



Manitoba

Inspection and Technical Services

Photovoltaic Module and Preassembled Connectors

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This bulletin is to clarify the distinction between mechanical and electrical aspects of the installation of solar panel assemblies and the connection of MC4 connectors. The scope of electrical work as defined in the Electrician's Licencing Act does not specifically distinguish between mechanical and 'purely' electrical work that is conducted, and therefore all aspects technically fall within the scope of the definition of electrical work.

It is apparent that there is a requirement to involve an electrician for some, however not all aspects of the installation of the solar panel assemblies, and the job as a whole requires the oversight and accountability of an appropriately licenced electrician.

Inspection and Technical Services holds the following position in regards to photovoltaic (PV) modules:

1. The mounting of PV modules, ground mounted or mounted on the building and/or roof does not require the work to be performed by an electrician provided the solar panels are not energized.
2. Where the PV module is pre-assembled with factory installed connectors (plug and play), making connections to modules does not require the work to be performed by an electrician provided the solar panels are not energized.
3. Actions such as, but not limited to: Bonding and grounding of the equipment, mounting of electrical equipment (such as the Combiner, Inverter, etc.), connection of the panels to the electrical equipment, as well as connection to the utility is considered electrical work, and must be completed by an appropriately licenced electrician.

Understanding that solar panels systems are designed and stamped by a professional engineer, and that electrical work that is being performed is ultimately the responsibility of the electrician that holds the permit for installation.