## DIVISION 15 - MECHANICAL

## SECTION 15400 - PLUMBING

1. Provide plumbing, waste, and vent systems for the following:
a. Toilets and bathrooms.
b. Kitchens.
c. Laundries.
d. Water heaters.
e. Whirlpool spas.
f. Floor drains.
g. Meters.
2. Provide water supply and distribution system sized for domestic and sprinkler systems.
3. Provide natural gas distribution sytem piping, specialties, and accessories.
4. Provide sewerage and drainage systems, specialties, and accessories.
5. Coordinate with Owner's room uses to provide adequate system for all contract areas.
6. Do not cut structural elements without prior written approval.

Submittals:

1. Submit product data, piping types by application, warranties, operating and maintenance data.
2. Submit signed and sealed shop drawings for review and as required for building permit.

Products:

1. Provide new materials suitable for service intended complying with approved submittals. Provide accessory materials such as hangers and pipe insulation. Provide fixtures complying with water consumption requirements and accessibility requirements.

Installation:

1. Comply with requirements of Section 01000 - Project Requirements.
2. Comply with applicable codes, regulations, ordinances and requirements of authorities having jurisdiction. Vent all fixtures.
3. Conceal piping to the greatest extent practical.
4. Maintain indicated fire ratings of walls, partitions, ceilings, and floors at penetrations. Seal with firestopping to maintain fire rating.
5. Test all systems for proper operation.
6. Instruct Owner's personnel in proper operation of systems.

## SECTION 15500 - HEATING, VENTILATING, AND AIR CONDITIONING

Summary:

1. Provide equipment, systems, and controls for heating, ventilation, and central air conditioning that will provide adequate heating (maintaining up to 80 degrees in winter) and cool (maintaining down to 60 degrees in summer) for each condo unit.
2. Coordinate with Owner's room uses to provide adequate system for all contract
areas.
3. Coordinate location of thermostats and controls with Owner's requirements.
4. Coordinate location of ductwork to avoid interference with location of designated lighting fixture locations.
5. Do not cut structural elements without prior written approval.

Product:

1. Manufacturer for heat pump and cooling unit: Space Pak at www.spacepak.com or (413) 568-9571.
2. System: ESP 3642D or approved equal.

Submittals:

1. Submit product data, warranties, operating and maintenance data, balancing reports.
2. Submit signed and sealed shop drawings for review, as required for coordination, and as required for building permit.

Products:

1. Provide new materials suitable for service intended complying with approved shop drawings. Provide accessory items such as controls, anchors and insulation.

Installation:

1. Comply with requirements of Section 01000 - Project Requirements.
2. Comply with applicable codes, regulations, ordinances and requirements of authorities having jurisdiction and SMACNA recommendations.
3. Conceal piping and ductwork to the greatest extent practical.
4. Center ceiling-mounted elements in center of ceiling tiles as applicable.
5. Maintain indicated fire ratings of walls, partitions, ceilings, and floors at penetrations. Seal with firestopping to maintain fire rating.
6. Insulate piping and ductwork. Provide vapor barrier on insulated piping operating below 60 degrees $F$.
7. Test all systems for proper operation.
8. Commission and balance systems.
9. Instruct Owner's personnel in proper operation of systems.
