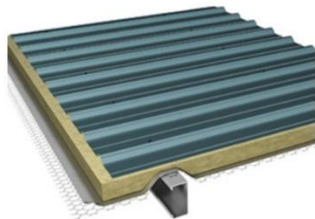




LLIC Re Roofing Solutions

SINGLE SKIN ROOF SYSTEM

In single skin roof system, insulation is installed below the metal cladding sheet held by steel wire mesh and aluminum foil rolled over purlins. This roofing system is an economically sound option for the construction industry. ThermalRock B, a non-combustible light weight thermal insulation blanket provides an ideal insulation solution to single skin roofing system.



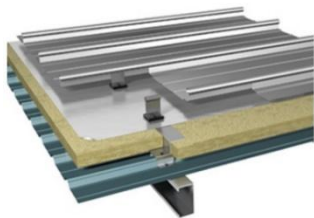
Single skin system

An uninsulated profiled metal sheet fixed directly to the purlins.



DOUBLE SKIN ROOF SYSTEM

The double skin roofing system is a high performance system comprising of an aesthetically designed trapezoidal or standing seam profile metal sheet on the top and a metal trapezoidal tray at the bottom. Coupled with ThermalRock S stone wool insulation, it boost the performance of the system with improved level of thermal efficiency, acoustic and fire performance as compared to other roofing system. ThermalRock S, a semi rigid slab product, is a versatile insulation that is available in various sizes to provide ease of installation and a perfect fit between purlins.



Double skin system

This common type of construction consists generally of a shallow profiled metal liner, a spacer system and an outer sheet usually in a deeper profile. The insulation is typically a mineral fibre quilt.



Profiled sheets

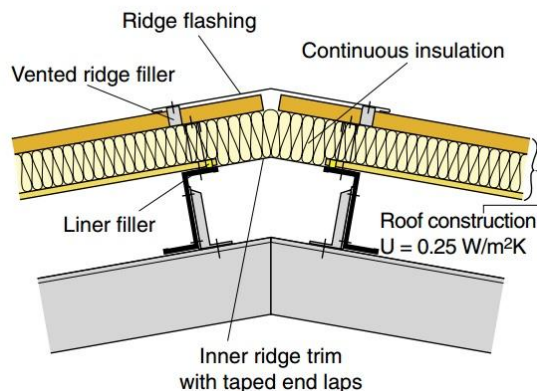
Profiled weather and liner sheets are made of steel to BS EN 10147 or aluminium to BS EN 485 (and related standards).

Thicknesses vary depending on product and application but the values in Fig 6 are generally regarded as minimum values in mm.

	STEEL	ALUMINIUM
Weather sheet	0.7	0.9
Liner sheet	0.4	0.5
Walkable liner sheet	0.7	0.9



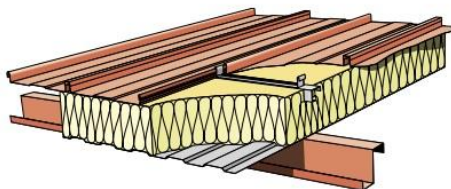
We supply a high performance roof insulation that provides the unique combination of thermal, acoustic and fire properties to enhance the performance of roofing systems. It is an environmentally green product to satisfy energy efficiency building requirements. Our Roofs are designed for single or double skin metal roof, with or without skylight, to satisfy U-value requirements in order to achieve the desired roof thermal transmittance value (RTTV)



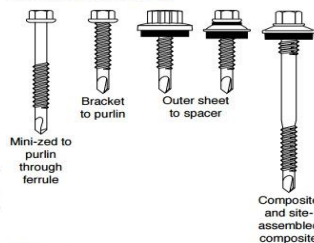
Secret fix

Secret fix or standing seam systems use special profiles for the weather sheet with virtually no exposed through fasteners. This provides greater reliability and means they can be used on very low slope roofs. Secret fix sheets can be used as the weather sheet in all the roof constructions shown.

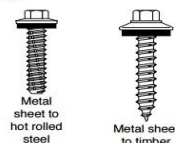
NOTE: For detailed information see MCRMA technical paper No 3 *Secret fix roofing design guide*



Self drilling and tapping

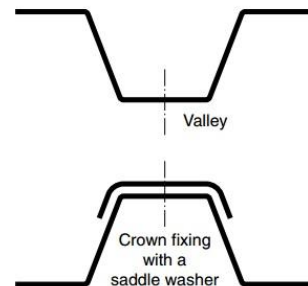


Self tapping



Primary

These fasteners are designed to transfer all loads on the cladding system back to the supporting structure so their strength is particularly important. If the fasteners are exposed they must also provide a weathertight seal. They are normally used in the valley of the profile. If crown fixing is recommended by the manufacturers, saddle washers are usually required.



Type	Substrate	Typical thickness: microns	Application
Plastisol	steel	200	weathersheet
Pv12	steel and aluminium	25	weathersheet
Multicoat	steel and aluminium	100	weathersheet
ARS	aluminium	28	weathersheet
Polyester	steel and aluminium	22	liner

