



# CheapSolar

A CAUTIONARY TALE



In Australia out of 1.7 million solar installations, too many are in the category of 'crap solar'. 'Crap solar' is a system that under-performs or is simply dead – sometimes without the owner's knowledge. Avoid being a 'crap solar' owner. Buy cheap; be seduced by 'no-brands' with long but worthless warranties and you will be the proud owner of 'crap solar'.

There is even a Facebook page with close to 12,000 members called 'Crap Solar'.

If you would like to view the page yourself, you can find it at: [facebook.com/groups/1453886731514406/](https://www.facebook.com/groups/1453886731514406/).



We have selected a range of submissions from the 'crap solar' facebook page to give consumers a greater awareness of the pitfalls and risks of buying cheap quality solar system in search of a bargain. This should highlight the need for caution when making purchase decisions. Today a quality mid-size system will cost between \$7,000 and \$10,000. Be careful if the quote is much cheaper than that. A quality system can last for decades, a cheap system will definitely not stand the test of time. - just check out the following pages of cheap solar.

**Buy quality; buy once.**

Disclaimer: Some of the comments have been edited to make the meaning clear and explicit language has been removed.

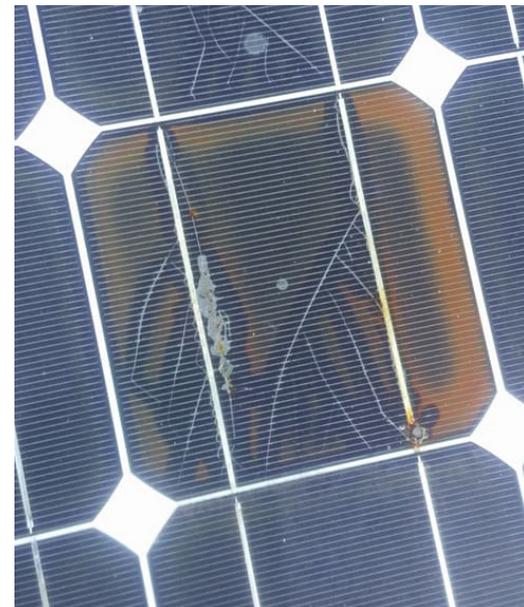
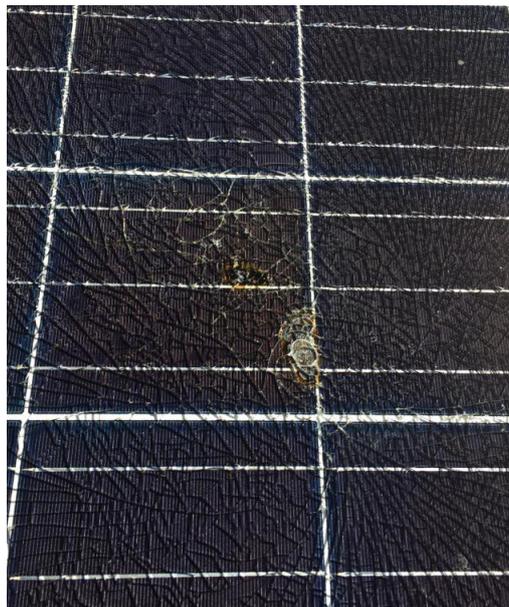
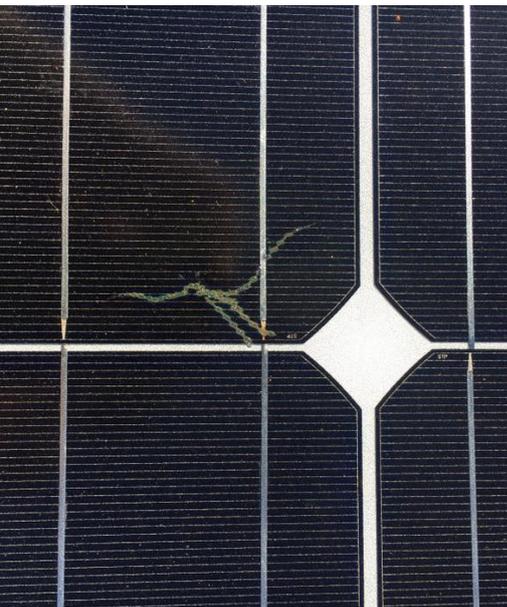


**Original poster:** “What causes this? Contamination?”

**Installer 1:** ” Micro cracks usually from poor/rough handling or shipping (inverter and bolts etc stacked on top of flat packed panels on pallet, followed by too many blokes who have no idea except faster faster!!!!) Rest might be bad seal (cheap panels have crap finishing during manufacture) allowing moisture ingress. Micro cracks can cause permanent shorts, until one day it burns through the backing sheet, causing fire on the roof.”

## LOW PANEL QUALITY

POSTED 2017



**Installer 2:** “I have also had to deal with this”

**Installer 3:** “The cheap solar cells themselves have problems.”

**Original Poster:** “Anybody ever seen this? It looks like it has shattered the panel from what looks to be some sort of hot spot? I can’t see any evidence of impact anywhere else.”

**Installer 1:** “Had the same the other day.”

**Installer 2:** “It seriously looks like the cell has caused it. I suppose heat build-up could cause expansion between the backing sheet and pop the glass outwards, shattering it. Pretty extreme result though. Crap gear anyway.”

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# PANEL HOTSPOT

POSTED 2017



**Installer 3:** “Yeah had the same thing a few days ago.”

**Installer 4:** “Crappy bus bar soldering.”

**Installer 5:** “Yes, seen it happen a few times actually.”

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**Original Poster:** “I get sick and tired of going to a quote where the customer says they had a quote for “German” top quality product and asking why their quote is a lot cheaper than ours\*. Here we go again with the whole explanation. Now I have the evidence, not only is it only a couple of years old the panels are stuffed with de-lamination and water ingress. Quality stuff right there? How’s that spelt in German. “Schittsa”, there you go. Get the Schittsa out of here!”

**Installer 1:** “Ah - there’s your problem. They were installed outdoors.”

**Installer 2:** “Last time I was there, they were filling a 40ft container, with dead Hanover and Topsola solar panels,..... pallet after pallet. Was amazing to watch.”

**Installer 3:** “People are not driven by reality they are often driven by what they want to believe is true, this is where the issue is, people for some reason can’t understand that you cannot buy the latest Mercedes for the price of a Datsun 120Y yet they for some reason think they can get the best panel for a budget price.

**Installer 4:** “You can’t blame them for thinking this, as they have been oversold budget products as quality for many years now resulting in total confusion in the industry for the lay person.”



# LOW QUALITY PANELS DE-LAMINATING

POSTED 2015

\*Explanation: Some German sounding brands are made in China and not made in Germany.

**Original Poster:** “Called to a Fronius not working, customer said they have a panel cracked! This is what I found.”

**Installer 1:** “This is scary. Looks like the panel has been put inside a large microwave oven for a couple of minutes (Put a CD in a microwave to see what I mean).”

**Installer 2:** “I’ve seen this on a job I installed with the same panel but not as drastic hot spots.”

**Installer 3:** “Pretends to be quality’ crap solar.”

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# CHEAP PANEL FIRE RISK

POSTED 2017



**Installer 4:** “Found one a while ago in a similar state.”

**Installer 5:** “Buy from reputable companies and good brands, everything else is like buying a ticket in a Chinese lottery.”



**Original Poster:** “Anybody have a contact for this panel from LDK?”

**Installer 1:** “LDK went bust a few years ago.”

**Installer 2:** “I think they came back from the dead recently??”

**Installer 3:** “Probably same company - different name and won't honour warranty.”

**Installer 4:** “That's nasty.”

**Installer 5:** “Yes it bugs me, our supplier passes it on, the importer is no longer in business and my customer wants the 10 year manufacturer's warranty honoured, like I told the owner at the time, we only buy from the companies that will be around in the long run.”

**Installer 6:** “Call 1800 crap solar.”



**LOW QUALITY PANEL WITH  
DISHONOURED WARRANTY**

POSTED 2017

**Original Poster:** “From a supposedly quality Tier 1 panel circa 4 years old. Customer says over half his 18 panels are suffering like this. Thoughts?”

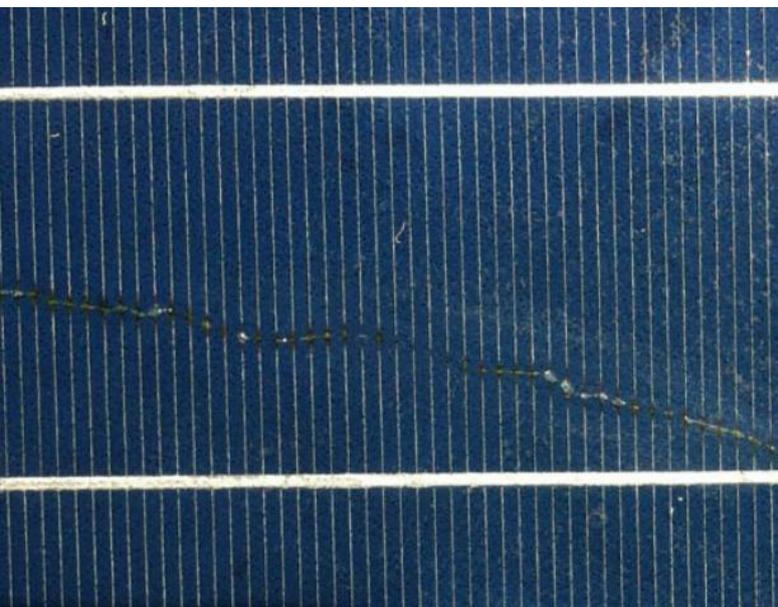
**Installer 1:** “Snail trails. I see them regularly on crap panels. Don’t know why.”

**Installer 2:** “My opinion is that these are the cell cracks that are actually picked up in the electroluminescence test (EL). This test happens right at the end of the build process, and generally every manufacturer has its

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## POOR QUALITY PANEL

POSTED 2016



own criteria as to what will pass or not... The cells are cracked during soldering or prior (but from memory they get an EL during cell manufacture), but I’m guessing that some arise during lamination.”

**Installer 3:** “It does not matter if your Panel fails if the tier one company has flopped. You receive no warranty, no nothing...I can go on and on. Most people on this site have been doing solar since 2010. Seen it many times.”



**Original Poster:** “Someone had a crack at string protection.”

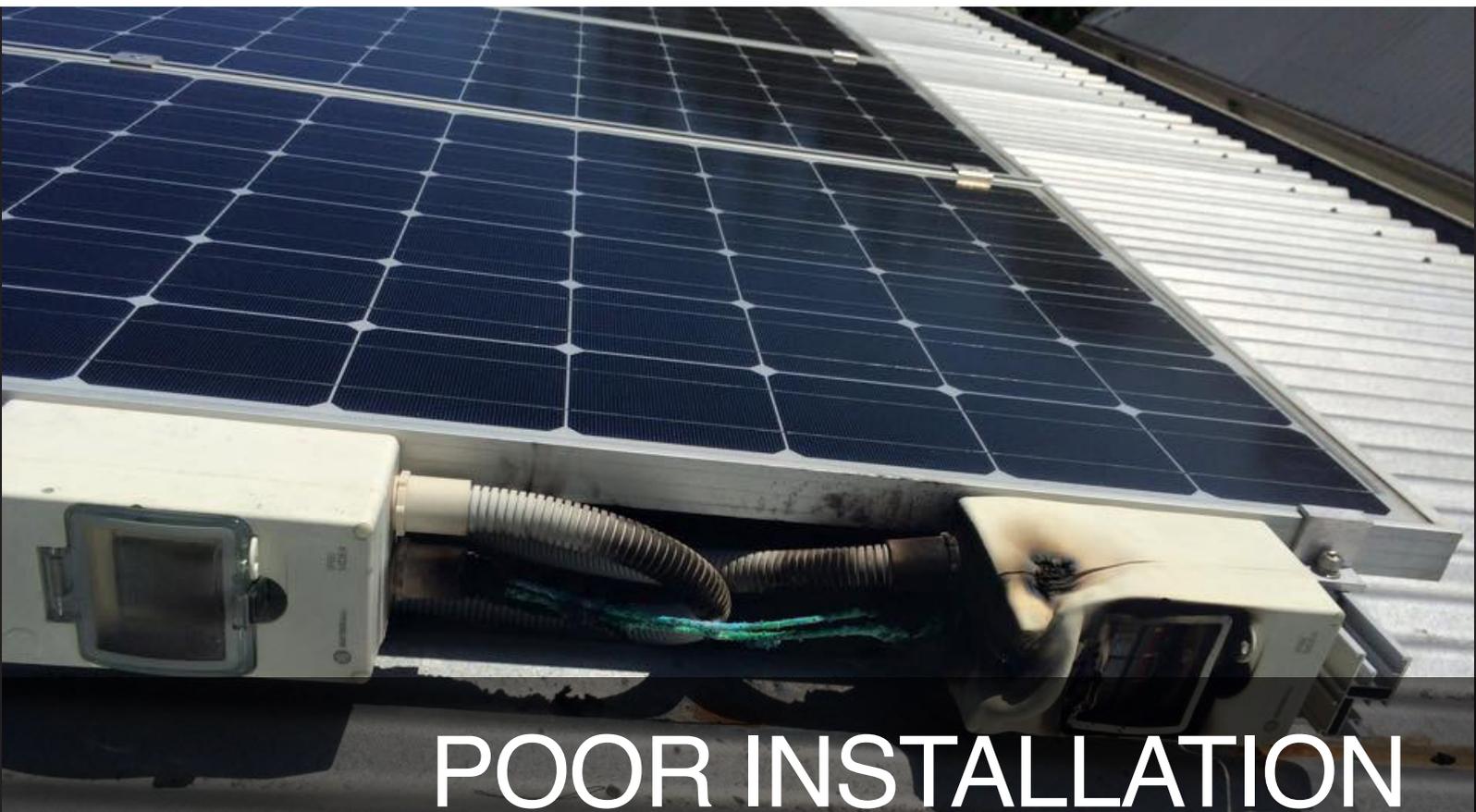
**Installer 1:** “All parts from an unnamed company recalled, no longer in business. The solar retailer is no longer around. The worst part is the original installer came out check it and said he’d be back. Never came back and the system had been left on.”

**Installer 2:** ” At least it’s isolated now :)”

**Installer 3:** “Cable entry on the top of a weatherproof box is just plain poor workmanship.”

**Installer 4:** “Rooftop isolators make sense - that is the source of power (you wouldn’t put a breaker next to a GPO). They are no worse than an air-con switch. The problem is lose standards, poor quality components, and dodgy tradespeople.”

**Installer 5:** “And hope like hell that the installer has put appropriately rated DC isolators in the system. If not you have a nice little fireworks show..... I’ve seen 240vAC isolators used before.”



**POOR INSTALLATION  
AND NO FOLLOW-UP**

POSTED 2015

**Original Poster:** “When the owner can’t get onto the original installers so you get a call about their solar not working. Find this 80% of the time I reckon. Cable entries were on the top of the enclosure and fixing screws were not siliconed, so good chance it was moisture. How hard is it to: #1. Use a good weather proof enclosure. #2. Cable entries and exits out the bottom. #3. Use glands with rubber inserts with holes for cables which seals the glands. #4. Silicone up any holes or screws! We have never, not once had this problem! But we find it on other jobs all the time.”

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## POOR PARTS & INSTALLATION

POSTED 2017



**Installer 1:** “Who uses a c10 breaker!!”

**Original Poster:** “I know”

**Installer 2:** “Nothing wrong with top entry. Know how to seal them properly and you don’t have a drama.”

**Original Poster:** “I totally agree. Just never seen another installer do it properly to be honest lol which is very sad...”



**Original poster:** “When you send the first year to grab the panels...”

**Installer 1:** “That’ll be those damaged ones on e-bay.”

**Installer 2:** “Wouldn’t even tie them in.”

**Installer 3:** “Wow, this will be future service work...near future.”

**Installer 4:** “What micro cracks?”

**Installer 5:** “Jump on the brakes when some idiot pulls out in front of you and they are all stuffed, that strap will do bugger all. With all that weight the front of the trailer will just fold over and they will end up in the back window.”



# CARELESSLY SECURED PANELS DURING TRANSIT

POSTED 2017

**Original Poster:** “How do you like your isolator sir? Well done?”

**Installer 1:** “Customer had the fire brigade out because of the amount of smoke apparently.”

**Installer 2:** “Dodgy install - can’t be that old.”

**Installer 3:** “Roof top isolators are our industry’s version of the introduction of the Cane Toad. When you have people out of their depth without the necessary underpinning knowledge making poor decisions based on false assumptions for the industry in general this is the end result. Proof is in the pudding.”

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## BURNT ISOLATORS – CHEAP COMPONENTS POSTED 2017



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**Original Poster:** “Pretty fried.”

**Installer 1:** “I’m going to start calling you Mr Charcoal”

**Original Poster:** “Yeah, two in a week. This one actually burst into flames when I opened it.”

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**Original Poster:** “Drove past this beauty today.”

**Installer 1:** “Sure got value for them STCs! What crap.”

**Installer 2:** “Hope they are not in series.”

**Installer 3:** “With shade like that? Wouldn’t matter much.”

**Installer 4:** “A responsible installer would have said: I’m sorry but your roof is just not a good candidate.”

## SHADED SOLAR SYSTEM – POOR INSTALLATION POSTED 2017



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Another Example of Shaded Installation

**Installer 1:** “I see the problem, there’s a guy standing in front of the array shading it”

So in summary, one gets what one pays for. Tier 1, 25 year output warranty are meaningless terms. Tier 1 is no reflection of build quality and it is not a reflection of the financial strength of the manufacturer. The 25 year output warranty is worthless and will never be claimed. The fine print prevents that. The Manufacturer Warranty and the strength of the manufacturer is all that counts. Buy big brands with a quality reputation and you can avoid being a CRAP SOLAR customer .

# YOU GET WHAT YOU PAY FOR



Cheap panels waiting for the tip - 2015.



Failed solar panels in recycling yard. (Frames already removed).