

Canopy Management in the Ætrium System



SOP4

Providing Support to Indoor Cannabis

Naturally, terrestrial plants anchor into soil for structural support. In the aeroponic environment of the Ætrium System, structural support is provided in two different ways: trellising, and through the use of net pots.

If trained properly, the plants will be supported by their foam collar until they grow into the trellising. At this point, the plants are supported by the trellis **(fig. 1)**.

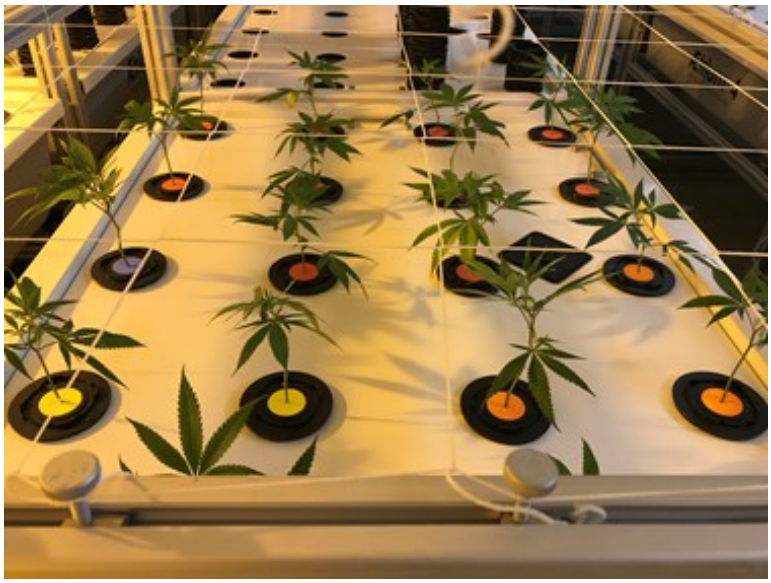


Fig. 1: Physical support from trellis.

If the plants become too heavy before they reach the trellis due to extensive pruning, or too tall of trellis height, the net pot **(fig. 2)** can provide some lateral structural support to the plant before it reaches the trellis.

By utilizing a combination of support methods, your plants will be held up throughout their lifecycle.

Providing structural support can result in increased yields by creating a uniform canopy and minimizing physical damage. A uniform canopy will allow for an even distribution of light and allow for greater light intensity to reach the entire canopy under one lamp.



Fig. 2: Physical support

The height of the Trellis Supports is determined by the grower's preference, and based on the plants to be grown in the system:

- Depending upon the strain, plants may double or triple in size during flowering
- Adjust trellis bars accordingly

Installing the Trellis Supports

The optional Trellis Supports are shipped bundled in plastic wrap. Trellis Support upright bars are included with the Trellis Supports unless they are ordered with the optional Light Gantry **(fig. 3).**

1. Measure and mark all of the upright bars with the desired height of the bottom of the Trellis Supports.
2. Use the 13mm wrench to loosen the nuts on the all of the T-bolts in the 90-degree brackets.
3. Use a T-bolt to attach a 90-degree bracket **(fig. 4)** to each upright bar so that the top of the bracket lines up with the mark.
4. Using the 13mm wrench, tighten the T-bolt.

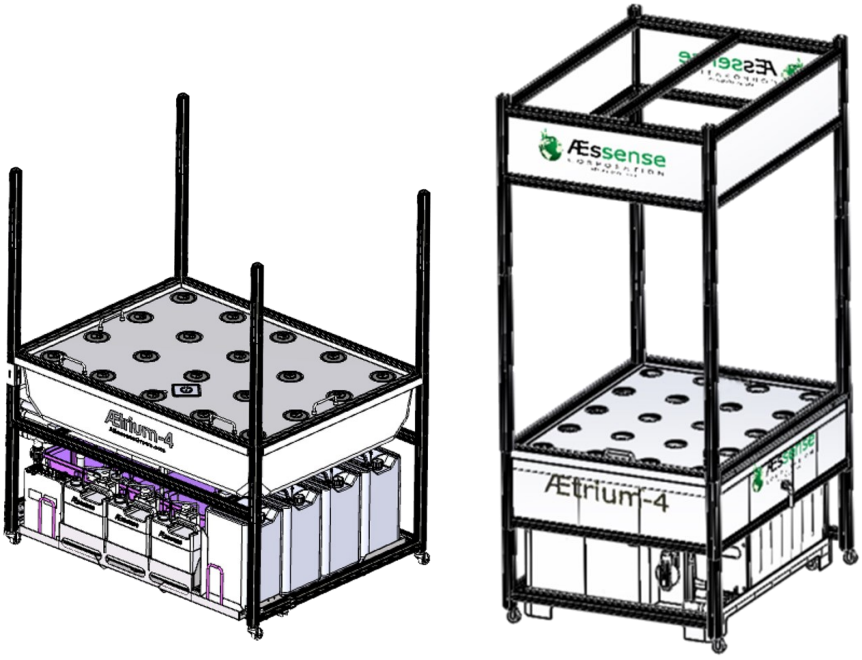


Fig. 3: Ætrium-4 with trellis support upright bars (l) and optional Light Gantry (r).

Note: Install all eight of the 90-degree brackets before installing the crossbars.

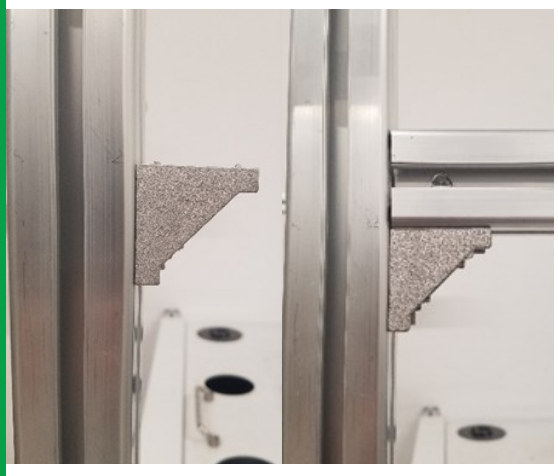


Fig. 4: 90° bracket (l), and Trelllis Support crossbar (r).

5. Align the Trellis Support crossbars to the top of the 90-degree brackets **(fig. 4)** with the thumb screws pointing up.
6. Use T-bolts to secure the crossbar ends of the crossbars to the 90-degree brackets.
7. Repeat these steps for all of the crossbars **(fig. 5)**.



Fig. 5: Complete trellis support on Ætrium-4.

Once trellis support bars are in place, the trellis can be strung to provide structural support and allow for canopy management to the plants.

1. Set screw 4" from the edge of the 8020 trellis support bar **(fig. 6)**. T-Bolts or the provided trellis thumbscrews can be used to anchor the trellis.

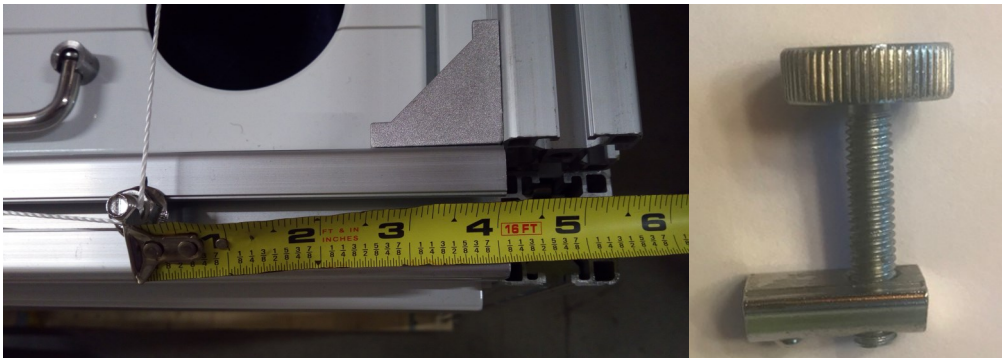


Fig. 6: First T-bolt to establish anchoring for trellis (l), provided thumbscrew (r)

2. Space additional screws at 4" spacing across the top of the trellis support bars **(fig. 7).**

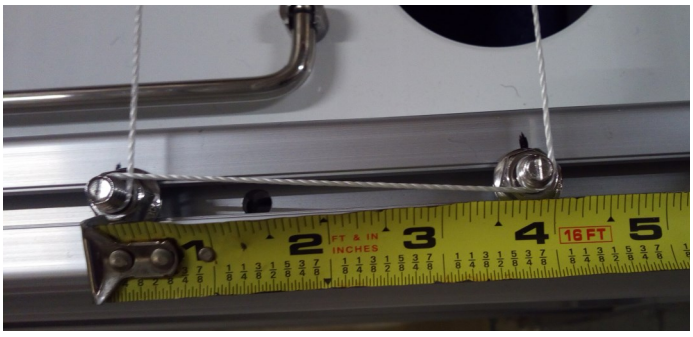


Fig. 7 T-bolts along trellis support bars to anchor trellis

3. If using spooled nylon string as a trellis, knot the string from the first placed screw and stretch the string to the opposite trellis bar. If using a pre-woven poly or nylon trellis roll **(fig. 8)**, roll out across the tubs and lock in place using the screws on the trellis bars.

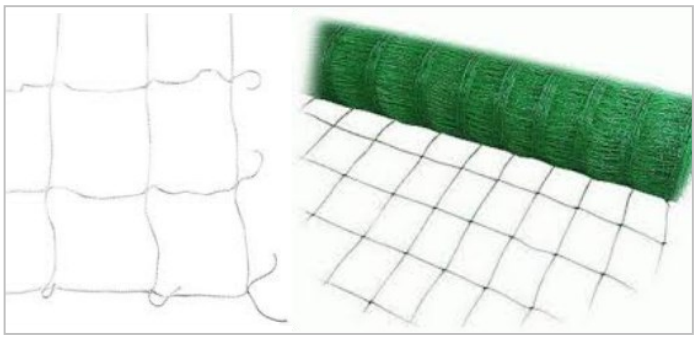


Fig. 8 Pre-woven nylon (l) and poly (r) trellis rolls

4. Wrap the string around the bolt/thumbscrew and connect to adjacent bolt on the trellis bar by wrapping around it before stretching across the tray back to the trellis bar on the opposite side. Repeat these steps to weave the trellis across parallel trellis bars creating the woven trellis **(fig. 9).**

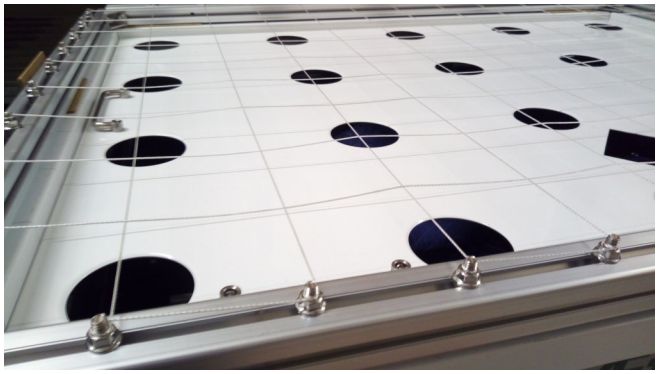


Fig. 9: Complete woven nylon trellis on trellis support bars

4. Plants can be supported and trained using the trellis based upon the grower's preferences **(fig. 10).**



Fig. 10: Trellis providing structural support to plant canopy.



Fig. 11: Second trellis support bar to accommodate tall plants.

5. If needed, a second trellis bar **(fig. 11)** can be added to provide additional support excessive canopy growth.

A 1281 Reamwood Ave.
Sunnyvale, CA 94089

P 1.800.369.8673

O 1.650.564.3058

E info@aessensegrows.com