



SCOPE OF WORK – 23-001 HVAC

Furnish and install any work included in, but not limited to, the following specification sections.

General Conditions of the Contract
Division 00..... Procurement and Contracting Requirements
Division 01..... General Requirements
07 84 13.....Penetration Firestopping
07 84 43.....Joint Firestopping
07 92 00.....Joint Sealants
08 91 19.....Fixed Louvers
Division 21.....Fire Suppression (as applicable)
Division 22..... Plumbing (as applicable)
Division 23..... HVAC
Division 26..... Electrical (as applicable)
Division 27.....Communications (as applicable)
Division 28..... Electronic Safety and Security (as applicable)

General Items

Furnish materials, equipment and labor, including all applicable freight charges and taxes for the following items that are part of contractor's scope of work:

1. Contractor shall follow all OSHA and Edifice safety policies at all times.
2. Provide full-time daily cleanup personnel with this scope while onsite. Daily cleanup is required for each trade. This cleanup person is managed by the CM to continuously clean the project, full time, from the start of their activities to the end of their activities on the project. For every fifteen (15) people or personnel on the jobsite the trade contractor shall provide one (1) cleanup person. Provide no less than one (1) cleanup person whether its their own personnel or temporary labor.
3. Contractor to have fulltime supervision for this scope including tiered subs.
4. Obtain and pay for all required permits and licenses to perform work.
5. Furnish all required equipment, material, labor, and tools for a full turnkey mechanical package.
6. Contractor to provide any required crane certifications prior to lifting.
7. Contractor is responsible for cutting and patching of all required openings for this scope including but not limited to louvers, duct, roof sleeves and equipment.
8. Contractor to submit all required shop drawings, product data, and submittals for approval prior to release. No substitutions will be allowed unless approved by Edifice and Owner.
9. Contractor shall provide access door count and sizes for their complete system to door and hardware contractor as soon as practical. Door and hardware contractor will provide access doors. Contractor shall layout access doors for installation by masonry or gypsum trade contractor prior to are being enclosed.

10. Furnish and install all required mechanical equipment per construction documents including but not limited to: Electric heaters, RTUs, grills and diffusers, VAVs, ductless split systems, fans, pumps, boilers, louvers, exhaust fans, safety switches, transformers, power ventilators, air/dirt separators, expansion tanks and all related accessories. Electrical hookup and connections including fire alarm will be by others and only include connections outlined on M605. Coordinate with Electrical and Fire Protection Contractors as required.
11. Contractor to furnish and install kitchen hood per plans and specifications. This includes but is not limited to hood, exhaust, fans, devices, controls, ancillary fire protection system, activation devices, piping valves, sensors, filters, switches, tanks, grease ducts, grease boxes, accessories, mounting hardware, hoses, insulation, fire cabinet, factory lighting etc. for a full functioning hood exhaust system.
12. All items outlined as "optional" on the kitchen hood design documents are to be included by this trade contractor.
13. The Contractor shall be responsible for coordination of their work with sprinkler piping, lights, fire alarm devices and finished ceiling heights.
14. All additional support required for installation of systems, beyond what is indicated on architectural and structural documents.
15. Furnish all required disconnects, fuses, VFD's, and sensors. High voltage electrical by Electrical Contractor. Low Voltage connections by Mechanical Contractor.
16. Contractor to furnish and install all dampers.
17. Install duct mounted smoke detectors (temporary and permanent - furnished by electrical package).
18. Furnish and install carbon monoxide detectors.
19. Furnish and install all required thermostats and control wiring per plans.
20. Furnish and install all required duct per plans. Contractor is responsible for storage of all duct and related material. Duct openings are to be covered with plastic until installation and covered nightly at completion of work prior to leaving project site for the day. Contractor is to ensure all duct is clean inside prior to installation.
21. Furnish and install all required insulation per plans. Provide interior lined duct and sound attention where indicated per drawings.
22. Coordinate roof opening requirements with Edifice and Steel contractor. Provide framed opening shop drawings for roof mounted equipment.
23. Furnish and install drains and piping related to HVAC systems.
24. Mechanical contractor is responsible for removal of all decking at duct openings.
25. Furnish all required medium pressure duct loops and related accessories per plans.
26. Contractor is responsible for cutting openings for all duct work. Provide support steel as needed at openings.
27. Contractor is responsible for sealing all openings after duct and insulation is complete.
28. Provide all required transitions to diffusers.
29. At all penetrations through firewalls, fire seal in accordance with contract documents. All penetration and joint firestopping must be installed per the required U.L. details specified and required by the AHJ.
30. At penetrations through non rated walls sound caulk penetration to adjacent wall construction.
31. Furnish and install wood cribbing, vibration isolators, slip sheets, neoprene pads and isolators for rooftop equipment.
32. Provide complete Building Automation System, including conduit, per plans and specifications. All controls and control wiring is to be furnished and installed by the HVAC contractor. HVAC contractor shall coordinate all of this installation and paths for control wire with the installation of interior and exterior walls. Provide conduit for controls wiring as required. This Contractor is the chief coordinator of this system and is required to verify system requirements with all affected trade contractors.
33. The Contractor shall furnish and install curbs and metal caps for line-set penetrations through roof.

34. Provide all means necessary for early operation of the mechanical system(s) to allow for finishes installations. The Contractor will be responsible providing and maintaining clean temporary air filters and replacement with final filters on all HVAC equipment prior to testing and balancing.
35. Supply construction filters for use of temporary use of HVAC system. Filters to be maintained as necessary throughout the project. Remove at turnover of project and install final filters. Provide additional filters as noted.
36. Furnish and install all louvers and frames as specified regardless of mechanical, architectural, etc. Coordinate rough-in opening sizes with metal framing and masonry trades. This includes but is limited to blank off panels, bird screens, rain diverters, subsills, flashings, end dams and any other required accessories for a complete installation of architectural and mechanical louver systems. Top wall screening at generator screen wall is by others.
37. All concrete pads and grouting for contractor's work to be by this contractor.
38. Contractor is to provide all required supports for duct including but not limited to threaded rods, galvanized steel angle, strut, straps, and connections. Provide additional steel as needed for supports.
39. Furnish and install all required roof mounted equipment. Roof equipment to be placed on dunnage (i.e curbs, etc.) and additional roofing membranes. Dunnage and roof membrane furnished and installed by Mechanical Contractor.
40. Gas piping is by others. Final connections to mechanical equipment is the responsibility of the Mechanical Trade Contractor.
41. Contractor is responsible for all startup and commissioning of all HVAC equipment. Provide certified test and balance for this scope in accordance with contract documents. Provide temporary filters for all return diffusers to prevent construction dust from getting into the system. – double check spec and try to let them do their own.
42. Coordinate and support separate owner commissioning agent and their tests and certification in accordance with contract documents.
43. Contractor is responsible for condensate piping through walls for split systems per plans and details.
44. Install all piping, ductwork and sleeves to or at right angles to the building structure.
45. Authorized factory start-up and owner training.
46. Contractor is to provide and install a clean set of filters for all applicable equipment at time of turnover. Coordinate with Edifice team to be done after final cleaning.
47. Contractor is responsible for all condensate piping at units per plans and manufacturer specifications. Pipe condensates to nearest roof drain or downspout. Provide blocking and anchoring of condensate piping per local codes.
48. Contractor shall be responsible for all hoisting rigging items along with sufficient personal to rig as necessary to safely load/unload and set all equipment in the contract.
49. Contractor shall have competent riggers and proper rigging equipment for this scope of work.
50. Contractor along with CM shall agree on the delivery dates, location and dismantling dates of all cranes.
51. Contractor shall provide appropriate roof protection for all work in this contract on, above and adjacent to all building roofs.
52. Contractor shall provide isolation between dissimilar metals as well as all protective coatings, adhesives and sealers required for Mechanical work.
53. Contractor includes cost to replace sheaves and belts required for correct balance during test and balancing portion of the project.
54. Contractor shall provide all plan checks, licenses, inspections and associated fees (if necessary) to complete the work of this Subcontract.
55. Contractor shall be responsible for all traffic control including flag men and barricades as required for the execution of the work of this contract.
56. The Subcontractor shall provide BIM modeling of all their systems. This is to be used for coordinating with other trades. Participation in weekly coordination meetings is required. A copy of the BIM execution plan has been provided to the trade contractor.