



Solar Panel Installation Roof Audit Checklist

R&BS

Water penetration solutions.

Solar Panel Installation Roof Audit Checklist

At R&BS we believe that preventative maintenance is the key to successfully limiting the risk of water penetration to your facility. We have drawn on nearly 90 years of experience to compile this Pre-Solar Installation Roof Checklist that identifies the most critical areas that cause water ingress in Australian facilities and buildings.

Solar energy is a sustainable energy source which is being utilized by many facilities, frequently installed over vast expanses of rooftop. However, R&BS has found that the increased popularity of solar panels has caused water ingress repair costs to the roof beneath to increase dramatically.

This is predominantly due to the increased difficulty of accessing the roof space beneath the panels, around the panels and the possibility of numerous roof penetrations being created during the installation process.

By using this checklist methodically, it will allow you to pro-actively identify if you have any issues that need to be attended to prior to installing solar panels on your roof.

- | | | | |
|--|-----|----|--------|
| ▪ Do you have any existing leaks? | Yes | No | Unsure |
| ▪ Are there any trees that overhang the roofing areas that could lose limbs or foliage during a severe weather event and damage the roof/solar panels, block the roof drainage or collect beneath the solar panels to cause corrosion? | Yes | No | Unsure |
| ▪ Is there any loose or disused machinery, ventilators, ductwork, outdoor furniture etc... sitting on your roof area that could move about and damage the roof area or solar panels in a severe weather event. | Yes | No | Unsure |

What's your roof type?

All roofs have unique potential areas of concern, so no matter what type of roof you have, this checklist will provide you with critical questions that need to be asked when preparing for solar installation.

Is your roof:

- Metal Roof
- Tile or Slate Roof
- Concrete Roof

Please see over the page for your unique checklist depending on your specific roof type.

Metal Roof

- Have you checked your metal roof sheeting for any damaged areas and corrosion (remember this corrosion can often be concealed by roof flashings or on the underside of the roof sheeting and not completely visible). This means that you will be looking for any signs of rust staining, discoloration of the metal or patches of white oxidised spots. Yes No Unsure
- Have you checked all roofing penetrations (especially air-conditioning pipework and cables) and the associated weather-stop sealants such as rubber boots and silicone type seals. Are these still sealed and weatherproof or are they deteriorated and allowing water entry? Yes No Unsure
- Have you checked the insulation around the air-conditioner condenser pipes, is it deteriorated and compromising the watertightness of the sealants? Yes No Unsure
- Have you checked all areas where silicone type sealants have been used such as the parapet cappings, ridge caps and any flashings that may be covered by solar panels, is it deteriorated and potentially allowing water entry? Yes No Unsure

Tile or Slate Roof

- Are there any broken/cracked tiles or slates that need to be replaced? Yes No Unsure
- Is the pointing on the ridge capping cracked, loose or even missing? (This is one of the main reasons tile roofs leak in storm events.) Yes No Unsure
- Are there any tiles or slates that have slipped down in the valley gutters and blocking water flow? Yes No Unsure
- Are any of the lead flashings around the roof perimeter or around any roof penetrations that are cracked and potentially allowing water entry? Yes No Unsure

Concrete Roof

- Does the roofing membrane look to be in poor condition? Yes No Unsure
- Are there any blisters, cracks or delamination from the concrete substrate happening to the existing membrane? Yes No Unsure
- Are there large areas of ponding water on the roof deck areas that may be limiting the life of the existing membrane? Yes No Unsure
- Does the membrane detailing work around any of the roof penetrations appear sound and watertight? Yes No Unsure
- Are the perimeter flashings intact and watertight? Yes No Unsure

If you answered 'yes' or 'unsure' to any of the above questions, consider whether you need to take advantage of our free 30 minute consultation to discuss strategies that will help you prepare for solar installations.

p 1800 550 037 **f** (07) 3868 4138
e enquiries@roofandbuildingservice.com.au
w roofandbuildingservice.com.au

R&BS
Water penetration solutions.