

Introduction

The Skyvane system has been designed to shade horizontal, inclined and irregular shaped glazing. The system is extremely versatile and can be installed internally (in its 50, 75 and 80mm versions) or externally (75 and 80mm only). As a result, Skyvane not only gives extremely good light control, often in situations where no alternative can be used, but also solar control when installed externally. In such situations, up to 90% of solar heat gain can be excluded from the building, allowing substantial savings in air conditioning costs - both initial capital costs and on-going running costs.

The Skyvane system can be used in a wide range of applications, from domestic conservatories to large commercial buildings. It is particularly appropriate for Museums and Art Galleries where a high degree of light control is required. The 75mm version has interlocking louvres to allow a high level of dim-out to be achieved, enabling external light levels to be reduced to less than 100 lux inside the building.

Features & Benefits

Energy savings - solar heat gain can be a significant problem, in particular with glazed atria and south-facing façades. Installation of a Skyvane system can significantly reduce the level of solar gain entering the building, resulting in reduced air-conditioning loads and providing large savings in both capital costs and on-going running costs.

Fitted internally, reductions of up to 45% of solar heat gain can be achieved, increasing to up to 90% when the system is installed externally.

Flexibility - Skyvane can provide an effective sun shading solution, whatever the design of the glazing. The system can be designed to shade almost any shape of glazing, including triangular, trapezoidal and circular windows, as well as barrel vaults and inclined glazing.

Low maintenance - the robust construction of the system, combined with self-lubricating nylon components ensures an almost maintenance free life.

Wide choice of options - the Skyvane system is available in three options incorporating 50, 75 and 80mm slat widths. Aluminium components are available in mill-finish, anodised or polyester powder coated finishes. The 50 and 80mm slats are available in solid or perforated options with a wide choice of colours from our standard range. The extruded aluminium louvres used in the 75mm system can be anodised or polyester powder coated to any standard RAL colour.

System Construction

The Skyvane system comprises of these main components:

- Rackarms • Drive shaft and operating mechanism
 - Controls • Slats
- Skyvane rackarms are manufactured from extruded aluminium profiles and incorporate injection moulded components to both hold and operate the slats. The rackarms are generally fixed back to the glazing bars and the distance between rackarms depends upon the slat used, whether the installation is internal or external and the structure of the glazing system. Two different rackarm profiles are available - the standard profile which is used in most situations and a heavy duty section which allows a greater distance between fixing centres.
- The drive shaft connects the rackarms and enables them to be operated to tilt the slats through approximately 100° from fully open to fully closed.
- A variety of control options are available, including manual operation with gear box and detachable handle, motorised with operation via switch, infra-red or remote control and fully automated with solar control. In addition, the blinds can be connected into the building management system.
- Slats are attached to the rackarms by means of injection moulded clips which in turn form part of the rackarm assembly.

The Range

Levolux Skyvane 650 Internal - the popular 50mm slat allows co-ordination with all types of interior décor and is available in a wide variety of colours.

Levolux Skyvane 650 is also available with 50mm timber slats.

Levolux Skyvane 675 Internal - incorporating interlocking extruded aluminium louvres, the system is specifically designed to provide a high level of dim-out in addition to light control. It is particularly suitable for Museums, Art Galleries and Conference facilities.

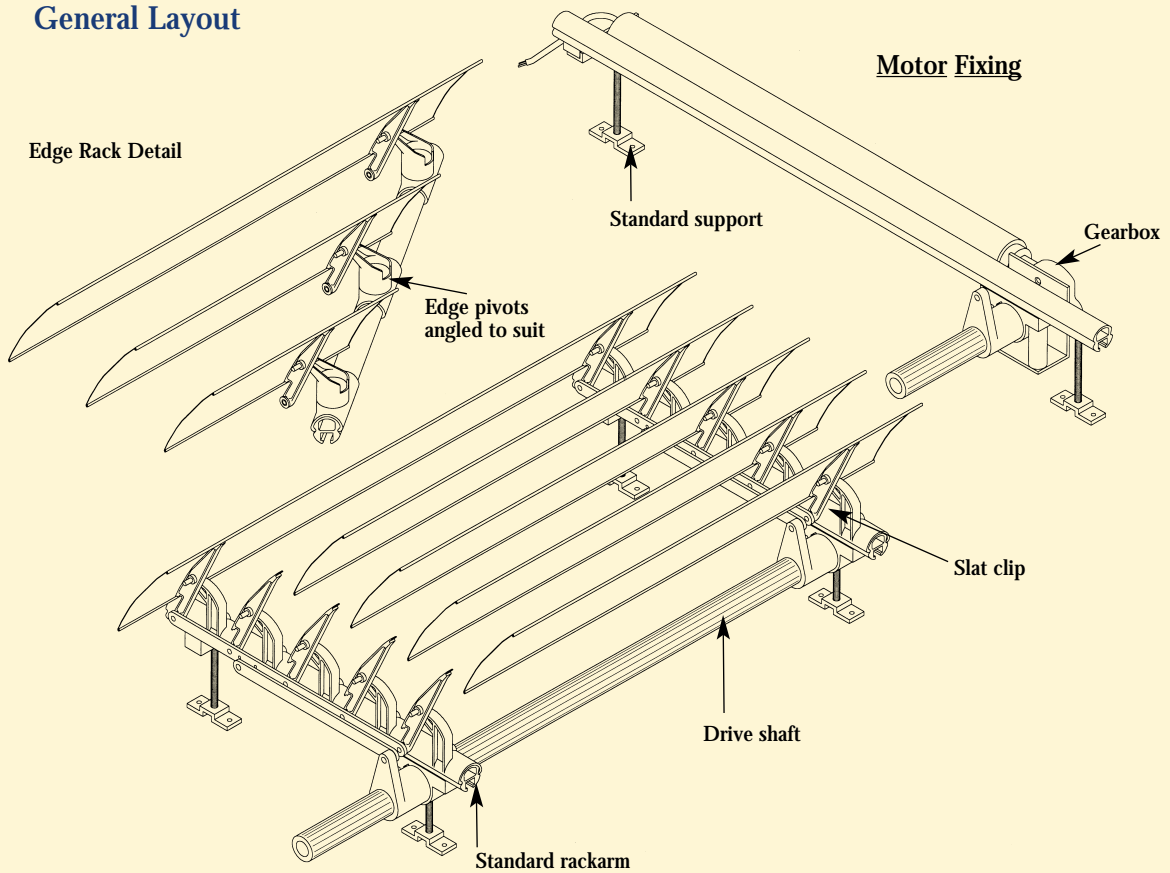
Levolux Skyvane 675x External - similar to the internal system, but with the added benefit of increased control of solar gain.

Levolux Skyvane 680 Internal - the rolled edge on the 80mm slat gives it excellent rigidity allowing an increased span between rackarms as compared with the 650 version.

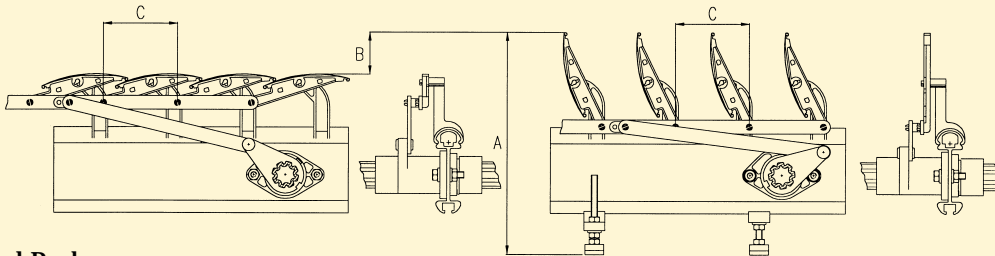
Levolux Skyvane 680x External - the ideal solution where solar protection from both heat and glare is required.



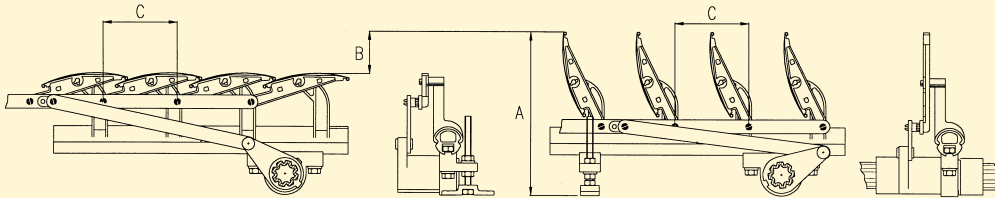
General Layout



Heavy Duty Rackarm



Standard Rackarm

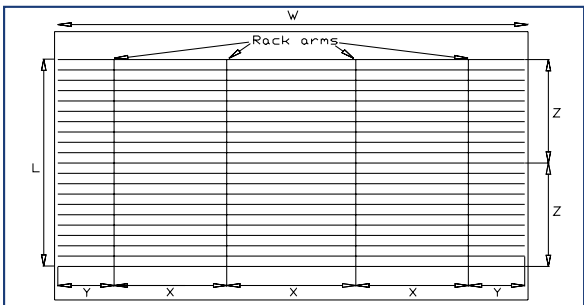


DESIGN PARAMETERS

Model - (dimensions in mm)		A	B	C
Type 650	Standard	120	21	45
	Heavy Duty	136	21	45
Type 675/675X	Standard	151	32	70
	Heavy Duty	167	32	70
Type 680/680X	Standard	155	40	70
	Heavy Duty	171	40	70



Design Parameters						
Dim.	Description (dimensions in mm)	650	675	675X	680	680X
W	Max length of slat	6000	5000	5000	5000	5000
L	Max length of rackarm	6000	4000	4000	6000	6000
X	Max distance between rackarms	900	1500	1000	1500	1000
Y	Max slat overhang	400	200	150	300	200
Z	Max support spacing (standard)	2250	1500	1200	2250	1500
Z	Max support spacing (heavy duty)	4000	3000	2500	4000	2750
WxL	Max area - gearbox operation (m ²)	30	16	16	30	30
WxL	Max area - motorised operation (m ²)	48	32	32	48	48



Testing

The Skyvane 680x System has been tested in the wind tunnel at the Building Research Establishment. Versions of the blind have been tested in wind speeds of up to 50 m/s (180kmh or 112.5 mph), giving evidence of the rigidity of the system, providing that the installation is designed and installed correctly.

To ensure that the system will meet the specific requirements of a project, Levolux is able to provide a design service.

Specification

Item: External/ Internal* Sunscreening
 Fully adjustable non-retractable louvre system to be Levolux Skyvane 650/ 675/ 675X/ 680/ 680X* Internal/ External* system. To be assembled complete with extruded aluminium rackarms, UV and heat resistant nylon pivot arm and slat clips, stainless steel fastenings and fixings, and 675/675X* side baffles*.

50/80 mm solid/ perforated slats selected from our Levolux colour range, colour+

*75mm extruded aluminium louvres to be anodised or polyester powder coated to any colour from the RAL range.

System to have manual/ electric* operation with switch/ remote infra-red/ fully automatic solar* control.

To suit glazed areas.....mm wide
high+ or in accordance with glazed areas as detailed on drawing nos.....+

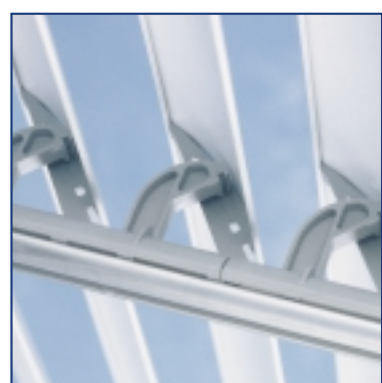
Supplied and installed by an approved Levolux distributor.

+ Insert as applicable *Delete as applicable.

3 Year Warranty

All Levolux systems are made of high grade material to exacting specifications. This enables us to offer a guarantee providing free of charge replacement parts should any system prove defective within 3 years of installation. This guarantee is conditional on manufacturer's recommended fitting and operating instructions having been followed and annual maintenance being carried out by a Levolux appointed contractor.

In line with the policy of continuous product development Levolux reserves the right to alter specifications without prior notice.



For further information on Levolux suncreening systems and effective ways to control light, heat and glare please contact:

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