



**Cast Stone Arbor** 

# **Installation Instructions**

### Single Beam Structure

&

### **Double Beam Structure**

45-KITLO1L	45-KITLOOL
45-KITGO1S	45-KITGOOS
45-KITBO1S	45-KITBOOS
45-KITGO1F	45-KITGOOF
45-KITL01D	45-KITLOOD





#### Installation Kit Contents: SINGLE BEAM

ITEM	DESCRIPTION	Qty	TYPE	PICTURE
1	Beam Plate	2		• • • •
2	Post Plate	2		. : .
3	#12 x 1-1/2" Phillips Flat Head (Post Plate to Post)	4	Phillips Flat Head	
4	#8 x 3/4" Flat Head Sheet Metal Screw (Beam Plate to Beam)	4	Flat Head Sheet Metal	
5	#8 x 1-1/2" Flat Head Wood Screw (Stone Base to Post 12 req'd) (Extension Column to Post 8 req'd)	20	Phillips Flat Head	
6	1/4-20 x 1/2" Phillips Pan Head (Beam Plate to Post Plate)	4	Phillips Pan Head	
7	Exterior construction grade adhesive	1	Clear	

#### Installation Kit Contents: DOUBLE BEAM

ITEM	DESCRIPTION	Qty	TYPE	PICTURE
1	Beam Wing Bracket	2		$\mathbf{V}$
2	Post Plate	2		
3	#12 x 1-1/2" Phillips Pan Head (Beam Bracket to Post Plate to Post)	4	Phillips Pan Head	
4	#8 x 1-1/2" Flat Head Wood Screw (Stone Base to Post 12 req'd) (Extension Column to Post 8 req'd)	20	Phillips Flat Head	
5	Exterior construction grade adhesive	2	Clear	
6	#14 x 1/4 Self Drilling Hex Head Screw	8	Hex Head	



#### **Materials Required:**

- 1. Two 4" x 4" wood support posts 10' long (minimum)
- 2. Exterior construction grade clear silicone sealant
- 3. 80 lb. ready mix cement (est. 2 bags per post)
- 4. (24) #10 x 2" Long common nails
- 5. Two 12" diameter Sonatubes for concrete Optional
- 6. Two 2" x 4" x 8' wood Optional
- 7. Wood shims Optional small pack

#### **Tools Required:**

- Shovel
- Post Hole Digger
- Tape Measure
- Level
- Step Ladder
- Drill
- Screw Driver Set

- Caulk Gun
- Wheelbarrow
- Trowel / Float
- Bucket / Hose
- Circular / Hand Saw
- Carpenter Square
- 3/8" Nut Driver

#### **Arbor Kit Description:**



Clamps

Hammer

Drill bits

String Line

**Carpenter Pencil** 



#### **IMPORTANT NOTES:**

- Before digging, check for underground utilities. The North American One Call Referral Service at 1.888.258.0808 connects you to a national directory of utility companies.
- If installing onto an existing foundation, additional post brackets and hardware are required and not explained within the arbor installation instructions.

#### **Arbor Layout & Preparation:**

- 1. Locate the arbor posts on appropriate centers to suit your walkway width, recommendation is (51" 57"). Width centers determines purlin overhang.
- 2. Dig (2) holes for a 12" diameter Sonatube (optional) below your local frost line or at local building code requirements, on appropriate centers.



- 3. Trim the top of the Sonatube (optional) 4" below the finish grade.
- 4. Square off the top of the hole with 2" x 4" wood to create a 16" square form to create a concrete pad for the cast stone base. Pads should be level to one another.
- 5. Prep the ends of the posts for anti-twist and lift, by driving (24) #10 x 2" long common nails into opposite sides of the post (6 on each side) approximately 1" deep. This will leave 1" exposed to set in the concrete.
- Set the posts in the hole, maintaining the appropriate center dimension, with a minimum of 98" of the post above the finished grade. Square and secure posts as concrete cures. The post will be cut to size after the concrete has cured for leveling.
- 7. Mix and pour the concrete around the posts. Smooth the surface with a trowel.





#### Assembly Instructions for **Single Beam Structure**:

\*Some parts are heavy and will require two or more people to safely handle and install.

- After the concrete has set, lower and center a cast stone column over each post and secure with (6) #8 x 1-1/2" long wood screws (Item #5) through the embedded metal bracket in the cast stone base and into each wooden post. Wood shims can be used to take up extra space between the bracket and post.
- 2. Apply a bead of silicone around the top of the cast stone column.
- 3. Lower a base cap over each post and set in the silicone.
- 4. Accurately measure the length of the extension columns. Mark the finish height of the post from the top of the cast stone cap. Be sure the marks on both posts are level. Carefully cut both posts to length with a circular saw.
- 5. Slide and center an extension column over each post. Lightly mark or tape where the edge of the column is located. Raise the column, apply silicone inside the taped area, and then lower the column into the silicone.
- 6. Square the extension column, then secure the top of the extension column with (4) #8 x 1-1/2" long wood screws (Item #5) through the embedded metal bracket in the extension column and into each wooden post (Figure 1).



Figure 1

Align large post plate (Item #2) with the top of the column and attach with (2) #12 x 1-1/2" long wood screws (Item #3) (Figure 2). The plate must be orientated so the support beam runs front to back when mounted to the plate. Apply a bead of silicone around the edge of the plate to provide a seal.





8. Center the small mounting plate (Item #1) on the beam as shown. Mark the hole locations and pre-drill the holes for (Item #4). Apply adhesive (Item #7) between the plate and beam, then secure using (2) #8 x 3/4" long sheet metal screws (Item #4) (Figure 3).



9. Place beam with attached bracket on top of column, align the mating holes and secure with (2) 1/4-20 pan head screws (Item #6) (Figure 4).



Figure 4

10. See page 7 for attaching purlins.

#### Assembly Instructions for **Double Beam Structure**:

\*Some parts are heavy and will require two or more people to safely handle and install.

- After the concrete has set, lower and center a cast stone column over each post and secure with (6) #8 x 1-1/2" long wood screws (Item #4) through the embedded metal bracket in the cast stone base, and into each wooden post. Wood shims can be used to take up extra space between the bracket and post.
- 2. Apply a bead of silicone around the top of the cast stone column.
- 3. Lower a base cap over each post and set in the silicone.
- 4. Accurately measure the length of the extension columns. Mark the finish height of the post from the top of the cast stone cap. Be sure the marks on both posts are level. Carefully cut both posts to length with a circular saw.
- 5. Slide and center an extension column over each post. Lightly mark or tape where the edge of the column is located. Raise the column, apply silicone inside the taped area, and then lower the column into the silicone.
- Square the extension columns, then secure the top of the extension columns with (4) #8 x 1-1/2" long wood screws (Item #4) through the embedded metal bracket in the column and into each wooden post (Figure 1) on page 5.



Align the mounting holes of the post plate and the wing bracket. Center the two brackets over the extension column and secure in place with (2) #12 x 1 1/2" Phillips pan head (Item #3), screwing directly into the top of the wooden post (Figure 5). Apply a bead of silicone around the edge of the plate to provide a seal.

Figure 5



**Note:** Figures 5 is shown with the post extended above the Column Extension for clarity only.

Assemble the double beams to the wing brackets using construction adhesive (Item #5) and clamps. Mark the hole locations and pre-drill the holes for (Item #6). Secure in place with (4) #14 1/4" self-drilling screws (Item #6) (Figure 6).





**Final Step:** Evenly space (5) purlins across the beams and secure with the construction adhesive (Item #5) (Figure 7).



Figure 7

**Questions?** Contact your local Eye Level Dealer or Eye Level Customer Service at 888.782.1760, option 3.