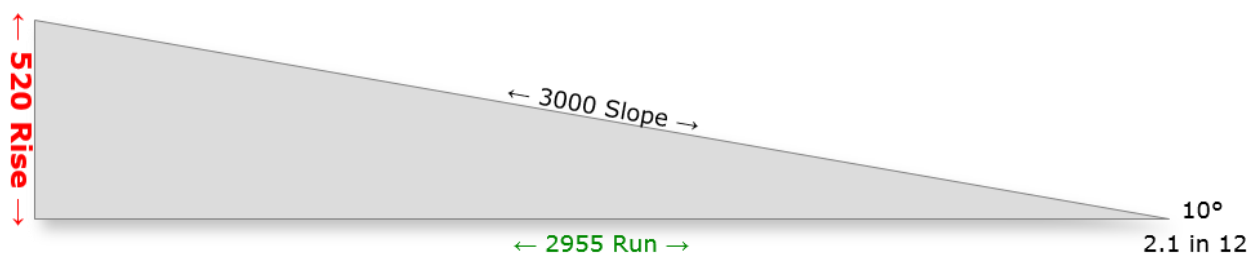


ALUMINIUM SELF-SUPPORT KITS - THE PARTS

Sheeting - 16mm Triplewall & 25mm Multi-wall Polycarbonate available in clear, bronze tint or opal. 25mm thickness offers about 43% more insulation than 16mm and being more rigid can span a greater width with less glazing bars. Both bronze tint and opal reduce the light transmission by more than 50% in 16mm and substantially more in 25mm so it is not necessarily a good idea to fit these if the building covers a small house window where the internal room has no other light source.

Bronze tint can look aesthetically pleasing from the outside but the tint is not so obvious when looking from the inside. **It will not stop the glare from the sun.** Opal white (my favourite) reduces light transmission, cuts out most of the glare and when the sun goes down provides a nice ceiling effect when lit from below. If you are coming off the side of a bungalow underneath the fascia, please make sure that you have a reasonable fall otherwise you may find that the water does not drain away fast enough and somehow finds its way through the glazing bar profile. **Minimum pitch for self-support bars 10 degrees** (fall of 500mm/20" over 3m/10' length).



	<u>Light Transmission</u>		
	Clear	Bronze	Opal
16mm	76%	35%	48%
25mm	60%	25%	15%
6mm glass double glazed unit commonly 78%			

Self-support glazing bars - Two part intermediate glazing bars (aluminium base + cap) complete with all fittings except fixings from the retaining brackets to your front framework and wall plate. This is a really good strong glazing bar which has been available since the early 1980's and so has a proven track record. The box shape construction allows for an aesthetically pleasing low profile with no unsightly glazing bar caps towering above the sheet line. This also makes the roof easier to flash down on to. You will see that I have priced the aluminium wall plate as an optional extra. In common with other manufacturers, it is so expensive that most people fit a timber wall plate instead. Manufacturers fitting instructions supplied with the bar.



For spacing of glazing bars;
Bar centre to edge of sheet = 12mm
Therefore sheet width + 24mm
= bar centre to centre.
Not for end bar.



End finishing bar – The two end bars have a long downward return leg on one side making a watertight joint between the bar and side cladding. No image available at present.

Breathable closure tape – The open flutes at both ends of the sheets must be closed with breathable closure tape. This prevents the ingress of dirt & insects and reduces algae whilst allowing any condensation to drain out or to evaporate. Condensation sometimes occurs inside the sheets mainly caused by a difference in temperature between outside and in.

Sheet closure – Also at both ends, the sheet needs to be capped with a rigid sheet closure to prevent deterioration of the closure tape and to stop rainwater from entering the flutes. At one time this was only fitted to the gutter edge but I note that some manufacturers are now recommending both ends. For the small difference in cost it is better to play safe. Use a small amount of silicone sealant inside the leading upper edge to keep it in place.



Eavesfiller – This is a rather chunky foam block to fill the gap between the underside of the sheet and the top of the front timber.

Spacers – When fitting the sheets, a 5mm gap should be left between the sides of the sheet and the sides of the aluminium glazing bars to allow for thermal movement. To make this easier I supply some temporary plastic spacers for insertion into the gap.

Butyl flashing – Not included in the kit price as some existing buildings may already have lead flashing etc which can be re-used. I offer this as an optional extra. This is an excellent self-adhesive flashing tape especially designed to work with polycarbonate and easily applied to the low profile glazing bar caps. **DO NOT USE** bitumastic tapes as these will degrade the sheeting. Butyl tape sticks really well to a clean dust-free surface even in cold weather. Always prime the wall first to seal it.

Fixing buttons – Don't use them!! These toadstool looking buttons have a centre stem that goes down through the sheet to the timber to prevent the screw being over-tightened and thus not allowing the sheet to expand and contract. The button is theoretically sealed by a foam washer but after fitting this loses its bounce. Even applying silicone to the washer doesn't help because the seal breaks during thermal movement. Glazing bars work because although they are slack enough to allow for thermal movement they incorporate a drainage channel to cope with any leakage. If you fit a polycarbonate roof with the correct width of sheet you should not need any further fixings. Go for a leak free roof!

SHEET CUTTING TIPS

Sheeting – Max. widths 16mm – 980mm, 25mm – 1200mm

You may wish to line the glazing bars up with your window frames/doors. Always read the protective covering as one side (usually the printed) is more UV treated and should face the sun. The protective covering creates a lot of static within the sheets, which are supplied with the ends taped over to stop any dust being attracted into the flutes. Leave this in place for as long as possible and remove it away from any dust source. The flutes will eventually be covered with the breathable tape. If you need to cut the sheet to length **DO NOT** use a saw as this will again create swarf which is then liable to be sucked inside. Cutting to length is best with a new Stanley knife blade (and straight edge) although it helps to make a guide for the knife with a sharp point (I use a laminate blade). 16mm will possibly need cutting from both sides. 25mm is best requested to be cut to length at the factory although cutting on site is recommended due to any unforeseen changes that might occur. This job is not brilliantly easy but in most cases you will be able to hide the cut edge under the flashing against the house wall. The factories clear the flutes with an airline. Although this is not always 100% it is acceptable. Sheets can be cut lengthways with an ordinary saw. Do not store sheets in direct sunlight even if covered up.



**Clear,
Opal white
Bronze tint
16mm
Triplewall**



**Bronze 25mm
Multiwall**