

# Assemble Chicago Reinventing Cities — Downtown Chicago Loop Site

Uniting a dynamic public program with integrated, sustainable systems and efficient materials, Assemble Chicago responds to C40's 10 Challenges for Climate with a site-specific design that provides a new model to simultaneously address the urgent issues of climate change and inequality in cities.

Sustainability at the scale of...



Studio Gang

COMMUNITY BUILDERS

Assemble Chicago's high performance façade, along with the increased therma mass of its structure, optimizes energy usage and comfort. Solar heat gain is minimized by angling the window to the south.

Operable windows oriented to the north minimize noise infiltration from the CTA and allow for natural ventilation.

### High Efficiency PV

Our proposal is carbon neutral, with on and off-site renewable generation to offset energy use and embodied carbon.

#### Rooftop Water Tank

Water storage on-site limits potable water needs while managing storm water run-off and providing resilience during outages.

#### Heat Recovery

Reuse of waste water heat minimizes energy use.

#### No Fossil Fuels 9

All cooking is electric, including the food hall, and renewable energyuse ready. There is no use of natural gas in the building.

### Facade Design



25% glazing ratio, performance insulation and integrated shades allow solar control and resilient heat loss/gain control.

#### **Efficient Structure**

Short spans and light façade minimize the weight of the structure and foundation; cutting-edge concrete technology reduces embodied carbon by 30°

### Recycling Program

Accessible stations on every floor serviced daily as a potential job opportunity for lower-income residents.

### Rooftop Garden

Native plants attract pollinators while offering storm water infiltration and a place of respite.

### Backup Generator

Permeable Paving

Healthy Community

Mitigates stormwater runoff.

Plaza that invites local vendors to

connect with the neighborhood.



### Community



#### Creating Mutual Benefits for People and the Environment

The design unlocks the exciting possibilities found at the overlap of sustainable practices and social and economic opportunity

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- **1**. Energy Efficiency / Low-Carbon Energy () 2. Life Cycle / Sustainable Materials 😨 3. Low Carbon Mobility 4. Climate Resilience / Adaptation 5. Ecological Services / Green Jobs 6. Sustainable Water Management 7. Sustainable Waste Management (刘 8. Biodiversity / Urban Ag. & Vegetation **9.** Social Benefits / Incl. Engagement
- 10. Innovative Arch & Urban Design

Located on Level 2 for resilience to potential future flooding; power backup during outages.



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 $( \nearrow )$ Urban Habitat Native and adaptive species foster biodiversity and an urban oasis.  $(\vec{P})$ encourages a healthy commute.

**Stormwater Planter** Add to diverse habitat and facilitate healthier root growth. **Carbon Free Transport** Easy to access bike station





The building is grounded in a vibrant, community-centered base: the NeighborHub. It hosts new recreational, wellness, professional, and cultural resources for residents, community groups, and local businesses. Weaving seamlessly together with a reinvigorated Pritzker Park, the NeighborHub transforms its site into a vibrant indoor-outdoor civic hub for all Chicagoans.

#### A Vibrant Public Space to Assemble

The NeighborHub has been designed to operate seamlessly with Pritzker Park as a vibrant indoor/outdoor environment capable of supporting diverse community-driven programming and activations. Each space within the NeighborHub is designed to function independently while also retaining the ability to spill out into adjacent spaces and the Park for larger events and gatherings.







## A vibrant, mixed-income community with 207 apartments introduces equity to downtown Chicago



**Unit Proportion Diagram** showing how the proposed stacked layout will allow for a more efficient layout of units on the given site.

LOOP WORKFORCE APARTMENTS: UNITS AND INCOME MIX						
Units	% of Units	Studio	1bd	2bd	Total	Maximum Income
80% AMI	33%	11	44	11	66	\$51,000 to \$73,000
60% AMI	35%	14	46	12	72	\$38,000 to \$54,000
30% AMI	32%	12	46	11	69	\$19,000 to \$27,000
Totals	100%	37	136	34	207	\$19,000 to \$73,000
One-Third CHA Units		12	48	9	69	
Net Square Footage		464 sf	625 sf	987 sf		

Assemble Chicago provides efficient and healthy living spaces for the Loop's moderate- and lower-income workforce. Each apartment features a contemporary version of Chicago's classic bay window for ample natural daylight and fresh air.









The building's distinctive, expressive facade emerges from updating the classic Chicago Window—a tripartite formation composed of a large fixed central panel with two smaller operable side panels—that defines the neighboring historical buildings.











MT SEX RM

235' - 4"



Large Window

**East Elevation** 

5' 10' 20' 30'

0' - 0"





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