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Spring 2026

Welch Family Music Studio

This project was to design sound mitigation for our home music studio space. What felt like an insurmountable project for a non-professional musician was completed in a fun afternoon with support from Claude.

AI-Assissted Music Studio Design

I used two AI tools to plan the acoustic treatment layout for our home music studio:

ChatGPT helped with the initial phase:

- **Researched and selected materials** — identified acoustic panels, bass traps, ceiling panels, mounting hardware, and other supplies suited to the space and budget

Claude (Anthropic) supported the design and planning phase:

- **Organized project specs** — room dimensions, gear inventory, supplies on hand, and mounting constraints
- **Generated scaled SVG floor plans and wall elevations** — one artboard per surface, with all fixed elements (arch, doors, desk, drum kit, sump pump riser) accurately placed
- **Iterated on the design** — refined layout through multiple rounds of feedback until the floor plan accurately reflected the space
- **Developed an acoustic treatment strategy** — panel placement prioritizing bass control, first reflection points, and working around curtained mirror walls
- **Calculated scale conversions** — translated all real-world measurements into pixel dimensions for use in Adobe Illustrator
- **Built a materials inventory** — tracked supplies on hand, quantities needed, and sourced product links

The initial layouts were generated by Claude as an SVG file. Then I used Adobe Illustrator to make final adjustments.

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Summary of Prompts

~12 prompts answering clarifying questions about the room (dimensions, gear, walls, mounting preferences, etc.)
~8 prompts providing corrections and refinements to the floor plan orientation and element placement
~6 prompts requesting unit conversions (inches to pixels)
~4 prompts requesting product/gear lookups (keyboard dimensions, bench dimensions, drum throne dimensions)
~4 prompts requesting document deliverables (materials table, slide content)
~2 prompts sharing files/images (photos of the space)

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Inputs provided to Claude

Photos

- 6 photos of the space covering all walls, ceiling, and the arch opening

Room Specs

- Dimensions: 149"W × 128"D × 93"H
- Four distinct walls: arch wall, jog wall, and two curtained mirror walls
- Architectural features: arched opening (60"W × 82.5"H), sump pump riser (69" hypotenuse), diagonal corner wall, storage door recess with jog (31.5" / 5.5" deep)

Gear & Furniture

- Roland JUNO-DS88 keyboard, Roland KC-600 amp, full drum kit on 7’ round rug
- Production desk (47.2"W × 18.9"D) with laptop and Tascam Model 12 mixer,
- Existing curtain track system with heavy velvet curtains over mirrored walls

Supplies on Hand

- 116 acoustic panels, 4 ceiling panels, 12 corner bass traps, decibel meter, guitar wall mounts, wood mounting strips, impaler clips, command strips

Mounting Preferences & Constraints

- Horizontal wood strips screwed into studs with impaler clip system
- Heavily textured walls requiring command strip backing on poster board
- Bass traps mounted ceiling-down with vacuum gap at floor
- Curtained walls excluded from panel placement

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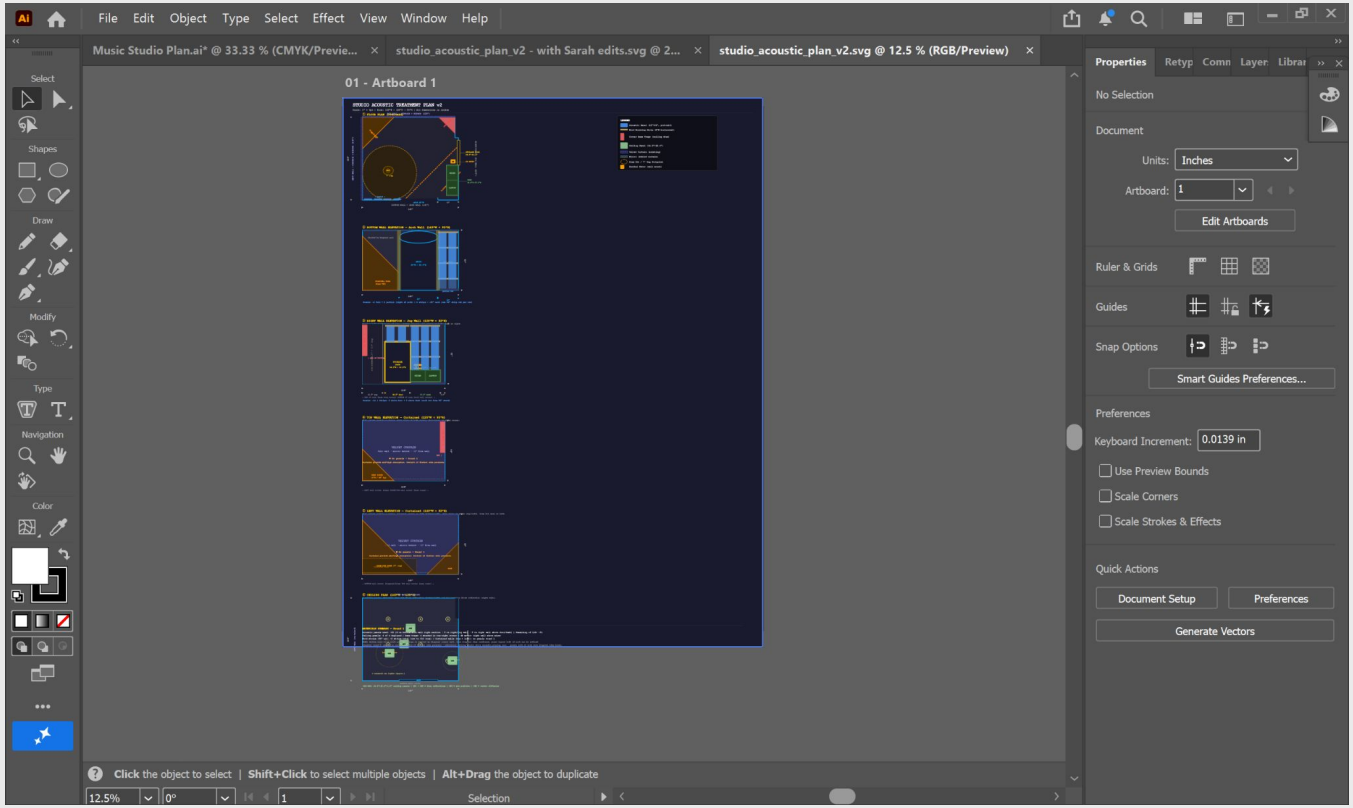
Original* Output



I told Claude that I would do finishing touches in Adobe Illustrator, and it output an SVG format.

If I do a similar project, I'll provide a color palette, but this is fine!

* This is actually the second version. The original was 99.5% the same, but the file was corrupted on my end before I put this deck together.

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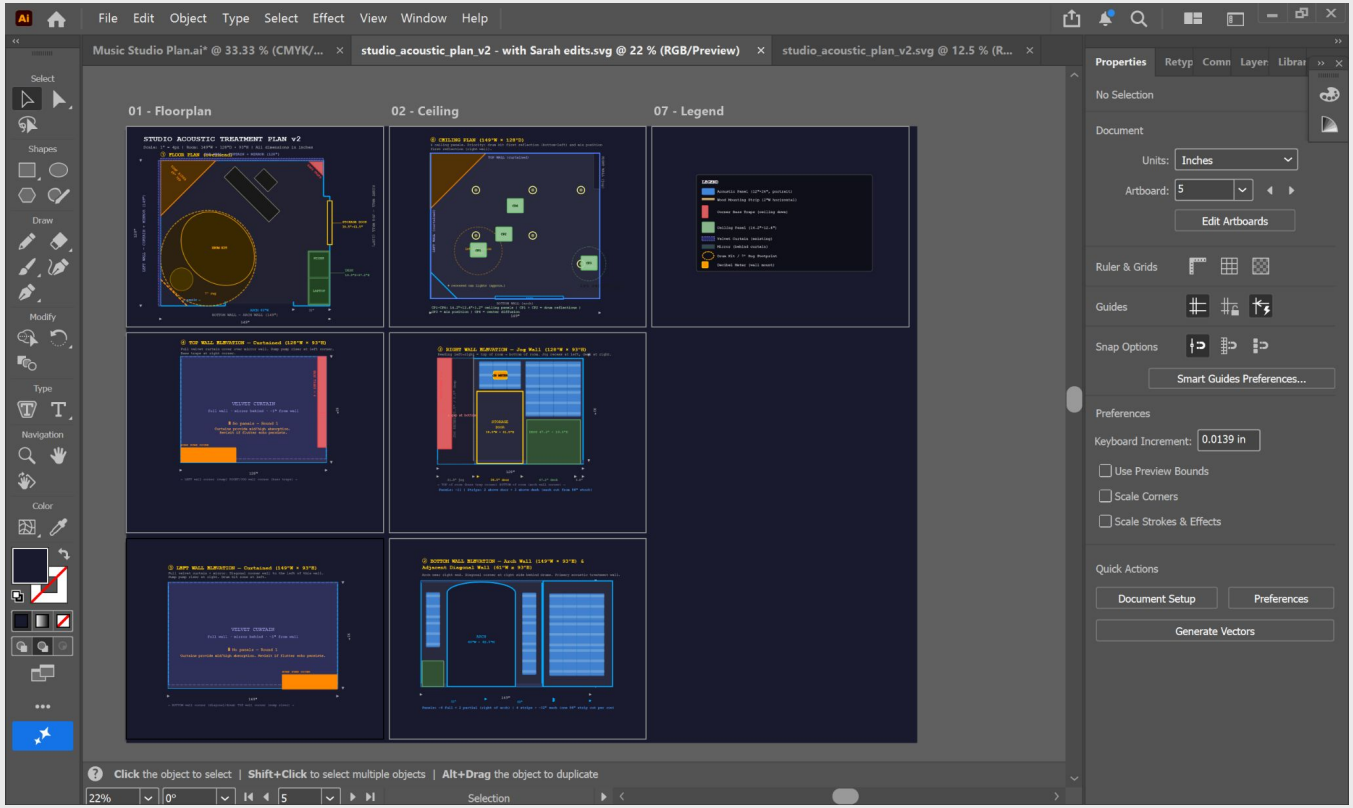
Human Refined Output



Rough clean up of artboards & object placement, e.g. some text labels needed to be moved for legibility due to overlap issues.

Refined placement of acoustic panels (in bright blue) and their mounting strips.

Placed a decibel meter that I did not ask Claude to place.

Corrected dimensions of the bass traps (in red) and sump pump cover (in orange).

Converted arched doorway from two shapes to one.

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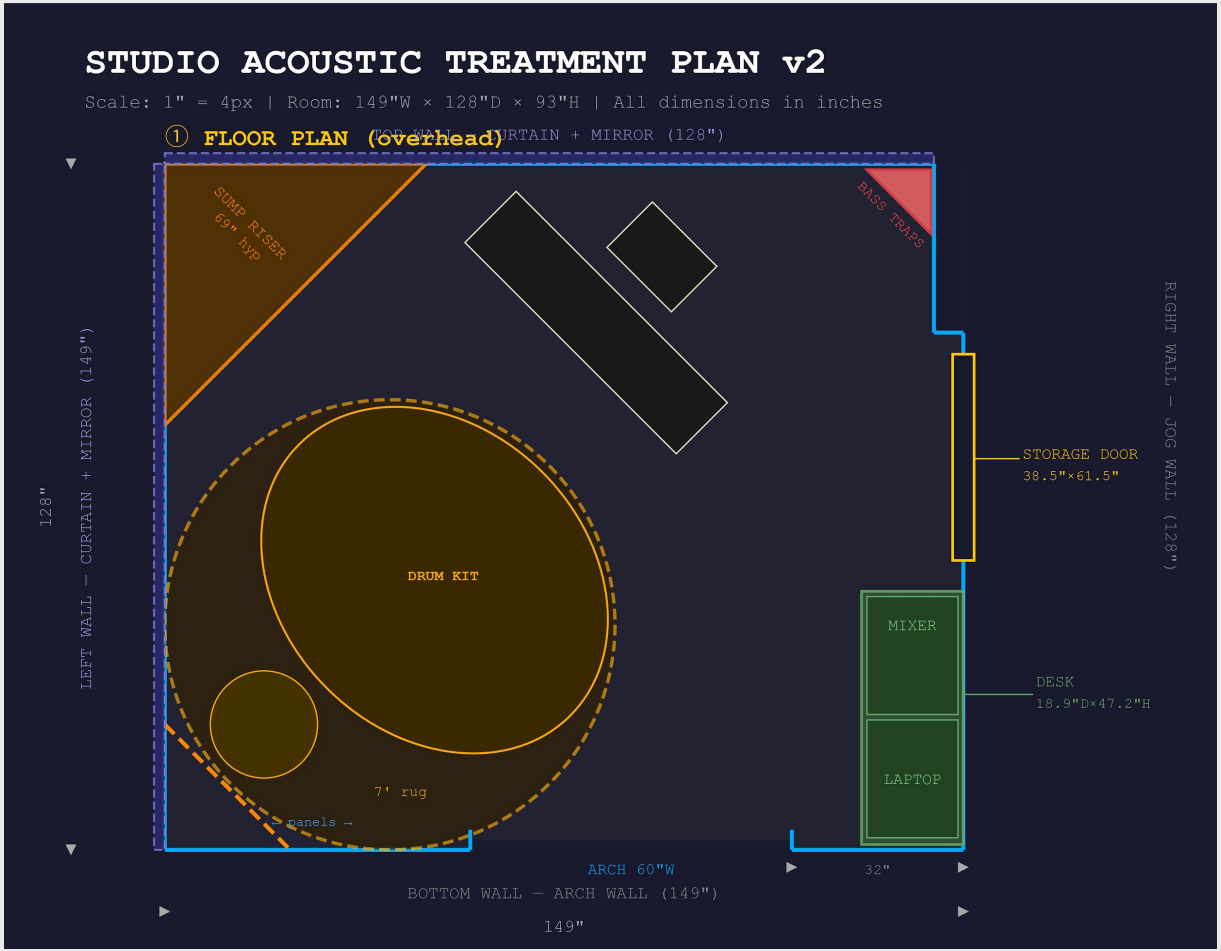
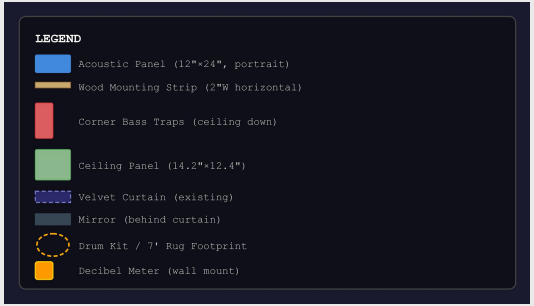
Final Outputs:
Sarah Powered by Claude





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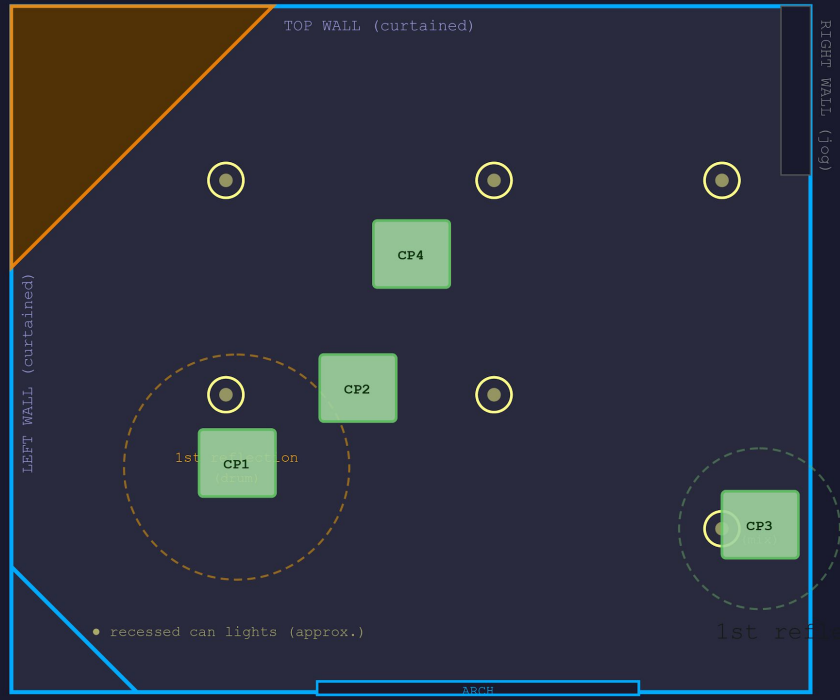
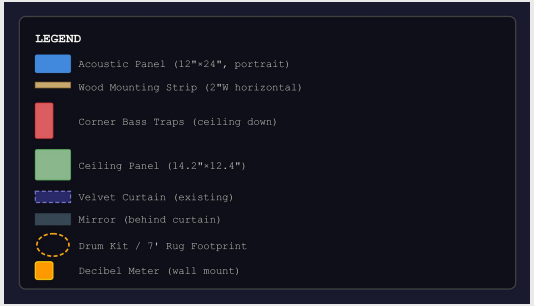
⑥ CEILING PLAN (149"W × 128"D)

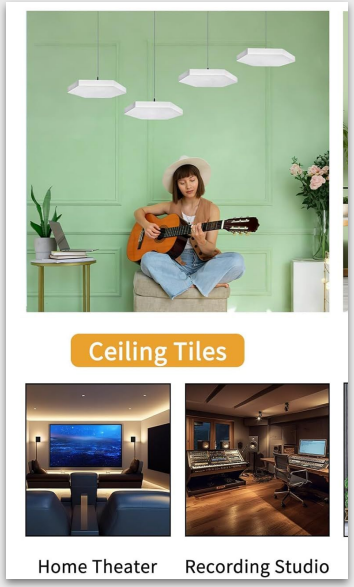
4 ceiling panels. Priority: drum kit first reflection (bottom-left) and mix position first reflection (right wall).



CP1-CP4: 14.2"×12.4"×1.2" ceiling panels | CP1 + CP2 = drum reflections | CP3 = mix position | CP4 = center diffusion

149"





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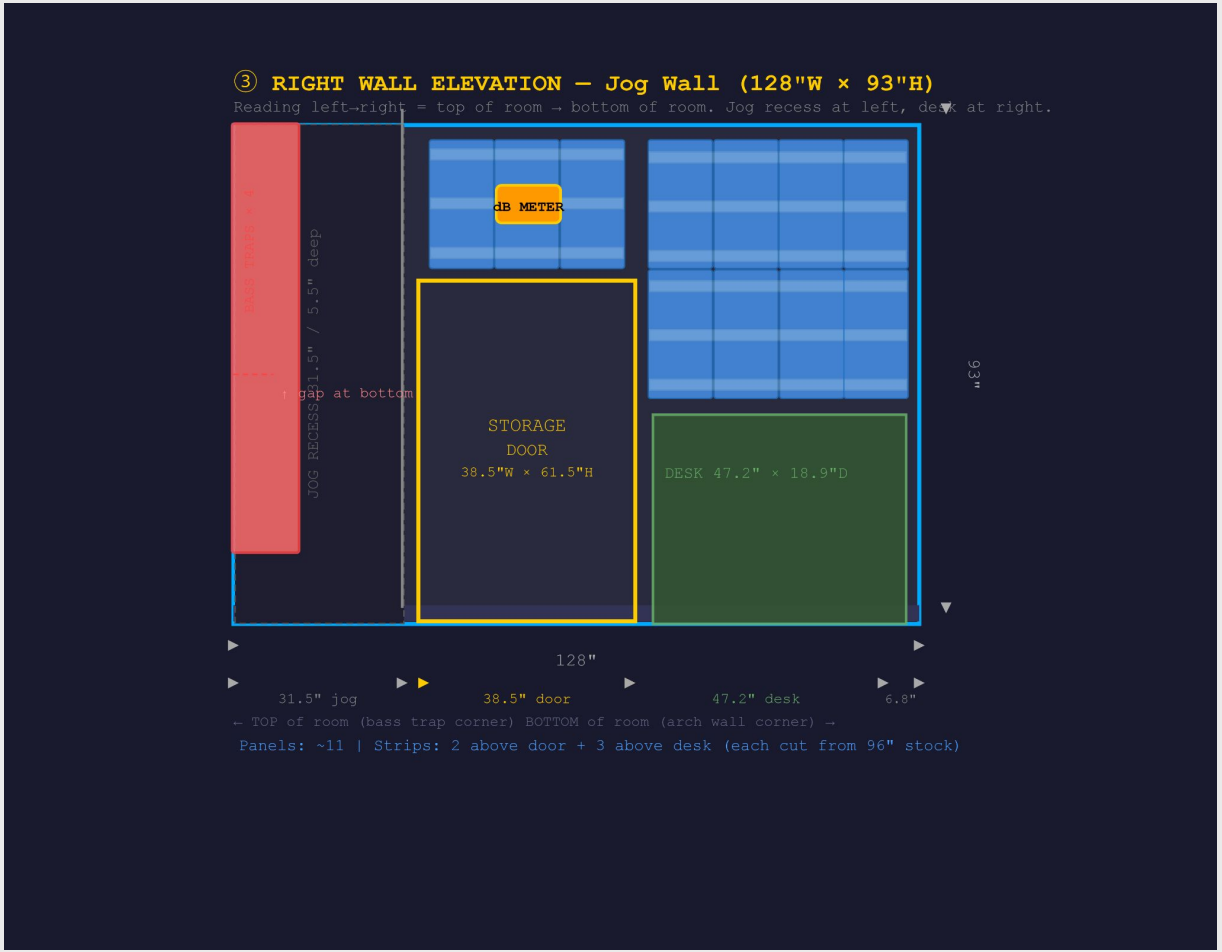

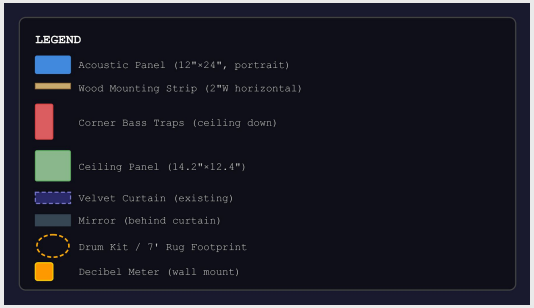

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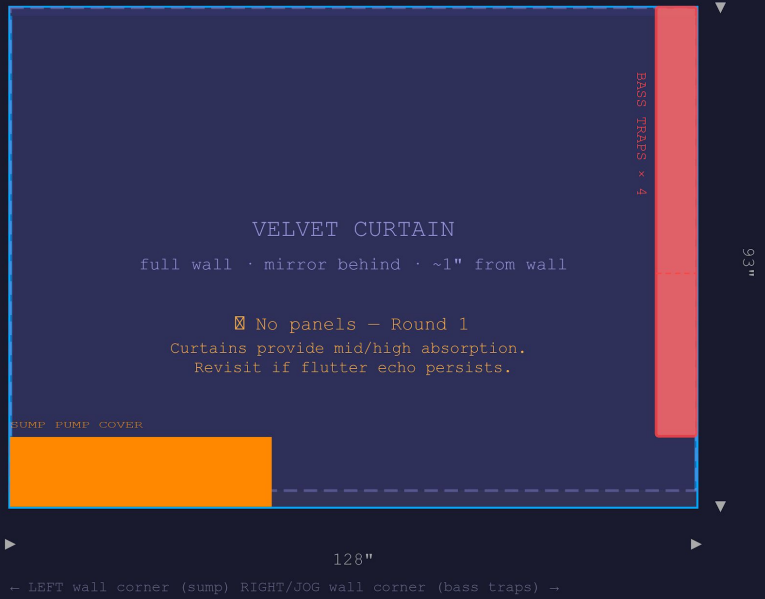
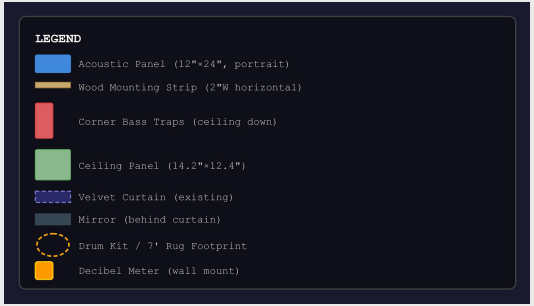
④ TOP WALL ELEVATION — Curtained (128"W × 93"H)

Full velvet curtain cover over mirror wall. Sump pump riser at left corner.
Bass traps at right corner.





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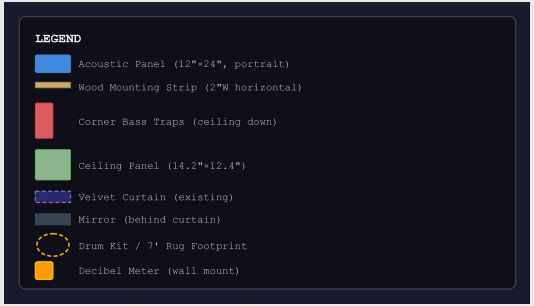
⑤ LEFT WALL ELEVATION — Curtained (149"W × 93"H)

Full velvet curtain + mirror. Diagonal corner wall to the left of this wall.
Sump pump riser at right. Drum kit zone at left.



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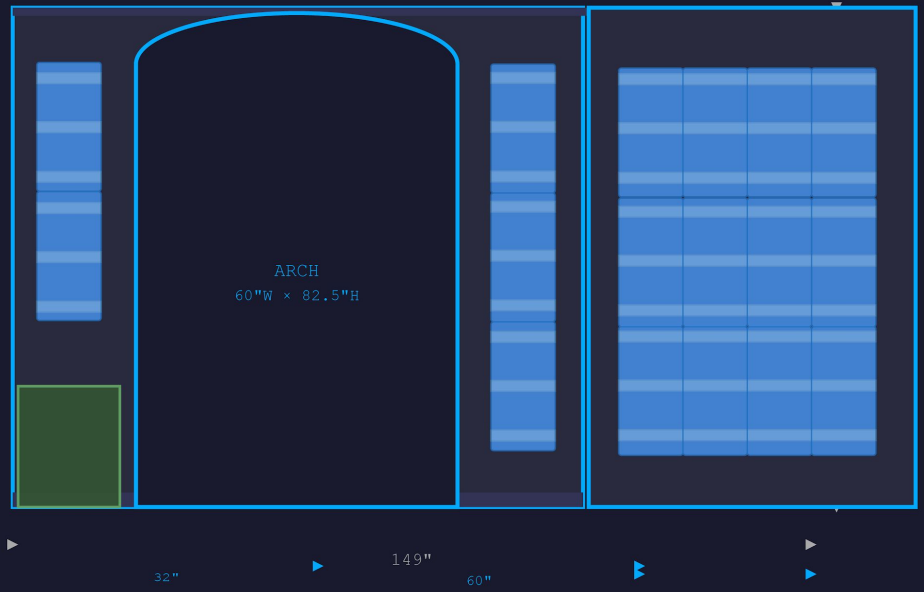
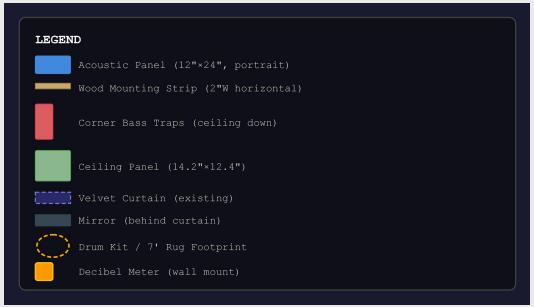
② BOTTOM WALL ELEVATION — Arch Wall (149"W × 93"H) & Adjacent Diagonal Wall (61″W x 93″H)

Arch near right end. Diagonal corner at right side behind drums. Primary acoustic treatment wall.



Panels: ~6 full + 2 partial (right of arch) | 4 strips × ~32" each (one 96" strip cut per row)



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With a full visual plan, I was able to easily identify the sizes and quantities of the mounting supplies required.

Item	Length	Quantity	Impaler Clamps	Screws
1”x2” wood strips	12”	15	30	90
1”x2” wood strips	36”	3	12	36
1”x2” wood strips	48”	15	75	225
		Total	~120	~360

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Conclusion

Would I use AI again for this type of project?
Absolutely. Claude took what felt like an insurmountably large project and helped me to complete it in a fun afternoon.

What did I bring to the project?
I started with strong spatial, design, and Adobe Illustrator skills–and a clear vision. Claude was already seeded with context about my family's music needs in my Music Mentor project. I had completed one much smaller spatial layout with Claude.

How long did this take, really?
This project, including this deck, which was also a joint effort with Claude was completed in 6 hours on the clock, disrupted by lunch and supporting/supervising other family members working on other aspects of the project

Recommendations on using AI in new ways
Start with a clear problem statement and be prepared to answer a lot of clarifying questions — the more specific your inputs, the more accurate and useful the outputs. Expect the process to be collaborative rather than instant — refining and correcting outputs across multiple prompts is normal and produces significantly better results than a single broad request.

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