

Exhibit C.5: Mechanical, Fire Protection & Plumbing Components Check List

The following indicates the minimum mechanical technical design item requirements of the Design that should be shown on all tenant designs in draft form beginning in Phase 3: 60% Design Development and in Phase 4: 90% Construction Documents (incomplete submittals may delay your project schedule):

General

- Verify Design is in accordance with All Codes, Chicago Codes & CDA Standards
- Comply with CDA Design & Construction Standards, Part 5,- Mechanical (M, P & FP)
- Existing pneumatic VAV boxes controls should be converted to DDC-Type VAV boxes

Mechanical

- 1. Testing, Adjusting, and Balancing (TAB) Mechanical HVAC Tenant System(s) BEFORE to confirm existing data available & AFTER to document the existing/altered HVAC systems data vs required Tenant Design Requirements.
- 2. Provide complete HVAC Ventilation Schedule indicating cfm-air changes required per Codes, per design. Chicago Building Code: 18-28-403.14 Requires Outside Air OA on schedules
- 3. Provide New Area heating-cooling-venting loads. Adjust or add HVAC Equipment as required. Provide New or Altered Mechanical Systems equipment, ductwork, piping, and control details
- 4. Additional base building airport HVAC is NOT available. Provide additional HVAC as necessary for Tenant operations

Fire Sprinkler System

- 1. Show all existing, relocated, and New Heads or Covers. Verify coverage is not blocked by new construction, full or partial height walls, Electric Closet, storage rooms, or signage, etc.
- 2. Provide new systems piping details
- 3. Indicate the location of the nearest shut-off valves and drain-downs
- 4. Indicate Fire Protection shut downs and expected durations

Plumbing

- 1. Need plumbing installation details for the following: meter and back flow preventers, check & double check valves, vacuum breakers, gas fired hot water tank-expansion tank-piping-return piping-blow downs-mixing valve assemblies, flue(s), EM drain pan under hot water tank, ID labeling, wall/floor penetration(s), pipe hangers & supports, vibration isolators, etc.

Demolition (If Applicable)

- 1. Domestic water pipes to be demolished shall be removed back to an active line
- 2. According to the Illinois plumbing code, demolition of abandoned existing domestic water and sanitary drain piping needs to be properly removed and capped up to the active branch connections

Food Service & Kitchen Equipment Areas (If Applicable)

- 1. Board of Health review required
- 2. Special exhaust fans, hoods, makeup air equipment, to maintain negative air as required per codes. Special materials required; Stainless Steel, Black Iron, Aluminum, Ansel, fire dampers, gas & electric automatic shunt-trips, etc. per Codes & CDA Standards
- 3. Where cooking devices are provided and a vented exhaust duct is not required by code, install a ventless, charcoal filter, electric air cleaner hood above all cooking devices

Other Information

- The checklist is to be turned into CDA's designated representative with ALL items attached. Incomplete submittals will be returned unprocessed to the tenant and may cause a delay to the project schedule.
- This signed checklist should be used as a cover page to your submittal to CDA. Without proper sign off, this design submittal package will not be reviewed by CDA.

CDA designated representative signature of review:

Name & Date

Design and Construction Standard Operating Procedures Concessions Projects (C-SOP Exhibits)