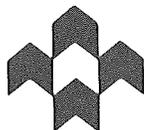
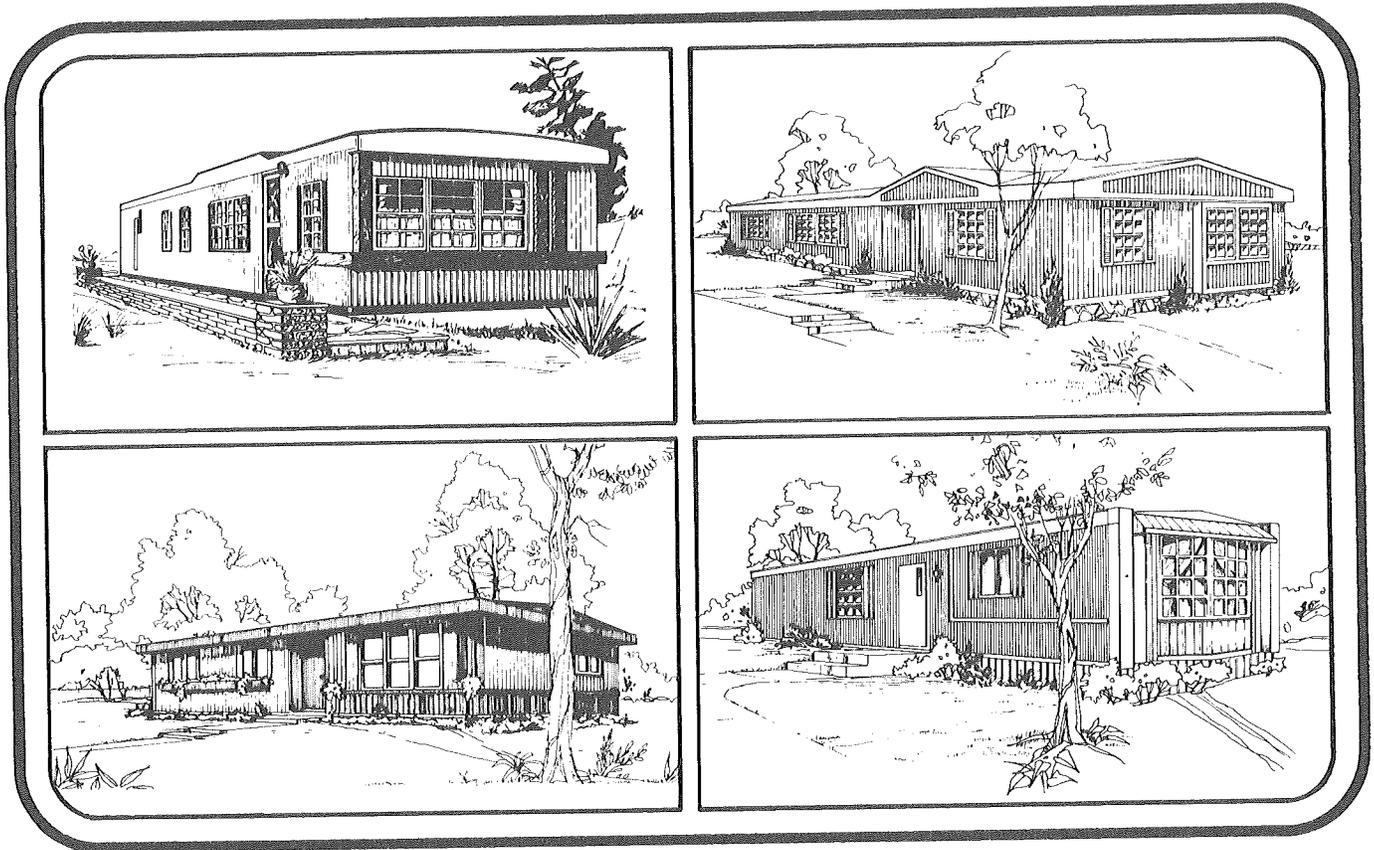


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REDMAN OWNER MAINTENANCE MANUAL



Redman Homes, Inc.

INTRODUCTION

Your new home, manufactured by Redman Homes, Inc., is manufactured in accordance with the requirements of the National Mobile Home Construction and Safety Standards. In addition, a limited warranty issued by Redman Homes, Inc. is provided with your home.

Before being delivered to your retailer the home was completely inspected to insure that it met the quality levels that have been established by our manufacturing plant. In addition, plumbing, the electrical and the gas systems were completely checked before the home left the factory.

Because new products and methods are constantly being introduced, instructions may be required. Applicable addenda may be found inside the back cover of this instruction manual.

Redman Homeowner Protection

Confidence in our product and our people gained from over 40 years of experience in the manufacture of homes makes it possible for us to provide the Redman Homeowner Protection Program first.

Over the years, Redman has been the first manufactured housing company to:

- Provide a one-year written limited warranty on all components
- Develop a mechanized production assembly line
- Use exterior paint styling
- Use all-weather climate testing
- Distribute manufactured homes nationwide
- Use a national consumer advertising program
- Conduct effective retail sales training for retailers

Redman corporate standards are stressed in each of our plants located throughout the United States. This enables us to deliver a more trouble-free home to our retailer organization. And it means better service and a better way of living for you.

Redman builds a better way of living



If you should lose the instruction material for any separate appliance, you can write the manufacturer for a replacement copy. Address of the manufacturer is on the nameplate of the appliance. Be certain to mention the model or serial number.

LIMITED WARRANTY

LIMITED WARRANTY

Redman Homes, Inc. (the "Manufacturer") warrants this mobile home, including the structure, plumbing, heating, and electrical system, and all appliances and equipment installed by the Manufacturer, when purchased new, to be free from substantial defects of material and workmanship under normal use and service for a period of twelve (12) months or of fifteen (15) months if the first retail purchaser acts in the manner set forth below to extend this limited warranty, from the date of delivery to the first retail purchaser, and that the mobile home complies with statute, code, and rules in effect on date of its manufacture in the state in which the dealer is located and in which the sale to the first retail purchaser occurred. This limited warranty does not extend to damage resulting from misuse, unauthorized repairs, additions or alterations, or improper transportation or set-up. The Manufacturer does not warrant the furniture, drapes, floorcovering, and bedding. The Manufacturer does not warrant any appliances or equipment installed by the dealer.

EXTENSION OF LIMITED WARRANTY

The period of the limited warranty will be a period of fifteen (15) months from date of delivery to the first retail purchaser if the first retail purchaser completes and mails, within sixty (60) days after the date of delivery to the first retail purchaser, to the Manufacturer one copy of the completed Homeowner Checklist accompanying the delivery of the home.

REMEDY UNDER THIS LIMITED WARRANTY

The exclusive remedy for any such defect is the Manufacturer's obligation to repair or replace, at its option without cost to the purchaser or his transferee, at the site of the mobile home, any defective part or parts within the scope of this limited warranty, provided that written notice of the defect is received from the purchaser or his transferee by the Manufacturer or dealer at their business address within one year (or fifteen months, if appropriate) and ten days from the date of delivery to the first retail purchaser. If the purchaser or his transferee believes such defect exists, the purchaser or his transferee shall contact the dealer selling the mobile home. The dealer, at no cost to the purchaser or his transferee, shall repair or replace any parts necessary to correct defects in material or workmanship. If the dealer does not correct the defect and the purchaser or his transferee believes that it is covered by limited warranty, the purchaser or his transferee shall contact the Manufacturer's factory at the address shown below and in writing describe the problem. If factory personnel fail to resolve the problem the purchaser or his transferee shall call the Manufacturer at Dallas, Texas, collect, (214) 353-3600. Office of the National Quality Assurance Manager, and describe the problem and attempts made to resolve it. Delegation of the duty to repair to the dealer in no way relieves the Manufacturer of the ultimate responsibility to fulfill all of its warranty obligations.

DISCLAIMER OF WARRANTIES

The Manufacturer does not assume responsibility for any undertaking, representation, or warranty made by dealers, agents, or salesmen, representatives, employees, or any other persons, other than those expressed herein. The failure of the Manufacturer on one or more instances to insist upon the performance by the first retail purchaser of any of the requirements of this limited warranty as set forth above, shall not be construed as a waiver of any such requirement; but the same shall continue and remain in full force and effect the same as if no such failure or waiver had occurred. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER EXPRESSED WARRANTIES AND ALL IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS, ARE LIMITED TO THE DURATION OF THIS EXPRESSED WARRANTY: HOWEVER, SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THE MANUFACTURER DOES NOT ASSUME RESPONSIBILITY FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES INCURRED AS A RESULT OF ANY DEFECT IN THIS MOBILE HOME. SUCH CONSEQUENTIAL OR INCIDENTAL DAMAGES MAY INCLUDE BUT ARE NOT LIMITED TO, LOSS OF USE OF THE HOME; LOSS OF TIME; INCONVENIENCE; MENTAL DISTRESS; EXPENSE FOR GASOLINE, TELEPHONE; TRAVEL, MEALS OR LODGING; LOSS OR DAMAGE TO PERSONAL PROPERTY; OR LOSS OF EARNINGS OR OTHER REVENUES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Manufacturer's Plant:

Redman Homes, Inc.
Attn: General Manager

Manufacturer's Principal Office:

Redman Homes, Inc.
Attn: National Quality Assurance Manager
2550 Walnut Hill Lane
Dallas, Texas 75229
(214) 353-3600

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

Welcome To Your Home:

Redman homes are designed and built to meet the National Mobile Home Construction and Safety Standards Act of 1974.

All Redman homes are built to quality standards that are the highest in the industry. Each home is inspected at the factory both during and after construction by well-trained, high qualified personnel. Each home is covered by a written limited warranty from Redman Homes, Inc.

Even with all that care, sometimes corrections need to be made after a home is transported from one of our plants. This is why we developed the Redman Homeowner Protection Plan explained on Page 3 of this manual.

Highlights of the Redman Homeowner Protection Plan are:

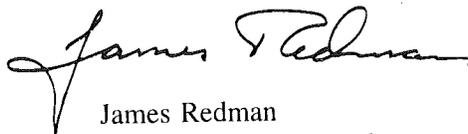
1. Your Redman retailer thoroughly inspects your home as he receives it to make certain that the home is in good condition.
2. You review all items on the Homeowner Checklist after your home is delivered and set up. You are encouraged to complete the checklist immediately upon taking possession of your home. If you complete and return the Homeowner Checklist within sixty days of the date of original retail delivery Redman will extend your limited warranty to fifteen months from date of original retail delivery.

After these steps of the Redman Homeowner Protection Plan have been completed, the Redman Limited Warranty still applies — even though there should be very few instances where problems develop. If a situation does develop that requires attention, please contact your retailer and follow the procedure outlined in this owner's manual.

As a homeowner, there are things that you must do to maintain the value and liveability of your home. This owner's manual describes many of those things and provides safety tips and other helpful information. I highly recommend that you study the manual and keep it handy for your records and reference.

After we and our retailer have fulfilled our obligations and you have followed the recommendations of the owner's manual, I am convinced that you will be a happy owner of a Redman home and will recommend us to your friends.

Sincerely,



James Redman
Chairman of the Board
Redman Homes, Inc.

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Limited Warranty...Separate Document

Procedures of the Redman Homeowner Protection Plan and Warranty Claims

Homeowner Checklist

After your home is delivered and set up, you will go through the home and review all items on the Homeowner Checklist. This is a comprehensive review covering gas and/or oil systems, water systems, electrical systems, appliances, interior features and furniture, and exterior features and equipment. When the review is completed you should sign, date and mail the form. If one copy of the Homeowner Checklist is completed by you and mailed within sixty days of the date of original retail delivery, Redman will extend your warranty to fifteen months from date of original retail delivery.

Redman's Warranty Claim Procedure on Your Home

The Redman retailer from whom you purchased your home has been selected by Redman as being an outstanding retailer to handle Redman products — who has the facilities and capabilities to serve you better and to insure you the best possible service and handling of warranty claims. Since your retailer is the closest representative, we ask you to channel service and warranty claims through him. This way we can better service your needs.

Steps to be Taken for Service and Warranty Claims

For quick, efficient service and warranty claims on your home, we ask you to take the following steps:

1. Apply for service and warranty through the retailer who sold you your home.
2. When you contact your retailer for service or warranty claims, be sure to give him all the home identification information listed on your owner's copy of the manufacturer's warranty form (serial number, model, and date purchased). Be specific about the service or warranty claims to insure efficient service.
3. Once your retailer has the essential information (serial number, model, and purchase date), he will determine whether the service is your responsibility, his responsibility, or Redman's responsibility under our warranty.

If it is determined to be warranty service he will contact the factory for authority to do the work or get the work done at Redman's expense. He may request that the factory handle the service if it is determined that this is the best way to serve you. You will receive confirmation of the work that has been authorized, who will do the work, and approximately when it will be done. Our service manager will follow up with our retailer and you if we do not receive notice that the service work has been completed within 30 days. Redman will use its best efforts to complete warranty service as expeditiously as possible.

In case you cannot contact the retailer from whom you purchased your home, please contact the factory where your home was built. Please remember, **GO THROUGH YOUR RETAILER** for quick, efficient service and warranty claims.

The limited warranty issued by Redman Homes, Inc. is included as a document that is a part of this consumer manual package.

General Consumer Information

Owner's Responsibility

As the owner of your new home, it is your responsibility, working in conjunction with your retailer to see that it is properly leveled at the site of your selection and set up properly, including all necessary tests and adjustments described in the Field Installation Manual that has been supplied to you. It is also your responsibility to provide preventative maintenance as may be required. It is suggested that minor adjustments to your home can be more effectively made by you, the homeowner.

For homeowner insurance information and insurance information if your home is to be moved from one location to another, see Insurance Section, page 25.

You should also become familiar with the Data Plate, for your home, which is located at the main electrical panel or in the kitchen. The data plate provides various identification numbers and identifies the wind and roof loads for which your home was designed. An example of the data plate is included in the back of this book.

What The Owner Is Expected To Do

Your home is like any other fine dwelling. It requires routine maintenance to keep it in first class condition.

Here is what you should do to protect your home and keep it in first class condition:

1. Fill out and return all registration cards. Read all appliance warranties and instructions — make sure you understand them — ask questions of your retailer if necessary.
2. Find out from your retailer how to get emergency service for appliances, heat, light, water, gas, etc.
3. Clean all appliances (ranges, furnace filters, etc.) at recommended intervals. Oil furnace as recommended.
4. Clean and check plumbing regularly for proper operation — follow directions for cleaning.
5. Purchase a set of tools to make minor adjustments.
 - a. Hammer.
 - b. Slot & Phillips screwdriver (standard, small, medium, large tips).
 - c. Square head screwdrivers.
 - d. Pliers — standard.
 - e. Channel lock pliers for large nuts on plumbing traps.
 - f. Set of open end wrenches (up to 1").
6. Check tie downs and foundation regularly to assure that they are safe and secure.
7. Keep animals from under the home. They can do damage to power lines, phone lines, water pipes, gas pipes, etc.
8. In the fall start the water inlet heat tape — in spring, disconnect it. Failure to do this may cause frozen pipes. Frozen pipes can break!
9. Install skirting and then ventilate the skirting to insure enough air circulation to protect against condensation, if any.
10. Check fuel oil for water accumulation occasionally. Have it pumped out if necessary.
11. Lock the top of your fuel oil tank.
12. Make sure a fuel filter is installed in the fuel oil pipe.
13. Stresses and vibrations incurred in shipping can create the need for minor maintenance. If you failed to notice some things at the time of delivery, make those adjustments yourself. If a moulding comes loose, nail it back. If a trap leaks, tighten the nut. If some screws loosen, tighten them. Your retailer and manufacturer want you to be satisfied customers, but unreasonable demands for minor service items aren't fair to either.
14. If you install a dryer, vent it properly. Failure to do so may severely damage your home.
15. Check the home roof twice a year. Recoat the entire roof with particular attention to the seams and stacks, at least once a year.
16. Make these minor adjustments, if necessary:
 - a. Adjust cabinet doors and drawers.
 - b. Renail loose mouldings.
 - c. Renail paneling that comes loose.
 - d. If a trap begins to leak, tighten it gently until the leak stops.
 - e. Remove stains from ceilings with a little bleach and water.
 - f. Hammer in loose nails.
 - g. Tighten loose screws.

Retailer's Responsibility

Even though each home manufactured by Redman Homes, Inc. is thoroughly checked and tested before it leaves the factory, it is possible that during transit the stresses applied to the home may cause minor adjustments to be required. To assure that all systems are operating properly, your retailer is required to test all plumbing and utility systems when the home is turned over to you for occupancy.

Should any services be required under the terms of your warranty, you should contact your retailer directly. Redman Homes, Inc. does not sell its products directly to the consumer. All Redman homes are sold to retailers who are independent businessmen. Your retailer is required to provide you with necessary service, tests, and adjustments to assure that your home is trouble-free. If your retailer determines that a problem you are experiencing with your home is one that requires assistance from the manufacturer, he will in turn contact the manufacturer directly.

What The Retailer Is Expected To Do

The retailer must have the facilities to properly check out, deliver, set up, and service Redman homes (or has contracted with an established servicing agency approved by Redman Homes, Inc.)

1. Assume responsibility for properly setting up those Redman homes sold to retail purchasers unless the retail purchaser elects to provide the set up of the home himself.
2. Provide each retail purchaser with a copy of the Redman limited warranty before execution of the retail sale contract, and complete the owner registration card stating the name and address of each retail purchaser and the date of purchase.
3. a. Where a defect in a Redman home affects the safety of the home, or makes it substantially uninhabitable, commence warranty service as soon as possible in the normal course of business, but in no event later than three (3) business days following receipt of notice of such defect and complete such repairs expeditiously.

b. In the normal course of business, respond to the notice of the need for warranty service or repairs within a reasonable time, not to exceed seven business days of notice and complete all warranty service within a reasonable time in the normal course of business, not to exceed thirty (30) days following the receipt of a service request.

c. The "normal course of business" shall not include conditions which place an unusually large demand upon service facilities, such as disasters, strikes, acts of God or of the government, instances of force majeure, or other occurrences which are beyond the control of Retailer and which prevent Retailer from responding to service requests within the time periods stated in subparagraphs 3(a) and 3(b) above.

4. Where a defect is alleged to exist in a Redman home which is beyond retailer's ability to repair or which retailer will not repair within the time period stated in sub paragraph 3a. and 3.b. above, inform Redman of such defect no later than seven (7) business days after receipt of the service request, and if the defect affects the safety of the home or makes it substantially uninhabitable, inform Redman of such defect no later than two (2) business days after receipt of service request.

5. Where a defect or malfunction of a Redman home exists, and a dispute arises between Redman and the retailer as to whether the retailer will be reimbursed for the repair of such defect or malfunction, necessary repairs will be performed expeditiously by the retailer with the dispute to be resolved subsequently.

6. Maintain or contract for service personnel or facilities which, in Redman's reasonable judgment, are adequate to check out, deliver, set up and service Redman homes.

7. In the event of termination of the retailer provide the same warranty service as would otherwise be provided on Redman homes still under warranty or not yet sold to retail purchasers.

Setting, Leveling, and Blocking Your Home

It is extremely important to properly set, block and level your home.

Only a knowledgeable and experienced mobile home mover, dealer, or installer should prepare your home for occupancy. He should know how to properly set and block your home, so that it will be level and remain level. It could prove to be well worth your extra expense in engaging such an expert instead of attempting to do the installation job yourself.

A properly maintained installation will, under normal circumstances, prevent the home from sagging and prevent you from possibly incurring expensive repair bills. Your home was carefully manufactured and engineered according to approved standards and specific codes. However, if your home is not set and maintained level as it was designed, or if it is not set on a completely firm foundation, certain portions of your home will undergo undue and unnatural structural strain. As a result, the home could sag substantially after a period of time.

Site Requirements

A firm foundation is absolutely necessary before your home is blocked and leveled. This is one very important requirement that should prevent your home from sagging, and it is the requirement that Redman Homes, Inc., must consider before the Company is able to honor any apparent sag-related warranty claims.

Your home should most preferably be set on a solid poured concrete slab, pad, or wide ribbons of concrete – whichever foundation is suggested and judged best by your independent home installer. Before you place your home on a site, the site should be carefully evaluated to make sure it will not be likely to settle beyond normal expectations. In this respect, be extremely cautious before placing your home on land that was filled in at any time or which was not sufficiently filled in. The following requirements should be carefully considered.

- That portion of the lot or site intended for placement of the home shall be undisturbed soil or compacted fill.
- The home lot or site shall be graded so that there shall be no depressions where surface water will accumulate. The ground shall be sloped to provide storm drainage run-off.
- The area beneath the home shall be sloped to provide drainage from beneath and to the outside of the home.

Utility Facilities

Prior to installation of the home for occupancy, utility facilities for the home shall be provided on the lot or site. A sewer drain outlet connected to an approved sewage disposal system, and the installation of equipment supplying water, electricity and fuel for heating purposes shall be completed and ready for connecting the home. All such connections shall comply with local regulations.

Local Requirements

All home installations shall comply with the requirements of the local zoning ordinances and conditional use permits established by local authorities pertaining to any health and/or safety codes.

New Home Set Up

Most new homes are moved and installed by the dealer. An installation manual has been provided describing the minimum requirements for your home set up. The installation procedures in that manual must be accomplished by qualified and experienced personnel. In some cases state, area or city codes require that home set up be performed by firms having special licenses, so check with your local agencies or ask your dealer. Your dealer will usually make arrangements for proper installation.

If you plan to make your own arrangements, consider using a professional because of the factors that make proper installation and blocking so important. The following are a few advantages of good blocking:

1. It puts the home on a suitable foundation.
2. It levels the home so that the plumbing will function properly.
3. It aligns panels, walls and cabinets so that doors and windows will close smoothly.
4. It prevents sag in the structure of the home which can result in unnecessary repairs.
5. In order to avoid NEGATING THE WARRANTY THE HOME MUST BE INSTALLED ACCORDING TO THE INSTALLATION MANUAL.

Regardless of who installs your home on your site, special considerations should be given to the above factors.

Setting up Your own Home

If the site for your home is not in a manufactured housing park, special site preparation may be required before the home can be placed as specified in your Field Installation Manual. It may be necessary to have service and utilities installed on the lot. The methods and materials vary as determined by local conditions and regulations. Always check local building codes for any provisions pertaining to manufactured housing lots. Be sure that the site has proper slope for surface water drainage, to protect your home from possible damage or discomfort due to water collecting under or around it. The grade or slope required for residential lots is often specified in local codes.

The soil under the home must remain stable enough under all local conditions (rain, ice, frost and/or snow) to provide a firm footing for piers or foundation supports installed in accordance with the Installation Manual. It will be more convenient and economical to choose a site having access roads or other means for access to move the structure into position. In extreme temperature areas certain additional measures, such as burying water lines below the frost line, need to be considered. Discuss with your dealer or set up contractor any special problems or considerations appropriate to particular weather, terrain or other factors. Refer to Field Installation Manual.

Setting Up In A Manufactured Housing Park

Should you be planning to locate in one of the many manufactured housing parks, site and facility preparation should be simpler. Adequate electrical, gas, water, and other facilities should be already installed; however, it may be wise to check ahead to be sure. Typical home service facilities include:

1. Electrical power hook up.
2. A telephone connection.
3. Gas or oil facilities.
4. Drinking water.
5. Sewer.

Your home can be equipped with chassis tie down straps or cables. In addition, should they be desired, over-the-roof tie downs can also be installed. These tie downs must be properly attached to ground anchors to provide the type of secure installation that they have been engineered to achieve. Please see your Installation Manual for further details on tie downs.

Consequences of Incorrect Blocking and Leveling

Incorrect blocking and leveling of your home could produce a sagging home in these related conditions.

- Buckling and/or loosening of walls,

partitions, siding, ceilings, doors, floors, linoleum, carpeting, insulation, wiring, sinks, tubs, toilets, weather stripping, and miscellaneous fixed original fixtures of the home.

- Leaking windows, doors, roof, ceiling, walls, floor, seams, and junctions generally caused from rain, snow, or moisture.
- Improper closing, binding and sagging of windows, cabinets and inside/outside doors;
- Malfunctioning of plumbing; water outlets, lighting fixtures; electric heating and air conditioning systems.

Periodic Releveling of Home

If any of the aforementioned sag-relating conditions occur, as listed in the preceding paragraphs and after your home has been properly blocked and leveled, you should recheck the home's leveling.

In some parts or regions of the country, the initial proper blocking and leveling of the home can be gradually impaired due to generally abnormal or even relatively normal settling of the site on which it sets. This is particularly true in geographic locations subject to seasonal freezing and thawing.

To determine if your home needs possible releveling, from time-to-time simply place a carpenter's level on the floor of your home at various lengthwise and crosswise spots in each room to see if it measures level throughout. Small variations should not create concern, as this can occur in the underlying floor joist and floor decking.

Should releveling be necessary, corrective measures can be taken by having a competent and knowledgeable home mover or installer follow the suggested procedures outlined below. Although these procedures may appear easy for an amateur to attempt, they require repeated experience to master.

Releveling Procedures

1. Place a carpenter's level upon the floor of the home while using the coupler jack at the front of the home to level the home lengthwise.
 2. Check to see if the home is level crosswise. If not, raise the side that is low by placing a hydraulic jack under the main frame in the axle area to raise the side.
 3. Place blocks or supports immediately ahead of and behind the spring hangers under the main frame.
 4. Place blocks under the main frame of the home near the front and rear ends.
 5. Place blocks under the main frame members to left or right of exterior door openings and other locations that are indicated by the diagrams.
 6. After you have placed the blocks, add wood boards of the necessary thickness, wood shims, or wood shingles to make the blocks support the weight. With stabilizer jacks it is just a matter of adjusting to snug up each jack.
- NOTE:** Because of local, state or municipal

codes, it may be necessary to secure a building permit before setting up your home. If this is necessary, contact a local engineer to work out the details to meet all applicable codes.

Testing Before Moving In

The dealer or the home installer shall be responsible to see that each of the utility systems is properly tested at the site using the following procedures:

- *Water and drainage.* If water at normal operating pressure is not available, the home water piping system shall be tested by 40 pounds per square inch air pressure test for a period of not less than fifteen minutes without leaking. The proper pressure gauges shall be utilized to indicate a leak. The drainage piping system shall be tested by letting at least three gallons of water into each fixture or receptor with no visible evidence of leaks. If water is available at normal operating pressure, it shall be connected to the home for a period of fifteen minutes with no visible evidence of leaks.
- *Gas piping.* The home gas piping system shall be tested before it is connected to the gas supply. The gas piping system shall be subjected to a pressure test with all appliance burner and pilot valves closed. The gas piping system shall be pressurized a sufficient period of time before testing to assure that the temperature of the air in the piping and the outside air temperature are equalized. The source of pressure shall be isolated before the pressure tests are made. The tests shall consist of air at not less than 10" nor more than 14" water column (8 oz.) and shall hold this pressure for not less than ten minutes without perceptible leakage. Pressure shall be measured with a mercury manometer or slope gauge or equivalent device calibrated so as to be read in increments of not greater of 1/10 pound. Upon satisfactory completion of the test, the gas connector shall be installed and the connections tested with soapy water. The gas appliance vents shall be visibly inspected to insure that they have not been dislodged in transit and are securely connected to the appliance.

- *Electrical.* The electrical wiring and feeder assembly of the home shall be tested before energizing. All electrical fixtures and equivalent shall be connected and all branch circuit switches or circuit breakers shall be in the "on" position.

The electrical wiring and feeder assembly of the home shall be tested by making a continuity test at the point of supply to the feeder assembly. The test shall be performed by checking between each supply conductor, including the neutral conductor, and the home grounding conductor (green). There shall be no evidence of any connection between the circuit conductors, including its neutral conductor, and the grounding conductor. Upon satisfactory completion of this test, the home may be connected to the lot or site service equipment.

Securing Home in High-Wind or Hurricane Areas

In all geographical locations, especially in high wind or hurricane prone areas, the installation of approved means for tie down of your home is suggested for safety reasons as well as for helping maintain proper leveling of your home. There are several tie down methods on the market which are designed to withstand the forces created by high winds.

Diagonal straps are to be used on the main frame members to protect against wind forces.

You, the owner, are responsible for securing the necessary brackets, clamps, ground augers and strapping to secure the tie down system into the ground.

Suggested methods for tying down your home are detailed in the Redman Field Installation Manual. However, it is advisable to consult your local building inspection authority for the recommended method to be used in your geographical area.

Exterior Care and Upkeep

Care and Cleaning of Exterior Finishes

Your home's exterior siding is made of color-coated aluminum or wood. Any finish will deteriorate with age and exposure to the elements. However, in the case of aluminum siding only, this process can be retarded if the aluminum finish is protected by keeping it clean and waxed.

Cleaning of Vinyls or Plastics

Some of the decorative or trim pieces on your home may be constructed of a vinyl or plastic material. When an unusual amount of dirt accumulates on such material, you need only to use a rag, sponge or soft bristle brush with gentle rubbing action using a soap or detergent to clean it. It should not be cleaned if it has been standing in bright sunlight and is extremely warm. This material should be allowed to cool before it is washed.

Exterior Washing of Aluminum Siding

A home should never be washed in rays of the hot sun. The exterior siding should be allowed to cool before it is washed, with a detergent, if necessary, and rinsed. A small soft brush is helpful in removing dirt from crevices.

Oil, Tar, Salt Air

A tar remover can be used to remove tar and oil from aluminum siding without damaging the finish. CAUTION: Naphtha or gasoline should *not* be used for removing tar, as such solvents may soften the finish.

If your home is located near the seashore, you should wash and, if it is aluminum-sided, also polish it every few months in order to remove accumulation of salt deposits which are very damaging to the finish.

Cleaners and Polishes for Aluminum Siding Only

These common pastes in liquid form can be used to loosen an accumulation of film, scum, oil, tree sap, and grime which cannot be removed by washing.

In the case of aluminum siding, an efficient cleaner removes oxidized siding paint which sometimes forms on the homes. Because paint and lacquer are organic materials, they deteriorate from the reaction of the elements — especially sunlight. A microscopic film of "dead" paint or lacquer forms on the surface and must be removed if the finish is to be bright. The "live" paint remaining is still tough and hard and not affected by the cleaner.

Before using either a cleaner preparation or a combination cleaner/polisher, your aluminum-sided home should be washed with a detergent, rinsed, and allowed to dry. A cleaner then can be

applied to its finish with a soft, clean cloth. The residue then should be removed with a dry cloth.

For dirt accumulations built up over long periods between cleanings, use a non-etching chemical cleaner on your aluminum-sided home, diluted three parts of water to one part of cleaner.

A combination cleaner/polish usually is in liquid form. A single application both cleans and polishes aluminum-sided homes. It contains a slightly abrasive cleaning ingredient and a small amount of wax or oil. There is no lasting protection from the wax or oil, however, so such cleaners should be applied often.

Waxing of Aluminum Siding

Pre-finished aluminum metal exteriors may be waxed for maximum protection. The wax jobs last longest when applied in spring or fall and when the temperature ranges between 50 and 70 degrees. Winters are hard on wax durability because of snow, sleet, mud, and dirt. Hot summer sunshine deteriorates paint film and makes waxing needed more frequently.

Paste waxes leave a durable coating of wax on finishes of aluminum-sided homes. They provide protection from abrasion and minor scratches. The wax coating will make your home much easier to wash because dirt will not stick to it readily.

Most waxes have limited cleaning power. Unless your aluminum-sided home is brand new, it should be cleaned with a commercial cleaner or cleaner/polish before waxing. The wax should be applied to a small section of the exterior at a time with a soft cloth. Only a thin coating should be put on and then rubbed vigorously until the solvent has evaporated and the wax is set in the hard, brilliant shine.

Cleaning and Repair of Hardboard Siding

Care should be taken in the cleaning, repair and protection of your hardboard siding to insure lasting performance. By following the suggested maintenance and repair procedures, this can be accomplished.

Maintenance — Use water to which a moderate amount of household cleaner (such as Soilax or Spic-and-Span) has been added. Apply the solution with a cloth, sponge or soft brush (such as a car wash brush) followed by rinsing with plain water from a garden hose. Never use harsh cleansers, abrasives or strong solvents as they may cause damage to the finish.

When using aerosols such as insecticides and weed killers, it is a good practice to avoid spraying directly on the siding. Maintenance painting should be done before the factory applied coating has reached an advanced stage

of deterioration. Good quality latex paints are recommended, oil paints should not be used.

Repairs — If siding is gouged or otherwise damaged, remove any loose material and fill the depression with an exterior grade spackling compound. Carefully sand the filler when dry and seal with paint, stain or touch-up coating as appropriate.

In the event your siding becomes loose at some point, you may have to resecure the panel, which is a simple task, by using corrosion resistant box or siding nails, 6d or longer if siding is direct to studs. Plastic hammer caps are recommended to minimize hammer marks on nails and prefinished sidings.

Clean Up — Clean up problems can be minimized. If exterior painting, masonry and cement work has been performed near the siding and paint, mortar or cement is splashed on the siding and clean up is necessary, it should be done without delay while the contaminants are still fresh and before they can set or harden. Specific recommendations are as follows:

Paint Drippings: Oil paint can be removed with naphtha, mineral spirits or turpentine. Latex paint should be wiped up promptly using a cloth dipped in warm, soapy water.

Cement or Mortar: All traces of cement or mortar should be flushed from the surface with water. If water alone is not sufficient, try a solution of household cleaner as described in the section on Maintenance, but apply with a brush having soft, nonmetallic bristles. Do not use a sponge or cloth which might cause scratches from abrasive particles in the mortar.

Skirting

This is extremely important. Before paneling, covering, or skirting is installed around your home to ground level, provision should be made for both front and rear vents to allow for air circulation which will help prevent damage-causing moisture accumulation underneath the home. Also, cover the ground under the home with a rolled roofing or asphalt paper. This will prevent drawing ground moisture into your home.

The space around and under your home should be properly graded to provide run-off of water, rain, or snow. If the home is located on concrete "ribbons," rather than on a concrete stand, the area between the ribbons should be gravelled for drainage to a depth of four to six inches — before adding skirting — to provide additional protection against damage-causing moisture forming under your home.

Caulking

As with any type of house, your home should be caulked from time to time. All home settling, cracks and openings — no matter how small — which may occur around the molding, joints, rails, windows, roof top seams, doors, and roof vents, should be sealed with caulking to prevent damage-causing moisture from entering. Loose nails and screws that are exposed should be

tightened or replaced at once, so moisture cannot enter.

Sealing compounds are made in a variety of colors to match the existing finish. The best caulking compounds do not dry out hard but, instead, remain elastic. These can be applied with a caulking gun or putty knife. For filling up small openings and cracks, caulking consistency can be cut with a paint thinner. The instructions provided with the caulking compound should be followed.

Insulation

Your home is built with fiberglass insulation in the walls, floors, and ceilings.

The type, thickness, and application of the insulation has been calculated by insulation engineers, so that both winter and summer comfort will be maintained. Crevices, corners, and exterior connections should be carefully caulked to provide added protection against infiltration of cold air in winter.

Locks

A door-locking mechanism for your home provides adequate protection. It also is easy to unlock in case of an emergency. Powdered graphite should be used to lubricate any lock mechanism.

The latch bolt and door strike must be maintained completely in alignment. If not, an adjustment should be made, so that the door strike and the latch bolt will meet properly.

Keys to your home have identification numbers. A record should be kept of the numbers and the make of the house lock. With this information, it should be possible to obtain duplicate keys from a locksmith if the keys are lost.

Roofs

The smallest leak or break in the roof or roof edges could result in damaged ceilings, interior panels, and even furnishings. Whenever your home is relocated, make sure you seal the roof.

The cause of most costly roof troubles can be prevented. The home roof should *not* be walked on except when absolutely necessary. Most inspections, cleaning, and repair work can be done effectively from a step ladder.

When walking on the roof cannot be avoided, only those sections which are supported by rafters or stringers should be walked on. Moreover, pieces of board or plywood can be used as walkways to distribute weight and avoid roof damage.

The roof and roof edges should be inspected for leaks, breaks, or openings at least twice yearly, and accumulated debris should be removed. The roof can be washed occasionally with a mild soap solution followed by a rinse with clear water. This will eliminate corrosive action from accumulated dirt.

It is *extremely important* that your home be properly leveled when it is placed on site (See "Setting, Leveling and Blocking Your Home") to avoid strain which can part seams and create

buckling of the roof area. Low-hanging tree branches should not scrape the roof as this can damage, dent, or puncture it.

Metal roofs should be coated or painted at least every other year with a roof preservative and preferably once a year for maximum trouble-free life and added insulation benefits.

Make sure you use a roof preservative that is of good quality, so that the preservative does not melt in hot sunshine and run and streak the sides of your home. *Some roof preservatives are guaranteed not to streak your pre-painted side panels.* Check before you buy.

Metal roof coatings should be applied with an applicator; they should never be painted on with a brush. Coatings should be applied in heavy coats.

Do not remove the furnace or furnace pipes and re-install without checking the roof stack outside. A crack in the stack caulking or a loosened stack could be a cause of a roof leak. A loose roof stack or related furnace pipe also could create a hazardous condition. Check this thoroughly. Recaulk stacks if necessary.

Metal Roofs

Metal roofs are generally either sheet aluminum or steel. The roofs are either coated or painted. When the roof is inspected, moldings, stacks, vents, as well as the roof surfaces, should all be checked and repaired or replaced if necessary.

Shingled Roofs

Shingled roofs should be periodically inspected for any tearing, cracking, or rolling of the individual shingles. Shingles which have been rolled up by the wind can be flattened out and cemented down with an approved roof mastic. Any shingles which are cracked or torn should be replaced. This is extremely important, since it can curtail any leaks which could damage the interior of your home.

Roof Moldings

All roof moldings should fit tightly to the roof—firmly held by screws or nails. Damaged molding should be removed and either repaired or replaced. Before moldings are reset, a heavy coating of caulking should be liberally applied to the underside by a small brush, putty knife, or caulking gun. If the roof or roof line is tight, or after it has been reset, a preservative coating should be applied over the top of the entire molding. Special attention should be given to make sure all screw or nail heads are covered or coated with a preservative.

Roof Stacks and Vents

If stacks or vents have rusted and failed to function properly, they should be replaced. Before replacing them, remove the old dried caulking around them and apply a new caulking. In setting stacks, caulking should be applied under the base of the fixture as well as the roof where it is to be set.

The fixture should be firmly secured in place with screws, nails, or other suitable fasteners.

Caulking should be applied so that it completely covers all fasteners to the stacks or vents. If stacks do not have to be removed, old dried caulking around them should be scraped away and a new coating liberally applied from time to time and as regular inspection dictates.

Roof Seams

The roof seams should be checked for spreading, parting, or buckling and for loose nails or screws. If any of the conditions occur, immediate corrective action should be taken to prevent roof leaks. Caulking, nails, screws, and paint—or all four—may be required to correct spreading, parting, or buckling roof seams.

Roof Surface

Rust, oxidation, breaks, and cracks on the roof panels are all potential trouble points. Roofs should be checked for these danger signals. Rust and oxidation are almost sure signs of metal roof panel wear. Affected areas should be scraped or brushed and recoated before additional damage occurs.

Cracks and breaks in the metal roof panel should be treated with a special conditioner before using the regular roof coating. Consult your local paint dealer for a recommended conditioner.

Roof Rumbles

Occasionally, under high wind conditions you may experience a slight rumbling of the metal roof. There are reasons for the rumble. (1) a great deal of expansion and contraction occurs between the hours of normal sunlight and night cooling. This could make the roof somewhat loose. (2) When the wind blows over the top of your roof, a Venturi effect is created which literally raises the roof metal. When the wind subsides, the roof will be lowered—causing the rumbling sound.

To correct such a condition, it is usually necessary to apply a liberal amount of roof coating over the area affected. It sometimes is necessary to mix the coating with a small amount of sand, so that the additional weight will hold the roof metal tightly against the roof rafters.

Water Supply Line

If your home is located in an area where prolonged periods of freezing temperatures occur, the water supply line to the home should be installed below the frost line. The entire pipe riser above the frost line should be insulated. There are a number of suitable insulating materials available. An electric heating element called a "heat tape" also may be used. When the heat tape is placed around the pipe and plugged into an electrical outlet, protection against freezing will be provided to the pipe even in the coldest weather. Electric current consumption is about equal to that of a 25-watt light bulb if the water line is not too long.

An alternate method for protection is a thermostatically controlled heat pipe which will

turn off when the heat is not required to prevent freezing.

It is advisable to occasionally check your water inside and outside. Leaking can cause extensive trouble if not found early.

Oil and Gas Systems

Oil Systems

Where oil is used as a fuel for heating, an adequate supply must be readily available. In general, this means the use of either an individual oil storage tank located adjacent to your home or a centralized oil distribution system found in some of the new manufactured housing parks.

The oil tank that feeds vaporizing type oil furnaces must be installed so that oil flows by gravity. The top of the oil tank can be no higher than eight feet above the appliance oil control, and the bottom of the tank can be no less than 18 inches above it.

A readily accessible and approved shut-off valve, manually operated, must be installed at the outlet of the oil tank. When a centralized system

exists, it normally should only be necessary to connect from the home to the oil connection provided. The oil in the system is under pressure and is supplied through a suitable metering device.

During summer months, when the heater is not in operation, the oil tank should be kept full to prevent condensation and rusting.

Check your oil line from the oil tank to the furnace. Check for leaks and for kinks in the tube. In extremely cold climates, the outside oil lines should be completely wrapped to keep oil from congealing.

Bottled Gas – Caution

If you should decide to use bottled gas for cooking or heating or both, extreme caution should be used before turning on gas at the cylinder. All appliance valves must be closed. If your home has been in transit, fuel lines, connections, and appliance valves should be checked for loose connections and leaks before and after opening the cylinder valve. *A match or flame never should be used in checking for leaks.* A safe and frequently used method for checking for gas leaks is the application of a soapy water solution to suspected points while looking for bubbles.

Caution

The only butane cylinder or bottle that should be used is one bearing the approval marking of either the U.S. Dept. of Transportation (DOT) or the American Society of Mechanical Engineers (ASME). The chief difference between these two is that the DOT cylinders are acceptable in any state, while the ASME cylinders, built to the boiler and pressure vessel code of the ASME may not be acceptable in all states.

No DOT container which has been involved in a fire should be refilled until it has been requalified for service according to DOT regulations. No ASME container which has been involved in a fire should be refilled until it has been retested in accordance with the requirements for its original hydrostatic test and found to be suitable for continued service.

Your dealer, home set-up crew, or licensed utility man should carefully and thoroughly check, fill, and recheck all connections between the gas cylinder, water heater, range, and other gas appliances. Only after that should the gas be turned on again. The gas must be turned off at the main valve above the cylinder before your home is moved.

Drain Connections

Your home is provided with a single drain outlet connection. However, there are occasions because of the design of the home, where a loose length of drain piping is provided for connecting a remote drain to the main drain line. This piece normally will be installed at the time your home is first set in place.

If the drainage lines underneath the home are exposed, there should be sufficient fall ($\frac{1}{4}$ " per foot) to prevent freezing and bursting of the line. Special treated rubber sewer connectors are available through dealers and mobile home supply houses.

Fats, greases and oil allowed to go down the kitchen sink drain may tend to clog the sink trap. Within a period of a few weeks, they can build up in certain spots until the drain is partially or completely blocked.

Many owners pour a commercial drain cleaner through the kitchen sink at regular intervals. *Caution should be taken to see that the cleaner does not damage the drain line if one is used.* It may be advisable to remove the rubber drain hose and use a bucket or other container instead.

Winter Protection During Non-Occupancy

All sink and lavatory traps should be drained, or antifreeze should be poured into the traps. Antifreeze always should be poured into toilet and bathtub traps. No water should be allowed to remain in a toilet flush cabinet. All hot and cold water lines should be completely drained or blown out with air to prevent bursting. The shut-off valve below the frost line on the main water supply should be closed.

Interior Care and Upkeep

Furniture

The life and beauty of any kind of furniture can be prolonged with proper cleaning and care. One form of protection for upholstered furniture is the use of slipcovers. It is also important to vacuum the upholstery cover at least two or three times a month.



Loose cushion pieces, as well as mattresses, should be turned frequently. Turn and reverse, so that the same side will not be in constant use.

Wood, leather, and synthetic material require regular cleaning. This is best accomplished by using some of countless cleaning agents designed for specific materials and available to the home owner in almost every hardware store or supermarket.

Walls Windows, Doors and Floors

Care of Plywood and Natural Wood Walls

Walls may be washed with a mild detergent or household cleanser. A mellow sheen may afterwards be produced on the walls by using a good cleaning polish, household wax, or any oil soap.

Most wax manufacturers recommend using a damp cloth to apply the wax. The cloth should be wiped across the wax in the can, then applied to the walls in a thin even coat. The thinner the coat, the better the polish will be.



Liquid polish and cleaner combinations also give excellent results. These should be applied with a damp cloth or sponge after which the walls should be polished with a clean cloth. These polish cleaners also can be used on appliances and vinyl upholstered materials.

Wax should be applied, using a circular motion, first by rubbing across the grain of the wood with quick strokes and then rubbing with the grain using longer strokes. An area of about two square feet should be waxed and polished at a time.

Frequency of waxing depends on the amount of wear. Areas receiving hard use may need to be rewaxed occasionally. Smudges can be removed with any of the household waxes marketed for that purpose. The label on the container will tell the types of surfaces for which the wax is made.

Woodwork that has a dull natural finish to start with should be cleaned with mild soapy water, dried, and then treated with any of several wood oils—such as lemon oil, olive oil, linseed oil—any one of which prevents drying out of the wood.

Care of Plastic Coated Wood, Drywall, and Hardboard Walls

Surface dirt can easily be removed with a damp cloth or vacuum cleaner using one of the special attachments. A mild detergent solution will remove a stubborn stain or grease spot. In the case of plastic coated wood, some home owners apply furniture wax for added beauty. Any of the liquid or spray waxes intended for use on wood also may be used. Strong soaps or cleansers are not advisable.

Windows

In extremely cold climates, windows or exposed glass areas may accumulate excessive moisture due to condensation. In most cases, it is helpful to install storm windows when cold weather comes. If they are not already on your home, they can be ordered through your home dealer and are easily installed.

Windows should be opened frequently and cleaned around the metal casing. A good window cleaning preparation should be used to clean the glass. If excessive moisture on the glasses becomes bothersome, they should be wiped slightly with cloth slightly moistened with any of the many cleaning solutions.

Loose screws in the window garnish and thrust arms should be kept tightened. Window hinges and operating arms should be lubricated with light oil at least once a year.

Doors

The care of doors in your home is the same as in site-built houses. The exterior doors of your home have been installed, so that they provide a certain amount of clearance at both the top and bottom of the door opening. If the door clearances are not maintained very uniformly, there is a likelihood that the door will bind, and ultimately the

door hardware may fracture. Careful and maintained leveling of the home will normally assure that proper clearances are made and prevent this problem from occurring. However, it may be necessary to shim the foundation block near the door to make the door work properly after leveling. Further, it will assure that the door will remain weather tight and that the lock mechanism will function properly.

Floors

The floors in your home are covered with inlaid vinyl linoleum or carpeting. Linoleum will look better and last longer if it is cleaned and waxed regularly. Avoid excessive application of water, as it may cause lifting and curling. It is best to establish a good coating of wax. A number of good floor coatings and preservatives are available and may be purchased locally. All carpeting should be vacuumed and cleaned regularly and kept clean for long wear.

Ceilings

White, sound-deadening, wood fiber ceilings or dry-wall ceilings are used in your home because of their attractive appearance, acoustical characteristics, ease of installation, and low maintenance. They require little care but a few common problems sometimes occur.

Ceiling Marks and Gouges

Ceiling marks can be rubbed with very soft white chalk and then wiped with a clean cloth. A deep scratch may require more than one application. In the case of a dry wall ceiling, a little touchup paint should be applied over chalk.

If practical, a gouged or damaged wood fiber panel should be removed and a new one installed in its place. (It is not necessary to replace a dry wall panel). Where this is not practical, the gouge should be cleaned of loose dust particles and then filled in with a spackling paste applied with a clean putty knife. The paste should be leveled off to the surface of the panel, and then the compounds should be sculptured to conform with the surface of the panel. After the compound dries white, touchup paint should be applied. Follow the same procedure for repairing gouges in dry wall ceilings.

Ceiling Dirt Smudges

For wood fiber ceilings, soft hardgum erasers probably will remove dirt and fingerprints. If a portion of the smudge remains after the eraser has been used, the area should be wiped with a soft white chalk—rubbed over the spot to conceal as much as possible. On dry wall ceilings, apply a damp cloth with a mild detergent to remove dirt.

Ceiling Water Stains

Replacement of the wood fiber panels or repainting are two solutions. In some instances, water stains can be taken out by bleaching them

with Clorox. In the case of dry wall, repainting is all that is necessary.

Warped Wood Fiber Ceiling Panel

The only remedy is to replace the wood fiber ceiling panel with a new one after first correcting the conditions which caused the trouble—such as moisture from a leaky roof. If moisture conditions cannot be corrected, mineral-fiber tile should be used as a replacement, since it is less affected by moisture.

Wood Fiber Ceiling Panel Removal and Replacement

Tongue-in-groove wood fiber paneling must be removed by cutting it along the edge with a sharp knife and prying it loose. Before replacing the panel, apply an adhesive to the furring strip where the panel is to fit. If trimming is unnecessary, place the tongue into the groove of the adjacent panel and raise the panel into place. Since the adhesive will not take an immediate bond, nail through the face with a one-inch No. 18 finish nail to the furring strip in the two unattached corners.

Ceiling Maintenance

The resin emulsion paint of a wood fiber ceiling can be washed clean of smudges with a cloth dipped in mild soap solution and wrung dry. A vacuum cleaner attachment will remove loose dirt or dust. The same procedure can be used for dry wall ceilings.



Ceiling Repainting

When repainting is necessary, an acoustical ceiling paint should be used. A quality product should be selected to assure the paint will not have a tendency to yellow with age. For dry wall ceilings any good name brand household paint which will match, should be used.

Built-Ins and Hardware

Cabinet Drawers

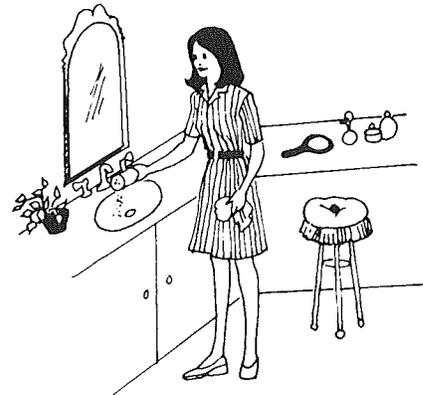
Your new home has built-in cabinetry. If any drawers should stick, apply tallow, bees' wax or even a bar of soap to the drawer guides to make them work better.

It is imperative, however, that your cabinet drawers not be overloaded. By overloading the drawer, construction could be damaged or even broken. Normally, loading is a matter of good judgment.

Should heat, cold, or excessive moisture cause plywood or lumber to expand, cabinet drawers might stick. If so, a block plane can be used to remove just enough material from the wood to eliminate this binding.

Porcelain Enamel

Kitchen sinks, and working surfaces of some appliances are often finished with acid-resisting porcelain enamel baked on steel. Soap or a suitable household cleaner will keep them spotless and clean. Stains or discoloration caused by food acids or alkalis can be removed with a mild scouring cleanser.



If the enamel becomes chipped or broken, patching materials are available that can be used to permanently repair the damage on white or colored units. Check your local hardware store for recommendations.

Chlorine-type bleach will probably remove stains that have been allowed to remain for any length of time. The stains should disappear after the bleach has remained on the stain for at least 30 minutes; then rinse with water. Repeat if necessary.

Porcelain enamel should be protected from extreme heat which may crack it. Hot utensils should not be placed on any porcelain surface. A wire rack or protective pad should be placed underneath the hot utensil until it has cooled.

Molded Lavatory Tops and Shower Enclosures

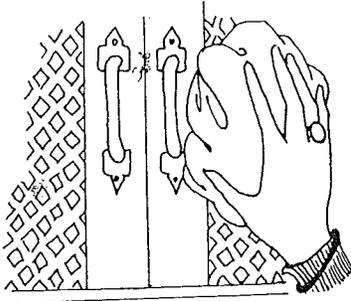
Vanity tops, bath tubs, and shower enclosures made of high-impact plastics may be cleaned with a soft household dishwasher detergent, applied with a soft cloth. This will keep them looking new for

years. Make certain you rinse the detergent off early to eliminate any film deposits. Do not use any powder-type abrasive cleaners, as they usually will dull, scratch, and possibly corrode the lustre finish.

Hardware

Your home may have chrome, brass, antique copper or colonial black hardware.

Genuine chrome plated hardware is best cleaned with a commercial chrome cleaner. In some cases, soap and water will remove discoloration and spots.



Brass, antique copper and colonial black hardware can be cleaned by simply wiping with a damp cloth. Use a very mild soap or detergent if necessary. Cleaning agents containing abrasives are not recommended. Do not use chemicals of any kind on these finishes, because they will destroy the protective coating usually applied to them.

Air Conditioning and Heating

Air Conditioning

Operating and installation instructions for air conditioners are furnished by the air conditioner manufacturers. Keep this information filed for reference.

For proper operation of the air conditioner, the return air filter must be kept clean and dust free. This will allow for free flow of air through the evaporator coil to provide maximum cooling. (The air conditioner should never be operated without a cleaning filter in place.)

To clean the filter properly, some types require hot water with a detergent. Usually with this type, all that is necessary is to flush the filter with water from a hose or tap. To further enhance the operation of your air conditioner, if the windows of your home are facing the West, it is advisable to have them shaded with ventilated awnings; this will reduce the heat from afternoon sunlight through the glass area of your windows.

It also is advisable to provide some means of shading the condenser coil unit which is outside your home. This will increase the efficiency of your air conditioner.

Air conditioning equipment installed at the factory is properly wired and fused. If you should add air conditioning equipment after the purchase of your home, make certain to use the services of a qualified installer of air conditioning equipment.

If the unit fails to operate, check the fuse first. If operation ceases due to a blown fuse, check for what blew the fuse before you try to operate again.

Air Conditioner Warranty Service

If service is required on your air conditioner, the dealer from whom your home was purchased and/or the air conditioner dealer should be contacted. In many cases, the respective manufacturer of air conditioners will have a local service center to serve you. Your dealer will know where they are located.

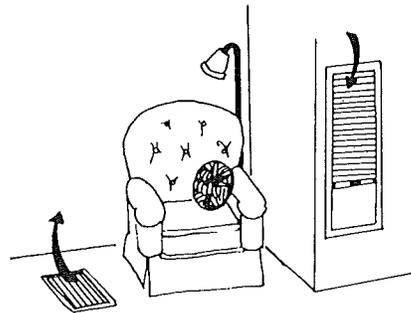
A warranty card is usually supplied with each air conditioning unit. The card should be filled in and mailed to the manufacturer as soon as you move into your home and within the time specified on the card in order to validate the warranty.

Heating Systems

Gas, oil, and electric heating systems are designed to provide maximum comfort with a minimum of maintenance and service. A separate booklet supplied by the manufacturer of your system will outline the care and operation of it. The booklet should be read carefully and filed for reference.

Air Circulation

Your home has a central heating system. Adequate circulation of warm air is accomplished by the blower in the furnace. This blower forces air through floor or ceiling ducts to various points within the home. Air within your home is pulled back to the furnace by the blower through return air openings, reheated, and then discharged through the ducts again.



Your furnace is especially designed to provide "sealed combustion." This means that air from the outside is used for combustion and that no inside air is used. Furthermore, sealed combustion design prevents flu products from entering your home. Your furnace pulls in a certain amount of fresh air from the outside which is heated and then blended with the inside air.

Under no conditions should the fresh air intake on the furnace be blocked or obstructed, and the outside draft opening must not be obstructed. The extra clearance under your room doors is to facilitate air circulation throughout the home.

Oil or Gas Heating Systems

Your automatic gas heating system is equipped with factory installed safety devices. This is true whether operated by oil or gas or if it is an electric furnace. The gas systems are designed to use either natural or liquified petroleum gas thru an orifice. Make certain that the person connecting gas to your home has installed the proper orifice.

Lighting, operating, and maintenance information (in booklet form) is supplied by the manufacturer and usually placed within the burner compartment or attached to the furnace door when the home leaves the factory. These instructions should be carefully followed at all times.

If by chance there are no instructions with the furnace, you should write to the furnace manufacturer giving the model number of the furnace and request a new copy of the use and care manual. The address of the manufacturer can be found on the name plate attached to the furnace.

CAUTION: If adjustment of the furnace is necessary, a qualified oil or gas service man or your home dealer should be contacted.

Electric Heat Systems

Electric furnaces operate in the same manner as gas or oil furnaces, except that electricity instead of gas or oil flame provides the heat source. The duct system and means of heat distribution remain the same.

Furnace Maintenance

The operating instructions furnished by the furnace manufacturer will outline the maintenance required for this specific model. Basically, the following points should be observed as applicable:

- The outside fuel tank should be kept clean. Dirt or water in the fuel oil will retard the flow of oil into the burner.
- With vapor type oil furnaces, a filter should be installed between the oil cylinders and the furnace. It should be inspected frequently and kept clean.
- Vaporizing type furnaces should be cleaned at least once during the season or more often if necessary. A dirty burner can reduce oil flow and cause improper combustion. Evidence of this condition is usually indicated by a black sooty smoke exiting from the roof jack.
- The blower must be cleaned regularly; if the blower or impeller (squirrel cage) becomes linted up and dirty the blower motor can overheat. This can also curtail proper air delivery from your floor registers.
- The blower motor should be oiled regularly according to the manufacturer instructions.

Avoid over-oiling and use of thin household oil.

- The flue pipe and roof jack should be kept free from excessive deposits of carbon and inspected at least once a year for rusting and corrosion.
- A gun-type oil furnace should have its nozzle replaced each year. At the same time, the electrodes in the ignition system should be cleaned and adjusted if necessary.

Furnace Service

If service is required on the heating system, the dealer from whom your home was purchased should be contacted. In many cases the furnace manufacturer will have local service centers where service can be obtained. Your dealer will know the whereabouts of such centers.

Furnace Warranty

A warranty is supplied with each furnace. This warranty should be returned to the furnace manufacturer within the time specified on the card in order to validate the warranty.

Water Heaters

These appliances, whether gas or electric, require very little care. Water heaters are equipped with thermostats to maintain the water at the desired temperature (usually around 150°F). An adjustment can be made to obtain either warmer or cooler water. The water heater must also be equipped with a temperature and pressure relief valve to prevent the buildup of dangerous temperatures in the event that the tank thermostat should fail.

The heater installed in your home has an automatic shut-off system. This system works when high water temperatures are present. A new temperature and pressure relief valve has been installed on the heater when it was placed in your home. These valves must be installed to meet local codes and must be of an approved type.

Water expands when it is heated. This will make the pressure in the water heater higher than the pressure of the water coming into the water heater. When this happens, the T & P valve may open and lower the pressure while the heater is working. A drain line is installed in the outlet of this valve. The drain line leads to an opening directly under your home in a position where a discharge of water will not damage anything.

If you should have to replace your water heater, a new approved T & P valve must be installed.

National fire codes will not allow gas water heater installation in normally closed occupied rooms; therefore, your heater has been placed in an isolated compartment which has been sealed to prevent combustion fumes from entering the living space. It is extremely important that before the heater is lit the flue pipe installation be checked to

make sure it is in place and the draft hood is properly installed. Under no condition should this draft hood be blocked off so that adequate air flow is impaired. Your gas water heater is installed with natural gas orifice unless otherwise specified. LPG orifices also are provided, and it is of extreme importance that the proper orifices are installed for whatever type of gas you will be using.

Operational Checklist (Gas)

If your water heater is not functioning properly, you can often find what is wrong by reviewing the following list:

1. *Not Enough or no Hot Water*
 - a. Check your pilot flame; it may not be on.
 - b. If the pilot light is out, follow the lighting instructions in your manual accompanying your water heater. If your water heater was extremely hot and not cooled, the high limit control puts out the burner and pilot. Check your thermostat temperature dial, reduce the setting if necessary.
 - c. Check the manual gas shut-off valve and be sure it is open. Maybe your thermostat temperature dial is set too low.
 - d. Your thermostat indicator knob has to be on (see the lighting instruction).
 - e. Look for leaking or open hot water faucets.
 - f. Your gas company can check the gas input to see if it is right. An underfired heater will not heat as much water.
 - g. The cold water temperature may be colder during the winter months. It will take longer to heat the water and will seem like less hot water.
 - h. Your thermostat dial may be set too low. See the temperature regulation instructions.
 - i. If you cannot find out what is wrong call an authorized appliance service man.

In addition to the above items, if you have an *electric water heater*, check for tripped breaker and reset.

2. *Water is too Hot*
 - a. Your thermostat temperature dial may be set too high. See the temperature regulation instructions.
 - b. If lower settings won't lower the water temperature, call an authorized serviceman to determine the problem.
3. *Gas Smell at your Heater*
 - a. Use a soapy water solution, not a match or open flame, to check all piping for bubbles. If a leak cannot be found, close the gas shut-off valve. Your thermostat valve indicator knob can now also be turned to the off position.
 - b. Call your gas company.
4. *Water Leakage is Suspected*
 - a. Check all your pipe fittings for leaks, be sure your drain valve and T & P valve are not leaking.
 - b. What seems like leakage may be condensation. It can be found in places when it is warm or humid. Condensation will run from

your pipes and heater. In some locations, condensation may puddle on the floor.

c. When hot or steaming hot water comes out of your T & P valve, this does not mean there is a problem. The T & P relief valve is only doing its job. When water is heated it expands, making the water pressure higher. In most cases the water pressure will not increase very much. If a check valve, a nonreversing water meter or a pressure reducing valve without a bypass, is used, extra pressure cannot be absorbed by the city water mains.

d. If you cannot fix the leak; (1) turn off your gas supply to the heater; (2) close your inlet cold water valve to the heater; (3) call your authorized serviceman.

5. *Water Heater Makes Noises*

a. Sometimes condensation will cause a sizzling sound when it hits the hot burner. Don't worry about this sound.

b. Sediments may build up on your tank bottom. Your water heater will make rumbling and boiling noises with sediments on the tank bottom. This usually can be resolved by draining a small amount of water from your water heater each month.

c. If you cannot find or fix a noisy problem, call an authorized serviceman.

Codes require that adequate combustion air be provided for a gas water heater. This is accomplished by the open louvers located either in the water heater door, or in the exterior wall. Under no condition should these openings be plugged or blocked so that your heater cannot get sufficient combustion air.

Appliances

Warranty Service

If, for any reason service is desired on any of the installed appliances, you should contact the dealer from whom your home was purchased. In many cases the respective manufacturer of the appliance will have a local service center to serve you. Your dealer will know the location of such a center.

A warranty card is supplied for each appliance. The card should be filled in and mailed to the manufacturer as soon as you move into your home — within the time specified on the card — in order to validate the warranty.

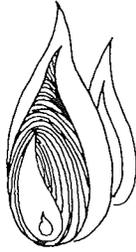
Cooking Ranges

No attempt should be made to clean a porcelain enamel range while it is still hot, as the finish may be damaged.

Gas Ranges

The standard gas cooking range in your home uses natural gas. The gas range should be carefully adjusted to accommodate the kind of gas being

used (LP or Natural). The entire gas system should be thoroughly checked for leaks before the gas is initially turned on. *Never check gas lines with a match or lighted flame.* Always check with soapy water or a bubble-making solution.



Do not make your own gas connections. This could be very dangerous. Call the dealer from whom you purchased your home and request assistance. He should be able to direct you to a qualified gas technician who can hook up your gas appliances and will be qualified to check the piping for any possible leaks.

Have a service technician check the range burners, all pilot lights and adjustments, and bypass (minimum) oven burner flame. Improper adjustments here can cause unsatisfactory operation and pilot light failures.

Proper gas pressure is important, too. Any considerable variation from normal will adversely affect the stability of the pilot light. Although all ranges are built to accommodate either natural or LP gas, the proper size orifice must be installed to accommodate the fuel being used.

The operation of your gas range will be thoroughly explained in a booklet supplied by the manufacturer. Read it carefully; this is important. Then file it in the cover pocket provided with this manual.

If you move your home, be sure to turn off the main gas valve at the outside cylinder.

NOTE: See Page 12; on use of gas bottles.

Electric Range

The range manufacturer's manual should be followed for the care, operation and maintenance necessary. Be certain the range is properly grounded and fused per manufacturer directions before initial operation. Also file that separate manual in the cover pocket provided in this manual.

Range Warranty Service

The manufacturer of your range, in many cases, will have a local service center to serve you. If service is required on your range, the dealer from whom your home was purchased should be contacted, and he will assist you in locating an authorized service center. A warranty card is supplied with each range. This card should be filled in and mailed to the manufacturer as soon as you move into your home and within the time specified on the card in order to validate the warranty.

Refrigerator Care

Refrigerators installed in Redman homes are the same type as those used in homes and apartments built on site. They will include a use and care booklet supplied by the appliance manufacturer. Read this separate booklet carefully, and file it for reference.

Refrigerator Warranty Service

The respective manufacturer of your refrigerator in many cases will have a local service center to serve you. If service is required on your refrigerator, the dealer from whom your home was purchased should be contacted, and he will assist you in locating the service center. A warranty card is supplied with each refrigerator. The card should be filled in and mailed to the manufacturer, as soon as you move into your home and within the time specified on the card, in order to validate the warranty.

Dishwashers, Disposers and Laundry Equipment

CAUTION: Prior to adding any major electrical appliance yourself, make sure the electrical power supply in your home is sufficient to handle it. Have a licensed electrician check to make sure the circuits are not overloaded. Manufacturers of major appliances such as dishwashers, waste disposers, automatic dishwashers, and dryers supply booklets covering the use and care of those appliances. Those books are supplied with the appliance when it is installed in the home. They should be studied and kept.

Under no circumstances should you as the owner remove the ground prong on an electrical plug on an appliance. Neither should you ever use an auxilliary plug which does not engage the grounding prong. This would render the appliance ungrounded.

Warranty Service

If for any reason service is desired on any of the installed appliances, you should contact the dealer from whom your home was purchased. In many cases the respective manufacturer of the appliance will have a local service center to serve you. Your dealer will know the location of such a center.

A warranty card is supplied for each appliance. The card should be filled in and mailed to the manufacturer as soon as you move into your home — within the time specified on the card — in order to validate the warranty.

Electrical System

Electric Power Supply

Your home requires the same type of electric supply (125/250 volt, 3 pole, 4 wire with ground)

that is used in modern site-built dwellings.

Before moving in, the park or the intended site for your home should be checked to see that the electric power supply meets the needs of your home.

Wiring of inadequate capacity can result in low voltage to the home and cause a drop in the efficiency of all lights as well as appliances. Motors may burn out, and you may be paying for electricity you do not use.

To avoid the possibility of low voltage, proper size wiring must be installed. The wiring material should be UL listed. Please refer to the Redman Field Installation Manual — Table V, Page 36. The ampere rating of the main circuit breaker and main fuses must not exceed the power supply assembly rating.

For the protection of the occupants, it is vital that your home be properly grounded whenever it is connected to the source of electric power. Grounding to a rod, a water pipe, through the mobile or sectional home hitch caster, or metal stabilizer in most cases will *not* provide this important protection. The only safe and approved method of grounding your home is through an electrically isolated grounding bar in or on the manufactured housing home power supply panel, which grounds all non-current-carrying metal parts to the electrical system and your home at a single point. The ground conductor of the power supply cable in turn connects the grounding bar to a good electrical ground back through the park electrical power supply system. This means that for 125/250 volt service, you must have a three-pole, four-wire service or power supply cable. It is extremely important that the neutral connector not be grounded in or on the home or the home service entrance cabinet.

Defective or apparently defective wiring should be repaired or inspected only by a licensed electrician or your home dealer if your home is still under manufacturer warranty.

Branch Circuits

The electrical system within your home contains a number of branch circuits designed to prevent overloading of any one circuit. There will be a minimum of two general lighting circuits that will supply the wall receptacles and the light fixtures in the living room, bathroom, and bedrooms. These circuits will be fused 15 amperes. There also will be two portable appliance circuits

for the kitchen, dining, and den areas in your home. There will be no lights on these circuits; only portable appliances are to be plugged into the receptacles. These circuits are fused 20 amperes. There also will be in your home, general appliance circuits for the furnace, water heaters, ranges, central or room air conditioners, and the laundry area. These circuits will be fused appropriately for the appliances to be installed. You, as the owner, should be extremely careful that these circuits are not overloaded by placing a combination of appliances, whose combined amperages would exceed the rating of the circuit. For example, some of the most commonly used kitchen appliances draw the following amperages: automatic toaster — 10 amps; hand iron — 9 amps; electric grill — 11 amps; rotisserie — 12 amps; room heater — 14 amps; window air conditioner — 10 amps.

If, for example, a large electric grill and automatic toaster were both plugged into the same circuit, the total amperage would be 20 on an appliance circuit — the maximum allowable. Any other appliance plugged into this same circuit would cause the breaker to trip. If an electric room heater were plugged into a bedroom circuit which draws approximately 14 amps, this would be nearly the capacity of that circuit. Should any other appliance be plugged into the same circuit, with a total draw of three or four amps, it would be possible to trip the circuit breaker for this lighting circuit. If this should occur, a careful check of the appliances being used should be made, and one or more should be disconnected before this circuit breaker is reset in order to prevent the overheating of the wires. Normally the amperage rating of an electric appliance is clearly stamped on the nameplate, and by simply adding up the total amperage of the appliances which are to be used, you can calculate a safe load for the circuitry.

The service entrance equipment of your home is provided with either one or two means of overload protection type "S" fuses or circuit breakers. If a circuit is overloaded or a short occurs in the wiring, the fuse or circuit breaker will interrupt the circuit. If the fuse or circuit breaker continually interrupts the circuit, this is an indicated danger signal, and it is advisable to call in a competent and licensed electrician to locate and correct the difficulty. Always replace a blown fuse with a Type "S" fuse of the correct current rating. A circuit breaker needs merely to be reset.

Condensation

Every winter sees more and more home owners vitally interested in the subject of condensation. It is not a happy interest. It stems from bad experiences with windows, doors, and even ceiling and wall condensation which range from irritating to down right expensive.

It may strike you as odd, but the growing condensation problems are a result of progress. The home of today is a more modern, more tightly "constructed unit" than was possible a few years ago, which makes it cleaner and much more comfortable to live in. And, in addition, your condensation problems also are a result of wide spread use of several labor saving appliances that make life easier than it used to be.

What is Condensation?

All air contains invisible evaporated water in the form of vapor. When this vapor changes from a gaseous form to a liquid form, the process is called condensation. Warm air absorbs evaporated water or moisture much like a sponge. But, as this warm air is cooled, it takes up less volume of space and can hold less moisture. Cooling warm moist air is just like squeezing a wet sponge, the moisture has to come out. When it does, it collects on cool surfaces such as windows, around doors, etc.

What is Trouble Condensation?

A little moisture or fog in the corners of your windows, now and then, probably does not bother you. It shouldn't. By the time you have thought about it the second time, it is usually gone away. But what we are talking about is *excessive* condensation. Troublesome condensation. Condensation that blocks all windows with fog or frost. Water that runs off windows to stain woodwork—or in serious cases, even damage walls or ceilings.

If you have this kind of condensation on your windows, you have good reason to worry. *And a good reason to act.* Remember that sweating windows are a danger signal; it means that moisture is trying to get out!

The moisture in wet air tries to flow toward drier air and mix with it. Scientists describe this force as "vapor pressure", and it can act independently on the flow of air that holds the moisture. Vapor pressure can force moisture through virtually all forms of building materials—glass and metal being two of the few exceptions. Therefore, you should not worry too much about windows where you can see the effect of excessive humidity. You should worry more about what excessive moisture may be doing elsewhere in your home such as in walls, ceilings, or floors where you can not see it. This could be the most expensive to you as serious damage can result in your home.

It is natural and easy in such cases to blame the doors, the windows, the insulation, or the

manufacturer when excessive and troublesome condensation occurs. *But you are wrong to blame them.* The real villain is invisible. It is water vapor—*too much water vapor.* It comes from more washing, more bathing, more showers, more appliances, more unvented gas burners—all pouring more water vapor into homes than in former years. The following are a few examples:

Floor Mopping

The water vapor produced by washing a floor is not a major source of moisture produced within a home, but because of the amount, in the short time of liberation, it is the most important high rate basis. When an 8' x 10' kitchen is washed with soapy water and rinsed with clear water, 2.4 pounds of water vapor are released. Unless this water vapor escapes to the outside, it will add to the relative humidity inside the house. To prevent this, it is important that your kitchen vent fan be operated during mopping or a window in the kitchen area be cracked open to permit the moisture to escape outside.

Clothes Drying

Many home owners fail to realize that 10 pounds of clothes, after being washed and spun dried in an automatic machine, still contain about 10 pounds of liquid water. If these clothes are dried inside, this water must be evaporated, and the in-vapor form will mix with the air within the home. It is not recommended that drying of clothes be conducted within a home, but rather that a mechanical clothes dryer be utilized, and it should be vented to the outside while the dryer is in use.

Cooking

Cooking, especially boiling, creates considerable moisture. An hour-to-hour record of moisture content of the air in the home usually shows a marked increase during the hours the meals are prepared. In the preparation of food for an average family of four, the following amounts of water are introduced into the air:

Breakfast	0.9 pounds
Luncheon	1.2 pounds
Dinner	2.7 pounds

A kitchen ventilating fan operating during the cooking period will remove this moisture and discharge it out doors.

Bathing

An average shower adds between ¼ and ½ pound of water vapor to the moisture content of the home, and, in the case of people who take more time in the shower, the amount may be more. For tub baths, the amount of moisture produced is somewhat less, and tests have shown that the total moisture produced when four baths are taken consecutively is between ¼ and ½ pound. This means that one shower produces as much moisture as four regular baths. The corrective procedure, to prevent the water vapor from spreading throughout the air in the home, is to close the bathroom door while bathing and open the window a few inches, or if possible, run a bathroom exhaust fan.

Dishwashing

The dishes and cooking utensils soiled during an average dinner for the family of four, when washed and scalded, release between ½ and ¾ pound of water vapor. Since fewer dishes are generally soiled at breakfast and luncheon than at the larger evening meal, it is estimated that one pound of water vapor per day is a representative value for the process of washing and drying dishes.

Human Contribution

Largest source of water vapor in a home is that contributed by the inhabitants themselves through respiration and perspiration. This source even though large (12 pounds per day) for a family of four, is not a serious contributor to the condensation difficulties, because it is quite uniformly distributed throughout the house over the 24 hours, and the rate per hour is low. Thus it tends to raise the moisture level of the house only slightly.

Gas Appliances

When a gas stove is used for cooking, there is in addition to the moisture given off by the food—the moisture resulting from the combustion of gas in the flame. When gas is completely burned, the products of combustion are carbon dioxide, nitrogen, and water vapor. For every 1000 cubic feet of gas burned, as much as 2000 cubic feet of water vapor may be formed. This water vapor when condensed amounts to approximately 88 pounds of liquid water. All gas-fired equipment including stove and water heaters should be properly vented to the outside.

Humidifiers

There are various devices for increasing the humidity in a home, as, for example, the familiar

pan of water placed on top of the furnace, or in the heat duct under the registers. Often the amount of moisture that is so added to the air of the house is uncontrolled, and at times it may be excessive. A humidifier can produce as much as 2 pounds of water vapor per hour. When the relative humidity within a home reaches the recommended limits, the operation of all humidifier equipment should be *discontinued*.

House Plants and Aquariums

The amount of moisture given off to the atmosphere by house plants is nearly equal in volume to the amount of water required to water the plants. Open aquariums permit evaporation of water to the air of the home. All of these items add to the problem of condensation.

The best way, and usually the only way, to prevent this trouble is to get rid of the excess water vapor. The only person or persons that can do this are *the people that live in a home*.

How You Can Control Condensation

There are only three basic methods by which condensation can be controlled, and following are suggestions for home owners to follow in each of the categories.

1. Control of sources of humidity.
 - a. Vent all gas appliances to the outdoors, check periodically to make certain vents do not become blocked.
 - b. Use kitchen or optional bath exhaust fans when cooking or bathing. Allow to operate for a short interval after completion of meal or bath.
 - c. Do not operate vaporizing inhalers, etc., for prolonged periods unless adequate ventilation of moist air is provided.
 - d. Do not place containers of water on furnace or in ducts etc., to raise humidity.
2. Winter ventilation
 - a. Run kitchen and bath ventilators for longer periods of times after cooking or bathing.
 - b. Open windows or doors for brief period even in cold weather. (In winter, the outside air is usually quite dry and a little ventilation can reduce inside humidity quickly without serious loss of heat.)
 - c. Do not tape doors or windows tightly closed to prevent any movement of air.
 - d. Do not crowd wardrobes with clothing and other objects preventing free circulation of air.
 - e. Do not locate beds or furniture tightly against the wall preventing air movement.
 - f. Do not stock kitchen cabinets to points where circulation of air is impossible.
 - g. Do not leave draperies closed over windows.
3. Heating the Home
 - a. The process of heating will reduce the humidity *if it is dry heat*.
 - b. Keep registers and furnace blower clean to insure maximum circulation.

- c. Clean air filters and furnace regularly.
- d. Equip windows with storm windows, except vents.
- e. Do not operate any humidity device on the furnace.

10° F to 20°not over 35%
 20° F to 40°not over 40%

Now, before we summarize specific steps for reducing humidity in your home, let's include some basic data about recommended moisture.

Outside Air Temperature	Inside Relative Humidity for 70° F Indoor Temperature
-20° F or belownot over 15%
-20° F to -10°not over 20%
-10° F to 0°not over 25%
0° F to 10not over 30%

To Summarize:

1. Install storm windows.
2. Recognize that the only way to stop condensation is to reduce moisture in your home.
3. Be willing to try living in lower humidity.
4. Turn off any source of moisture which you can control.
5. In the winter, provide more controlled ways for inside air to get out, for dry outside air to get in.
6. If troublesome condensation still persists, purchase one or more dehumidifying devices and operate as needed.

If You Ever Move Your Home

Your home should be moved by professional manufactured housing movers. There are several firms that specialize in this activity, and they have offices in all major cities.

While you should never attempt to move your home yourself, there are certain procedures that you should follow to prepare for the move.

Getting Ready for the Move

Pictures, clocks, radios, small television sets, lamps and other fragile items can be tied on the couch in the living room or on a bed. Anything loose will slide forward on a quick stop. Some people prefer to put these small items in cartons.

Dishes should be packed in cartons with towels and pillows. If latches are inclined to jolt open, use masking tape to secure them.

It is strongly recommended that you consult with a professional home mover about the load and weight distribution within your home prior to moving. Since loose articles within a moving home tend to shift to the front and to the right, most of the weight should be placed against the forward walls.

Heavier and unbreakable items should be packed over the axle and to the front – with the weight evenly distributed to the center of the home. Place as few items as possible in the rear rooms.

The water inlet and sewer outlet should be capped. Close all windows. Lock all doors. The mover should check the entire undercarriage of the home and the tires for proper inflation.

Do Not Overload Your Home

Remember, overloading means overweight, unnecessary stress, and undercarriage sway – all

of which result in extra cost to you for tire blow-outs, structural damage, and longer routing.

Check and make sure after loading that the distance between the top of each tire and the bottom of each wheel well is three inches or more. This will prevent a dangerous rubbing of tires when the home is moving.

Prior to moving, a good rule of thumb is to take out everything that was not on the home's original factory invoice except your normal clothing supplies. Your home was not built to haul cargo. Do *not* carry such things as blocking apparatus, blocks, lawn mowers, or lawn equipment in your home when moving.

Items such as a piano, freezer, or large trunks should be shipped separately. Your home has been designed and constructed to be capable of sustaining the design loads consisting of the dead load plus a minimum of three pounds per square foot floor load in the superimposed dynamic load resulting from over-the-road movement.

Excessive weight or improper weight distribution while towing your home to another site could possibly cause the home's under-frame to bend or misalign during transit. As a result, the whole structure of the home could be impaired, and the same four general conditions resulting from improper blocking and leveling of your home could also occur immediately or gradually after any secondary moves of the home.

Pick a Smooth Route

Make sure you and your home mover map out a smooth route to the new location of your home. Your home should not be towed over a rough dirt or gravel road. It should not be towed at excessive speeds.

It is extremely important to consult with a professional mobile home mover about the weight and load distribution prior to moving to prevent impairing the home's structure.

Hitch, Brakes, Tires, Wheels

Hitch Coupler Assembly

Your home is equipped at the front with a coupling and hoisting device called a hitch. This provides a means for attachment of the home to the towing vehicle.

Most hitches also include a jack or screw device for raising or lowering the front end of the home.

Grease fittings or oil points are provided on most couplers for lubricating the jack mechanism to prevent rusting and to provide for easier operation. Regular greasing and cleaning of the mechanism is advisable so the parts will be functioning when they are being used.

Brakes

A home that has been parked for a prolonged period should have its brakes checked by a competent mechanic before being moved over the highway. Electrical connections to the brakes should be checked to make sure they are clean and tight, or the result may be weak, uneven, or grabbing brakes or a lack of brakes. Linings should be replaced immediately when they become worn out or greasy. Linings approved by the manufacturer of the brakes should be used.

Tires

When a home is blocked in position, tires should carry some of the weight, but a board may be placed under the tire to keep it free of the soil. Tires should be kept inflated.

After the home is positioned and the skirting is installed, the tires will be shielded from the sun. Painting the tires with a rubber tire paint helps protect them from deterioration.

The original tires furnished with your home are guaranteed by the tire manufacturer to be free from defects in workmanship for a certain period of time. Check the tire warranty information. If an examination shows that any tire has failed under the terms of the warranty, adjustment should be arranged through the nearest tire dealer handling that brand of tire.

All tires are designed to carry a specific load at a specified air pressure. They will render satisfactory service if used within the load limitation indicated by the tire manufacturer.

Wheels

Wheel bearings can become badly etched or corroded when your home is parked for long periods unless the bearings are well covered with a protective covering of a suitable lubricant.

Corrosion is caused by water getting in through the seals or by moisture due to condensation forming in the hub with variations in temperature. There is no way to prevent the condensation except to fill the hub and bearings completely with grease. After your home has been permanently located, the wheel bearings and the hub should be cleaned and repacked with grease, leaving no voids in the hub to prevent the entrance of moisture.

If your home is to be moved on the highway again, some of the grease should be removed, so that the hub is about two-thirds full. This will prevent grease leakage through the seals to the brakes. If the hubs are left fully packed, the grease will expand from heat generated at higher speeds and will be forced through the seals. This can cause faulty brake operation.

It is important that the wheel bearings be inspected and cleaned prior to moving.

To check for spindle tightness, the grease cap under the hub should be removed. The spindle nut should be pulled up tight, then backed off to the first cotter pin hole, so that the wheel will rotate freely when jacked up. No side play should be present in the bearings. This can be checked by rocking the wheel sideways by hand with the wheel jacked up.

Insurance

Physical Damage Insurance

If your home is moved from one location to another, you should have insurance coverage in the event your home is damaged in transit. This coverage may be provided by the carrier who moves your home; however, you should inquire about this prior to a move.

The purpose of such insurance is to cover collision or upset during any move. This is usually available on a term or trip basis. It should be noted that your product warranty is not intended to cover damage incurred during moves, so insurance should be sufficient to cover the possibility of damage or loss to your home and any contents.

Homeowner Insurance

Consideration should be given to obtaining

insurance appropriate for all homeowners.

1. Mobile home owners policy (in those states where they are offered) typically covers damage to your home and appurtenant structures as a result of perils normally insured under a general homeowner's policy. (For example: Fire, lightning, wind, vandalism, etc.). In addition, coverage is normally provided for personal property, additional living expenses, personal liability and medical payments.
2. Those states where mobile homeowners policies are not offered, individual policies covering property damage to your home, loss of personal property, personal liability, and so on may be obtained separately.

You should discuss insurance coverage with your insurance advisor prior to the time you move into your home.

Home Safety

Fire Safety Devices in Your Home

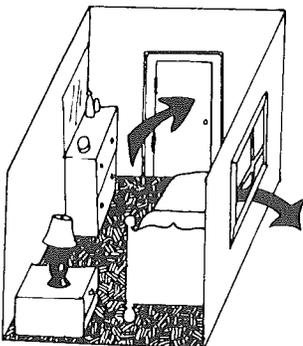
All homes built by Redman are built to meet the National Mobile Home Construction and Safety Standards Act of 1974.

Two important safety features are built into each Redman home:

- Egress windows in each of the bedrooms to provide an escape route to the outside
- Smoke detectors which serve as early warning devices in the event of fire

Safety Exit Window

Federal law requires mobile homes to have one window in every bedroom as a safety exit. The windows may differ in size; however, each allows plenty of room for easy and fast escape.



To properly use the windows, follow these steps: (Instructions attached to the windows should be carefully read and memorized.)

- Prepare windows immediately after moving into the home. (This may have been done by your dealer, but make sure that you, as the owner, double-check.)

Remove any installation clips which may have been installed for transit.

Remove all clips installed by supplier at hinges or actuating mechanisms.

- To exit in case of fire

Remove storm sash by turning the retaining clips. (or screen by pulling nylon tabs)

Trip exit latches at sill.

Open the window by either the sliding or hinge method.

Exit

- Go over the above procedures several times a year—especially with children. Check to make sure windows and screens can be removed easily.

- In case of severe emergencies, when there is not time to open windows, break them. A lamp, drawer, picture, or shoe can be used.

Smoke Detectors

Each sleeping area in your home is equipped with a highly sensitive smoke detector. The detectors are mounted on the wall to detect smoke which might rise from a fire.

The smoke detector shall be either ionization chamber or the photoelectric wall mounted type and shall comply with the requirements of Underwriters Laboratory Standard for ionization chamber and photoelectric type. In the early stages of the fire, there is no visible smoke, no flame, and no appreciable heat. Yet the early warning system senses fire is in the making and warns of the fire immediately by emitting a loud, distinctive alarm horn sound.

When cleared of combustion products, the detector resets itself automatically. One glance at the smoke detector tells you the power is on, the circuits are functioning, and the sensitivity adjustment is correct. A solid state light set in the detector lets you know that the fire detector is on and working.

For maintenance instructions, please see the separate smoke detector owner manual. Please read it carefully and keep it in the front jacket of this manual.

Fire Safety Tips

Dependable and timely warning of fire is of utmost importance, but it may be in vain if you and your family do not know how, or are not able, to escape from a burning home.

Why do people every year fail to survive home fire even though they wake up in time? First, thinking it only can happen to the other family, they make no plans for coping with a fire emergency situation. Second, most people lack even a basic knowledge of fire, its behavior, and its actual dangers. They may fear flames but show little respect for the deadly gases of combustion or super heated air. Third, when fire does break out, they may find themselves trapped — either from fear of jumping from a window or the lack of preparation of escape facilities.

With the safety devices built into your Redman home, you actually live in a more fire safe situation than in most stationary homes. Statistics show that there are fewer fires in mobile homes than in stationary homes, but it always is wise to be prepared.

Things to Know and Remember

Every member of the family should know the basics for preventing fires or, in the event a fire does start, what to do and how to escape.

1. Have a fire exit plan. Know all possible escape routes from each room of the home. Determine two routes to escape — especially from bedrooms. Hold family fire exit drills.

Plan to do this periodically, and do not let anyone laugh you out of it. Decide who is to be in command in the emergency, who will substitute if necessary, and how the alarm is to be given so that everyone in the house is warned.

It is smart to plan on the worst conditions under which a fire can break out in your home. For example, it could happen on a bitterly cold winter night. Will your driveway be clear? Will your car keys be where they can be found easily? Will your car be in working order to get you and your family away from the burning building and give you temporary shelter from the cold? Think ahead and prepare for any and all difficulties.

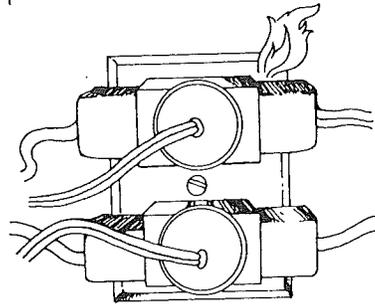
2. Keep dust and lint to a minimum around heat sources such as television sets, furnaces, and appliances. Remember that an accumulation lint burns as well as paper.
3. Never leave the house unattended with something cooking on the range.
4. Keep all bedroom doors closed at night.
5. Use the special egress windows to escape from bedrooms in a burning house rather than taking a chance on reaching the front door. If you must leave by a door, close it after you.

6. Do not try to fight your own fire. Leave immediately and call the fire department from an outside building or from a neighbor's home.

7. Keep matches and lighters away from children.

8. Store flammable liquids in safe metal containers outside the house.

9. Do not overload electrical circuits or tamper with fuses and electrical wiring.



10. Do not smoke in bed.

11. Use a flashlight to look into dark areas — never a match or candle.

12. Do not run extension cords across nails or under rugs. It is not advisable to use any extension cords on a permanent basis.

13. Dispose oily rags properly in a covered metal container or store them outside the house.

14. When using a deep fryer or frying pan, keep the long-handled fork and a lid nearby to smother any possible fire. Also keep a container of baking soda on hand for smothering grease fires. (An alternate is salt; do not use flour, for it is too dusty and explosive.)
15. Never pour water on a grease fire.
16. In case of a broiler fire, turn the heat off. Throw baking soda on the broiler or pan and shut the oven door.

The Nature of Fires

Regardless of the type of home you live in, once a fire starts, it generates heat, smoke, and poisonous gases – all of which rise to the highest possible point and then begin accumulating.

The layers deepen and extend themselves downward from the ceiling toward the middle level of the rooms. Therefore, if an individual is awakened by heat, he should not stand up; he should try to crawl to safety. He should stay close to the floor, breathe through a wet cloth if possible, and take short breaths.



It is best to close all bedroom doors at night because the harmful gases and smoke will reach you faster than the heat will if the doors are open.

In event of fire, experts say that the worst move is to open the bedroom door. This gives the fire a boost and allows the smoke and heat to rush into the room. The proper procedure is to feel the door and the door knob. If excessive heat can be felt through the door, it should be left closed. Exit through the bedroom window.

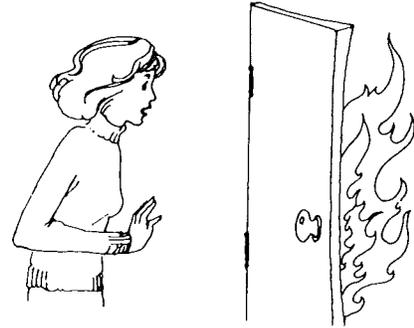
If children must be rescued in such a situation, say the experts, it is best to leave through the bedroom window and enter the children's room from the outside – through a window in their bedroom. If this is impossible and it is necessary to travel through the smoke-filled hallway, get down on the floor and crawl quickly on hands and knees.

If there is any breathable air at all, it is most likely to be at approximately the head level of a small child or a crouching adult.

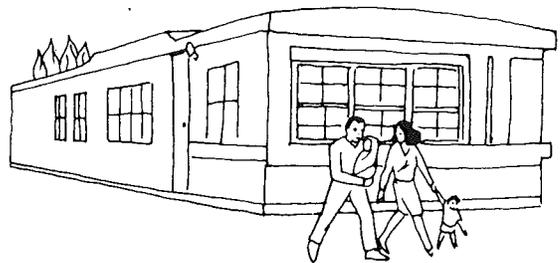
Opening a door of a burning house just helps feed the fire, so, if you must leave the house by the front door, close it after you.

Fire travels fast, and escape must be immediate. A fire can reduce a home to ashes in 20 minutes. Do not waste time calling the fire department from your house. Do not stop to gather up valuables or take time to get dressed. Get the family out first. Then stay out.

A most vital rule for survival is: In a building on fire, never open a door that feels hot to the touch. If there is enough heat on the other side of the door to warm it through, there is enough to kill you with your first breath of it.



A pre-arranged plan of escape is a necessity. Hold a family conference on what every member must do in a fire emergency. Map out at least two safe avenues of escape for each person.



Escape routes and facilities should be checked and improved if needed. Make sure that the egress windows selected for escape can be opened easily – even by a child or an infirm person. If screens or storm windows obstruct fast exit, consider doing without them on escape windows or replace them and the windows with some other type.

You can ask advice of your local fire department if you have any problems or doubts about the fire escape plans.

The three most common mistakes are:

1. Trying to fight your own fire.
2. Trying to call the fire department from inside the burning house.
3. Neglecting to hold family fire drills before the need ever arises.

Fire Safety Checklist

("Yes" answers indicate you have fire safety in mind.)

General

- | | Yes | No |
|---------------------------------------------------------|--------------------------|--------------------------|
| 1. Have all family members been briefed on fire safety? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Does everyone know how safety exit windows work? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Does everyone know how the smoke detectors work? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Do you have a family fire exit plan? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Do you have family fire exit drills? | <input type="checkbox"/> | <input type="checkbox"/> |

Bedrooms

- | | | |
|--------------------------------------------------------------------------------------|--------------------------|--------------------------|
| 1. Are space heaters and lamps kept away from burnables? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Are electric blankets U. L. listed? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Are lights in closets away from burnables? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Are you avoiding overloading of electrical outlets? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Do you have rules against smoking in bed and
are ashtrays kept away from beds? | <input type="checkbox"/> | <input type="checkbox"/> |

Outside Home

- | | | |
|----------------------------------------------------------------------|--------------------------|--------------------------|
| 1. Does the television antenna have a lightning arrestor? | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is the trash burner well away from things you don't want to burn? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Is the barbecue grill clean and away from all buildings? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Do you avoid storing old paint under the home? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Is gasoline stored away from the home? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Are all volatile liquids stored properly? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Is the lawnmower tank empty? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Is under-floor furnace duct work in good repair? | <input type="checkbox"/> | <input type="checkbox"/> |

MAINTENANCE CHECK LIST

Seasonal maintenance and care of your home can add to your convenience and comfort. We have listed some key activities. You may wish to include others.

Spring

- Wash exterior; wax aluminum siding only
- Wash, wax walls
- Inspect roof; clean off debris; rinse off with water and hose
- Check exhaust fan systems
- Check floors for level
- Check blocking for rigidity

Summer

- Check air conditioner
- Clean air filters
- Replenish fuel oil supply
- Inspect, clean wheel bearings

Fall

- Check/clean furnace
- Check oil supply
- Caulk all small openings
- Wash exterior; wax aluminum siding only
- Inspect and rinse roof
- Recoat metal roof if necessary
- Check exhaust fan systems
- Clean air filters

Winter

- Lubricate window hinges and arms
- Check furnace filters every 30 days
- Clean filters if necessary
- Check skirting around perimeter

Special Information

U.S. Department of Housing and Urban Development (HUD)

HUD is the Federal Agency which administers the National Mobile Home Construction and Safety Act of 1974 and any questions concerning the Act or your rights under the Act can be directed to HUD or to the approved SAA in your state which acts as HUD's agent. In order to contact HUD you should refer to the Department of Housing and Urban Development under

listings for the U.S. Government in your telephone book. In calling or writing the local HUD office, you should address your inquiry or call to the "Consumer Complaint Officer." If you live in a small town or rural area, your local HUD office will probably be located in a nearby city. You may also contact the Central HUD Office directly by writing or calling the Mobile Home Standards Division, Department of Housing and Urban Development, Washington, D.C. 20410 (telephone 202-472-4703).

State Administrative Agencies (SAA):

- Alabama — State Fire Marshal, Insurance Department, 445 South McDonough Street, Montgomery, Alabama 36130.
- Arizona — Director, Arizona Division of Building Codes, 1645 West Jefferson, Phoenix, Arizona 85507.
- Arkansas — Public Health Administrator, Arkansas State Board of Health, Mobile Homes Standards Section, 4815 West Markham Street, Little Rock, Arkansas 72201.
- California — Director, Department of Housing and Community Development, 1807 13th Street, Sacramento, California 95814.
- Colorado — Director, Colorado Division of Housing, Department of Local Affairs, 623 Centennial Building, 1313 Sherman Street, Room 523, Denver, Colorado 80203.
- Florida — Chief, Bureau of Mobile Construction, Department of Highway Safety and Motor Vehicles, 2900 Apalachee Parkway, Tallahassee, Florida 32304.
- Georgia — State Fire Marshal, Office of the Comptroller General, 238 State Capitol, Atlanta, Georgia 30334.
- Idaho — Director, Idaho Department of Labor and Industrial Service, 317 Main Street, Room 400, Boise, Idaho 83720.
- Indiana — State Building Commissioner, State of Indiana, Manufactured Building Division, Administrative Building Council, 300 Graphics Art Building, 215 North Senate Avenue, Room 300, Indianapolis, Indiana 46204.
- Iowa — State Building Code Commissioner, Office of Planning and Programming, State Planning Code Section, 523 East 12th Street, Des Moines, Iowa 50319.
- Kentucky — State Fire Marshal, Mobile Home Section, Capital Plaza, Frankfort, Kentucky 40601.
- Louisiana — State Fire Marshal, 106 Louisiana State Office Building, New Orleans, Louisiana 70112.
- Maryland — Director, Codes Administration, Department of Economic and Community Development — Division of Housing, 1748 Forest Drive, Annapolis, Maryland 21401.
- Michigan — Executive Director, Construction Code Commission, Department of Labor, 7150 Harris Drive, Lansing, Michigan 48926.
- Minnesota — Section Chief, State of Minnesota, Building Codes Division, Department of Administration, 408 Metro Square Building, 7th and Robert Streets, St. Paul, Minnesota 55101.
- Mississippi — Director, Mobile Home Inspection Division, Office of the Fire Marshal, 416 Woolfolk Building, P. O. Box 22542, Jackson, Mississippi 39205.
- Missouri — Director, Mobile Home and Recreational Vehicles Division, Missouri Public Service Commission, P. O. Box 360, Jefferson City, Missouri 65101.
- Nebraska — Director, Division of Housing and Environmental Health, State Department of Health, Lincoln Building, 3rd Floor, 1003 "O" Street, Lincoln, Nebraska 68508.
- Nevada — State Fire Marshal, State Department of Commerce, Mobile Home Section, 505 East King Street, Room 302, Carson City, Nevada 89701.
- New Jersey — Director, Bureau of Housing Inspection, Division of Housing and Urban Renewal, Department of Community Affairs, 363 West State Street, Trenton, New Jersey 08625.
- New Mexico — Executive Director, Mobile Housing Commission, State of New Mexico, P. O. Box 5759, Santa Fe, New Mexico 87502.
- New York — Director, Codes Bureau, Division of Housing and Community Renewal, Two World Trade Center, New York, New York 10047.
- North Carolina — Commissioner of Insurance, North Carolina Department of Insurance, P. O. Box 26387, Raleigh, North Carolina 27611.
- Oregon — Chief, Mobile Home and Recreational Vehicle Section, State of Oregon, Department of Commerce, Building Codes Division, 401 Labor and Industries Building, Salem, Oregon 97310.
- Rhode Island — State Building Code Commissioner, State of Rhode Island, Building Code Commission, 12 Humbert Street, North Providence, Rhode Island 02904.
- South Carolina — Director, Division of Inspections Services, South Carolina Budget and Control Board, 300 Gervais Street, Columbia, South Carolina 29201.
- South Dakota — Secretary, Commerce and Consumer Affairs, Division of Consumer Protection, State Capitol, Pierre, South Dakota 57501.
- Tennessee — Director, State of Tennessee, Department of Insurance, Division of Fire Prevention, 202 Capitol Towers Building, Nashville, Tennessee 37219.
- Texas — Administrator, Texas Department of Labor and Standards, Mobile Home Division, P. O. Box 12157, Capitol Station, Austin, Texas 78711.
- Utah — Director of Mobile Homes and Recreational Vehicle Division, Department of Business Regulation, State of Utah, 330 East 4th, South, Salt Lake City, Utah 84111.
- Virginia — Chief Fire Marshal, State Corporation Commission, Commonwealth of Virginia, 521 Blanton Building, P. O. Box 1157, Richmond, Virginia 23209.
- Washington — Assistant Director, State of Washington, Department of Labor and Industries, Mobile Home and Recreational Vehicles Section, 300 West Harrison Street, Seattle, Washington 98119.
- Wisconsin — Chief, Mobile Home Section, Department of Industry, Labor and Human Relations, 201 E. Washington Ave., Madison, Wisconsin 53701.

Manufacturer Address

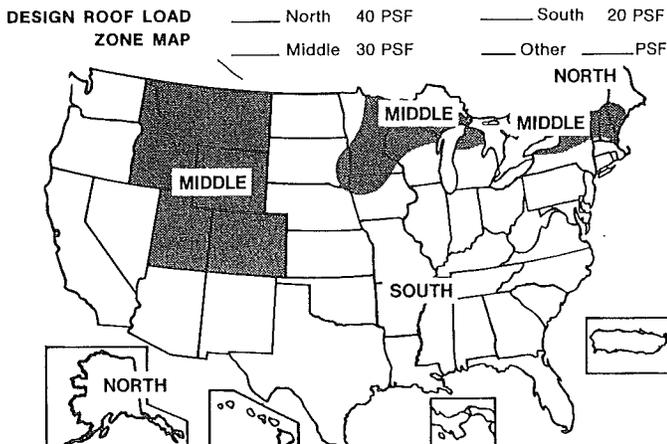
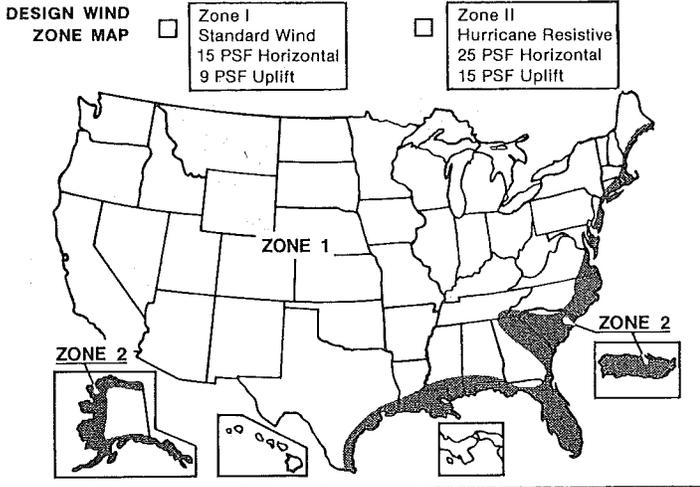
COMPLIANCE CERTIFICATE

Date of Manufacture	Plant Number	HUD No.
Manufacturer's Serial Number and Model Unit Designation		
Design Approval by (D.A.P.I.A.)		
<p>This mobile home is designed to comply with the federal mobile home construction and safety standards in force at time of manufacture. (For additional information, consult owner's manual.)</p>		

The factory installed equipment includes:

Equipment	Manufacturer	Model Designation
For heating	_____	_____
For air cooling	_____	_____
For cooking	_____	_____
Refrigerator	_____	_____
Water heater	_____	_____
Washer	_____	_____
Clothes Dryer	_____	_____
Dishwasher	_____	_____
Garbage Disposal	_____	_____
Fireplace	_____	_____
	_____	_____
	_____	_____
	_____	_____

STRUCTURAL DESIGN BASIS CERTIFICATE



HEATING AND COOLING DESIGN BASIS CERTIFICATE

COMFORT HEATING

This mobile home has been thermally insulated to conform with the requirements of the federal mobile home construction and safety standards for all locations within climate zone _____.

Heating equipment manufacturer and model (see list at left).
The above heating equipment has the capacity to maintain an average 70° F temperature in this home at outdoor temperatures of _____ F.

To maximize furnace operating economy, and to conserve energy, it is recommended that this home be installed where the outdoor winter design temperature (97½%) is not higher than _____ degrees Fahrenheit.

The above information has been calculated assuming a maximum wind velocity of 15 mph at standard atmospheric pressure.

COMFORT COOLING

Air conditioner provided at factory (Alternate I)

Air conditioner manufacturer and model (see list at left).

Certified capacity — _____ B.T.U./hour in accordance with the appropriate air conditioning and refrigeration institute standards.

The central air conditioning system provided in this home has been sized assuring an orientation of the front (hitch end) of the home facing _____. On this basis the system is designed to maintain an indoor temperature of 75° F when outdoor

temperatures are _____ F dry bulb and _____ F wet bulb.

The temperature to which this home can be cooled will change depending upon the amount of exposure of the windows of this home to the sun's radiant heat. Therefore, the home's heat gains will vary dependent upon its orientation to the sun and any permanent shading provided. Information concerning the calculation of cooling loads at various locations, window exposures and shadings are provided in Chapter 22 of the 1972 edition of the ASHRAE Handbook of Fundamentals.

Information necessary to calculate cooling loads at various locations and orientations is provided in the special comfort cooling information provided with this mobile home.

Air conditioner not provided at factory (Alternate II)

The air distribution system of this home is suitable for the installation of central air conditioning.

The supply air distribution system installed in this home is sized for mobile home central air conditioning system of up to _____ B.T.U./hr. rated capacity which are certified in accordance with the appropriate air conditioning and refrigeration institute standards, when the air circulators of such air conditioners are rated at 0.3 inch water column static pressure or greater for the cooling air delivered to the mobile home supply air duct system.

Information necessary to calculate cooling loads at various locations and orientations is provided in the special comfort cooling information provided with this mobile home.

Air conditioning not recommended (Alternate III)

The air distribution system of this home has not been designed in anticipation of its use with a central air conditioning system.

INFORMATION PROVIDED BY THE MANUFACTURER NECESSARY TO CALCULATE SENSIBLE HEAT GAIN

- Walls (without windows and doors) "U" _____
- Ceilings and roofs of light color "U" _____
- Ceilings and roofs of dark color "U" _____
- Floors "U" _____
- Air ducts in floor "U" _____
- Air ducts in ceiling "U" _____
- Air ducts installed outside the home "U" _____

The following are the duct areas in this home:

- Air ducts in floor sq. ft. _____
- Air ducts in ceiling sq. ft. _____
- Air ducts outside the home sq. ft. _____

To determine the required capacity of equipment to cool a home efficiently and economically, a cooling load (heat gain) calculation is required. The cooling load is dependent on the orientation, location and the structure of the home. Central air conditioners operate most efficiently and provide the greatest comfort when their capacity closely approximates the calculated cooling load. Each home's air conditioner should be sized in accordance with Chapter 22 of the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Handbook of Fundamentals, once the location and orientation are known.

OUTDOOR WINTER DESIGN TEMP. ZONES

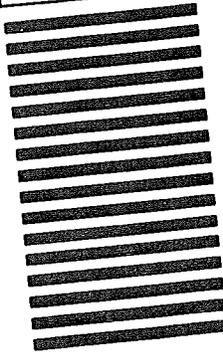


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POSTAGE WILL BE PAID BY
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Redman Plaza East
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Dallas, Texas 75229

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IN THE
UNITED STATES



that your dealer has completed and mailed a card for you. If you acquired your home from someone who is not a dealer, you should promptly fill out and send a card to the manufacturer. It is important that you keep this booklet and give it to any person who buys a home from you."

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Redman Plaza East
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Dallas, Texas 75229



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



VI of the Housing and Community Development Act of 1974 provides you with protection against certain construction and safety hazards in your home. To ensure your protection, the manufacturer of your home booklet completed and mailed,

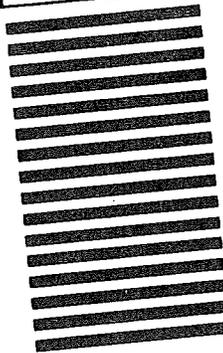
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