



U.S. DEPARTMENT OF ENERGY
SOLAR DECATHLON

2011

Life After... Solar Decathlon

The Hunt for a Career in Sustainable Building

Scott Solomon (M.C. Dean)



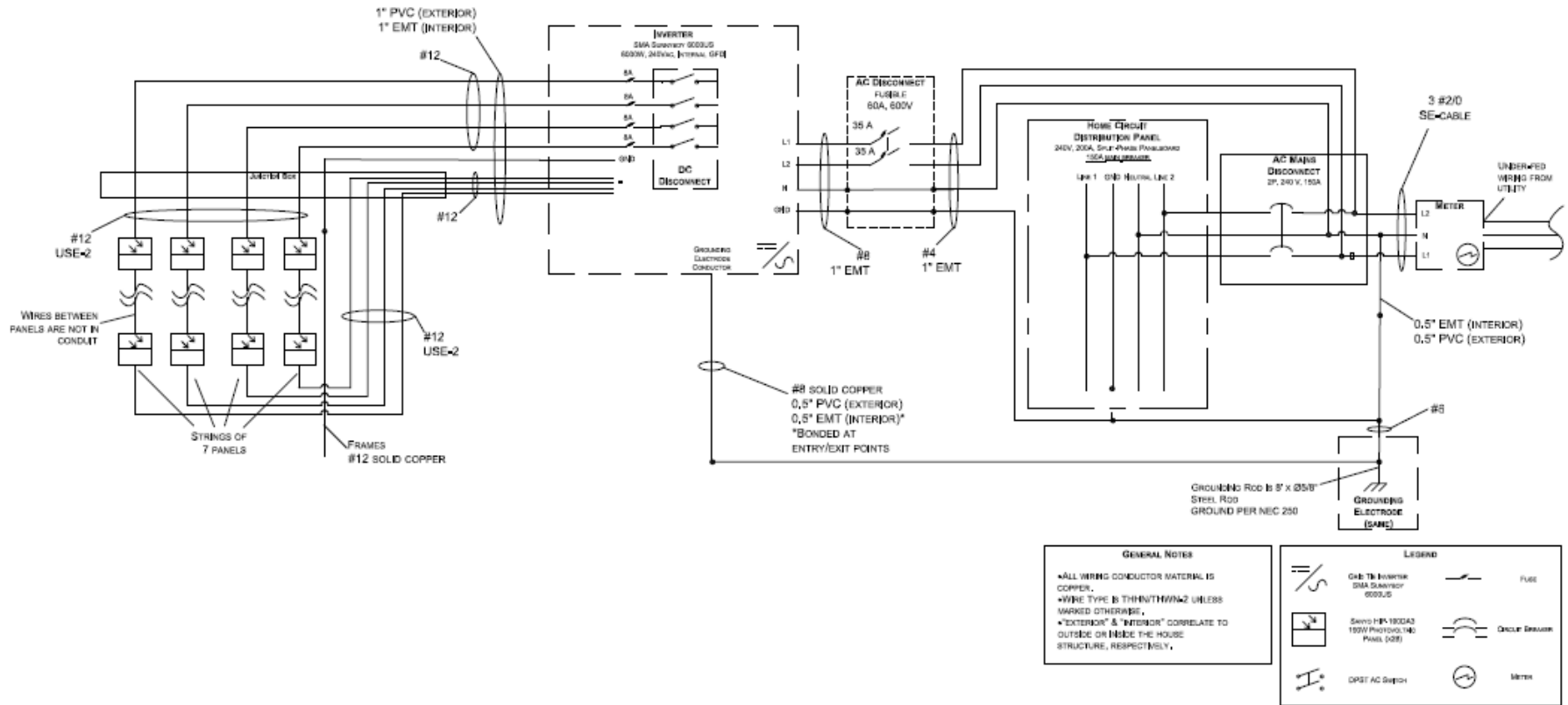
The Ohio State University

- Electrical Team
 - Photovoltaic Design (solar panels)
 - Load Calculations
 - LV Distribution (wiring)
 - National Electric Code
 - Competition Requirements



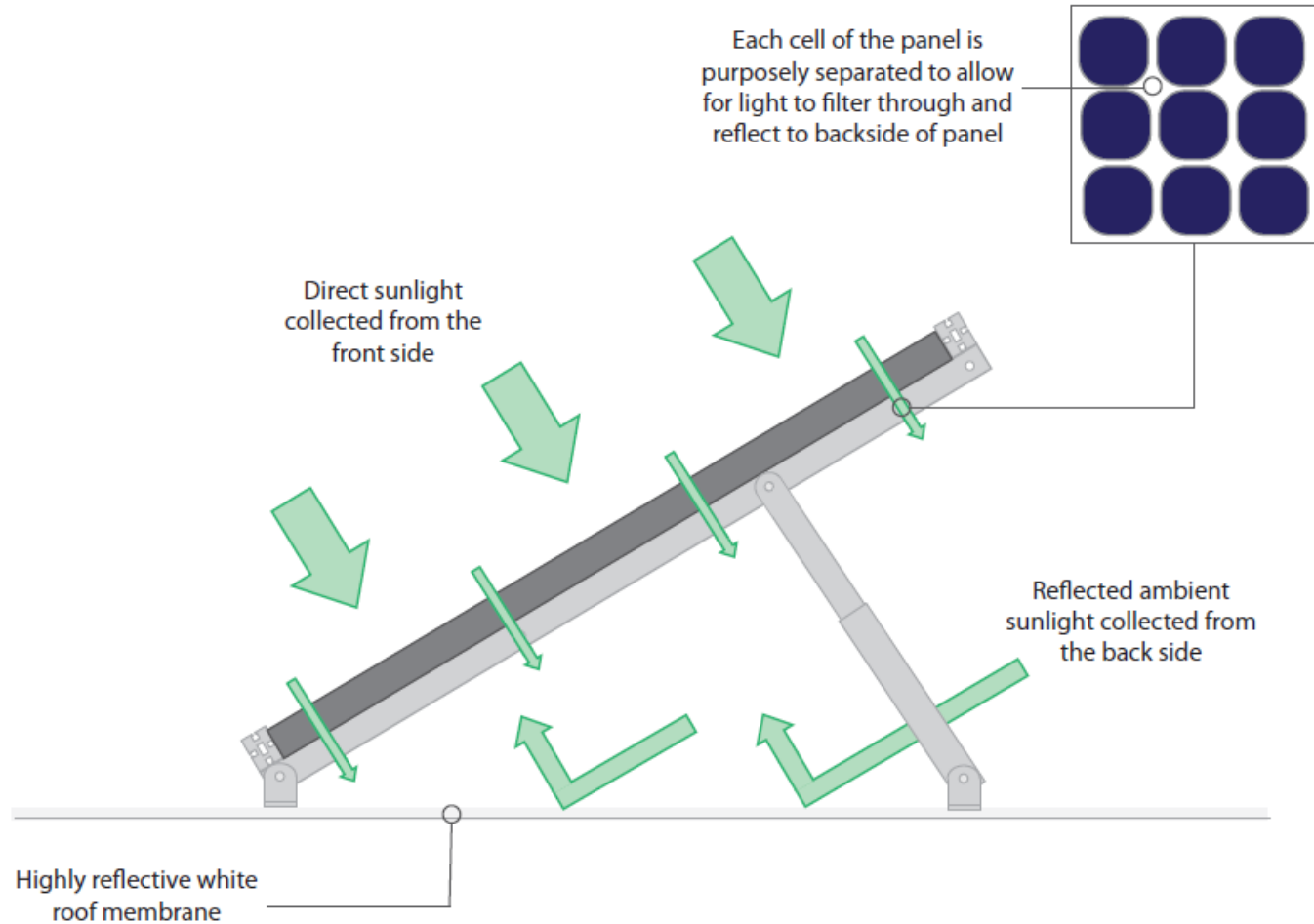


3-Line Diagram















Bi-facial Modules





2009 Solar Decathlon

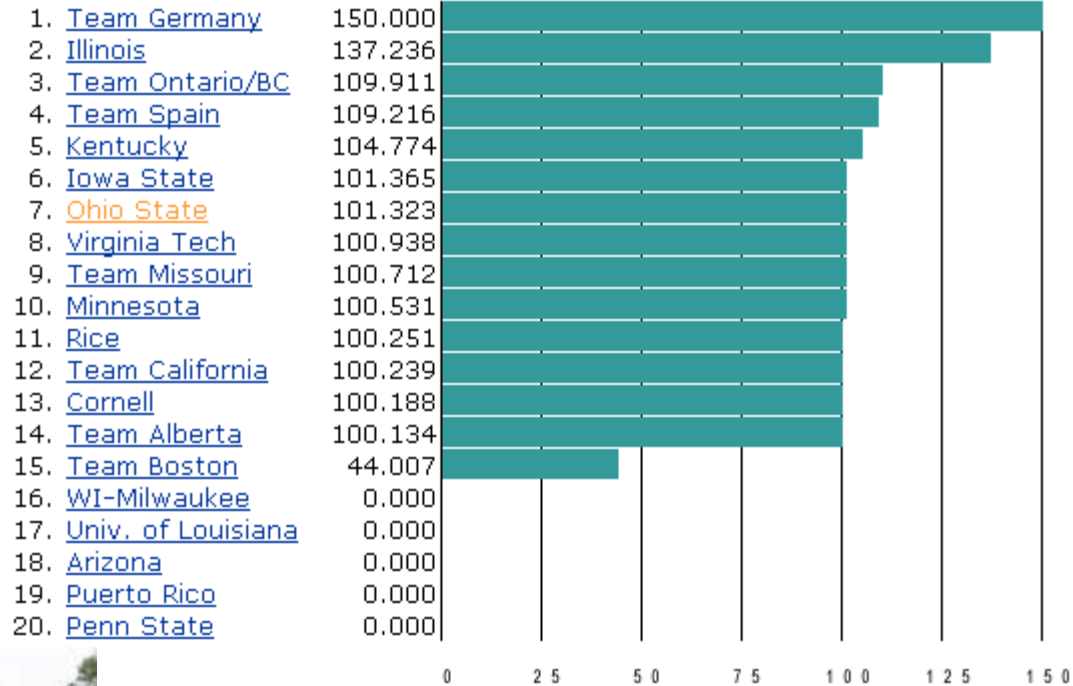
- The Ohio State University – 10th Overall**

Contest	Rank	Score	
Net Metering	7	101.323	 150 points possible
Architecture	8	82.000	
Market Viability	5	91.000	
Engineering	10	84.000	
Comfort Zone	4	82.360	
Hot Water	16	62.250	
Appliances	18	51.257	
Home Entertainment	17	60.492	 100 points possible
Lighting Design	19	57.750	
Communications	5	64.500	 75 points possible





Net Metering / Energy Contest





Ohio State is back in 2011, *enCORE*





To the Job Market

- Picking an industry
 - Product Design
 - Manufacturing
 - Computers
 - Power Electronics
 - Regulators/Gov't (i.e. Federal Energy Regulatory Commission, DOE, NREL)
 - Utilities
 - Construction & Power
 - Renewables & Energy Efficiency
- Something Innovative
- Something **GREEN**



How did Solar Decathlon Influence/Help?

- Experience with...
 - Design documentation
 - Photovoltaics
 - Physical construction
 - Working on a team on a *real project*
 - Tight deadlines
 - Even tighter installation schedule

- **You can't fake that!**



How do I like my choice?

- M.C. Dean
 - Design-Build – Construction
 - Large Projects
 - Power, Lighting, Security, Telecom, Controls
 - Renewable Technologies
 - Research is Encouraged
 - Worldwide

- Construction vs. Other industries



Our Role at the Solar Decathlon 2011

Full Circle

- Safety first, always
- Distribution (microgrid) Installation
- Design review
- Able to meet extreme installation schedule
- Prefabrication of equipment
- Installation plan
- Flexible on-site team
- Lightning protection study

