## **Installation Instructions for Greenway Trellis (item #8705)**

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#### Parts List:

- (A) 1 qty, top tube (1-1/2"OD x 43" long x 8" high)
- (B) 1 qty, left side tube (1-1/2"OD x 76" long)
- (C) 1 qty, right side tube (1-1/2"OD x 76" long)
- (D) 1 qty, bottom tube (1-1/2"OD x 40" long)
- (E) 2 qty, splice sleeves (1-1/4"OD x 4")
- (F) 2 qty, splice sleeves (1-1/4"OD x 1")
- (G) 10 qty, screw (#8 x 3/4") (you'll need 6, so there are 4 extra to use or lose)
- (H) 4 qty, screw (#10 x 1-1/2")
- (I) 4 qty, cables with threaded terminal fitting on one end & button head fitting on other (1/8" diam. x 60" long)
- (J) 4 qty, nylon flat washers (1/4"ID x 7/16" OD)
- (K) 4 qty, nylon flat washers (1/4"ID x 3/4" OD)
- (L) 4 qty, Snug-Grip® washer nuts (1/4-20RH)
- (N) 4 qty, black plastic caps (3/4" OD)
- (O) 4 qty, rods (1/8" diameter x 38" long)
- (P) 16 qty, cross-clamps with set screws

#### **Tools Needed:**

Safety glasses

Pencil

Measuring tape

Hammer

Electric drill

9/64" drill bit

#2 square drive bit (included in kit)

7/16 socket wrench or other

Vise-Grip® type pliers

Hacksaw or electric grinder with cut-off disk

Sharpie felt pen

3/16" hex key wrench (included in kit)

Shovel or posthole digger

Level

Concrete or compacting gravel (3/8" to dust)

### Please refer to the *Installation Details* diagrams during installation.

#### **Building The Frame:**

- 1. Find a smooth, flat area to layout all of the components and build your frame. Be sure to protect the tubes from scratches during frame construction by laying down blankets, rags, or packing wrappers.
- 2. Insert a splice sleeve (E) 2 inches into the top end of both the left side tube (B) and the right side tube (C). If the splice sleeve is too tight to insert by hand, gently tap with a hammer. The top end of the side tubes can be identified by the small pilot hole on the side. Be sure that the slot in the splice sleeve is not positioned over the pilot hole.
- 3. Lock the splice sleeves (E) in position by driving a #8 screw (G) through the pilot hole in the side tubes (B) & (C) and into the splice sleeve. Use an electric drill and #2 square drive bit to attach the screws. If you have difficulty driving the screws, use a 9/64" bit to drill a pilot hole through the sleeve.
- 4. Attach a splice sleeve (F) to the side of each side tube (B) & (C) using two #10 screws (H). The screws will run through the chase holes in the splice sleeves and into the pilot holes in the side tubes. Use an electric drill and #2 square drive bit to attach the screws.
- 5. On your flat surface, lay the side tubes (B) & (C) parallel to one another and about 4 feet apart with the splice sleeves (F) facing one another and the pilot holes facing upward.
- 6. Carefully slide the ends of the bottom tube (D) over each splice sleeve (F). Be sure that the small pilot holes in the bottom tube are not lined-up over the slot in the splice sleeves.
- 7. Secure the bottom tube (D) in position with a #8 screw (G) inserted through the pilot hole and into each of the splice sleeves (F). If you have difficulty driving the screws, use a 9/64" bit to drill a pilot hole through the sleeves.

- 8. Carefully slide the ends of the top tube (A) over each of the splice sleeves (E) in the top of the side tubes (B) & (C).
- 9. Secure the top tube (A) in position with a #8 screw (G) inserted through the pilot holes and into each of the splice sleeves (E). If you have difficulty driving the screws, use a 9/64" bit to drill a pilot hole through the sleeves. Your frame is now ready for cables.

#### Stringing the Cables:

- 10. For each cable (I), lace the threaded terminal fitting through a 7/16" OD nylon flat washer (J), then down through the hole in the top tube (A) and continue on down through the hole in the bottom tube (D). The tip of the threads on the threaded terminal will just barely protrude beyond the bottom of the bottom tube.
- 11. For each cable (I), slide a 3/4" OD nylon flat washer (K) over the exposed threads on the threaded terminal fitting and then attach a Snug-Grip® washer nut (L) and gently spin by hand until the threads engage and you start to feel resistance.
- 12. Tighten the cables (I) a bit more by turning the Snug-Grip® washer nut (L) with a 7/16" wrench. IMPORTANT NOTE: When initially tightening the Snug-Grip® washer nuts, you will encounter resistance as the special Snug Grip® threads engage; hold the hexagonal shaft of the threaded terminal with Vise-Grip® pliers to keep it from spinning. Only use hand tools to tighten the washer nuts in order to avoid overheating the nuts and possibly causing the threads to seize. Do not over-tension the cables; they should simply hang straight and flex easily.
- 13. If necessary, trim any excess exposed threads with a hacksaw or electric grinder with cut-off disk, and then Snap black plastic caps (N) over the raised lip of the Snug-Grip® washer nuts (L) to cover.

#### Hanging the Rods:

- 14. With a measuring tape and felt pen, mark each cable (I) at the points where you'd like to attach the rods (O). Equal vertical spacing between rods is recommended.
- 15. Slide four cross-clamp fittings (P) onto each rod (O) and then loosely attach the rods to each cable (I) at the marked locations by gently tightening the cross-clamp (P) setscrews using a 3/16" hex key wrench. *IMPORTANT NOTE: do not force the setscrews into the cross-clamps as this might damage the threads; if you encounter any resistance, simply back off the setscrew slightly to re-align the threads and then try again. The when properly aligned, the setscrews will smoothly and easily spin into the cross-clamp.*
- 16. Make any final adjustment to the rod (O) positions, and then securely tighten the setscrews on all cross-clamp fittings (P).

#### **Erecting the Trellis Panel (Legs cast in gravel or concrete):**

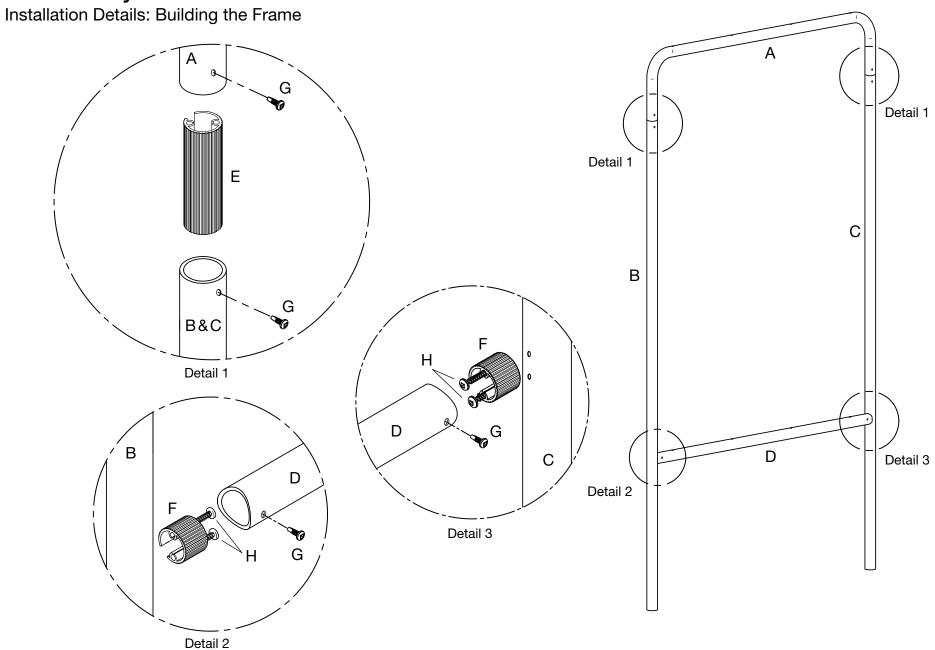
Note: the Greenway trellis can also be surface mounted using the optional Base Plate Kit (complete kits with instructions are sold separately; please call for details 1-800-888-2418 or 1-510-893-9473).

- 17. Dig two 6-inch minimum diameter holes 41-1/2" on center to a depth of 2-feet.
- 18. Fill each hole to within 1-foot of the top with either compacting gravel (3/8" to dust) or concrete. If using gravel, compact it as much as possible by tamping with the end of hefty piece of wood such as a long 2"x 4" or 4"x 4". If using concrete, tamp it lightly to settle and even out the load.
- 19. Set the legs of the trellis panel into the holes so that a minimum of 1-foot of each leg is below grade.
- 20. Level and plumb the trellis panel and then fill the holes to the brim with your gravel or concrete. Compact the gravel or tamp the concrete as described in step 18. Be sure to frequently check that your trellis is level and plumb. If using concrete, support the trellis until the concrete sufficiently thickens.
- 21. Step back and admire your work.

Questions? 1-800-888-2418 or 1-510-893-9473

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# **Greenway Trellis**



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Installation Details: Attaching the Cables & Rods

