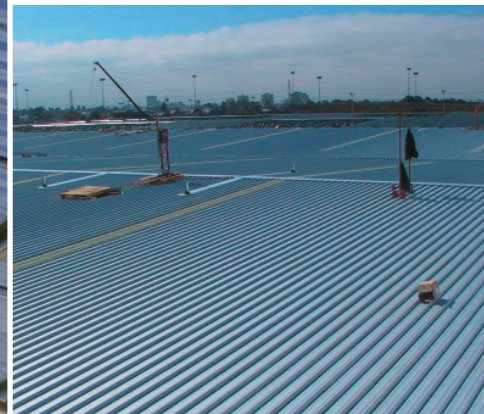


# DIMOND

## NATURAL LIGHTING



MAXILITE®  
DUROLITE®  
– GELCOAT  
– HEATGUARD™

*Maxilite is a natural lighting roof product suitable for use on low cost commercial buildings or residential building projects for roofing or wall cladding. Life cycle costings prove Maxilite is an extremely cost effective option for residential buildings compared to standard sheets, helping match your budget to product quality.*

It has a 20 micron thick Melinex® 389 surface film laminated to the top side, making it resistant to surface erosion and moisture penetration.

Once installed Maxilite is warranted to keep the weather out for 20 years and is also warranted not to lose more than 30% of its original light transmission after 10 years of use\*.








It diffuses natural light to provide even distribution within the building while blocking out 99% of UV rays.

Sheet weights can also be customised to suit your span requirements.

\* Refer to Dimond Conditions of Warranty.

## Curved Roofing

Maxilite and Durolite can be drupe-curved to true radii curves of radii no less than the minimum given for each profile.

Profile	Minimum Curve Radius (m)	
	Thickness 1.1mm	Thickness 1.4mm
<b>Corrugate</b> 	4	5
<b>Styleline/Trimdek</b> 	8	9
<b>V Rib</b> 	12	14
<b>LT7</b> 	12	14
<b>BB900</b> 	12	14
<b>SS900</b> 	16	18
<b>SUPER SIX</b> 	16	18

### Maxilite Advantages

- ✓ **Economic and cost effective for residential buildings**
- ✓ **Reduces the need for artificial light**
- ✓ **Blocks 99% of UV rays**
- ✓ **Large range of profiles as well as flat sheets**
- ✓ **Variety of tints**
- ✓ **20 year perforation warranty**

*Durolite has an advanced gel coating bonded to the sheet to provide a durable natural lighting solution for roofs and walls with unparalleled sheet life, strength and durability for commercial applications.*

It has a 100 micron thick gel coating that forms a chemical bond with the reinforced sheet, increases the useful life of the sheet, reduces glare, solar heat gain and the transmission of UV radiation and disperses natural light uniformly, giving even light within the interior of the building.

Durolite is used in strips with metal roofs and comes in a wide range to suit Dimond profiles, sheet lengths and tints to suit new and existing buildings. Durolite is also available in foot trafficable sheets.

Durolite has the best life cycle costing of over 25 years, lasts up to four times longer than film-based natural lighting sheets and is guaranteed to provide the transmission of natural light for a useful life of 25 years\*.



## Durolite Advantages

- ✓ **Reduce the need for artificial light**
- ✓ **Significantly reduce long term power requirements**
- ✓ **Improve lighting conditions**
- ✓ **Foot trafficable and non-trafficable sheets**
- ✓ **Large range of profiles as well as flat sheet**
- ✓ **Variety of tints**
- ✓ **25 year perforation warranty**



# DUROLITE® HEATGUARD 4 & HEATGUARD 8

*The technologically advanced Durolite HeatGuard™ range is specifically designed to reduce transmitted heat inside a building and also increase visible lighting.*

Durolite HeatGuard 4 and HeatGuard 8 are the two new natural lighting products which reduce the amount of heat transmitted into a building while still providing the highest level of visible light transmission. An easy way to remember which product to select is the larger the number the less heat transmitted.

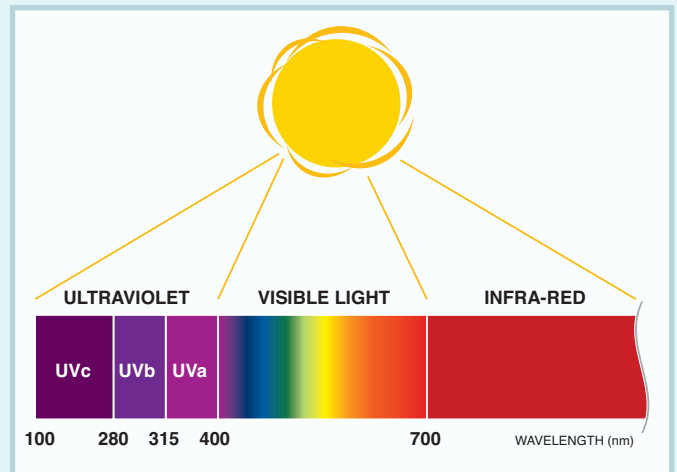
Durolite HG4 and Durolite HG8 have infra-red ray reflecting additives in the gel coat which reduce heat without losing light transmission plus Durolite HG4 and Durolite HG8 block 99% of the harmful ultraviolet UVA and UVB rays for extra protection.

When this energy efficient product is used as roofing or cladding, costs for cooling and lighting in commercial and residential buildings are reduced.

Durolite HG4 and Durolite HG8 are part of the Durolite natural lighting range that can be used with Dimond's metal roofing and cladding products. Both come in a wide range of profiles, sheet lengths and are also available in foot trafficable sheets.

## HOW IT WORKS

We see visible light as the colours of the rainbow with each colour having a different wavelength. The infra-red rays are within another wavelength called the thermal wavelength and we experience this every day as heat. The heat we feel from sunlight is actually the solar energy from the sun being transmitted by infra-red rays. Durolite HeatGuard reflects most of these infra-red rays so they do not pass through the Durolite sheet, thereby reducing the amount of heat entering the building, without sacrificing the amount of visible light.

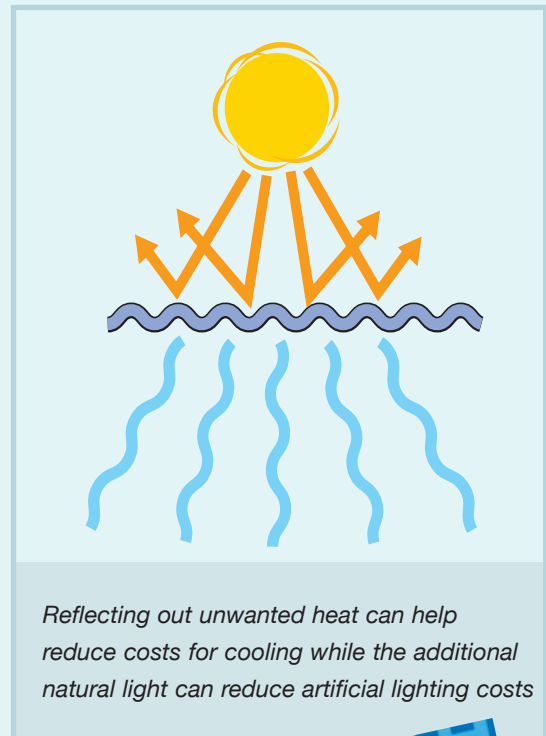


The ability of sheeting to differentiate between light and heat can be measured by dividing the total visible light transmission by the total solar transmission. This is called the selectivity index. The chart below shows the difference in the selectivity index for the two grades of Durolite HeatGuard when compared to standard clear and opal sheet.

Product	Visible Light Transmission	Total Solar Transmission	Selectivity Transmission Index
Durolite HG4	64%	50%	1.28
Standard clear	63%	63%	1.00
Durolite HG8	49%	36%	1.36
Standard opal	36%	40%	0.90

As seen above the Selectivity Index of Durolite HeatGuard is comparatively high. Durolite HG4 selects and distinguishes infra-red rays and is 28% more efficient in reducing heat while letting natural light in like a clear sheet, whereas Durolite HG8 is 36% more efficient than any opal sheet.

Durolite HG4 is recommended for factories and warehouses where a high level of light transmission is required and traditional clear sheeting would have been used but with large amounts of heat entering through the roof. Durolite HG8 is recommended where even lower heat levels are required such as office or work areas without further loss of light transmission.



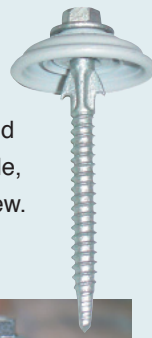
### Durolite HeatGuard Advantages

- ✓ **28% to 36% more effective than standard clear or opal sheets**
- ✓ **Reduce the need for artificial light**
- ✓ **Block 99% of harmful UV rays**
- ✓ **Wide range of profiles and sheet lengths**

## Clearfix Industrial Screws

To make the installation of fibreglass sheeting quicker and to eliminate the double tooling needed to drill and fix through an over-sized fastening hole, Dimond has introduced the Clearfix hexhead screw.

- No pre-drilling is required
- Self centres during installation
- Installed in half the time of conventional fasteners
- Can be used in both steel and timber purlins

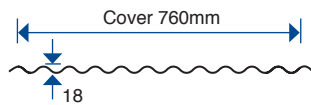


Clearfix guarantees clearance around the fixing hole by over-sizing it by 1mm. Clearfix comes in a 12g x 65mm long screw designed for timber or steel purlins. See table below for recommended profiles.

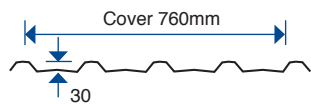
Profile	Timber	Steel
Corrugate	✓	✓
Styleline	✓	✓
Trimdek	✓	✓
Dimondclad 20 & 50	✓	✓
BB900	–	✓
LT7	–	✓
V Rib	–	✓

## Range of Profiles

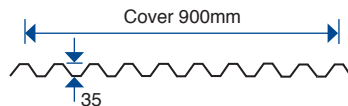
### Corrugate



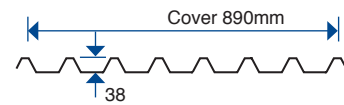
### Styleline/ Trimdek



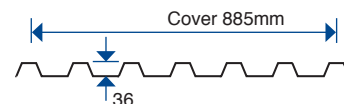
### V Rib



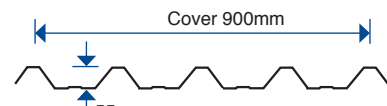
### LT7



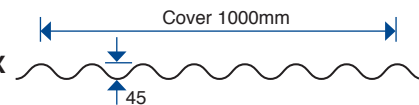
### BB900



### SS900



### SUPER SIX



These profiles are all manufactured to a nominal sheet weight of 1800 g/m<sup>2</sup>. All dimensions are nominal. Other profiles are available. Talk to your nearest Dimond Sales Centre or call 0800 ROOFSPEC.

## Span Capability

Maximum Ultimate Wind Load 1.5 kPa.  
Not intended to support point loads.

Profile	Thickness BMT	Nominal Sheet Weight		Max. span (mm)
		mm	kg/m <sup>2</sup>	kg/m <sup>2</sup>
Corrugate	1.1	1.8	1.52	1000
	1.4	2.4	2.03	1200
Styleline/ Trimdek	1.1	1.8	1.46	1200
	1.4	2.4	1.94	1500
V Rib	1.1	1.8	1.45	1200
	1.4	2.4	2.35	1500
LT7	1.1	2.0	1.93	1400
	1.4	2.6	2.50	1700
BB900	1.1	2.0	1.91	1400
	1.4	2.6	2.49	1700
SS900	1.1	2.0	2.03	1600
	1.4	2.6	2.64	1800
Super Six	1.1	1.8	1.97	1400
	1.4	2.4	2.63	1600

Typical sheet thicknesses are 1.1mm or 1.4mm, but other thicknesses are also available to suit your span requirements. Please contact your nearest Dimond Sales Centre for details.

## General Maintenance

All products in the Dimond Natural Lighting Range require a minimum degree of maintenance to ensure the expected performance is achieved. Careful and regular maintenance can extend the useful life of the product.

It is recommended that surfaces are kept clean and free from continuous contact with moisture and debris by regular washing and if necessary scrubbing with a soft bristle brush.

Damaged sheets should be replaced.

Inspect and replace where necessary any fasteners or fastener sealing washers that have deteriorated sufficiently to cause a leakage risk.

As part of Dimond's policy of continued product improvement, the company reserves the right, at any time, at their discretion and without notice to discontinue or change the features, designs, materials, colours and any other specifications of their product and to either permanently or temporarily withdraw any such products from the market without incurring any liability. This publication is issued as a general guide only and should not be treated as a substitute for detailed technical advice in relation to individual circumstances. Dimond disclaim any liability for loss or damage suffered from the use of such data, except liability under the Consumer Guarantees Act 1993. To the best of our knowledge all information is correct at the time of printing.