



Smart Building Technology
and Hybrid Work Solutions

Cisco Talent and Collaboration Centers

Medium Brainstorming Room Design Guide



Introduction

Overview and Intent

This document provides guidance on how to effectively design a Medium Brainstorming Room.

This design brings space layout, technology, and furnishings together to create an optimal experience for those present locally and for remote attendees.

Each customer project is unique. Thus, involving local facilities teams, workplace design resources, architects and space designers, IT, and a Cisco-certified integrator is important. The collective goal is to finalize the details of any design, verify the applicability and address any local concerns – electrical/mechanical, orientation and location of the room within the floor plan, accessibility, circulation, and external factors such as noise, light, and temperature.

Room Description

This brainstorming space is built for when larger groups need to ideate. The table orientation and shape ensure everyone can be seen and heard, and the density of the space is gracious, allowing ample space to move within the room. The Cisco Board Pro 75 is multi-functional, enabling video calls, content sharing, and whiteboarding.

Supported Collaboration Activities

Information Sharing	✓
Brainstorming	✓
Team Building	✓
Decision Making	✓

Table of Contents

- ▶ Introduction 2
- ▶ Visualization of key Cisco elements 3
- ▶ Video Device Mounting Options 4
- ▶ Composite Plan 5
- ▶ Room Layout 6
- ▶ Reflective Ceiling Plan & Acoustical Treatment 7
- ▶ Room Elevations 8
- ▶ Power & Data 9
- ▶ Exploded IT Diagram 10
- ▶ Connectivity View 11
- ▶ IT/OT Reference Architectures 12
- ▶ IT/OT Bill of Material 13
- ▶ Commissioning-User Acceptance Testing Criteria 14
- ▶ Design Files & Resources 15

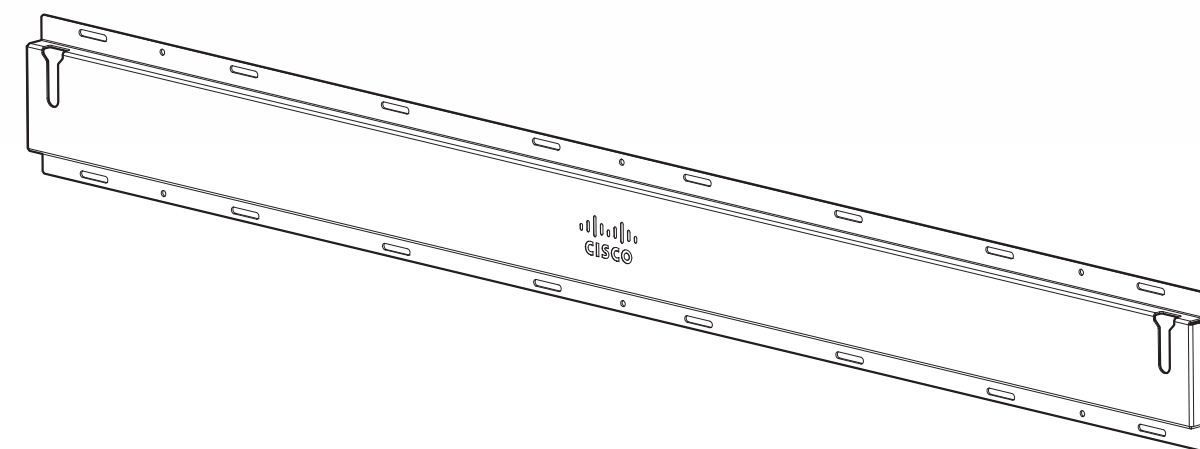
Visualization of key Cisco elements



Cisco Board Pro 75



Cisco Room Navigator for Wall
(When Deployed in an Enclosed Room)



Cisco Board Pro 75 Wall Mount



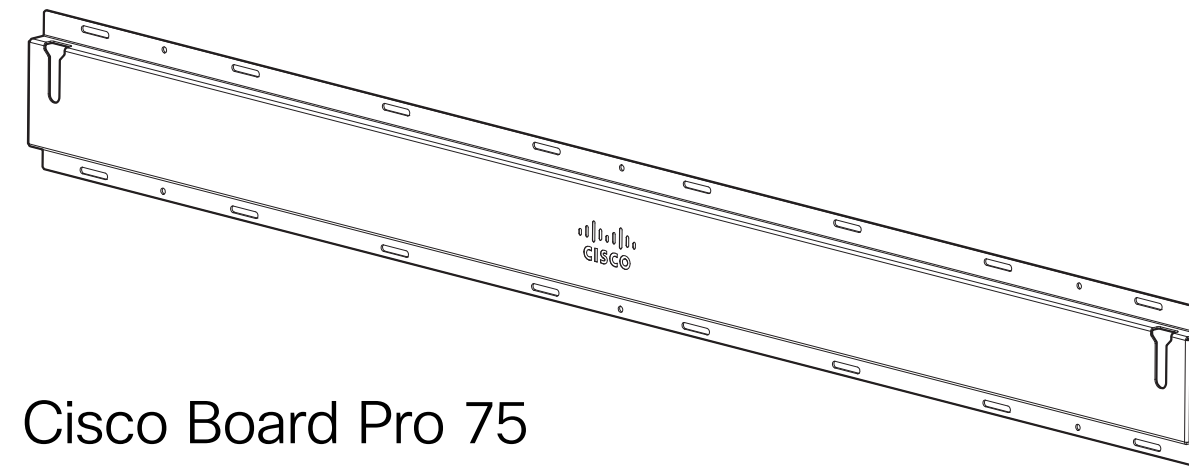
Cisco Room Navigator for Table
(Optional)

Video Device Mounting Options

There are two mounting options for the video device in the Medium Brainstorming Room, 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.



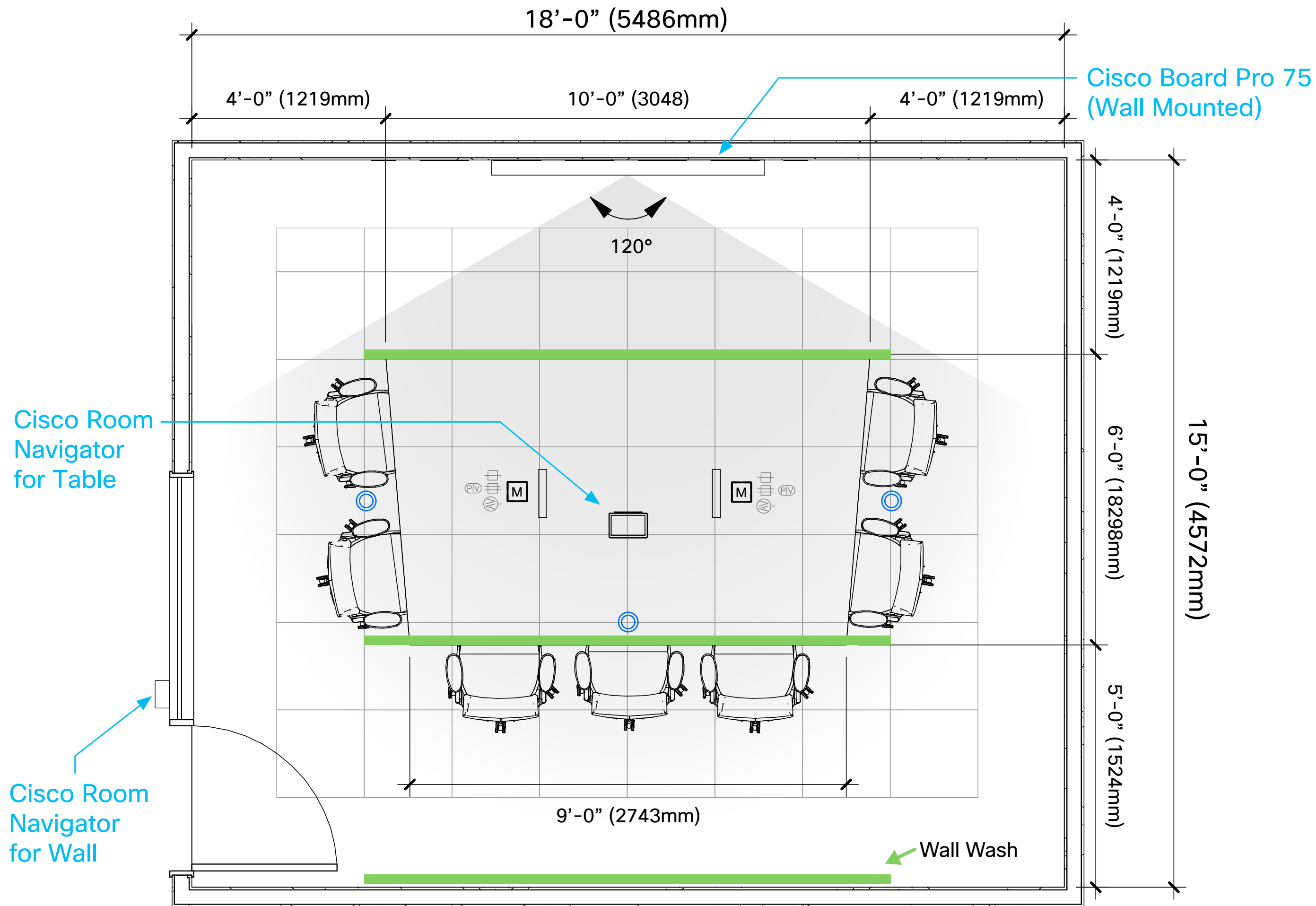
Cisco Board Pro 75
Wall Mount

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

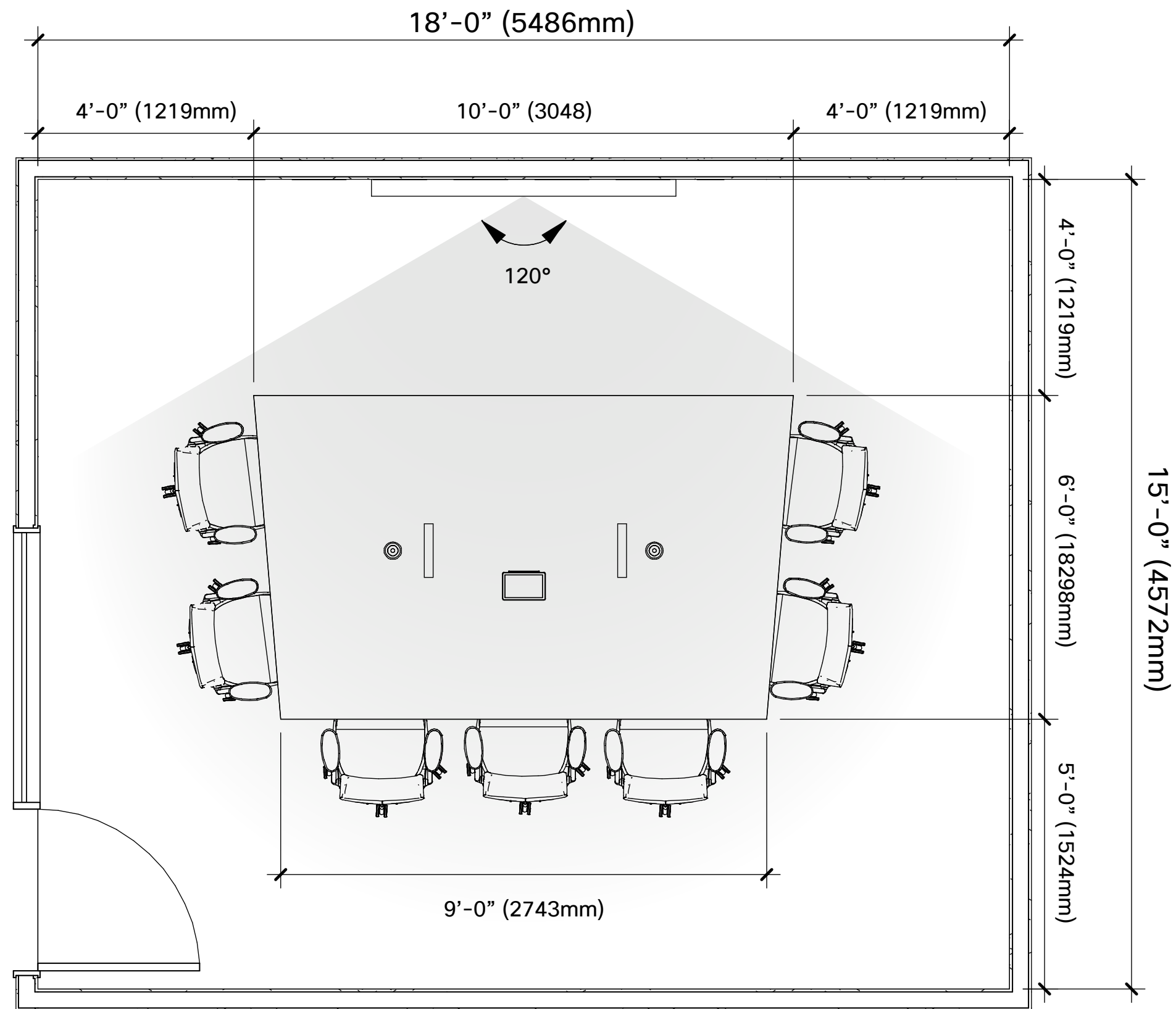


Graphics Symbols

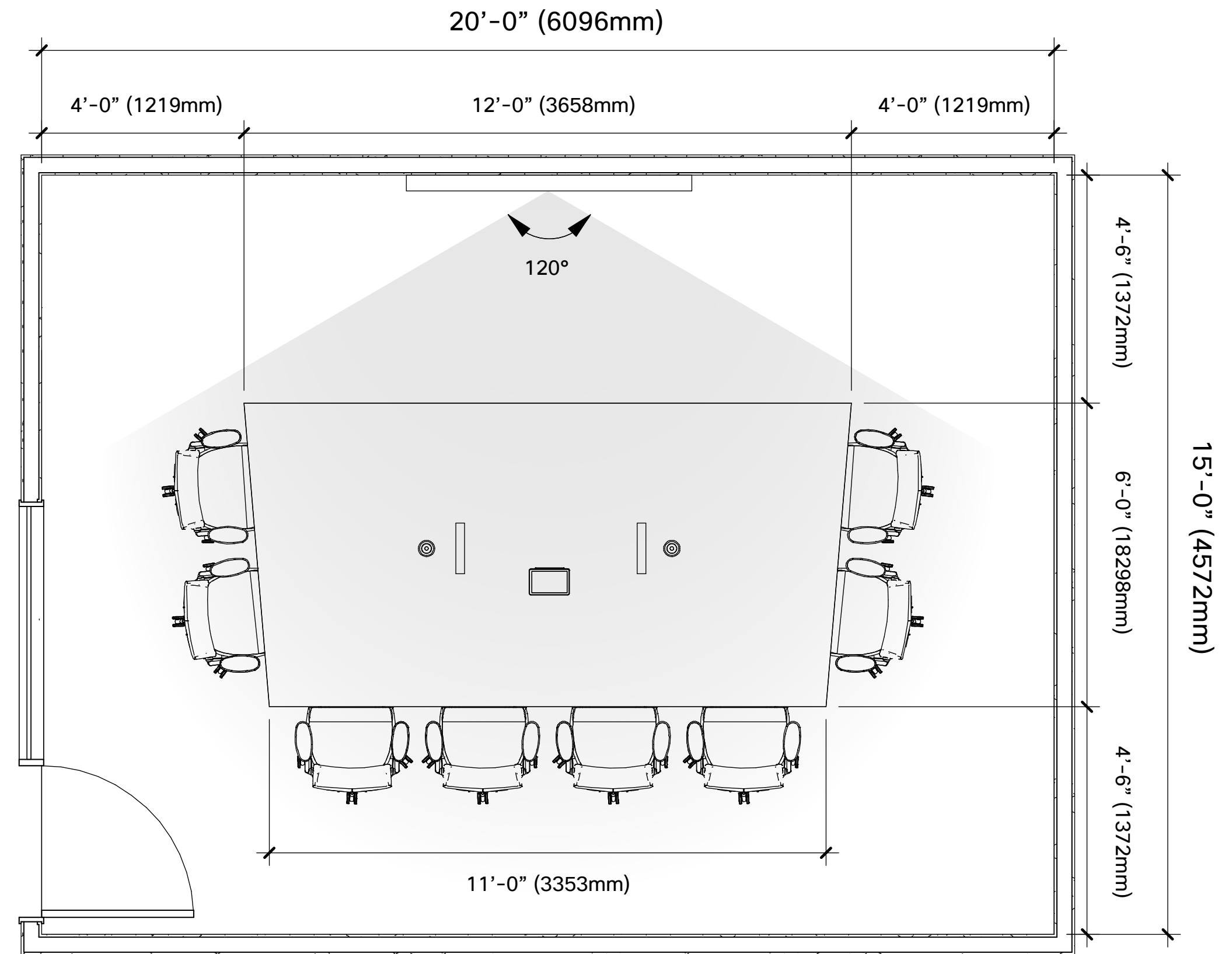
- Acoustical Ceiling & Grid
 - HVAC Diffusers (T.B.D.)
Shown as Example Only
 - Light Fixtures
 - Acoustical Wall
- Furniture Systems Version Devices**
- Duplex Receptacle & Grid
 - Data Receptacle
- Power and Communication**
- WALL / CEILING / FLOOR VERSION DEVICES
- Third Party Speakers (Optional)
 - Duplex Receptacle
 - Data Receptacle
 - Light Switch
 - AV Receptacle
 - Table Version Microphone
 - Combination Power & Voice / Data Infeed

Room Layout

7-Person Option



8-Person Option

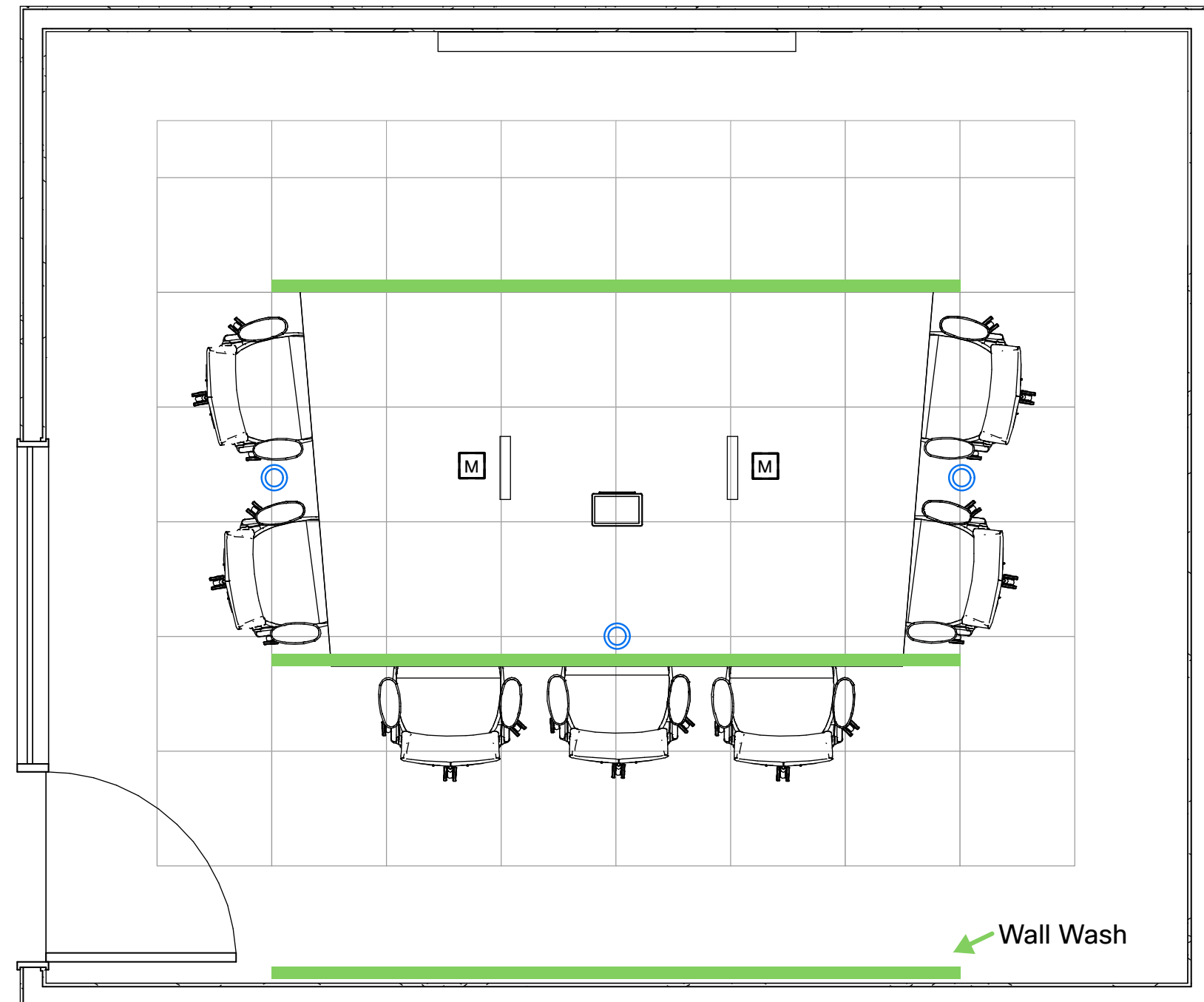


Note: Room dimensions shown are minimal size, based on the two occupancy options. Table size and circulation area can be increased if space permits, the setback from the

video device to the front edge of table is based on field of view (FoV) of the Cisco Board Pro, and can be increased for additional circulation, if necessary.

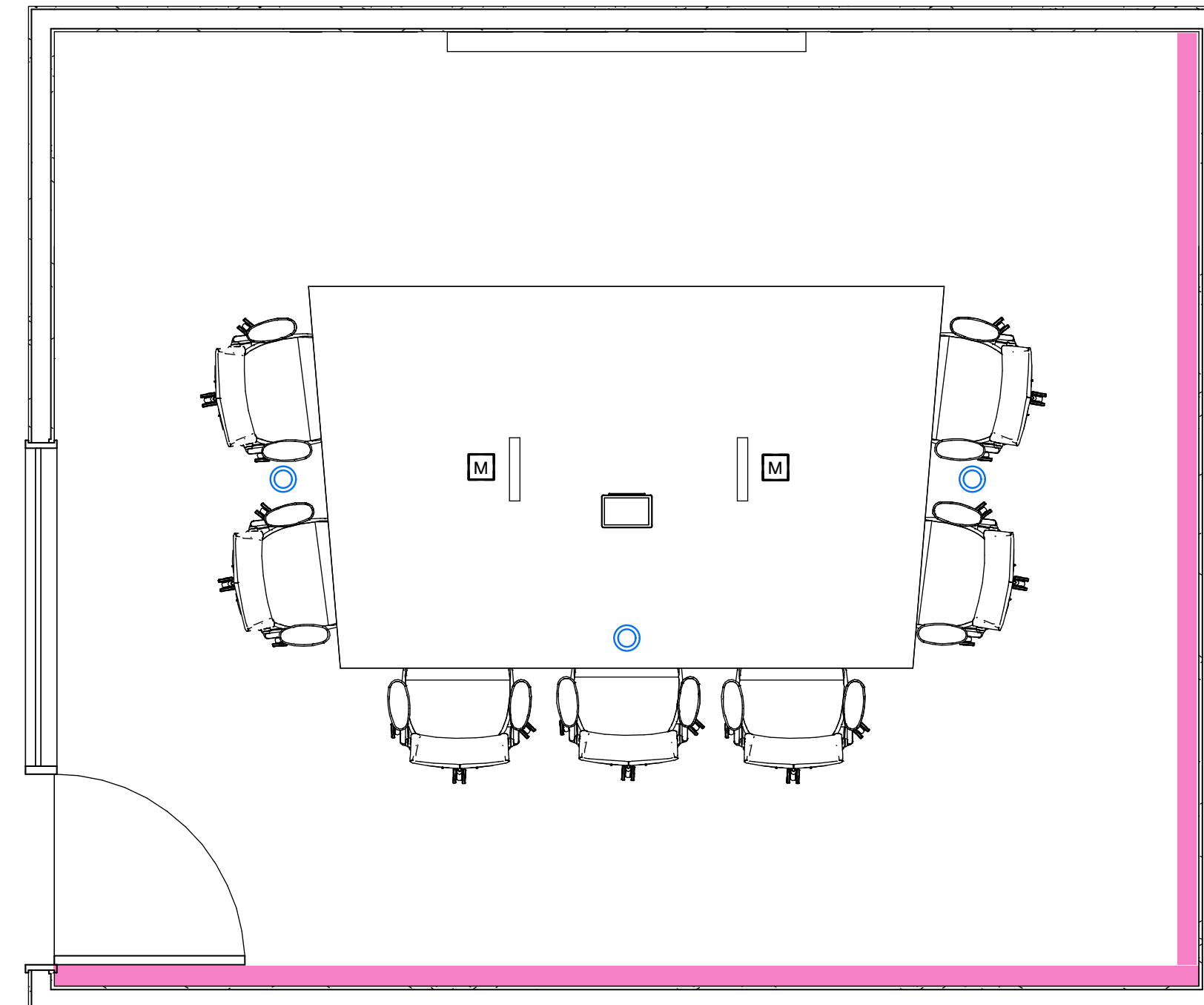
Reflective Ceiling Plan & Acoustical Treatment

Reflective Ceiling Plan



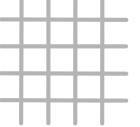












● A glare-free luminary with a beam angle of 90° or wider is recommended. In addition, fixtures selected should have a color temperature of ~4000K and color rendering index (CRI) of 85 or better.

Acoustical Treatment



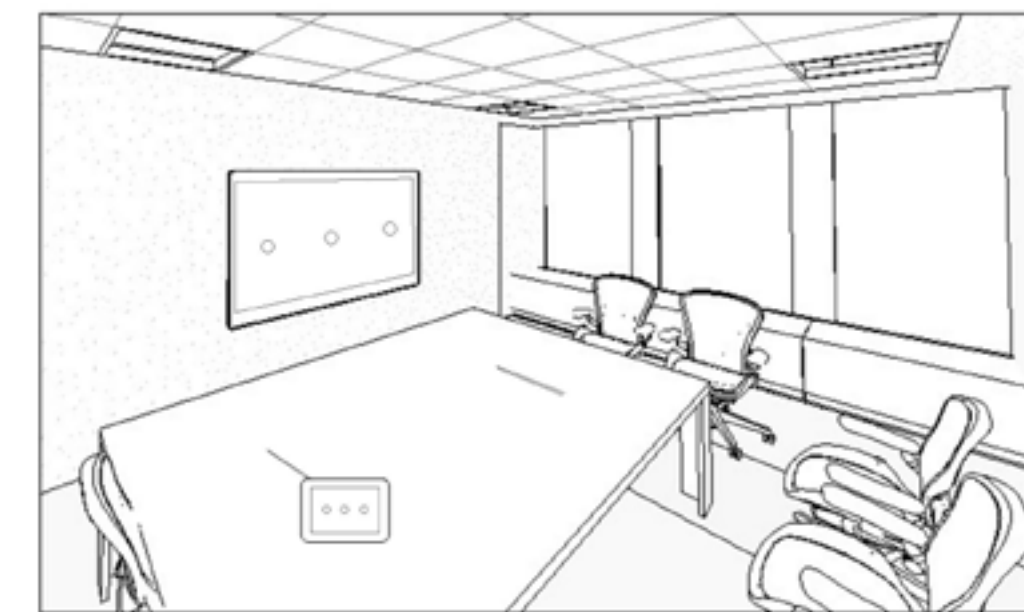
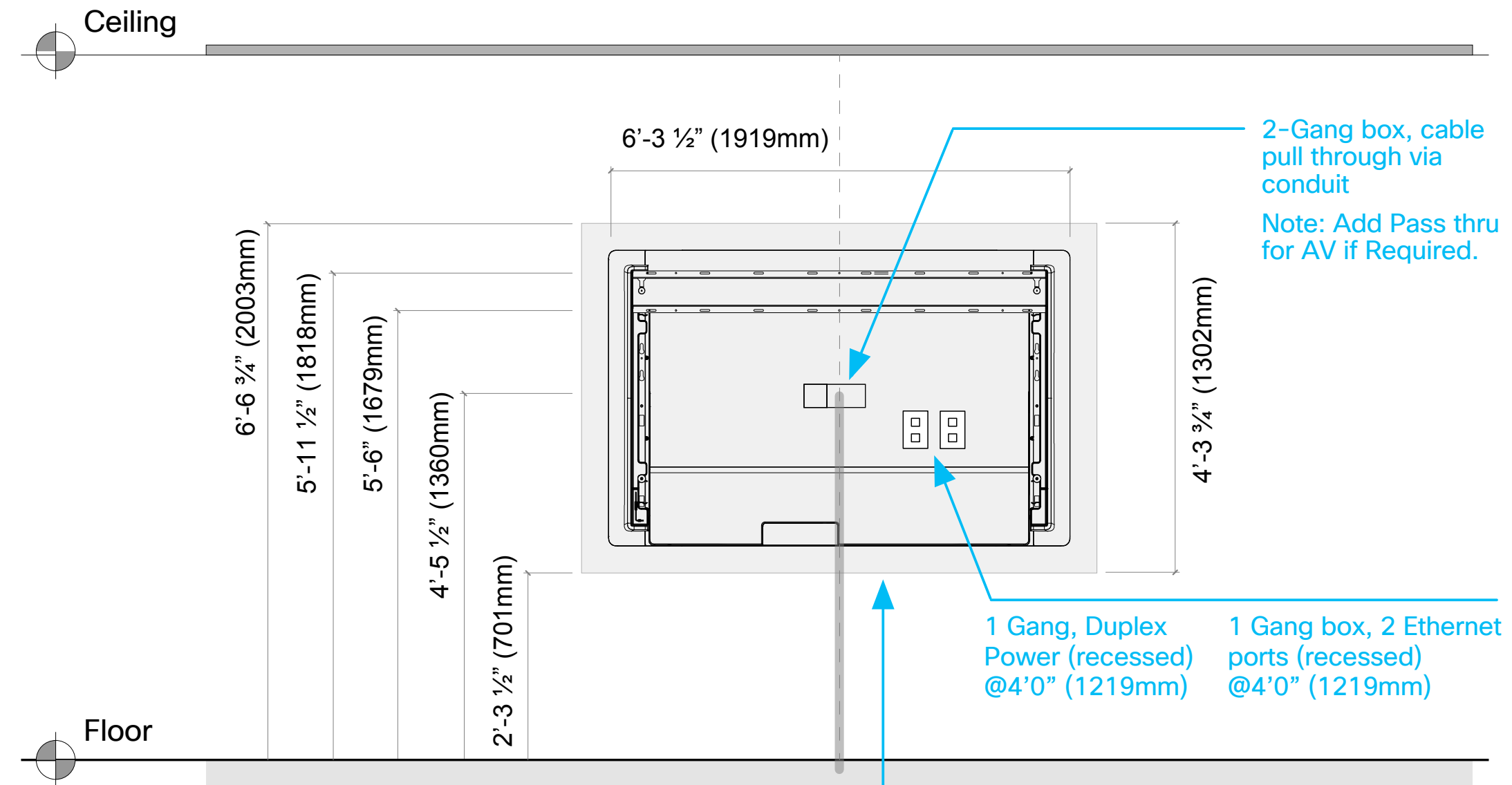
● Two walls of acoustical wall treatment is optimal, preferred location is wall opposite device and then adjoining, away from entry location.

Graphics Symbols

-  Acoustical Ceiling & Grid
-  HVAC Diffusers (T.B.D.)
Shown as Example Only
-  Light Fixtures
-  Acoustical Wall
- Furniture Systems Version Devices**
-  Duplex Receptacle & Grid
-  Data Receptacle
- Power and Communication**
- WALL / CEILING / FLOOR VERSION DEVICES**
-  Third Party Speakers (Optional)
-  Duplex Receptacle
-  Data Receptacle
-  Light Switch
-  AV Receptacle
-  Table Version Microphone
-  Combination Power & Voice / Data Infeed

Room Elevations

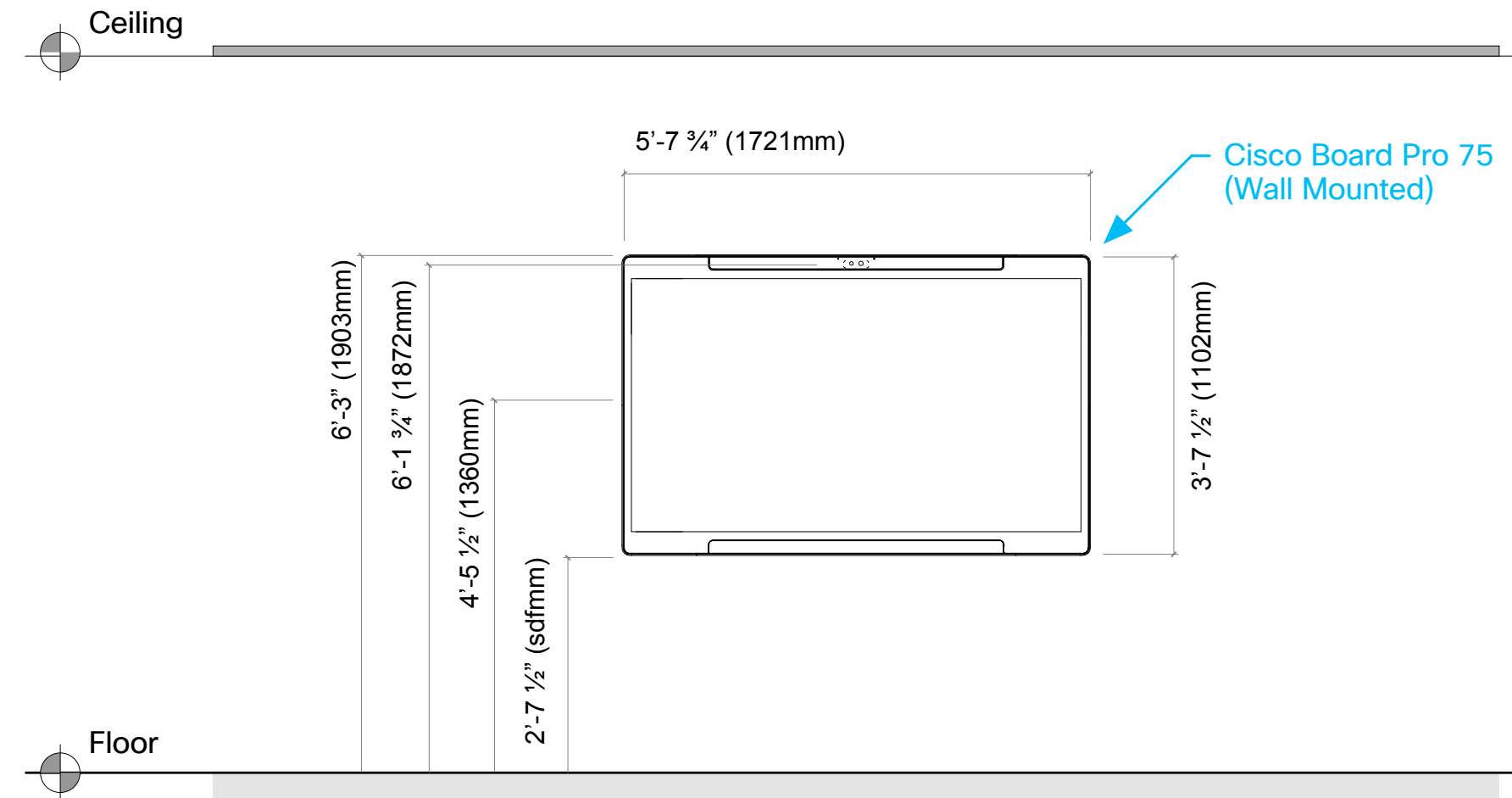
Construction Elevation



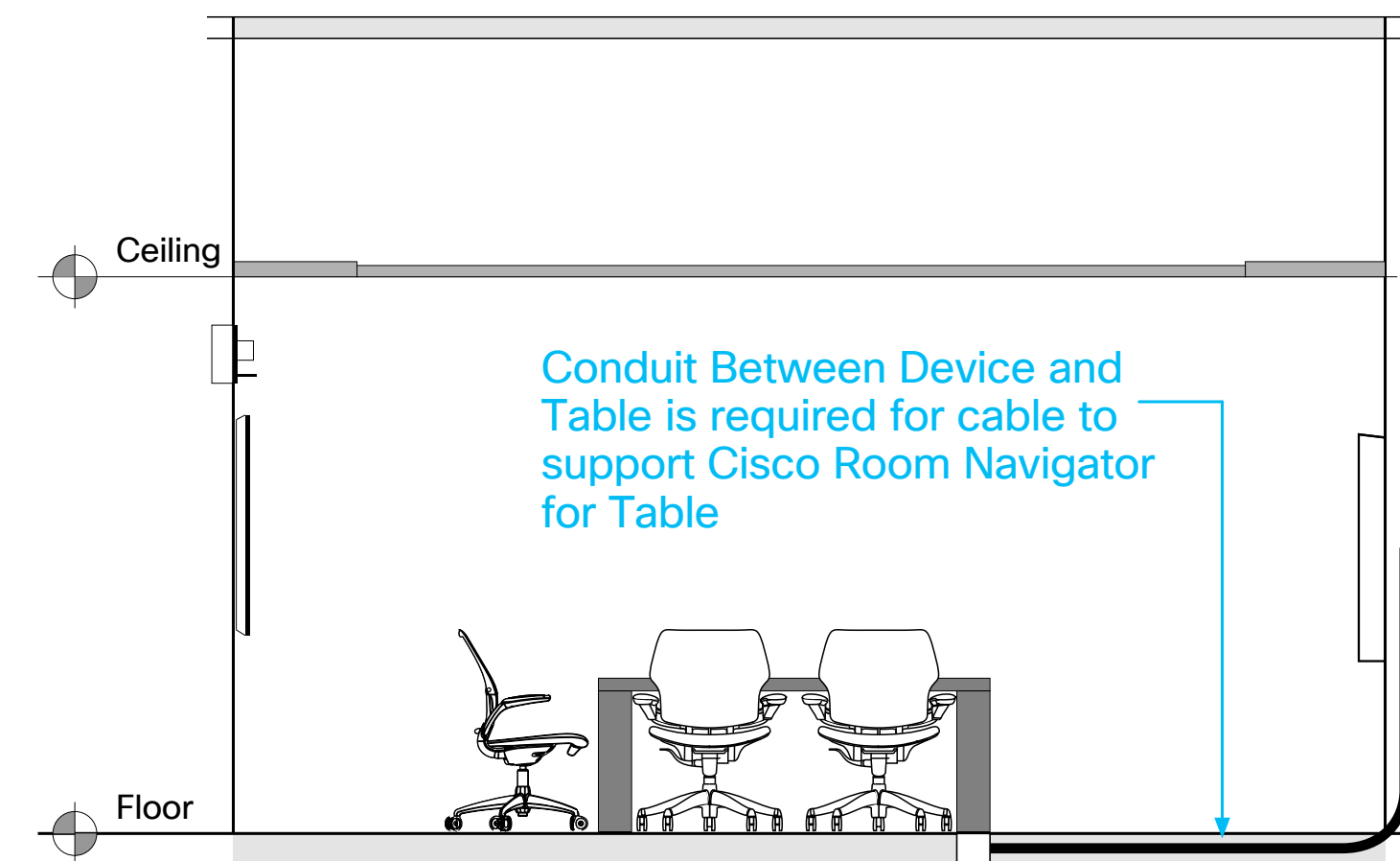
Perspective View

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

Finished Elevation



Side Elevation





Power & Data

General Specifications

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

Power & Data

If wall-mounted, provide two (2) recessed data jacks and dual plugs on the wall behind the video device. If using a credenza, power and data can be at standard height per local code. Connectivity for the Cisco Navigator-table version requires either a data jack installed under the table or a conduit between the device and table.

Power in Tabletop

User power should be surface mounted in the tabletop. If pop-ups or table wells are used, it is important to verify that they can accommodate all laptop power supplies. Provide shared power – 1 power port for every two seats.

Exploded IT Diagram



Cisco Room Navigator for Table (required)

The recommended approach is to connect the table stand Cisco Room Navigator directly to the Cisco Board Pro 75 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

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

Third-party Speakers

Although not typically required for this space, they can be used if local conditions warrant. (Requires conduit behind device to ceiling.)

Table Top Charging

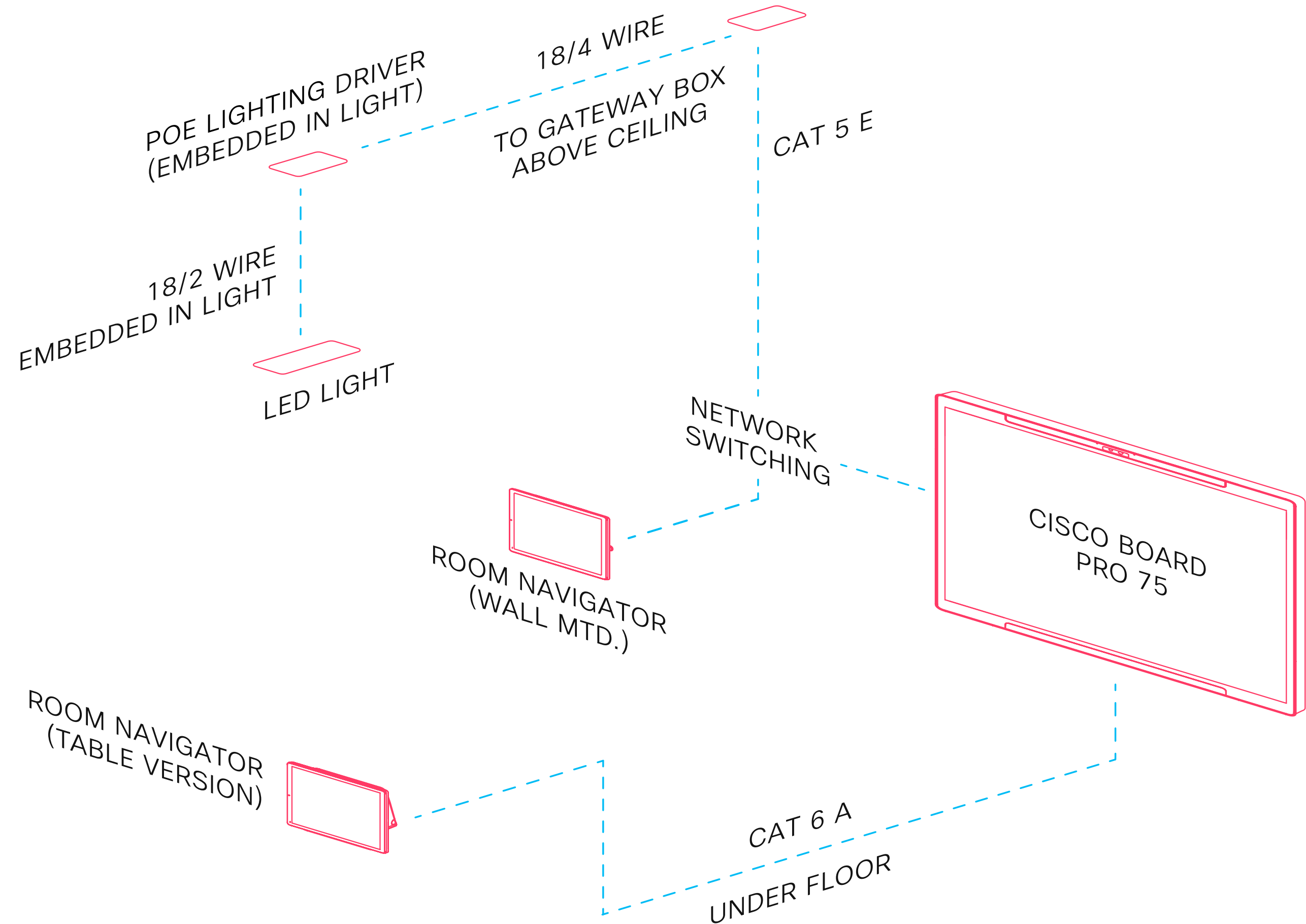
USB-C charging and convenience outlets on table top. Ensure the size of the trough and layout can accommodate a variety of laptop power supplies.

Wall Blocking

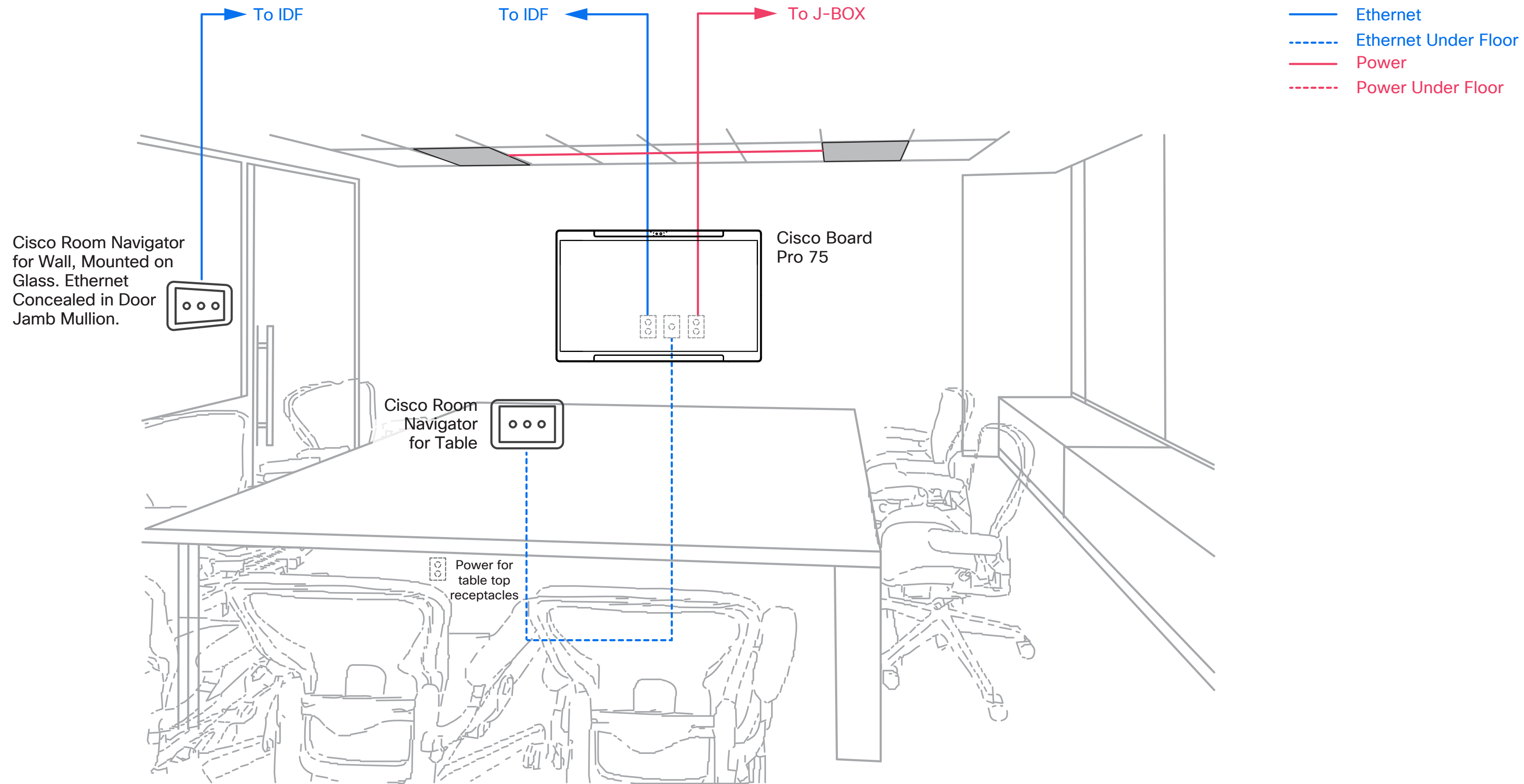
Required when the device is wall-mounted. The recommended size and composition of blocking materials are outlined in this design guide, but should be confirmed with the A/V integrator.

Core Drilling

Core Drill-Preferred method for providing connectivity between the table and the Cisco Board Pro 75 for the Cisco Room Navigator for Table, Cisco Table Microphones and/or A/V cables. If core drilling is not an option, a floor cable cover or wire concealer can be used.

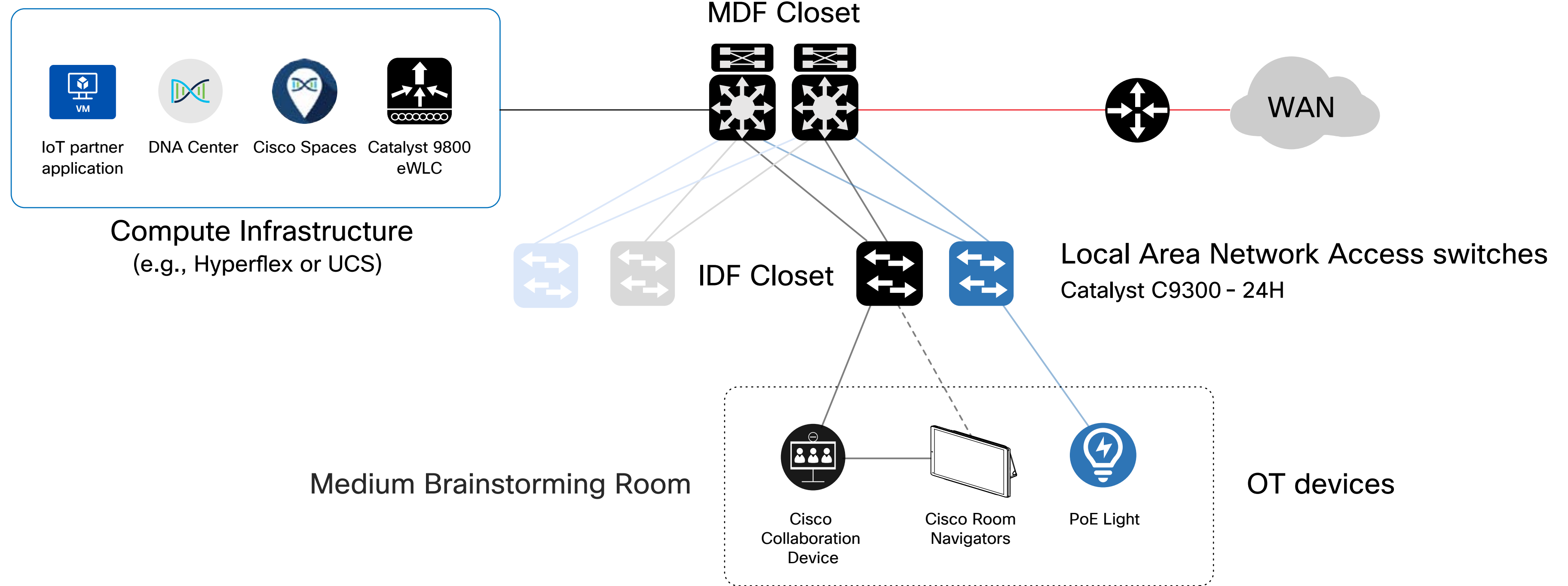


Connectivity View



IT/OT Reference Architectures

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



- 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 (Optional)
- **CS-T10-TS-K9=** Cisco Room Navigator for Table
- **CS-T10-WM-K9=** Cisco Room Navigator for Wall

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

OT/Space Testing

- Verify manual adjustment of lights, shades and environmental controls 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

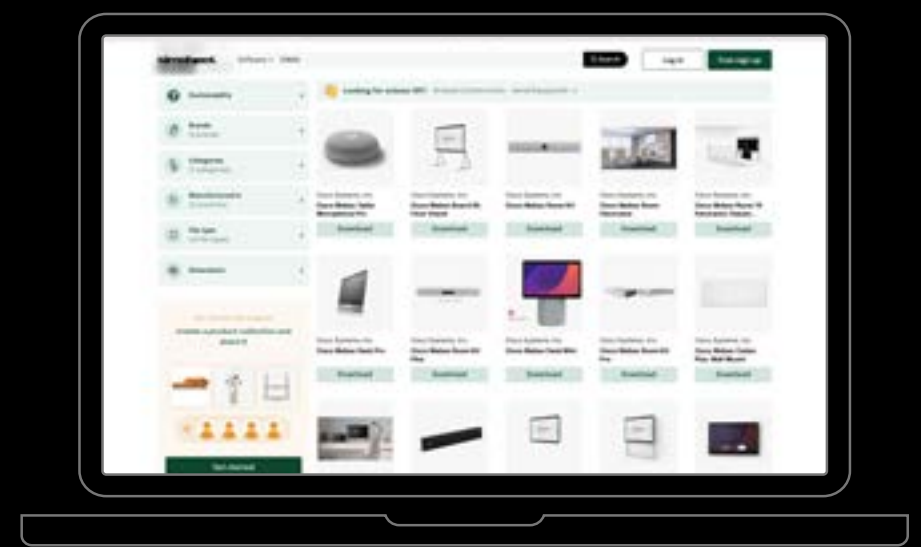
IT Testing

- 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

Cross View Room Preparations Guidelines

© 2024 Cisco and/or its affiliates. All rights reserved. Cisco, the Cisco logo, Webex by Cisco, and Webex are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, see the Trademarks page on the Cisco website. Third-party trademarks mentioned are the property of their respective owners. The use of the word “partner” does not imply a partnership relationship between Cisco and any other company. (2106R)

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 18 (September 11, 2024)

