HOUSING the HOMELESS

CITYSPACES MicroPAD ®

Prefab Affordable Dwelling



An Infill Developer Versus the Forces of No

Urban Ecologist

AN INFILL DEVELOPER VERSUS THE FORCES OF NO

BY PATRICK KENNEDY

Many cities now recognize the value of promoting dense, mixed-use, infill development to enliven their downtowns, to provide affordable housing, and to improve transit ridership. But obstacles to such projects abound, among them reluctant construction lenders, skeptical mortgage financiers, and complicated building code requirements.

One of the biggest hurdles I've encountered as a developer of mixed use infill projects in Berkeley, California is the project approvals process, which invariably involves complying with the city's zoning ordinance. Many cities have ordinances that thwart the very kinds of developments they desire. In my experience, there are three particular areas of local zoning law that are most often used by city staff, opposition groups, and others to kill worthy projects.

DENSITY — The issue of density is one of the biggest sources of resistance to infill projects and the most misunderstood. The problem in many downtowns and city thoroughfares is the absence of people and their purposeful activity, not an excess of them. Samuel Johnson once wrote, "Men, thinly scattered make a shift, but a bad shift, without many things. It is being concentration that produces convenience."

The empty-lots and vacant storefronts that stretch along Berkeley's University Avenue, the once proud gateway to my city, attest to the need for more density. Yet many projects are challenged on this ground alone, with the unsupported claim that more people would be detrimental to the area. In Berkeley, any "detriment" may be grounds for denial of a project, and "detriment" is often broadly defined, since no definition is given in the ordinance itself.

On one mixed use project I recently proposed on a vacant commercial lor abutting a residential neighborhood, a protester announced that "even one more person in this neighborhood or on this street would be detrimental."

The Zoning Board dispared, recognizing that the

1995 NUMBER 2

Few seem aware that infill development in mature,

Panoramic has been doing high density infill development since 1990

financially impossible, since few residential developments, particularly affordable or mixed use ones, can afford to build the underground parking garages necessary to accommodate them. The irony, of course, is that many people living in centrally located infill side don't even need a parking space, and certainly don't want to have to

pay for one they are not going to use.



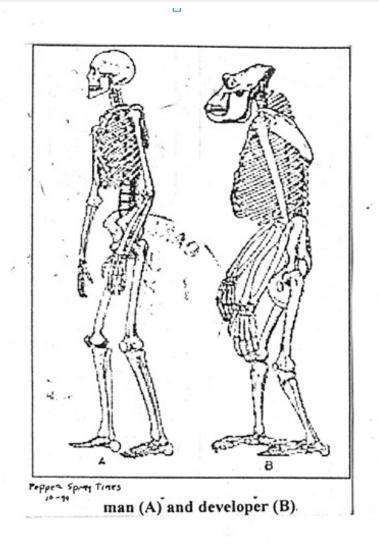
ennedy's mixed-use Shattuck Avenue Lofts

URBANECOLOG

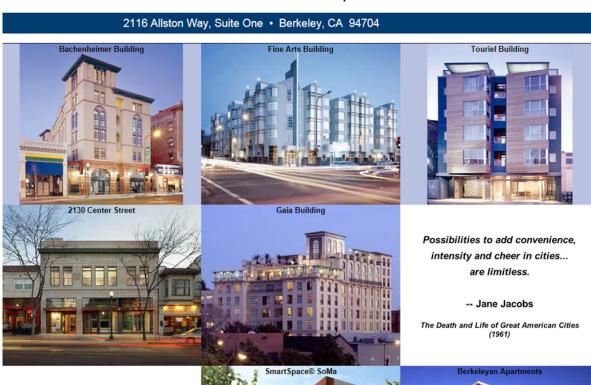
OPEN SPACE - Another particularly troublesome requirement is open space, which, as Jane Jacobs writes in The Death and Life of Great American Cities (see sidebar), enjoys the slavish devotion of many city planners. Many city ordinances mirror this devotion, and make infill development all the more difficult, if not impossible. For example, the open space needed under the ordinance for a four story, infill project in downtown Berkeley that I recently considered is greater than the actual size of the lot. And the lot is across the street from U.C. Berkeley, a place with acres of open space. Another example of the perversity of the city's ordinance is that an entry front porch - where people naturally gravitate - cannot be considered open space, but a sideyard - with no direct access to a dwelling and only space enough for a garbage can and a lawnmomer (10-foot-wide minimum) - can.

"In orthodox city planning, neighborhood open spaces are venerated in an amazingly uncritical fashion, much as savages. venerate magical fetishes. Ask a houser how his planned neighborhood improves on the old city and he will cite, as a self evident virtue, More Open Space. Ask a zoner about the improvements in progressive codes and he will cite, again as a self evident virtue, their incentives toward leaving More Open Space. Walk with a planner through a dispirited neighborhood and though it be already scabby with deserted parks and ired landscaping for

Berkeley Pepper Spray Times, October 1st, 1994



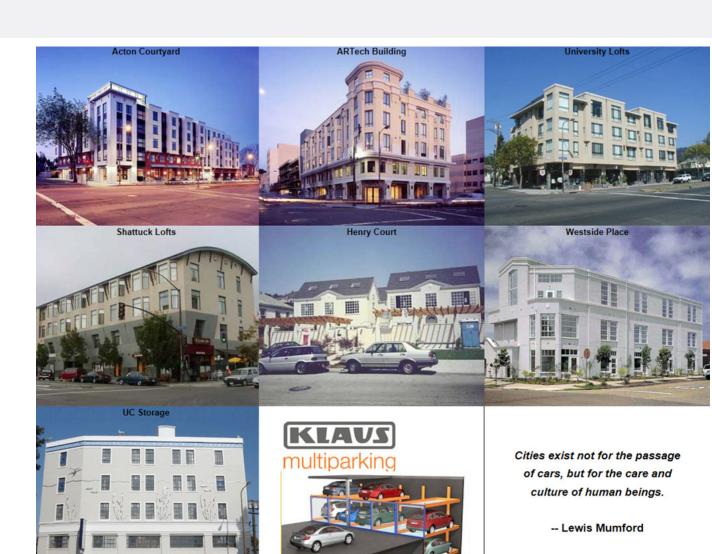
Innovative Infill Development



More than any other human artifacts, buildings improve with time if they are allowed to.

-- Stewart Brand

How Buildings Learn (1994)



Current Pipeline



The Panoramic: 160 units Student Housing



The Nexus: 70 units Student Housing



Shattuck: 22 units Workforce Housing



200 Hyde: 168 units Homeless Housing



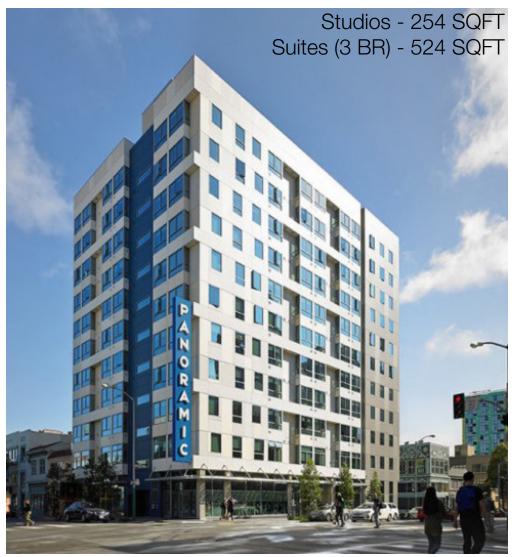
333 12th Street: 201 units Workforce Housing



MicroPAD Homeless Housing for Cities

The Panoramic, San Francisco

160 Micro-apartments



Challenges & barriers to permanent, supportive housing for the homeless

Inadequate & insufficient housing stock

Escalating construction costs

Lack of public funding

High land costs

Rising rents



Housing First Model: permanent, supportive housing

The Washington Post

Inspired Life

Meet the outsider who accidentally solved chronic homelessness



By Terrence McCoy May 6 💟 🔰 Follow @terrence_mccoy



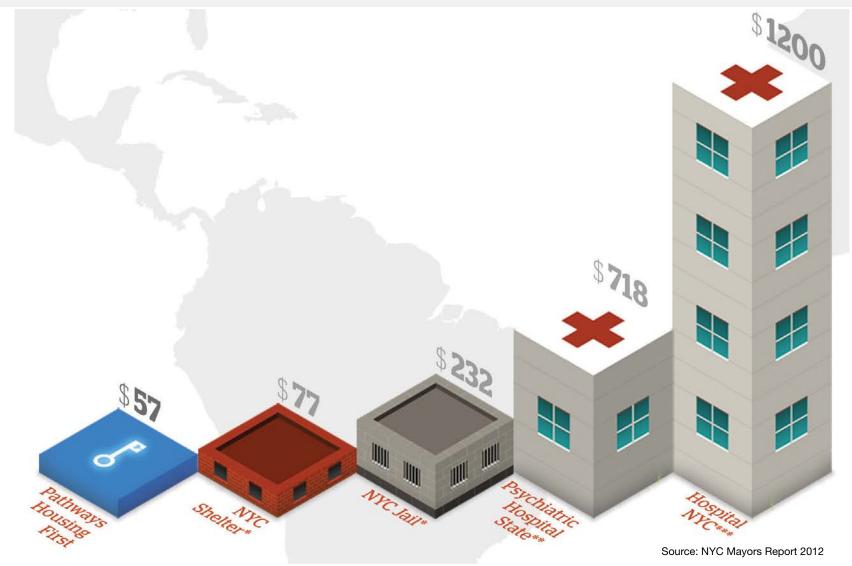
Sam Tsemberis, founder and CEO of Pathways to Housing, stands near one of the buildings in NE Washington D.C. that offers housing to formerly homeless. (Photo by Reza A. Marvashti for The

"...It's that simple," he said. "Give homes for the homeless, and you will solve chronic homelessness."

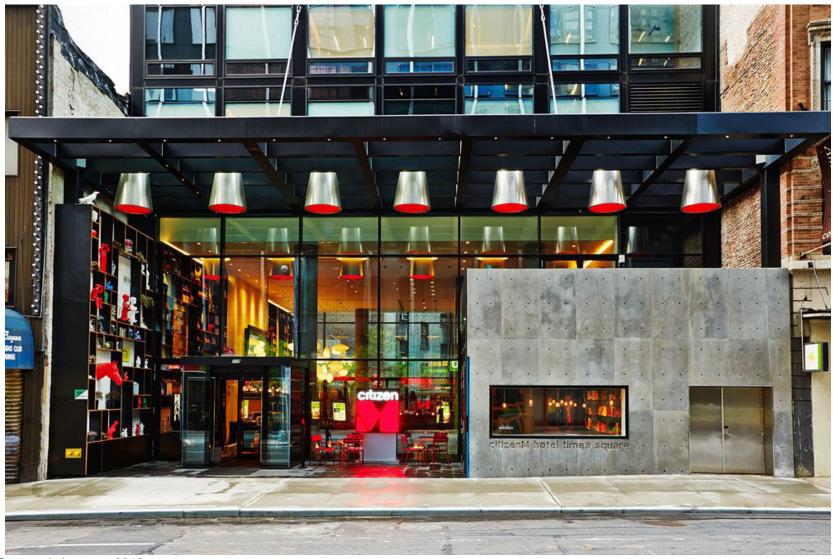
-Sam Tsemberis *Washington Post,* May 6, 2015

Housing First Model: permanent, supportive housing

New York City: cost savings with housing first method

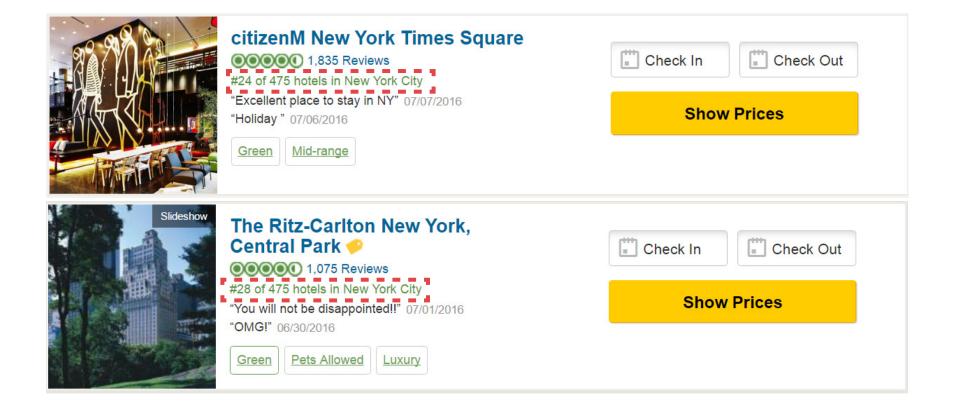


CitizenM Hotel, Times Square, New York



CitizenM Hotel, Times Square, New York

#24 of 475 on Trip Advisor, 3 notches above the Ritz-Carlton



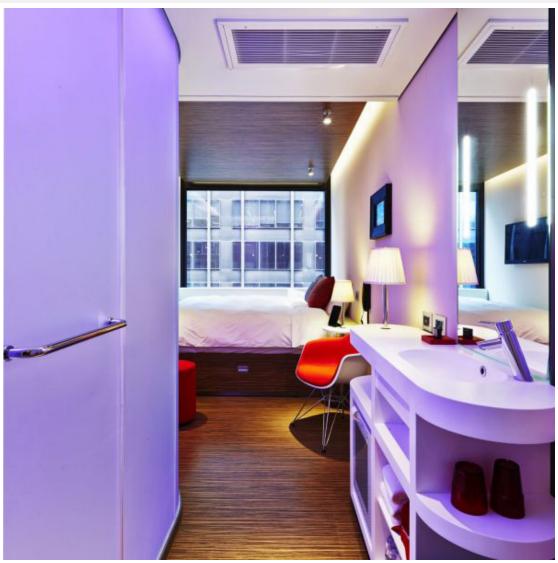
CitizenM Hotel, standard room: 8' x 20' = 160 SQFT



CitizenM Hotel, standard room: 8' x 20' = 160 SQFT

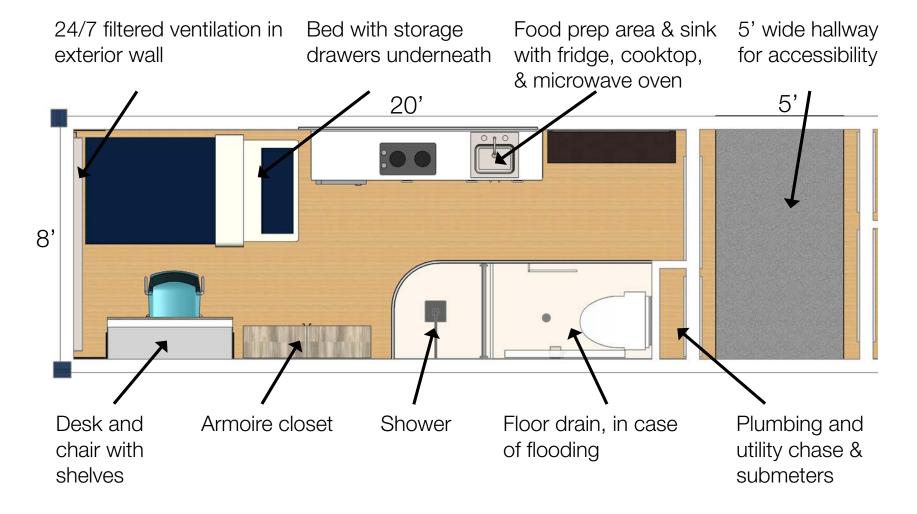


CitizenM Hotel, standard room: 8' x 20' = 160 SQFT



CITYSPACES MicroPAD floorplan

Turn-key, self-contained, indestructible



CITYSPACES MicroPAD interior

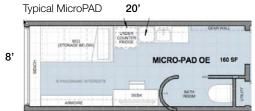
Self-contained supportive housing, taking design notes from a leading hotel brand



Design inspired by citizenM Hotel \$159-\$400 / night











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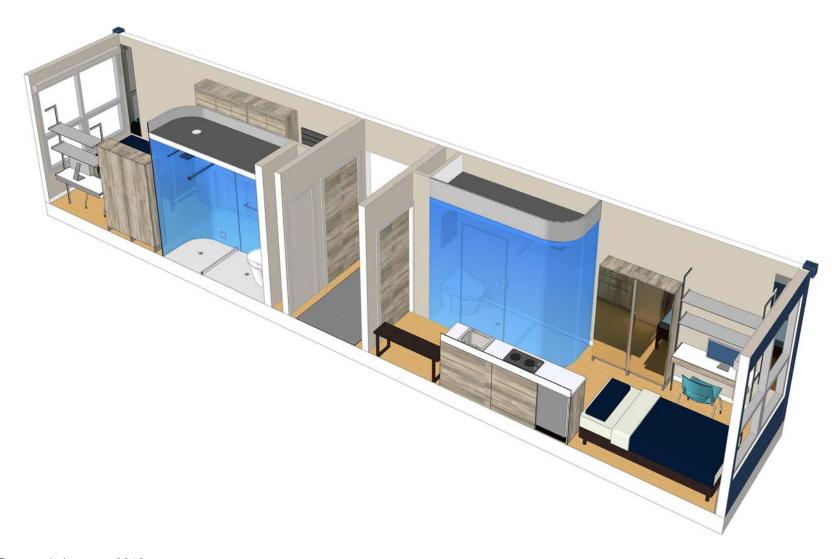
CITYSPACES MicroPAD

Incredible strength. Ultimate simplicity.



CITYSPACES **MicroPAD**

Incredible strength. Ultimate simplicity.



CITYSPACES MicroPAD interior

Self-contained, supportive housing

Each unit equipped with:

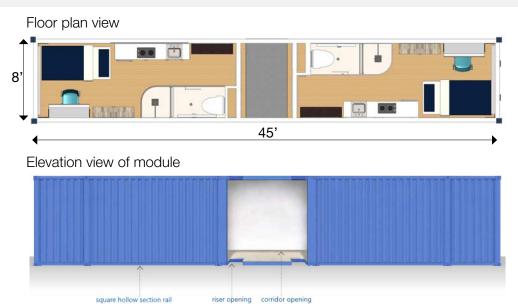
- •Full kitchen
- Microwave, fridge, garbage disposal
- Captains bed with storage underneath
- •Full bath with toilet and shower
- Desk with floating shelves above
- Plenty of natural light
- •24-hour filtered air via heat exchanger
- Wall-mounted flat screen TV
- Armoire closet
- •Gear wall at entry for more storage
- Window bench with views
- Operable windows



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CITYSPACES MicroPAD module

2 CITYSPACES MicroPADs are connected with a 5' hallway & contained in a 45' x 8' module



Solid steel walls & unibody construction isolate and control:

- •Flooding: Built-in secondary drain to contain plumbing mishaps.
- Fire: 2-hour fire ratings and a fully sprinklered building, ensure fire safety.
- •Odors: 24/7 fresh air exchange & ventilation.
- •Insects: Steel demising walls prevent spread of pests.
- •Noise: Double-wall construction & air spaces between units provide engineered soundproofing.

... protecting all other units in the building.

CITYSPACES MicroPAD

All steel bed, with drawers. Underbed storage and ultraviolet lighting.

The Impact of Ultraviolet Light on Survival and Behavior of the Human Bed Bug, *Cimex lectularius* Linnaeus

The Ohio State University April 2013

This project strongly suggests that UV light is effective, both in killing bed bugs, and in

impairing their ability to reach a host. Perhaps the most encouraging aspect of this study was the



38 Harriet Street

CITYSPACES 38 Harriet: 23 units stacked in 4 days, finished in 4 months



Before: August 18, 2013



During: August 22, 2013



After: December 31, 2013

Steel modular construction, based on ISO shipping container dimensions

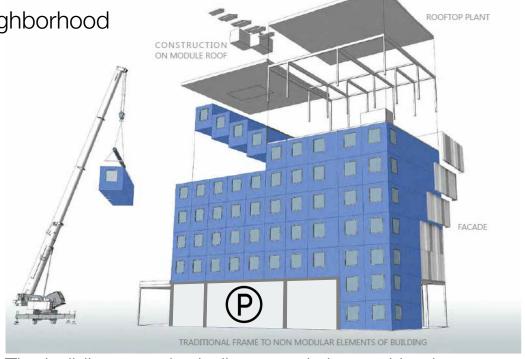
Finally: Innovation in the construction industry

Intermodal size easily fits on a standard ship, truck, or train

Flexible design that fits in any neighborhood

Easily relocated, if desired

Installed in days



The buildings can be built over existing parking lots, preserving the parking below.

Streamlined fabrication and delivery

Modules manufactured in the time it takes to pour the foundation







3) Module fit-out





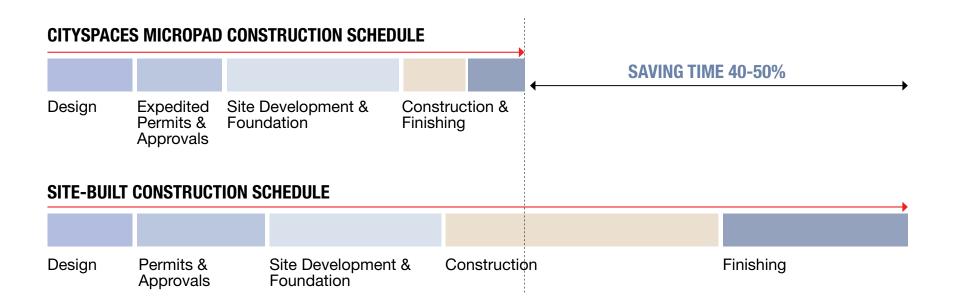
5) Erection



6) Zip up & Finishing

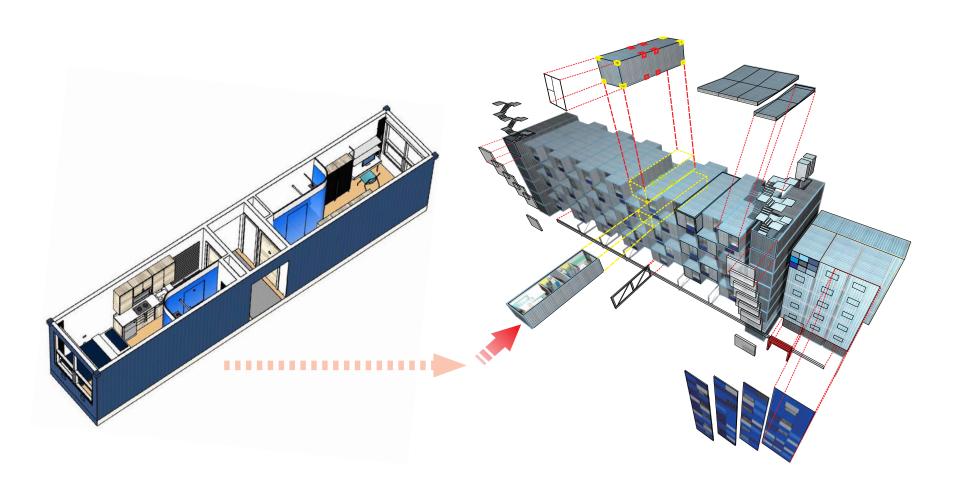


Streamlined Fabrication and Delivery



Streamlined fabrication and delivery

CITYSPACES MicroPAD modules are stacked like LEGO blocks & erected in DAYS



Streamlined fabrication and delivery

Student housing, UK - 190 apartments - 8 DAYS (2015)



Dwellings arrive to site completely finished on the inside. 22,000 hotel rooms completed worldwide with same technology.













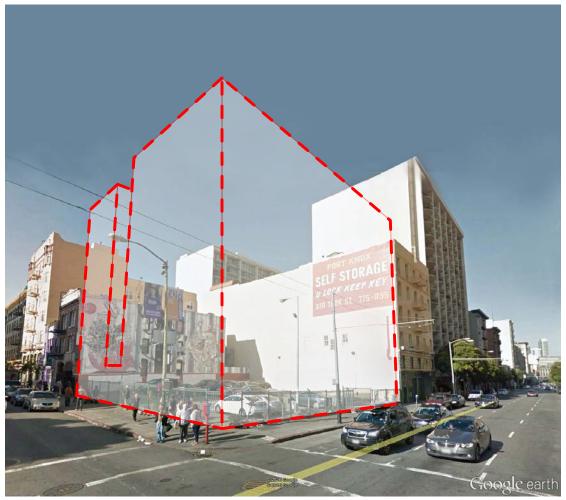
Site case study

200 Hyde Street (Corner of Hyde and Turk in Tenderloin): 7,650 square foot site



Site case study

200 Hyde Street - 168 SF MicroPADs in 85' tall, 8 story building.



Much needed ground floor retail and services

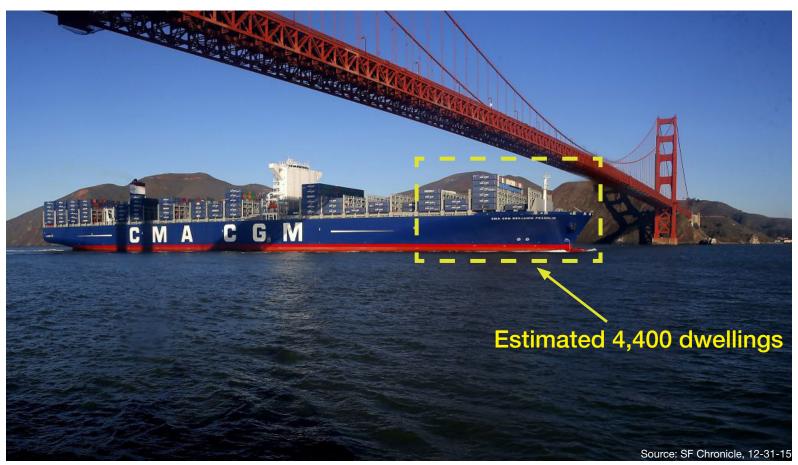
Site case study

200 Hyde Street - 168 SF MicroPADs in 85' tall, 8 story building.



Streamlined fabrication and delivery

San Francisco rapid supportive housing for homeless



4,400 +/- unhoused homeless in San Francisco. This ship could deliver housing for all those individuals, using only 24% of its capacity. (Capacity: 18,000 TEUs)

CITYSPACES MicroPAD



CITYSPACES MicroPAD

MicroPADs can be assembled on any site, at any scale desired

Create buildings like this: 33 MicroPADs



38 Harriet, San Francisco, 4 floors Lot size: 3,750 SF

OR

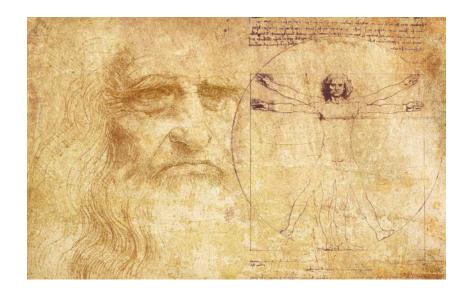
Create buildings like this: 300 MicroPADs



1321 Mission, San Francisco, 11 floors Lot size: 9,208 SF

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Timeless advice from a 15th century city planner



"Small rooms or dwellings set the mind on the right path, large ones cause it to go astray."

- Leonardo da Vinci

