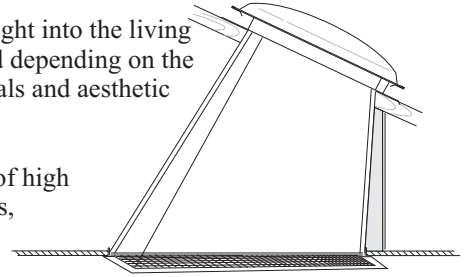


SOLID SHAFT

The primary function of light shafts is to channel the light made available by the skylight into the living areas throughout the void of the ceiling space. The materials used for shafts are varied depending on the details of the installation, geographic location, climate, availability and cost of materials and aesthetic considerations.

To optimise the amount of light entering the living space the duct material should be of high reflectivity. All the shaft materials in common use have advantages and disadvantages, the table below will provide information for your understanding and selection.



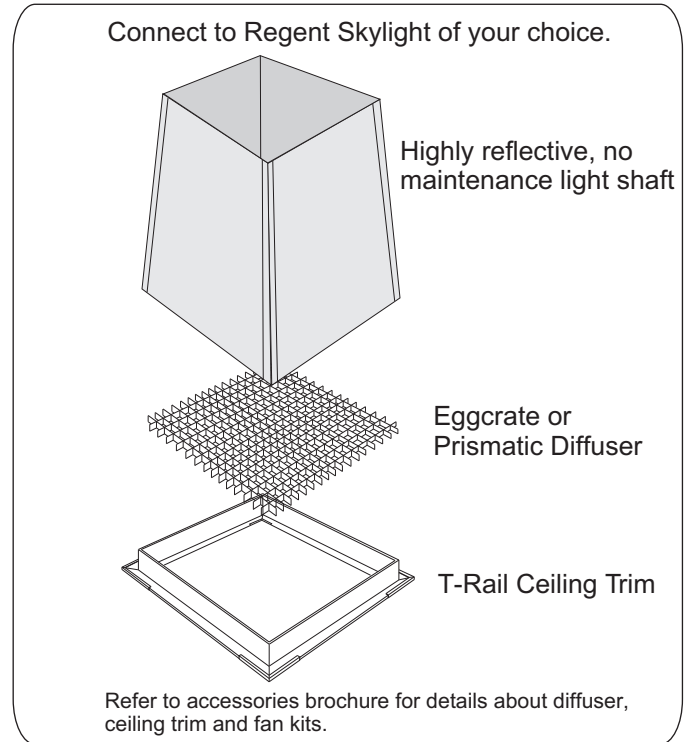
INSTALLATION

The light well can be of rectangular section or to optimise the light distribution flare out towards the ceiling level. The rafter location dictates generally the positioning of the Skylight and this provides the starting point. The correct choice of location and sizing of skylight to suit existing building elements will result in saving of work and cost.

The positioning of the opening in the ceiling should consider symmetry, desired location, with consideration for lights and ceiling fans. Mark location and check for plumbing, electrical wires and air conditioning ducts.

The light well may be constructed of Gel Coated Plywood, Pre-finished lining Boards, Particle Board or Plaster Board, Metal Sheeting is not recommended as condensation may form with a change in temperature. If using Gel Coated Plywood or Pre-finished Lining Boards framing may be required depending on light well size. Fix pre-finished sheet with liquid nails in preference to nails or screws. Where nails or screws are necessary, use galvanised, paint to match lining board.

To support diffuser at ceiling level the opening should be cut in ceiling 15mm smaller than internal size of light well and trimmed with casing bead forming a ready made seating for diffuser panel. Alternatively painted timber trim batten or T-Rail may be fitted.



CAUTION: Structurally adequate trimmers or other supporting members must be provided when cutting rafters or ceiling joists.

TABLE: Properties of Skylight light shaft materials

MATERIAL	ADVANTAGES	DISADVANTAGES
Painted Plasterboard	Readily available, no condensation problem. Can be fire rated.	Difficult to finish off in confined space of shaft. Indifferent reflectivity, expensive
Painted building board	Readily available, inexpensive, no condensation problem.	Indifferent reflectivity
Painted particleboard	Readily available, inexpensive, no condensation problem.	Indifferent reflectivity Not suitable in damp areas
Pre-finished melamine face water resistant ply	Readily available, inexpensive, no condensation problem. Good reflectivity	Clear access must be available for shaft.
Flexible light shaft	Readily available, inexpensive, no condensation problem. Best reflectivity. Can save structural work by bypassing obstructions.	Must be used with a diffuser for aesthetic considerations.
Pre-coated steel	Readily available, inexpensive. Good reflectivity	Can produce condensation problem in coastal and humid areas and in rooms heated with fuel fire. Aggravates heat problem by re-radiating into room
Natural timber	Readily available, no condensation problem. Attractive	Poor reflectivity Splayed shaft is expensive

REGENT SKYLIGHT SYSTEMS

PTY. LTD.

" The Ultimate in Skylights and Ventilation Products! "

www.regentskylights.com.au

September 2009