

# Plans: Vocal Isolation Booth

Plans for an isolation booth designed for voice-over recording.

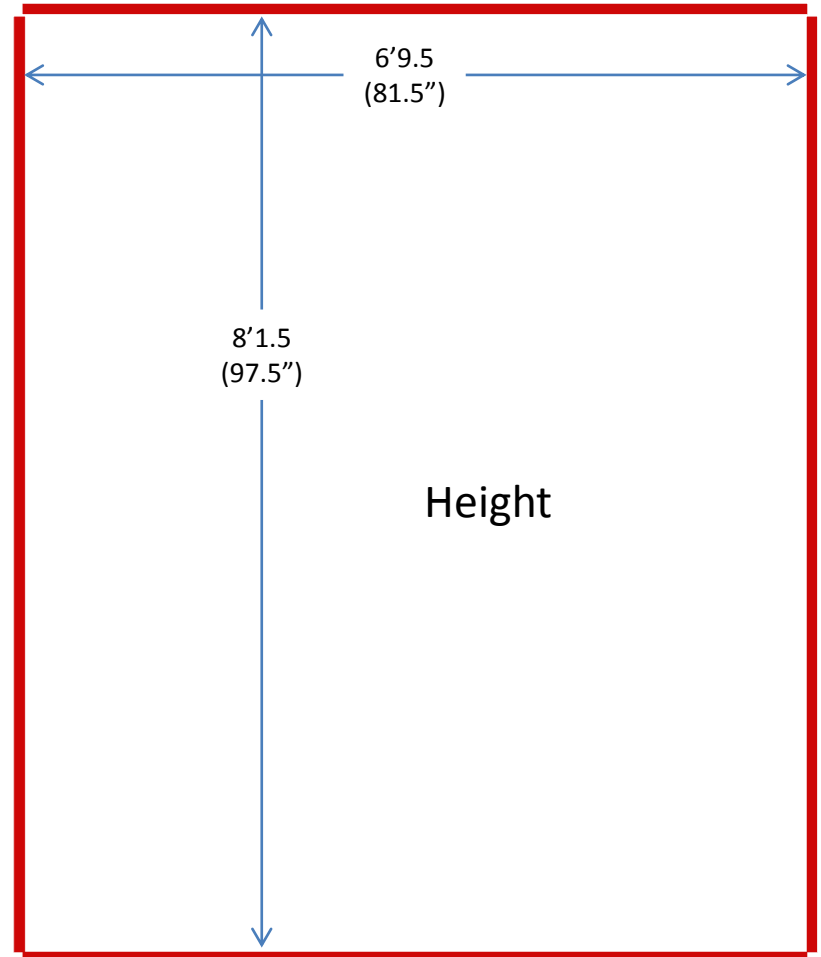
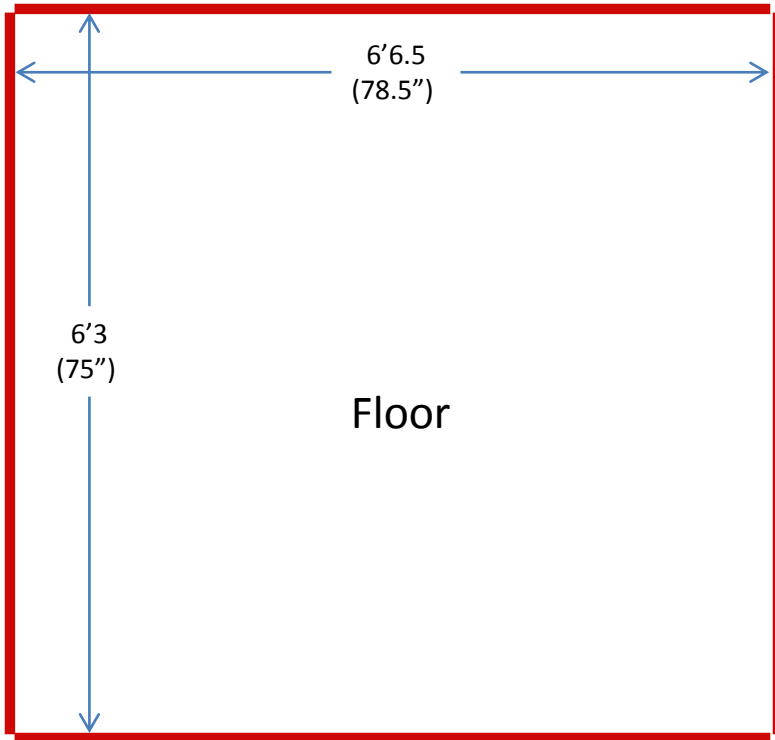
The booth will be located within an existing home office space, thus establishing the initial size constraints.

The design seeks to mitigate neighborhood and traffic noise while providing dry, non-reverberant sound treatment appropriate for voice recording.

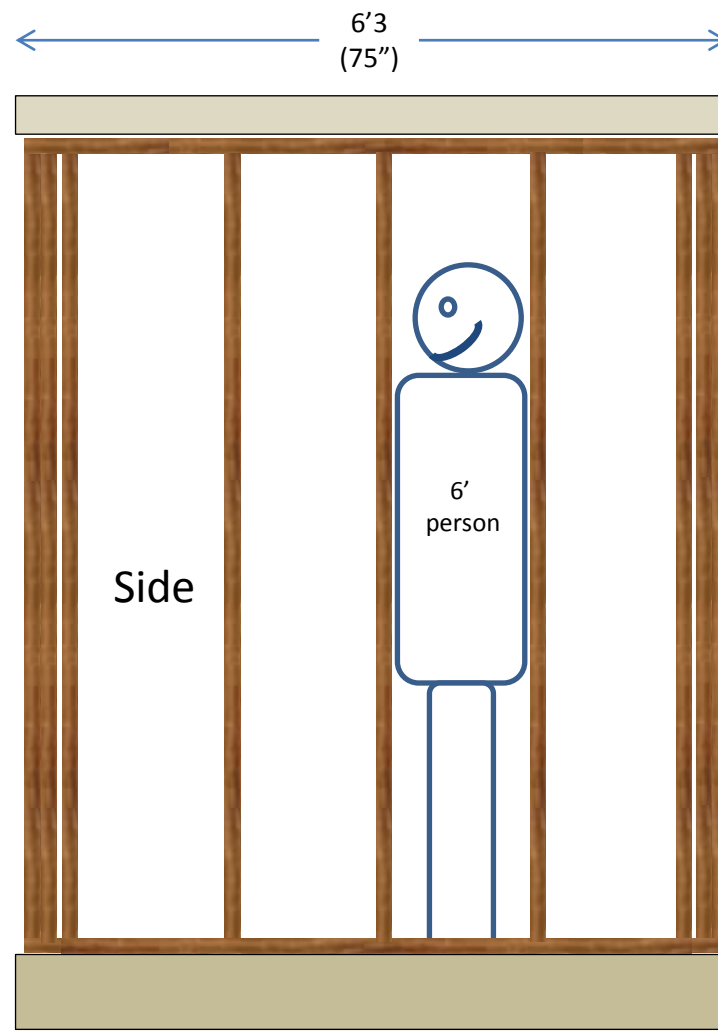
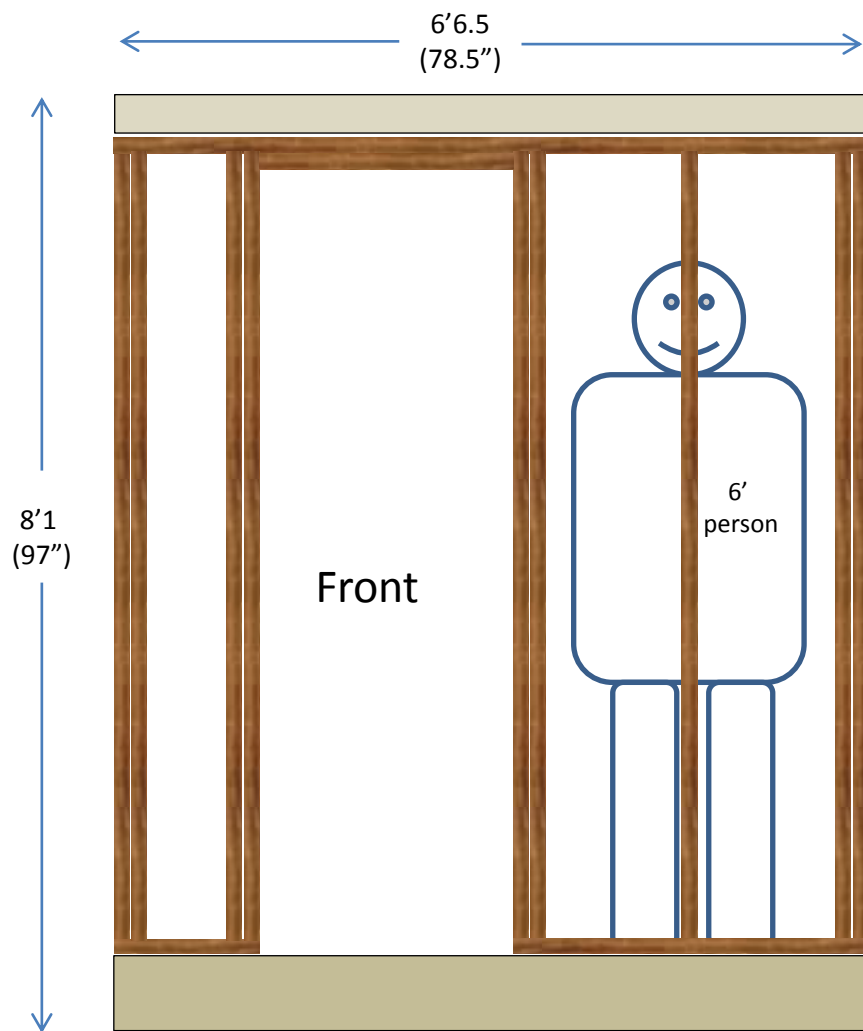
Designed by  
Paul D. Ford  
pauldford.com  
September 2011

- Available Space
- Structure Overview
- Internal Top View
- Sound Blocking
  - ❖ Floor
  - ❖ Back Wall
  - ❖ Side Walls
  - ❖ Ceiling
  - ❖ Front Wall
- Sound Treatment
  - ❖ Floating ceiling
  - ❖ Curtains
  - ❖ Carpets
  - ❖ Cable Entry and Concealment
- Order of Construction
- Material list/budget

# Available Space

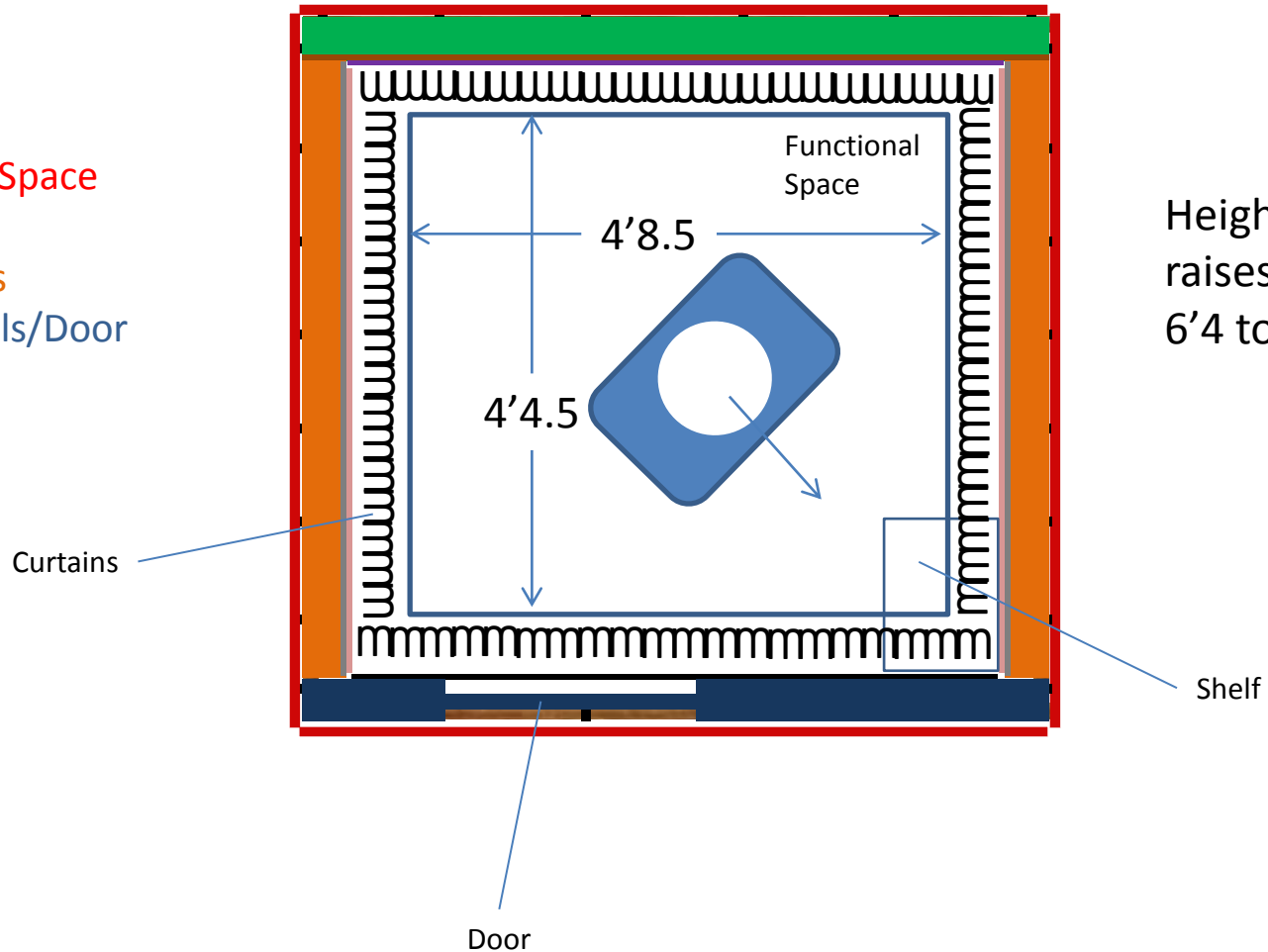


# Structure Overview



# Internal Top View

Available Space  
Back Wall  
Side Walls  
Front Walls/Door



Height  
raises from  
6'4 to 6'9



# Floor

Width reduced 3" for U-Boat spacers, and for wall offset on low left hand side of wall ( $2 \times 1\frac{1}{2}'' + 2''$ )

Length reduced 4" for U-boat spacers and width of 2x6's ( $2 \times 1\frac{1}{2}'' + 2 \times 1.5''$ )

Studs 16" OC

2 2x6 cut at 6'6.5

6 2x6 cut at 5'11

60 Auralex U-Boat floaters

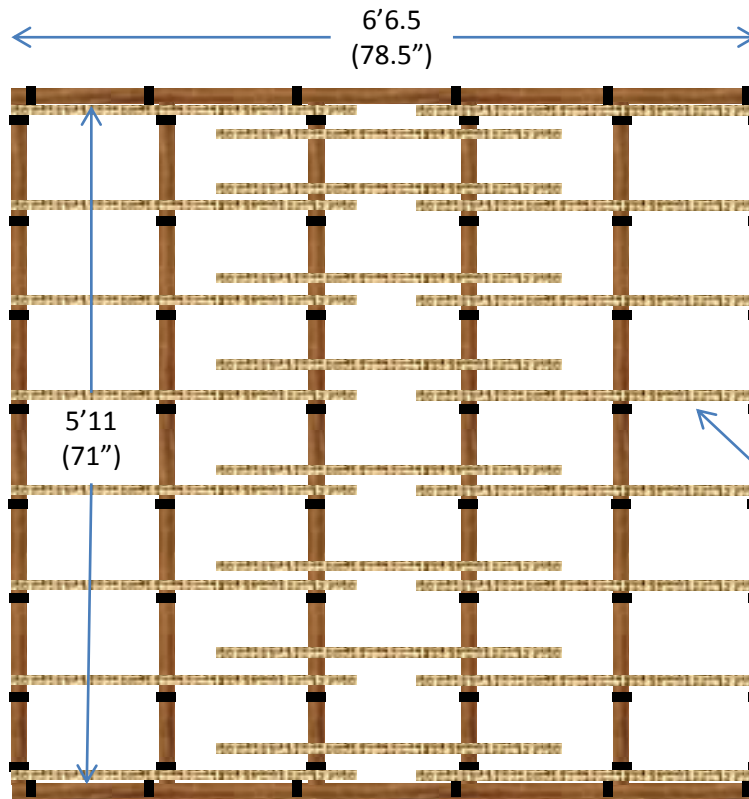
24 yardsticks

R19 Insulation ~ 30' (5x6')

Barrier and layers cover entire surface

1 4x8 cut at 2'2 x 6'6.5

1 4x8 cut at 4' x 6'6.5



**U-Boat floaters**– These U-shaped pieces of rubber wrap around the bottom of the 2x6's, floating the studs  $\frac{1}{2}''$  off the ground.

**Yardsticks** – Since the bottom is not covered with drywall to allow room for the U-boat floaters, these 36" x  $\frac{1}{4}''$  sticks make a simple and inexpensive way to hold the insulation up from touching the ground.

## Top/Inside

↑  
7.75"  
↓



**From top to down:**

- $\frac{1}{2}''$  plywood
- $\frac{1}{2}''$  Acoustic foam pad
- $\frac{3}{4}''$  plywood
- Vinyl acoustic barrier
- 5  $\frac{1}{2}''$  2x6 stud w/R19 insulation
- $\frac{1}{2}''$  Auralex Uboat floaters

# Back Wall

Stud height reduced 10 3/4" for floor height and height of 2x4s (7 3/4" + 2\* 1 1/2")

Studs at 16" OC

8 2x4 cut at 6'10 1/4  
2 2x4 cut at 6'6.5

Outside barrier, and then drywall, cover entire surface

1 4x8 cut at 4' x 6'6.5  
1 4x8 cut at 3'1.25' x 6'6.5

Insulation ~35' (5x7')

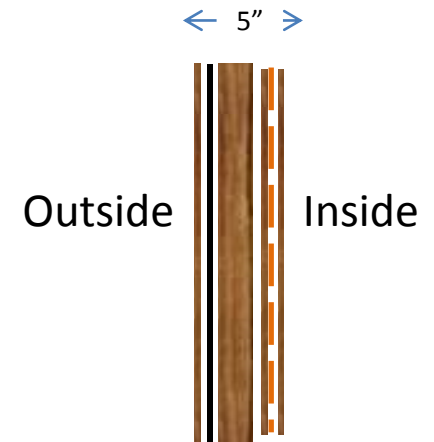
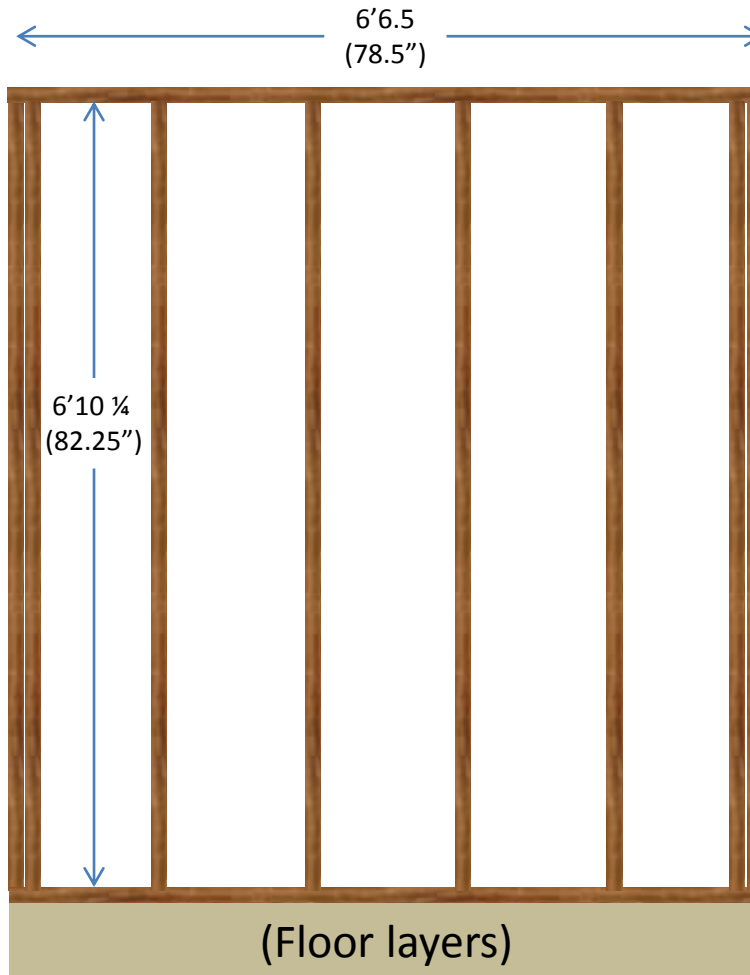
Middle drywall layer is 1/2 inch short to leave 1/4 inch gap on top and bottom

1 4x8 cut at 4' x 6'6.5  
1 4x8 cut at 3'0.75' x 6'6.5

Inside finish drywall height is 6'1 (6'2 minus 1/2" ceiling drywall depth, minus 1/2" for 1/4" sealer gap on top and bottom)

Width is 5'9 (6'6.5 minus 9" wall depths minus 1/2" gap for sealer on both sides)

1 4x8 cut at 4' x 5'9  
1 4x8 cut at 2'1 x 5'9



### From outside in:

- 1/2" drywall on outside
- Vinyl acoustic barrier
- 3 1/2" 2x4 stud w/R13 insulation
- 1/2" drywall in middle
- Acoustic damping adhesive
- 1/2" drywall on inside

Acoustic seal applied around all 4 sides of drywall in 1/4" gaps between drywall and structure; also between all abutting wood structures

# Side Walls

Width reduced 9" for width of 2 sets of 2x4s, and for offset for 4 dry wall external coverings (2\*3.5 + 4\*.5")

Height reduced 10 3/4" for floor height and height of 2x4s (7 3/4" + 2\* 1 1/2")

Studs 16" OC

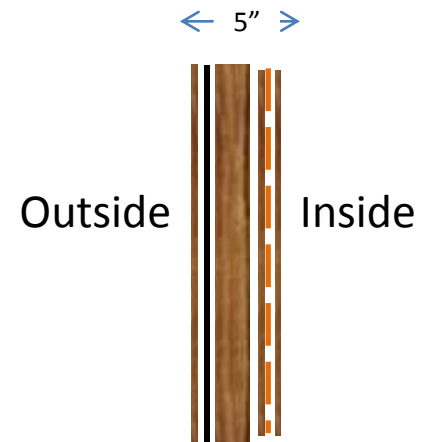
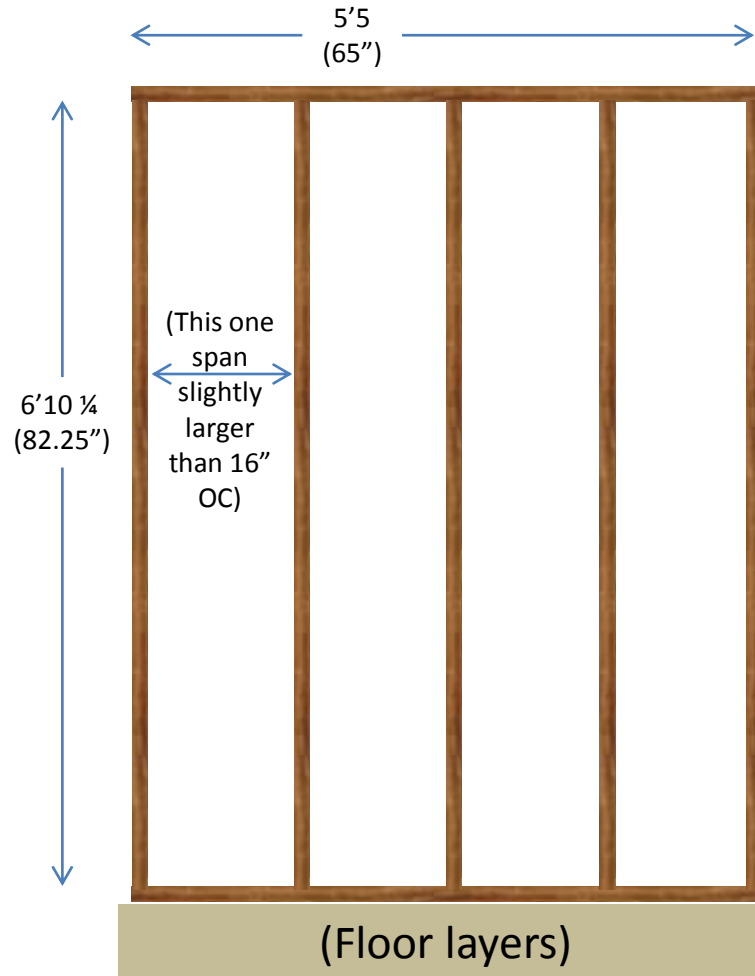
- 4 2x4 cut at 5'5.5
- 10 2x4 cut at 6'10 1/4

Outside barrier, and then drywall, cover entire surface  
 2 4x8 cut at 4' x 5'5.5  
 2 4x8 cut at 3'1.25 x 5'5.5

Insulation ~28' (4x7')

Middle drywall layer is 1/2 inch short to leave 1/4 inch gap on all sides for sealer  
 2 4x8 cut at 4' x 5'4.5  
 2 4x8 cut at 3'0.75 x 5'4.5

Inside finish drywall is 1" shorter on all sides from middle dimensions to compensate for ceiling and back wall drywall, and then 1/4 inch gap for sealer  
 2 4x8 cut at 4' x 5'3.5  
 2 4x8 cut at 2'11.75 x 5'3.5



**From outside in:**

- 1/2" drywall on outside
- Vinyl acoustic barrier
- 3 1/2" 2x4 stud w/R13 insulation
- 1/2" drywall in middle
- Acoustic damping adhesive
- 1/2" drywall on inside

Acoustic seal applied around all 4 sides of drywall in 1/4" gaps between drywall and structure; also between all abutting wood structures

# Ceiling

Studs 16" OC

- 2 2x4 cut at 6'6.5
- 6 2x4 cut at 5'11

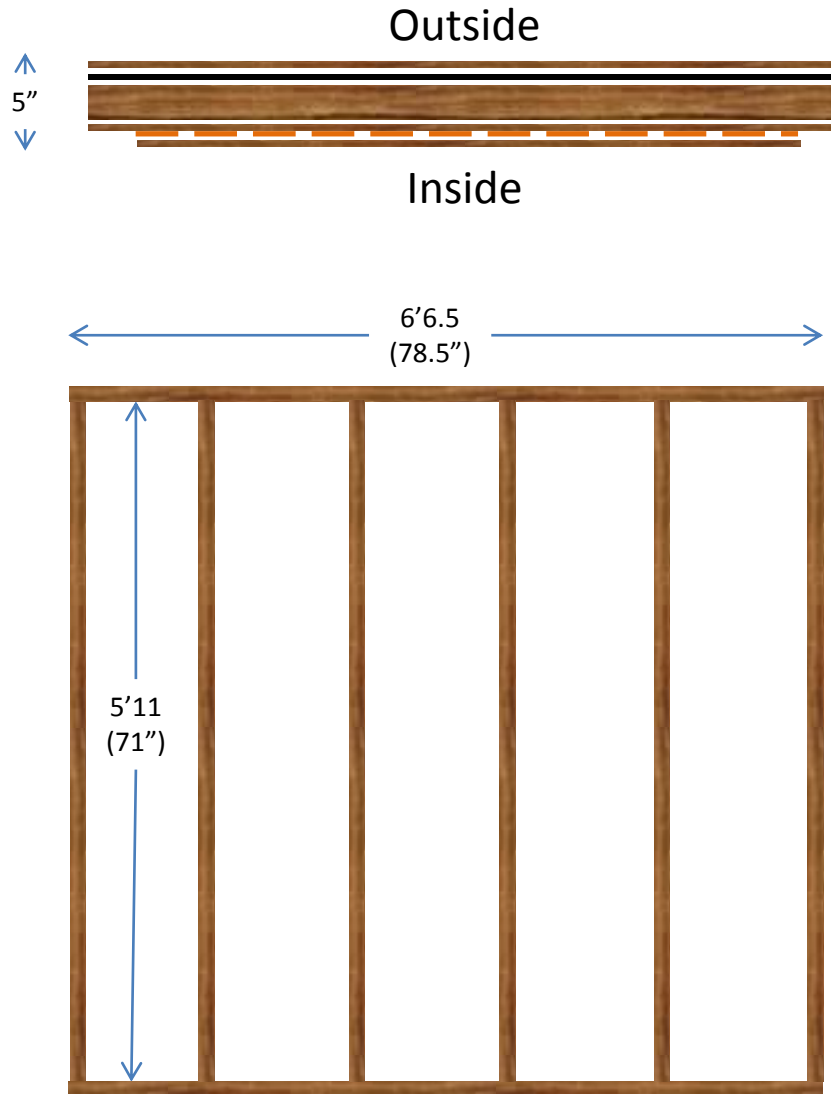
Outside drywall, vinyl barrier, and middle drywall cover entire surface

- 2 4x8 cut at 2'2 x 6'6.5
- 2 4x8 cut at 4' x 6'6.5

Insulation ~30' (5x6')

Inside drywall is 9 1/2 inch short on all sides to account for width of back wall, sides, and front wall thicknesses at this point, all 4 1/2", and then 1/2" gap on all sides for sealer

- 1 4x8 cut at 4' x 5'9
- 1 4x8 cut at 1'4.5 x 5'9



## From outside in:

- 1/2" drywall on outside
- Vinyl acoustic barrier
- 3 1/2" 2x4 stud w/R13 insulation
- 1/2" drywall in middle
- Acoustic damping adhesive
- 1/2" drywall on inside

Acoustic seal applied around all 4 sides of drywall in 1/4" gaps between drywall and structure; also between all abutting wood structures

# Front Wall

Width is entire width of floor.

Height of studs reduced  $10 \frac{3}{4}$ " for floor height and height of 2x4s ( $7 \frac{3}{4}$ " +  $2 * 1 \frac{1}{2}$ " )

Studs 16" OC

- 2 2x4 cut at 6'6.5
- 9 2x4 cut at 6'10  $\frac{1}{4}$

Internal drywall is 5'8 wide (6'6.5 width minus 10.5" for 2 walls and  $\frac{1}{2}$ " gap for sealer) by 6'11.75 tall (7'1.25 minus 1 inch for ceiling drywall and  $\frac{1}{2}$ " for gap for sealer)

- 1 4x8 cut at 4' x 5'8
- 1 4x8 cut at 2'11.75 x 5'8

Insulation ~21' (3x7')

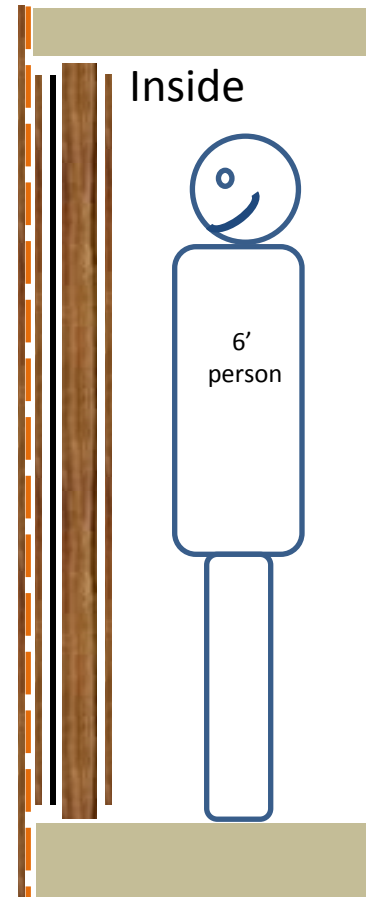
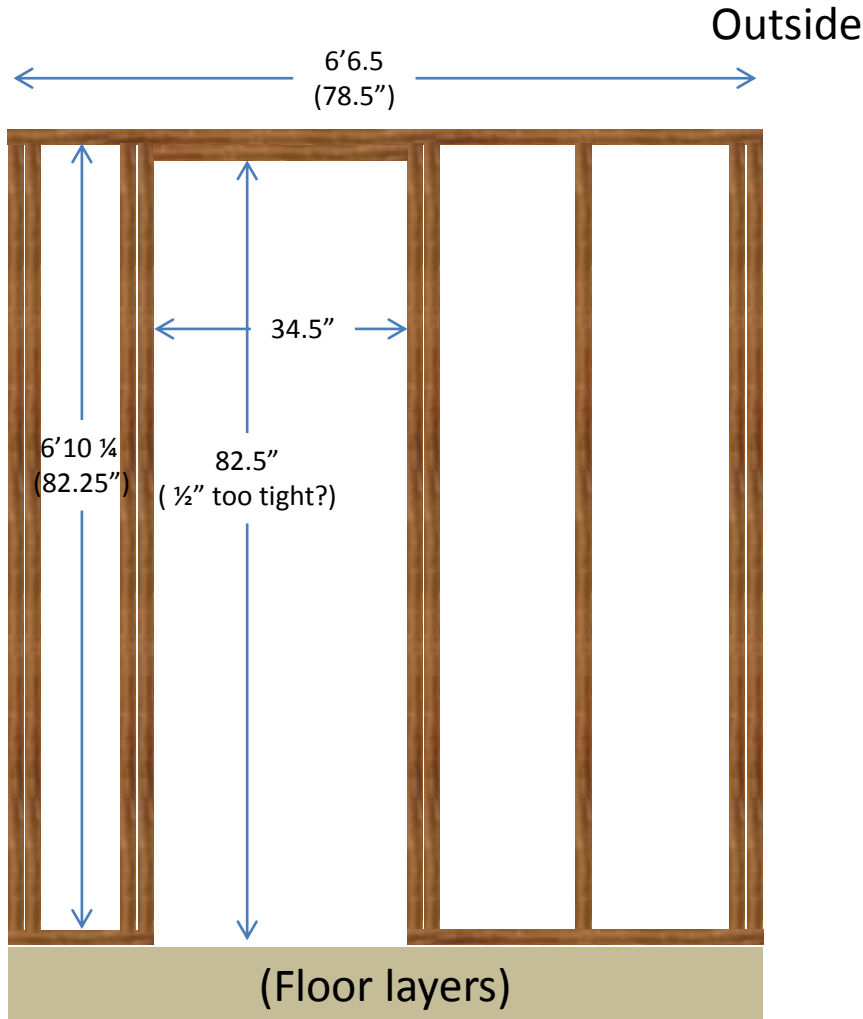
Middle drywall and vinyl barrier are complete width, but  $\frac{1}{2}$ " short on top and bottom for sealer.

- 1 4x8 cut at 4' x 6'6.5
- 1 4x8 cut at 3'0.75 x 6'6.5

External drywall is entire width of floor 6'6.5, and 8'1.5 tall (7'1.27 plus 12.25" of floor and ceiling

- 1 4x8 cut at 4' x 6'6.5
- 1 4x8 cut at 3' x 6'6.5
- 1 4x8 cut at 1'1.5 x 6'6.5

Spaces for door will be cut out or excluded from layers.



### From outside in:

- $\frac{1}{2}$ " drywall on outside
- Acoustic damping adhesive
- $\frac{1}{2}$ " drywall in middle
- Vinyl acoustic barrier
- 3  $\frac{1}{2}$ " 2x4 stud w/R13 insulation
- $\frac{1}{2}$ " drywall on inside

Acoustic seal applied around all 4 sides of drywall in  $\frac{1}{4}$ " gaps between drywall and structure; also between all abutting wood structures

# Sound Treatment

## Features:

The primary purpose of the isolation booth is to record vocals and spoken words, so an overall dry or non-reverberative treatment is desired. We achieve this by conditioning reflection and increasing sound absorption.

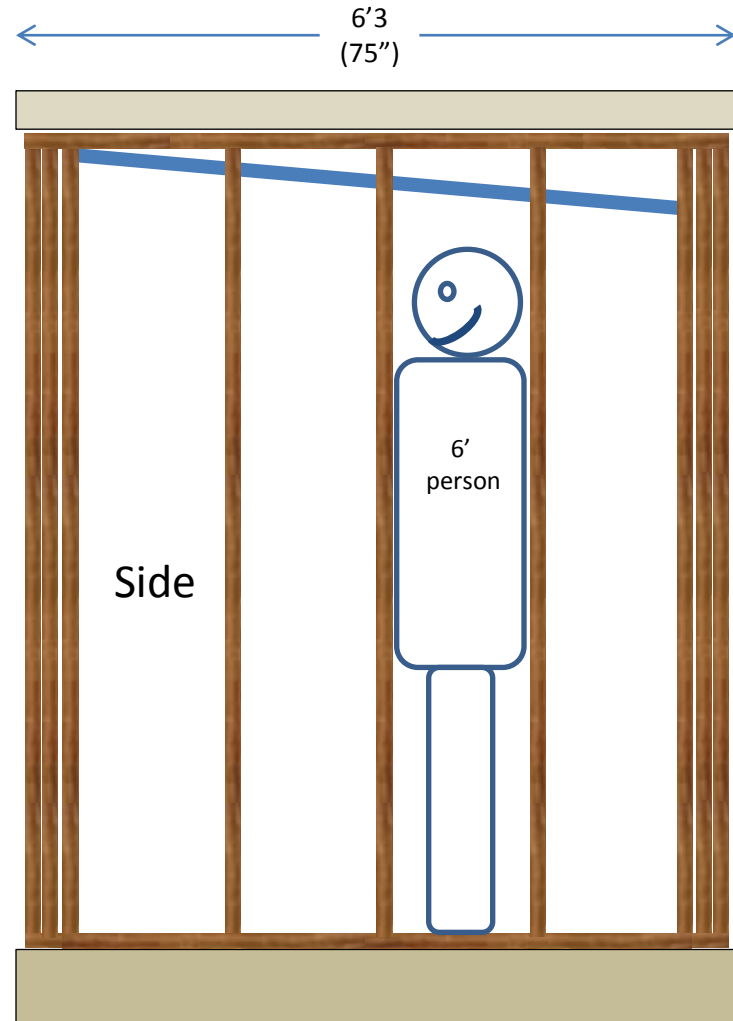
1. Eliminate parallel angles between floor and ceiling through a **hanging ceiling at a 5 degree slant** (one inch drop per foot of length).

The wall is  $\frac{1}{2}$ " drywall, 5'8.5 x 5'9  $\frac{3}{8}$ , hanging 6 inches low on the back wall.

- 1 4x8 cut at 4' x 5'9  $\frac{3}{8}$
- 1 4x8 cut at 1'8.5 x 5'9  $\frac{3}{8}$

2. Hang **two layers of curtains** along the walls from floor to ceiling that curve around the space to absorb sound and diffuse right angles and parallel walls. (Use existing curtains, rods, and brackets.)
3. Area **carpet on the floor and ceiling** to absorb sound and deaden footstep vibration.

- 2 6x8  $\frac{1}{4}$ " thick area rugs cut to size



# Floating Ceiling

Framework to support ceiling is minimal 1x2 construction with no insulation other than carpet as final layer.

Height is side length minus 1" for back wall middle and internal drywall, or 5'4", plus extra length for 5 degree tilt. Overall 5'4.25 will allow for some extra play.

Width is 10 inches short of floor width from depth of 2 side walls, plus 1/2" for some play, so 5'8".

Studs 16" OC

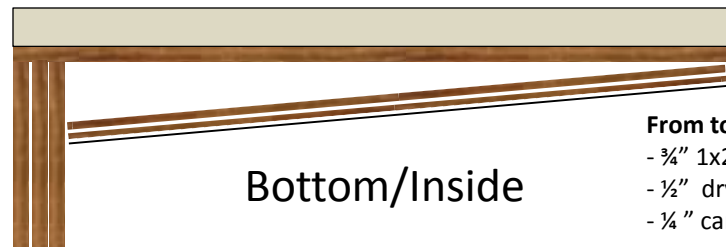
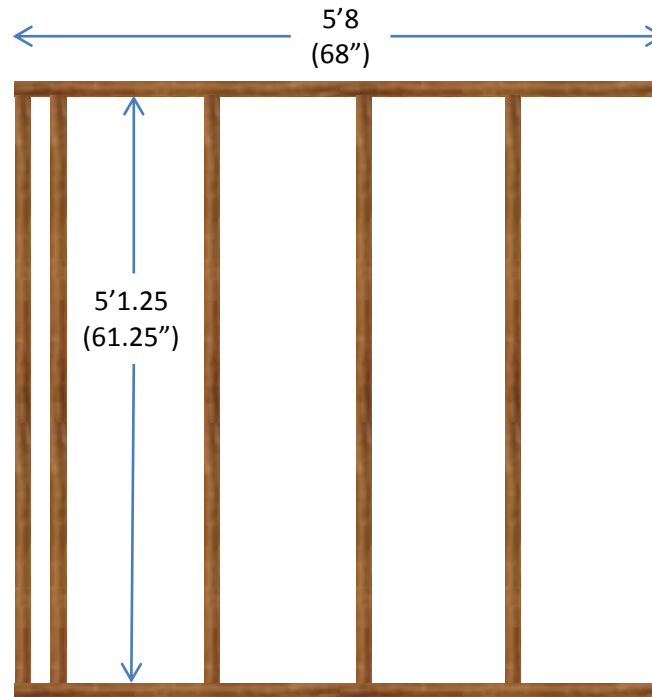
- 2 2x1 cut at 5'8
- 6 2x1 cut at 5'1.25

Drywall cover is

- 1 4x8 cut at 4' x 5'8
- 1 4x8 cut at 1'4.25 x 5'8

Ceiling can float atop some 1x2 tracks nailed underneath the ceiling.

- 1 2x1 cut at 5'8
- 2 2x1 cut at 5'4.25



**From top to down:**

- 3/4" 1x2 stud
- 1/2" drywall
- 1/4" carpet on outside

# Cable Entry and Concealment

There is need to bring cables into the booth from the outside, but we do not want to significantly compromise the sound seal of the booth. There is also a need for a small table or platform on which to secure a boom microphone stand and lighting (since space is tight, we do not want to waste space with mic stands, hanging or recessed lighting, and music stands).

A box 40" x 12" x 16" affixed to the front right corner will provide table top space and conceal a twisted PVC pipe structure to transport cables from the outside.

Can use 1x2 for framing.

16" OC

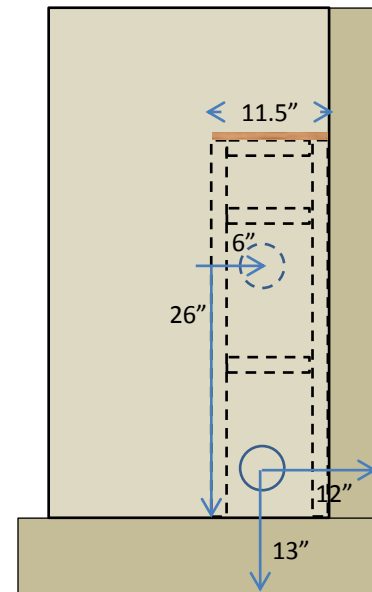
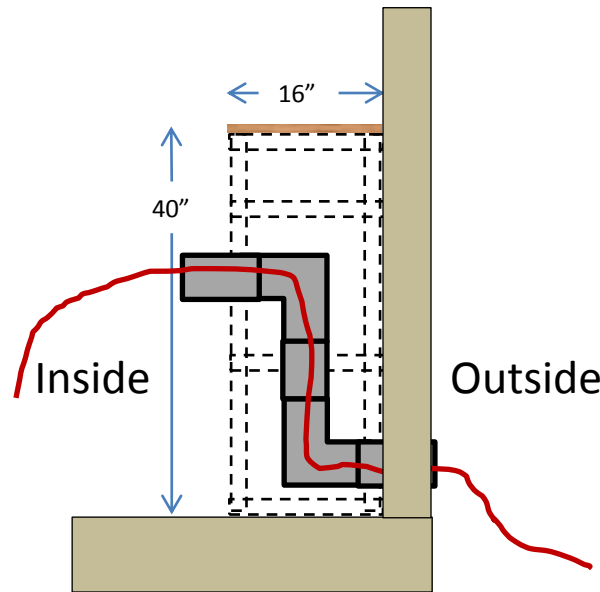
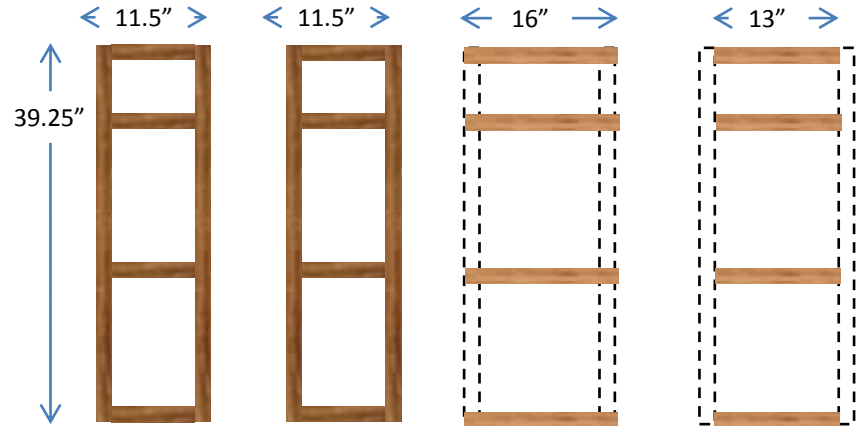
- 8 1x2 cut at 8.5"
- 4 1x2 cut at 39.25"
- 8 1x2 cut at 16"
- 4 1x2 cut at 13"

Coverings

- Side: 1/2" drywall at 39.25" x 16.5"
- Back: 1/2" drywall at 39.25" x 12"
- Top: 12" x 16" (3/4" plywood scrap)

Internal PVC pipe structures:

- 2 90 degree 4" pipe elbows
- 2 4" pipe cut to 8" ?
- 1 4" pipe cut to 6" ?



Front

# Air circulation system

Given the tight closure of the booth, there is a need for an air circulation system to bring in fresh air and exhaust the old. Using the wire management system as an air intake, we can add another pipe structure on the ceiling as an exhaust system. Add a fan on the end of the pipe to draw the air through the system.

Can use 1x2 for framing.

16" OC

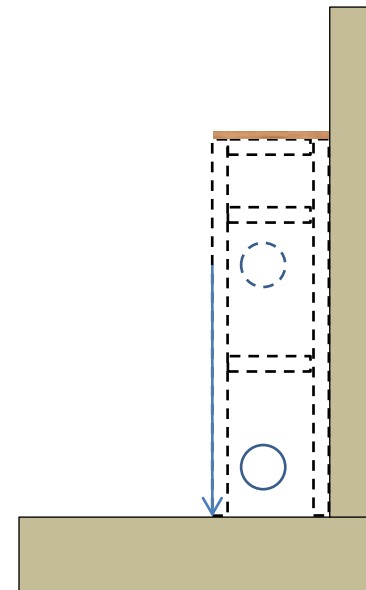
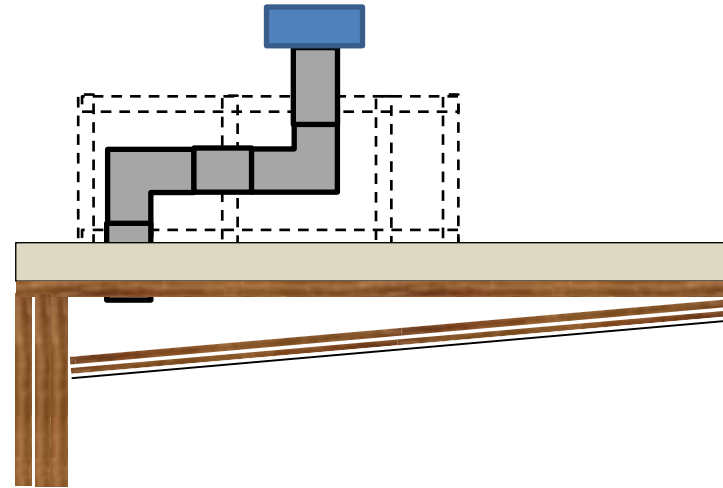
- 8 1x2 cut at 8.5"
- 4 1x2 cut at 39.25"
- 8 1x2 cut at 16"
- 4 1x2 cut at 13"

Coverings

- Side: ½" drywall at 39.25" x 16.5"
- Back: ½" drywall at 39.25" x 12"
- Top: 12" x 16" (¾" plywood scrap)

Internal PVC pipe structures:

- 2 90 degree 4" pipe elbows
- 2 4" pipe cut to 8" ?
- 1 4" pipe cut to 6" ?



# Order of Construction

1. Build floor
2. Attach back wall with external drywall to floor
3. Attach back wall middle drywall only where sidewalls overlap, no other middle drywall on back wall at this time
4. Attach side walls with external drywall to floor
5. Attach side walls to back wall
6. Build ceiling with external and middle drywall
7. Attach ceiling to 3 walls (brace for missing front wall)
8. Install back wall insulation and middle drywall
9. Install side wall insulation and middle drywall
10. Install ceiling internal drywall
11. Install back wall internal drywall
12. Install side wall internal drywall
13. Assemble hanging ceiling
14. Install hanging ceiling on 3 walls at 5 degree angle, starting 6" low on back wall.
15. Install front wall with inside and middle drywall
16. Install front wall outside drywall
17. Cut cable hole on front wall
18. Assemble and install cable entry and concealment structure
19. Hang door
20. Install carpet and curtains
21. External finishing

# Materials and budget

Model # Vender	Item	Count	Cut	Structure	Sub	Cost	Total
820065 Home Depot	<a href="#">2x6x8 #2 &amp; Better Green Douglas Fir Lumber</a>	2	6'6.5	Floor	plate	4.14	8.28
820065 Home Depot	<a href="#">2x6x8 #2 &amp; Better Green Douglas Fir Lumber</a>	6	5'11	Floor	stud	4.14	24.84
Amazon	<a href="#">Auralex Acoustic U-Boat floor floaters</a>	60		Floor	insulation	2	120
30045HDW Home Depot	<a href="#">Old time yardstick</a>	24		Floor	insulation	0.61	14.64
RF40 Home Depot	<a href="#">Owens Corning EcoTouch R-19 Kraft 6-1/4 in. x 15 in. x 39.2 ft. Continuous Roll Insulation</a>	1	30'	Floor	insulation	17.8	17.8
DB348X96BX Home Depot	<a href="#">dB-3 4 ft. x 8 ft. Acoustical Barrier</a>	2			insulation	29.99	59.98
920924 Home Depot	<a href="#">23/32 in. x 4 ft. x 8 ft. OSB Tongue and Groove Flooring Board</a>	1	2'2 x 6'6.5	Floor	cover	14.27	14.27
920924 Home Depot	<a href="#">23/32 in. x 4 ft. x 8 ft. OSB Tongue and Groove Flooring Board</a>	1	4' x 6'6.5	Floor	cover	14.27	14.27
HPD550608 Home Depot	<a href="#">Nance Carpet and Rug 6'x8' Premium Plush Rug &amp; Carpet Pad</a>	2	6'6.5 x 6'2	Floor	cover	24.95	49.9
386081 Home Depot	<a href="#">7/16 in. x 4 ft. x 8 ft. OSB Sheathing</a>	1	2'2 x 6'6.5	Floor	cover	7.97	7.97
386081 Home Depot	<a href="#">7/16 in. x 4 ft. x 8 ft. OSB Sheathing</a>	1	4' x 6'6.5	Floor	cover	7.97	7.97
161640 Home Depot	<a href="#">2 x 4 x 8 Premium Kiln Dried Whitewood Stud</a>	2	6'6.5	Back Wall	plate	2.26	4.52
161640 Home Depot	<a href="#">2 x 4 x 8 Premium Kiln Dried Whitewood Stud</a>	8	6'10.25	Back Wall	stud	2.26	18.08
DB348X96BX Home Depot	<a href="#">dB-3 4 ft. x 8 ft. Acoustical Barrier</a>	2		Back Wall	insulation	29.99	59.98
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	1	4' x 6'6.5	Back Wall	Outside drywall	6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	1	3'1.25' x 6'6.5	Back Wall	Outside drywall	6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	1	4' x 6'6.5	Back Wall	Middle drywall	6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	1	4' x 5'9	Back Wall	inside drywall	6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	1	2'1 x 5'9	Back Wall	inside drywall	6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	1	3'0.75' x 6'6.5	Back Wall	Middle/Inside drywall	6.4	6.4
RF10 Home Depot	<a href="#">Owens Corning EcoTouch R-13 Kraft 3-1/2 in. x 15 in. x 32 ft. Continuous Roll Insulation</a>	1	35'	Back Wall	insulation	9.98	9.98

# Materials and budget

Model # Vender	Item	Count	Cut	Structure	Sub	Cost	Total
161640 Home Depot	<a href="#">2 x 4 x 8 Premium Kiln Dried Whitewood Stud</a>	4	5'5.5	Side Walls	plate	2.26	9.04
161640 Home Depot	<a href="#">2 x 4 x 8 Premium Kiln Dried Whitewood Stud</a>	10	6'10.25	Side Walls	stud	2.26	22.6
DB348X96BX Home Depot	<a href="#">dB-3 4 ft. x 8 ft. Acoustical Barrier</a>	4		Side Walls	insulation	29.99	119.96
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	2	4'x 5'5.5	Side Walls	Outside drywall	6.4	12.8
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	2	3'1.25 x 5'5.5	Side Walls	Outside drywall	6.4	12.8
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	2	4 x 5'4.5	Side Walls	Middle drywall	6.4	12.8
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	2	4' x 5'3.5	Side Walls	inside drywall	6.4	12.8
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	2	2'11.75 x 5'3.5	Side Walls	inside drywall	6.2	12.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	2	3'0.75 x 5'4.5	Side Walls	Middle drywall	6.4	12.8
RF10 Home Depot	<a href="#">Owens Corning EcoTouch R-13 Kraft 3-1/2 in. x 15 in. x 32 ft. Continuous Roll Insulation</a>	1	28'	Side Walls	insulation	9.98	9.98
161640 Home Depot	<a href="#">2 x 4 x 8 Premium Kiln Dried Whitewood Stud</a>	2	6'9.5	Ceiling	plate	2.26	4.52
161640 Home Depot	<a href="#">2 x 4 x 8 Premium Kiln Dried Whitewood Stud</a>	6	5'11	Ceiling	stud	2.26	13.56
DB348X96BX Home Depot	<a href="#">dB-3 4 ft. x 8 ft. Acoustical Barrier</a>	2		Ceiling	insulation	29.99	59.98
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	2	2'2 x 6'6.5	Ceiling	Outside/middle drywall	6.4	12.8
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	2	4 x 6'6.5	Ceiling	Outside/middle drywall	6.4	12.8
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	1	4' x 5'9	Ceiling	Inside drywall	6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	1	1'4.5 x 5'9	Ceiling	Inside drywall	6.4	6.4
RF10 Home Depot	<a href="#">Owens Corning EcoTouch R-13 Kraft 3-1/2 in. x 15 in. x 32 ft. Continuous Roll Insulation</a>	1	30'	Ceiling	insulation	9.98	9.98

# Materials and budget

Model # Vender	Item	Count	Cut	Structure	Sub	Cost	Total
161640 Home Depot	<a href="#">2 x 4 x 8 Premium Kiln Dried Whitewood Stud</a>	2	6'6.5	Front Wall	plate	2.26	4.52
161640 Home Depot	<a href="#">2 x 4 x 8 Premium Kiln Dried Whitewood Stud</a>	96	10.25	Front Wall	stud	2.26	20.34
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	14	5'10.5	Front Wall	Inside drywall	6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	12	9.75 x 5'10.5	Front Wall	Inside drywall	6.4	6.4
DB348X96BX Home Depot	<a href="#">dB-3 4 ft. x 8 ft. Acoustical Barrier</a>	2		Front Wall	insulation	29.99	59.98
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	14	4' x 5'8	Front Wall	Inside drywall	6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	12	11.75 x 5'8	Front Wall	Inside drywall	6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	14	6'6.5	Front Wall	Middle drywall	6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	13	0.75 x 6'6.5	Front Wall	Middle drywall	6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	14	4' x 6'6.5	Front Wall	Outside drywall	6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	13	4' x 6'6.5	Front Wall	Outside drywall	6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	11	1.5 x 6'6.5	Front Wall	Outside drywall	6.4	6.4
RF10 Home Depot	<a href="#">Owens Corning EcoTouch R-13 Kraft 3-1/2 in. x 15 in. x 32 ft. Continuous Roll Insulation</a>	1	21'	Front Wall	insulation	9.98	9.98
769925 Home Depot	<a href="#">JELD-WEN 32 in. x 80 in. Galvanized Steel White Prehung Right-Hand Inswing Premium 9 Lite Entry Door with Brickmold</a>	1		Door		188	188
F10 PLY 619 Home Depot	<a href="#">Schlage Plymouth Satin Nickel Hall and Closet Knob</a>	1		Door		17.75	17.75
B80 619 Home Depot	<a href="#">Schlage Commercial Door Bolt (Satin Nickel)</a>	1		Door		29.78	29.78
160954 Home Depot	<a href="#">1 x 2 x 8 Furring Strip</a>	6		Door		0.98	5.88
11882 Home Depot	<a href="#">MD Building Products 1-3/4 in. x 36 in. Threshold</a>	1		Door		7.11	7.11
48998 Home Depot	<a href="#">MD Building Products 1-3/4 in. x 36 in. Aluminum and Vinyl L-Shaped Drip Cap Door Bottom</a>	1		Door		11.66	11.66
1025 Home Depot	<a href="#">MD Building Products 5/16 in. x 17 ft. All Climate Auto and Marine D-Profile Weatherstrip</a>	3		Door		7.99	23.97

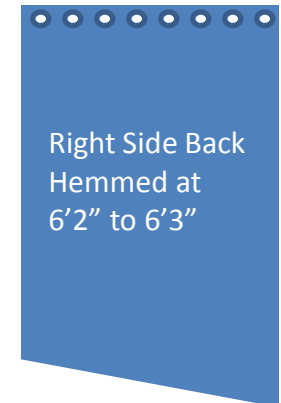
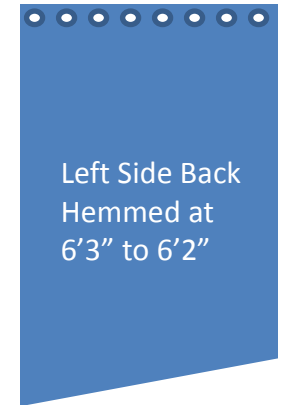
# Materials and budget

Model # Vender	Item	Count	Cut	Structure	Sub	Cost	Total
3220020500 Home Depot	<a href="#">Nashua 322 1-57/64 in. x 150 ft. Aluminum Foil Tape</a>	3		insulation		6.58	19.74
ATS Acoustics	<a href="#">QuietGlue Pro - Case of 12</a>	1		insulation		115	115
ATS Acoustics	<a href="#">QuietGlue Pro - Individual Tubes</a>	4		insulation		9.95	39.8
ACCUCAULK Markertek	<a href="#">SilenSeal Acoustical Caulk 12 Pack</a>	2		insulation		73.45	146.9
CN19N40PJ1H1 Home Depot	<a href="#">Foss Hobnail Taupe 6 Ft. x 8 Ft. Indoor/Outdoor Area Rug</a>	2		insulation		17.88	35.76
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	14	x 5'8"	Float Ceiling	Inside drywall	6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	11	4.25 x 5'8"	Float Ceiling	Inside drywall	6.4	6.4
160954 Home Depot	<a href="#">1 x 2 x 8 Furring Strip</a>	3	5'8"	Float Ceiling	plate/frame	0.98	2.94
160954 Home Depot	<a href="#">1 x 2 x 8 Furring Strip</a>	6	5'1.25"	Float Ceiling	studs	0.98	5.88
160954 Home Depot	<a href="#">1 x 2 x 8 Furring Strip</a>	2	5'4.25"	Float Ceiling	frame	0.98	1.96
212CDWS5 Home Depot	<a href="#">Grip-Rite #8 x 2-1/2 in. Coarse Phosphate-Plated Steel Bugle-Head Phillips Drywall Screws 5 lb. Pack</a>	1		hardware		21.97	21.97
16HGBX5 Home Depot	<a href="#">Grip-Rite #10 x 3-1/2 in. Galvanized Steel Box Nails (5 lb. Pack)</a>	1		hardware		15.93	15.93
C5807 Home Depot	<a href="#">NIBCO 4 in. ABS DWV 90-Degree Hub x Hub Elbow</a>	2		Wire mgmt		8.71	17.42
1204 Home Depot	<a href="#">VPC 4 in. x 2 ft. Plastic ABS Pipe</a>	1		Wire mgmt		10.95	10.95
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	139.25	x 16.5"	Wire mgmt		6.4	6.4
GB00090800 Home Depot	<a href="#">Gold Bond 1/2 in. x 4 ft. x 8 ft. Gypsum Board</a>	139.25	x 12"	Wire mgmt		6.4	6.4
161640 Home Depot	<a href="#">1 x 2 x 8 Furring Strip</a>	1	8 at 8.5"	Wire mgmt		2.26	2.26
161640 Home Depot	<a href="#">1 x 2 x 8 Furring Strip</a>	2	4 at 39.25"	Wire mgmt		2.26	4.52
161640 Home Depot	<a href="#">1 x 2 x 8 Furring Strip</a>	2	8 at 16"	Wire mgmt		2.26	4.52
161640 Home Depot	<a href="#">1 x 2 x 8 Furring Strip</a>	1	4 at 13"	Wire mgmt		2.26	2.26

# Materials and budget

Model #	Vender	Item	Count	Cut	Structure	Sub	Cost	Total
	Amazon	<a href="#">Sunter Lighting Natural Daylight LED Desk Lamp</a>	1		Internal finishing		38.99	38.99
	Amazon	<a href="#">Heil Sound PL-2T Overhead Broadcast Boom</a>	1		Internal finishing		120	120
	Amazon	<a href="#">Heil Sound WM-1 Vertical Surface Mount for Heil Booms</a>	1		Internal finishing		22	22
	Amazon	<a href="#">On-Stage Stands MSA-9508 Posi-Lok Side Mount Boom</a>	1		Internal finishing		12.99	12.99
	Amazon	<a href="#">Large Tray Music Stand with stand mount</a>	1		Internal finishing		24	24
	Amazon	<a href="#">Small Tray Music Stand with stand mount</a>	1		Internal finishing		24	24
	Amazon	<a href="#">Quik Lok MS-329 Microphone Stand Accessories</a>	1		Internal finishing		18.99	18.99
							sub total	2006.25
							Tax 10%	200.625
							Extra 10%	200.625
							Budget	\$ 2,407.50

# Curtain Hemming



## Door Modifications

Layers:

Door

Vinyl barrier

Frame of 1x2

Drywall

Quiet Glue

Drywall

Carpet

Install door bottom

Install threshold

Weather strip across all four sides  
connected to frame