

Illinois Energy Efficient Affordable Housing Construction Program (EEAHCP)

Illinois Energy Efficiency
Stakeholder Advisory Group
January 31, 2017

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Oak Park, IL



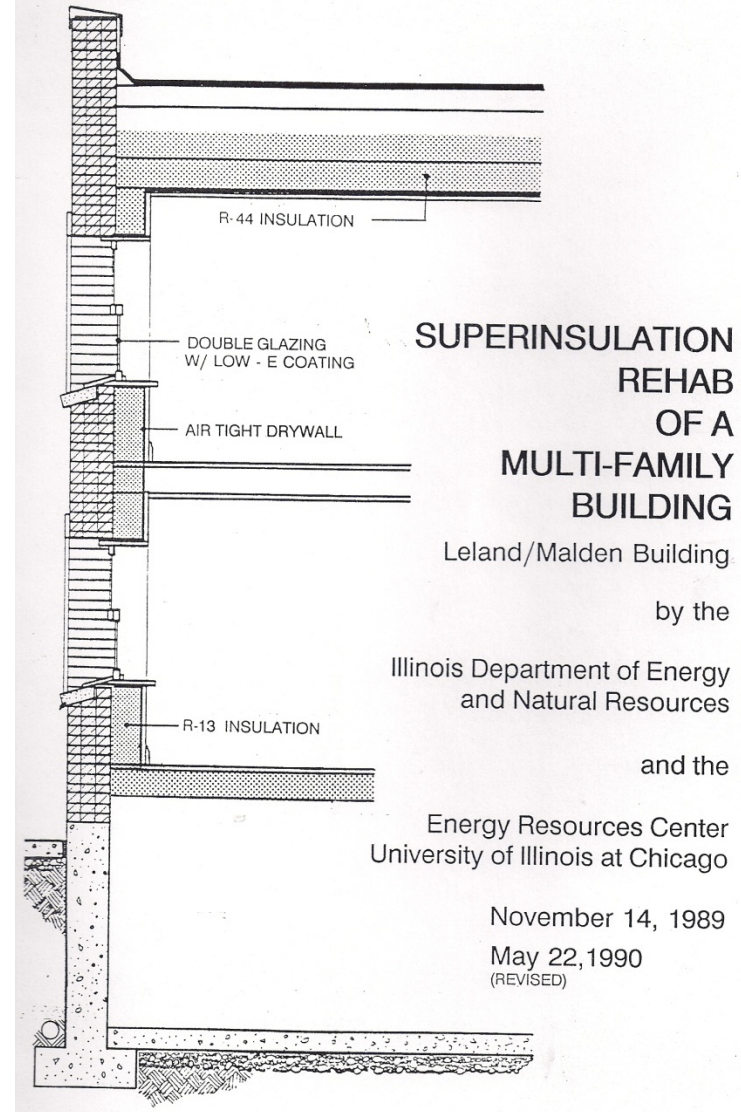
Program Inception 1988

- Program Objectives:
 - Demonstrate impact that energy efficiency has on creating and maintaining affordable housing
 - Lower housing costs with energy efficiency
 - Treat the building as system
 - Energy efficiency
 - Indoor air quality
 - Educate developers, architects and contractors



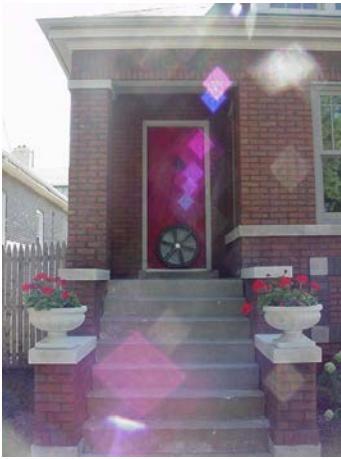
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■ Energy Efficiency Focus:

- Insulation
- Air sealing
- Heating, domestic hot water & air conditioning
- Ventilation
- Appliances, lighting



Appendix A
New Single-Family and Multi-Family Low-Rise Residential Construction (3 stories and under)
Minimum Energy Standards
June 2016

I. Insulation

- Sidewalls
 - Wood Framing*
 - R-21 insulation with R-5 minimum continuous insulation and;
 - blown cavity, or
 - "flash & batt" w/ minimum 1" closed cell spray foam and unfaced batt or blown insulation, or
 - closed cell spray foam insulation
 - Metal Framing*
 - R-23 insulation with R-10 minimum continuous insulation and:
 - blown cavity, or
 - "flash & batt" w/ minimum 1" closed cell spray foam and unfaced batt or blown insulation, or
 - closed cell spray foam insulation
 - Attic/Roof
 - Attic Cavity*
 - R-49 blown or spray foam insulation (no batts)
 - minimum R-38 over exterior wall top plates w/ barrier to hold insulation over plate and prevent wind washing
 - all attic bypasses sealed
 - Roof Top*
 - R-49 average insulation
 - Foundations
 - Slab-on-grade*
 - R-10 full slab & R-5 edge insulation
 - Basement*
 - R-15 exterior or interior foundation insulation
 - R-21 rim joist insulation
 - Crawl Space (walls)*
 - R-15 exterior or interior foundation wall insulation and
 - R-21 rim joist insulation, or
 - Crawl Space (floor)*
 - Full joist cavity insulation w/ R-7 continuous and sealed insulation over floor joists

II. Windows

- Maximum U-value of 0.30 or ENERGY STAR rated for window unit

III. Air Sealing

- Air sealing to meet the requirements in Table R402.4.1.1 in the 2015 *International Energy Conservation Code*

¹ Three stories and under

- Single-family dwelling units not to exceed 4.0 air changes/hour at 50 Pa as measured with blower door



New Homes - 1990

CHICAGO TRIBUNE SATURDAY 1/25/92

W Chicag

Affordable project opens model in city

A two-story, Victorian-style model is now open to the public at City Gardens, an affordable single-family home development in Chicago's Humboldt Park neighborhood.

Planned for 21 homes, the project is being jointly developed by the Hispanic Housing Development Corp. and RESCORP Development Inc. as part of the City of Chicago's New Homes for Chicago program in an effort to create affordable housing.

Prices start at \$93,600 for the three-bedroom, 1,400-square-foot homes. Four homes already have been sold, although construction will not begin until March. They can be purchased with a down payment of as little as 5 percent.

The homes have a wood frame construction, choice of exterior siding colors and styles, concrete walks, concrete two-car parking pad, two baths, wall-to-wall carpeting, dining area, eat-in kitchen with a frost-free refrigerator, self-cleaning gas oven, dishwasher and oak cabinets.

Options include a full basement, priced at \$12,000; brick exterior, \$4,500; two-car garage, \$5,000; and central air conditioning, \$2,500.

They feature a heating and insulation package that includes a gas forced-air heating system, double-pane windows and a 40-gallon hot water heater. Energy-efficient upgrades are being provided through a grant by the Illinois Department of Energy and Natural Resources.

Energy costs are estimated to be 50 percent less than for comparably sized homes.

"The homes are aimed at moderate-income families. These are the people who are leaving the city in droves," said Paul Roldan, president of the Hispanic Housing Development Corp.

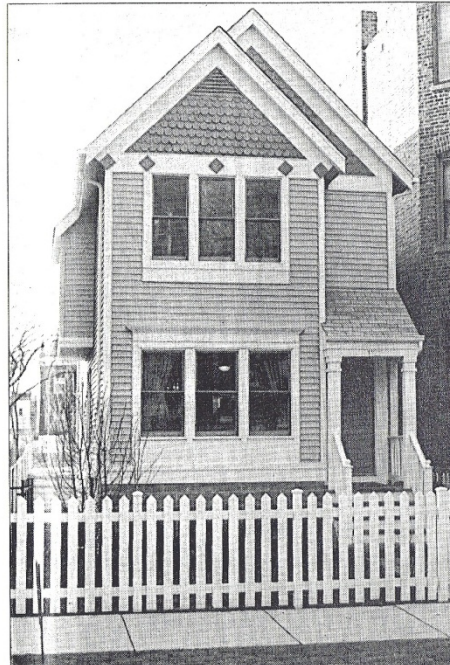
To keep them, the city is providing a \$20,000 subsidy for each residence, plus waiving certain fees.

There are annual income limits for buyers of the homes: \$39,360 for one person, \$45,000 for a family of two, \$50,640 for three, \$56,280 for four, \$60,750 for five and \$65,250 for six.

The interior of the model was decorated by Shelly Barrad Design, and furniture and accessories were provided by John M. Smyth Homemakers.

City Gardens was designed by the architectural firm of Pappageorge Haymes Ltd. The project is being built by Home by Hemphill, a custom home builder. Home Savings of America, a California-based lender, is providing construction financing at a favorable rate to reduce the cost of the homes.

The model at 1122 N. Mozart St. — one block south of Division Street and one block west of California Avenue — is open from 10 a.m. to 6 p.m. Monday, Thursday and Friday, and 11 a.m. to 5 p.m. on weekends. For more information, call City Gardens at 312-342-0060.



Prices for the three-bedroom, 1,400-square-foot homes at City Gardens in Humboldt Park start at \$93,600.



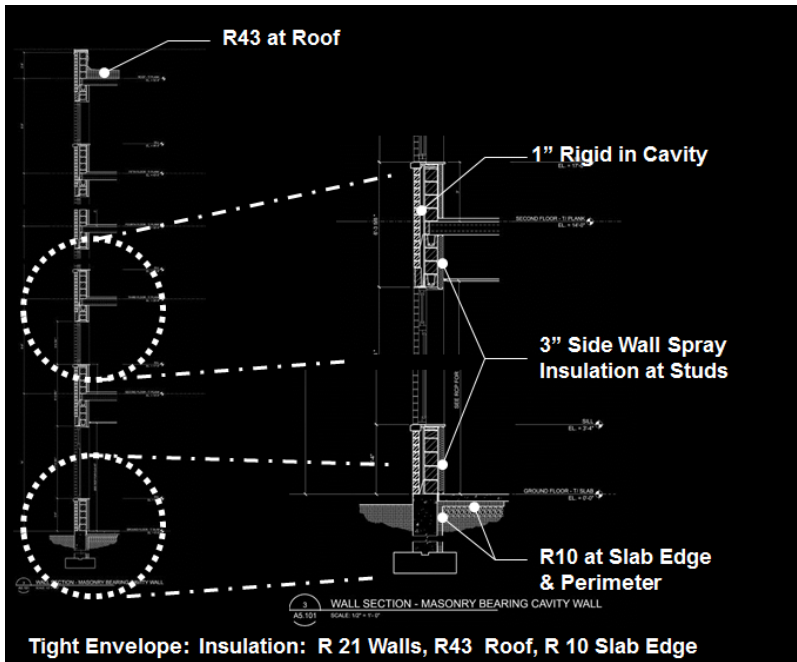
California/Ogden New Homes – 1991
18 Units



New Homes for Roselawn – 2000, 2006
28 Units

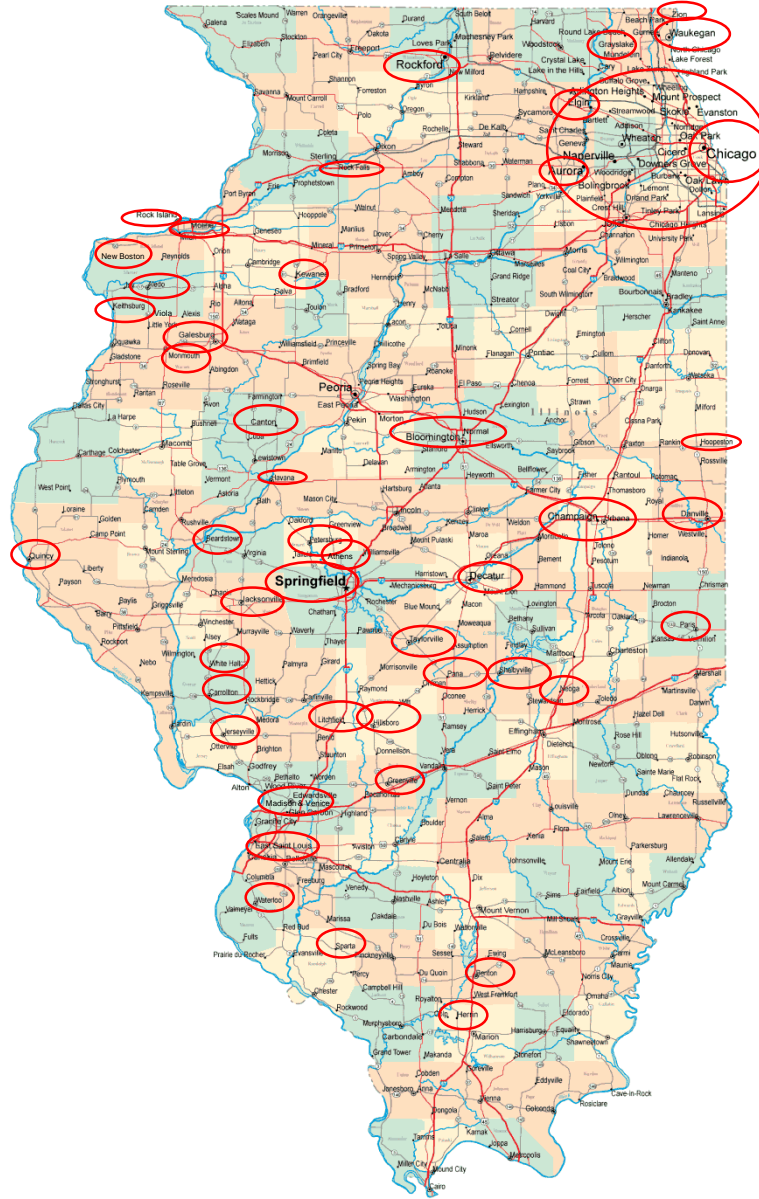
- ENERGY STAR for New Homes – 1995
- 650 homes completed under the *EEAHCP*

New Multi-Family - 1994



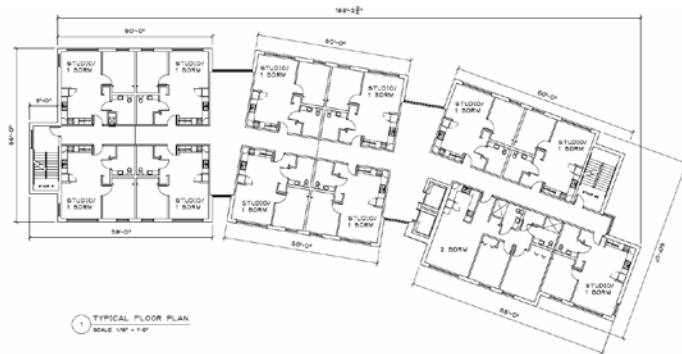
- LEED initiated in 2000
- 500 units of new MF completed under the *EEAHCP*

Locations 90+ Cities



Program Operation

- Grantee submits an application
 - Schematic drawings
- Energy grant amount is estimated
- Project financing is completed
 - Construction documents submitted and reviewed
 - Energy specs developed
 - DCEO energy grant awarded
- Site inspections
- Final inspection



SECTION 8: PROGRAM SPECIFIC INFORMATION		
Additional Project Information		
Energy Efficient Affordable Housing Construction Program		DCEO Energy Grant
New Single Family/Low Rise ¹ (Appendix A) <input type="checkbox"/>		
Single & Multi Family Rehab (Appendix B) <input type="checkbox"/>		
New Multi-Family Construction ¹ (Appendix C) <input type="checkbox"/>		
Project Name: Southwick Apartments		
Please identify the number of housing units by location and type of building. Only include the number of units targeted to households at or below 80% AMI. Use the codes listed below to indicate building type. Add lines if necessary.		
Project building address and zip code	Building type	Number of units
4801 Southwick Drive, Matteson, IL 60441	NC-MF-80	39
Building type codes:		
Rehab MF = multi-family rehab	NC-SF = New Construction single family	
Rehab SF = single-family rehab	NC-2 = New construction duplex	
NC-MF-30 = New construction multi-family building with less than 80 units	NC-3 = New construction 3-flat	
NC-MF-80 = New construction multi-family building with 80 units or more	NC-4 = New construction 4-flat	
	NC-6 = New construction 6-flat	
	OTH = Other	
Project's Electric Utility	ConEd <input checked="" type="checkbox"/> Ameren Illinois <input type="checkbox"/> DP, CPS, CLECO <input type="checkbox"/> Other _____	
Project's Natural Gas Utility	Nice <input checked="" type="checkbox"/> Peoples <input type="checkbox"/> Northshore <input type="checkbox"/> Ameren Illinois <input type="checkbox"/> Other _____	
Project's Heating Fuel Type	Natural Gas <input checked="" type="checkbox"/> Electric <input type="checkbox"/>	
Project closing date: 3/1/2014		
Anticipated construction start date: 3/1/2014		Planned completion date: 3/1/2015
Architect name, address, phone and contact person: Korte Heinz, Wense Langley Wense Architects, L.L.D., P.C., Hubbard Street, Chicago, IL 60654, 312.642.1820		
General contractor name, address, phone and contact person: To Be Determined		
Other funding involved in project: IHDA <input checked="" type="checkbox"/> HUD <input checked="" type="checkbox"/>		
Tax Status: Not-For-Profit/Tax Exempt <input checked="" type="checkbox"/> For-Profit <input type="checkbox"/> Corp <input type="checkbox"/> Gov <input type="checkbox"/> Other _____		

Attachment A
 Illinois Department of Commerce and Economic Opportunity
 Energy Efficient Affordable Housing Construction Program
 Over the Rainbow Association
 Southwick Apartments
 4801 Southwick Dr.
 Matteson
 39 Units¹
 May, 2014

I. DEFINITIONS

Exterior wall - a wall that separates the interior from the outside

Demising wall - a wall that separates units

Conditioned wall - a wall that separates a conditioned space from an unconditioned space (a wall that separates a heated space from an unconditioned stairwell, for example)

II. INSULATION

A. Slab on Grade

1. A capillary break shall be provided beneath the entire slab. Alternately, a polyethylene vapor diffusion retarder (minimum 6 mil) shall be installed beneath entire slab.
2. Slab shall be fully insulated to R10.
3. Slab edge shall be insulated with minimum R5 insulation.
4. If two or more layers of rigid insulation are used to achieve a required R-value, insulation boards shall be offset slightly to stagger all vertical and horizontal joints.
5. Above grade insulation exposed to the outside shall be covered with an appropriate protective covering.

¹ Total of 40 units in project

Program Operation

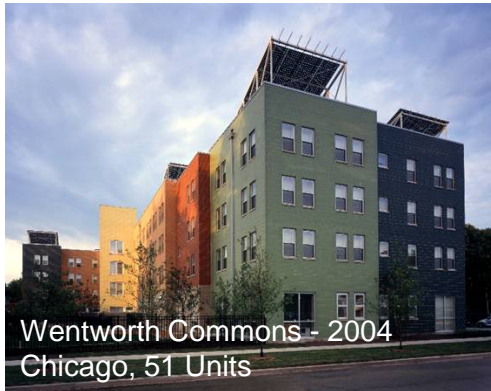
Grant Funding Levels.

REHAB

- Grant amounts of up to \$4,650 per living unit for single-family homes
- Grant amounts of up to \$4.60/ft² of gross square footage of living space or \$4,650, whichever is less, for multi-family buildings that will result in less than 80 units
- Grant amounts of up to \$4.35/ft² of gross square footage of living space or \$4,650, whichever is less, for multi-family buildings that will result in 80 units or more

NEW CONSTRUCTION

- Grant amounts of up to \$4,150/living unit for new single-family homes
- Grant amounts of up to \$6,700/building for new duplex construction
- Grant amounts of up to \$7,800/building for new "3-flat" construction
- Grant amounts of up to \$8,900/building for new "4-flat" construction
- Grant amounts of up to \$11,500 for new "5-flat" construction
- Grant amounts of up to \$4.35/ft² of gross square footage of living space in new multi-family buildings with less than 80 units
- Grant amounts of up to \$4.10/ft² of gross square footage of living space in new multi-family buildings with 80 units or more



Program Accomplishments

- Total Projects Completed: 385
- Total Units Completed: 13,754
 - Rehab: 4,524
 - New SF: 1,893
 - New MF: 7,337
- Total Square Footage: 11,720,692
- Number of Different Grantees: +150



Where We Are Today ...

- Current Projects under Construction:
 - Rehab: 5 projects (651 units)
 - New MF: 8 projects (503 units)
 - New SF: 2 projects (43 units)

- Total: 15 projects 1,197 units



Looking Ahead

- In the Queue ...
 - Projects: 12
 - Units: 745
- Performance Approach
- Require Certification
- Passive House Demonstration

