SCULPTURE LAB

SPACE DESCRIPTION

The Sculpture Lab is a dedicated space for 3D artwork in various media such as plaster, wood, paper, clay, and metal. This space tends to be noisy, and requires additional ventilation due to heat, combustion, fumes, or emissions. The room shall be organized in a grid or linear arrangement with 5' x 5' open work areas for each student. Separate, adjacent space is required for 3D printing kilns and material storage. Materials and processes vary widely; review specific requirements with the program before design begins.

GENERAL

All perimeter walls shall extend full height to deck.

Lab designed with a width to length ratio no more than 3:4 to allow for maximum flexibility.

Minimum Ceiling Height: 9'.

ADJACENCIES

Display space for student work: Gallery.   Separate storage spaces for materials such as metal and wood. Provide access to laundry, locker rooms, showers and custodial amenities.

ACOUSTIC

The Sculpture Lab is a very noisy space due to the processes and activities in the room. Perimeter walls should have a minimum STC rating of 50. Provide absorbent panels on walls and ceilings for noise reduction and to decrease sound transmission to adjacent spaces.

Maximum recommended HVAC Background Noise: 40dBa

Follow the recommended methodologies and best practices for mechanical system noise control in ANSI Standard S12.60; the 2015 ASHRAE Handbook-- HVAC Applications, Chapter 48, Noise and Vibration Control (with errata); and AHRI Standard 885–2008.

Maximum NC Level for VAV's shall be less than 30 at maximum CFM.

MECHANICAL

Dedicated air handling and ventilation for heat, combustion, fumes, or emissions. Coordinate with specific program requirements. If using a kiln, prefer outside wall location to exhaust.

Additional exhaust required in 3D Printing Kiln room.

PLUMBING / GASES / UTILITIES

Large, deep Sinks with Clay Trap at each

ADA Sink with Clay Trap

ELECTRICAL & DATA

Place wall outlets at no more than 6' intervals or as necessary to allow for 30% coverage.

Provide overhead retractable outlets.

Provide additional power for 3D printers / printing kilns.

LIGHTING

Provide LED lighting system with appreciable indirect component and good diffusion for maximum visibility from all directions. Lighting color rendition to be 5,000K – 5,500K (Natural White to Pure White)

Provide low-brightness luminaires with high visual comfort probability (VCP) in all viewing directions. Average 40fc at 30" A.F.F. Min CRI 80.

Lighting watts per square foot and controls shall meet the latest requirements of ASHRE 90.1

Prefer North-facing windows or clerestory for natural daylight.

TECHNOLOGY

Provide Wireless capability in all labs.

Verify equipment specifications and requirements.

ACCESSORIES AND EQUIPMENT

Provide ample storage systems within the Lab and separate storage room within the Lab for equipment, tools, supplies and projects in process.

3D Printers on carts – typically 12" x 12" x 24" – Coordinate with specific program requirements.

Engraver

Provide a whiteboard with marker tray and two framed 4' x 4' tackboards.

FURNITURE

Folding tables and chairs

Mobile sculpture stands with turn table tops.

Furniture shall be selected for durability, cleanability, and flexibility.

FINISHES

Ceilings
Recommended Height: 9' minimum.

Ceilings shall have an NRC of .70 to .85.

Floors
Sealed concrete or Hard surface flooring.

Countertops
Solid surface or stainless steel. Verify requirements with the program.

Walls
Epoxy Paint.

DOORS AND WINDOWS

Doors shall be minimum STC 30 with 6" x 30" Window Lite preferred.

Provide Overhead door with direct access to the exterior.

Consider interior windows to provide visibility of the program in action from high-traffic areas in the building.

Windows or clerestory for daylight: North facing preferred.