

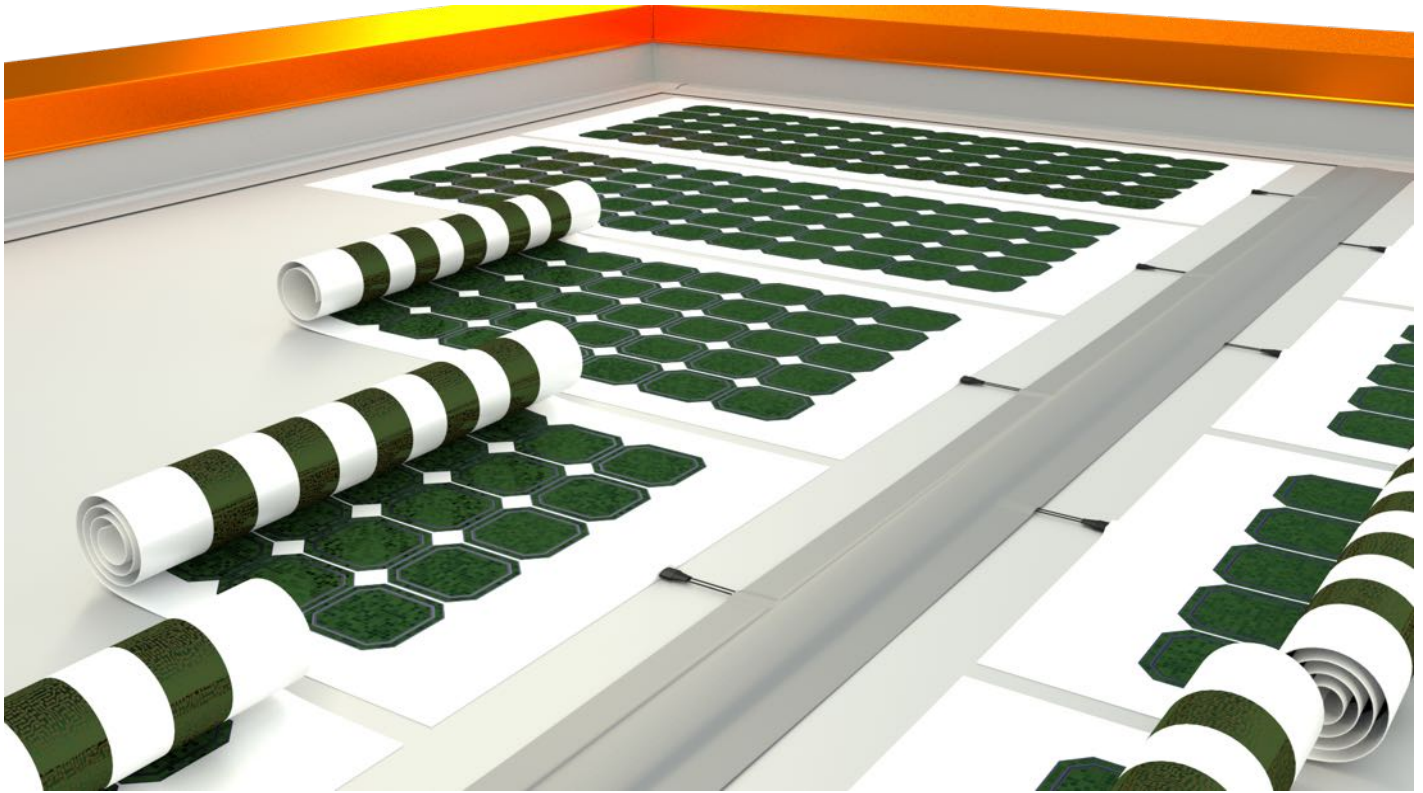
THE ENLIGHTENMENT RANGE

Excellence in
Flexible Solar Systems

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www.mrc-group.co.za



FLEXIBLE SOLAR SYSTEMS ON PITCHED, CURVED AND FLAT ROOFS



SYSTEM OVERVIEW:

MRC's range of flexible, non-penetrating photovoltaic modules are one most advanced CIGS (Copper Indium Gallium Selenide) thin-film modules available.

One of the dangers with traditional framed solar panels is not just the ability for the existing roof to withstand the weight but more importantly the wind uplift. The panels are permanently secured with structural adhesives to provide a non-penetrative fixing arrangement.

The CIGS modules can withstand high loads and impacts without serious damage as there is zero glass content. The CIGS technology exhibits higher yields in low light conditions compared with silicone based systems.

MRC Group's installed system is backed with the unrivalled, single source, Guardian™ System Warranty covering materials, installation & maintenance for the term of the Solar System.

KEY FEATURES:

- Second generation, non-penetrating, flexible photovoltaic module
- Multiple adhesive applications
- Used on pitched, curved and flat roofs
- Approximate weight of 2.4kg / m²
- Panels can be laid to maximise the available footprint, minimising wastage and increasing yield
- Ideally used on metal roofs or single-ply synthetic membrane
- Manufactured in the USA.
- Backed with the up to 10 year Guardian™ System Warranty

JOHANNESBURG • DURBAN • CAPE TOWN

For project specific specifications, CAD Details, Samples or technical assistance please contact our technical department on +27 (0) 861 672 476 or refer to our Technical Brochure available on www.mrc-group.co.za

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TECHNICAL DATA:

LIGHTWEIGHT SOLUTION

The cell structure of the module has been combined into 53 μ m, and therefore the total roof load is a mere 2.4 kg / m². The volumetric weight of the module produces savings in delivery, storage and installation.

MODULE SIZES

- SP1 – Single module is 399 mm wide x 2187 mm long.
- SP3 – Triple module is 1146 mm wide x 2187 mm long.

FLEXIBLE

- SP1 – Can be curved or rolled down to 300 mm diameter.
- SP3 – Can be curved or rolled down to 400 mm diameter.

No rigid glass content means the panel is easily adapted to curved profiles with ease.

MATERIAL

The modules are manufactured from a thin-film of CIGS (Copper Indium Gallium Selenide). The flexibility of the panels is made possible due to the nano-structure of the actual CIGS cell and the encapsulation materials.

The substrate of the cell is a stainless steel foil providing the basis of the flexibility to begin with. The high-grade thermo-plastic laminate and backing provide some rigidity, but not enough to limit the flexibility.

POTENTIAL OUTPUT

- SP1 – Between 75 – 85 Watts
- SP3 – Between 220 – 240 Watts

RESISTANCE TO DIRECT IMPACT

As the panels are not rigid therefore the modules ability to resist impact from hail at great velocity is increased. The panels can be walked on but care not to scratch the surface should be taken.

SYSTEM WARRANTY

- Up to 10 year, single source Guardian™ System Warranty covers Materials, Workmanship & Maintenance.



ACCREDITATIONS



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