

Who We Are

Power Loft Services is the division of Corporate Office Properties Trust (COPT) responsible for developing COPT's line of high efficiency data centers.

COPT (NYSE: OFC) is a \$4.9 billion REIT headquartered in Columbia, Maryland whose 21.4 million square foot portfolio of office buildings and data centers is primarily leased to the U.S. Government and related contracting community.

In 2010, COPT decided to use its national real estate platform with over 400 full time employees and \$1.0 billion in construction financing to acquire and develop high efficiency data centers.

COPT has a long history of serving the U.S. Government and defense community with assets under management that span the range of security operating protocols.

What We Do

COPT recently acquired, Power Loft @ Innovation, a 268,000 square foot, two story, high efficiency data center located 30 miles west of Washington, DC in Manassas, Virginia. This facility offers 100,000 sf of raised floor space with up to 30MW of critical power with reliability available from N to 2N+1.

Also, COPT is pursuing select build-to-suit opportunities with corporate and Government users who are interested in tapping into COPT's mission critical construction capital and talent.

Power Loft Data Center Advantages



With the 2010 purchase of Power Loft @ Innovation, COPT also purchased a controlling interest in Power Loft Services, LLC. That group is developing data centers that are more energy efficient, scalable and secure than peer alternatives, with zero sacrifice to reliability.

COPT is currently offering wholesale leases for fully energized, cooled and secured data suites in Power Loft @ Innovation that are priced on a cost per kilowatt, per month of available critical power.

WHY THIS DESIGN MATTERS

Scaling Efficiency: Isolating the IT equipment one story above the MEP equipment allows users to scale up their critical power from 150 to 300 watts per square foot with minimal loss or disruption to the operating raised floor area, during construction or maintenance activity.

Space Efficiency: Instead of using computer room air conditioning units (CRACs) that compete with racks for space and power, this design uses high volume/ low velocity, industrial sized air handlers which are provided a constant flow of chilled water from an array of energy-efficient evaporative chillers. The resulting rack to square foot ratio of 1:25 accommodates 40% more racks than traditional designs.

Operating Efficiency: In a market where the difference between a 1.5 and a 2.5 PUE amounts to \$570,000 in annual savings per

megawatt of critical power, COPT spent slightly more to build a "Green" facility that uses 70% less essential power than traditional designs to date.

Reliability: COPT, not a hired third party, manages this facility and COPT is responsible for insuring that the facility and campus stand up to an exacting array of SLAs that track all operations 24/7, from closed circuit cameras prowling the perimeter down to a single branch circuit monitoring device - and it is all transmitted to a 24/7 Network Operation Center located on site.

High Security: Finally, COPT designs these properties to meet stringent Federal security standards that include: a minimum 150' secured standoff, vehicle arrest barriers, K-12 personnel fencing, guarded entrances, man traps, biometric access controls and multiple video surveillance zones.

Power Loft @ Innovation:

Located on a secured campus in Innovation Technology Park, Prince William County, Virginia, 30 miles West of Washington, DC.

Fiber providers include: Above Net, Level (3), FiberLight, NOVEC, Verizon, Comcast.

NOVEC provides dedicated 50 MW power feed at 34.5kva.

Two story, 235,000 square foot structure supporting 100,000 square feet of raised floor area and 30 megawatts of critical power.

Built to achieve LEED Silver certification.

Ability to deliver N, N+1, 2N or 2N+1 levels of reliability.

Security specifications comply with DOD UFC parameters: minimum 150' secured setback, K-12 personnel fencing, vehicle arrest berms and barriers, CCTV surveillance array, 24/7 security NOC, access controlled with mantraps and biometric access devices. Hard separation between MEP and IT zones.

Neighbors include: FBI, Lockheed Martin, George Mason University, Micron Technology, BAE Systems, U.S. Government.



RAISED FLOOR

- 100,000 square feet of raised floor area
- Divisible into 16 bays, each supported by 1.875mw of critical power
- 250 pound per square foot floor loads
- CRAC free design accommodates 40% more racks
- Ability to scale from 150 to 300 watts per square foot with no disruption or loss to secured raised floor zone

POWER SYSTEM

- 25 x 2.25 MW Diesel Gensets (1.25 MW Critical)
- Configured in 6 MW block—4 primary, 1 backup
- Rotary or Static UPS
- No paralleling
- 8 x 2 MW Diesel Generators provide N+2 power to mechanical plant
- Power topology with backbone designed to accommodate AC or DC power loads
- Modular design that provides ability to expand power in place with minimal disruption and lead time

FUEL STORAGE

- Up to 500,000 gallons of ultra-low sulfur diesel fuel storage
- Fuel polishing system, with redundant fuel piping systems

HVAC

- 11,400 tons of refrigeration
- 60 x 60,000 CFM air handlers
- High efficiency chilled water plant
- Air and Water side economization
- 250,000 gallon make-up water storage
- On site make-up water supply wells
- Redundant chilled water piping loops
- N+2 redundant
- No water over raised floor

FIRE SUPPRESSION

- Multi-zone dry pre-action dry pipe sprinkler system in raised floor areas
- VESDA detection available

MONITORING SYSTEMS

- Four Siemens modules: EPMS, BMS, Security and Life/Fire/Safety

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