

Lumber List

Code	Descriptions	Dimension	Qty
A	2x4 Lumber	20'	20
A	2x4 Lumber	12'	95
B	2x6 Lumber	20'	3
C	7/16" OSB	4'x 8'	42
D	1/2" Plywood	4'x 8'	3
E	9" Bevel Siding	24'	46
F	1x1/2" Lumber	12'	5
G	1x3 Lumber	8'	4
H	1x4 Lumber	16'	7
I	1x6 Lumber	16'	8

☀ It makes sense to over buy on materials. It is very frustrating to have to return to the store to buy one more 2x4 because you miscue the last one that you had. I always add at least 10 percent to materials list to allow for waste and any cutting mistakes. At the end if I don't use them I take them back to the store for refund.

Other Items Needed

- | | |
|---------------------------------|---------------------------------|
| - 16"W 7"H Overhead Door .. 1 | - Screen 18 in x 6 ft |
| - 30"W 82"H Door 1 | - Drip Edge 100 ft |
| - 18"W 18"H Window 1 | - 3/4" Roofing Nail 2 lb. |
| - 28"W 38"H Window 1 | - 2" 6d Trim Nail 1 lb. |
| - Paint 3 gallons | - 2" 6d Nail 12 lb. |
| - Shingles 18 bundles | - 3" 10d Nail 8 lb. |
| - Roofing Felt 600 sq. ft | - Silicone Caulk 20 oz |
| | - Staple 1 box |

Material for Foundation

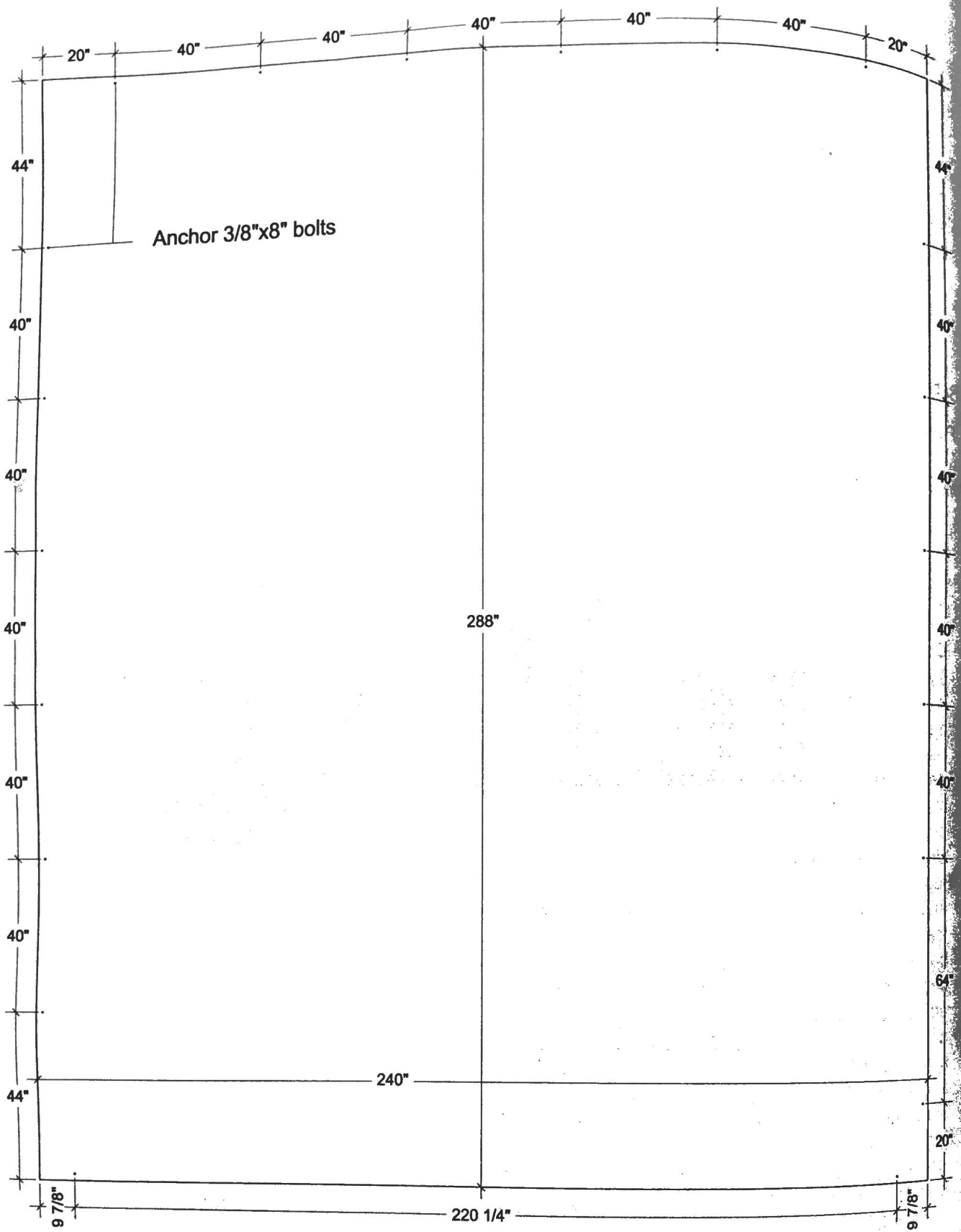
- Wire Mesh 20ft x 24ft
 - Rebar 352 ft
 - Pea Gravel 6 cubic yards*
 - Premixed Concrete 11.5 cubic yards*
 - 3/8"x8" Anchor Bolt 20
- * 1 cubic yard = 27 cubic feet

Tools Needed for Concrete

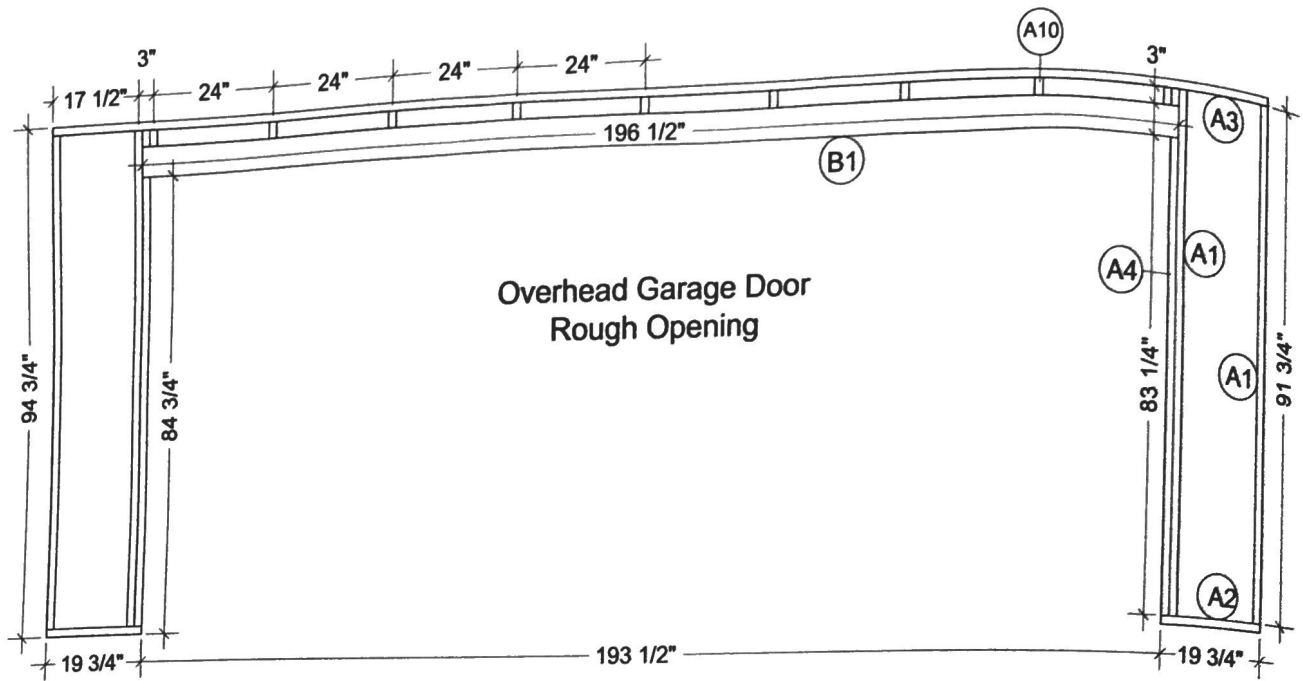
Batter boards (2x2 stake and 1x4 batter board), 2x6 form boards, 2x2 stake, mason's line, spade or small shovel, concrete finishing trowel, hammer, level, measuring tape, pencil, carpenters square, wheelbarrow, bucket.

Cutting Pieces

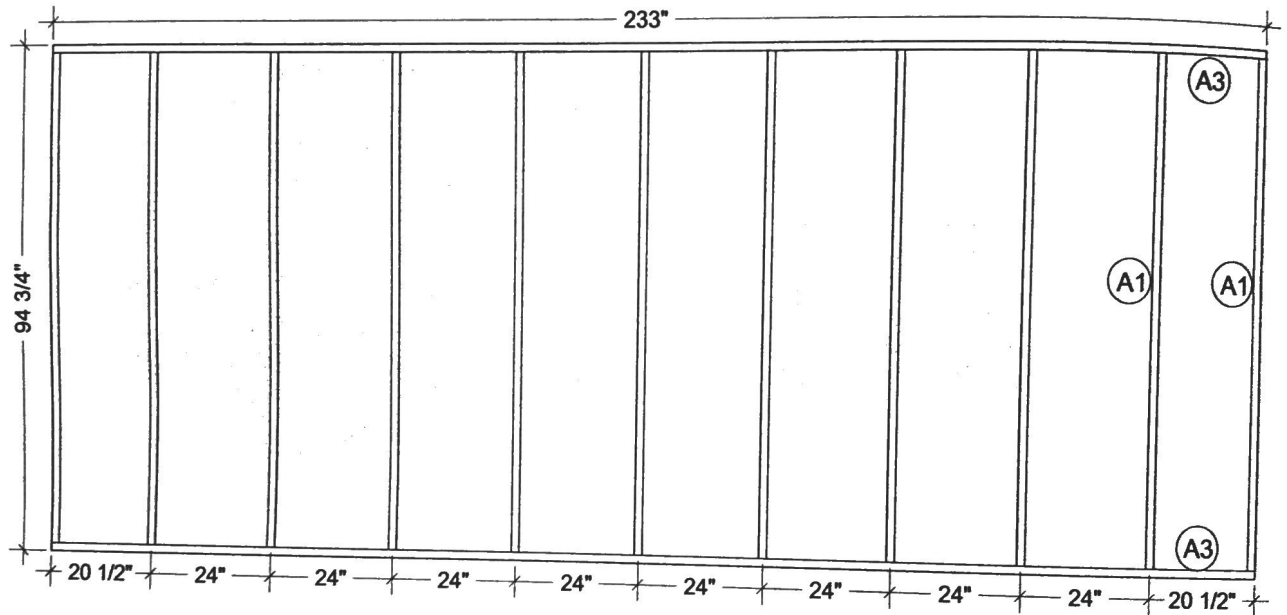
1. When you begin the actual cutting start with the longest board, if you miscue you will still have plenty of material left to cut another piece and miscue board can be use for the shorter pieces.
2. Make trial fittings whenever possible. Keeping the waste pieces intact for future project.
3. The cutting lists are all specified in liner feet, which indicates only the total length you need unless otherwise specified. If cutting list code: A1; dimension: 91³/₄"; descriptions: stud; Qty: 41, cut forty-one studs from 2x4 lumber (A is 2x4), each 91³/₄" long.



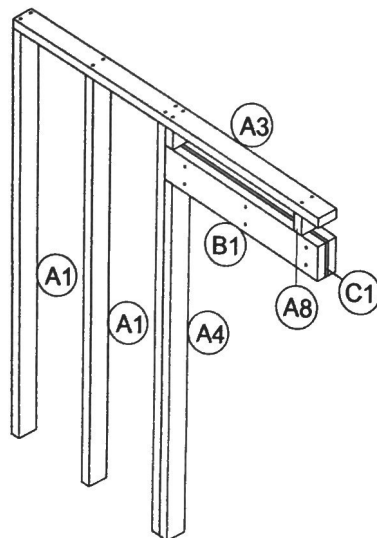
Concrete Slab Foundation

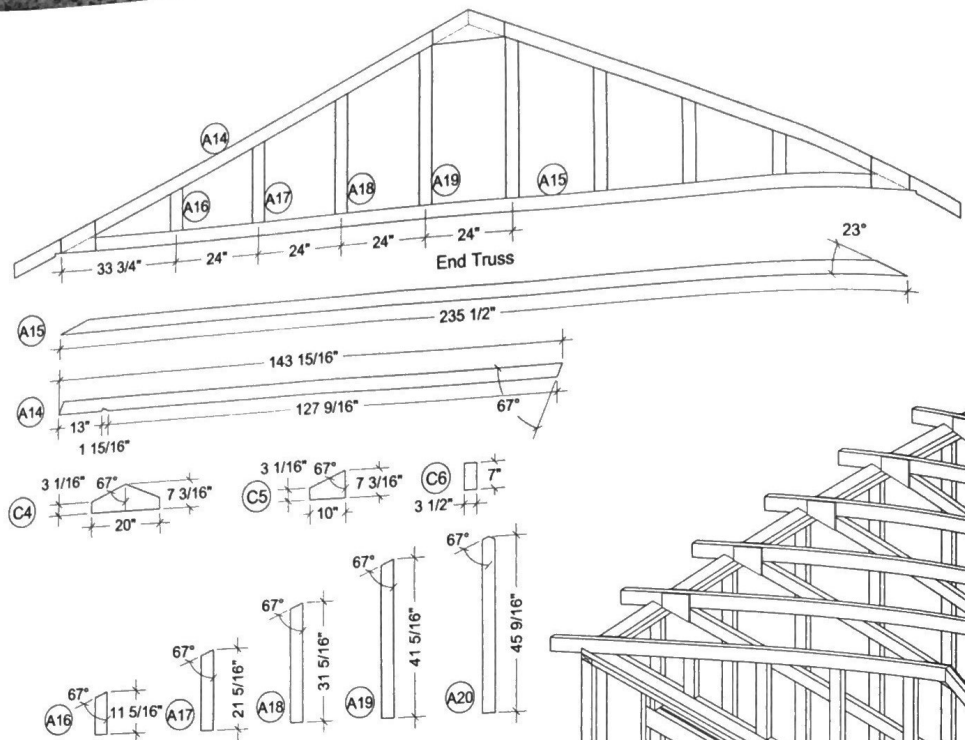


Garage Door Wall Framing



Back Wall Framing





Truss Cutting List

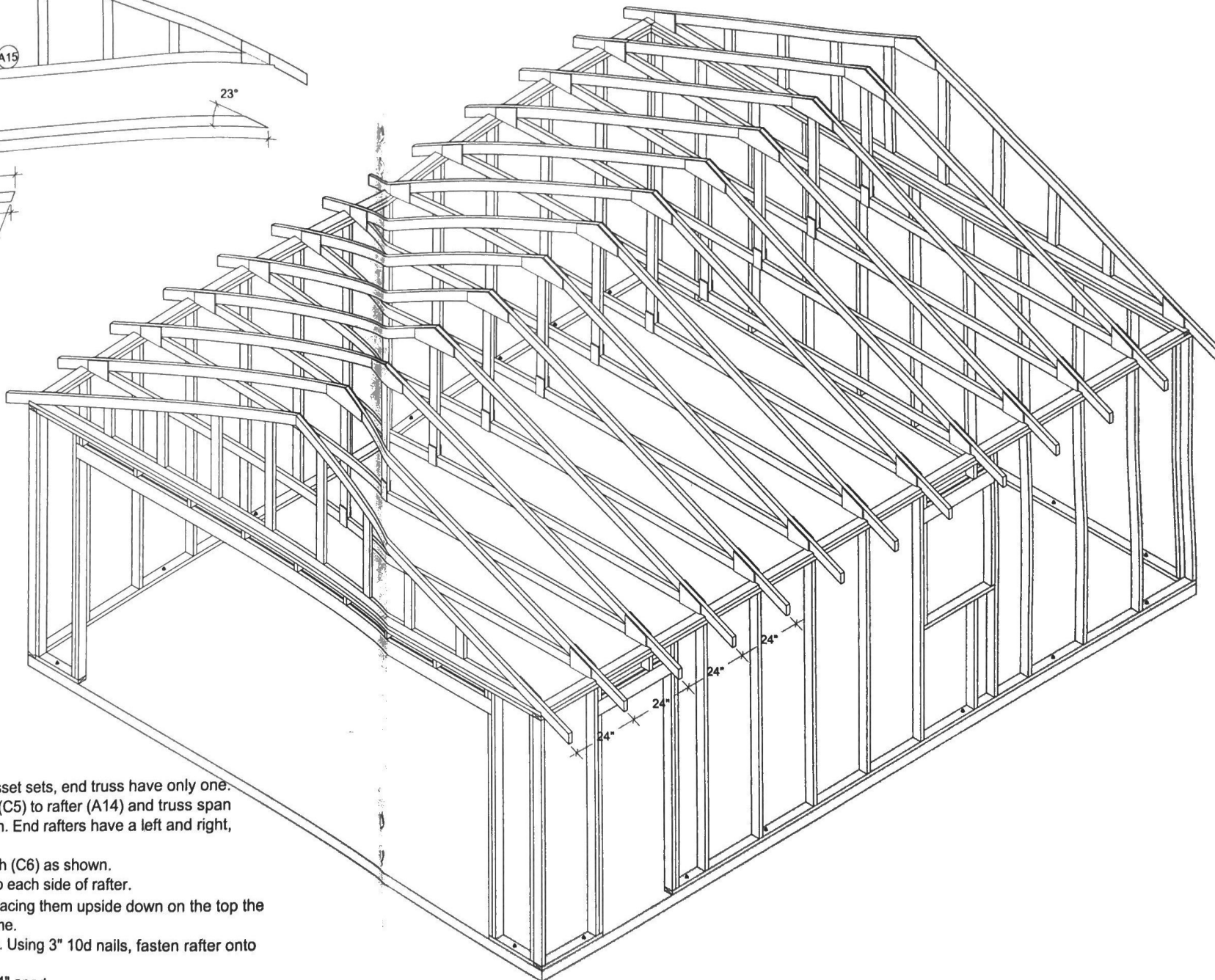
Code	Descriptions	Dimension	Qty
A14	Rafter	143 ⁵ / ₁₆ "	26
A15	Truss Span	235 ¹ / ₂ "	13
A16	11 ⁵ / ₁₆ " Jack	11 ⁵ / ₁₆ "	2
A17	21 ⁵ / ₁₆ " Jack	21 ⁵ / ₁₆ "	2
A18	31 ⁵ / ₁₆ " Jack	31 ⁵ / ₁₆ "	2
A19	41 ⁵ / ₁₆ " Jack	41 ⁵ / ₁₆ "	2
A20	45 ⁹ / ₁₆ " Jack	45 ⁹ / ₁₆ "	12
C4	20" Gusset	20"x7 ³ / ₁₆ "	24
C5	10" Gusset	10"x7 ³ / ₁₆ "	48
C6	3 ¹ / ₂ " Gusset	3 ¹ / ₂ "x7"	22

Truss Assembly

1. Layout rafters and gussets and align as shown. Two gusset sets, end truss have only one.
2. First assemble 2 end truss by fastening gussets (C4) & (C5) to rafter (A14) and truss span (A15) using 2" 6d nails. Add jack (A16) - (A19) as shown. End rafters have a left and right, make sure to assemble with gusset of opposite side.
3. Repeat on step 1-3 on center rafters. Add jack (A20) with (C6) as shown.
4. Assemble remaining truss by fastening a rafter gusset to each side of rafter.

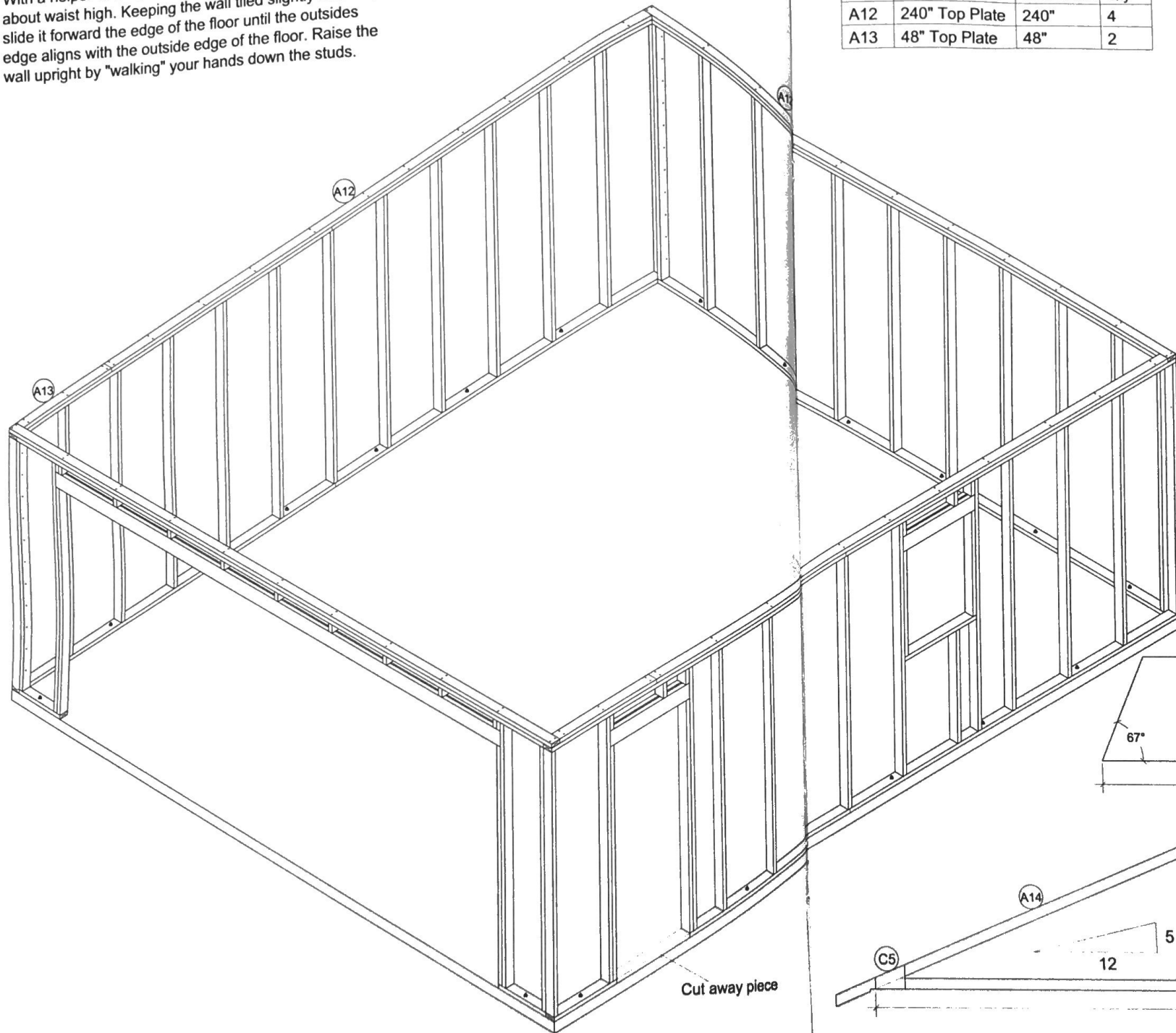
Install Truss: Trusses are generally installed by first placing them upside down on the top the plats and then flipping them up into position one at a time.

1. Install first end truss making sure gusset is facing inside. Using 3" 10d nails, fasten rafter onto top plates and into bottom of rafter as shown.
2. Install remaining rafters keeping them spaced exactly 24" apart.



Lift the Wall into Position

With a helper or two, lift the wall up so its top plate is about waist high. Keeping the wall tiled slightly forward, slide it forward the edge of the floor until the outside edge aligns with the outside edge of the floor. Raise the wall upright by "walking" your hands down the studs.



Double Top Plat Cutting List

Code	Descriptions	Dimension	Qty
A12	240" Top Plate	240"	4
A13	48" Top Plate	48"	2

Brace the Wall

1. Lift each wall so that the bottom plate fits over the anchor bolts. Place washer over the bolts, and thread on nuts but do not fully tighten.
2. Measure diagonals inside the tractor and adjust for the square. Check the walls for level; shim as needed.
3. Using 3" 10d nails, nail the the walls together at the corner every 8" then tighten the nuts on the bottom plats.
4. Cut out the bottom plate at the door opening.
5. Add top plates (A12) & (A13) using 3" 10d nails, making sure they are flush to the outside all edges.

Cutting a Bird's Mouth

1. The first step is to outline a pattern, figuring from the drawing. This pattern should be marked in pencil on the 2x4 lumber.
2. Next set the blade of a circular saw for maximum depth and made the bird's mouth cuts. Stop the cuts where the lines intersect. This won't cut out the notch completely; cutting past the marks will weaken the rafter.
3. Finally use a compass saw to complete the cut to remove the waste. If necessary, use a sharp chisel to clean up any rough edges, especially in the corner so that the notch will rest flat on the top plates.
4. Once you've cut a rafter to the length and made the bird's mouth cut, use this as a template to make another rafter.

