



## A. GREENGRID MODULE FASTENING

Fastening GreenGrid modules may be recommended under certain conditions. The determination to fasten modules may be based on several factors including building location, height, and geometry; presence or absence of parapets and rooftop equipment; prevailing wind direction; or design wind speed areas. Module fastening may be recommended over the entire green roof area or in specific zones where wind uplift conditions may be more extreme (e.g., corners, edges, exposed areas, etc.).

The determination whether to fasten modules shall be made by project licensed design professional using current wind engineering practices and design guidance such as ***ANSI/SPRI RP-14 "Wind Design Standard for Vegetative Roof Systems"***.

If it is determined by the design professional that module interlocking is warranted, the following materials and procedures are recommended. Only one fastening method

- a. GreenGrid® modules may be fastened together using heavy duty cable ties method.

- i. Cable ties (e.g., Zip-Ties) shall consist at a minimum of black, UV stabilized nylon, measuring 5/16" wide by 7.5" long, and have a break- strength of 120 lbs., or greater. Self-locking stainless steel cable ties of similar length and break-strength are also recommended and should be considered for demanding climate conditions.

- b. Fastening Method

- i. Modules shall be fastened at a minimum of 2 positions on each side of the module (2'x2' module dimension).
  - ii. Module shall be drilled using a 3/8" drill bit approximately 1/2 and 3/4 inch below the module top edge.

To ensure proper hole alignment between modules, this will require that modules are installed in their final location and fit tightly against each other and properly aligned using the module alignment notches.

Gently scrape or push away growth media and vegetation from the area to be drilled and fastened. Just enough to allow access for the drill and drill bit.

- iii. Install nylon or stainless steel cable ties threaded through both modules and pull tight to lock.
    - iv. Excess cable tie ends shall be removed using snips.



c. GreenGrid® modules may be fastened together using mounting fastener clips method.

- i. Mounting fastener clips shall consist at a minimum of black anti-corrosive stainless-steel with inward facing connector hooks, measuring approximately 1/2" wide by 5/8" or longer.

d. Fastening Method

- i. Modules shall be fastened at a minimum of 2 positions on each side of the module for both options (2'x2' module dimension).
- ii. To ensure proper hole and/or clip alignment between modules, this will require that modules are installed in their final location and fit tightly against each other and properly aligned using the module alignment notches.

Gently scrape or push away growth media and vegetation from the modules walls where the clips will be mounted.

- iii. Install the mounting fastener clips by pushing the clips opening down the walls of both modules and use a hammer to push the clip down as far as possible for a secure fit.

