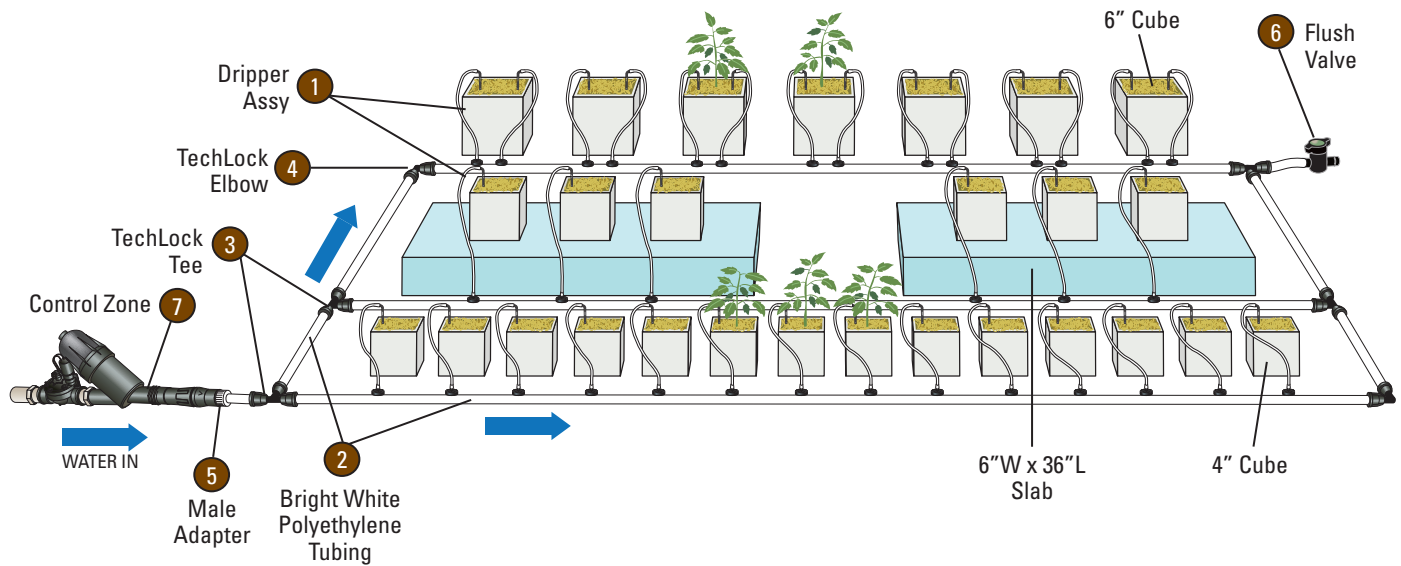


# GREENHOUSE CULTIVATION

## PRECISION ROCKWOOL APPLICATIONS



### ORDERING INFORMATION

| KEY | MODEL NUMBER    | DESCRIPTION   | QUANTITY NEEDED   |
|-----|-----------------|---|---|
| 1   | 01WPCJL1.2AW-30 | 1200 ML/HR DRIPPER STAKE ASSEMBLY, 25 PER BUNDLE  | 1 PER 4" AND SMALLER CUBES<br>2 PER 6" AND LARGER CUBES<br>3 PER 39" LONG SLAB                              |
| 2   | 14BW056066-05   | 17MM BRIGHT WHITE UV POLYETHYLENE TUBING, 500' ROLL   | EITHER 1 RUN PER ROW OF PLANTS OR<br>1 RUN DOWN THE CENTER OF EVERY 2<br>ROWS OF PLANTS DOWN THE TABLE/TRAY |
| 3   | TLCKTEE         | 17MM TECHLOCK TEE (25 PER BAG)  | AS NEEDED   |
| 4   | TLCKELL         | 17MM TECHLOCK ELBOW (25 PER BAG)  | AS NEEDED   |
| 5   | TLCK075MA       | 3/4" MPT X 17MM TECHLOCK MALE ADAPTER (25 PER BAG)  | AS NEEDED   |
| 6   | 58ISV600        | 17MM BARBED LINE FLUSH VALVE (25 PER BAG)   | 1 AT THE END OF EVERY PE LINE OR AT<br>THE END OF A TABLE MANIFOLDED<br>TOGETHER AS SHOW IN DIAGRAM ABOVE   |
| 7   | LVCZS8010075-LF | CONTROL ZONE: ZONE VALVE, FILTER, PRESSURE<br>REGULATOR PRE-ASSEMBLED, 1 PER ZONE UP TO 4.4 GPM | 1 CAN BE USED FOR UP TO 800 OF<br>THE 1200 ML/HR DRIPPERS   |

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### RUNTIMES

| GORDAN PRODUCT  | SUBSTRATE VOLUME (L) | RECOMMENDED IRRIGATION VOLUME (ML) | NUMBER OF DRIPPERS PER CUBE/SLAB | RUNTIME TO ACHIEVE RECOMMENDED IRRIGATION VOLUME |
|-----------------|----------------------|------------------------------------|----------------------------------|--|
| MM50            | 0.10                 | 3.00                               | 1                                | 9 SECONDS  |
| SMALL 3" (D4)   | 0.37                 | 10.97                              | 1                                | 33 SECONDS                                       |
| LARGE 3" (D5.6) | 0.56                 | 16.88                              | 1                                | 50 SECONDS                                       |
| SMALL 4" (D6.5) | 0.65                 | 19.50                              | 1                                | 1 MINUTE   |
| MEDIUM 4" (D8)  | 0.80                 | 24.00                              | 1                                | 1 MIN 12 SEC                                     |
| LARGE 4" (D10)  | 1.00                 | 30.00                              | 1                                | 1 MIN 30 SEC                                     |
| JUMBO           | 2.36                 | 70.80                              | 2                                | 1 MIN 47 SEC                                     |
| HUGO            | 3.38                 | 101.25                             | 2                                | 2 MIN 32 SEC                                     |
| MAMA            | 8.00                 | 240.00                             | 2                                | 6 MINUTES  |
| UNI-SLAB        | 4.80                 | 144.00                             | 3                                | 2 MIN 24 SEC                                     |
| GRO-SLAB 6"     | 10.13                | 303.75                             | 3                                | 5 MINUTES  |
| GRO-SLAB 6" FAT | 13.50                | 405.00                             | 3                                | 6 MIN 45 SEC                                     |
| GRO-SLAB 8"     | 13.50                | 405.00                             | 5                                | 4 MINUTES  |
| GRO-SLAB 12"    | 20.25                | 607.50                             | 5                                | 6 MINUTES  |

If you do not have the ability to set run times in seconds, simply run up to the next whole minute. The flow rates of these drippers are low enough where the additional drainage will not have any noticeable effect, but having too little drainage may.

### Best Practices

The above shot volumes and run times are aimed at vegetative growth. When going from the vegetative stage to the generative stage, you may need to double the shot volume and double the time in between shots. This results in a slightly lower water content (WVC) and higher EC in the substrate, which steers the plants in a generative direction. It is unknown how strong the effect is, but maintaining a root zone close to saturation with lower EC generally steers plants towards vegetative growth, so we want to do the best we can to steer towards reproductive growth when it is desired.

Always maintain the same volume applied per irrigation "shot" (say either 101.25 mL for veg or 202.50 mL for flower in a 6" cube) and add additional irrigation events to achieve the desired runoff % and EC content of the rockwool substrate. For the first week or two, you may only need to water once a day. However, it is perfectly normal to reach a point where your plants will need to be irrigated with these small shots upwards of 20 times per day, especially for outdoor and intense light greenhouse applications or very large plants in small cubes.

Begin with the first shot roughly 1-3 hours after sun-up (or lights-on) and stop irrigation events 1-3 hours before sun-down (or lights-off) to allow a bit of dry-back overnight and to prevent root rot (1 hour for vegetative stage, up to 3 hours for generative stage). The purpose of this 'multi-pulse' method is to maintain the root zone at the ideal balance of water content, oxygen and available nutrients at all times, preventing the plants from becoming stressed due to low water content, deoxygenation, or unbalanced nutrition/salt buildup in the root zone.