SCOPE OF WORK

1. MUSIC STUDIO

(Includes Engineering Booth, Recording Studio and Lounge Area

1.1 ACOUSTICAL DOORS

i. 1- Engineering Booth Entry Door – Door # 16
ii. 1- Recording Studio Entry Door – Door #17

a. Remove (1 existing door) and replace (2 Doors) - (3'-0'' wide, 6'-8' high)
   i. entry to newly formed Recording Studio (acoustical) #17
   ii. entry to Engineering Booth (acoustical) #16

b. Location: #16 and #17 doors

c. Color: Choice by Owner; INSTOCK color choices only

d. Replacement. STC Rating larger than 60. Verify that opening sizes and tolerances are acceptable. Do not install doors in frame openings that are not plumb or are out-of-tolerance for size or alignment.

   i. Install doors in accordance with manufacturer's instructions and specified quality standard.
   ii. Use machine tools to cut or drill for hardware.
   iii. Coordinate installation of doors with installation of frames and hardware.

Accepted Material: IAC ACOUSTICS NOISE LOCK ACOUSTIC DOOR

1.2 NON-ACOUSTICAL DOOR – ENTRY DOOR to Music Studio

a) Install NEW DOOR to Music Studio. Solid Wood

b) Color: Choice by Owner; INSTOCK color choices only

c) Install doors in accordance with manufacturer's instructions and specified quality standard.

d) Use machine tools to cut or drill for hardware.

e) Coordinate installation of doors with installation of frames and hardware.

f) Accepted Material: NON-ACOUSTIC DOOR – SOLID WOOD MASONITE

1.3 RESILIENT FLOORING WITH ACOUSTIC RUBBER MATT

Installation THROUGH OUT MUSIC STUDIO

Description from Bottom layer up

i. Existing Concrete Prepare Existing Concrete surface to receive new floor. Make sure that is clean and dry.

ii. Place 2x4 wood sleepers laid flat on top of the concrete.

iii. ¾” OSB tongue and groove flooring glued and screwed to sleepers.

iv. 3/8” thick” Acoustic Rubber Underlayment (Glued) Material: Acoustical Iso-Step Floor Underlayment rubber based.

v. ½” Plywood (Glued and screwed)

vi. Top Layer consisting of Tongue and Groove wood.

1.4 ROUGH CARPENTRY

1.4.1 FRAME NEW WALL W/ENTRY DOOR OPENING (1.1 SEE DOOR) separating Lounge Area from Recording Studio

1. Prepare the space to receive the new wooden frames that run around the interior perimeter of the room. Make sure that there are no obstacles adjacent to the existing CMU wall that would interfere with the installation.
2. The new wooden Frames will consist of 2x6 studs at 16 inches with a single plate (2x6) at the bottom and double plate (2x6) at the top connected to existing ceiling joists.
3. Complete placement of INSULATION AND ACOUSTICAL PANELS (SEE BELOW) before erecting the wooden frames.
4. Anchors and fasteners shall be compatible with adjoining construction.

5. Area between the new wooden frame and CMU walls shall be insulated, trimmed, weather-stripped, and caulked to minimize air infiltration to the maximum extent possible.
6. Structure:
7. Timber: Douglas Fir or Yellow Southern Pine Strength Fb=1,800 psi,(Allowable bending strength) E= 1,800 Ksi (Young’s Modulus).

Connections for Frame New Wall: Use Screws, Bottom Plates Anchors, (Connection of Bottom plate to Slab on Grade) Manufactured by Simpson Strong-Tie, Hilti or equivalent.

ACOUSTICAL SOLUTIONS WALL, CEILING PANELS AND FLOORING

For Soundproofing Your Wall:

- Start by insulating. Placing fiberglass insulation in the walls will prevent sound From bouncing around within the wall by absorbing it and will help to reduce some airborne sound as well. Never use foam insulation: while this has a good thermal rating, it is not designed for acoustical use.

- Vinyl Sound Barrier Mass Loaded Vinyl (MLV) has been an industry standard in noise control for decades. Mass Loaded Vinyl is very dense, weighing one pound per square foot. This mass is what allows the MLV to be so effective at reducing airborne noise. MLV can be used in walls, floor, and ceilings to significantly increase the mass of these surfaces.

- Resilient Isolation Clips The PAC RSIC-1 is one of several “two piece” resilient sound isolation clips. This two-piece construction provides for more isolation in the low frequencies. Because they are spaced in rows 16” or 24” apart, the drywall is attached with far fewer contact points to the original framing. The clip and drywall furring channel assembly is resilient. This allows a wall to flex, and this increases sound isolation as well as lowering the troublesome primary low frequency resonance point. These clips help to de-couple¬ the drywall from the studs.

- Green Glue Soundproofing Compound dramatically reduces sound vibration and improved soundproofing performance in commercial, residential and industrial walls, floors and ceilings. Green Glue is applied between two sheets ridged building materials (ie. drywall, plywood, MDF, Rockboard, etc.). Green Glue rapidly converts sound energy into heat for superior noise control for your soundproofing projects. Green Glue is a damping compound. It blocks 90% of the sound from transmitting through that wall. Please see the attached information on Green Glue.

- Acoustic Caulk is a water-based sealant designed to reduce sound transmissions in soundproof walls, floors and ceilings assemblies. When building a soundproof room, you need

to seal any openings and gaps to achieve and maintain a high performing STC (Sound Transmission Class) value.

- Firestop Putty Pads are specifically designed to maintain high acoustical and soundproof ratings in fire rated walls. It is easy to apply and will stay resilient (will not harden). Putty Pads are UL classified for both non-metallic and metallic outlet boxes to prevent the spread of smoke, fire and toxic gases. Putty pads are sized to cover standard size outlet boxes and are designed to work with sound rated wall assemblies.

For Soundproofing Your Ceiling:

- Insulation, Resiliant Isolation Clips, Mass Loaded Vinyl Barrier and Green Glue all work in the same way as on the ceiling as the wall.

- Privacy Shield Ceiling Tiles: A composite material constructed of a 1/8″ thick layer of mylar faced mass loaded vinyl weighing 1 lb/psf bonded to a 1″ or 2″ thick layer of scrimmed faced acoustical fiberglass. This product has an STC rating of 29 or 30 and is designed to significantly reduce the amount of sound that is carried up and into drop tile ceiling areas. AudioSeal Drop Ceiling Sound Barrier is available by the roll or in 2’ x 2’ and 2’ x 4’ sections to fit over existing drop ceiling tiles, and in 30’ x 54” sections with slits for fluorescent light covers.

- Barrier Ceiling Tiles: The Signature Barrier Acoustic Ceiling Tile is a double duty soundproofing ceiling tile. It works for both lowering sound transmission as well as reducing reverberation. The ceiling tile consists of a 1” thick 6-pound density fiberglass, covered with your choice of four facings. This tile has an absorption of NRC .85, and the attached AudioSeal™ Sound Barrier with an aluminized facing adds a strong sound blocking rating of STC 26. This double rating is not found in standard acoustic ceiling tiles. Signature tiles are Class 1 Fire Rated and come in standard sizes of 2’ x 2’ and 2’ x 4’ and standard thickness of 1”.

For Soundproofing Your Floor:

- IsoStep: Iso-Step Floor Underlayment is an environmentally friendly rubber-based product made from recycled tires that is available in 1 pound per square foot and 2 pound per square foot models. It offers credible sound reduction of both airborne and structure borne noise. Iso-Step Floor Underlayment also offers STC performance superior to other underlayment’s in the market today. The ¼” thick model has an STC 26, and the ½” thick model has an STC 31.

ACCEPTABLE PRODUCTS: MLV (Mass Loaded Vinyl)

AudioSeal™ Drop Ceiling Sound Barrier or similar STC rating larger than 40

Composite material constructed of a 1/8″ thick layer of mylar faced mass loaded vinyl weighing 1 lb./psf bonded to a 2″ thick layer of faced acoustical fiberglass. Roll or in 2’ x 2’ and 2’ x 4’

sections to fit over existing drop ceiling tiles, and in 30’ x 54” sections with slits for fluorescent light covers.

AudioSeal™ Sound Barrier or similar STC rating larger than 40 Barrier Acoustic Ceiling Tile double duty soundproofing ceiling tile.. The ceiling tile 1” thick 6-pound density fiberglass, covered with choice of four facings. Attached with an aluminized facing. Sizes of 2’ x 2’ and 2’ x 4’ and standard thickness of 1”.

Mounting devices: Connections and seal for Acoustical wall and Ceiling Panels

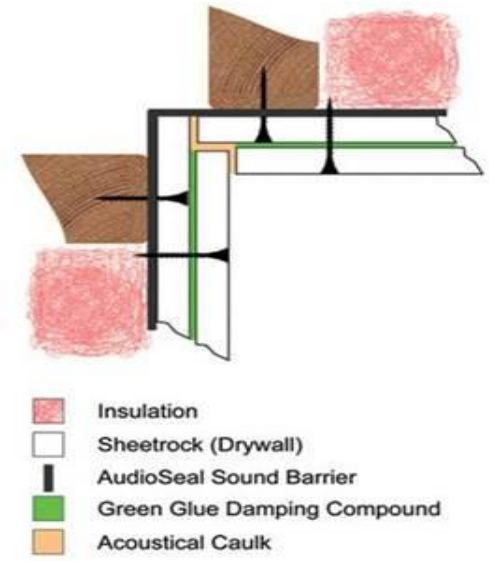
Use Alpha resilient sound Isolation Clips to connect Sheet rock wall and ceiling panels to wood studs and joists. Seal with Green Glue Damping Compound, Acoustical Caulk and Firestop Putty Pads as shown in following sketch.

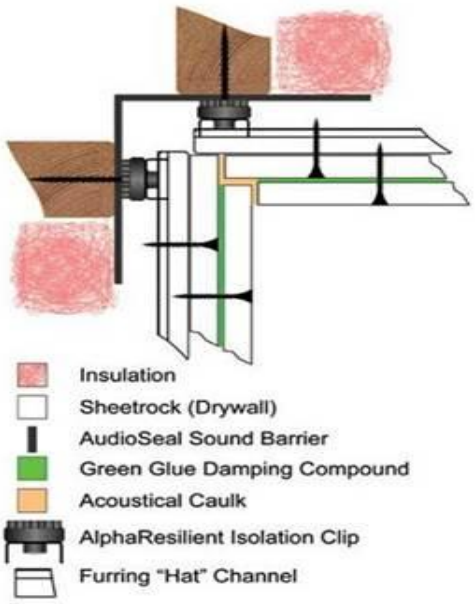
Requirements

Certification of Seismic Design: Submit certification that installed ceiling grid assembly complies with seismic Zone "2" International Building Code requirements specified.

Submittal: Submit specifications, manufacturer’s installation instructions for selection and approval.

WALL AND CEILING CONSTRUCTION DIAGRAM





1.4.4 LOUNGE AREA

1.4.4.1 Construct frame around Electric Wall Fireplace (see photo below)

1.4.4.2 Add Bookshelves on each end of frame (see photo below)

1.4.4.3 Add decorative stone face to the surround of fireplace.

1.4.4.4 Provide Electric Wall Fireplace

Acceptable Product: 60 inch Recessed Ultra-Thin Wall Mounted Electric Fireplace with 12 Flamer Color (Clihome Model #CWCH-EPA24706)

1.4.4.5 Outlet in frame for TV (outlet in Electrical 1.6.5 below)

1.4.4.6 Outlet for the Electric Fireplace (outlet in Electrical 1.6.5 below)

1.5. INSULATION To be installed in New wooden Frame Walls and Ceiling of Recording Studio and Lounge Area

a. **Preparation:** Clean, repair/prepare the surfaces to receive insulation in accordance with the manufacturer's instructions.

b. Install R-21 Rockwool Insulation Wool Batt insulation in space between new wooden frame studs. (2x6 studs at 16” space and secure in place with metal “tiger claws” or other acceptable method approved by owner. Face of frame shall be covered with minimum 6 mil. Poly lapped 6 inches and turned up 6 inches on the foundation walls and secured.

c. Ceiling/Roof Install R-30 Rockwool Wool batt Insulation for a total R-value of R-38. Install baffles or air chutes as necessary to contain the insulation and ensure proper ventilation.

d. Certification: The contractor shall certify R-values by placing a certification tag in a visible area.

1.6 ELECTRICAL

1.6.1 Install Separate Electrical Panel (service) to Music Studio
1.6.2 Install LED recessed lighting throughout Music Studio (15 lights)
1.6.3 Install necessary wiring to accommodate sound equipment and recording equipment.
1.6.4 Install USB/Electrical Outlet throughout the Music Studio
1.6.5 Install (2) Outlets on Back of Lounge Wall to accommodate electric fireplace and TV.

1.7 GYPSUM BOARD (Dry Wall) Walls and ceiling: **Lounge Area and Engineering Booth**

SECTION INCLUDES

a. Gypsum board.

b. Cement board.

c. Accessories

MANUFACTURERS

U.S. Gypsum Co.

National Gypsum Co.

Georgia-Pacific Co.

GYPSUM BOARD MATERIALS

a. Regular Board: ASTM C36, tapered edge and square edge; USG “SHEETROCK”; 5/8- inch thick, sizes as required to minimize number of joints.

b. Moisture Resistant Board: ASTM C630, tapered edge; USG “SHEETROCK” Brand W/R Panels; 5/8-inch thick, sizes as required to minimize number of joints.

CEMENT BOARD MATERIALS

Cementitious Backer Units: USG “DUROCK” Interior Cement Board; aggregated cement board with polymer-coated glass fiber mesh completely encompassing edges, back and front surfaces; 1/2-inch thick, three (3) ft wide with weight of 3 lbs/sq ft.

INSTALLATION OF EXTERIOR GYPSUM CEILING BOARD AND WALLS

Install exterior gypsum ceiling board with long dimensions across supports. Maximum support spacing: 16 inches oc. Position end joints over supports. Use maximum practical lengths to minimize end joints. Allow 1/16-inch to 1/8-inch space between butted ends of board. Fasten board to supports with cadmium plated screws spaced 12-inches oc.

Ceiling and walls: Erect gypsum ceiling board perpendicular to supports with staggered end joints over supports. Drywall entire ceiling and walls tape and compound (3 coats).

Prime and Paint (2 coats) Studio, lounge, and engineering room. To include all doors and trim. Color and finish to be selected and approved by tenant.

1.8 MUSIC STUDIO WINDOWS - INTERIOR

1.8.1 Construct Soundproof Interior Window in Engineer Booth overlooking the Recording Studio

1.8.1.1 Construct Opening for 4x 6 (2-tempered glass panels ½ inch thick)

1.8.1.2. Supply 2 tempered glass panels 4x8 half inch thick (2) window

1.8.2 Construct Soundproof Interior Window in Lounge Area overlooking into the Recording Studio (newly constructed wall)

1.8.2.1 Construct Opening for 3x 8 (2-tempered glass panels ½ inch thick)

1.8.2.2 Supply 2 tempered glass panels 3 x 8 half inch thick

1.8.4 Install at 15-degree angle.

1.8.5 Seal tight.

1.9 ENGINEER DESK FOR MUSIC STUDIO (hold music recording equipment)

1.9.1 Design and build custom desk for music engineering equipment. Design, including materials to be used, shall be approved by tenant before construction.

END OF SECTION 1 MUSIC STUDIO