Solar Panel Bracket Bonding with LORD® 810/20GB Acrylic Adhesive

Application Guide – India/SEA only

Preparation:

1. Place bracket to be bonded on metal roof, and mark area where bracket will be attached (see Figure 1).
2. Grind the application area marked on the roof using a hand scrubber, grinder or sander (see Figure 2).
3. Clean application area with dry rag wipe or solvent wipe (IPA).
4. Remove any caps and plugs from the adhesive cartridge, and insert the cartridge into the dispensing gun.
5. Dispense a small amount of material to level the plungers and remove any air from the cartridge (see Figure 3).

Note: Process of leveling plungers must performed on each new cartridge used.

6. Attach static mix tip to cartridge. Dispense enough adhesive on scrap material to ensure proper mix ratio and removal of air (see Figure 4). Uniform grey color indicates adhesive is correctly mixed.

Note: Procedure must be repeated whenever new mix tip is attached to cartridge.

Application:

1. Apply adhesive to one substrate, either bracket or grinded area (see Figure 5).
2. Place bracket on application area of roof (see Figure 6). Apply pressure to squeeze out excess adhesive. Keep excess adhesive in place in order to seal corners of bracket.

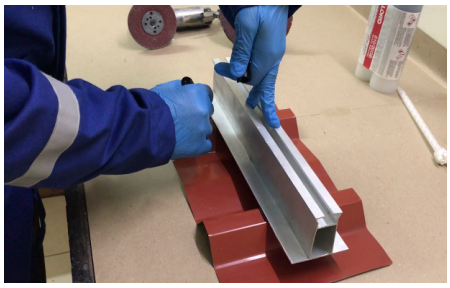

Figure 1. Mark application (bondline) area on metal roof using marker

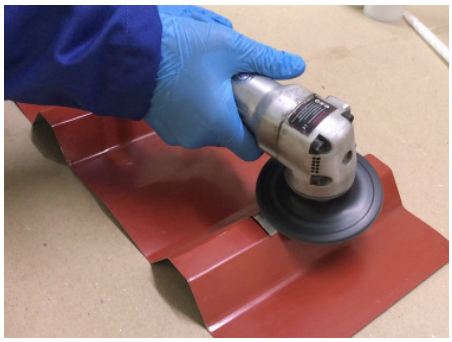

Figure 2. Grind application area only

Figure 3. Dispense material to level plungers

Figure 4. Attach mix tip and dispense material to ensure proper mix ratio

Figure 5. Apply adhesive to grinded area

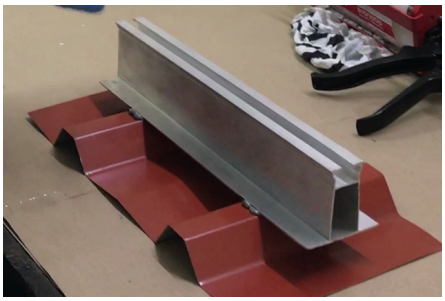

Figure 6. Place bracket on roof

3. Handling strength of LORD 810/20GB adhesive develops within 10-15 minutes at ambient temperature [86-95°F (30-35°C)].
4. Solar panels can be installed one hour after bonding. Initial cure (60-70% cure strength) is achieved after one hour.
5. Full cure is achieved in 24 hours at room temperature. Full cure properties include UV resistance, temperature resistance, water resistance and other chemical properties.

Useful Video Links:

The video links listed can be found on the Parker LORD YouTube channel.

- How to Bond Solar Panel Brackets to a Metal Roof
- LORD-Pak 50 ml Cartridge Manual Dispensing Gun: Instructional Video

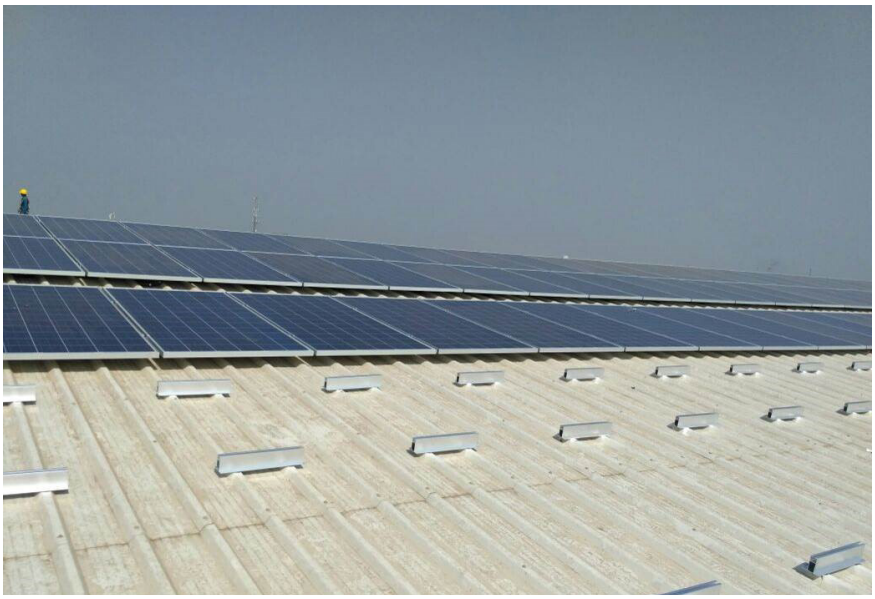

Figure 7. Actual site photograph

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