

**PRODUCT BROCHURE**

**Zefyr**

*Innovative Building Solutions*



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# Introduction

Zefyr Group - Design, Manufacture and Installation of Innovative Building Solutions for a Sustainable Environment

Zefyr is a flexible organisation that specialises in bespoke façade and roofing systems, tailor-made to suit almost any architectural specification, providing a comprehensive range of bespoke and off-the-shelf solutions. With our global portfolio Zefyr can offer a world-wide service.

Formerly Robertson Vogue, the Zefyr Group has become one of the world leaders in the design and manufacture of 'Natural' Ventilation and Solar Engineering products and services.

The Zefyr vision is to be a world-leading force in environmental and architectural engineering through it's excellence in providing a unique range of products and services with particular expertise in natural ventilation and solar shading.



**ARCHITECTURAL  
SCREENING**

**SOLAR  
SHADING**

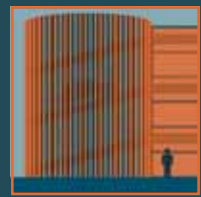
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VENTILATORS**

**INDUSTRIAL  
WEATHER LOUVRES**

**ARCHITECTURAL  
WEATHER LOUVRES**

**ACCESS  
HATCHES**

**ARCHITECTURAL  
METALWORK**



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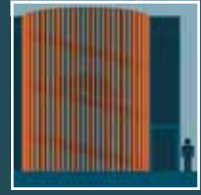
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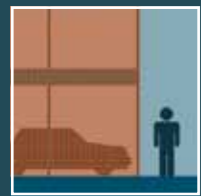
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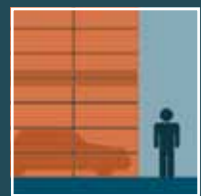
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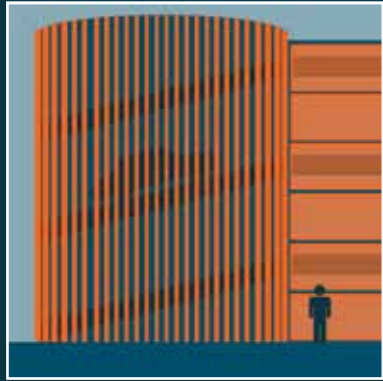
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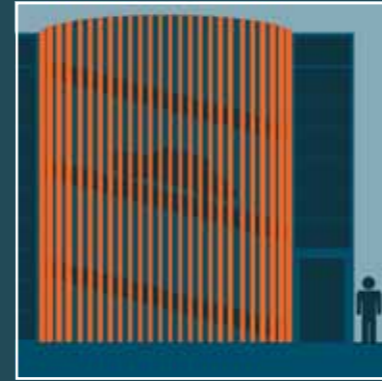


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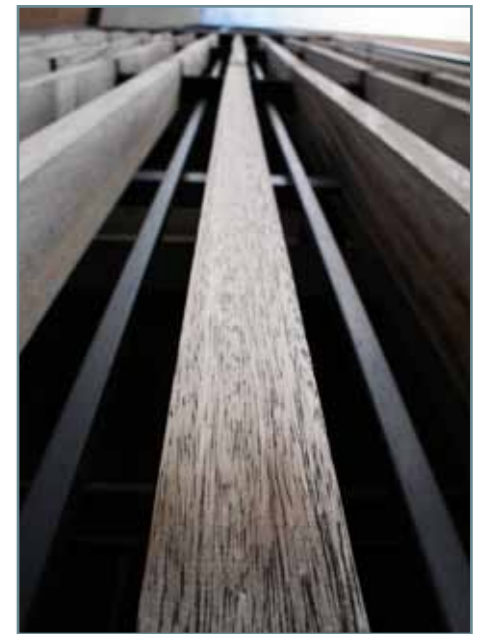
## Architectural Screening

Zefyr's "Architectural Screenings" are tailor-designed; bespoke flexible systems that suit design principles. These cost-effective systems are low maintenance and designed to be highly durable boasting a specialist coating to coordinate with any architectural spectrum - along side this the use of innovative fixing techniques allows the system to be installed on to any structure. The use of a wide variety of materials including timber, aluminium, steel, stainless steel, copper and many more allow for all design scenarios to be catered for. This integration of recyclable, sustainably sourced materials into industrial design is helping to reduce the increasing human impact upon the environment. Zefyr's bespoke systems can be tailored such that they can be used for more than just hiding structures or plant and machinery but can be used to clad buildings, such as multi-storey car parks, to help provide ventilation and aesthetically enhance the appearance of the structure.



## Vertical Fin Screening

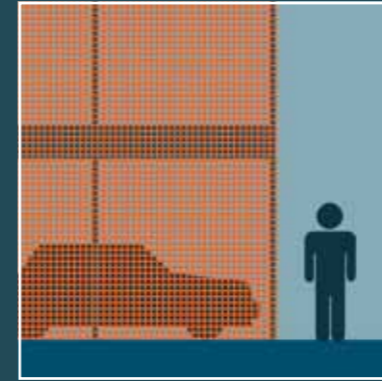
Zefyr's "Vertical Fin Screening" systems have been designed for the concealment of a structure whilst providing natural ventilation and solar shading. For most projects fins are wall-mounted, allowing the desired architectural profile to be achieved. Combining this with the wide range of shapes and sizes available from Zefyr, architectural fins help to reduce the effect of solar glare whilst dramatically increasing the aesthetic appeal of the building façades. The option to use a large array of materials whilst having control over fin length, and the option to integrate car park barrier systems, provides the customer with endless possibilities to complete any façade.





## Horizontal Louvred Screening

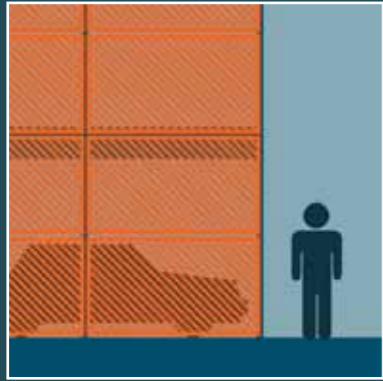
Zefyr's "Horizontal Louvred Screening" can be wall mounted for free standing depending on its required purpose. The louvred screening can be an affordable screening option for any building whilst giving an impressive visual impact. They are often used for hiding items which are undesired to show or often for a purely aesthetics purpose.



## Open Cell Grid Screening

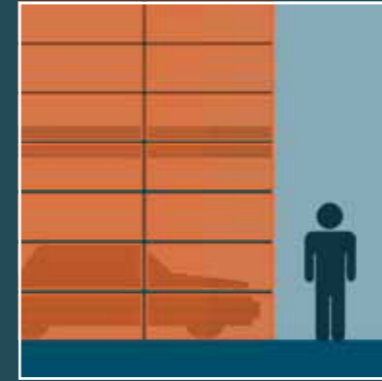
The majority of "Open Cell Grid Screening" systems provided by Zefyr are roof-mounted helping to obscure the undesired area from all angles whilst still providing ventilation to machinery and roof-mounted items such as heating and ventilation plants. The flexibility in size and shape allows for all customer needs to be catered for. The lightweight aluminium structure can be finished in almost any colour and discreet fixings and flashings help to complete the overall effect.





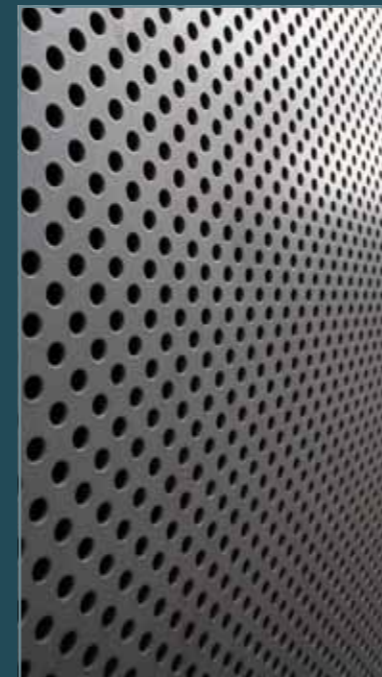
## Expanded Mesh Screening

Zefyr's "Expanded Meshes" are normally expanded aluminium or stainless steel that can have apertures from 2mm to 400mm. They can either be continuous or modular systems in sections up to 4m x 2.5m. The flexible, lightweight expanded metal grid provides a strong, durable and virtually maintenance-free solution to any structure exterior. These systems are not necessarily solely for screening as they are also used as a feature surface normally enhanced by specialist light which can create a fascinating visual impact.



## Perforated Panel Screening

Zefyr's "Perforated Panel" systems offer a secure screening system with a highly aerodynamic performance due to their large free area. The perforations can be any shape, any size and any pattern with concealed fixings, optional frames and finish options including; mill finish or PPC to any RAL / bespoke colour and gloss level. Zefyr's "Perforated Panels" are perfect for any building's façade, using a modular system, which makes it easy to integrate into most structures.





## Living Roof Screening

Zefyr's "Living Roofs" are a great green option as they can improve a buildings performance in heat insulation, noise reduction and energy saving. These living roofs are surprisingly low maintenance but also very durable which makes them extremely long lasting. They can also be used as a rain filtration system for water which can then be used for grey / waste water.



## Living Wall Screening

Zefyr's "Living Walls" are another great green option as they can improve a buildings performance in heat insulation, noise reduction and energy saving. They also protect the building from the environment and are surprisingly low maintenance and very durable. The "Living Wall" can be planted with a variety of vegetation, which can dramatically improve the appearance of a building. Certain options will change the appearance with the changing seasons.





## Solar Shading

“Solar Shading”, also known as “Brise Soleil”, can be an important part for any building as they prevent direct sun glare reducing over-heating which makes a building more energy efficient - reducing the energy requirements of the building by up to 15%. “Solar shading” can also reduce solar glare by letting in natural light at the same time as reducing the contrast ratios. This increases visual comfort that can often lead to an increase in worker satisfaction and productivity. “Solar Shading” systems always provide an aesthetically pleasing addition to the building and are often used solely for their aesthetic properties as they offer the opportunity of differentiating one building façade from another. The Zefyr group offers a unique bespoke design service to suit special design requirements. Full in-house solar engineering, structural and aerodynamic services are employed to achieve the optimum aesthetic and economic solution. Our “Solar Shading” systems can be produced in a wide variety of materials including timber, aluminium, steel, stainless steel, copper and others allows for all design scenarios to be catered for. This integration of recyclable, sustainably sourced materials into industrial design is helping to reduce the environmental impact caused by the ever-increasing human world.



### Zefyr Solar Shading Blades

The Zefyr solar shading blades form a highly aesthetic solution to a full range of design problems. The blades are spaced to suit each application in order to deflect the peak solar energy.



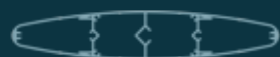
**Standard:** The Zefyr “Standard” blade is a louvre blade with sharp profile which provides a clean, crisp effect.



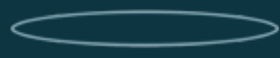
**Smoothflow:** The Zefyr “Smoothflow” blade is a Louvre blade with curved profiles offering a distinctive smooth appearance.



**Perforated:** The Zefyr “Perforated” blade can be administered to most blade shapes. The perforations can be designed in any size, form or pattern.



**Aero-X:** The Zefyr “Aero-X” blade is an aerofoil blade made by extruding aluminium or stainless steel.



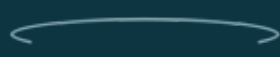
**Aero-P:** The Zefyr “Aero-P” blade is an aerofoil blade made by press forming aluminium or stainless steel.



**Aero-T:** The Zefyr “Aero-T” blade is an aerofoil blade made from timber with a wide variety of options available.



**Aero-X-SE:** The Zefyr “Aero-X-SE” is a semi-ellipse blade made by extruding aluminium or stainless steel.



**Aero-P-SE:** The Zefyr “Aero-P-SE” is a semi-ellipse blade made by press forming aluminium or stainless steel.



**Bespoke:** Zefyr’s “Bespoke” service is for jobs with requirements that differ from, or may be more specialised than, our standard solar shading systems.



## Horizontal Solar Shading

Zefyr’s “Horizontal Solar Shading” systems are normally fitted above windows with either horizontal or sloping supports. The blades can be supplied in continuous or modular formats to meet the architectural requirements. Our blades are lightweight and set to minimise dynamic loading such as wind and snow. Braces also can be fitted as an option to further reduce loading.





## Vertical Solar Shading

Zefyr's "Vertical Solar Shading" systems are normally fitted to vertical posts in front of windows. The blades can be made operable as an option but they are usually set at the optimum position to suit each building.



## Fin Solar Shading

Zefyr's "Fin Solar Shading" systems are normally fitted either above windows horizontally or vertically adjacent to the window. The fins are often a bespoke design to reach specific architectural requirement. Our blades are lightweight and set to minimise dynamic loading such as wind and snow.





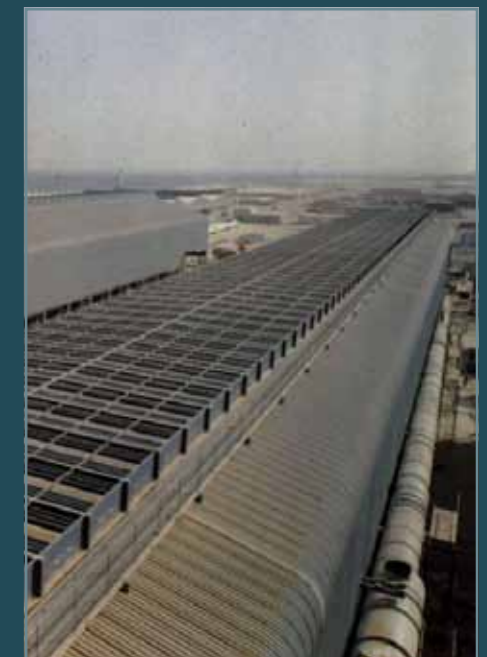
## Bespoke Solar Shading

Zefyr design “Bespoke Solar Shading” systems that can be developed to comply with many different design situations. We develop specific designs to suit unique applications and, through close work with businesses and architects, optimum solutions within specific budgets can be met. Zefyr’s “Bespoke Solar Shading” systems range from purely aesthetical to fully practical, functioning systems allowing for design requirements to be met. Our systems range from bus shelters to the control of internal light constraints for buildings such as galleries.



## Natural Ventilators

Zefyr’s “Natural Ventilator” systems are world leading high performance extract ventilators that allow for the easy escape of hot / stale / smokey air, normally from the roof of a building. The “Natural Ventilator” systems are often applied to buildings that experience extreme, indoor working conditions in order to create as comfortable an environment as possible (whilst complying to building codes and regulations). “Natural Ventilators” benefits the environment and are a cheaper alternative to air-conditioning plants. Operable options allow for the full control of air flow rates whilst ensuring full weather protection. These systems also provide safety by allowing for the clearance of smoke. All Zefyr “Natural Ventilator” products have been fully tested in airflow performance, weather performance, acoustic performance and structural performance. A wide variety of materials and finishes are available so that the ventilators can reach aesthetical requirements.





## Heat Mover Ventilator

The Zefyr's "Heat Mover Ventilator" is designed for removal of high heat problems for industrial buildings if structural limitations do not allow for heavier ventilators. This ventilator has a low profile and has been full scale tested for airflow characteristics as an exhaust ventilator. The units are fully weather proof and designed to have a long maintenance free life under the most arduous of conditions. The "Heat Mover" is an operable ventilator installed in multiple lengths in relation to the building structure and have been tried, tested and proven on many installations throughout the world.



## Heat Mover S Ventilator

The Zefyr's "Heat Mover S Ventilator" is a high performance extreme heat extraction ventilator designed specifically for power plants, aluminium smelters and industrial complexes where the most efficient natural ventilator modular natural ventilator is the logical choice. This ventilator is particularly suited for lighter weight applications where wind and dead loading factors are an important consideration in the overall building design and structural limitations do not allow the installation of larger types of ventilators. This system can be readily installed in multiple lengths that gives the customer the flexibility they require with out having to substitute any quality or performance. Designed with a high discharge coefficient, these ventilators are tried, tested and proven on many installations throughout the world. The "Heat Mover S" is fully weather proof and able to endure most elemental conditions the system faces.





## Heat Mover S CE Ventilator

The Zefyr "Heat Mover S CE" is the universal ventilator for industrial enterprises. It combines outstanding coefficient discharge of 0.65Cd with the requirement for smoke and heat exhaust. The "HM-S-CE" has been tested according to the EN 12101-2 for European Standard. The units are fully weather proof and designed to have a long maintenance free life under the most arduous of conditions. Tested in temperatures as low as -30 °C and as high as 600 °C. Tested in high wind and snow loads. The ventilators are simple to install pre-assembled, fully tested and available in multiple sized modules. Additional accessories such as acoustic treatment, operable dampers and pest control are available.



## Heat Mover Valun Ventilator

Zefyr's "Heat Mover Vulcan" is the most recent ventilator specifically designs for industrial application. The 'Vulcan' is approved according to European Standard EN 12101-2 and classifications of B600 and T (-30°). This ventilator has an exceptional coefficient discharge of 0.56Cd that will provide sufficient ventilation for all industrial needs. The operable dampers give a lot more control over the building conditions, and can either be electric or pneumatic actuated. The ventilators are easy to install pre-fabricated, fully tested and available in multiple sized modules. The units are fully weather proof and designed to have a long maintenance free life under the most arduous of conditions. Optional extras such as acoustic treatment and pest control are available.





## High Capacity Discharge Ventilator

Zefyr's "High Capacity Discharge Ventilator" specifically design for industrial buildings for maximum discharge of heat, smoke and fumes. Full scale tests haven been taken showing supreme aerodynamic efficiency and protection that can cope with the most arduous weather conditions. The "HCD" vent has had full scale laboratory tests which have been independently certified showing a minimum "Coefficient of Discharge" of 0.65. The ventilator has been designed for the minimum sized roof opening and is constructed from profile sheet metal fixed to galvanised steel frameworks that is formatted in continuous runs down the length of the building. With the option of fixed or operable dampers available using either electrically or pneumatically actuated control systems that can be remotely controlled. A wide range of materials and finishes are available to help maintain high quality aesthetics.



## Streamline Ridge Ventilator

The Zefyr "Streamline Ridge Ventilator" range is designed to provide natural ventilation in buildings where nominal ventilation rates are required through solar gain, light engineering processes or general warehousing. Their low profile means that they fit unobtrusively onto any building. Usually installed as individual ventilators or joined lengthways to form one continuous run as a continuous ventilator running along the building ridge line; designed to give uninterrupted, but evenly balanced air flow throughout the building. All units can be fitted with dampers to enable maximum control of the ventilator rates. The method of control can be manual cord, remote electric or pneumatic depending on the customer's requirements. Structurally and aerodynamically tested to produce the optimum coefficients of discharge to ensure maximum performance/minimum cost installations. The "SRV" has had aerodynamic performance testing independently verified by a leading test authority.





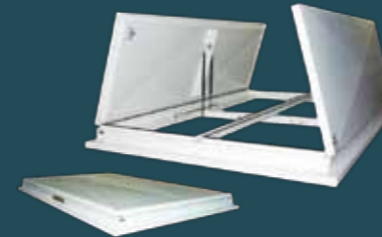
## Merlin Ventilator

The Zefyr's "Merlin Ventilator" is specifically designed for fire ventilation that can be either wall or roof mounted. The "Merlin" is an operable louvered ventilation system and its main purpose is to exhaust smoke. The ventilator can be supplied with manual, pneumatic or electrical operation. The control mechanism is concealed within the side joint of the unit to improve its aesthetic appearance. The body and blades of the ventilator can be manufactured with integrated aluminium foil-faced rigid foam to give a U value of 0.6W/m<sup>2</sup>C. The merlin ventilator has excellent day lighting characteristics are obtained using durable, tough and UV light resistant triple wall polycarbonate material. Polycarbonate also retains its physical properties of strength and impact resistance down to extremely low and high temperatures.



## Swift Ventilator

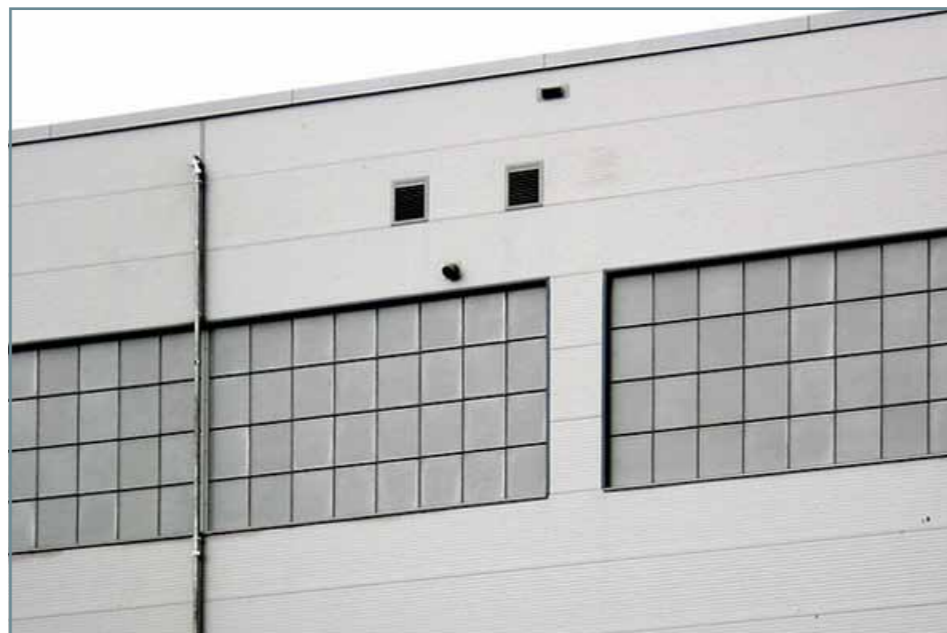
The Zefyr "Swift Ventilator" is specifically designed for fire ventilation that can be mounted to roof or wall. The vent is an operable flap ventilation system which primary use is to exhaust smoke. Ventilators can be supplied with manual, pneumatic or electrical operation. The control mechanism is concealed within the side frame of the unit to improve its aesthetic appearance. Optional accessories include bird guards, burglar / security guards, fusible link shields, closure flashings and windshields. The Swift roof unit is supplied as a two-part assembly; flat base to suit a pitch roof, or curb base to suit a flat roof with a builder's up stand.





## Pressure Release Panel Ventilator

The Zefyr's "Pressure Release Panel Ventilator" is a modern pressure release system that meets the current standard for external walls and is intended for buildings with high risks of explosion, for example; in gas-fired power plants with electrical switchgears, serving pressure release in case of an electric arc disturbance. The magnetic clamps fitted to the rotatable fittings keep the pressure panel folds shut during nominal working conditions, with the automatic opening of the folds by increased pressure.



## Industrial Weather Louvres

Zefyr's "Industrial Weather Louvres" are high performance wall louvre systems designed to allow fresh air to replace exhausted air in buildings ranging from apartment and office blocks to industrial factories. We offer an operable option that allows control over internal conditioning through the changing seasons, climates and weather conditions. They also provide smoke ventilation in the case of emergencies such as a fire. These louvre systems can be specifically designed to allow airflow into buildings and, at the same time, stop any harsh weather conditions and elements in places which suffer from severe seasonal changes or strenuous weather conditions most of the year. As an option they can be fitted with bird guards and insect mesh to stop wildlife from entering. These louvres can be designed to have acoustic added to the system helping reduce the sound levels across the units. Manufactured from either aluminium, galvanised steel or stainless steel, the units are designed to be durable system which can stand the test of time. The louvres can be installed as single units or banked either vertically or horizontally into cladding or brickwork.





## Thunderbird Louvre

The Zefyr “Thunderbird Louvre” is a high performance operated wall louvre system that gives control of airflow into the building. These systems consist of aerodynamic blades which profiles have excellent structural and aerodynamic characteristics to get such a high performance to make it a good choice for an industrial solution. The variable blades can either be horizontal or vertical to suit the particular application or architectural requirements. Being fabricated primarily from 2.5mm thick extruded aluminium, the Zefyr “Thunderbird Louvre” is attractive and durable system that can stand the test of time.



## Eliminator Louvre

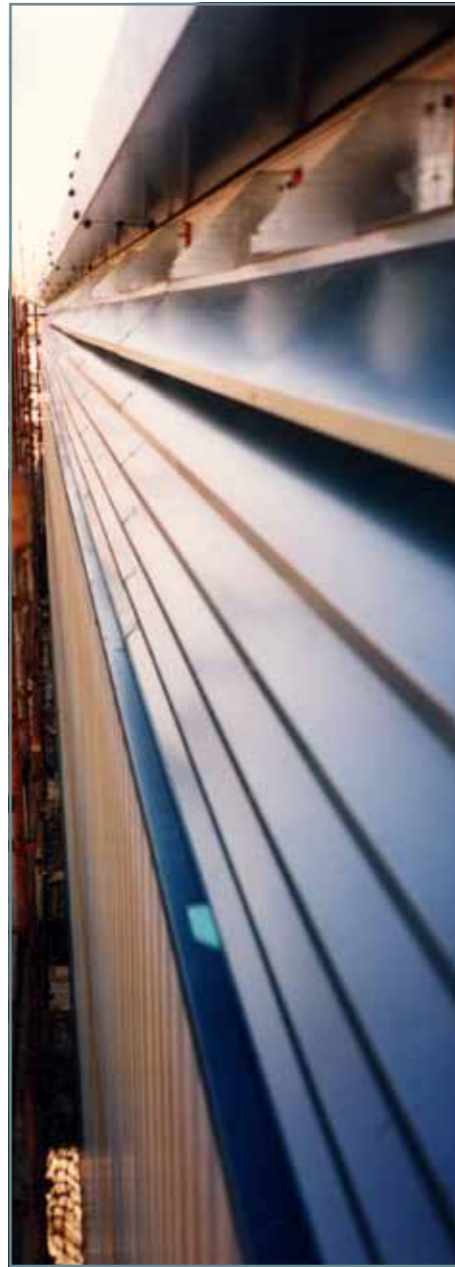
Zefyr’s “Eliminator Louvre” systems have been specifically designed to allow airflow into buildings and, at the same time, stop any harsh weather conditions in places which suffer from severe seasonal changes or strenuous weather conditions most of the year. Also to repel the entry of dust and sand where these elements are natural hazards. There is an acoustic that designed to suit each application to reduce the sound levels across the unit. Installed vertically or inclined in building facades these units provide a unique feature visually and perform a critical element in ventilation design. The system itself is fitted to the building with the louvres clipped to the front of it enabling either “Architectural Weather Louvre” or “Architectural Screening System” to be fitted to the front depending of the required visual effect without compromising its prime function.





## Vogue Pressed Louvre

The Zefyr's "Vogue Precision Formed Louvre" systems are design to provide the maximum capacity air inlet with minimum louvre face area on the building - free inlet areas can be up to 75%. The "Vogue Precision Formed Louvre" system has been designed as not to protrude from its framework, In the fully open position the louvre blades are contained completely within the louvre framework and when closed they have minimum air gaps preventing heat loss and draughts. These systems are manufactured primarily in Versacor, the louvres can be installed as single units or banked either vertically or horizontally into cladding or brickwork.



## Acoustic Louvre

The Zefyr "Acoustic Louvres" are specifically designed to reduce noise levels with a wide range of products to suit each application depending on the customer-required performance. Our acoustic louvres have been designed and textured to reduce the sound levels across the unit whilst allowing efficient airflow in to the building.





## Turret Louvre

The Zefyr “Turret Louvre” system consists of fixed / operable louvre panels fitted to one or more sides of a structure which is normally square or rectangular on plan but a but can be designed to each customers required standards. The structure is weathered with a roof, which can be insulated. Optional internal deflectors and dampers can be fitted to control air flow and form part of an engineered natural ventilation system.



## Radiant Heat Shield Louvre

The Zefyr “Radiant Heat Shield Louvre” is designed to change radiant heat to a convective heat so that it can be exhausted from them building through roof ventilators. The “Radiant Heat Shield Louvre” consists of rows of vertically stacked louvre blades attached to the roof trusses of a building. They are positioned above the heat source to absorb the radiant heat. The absorbed heat energy is transferred to the air surrounding the louvre blades – convective heat - exhausted via natural ventilation.





## Architectural Weather Louvres

Zefyr's "Architectural Weather Louvres" are groups of fixed blades to be aesthetically pleasing. The blades are jointed on site and can be mitred to follow the lines of the building with two format options, either a constant continuous effect or sectioned framed modular effect depending your desired visual impact. These louvres can be fitted in different ways to the building such as vertical, horizontal or a mixture of the both to achieve the desired visual effect. The use of a wide variety of materials including timber, aluminium, steel, stainless steel, copper and others allows for all design scenarios to be catered for. This integration of both recyclable and sustainably sourced materials into industrial design is helping to reduce the environmental impact caused by the ever-expanding human world. We also have a large range of options to chose from to reach the desired visual impact, from material finishes to our standard or unique colour range.



### Zefyr Louvre Blades

The Zefyr's Louvre blades form a highly aesthetic solution to a full range of design problems. The blades are spaced to suit each application in order to allow airflow into building and, at the same time, stop any weather conditions.



**Standard:** The Zefyr "Standard blade is a louvre blade with sharp profile which provide a clean, crisp effect.



**Smoothflow:** The Zefyr "Smoothflow" blade is a Louvre blade with curved profiles offer a distinctive smooth appearance.



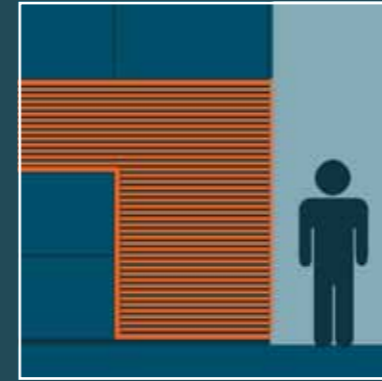
**Perforated:** The Zefyr "Perforated" blade can be administered to most blade shapes. The perforations can be designed in any size, form or pattern.



**Rollformed:** The Zefyr "Rollformed" louvre systems are modules made of one sheet of metal which are perforated and then pressed to produce this rollformed shape.



**Bespoke:** Zefyr's "Bespoke" service are for jobs with requirements that differ from, or may be more specialised than, our standard solar shading systems.



## Continuous Louvre

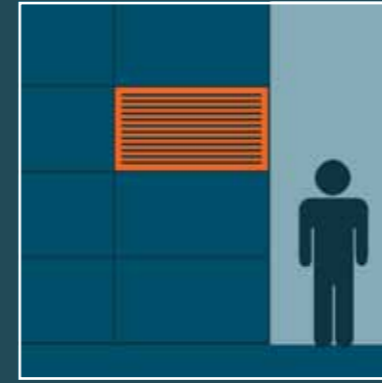
Zefyr's "Continuous Louvre" systems help form the appearance of a never-ending louvre. The blades are fitted to concealed supports, on clips and cleats, which are designed to allow for both thermal and structural movement. These measures are in place to make sure the louvre systems do not fail when the building is settling. Doors can be integrated into these systems allowing for access whilst still providing a flush continuous appearance.





## Modular Louvre

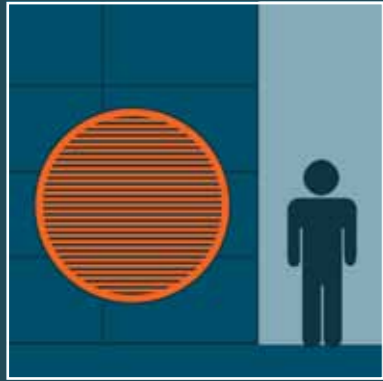
Zefyr's "Modular Louvre" systems are supplied in factory-assembled modules. They have been designed to aid speed of build or to suit irregular openings that are not suited to a continuous format.



## Interlocking Louvre

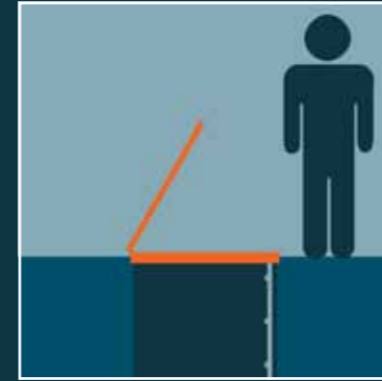
Zefyr's "Interlocking Louvre" systems are modular louvres, factory-fitted with interlocks at their edges to suit all modular cladding systems. These systems require no perimeter flashings or structural support. Generally, they are the same as the cladding modules, allowing them to be fitted easily by cladding contractors.





## Bespoke Louvre

Zefyr also offer the option of “Bespoke Louvre” systems with countless possibilities regarding the design and installation of unique louvres to solve almost any architectural problem. With an organic blend of aesthetics and practicality, Zefyr’s “Bespoke Louvres” are an integral component of any building design.



## Access Hatches

Zefyr’s range of “Access Hatches” facilitate the safe and convenient movement of equipment or persons to and from a building. All our “Access Hatches” come with a hinged, self-locking safety grid with extended handholds as standard, and conform to single man operating lifting, in compliance with the Manual Handling Operations Regulations 1992.





## Ground Access Hatch

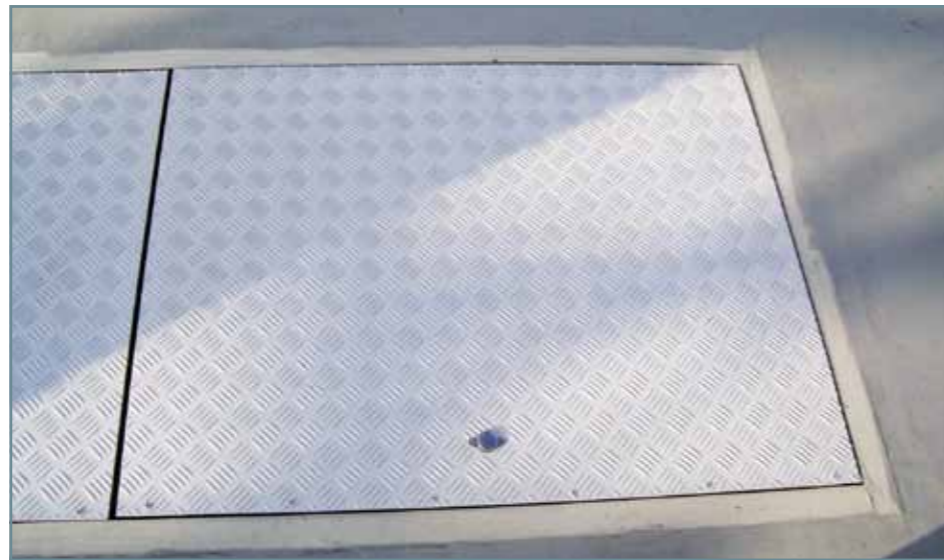
Zefyr's "Ground Hatches" are an assembly consisting of a frame and cover (or covers) providing access for personnel whilst offering protection - as when opened safety barriers are raised. The hatches can also offer protection to the area they cover by providing secure, locked access.

### 1. Flush

Zefyr's Flush units are designed to be walked across by pedestrians but can also be designed, under FACTA regulations, to accept much higher loads such as forklift trucks, cars, lorries, tractors, aeroplanes etc. without failing or causing damage to the vehicle in question.

### 2. Curb (sit on)

Zefyr's Curb (sit on) units are purely designed for pedestrian use yet have also been tested for unexpected, increased loads.



## Roof Access Hatch

Zefyr's "Roof Hatches" are designed for the purpose of allowing personnel access to roof areas on buildings without risk to workers or people in the surrounding area. This is ensured with the simultaneous raising of protection barriers with the opening of the hatch.

### 1. Curb (sit on)

Raised from the surface of the roof - pedestrian loading

### 2. Curb (drop in)

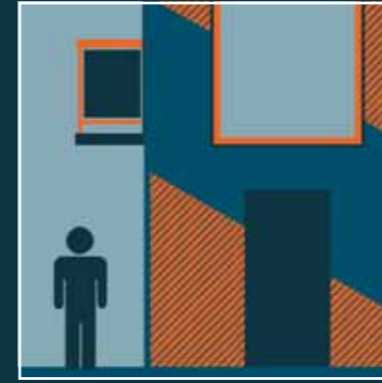
Dropped from the surface of the roof - pedestrian loading  
There is no limit to the size of the opening that the units can fit onto, however, the bigger units (limited by the weight an individual can lift and the sizes of sheet metal available) will need multiple lids and sometimes, with the access of heavy machinery, the cross members have to be removable.





## Bespoke Access Hatch

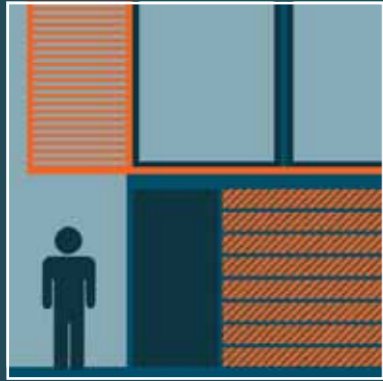
Zefyr "Access Hatches" are often required to cover unconventional spaces that present the necessity for exclusive designs in order to cater for unique situations. Zefyr's "Bespoke Access Hatches" overcome such architectural problems placing power into the hands of the customer.



## Architectural Metalwork

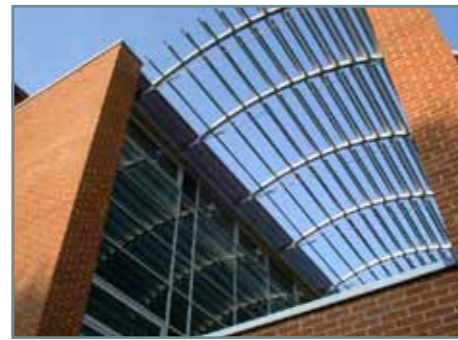
Zefyr provide a diverse range of bespoke "Architectural Metalwork" systems that can be specifically tailored to suit almost any building design. Each custom-made piece of metalwork embodies the architect's intrinsic vision so that they not only act as a necessary, functional component of the building but also become a distinctive and aesthetically ergonomic feature to project the structure's exclusivity and originality.





## Façades

Zefyr's bespoke "Façades" are popular amongst architects as they contemporarily complete the aesthetic vision of a building. The intention of "Façade" systems is to enhance the ambience and overall impression of a structure, helping to differentiate the building allowing it to propagate its' own personal image.



## Handrails

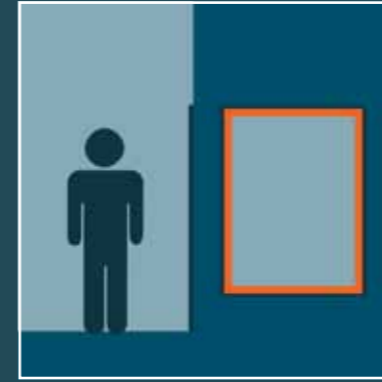
Zefyr have risen enthusiastically to the challenge of elaborate and complex bespoke "Handrails" that previously include the incorporation of constantly changing, continuous curves and illumination to enhance safety and visual perfection.





## BALCONIES

Zefyr's "Balconies" are intricately designed and individually produced to accommodate for completely unique building situations - bespoke designs have included incorporated glasswork with exclusive forms. Zefyr's attention to detail enables the construction of heterogeneous structures in a contemporary fashion despite the complexity of a building.



## Windows

Zefyr also provide "Window" design as a choice. Designs allow for a simple but elegant window, whilst incorporating a box design allowing for it to provide strength and support to comply with building regulations. Zefyr "Windows" add to the wholeness of a building by producing a unique, floating effect that completes the aesthetics.



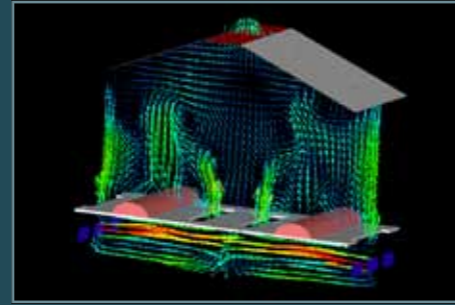
## 2D/3D Modelling

Zefyr Consultants Ltd. offer technical support for product and system design via two-dimensional and three-dimensional modelling. Our digital models are completed using state-of-the-art computer software by fully-trained professionals and are presented intricately or simplistically depending on client discretion.



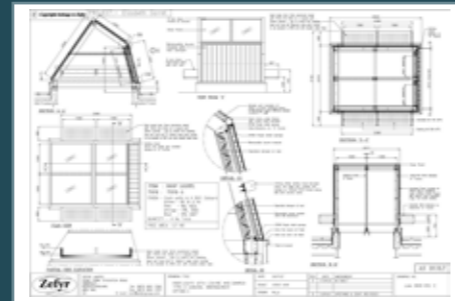
## Computational Fluid Dynamics

Zefyr Consultants Ltd. offer a comprehensive range of Computational Fluid Dynamics services such as Air Flow Modeling for industries including Power Stations, Metal Works, Glass Works, Geothermal Energy, Biofuel Production, Cement Production, Combined Heat and Power, Pharmaceutical and Chemical Manufacturers, Incinerators and Crematoriums.



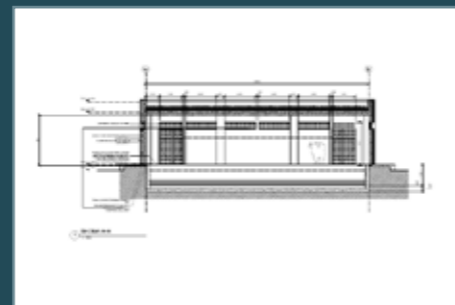
## Product Design

Zefyr Consultants Ltd. offer a bespoke product design service to innovatively solve your unique, architectural problems. Our imaginative building solutions have ranged from: contemporary perforated screening to curved balconies; specialised solar shading to decorative façades; continuous louvers to unconventional access hatches; and high heat ventilation to LED illuminated hand-rails.



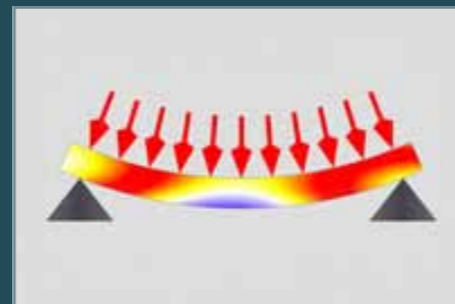
## System Design

Zefyr Consultants Ltd. provide full architectural designs for construction companies regarding projections for building systems such as large-scale ventilation. This technical support is administered by fully qualified engineers to ensure the very best efficiency and aesthetical quality of the proposed system.



## Structural Analysis

Zefyr Consultants Ltd. offer a comprehensive structural analysis of existing and proposed buildings including a detailed Finite Element Analysis of materials. This service can be crucial for evaluating the stability of complex architectural structures and the suitability of design and building components for specific building quandaries.



## Innovative Building Solutions

The Zefyr Group have more than 95 years experience in high quality ventilation engineering solutions. Our unique range of products and services are available worldwide through the ever-expanding international network of Zefyr's partners, licensed manufactures and distributors. If you wish to see any of our past projects we have Case Studies which can be downloaded from our website.

Our products have been passionately supplied and installed transnationally - the knowledge and experience gained in all conditions has been used to continually develop our range by utilising state of the art technology and systems.

Individual customer needs can be incorporated into the design of complete installations, tailoring the solution, and following it through to completion. This ensures customers receive a complete 'concept to completion' service, all the while meeting our sustainable design philosophy. All our work has been tested and meets all the specifications needed to provide the best cost and quality possible.

Our wide range of products can be found on our website and if you require more specific information regarding products we have Data Sheets that can also be downloaded. Please feel free to contact us with any questions if you wish to receive information about a bespoke project.



**Zefyr Group**  
*Design, Manufacture and Installation of  
Innovative Building Solutions for  
a Sustainable Environment*

Zefyr

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