TECHNOLOGY INFRASTRUCTURE DESIGN CHECKLIST

The following is a partial checklist for technology infrastructure coordination.

✓ Space
✓ Sightlines
✓ Ceilings
✓ Floors
✓ Walls
✓ Lighting
✓ Electrical
✓ Mechanical
✓ Furniture

Space

☐ Verify functional adjacencies that may be required (audiovisual control rooms near presentation spaces)

☐ Verify adjacent spaces are acoustically compatible

☐ Equipment and telecom rooms: verify size requirements and cable distances from furthest data outlets (295 feet)

☐ Equipment racks: verify there is adequate space in front and behind equipment racks for operation and service

☐ Verify control rooms and equipment layouts

Sightlines

☐ Verify unobstructed sightlines to displays and projection screens

☐ Verify unobstructed light paths for video projectors

Ceilings

☐ Verify pendant lights and other hanging objects do not obstruct projector's light path
Review the locations of ceiling-mounted items (e.g., projectors, loudspeakers, cameras, microphones, etc.) for conflicts with other ceiling items such as light fixtures, ceiling clouds, diffusers/returns, sprinkler heads, fire alarm strobes, occupancy sensors, etc.

Review mechanical system for potential conflicts between ductwork and ceiling-recessed projection screens, projector mounts, ceiling loudspeakers, or loudspeaker cluster rigging points.

Verify acoustical requirements of ceiling.

Verify there is adequate space for structural attachments of projectors; avoid ductwork and plumbing where projectors live.

Manage aesthetics.

Floors

Floorboxes: verify locations relative to lecterns and presenter requirements.

Verify location of conduit stub-ups is coordinated with furniture.

Review structural drawings for beam locations for potential conflicts with floorboxes.

Avoid trip hazards such as strewn cables.

Address concerns:
  - Post tension slabs
  - On-grade installation.

Manage aesthetics.

Walls

Verify requirements and locations of junction boxes, receptacle plates, network outlets, AC power duplex, and cable TV.

Coordinate location and heights of audiovisual control panels with other switch plates.

Displays: provide necessary structural backing.

Sound isolation: avoid back-to-back junctions is adjacent spaces.

Room acoustics: provide sound-absorbing treatments where controlled acoustics are required (teleconference room).

Manage aesthetics.
Lighting

- Minimizing light spilling on projection screen
- Verify projector lumens required based on ambient lighting conditions and required contrast ratio of projection screens
- Verify that the lighting design provides proper zoning of lights appropriate for audiovisual presentation
- Verify if shade control is needed
- Verify conduit infrastructure allows interfacing shade control and lighting systems with audiovisual system
- Verify adequate lighting is available for successful videoconferencing

Electrical

- Verify AC power receptacle at technology equipment
- Verify electrical loads
- Verify proper grounding
- Provide energy saving features for audiovisual and technology systems to emerging sustainability requirements

Mechanical

- Provide heat loads for technology equipment to mechanical engineer
- Provide proper ventilation of technology equipment
- Verify proper background noise for mechanical equipment (NC)

Furniture

- Conference room tables:
  - Cable cubbies
  - Cable retractors
- Credenzas
- Lecterns
- Millwork
Ventilation: provide adequate ventilation of technology equipment mounted in credenzas and other enclosed millwork

**Aesthetics**

- Flat-panel displays: surface mount vs. recessed; verify color of bezel
- Projectors: conceal if possible; verify size and colors, and coordinate location of ceiling outlet boxes to minimize visible cable
- Wall plates: verify finish and color
- Projection screens: coordinate color and finish type of screen enclosure
- Loudspeakers: conceal behind acoustically transparent fabric if possible
- Floorboxes: conceal under furniture if possible; review finish type, carpet inset, and color options
- Cameras: locate in wall recess behind glass if possible; coordinate size and color options available
- Lecterns: verify size, finish, and color
- Touch panels: verify size, color, and room location
- Cabling: provide neat cable dressing, especially when cable is exposed