

For SI: 1 inch = 25.4 mm.

W = Width of footing, T = Thickness of footing and P = Projection per Section R403.1.1.

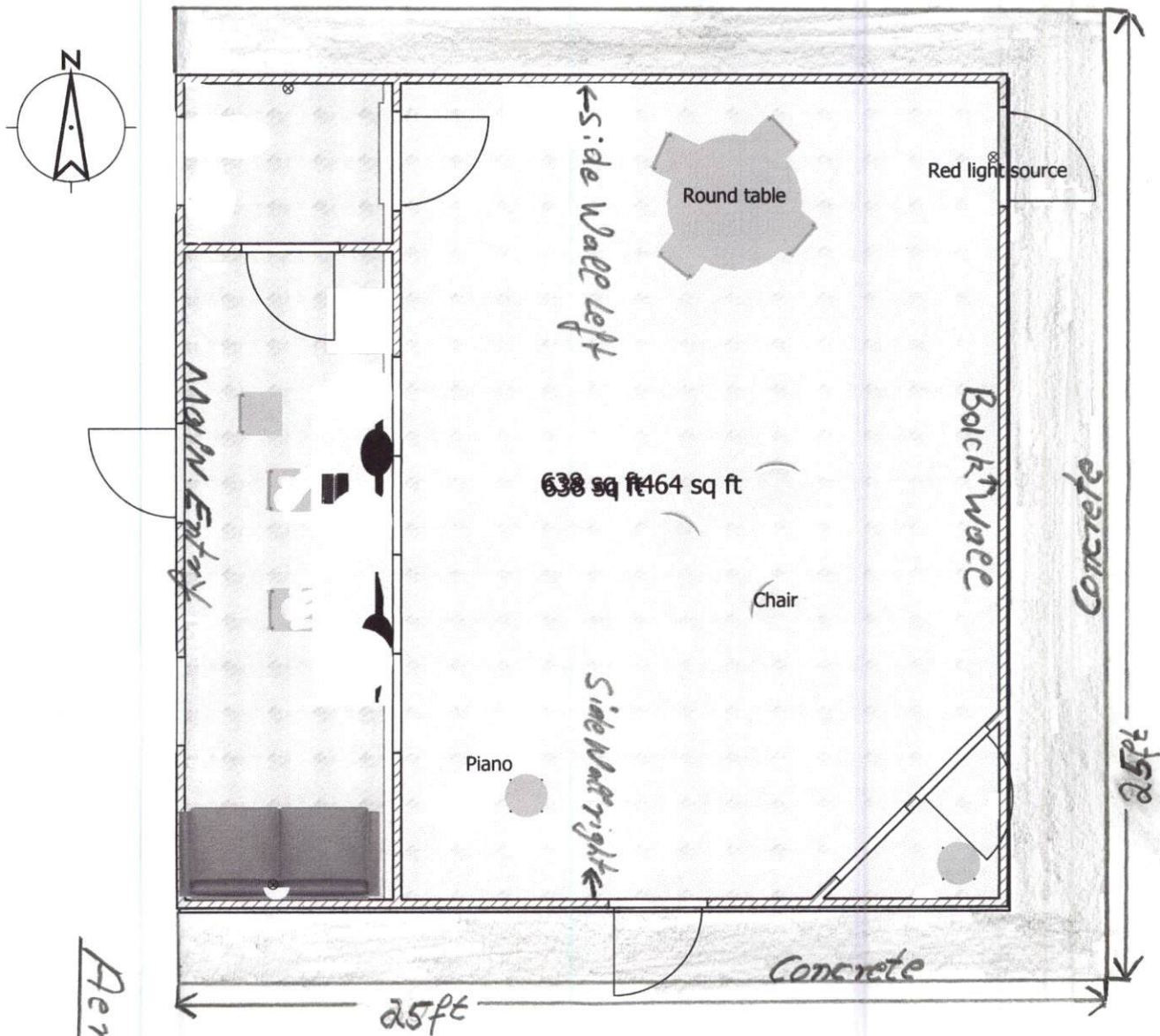
Notes:

- a. Foundations shall extend not less than 12 inches below finished grade and in no case less than the frost line depth.
- b. Footing sizes are based on soil with an allowable soil pressure of 2,000 pounds per square foot. Footings on soil with a lower allowable soil pressure shall be designed in accordance with accepted engineering practice.
- c. Footing projections shall not exceed the footing thickness.
- d. For minimum footing width (W) see Table R403.1(1).
- e. Minimum footing thickness (T) is: 6" for 1 story, 8" for 2 story and 10" for 3 story.
- f. Install anchor bolts per Section R403.1.6.

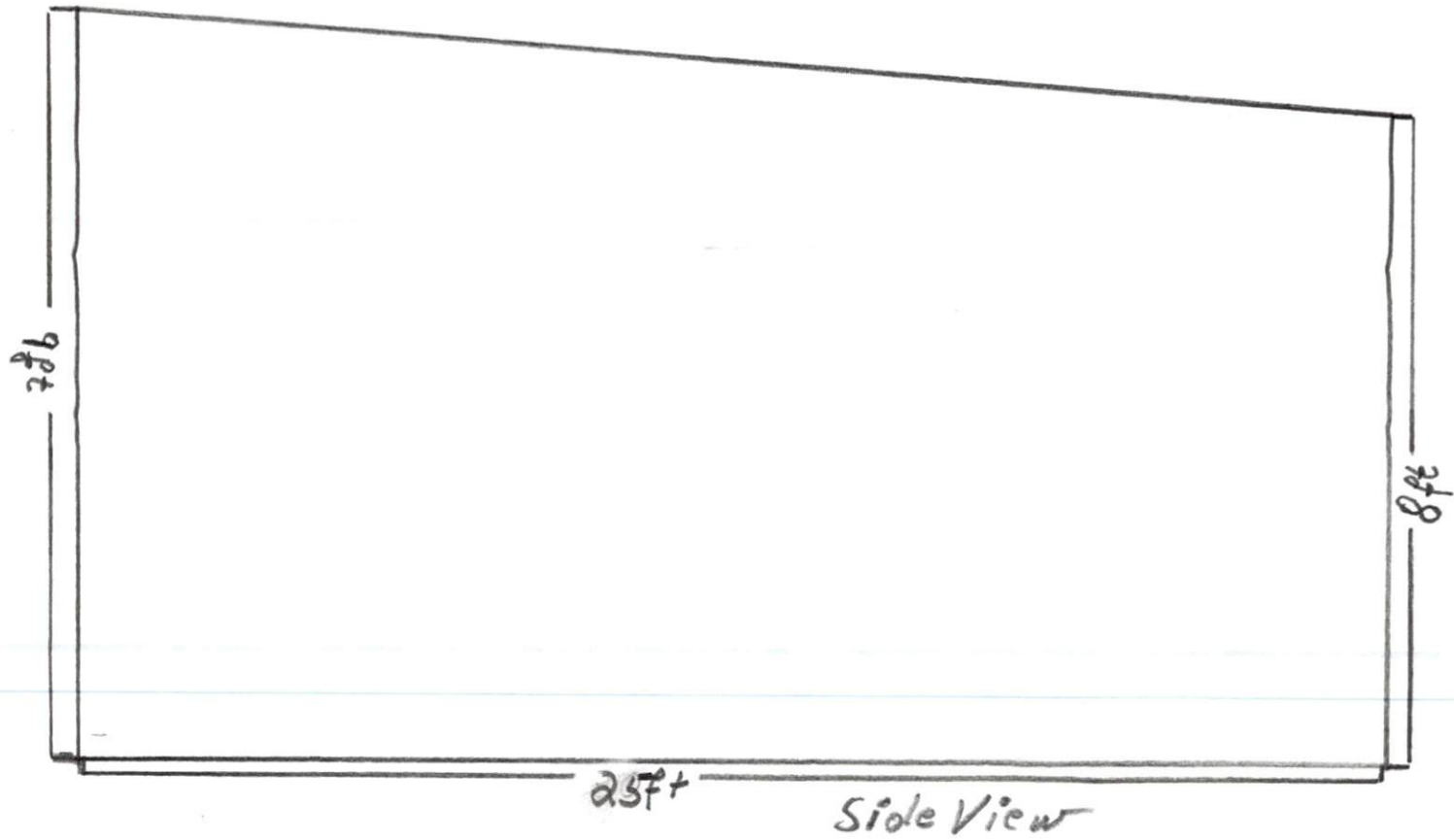
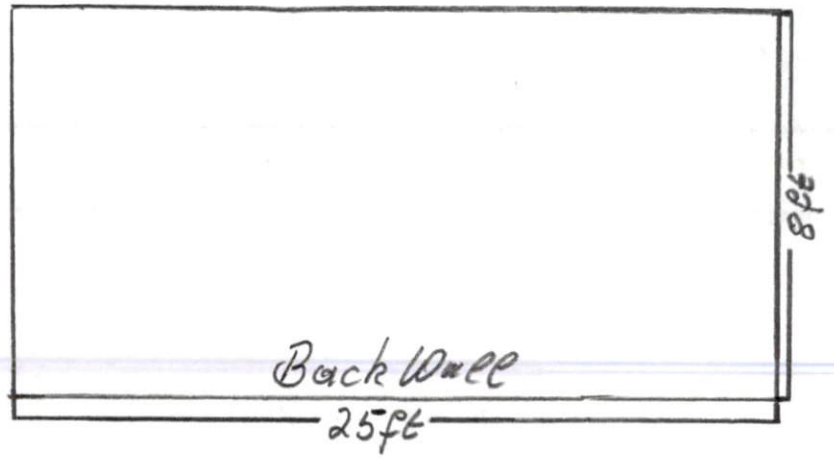
FIGURE R403.1(1)
CONCRETE AND MASONRY FOUNDATION DETAILS a, b, e, c, d, e, f

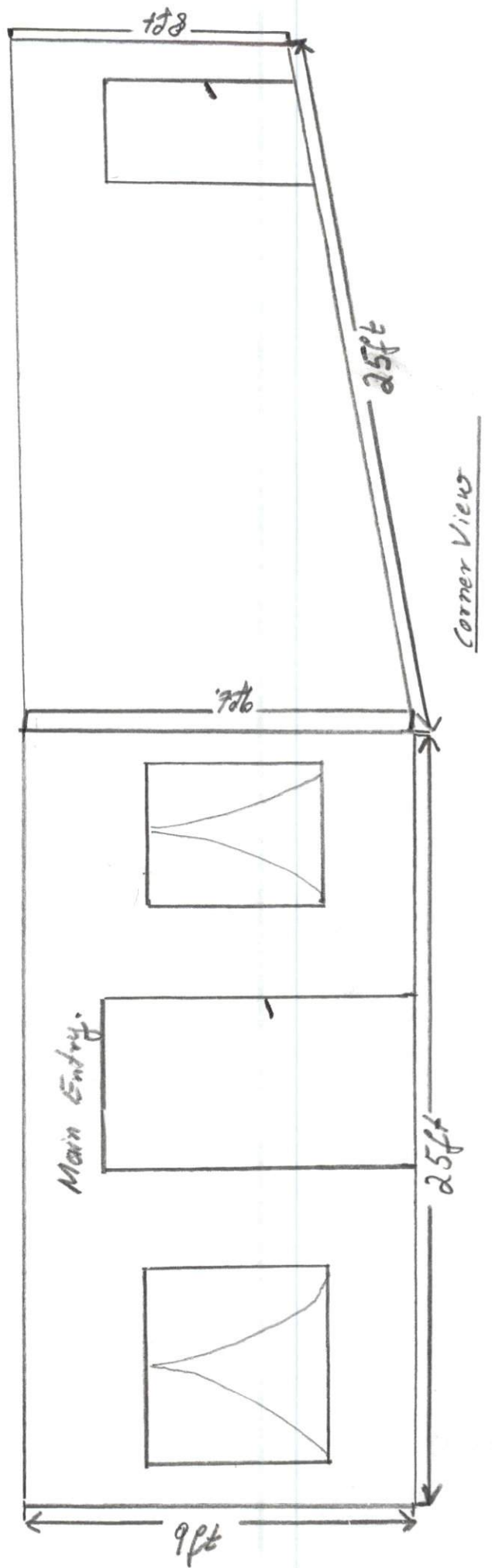


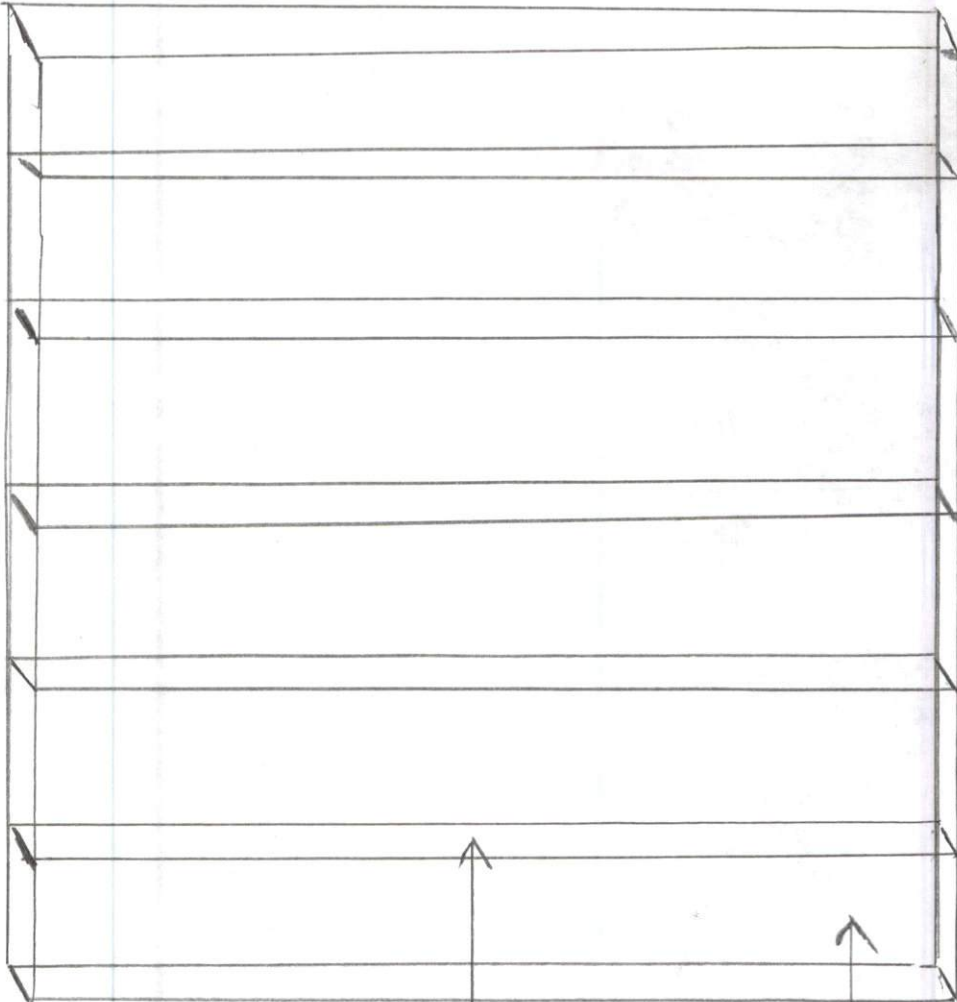
This will be on a code compliant mono slab. Walls 2x4 @16" oc on a treated bottom plate and anchored per code. Rafters to be 2x8 @16" oc minimum with a maximum span of 17'9" single slope roof per plan



Aerial View







2x4x10-8

← ALL WOOD

Bi- Level Recreational Building Part A & Part C

120 Ridge View Drive Cameron, NC 28326

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Structure/ Posts:

All 4x4 post are going to be settled in 2 ft concrete with protective sleeves and secured with 4ft long steel anchors into the ground.

To assure proper connections between the 4x4 post there will be 2 way and 3 way post brackets used and attached with 3 inch bolts.

Walls:

The wall structures are build with untreated 2x4s with a 16 inch distance- and enclosed on both sides- interior/exterior, with $\frac{3}{4}$ x 4x 8 plywood panel boards and triple thermal insulation, first layer interior with $\frac{3}{4}$ Styrofoam panels next layer, top faced fiberglass roll insulation.

The exterior walls will be insulated with a reflective roll insulation and finished with Vinyl Siding.

Wall Part B is a 2 ft wide connection between Part A and Part C.

Floor Structure Sub floors

Before floor installations a vapor barrier will be installed.

The floor Joists and frames are all pressure treated lumber and will be additionally treated with bitumen.

The floor constructions will be secured with steel anchors on every corner and double thermal insulated between the joist with $\frac{3}{4}$ thick Styrofoam panels and top faced fiberglass roll insulation.

On top the floor structure/ insulation, there will be $\frac{3}{4}$ x 4x8 plywood boards installed and are finished with a bubbled noise barrier and Laminate flooring.

Roof structure

Two Flat Roofs with a 4ft slop

Roof Structures are build with 2x6x16 lumber, notched and attached on top 4x4 with a 12 inch distance and secured with Hangers with bolts

Two additional 4x4x16 rafters on Part A and Part C will be installed, attached with 3 way steel brackets for additional stability.

Sealant and Vinyl flashing will be installed around the framing.

Two roof vents on Part A and Part C, will be installed – font and backside for proper ventilation $\frac{3}{4}$ x 4x8 plywood panel boards will be installed on the interior first ,to install double thermal insulation $\frac{3}{4}$ Styrofoam panels plus faced fiberglass roll insulation.

The exterior $\frac{3}{4}$ x 4x8 plywood will be finished with tar paper and asphalt shingles.

Structure Posts:

All 4x4 post are going to be settled in 2 ft concrete with protective sleeves and secured with 10 long steel anchors into the ground.
To assure proper connections between the 4x4 post frames will be 2 way and 3 way post brackets used and attached with 1/2 inch bolts.

Walls:

The wall structures are built with untreated 2x4 with a 10 inch distance and enclosed on both sides-interior with 2x4 plywood panels and triple thermal insulation. Just interior with 2x4 plywood panels and triple thermal insulation.
The exterior walls will be finished with a reflective foil insulation and finished with 7/8 inch siding.
Wall Part B is a 1 ft wide connection between Part A and Part C.

Floor Structure Sub floor:

Before floor installations a vapor barrier will be installed.
The floor joists and frames are all pressure treated lumber and will be added, evenly treated with distance.
The floor construction will be secured with steel anchors on every corner and double thermal insulation between the joist with 2x4 plywood panels and top faced fiberglass and insulation.
On top the floor an exterior insulation there will be 2x4 plywood boards installed and are finished with a bubble noise barrier and laminate flooring.

Roof Structure:

The flat roof with a 1/4 slope.
Roof structures are built with 2x6x6 lumber, spaced and attached on top 4x4 with a 12 inch distance and secured with hangers with bolts.
Two additional 4x4x6 rafters on Part A and Part C will be installed, attached with 3 way steel brackets for additional stability.
Sealant and Vinyl flashing will be installed around the framing.
Two roof vents on Part A and Part C, will be installed - front and backside for proper ventilation.
2x4 plywood panel boards will be installed on the interior flat, to install double thermal insulation 2x4 plywood panels plus faced fiberglass roll insulation.
The exterior 2x4 plywood will be finished with top paper and asphalt shingles.

Power Supply :

Power would be provided by Central Electric.

The interior and exterior electrical installation will be performed by High speed Electric.

Heating and Air:

A new ductless Heating and Air system will be installed suitable for 816 sq ft.

Interior:

There are no Bathrooms, closets or Kitchens installed.

Main entry Door size 80x36 steel door

Door to Part C 80x38 steel door.

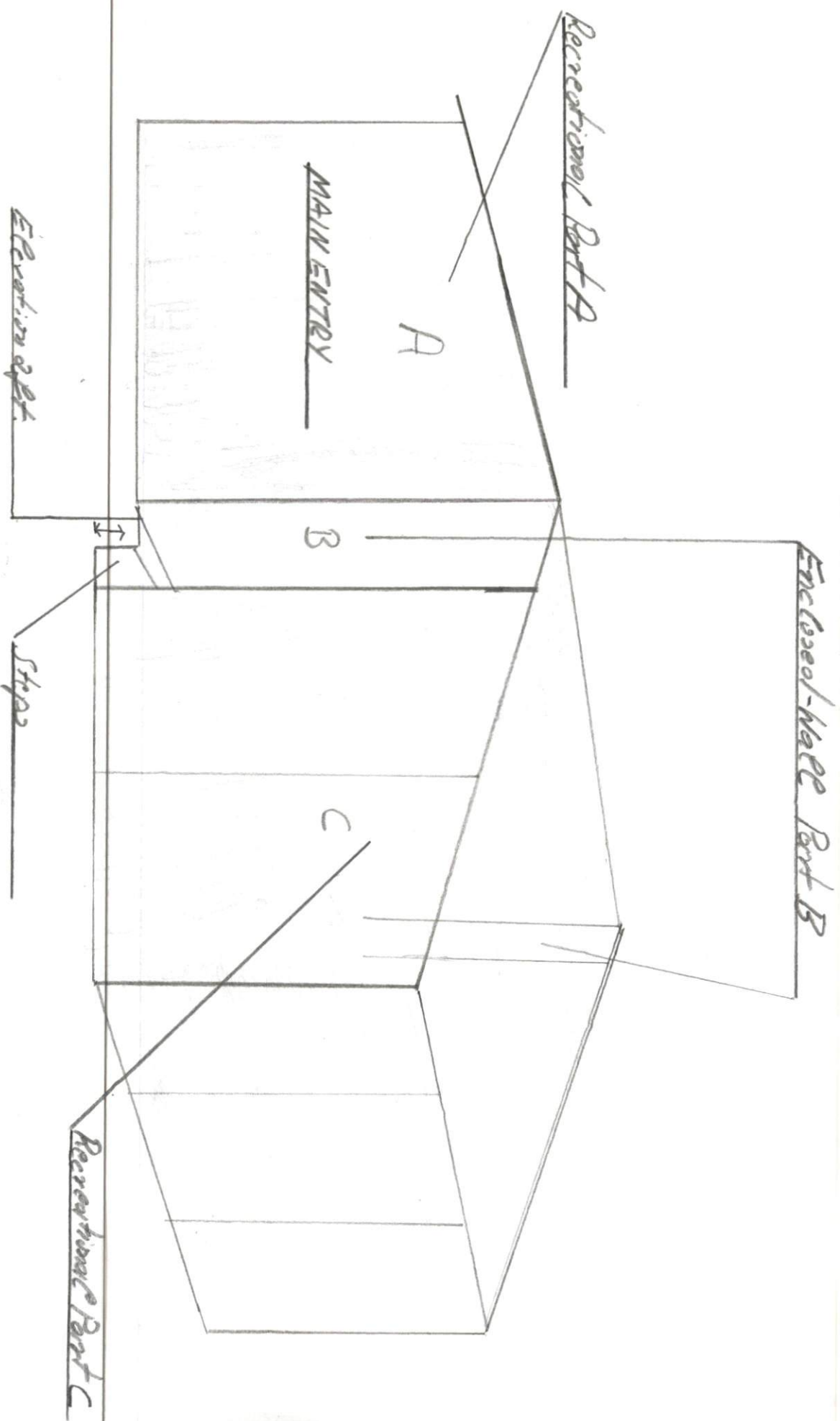
Three windows installed to Part A right side wall installed side by side measurement 30x30

Main Entry. Wall Part A. One Window measurement 30x30

All Lights are dimmable LED Fixtures and controlled by Dimmer Light switches

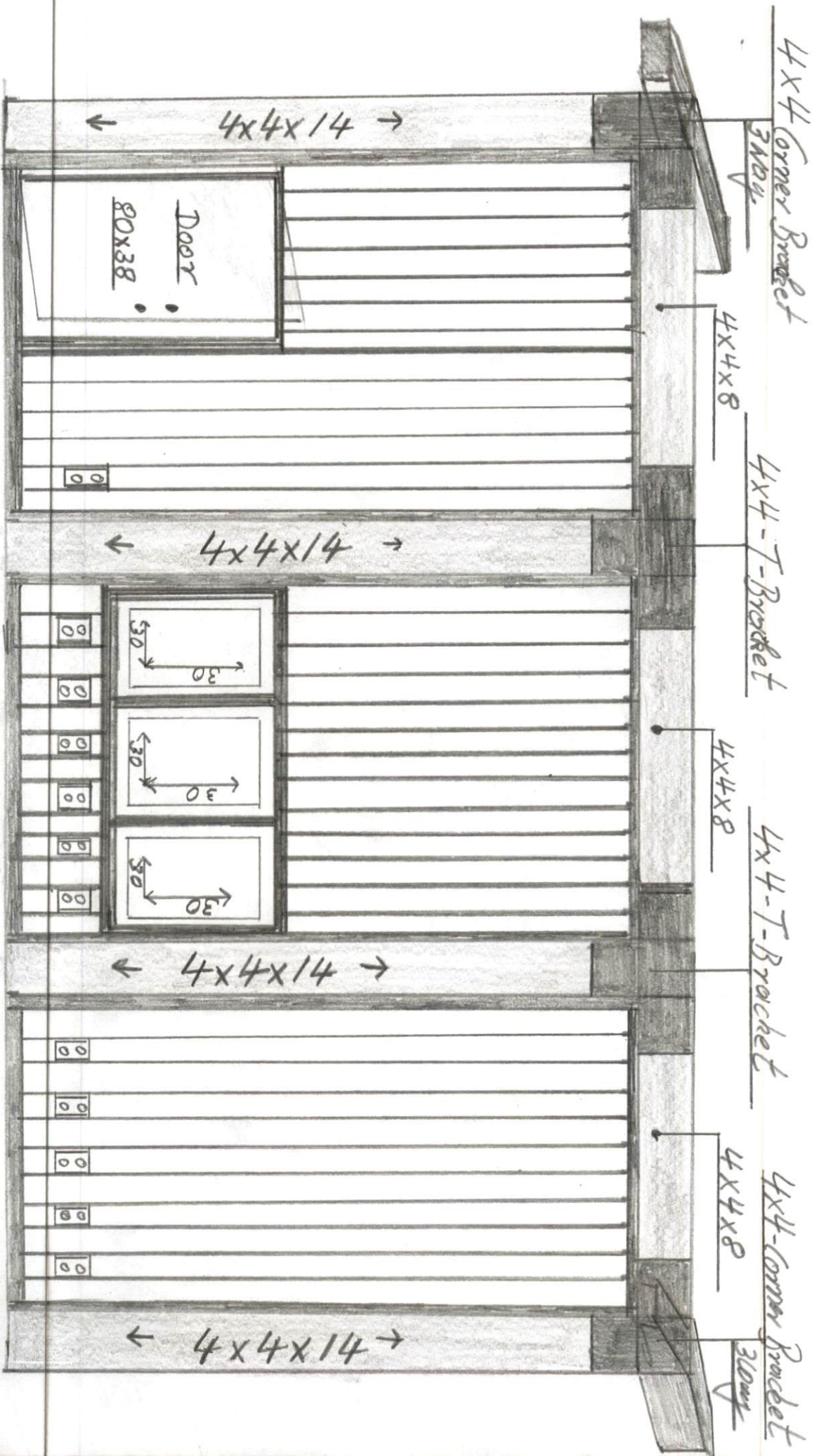
Power outlets and Lights will be connected in separate circuits by High Speed Electric.

Recreational Barn Bi-Level



RIGHT SIDE WALL

Recreation Part A



LEFT SIDE WALL

Recreational Part A

INTERIOR OUTLETS

Corner Bracket - Steel

4x4 Corner Bracket

2x4x8

4x4x8

4x4-T-Bracket

2x4x8

4x4x8

4x4-T-Bracket

2x4x8

4x4x8

4x4 Corner Bracket

2x4x8

4x4x8

4x4x10

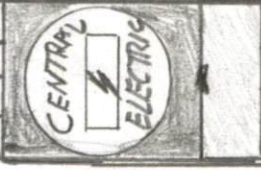
2x4x8

4x4x10

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4x4x10

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4x4x10

2x4x8

4x4 Wall Studs distance 16 inches

2x4x8

MAIN ENTRY WALL

Recreational Part A

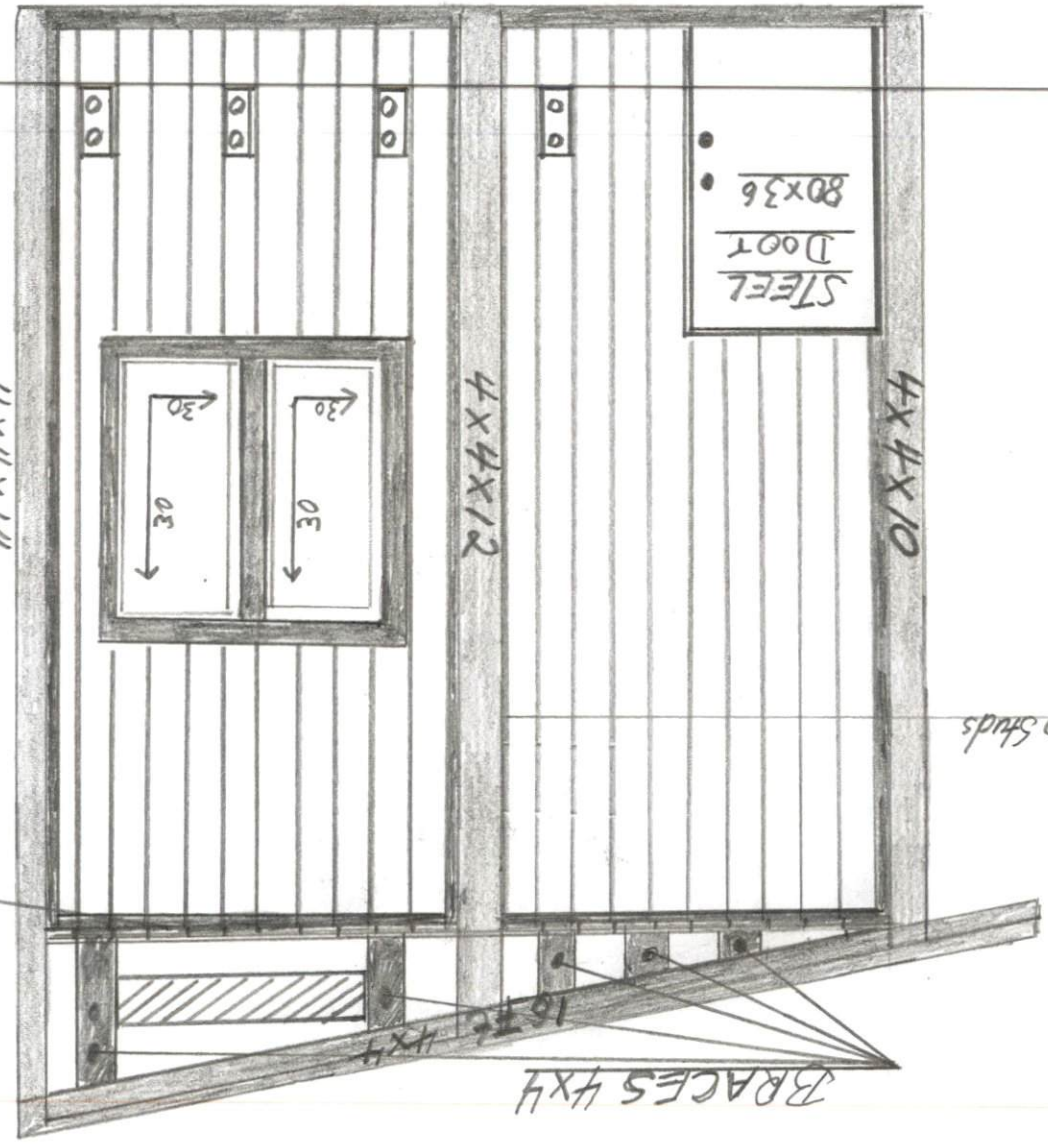
23.5 x 23.5 Window

80x36 Door

2x4 wall

AIR VENT

INTERIOR OUTLETS



2x4 wall 16 in studs

BRACES 4x4

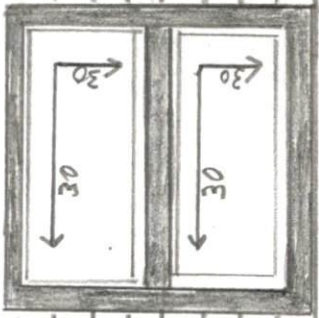
10T 4x4

4x4x10

4x4x12

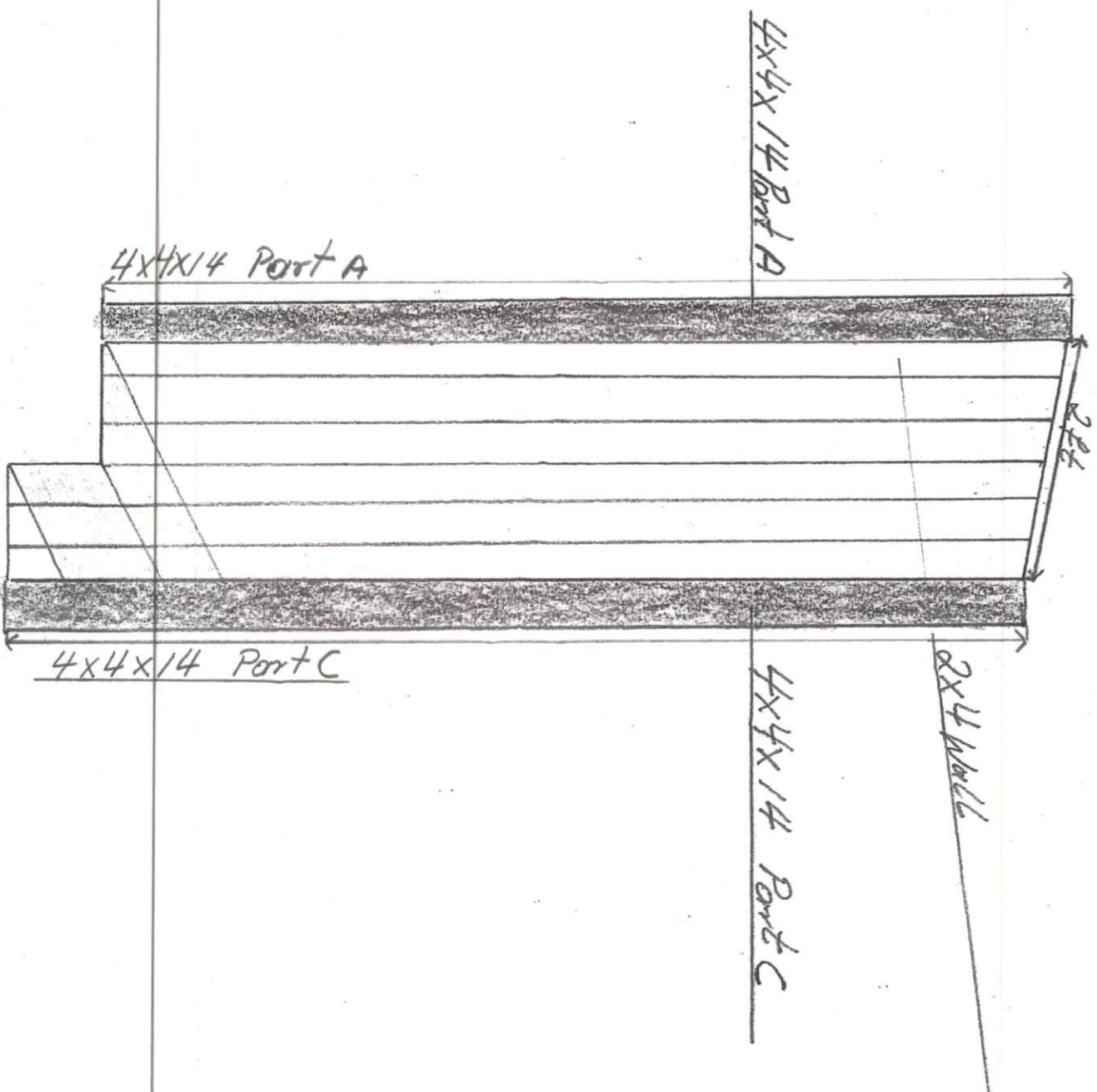
4x4x14

STEEL
DOOR
80x36

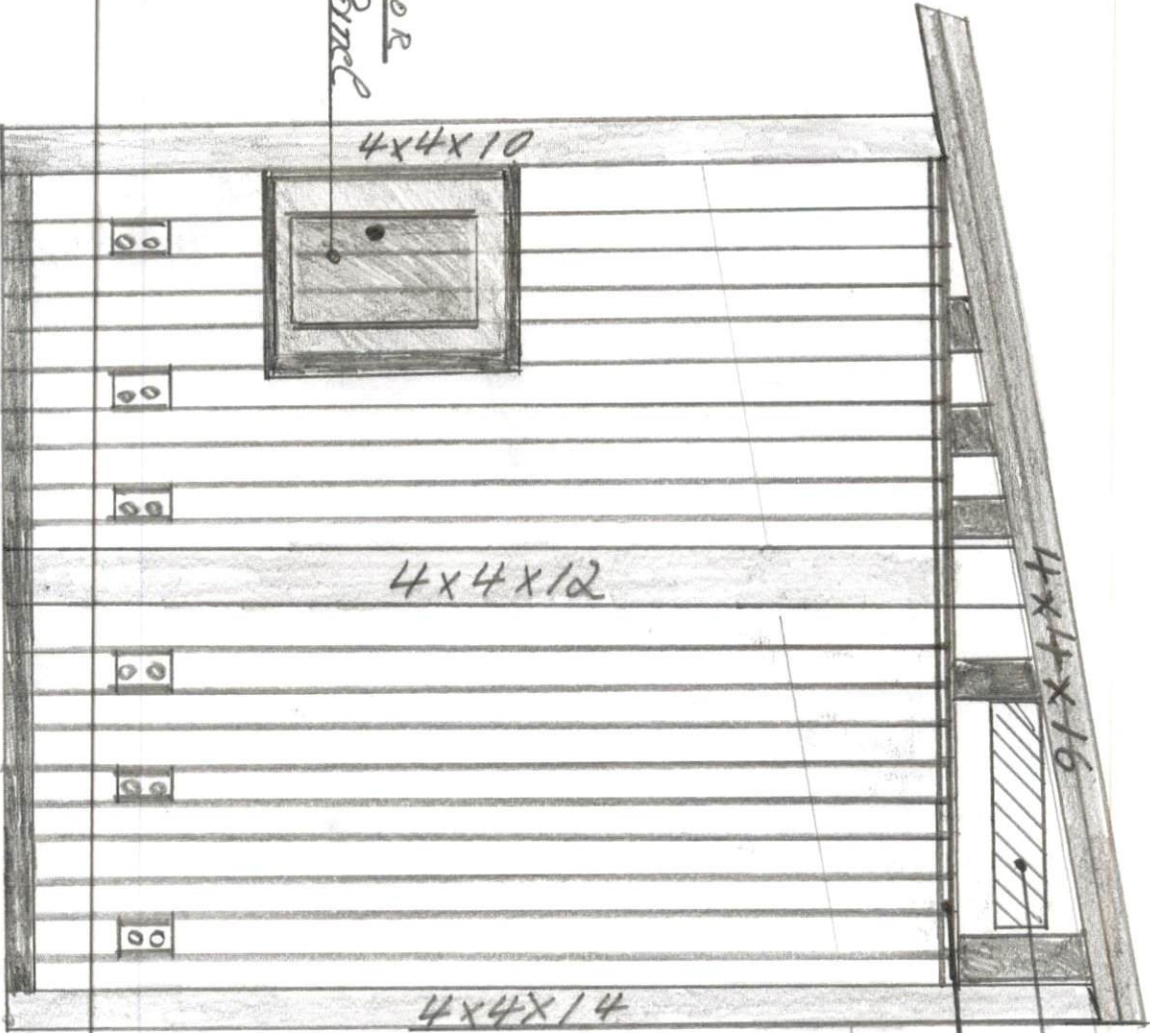


2x4x16

Wall Part B Main Entry Front Connects Part A and Part C



Back Wall
Recreational Post A



4x4 BRACES

Air Vent

2x4x16

2x4 Wall Stud distance 16 in.

 INTERIOR OUTLETS

INTERIOR
Breaker Panel

4x4x10

4x4x12

4x4x14

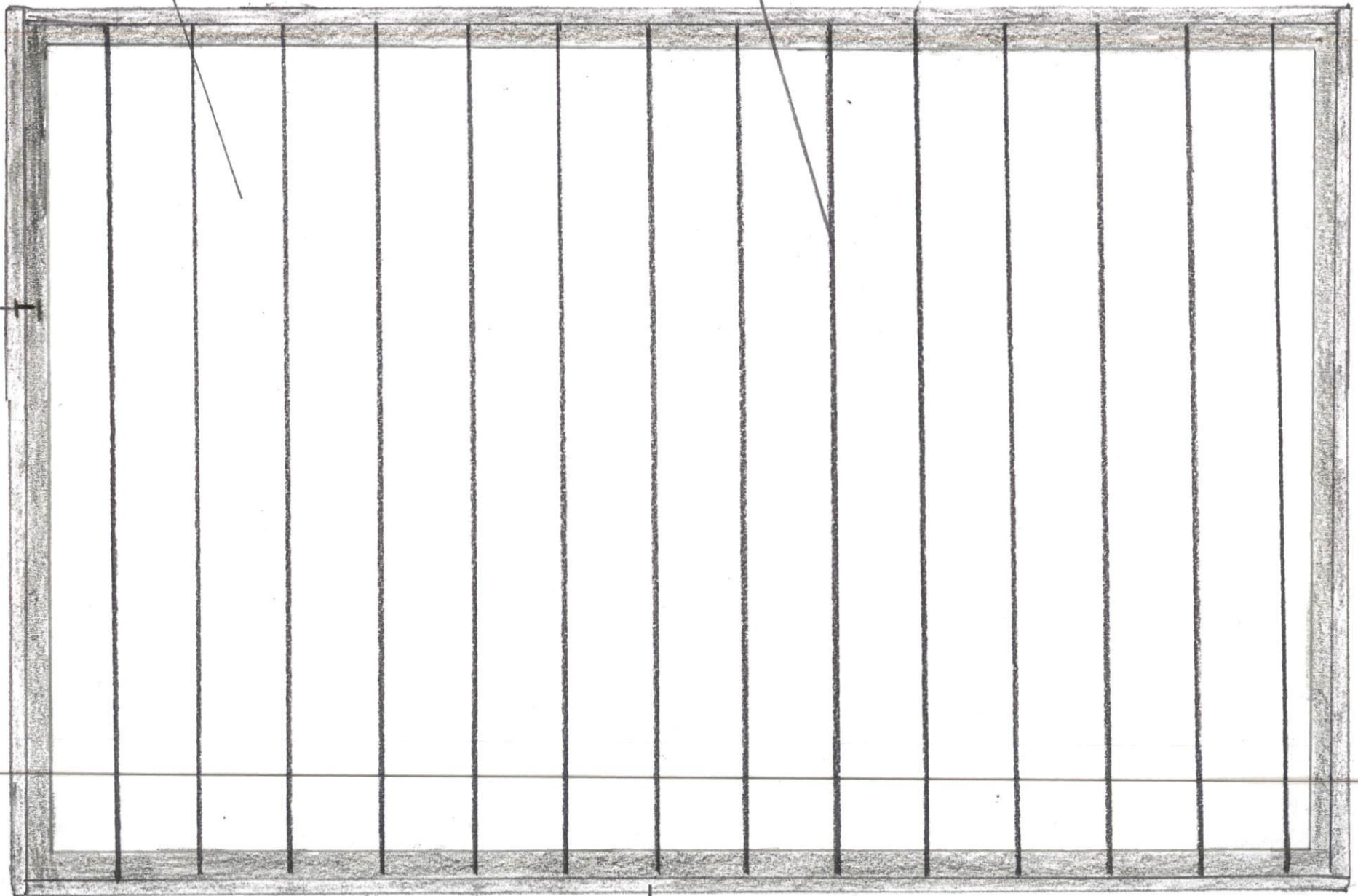
4x4x16

Wooden Floor - Recreational Barn Part A Subfloor

4x3/4x8 Floor Boards

2x6x16 Joist's

2x6x16 Frame



2x6x24 Frame

Roof boards 4x3/4x8

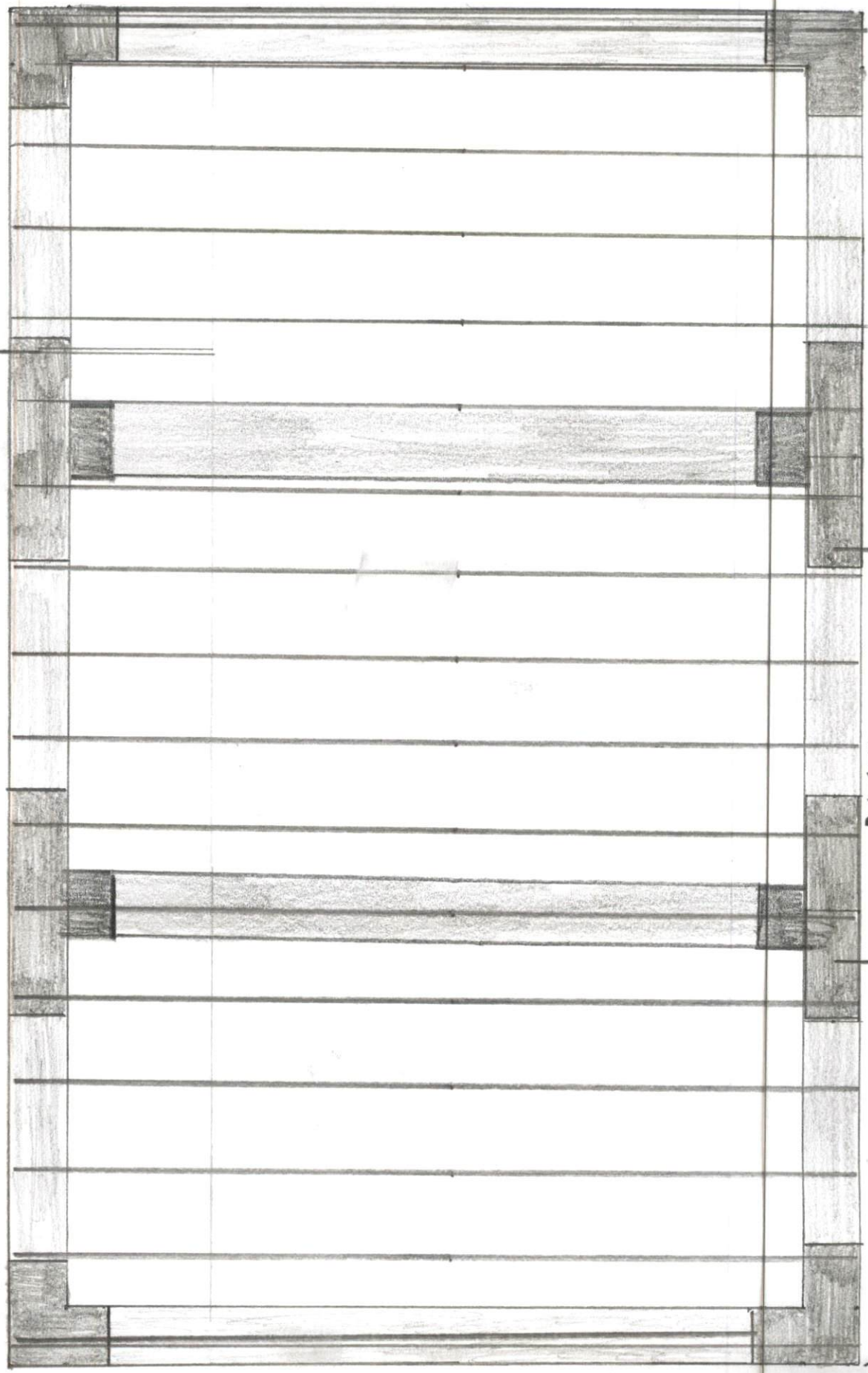
Roof Felt

Asphalt Shingles

Roof

Recreational Part A

2x6x16 Rafter 12inch distance



3 way

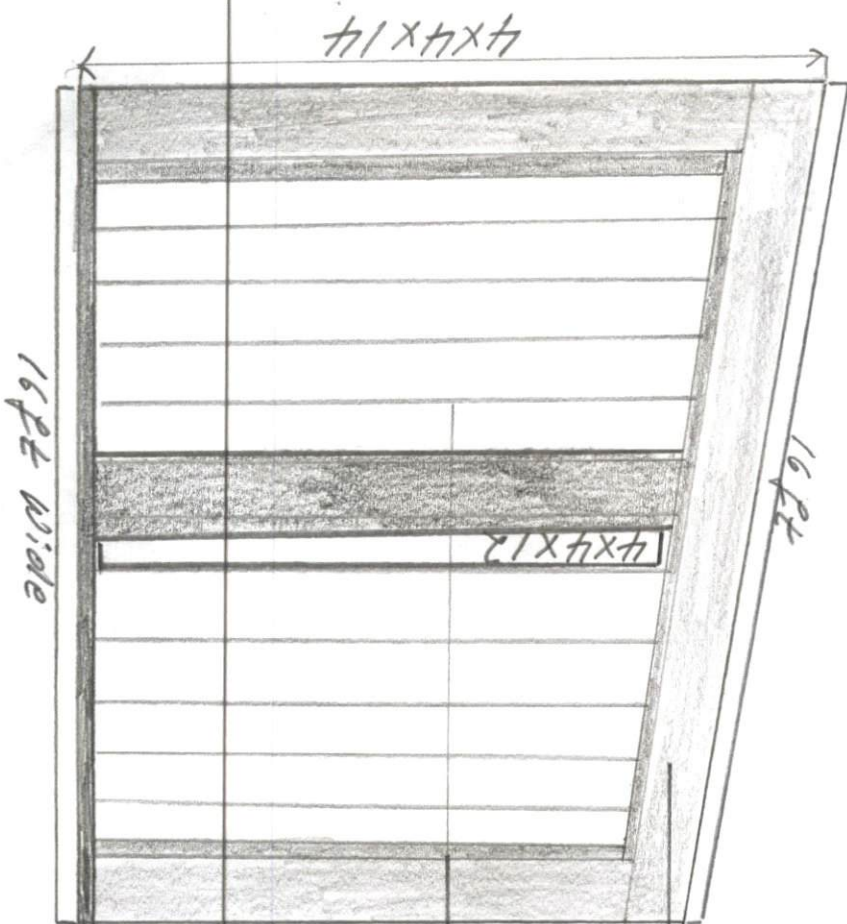
TOP 7-Bracet 24ft Wall

4x4x24

Part C

Equipment Shelter

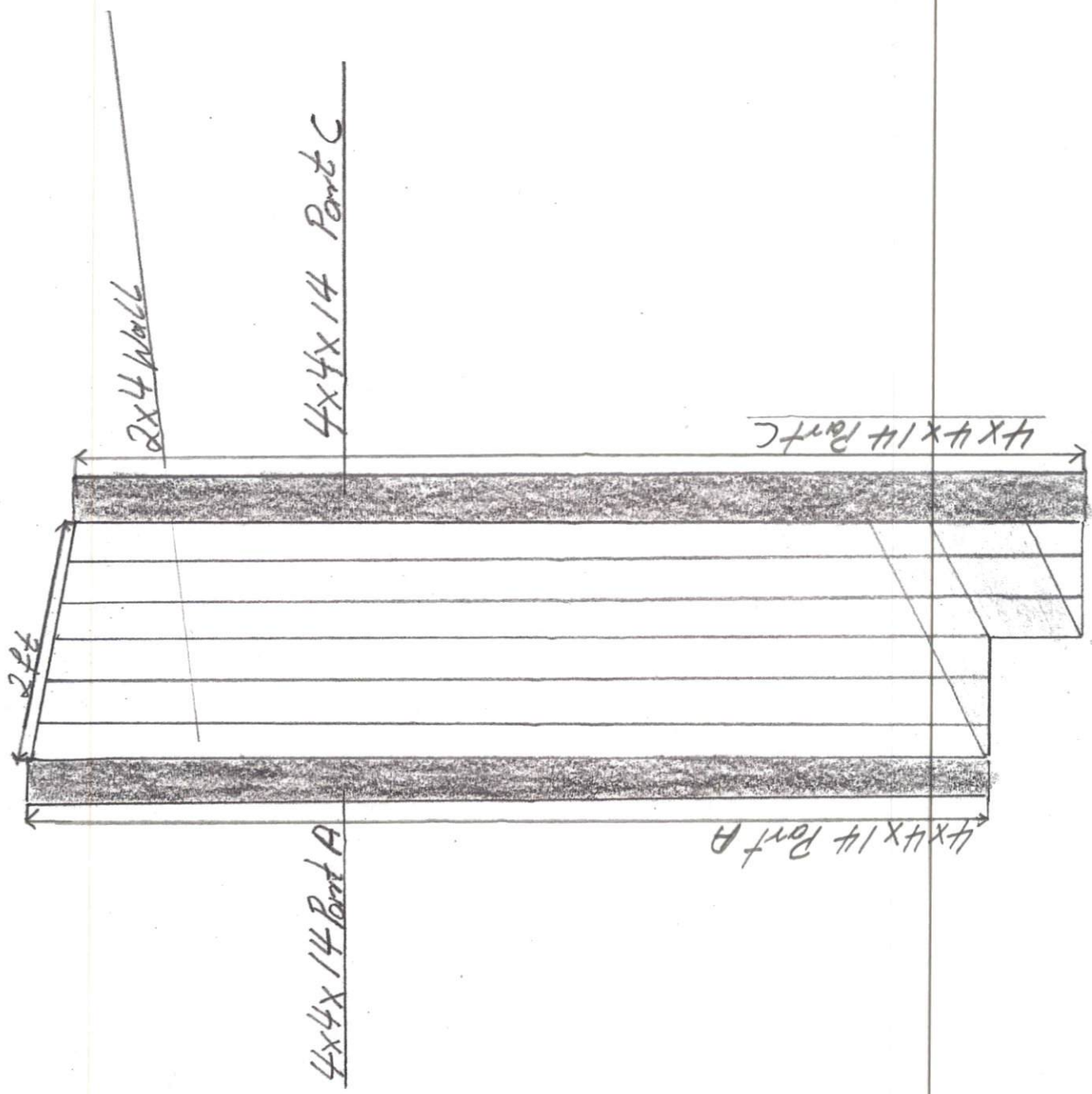
FRONT Side Wall



4x4x16

2x4 Wall Spacing 16 inches distance


Wall Part B Back Side Connects Part A and Part C

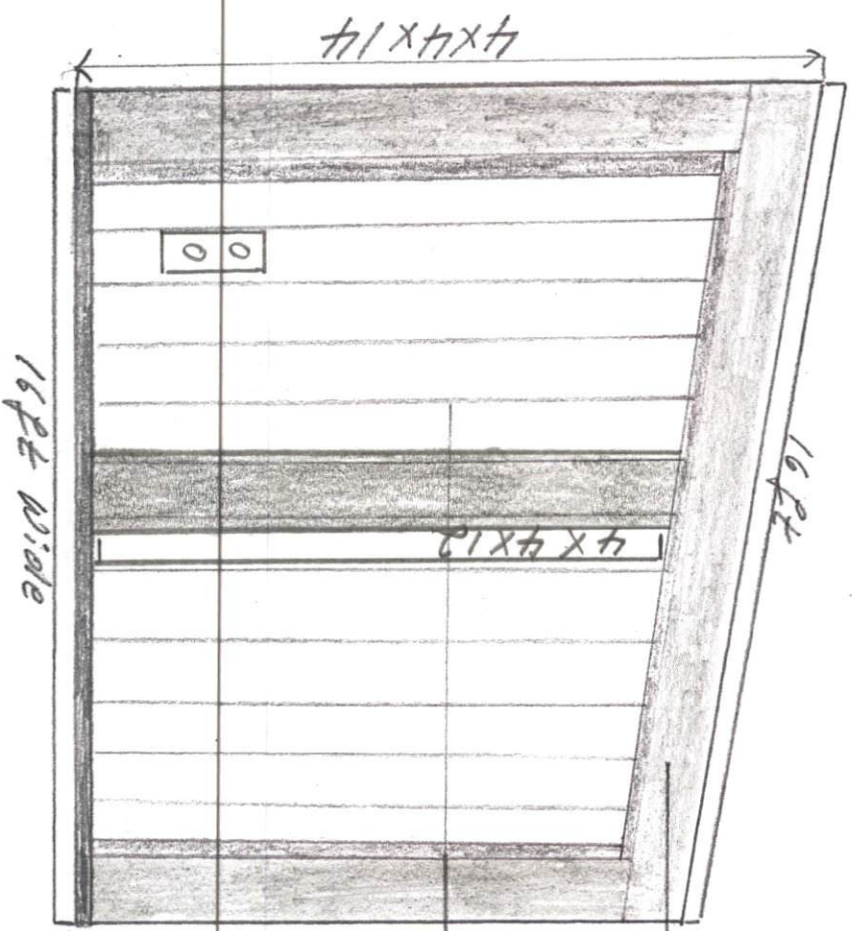


Part C

Equipment Shelter AREA

BACK SIDE WALL

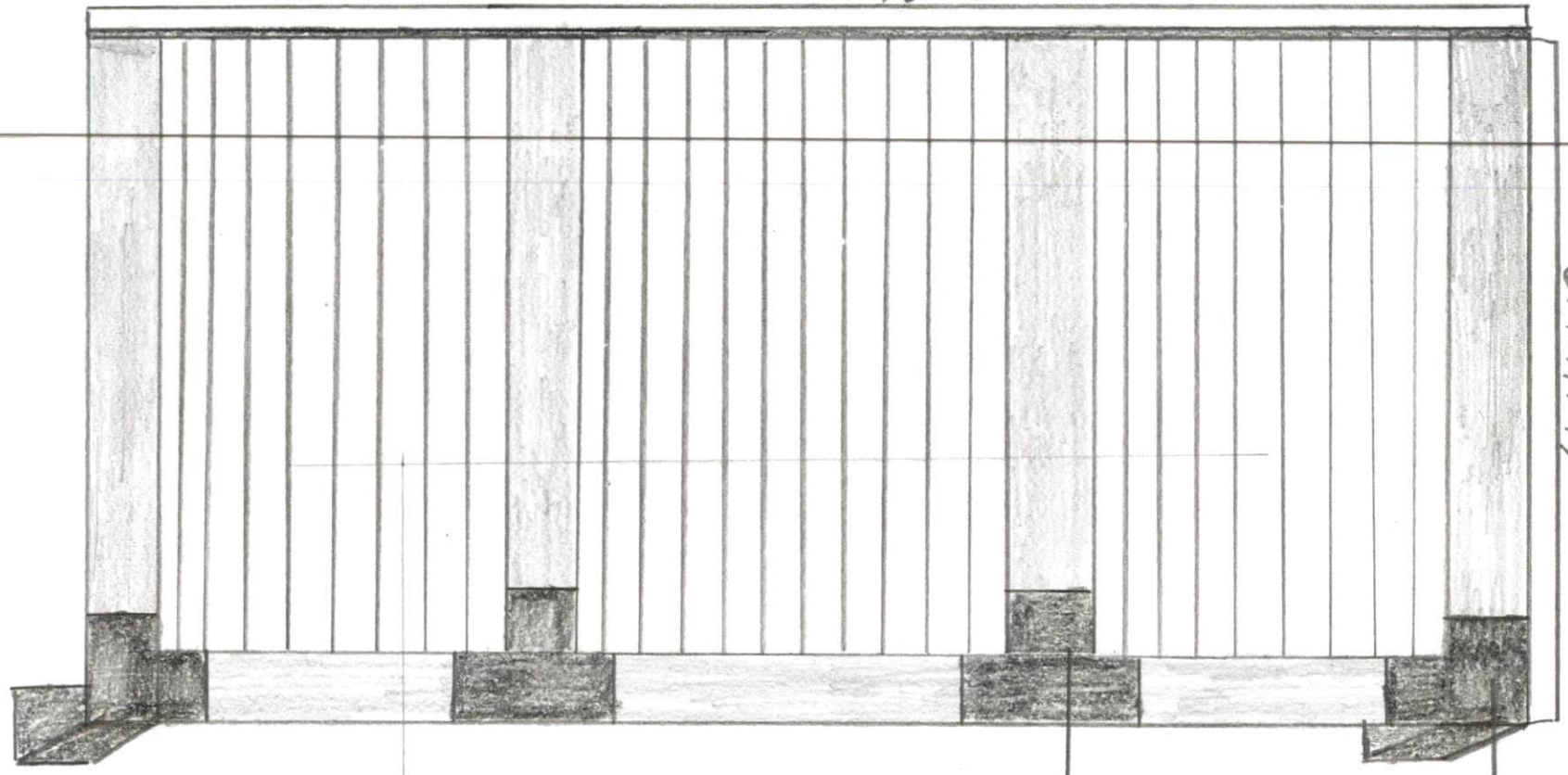
 OUTLET



4x4x1/2

2x4 Wall Spaced 16 inches distance

4x4x24 Long



4x4x10

4x4 Corner Bracket

4x4-T-Bracket

2x4 Wall Studs 16 inches on center

Equipment Area Part C

LEFT WALL

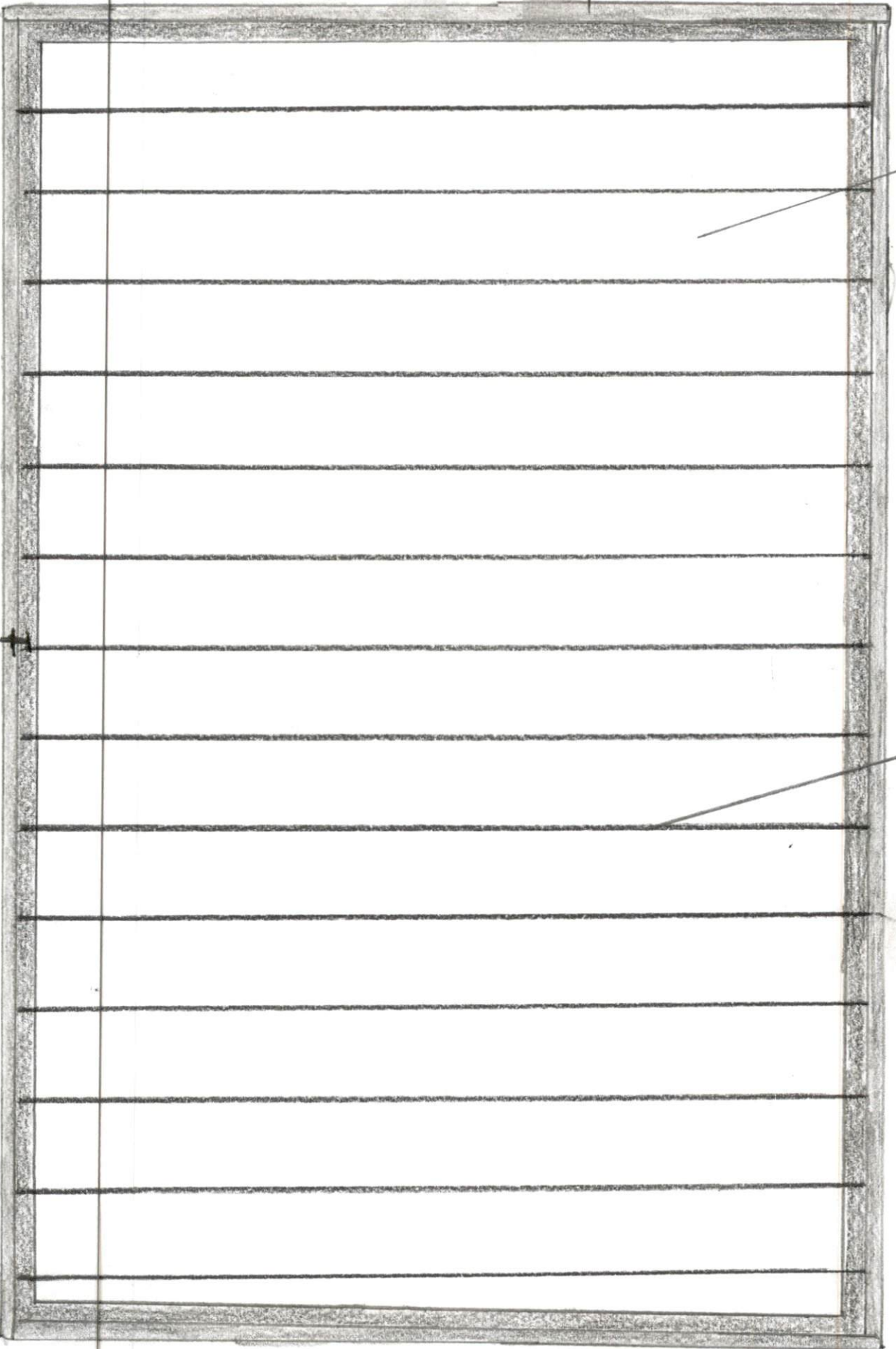
Wooden Floor Equipment Area Part C Sub Floor

4x3/4x8 Floor Boards

2x6x16 Joists

2x6x24 Frame

2x6x16 Frame



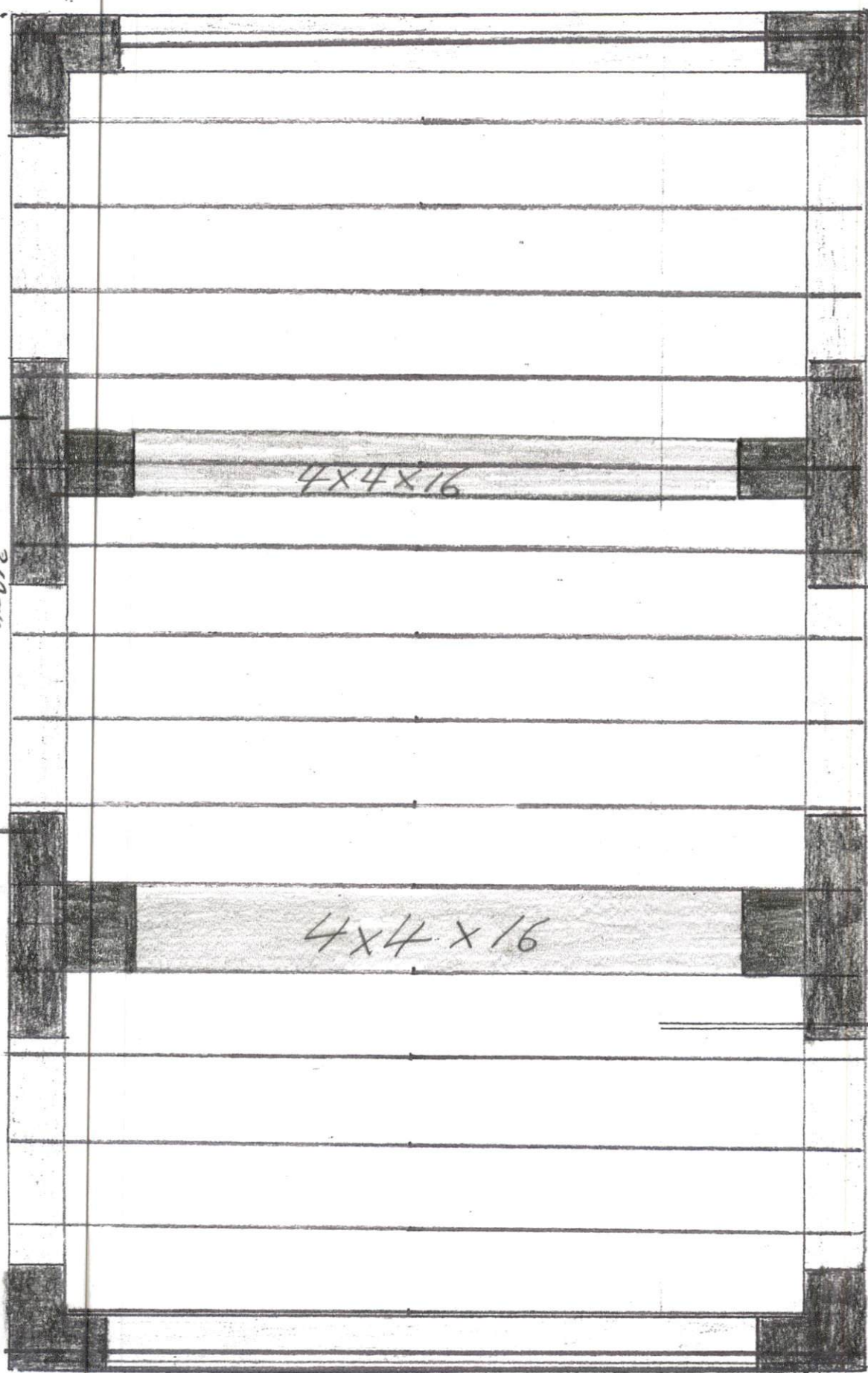
Roof boards 4x3 1/4 x 8

Roof Felt

Asphalt Shingles

Roof - Equipment AREA Part C

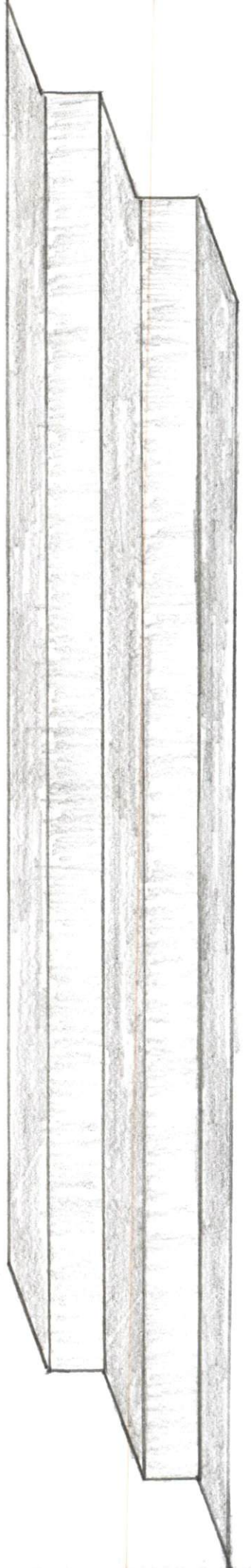
2x6x16 Rafter 12 inch o/c distance



4x4x16

4x4x16

3 Day Top Truss + 24ft Wall 4x4x24



6 Stair Stringers are used to connect Recessional Part A+C
Elevation of It between Part A+C