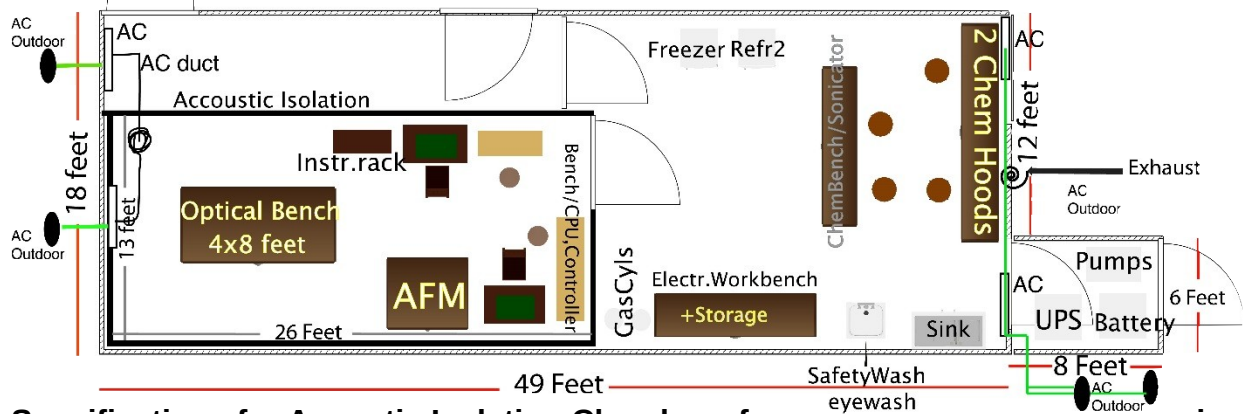


Sabyasachi Rakshit: Single Molecule Laboratory

Top-View in 2D with scaling (without any electrical and Water connections and Drainage)



Specifications for Acoustic Isolation Chamber of 13 Feet (W) x 26 feet (L) x 8 feet (H) (The desired isolation level is STC 60) size:

Layers on Wall, Ceiling and Floor:

1. Gypsum Board or drywall as panel (1/2")
2. PVC or mass loaded vinyl curtain or other noise damping compounds
3. Gypsum Board or drywall as panel(1/2")
4. Neoprene Rubber as Noise Insulator (3 mm x 1 layer)
5. Rockwool (~2" thick) as a layer of sound Absorber
6. Perforated Gypsum (Perforation facing out-ward)
7. Neoprene Rubber as Noise Insulator (3 mm x 1 layer)
8. Perforated Gypsum (Perforation facing in-ward)
9. Additional measures should be taken to ensure STC 60 sound isolation level or higher inside the chamber without additional cost.
10. Door should have openings of 4 feet and should be mounted properly to acquire sound isolation of 60 STC or more.
11. Frame for the roof should have steel materials to reduce shaft from heavy roof.

Specifications for Ac duct:

1. Length of the inlet-duct and outlet-duct should be at least 14 feet each
2. 1 foot x 1 foot opening inside
3. Both the ducts should be equipped with Hepa-filters and air-diffusers
4. Inlet should have options to connect to two ACs
5. Outlet should have an exhaust fan outside the isolation chamber connected to the duct through canvas
6. The duct should be equipped with sound isolation material in order to provide sound isolation level of STC 60 or higher inside the enclosure.

For any kind of sealing, please use Acoustic sealants only.

For electrical inlets, please take proper precautions for sound isolation and electric noise isolation.

Interior should be painted with black and non-fluorescent color and should be given a pleasant finish.