

1. **General Information**

1.1 For all work

- .1 Unless otherwise indicated, all work outlined in the plans and specifications is part of the contract and is at the expense of the general contractor. The plans and specifications are supplementary documents. The general contractor is responsible for executing all work, including that entrusted to subcontractors.
- .2 The work targeted by this contract consists of the supply, transportation, installation, support, connections, identification, tests, commissioning, calibration, balancing and programming, in addition to the thermal insulation work, plumbing, ventilation, and air conditioning, as indicated in the drawings and / or specification.
- .3 Provide all materials, labour, tools, hoists, scaffolding, temporary structural supports, cranes and services required to complete the work.
- .4 Work must be complete, functional and safe, including all minor work required for their completion, even if the minor work is not indicated in the plans and / or specification.
- .5 The ministerial representative may modify the exact location of the equipment, pipes, conduits, ducts, accessories by 3050 mm before installed at no additional cost.
- .6 All subcontractors must carry out the fireproof seals.

1.2 Specialized contractor and subcontracting

- .1 The division of mechanical work between the different specialized contractors is to help inform these entrepreneurs about the extent of their work for bid preparation. Therefore, any claim for a supplement based on the division of work will be rejected by the ministerial representative and the general contractor must be informed, who is responsible for the entire work.
- .2 Mechanical work must be completed by the following contractors:
 - .1 Insulation contractor;
 - .2 Plumbing contractor;
 - .3 Piping/heating/cooling contractor (by the ventilation contractor);
 - .4 Ventilation contractor;
 - .5 Control contractor.
- .3 Each specialized contractor must review all plans and specifications to be aware of

the scope of their work, in addition to the coordination and interactions with the other fields.

- .4 Before submitting their bid, the General Contractor must ensure that the cost for the subcontractors used in bid preparation, cover all mechanical work indicated in the bid documents. If the work is not assigned to any Specialized Contractor, the General Contractor will be responsible for the expenses.

1.3 Plumbing

- .1 In general, the plumbing work includes:
 - .1 The demolition works as indicated in the plans.
 - .2 The supply, installation and connection of the plumbing drainage network.
 - .3 The supply, installation and connection of all floor drains.
 - .4 The supply, installation and connection of domestic water distribution networks (cold and hot water) included with the piping, fittings, supports, valves, etc.), in addition to all accessories required for proper operation.
 - .5 The supply and installation of all the earthquake-proof measurements required by the NBC.
 - .6 The heat pump unit drainage from the ceiling space.
 - .7 Identification of all networks.
 - .8 The cleaning and commissioning of all networks.

1.4 Heating/cooling (by the ventilation contractor)

- .1 In general, the heating work (piping/heating) includes:
 - .1 The demolition works as indicated in the plans;
 - .2 Cleaning and commissioning of all networks. Balancing the heat pump mixed water systems according to the table values.
 - .3 Pipe connections for the heat pumps.

1.5 Ventilation

- .1 In general, the ventilation work includes:
 - .1 The demolition works as indicated in the plans.
 - .2 The supply, installation and connection of the heat pumps indicated in the plans, including all accessories required for the installation to be complete and functional.
 - .3 The supply and installation of all ventilation ducts as indicated in the plans and specifications.
 - .4 The supply, installation and connection of terminal components (grids, diffusers, etc.).
 - .5 The supply and installation of all accessories such as flexible air ducts, access doors, baffles, connectors for test instruments, etc.
 - .6 The supply and installation of all balancing dampers.
 - .7 The testing, adjusting and balancing for all systems.
 - .8 The supply and installation of all the earthquake-proof measurements required by the NBC.

1.6 Insulation

- .1 Plumbing:
 - .1 Insulate hot and cold domestic water systems and all recovery of insulation from existing connections.

1.7 Controls

.1 In general, the control work includes:

The cost of the inspection works must be provided by the ventilation contractor, unless otherwise stated in the bid form.

- .1 The supply and installation of the control system as indicated in section 23 09 33.
- .2 Supply, installation and the control wiring.
- .3 Provision and installation of control devices (panels, local controllers, application controllers, control software)
- .4 Assist other contractors with equipment commissioning.
- .5 Design, programming, running and commissioning of all HVAC systems and equipment (heat pumps).
- .6 Provide training and assistance to the owner during the first year of building operations.

1.8 Balancing

.1 In general, the balancing work includes:

- .1 Balancing the air distribution networks and the ventilation unit according to the flows indicated in the plans
- .2 Balancing mixed water networks in a closed circuit. See heat pump chart.

1.9 Fire protection

.1 In general, the fire protection work includes:

- .1 Moving and replacing sprinkler heads for the layout of the new ceiling frames by the architect. See plans for the number of heads and approximate location.

END OF SECTION