

Buying a Mobile Home



By Susan Merkley, Extension Assistant, Department of Human Environment and Design.

Shopping for a mobile home can be an exciting or frustrating experience. Several considerations are important, as in choosing any alternative for family housing: size, construction, availability of service and cost. Other factors unique to mobile homes are manufacturer and dealer reliability, warranties, transit arrangements, and site or location selection.

CHOOSING A DEALER

Michigan law requires licensing by the State Mobile Home Commission of all mobile home dealers and brokers selling new or used homes in the state. The Commission also regulates the business practices of dealers, requiring conformity to a variety of state and federal laws. These include truthful advertising claims, specification in a written sales contract or purchase agreement of all items and services included in the price of the home, and disclosure in the sales contract of full costs involved in purchasing and financing the home.

Even though these types of regulations are in effect in Michigan, buy only from a reputable dealer. Although you do not have to finance through a dealer, you might have to depend on the dealer to arrange for financing as well as for knowledge of the mobile home, warranties, and the price.

Repair service is very important. The dealer should be capable of servicing your mobile home either directly through the dealership, or by agreement with qualified repair services. Ask about future service so you know exactly what to expect, and what might have to be done to obtain service. This will be particularly important to you during the warranty period.

It is the dealer's responsibility to deliver and install

your mobile home on your site. This may be done directly by the dealership using his own resources, or through agreement between the dealer and some other party. In any event, the dealer is responsible to you for the proper installation of the home. The price you pay usually includes delivery, placement and a guaranteed number of service calls within a specific time period. You may elect to have some other licensed installer and repairer place your mobile home, other than the dealer or his/her agent; however, if you do and the home is damaged in the process of installation, you may not have any recourse against the dealer in getting the damage repaired. If you do elect to have the home installed by someone other than the selling dealer, have a clear understanding of who is responsible for what. Check your service agreement and get satisfactory answers to such questions as:

- What is the total cost of transportation?
- Is this cost included in the purchase price?
- How far will a dealer transport your home before charging a fee?
- Are special permits required for transportation? What are they?
- Who arranges and pays for special permits?
- Is the cost of installing the home included in the price?
- Does installation include anchoring systems? What type?

Consider buying close to your final destination. Service will be more readily available and additional transportation charges avoided.

Originally prepared by MSU Housing Task Force in Community Resource Development, Coordinator—Elizabeth B. Mowery, Jan. 1975.

FINDING A BARGAIN

Don't be fooled by "sales" or bargain prices. This may only mean the dealer has a lot of homes he wants to move. The price may not be any lower than usual. The model may be discontinued and parts difficult or impossible to get. The manufacturer might even have gone out of business, which could mean unavailable factory service on a warranty.

Don't let a salesman convince you that a certain model he has in stock is just what you should have. You will be living in it—it should fit your needs. Don't be pressured by the comment that someone else is interested in the home. This tactic is used to make you rush into a purchase.

Reliable dealers do have special sales. A dealer might have second year models at reduced prices. Some depreciation on new models is usually normal in mobile homes after the first year, and the dealer may choose less profit instead of carrying the model into a second year. If a dealer is expanding and moving to a new location, he/she might sell at a reduced price to develop a clientele or avoid having to move the home.

Some mobile homes are damaged in transit from the factory. Small paint chips or dents on panels can affect appearance. A dealer may prefer to lower the price rather than pay for repairs. If such an accident has not affected the structure, you could save money buying a home with a small defect.

Look at the models displayed by several dealers to learn what is on the market. Prices vary widely depending on quality of materials, workmanship and furnishings. If possible, look at some used models of the same type you are considering. Faults will have become more obvious in an older home.

An "Official Mobile Home Market Report," similar to the "blue book" used by automobile dealers, gives list prices for used mobile homes. This is a guide—real market value is influenced by the local housing market, the condition of the home, and (if not in dealer's lot), by site, accessories and landscaping.

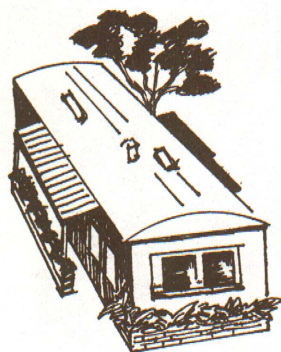
DETERMINING YOUR NEEDS

Your housing needs are influenced by:

- Family size and composition.
- Family lifestyle.
- Family personality.

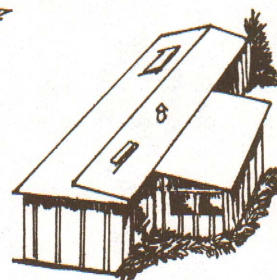
The kind, size and shape of rooms should meet your family needs. Wider homes and expandables make larger rooms possible.

Mobile home sizes range from 10 to 14 feet wide, and up to 70 feet long. A 14-foot home can be moved

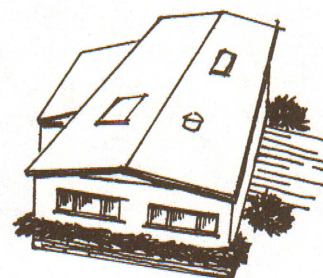


Single-wide

Expandable



Double-wide



Three different types of mobile homes are offered on the market.

over Michigan highways by special permit. There are three kinds of homes:

1. A single-wide is the standard home. Since measurement is from tip of hitch to rear of home, the actual living space for a 65-foot home is approximately 62 feet.

2. A double-wide is two homes situated side-by-side. Two 12-foot units provide a 24-foot-wide home. The combination consists of a wet unit for the kitchen and bathrooms, and a dry unit for the living and sleeping areas. Outside finishing materials are often added after the home is on its foundation.

3. An expandable home features a section that opens to added width (usually in the living room area). The walls of this extra area slide into the main unit for transportation.

The location of rooms is important for proper weight distribution. The kitchen contains heavy equipment and storage. Locating this area over the wheels may prevent the frame from springing. Towing is easier if most of the weight is concentrated slightly ahead of the wheels.

You should be able to partition the activity area from the sleeping area. Other desirable features include:

- a coat closet near the front door
- a utility closet near the rear door
- linen and equipment storage near the bathroom
- adequate clothes storage for each bedroom

Remember, this will be your home. Don't be misled by a luxurious appearance or eye-catching gadgets that may be of little use. Small inconveniences may go unnoticed on first inspection but can become major hardships.

KNOW WHAT YOU ARE BUYING

A mobile home is made of a variety of materials and contains equipment much like that in a conventional home. Ask questions and investigate structural elements before you buy.

The United States Department of Housing and Urban Development (HUD) has prepared a set of minimum standards covering the quality, durability, and safety of mobile homes. These "Federal Mobile Home Construction and Safety Standards" stipulate minimum performance requirements for all equipment and installations in the home. They include requirements covering body and frame design, construction, plumbing, heat producing and electrical systems of mobile homes designed to be used as dwelling units. In addition, HUD requires that all mobile homes come equipped with at least one smoke detector. This federal standard acts as the construction standard for all mobile homes sold within Michigan, and has been in effect since June, 1976. A label attached to the mobile home shows that it complies with all requirements of the HUD standards.

Michigan law requires that *all* mobile homes sold in the state be equipped with a multi-purpose fire extinguisher in addition to the smoke detector required by HUD. This applies to *all* sales; regardless of who sells the home (dealer, broker, or individual) this requirement must be met.

Keep in mind as well, that according to Michigan law (P.A. 288 of 1974), a warranty furnished by the manufacturer must state that the mobile home complies with HUD standards and was manufactured free from substantial defects in materials or workmanship. The dealer, in turn, warrants that the home was free from substantial defects when sold. The dealer or manufacturer is responsible for correcting any defects that become evident within one year if notified in writing. They are not liable for problems caused by moving, set up, or other work done unless the work was done by them.

If you are buying a used mobile home, you should realize that when regulations covering the construction of mobile homes sold within Michigan originally went into effect in November 1974, the code used as the standard for minimum requirements was American National Standards Institute A119.1 (ANSI A119.1). At that time, Michigan affixed its own label of compliance to mobile homes meeting the ANSI standard which were sold within the state. In June 1976, when Michigan law was pre-empted by the HUD minimum standards, homes sold within Michigan were then required to carry a permanently affixed label certifying the manufacturer built the home in compliance with HUD standards. Homes built prior to these dates may not carry a certification label.

Exterior

Outside appearance may give you a clue to structural details. Mobile home weight is carried by two long I-beams. These are supported by the trailer hitch and wheels and carry considerable weight between the wheels and hitch. These beams extend out several feet behind the wheels. The weight on this part of the home can cause the frame to deflect or bend slightly, depending on the strength of the I-beams. If this deflection is excessive, siding sheets will warp or bulge. Sight along the side of the home to be sure there is minimal warping of the siding. Excessive warping could indicate inadequate structural support. Once the home is on blocks, the floor should be level and minimal warping should disappear.

Steel or aluminum can be used as siding material. Aluminum thickness is usually designated by such numbers as .024, which is heavier than .019, a light gauge. Steel, on the other hand, is specified by a gauge number. The smaller the number, the heavier the material. Thus, 28-gauge steel is heavier than 29-gauge steel. Insist on seeing manufacturer's literature concerning these specifications.

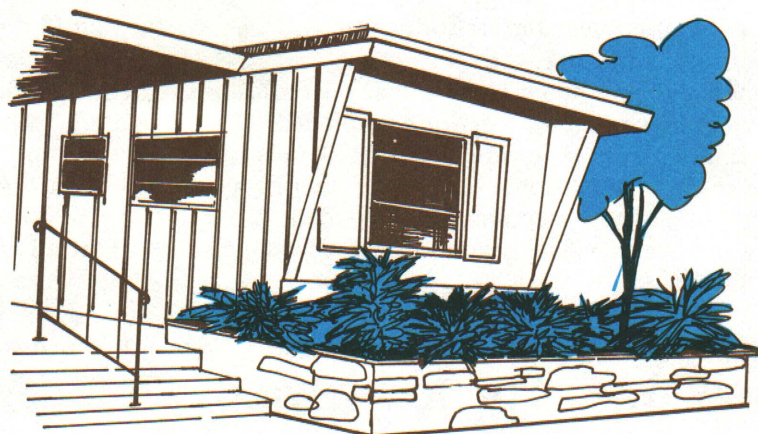
Aluminum is a softer metal and will dent more easily when struck by handles of tools, stray baseballs or objects leaning against the home. Baked-on enamel finishes are available for both steel and aluminum.

Roof

A roof with a slight curvature is a better buy than a flat one. On a flat roof, small depressions will collect rainwater; a slight curve in the roof allows water to drain off. If roofing sheets are rolled over the edges of the home there is little chance of leaks where roof and sides join.

Dirt and foreign material in the air tend to settle on a flat roof and dirty streaks result when rain washes

The awning-type window (shown here) is not as energy efficient as the double-hung window.



this down the home sides. Gutters along each side will prevent streaks.

A white roof reflects more heat than a dark one. Since there is no attic space in a mobile home, any heat absorbed by the roof will warm the ceiling. A warm ceiling radiates heat, causing discomfort to occupants and additional work for the air conditioner.

Roofs deteriorate rather quickly depending on construction, materials and site location. A good plan is to resurface the roof every 2 to 5 years.

Doors

Every mobile home should have two access doors, one at each end of the home. Doors should be of conventional construction, set into regular frames. Outside doors should be strong so that if the wind catches them they will not bend out of shape. A combination storm and screen door with self-storing panels greatly reduces heat loss during cold weather. The inside door may require weatherstripping to prevent heat loss. If doors are located on opposite sides at each end, a "tunnel effect" hall will be broken up and fire escape made easier.

If door latches do not work, suspect changes in the foundation due to settling or frost heaving.

An accessory porch with a roof protects an entry door from snow and rain.

Windows

Windows make a house livable. Check mobile home windows in relation to:

- cross ventilation for summer comfort
 - flexibility of furniture arrangement
 - means of escape in case of fire
- Windows should be thermosealed or equipped

with storm windows to minimize heat loss in cold weather. According to HUD standards, new homes sold in Michigan should be equipped with storm windows or insulating glass. Ask if these windows are included in the price. Awning type windows are sometimes used in mobile homes, but there are a number of joints in this style. Thus they are difficult to seal in cold weather. Verticle sliding windows, similar to double hung windows in conventional homes, are easier to close tightly, but they may be more costly.

Check each window to be sure it opens properly. At least one window in each bedroom must be of a safety type—large enough for an adult to climb through and easy to open in an emergency. Two acceptable types of emergency windows can be opened by (1) pulling a lever and swinging the window out, or (2) pulling two levers and dropping the entire window out.

Plumbing

Plumbing in homes bearing the HUD seal is installed according to minimum requirements of approved national plumbing regulations.

Check to see if all water pipes are on the warm side of the insulation to prevent freezing. Be sure there are no joints or small lengths of pipes exposed to the weather where they will freeze. Water pipes along the heat ducts or in the joist area allow heat from ducts to reach the pipes. Some manufacturers force some heat into the joist area.

If water pipes must be exposed, they can be protected by wrapping a special heating tape around the pipe, being careful to avoid crossing the tape over itself. Such tape is plugged into a regular 110-volt circuit. (Heating tape should never be used on pipes

already wrapped with insulating material.) In an emergency, water pipes can be kept from freezing by letting water run slowly from a faucet. Do not allow water to drip from faucets, as this can allow water to build up in drain lines and freeze due to the fact that there is not enough pressure to force the water through the drain system. Keep in mind that heat tape should not be used on drain lines due to the possibility of any escaping sewer gas being ignited by an electrical short in the heating tape.

Every plumbing fixture should have a trap to seal out sewer gas, and sinks and lavatories should have overflows. A flexible connection between the mobile home and the ground pipe permits some movement due to settling. This may also facilitate emergency cleaning to remove obstructions in the drain line. Position your mobile home so that sufficient slope is provided for the drain line.

Be sure the sinks, wash basins and bathtubs fit your requirements. A shallow tub might be an advantage for small children and senior citizens. A plastic tub must be strong enough to hold a tubful of water plus a heavy adult, without cracking.

Check on whether water and drain hook-ups for a washer and dryer are included in the mobile home price. The water heater should be large enough for your family use; a 30-gallon or larger tank is recommended, depending upon the size of the area where the tank is to be stored. A quick-recovery heater is much preferred over a regular heater.

Electrical Service

Service is determined by the amount of electricity available at your site. Before adding electrical appliances or changing from gas to electricity, be sure you know how much power is wired into the site.

For many mobile homes, a 50-A (ampere) or 60-A service is adequate for lights and small motors. If you have an electric range, water heater and/or clothes dryer, a 100-A is suggested. When electric space heating is used, a 200-A is required. The 200-A service is usually connected directly to the supply and must be arranged for with the power company involved.

Check the amount of voltage. (Amperage is the amount of electricity, voltage is the pressure of electricity.) Most small appliances use 110 volts, but ranges and clothes dryers use 220 volts. Again, ask your local power company about available voltage.

Heating

Fuel oil, gas or electricity can be used to heat a mobile home. Natural gas or bottled gas are probably most common, but the shortage of energy products may affect supply as it might with fuel oil. An outside

storage tank is required with bottled gas or fuel oil, and can detract from appearance.

Natural gas is convenient, but dependent upon whether the private lot or park is connected to the supply. Bottled gas is available at most sites. But, bottles must be refilled, and bottled gas is not as clean as natural gas. Nearly all appliances can be adjusted for natural or bottled gas.

Electricity is perhaps most convenient, but at least a 200-A service should be available. Electricity, if used with base board heating units, allows you to control the temperature in each room individually. Electricity for heating purposes is very expensive in northern climates such as Michigan's.

Distribution of heated air is by a central duct extending the length of the mobile home. Registers are located in the floors. Occasionally, branches are run to outside walls to discharge heat where it is usually coldest.

The furnace, to function properly, needs a large supply of cold air. Some of this comes from the outside; a small portion comes from cold air inside the home. Cold air from inside the home usually returns to the furnace through the space left at the bottom of the door of the furnace room, or through a louver in the door to the furnace room. To insure proper functioning of the furnace and proper circulation of air within the home, this space at the bottom of the door or in the louvered area should always be open and free of obstructions.

Check the heating system by reading the heating certificate attached to the home. HUD regulations require that all new mobile homes sold in Michigan meet certain design criteria for heating comfort. If the mobile home complies with HUD standards, a permanently fixed certificate will be found usually located near the heating unit. The certificate will state the lowest outdoor temperature at which the installed heating equipment will maintain a 70°F temperature inside the home with storm windows or insulating glass in place.

Insulation

Walls should be well insulated with a minimum of 4 inches of insulation. Floors and ceilings should have a minimum of 4 inches of insulation (R equals 16 to 19, which will be marked on the batt). Do not be misled by such terms as "extra thick", "full batts" or "double thick".

Vapor Barrier

A vapor barrier may be the most important feature of the entire home in preventing deterioration. This is a plastic film, usually 4 mils thick, applied to the inside of the studs before the inside walls and ceiling

are installed. Mobile homes are usually very tight and cubic feet of space per person is relatively low. Moisture can accumulate quickly. Bathroom and kitchen fans should be on when these rooms are in use.

Air Conditioning

There are three basic choices available to cool the mobile homes: central air conditioning systems, window-mounted units or wall-mounted units.

A central air conditioning system is designed to operate in conjunction with the furnace, using the same air ducts and vents. Locate the unit adjacent to the home; do not locate the unit under the home as insufficient air flow will hamper efficiency.

If the home is equipped with central air conditioning when purchased, check the comfort cooling certificate which HUD regulations stipulate must accompany the home. For Michigan homes, the certificate should indicate that the system has been sized to keep the interior of the home at 75°F when outdoor temperatures reach high levels.

Keep in mind, however, that the efficiency and cooling ability of the factory installed system will depend upon a number of factors, the most important of which is site location chosen for the home. If the home is located in such a manner that the major amount of window area faces the sun in summer weather, and no protective covering for windows is provided, by awnings for instance or by tree plantings, the home may not be as cool as the certificate indicates.

If central air conditioning is not provided with the home, check the comfort cooling system certificate to see if the manufacturer has designed the home in such a manner that central air can be added in the future. If it is, the manufacturer should provide special cooling information specific to the home, which can be used to determine the size of unit needed once the location and orientation of the home are known. Keep it, and share it with the heating and cooling professionals contacted to install the unit.

Window-mounted and wall-mounted units are usually used if the home has not been designed to accommodate a central air system. Again, check the cooling certificate. It will indicate this fact.

A window-mounted air conditioner is usually sufficient for a small mobile home, but usually inadequate in a large one. Some homeowners use two such units, one in the work/living area and one in the bedroom area. These can be operated separately or together and provide greater temperature control. With energy costs continuing to rise, it is recommended you contact a professional heating and cooling dealer to determine the size of these non-central air

conditioning units. An over-sized unit wastes energy.

Consider wall-mounted units carefully before installing, as they can create special problems. They require cutting holes in walls, for example, which can be hard to patch if the unit is ever changed. And they often require modifications in electrical systems.

An air conditioner should not be left in place during a move. Place it inside the home and secure it to the floor, or move it separately.

Flooring

Flooring should not show signs of springing when you step between the floor joists. This is not an unsafe condition, but will eventually result in squeaking. Floor covering in mobile homes is sometimes the "cost saver": to keep the purchase price as low as possible, lower grade products are used. Consult Extension Bulletin E-571, "Carpet and Rug Selection: A Consumer Guide" (20 cents), a consumer reference guide, or your Extension Home Economist for guidance in evaluating serviceability of carpeting and resilient floor coverings. In general, wearability and cleanability are important for high traffic areas; and resistance to staining and moisture is necessary for bathrooms and kitchens.

New homes purchased with FHA loans must have carpeting which meets specific quality standards. Carpeting which has been tested and meets these requirements will be so labeled. Not all carpeting is tested, however, and much that is not would meet or exceed these requirements.

Furniture and Appliances

Like the floor covering, compromises are often made in the quality of furniture in a mobile home to keep the total package price down. Even so, furnished models have the advantage of limiting the number of items you would have to purchase as extras. Because manufacturers buy furnishings in carload lots, the discount for an unfurnished mobile home would amount to only several hundred dollars at most. You couldn't completely furnish a home with this savings, nor expect long-term durability from such low-cost furnishings.

Consider replacement costs. Even though your family's lifestyle will determine, in general, the wearability of furnishings, expect to begin replacing some items within three to five years. And, because the furnishings are the same age, they will wear out at somewhat the same time, placing a considerable strain on the budget. Some basis for evaluating the cost/quality relationship of furniture can be derived from reading consumer buying guides and references.

Appliances, however, are usually name brands, full size, and of high quality. For example, a 30-inch-wide range and a 12-cubic-foot refrigerator are part of the purchase price. Washers, dryers and dishwashers are included as the price of the home increases. Make sure all appliances have at least a one-year written warranty.

If the mobile home complies with HUD federal standards, heating appliances must meet the requirements of the American National Standards Institute, have Underwriter's Laboratories approval, or meet other national minimum standards. All mobile homes sold in Michigan are now required to be built according to HUD standards.

Storage

Space is well utilized in a mobile home. Built-in storage is the rule. Closets can have different types of doors, such as:

- Sliding—compact, but only one side is usable at a time.
- Folding—open completely, but not as durable.
- Telephone booth—a good compromise.

Check closets for adequate rod space and shelving. They should be deep enough so clothes will hang evenly.

Check the closure of cabinet doors. They should fit tightly (you don't want them to swing open during transport). Doors should be even at the top and bottom if there are two that come together when shut. Many cabinets in the kitchen and bathroom do not have bottom shelves; you use the floor instead. Adjustable shelves are a plus and are found in some models.

Bathroom storage in mobile homes ranges from excellent to inadequate. If it seems inadequate, look outside the bath area for a closet that features shelf space.

Kitchen and Bathroom

The counter area in the kitchen should be in one or two large areas rather than in several small ones. Counter space on both sides of the sink and next to the range is good planning. Ten linear feet of counter top would be helpful.

Is the sink suitable? Does its size, shape and type meet your needs? A double sink is a good investment, but a shallow and deep bowl combination is a possibility as is a double sink separated by a small garbage bowl.

Ventilation in the kitchen is provided by windows, or if windows are not used for ventilation, by a mechanical fan capable of producing a change of air

in the kitchen every 30 minutes. The bathroom should be provided with movable windows capable of providing ventilation or the bath should include a wall or ceiling fan which will change the air every 12 minutes.

If kitchen or bath walls are papered, ask about washability. The paint should be washable and stain-resistant.

Fluorescent lights are often used in bathrooms and sometimes in kitchens, but they can distort color unless a "warm white" bulb is used. Fluorescent fixtures are slow to light but use less energy than incandescent fixtures. Electric outlets should be conveniently located.

Exterior Extras

Exterior extras can be put into two categories: 1) convenience and 2) essential. Depending on your specific needs and budget, you might want to consider some convenience options such as decorative porch lights, awnings, add-a-rooms, porches, additional outdoor electrical outlets, or other accessories that might add to your personal convenience. Skirting is another option to be considered. Although not a "convenience" option, it adds to the looks of your mobile home and may in fact be required by the mobile home park in which you place your home. In fact, before you buy any option, you should check with the park to make sure they are allowed. If they are not, and you bought them, you have spent money for something you cannot use (see companion Extension Bulletin E-796 Revised, "Selecting a Mobile Home Site" (20 cents).

Some extras are essential, such as steps, water heat tapes, anchoring systems, and if your home heats with fuel oil, a proper storage tank (commercial drums are prohibited) and a sturdy rack for the tank.

In any event, know your needs before you buy, but more importantly, know what the park will allow, and if the home is to be placed on private property, the requirements of local government.

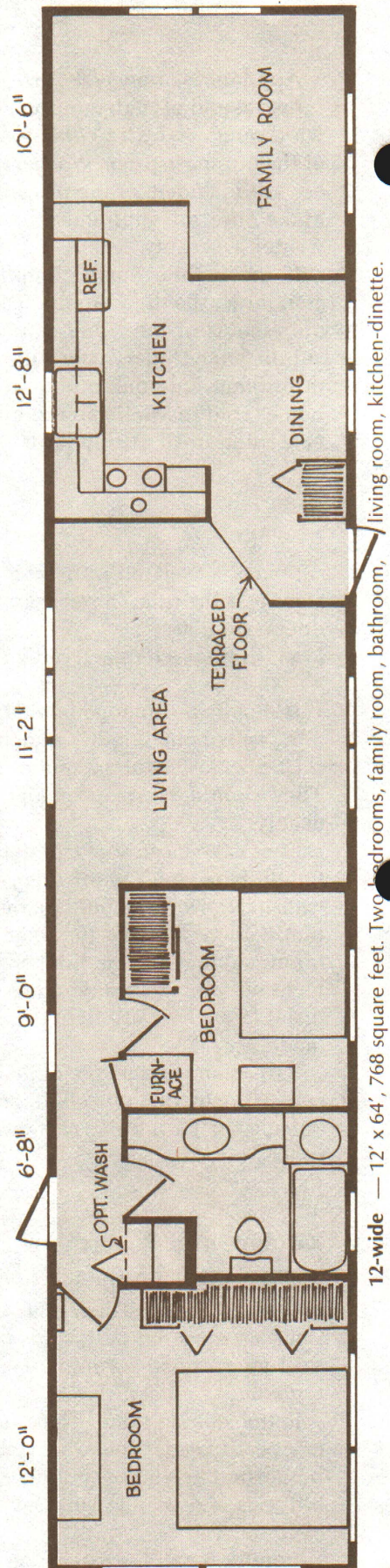
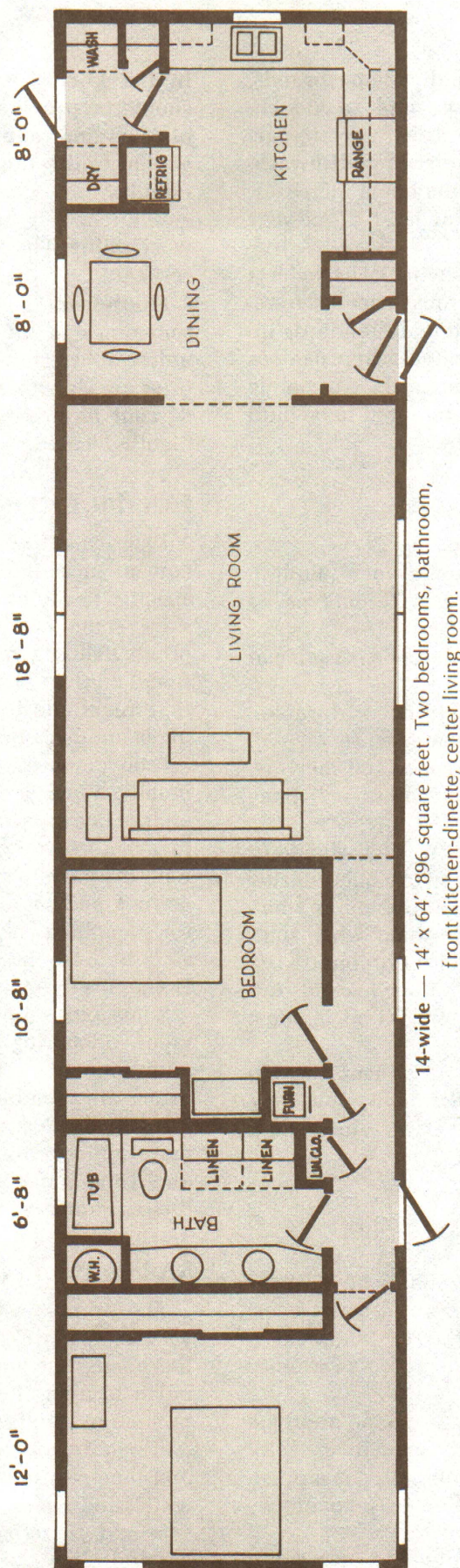
Mobile Home Installation

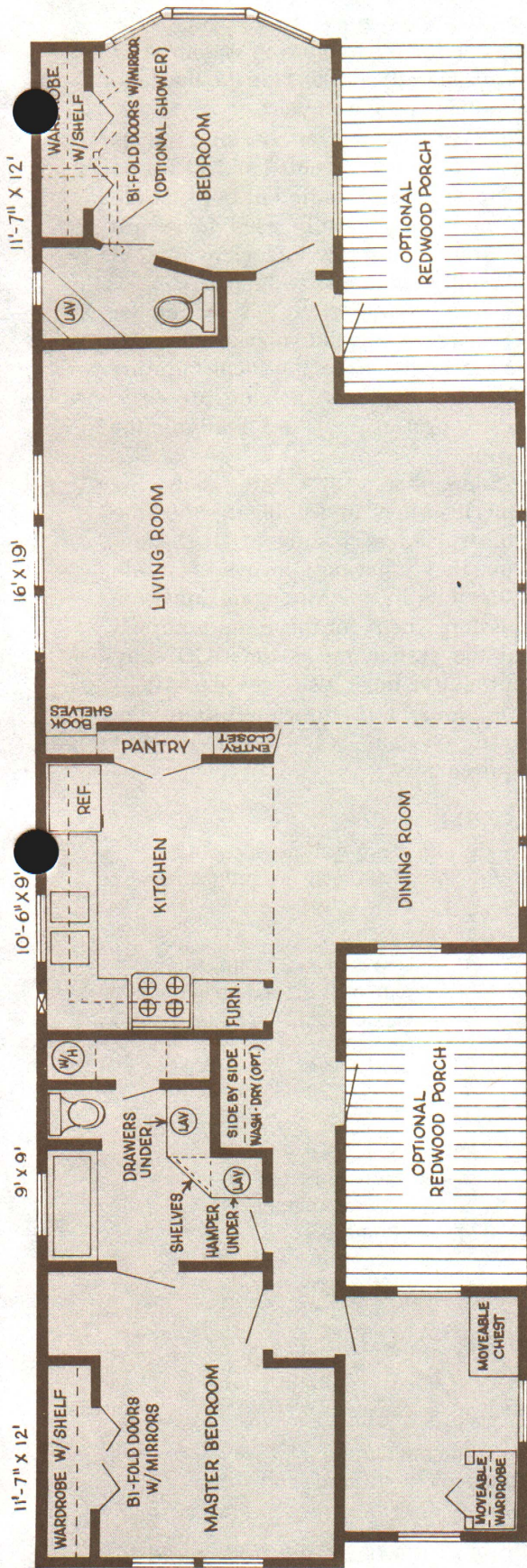
The proper installation of your mobile home is very important. You can be completely satisfied with the home, but improper installation can cause you much trouble. The State of Michigan has adopted minimum standards for mobile home installation and requires independent mobile home installers and repairers to be licensed (dealer, under law, can install and repair mobile homes as part of their business and, therefore, do not have to be licensed separately). These standards require certain spacing of pillars, platform dimensions, and other requirements such as utility hook-ups.

MOBILE HOME FLOOR PLANS

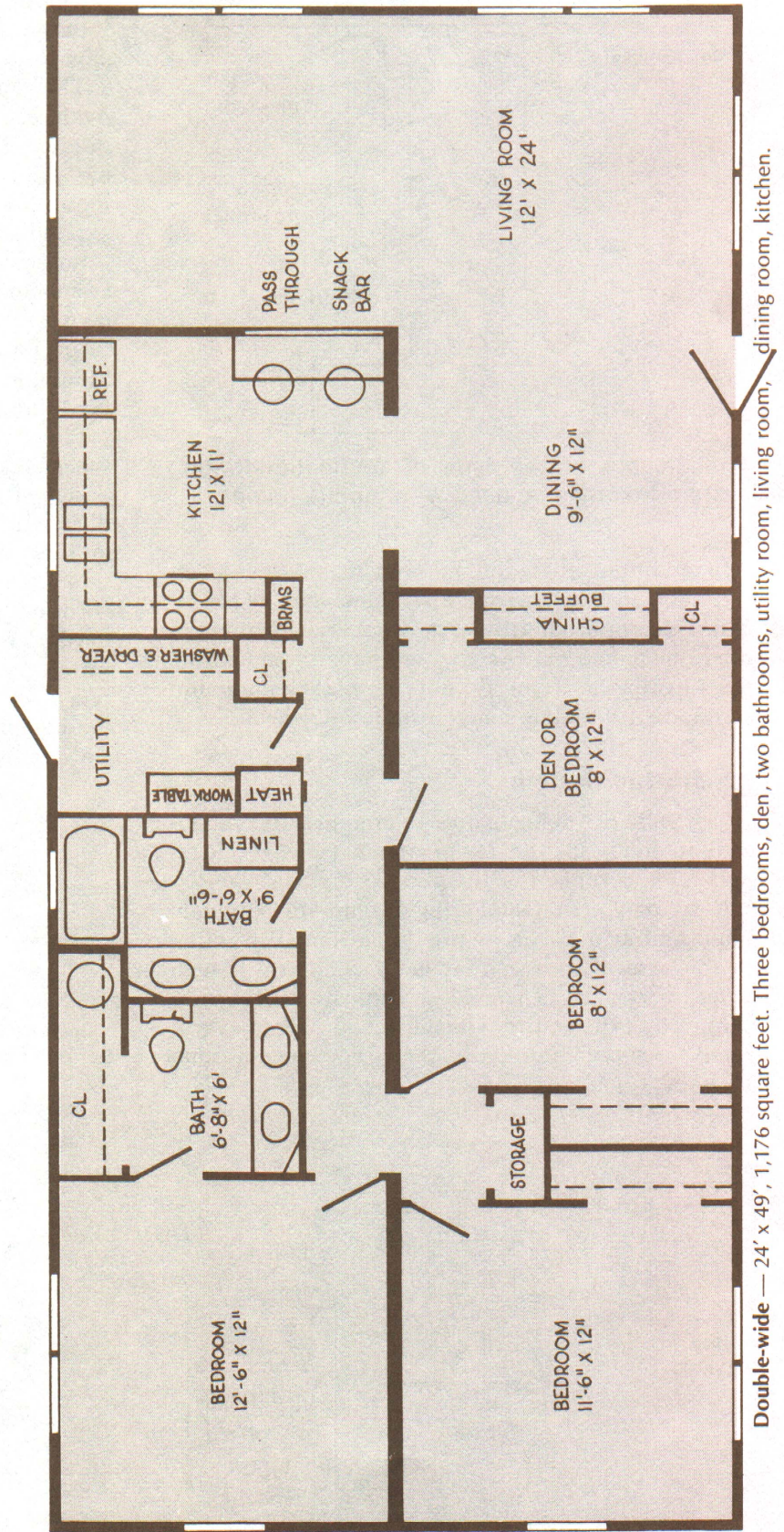
Room arrangements shown here are representative of those found within each of the four major home styles and size categories. Double-wides and expandables answer specific housing needs. Manufacturers commonly include the 3 foot towing hitch when indicating the overall length of the home. In the plans shown here, actual

room measurements are given, and home sizes are indicated in square footage of living space—the length of the hitch is not included in the measurements. Note how location of outside doors in 12-wide and double-wide examples break up the “tunnel effect” of a long hall. Courtesy: Manufactured Housing Institute.

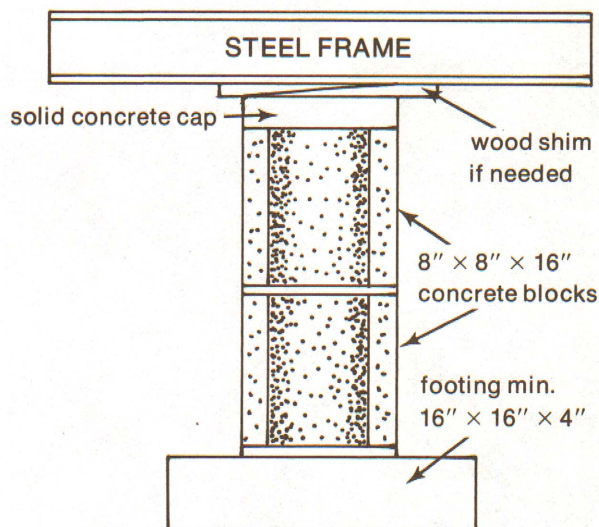




12-wide double expandable — 12' x 58' expandable, 815 square feet. Two bedrooms (one pull-out), two bathrooms, pull-out living room, kitchen, dining room.



Double-wide — 24' x 49', 1,176 square feet. Three bedrooms, den, two bathrooms, utility room, living room, dining room, kitchen.



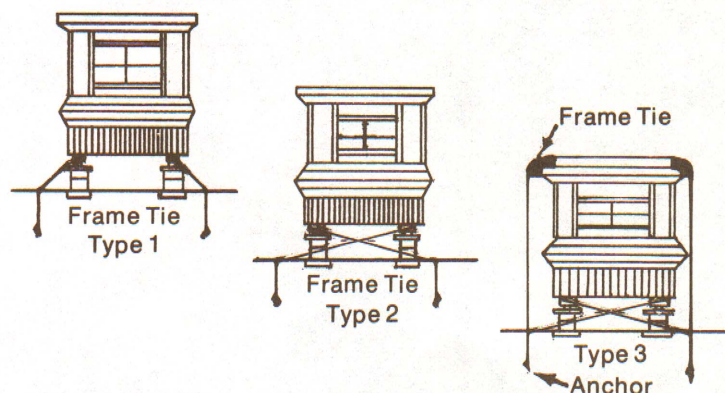
An example of the type of foundation/footing system that may be used with mobile homes.

In addition, all manufacturers must provide installation instructions for any home sold in Michigan. This applies mostly to new homes. If you buy a used home, you may or may not have these instructions available. If you do not, the State's minimum standards for mobile home installation prevail.

Anchoring Systems

The State of Michigan does not require that you install an anchoring (tie-down) system. However, local units of government or the park may.

Keep in mind that anchoring systems are extremely important as a means of providing some protection in the case of severe weather, particularly if high winds occur. HUD standards indicate that homes cannot be expected to withstand high winds over a given force unless properly anchored. This informa-



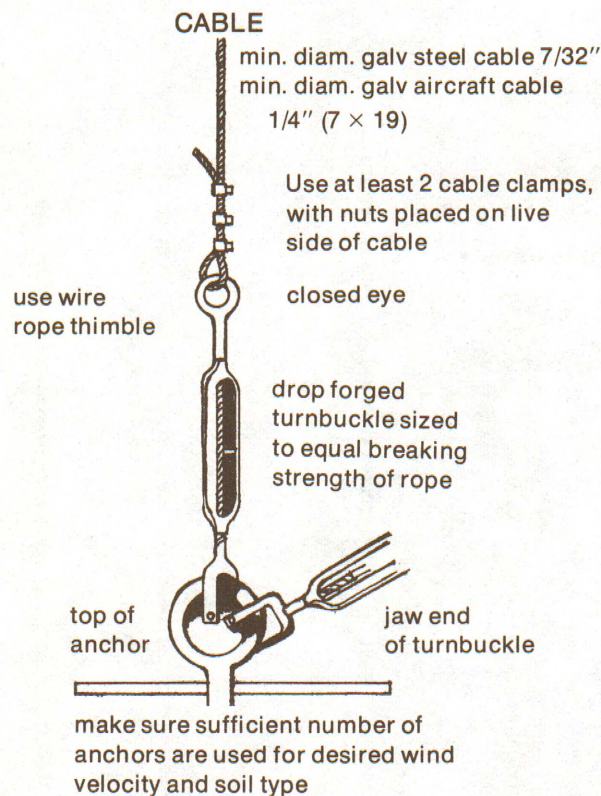
A variety of anchoring systems are available to tie your mobile home to the ground.

tion must be provided to buyers. However, you as the buyer are responsible for the anchoring system. And if they are not required in the park or locale, the decision to install a system rests with you.

There are two basic types of anchoring systems available: 1) bale or "over the roof," and 2) frame ties, or you can choose a combination of both. There are three basic methods generally used to secure these ties to the ground: 1) screw auger anchors, 2) expanding anchors, 3) concrete "deadmen."

Soil conditions are very important in selecting the system to use. It is, therefore, best to consult the park owner or manager for advice, or the local building inspector, if siting the home on private property. Mobile home service professionals are available for consultation as well.

Effective in September, 1979, all anchoring systems sold and installed in Michigan must be designed and constructed according to HUD standards. In addition, they must be approved for sale and use within the state by the Michigan Construction Code Commission. Check for the manufacturer's certification that the system meets the HUD standards. The manufacturer must also provide written installation instructions, and information on the types of soils the system was tested in and maintenance requirements.



An example of one of the basic methods used to secure mobile home anchoring systems to the ground.

One final comment: an insurance company may require that you install an anchoring system as a condition of insuring your home. If this requirement is necessary to obtain insurance (normally a condition to financing the home), you will have to install an anchoring system.

MOBILE HOME INSURANCE

A financing institution may require that you obtain and maintain loss and damage insurance as a condition of financing. However, you have the right to select your agent. A dealer can recommend an agent, but can not require you to buy from a particular agent as a condition to the sale. The choice is yours.

FIRE SAFETY REQUIREMENTS

All mobile homes manufactured, sold, or brought into Michigan are now required to comply with HUD minimum safety standards. The following is a partial list of things to expect and check for:

1. Are there two ways to get out of each room in case of fire? Are door locks and security latches of a type that can be released quickly? Can windows be used for escape routes? Make sure you know how to release a "pop out" window.

2. Is the furnace in top working order? Is the air opening clear of obstructions so the furnace will get ample air from the outside? Are all automatic limit controls in working order? Is the furnace room properly vented, either by having louvers in the door or by having enough space between the door bottom and floor, in order to allow air to circulate into the furnace room. Do not block the door or store anything in the furnace room. You invite trouble. The lining of the room used to store the heating unit should be made of materials that will retard the spread of fire if the home was built according to HUD standards.

3. Is the electrical system adequate? Have a licensed electrician check it if you have an indication the previous owner had trouble with blown fuses or tripped circuit breakers. Are there ample outlets so that extension cords will not be needed regularly?

4. If buying a used home, check to see if the home is equipped with a smoke detector and a fire extinguisher rated 2A-10B-C as required by Michigan law. Consider a smoke detector listed by Underwriters Laboratories or Factory Mutual and installed according to HUD standards for mobile homes. These standards also suggest a combination rate of rise and smoke detector alarm to be placed in the closet or enclosure where the furnace is located.

FINANCING YOUR MOBILE HOME

The least expensive way to buy a mobile home is to pay cash, but most buyers must borrow. Conventional mortgage financing is sometimes available on mobile homes. But financing a mobile home is usually like financing a car—on an installment basis, with the interest calculated on the original balance of the loan and added to the principal. This contrasts with conventional real estate loans, where the interest is calculated on the declining balance.

Under a mobile home installment sales contract, the term of the loan is relatively short (ranging from 7 to 12 years) in contrast to 20 years or more for a conventional home mortgage. The downpayment is usually 10 to 15% of the purchase price and includes charges for transportation, optional items and the dealer's profit. Finance charges are high as well, running approximately 14% for regular mobile home loans in early 1979.

Sources for financing mobile homes vary in different areas of the state. The lending policy of local financial institutions will determine availability of funds. Some will lend on mobile homes, others will not. Check with local banks, Savings and Loan Associations, and Credit Unions to learn their policy.

In addition, the mobile home dealer may be a source for funds. Often they can arrange an indirect loan on a home by working through a bank or mortgage company in order to secure financing. These indirect loans can often provide more liberal terms than direct loans through financial institutions. For instance, in Michigan, banks are limited by law to extending loans for mobile homes to only 7 years. If the same bank, however, indirectly loans money on a mobile home through a dealer, terms can be extended to as many as 12 years.

Federal Housing Administration (FHA) insured loans and Veterans Administration (VA) guaranteed loans are available for mobile homes as well. Under these programs, neither FHA nor VA will directly lend you money to purchase a mobile home. Instead, they insure the mobile home loan you secure from a traditional lender. There is a small annual charge for this insurance.

In effect through the programs, FHA and VA guarantee the lender that if you should default on your monthly payments, FHA and VA will pay the outstanding balance of your loan to the lender. If this should happen, your mobile home would then become the property of FHA or VA.

These programs act as security for lenders, encouraging them to make loans on mobile homes. Not all lenders participate in the FHA or VA programs, however. Check with local financial institutions to see if FHA or VA financing is available. Often terms under

these programs are somewhat better than conventional mobile home financing terms. Interest rates may be lower, downpayment may be lower, and length for repaying the loan may be longer.

All lending agencies require insurance on mobile homes. It may be part of the purchase contract (added to the amount on which the buyer pays interest) or purchased separately. Consider all options for insurance before you sign a financing contract, and be sure your own investment will be adequately protected. Include homeowner's liability as part of the insurance policy package.

COSTS OF A MOBILE HOME

Usually the mobile home buyer finds that new 14-foot wide mobile homes, including furnishings, equipment and set-up cost between \$7,000 and \$19,000 with average cost being \$13,000. Double wides generally cost from \$10,700 to \$30,000, average price \$20,350.

Although the purchase price is important, many people are more concerned with monthly costs of mobile home living. The highest proportion of housing costs, such as principal, interest, park rent, and utilities are paid monthly. Other expenses, including insurance, maintenance and repair, can be budgeted monthly.

In the end, it is the monthly costs that you must be willing and able to meet.

What monthly expenses can be expected?

1. Principal and interest—the amount necessary to pay for the mortgage varies according to the amount borrowed, interest rate, and length of the mortgage, as well as the purchase price of the mobile home. For example, if we vary only one factor, the results would be as follows:

	Monthly Payment	Total Payment
• amount borrowed at		
14% for 12 years		
= \$12,000	\$173.33	\$24,950.00
= \$10,000	\$144.44	\$20,799.36
• interest rate for		
\$12,000 for 12 years		
= 14%	\$173.33	\$24,950.00
= 12%	\$156.12	\$22,481.28
• length of the mortgage for		
\$12,000 at 14%		
= 12 years	\$173.33	\$24,950.00
= 7 years	\$232.85	\$19,559.40

2. Property tax—in Michigan, mobile home owners locating their home on private property pay direct property tax. Taxes are paid on assessed value of the home which is 50% of the home's market value plus assessed value of the land on which the home is located. The average tax rate (millage rate) in Michigan is \$51.64 per \$1,000 of assessed value for real property. Thus taxes the first year for a \$12,000 unit would be at least \$309 a year ($6 \times \51.64, i.e. assessed value = to 50% of market value $\times$ local millage rate) or \$25.75 a month. In addition to this amount on the home, tax on the land must be paid as well. For specific figures, contact your local assessor. Owners locating homes in parks, on the other hand, pay indirect property taxes through monthly park rent. In addition, they pay a "specific tax" of \$36 per year (\$3 per month) as property tax. This specific tax is usually included in monthly park rent as well.

3. Insurance (Comprehensive property)—mobile homeowner's insurance policies covering physical damage, theft, and liability can usually range from .5 to 1.75% of the purchase price per year depending upon the company selected, coverage and policy. For example, the insurance on a \$12,000 mobile home may average about \$170 per year or \$14.16 per month. It is wise to shop around as company rates differ dramatically. Be sure to check comparable policy coverage with each company.

4. Utilities—annual cost of utilities is at least 5 to 10% of the purchase price of the mobile home, and will vary according to location, quality of construction and use family members make of heat, air conditioning, etc. Keep in mind that utility costs are expected to increase at a dramatic rate in the future. Thus, the buyer of a \$12,000 mobile home could easily expect the costs of electricity, water and sewer, heating fuel, and phone service to be at least \$900 per year or an average of \$75.00 or more a month.

5. Repair and maintenance—generally about 1% of the purchase price of a mobile home should be allowed annually for repair, maintenance, and replacement of equipment. Repair and maintenance of a new \$12,000 mobile home would average about \$120 per year or \$10 a month.

6. Park rent—if the mobile home is to be placed in a park the owner will probably pay between \$90 to \$140 a month for site rental. (The lower charge could be expected in smaller communities, the higher rate in more urban areas.)

How these monthly costs add up is shown in the following example. Thus, if we assume that all costs will remain stable (which, of course, they won't) the

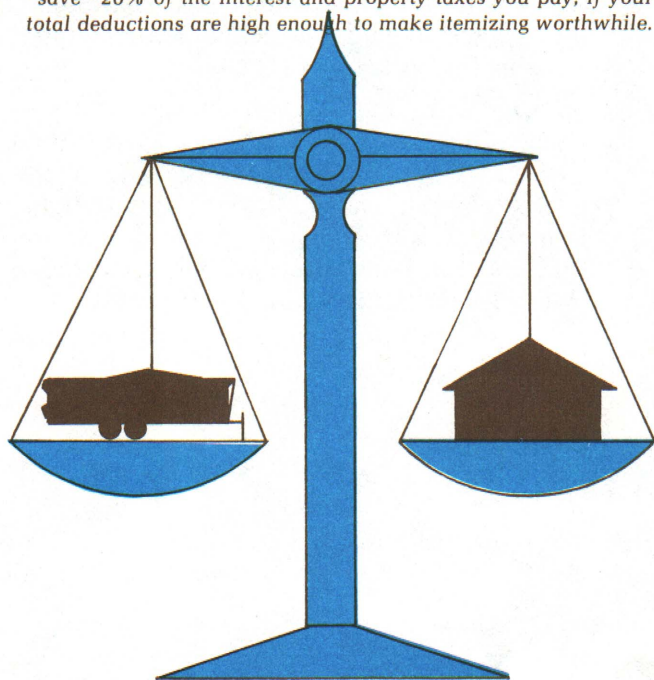
costs of a \$12,500 mobile home could be similar to the following:

\$12,500	Base price (average 14×70, 3 bedroom home with refrigerator and range).
+ 1,000	Options (deluxe carpet, gas hot water heater, furniture group, 100 amp electrical service, storm and screen windows).
+ 1,000	Essential Accessories (steps, skirting, heat tape, set-up and delivery of home).
\$14,500	Purchase Price
- 2,500	Down Payment
\$12,000	Mortgage at 14.12% (annual percentage rate) for 12 years.

Monthly Expenses

Item	Monthly Cost
Principal and interest*	\$173.33
Property tax (\$36 per year if home is located in a park or in this example, tax on \$14,500 home at 50% assessed value, mileage rate equal to \$51.64 per \$1,000 of assessed value)	31.19
Property insurance (at 1.1% of price per year)	13.29
Utilities (at 7.5% of price per year)	90.62
Repair and maintenance (at 1% of price per year)	12.08
Park Rent (none in this example as home is located on private property)	
Total	\$320.51

*Interest and property taxes are deductible from your taxable income if you itemize deductions on your federal tax form. For instance, if you are in a 20% tax bracket you could expect to "save" 20% of the interest and property taxes you pay, if your total deductions are high enough to make itemizing worthwhile.



Mobile home vs. house—which is best?

Analysis of mobile home financing is not easy, since it involves factors substantially different from other types of residential mortgages. For instance, as indicated earlier, mobile home loans generally have a shorter term or length than conventional mortgages—usually between 7 and 12 years for new single width homes. Also the method by which interest is computed is often significantly different from that used for other residential mortgages. Frequently, the add-on method is used to determine the actual rate of interest the mobile home buyer pays. The importance of this fact is that the true annual percentage rate of interest is higher and more expensive than the add-on rate which may be quoted. The following table illustrates this relationship:

Add-on Rate	(for)	Number of years	(equals)	Annual Percentage Rate
7%		7 years		12.15%
		10 years		11.68%
		12 years		11.40%
8%		7 years		13.69%
		10 years		13.11%
		12 years		12.78%

When shopping for mobile home financing, ask the lender (or dealer) to quote the annual percentage rate (not the add-on rate). According to the Federal Truth in Lending Law, all written contracts must state the annual percentage rate. However, knowledge of this fact alone may not help you when shopping for a loan. So—in addition to asking what the annual percentage rate is, you may find it to your advantage to ask the lender to quote also (1) the dollar amount of the monthly payment and (2) the total cost of interest during the mortgage period. With this information you can compare different types of loans and obtain the "best buy for your money."

Another important fact mobile home buyers should recognize is that the allocation of the buyer's payment to interest and to principal may vary according to the computation method used by the lender. This fact is EXTREMELY IMPORTANT IF THE OWNER REPAYS HIS/HER LOAN EARLY DURING THE ORIGINAL TERM, and the majority of mobile home loans are paid before the contract expires (e.g. the home is sold and the seller pays his/her contract). To illustrate the importance of the computation method when prepayment occurs, let's examine the two basic methods of computation:

—Rule of 78's (also known as "Sum of the Digits" or "Direct Ratio" method) is the most common method of computing repayment for add-on interest rate contracts. When prepayment occurs, the annual percentage rate (simple interest rate) increases and the borrower is in effect penalized. For example, if

you obtain a 96-month loan with an add-on interest rate of 7.5%, the annual percentage rate is 12.75% if you hold the contract for the entire 96 months. However, if you prepay your loan, the annual percentage rate will be higher. For instance, if after 6 months you prepay the 96-month contract, your annual percentage rate increases to 14.63% when the Rule of 78's is used.

—Actuarial or Direct Reduction method is less common for mobile home loans although used for FHA, VA, and other mortgages where simple (rather than add-on) interest is used to compute repayment schedules. Using this simple interest method, the annual percentage rate will not change if the borrower prepays his/her loan. In short, this computation method is more desirable for the borrower.

When shopping for a mobile home loan, ask the lender (or dealer) what the remaining balance due would be if you prepaid your loan after 12 months, for example. The lower the remaining balance (on contracts with the same original terms and principal), the more favorable you will find the loan.

INVESTMENT POTENTIAL AND DEPRECIATION

For years, mobile homes have had a reputation of providing poor investment potential for owners because they depreciated rapidly and had a useful life of approximately 15 years. Viewed as personal property rather than real property, they declined in value much as a car. In the late 1970's, however, there has been some evidence that this depreciation trend may be reversing itself. There are a number of factors responsible for the new outlook: 1) demand for used mobile homes has increased as prices for new mobile homes and conventional housing have skyrocketed during the past decade, 2) better construction standards have increased the durability of homes since federal and state legislation regulating mobile home building were passed in the early 1970's, thus extending their useful life, 3) the acute shortage of sites to locate new homes has helped maintain and appreciate the value of well-kept used homes placed in desirable locations.

As indicated, this is a relatively recent development and agreement is not complete as to its applicability in all parts of the state. Some mobile home owners, however, are reporting quite substantial profits on homes resold, according to the Michigan Manufactured Housing Institute and the Michigan Mobile Home Owners Association.

To determine the trend in the area where you plan to locate your home, visit with bankers and other lenders, mobile home dealers, and home owners.

They can provide you with general market facts. Keep in mind, however, that future resale value will depend largely upon the local housing demand situation at the time you choose to sell your home, as well as how well you MAINTAIN the home.

Sources:

Angell, William J. *Costs of Owning a Mobile Home*. (Extension Folder 287). Agriculture Extension Service, University of Minnesota, St. Paul, MN, 1976.

Complete Guide to the HUD Mobile Home Standards Program, second edition. Compliance Systems Publications, Inc., 1977. (A reprint of information taken directly from the *Federal Register*, December 18, 1975.)

Councils of Better Business Bureaus, Inc. "Tips on Buying a Mobile Home." Washington, D.C.: Council of Better Business Bureaus, Inc., 1977.

"Department of Commerce, Mobile Home Commission, General Rules." Parts 1 through 10, published in mimeograph form by Michigan Department of Commerce, Corporation and Securities Bureau, Mobile Home Section, Lansing, MI, 1978-1979.

Michigan Manufactured Housing Institute in cooperation with the University of Detroit. *The Michigan Mobile Home Community: An Economic Analysis*. No publisher, no date.

"Mobile Home Commission Act." Public Act No. 419, Public Acts of 1976, State of Michigan.

"Quick Facts About the Manufactured Housing Industry." Arlington, Virginia: Manufactured Housing Institute, June, 1978.

Stedron, Charles J., and Wimsatt, Thomas. "Mobile Home Taxation: A Comparative Report on Types of Housing Within the State of Michigan." Prepared for the Michigan Mobile Home Commission by the Department of Commerce, Corporations and Securities Bureau, Mobile Home Section, Lansing, MI, February 20, 1979.

CHECKLIST FOR COMPARING MOBILE HOMES

There are many important factors to keep in mind when shopping for a mobile home. This checklist is provided to help you recall the points made in the bulletin.

Take it with you; write in the answer to each question; then compare!

MODELS BEING CONSIDERED:

A. Make _____ Size _____

Price _____ Dealer _____

B. Make _____ Size _____

Price _____ Dealer _____

C. Make _____ Size _____

Price _____ Dealer _____

MODEL

A B C

- | | | | |
|---|-------|-------|-------|
| 1. Is roof curved or sloped? | _____ | _____ | _____ |
| 2. Is roofing rolled on edge? | _____ | _____ | _____ |
| 3. Are gutters and downspouts provided? | _____ | _____ | _____ |

Undercarriage

- | | | | |
|---|-------|-------|-------|
| 4. Is frame strong enough to prevent automatic washer vibration? | _____ | _____ | _____ |
| 5. Is there a steel beam frame? | _____ | _____ | _____ |
| 6. Are floor joists 4 feet or less apart? | _____ | _____ | _____ |
| 7. Are installation specifications written by the manufacturer included in the home? | _____ | _____ | _____ |
| 8. Does the park owner supply a foundation which will be suitable with the type of installation requirements the mobile home manufacturer recommends? | _____ | _____ | _____ |
| 9. Does the park owner supply sidewalks and paved parking spaces? | _____ | _____ | _____ |
| 10. Are approved safety anchors included in the price? | _____ | _____ | _____ |

MODEL

A B C

Heat and Ventilation

- | | | | |
|---|-------|-------|-------|
| 11. Is fuel oil tank furnished by dealer? (Tank should be 18" above furnace.) | _____ | _____ | _____ |
| 12. Is there a ceiling fan in bathroom with hood and flashing? | _____ | _____ | _____ |
| 13. Is kitchen fan provided? (Minimum capability: change of air every 30 minutes) | _____ | _____ | _____ |
| 14. Is kitchen window area at least 5% of floor area? | _____ | _____ | _____ |

Insulation

- | | | | |
|--|-------|-------|-------|
| 15. Is home insulated according to HUD standards? (minimum of 4 inches on sides and ceiling) | _____ | _____ | _____ |
| 16. Is a plastic film vapor barrier provided? | _____ | _____ | _____ |
| 17. Are exterior walls ventilated? | _____ | _____ | _____ |

Wiring

- | | | | |
|--|-------|-------|-------|
| 18. Are electrical circuits provided adequate? | _____ | _____ | _____ |
| 19. Are there electrical outlets on all walls? (12"-18" above floor) | _____ | _____ | _____ |
| 20. Are wires shielded when they pass through joists, studs or rafters? | _____ | _____ | _____ |
| 21. Is an approved electrical symbol used on home wiring? | _____ | _____ | _____ |
| 22. Is the service entrance designed for both overhead and underground wiring? | _____ | _____ | _____ |
| 23. Is there an approved outside electrical receptacle easily accessible for heat tapes and central use? | _____ | _____ | _____ |

Plumbing

- | | | | |
|---|-------|-------|-------|
| 24. Are all drain fixtures trapped and vented? | _____ | _____ | _____ |
| 25. Do lavatories and sinks have overflow drains? | _____ | _____ | _____ |
| 26. Are bathroom fixtures of suitable quality? | _____ | _____ | _____ |
| 27. Are there water and drain connections for a washing machine? | _____ | _____ | _____ |
| 28. Are all exposed water pipes protected from freezing with heat tape or insulation? | _____ | _____ | _____ |

	MODEL		
	A	B	C
Storage			
29. Is there adequate storage in the bathroom?	—	—	—
30. Is there adequate storage in the kitchen?	—	—	—
31. Is there adequate storage in bedrooms?	—	—	—
32. Do cabinet doors fit well and swing properly?	—	—	—
33. Are kitchen base cabinets on the floor level or above a toe space?	—	—	—

Entrance

34. Do doors fit tightly and operate smoothly?	—	—	—
35. Do doors latch securely?	—	—	—
36. Is porch included in base price?	—	—	—
37. Is there an outside entrance light, front and rear?	—	—	—

Windows

38. Are storms and screens provided?	—	—	—
39. Can storms and screens be changed from the inside?	—	—	—
40. Is there space for storing storms and screens during off-season?	—	—	—
41. Are interior walls paneled?	—	—	—
42. Is there acoustical tile on ceiling?	—	—	—
43. Are ceilings 7 ½ feet or more?	—	—	—

Appliances

44. Appliances included:			
kitchen range with oven?	—	—	—
water heater?	—	—	—
washer?	—	—	—
dishwasher?	—	—	—
central air conditioning?	—	—	—
furnace?	—	—	—
refrigerator-freezer?	—	—	—
dryer?	—	—	—
garbage disposal?	—	—	—
45. Are the quality and size of these appliances adequate?	—	—	—

Furnishings

46. Is furniture included?	—	—	—
47. Is the quality adequate?	—	—	—
48. Are draperies included?	—	—	—
49. Is the quality satisfactory?	—	—	—
50. Are the pieces large enough for family comfort?	—	—	—

Services and Maintenance

51. Is an owner's manual provided by the manufacturer or the bulletin: "Owner's Guide to Mobile Home Maintenance" (\$1.00 from Manufactured Housing Institute, 1745 Jefferson Davis Highway, Suite 511, Arlington, VA 22202)?	—	—	—
---	---	---	---

(For more information on mobile home living, contact your Cooperative Extension Service office or the Michigan Manufactured Housing Institute, 19045 Farmington Road, Livonia, MI 48152.)

The author wishes to acknowledge the following consultants for their assistance in preparing this publication:

Charles Stedron, Michigan Department of Commerce, Mobile Home Section (Lansing, MI)

Larry Beyers, President, B & J Mobile Home Service (Lansing, MI)

Timothy J. DeWitt, Director, Michigan Mobile Home and Recreational Vehicle Institute (Livonia, MI)

Dr. Marilyn Nagy, Assistant Professor, Department of Family Ecology, Michigan State University (E. Lansing, MI)

Howard Haas, Assistant Vice President, Consumer Loans, American Bank and Trust (Lansing, MI)

David Bartram, Michigan State University Federal Credit Union (East Lansing, MI)

Libby Meyers, Michigan Mobile Home Owners Association (Canton, MI)

George E. Renault, Manufactured Housing Institute (Arlington, VA)