

UNIVERSITY OF  
ILLINOIS LIBRARY.  
URBANA CHAMPAIGN  
AGRICULTURE

**NOTICE: Return or renew all Library Materials! The Minimum Fee for each Lost Book is \$50.00.**

The person charging this material is responsible for its return to the library from which it was withdrawn on or before the **Latest Date** stamped below.

**Theft, mutilation, and underlining of books are reasons for disciplinary action and may result in dismissal from the University.**  
**To renew call Telephone Center, 333-8400**


UNIVERSITY OF ILLINOIS LIBRARY AT URBANA-CHAMPAIGN

--	--	--

L161—O-1096

JUN 12 1938

AGRICULTURE DEPT



Digitized by the Internet Archive  
in 2011 with funding from  
University of Illinois Urbana-Champaign

<http://www.archive.org/details/affordablehousin1299wyso>





NOTE: The information in this circular is provided for educational purposes only. Trade names have been used for clarity, but reference to trade names does not imply endorsement by the University of Illinois; discrimination is not intended against any product. The reader is urged to exercise caution in making purchases or evaluating product information.

---

Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Donald L. Uchtmann, *Director*, Cooperative Extension Service, University of Illinois at Urbana-Champaign.

Urbana, Illinois

3.5M-3-90-Crouse-AP

0630.7

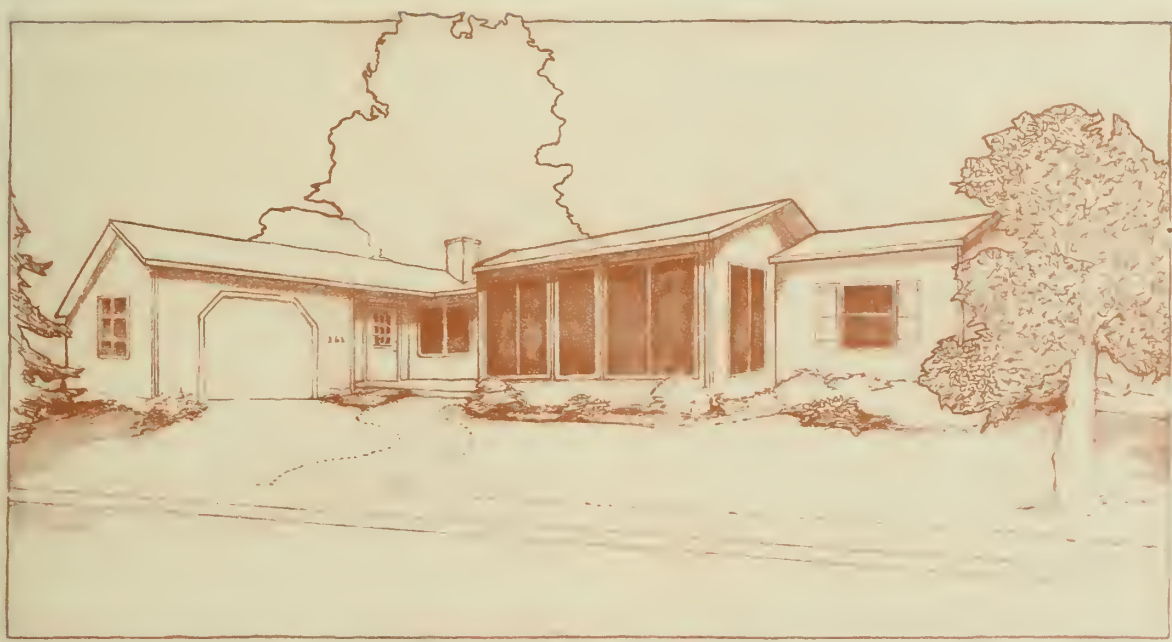
Il6c

no. 1299

B

---

*Affordable Housing:*  
**MANUFACTURED  
HOMES**



- **A Brief History**
- **What Are Manufactured Homes?**
- **Why Buy a Manufactured Home?**
- **Common Questions**
- **Mortgages and Loans**
- **Residents**
- **Shopping for a Manufactured Home**
- **Additional Resources**
- **References**
- **Checklist**

*University of Illinois at Urbana-Champaign*  
*College of Agriculture*  
*Cooperative Extension Service*  
AGRICULTURE LIBRARY Circular 1299

FEB 28 1990

**T**oday's housing costs have skyrocketed. For the first time in 50 years, home ownership is dropping. With the average price of a new site-built home well over \$100,000, many potential homeowners are looking to the manufactured housing industry for affordable homes. In 1987, more than a quarter of all new single-family homes sold in America were manufactured homes. This circular will give you facts about manufactured housing so that you can make a sound housing decision. You will learn about manufactured homes and other types of factory-built housing, discover how to select and finance a manufactured home, and find sources for additional information.

## A Brief History

Manufactured housing, innovative as it is today, is not new. It evolved from the covered wagons of our ancestors to the campground "house cars"—later called recreational vehicles—of 20th century adventurers. During World War II, mobile homes began to be considered permanent housing. "House trailers" were a popular solution to the housing shortage in the 1950s. When the 10-foot-wide home was introduced in 1954, the industry embarked on the factory-built home in earnest.

Today, manufactured homes are spacious and comparable to site-built housing, and manufacturers are still making innovative adjustments to accommodate the changing housing market. The trend is toward more natural-looking home exteriors with wood or brick siding, shingle roofs, and smooth, seamless wall and ceiling surfaces. Traditionally, manufactured homes have been built on metal transportation frames or "chassis" to which removable wheels and axles are attached. These metal frames are being redesigned to ease the placement of manufactured homes on permanent basement foundations or to site multistory manufactured homes.

## What Are Manufactured Homes?

Manufactured homes are built entirely in a factory. The one or more sections are transported to a homesite where the heating, plumbing, and electrical systems are connected. Once called "mobile homes," most manufactured homes—95 percent—are rarely moved after they are placed on a site. In recognition of this fact, in 1980, the U.S. Congress changed the name to "manufactured homes" in all federal laws and publications.

As defined by federal law, a manufactured home is a structure transportable in one or more sections, which in the traveling mode is 8 feet wide or more and 40 feet long or more, and, when erected, is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities. The typical manufactured home built today far exceeds these minimum definition standards.

Other types of factory-built homes include modular, precut, panelized, kit, and log homes. The main difference between manufactured and modular homes is the building code that applies to them. Manufactured homes are built to federal standards and are inspected by federally certified agencies. Modular homes are built to state and local codes. Panelized, precut, kit, and log homes consist of panels or precut materials which are shipped to the site and assembled there.



## Why Buy a Manufactured Home ?

**Lower cost.** Affordability is probably the main advantage of a manufactured home. It was listed as the most desirable feature of living in manufactured housing by Illinois residents in a recent Foremost Insurance Company survey. Manufactured housing costs less than conventional site-built homes. Per square foot, the price of a manufactured home is less than half that of a site-built home. The average cost for a new manufactured home in Illinois today is \$18,000 for a single-wide manufactured home and \$35,000 for a double-wide manufactured home—about a third the \$125,000 average cost of a new site-built home. Additional costs will vary with the buyer's choice of



optional interior and exterior features, such as a garage, deck, and landscaping; set-up requirements; and the selected location.

**Factory precision.** Due to the efficiency of factory production, the purchaser of a manufactured home can move into a new home within weeks, rather than six months to a year as is common for a site-built home. Construction in a factory offers other advantages over a site-built home. All building materials are stored out of the weather and production continues year-round with no weather delays. Certain pieces of the lumber can be nailed and fastened together better and stronger when the walls aren't yet attached to a foundation. Because materials are bought in cost-saving volume, assembly line wages are lower than on-site wages, and there is less possibility for



vandalism at the site, factory-built homes result in more efficient construction than conventionally built homes.

**Low maintenance.** The efficiencies of factory production and the constant updating of design and engineering aspects have kept maintenance costs of manufactured housing low. In a recent Foremost Insurance Company survey, Illinois residents listed "less upkeep inside and outside" as the second most desirable feature of living in manufactured housing.

**Quality control.** Manufactured homes are designed to be transported. Assembly line requirements and building materials are of the highest quality. Manufactured housing is constructed to a strict code administered by the federal government, which regulates factory certification as well as conducting frequent quality-assurance inspections. The building code regulates manufactured home design and construction, strength and durability, fire resistance and energy efficiency, as well as the installation and performance of heating, plumbing, air conditioning, and thermal and electrical systems.

**Options available.** The price of a manufactured home includes not only the structure, but also major appliances and furnishings—even carpeting and window treatments. The costs for transportation, steps, and skirting—the foundation or curtain wall that covers the bottom of the home—are usually included in the retailer's price. Many home buyers purchase their new homes fully furnished, selecting fabrics, styles, and extra amenities from a wide variety of choices. Cathedral ceilings, pitched roofs, fireplaces, and whirlpool baths are among the options available in a manufactured home.

## Answers to Some Common Questions

**What about placement?** Manufactured homes are located either in manufactured home communities or on private land. Zoning ordinances about manufactured homes vary within the state of Illinois. Many counties and communities are updating their ordinances to accommodate today's manufactured homes. As with any home selection, the buyer should check local laws and ordinances in regard to the designated homesite.

**What about safety?** Since 1976, the U.S. Department of Housing and Urban Development (HUD) has regulated the manufactured home industry under the Manufactured Home Construction and Safety Standards (HUD Code). A primary goal of the HUD Code is to improve the quality and durability of manufactured homes. A National Manufactured Home Advisory Council serves as a forum for ongoing discussion about the construction and safety standards contained in the code.

A recent study by Foremost Insurance Company indicates that, in terms of fire frequency, manufactured homes compare favorably with site-built homes. A fire is more than twice as likely to occur in a site-built home than in a manufactured home. Being built in a factory appears to enhance a manufactured home's fire safety. Windstorm damage is a safety factor also addressed by the

manufactured home industry. Designed for over-the-road transportation, manufactured homes are constructed to withstand greater strains from wind gusts and road travel than site-built houses. Properly anchored, manufactured homes can withstand winds of up to 90 miles per hour. In the case of tornados or hurricanes, there is no frame structure designed to withstand the wind forces and airborne debris without damage.

**What about energy efficiency?** Because they are constructed in a factory, manufactured homes are "sealed tight" from drafts and leaks. The HUD Code by which manufactured homes are regulated requires separate energy efficiency levels for the three different temperature zones of the United States. Optional energy packages, such as increased insulation, double-glazed and triple-glazed windows, "high-efficiency" appliances, and sheathing products, can increase the home's energy efficiency even further. The HUD Code's long-distance transportation requirements are a major reason for the high quality and energy-efficient construction.

**What about resale value?** Owning a home is a good investment for the future. Manufactured homes can appreciate when maintained and properly cared for. The same factors which influence the appreciation rate of site-built homes—location, landscaping, etc.—apply to manufactured homes.

## Mortgages and Loans

Many manufactured homes today are financed as real property with a long-term mortgage agreement. But most manufactured homes in Illinois are financed as personal property with a retail installment contract. Common terms specify a 10 percent down payment. Forty-seven percent of all manufactured homes in Illinois are financed for 10 years or more. Fifty-seven percent of manufac-

tured homeowners in Illinois financed their homes at the time of purchase, only thirty-three percent of whom are still financing their homes. Ownership offers tax benefits because buyers can deduct the home loan interest payments on their federal income tax returns.

Many manufactured home retailers can help arrange financing, but buyers are free to secure loans through local banks and savings

institutions. Both the Federal Housing Administration (FHA) and the Veterans Administration (VA) have financing programs for manufactured homes. Check with local lenders for common terms and notes for mortgages. Table 1 shows the finance sources used by Illinois residents.

**Table 1. Manufactured Home Finance Sources for Illinois Residents**

<i>Financial Sources</i>	<i>Percent of Loans</i>
Banks	61
Savings & loans	18
Finance companies	10
Credit unions	7
Mortgage companies	3
Former owner/land contracts	1

## Manufactured Home Residents

In Illinois, there are 137,011 manufactured homes. The average age of the manufactured home head of household is 47.2 years with a median income of \$15,600. Table 2 provides more specific demographic information about residents.

**Table 2. Demographic Information about Illinois Manufactured Home Residents\***

	<i>Percent</i>		<i>Percent</i>
<i>Marital Status</i>		<i>Head of Household Age</i>	
Married	52	Less than 30 years	22
Never married - female	9	30 - 39 years	20
Divorced - female	15	40 - 49 years	14
Widowed - female	15	50 - 59 years	13
Separated - female	1	60 - 69 years	19
Never married - male	3	70 years and older	13
Divorced - male	4	<i>Annual Household Income</i>	
Widowed - male	1	Less than \$10,000	29
Separated - male	0	\$10,000 - \$19,000	33
		\$20,000 - \$29,000	20
		\$30,000 - \$39,000	11
		\$40,000 and over	8
<i>Head of Household Education</i>		<i>Family Household Designation</i>	
College postgraduate	3	Husband and wife	52
College graduate	3	Male and child/other relative	1
Attended college	25	Female and child/other relative	13
High school graduate	45	Male living alone	7
Attended high school	16	Female living alone	24
Grade school graduate	6	Male and nonrelative	0
Attended grade school	3	Female and nonrelative	3

\*The average age of the head of household is 47.2 years. The median income is \$15,600.

## Shopping for a Manufactured Home

Any potential homeowner should consider all of their housing needs as they begin to shop for a new home. Financial advisors suggest that not more than 25 percent of the household's net income should be budgeted for housing costs. Other considerations are size of household, location and lot size, and accessibility to transportation, schools, shopping, etc.

As today's manufactured homes are getting bigger, multisectional homes make up more than 42 percent of the homes produced. Manufactured homes of all sizes are designed with many different interior and exterior styles from which to choose. Hundreds of floor plans are offered by nearly 130 manufacturers throughout the United States.

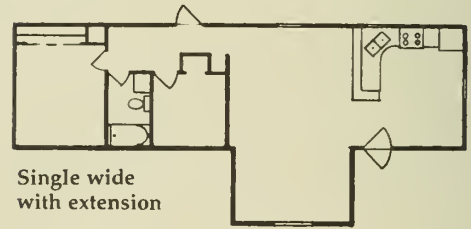


Illinois boasts more than 125 retail centers showing homes of all sizes, designs, and price ranges. The retailer's assistance and service can play an important role in consumer satisfaction. Retailers in Illinois who are members of the Illinois Manufactured Housing Association subscribe to a businessman's code of ethics, as well as having the advantage of up-to-date industry news on products and issues. In addition to selling the buyer a home, the manufactured housing retailer usually

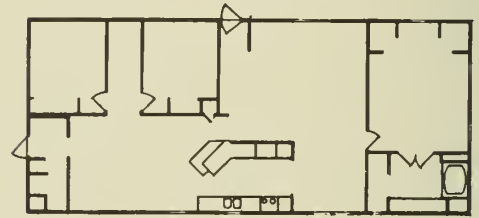
- transports the home to the site.
- properly sets up the home and makes sure that it is level.
- makes any necessary adjustments after setting up the home.
- assists or advises the homeowner on proper utility connections and tie-down procedures.
- stands behind the manufacturer's warranty with service.



Single wide



Single wide with extension



Double wide

- assists or advises the homeowner on other services including those involving appliances covered by warranties.
- offers general advice for the homeowners.

## Additional Resources

Cooperative Extension Service (offices listed in the white pages of the phone book)

Illinois Manufactured Housing Association  
3888 Peoria Road  
Springfield, Illinois 62702  
(217)528-3423

Manufactured Housing Institute  
1745 Jefferson Davis Highway, Suite 511  
Arlington, Virginia 22202  
(703)979-6620

Association for Regulatory Reform  
1331 Pennsylvania Avenue, NW Suite 524  
Washington, D.C. 20004

National Manufactured Housing Federation  
1701 K Street, NW, Suite 400  
Washington, D.C. 20006

## References

"Regulating Manufactured Housing," by Welford Sanders. American Planning Association, Chicago, Illinois, 1986.

"Fire Loss Study," Foremost Insurance Company, 1986.

"Manufactured Homes: The Market Facts for Illinois," Foremost Insurance Company, 1987.

"1988 Quick Facts," Manufactured Housing Institute, 1988.

"How To Buy a Manufactured Home." Manufactured Housing Institute in cooperation with the Federal Trade Commission's Office of Consumer & Business Education, 1986.

*The Best Kit Homes*, by Joanna Wissinger. Rodale Press, Emmaus, Pennsylvania, 1987.

This publication was prepared by Joseph L. Wysocki, Extension Housing Specialist, University of Illinois, and Marta E. Edgcomb and Nancy A. Latshaw, Illinois Manufactured Housing Association.

Editor: Eva Kingston

Designer: Mark Fetkewicz

Grateful appreciation is expressed to the Illinois Manufactured Housing Association for their support in producing this publication.

# CHECKLIST

• As you review your housing needs and consider manufactured homes as an affordable housing option, the following checklist may help you in your decision.

yes no

## FRAME

- Is the frame slightly bowed and free from undesirable warp, twist, or buckling?
- Does the frame extend the entire length of the home?
- Does the frame extend the full width of the home?
- Does the home have a built-in tie-down system to protect against wind damage?
- Are water pipes and heat ducts enclosed to prevent heat loss or freezing?
- Are holes in the "basement" floor neat and tight around the electrical and utility connections?
- Is the hitch detachable?

## WALLS

- Do the exterior walls contain either a 2- x 3-inch stud with a horizontal rail or a 2- x 4-inch stud?
- Are wood structural members designated as dried?
- Are double full-length (floor to ceiling) studs used between adjoining windows?
- Is a vapor barrier provided?
- Is the siding attractive and will it remain so?
- If metal siding is used, has insulation board been applied under the siding?
- If metal siding is used, what is its gauge? *Note: thicker siding will have a lower gauge number than thinner siding.*

## ROOFING

- Is insulation board used under the roof (if metal)?
- Is the roof-ceiling cavity ventilated?
- Are rain gutters provided?
- If an overhang is not provided, does the roof overlap the top of the siding to prevent leaks?

yes no

## WINDOWS / DOORS

- Can the screen and storm windows be removed for easy window washing?
- Are the windows caulked and well sealed, especially on the top?
- Do the windows open and close smoothly?
- Does the front door open inward and contain a window so callers can be identified without opening the door?
- Are exterior doors at least 1 3/4-inch thick and preferably of solid or insulated core construction?
- Do the door frames include weather stripping?
- Are storm doors provided?

## ELECTRICAL

*A 100-amp service is probably needed for a washer, dryer, air conditioner, garbage disposal, or dishwasher.*

- Is an electrical outlet placed every 6 feet and on single walls of less than 6 feet?
- Are there electrical outlets over the kitchen counters for small appliances?
- Are outside electrical outlets and lights provided?
- Are vented exhaust fans provided in the bathroom and over the kitchen range?

## PLUMBING

- Does all plumbing have an inside cut-off valve?
- Is there at least a 30-gallon gas or 40-gallon electric water heater?
- Are there plumbing and electrical connections for a washer or dryer?
- Is there an outside water connection?
- Are all water pipes insulated?
- Are shut-off valves provided at each toilet, sink, and faucet?

Checklist continued next page



yes no

### HEATING / COOLING

- Is the home adequately insulated for your area?
- Is there good distribution of heat?  
*Note: Look for hot-air registers or heating elements along the base of exterior walls and under windows.*
- Does the unit have air conditioning?
- Does the air conditioning unit make efficient use of energy?
- Is the home well-caulked around windows, moldings, joints, nails, splash panels, top seams, roof vents, and wheel housings?
- Will the roof reflect heat?  
*Note: A white roof reflects more heat than dark one.*
- Does the roof have a slight pitch or curve?
- Are there drip rails around the roof?
- Is the furnace area insulated with a fire-resistant material?

### INTERIOR / STORAGE

- Does the floor plan provide adequate space for your activities and privacy?
- Will the activity areas be free from interference of family traffic and circulation?
- Is a closet near the front door?
- Is linen storage at least 18 inches deep near the bathroom?
- Are the clothes closets at least 24 inches deep?
- Is 5 feet of rod space available for each person in your family?
- Do the closets open and close smoothly?
- Is storage space available for out-of-season clothes? Luggage? Sports equipment? Tools? Books? Hobbies?
- Does the kitchen include storage such as a lazy Susan in lower corner cabinets and adjustable sturdy shelving?

yes no

### FURNITURE / FURNISHINGS

- Can the home be purchased without furniture?
- Are the furniture joints firm, closely fitted, and strongly glued?
- Do the drawers open and close smoothly?
- Are the chairs and beds comfortable?
- Can the furnishings, materials, and equipment be cleaned easily?
- Will the carpeting resist soil, stains, static, and wear?
- Are the beds standard sizes (twin: 39" x 75"; double: 54" x 75"; queen: 60" x 80"; and king: 78" x 80")?
- Are the curtain and drapery fabrics durable? Easy to care for? Fire retardant?

### FLOORS / WALLS / CEILING

- Is tongue and groove subflooring at least 5/8-inch thick used?
- Is a baseboard or cove molding used along the edge of hard surface floors?
- Are the floors even, sturdy, and free from bumps and squeaking or popping noises?
- Is the carpeting resilient and resistant to abrasive wear, soil, stains, and static?
- Are the floors easy to clean?
- Are the walls an appropriate color?  
*Note: Dark colors absorb light and make rooms seem small and dark; light colors reflect light and make rooms seem larger.*
- Have the materials and finishes—paneling, paint, or paper—been installed with careful attention to detail?
- Are the walls rigid and stiff?
- Are wall panels free from gaps or bowing?
- Are window and door trim securely attached?
- Is the ceiling free of bowing and visible fasteners?









UNIVERSITY OF ILLINOIS-URBANA



3 0112 027487559