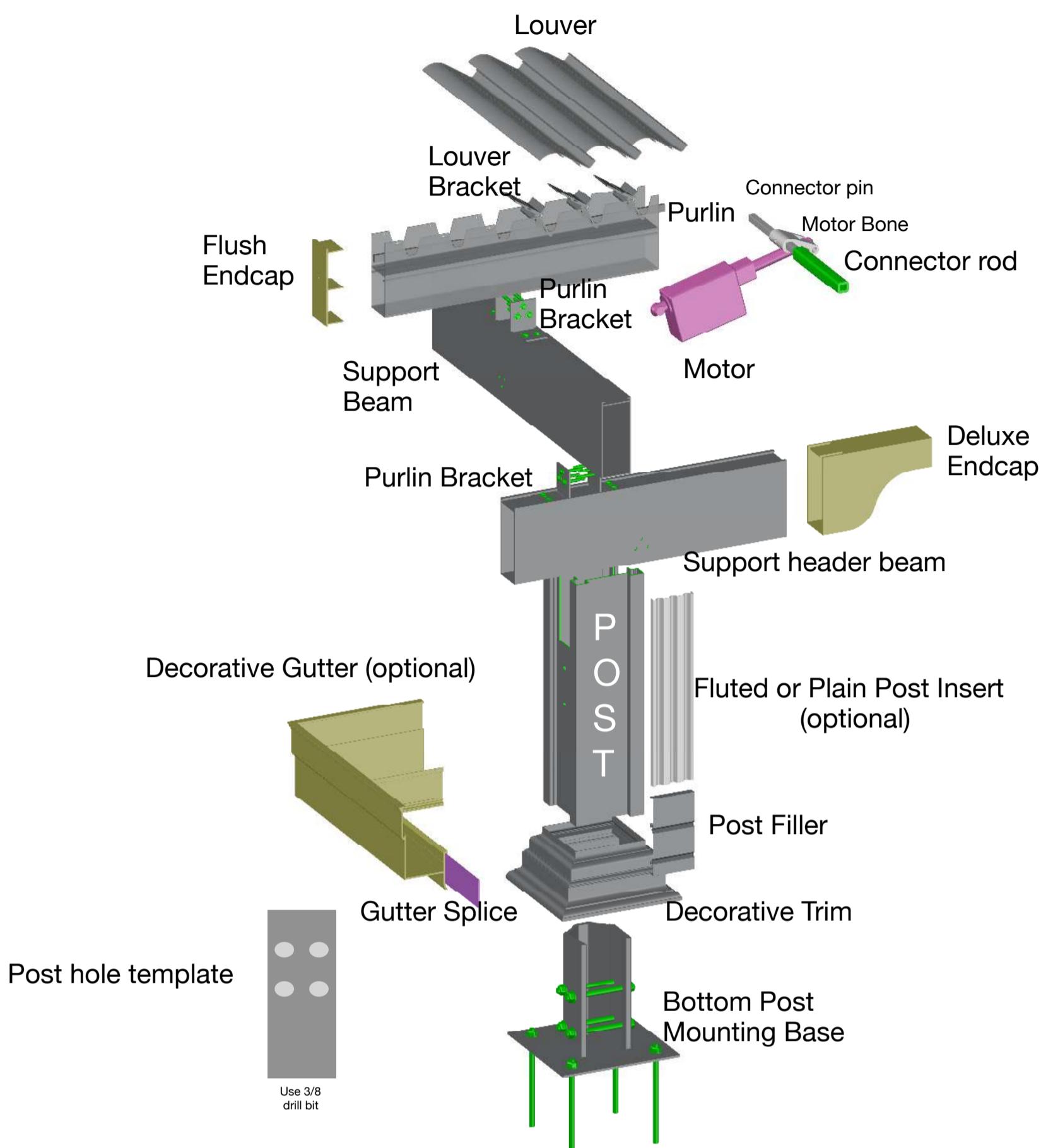




CARDINAL  
ARCHITECTURAL

## Quick Start Installation

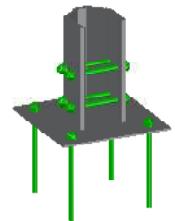


### Installation Sequence

1. Install bottom post mounting base.
2. Place post on saw horses and use post hole template to drill 3/8 hole on opposite of notch.
3. Slide post over mounting base and install through bolts.
4. Install post filler and slide decorative trim over post.
5. Install support header beam into notch in post and use template to drill holes for through bolts.
6. Install band board to wall or roof if host attached.
7. Install purlin brackets into slider on support header beam to hold support beam.
8. Evenly line up all support beams on a saw horse and install and fasten purlin brackets according to purlin layout.
9. Place support beams into purlin brackets on support header beam and fasten.
10. Install purlins into purlin brackets on support beams **but do not** fasten.
11. Install motor on to motor purlin.
12. Run all wiring.
13. Install connector rods and connector pins starting from motor out.
14. Install end caps.
15. Run a string line from top of purlin notch from one end to the other making sure the string touches the same spot on each purlin (Make sure they are square and aligned to each other).
16. Operate roof several times (You can use an 18v drill battery connected to motor wires for testing).
17. Install louvers.
18. Operate roof make sure all is good. If all is good fasten purlins to purlin brackets.
19. **All pre-drilled holes require a fastener.**

**NOTE:** These details are just a guide. Always refer to sealed engineering plans for updated & project specific requirements. Contact a local engineer or Cardinal Architectural for all custom field conditions.

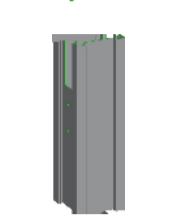
**“Refer to Local Engineering or project specific drawings for all connection details”**



#### **Bottom post mounting base**

Can be mounted on a deck or concrete.

Deck mount requires blocking between floor joist.  
Concrete requires footings or  $5\frac{1}{2}$ ". SLAB SHALL BE CONTINUOUS AND SHALL COVER THE



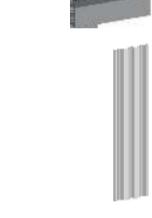
#### **Decorative trim**

Slides over Post before header beam is installed to hide bottom base and through bolts.



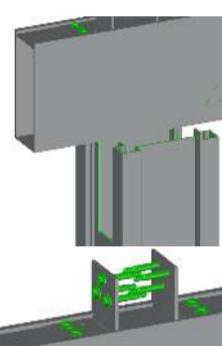
#### **Post Filler**

Fills the recessed part of post around decorative trim and also used to cover top through bolts.



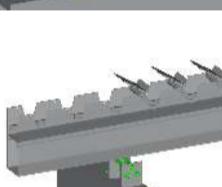
#### **Post Filler (Plain or Fluted)**

Snaps into post to create different post styles (optional)



#### **Support Beam (Header Beam)**

1. Slides into the notch on post to tie column line together.
2. Also used as ledger board on wall and on roof mounting brackets.
3. Also used to support purlins.



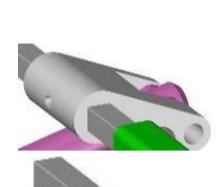
#### **Purlin**

The main operating part and come in sizes 8' to 18' with one motor and can be spliced together to make endless size.



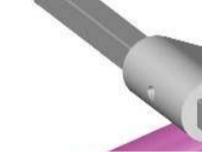
#### **Louver Bracket**

Louvers snap on to the brackets and rotate to open and close.



#### **Motor Bone**

2" wide that connects to connector pin and motor.



#### **Connector Pin**

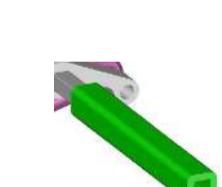
8" pin that connects the connector rods to the



#### **Motor**

Comes in 12V or 24v

Mounts to motor purlin and opens and closes louver



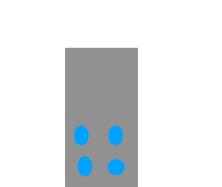
#### **Connector Rod**

Comes in 72" and is cut to size on site.



#### **Louver**

4" wide and come in sizes 8' to 24' in 1' increments.



#### **Post Hole Template**

Template used to drill holes for through bolts for post.



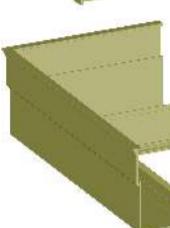
#### **Deluxe End Cap**

Finishes the end of support beam or purlin.



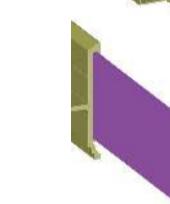
#### **Flush End Cap**

Finishes the end of support beam or purlin.



#### **Decorative Gutter**

Comes in 17' & 22' and can be installed on 1-4 sides (Optional).



#### **Gutter Splice**

Mill finish 6" and connects gutter pieces together.

### **Tips, Tricks, Do's and Don'ts**

Must have a minimum of 3/8" slope per foot.

Never force or beat connector Pin into slot. (Purlins not lined up or put pins into ice cooler to shrink)

Never over tighten motor bolts.

Always use and tighten set screws.

Always install motor flush to purlin wall.

**Always install motor on the most center purlin.**

Always leave a 1/2 gap on each side of connector rods.

**Purlins must be uniformly sloped.**

Always debur inside of dog bone's, connector rods and motor bone.

Make sure when installing connector rods that louver brackets are all in the same position.

Mark louver overhang on all louvers so they all line up at the end.

Always plan and run wiring during the build.

**Always run a string line on purlins to make sure they are completely lined up.**

Never bend louver brackets to close any light gaps. Roof will still be water tight if it has adequate amount of slope.

Never raise purlins in purlin brackets to create a slope.

All pre-drilled holes require a fastener.

Running wire video



Aligning Purlins



Attaching Dead Louver



Installing spliced purlins



Installing ledger beam to wall



Installing roof brackets



Questions or concerns please call customer service **888-550-5491**