

Framing End Walls on Nor'Easter, Northpoint & Eastpoint GH

1. Identify locations and rough opening dimensions of all doors and equipment that will be located on end walls. Make a sketch of how you plan to frame out each end using the grid sheets provided at the end of the instructions.
2. Make sure your greenhouse is plumb.
3. See Illustration 1 if you frame out ends using 2 x 4 lumber and see Illustration 2 if you frame out end walls using 1 ½" square steel tubing.
4. For planning purposes, you need at least 6 vertical members per end, and maximum spacing for horizontal members is 4 ft. apart.
5. Begin by installing two vertical members for doors if you have doors on end walls. If using steel framing, the steel should be set in a 12" x 12" concrete footing for stability. Adding the concrete can be done after you have finished framing out the end walls. If using wood, you can either set verticals in concrete or attach to a sill. However, be aware that under certain conditions frost heaving can occur with an unheated greenhouse. Each vertical member will use one bag of concrete mix.
6. Frame out the vertical members that will be used for fans, shutters, other doors, etc.
7. Frame out the horizontal members. If using 1 ½" square tubing, see Illustration 2 for proper use of angle brackets (JG15AB) when attaching horizontal members to vertical members. When using metal framing, there is no need for a sill along the bottom of the end wall. Note that if using either poly or polycarbonate for your end wall covering, they are buried in the ground about 6-12".
8. Make sure all equipment fits properly before adding any concrete footings.
9. Some people use a sill on their end walls. This is acceptable but not mandatory. This is your choice, and dependent on your type of end wall cover.

Rough Openings for Equipment

Tracrite Roll Up Doors (part number:TR940XXX)

Same size as door. Example – an 8' x 8' door has an 8' x 8' rough opening.

The framing requires a minimum of two pieces 2 x 4 lumber or two pieces of 1 ½" square tubing

for vertical and horizontal framing due to the weight of the door and the attachment of the

door to the framing. If using steel for end wall framing, you can attach 2 x 4 lumber to the verticals and a 2 x 8 to the horizontal for a header (see photos). If you are using only 1 ½" square steel and no wood, there must be two verticals used with a 1 ½" gap between the two pieces of steel to attach the tabs at the top of the door to the outer piece of the framing steel.

Plyco Pre-Hung Doors (part number:PLYXXXX)

Model 66, 3068 37 1/4" x 81"

Model 66, 4068 47 3/4" x 81"

HC Pre-Hung or Sliding Doors (part number:HCXXXX)

Double sliding doors-rough opening is 3" less than door width and 1" less than door height. Example-4' x 8' double sliding doors have a 93" wide opening and a 95" high opening.

Double hung doors-rough opening is 1 ½" more than door height and 1 ¾" more than door width. Example-3' x 7' double hung doors have a 85 ½" high opening and a 73 ¾" wide opening.

Single sliding door-rough opening is 3" less than door width and 1" less than door height. Example-4' x 8' single sliding doors have a 45" wide opening and a 95" high opening.

Single hung door-rough opening is 1 ½" more than door height and 1 ¾" more than door width. Example-3' x 7' single hung door has 85 ½" high opening and a 37 ¾" wide opening. If you are using steel framing and covering with poly on the ends, double up on the steel framing around the door so that you have a surface to attach the wire lock.

Coolair Fans (part number:ACNBFXXX OR ACMNBFXXX)

NBF24 33 ½" h x 33" w

NBF30 39 ½" h x 39" w

NBF36 45 ½" h x 45" w

NBF42 51 ½" h x 51" w

NBF48 57 ½" h x 57" w

Coolair Shutters (part number:ACLRWXXX)

Add ½" on to width and height of shutter. Example-39" shutter is 39 ½" x 39 ½".

Quietaire Fans (part number:QTAGCSXXX)

AGCS24 29 ½" h x 28 ¾" w

AGCS30 35 5/8" h x 34 ¾" w

AGCS36 42" h x 40 ¾" w

AGCS42 48 ¼" x 46 ¾" w

AGCS48 54 ¼" x 52 ¾" w

Quietaire Shutters (part number:QTHDEXXX)

Same as Coolair shutters. See above.

J & D Fans (part number:JDVNSXXXX or JDVESXX)

VES20 20 ½" h x 20 ½" w

VNS24 32" h x 31 ½" w

VNS30 38" h x 37 ½" w

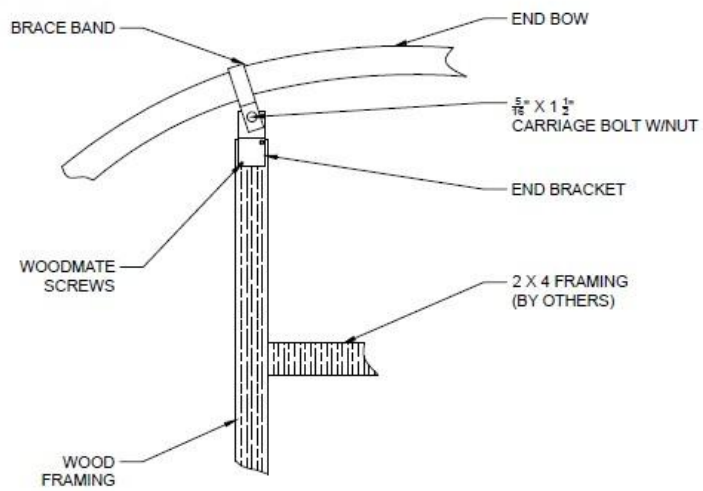
VNS36 42" h x 41 ½" w

VNS48 56 ½" h x 55 ½" w

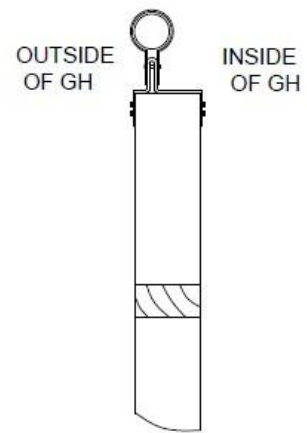
J & D Shutters (part number:JDVRSGXXPS)

Add ½" onto width and height of shutter. Example – 36" shutter is 36 ½" x 36 ½".

2X4 END WALL BRACKET ASSEMBLY



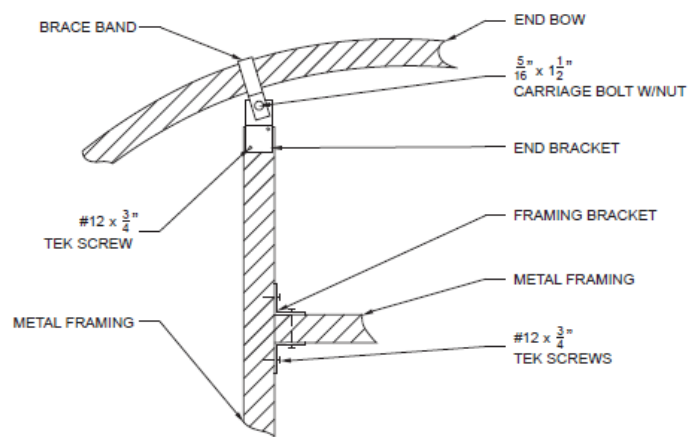
1 FRONT VIEW



2 SIDE VIEW

METAL END WALL BRACKET ASSEMBLY

ILLUSTRATION 2



1 FRONT VIEW



2 SIDE VIEW

Make sure the greenhouse is plumb



Pull the greenhouse forward from one end to plumb the greenhouse



String a line from one ground post to the other ground post to square up the ends

Examples of Framing



Wood framing. HC double sliding doors. Poly ends.



Trac Rite roll up door and Plyco pre-hung door. Wood framing.



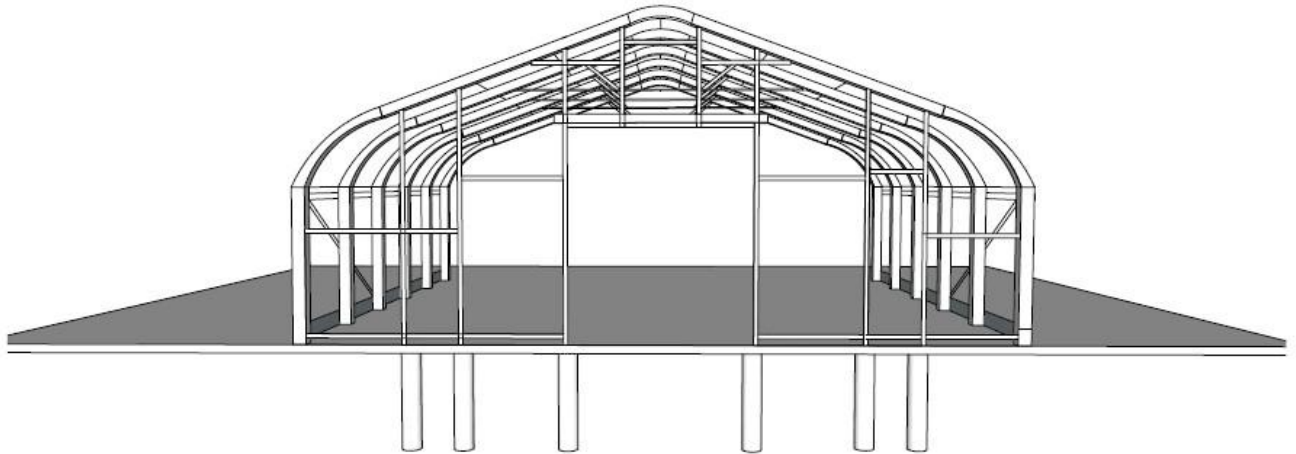
Trac Rite roll up door brush molding. Wood framing.



Steel framing. Polycarbonate ends. Roll-Up door. Pre-hung door.



Steel framing. Double sliding doors. Shutters. Polycarbonate



Steel framing showing concrete footings. Footings should be about 12" in diameter and a minimum of 12" in depth



Steel framing. Polycarbonate ends. Roll up door and Plyco door.



Gable shutter over roll up door.



Steel framing. Fan.



Steel framing. Polycarbonate end wall.



HC pre-hung door with framing doubled up for poly end walls



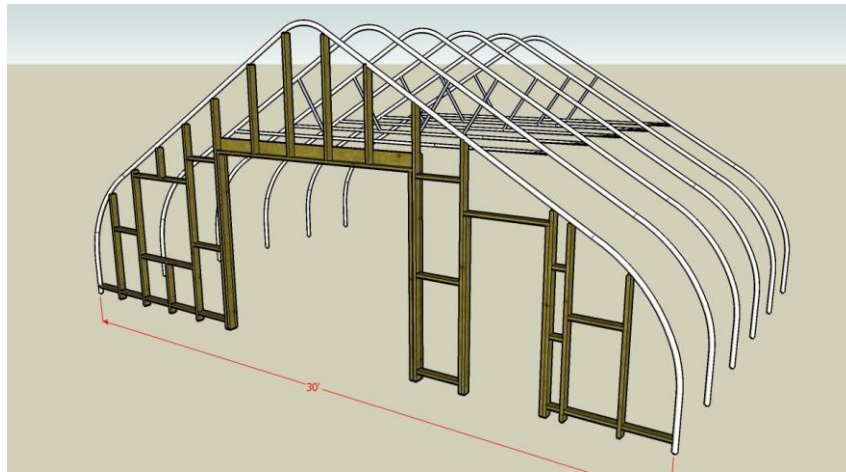
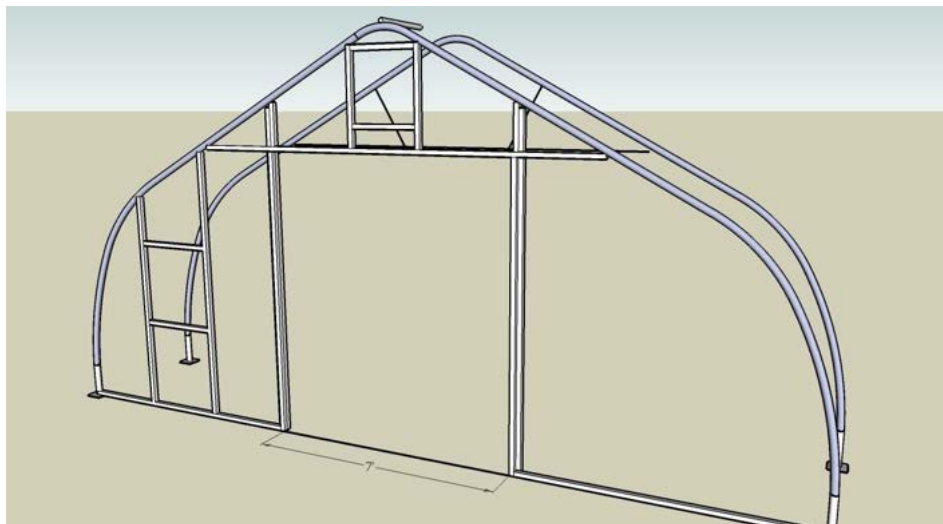
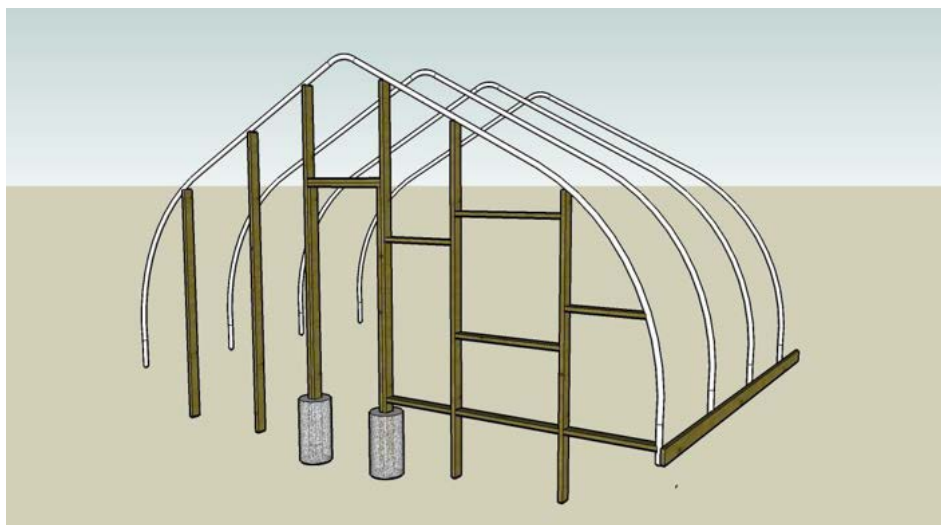


Diagram of end wall framing with doors for 30' wide structure



Framing with a roll up door.



Framing on an Eastpoint greenhouse with a door and fan.

Sequence of steps for roll up door installation



Attach 2 x 4 lumber to the verticals and 2 x 8 lumber for the header using 2" tek screws if the framing is steel.





Pre-assemble the door as per the manufacturer's directions on a flat and clean surface.



Position the door with 3 people and attach to the frame as per the manufacturer's directions



2" tek screw through the Trac Rite fram and wood goes into the steel verticals





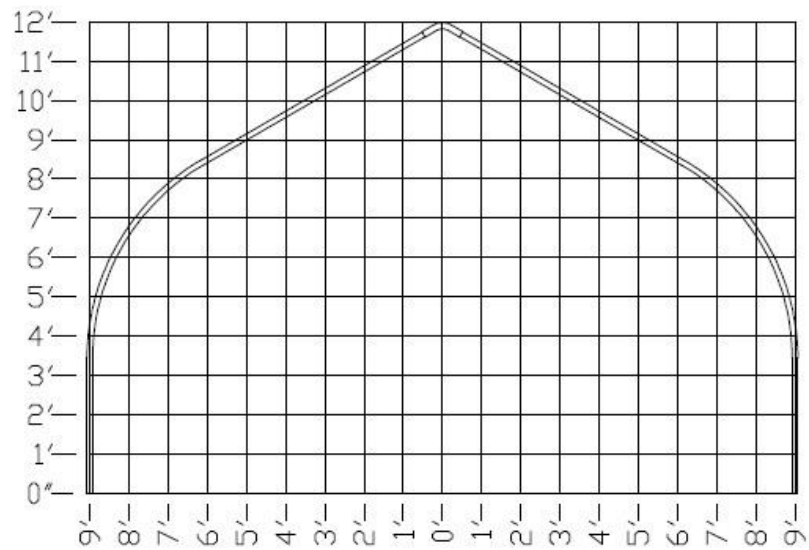
This is what the wood looks like attached to the steel framing



This is how the tabs attach to the wood at the top of the door



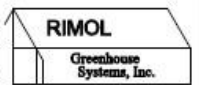




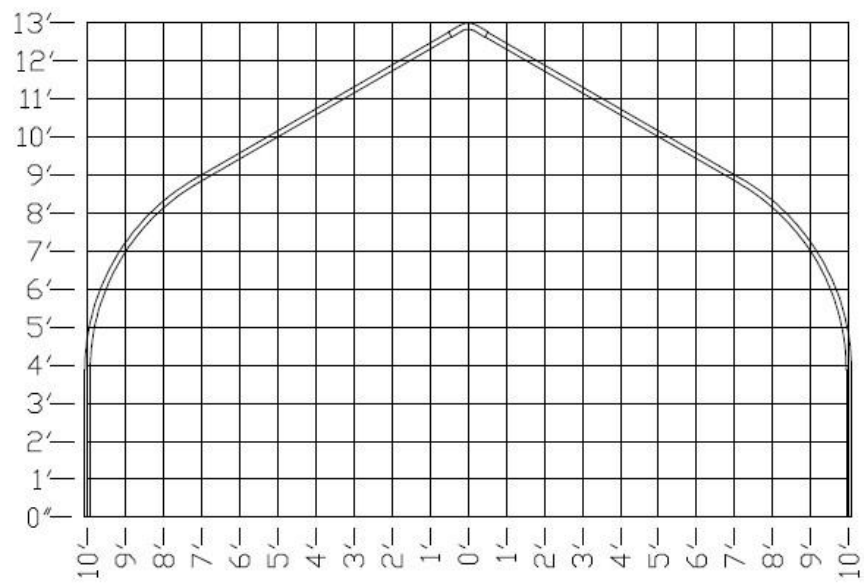
18' Bow
1 SQUARE EQUALS 1 SQUARE FOOT

A	RELEASED PER RIMOL	9/13/04

DRAWN BY: CHRIS DUDY
DATE: 9/13/04
DESCRIPTION:



DRAWING NAME: 18BOW



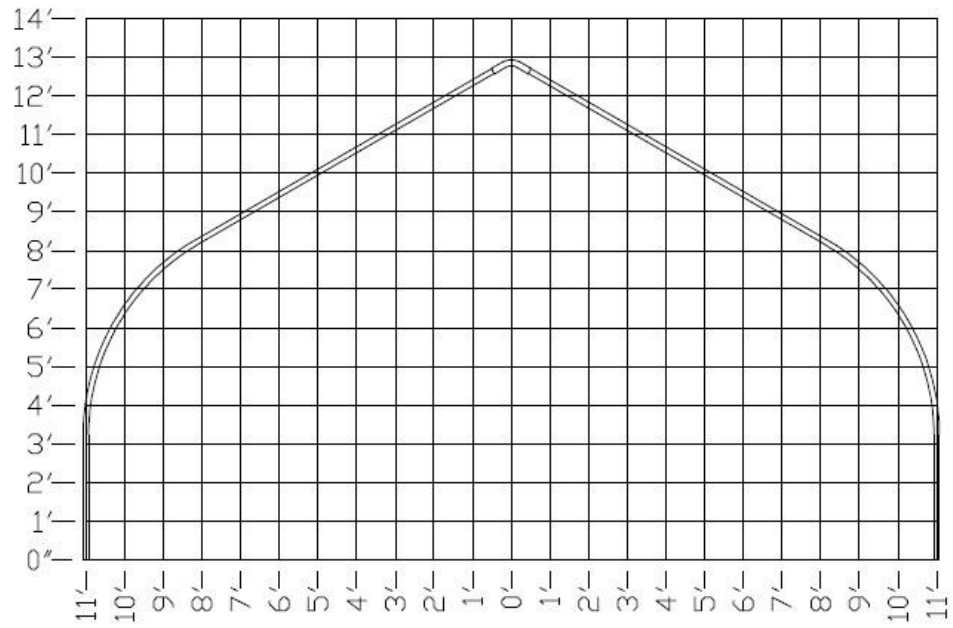
20' Bow
1 SQUARE EQUALS 1 SQUARE FOOT

A	RELEASED FOR RIMOL	09/13/04

DRAWN BY: CHRIS DUDDY
DATE: 09/13/04
DESCRIPTION:

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DRAWING NAME: 20BDV



22' Bow
1 SQUARE EQUALS 1 SQUARE FOOT

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DRAWN BY: CHRIS DUBOY
DATE: 09/13/04
DESCRIPTION:

RIMOL

Greenhouse
Systems, Inc.

DRAWING NAME: 2210W

