




Mission: Deliver **transformative**
construction **solutions** to fulfill our
vision of **better cities.**

RAD
U R B A N

CHAPTER 1:

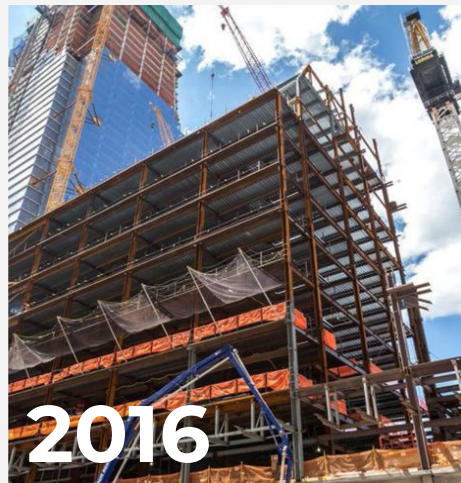
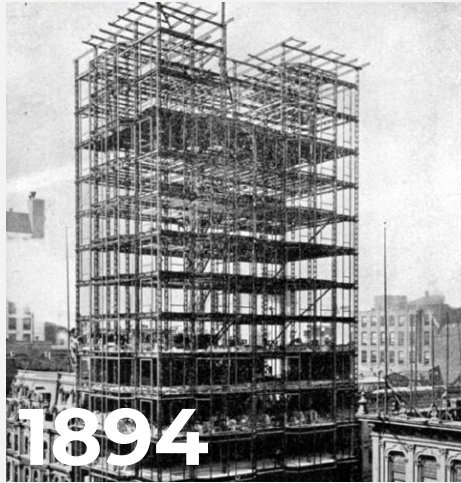
WHY TRANSFORM CITIES, CONSTRUCTION, MODULAR ...



An aerial photograph of a coastal city, likely San Francisco, showing the city's layout, the bay, and the surrounding mountainous terrain. The city is situated in a valley, with the bay to the west and mountains to the east. The text is overlaid on the top right portion of the image.

WE HAVE AN UNDENIABLE NEED FOR
AFFORDABLE LIVING WITHIN OUR URBAN CENTERS
WHAT IS KEEPING THIS NEED FROM BEING MET?

CONSTRUCTION HAS NOT CHANGED





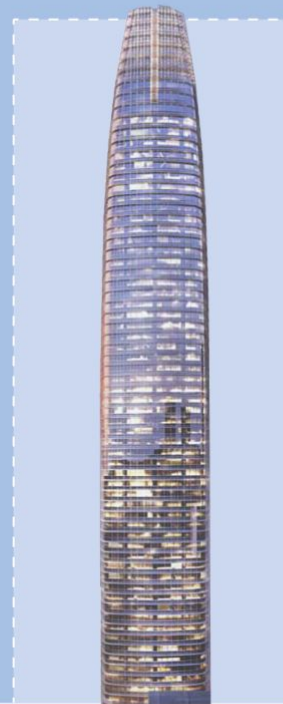
EMPIRE STATE

1930
13 MONTHS
1,250' TALL

SKILLED LABOR

BUILT DURING THE
DEPRESSION

CONTINUOUS WORK
THROUGHOUT THE WEEK

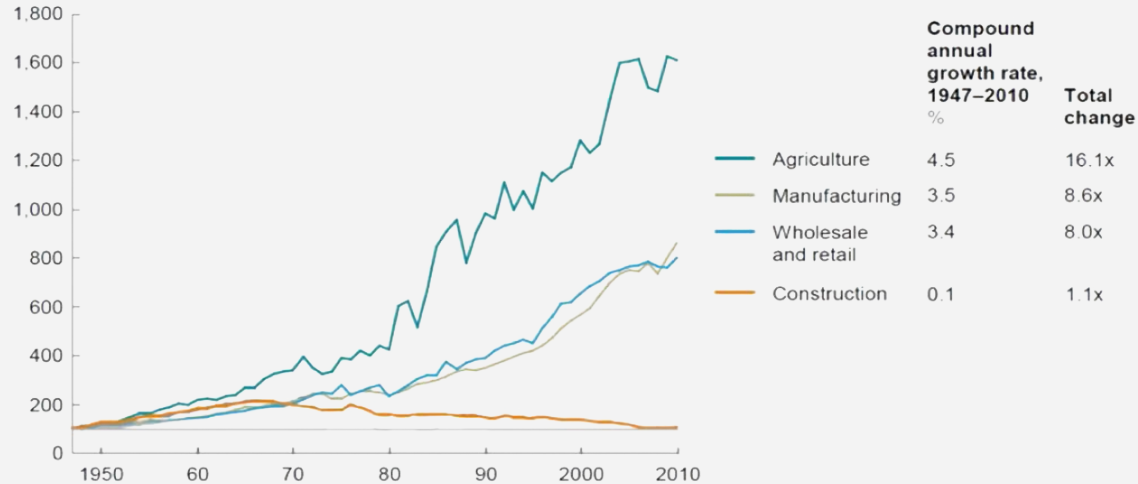


SALESFORCE

2013
5 YEARS
1,070' TALL

THE CONSTRUCTION INDUSTRY COMPARED TO OTHER INDUSTRIES

Index: 100 = 1947



Many sectors have transformed and achieved quantum leaps in productivity; construction has changed little, limiting productivity gains

Key advances, 1947–2010

Agriculture

Leveraged scale through land assembly and automation; deployed advanced bioengineering to increase yields

Manufacturing

Implemented entirely new concepts of flow, modularized and standardized designs, and aggressively automated to increase production

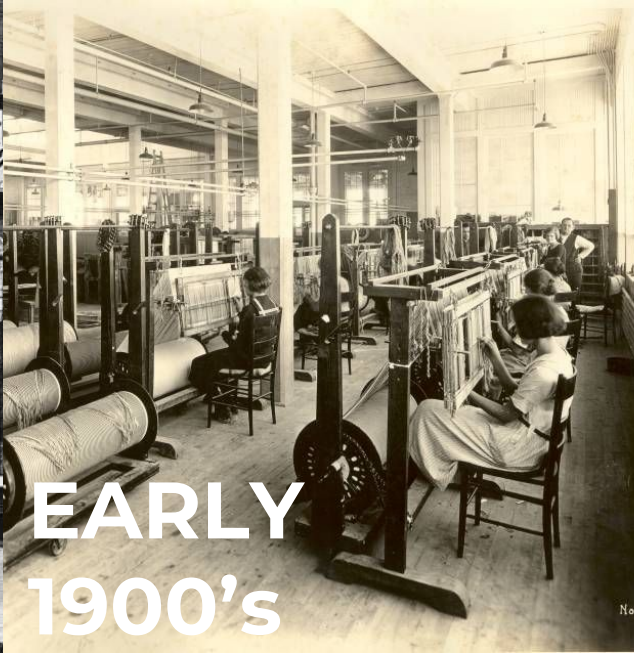
Retail

Utilized scale advantages and cutting-edge logistics to provide affordable goods to the masses

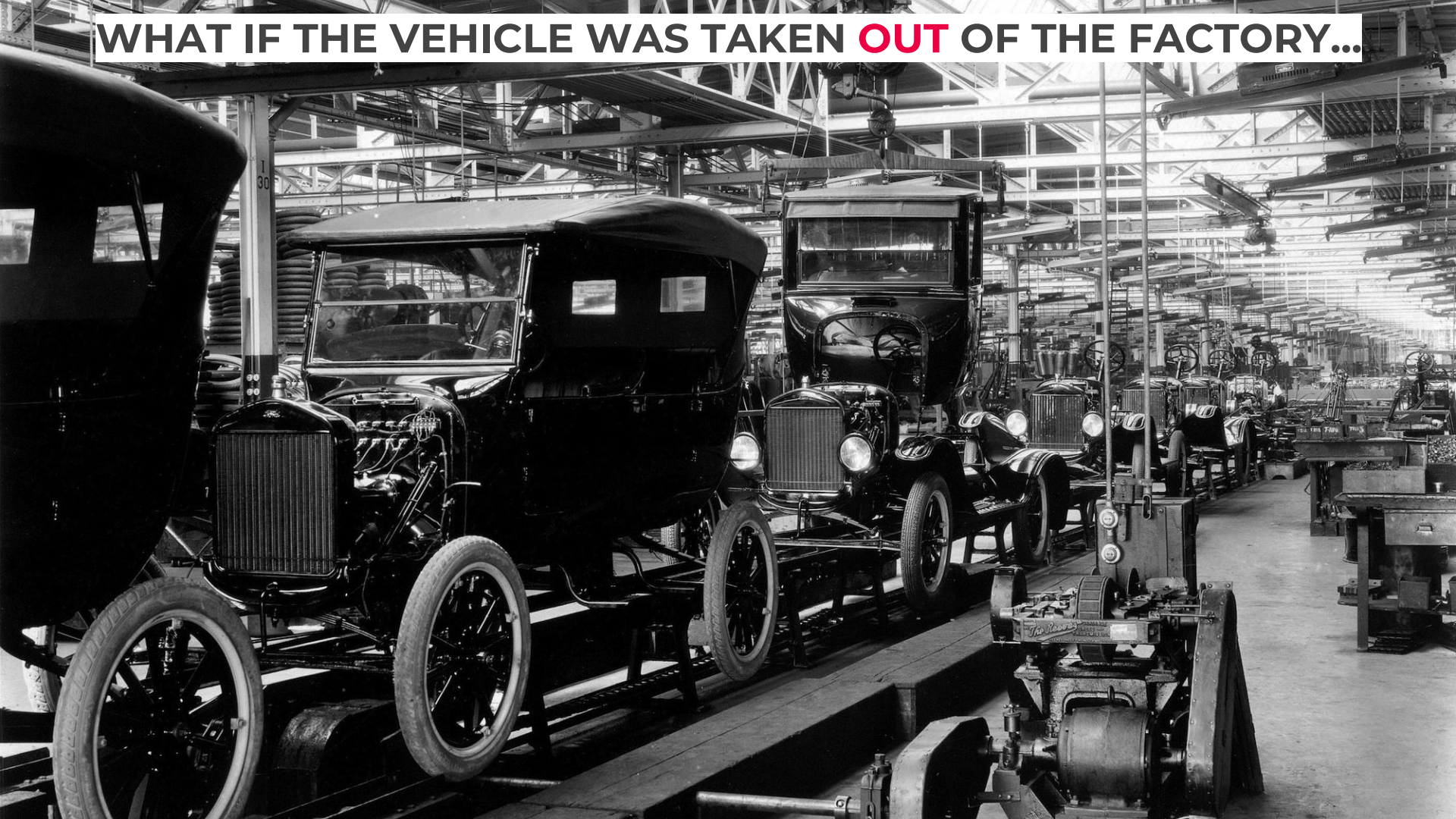
Construction

Limited improvements in technological capabilities, production methods, and scale

OTHER SECTORS HAVE EXPERIENCED MAJOR CHANGE

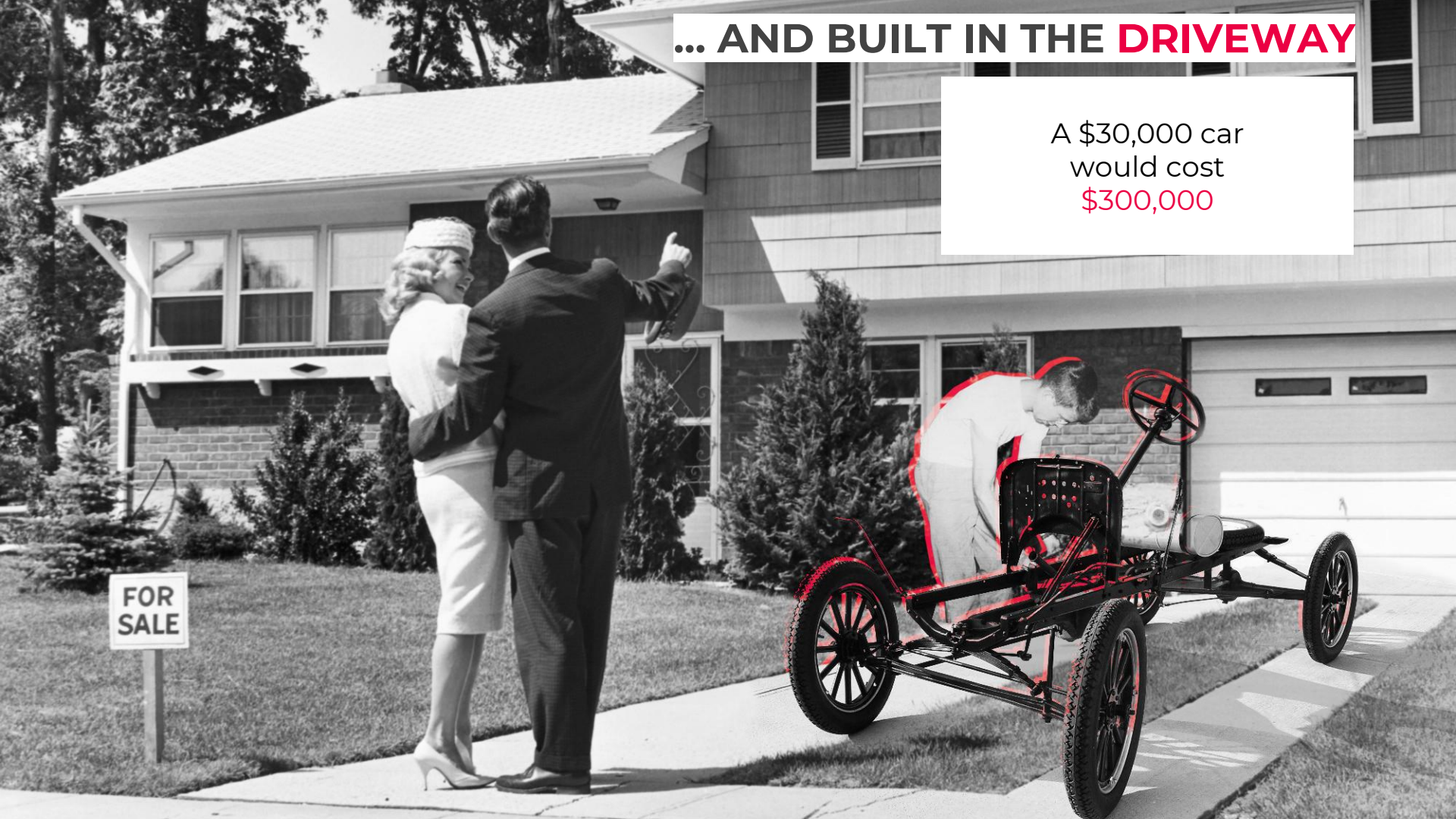


WHAT IF THE VEHICLE WAS TAKEN **OUT** OF THE FACTORY...



... AND BUILT IN THE **DRIVEWAY**

A \$30,000 car
would cost
\$300,000





TRANSFORMING AN INDUSTRY

In order for construction to become affordable its process must drastically change.

Manufacturing is our solution.

TRANSFORMATION IN BUILDING CONSTRUCTION



1930



2016



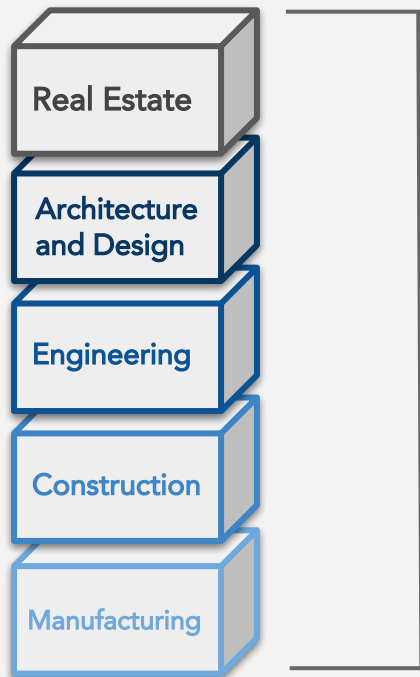
NOW

CHAPTER 2:

HOW WE BEGAN



STEP 1: SIMPLIFY THE PROCESS



VERTICALLY INTEGRATED TEAM

- Aligned Incentives
- Improved Communication
- Expedited Process
- Lower Cost
- Higher Quality

STEP 2: THE PERFECT MODULAR PROJECT

2201 DWIGHT:

MODULAR CONSTRUCTION BEGINNING



THE SEARCH FOR MODULES BEGAN

- ☒ Ceilings above 8'
- ☒ Non combustible construction
- ☒ Local / less time on the road
- ☒ Mostly finished - inside and outside

WOOD MODULES:

6-SIDED MODULE MANUFACTURERS

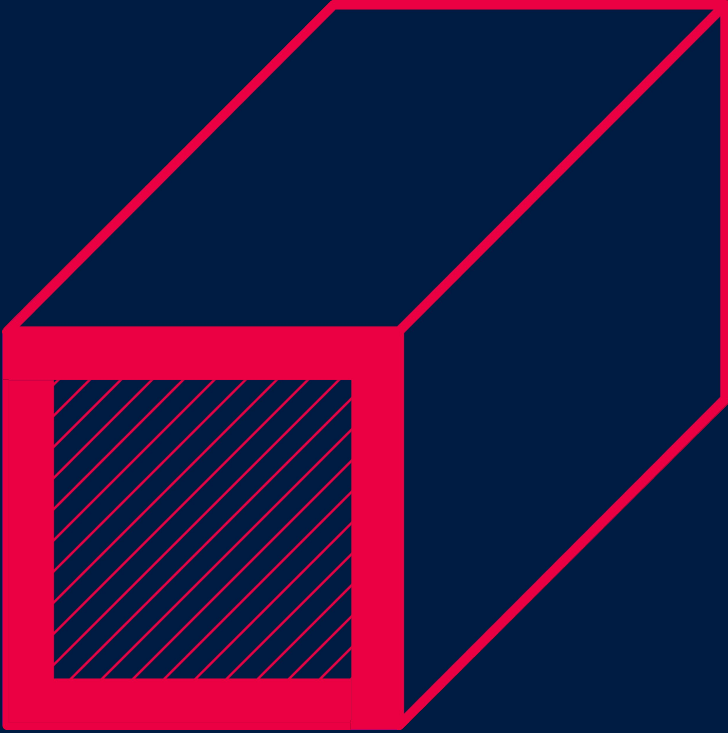


Ceiling-Floor
Redundancy



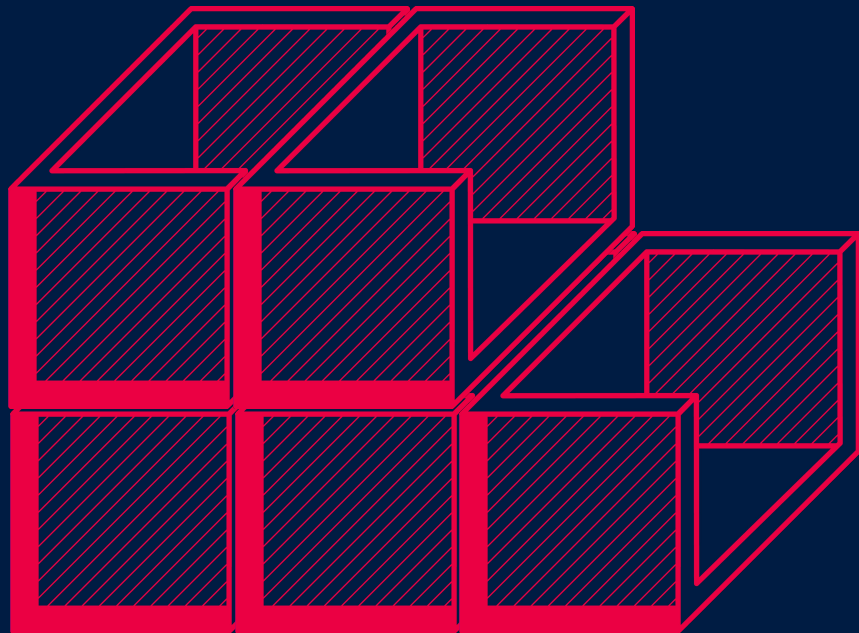
Wall-Wall
Redundancy

6-SIDED TO 4-SIDED

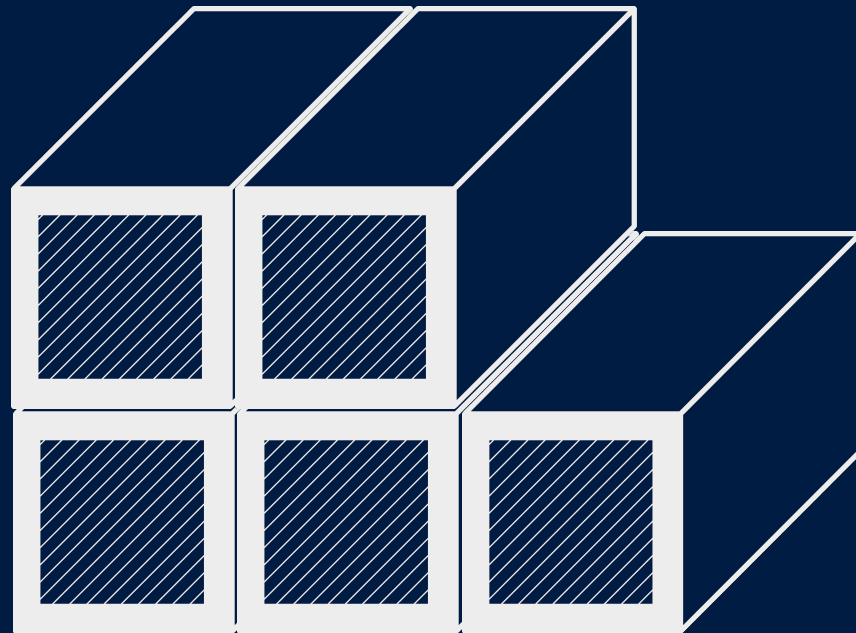


- “L” shaped, open top and open side
- 30% material reduction

STACKING UP THE DIFFERENCE



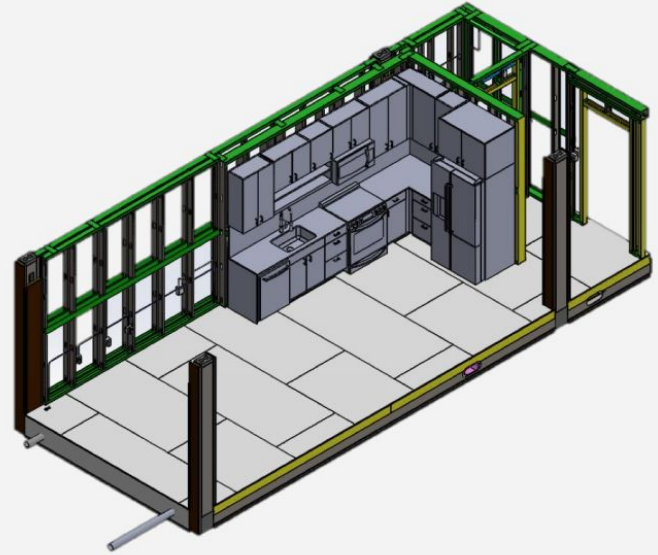
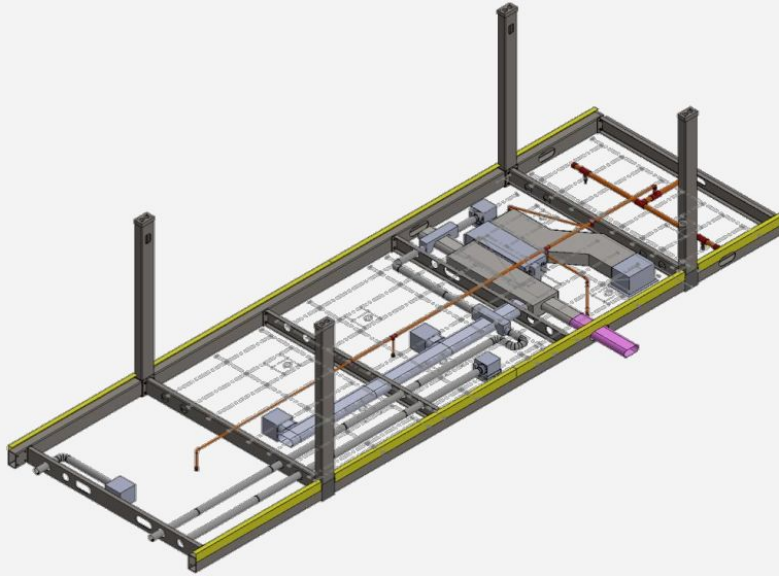
- No redundancy
- Taller interior space
- Increase in square footage



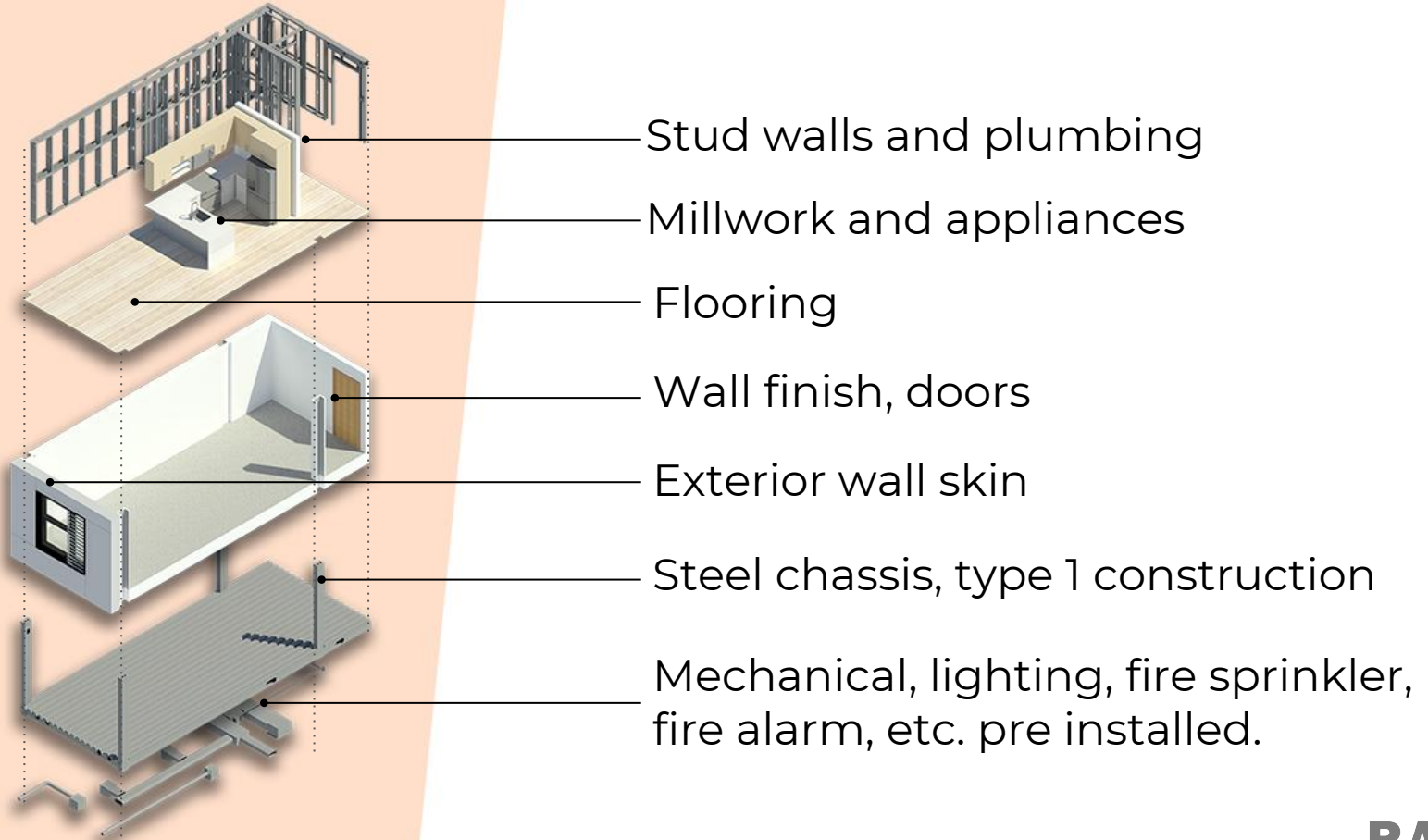
- Redundant floor / ceiling
- Lower unit heights
- Wall / wall redundancy

RAD BLOC MODULE:

INCLUDES ALL SYSTEMS AND FINISHES



RAD BLOC



PRODUCT: MODULES



MODULE STACKING: PRECISION TO ENSURE QUALITY



[Link](#)



2201 DWIGHT:

DESIGN VERSION-2

A GREAT SUCCESS

Residential


Height: 75 feet

Gross Area: 73,776 sq ft

Construction: Type II Modular

TransForm: Platinum

Project Value: \$65 Million

 **AIA** : National Citation award for innovation

 **AIA** : California merit award for design

CHAPTER 3:

SCALE UP AND UP AND UP



STEP 3: SCALE UP

Module Catalog



Standardization



Lean Manufacturing

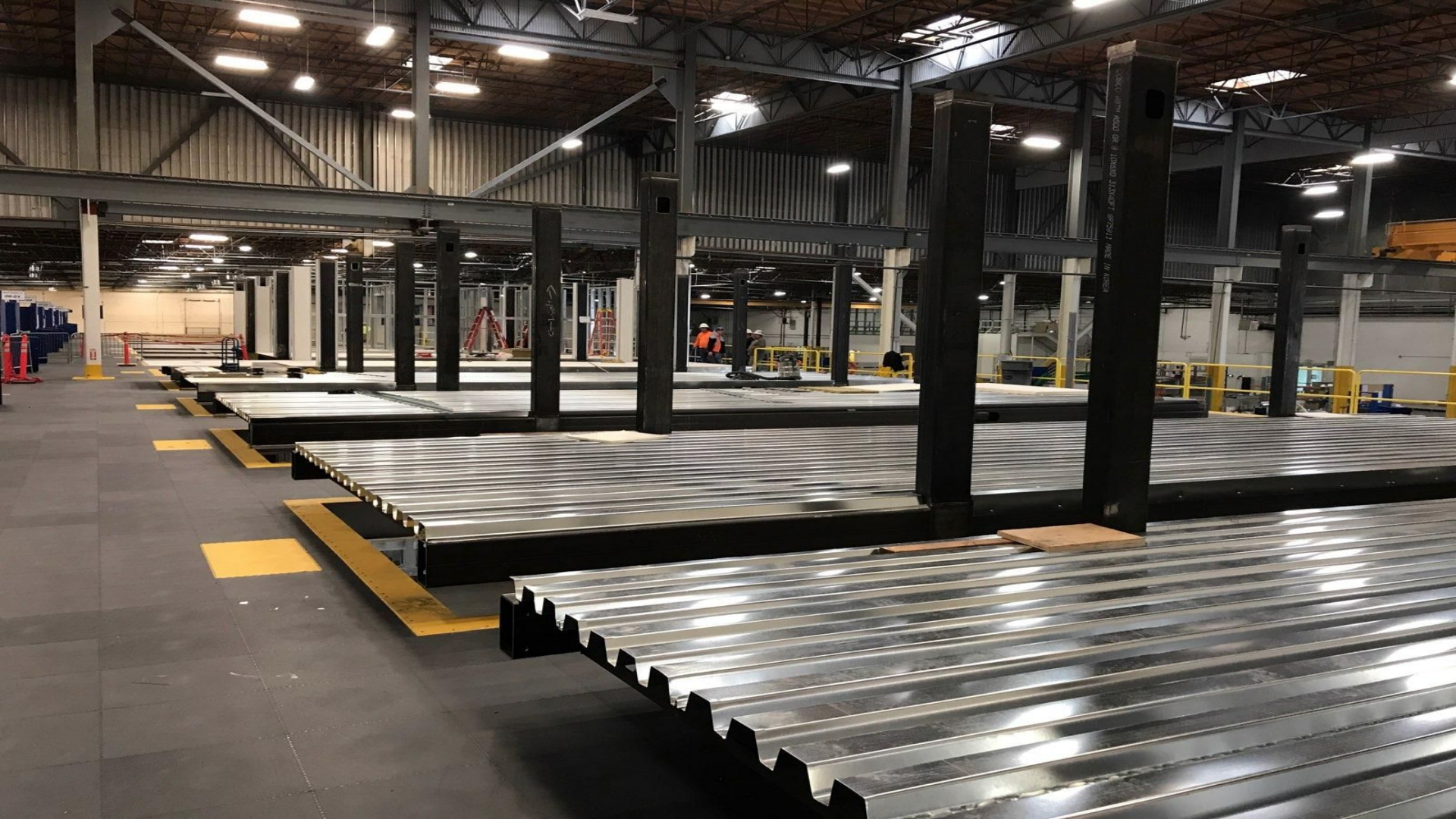


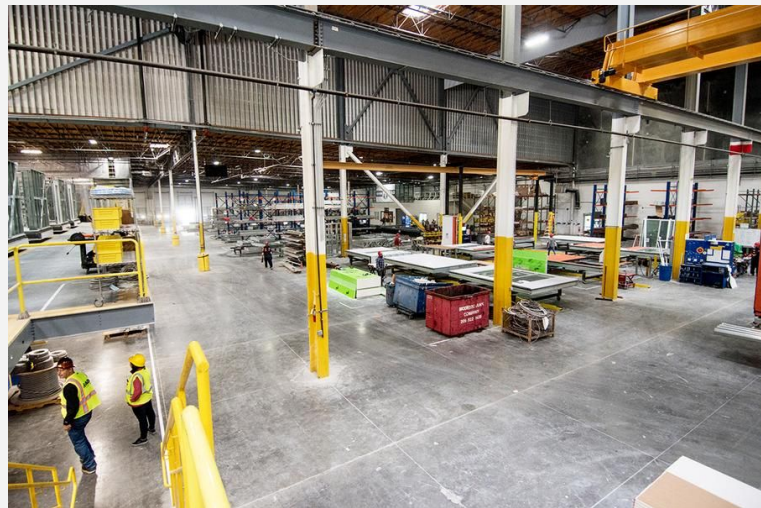
Scalable

D4 PRODUCTION LINE



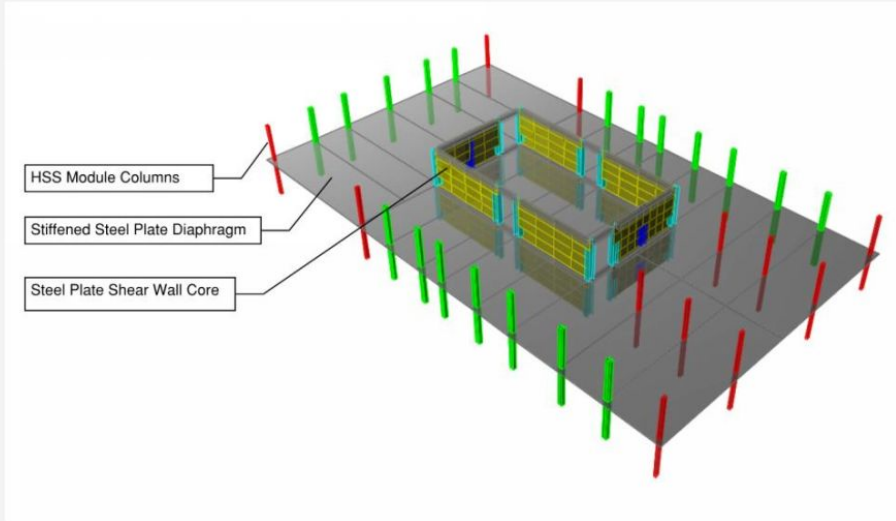




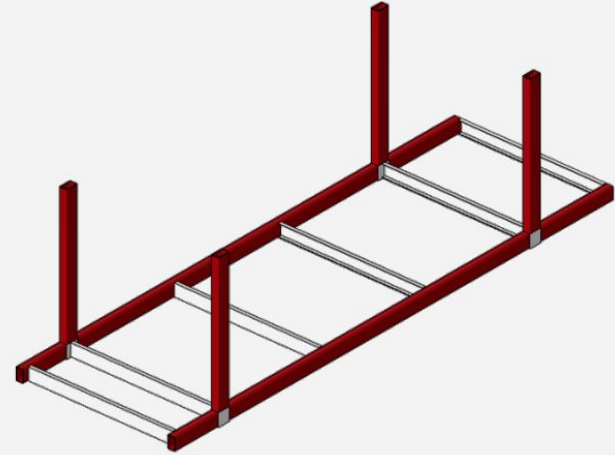




STEEL CHASSIS: HIGH-RISE CAPABILITY

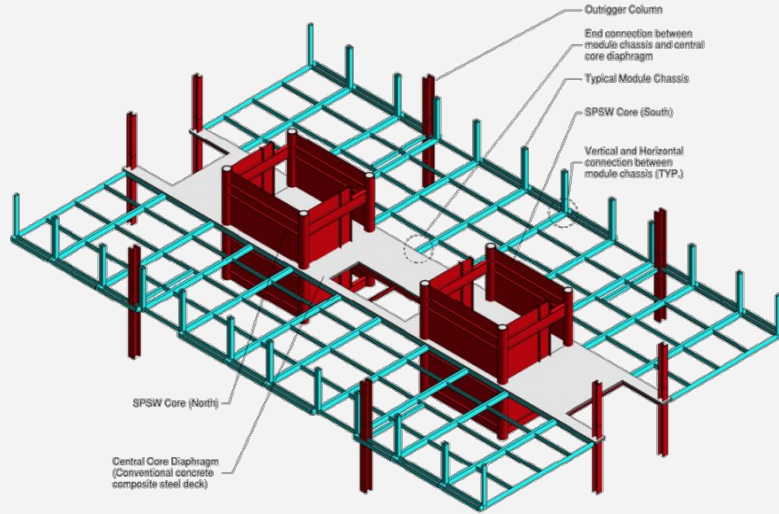


Typical floor framing of high-rise structural system of
RAD Urban

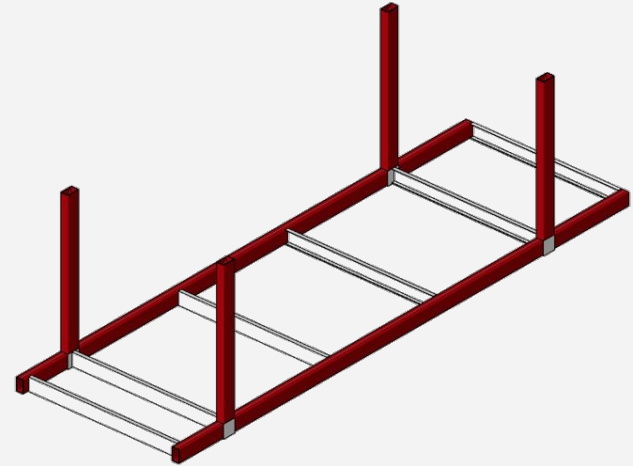


Steel chassis makes our module non-combustible and
allows us to stack modules for high-rises

STEEL CHASSIS: HIGH-RISE CAPABILITY



Typical floor framing of high-rise structural system of RAD Urban

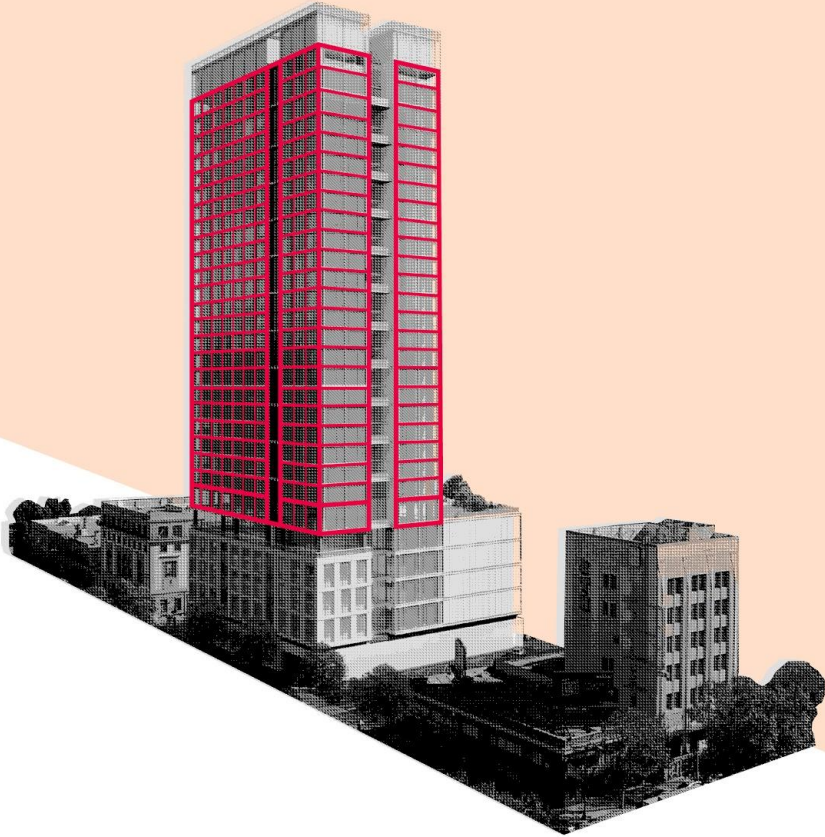


Steel chassis makes our module non-combustible and allows us to stack modules for high-rises

HIGH RISE MODULES

High-rise buildings are ideal for modular construction with their small footprint and repetitious floors.

Our modules can stack up to 40 floors





2201 DWIGHT: DESIGN VERSION-2



2201 DWIGHT: DESIGN VERSION-2

4801 SHATTUCK:

DESIGN VERSION-3

Mixed-Use Residential

Height: 57 feet

Gross Area: 47,300 sq ft

Construction: Type II Modular

Project Value: \$24.4 Million





4801 SHATTUCK: DESIGN VERSION-3

Current Development Work:



4700 Telegraph

Height: 57 feet
Gross Area: 65,000 sq ft
Construction: Type IIA
Project Value: \$33.2 Million



5110 Telegraph

Height: 74 feet
Gross Area: 394,960 sq ft
Construction: Type IA
Project Value: \$198 Million



2044 Franklin

Height: 362 feet
Gross Area: 387,169 sq ft
Construction: Type IA
Project Value: \$268 Million



1433 Webster Street

Height: 362 feet
Gross Area: 358,215 sq ft
Construction: Type IA
Project Value: \$202 Million

COST ADVANTAGE:

~20% HARD COST SAVINGS

LESS TIME:

~20% SCHEDULE REDUCTION

HIGHER QUALITY

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Sara Pacelko
spacelko@radurban.com