

Case Study

SOLAR ENERGY FOCUS

BARCALDINE SOLAR FARM



3E Basor
CABLE TRAY SPECIALIST

#YOURGLOBALPARTNER

3EBasor
CABLE TRAY SPECIALIST



**+ MORE
THAN**

1000

**REALIZED PROJECTS
IN THE LAST 15 YEARS**



**RENEWABLE
ENERGY**



**INDUSTRIAL
PLANTS**



**FOOD
INDUSTRY**



**SHIP
BUILDING**



INFRASTRUCTURE



**DATA
CENTER**



OIL & GAS



**WATER
TREATMENT**



MINING



BeGreen

TOGETHER FOR A
BETTER WORLD

SOLAR ENERGY FOCUS

Solar energy is the most abundant of all energy resources and can even be harnessed in cloudy weather. The rate at which solar energy is intercepted by the Earth is about **10,000 times greater** than the rate at which humankind consumes energy.

Solar technologies can deliver heat, cooling, natural lighting, electricity, and fuels for a host of applications. Solar technologies convert sunlight into electrical energy either through photovoltaic panels or through mirrors that concentrate solar radiation.

Although not all countries are equally endowed with solar energy, a significant contribution to the energy mix from direct solar energy is possible for every country.

Basor Electric supplies specific products for each of these clean energy generation subsectors, solving all those technical challenges that may arise. Our **Product Department** engineers work closely with those responsible for each project, to achieve every time the best solution.

CASE STUDY

Barcaldine Solar Farm

LOCATED AT
Barcaldine, Queensland

CAPACITY
25 MW

MATERIAL
BasorTrav FE GC



BasorTrav *FE*



6.000 m

OF CABLE LADDER



MORE THAN **4.000**

ACCESSORIES



MORE THAN **1.000**

SUPPORTS



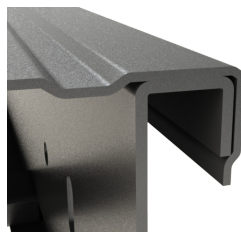
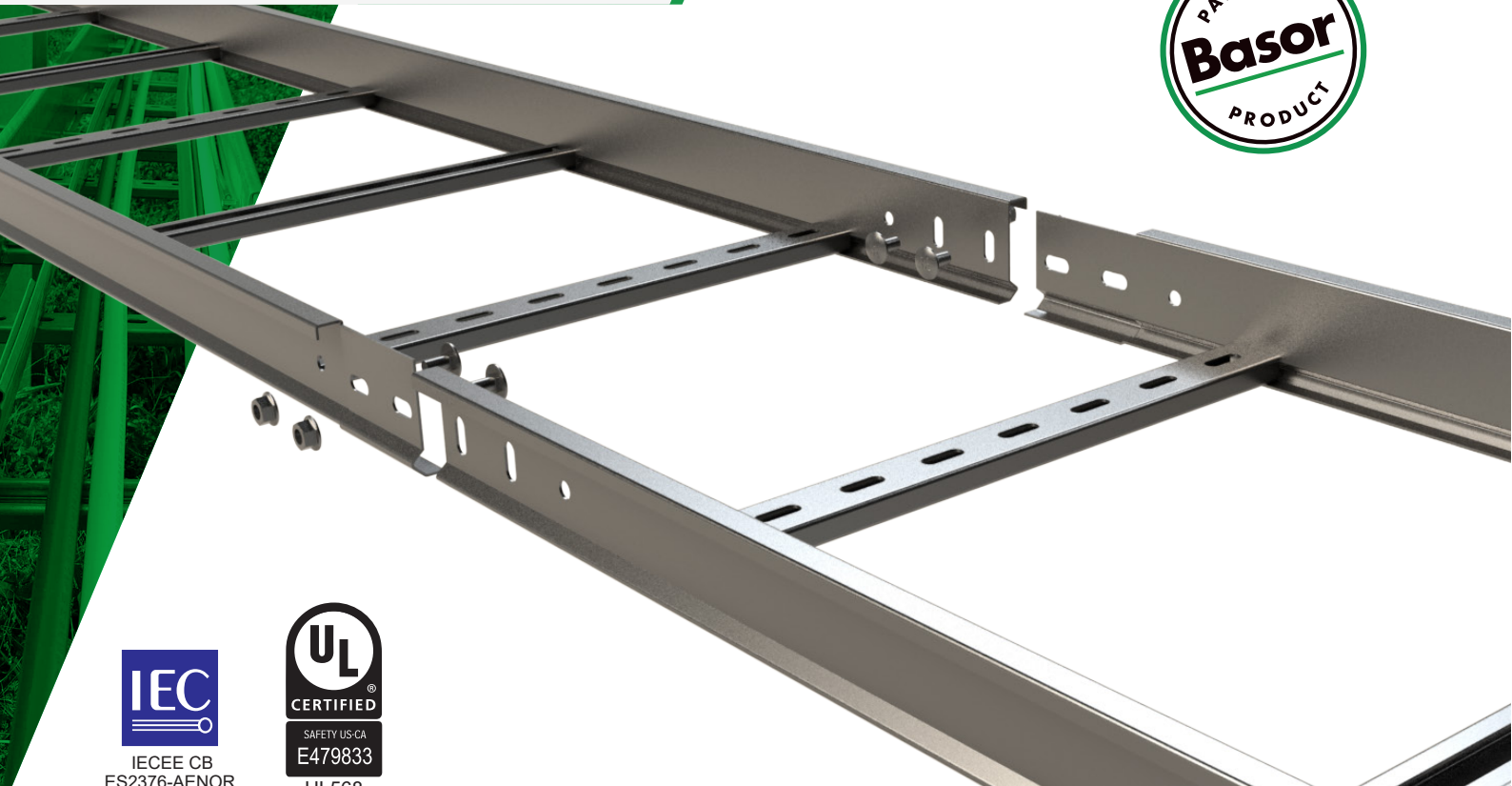
BARCALDINE SOLAR FARM

Barcaldine Solar Farm is a 25 megawatt photovoltaic solar project located approximately five kilometers east of the central western Queensland township of Barcaldine.

The 93 hectare site has approximately 79,000 solar modules. The site generates approximately 53,500 megawatt hours of renewable energy each year. The project has been designed using single-axis tracking technology allowing solar panels to tilt in the direction of the sun as it crosses the sky, maximizing the total energy generated and the effectiveness and efficiency of each of the panels.



BasorTray FE



B		Filling Area		Max. Filling*				
mm	inch	cm ²	in ²	2m	3m	4m	5m	6m
100	4	59	9,1	100%	100%	100%	100%	100%
150	6	89	13,8	100%	100%	100%	100%	100%
200	8	118	18,3	100%	100%	100%	100%	100%
300	12	177	27,4	100%	100%	100%	100%	74%
400	16	236	36,6	100%	100%	100%	83%	55%
500	20	295	45,7	100%	100%	100%	66%	44%
600	24	354	54,9	100%	100%	86%	55%	37%

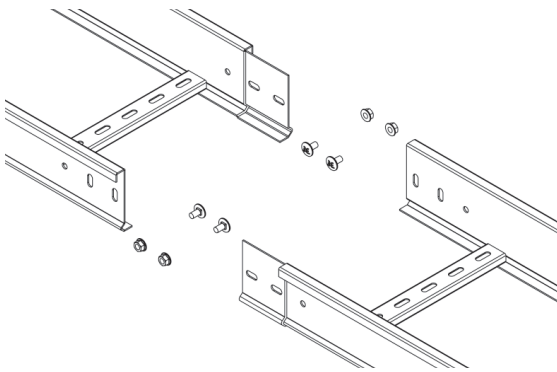
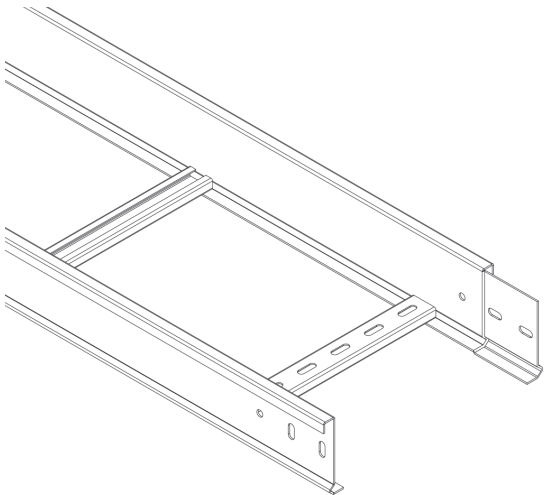
B		Filling Area		Max. Filling*				
mm	inch	cm ²	in ²	2m	3m	4m	5m	6m
100	4	84	13,0	100%	100%	100%	100%	100%
150	6	126	19,5	100%	100%	100%	100%	100%
200	8	168	26,0	100%	100%	100%	100%	100%
300	12	252	39,1	100%	100%	100%	100%	78%
400	16	336	52,1	100%	100%	100%	84%	58%
500	20	420	65,1	100%	100%	98%	67%	47%
600	24	504	78,1	100%	100%	82%	56%	39%

B		Filling Area		Max. Filling*				
mm	inch	cm ²	in ²	2m	3m	4m	5m	6m
150	6	156	24,2	100%	100%	100%	100%	100%
200	8	208	32,2	100%	100%	100%	100%	100%
300	12	312	48,4	100%	100%	100%	100%	72%
400	16	416	64,5	100%	100%	100%	78%	54%
500	20	520	80,6	100%	100%	100%	63%	43%
600	24	624	96,7	100%	100%	84%	52%	36%

B		Filling Area		Max. Filling*				
mm	inch	cm ²	in ²	2m	3m	4m	5m	6m
150	6	201	31,2	100%	100%	100%	100%	100%
200	8	268	41,5	100%	100%	100%	100%	100%
300	12	402	62,3	100%	100%	100%	100%	76%
400	16	536	83,1	100%	100%	100%	85%	57%
500	20	670	103,9	100%	100%	100%	68%	45%
600	24	804	124,6	100%	100%	87%	57%	38%

*Maximum filling depending on support span (m) considering a cable load of 0,23 kg/(m·cm²)

TECHNICAL DATA SHEET



MODELS

100x75; 150x75; 200x75; 300x75; 400x75; 500x75; 600x75; 100x100; 150x100; 200x100; 300x100; 400x100; 500x100; 600x100; 150x120; 200x120; 300x120; 400x120; 500x120; 600x120; 150x150; 200x150; 300x150; 400x150; 500x150; 600x150.

MATERIAL

HGC

NOTE

All models are available with 9 or 12 rungs.

CHARACTERISTICS

- Metallic
- Non-flame propagating component
- System with electrical continuity
- Electrically conductive component
- Minimum temperature of -50 °C
- Maximum temperature of 150 °C
- With metallic coating; resistance to corrosion:
HDG coating: class 6
- Impact Strength: 20J

Classification according to free base area:

BASE MODELS	CLASSIFICATION	
	p=250	p=333
100	X	X
150	X	X
200	X	X
300	X	Y
400	Y	Y
500	Y	Y
600	Y	Y

Models 400 & 500 H=120/150
Classification X with rung spacing (p)=250mm

ASSEMBLING INSTRUCTIONS

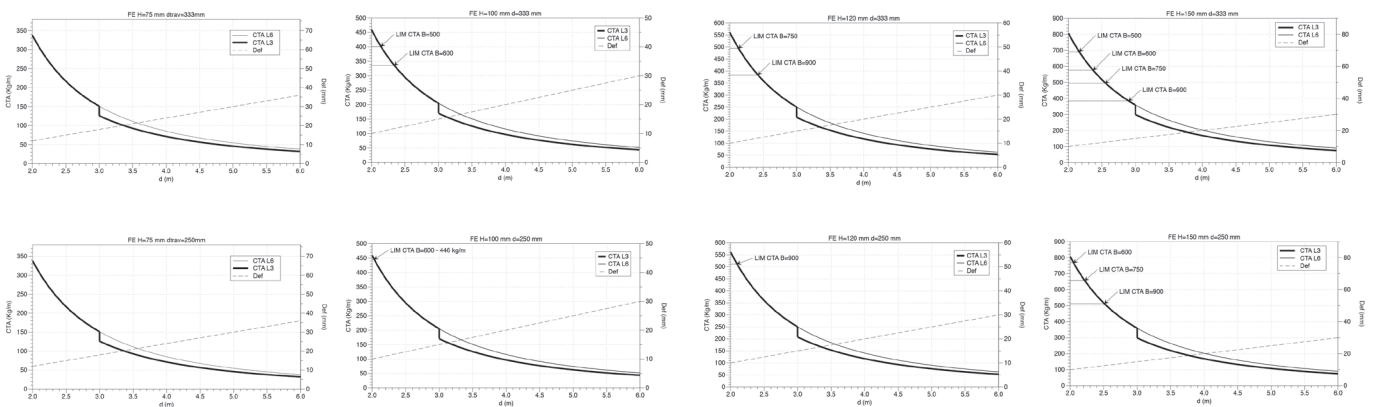
- For the set-up of the self-assembly system, 4 B2 Bolt sets (8 sets for H150 trays) and no union joint plates are needed.
- Tray installations for electrical systems should NOT run under other types of canalisations such as water, vapour or gas canalisations.
- To guarantee good ventilation, we recommend installing the trays keeping a minimum distance of 250 mm between each tray.
- Trays placed on supports shall keep a gap of 20 mm from the wall to allow the correct ventilation of the cables.

ACCESSORIES

This family has large array of accessories: Cover TFE/TFEL, cover clamps PTFE/PT2AFE/PTFE-E60/PVTFE-E60/PT2AFE-E60/PVT2AFE-E60, divider PS, horizontal bend CPFE, vertical inside/outside bends CCFE/CXFE, T intersection TEFE, cross intersection CRFE, reductions REFE, cable ladder clamp BFE, union joint plates JUFE, articulated union joints JUFE-A, horizontal angle joints JUFE-B.

The standard radius of the accesories is 300 mm. Ask us for accesories with diff erent radius

SAFE WORKING LOAD





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