
OPEN
Compute Project
OCP U.S. SUMMIT 2017
Santa Clara, CA

Colocation Facility Requirements for Open Compute Racks

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Agenda

1. Background & Key Objective
2. Scope \ Considerations
   - Data Center Access & Delivery Pathway
   - Structural & Architectural
   - Electrical Systems
   - Cooling
   - Telecommunications Cabling Pathways & Spaces
3. Checklist Matrix
4. Questions?

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Challenges: Delivery Clearances

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Challenges: Delivery Pathway

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Challenges: Floor Loading - An Open Rack is Heavy

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Data Center Access & Delivery Pathway

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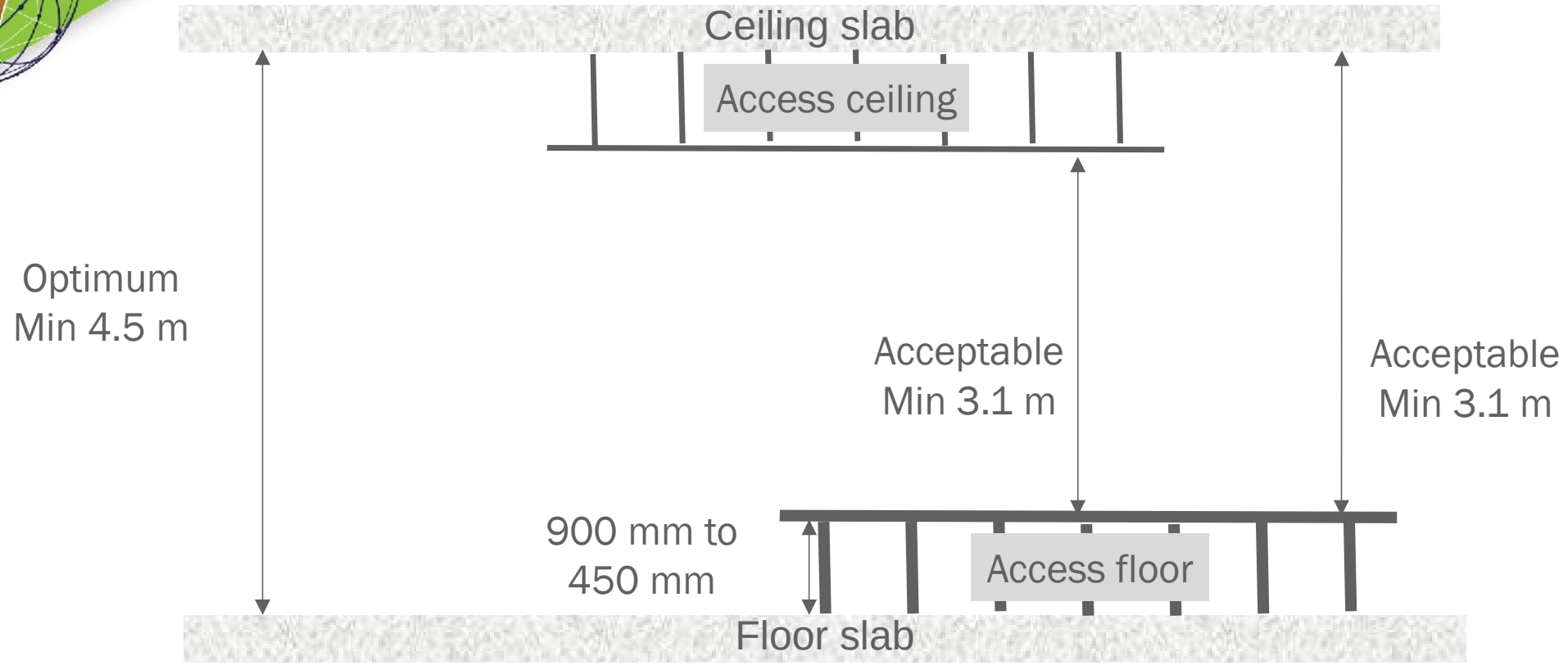
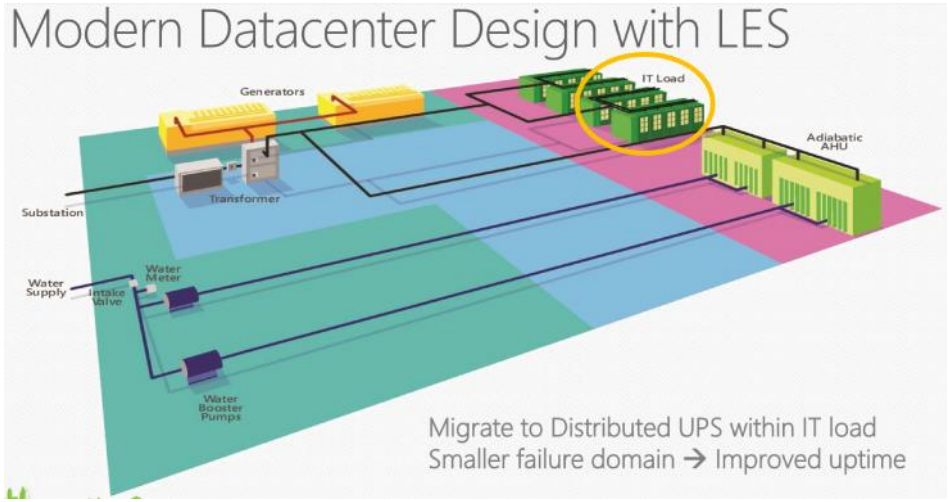
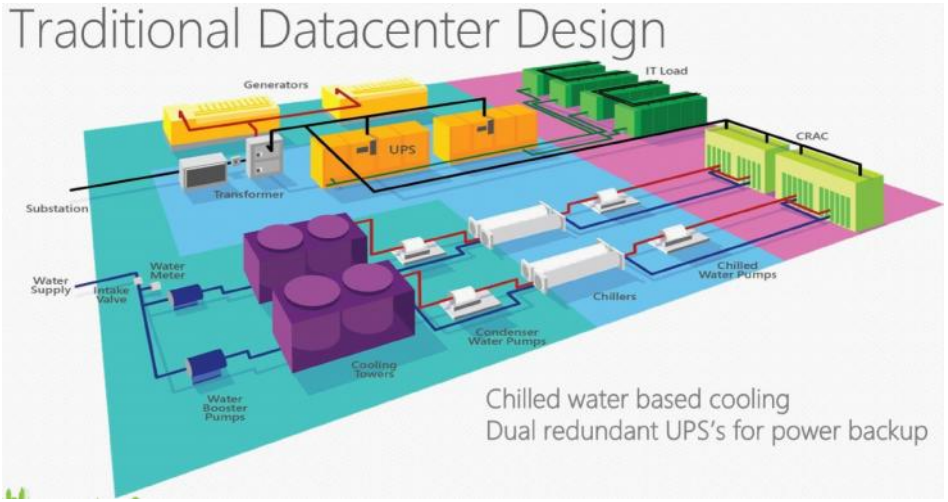
Structural & Architectural

White Space slab to slab and ceiling heights



Electrical Systems





Optimal

Acceptable

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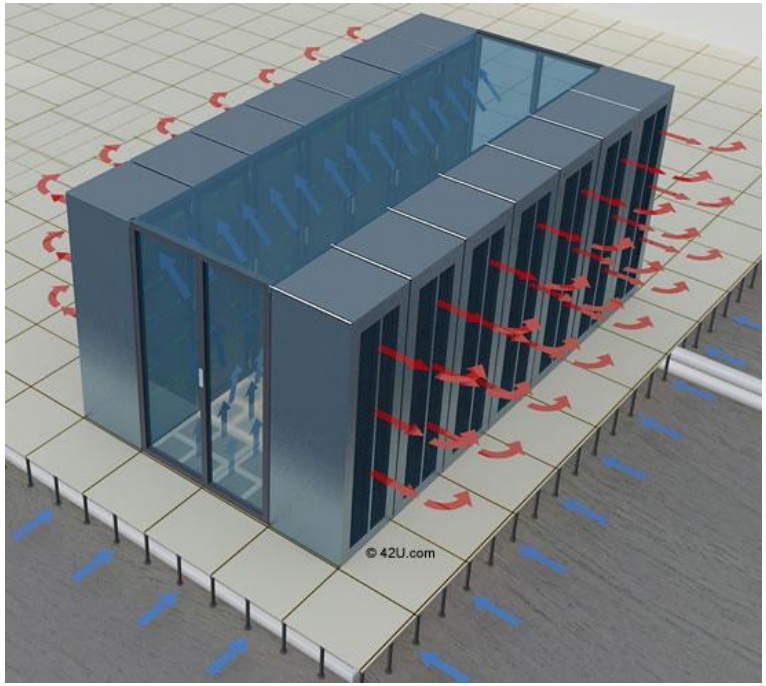
Cooling

Optimal



Acceptable

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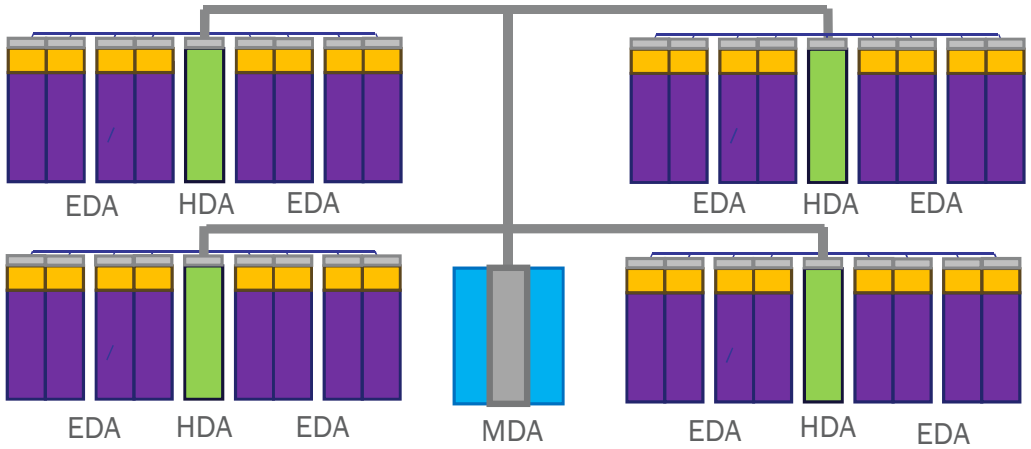
Telecommunications Cabling Pathways & Spaces

Pathways



Spaces

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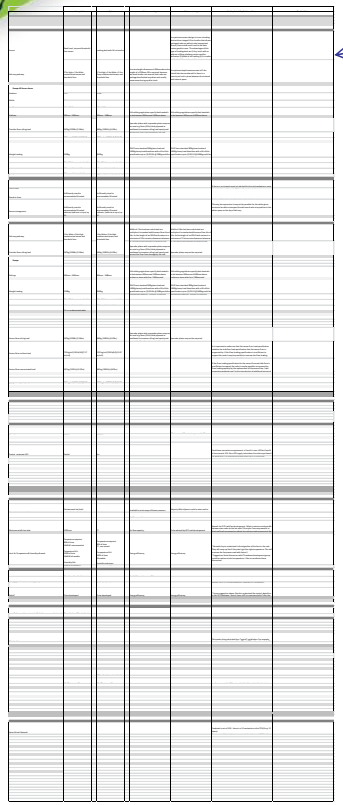
Checklist Matrix



	Acceptable	Optimum	Note reasoning Acceptable	Note reasoning Optimum
Data Center Subsystems				
Architectural				
Data Center Access **Access routes from loading dock to Goods in Area**				
must-have				
Access	Road level, step and threshold free access	loading dock with lift or leveller		An opitimum access design is to use a loading dock with an integral lift or leveller that allows packaged racks on pallets to be transported directly from inside truck level to the data centre goods in area. The advantages of this type of loading dock are 1) Any truck with or without a lifting platform can be used for deliveries 2) Speed of off loading 3) It is a safer method and there is less risk to equipment and personnel.
Delivery pathway	2.7m High x 1.2m Wide unobstructed access and threshold free	2.7m High x 2.4m Wide x 2.4 m Deep unobstructed access and threshold free	An extra height allowance of 490mm above the height of a 2210mm OR is required because we need to take into account that racks are packaged and bolted on pallets and usually manouvered using a pallet truck.	An optimum depth measurement of 2.4m should also be considered if a there is a security air lock in place between the external and internal space.

Questions?

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OCP Web Links and more information

Website

http://www.opencompute.org/

Data Center Project Wiki

http://www.opencompute.org/wiki/Data_Center

Data Center Project Mailing List

http://lists.opencompute.org/mailman/listinfo/opencompute-datacenter

Ask
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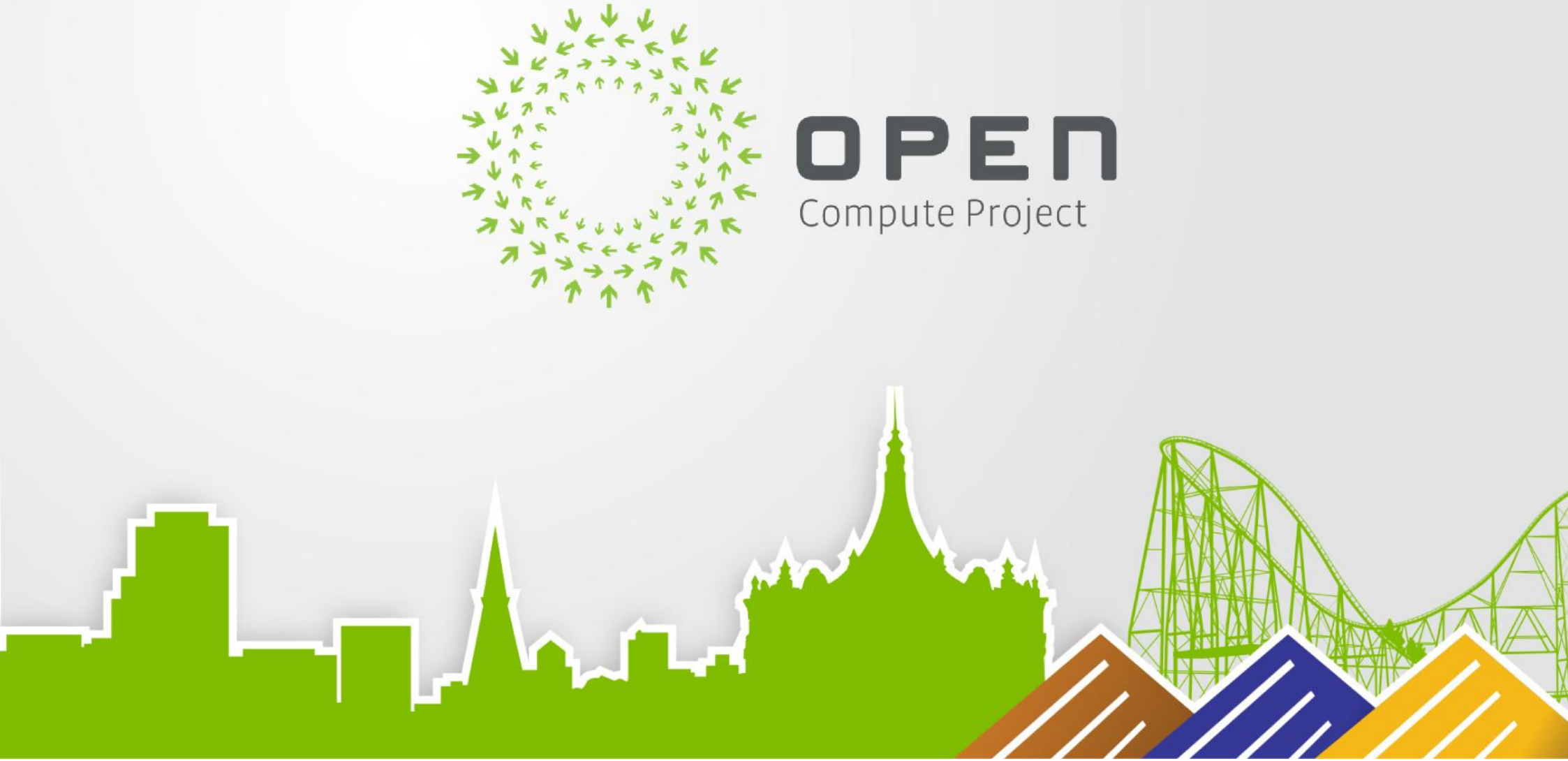
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