

**Mechanical, Electrical, Plumbing
and Fire Protection Systems**

**100 Sunport Lane
Orlando, FL 32809**

MEP/FP INFORMATION

1. MECHANICAL

A. Mechanical Systems

1. The mechanical (A/C) system is comprised of fifty-three (53) split systems (outdoor condensing units and indoor air handling units). There are eleven (11) rooftop units that serve the two story office space at the northwest end of the building. The split systems were installed in 1991 and the rooftop units were installed in 1992. All units utilize R-22 refrigerant.
2. Thirty six (36) condensing units are remotely mounted on the roof. There are seventeen (17) units mounted at ground level.
3. The air handlers are mounted above the ceiling.
4. The supply ductwork is fiberglass ductboard.
5. There is an existing data center with two (2) 15 ton split system Liebert computer room A/C units. These units were manufactured in 1985.
6. Each A/C unit is controlled by an independent space mounted thermostat.

2. PLUMBING

A. Plumbing Systems

1. The existing plumbing system consists of a 6" sanitary main below slab routed through the center of the building with branch pipes serving each restroom group. The existing fixtures consist of thirty-seven (37) water closets, forty-two (42) lavatories, twelve (12) showers, eight (8) urinals and four (4) mop sinks. A 2" domestic water main is routed above the ceiling throughout the building with valved 1-1/4" branch pipes serving each restroom group. Each restroom group is served by either an electric water heater or instantaneous water heaters and insulated copper hot water piping.
2. The storm system consists of roof drains collected into downspouts and piped to the site storm system. The storm piping is schedule 40 PVC.

3. FIRE PROTECTION

A. Fire Protection System

1. The building is fully sprinkled with an automatic wet pipe sprinkler system. The existing computer room is protected by a pre-action zone.

4. ELECTRICAL

A. Electrical Service

1. The building is served from a Progress Energy Utility pad mounted 277/480 volt, 3 phase, 4 wire Transformer. The transformer is located in the front building parking area.
2. The main switch board is a 277/480 volt, 3 phase, 4 wire, 3000 amp, (manufactured by Square D) "QED" with an "SE" electronic trip main circuit breaker. The switchboard has two (2) circuit breaker distribution sections.
3. A 277/480 volt, 3 phase, 4 wire 1600 amp, General Electric (ZTG/ZTGD series) emergency transfer switch is located at the end of the existing switchboard. The transfer switch was installed to provide connection to a portable emergency generator. There is no fixed emergency generator on site.

B. Electrical Distribution Equipment

1. There are four (4) distribution electrical rooms located throughout the building. This equipment (manufactured by Square D) provides circuits for HVAC equipment located in the mezzanine, 277 volt lighting and step-down transformers with 120/208 volt panels feeding receptacles and miscellaneous branch circuits.
2. The existing raised floor computer room has distribution equipment (manufactured by Square D) located in an adjacent room. This equipment serves the 80KVA uninterrupt power supply (UPS), lighting and air conditioning units.
3. The UPS is a 120/208 volt, 3 phase, 4 wire, 80KVA unit manufactured by Merlin Gerin Model #EPS-2000.

C. Lighting

1. The lighting system in the majority of office spaces is fluorescent 18 cell parabolic fixtures with older technology T12 type lamps. Some of the fixtures incorporate emergency battery ballast in order to provide emergency life safety lighting.

2. The main corridor lighting fixtures are surface mounted fluorescents that also have the T12 lamps.

D. Fire Alarm

1. The fire alarm system is a voice evacuation type manufactured by Simplex Model #4100.
2. There are wall and ceiling mounted speaker strobes throughout the building.

E. Systems (Data, Telephone, etc.)

1. There is category 5 type internet cabling run from several data racks in communications rooms located adjacent to the electrical rooms.
2. Telephone system wiring and punch-down blocks are also located in these rooms.

F. Lightning Protection System

1. The existing lightning protection is a faraday cage type system with air terminals and aluminum conductors.

5. EXTERIOR

A. Roof

1. A new, 60 mil TPO roof was installed in December 2006.
2. Includes a (2) year Workmanship Warranty and a (20) year Manufacturer's warranty.

B. Exterior Paint

1. The exterior of the building was repainted in January 2007 using Manor Hall Timeless Exterior Flat Acrylic Latex Paint by Porter Paints.
2. Includes a (1) year Workmanship Warranty and a (7) year warranty on material.