

## NEW PRODUCT RELEASE

# **Solar Heavy Duty Conduit**

## Providing UV resistance and heavy duty mechanical protection

We have released a new range of Solar heavy duty uPVC Rigid Conduit, which meets the conduit requirements of 'Installation and safety requirements for photovoltaic (PV) arrays' standard AS/NZS 5033: 2014 and meets the manufacturing standard AS/NZS 2053.

# **Features and benefits of Marley Solar Conduit:**

- Meets the installation and safety requirements for photovoltaic (PV) arrays' standard AS/NZS 5033: 2014.
- UV resistant as per the standard AS/NZS 5033 requires.
- Rated 'Heavy Duty' as per the standard AS/NZS 5033 requires and meets AS/NZS 2053.
- Is marked with the letter 'T'. As per AS/NZS 2053.1 the standard requires that conduits suitable for use in direct sunlight be marked with the letter 'T'.
- Higher impact and compression resistance than medium duty conduit.
- Greater wall thickness than medium duty conduit.
- Compatible with a full range of Marley heavy duty fittings.
- Full range of sizes available (20, 25, 32, 50mm in 4m lengths).
- Best Environmental Practiced Certified.
- 100% recyclable and proudly New Zealand made.

# **Key Points:**

Relating to the relevance of conduit in standard AS/NZS 5033, it states that for an PV Array (Solar Panel System) installation:

- Cables shall not lay on roofs or floors without an enclosure or conduit.
- All conduit and ducting exposed to sunlight shall be of a UV resistant type
- Where PV d.c. cables are installed within a ceiling space, in wall cavities or under a floor, they shall...be enclosed in metal or heavy duty insulating wiring enclosure
- When conduit or other wiring enclosure is used, the wiring enclosure shall be labeled 'SOLAR' on the exterior surface at an interval not exceeding 2 m.

# AS/NZS 5033:2014 Standard information relating to conduit:

## 4.3.6.2 Type

Cables used within the PV array shall (must) —

- (a) have a temperature rating according to the application;
- (b) if exposed to the environment, be UV-resistant, or be protected from UV light by appropriate protection, or be installed in UV-resistant conduit (refer to IEC 61386-1); and

All conduit and ducting exposed to sunlight shall be of a UV resistant type (refer to IEC 61386-1).

#### 4.3.6.3 Installation method

4.3.6.3.1 General

Cables shall be supported so they do not suffer fatigue due to wind/snow affects.

AS/NZS 3000 specifies that cables be routed, supported and protected.

Cables shall not lay on roofs or floors without an enclosure or conduit.

Cable enclosures and conduits on roofs or floors shall not obstruct the natural water drain paths or promote accumulation of debris.

Particular attention shall be given to mechanical protection requirements specified in AS/NZS 3000 to maintain the integrity of the cable insulation and conductors.

## 4.3.6.3.2 PV d.c. cables within buildings

Where PV d.c. cables are installed within a ceiling space, in wall cavities or under a floor, they shall be installed in such a manner as to reduce the risk of short circuit to a minimum, and be enclosed in metal or heavy duty insulating wiring enclosure to IEC 61386-1 or other equivalent AS/NZS Standards.

### 5.3 LABELLING/SIGNS FOR PV CABLES AND ENCLOSURES

### 5.3.1 Wiring identification

Permanent indelible identification shall be provided for PV array cabling installed in or on buildings. PV array (and sub-array) cabling shall be identified by one of the following methods:

- (a) Using distinctively marked PV cables which are permanently, legibly and indelibly marked in English.
- (b) Where cabling is not distinctively marked, distinctive coloured labels marked with the word 'SOLAR' shall be attached at an interval not exceeding 2 m.

When conduit or other wiring enclosure is used, the wiring enclosure shall be labeled 'SOLAR' on the exterior surface at an interval not exceeding 2 m. If fixed to a surface, the identification shall be visible after mounting.

# Packaging:





## **Print:**

HD SOLAR T HD SOLAR T HD SOLAR T MARLEY 20mm uPVC ELECTRICAL HD SOLAR T CONDUIT -15/60 AS/NZS 2053 LIC 2297 Y/M/D Time 01.20G.HDSOLAR 9414661248236 - MADE IN NZ - 100% RECYCLABLE - BEP CERTIFIED HD SOLAR T HD SOLAR T HD SOLAR T



## Label:

