



August 24, 2017

Technical Bulletin TB-2017-05

Roof Mounted Photovoltaic Equipment

ARCA Warranty Ltd. is pleased to provide the following additions to the ARCA Roofing Application Standards Manual for projects that include roof mounted photovoltaic equipment. These changes will be in effect for jobs bid on or after **August 24, 2017**.

1. Enclosed roof sections that include photovoltaic equipment shall be independently drained and shall have positive drainage with a minimum slope of 1:50 (2%).
2. The photovoltaic equipment shall occupy no more than 50% of the roof area.
3. Only rack-mounted photovoltaic systems secured directly to the structural roof deck will be approved when installed in accordance with ARCA Roofing Application Standards.
4. Ballasted photovoltaic systems may impact the ARCA Warranty Certificate.
5. Accessibility to roofing components shall be incorporated into the photovoltaic equipment design.
 - a. A minimum clearance of 3000mm (10') shall be provided around the perimeter of the roof area.
 - b. A minimum clearance of 1200mm (4') shall be provided between rows of photovoltaic arrays.
 - c. A minimum clearance of 1200mm (4') shall be provided to access all roof penetrations. There shall be a minimum 1200mm (4') clearance on all sides of each roof penetration.
 - d. A minimum clearance of 300mm (12") shall be provided beneath the photovoltaic equipment to permit installation of the roofing system. Equipment supports shall be designed by a structural engineer and shall conform to the Alberta Building Code.
6. Warranty coverage of this section applies to commercial buildings for leak repairs on roof systems for five (5) or ten (10) year terms only. The cost to remove and replace the photovoltaic equipment to facilitate access to the roof membrane for investigation and repair of workmanship related leaks is not included and is the responsibility of the building owner.

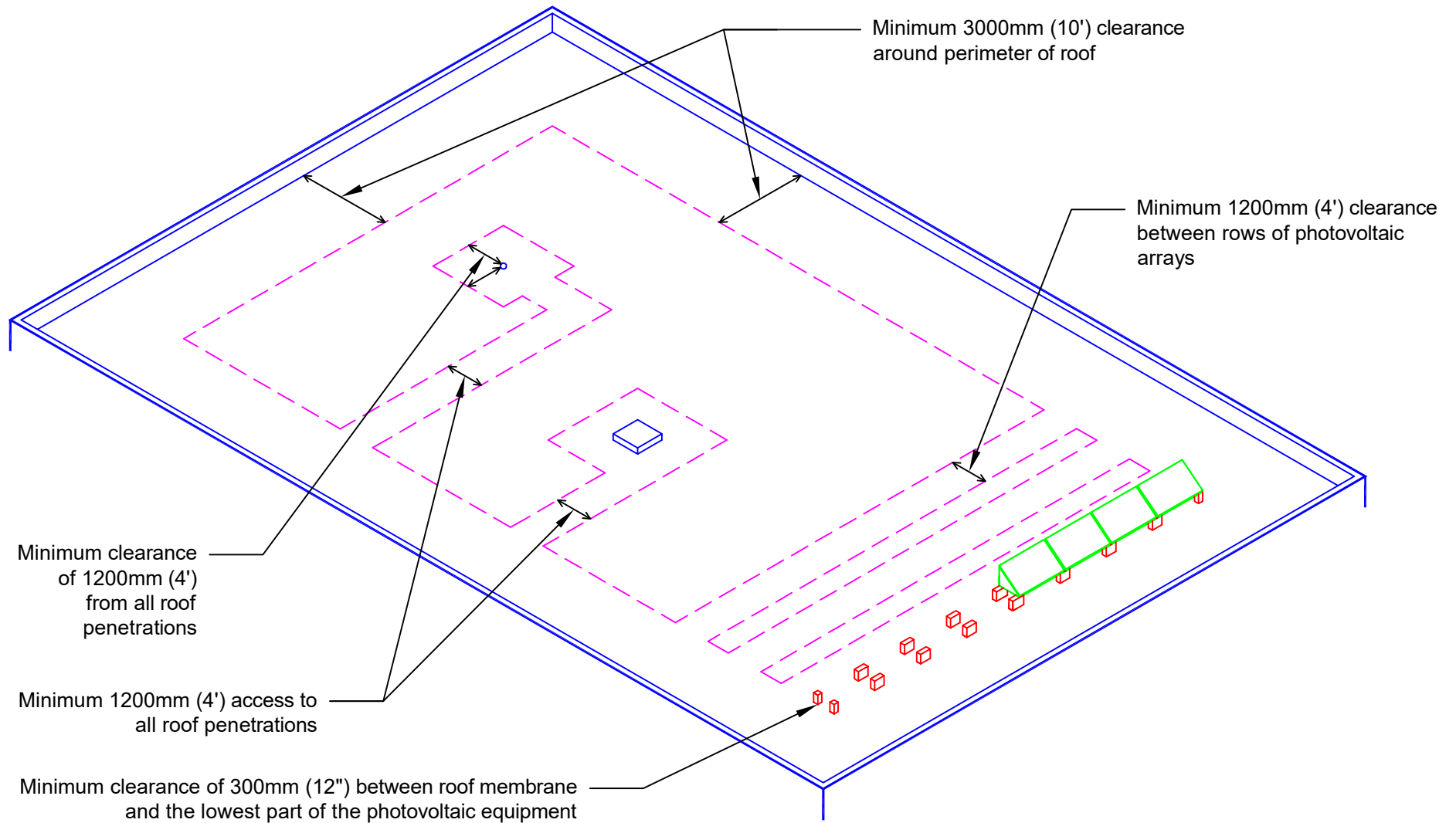
Definitions:

Ballasted photovoltaic system: A photovoltaic array that rests on the roof surface and is held in place with ballast consisting of large stone or concrete paver blocks.
(Not approved for an ARCA WC)

Photovoltaic array: An assembly of photovoltaic panels or modules, together with support structure and other components, to form a complete DC power-producing circuit.

Rack-mounted photovoltaic system: A photovoltaic array arranged on a rack that is supported on structural curbs, structural sleepers or structural pedestals attached to the structure or decking.
(Approved for an ARCA WC)

These changes will be referenced in the ARCA Roofing Application Standards Manual.



ARCA Roof Mounted Photovoltaic Equipment Minimum Roof Access Requirements