

## INSTALLATION INSTRUCTIONS FOR GROZONE FLAT SHADE 24x24

### PREPARATION

- Clear desired area to erect the structure
- Familiarize yourself with all the components of the structure and do an inventory of all the parts received. An inventory list is provided at the end of these instructions.

### Helpful Notes

- Start from the top and work down.
- Put some lubrication (3-n-1 Oil or Vaseline) on all the swaged ends of all 3-ways, 4-ways and 5-way fittings. This will help with putting the structure together and taking it down.
- In case you do not receive the correct quantities and/or damaged components, please call 800/323-3641 (Texas) or 800/231-7275 (U.S.).
- Do not inventory parts on top of the fabric panels, this could puncture the fabric panels.
- All post and columns have two small holes drilled in them, one approximately 2½" from each end. Do not count these holes if instructions call for pole to have holes drilled in them.
- When attaching all of the columns, posts or rafters onto any of the 3-way, 4-way or 5-way fittings make sure they completely cover the swage.

### INSTALLATION PROCEDURES

#### I. TOP

1. Starting with one 11'6-1/4" rafter post and one 3-way eave fitting. Slip one end of the rafter post on onto the *swaged end* of one 3-way eave fitting.

*Note: All holes on the columns, and posts should face the inside of the structure so they will not rip, tear, or fray the fabric.*

*Note: Make sure the black caps on the fittings are directed upwards.*

2. With the other end of the 11'6-1/4" rafter post, slip it onto one of the swaged fittings on a 4-way eave fitting.
3. Get another rafter post and put it into the other end of the 4-way eave fitting.
4. Continue this process rotating 4-way eave fittings and rafter posts until you get to the required length of the structure. After last ridge post is attached to the last 4-way eave fitting, attach the other 3-way eave fitting.

*Note: All structures have four 3-way eave fittings.*

*12 x 24 Flat Shade should have (2) 4-ways, (7) 11'6-1/4" eave posts to complete the top.*  
*24 x 24 Flat Shade should have (4) 4-ways (12) 11'6-1/4" eave posts and (1) 5-ways*  
*24 x 36 Flat Shade should have (6) 4-ways, (17) 11'6-1/4" eave posts and (2) 5-ways*  
*36 x 36 Flat Shade should have (8) 4-ways, (24) 11'6-1/4" eave posts and (4) 5-ways*

5. Start at the first 3-way eave fitting that you attached and slip one 11'6-1/4" rafter post onto the other side of a 3-way eave fitting.

*Note: You should now have one 90-degree angle started to the top of the structure.*

6. Slip two fence clamps on this 11'6-1/4" rafter post.
7. On the other end of this 11'6-1/4" rafter post, attach another 3-way eave fitting.
8. Continue this process down the entire length of the structure making sure to slip two fence clamps on each 11'6-1/4" rafter post.
9. On the other end of the 11'6-1/4" rafter posts you just attached, attach their respective 3-way eave fitting and 4-way eave fittings.

*Note: Again make sure that all holes are facing towards the inside of the structure.*

10. At this time, secure all connections at fittings with Tek screws.

*Note: You may want to drill a pilot hole in all the 3-way, 4-way and 5-way fittings before you attach the Tek screws.*

## II. COVER

1. The cover is to be stretched over the top of the structure.
2. Start at one side and begin attaching the top with the bungee balls provided.

*Note: When attaching bungee balls, start at the center of one end and work towards the sides. Do both ends then work towards the middle. All four corners require two bungee balls (one toward the end and one toward the sides).*

## III. SIDE COLUMNS

1. Lay out the 7'10" columns, one next to each 3-way eave fittings and 4-way eave fittings that is touching the ground around the outside of the structure.
2. Lift up an entire side of the structure.
3. At this time, insert the 7'10" columns onto the swaged fittings and make sure they completely cover the entire swage.
4. Once this is complete, do the same thing to the other side.
5. Secure all connections at fittings with Tek screws.

*Note: You may want to drill a pilot hole in all the 3-way, 4-way, 5-way fittings, and before you attach the Tek screws.*

6. Lift up each column and slip one fence clamp around the column.
7. Take the support braces and attach them to the fence clamps using the nuts, bolts, and washers provided with the fence clamp packages.

*Note: The support braces are approximately 2½ feet long and should be attached at every set of support columns.*

*Note: IF YOU ORDERED A 12 X 24 FLAT SHADE STRUCTURE, PROCEED TO THE BASE PLATE SECTION.*

#### IV. CENTER COLUMNS

*Note: You will not have center columns if you ordered a 12 x 24 Flat Shade structure.*

1. Take the remaining the 7'10" posts or center columns and put them inside the structure under each 4-way eave and 5-way eave fittings.
2. Insert one 7'10" center column onto the downward facing swage fitting of a 5-way eave fitting and completely cover the swage.

*Note: Start at the ends and work inward.*

#### V. BASE PLATES

*Note: Before inserting the base plates into the columns, slip one fence clamp onto every column.*

1. Take the side base plates and place one next to each 7'10" column.
2. Lift up one 7'10" column at a time and slip the pole on the base plate into the 7'10" column.
3. Do this for all the 7'10" columns.
4. Take the center base plates and place one next to each 7'10" column.
5. Lift up one 7'10" column at a time and slip the pole on the base plate into the 7'10" column.
6. Do this for all the 7'10" columns.

*Note: IF YOU WANT TO SECURE YOUR BASE PLATES TO THE GROUND, THIS IS THE TIME TO DO THAT.*

7. Secure all the base plates to their respective column using Tek screws.

*Note: You may want to drill a pilot hole in all the base plates before you attach the Tek screws.*

*Note: Your Gro-Zone Flat Shade should now be complete.*

## Inventory Check List

| <b>Part Numbers</b> | <b>Part Name</b>             | <b>24x24</b> |
|---------------------|------------------------------|--------------|
| 10221               | Tek Screw ¼"x1" lg           | 54           |
| 42402-REV           | Universal Base Plate         | 9            |
| 42242               | Bungie Straps, Black         | 160          |
| 424BK               | Bracing Kit                  | 5            |
| Cover               | 11'6" x 11'6" finsh dim.     | 4            |
| 42407               | Pipe 11'6-1/4" (Rafter,eave) | 12           |
| 42406               | 7'10" lg. Column             | 9            |
| 42410               | 5-way Center Peak, Fitting   | 1            |
| 42409               | 4-way Eave, Fitting          | 4            |
| 42408               | 3-way Eave, Fitting          | 4            |