  
Foam filled

RT7050 WW Classic profile.  
Flush track fitted with cill  
and internal rebate.

### Convenience

Open In/ Open Out  
Multiple configurations  
Clip on beads  
Track options

Encapsulated track (Winsul8)

Non encapsulated track

Encapsulated track (Classic)

### Modern aesthetics

Natural warmth of timber **WW** & **AW**  
Flush aluminium face to external **AA** & **AW**  
Choice of timber / Dual colour

### Weather performance

Additional rebate included, inside & outside (optional)  
High performance seals / gaskets  
Weather head drip bars



# BIFOLD DOOR FEATURES

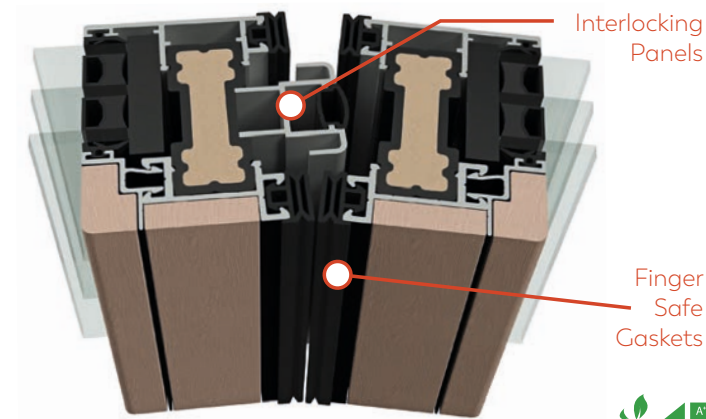
System RT7050

## Common Features

- Available in single or dual colour standard RAL finish(es) / double or triple glazing
- Optional foam filled frame & sashes
- Finger safe gaskets / Track rebates
- Trickle vents / Cill options
- Security; Multipoint locking, encapsulated tracks for bifold rollers. Interlocking panels
- Hardware; Flat, Lever and D-handles
- Fast fit glazing beads, thermal break inc.

Glass; Toughened Low-E Argon gas filled glazing units, includes Super Spacer® bars. Glass optional; Krypton gas filled, laminated, anti-sun tinting, turtle glass.

Gasket (each panel) ..... **6mm / 15/64 in**  
 GFRC Insulated Core ..... **51mm / 11/64 in**



## Configurations

- Open in: Bi-fold from 2 to 14 sashes
- Open out: Bi-fold from 2 to 14 sashes
- Corner set: Bi-fold from 2 to 14 sashes

## Door Energy Rating

Rhino Window's RT Systems has been assessed by an independent simulation specialist in accordance with BS EN ISO 10077-2:2017, using official Door Energy Rating software, and has been proven to be capable of achieving an 'A+' rating.



## Size Limitations

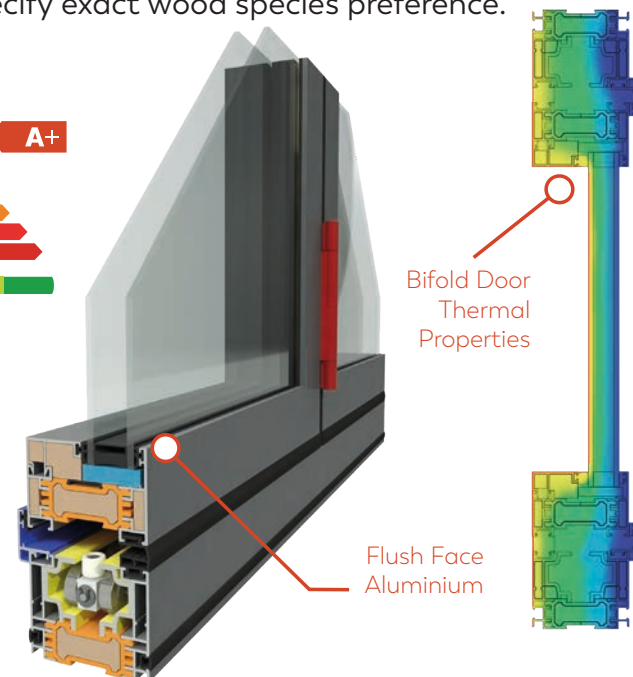
Max opening height ..... **4000mm / 13ft**  
 Max opening width ..... **18300mm / 60ft**  
 Panel height ..... **305mm/1ft - 4000mm/13ft**  
 Panel width **305m/1ft - 1200mm/3ft 11 1/4in**  
 Maximum weight/sash ..... **120 kg / 265 lb**

## Construction

Stronger build quality / improved robustness. Each sash corner is reinforced with dual aluminium corner cleats and 4x wedge pins per cleat. This creates a far superior and stronger system, and increases longevity. This is the same for all products in all material options

## Material Options

**Aluminium** profiles (1.8mm / 5/16 in) are extruded from aluminium alloy 6060T6, T5 or T4 complying with the recommendations of BS EN 12020-2/BS EN 755-Parts 1 to 9. **GFRC** RT750/9040 and thermal breaks are produced from glass fibre reinforced composite. **Wood** Environmentally sourced European Oak or Eucalyptus (standard), or can bespoke specify exact wood species preference.



## Finishes

The RT bifold door is available in a range or mix of material options, and can be provided in either of the following finishes:

**Aluminium/GFRC;** 1. Anodised to BS EN 12373-1 or BS 3987 2. Powder coated to BS EN 12206-1 or automotive spray painted (GFRC). Available in single or dual colour standard RAL finishes. 3. Special finishes can be requested.

**Wood;** 1. Unfinished natural European Oak or Eucalyptus 2. Painted. Available in single or dual colour standard RAL finishes. 3. Natural stain (breathable). Special finishes can be requested.

**Glass;** 1. Clear 2. Glass tint 3. Available in single or dual colour standard RAL finishes.

## Stock Colours (Aluminium)

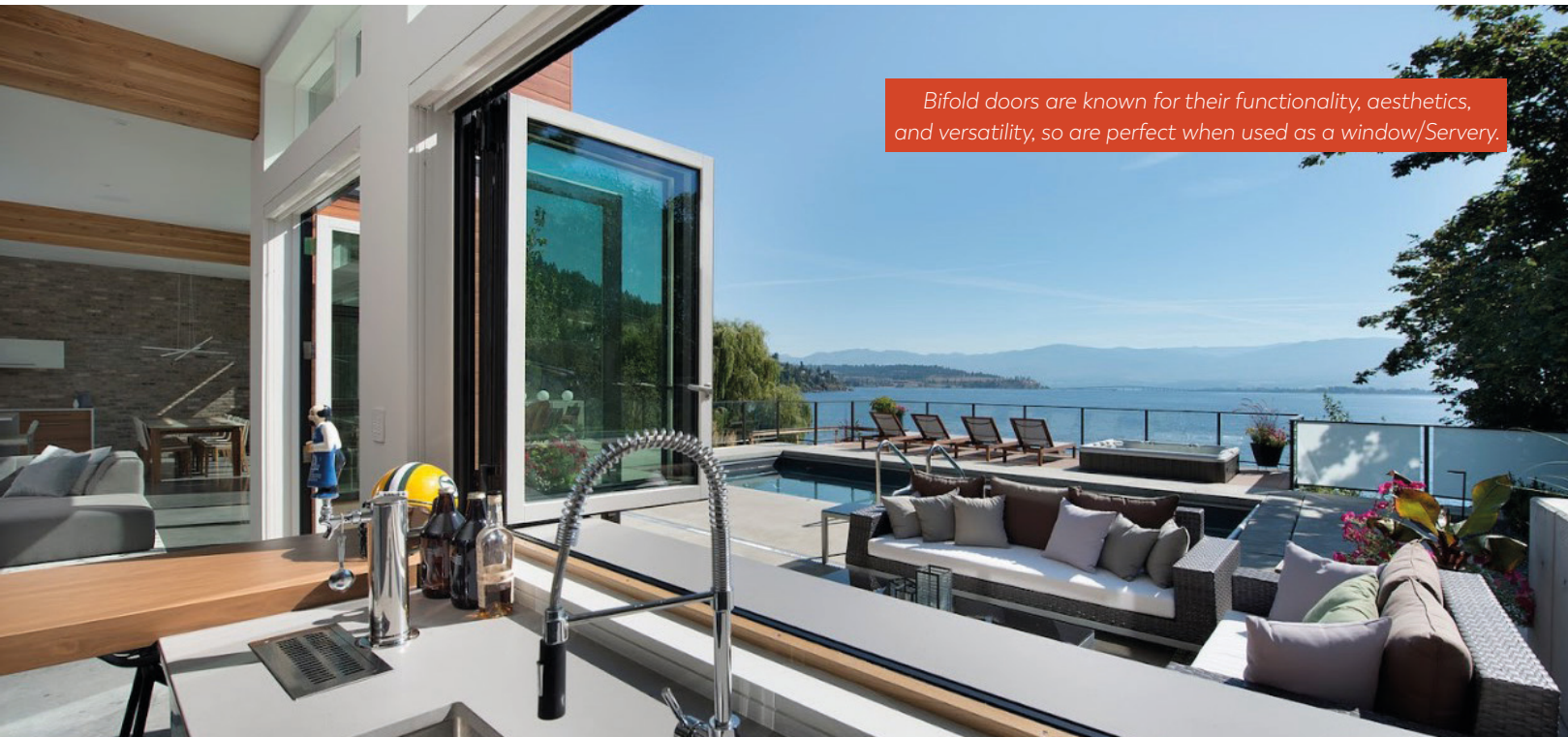
9016 Traffic White (Satin), 9005 Jet Black (Matt), 7016 Anthracite Grey (Matt)





# BIFOLD DOOR

System RT7050



Bifold doors are known for their functionality, aesthetics, and versatility, so are perfect when used as a window/Service.

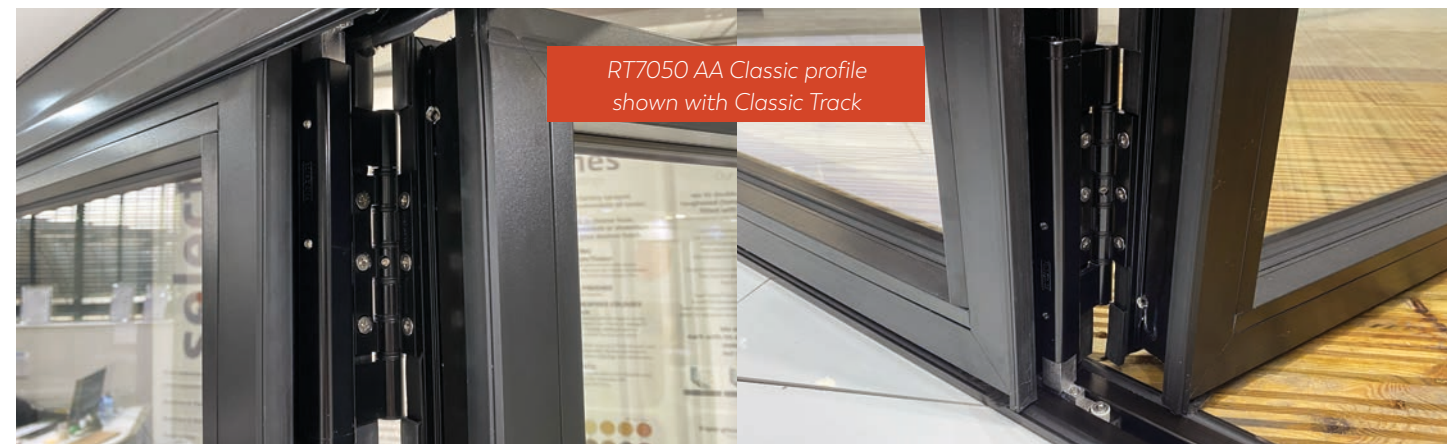
## Tracks & Rollers

All Rhino Window Bifold Doors can be; Top Hung, Bottom Rolling or both, which can satisfy various installation / load bearing requirements. Rollers are also fully adjustable.

**Top Hung** refers to where the bifold rollers are positioned, in this case to the top track only.

**Bottom Rolling** bifold rollers are fitted to the bottom track only.

**Top & Bottom Rolling** in this case the bifold rollers are positioned to both the top and bottom tracks, which results in a really easy to use, smooth balanced operation.



RT7050 AA Classic profile shown with Classic Track

## Threshold Options

Bifold Doors are available with a low threshold, raised, rebated and with or without a cill.

### Flush Track

This options gives an almost flush floor level, seamless transition from the inside of the property to the outside of the property.

- Compliant, Part M (UK) / ADA (USA)
- Extremely strong, a car can run over it to gain access to a garage

### Raised Track

Requires user to step over the threshold.

### Flush Track with Cill

This option offers a step down out of your property with no trip hazard, and with a cill to drain water away from the doors.

### Raised Track with Cill

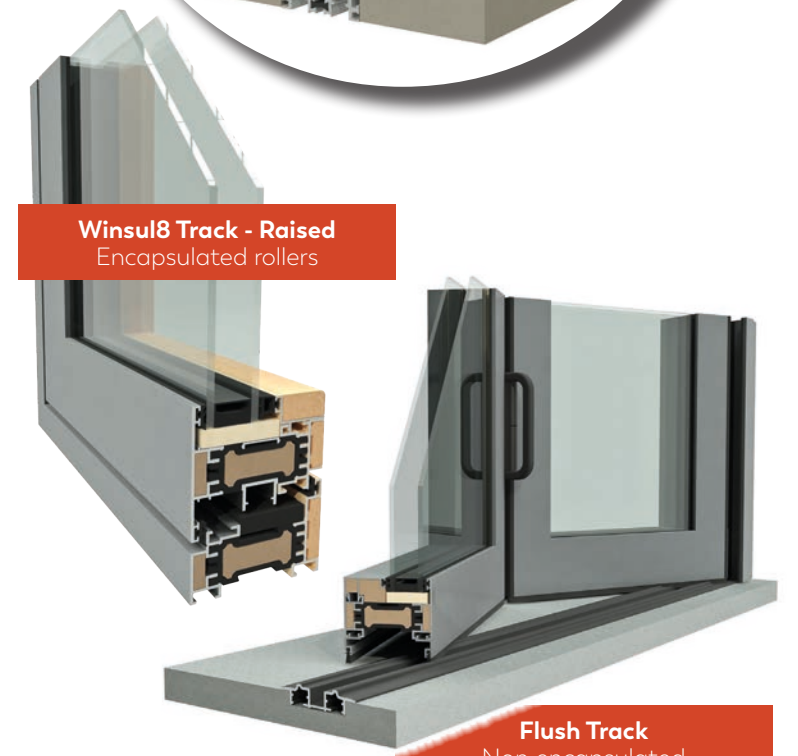
Offers a step down out of your property, with a cill to drain water away from the doors. Double cill also available.



Bifold Door sets showing: 1. Raised Track  
2. Raised Track & Cill



Classic Track - Flush  
Encapsulated rollers



Winsul8 Track - Raised  
Encapsulated rollers

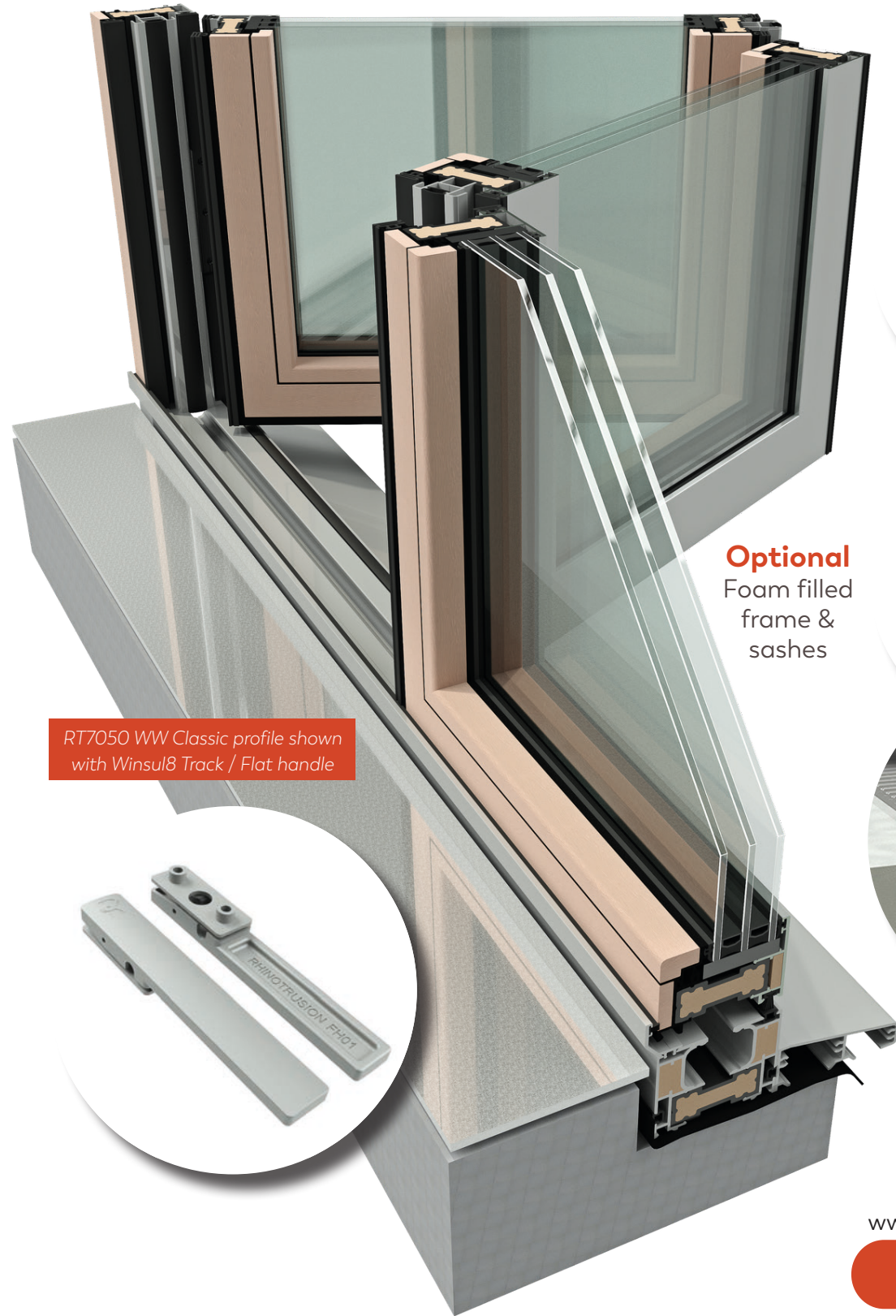


Flush Track  
Non encapsulated



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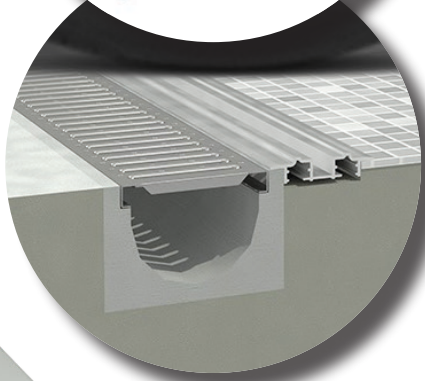
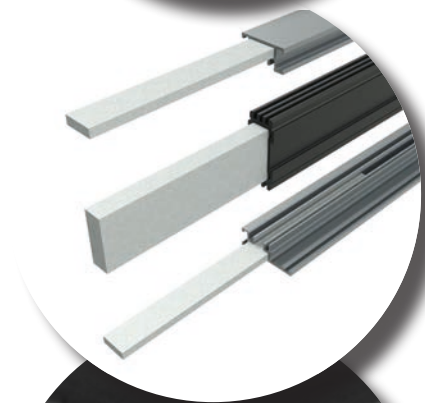


RT7050 WW Classic profile shown with Winsul8 Track / Flat handle

**Pivotable**  
Lift-On Hinges



**Optional**  
Foam filled  
frame &  
sashes



**Flush Track**  
Flush track (ride on)  
fitted alongside  
an eco drain

[www.rhinowindows.com](http://www.rhinowindows.com)

**LEARN MORE**



**Level Threshold**  
Bottom Rolling

**Level Threshold**  
Top Hanging

**Level Threshold**  
Top & Bottom Rolling

**Level Threshold**  
Top Hanging

**Raised Threshold + Rebate**  
Bottom Rolling

**Raised Threshold + Rebate**  
Top & Bottom Rolling

**Raised Threshold + Cill**  
Top & Bottom Rolling

**Raised Threshold + Cill + Rebate**  
Bottom Rolling

**Raised Threshold + Cill + Rebate**  
Top & Bottom Rolling



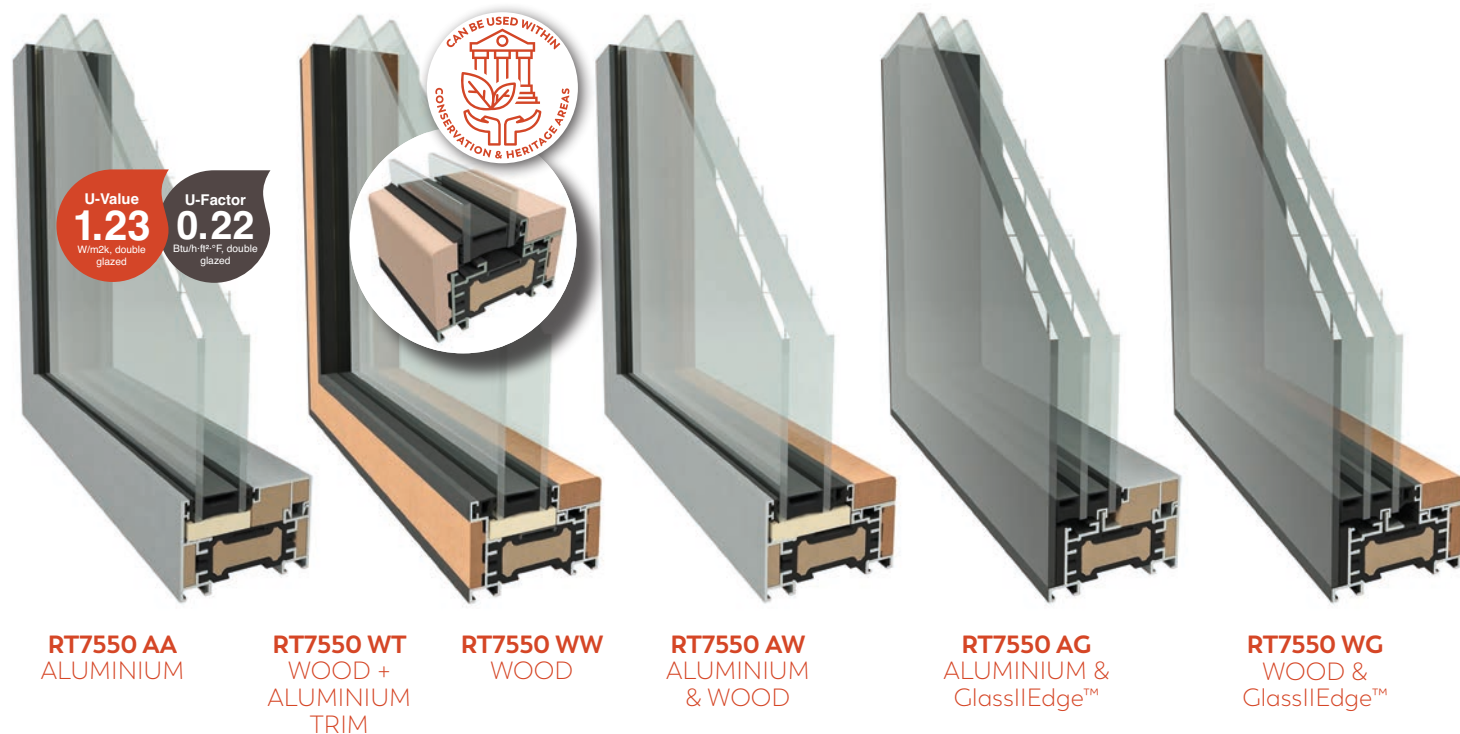
# COMING SOON

Upcoming NEW Sliding Door Systems for 2024

## RT7550 Signature *Ideal replacement system - Upgrade*

**Material options:** Aluminium (AA), Hardwood (WW), Hardwood/Aluminium Trim (WT), Aluminium/Hardwood (AW), Aluminium/Glass2Edge (AG) & Hardwood/Glass2Edge (WG)

**RT7550 offers further material options to the line-up, improved thermal values (even larger thermal breaks) and matching products across the system; Bifold Doors, Sliding Doors, Casement Windows and Vertical Sliding Windows.**



**Features:** 75mm deep, 50mm slim frame. Great thermal values, Ideal replacement upgrade. Includes **Winsul8 Technology** (GFRC Insulated 55mm core) to profiles and aluminium tracks. Six material options. Interlocking Panels, Finger Safe Gaskets, Fully adjustable (pivot) rollers, Lift on hinges. Can be top hanging or bottom rolling (or both). Flush external aluminium face.

**Track options:** **Winsul8** track; available with encapsulated or non-encapsulated rollers.

**Threshold options:** Flush (compliant Part M, UK / ADA, USA) or Raised. With or without cills.

**Further options:** Rebates. Cill (75mm projection). Internal Blinds. Glass options.

**Profile specification:**

Frame + Sash Depth .....	<b>75mm / 2 61/64 in</b>	Frame Width .....	<b>35mm / 1 3/8 in</b>
Sash Width .....	<b>50mm / 1 31/32 in</b>	Sight line .....	<b>110mm / 4 21/64 in</b>

## RT9050 Supreme *Ideal new build system*

**Material options:** Aluminium (AA), Hardwood (WW), Hardwood/Aluminium Trim (WT), Aluminium/Hardwood (AW), Aluminium/Glass2Edge (AG) & Hardwood/Glass2Edge (WG)

**RT9050 is very similar to the RT7550, but with it's increased depth to 90mm it accommodates an even larger thermal break, resulting in better thermal values and achieves PASSIVHAUS.**

**Features:** 90mm deep, 50mm slim frame. Fantastic thermal values, Ideal new build system. Includes **Winsul8 Technology** (GFRC Insulated 70mm core) to profiles and aluminium tracks. Six material options. Interlocking Panels, Finger Safe Gaskets, Fully adjustable (pivot) rollers, Lift on hinges. Can be top hanging or bottom rolling (or both). Flush external aluminium face.

**Track options:** **Winsul8** track; available with encapsulated or non-encapsulated rollers.

**Threshold options:** Flush (compliant Part M, UK / ADA, USA) or Raised. With or without cills.

**Further options:** Rebates. Cill (75mm projection). Internal Blinds. Glass options.

**Profile specification:**

Frame + Sash Depth ...	<b>90mm / 3 35/64 in</b>	Frame Width .....	<b>35mm / 1 3/8 in</b>
Sash Width .....	<b>50mm / 1 31/32 in</b>	Sight line .....	<b>110mm / 4 21/64 in</b>

The following two systems are **UNIQUE** in manufacture and material. They are also the **FIRST GFRC fenestration products available within Europe\***. These unique eco friendly systems **PRODUCE ASTOUNDING THERMAL RESULTS**, surpassing **PASSIVHAUS** requirements.

## RT7540 Ecotrusion *Eco-friendly replacement system*

## RT9040 Ultra-Ecotrusion *Eco-friendly new build*

**Material:** Glass Fibre Reinforced Composite (**GFRC**).

**Features:** GFRC pultruded profile throughout, Eco friendly manufacture & hugely thermally efficient (keeps energy bills low). 75 or 90mm deep (each panel) for improved thermal properties. Interlocking Panels, Finger Safe Gaskets, Fully adjustable (pivot) rollers, Lift on hinges. Can be top hanging or bottom rolling (or both). Flush external aluminium face

**Track options:** **Winsul8** track; available with encapsulated or non-encapsulated rollers.

**Threshold options:** Flush (compliant Part M, UK / ADA, USA) or Raised. With or without cills.

**Further options:** Rebates. Cill (75mm projection). Internal Blinds. Glass options.

**Profile specification:**

Frame + Sash Depth .....	<b>75mm / 2 61/64 in</b>	Sash Width .....	<b>40mm / 1 37/64 in</b>
Frame + Sash Depth ...	<b>90mm / 3 35/64 in</b>	Sight line .....	<b>90mm / 3 35/64 in</b>
Frame Width .....	<b>35mm / 1 3/8 in</b>		



RT7540 Full GFRC extrusion, foam filled cavities.

\* European availability, correct at time of publish December 2023





# Where Excellence Meets Innovation

At Rhino Windows, our passion for perfection is reflected in our meticulously crafted door and window systems. With a legacy of excellence, we are at the forefront of the fenestration industry, offering unparalleled quality, energy efficiency, and cutting-edge design.

Rhino Windows takes pride in designing, manufacturing, and supplying a comprehensive range of door and window systems. Our systems are of high-quality, energy efficiency and performance products to cater to the diverse needs of our clients.

**Elevate your space with our energy efficient doors and window systems.**



**BIFOLD  
DOORS**

**BIFOLD  
WINDOWS**

**MULTI  
SLIDING  
DOORS**

**FLUSH  
CASEMENT  
WINDOWS**

**VERTICAL  
SLIDING  
WINDOWS**



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Rhino Windows Bifold System RT7050, Rev 08/12/2023

