



Brooklyn Solar Canopy Co.

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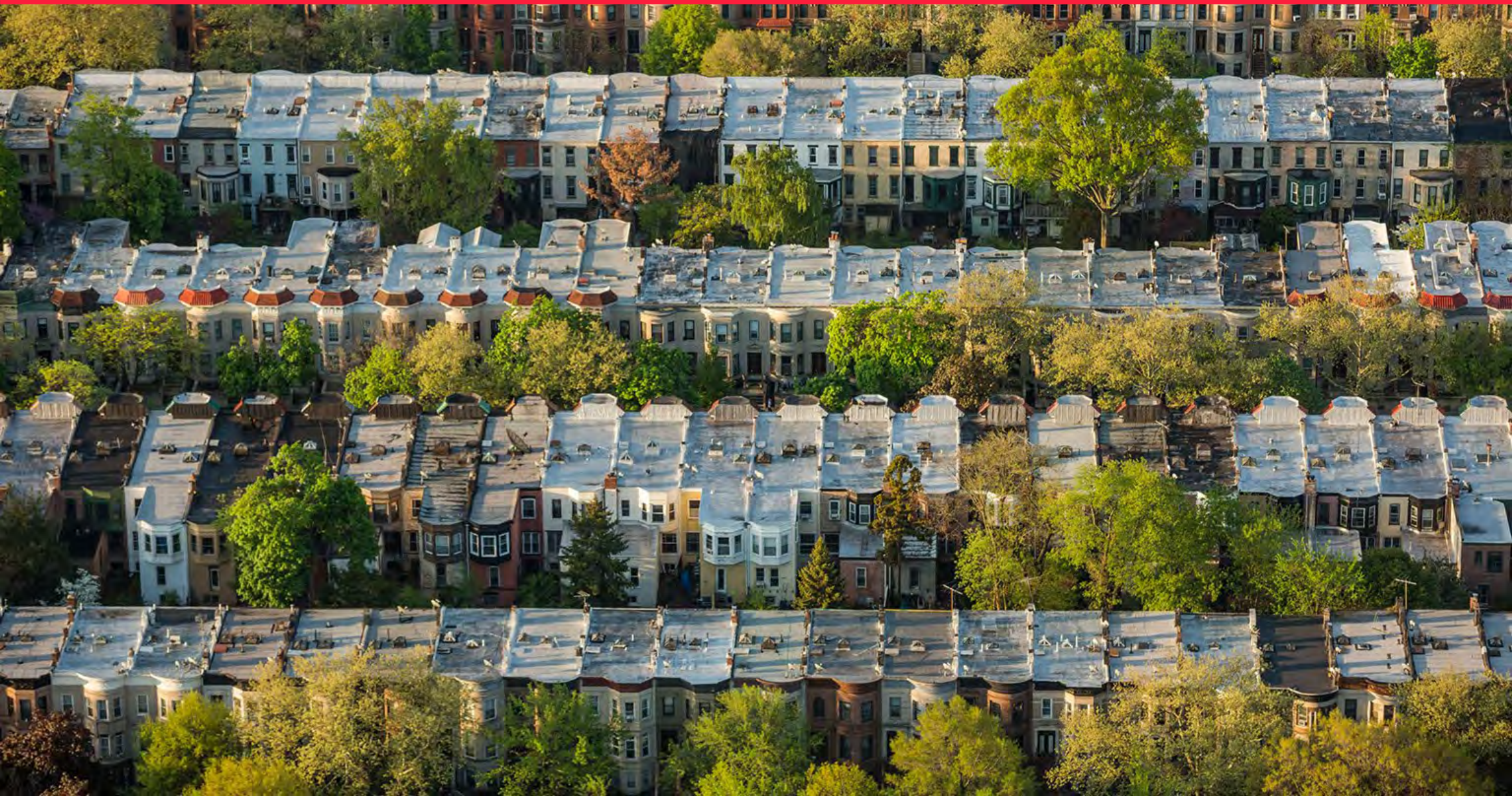
Taking solar to the next level

# Urban Habitat for Solar, Space for Urban People



1. Our Story
2. Canopy Tour
3. Applications

# Brooklyn, New York





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T.R. Ludwig

**CEO**



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Mark Cunningham

**CTO**



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Gaelen McKee

**PRESIDENT**



BROOKLYN  
SOLARWORKS

# The Flat Roof Challenge

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- Small,
- Crowded,
- Irregular,
- Fire Code Constrained
- Competing uses (ex. decks, green roofs)





# The Canopy Solution: Elevating Solar

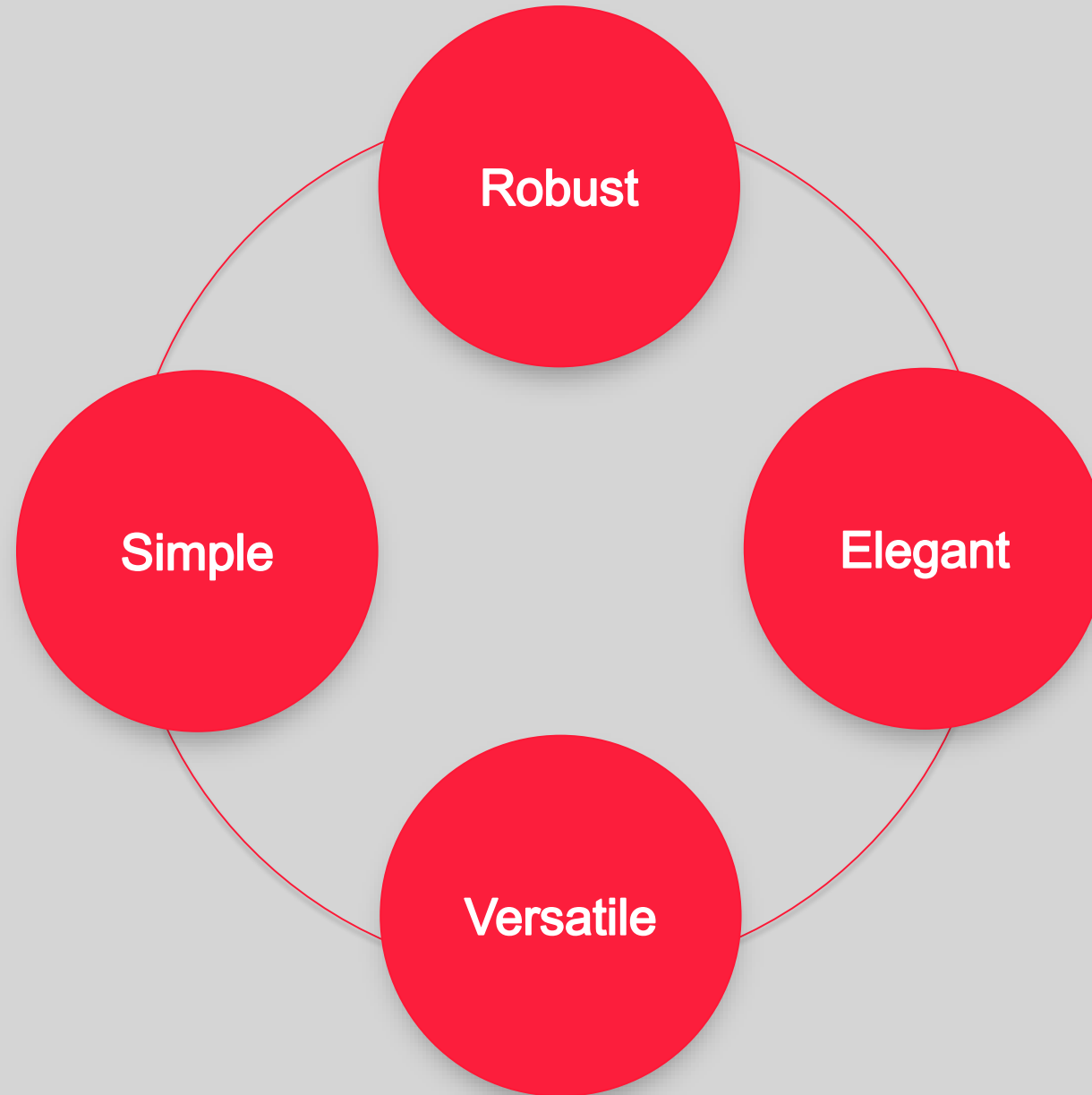
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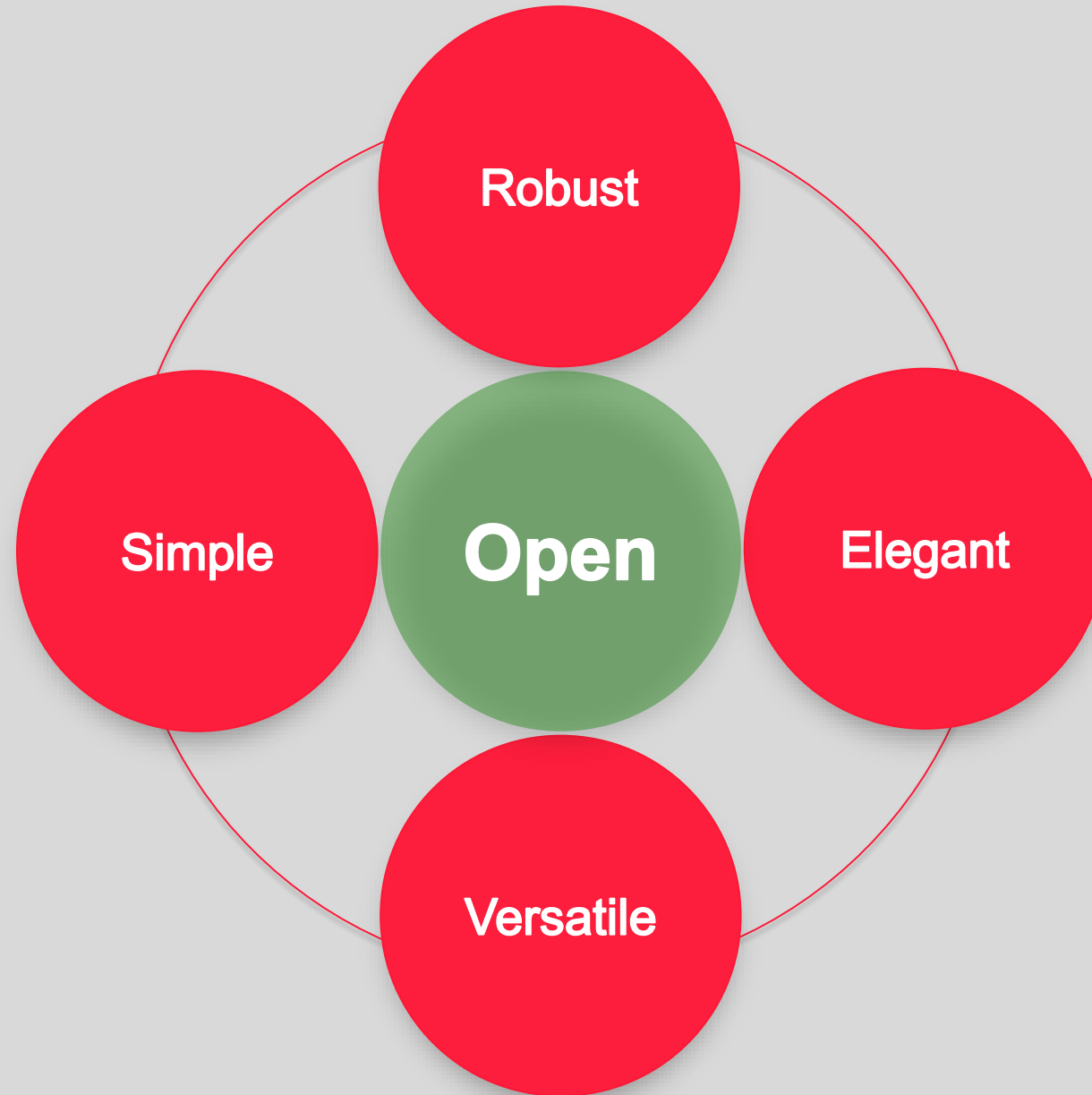
# Design

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# Design

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# 10 Month Design Collaboration

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**SITU/**

**BSE**

**B R O O K L Y N  
S O L A R W O R K S**

 **LED**  
laufs engineering design

★  
**MADE**  
IN THE USA  
★

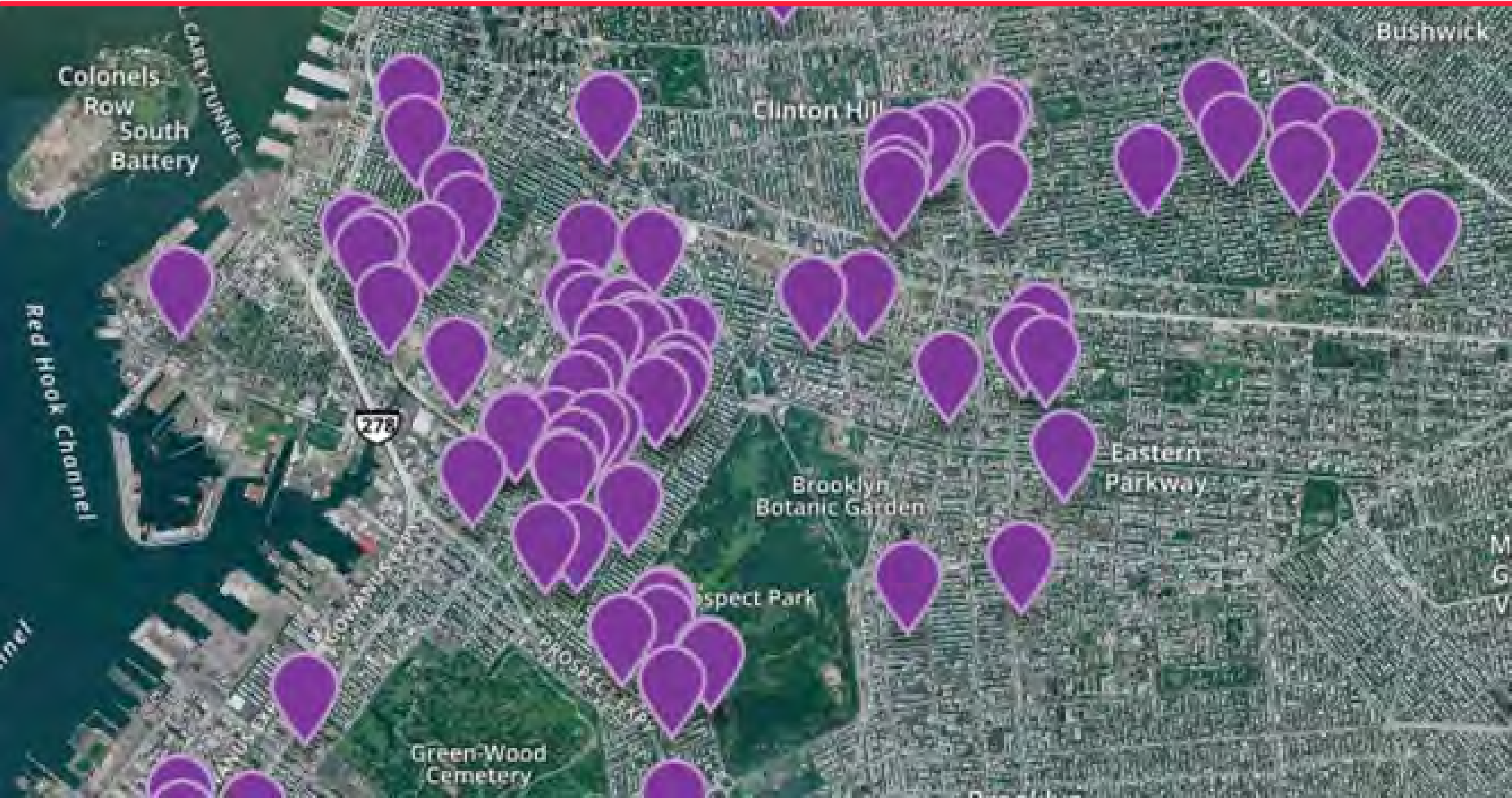
Warwick,  
Rhode Island



# November 2015: First Brooklyn Solar Canopy Installed



# 2018: 100 + Canopy Installations in NYC



# Residential Townhomes



# Small Commercial





# Multifamily Co-ops, Condos and Rentals



# March 2018: UL 1703 Certification

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# Awards

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Best of Year  
Green Design 2016



Best of NYC,  
Product Category (2018)



Popular Choice Winner  
Roof Category (2018)



Best of Design Awards,  
Smart Home Systems (2018)

# Media

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# January 2018: Brooklyn Solar Canopy Co. Launch

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Brooklyn Solar Canopy Co.

# June 2018

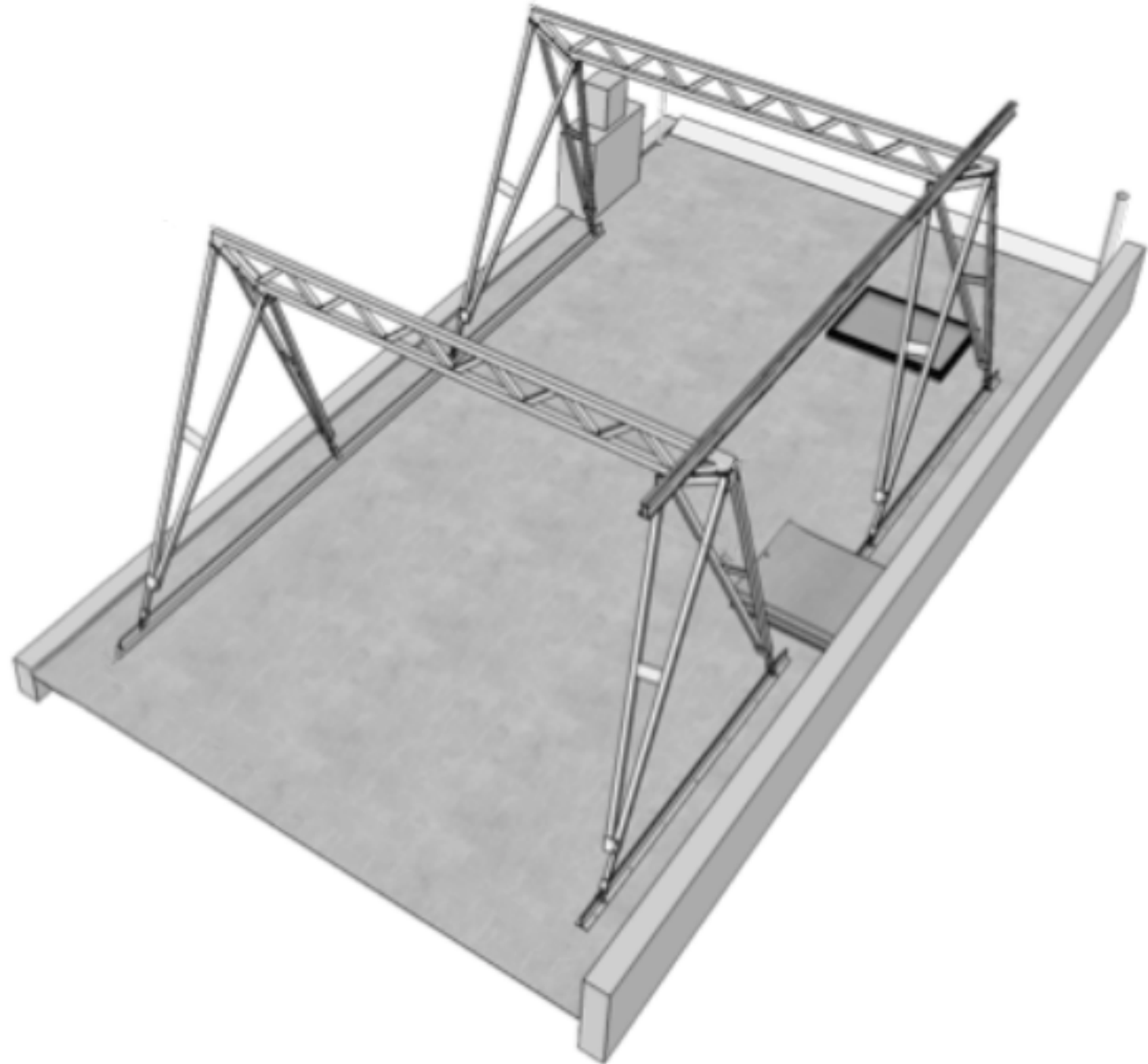
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- NYSERDA Megawatt Block Rooftop Solar Canopy rebate introduced in ConEdison Territory
- \$.30/watt for commercial meter projects < 25 KW



1. Our Story
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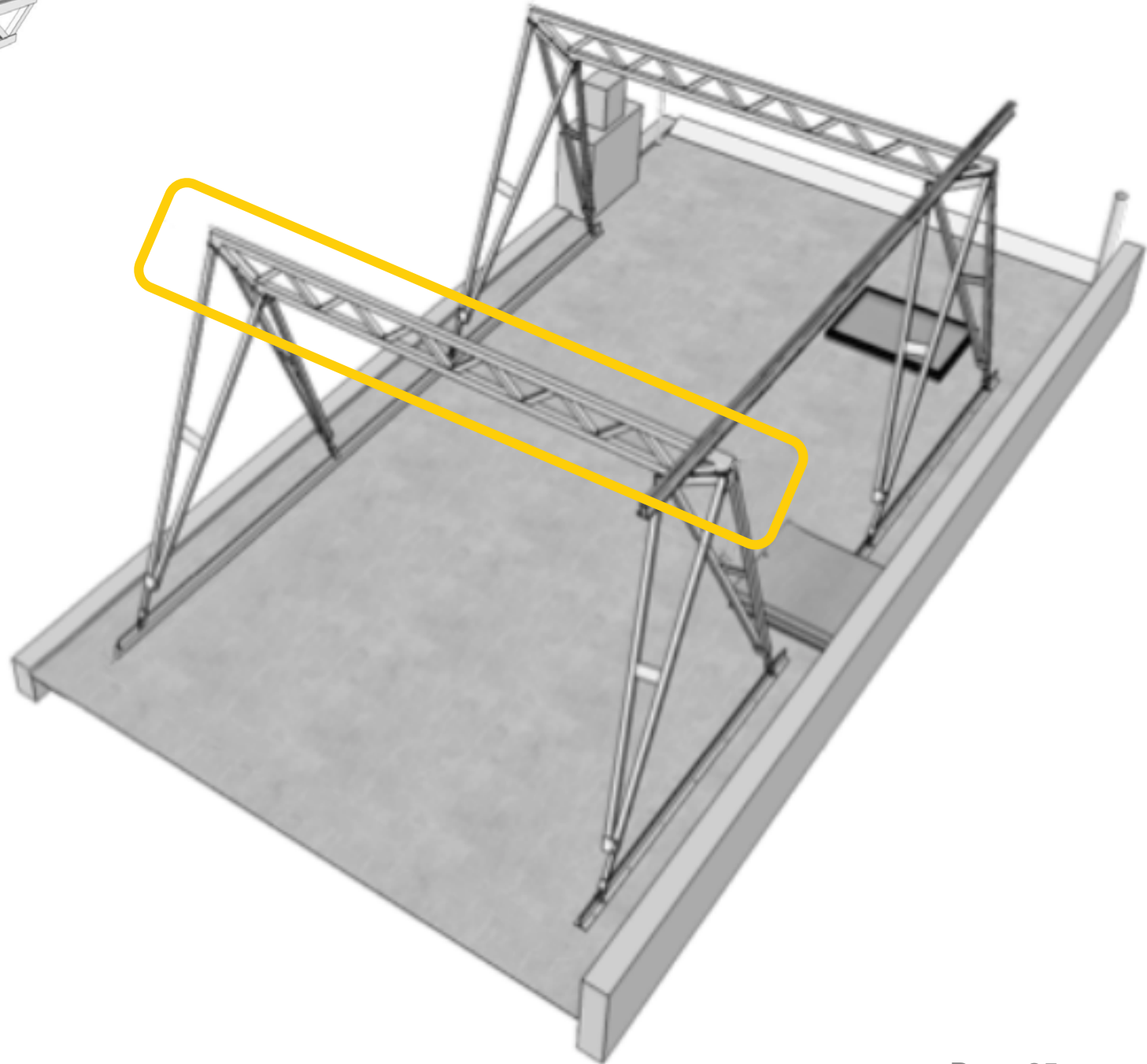
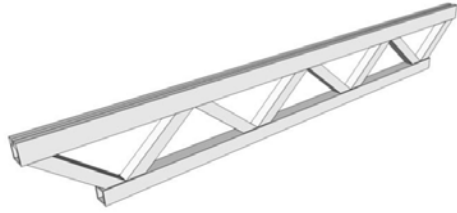
# Components and Assembly





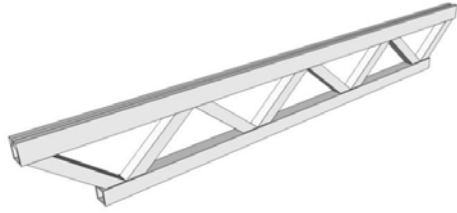
# Truss

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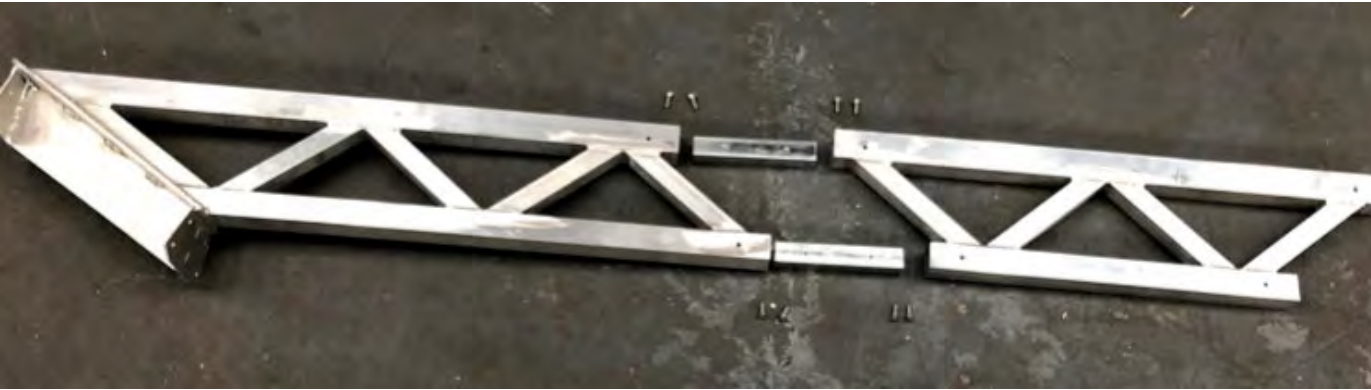


# Truss

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Spliced for easy transport



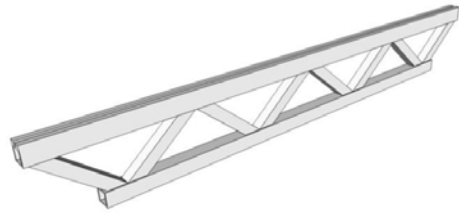
Right Socket

Splice Bar

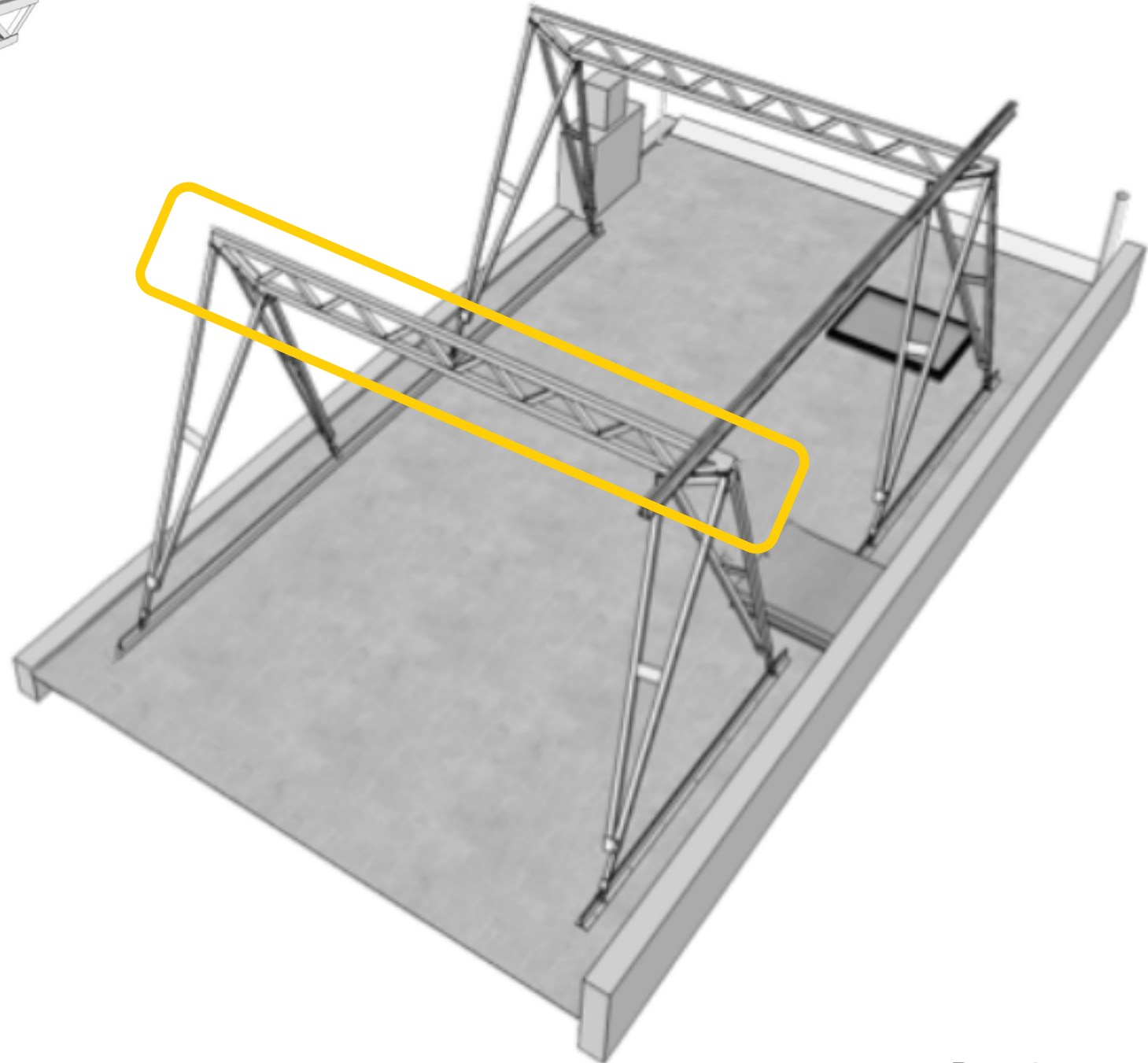
Center Piece



# Truss

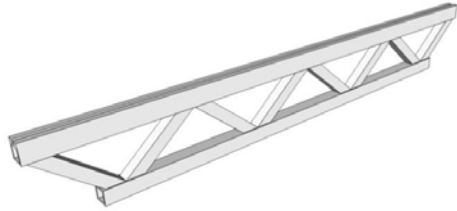


- 26' Maximum span
- 15' of unsupported span length

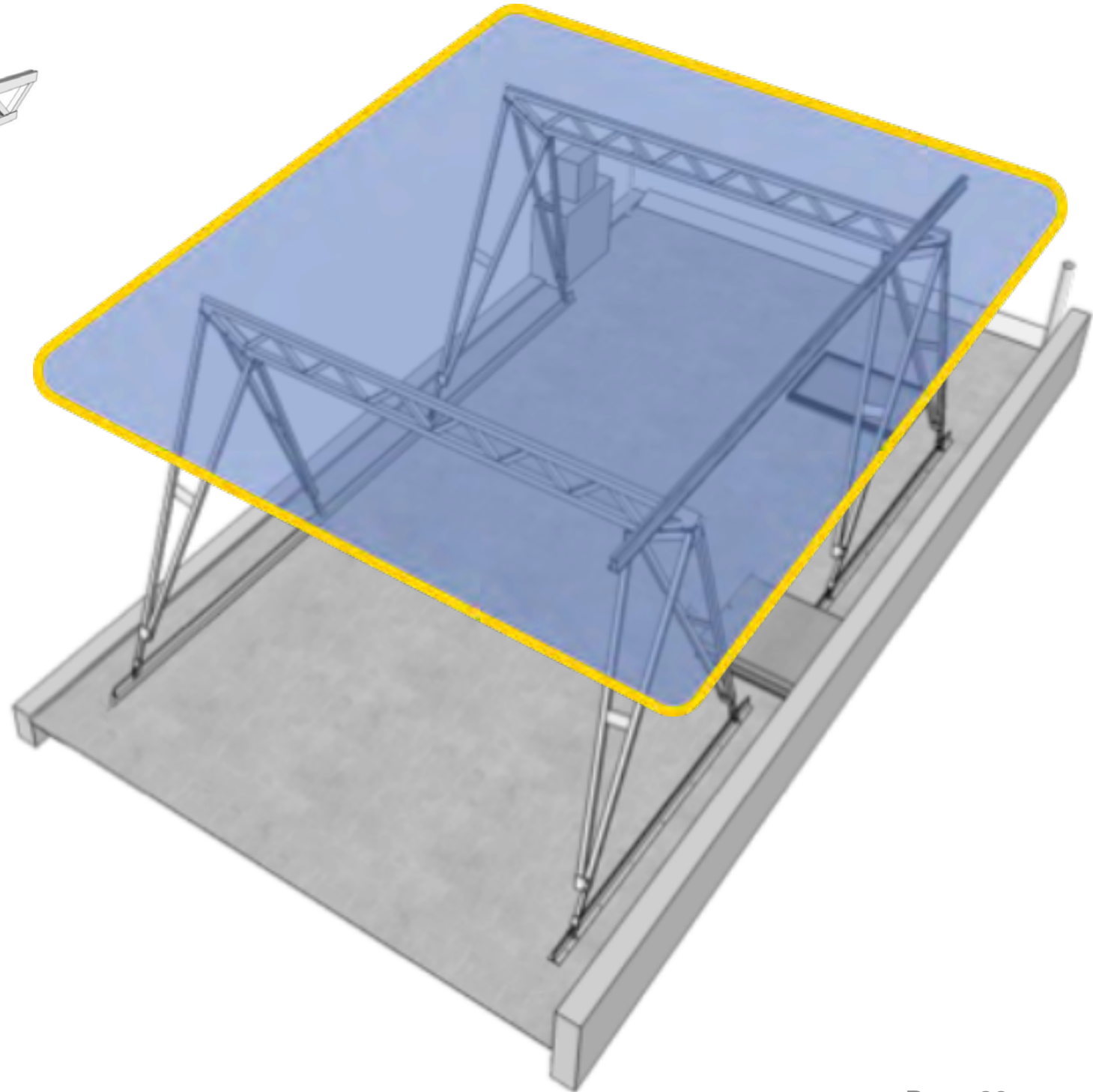


# Truss

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- 6' Max module cantilever off front and back truss
- 12" Max module cantilever off side rails



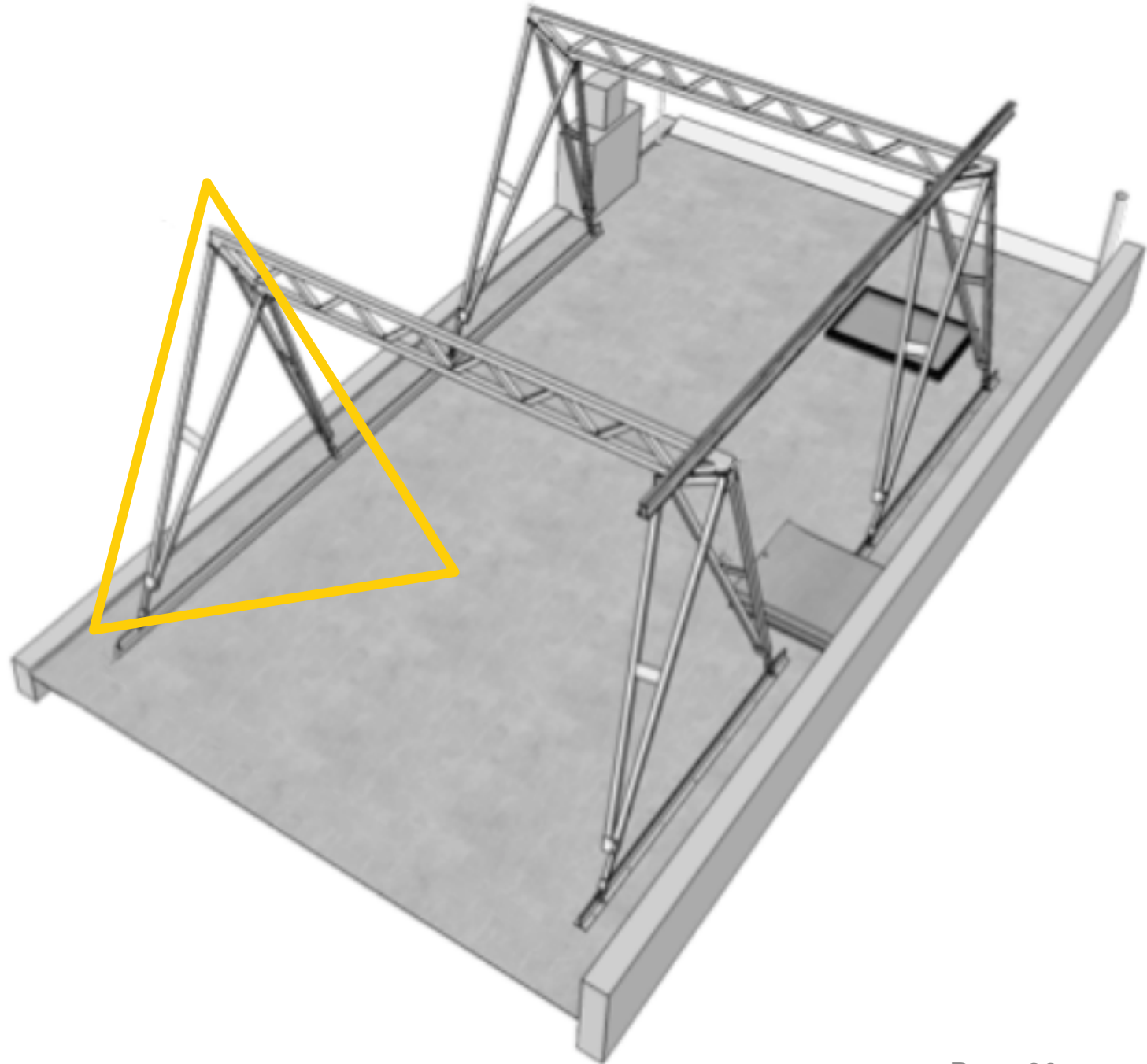
# Module – Truss Ratio

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# of PV Modules*	# of Trusses	System Capacity (KW)
15-21	2	5.4-7.5
24-30	3	8.6-10.8
33-39	4	11.9-14.0

\* Reference module: LG/SunPower 360 (60 cell)

# Leg and Foot



# Leg and Foot

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- **13'** Max height (determined by specific project requirements)
- Width adjustable to increase and decrease height
- Point load distributed across **2-3** rafters

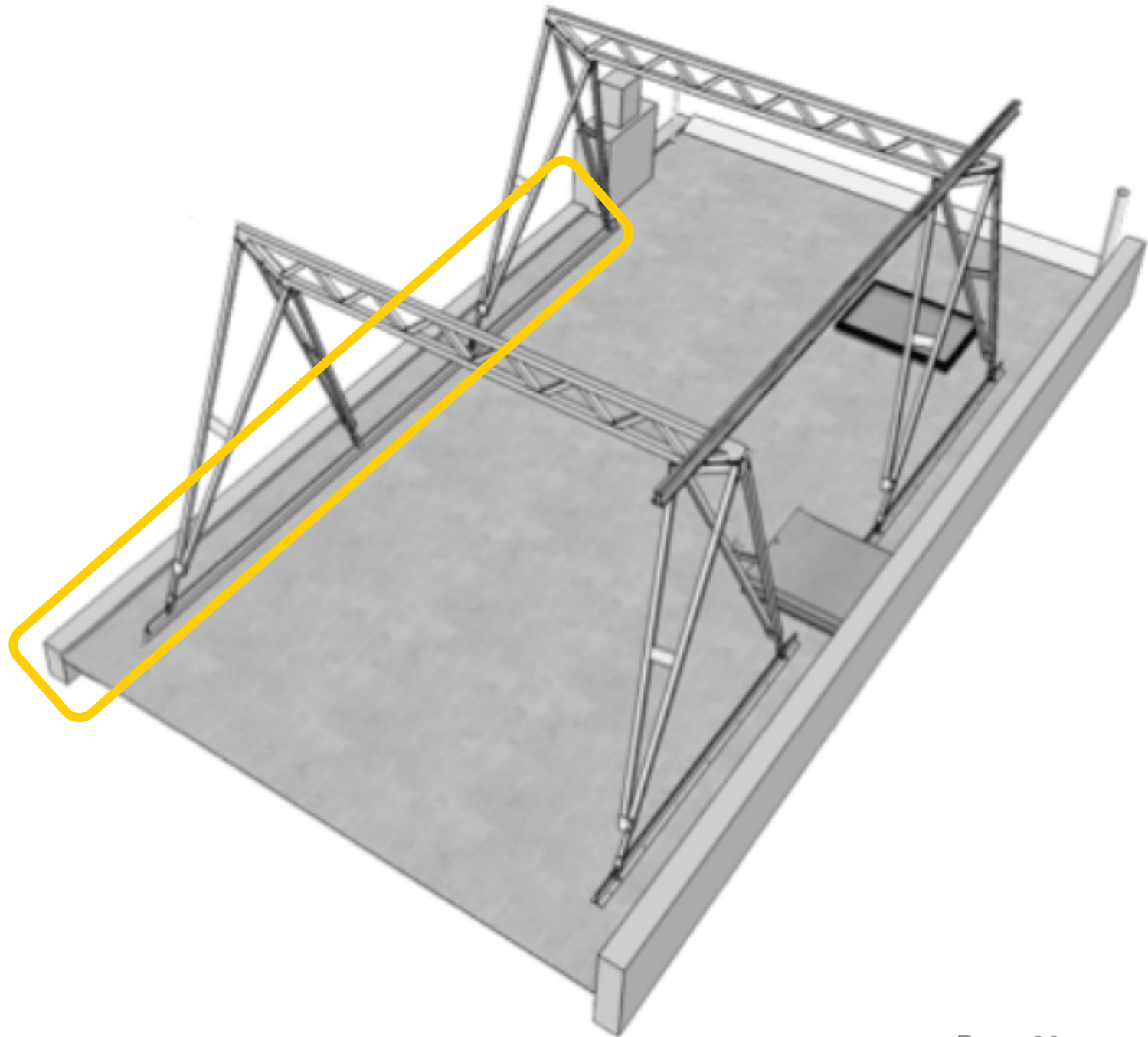






# T-Track

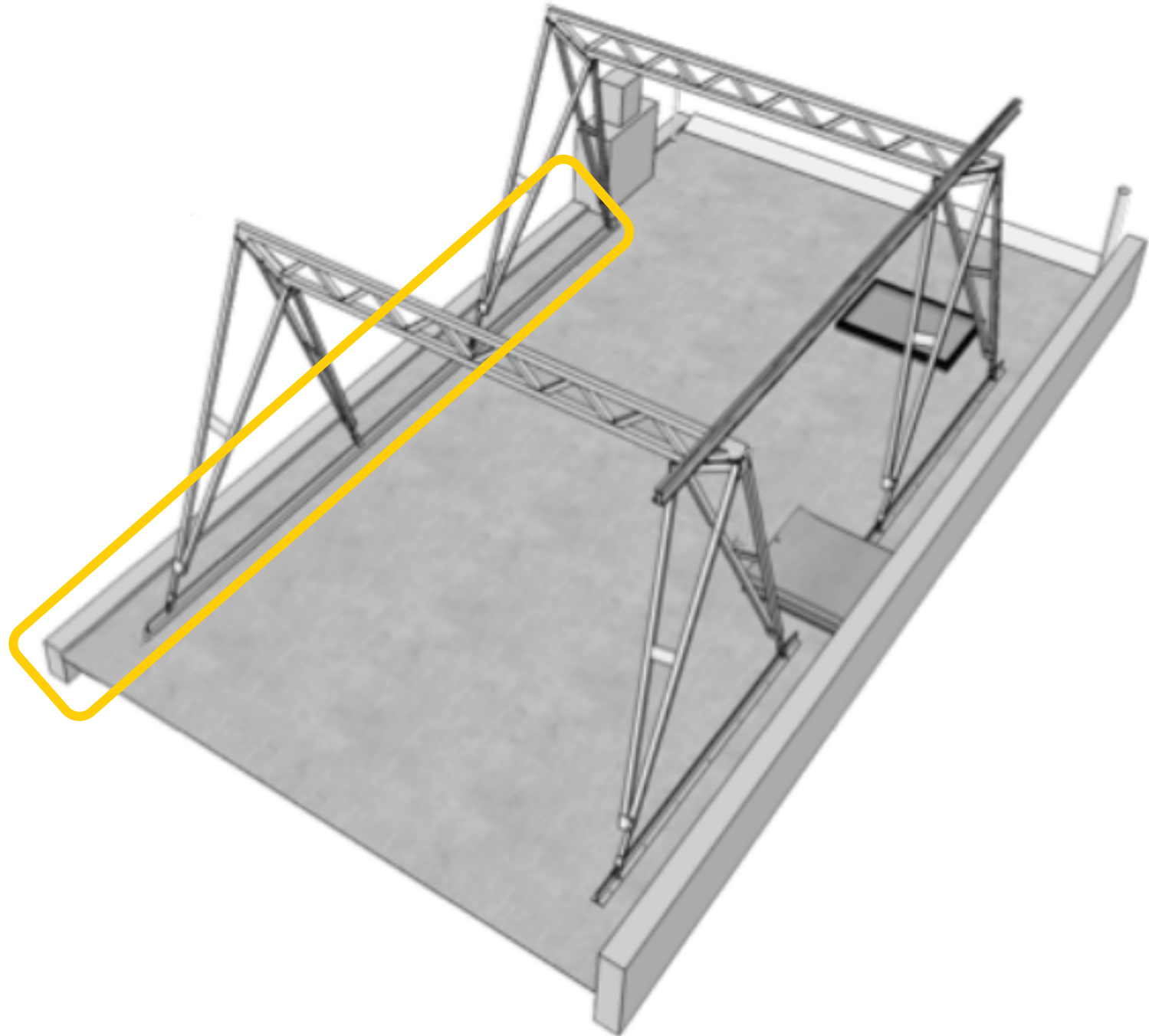
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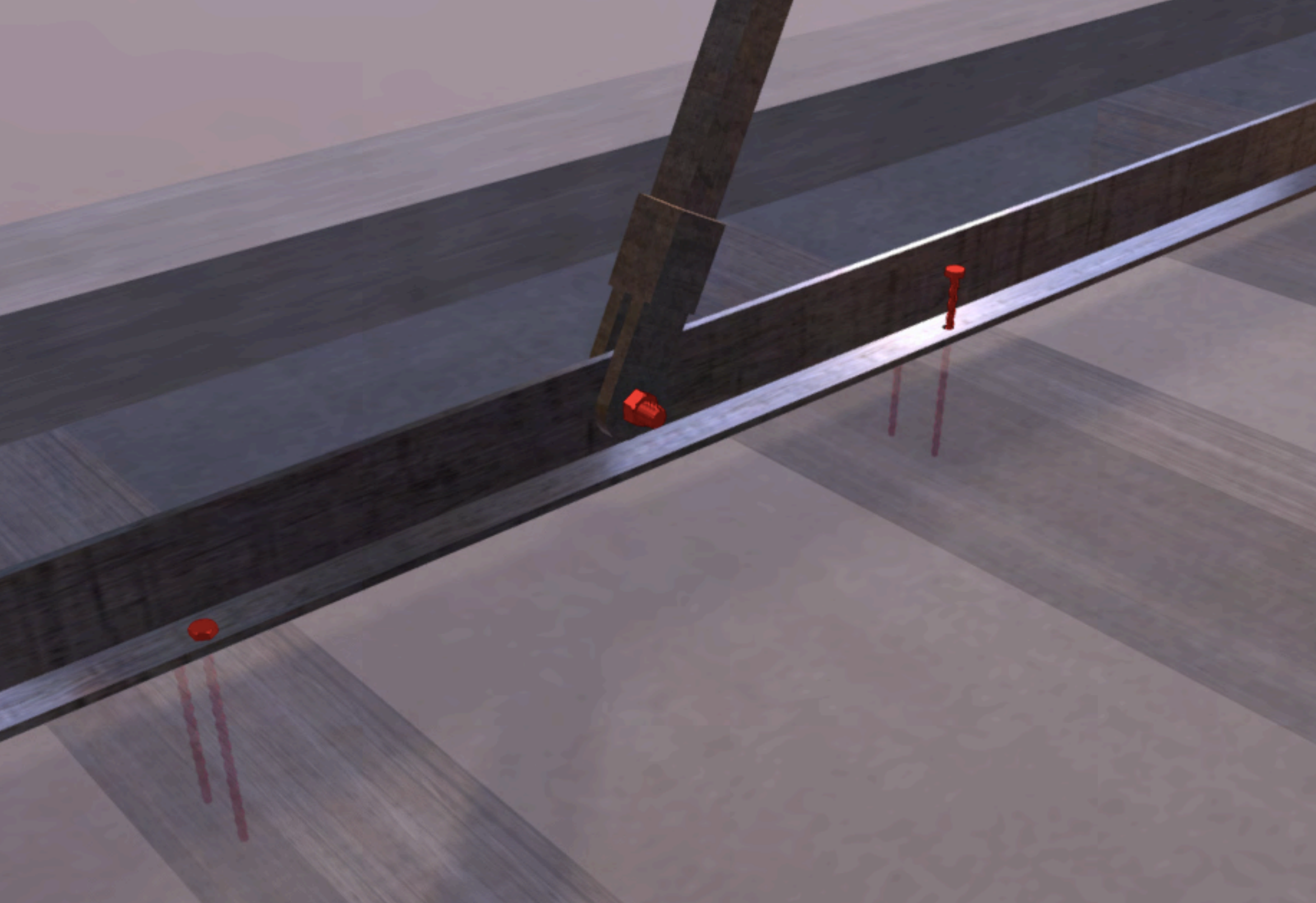


# T-Track

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- Attached on roof surface within **18'** of load bearing wall
- Cut in single or multiple segments depending on roof requirements

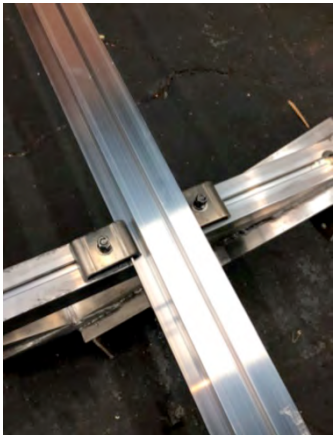
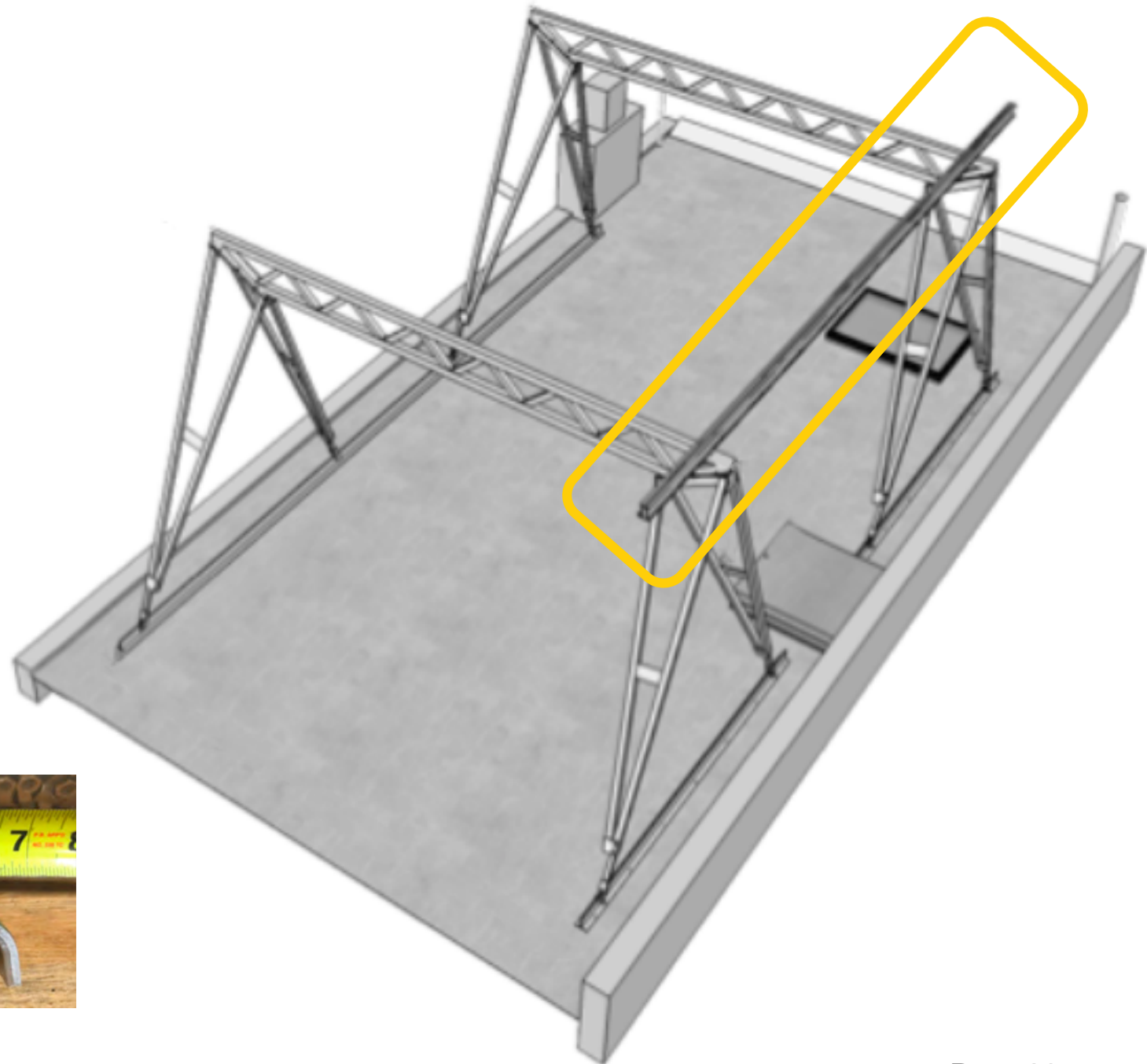




# Rails and Fasteners

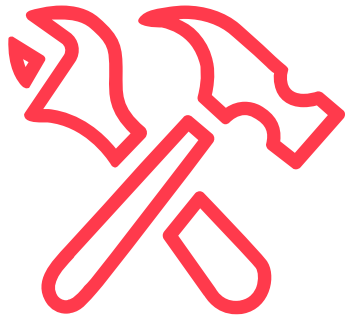
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- Truss clamp with channel bolt for rapid assembly



# Engineering

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## Materials

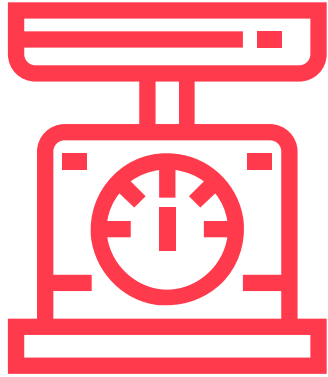
6000 Series  
Aluminum; Mill  
Finish (powder  
coat optional)



Maley Laser manufacturing facility  
Warwick, R.I., 2018

# Engineering

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Load  
23,000 lbs per  
truss



Maley Laser manufacturing facility  
Warwick, R.I., 2018

# Engineering

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Windload

110 mph



Maley Laser manufacturing facility  
Warwick, R.I., 2018

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# Small Residential



# Multi-Family

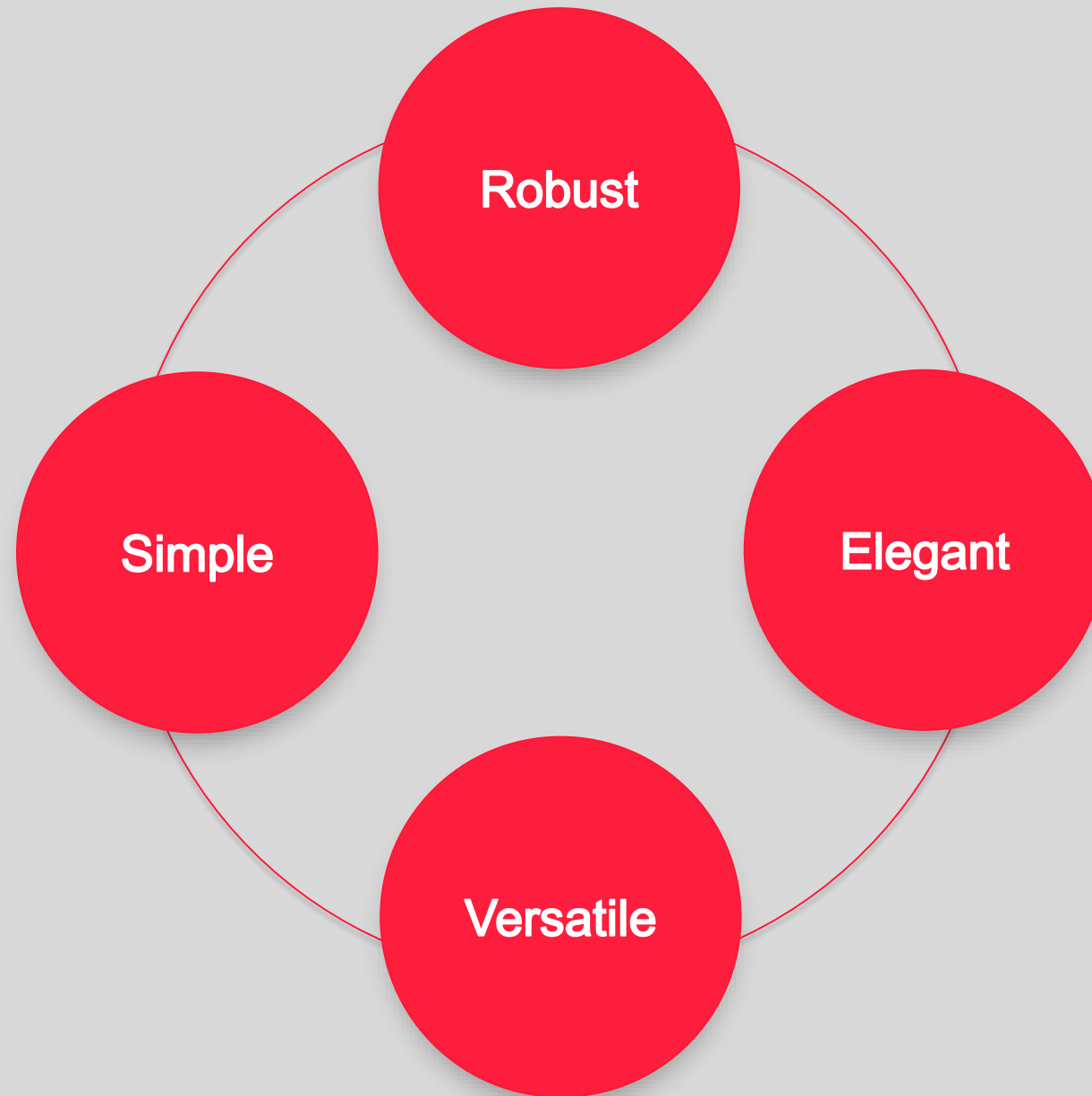


# Small Commercial



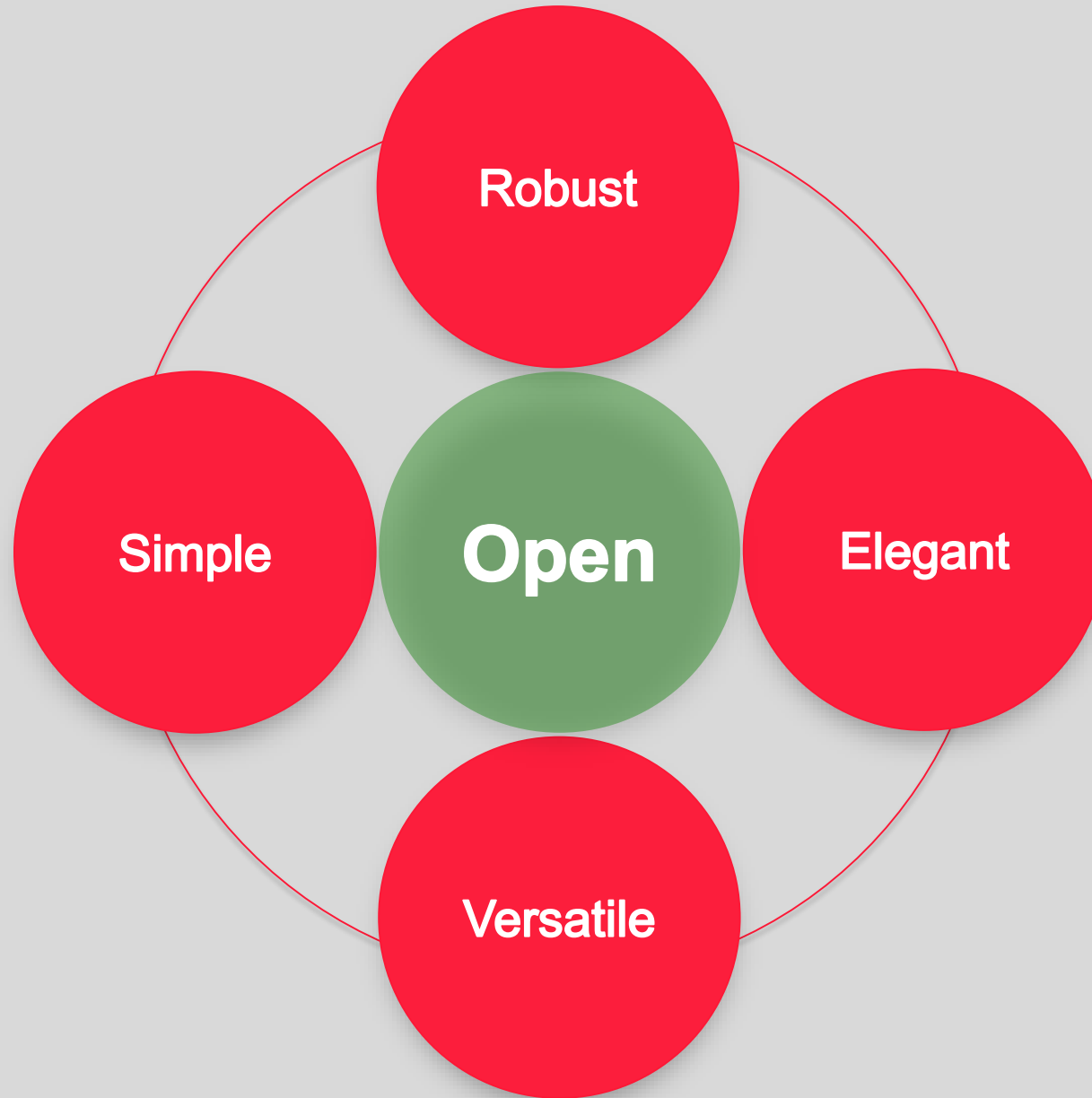
# Design

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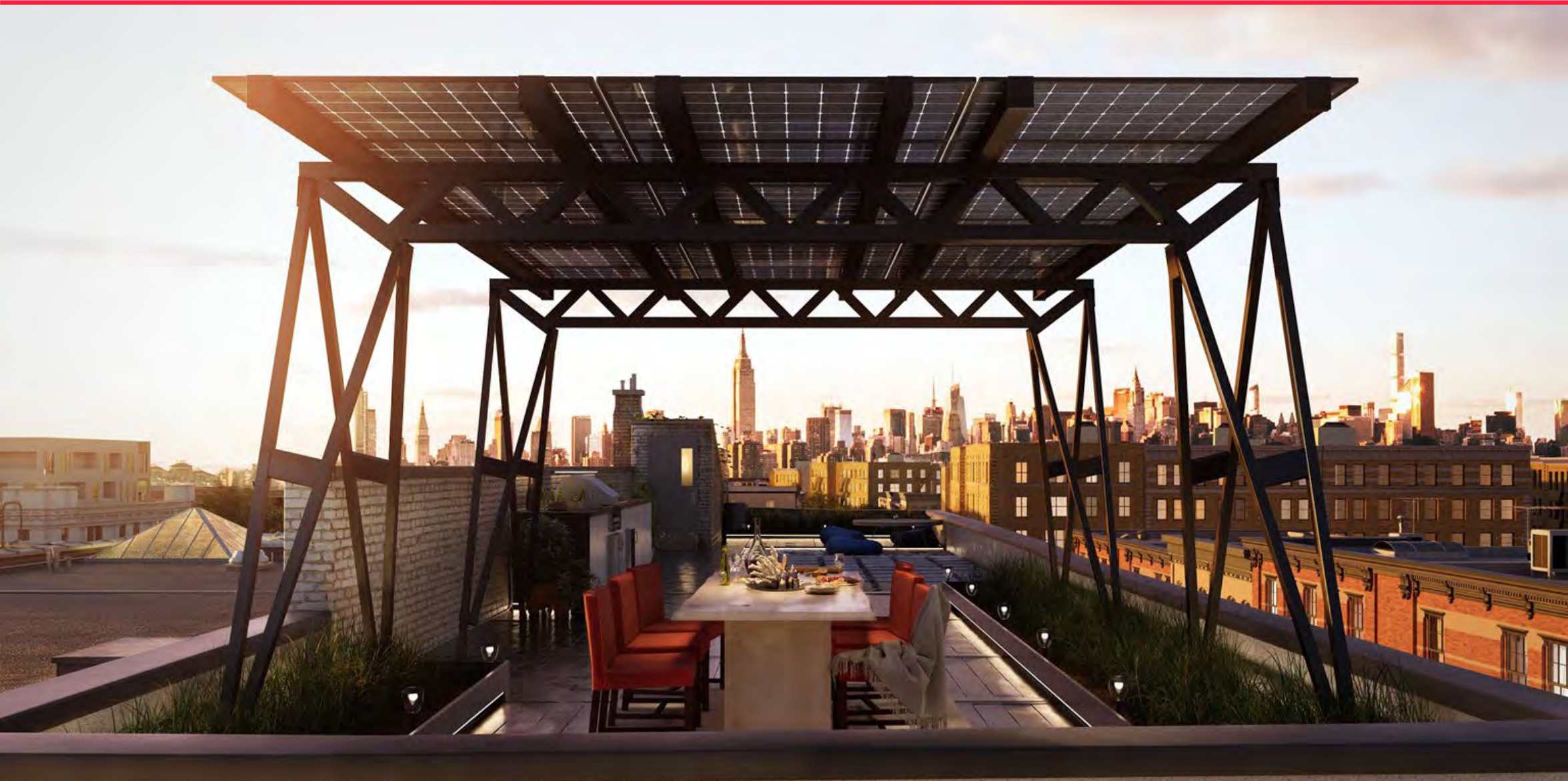
# Design

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# Roof Decks and Amenity Spaces

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# Ground Mount: Carports



# Ground Mount: Backyard Pergolas



# Thank You

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- [Video 1: “Introducing the Brooklyn Solar Canopy”](#)
- [Video 2: “Solar Living”](#)

