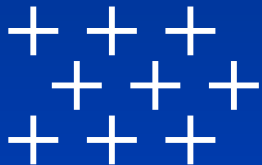




Decoding the Mysteries of Self-Storage Design: Your Preconceived Notions, Exposed and Solved

Presented by:

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This will help us clear the stage and set the room for the next presenter. Plus, you’ll have 30 minutes to converse in an open, roundtable format.

THANK YOU!

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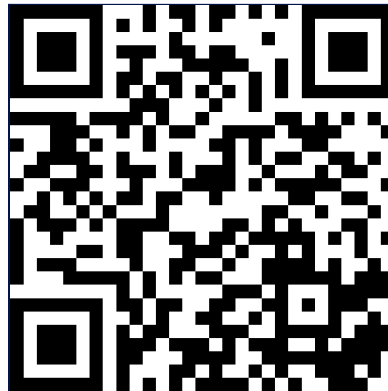


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The ADA-Unit Debate



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The ADA-Unit Debate

Do you need them, and if so, how many?

- Yes, between 3% and 5% (code calculation).

Coil-up doors need straps or a rope and weigh five pounds?

- Wrong
- Motor or secondary swing door
- Pro tip: Put larger ADA units on corners.

Do all unit sizes need to offer ADA options?

- Yes

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The Dreaded Elevator



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Elevator Questions

When?

- ALL multi-story (with rare exception)

Where?

- Logic prevails; grouped centrally in square-shaped building, distributed in long building
- Operators prefer less than 150' from elevator to unit

How many?

- Two if more than two stories or 70,000 SF (otherwise, one)

What?

- 4,500-pound passenger hydraulic with 6' x 8' cab interior

Note: This is not a freight elevator!

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Fire-Sprinkler Spat



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Sprinkle Some Knowledge

How big can I build without needing sprinklers?

- Approximately 12,000 to 20,000 square feet, drive-up facilities only (200- to 300-foot-long building)

Can a walk-in building have no sprinklers?

- A maximum 2,500 square feet is allowed per the International Code Council upholstery/mattress rule.

Can I just add a firewall?

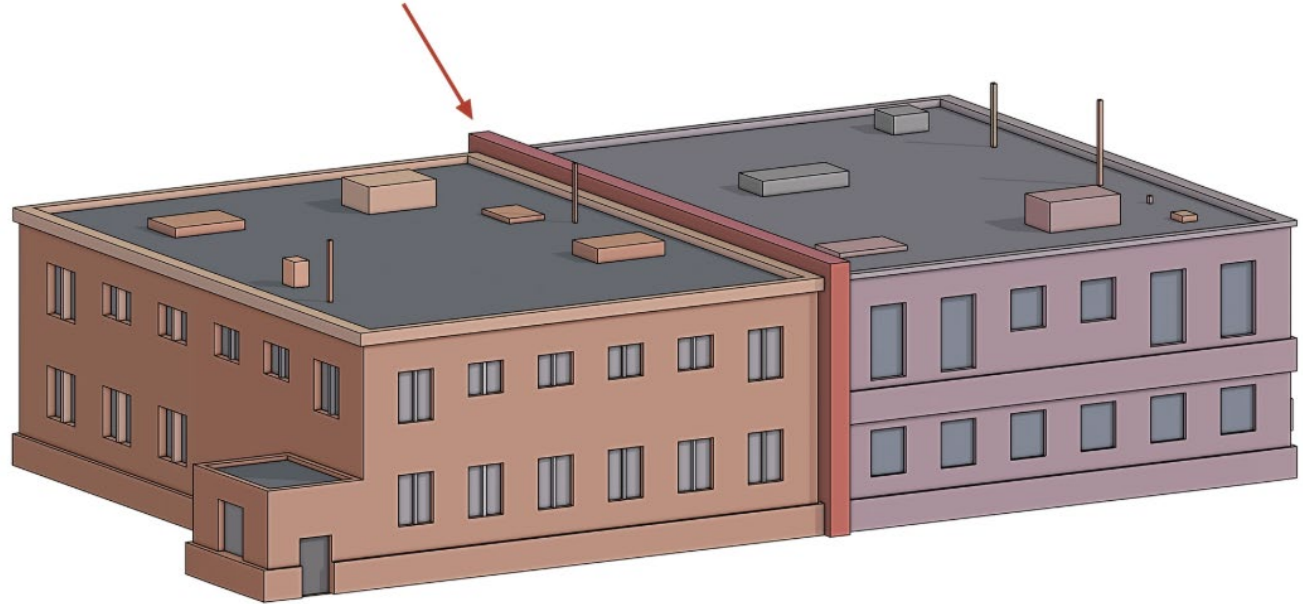
- Yes, but it isn't what you think, especially regarding occupiable buildings. (Peter, please explain.)

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Firewall Myth

Firewall extends continuously from the foundation to or through the roof.



- 2 buildings
- 2 exits each
- 2 stairs each

This isn't a simple fire-rated wall.

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Parking Problems



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Parking Problems

How many parking spaces should you build?

- Between seven and 10 needed, even for a large facility
- Easily negotiated, planners hate asphalt

Friendly reminder:

- One ADA space must be van accessible (16' x 18')

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Max Out the Height



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Max Height for Max Value

How many stories without fire-rated steel?

2021 Building Code allows four (previous codes allowed three).

- 1 foundation
- 1 roof
- 2 stairs
- 2 elevators

Can storage be higher than four stories?

Yes, but fire-rated structures add cost.

Note: *Smartest money builds four stories when allowable in zoning use. Buy less land or add rentable area, lowest building cost per square foot.*

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Bathroom Bickering



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Bathroom Bickering

Where and how many?

- One employee unisex bathroom near the office and...
- Customers must never be more than one floor away from one public, unisex bathroom.



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Distance to an Exit



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Distance to an Exit

How far before I find a way out?

- 250 feet from the back wall **in any unit** to an exit door (or stairwell door)

Why does this matter?

- It's very easy to have a normal floor plan that fails this rule.
- It's very difficult and expensive to fix after the fact.

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No Title Needed



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Rentable vs. Gross Reality

How can I increase this?

Larger unit mix, better space planner and perfect geometry

Why would this decrease?

Amenities, interior loading, existing conditions (conversion) and a smaller unit mix

- Amenities raise rates.
- Location is everything.
- A 5% swing at a large facility is \$90,000 per year.

“There are no solutions, there are only trade-offs.” ~Thomas Sowell

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Land-Acquisition Quick Tips



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Land-Acquisition Quick Tips

New ground-up construction, interior climate-controlled three-story facility

- Land to rentable storage ratio (**1.5 to 1**)

Example:

- 120,000 gross square feet = 88,000 rentable SF
- 88,000 SF x 1.5 = 132,000 SF = 3 acres

Note: A four-story facility changes the ratio to 1.38 to 1, requiring 2.75 acres.

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Land-Acquisition Quick Tips

New drive-up facility

- Land to rentable storage ratio **(2.5 to 1)**
- Example:
 - $88,000 \text{ rentable SF} \times 2.5 = 220,000 \text{ SF} = 5 \text{ acres}$

Disclaimer: *Figures provided are high-level benchmarks for preliminary evaluation. Detailed due diligence and site-specific analysis are required before development.*

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The Mysteries Have Been Debunked



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Peter Stuhreyer, AIA

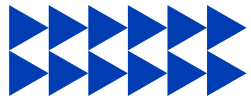
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