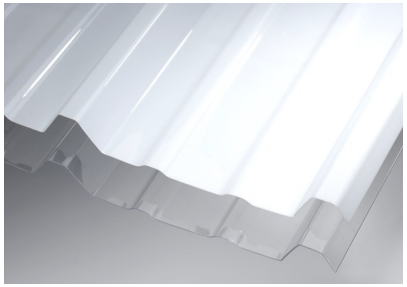
DMI Mega Corrugated Polycarbonate Translucent Panels



If you are looking for THE STRONGEST CORRUGATED POLYCARBONATE ROOFING AND SIDING PANEL on the market today, look no further. The Mega Polycarbonate panels are designed with the latest in product technology to take on harsh weather conditions.

Benefits include:
Polycarbonate panels are strong and durable up to 200 times the strength of traditional glass. Wide range of resistance to chemicals and corrosion. DMI Polycarbonate Translucent Panels are co-extruded with UV protection and offer a 10 year warranty against loss of light transmission due to yellowing, and against damage due to hail. UV Ray resistance with optimal light transmission, strong, easy to handle and install. DMI Mega panels are Made in the U.S.A.

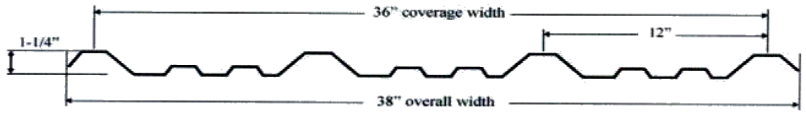
1.5 MEGA PC vs. Fiberglass / FRP Panels:

Warranty	10 Yr Hail /10 Yr Light Transmission	1 year Hail
Fire Rating	Flame spread FM rating of 6	FS25A Fire Rated 14 oz - 8oz FM rated 25
UV Exposure	Co-Extruded UV Resistant Material	Can cause yellowing and embrittlement
Impact Resistance	High impact strength, 10 Yr Warranty	Can break under pressure
Liquid Resistance	Panels do not absorb water or chemicals	Can absorb water causing wicking of fibers
Temperature Range	Temperature range –30 to 260 deg F	Temperature range 0 to 200 deg F
Safety	Safe and easy to cut no vapors	Respiratory- possible styrene vapors and floating fibers.

The MAGA/ULTRA MR12 SUNSKY Panel matches the popular R/PBR commercial building panels and comes standard in 12' lengths. This panel is designed to meet the highest specifications for ultimate performance and rigidity. This panel carries a 10 year warranty against yellowing and a 10 year warranty against breakage caused by hail.
Florida Building Code Approved as a wall or roofing translucent panel a FBC approval #'s 11238 &11240.
ICC code # ESR-1893 and now TDI approval # RWA-04

FBC Approved

MEGA MR12 Profile

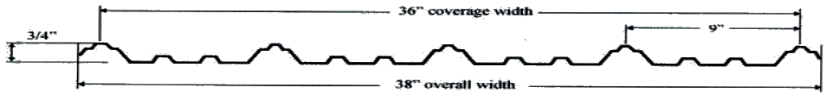


DMCMR12MC12	1.5 MEGA MR12	Clear 90% (+/- 5%) light transmission	36" coverage x 12' length FBC
DMCMR12MW12	1.5 MEGA MR12	White/Opal 45% (+/- 5%) light transmission	36" coverage x 12' length FBC

White/Opal is suggested for drop-in overhead skylight applications.

Also available

MEGA MR9 Profile



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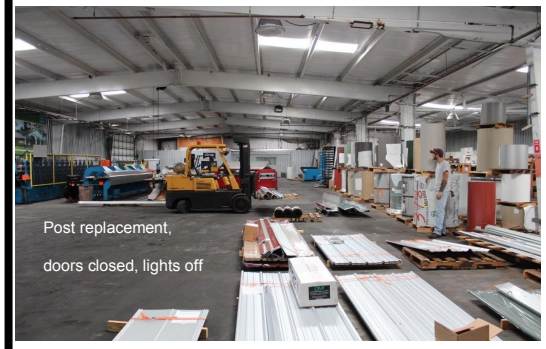
Replace Fiberglass Today !! Help Create a Safe and More Energy Efficient Workspace.



A DMI stock distributor recently replaced their old fiberglass panels with new MEGA R Polycarbonate panels.

Their reaction to the new panels…..

"I cant believe we worked in the dark for so long"-Amy

DIRECT METALS INC.

CASE STUDY

Purpose:

Evaluate lifecycle energy savings & lumen depreciation of Standard FRP (Fiberglas Reinforced Plastic) Sheets available in the market & SunSky polycarbonate sheet

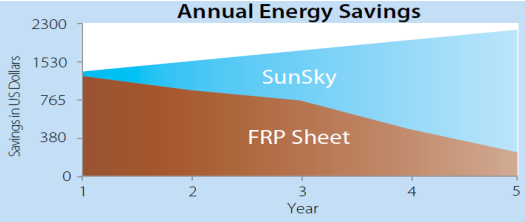
Method:

For our detailed study, we selected a pair of near identical machine shop sheds, which had an area of approximately 12,910 sq. ft.

The units operated for 24 hours a day and for 300 days a year and were illuminated by 200 Watt metal halide lamps. By installing an energy meter in the Main Lighting Distribution Board of the respective units, we measured power consumption over a week before sheets were installed on the roof covering to provide daylight in the shed. We took an identical set of measurements to record the illuminance level at different times of day at various places. The SunSky sheets were installed on the roof of one of the sheds while standard FRP sheets were installed on the roof of the other shed. We installed a timer to note and monitor the period during which the lamps were actually switched off.

We monitored the energy consumption as well as off time of the lamps by noting the requisite data on a day-to-day basis. The illuminance levels were measured once per week at different times of the day in both sheds at the same time intervals; the test continued for five years. After five years there was virtually no savings in the unit with the FRP sheets due to reduced light transmission of the FRP sheets over time.

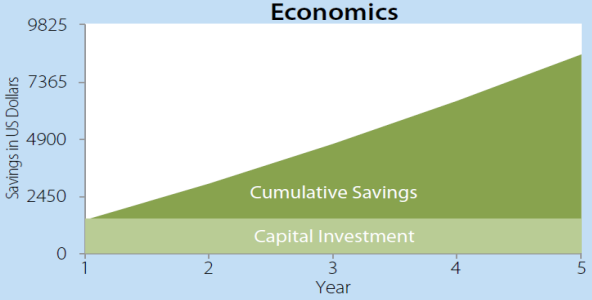
Annual Energy Savings



Annual Energy Saving in USD

Year	SunSky	FRP Sheet
1	$1,427.15	$1,365.10
2	$1,569.87	$1,172.17
3	$1,712.58	$1,032.51
4	$1,855.30	$643.17
5	$1,998.01	$324.32

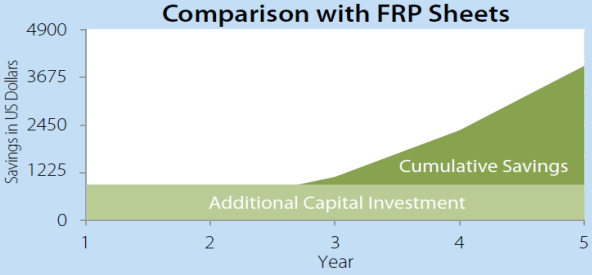
Economics



Cumulative Savings

Year	Savings
1	$1,427.15
2	$2,997.02
3	$4,709.61
4	$6,564.90
5	$8,562.92

Comparison with FRP Sheets



Additional Savings

Year	Savings
1	$62.05
2	$459.75
3	$1,139.82
4	$2,351.95
5	$4,025.65

Installation Details

Description	Units	Unit – I FRP Sheets	Unit – II SunSky
Width of the premises	ft.	98.4	98.4
Length of the premises	ft.	131.2	131.2
Area of the premises	ft^2	12910	12910
Height of fitting from working level	ft	14.8	14.8
Operation	Hr/day Day/year	24 300	24 300
Type of lamp	Metal Halide	Metal Halide	Metal Halide
Rating of the lamp	W	250	250
Number of fittings	—	20	20
Average Illuminance	Lux	200	200
Duration of the measurement	hr	24	24
Annual power consumption	kWh	36000	36000
Cost of Translucent sheets	USD	$496.40	$1,489.20

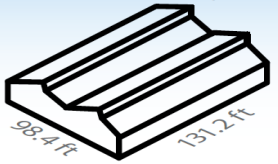
Actual Measurements

Duration of the test: April 2007 through September 2012

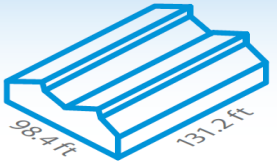
Description	Units	Year 1		Year 2		Year 3		Year 4		Year 5	
		FRP Sht.	SunSky	FRP Sht.	SunSky	FRP Sht.	SunSky	FRP Sht.	SunSky	FRP Sht.	SunSky
Illuminance	Lux	185	472	148	465	115	461	87	457	66	448
Time - Lamp Off	Hr./day	11	11.5	9.2	11.5	7.6	11.5	7.6	11.5	6.9	11.5
Days - Lamp Off	Days	300	300	280	300	257	300	225	300	203	300
Lamp On All Day	Days	0	0	0	0	0	0	5	0	10	0
Energy Savings	kWh	16500	17250	12880	17250	10400	17250	5980	17250	2800	17250
	USD	1,365.10	1,427.15	1,172.17	1,569.87	1,032.51	1,712.58	643.17	1,855.30	324.32	1,998.01

Quick Reference for Installation Details

Unit 1: 12,910 sq. ft.



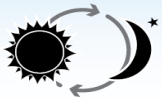
Unit 2: 12,910 sq. ft.



Lighting Specs

Bulb: Metal Halide
Wattage: 250
Avg. Illum.: 200 Lux

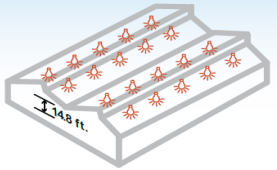
Operating Time and Duration of Measurement



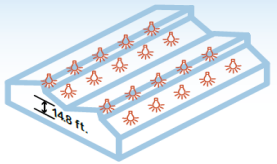
24 Hours/Day

300 Days/Year

Unit 1: 20 Lights @ 14 ft. Height



Unit 2: 20 Lights @ 14 ft. Height



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