

Technical Data Sheet –

Roof Access Hatch – Residential (RAH-R)



Solid insulated lid



Polycarbonate dome lid

The Sertus Roof Access Hatch – Residential (RAH-R) allows direct, safe and easy access to flat roofs for maintenance or as part of a fire escape route. The RAH-R is a modular roof hatch, designed for new-build or refurbishments of residential and commercial schemes.

Specific Features

- Available in a wide range of sizes (for larger sizes see our RAH-C range)
- Safe, direct access to roofs – no external stairways or ladders needed
- Manually or electrically opening
- Hinged, solid insulated cover or polycarbonate glazing options
- Accessories include ladders and handrails
- Polycarbonate glazing certified to BS EN 1873
- Internal fire rating B-s3, d0 to EN13501-1
- External fire rating B_{ROOF} (t4) to EN13501-5

Product Description

The Sertus Roof Access Hatch – Residential (RAH-R) allows direct, safe and easy access to flat roofs for maintenance or as part of a fire escape route.

The RAH-R is controlled with telescopic gas struts. It can be specified with polycarbonate glazing (clear or diffused) to maximise natural light.

The RAH-R electric is supplied with either the slim line motor mounted to one side or tandem depending on the size of the unit.

For larger units, a linear motor is installed across the width and exiting should be through the long side of the unit.

Technical Data Sheet –

Roof Access Hatch – Residential (RAH-R)

Thermal transmission

Values shown below are calculated U-Values, unless denoted otherwise. Complete unit U-Values are available on request.

Typical Values	U-Value (W/(m ² ·K))
Double Glazed Polycarbonate	2.68
Triple Glazed Polycarbonate	1.78
Quad Glazed Polycarbonate	1.37
Solid insulated cover 40mm	0.80
Upstand PVC 150mm ECO Splayed	0.90
Upstand PVC 150mm ECO Vertical	1.00
Upstand PVC 300mm ECO Splayed	1.00

Technical data

Sound Resistance (dB)	28
Air Permeability to EN1873	A4
Watertightness to EN1873	Pass
Impact Test to EN1873	1200J
Impact Test to ACR (M) 001:2005	Class B

Fire rating

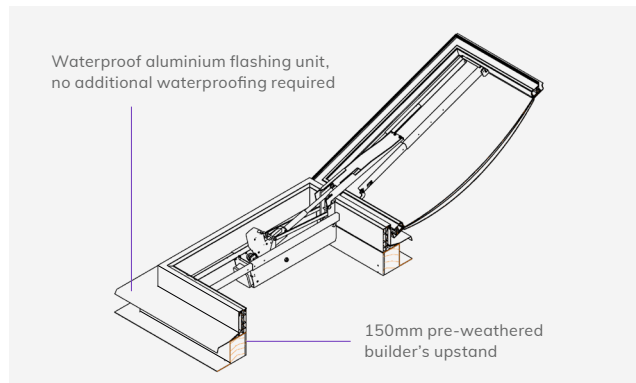
Typical Values		
Internal	B-s3, d0	EN13501-1
External	B _{ROOF} (t4)	EN13501-5
Service Temperature	-50°C to + 120°C	

Technical Data Sheet –

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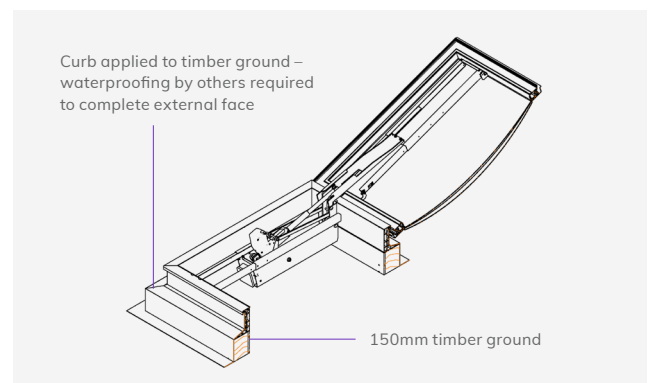
RAH-R Application Options

Option 1: RAH-R Applied to a 150mm Builder's Upstand, Electric Collar Version



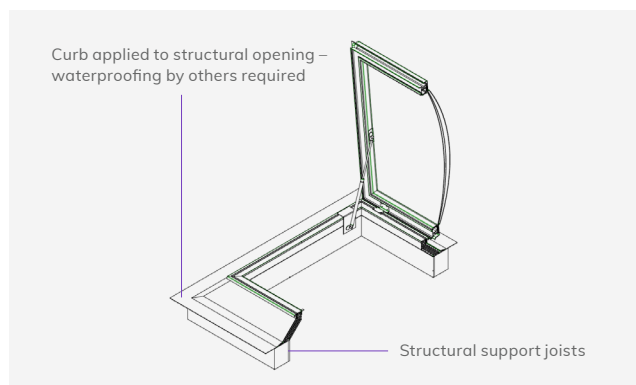
Note: on lengths over 2200mm, unit will be tandem motors as standard.

Option 2: RAH-R Applied to a 150mm Builder's Upstand, Electric Curb Version

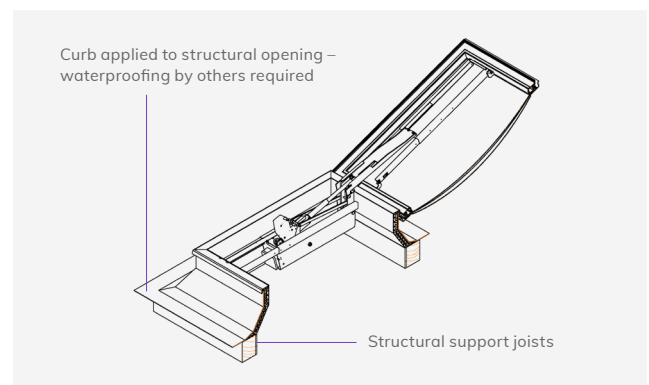


Note: on lengths over 2200mm, unit will be tandem motors as standard.

Option 3: RAH-R Applied to a Structural Aperture, 150mm Splayed Upstand

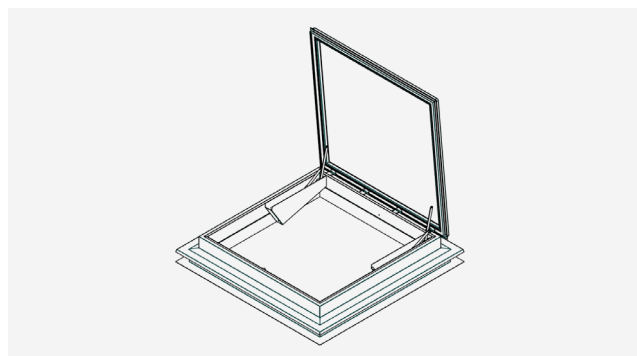


Option 4: RAH-R Applied to a Structural Aperture, 300mm Splayed Upstand, Electric Version

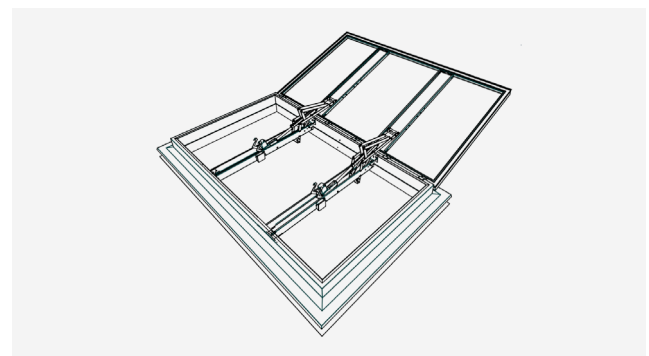


Note: on lengths over 2200mm, unit will be tandem motors as standard.

Tandem – Slim Line Motor



Tandem – Linear Motor



Note: position of motors can be adjusted to suit site requirements.

For other configurations, please contact.

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Roof Access Hatch – Residential (RAH-R)

Size Range – Manually Opening

Size Ref	Roof Opening Size (mm) (Options 1 & 2)	Roof Opening Size (mm) (Options 3 & 4)	Access Opening Size (mm)
Square Units			
RAH-R.60.60	600 x 600	800 x 800	600 x 600
RAH-R.70.70	700 x 700	900 x 900	700 x 700
RAH-R.75.75	750 x 750	950 x 950	750 x 750
RAH-R.80.80	800 x 800	1000 x 1000	800 x 800
RAH-R.90.90	900 x 900	1100 x 1100	900 x 900
RAH-R.100.100	1000 x 1000	1200 x 1200	1000 x 1000
RAH-R.105.105	–	1250 x 1250*	1050 x 1050
Rectangular Units			
RAH-R.40.70	400 x 700	600 x 900	400 x 700
RAH-R.40.100	400 x 1000	600 x 1200	400 x 1000
RAH-R.50.80	500 x 800	700 x 1000	500 x 800
RAH-R.50.110	500 x 1100	700 x 1300	500 x 1100
RAH-R.60.90	600 x 900	800 x 1100	600 x 900
RAH-R.60.120	600 x 1200	800 x 1400	600 x 1200
RAH-R.70.100	700 x 1000	900 x 1200	700 x 1000
RAH-R.70.130	700 x 1300	900 x 1500	700 x 1300
RAH-R.70.160	700 x 1600	900 x 1800	700 x 1600
RAH-R.80.110	800 x 1100	1000 x 1300	800 x 1100
RAH-R.80.130	800 x 1300	1000 x 1500	800 x 1300
RAH-R.90.120	900 x 1200	1100 x 1400	900 x 1200

*Option 3 only

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Size Range – Electrically Opening (Single Motor)

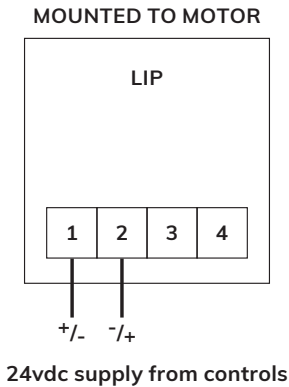
Size Ref	Roof Opening Size (mm) (Option 4 only)	Access Opening Size (mm)
Square Units		
RAH-R.100.100	1200 x 1200	1000 x 1000
RAH-R.105.105	1250 x 1250	1050 x 1050
RAH-R.110.110	1300 x 1300	1100 x 1100
RAH-R.120.120	1400 x 1400	1200 x 1200
RAH-R.130.130	1500 x 1500	1300 x 1300
RAH-R.140.140	1600 x 1600	1400 x 1400
Rectangular Units		
RAH-R.80.130	1000 x 1500	800 x 1300
RAH-R.90.120	1100 x 1400	900 x 1200
RAH-R.100.130	1200 x 1500	1000 x 1300
RAH-R.100.150	1200 x 1700	1000 x 1500
RAH-R.100.160	1200 x 1800	1000 x 1600
RAH-R.100.220	1200 x 2400	1000 x 2200
RAH-R.110.170	1300 x 1900	1100 x 1700

Note: sizes larger than these will be tandem actuator.

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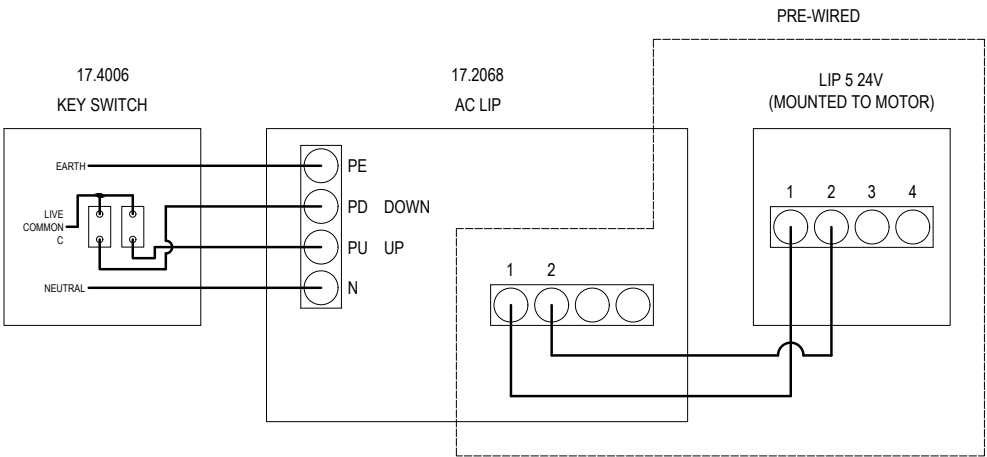
Electrical Connection Diagrams

24vdc single/tandem motor:



24vac single/tandem motor:

Key switch:



Retractive switch:

