# Open. Together.

OCP SUMMIT

Data Center Facility

# ISO Containers Are NOT a Good Data Center Solution

Rob Coyle, Director of Sales, PCX Corporation

OPEN COMMUNITY®

# The Foundation of my Passion

DATA CENTER FACILITIES

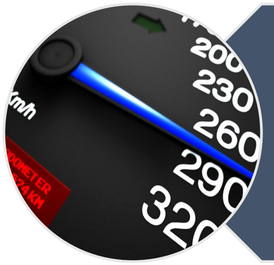
# Our Experience With ISO Containers

DATA CENTER FACILITIES

# Our Experience With ISO Containers

DATA CENTER FACILITIES

# The Modular Data Center Goals




Improved Deployment Speed

Higher Quality

More Flexible

DATA CENTER FACILITIES

# ISO Container Expectations

Ready

Transportation

Savings

DATA CENTER FACILITIES

# ISO Container Expectations

| Ready | Transportation | Savings |
|---|---|---|
| *after significant modification | *compromises included | *on the enclosure only |

DATA CENTER FACILITIES

# Ready?

DATA CENTER FACILITIES

# Ready?

DATA CENTER FACILITIES

# Ready?

DATA CENTER FACILITIES

International Energy Conservation Code (IECC)

ASHRAE 90.1
*conditioned space requires compliance

# Equipment

- Physical Limitations
- NEC
- NFPA
- Cabling Restrictions
- Raised Floor

DATA CENTER FACILITIES

# Transportation

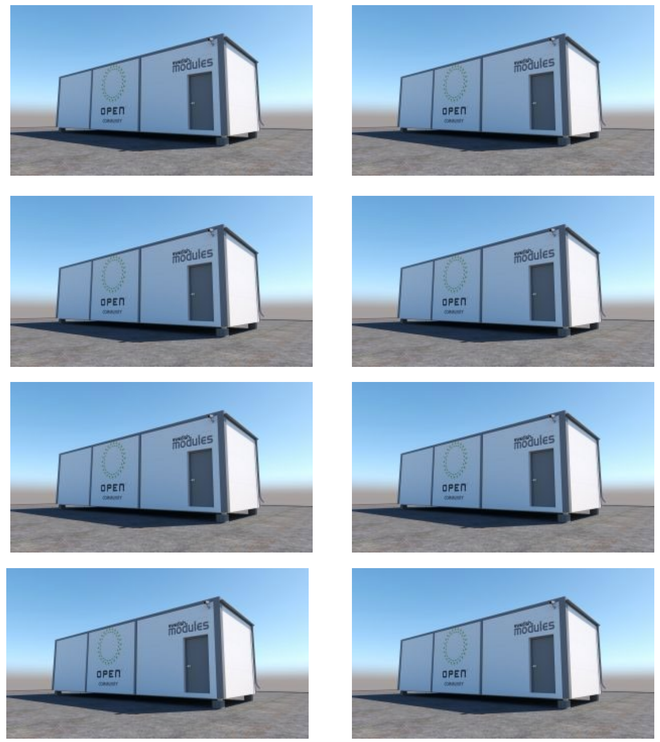
DATA CENTER FACILITIES

# Transportation

DATA CENTER FACILITIES

Now its ready, but how much will you save?

# Shipping Cost Comparison




vs.

DATA CENTER FACILITIES

# Transportation

DATA CENTER FACILITIES

- Built to be moved, not used.
- Mobility is not worth the compromise in **most** applications.

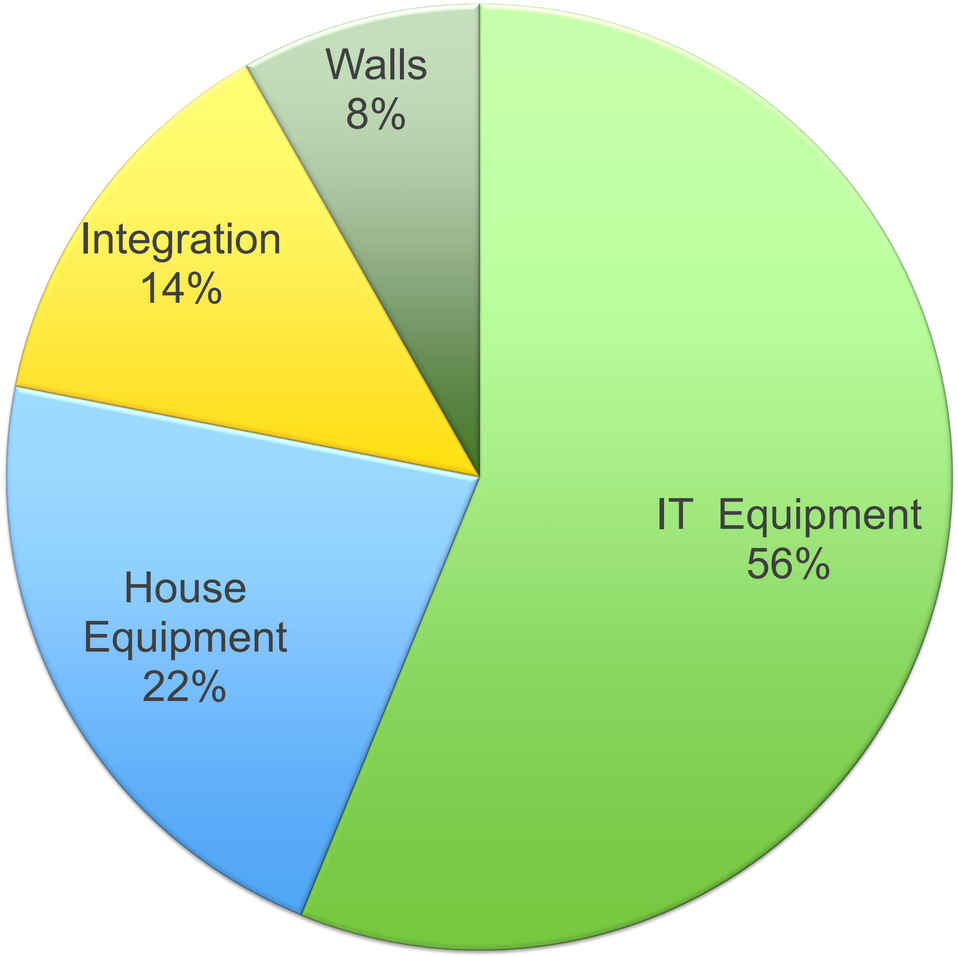
# Savings

DATA CENTER FACILITIES

# Recycling

DATA CENTER FACILITIES

# How Much Are The Walls?



DATA CENTER FACILITIES

# Cost Comparison

DATA CENTER FACILITIES

| | ISO Container | Custom Enclosure |
|---|---|---|
| Material Cost | ✓? | |
| Labor | | ✓ |
| Transportation | | ✓ |
| Rigging | | ✓ |

# ISO Container Expectations

**Ready**

Just not for a data center environment

**Transportation**

Efficiencies not yet found

**Savings**

Upfront wall savings do not offset the solution

DATA CENTER FACILITIES

# Custom MDC

DATA CENTER FACILITIES

INTENT INFORMS DESIGN

# Custom MDC

DATA CENTER FACILITIES

- Manufacturing process is optimized for the contents
- End user savings
- Can evolve for OCP components

OPEN COMMUNITY®

# Custom MDC

DATA CENTER FACILITIES

Next steps:

~~1.) Specification Approved  (90kw and 300kw)~~

2.) Product

3.) Evaluation and Improvement

OPEN COMMUNITY®

# Join Us!

https://www.opencompute.org/wiki/Data_Center_Facility/MDC

Mailing List
https://ocp-all.groups.io/g/OCP-MDC

This project meets on the 1st, 2nd, and 4th Wednesday of every month.

https://www.opencompute.org/projects/data-center-facility

*Contact me to get involved*

*rob.coyle@pcxcorp.com*
*919.437.6441*

Open. Together.
OCP Global Summit | March 14–15, 2019
OCP
SUMMIT