3. Jobsite Preparation
4. Setting Foundation Posts
5. Setting Corner Posts
6. Sidewall & Endwall Posts
7. Grade Board
8. Wall Girts
9. Truss Supports
10. Setting Trusses
11. Truss Bracing - Purlin & Lateral
12. Truss Bracing - Sway & Wind
13. Steel Trims - Overhang
14. Steel Trims - No Overhang
15. Steel Roofing
16. Steel Trim Profiles
JOBSITE PREPARATION

Leveling
Get your pad level and elevated (see Drainage below) before you begin construction. It is important that fill material is compacted with each 6-8 inches of material added.

Drainage
Raise your building pad at least 6” above the surrounding terrain. Extend the pad a minimum 3’ wider and longer than the building on all sides.

Staking
Use batter boards to lay out your building dimensions. Make the batter boards long enough (4’-6’) to allow adjustment of string line to get dimensions precise.

Post Plan Measurements
Note on your plan that the corner bays measure 1 1/2” less than those in between.

Setting the posts 1 1/2” inset from the actual building measurement leaves room for the girts that are nailed to the outside of the posts.

The combination of girt and post spacing below will result in a 24’ wide x 32’ long building including the girts and steel.

Squaring Your Post Plan
To confirm a square post plan, measure the same length diagonally as shown below. Adjust the string line until both measurements are the same.

Note:
Diagonal measurement for string line is post to post
So circumference on this post plan is 23’ 9” wide by 31’ 9” long
SETTLING POSTS

POST ORIENTATION

EMBEDMENT DEPTH & METHOD

Concrete Footer
Each post stands on concrete. A pre-cast concrete footer, sakrete, or pre-mixed concrete may be used, minimum compressive strength of 2500 psi.

Uplift Protection
Your plans will define the uplift protection used for your site location.

Treated uplift cleats are used in low wind areas

#4 rebar encased in a concrete collar is typical in high wind regions

Embedment Depth
Your plans will define embedment depth based upon your engineering requirements. This measurement is shown on the Wall Section drawing.

REFER TO YOUR PLANS FOR EMBEDMENT DETAILS
SETTING CORNER POSTS

Make certain that your hole is the proper depth including the thickness of the concrete footer.

Remove any loose soil from bottom of hole prior to pouring or dropping footer in hole. This will eliminate the possibility of settling when the weight of the building and snow load is applied to the structure.

Pre-cast footers should be laid on a level surface to ensure post stability.

Some packages will replace precast concrete footers with 80# sakcrete due to the amount of concrete required under the post.

With your uplift protection on the post and the footer in place the next step is to set the corner posts.

When placing the corner posts ensure that post is plumb on two sides, then backfill the hole compacting the material as required every 6”-8” with a 2x4 or spud bar.

Make sure the post is plumb until the hole is completely backfilled.

TIP
Foundation posts and other treated lumber will warp badly if left in the sun unbanded, even for short periods of time.

- Leave posts and lumber banded until needed.
- Cover lumber to prevent direct sunlight warpage in horizontal position.
SIDEWALL POSTS

Find the post plan drawing included in your structural building plans. Note the measurements are from center of post to center of post except for door openings and corner posts.

Door openings and corner posts are measured from the edge of the post.

Measure as indicated and lay a nail to mark the location required for each sidewall post. Embed each post and plumb using the technique described for corner posts above.

32' 0'' Eave Sidewall

Temporary bracing may be used to maintain plumb while construction is in progress.

ENDWALL POSTS

Locate the gable endwall posts which are longer than eave and corner posts.

These posts extend to the top of the truss.

Use the same measurement, plumb, and embedment techniques discussed earlier.
INSTALL SKIRT BOARD

Locate the 2x8 treated lumber in your package.
Find the corner post with the highest grade

Place a nail in the post establishing grade, or ground
level for your building.

Establish a level line around the perimeter of the
building and place a nail in each post.

Install treated skirt board with (3) 0.177 x 4"
20g galvanized ring shank nails.

The structural drawings include wall drawings that
identify the lengths of dimensional lumber to be
used for treated skirt board, untreated 2x4 wall
girts, and truss supports (2x10 or 2x12).

Your building package may include two, three, or
four truss supports on each eave side. See your
Wall Section drawing in the structural plans for
your specific supports.

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<td>-</td>
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</tr>
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</table>
                    by others!

FASTENER SCHEDULE PAGE 1 OF PLANS

SKIRT or GRADE BOARD

Skirt board, girts, and truss supports
will extend beyond corner posts 1 1/2"
on the eave sides.

For expansion and contraction issues
you can place a nail between lumber
lengths to leave a small gap.
INSTALL WALL GIRTS

Install girts to post using (3) 16d 0.131x3 galvanized ring shank nails. Girts on the eave (gutter sides) will extend 1 1/2" beyond the corner posts for a boxed fit with gable girts.

Dimensional lumber may be cut and staggered to improve wall fastening strength in high wind areas. To stagger girts simply move the fastening post over one bay. For instance in this drawing move row 2 fastening point B to the post between A and B by cutting a 16' 2x4 in two 8' lengths for the ends. We recommend staggering the skirt board and truss supports to fasten adjacent to the girts if girt rows are not staggered.

Wainscot (two tone walls) includes a 2x6 nailer and Z trim positioned at 40" from grade to work with 36" long wainscot plus 4" since the siding starts 4" up from grade.

Refer to Wall Section drawing for girt spacing for your design.
TRUSS SUPPORTS

Truss supports are sized based upon your specific needs. Supports may be 2 ply, 3 ply or 4 ply 2x10 or 2x12 dimensional lumber.

Placement of the truss support is simple. Measure from the bottom of the grade board up the post the height of your wall as shown on the wall section in the structural plans.

Mark the post and nail the truss supports to the post based upon the fastening specifications included in your plans. ONLY USE GALVANIZED RING SHANK NAILS AS REQUIRED BY OUR PLANS.

**TRUSS SUPPORTS MUST EXTEND 1 1/2" BEYOND CORNER POSTS TO SUPPORT GABLE ENDFRAME TRUSSES**

**NOTCH POST FOR MULTI-PLY TRUSS SUPPORTS**

**STACK MULTI-PLY TRUSS SUPPORTS**

**TRUSS SUPPORT FASTENING**

- (5) .131 x 3” 16D HDG RS Nails
- 2x6 or 2x8 Stub Post
- 20D Ring Shank Nails
- Each Side of Joint (Double that number for posts spanned by carrier)
SETTING TRUSSES

Endframe Truss To Corner & Gable Post Connection

The endframe trusses with horizontal nailers are nailed to all gable posts on the bottom and top chord of the truss. See page 1 fastener schedule for end truss nail size and quantity.

Endframes should rest on truss supports. If you didn’t extend the truss support beyond the post to support end truss then cut a 2x6 bearing block 18” long and nail with (6) 20d 0.177x4 ring shank nails.

Make sure truss is centered by measuring overhang on both sides.

Place both endframes trusses first. Then confirm squareness using the diagonal method discussed on page 3.

Nail a hurricane tie to each truss and the inside truss support using 1 1/2” nails provided.

Common Truss to Stub Post Connection

The next truss will be placed between posts. A 2x6 stub post is inserted between truss supports to secure the truss in place.

Ensure truss is square using a jig fashioned to your truss spacing.

Measure overhang on both sides and adjust until both measurements are the same.

Common Truss to Eave Post Connection

The next truss will sit full bearing on the post. Cut a 1 1/2” notch in the corner of the post and nail using fastener schedule on page 1 of structural plans.

Measure overhang on both sides and adjust until both measurements are the same.

LAMINATED POST

SAWN 4x6 or 6x6
Truss Bracing - Purlin & Lateral

After setting the gable end truss, bracing must be installed to support the intermediate trusses as they are placed.

2x4 purlins are used at 24” on center typically along the top chord of each truss. If your snow load dictates, the spacing may be less in the drift area.

Your structural plans will include the drift area if needed.

Full height gable posts should be cut even with the top chord of the truss. Eave posts are cut along the pitch of the roof.

TRIMMING POSTS

Prior to unbanding your trusses consult your structural plans to determine purlin spacing. Measure 24” (or your purlin spacing) from the ridge and mark the trusses for purlin placement.

Trusses with no overhang require a purlin at the end of the truss. Trusses with overhang use the 2x6 fascia board for the eave purlin. See Wall Section drawing on structural plans.

MARKING PURLIN LOCATIONS

Similar to girts, purlin runs can be staggered to prevent connection points from residing on the same truss thus making a stronger roof system.

2x4 PURLINS NAILED TO TOP CHORD OF TRUSSES

2x6 Fascia board used as edge purlin
For 2' on center trusses with no gable overhangs or plywood sheathing replaces purlins on the top chord. The need for sway bracing is determined by the spacing of the trusses and the overall height of the truss that is determined by the building span and roof pitch.

The taller the truss the more sway bracing you will need. An example where sway bracing is required for most any design is shown below. This 20' wide building has a 16' overhead door on the left endwall. As you can see sway bracing is included near the opening to further support that area.

Wind bracing is commonly used so it is included here. Our designs do not use wind bracing.

Wind bracing certainly doesn't hurt anything so feel free to liberally brace your trusses.
Trims may be fastened with wood binder screws or color matched nails. Both are included in your building package.

INSTALL EAVE TRIM BEFORE ROOFING
EAVE TRIM TUCKS UNDER ROOFING

EAVE TRIM
2x6 FASCIA BOARD
ANGLE TRIM
SOFFIT
F&J OVERHANG TRIM

ELEMENTS NOT SHOWN IN CONTACT FOR CLARITY

CORNER TRIM
ANGLE TRIM
INSTALL GABLE TRIM AFTER ROOFING
GABLE TRIM LAYS OVER ROOFING

2x6 FASCIA BOARD
SOFFIT
PURLIN
F&J OVERHANG TRIM
RAKE FILLER
ANGLE TRIM
FASTEN STEEL ROOFING

WOOD BINDER SCREWS - HOW TO TIGHTEN

Correct
Under-Driven
Over-Driven

"METAL PANEL INFORMATION"

Coverage 36"

OVERLAP SIDE
UNDERLAP SIDE

Foam closure seals rib where roofing meets siding
Foam closure seals rib on roofing to ridge cap

Starting at one end of the building, fasten the first roof panel at the top and bottom of the panel ensuring that the panel is square and that the roofing extends past the eave trim 2". This will leave a gap at the top where the foam closures and ridge cap go. The top and bottom of the panel require a screw on both sides of the rib. The screws between the top and bottom only require one screw next to the rib. DO NOT SCREW ON TOP OF THE RIB

TOP & BOTTOM OF EACH PANEL
IN BETWEEN TOP AND BOTTOM
RIDGE CAP

2" screws on the rib
14" Ridge Cap
Available Length: 10' 6"

20" Ridge Cap
Available Length: 10'

Angle Trim
Available Length: 10'

5-1/2" Corner/Gable Trim
Available Length:
8" - 10" - 12" - 14" - 16" - 18" - 20"

5-1/2" Inside Corner Trim
Available Length:
8" - 10" - 12" - 14" - 16" - 18" - 20"

Special trim prices based on total inches x total bends. A hem is one bend.

*STOCKED TRIM
“WORKING HARD FOR YOUR SUCCESS”

G-Rib Trim

End Wall Flashing
Available Length:
8’ - 10’ - 12’ - 14’ - 16’ - 18’ - 20’

6

Side Wall Flashing
Available Length:
8’ - 10’ - 12’ - 14’ - 16’ - 18’ - 20’

7

W-Valley Flashing
Available Length:
8’ - 10’ - 12’ - 14’ - 16’ - 18’ - 20’

8

Door Track Cover *
Available Length: 10’/6’

9

Overhead Door Trim w/J-channel
Available Length:
8’ - 10’ - 12’ - 14’ - 16’ - 18’ - 20’

10

J-channel *
Available Length: 10’

11

Overhang Trim *
Available Length: 10’

12

Ratguard *
Available Length: 10’

13

Z-bar *
Available Length: 10’

14

Special trim prices based on total inches x total bends. A hem is one bend.

*STOCKED TRIM
Eave Trim
Available Length: 10'

Special trim prices based on total inches x total bends. A hem is one bend.

* STANCED TRIM
Pre-manufactured truss 4' oc typical
Heel height to match rafter height

#1 SYP Rafters to site
specific snow load