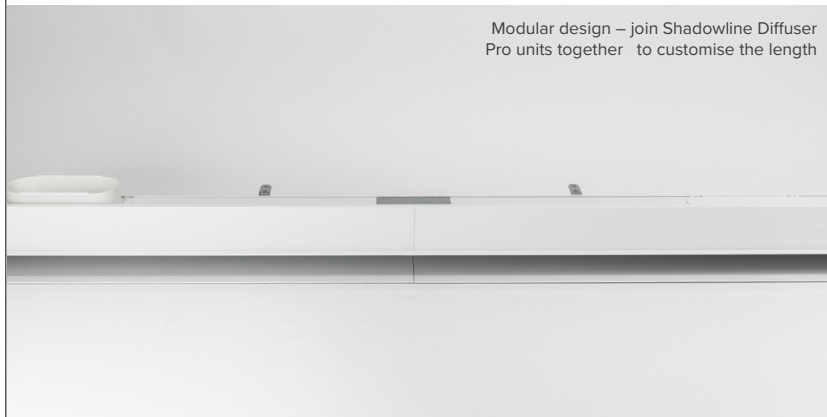


Wall/ceiling junction (shadowline) installation



Modular design – join Shadowline Diffuser Pro units together to customise the length



Ceiling installation

## SHADOWLINE DIFFUSER PRO

### Concealed flangeless internal grille

<b>Shadowline Diffuser Pro</b>	Shadowline Diffuser Pro 1200mm, White Powdercoat Aluminium Extrusion	1SLD1200P
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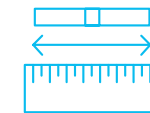
**Compatible Expella ventilation kits (sold separately):**

Standard Inline Exhaust Kit	1406530
Quiet Flow Inline Exhaust Kit	1406220
Quiet Flow Multi Inline Exhaust Kit	1406340
Roof Exhaust Kit	1406500

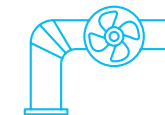
The Shadowline Diffuser Pro is an internal grille that allows air to be channeled through a ventilation system. Designed to blend seamlessly with its interior application, the grille can be positioned at the wall/ceiling junction offering a near invisible vent, or positioned in the ceiling offering a flangeless slot detail. Made from a custom aluminium extrusion, it has been engineered for maximum performance and ease of installation whilst offering a discreet architectural alternative to traditional ceiling grilles.



Designed to blend seamlessly with interior architecture



Easy to install modular design that can be cut or extended to suit varying wall and ceiling sizes



Suitable for inline ventilation and air conditioning systems

## SHADOWLINE DIFFUSER PRO

### Concealed flangeless internal grille



#### PRODUCT FEATURES

- Creates a unique shadowline detail between the wall and ceiling whilst making the ventilation system invisible
- Aluminium profile designed to optimise air flow, improve efficiency and reduce air turbulence and noise
- Suitable for use with inline ventilation and is adaptable for air conditioning systems
- Modular design that can be cut or extended to any length to suit varying wall and ceiling sizes
- Easy to install with adjustable clip-in brackets for multiple fixing options, compatible with Rondo suspended ceilings
- Low profile for restricted ceiling space
- Configurable duct spigot position, orientation and quantity
- Creates a rigid structure that secures the ceiling sheet
- Designed and engineered in Australia by Expella

#### SPECIFICATIONS

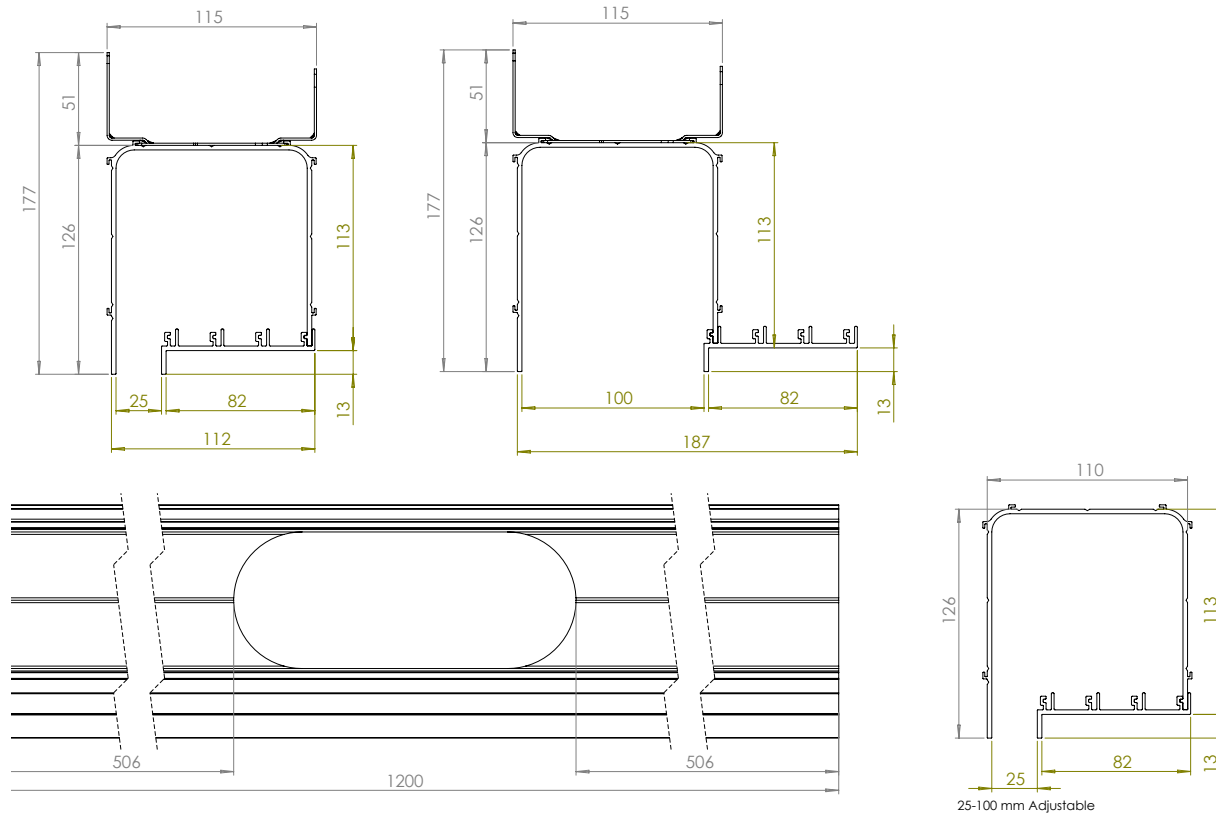
<b>Suitable applications</b>	<ul style="list-style-type: none"> <li>• Bathroom and laundry exhaust grilles (for inline ventilation systems)</li> <li>• Air conditioning supply and return grilles (for ducted systems)</li> </ul>																																								
<b>Material</b>	Custom aluminium extrusion with powdercoat finish. Powdercoat Dulux Satin White (close to RAL9003)																																								
<b>Compatible duct size (mm)</b>	<ul style="list-style-type: none"> <li>• 150mm flexible duct (sold separately)</li> </ul>																																								
<b>Product contents</b>	<ul style="list-style-type: none"> <li>• Shadowline Diffuser Pro components</li> <li>• 1x spigot for 150mm duct</li> <li>• 2x joiners (to join additional Shadowline Pro Diffusers)</li> <li>• 2x end caps</li> <li>• Brackets, screws and fixings</li> </ul>																																								
<b>Options (sold separately)</b>	<p>Insulation for air conditioning systems:</p> <ul style="list-style-type: none"> <li>• 1SLD1IN10 – Shadowline Diffuser Pro, Firemax A10 – 10mm R0.5</li> <li>• 1SLD1INR4 – Shadowline Diffuser Pro, Firemax A20 – 20mm R1.0</li> </ul> <p>LED lights:</p> <ul style="list-style-type: none"> <li>• Available in warm, cool and daylight temperatures. See next page for options and product codes.</li> </ul>																																								
<b>Design</b>	Designed by Expella Aust. Design Registration: 202112803, 202112804, 202415304																																								
<b>Performance</b>	<p>The graph plots pressure drop (Pa) on the y-axis (0.0 to 35.0) against airflow (L/s) on the x-axis (25 to 105). Four data series are shown: SLD @ 25mm (dark blue), SLD @ 50mm (medium blue), SLD @ 75mm (light blue), and SLD @ 100mm (very light blue). All series show an upward trend, with the 25mm duct having the highest pressure drop and the 100mm duct having the lowest.</p> <table border="1"> <caption>Approximate data points from the performance graph</caption> <thead> <tr> <th>Flow Rate (L/s)</th> <th>SLD @ 25mm (Pa)</th> <th>SLD @ 50mm (Pa)</th> <th>SLD @ 75mm (Pa)</th> <th>SLD @ 100mm (Pa)</th> </tr> </thead> <tbody> <tr> <td>35</td> <td>2.5</td> <td>1.5</td> <td>1.0</td> <td>0.8</td> </tr> <tr> <td>45</td> <td>5.0</td> <td>3.0</td> <td>2.0</td> <td>1.5</td> </tr> <tr> <td>55</td> <td>8.0</td> <td>5.0</td> <td>3.0</td> <td>2.0</td> </tr> <tr> <td>65</td> <td>12.0</td> <td>7.0</td> <td>4.0</td> <td>2.5</td> </tr> <tr> <td>75</td> <td>16.0</td> <td>9.0</td> <td>5.0</td> <td>3.0</td> </tr> <tr> <td>85</td> <td>22.0</td> <td>12.0</td> <td>6.0</td> <td>3.5</td> </tr> <tr> <td>95</td> <td>28.0</td> <td>15.0</td> <td>7.0</td> <td>4.0</td> </tr> </tbody> </table>	Flow Rate (L/s)	SLD @ 25mm (Pa)	SLD @ 50mm (Pa)	SLD @ 75mm (Pa)	SLD @ 100mm (Pa)	35	2.5	1.5	1.0	0.8	45	5.0	3.0	2.0	1.5	55	8.0	5.0	3.0	2.0	65	12.0	7.0	4.0	2.5	75	16.0	9.0	5.0	3.0	85	22.0	12.0	6.0	3.5	95	28.0	15.0	7.0	4.0
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# SHADOWLINE DIFFUSER PRO

## Concealed flangeless internal grille

### DIMENSIONS

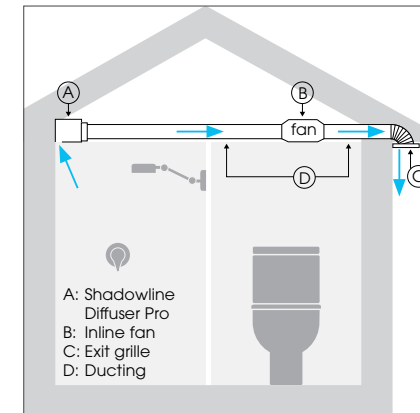
Each Shadowline Diffuser Pro measures 1200mm in length. It has been designed as a modular system so that units can be joined and/or cut to suit project requirements. See installation options section for details.



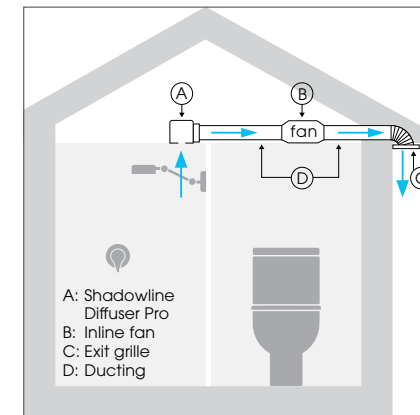
### INSTALLATION OPTIONS

#### Diffuser position

The Shadowline Diffuser Pro is designed to be used in conjunction with an inline fan, ducting and external grille (sold separately); or as part of a ducted air conditioning system. It can be installed at the wall/ceiling junction (shadowline) or in the ceiling.



Wall/ceiling junction (shadowline) installation



Ceiling installation

# SHADOWLINE DIFFUSER PRO

## Concealed flangeless internal grille



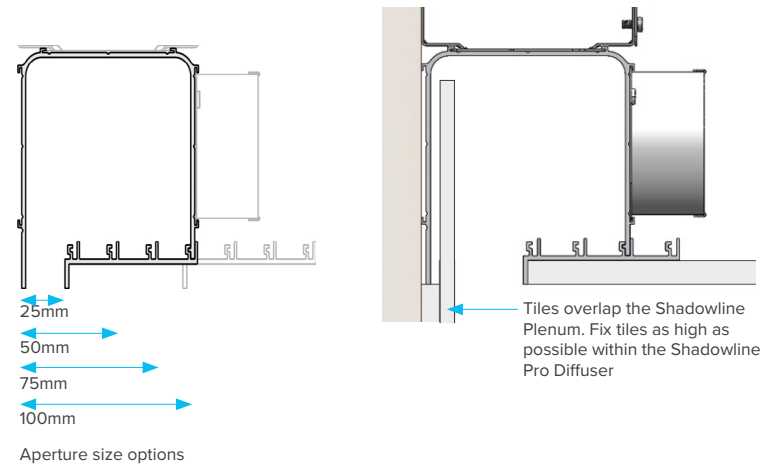
### Customisable length

The Shadowline Diffuser Pro has a modular design so that the units can be joined together and extended to any length to suit any wall/ceiling size. Depending on the length required, extra spigots and Y duct pieces may be required to connect the spigots to the fan. See table below for guidance.

Required length	Number of Shadowline Diffuser Pro units required	Number of spigots required	Number of Y pieces required
600 – 1200mm	1	1	0
1201 – 1800mm	2	1	0
1801 – 2400mm	2	2	1
2401 – 3000mm	3	2	1
3001 – 3600mm	3	3	2

### Adjustable aperture

The Shadowline Diffuser Pro has been designed so that gyprock and tiles can be installed to run inside the Diffuser opening (wall/ceiling junction installation only), resulting in a consistent finish. The Diffuser has an adjustable base aperture (vent opening size) to accommodate varying gyprock, tile and wall cladding finishes and thicknesses. The minimum aperture required is 20mm from the finished wall tile, a smaller aperture will reduce system performance.



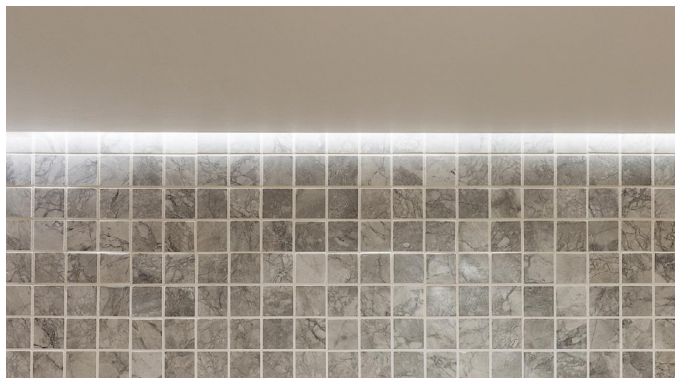
## SHADOWLINE DIFFUSER PRO

### Concealed flangeless internal grille

#### Shadowline Diffuser Pro with LED lighting

A LED light strip kit can be installed inside the Shadowline Diffuser for an ambient lighting effect. LED light strips are adjustable in length and are available in warm, cool and daylight colour temperatures.

LED strip light option	Product code
LED Warm Light Strip (adjustable up to 2m, cuttable every 50mm) – 3000K, 24V, 5w/m	5LED3K2M
LED Warm Light Strip (adjustable up to 5m, cuttable every 50mm) - 3000K, 24V, 5w/m	5LED3K5M
LED Cool Light Strip (adjustable up to 2m, cuttable every 50mm) - 4000K, 24V, 5w/m	5LED4K2M
LED Cool Light Strip (adjustable up to 5m, cuttable every 50mm) - 4000K, 24V, 5w/m	5LED4K5M
LED Day Light Strip (adjustable up to 5m, cuttable every 50mm) - 5500K, 24V, 5w/m	5LED6K5M



Shadowline Diffuser Pro wall/ceiling junction installation with LED lighting

## INSTALLATION AND MAINTENANCE

### Installation

It is recommended that installation of the Shadowline Diffuser Pro is carried out by a qualified tradesperson, it is to be installed as part of an inline ventilation system or ducted air conditioning system.

The Shadowline Diffuser Pro should be installed prior to wall and ceiling gyprock sheets being installed. The gyprock is then set to the shadowline finish.

Please check product specifications with your tradesperson before ordering.

### Maintenance

Periodic cleaning as required

### Warranty

5 year warranty from date of purchase. Refer to Expella's website for full warranty terms and conditions.

expella™

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