CISCO Smart Building Technology
and Hybrid Work Solutions

Cisco Talent and Collaboration Centers

Innovation Suite Design Guide

Introduction

Overview and Intent

This document provides guidance on creating the Innovation Suite, including space design, technology, and furnishings.

The intent of these Cisco Design Guides is to help organizations drive a repeatable and standardized approach to deploying collaboration spaces, leading to reduced implementation costs, quicker deployments, reduced solution complexity, and easier maintenance and support. Most importantly, the designs outlined in these documents will deliver an amazing experience for both in-person users of the space, as well as those participants connecting remotely.

The specifications and details in this document reflect how Cisco has approached the creation of these types of spaces in our own office environments. This should not be interpreted as a "validated design." Every project is different, therefore, assembling a multi-disciplined team of experts is critical to ensure success. This includes, but is not limited to, IT and facilities teams, architects and space designers, acousticians and lighting designers, change-management consultants, and a Cisco-certified integrator. These individuals need to be brought in at project inception to understand end-user requirements, assess the technical environment, and evaluate the attributes of the specific space, including overall layout, physical structure, accessibility, acoustics, electrical and mechanical systems, and external factors such as noise, light and temperature.

Room Description

A perfect space for a team meeting or when colleagues want to get together to share ideas and/or brainstorm. The informal setting, the mix of seating types, and varying postures provide choice and encourage interaction. Depending on the overall programing of the floor, this space can be oriented either landscape or portrait. It can also be deployed in the open plan or as subset of a larger collaboration area. Regardless of setting or location, the Cisco Board Pro 75 is the perfect multi-functional device for the space.

Supported Collaboration Activities

Information Sharing	
Brainstorming	✔
Team Building	✔
Decision Making	

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Visualization of key Cisco elements

Cisco Board Pro 75

Cisco Room Navigator for Wall
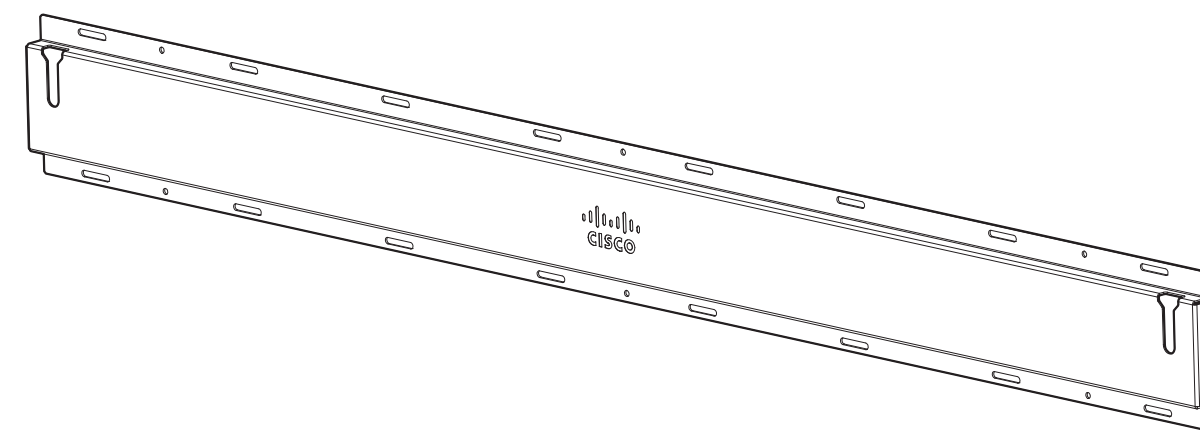
Innovation Suite

Video Device Mounting Options

There are two mounting options for the video device in the Innovation Suite, directly on the wall or leveraging an A/V compatible credenza. Several factors will go into determining which option is best.

Option 1: Wall Mount

Cisco Board Pro 75 Mounting Bracket – Requires wall to be blocked and electrical and data to be elevated.

Option 2: Credenza Option

Low profile A/V compatible credenza – Fully integrated cabinets available from a number of specialized vendors, many eliminate the requirement for the wall to be blocked and electrical moved. Perfect for new and retrofit installations, allowing for quick and efficient installation. Check with manufacturers for specific details.
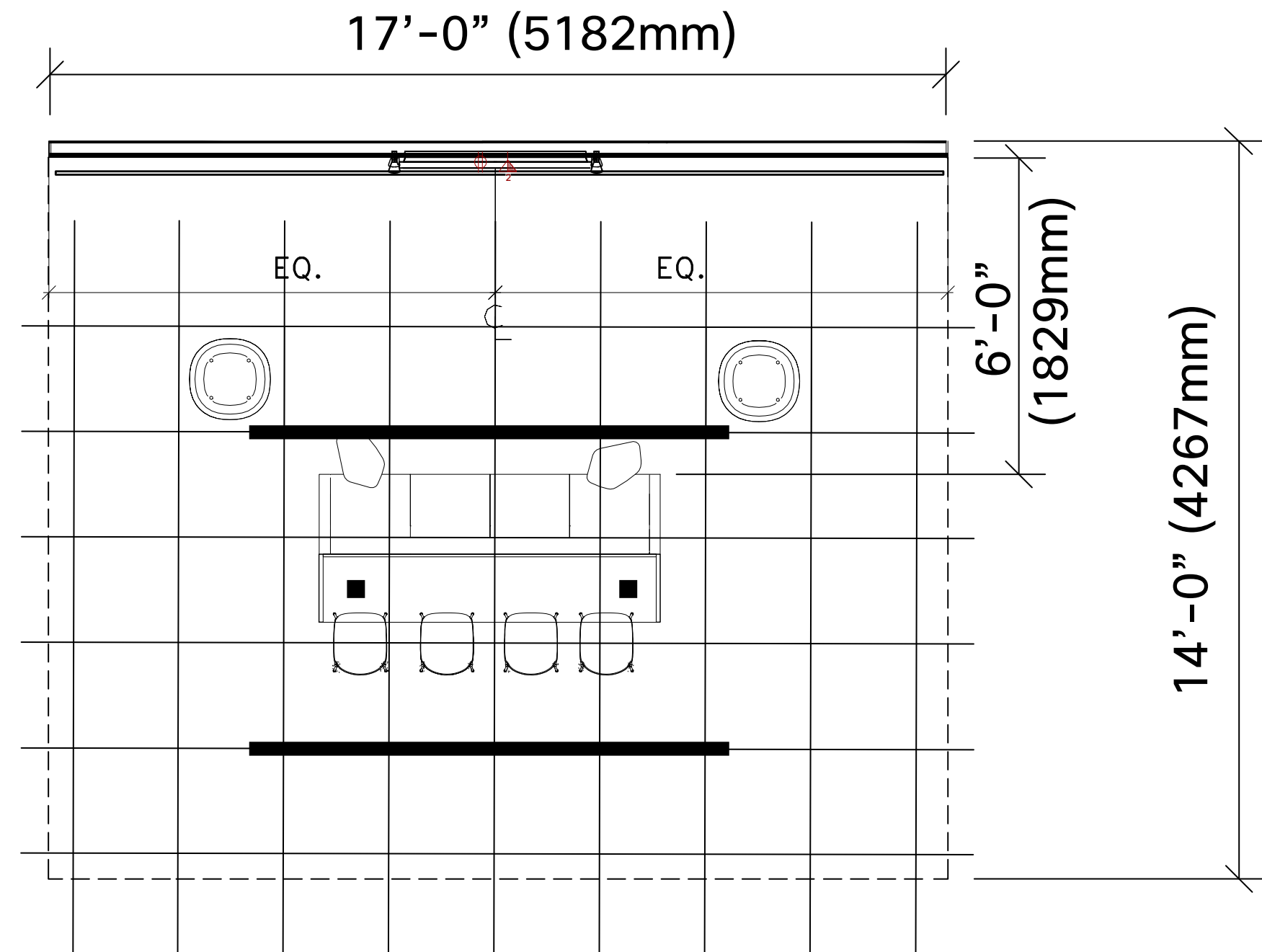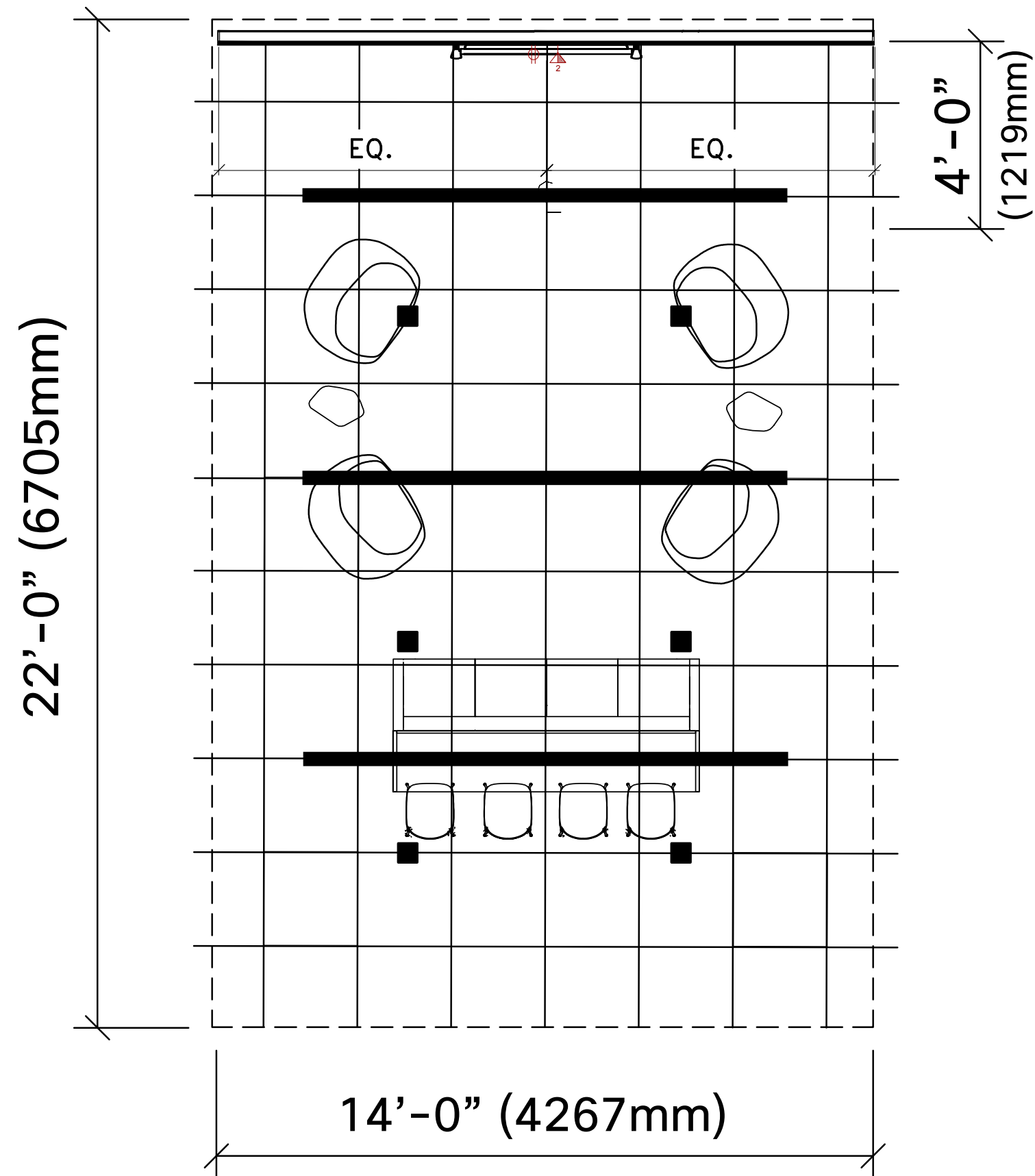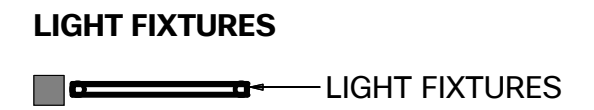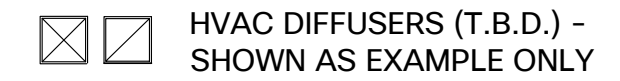
Composite Plan

Option 1: Landscape

17'-0" (5182mm)

EQ.　　　EQ.

HVAC DIFFUSERS (T.B.D.) –

6'-0" (1829mm)

14'-0" (4267mm)

Option 2: Portrait

EQ.　　　EQ.

4'-0" (1219mm)

22'-0" (6705mm)

14'-0" (4267mm)

Graphics Symbols

ACOUSTICAL CEILING
AND GRID

HVAC DIFFUSERS (T.B.D.) –
SHOWN AS EXAMPLE ONLY

LIGHT FIXTURES

LIGHT FIXTURES

FURNITURE SYSTEMS version DEVICES

DUPLEX RECEPTACLE

DATA RECEPTACLE

POWER AND COMMUNICATION

WALL / CEILING / FLOOR version DEVICES

DUPLEX RECEPTACLE

DATA RECEPTACLE

LIGHT SWITCH

AV RECEPTACLE

TABLE version MICROPHONE

COMBINATION POWER
& VOICE / DATA INFEED
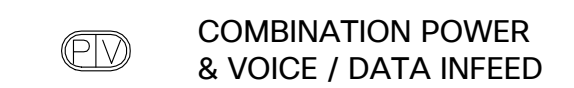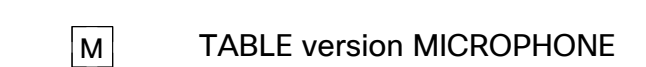
Room Layout

Option 1: Landscape
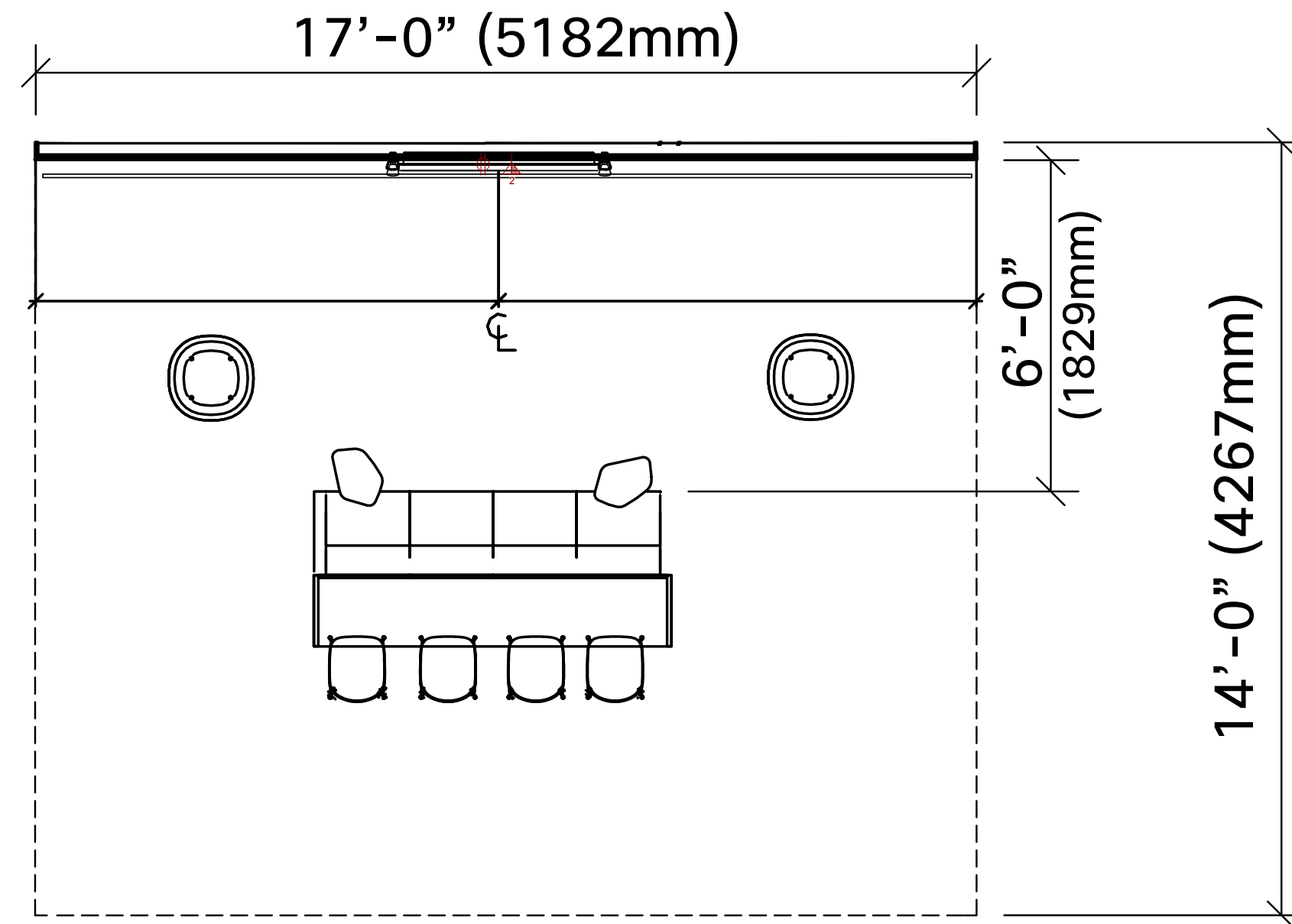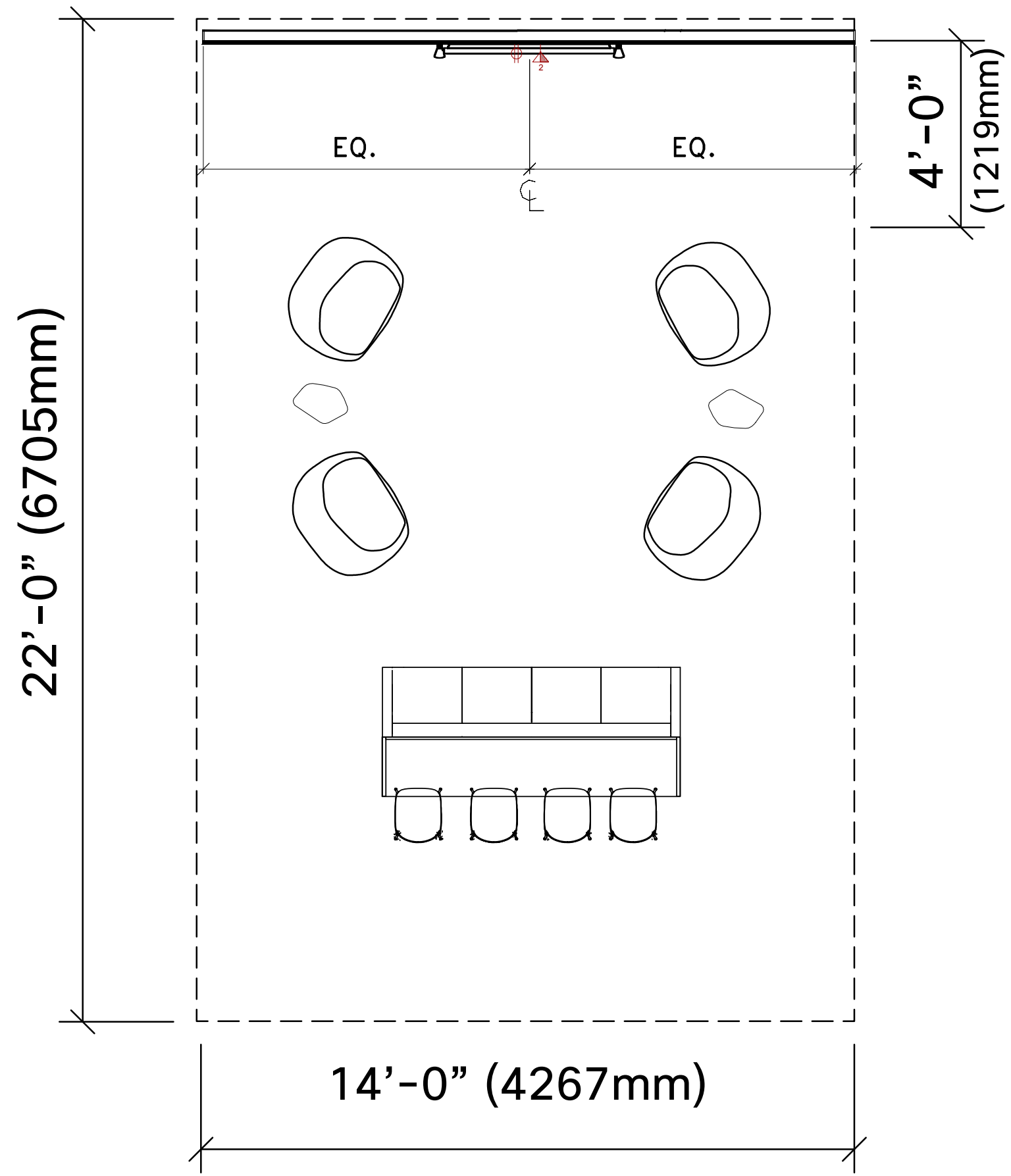
17'-0" (5182mm)

6'-0" (1829mm)

14'-0" (4267mm)

Option 2: Portrait

EQ.　　　EQ.

4'-0" (1219mm)

22'-0" (6705mm)

14'-0" (4267mm)

Graphics Symbols

ACOUSTICAL CEILING AND GRID

HVAC DIFFUSERS (T.B.D.) - SHOWN AS EXAMPLE ONLY

LIGHT FIXTURES

LIGHT FIXTURES

FURNITURE SYSTEMS version DEVICES

DUPLEX RECEPTACLE

DATA RECEPTACLE

POWER AND COMMUNICATION

WALL / CEILING / FLOOR version DEVICES

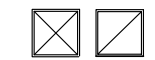DUPLEX RECEPTACLE

DATA RECEPTACLE

LIGHT SWITCH

AV RECEPTACLE

TABLE version MICROPHONE

COMBINATION POWER & VOICE / DATA INFEED

Reflective Ceiling Plan

Option 1: Landscape

17'-0" (5182mm)

6'-0" (1829mm)

14'-0" (4267mm)

Option 2: Portrait

EQ.   EQ.

4'-0" (1219mm)

22'-0" (6705mm)

14'-0" (4267mm)

Graphics Symbols

ACOUSTICAL CEILING AND GRID

HVAC DIFFUSERS (T.B.D.) – SHOWN AS EXAMPLE ONLY

LIGHT FIXTURES

LIGHT FIXTURES

FURNITURE SYSTEMS version DEVICES

DUPLEX RECEPTACLE

DATA RECEPTACLE

POWER AND COMMUNICATION

WALL / CEILING / FLOOR version DEVICES

DUPLEX RECEPTACLE

DATA RECEPTACLE

LIGHT SWITCH

AV RECEPTACLE

cisco
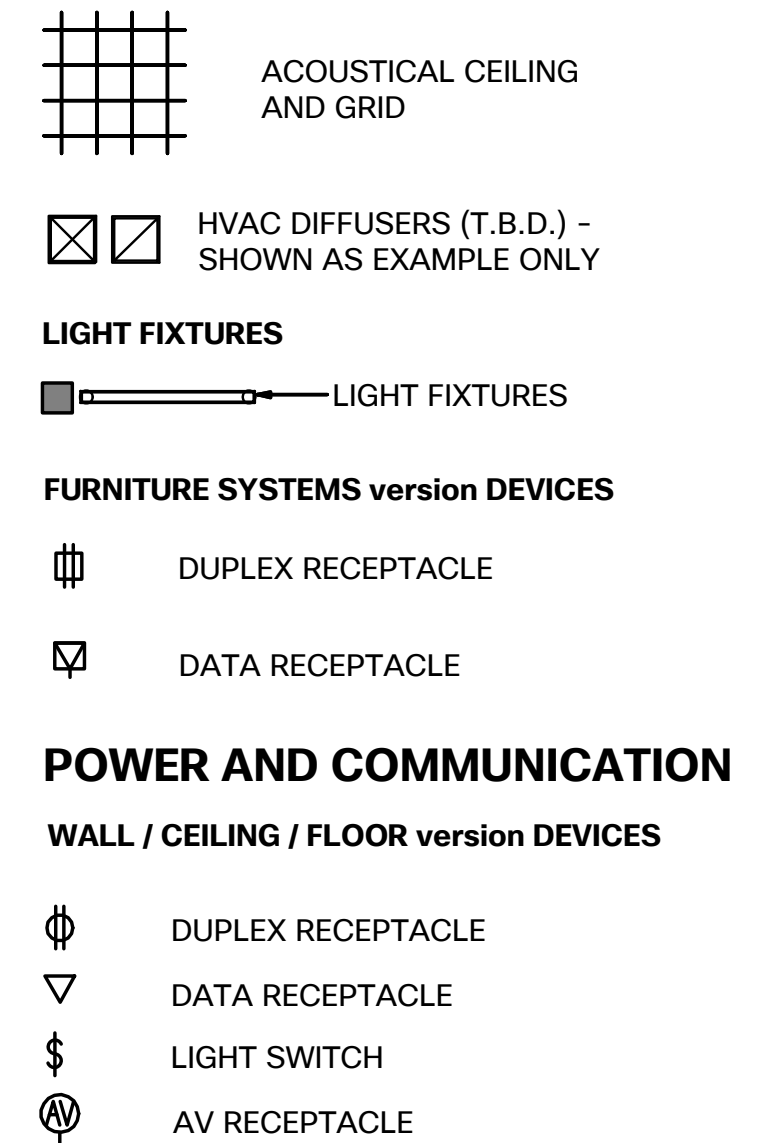
Room Elevations

Conduit Elevation
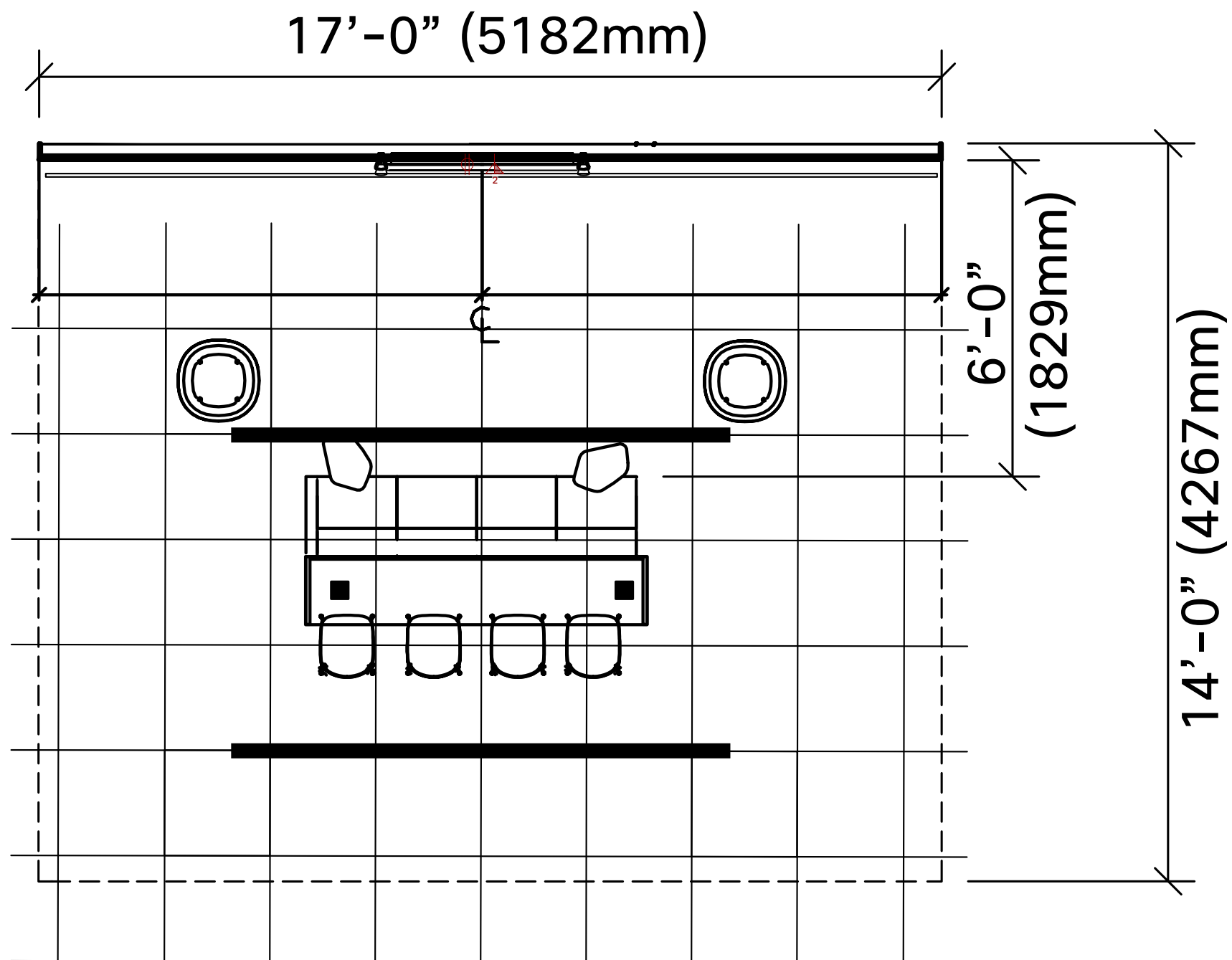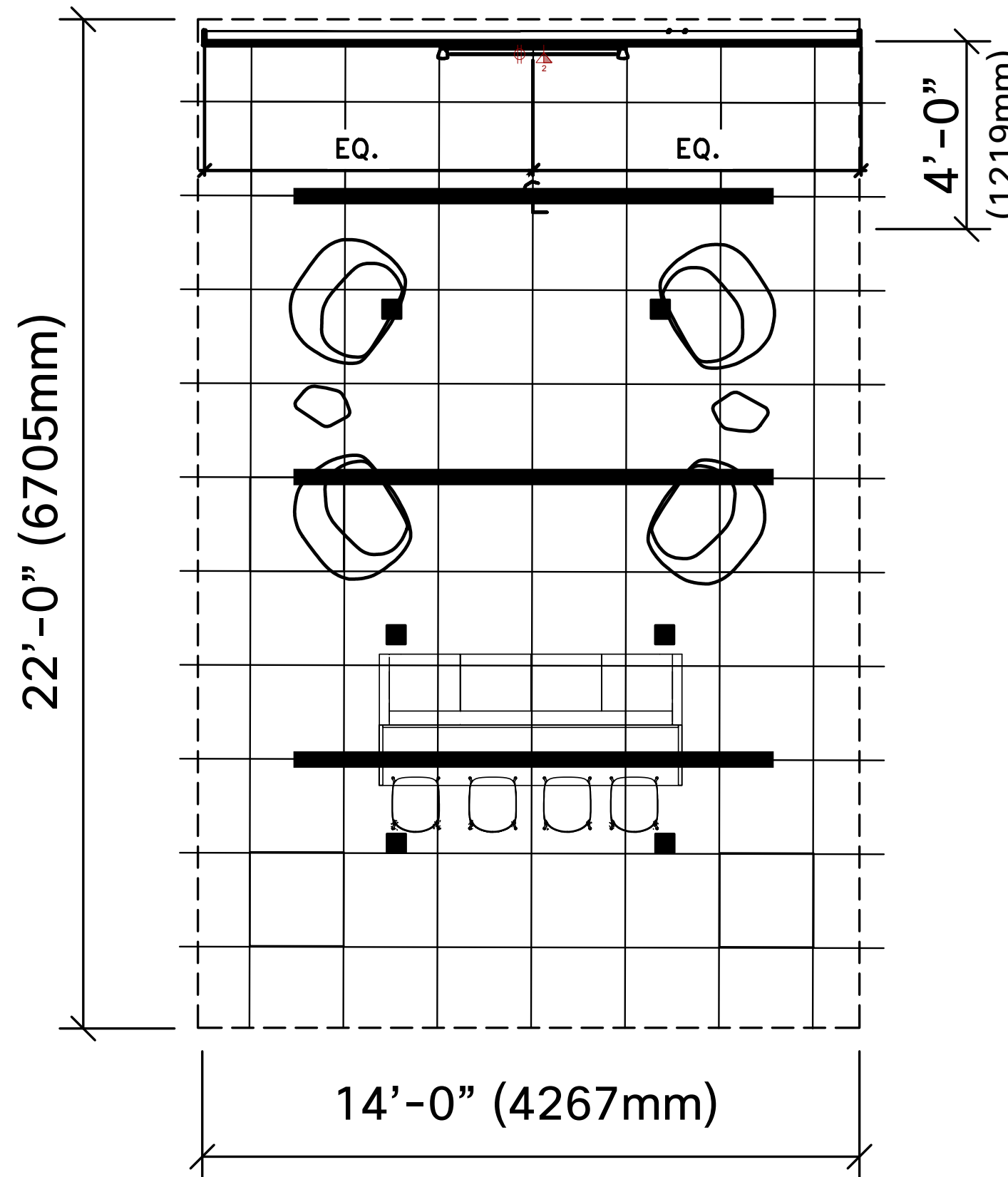

v.i.f.

CEILING

5'-11" (1803mm)

4'-0" (1219mm)

3'-1" (940mm)   4'-0" (1219mm)

1 gang box, 2 ethernet ports

FLOOR
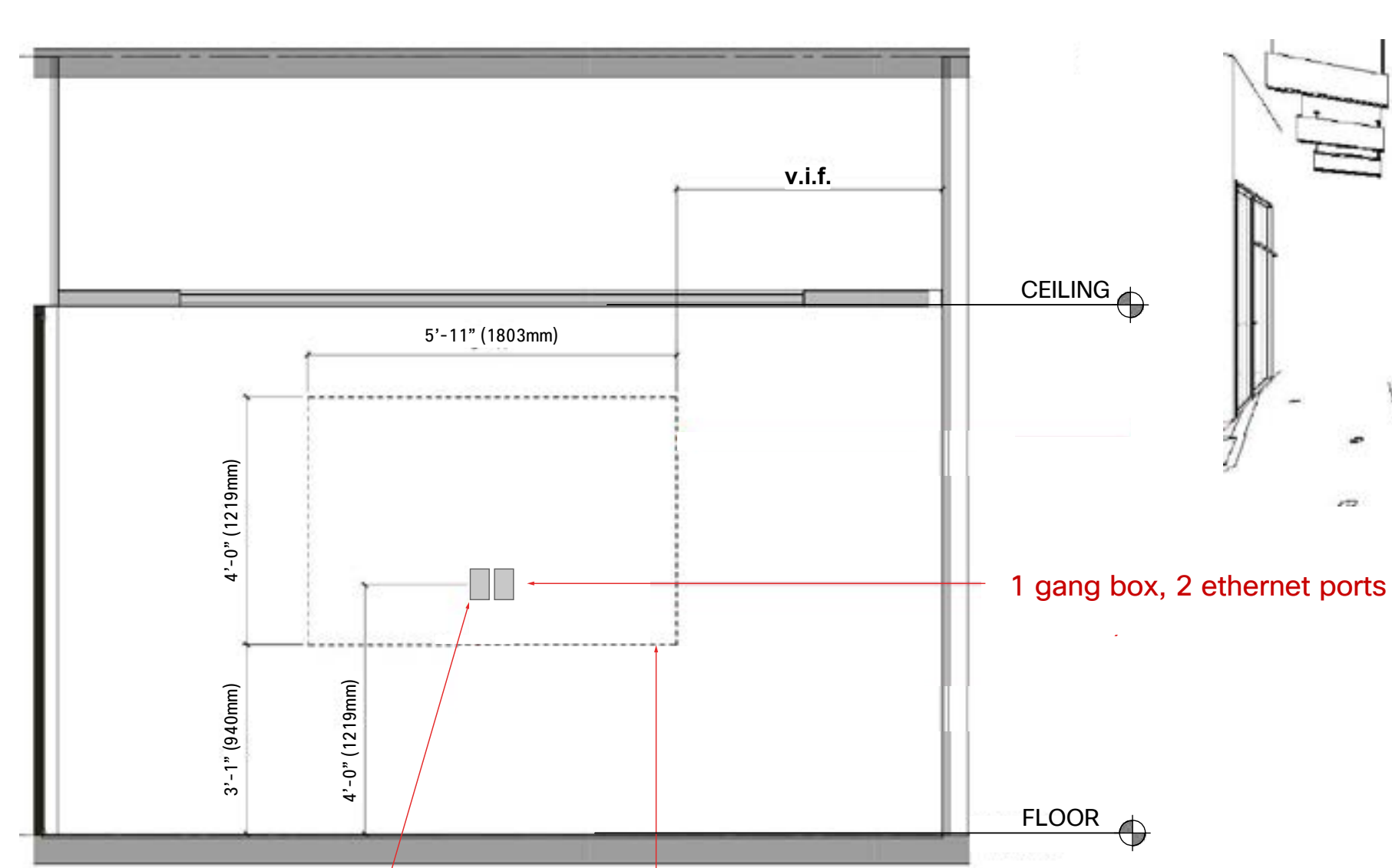
NOTE
Power and Data
to be Recessed

One (1)
duplex outlet

11-Ply (or similar approved),
prior to screen installation.
Steel fixings must be able to
support screen specification.
Wall should be made-good
to match existing wall finish

Perspective View

Front Elevation

AV Centre Line

(1719 mm)
5' - 8"

Cisco Board 75 Pro
Wall Mount

(1903 mm)
6' - 3"

(801 mm)
2' - 8"

NOTE: AV Centre Line
will be determined by
Dimensions on Room
Specific Floor Plans

Side Elevation

(95 mm)
0' - 4"

PAC525 @3'6" AFF
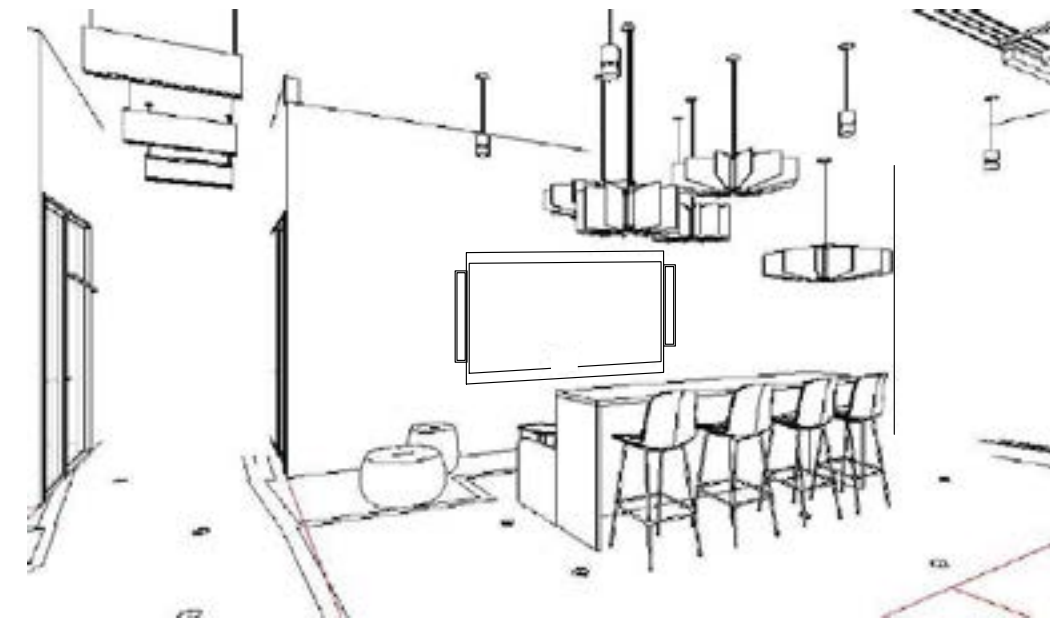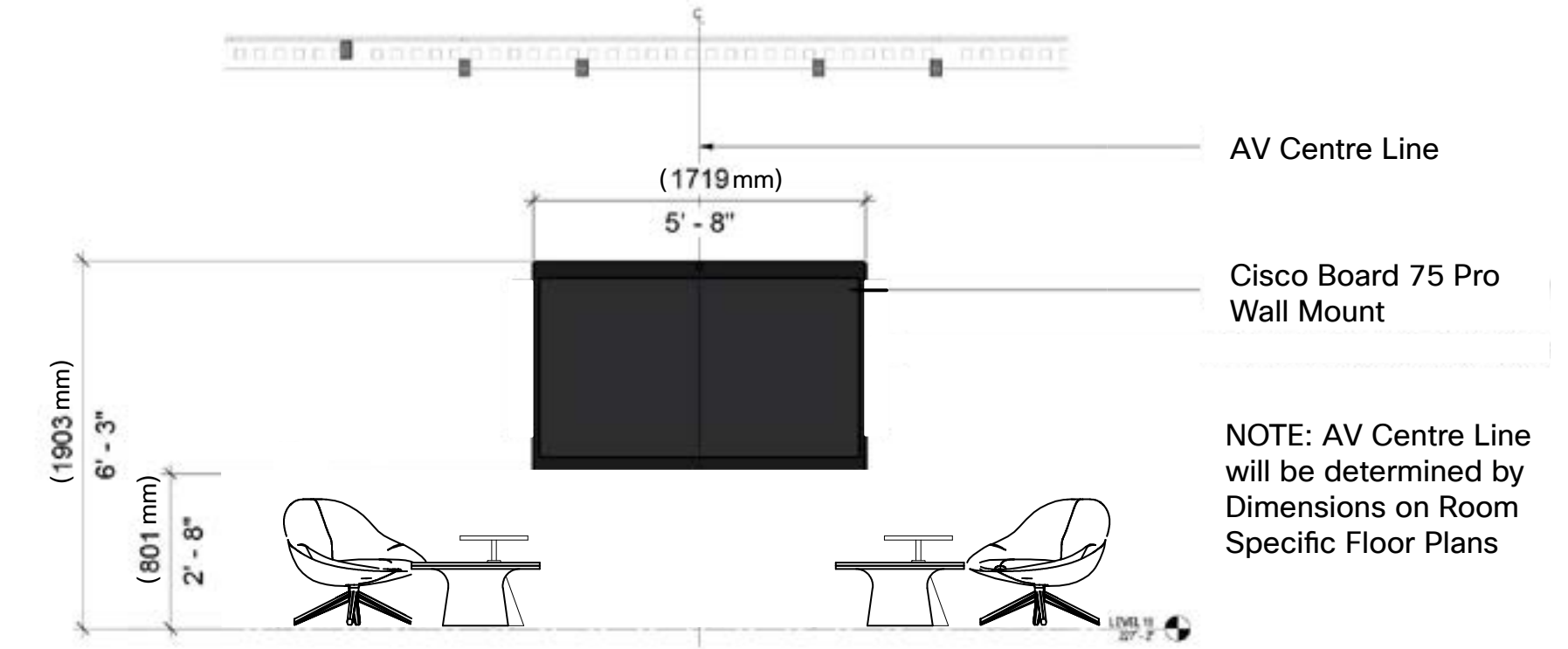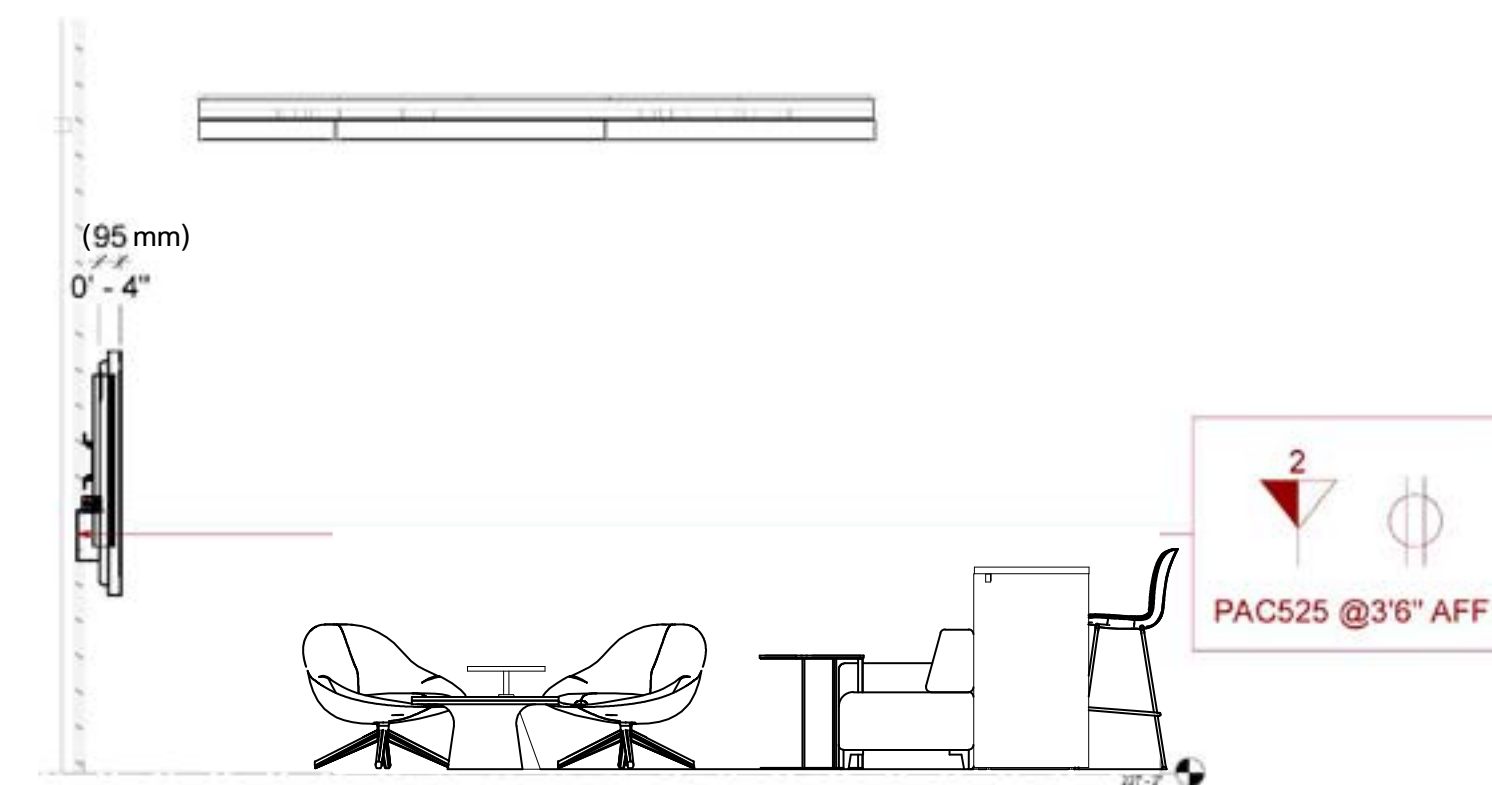
Acoustical Considerations

Option 1: Landscape

17'-0" (5182mm)

6'-0" (1829mm)

14'-0" (4267mm)
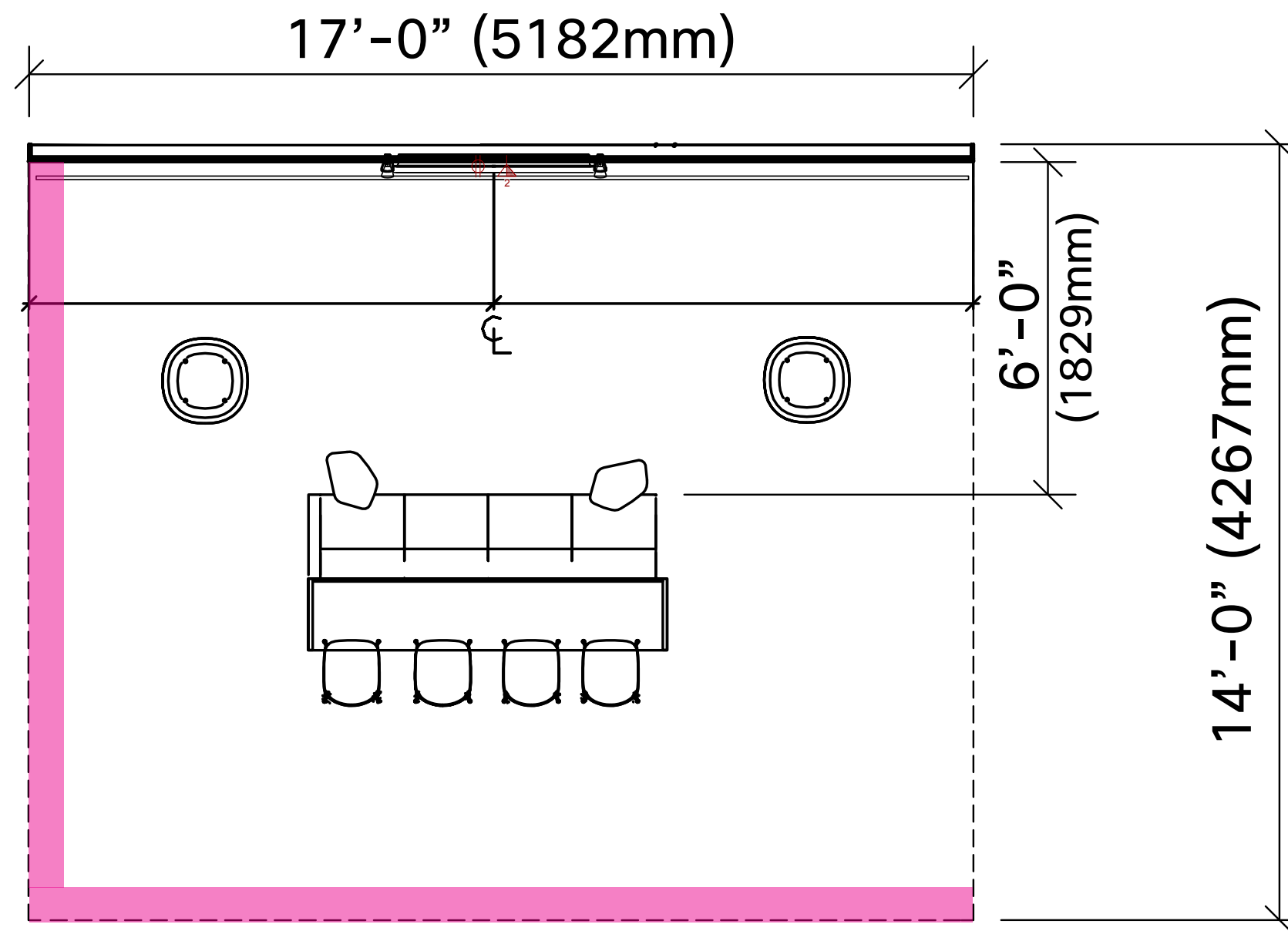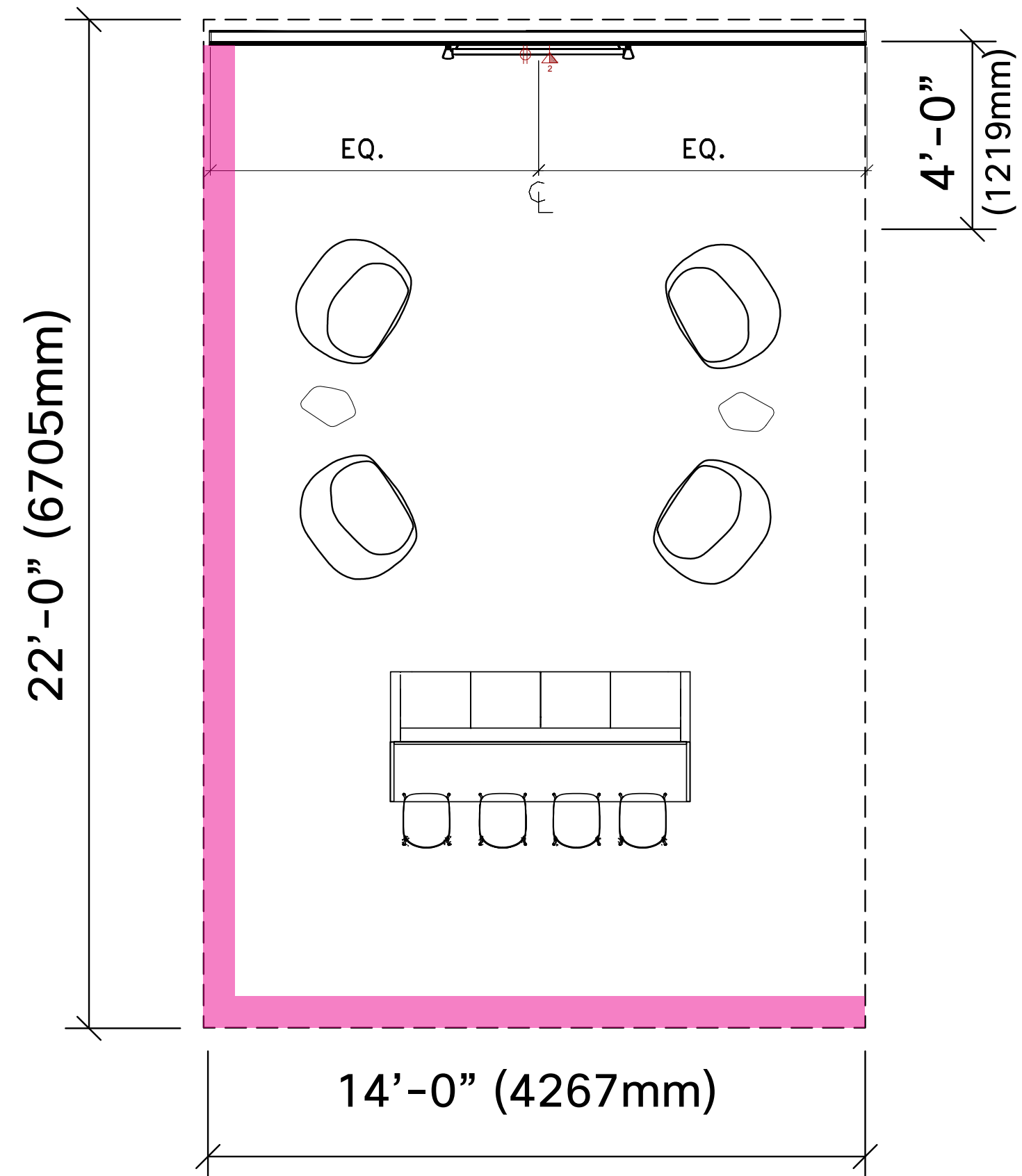
● Acoustic recommendations are made assuming this Innovation Suite is deployed as an enclosed room. If the space is in the open plan please consult an acoustic specialist to determine how best to optimize the space.

Option 2: Portrait

EQ.   EQ.

4'-0" (1219mm)

22'-0" (6705mm)

14'-0" (4267mm)

Innovation Suite

Power & Data

General Specifications

Power/data requirements need to be verified for each project. Provide video device power/data even if project plan does not include it day one. Based on the design of this space core drills and floor boxes will not be required.

Power & Data

If wall mounted, two (2) recessed data ports and one (1) duplex outlet on wall behind video device. If wall mounted both power and data should be recessed. If using a credenza, power and data can be at standard height, per local code.

CISCO

Exploded IT Diagram

Cisco Room Navigator for Table (Optional)

The recommended approach is to connect the table stand Cisco Room Navigator directly to the Cisco Room Bar using a network cable. The two can also be connected over the IT network if an ethernet port is available under the table.

Cisco Room Navigator for Wall (Optional)

It is recommended to run the cable inside the wall or through the door frame directly back to a network switch.

Table Top Charging

USB-C charging and convenience outlets on table top. Ensure the size of the trough and layout can accommodate a variety of laptop power supplies.

Wall Blocking

Required when the device is wall-mounted. The size and composition of blocking materials should be determined based on the overall weight of the solution deployed.

Core Drilling

Not required.

POE LIGHTING DRIVER
(EMBEDDED IN LIGHT)

18/4 WIRE
TO GATEWAY BOX
ABOVE CEILING

18/2 WIRE
EMBEDDED IN LIGHT

22 AWG
CATEGORY CABLE

LED LIGHT

SHIELDED ETHERNET CABLE TO IT

22 AWG CATEGORY CABLE

NETWORK
SWITCHING

(OPTIONAL)
CISCO ROOM NAVIGATOR
(WALL VERSION)

CISCO BOARD PRO 75

(OPTIONAL)
CISCO ROOM NAVIGATOR
(TABLE VERSION)

Innovation Suite

Connectivity View

TO POWER
J-BOX

TO IDF

CEILING

95
0' - 4"

NOTE: AV Centre Lin will be determined by
Dimensions on Room Specific Floor Plans

Cisco Board 75 Pro Wall Mount

2

PAC525 @3'6" AFF

FLOOR

IT/OT Reference Architectures

- Separate IT and OT network layout
- Port based DHCP allocation
- 90W UPoE+

Compute Infrastructure
(e.g., Hyperflex or UCS)

IoT partner application | DNA Center | Cisco Spaces | Catalyst 9800 eWLC

MDF Closet

WAN

IDF Closet

Local Area Network Access switches
Catalyst C9300 – 24H

Innovation Suite

Cisco Collaboration Device | Cisco Room Navigators | PoE Light

OT Network & devices

IT Network & devices

------ Alternate connectivity option
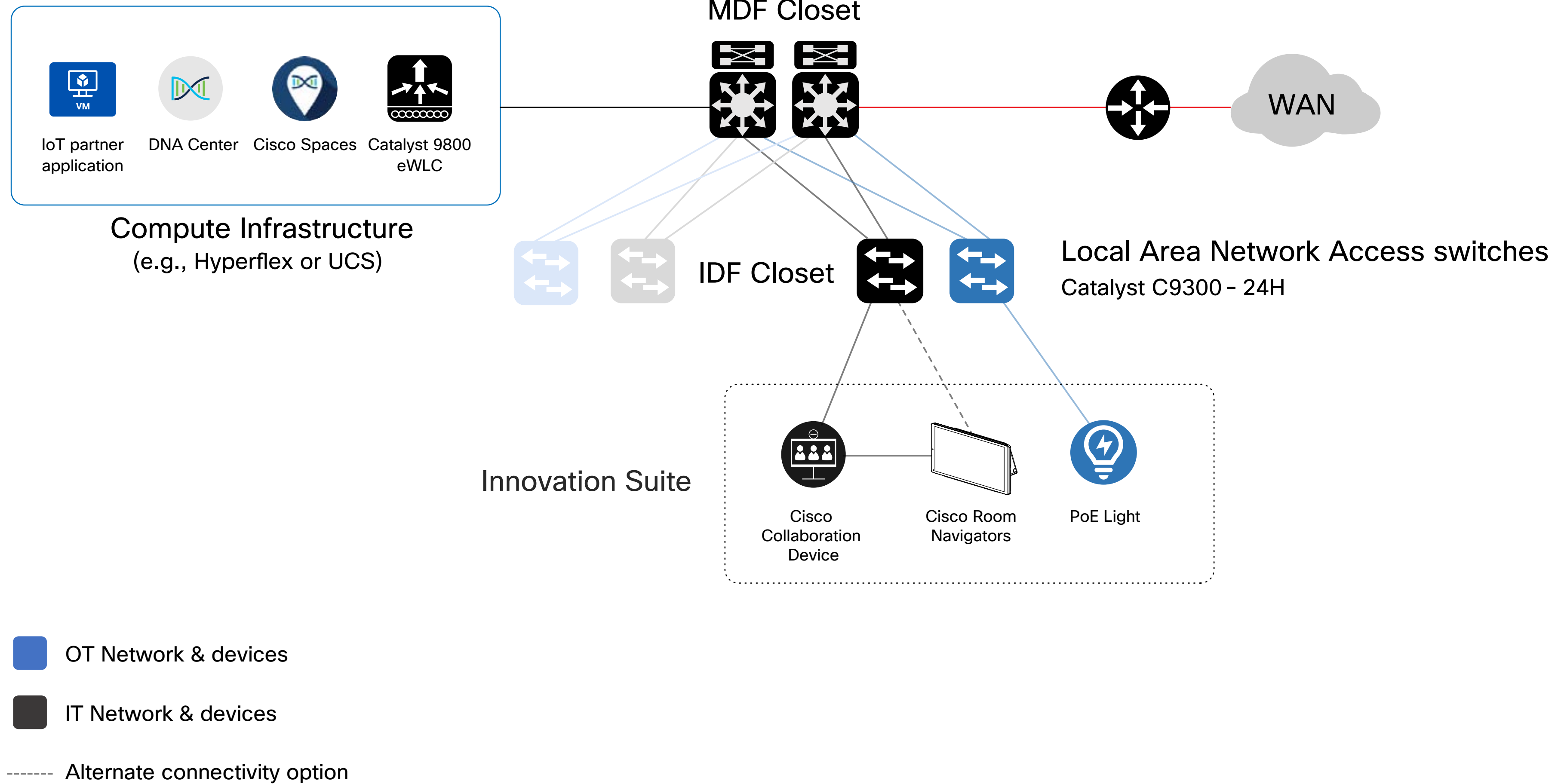
IT/OT Bill of Material

Cisco Products

- **CS-BRD75P-K9** — Cisco Board Pro 75
- **CS-BRD75P-WMK=** — Cisco Board Pro 75 Wall Mount
- **CS-T10-TS-K9=** — Cisco Room Navigator for Table (Optional)
- **CS-T10-WM-K9=** — Cisco Room Navigator for Wall (Optional)

IOT Considerations

- IAQ coming from the Cisco Room Navigator, No additional IoT IAQ
- Occupancy sensing is coming from the Cisco Endpoints and IoT sensor
- Suggested lighting specifications: 220LPW raw, 140LPW delivered
- Each Medium Collaboration room POE lights being power by 4 ports on the ceiling
- Traditional DC Wall Switch
- Ensure device is not connected to ASHRAE 90.1 outlet

External microphones and speakers

- Mic and speakers are embedded in the Cisco Endpoints, no additional mic or speakers required

Commissioning–User Acceptance Testing (UAT) Criteria (Sample)

OT/Space Testing

☐ Verify manual adjustment of lights, shades and environmentals are operational from wall controls

☐ Confirm lighting occupancy sensor is functional

☐ Check any tabletop power and data functionality

☐ Verify any smart buildings integrations are working properly

IT Testing

☐ Internet connectivity of Cisco Collaboration device

☐ Initiate test calls on video endpoint (via Board Pro 75, Webex app and voice controls)

☐ Validate environmental metrics are being displayed on collaboration device and Room Navigator

☐ Confirm help videos are loaded

☐ Confirm that Room Navigator – Wall is powered and that booking function is working properly. Check that booking function is also available within the room on the Room Navigator–Table version

☐ Verify the Cisco Smart Workspaces display is showing proper presence status

Design Files

Design files (Revit, AutoCAD, Sketch up, Rhino3D, etc.) for Cisco's collaboration devices, network switches, wireless access points and Meraki security cameras can be found at www.bimobjects.com, search "Cisco."
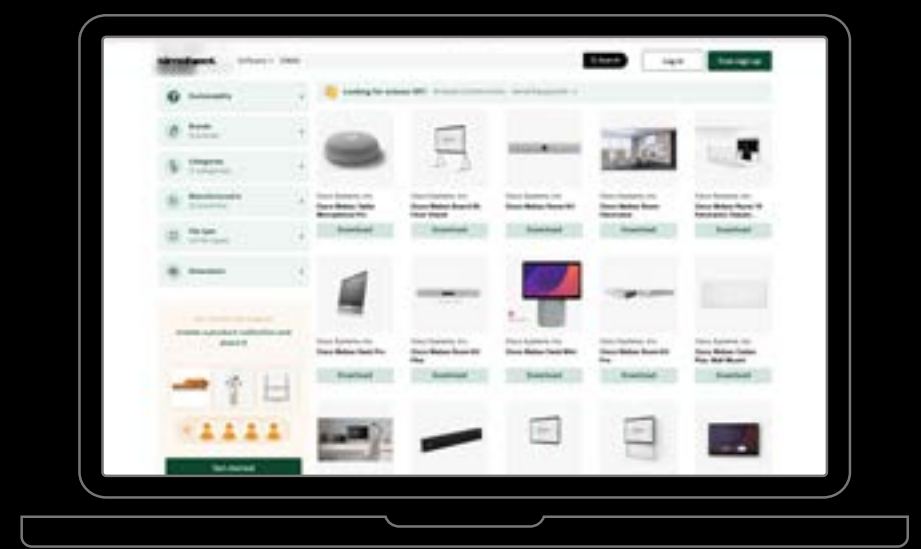
Resources

Guide: Best Practices for Creating Effective Video-enabled Rooms

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The intent of this document is to highlight the details, components and partners used in the creation of a Large Collaboration Room. Any reference herein to any specific commercial products or service does not necessarily constitute or imply its endorsement or recommendation.

Version 7 (August 29, 2024)