

**Vental** AUSTRALIA

R80

**REFLEXA R80 EXTERNAL LOUVRE BLINDS**

External Aluminium Louvre Blinds for Sunshading over Glazed Surfaces



# Benefits

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## Sun Protection & Insulation

The priority is to stop excess solar heat gain by blocking the sun outside the building before it strikes the glass.

Vental R80 external blinds reduce the transmission of solar radiation into the building and provide diffused and more uniform daylight through tilt adjustment of the louvres. Vental R80 external blinds can shield against direct sun rays at any time leading to a reduction in internal temperatures of up to 10°C.

Even with expensive special glazing, when direct sun hits windows heat penetrates, and air conditioning systems become over-loaded; an energy and money wasting exercise.

Vental R80 external louvre blinds can cut capital expense for air conditioning by up to 30% plus a proportionate saving in operating expenses there after.



## Day Lighting & Glare Control

Vental R80 external louvre blinds make maximum use of natural daylight to illuminate the inside of a building without glare. Clear untinted glazing can be used allowing full natural sunlight in.

## Sun Shading

Research has proved that exterior adjustable blinds are seasonally more effective for sun shading, glare protection and daylight control.

Vental R80 external blinds not only show low shading coefficients (ie. they transmit less heat than other systems) but they also reduce the need for artificial lighting since they can be used in combination with clear glass.

Reflective glazing, because of its poorer shading coefficient, requires higher cooling loads than exterior blinds. As this type of glazing reduces infra-red radiation and visible daylight, artificial lighting becomes necessary in dull weather.

Light coloured R80 external blinds yield better shading coefficients than dark colours. Light coloured blinds admit less heat to the space between blinds and glass. The inner glass surface temperature is therefore lower, which results in less heat being transmitted into the room.

Overall there is noticeable improvement in room comfort using Vental R80 external louvre blinds with ample light and temperature control to please those on the inside.

# Technical Description

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## Specification:

Slats are 80 x 0.98mm stove enamelled roll formed aluminium. Rack arms are natural anodised extruded aluminium with grey UV stabilised nylon slat clips. All other blind components are stainless steel, aluminium or UV stabilised nylon. Operation is by electric motors. The slats can be tilted from fully closed through to fully open (perpendicular to the rack arm) or to any point in between.

A number of standard slat colours are available (see colour card).

Special colours are available at extra cost and extended delivery times (for large jobs in excess of 200 blinds).

## Electric Blind Motor

Blind motors are totally contained within the motor box. They are bi-directional short run motors with built-in thermo fuse and permanent lubrication.

Each motor is single phase 230VAC and draws approx. 0.7A at full load.

Motors are of high quality German manufacture and have an average life span of 7 years.

Wiring must be in 4-core FLEX to provide adequate weather proofing to the motor plug glands.

# Design Considerations

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Pre-planning for Vental R80 external louvre blinds from the earliest stages of building conception is advantageous, because this is how best blind utilisation and greatest savings are obtained

Whenever possible, design for the largest practical square meterage per blind. This is 20m<sup>2</sup>. If it fits your design, the most economical way to cover this area is with blinds that are higher than they are wide. This is because rack arms are more expensive than individual blind slats.

## Important Design Concerns

Vental R80 external blinds must be inside the maximum and minimum dimensions listed (see table) to operate reliably and be covered by warranty. Of main importance is the maximum spacing of the rack arms. This **MUST NOT** exceed 1000mm (for externally fitted blinds).

Blinds fitted to triangular, curved or similarly shaped window configurations will require intermediate rack arms to support the blind slats as they must not project more than 300mm past the last rack arm clip without additional support.

Rack arms are typically fitted to the window mullions. These mullions need to have a flat surface of at least 35mm wide for the fixing of the rack arm standoffs. Where no sufficient fixing points exist a rack arm stiffening member can be provided (at additional cost) to allow top and bottom fixing of the rack arm only (up to a maximum height of 3000mm).

Where R80 blinds exceed the maximum allowable width it is necessary to place two or more blind units side by side. Where the R80 blind units meet two (2) rack arms are required to support the slat ends (one (1) for each blind). These rack arms must be spaced a minimum of 100mm apart and a maximum of 600mm apart. A gap of 15mm must be left between slats at the join to allow for expansion and movement.

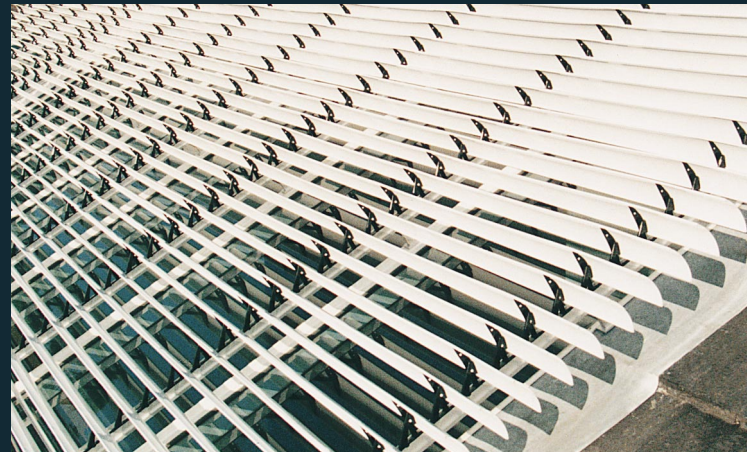
Please see loose leaf sheets marked 'R80' for scale technical drawings of components and specifications.

## Cleaning

Blinds may be cleaned with mild soapy water and a sponge. Gently rinse blinds with a light hose.  
**DO NOT USE HIGH PRESSURE CLEANING EQUIPMENT.**

## Technical Note

Technical details of blinds contained in this brochure may change without notice so it is important that you check with Vental Australia Pty. Ltd. before finalising design details of glazing bars, framing systems, etc. We want your energy efficient building to work at maximum capacity.



## Motorised Operation

Electric motor operation is mandatory on R80 blinds as there is no way to adequately waterproof a manual crank penetration.

Significant savings may be achieved by designing skylights or glazed roofs close together, with narrow mullions and posts, and with no other structural protrusions in between. This way, blinds may be coupled together - 1 motorised blinds may be able to drive up to 2 slave blinds (depending on total area).

Main leads, connecting leads, switches, plugs and connection work to be carried out in accordance with our instructions.

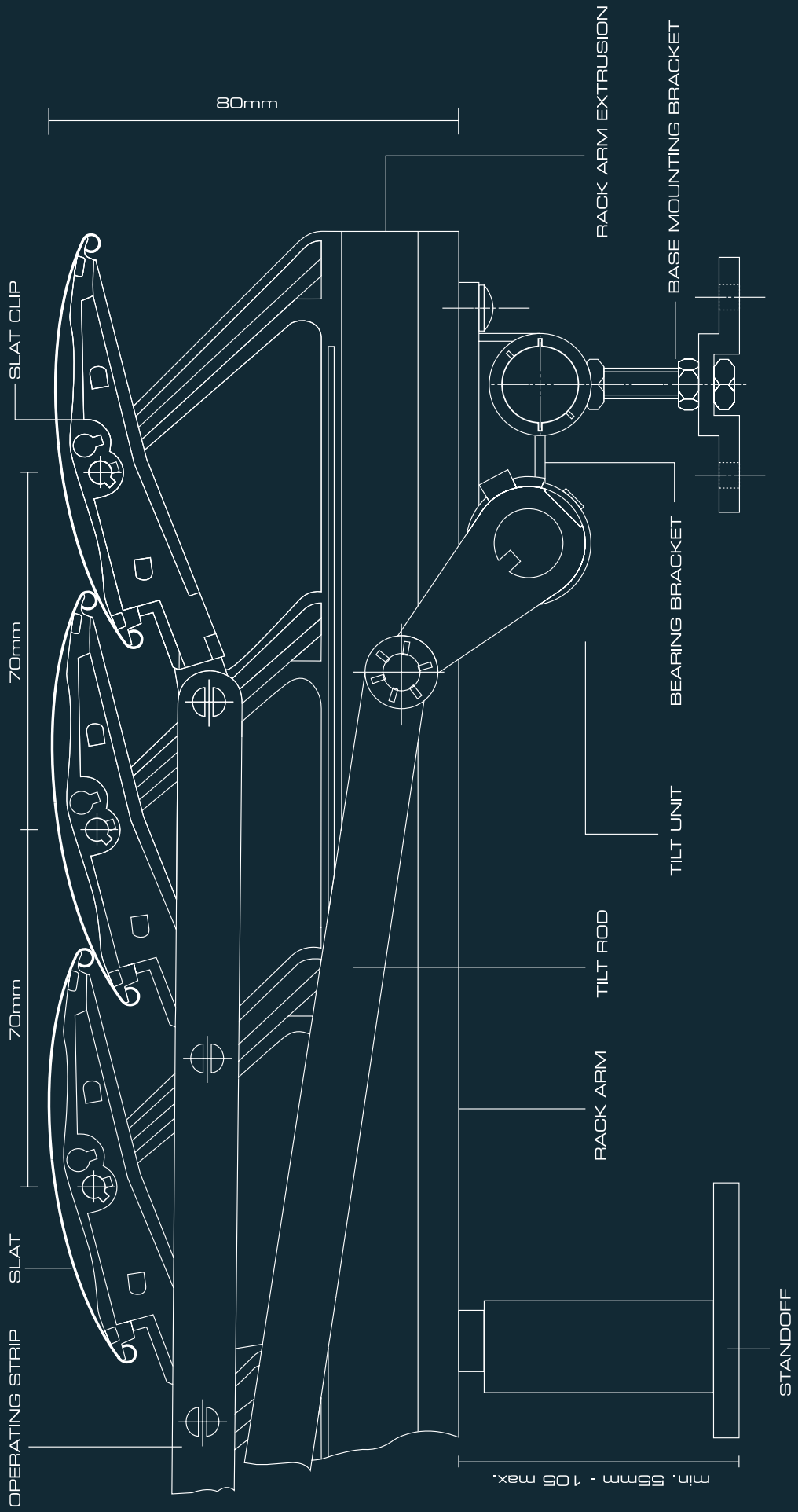
## Weather Resistance

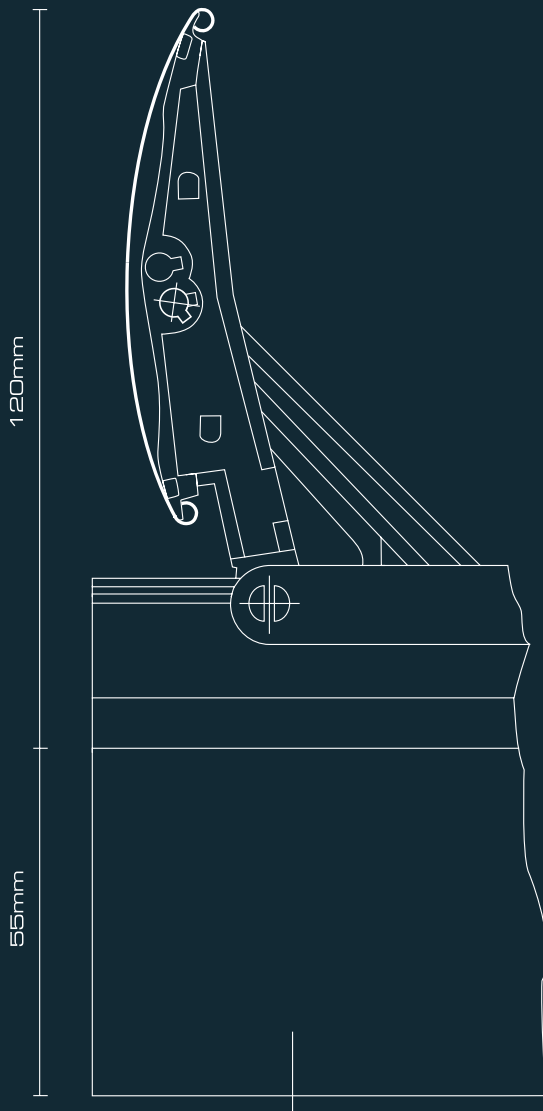
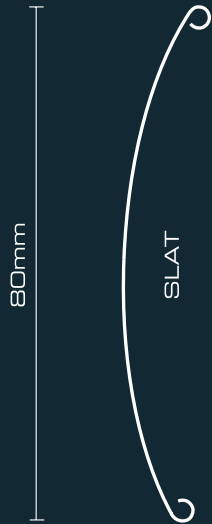
Vental R80 external blinds are made of special weather resistant materials since they are exposed day after day to sun, wind and other environmental influences.

## Note

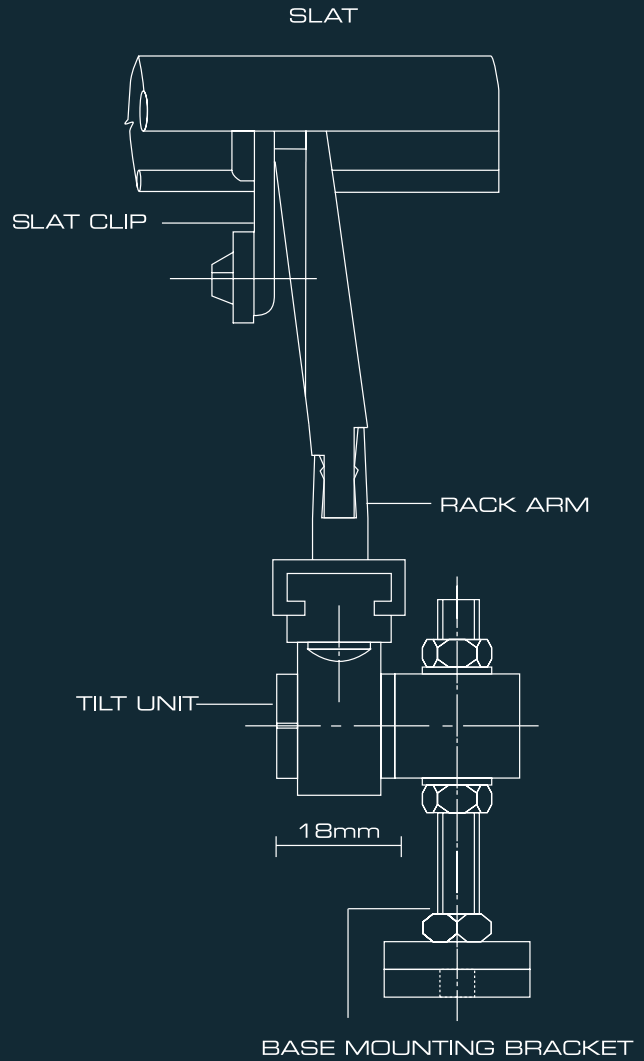
*Vental R80 external blinds do not offer any protection from fire or break-in and are not designed to provide protection from wind and rain.*

*Blinds should always be fitted over glazed backing.*





Optional stiffening member where no intermediate supports are available



### Blind Sizes and Areas

#### SPACING BETWEEN RACK ARMS

External Fitting - 1000mm

Internal Fitting - 1200mm

#### AREA

Max - 20m<sup>2</sup>

#### WIDTH

Max - 5000mm

Min - 1000mm

#### HEIGHT

Max - 4500mm

Min - 470mm

**NOT TO SCALE**



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