



**Installation Manual
For
Prime System**

**Base Kit
Upgrade Kit**

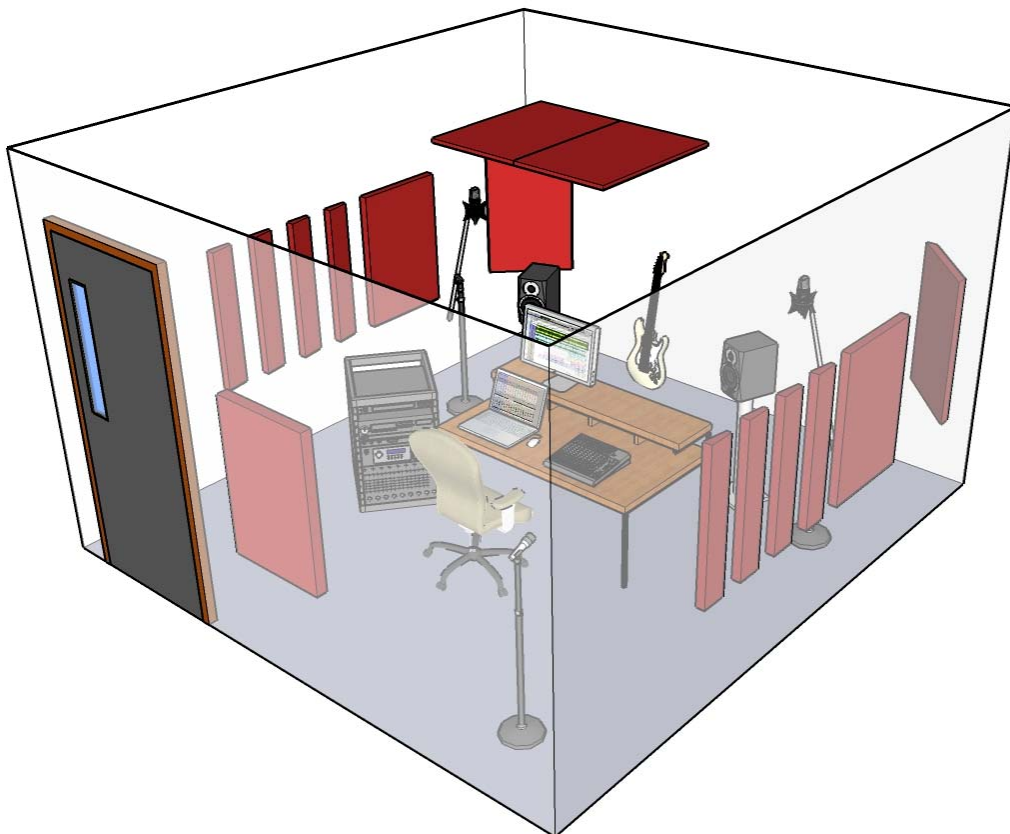


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Introduction

Every studio is affected by room acoustics. Allow the articulation, tonal balance and clarity of your monitors to be heard. Don't chance missing important elements within the mix. The Dimension4 Prime kit is an economical, easy-to-install acoustic treatment solution for studios. Based on scientifically-designed building blocks including Absorbers, Abfuser Strips, Corner Traps, and Ceiling Panels, Dimension4 Prime is calculated to provide optimum absorption and diffusion and is a full-frequency component solution.

Dimension4 Prime panels can be installed in minutes by observing the following simple instructions.



Modules



Absorber:

Construction: A 24" x 36" x 2" flat panel consisting of a mineral wool core clad in a fiberglass lining and wrapped in fabric

Benefits: Provides absorption down to 400Hz



Abfuser Strip:

Construction: A 6" x 36" x 2" (tapers to 1") panel consisting of mineral wool clad in a fiberglass lining and wrapped in fabric

Benefits: Provides diffusion down to 800Hz by means of an absorptive-reflective transition zone phase shifting process



Corner Trap:

Construction: A 24" x 36" x 2" bevel-edged panel consisting of a mineral wool core clad in a fiberglass lining and wrapped in fabric

Benefits: Provides bass absorption down to 125Hz by means of corner mounting



Ceiling Panel:

Construction: A 24" x 36" x 1" flat panel consisting of a mineral wool core clad in a fiberglass lining and wrapped in fabric

Benefits: Provides absorption down to 300Hz

Tools and Materials Required

- Screwdriver (Philips or standard depending on the type of fastener)
- Hammer
- Wood Saw and Miter Box
- 25 Foot Measuring Tape
- Pencil
- Masking Tape
- Bubble or Laser Level
- Mirror
- Screws or other appropriate fasteners for your wall surface (E-Z Ancor works well for sheetrock)
- Eye Hooks
- 8 Feet of 2"x4"

Panel Placement

The Dimension4 Prime Base Kit is designed for studios of 100-200 ft². An Upgrade Kit that provides two additional Absorbers and four Abfuser Strips is available for larger rooms. Place the panels as closely as possible to the layout shown in fig 1. For best results, you will need to find the first reflection points between your speakers and your mix position. (See instructions later in this manual.)

Room Size (ft ²)	Kit	Number of Panels
100-200	Base Kit	15
200-300	Base Kit + Upgrade Kit	21
300-400	Base Kit + Base Kit	30

!!!Special Note on Monitor Speaker Placement!!!

In fig 1, the monitor speakers are on stands in front of the mixing desk. This configuration is superior to near field for recreating the listening environment typically found in a home. Listeners at home never sit in the near field; 99% of the time, the speakers are at least 8 to 12 feet away. For best translation to your audience's ultimate experience, try your best to emulate a home environment with your monitor placement.

100-200 ft2 Room Using Dimension4 Prime Base Kit

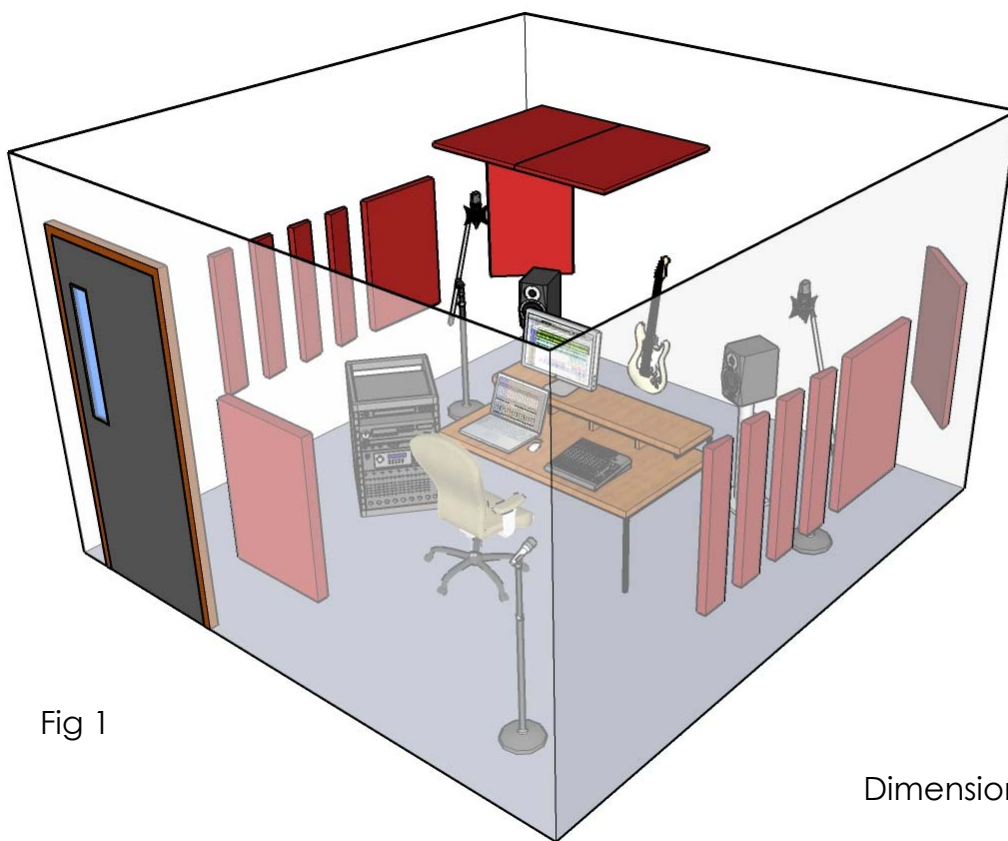


Fig 1

Dimension4 Prime

- 3 Absorbers
- 8 Abfuser Strips
- 2 Corner Traps
- 2 Ceiling Panels

MSRP: \$799

200-300 ft² Room Using Dimension4 Prime Base Kit + Upgrade Kit

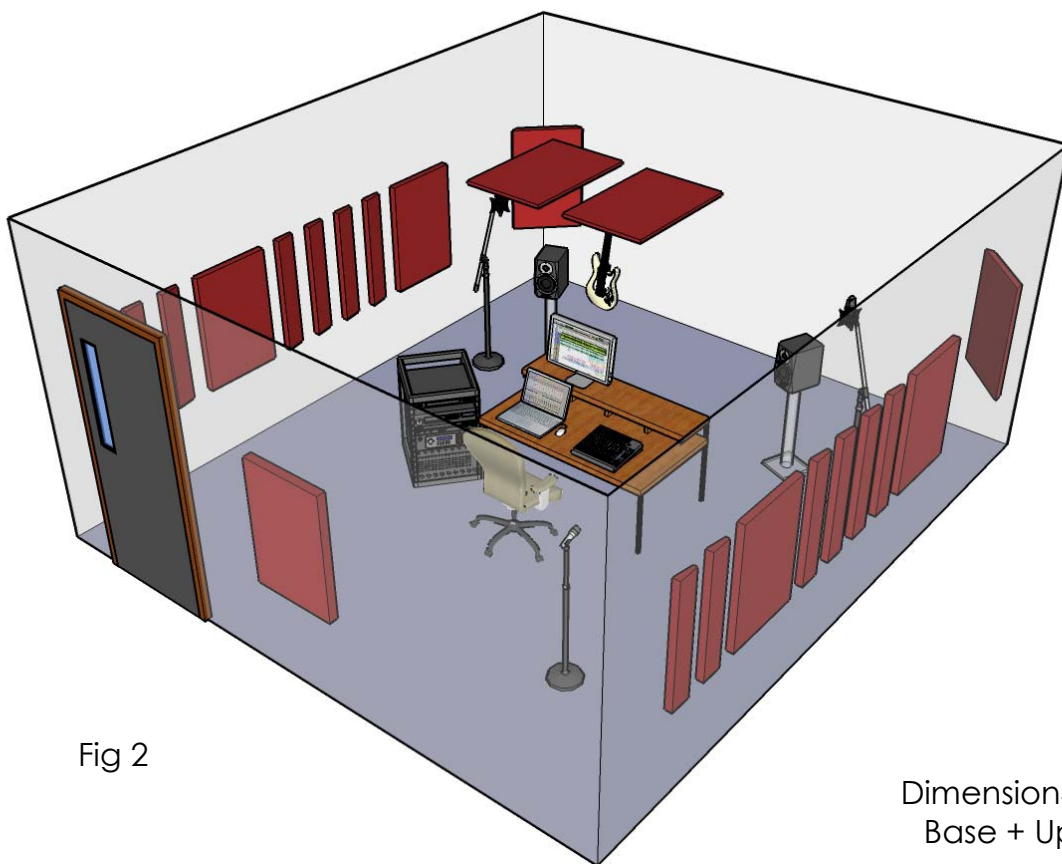


Fig 2

Dimension4 Prime
Base + Upgrade

5 Absorbers
12 Abfuser Strips
2 Corner Traps
2 Ceiling Panels

MSRP: \$1108

300-400 ft2 Room Using Two Dimension4 Prime Base Kits

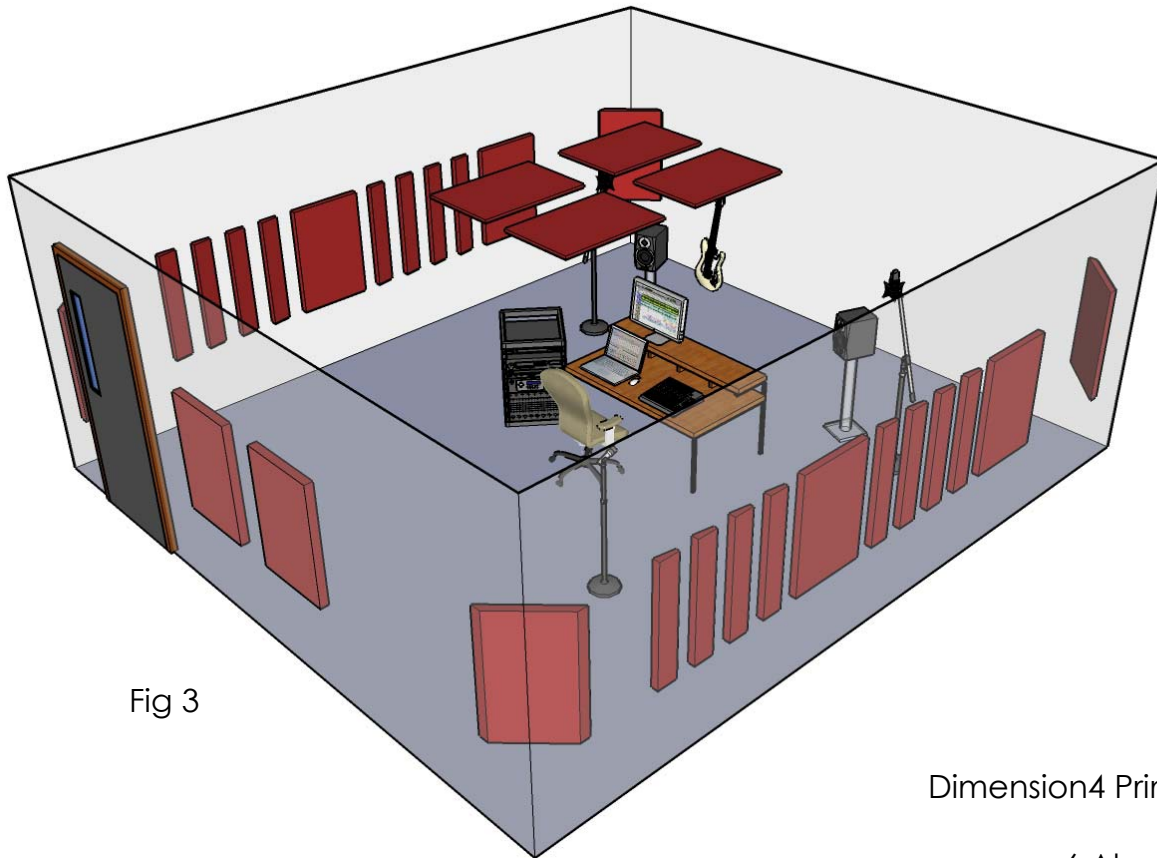


Fig 3

Dimension4 Prime x2

- 6 Absorbers
- 16 Abfuser Strips
- 4 Corner Traps
- 4 Ceiling Panels

MSRP: \$1,598

First Reflection Points

The panel layout shown in fig 1 gives you great control over the acoustic reflections in your room. For further enhancement, ensure that you have placed an Absorber at all the first reflection points on the side and back walls. You can find these by simply using a mirror as shown in fig 4. Sit at the mix position and have someone walk up and down the left wall holding the mirror flat against it. Mark an X at the point where you can see the left monitor in the mirror. Repeat for the right wall and back wall. (You should be able to see both monitors at the first reflection point on the back wall.) Later on, you will be covering these X's with Absorbers.

Place the Abfuser Strips 6 inches behind the Absorbers on the side walls as shown in fig 1. The Abfuser Strips should be separated from each other by 6 inches as well. Note that the direction of the Abfuser Strips' tapered surfaces does not affect acoustical performance. Feel free to experiment with orienting them forward or backward in the room to create your own distinctive look.

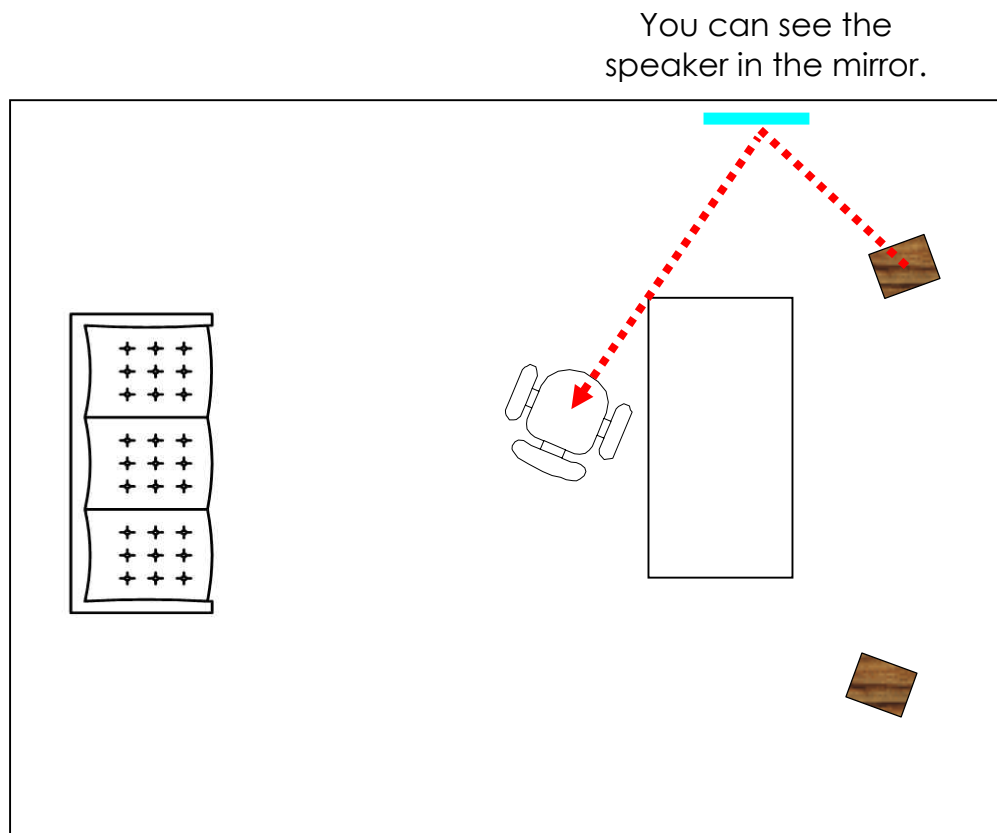


Fig 4 First Reflection Point

Corner Trap

The Corner Trap is a mid to low frequency absorption device with an effective bandwidth down to 125Hz. Corner Trap panels should be placed in the front corners of the room (angled between the front/side wall) at the same height as all other panels. If the corners aren't available, place Corner Traps along the front wall/ceiling junction.

Ceiling Panel

The floating Ceiling Panel is our solution to unwanted reflections from the ceiling. Research has shown that ceiling reflections are detrimental to good sound reproduction.

We recommend hanging Ceiling Panels at the first reflection points for the front speakers as shown in Fig 5.

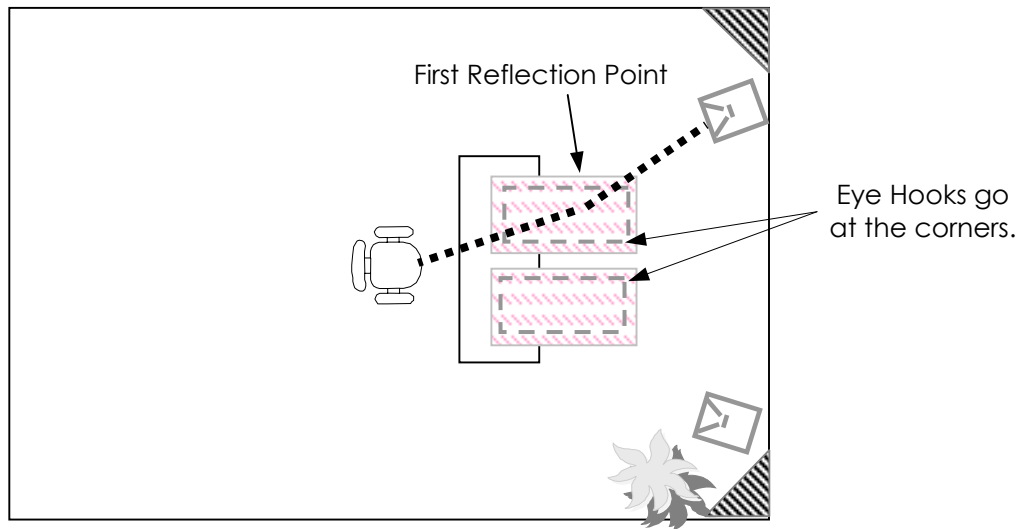


Fig 5 Ceiling First Reflection

Optional Special Products

SpringTrap®

A spring-loaded bass trap, the SpringTrap is our solution to very low frequency room resonance buildup in the range of 40 to 100Hz. This unique, patented design, which received the Mix Magazine Certified Hit award, was presented as a research paper at AES in Amsterdam 2003.

The SpringTrap should be placed in an inconspicuous area in front of the mix position or in a corner on the floor. Experiment with the placement of the SpringTrap. Since it is a triangular device, you should have no trouble finding areas to place it.

The SpringTrap is not included in the Dimension4 Prime kit. It is available separately.



Panel Installation

Now that you've located the exact recommended placement for each panel, you can move on to the actual installation. Absorbers and Abfuser Strips are hung from the walls using the supplied impale clips (fig 6). There are 3 per Absorber, 2 per Abfuser Strip, and 3 per Corner Trap for a total of 31. Please contact MSR immediately if any of the impale clips are missing.

The Ceiling Panels are hung using Eye Hooks. You will need to supply a total of 8 Eye Hooks (not included with the Dimension4 Prime kit).

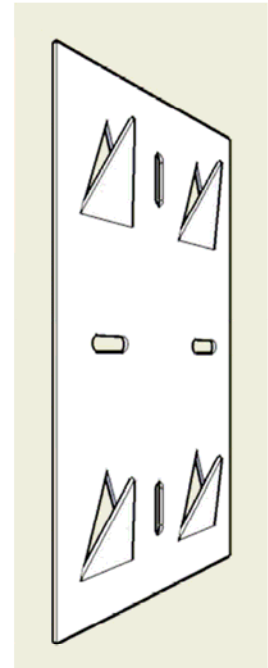


Fig 6 Impale
Clip

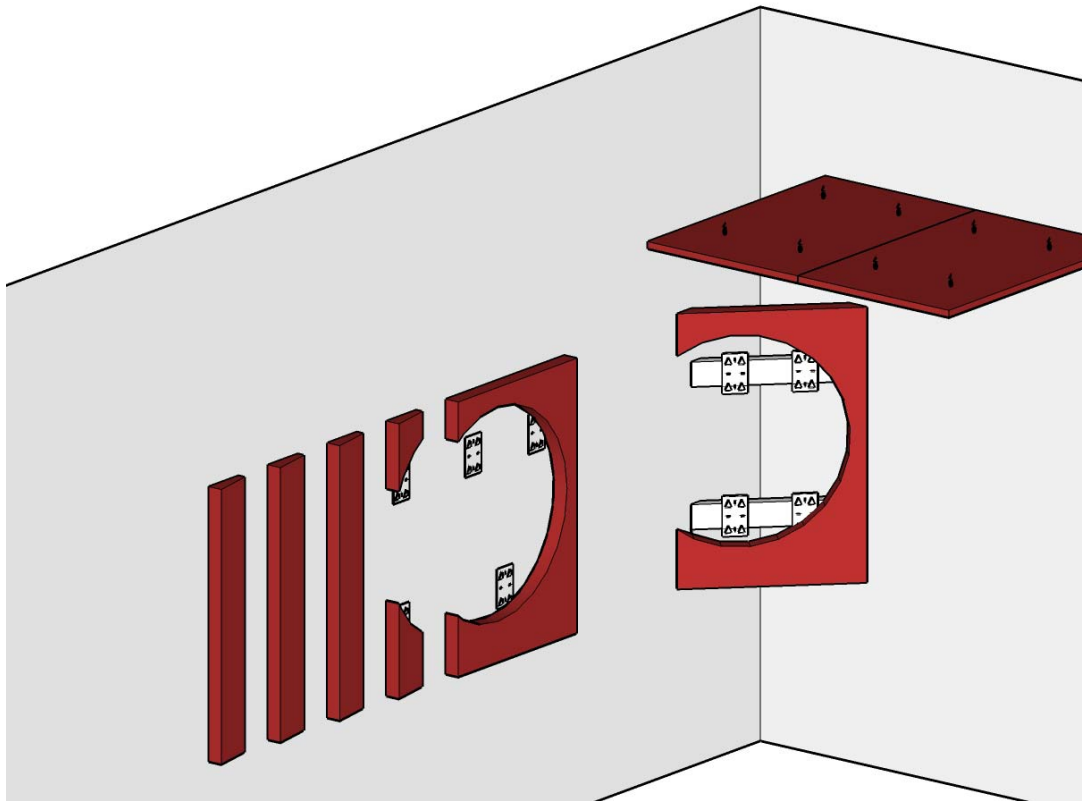


Fig 7 Clip Locations

Absorbers

- Position the Absorbers based on the diagrams and instructions from the preceding pages.
- Mark the first reflection points as described earlier.
- Determine the exact location on the wall for each Absorber. The top edge should be 66 inches from the floor. The middle of the panel should line up with the first reflection point as marked on the wall.
- Attach three impale clips to the wall per Absorber using screws into studs, wallboard inserts and screws, or other appropriate fasteners. The spiky flanges should point toward the ceiling as shown in fig 7. The position of the impale clips does not matter as long as they are hidden behind the Absorber. We recommend that you position one clip 6 inches from the top edge and 6 inches from the left edge, another clip 6 inches from the top edge and 6 inches from the right edge, and the third clip 6" from the bottom edge, centered.
- Press the Absorber against the impale clips and apply gentle downward pressure until the panel is caught securely. Use a bubble or laser levels to make sure the Absorber hangs straight. Note that the Absorber will travel down

about ½ inch from where it started. Thus, you should press it against the impale clips about ½ inch above where you want it to end up. It may be helpful to put a piece of masking tape on the wall at 66 ½ inches as a guide for where to start the top edge of the Absorber.

Abfuser Strips

- Position the Abfuser Strips based on the diagrams and instructions from the preceding pages.
- Determine the exact location on the wall for each Abfuser Strip. The top edges should be 66 inches from the floor. The edge of the first Abfuser Strip should be 6 inches from the edge of the adjacent Absorber. Subsequent Abfuser Strips should be 6 inches from the preceding Abfuser Strip.
- Attach two impale clips to the wall per Abfuser Strip using screws into studs, wallboard inserts and screws, or other appropriate fasteners. The spiky flanges should point toward the ceiling as shown in fig 7. The position of the impale clips does not matter as long as they are hidden behind the Abfuser Strip. We recommend that you position one clip 6 inches from the top edge and 6 inches from the bottom edge, centered.
- Press the Abfuser Strip against the impale clips and apply gentle downward pressure until the panel is caught securely. Use a bubble or laser levels to make sure the Abfuser Strip hangs straight. Note that the Abfuser Strip will travel down about ½ inch from where it started. Thus, you should press it against the impale clips about ½ inch above where you want it to end up. It may be helpful to put a piece of masking tape on the wall at 66 ½ inches as a guide for where to start the top edge of the Abfuser Strip.

Corner Traps

- Position the Corner Traps based on the diagrams and instructions from the preceding pages.
- In order to hang the Corner Traps in the front corners of the room, you will need to fashion four (two per Corner Trap) braces using 2x4 studs, cut to 19 5/8" inches long with 45 degree angle cuts on each end as shown in fig 7. These braces will span the corner, the impale clips will attach to them, and the Corner Trap will hang from the impale clips. Install one brace centered at 36 inches from the floor. Install the second brace centered at 60 inches from the floor. You will need to do this for both corners.
- Attach two impale clips to the top brace and one to the bottom using screws. The spiky flanges should point toward the ceiling as shown in fig 7. The position of the impale clips along the 2x4 brace does not really matter.
- Press the Corner Trap against the impale clips and apply gentle downward pressure until the panel is caught securely. Use a bubble or laser levels to make sure the Corner Trap hangs straight. Note that the Corner Trap will travel down about ½ inch from where it started. Thus, you should press it against the impale clips about ½ inch above where you want it to end up.

Ceiling Panels

- Position the Ceiling Panels based on the diagrams and instructions from the preceding pages.
- Mark the first reflection points as described earlier.
- Determine the exact location on the ceiling for each Ceiling Panel. The center of each panel should line up with one of the first reflection points as marked on the ceiling.
- Screw 4 open Eye Hooks into the ceiling in a rectangular pattern 24 inches by 12 inches (6 inches inside each edge of the Ceiling Panel) as shown in fig 7. Make sure that you secure the Eye Hooks in joists or use wallboard inserts. After all 4 Eye Hooks are installed, simply lift the wire loops (pre-installed in the Ceiling Panel) over the hooks. The Ceiling Panel will float a few inches below the ceiling.

Care Instructions

The fabric may be cleaned with mild, water-free solvents or water-based cleaning agents or foam.

Spares

If any mounting hardware, panel parts, or extra printed material are needed, please call MSR.



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090130 Dimension4 Prime Instruction Manual v4_8.5x11