



Aloha Kakou.

Congratulations on your decision to purchase your new home at Ke Ola O Pōka'i Bay. We share your excitement about your new residence and welcome you and your family to your new home.

We designed this *Homeowner Manual* to assist you after the purchase of your home. The information presented here will answer many questions and provides you with the necessary information on 1) CONSTRUCTION EXPECTATIONS, 2) MAINTAIN YOUR NEW HOME, and 3) ENJOY YOUR NEW HOME.

Please take time to review this material thoroughly. Note the amount of detail we have provided. Your new home will receive the same attention to detail.

Please keep this manual in a secure place as it will provide a useful resource and record of information about your new home now and in the future.

If you need clarification or additional details about any topic discussed, please give us a call. We are delighted to welcome you as part of our family and are always ready to serve you.

Sincerely,

Mark Development, LLC.



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Section 1: Introduction

An Overview of Your New Home Experience

Purchasing a new home is an exciting experience and is an investment of your money, your emotions, and your time. The process is also complex, with many details to be decided and arranged.

Homeowner Manual

This book is your Homeowner Manual. It will guide you through the homeowner orientation, care of your home and serve as a useful reference after your move in.

Utilities and Mailboxes

The location of meters, phone and electrical junction boxes, and mailboxes are examples of items outside the control of the developer and builder. The authority of the utility companies and the U.S. Postal Service to designate the placement of these items is well established.

Utilities - The developer or builder will have utility service removed from its name upon closing. You will need to notify all applicable utility companies of your move so that service is provided in your name. We suggest that you contact these companies well ahead of time to avoid any interruption in service. If you ordered a security system for your home, you can arrange to activate that system by contacting the monitoring service for a connection appointment. For your convenience, we have included a list of your utility companies and contact information at the end of this section.

Changes in Materials, Products, and Methods

The new-home industry, building trades, and product manufacturers are continually working to improve methods and products. In addition, manufacturers sometimes make model changes that can impact the final product. For instance, appliance manufacturers generally make design changes every year. The model homes will show the appliances that were current when the models were built although your home may have a more recent version.

In all instances, as required by your purchase agreement, any substitution of method or product that we make will have equal quality than that shown in our models. Since such substitutions or changes may become necessary because of matters outside our control, we reserve the right to make them without notification.

Natural Variations

Dozens of trade contractors have assembled your home. The same individuals rarely work on every home and, even if they did, each one would still be unique. The exact placement of switches, outlets, registers, and so on will vary slightly from the model and other homes of the same floor plan.

Quality

Our company and builders will build your new home to the quality standards described in our documents and demonstrated in our model homes. Each new home is a handcrafted product—combining art, science, and raw labor. The efforts of many people with varying degrees of knowledge, experience, and skill come together.

Errors and Omissions

From time to time during a process that takes several months and involves dozens of people, an error or omission may occur. Systems and procedures are in place for inspecting homes to ensure that the level of quality meets our requirements. Our builders inspect every step of construction and are responsible for quality control. In addition, the county, city, an architect or an engineer conducts a number of inspections at different stages of construction. Your home must pass inspections before construction continues.

Homeowner Orientation

The homeowner orientation has two purposes. The first is to demonstrate the features of your home and discuss maintenance and our limited warranty program. Equally important, we want to confirm that we have delivered your new home at the quality level described in our documents and shown in our model homes and with all your selections correctly installed. For detailed information, please review *Section 2, Homeowner Orientation*.

House Keys

When the closing process is complete, you will get the keys to your new home. You will receive four keys for each lock on your home. The same key will operate both the knob and the deadbolt locks. When you insert your new key for the first time in each lock, the tumblers are altered and our construction master key will no longer unlock your door.

We recommend that you try all of the keys in all of your locks to confirm smooth operations. Depending on the number of family members living in the home, you may want to get extra copies of your house keys made.

Garage Door Opener Operators

Garage door opener operators will be left in a drawer in your kitchen. If you wish to change the code, review the manufacturer instructions. Batteries typically need to be replaced about once a year. If you need additional operators, contact the garage door opener company.

Mail Delivery and Mailbox Keys

Mail Delivery – U.S. Postal Services regulation prohibit mail delivery at locations where there are ongoing construction activities. Mail will be available for pick-up at the Waianae Post Office until the time the U.S. Postal Service starts delivery to the Cluster Box Units.

Mailbox Keys - U.S. Postal Service regulations state that, the developer or builder is not permitted to deliver mailbox keys to you. Mailbox keys, where applicable, are available from your post office. You will need proof of identity, and you will be asked to sign for your keys.

Utility and Service Information

Our utility and service information provides you a quick reference and contact information. Please call utility companies before your closing date to transfer services to be effective on your closing date.

Caring for Your Home

Many of your responsibilities as an owner and the builder's responsibilities under the terms of its limited warranty are discussed in *Section 4 Caring for Your Home*. Begin now to become familiar with the home maintenance you should provide and the builder's warranty service commitment to you.

Your Feedback and Suggestions

Our desire to maintain open communication with you extends through the buying process and after your move-in. In an effort to improve the product and service we provide, we welcome your comments on how we've performed. Our goal is to build the best home and the best customer relationship possible. Your feedback helps us reach that goal.

Your Questions

We also respect your interest and appreciate your attachment to the new home. Therefore, your input into our system is welcome. However, to avoid duplication of efforts, confusion, misunderstandings, or compounding errors, we ask that you first check your purchase documents to review what you ordered and the specifications for construction of your home. If you still believe we are in error, do the following:

- Contact us, in writing, with your question. You are welcome to use the *Customer Wants to Know* form. We will note the date and time it was received and will respond within fifteen business days. You will find a copy of this form at the end of this manual.

Section 2: Homeowner Orientation

Your homeowner orientation is an introduction to your new home and its many features. Your homeowner orientation provides you with a:

- Demonstration of your new home.
- Review of key points about maintenance and limited warranty coverage.
- Confirmation that builder installed selections and options as you ordered them.

Scheduling

We schedule the orientation with you as your home nears completion, typically several days before your closing. We meet at your new home. Only those persons on title will be allowed at the orientation. Expect your orientation to take approximately 2 hours.

Last-Minute Activity

If you visit your home a day or two prior to orientation, you may notice dozens of details that need attention. During the last few days just prior to your orientation appointment, many tradespeople and the builder's employees will be working in your home. They are completing last-minute adjustments and fine-tuning your home. These finishing touches cannot be performed until all of the parts have been installed. What seems like a rush of activity is a normal part of the construction process.

Preparation

Following these hints will assure that you get the maximum benefit from your orientation.

Allow Enough Time

Arrange your schedule so you can use the full amount of time allotted.

Sales Documents

By having your sales documents and any approved changes with you, any questions about the items installed in your home can usually be answered conveniently and immediately.

Attend Alone

Our experience shows that the orientation is most beneficial when buyers focus all their attention on their new home and the information we present. Only persons on title will be allowed at the orientation. Although we appreciate that friends and relatives are eager to see your new home, it would be best if they visit after your orientation. Similarly, we suggest that, if possible, children and pets not accompany you at this time.

Cosmetic Surfaces

Cosmetic surface damage caused during construction is readily noticeable during the orientation. Such damage can also occur during the move-in process or through daily activities. Therefore, during your orientation, we will confirm that all surfaces are in good and acceptable condition. Any details that need attention will be listed on your Homeowner Punch List form. After the builder corrects any items noted during the orientation, repair of cosmetic surface damage is your responsibility and are excluded from warranty coverage except as specifically described in your builder's warranty manual

The builder's limited warranty specifically excludes repairs for damage caused by moving in or living in the home. If your movers scratch the marble entry floor bringing the piano in, notify the moving company. If you splinter some wood trim and break a taillight backing out of your new garage, repairs to the garage and the car are your responsibilities. The developer is always available to assist you with information about cosmetic repairs you may need to make.

Attire

Wear shoes that are convenient to get off and on. We will tour both the exterior and interior of your home. Anticipate that some dust, bending, kneeling, and reaching may be encountered.

Get Involved

Plan to listen carefully and take a hands-on approach. Push buttons, lock locks, and flip breakers. This helps you remember the dozens of details we cover.

Quality

The overall quality of your home should equal that shown in our models and described in your purchase documents. We list items we agree need further attention and arrange appropriate work. Orientation items fall into several categories:

- Incomplete or missing (Cabinet knob not installed.)
- Incorrect (Porch light should be polished brass, not antique.)
- Dysfunctional (Bath fan does not come on.)
- Below company standard (Mitered corner rough, top right of den door, hallway side.)
- Damaged (Scrape on wall from carpet installation.)
- Uncleaned (Mud on the garage floor.)

At some point, quality ceases to be scientific and becomes a matter of personal taste. In a few areas, your personal standards may be even higher than ours. Our commitment to you is that we will deliver what we promised.

Completion of Items

The builder takes responsibility for resolving any items noted on the Homeowner Punch List and will complete most items before your move-in. If work needs to be performed in your new home after your move-in, builder will typically schedule appointments with you between Monday through Friday, 8:00 a.m. to 4:00 p.m.

Please note that builder will correct only those items listed on the Homeowner Punch List. No verbal commitments of any kind will be honored by the builder.

Gaining access to occupied homes to complete orientation items is a concern to homeowners and builders alike. The builder asks that you make appointments so that someone over 18 is present during repairs. Working around your busy schedule may result in service taking longer than anyone wants. Your cooperation is essential.

To confirm that any items listed during your orientation have been resolved to your satisfaction, please submit the *Feedback on Orientation Items* form to us within 60-days of your closing date. You will find a copy of this form at the end of this manual.

Section 3: Utility and Service Information

Utility Services

Electricity

Hawaiian Electric Co., Inc.
820 Ward Avenue
Honolulu, Hawaii 96814

To Start or Stop Service call (808) 548-7311
Telephone Service Hours (Mon-Fri) 6:30 am. – 6:00 pm.

Please call HECO before your closing date to transfer services to be effective on your closing date. There is a one-time service fee of \$15 and there may be a minimum deposit of \$50. The developer and builder will not be responsible for your electricity after your closing date and services will terminate if not transferred. On closing day, should you neglect to transfer and call HECO to start service, there will be an additional HECO charges for same-day service

Water

Board of Water Supply
630 South Beretania Street
Honolulu, Hawaii 96813

To Start or Stop Service call (808) 748-5000
Mon-Fri 7:45 am. – 4:30 pm.

Please call BWS before your closing date to transfer services to be effective on your closing date. There is no charge. The developer and builder will not be responsible for your water after your closing date and services will terminate if not transferred.

Sewer and Refuse

City and County of Honolulu
Department of Environmental Services
650 South King Street
Honolulu, Hawaii 96813

Sewer Charges and Billing call (808) 768-3330
Main Refuse Service call (808) 768-3407
Refuse Division, Waianae
call (808) 697-1178

Automated trash pick-up is currently in service in the Waianae area. If you unit does not have an automated trash can in the garage, you need to call 697-1178 to request delivery of an automated trash can.

Telephone

Hawaiian Telcom
Customer Relations
P.O. Box 2200
Honolulu, Hawaii 96841

To Start or Stop Service call (808) 643-3456

Cable TV

Oceanic Cable
200 Akamainui Street
Mililani, Hawaii 96789

Sales and Billing call (808) 625-8100
Repair Center call (808) 625-8200
24 hour a day, 7 days a week

Satellite TV

See your yellow pages for available service.

Internet Providers

See your yellow pages for available service.

Warranty and Support Services

Warranty Service

Mail, fax or drop your forms to:

Mark Development, LLC.
Ke Ola O Pokai Bay
3165 Waialae Avenue, Ste 200
Honolulu, Hawaii 96816
Ph: (808) 735-9099
Fax: (808) 737-5633

For services not covered under the builder’s limited warranty please contact vendors directly using information provided below.

Air Conditioning

Commercial Sheetmetal Co., Inc.
94-142 Leoleo Street
Waipahu, Hawaii 96769
Ph.: (808) 671-4002

Appliances

**Servco Home & Appliance
Distribution**
2841 Pukoloa Street
Honolulu, Hawaii 96819
Ph.: (808) 564-2440

Alarm System

Alert Alarm of Hawaii
2668 Waiwai Loop
Honolulu, Hawaii 96819
Ph.: (808) 521-5000

GE Appliances
www.geappliances.com

GE Answer Center
1-800-626-2005



Cabinets

Pacific Resources, LLC
3220 Waialae Avenue
Honolulu, Hawaii 96816
Ph.: (808) 732-1818

Floor Coverings

Inline Flooring, LLC
99-899 Iwaena Street
Aiea, Hawaii 96701
Ph.: (808) 486-5650

Overhead Garage Doors

Servco Raynor Overhead Doors
94-Pahu Street
Waipahu, Hawaii 96797
Ph.: (808) 676-3667

Roofing

ALCAL Hawaii
91-446 Komohana St., Unit A, B, C, D
Kapolei, Hawaii 96707-1738
Ph.: (808) 682-5222

Solar Water Heating System

Grand Solar, Inc.
4882-4 Kilauea Avenue
Honolulu, Hawaii 96816
Ph.: (808) 737-3536

Termite Protection

Terminix
Hauoli Termite & Pest Control
650 Kakoi Street, Unit 100
Honolulu, Hawaii 96819
Ph.: (808) 836-0272

Vinyl Windows and Doors

Alii Glass and Metal, Inc.
2159 Lauwiliwili Ave.
Kapolei, Hawaii 96707
Ph.: (808) 671-4571

Window Coverings

Design 5 Ltd.
1139 9th Avenue, Ste C109
Honolulu, Hawaii 96816
Ph.: (808) 732-4476

Plumbing Service

TNH Plumbing, Inc.
911 Palm Place
Wahiawa, Hawaii 96786
Ph.: (808) 622-1695

Or other HECO approved warranty provider

Section 4: Caring for Your Home

The developer and builder have constructed your home with carefully selected materials and the effort of experienced craftsmen and laborers under the supervision of our field personnel, with the administrative support of our office personnel. Although this group works from detailed plans and specifications, no two homes are exactly alike. Each one is unique; a home is one of the last hand-built products left in the world. Over time, each behaves differently.

Although quality materials and workmanship have been used in creating your home, similar to an automobile, it requires care from the first day. Regular homeowner maintenance is essential to providing a quality home for a lifetime. This section of our manual was assembled in to assist you in that effort.

Homeowner Use and Maintenance Guidelines

We are proud of the homes we build and the neighborhoods in which we build them. We strive to create lasting value. This is best achieved when you, as the homeowner, know and perform appropriate maintenance tasks. Periodic maintenance is necessary because of normal wear and tear, the inherent characteristics of the materials used in your home, and normal service required by the mechanical systems. Natural fluctuations in temperature and humidity also affect your home, resulting in maintenance items. The natural and manufactured materials, the components interact with each other and the environment.

We recognize that it is impossible to anticipate and describe every attention needed for good home care. We focused on items that homeowners commonly ask about. The subjects are listed in alphabetical order to make finding answers to your questions convenient. Because we offer home buyers a variety of floor plans and optional features, this manual may discuss components that are not present in your home.

Checklists

You will find several checklists included in this manual. These cover fire prevention reminders, energy and water conservation tips, suggestions for extended absences, appliance service information and home maintenance supplies list. Again we make no claim that we have included every detail. We do believe we have provided you with a good start for understanding what to expect and how to care for your home

Prompt Attention

In addition to routine care, many times a minor maintenance attention provided immediately saves you a more serious, time-consuming, and sometimes costly repair later. Note also that neglecting routine maintenance can void applicable limited warranty coverage on all or part of your home.

By caring for your new home attentively, you ensure uninterrupted warranty coverage as well as your enjoyment of it for years. The attention provided by each homeowner contributes significantly to the overall desirability of the community.

Manufacturer Literature

Please take time to read the literature (warranties and use and care guides) provided by the manufacturers of consumer products and other items in your home. The information contained in that material is not repeated here. Although much of the information may be familiar to you, some points may differ significantly from homes you have had in the past.

We make every effort to keep the information in this manual current. However, if any detail in our discussion conflicts with the manufacturer's recommendations, you should follow the manufacturer's recommendations.

Activate specific manufacturer's warranties by completing and mailing any registration cards included with their materials. In some cases, manufacturer's warranties may extend beyond the first year and it is in your best interests to know about such coverages.

Termite 10-Year Protection Plan.

Your home comes with a 10-year subterranean termite protection plan through our termite protection provider Terminix/Hauoli Termite and Pest Control. Please carefully read the terms and conditions of the warranty to ensure that you maintain your warranty coverage and do not void it in any manner. (See *Termite* for more details.)

Builder's Limited Warranty Guidelines

While we strive to build a defect-free home, we are realistic enough to know that, with repeated use, an item in the home may fail to perform as it should. When this occurs, the builder will make necessary corrections so the item meets their warranty guidelines. In support of this commitment, the builder provides you with a limited warranty. See the *Robert M. Kaya Builders, Inc. Limited Warranty on Building Construction*.

Builder's Warranty Reporting Procedures

Providing warranty service for a new home is more complicated than for other products. When you purchased your home, you actually purchased hundreds of items and the work of 35 to 50 independent trade contractors. With so many details and people involved, a planned system is essential.

Our warranty service system is designed based on your written report of nonemergency items. This provides you with the maximum protection and allows us to operate efficiently, thereby providing faster service to all homeowners. Emergency reports are the only service requests we accept by phone. Please put all nonemergency service requests in writing.

You are welcome to mail, fax, e-mail, or drop off your list in person. Keep a copy for your records. This written system permits the contractors to focus their time producing results for you and following up. Experience has taught us that accuracy and efficiency suffer when we work outside this system and sacrifice careful documentation.

We plan two standard warranty contacts with you. The first is 60 days after your closing and the second is at 11 months after closing. We also have emergency response procedures and have provided for miscellaneous warranty requests between the standard 60-day and 11-month reports. Service for your appliances is handled differently and is described in detail on the following pages.

60-Day Report

For your convenience and in order for our service program to operate at maximum efficiency, we suggest that you wait 60 days before submitting a warranty list. This allows you sufficient time to become settled in your new home and to use most components repeatedly. As you notice items, jot them down on a *Warranty Service Request* form (found at the end of this manual).

11-Month Report

Near the end of the eleventh month of your materials and workmanship warranty, you should submit a year-end *Warranty Service Request* form (found at the end of this manual) if you have any items to report. We will also be happy to discuss any maintenance questions you may have at that time. Again, keep notations of items on a *Warranty Service Request* form (found at the end of this manual).

Builder Warranty Items

See the *Robert M. Kaya Builders, Inc. Limited Warranty on Building Construction*. For items covered under its program, complete the *Warranty Service Request* form and mail or fax to:

Mark Development, LLC.
Ke Ola O Pokai Bay
3165 Waialae Avenue, Ste 200
Honolulu, Hawaii 96816
Ph: (808) 735-9099
Fax: (808) 737-5633

Other Warranty Items

For the following categories, please contact providers directly for warranty or service:

- Alarm System: Contact Alert Alarm of Hawaii
- Appliance Warranty: Contact GE Appliances.
- Flooring Warranty: Contact Inline Flooring, LLC.
- Termite Warranty and Termite Treatments: Contact Terminix/Hauoli Termite and Pest Control.
- Window Covering Warranties: Contact Design 5 Ltd.
- Solar Water Heating System Warranty: Contact HECO after first year.

See Section 3: Utility and Service Information for contact information.

Emergency Service

While emergency warranty situations are rare, when they occur, prompt response is essential. Begin by checking items you can check. Troubleshooting tips appear in this manual for several of your home's components:

- ▶ Air conditioning
- ▶ Electrical
- ▶ Plumbing
- ▶ Roof (leak)
- ▶ Solar Water Heating System

Please refer to the individual categories to review these hints; you will find them at the end of the corresponding sections. Often the appropriate action by you can solve a problem immediately or mitigate the situation until a technician arrives.

If your review of the troubleshooting tips fails to solve the problem, during business hours call the Mark Development, LLC:

(808) 735-9099

Our trade contractors or local utility companies usually provide emergency responses to the following conditions:

- ▶ Total loss of electricity
- ▶ Total loss of water
- ▶ Plumbing leak that requires the entire water supply to be shut off

Note that if a service (electricity, water) is out in an entire area, attention from the local utility company is needed. Trade contractors are unable to help with such outages.

Roof Leak

While we agree with homeowners that a roof leak is indeed an emergency, the reality is that repairs cannot safely or effectively be performed while the roof is wet. Follow reporting procedures in the builder's limited warranty, and they will follow up when conditions make repairs possible. (See *Roof* for more details.)

Other Emergencies

In addition to emergency situations covered by the builder's limited warranty, be prepared for other kinds of emergencies. Post phone numbers for the fire department, police, paramedics, and poison control near phones in your home. Have companies in mind in the event you need a locksmith, water extraction, glass breakage repair, or sewer router service. If you are new to the area, neighbors may be able to recommend good service providers. Introduce your children to neighbors who might be available to help in an emergency if you are not home.

Other Warranty Service

If you wish to initiate non-emergency warranty service you are welcome to do so by sending in a *Warranty Service Request* form or simply by writing a letter that includes your name, address,

phone numbers, and a list of your concerns. See the *Robert M. Kaya Builders, Inc. Limited Warranty on Building Construction* for warranty coverages.

Kitchen Appliance Warranties

The manufacturers of kitchen appliances have asked to work directly with homeowners if any repairs are needed for their products. Customer service phone numbers are listed in the use and care materials for each appliance. Be prepared to provide the model and serial number of the item and the closing date on your home. For your convenience, we have included an Appliance Service information sheet among the other checklists in this manual.

Appliance warranties are generally for one year; refer to the literature provided by the manufacturer for complete information. Remember to mail in any registration cards you receive with manufacturer materials. Being in the manufacturer's system assures that in the event of a recall the company can contact you and arrange to provide the needed correction.

Storm Damage or Other Natural Disaster

Contact your homeowner's insurance agent immediately. Contain damage as much as possible without endangering yourself. In extreme situations, photograph the damage.

Help Us to Serve You

We can provide service faster and more accurately if the builder has all the necessary information. With your warranty request, please include:

- ▶ Your name, address, and the phone numbers where you can be reached during business hours.
- ▶ A complete description of the problem, for example, "guest bath—cold water line leaks under sink," rather than "plumbing problem."
- ▶ Information about your availability or the best days or times to reach you. For instance, if calling you at work is acceptable, let us know. Otherwise, we will use your home phone number. If you are usually home on Thursday, mention that.

Access to Your Home

The builder will conduct inspections of interior warranty items only when an adult is available to accompany their representative and point out the items you have listed. Both the builder's service technicians and those of our trade contractors will likewise perform repairs only when an adult is available to admit them to your home. An adult is a person 18 or older who has your authorization to admit service personnel and sign completed work orders.

Builder will not accept keys, nor will permit trade contractors to accept your key and work in your home without an adult present. While we recognize that this means processing warranty service items may take longer, we believe your peace of mind and security should be our first concern.

Exterior Items

Exterior items can usually be inspected and repaired without an adult present, provided access is available (for instance, no locked gate). However, builder will contact you the day prior to any visit and let you know we will have someone on your property. If you prefer to meet with us and discuss the item(s) in question, we are happy to arrange an appointment to do that.

Pets

The builder respects the pets that many homeowners count as members of their households. To prevent the possibility of an animal getting injured or lost, or giving in to its natural curiosity about tools and materials used for repairs, we ask that you restrict all animals to a comfortable location during any warranty visit, whether for inspection or warranty work. This policy is also for the protection of our employees and trades personnel.

Your Belongings

In all work that we perform for our homeowners we are concerned that their personal belongings be protected. When warranty work is needed in your home, we ask that you remove vulnerable items or items that might make performing the repair difficult. The builder and trade personnel will reschedule the repair appointment rather than risk damaging your belongings.

Signatures on Work Orders

Signing a work order acknowledges that a technician worked in your home on the date shown and with regard to the items listed. It does not negate any of your rights under the builder warranty nor does it release the builder from any confirmed warranty obligation. If you prefer not to sign the work order, the technician will note that, sign the work order and return it to us for our records. If you are dissatisfied with any service provided, you can note that on the work order or call Mark Development, LLC with your feedback. We will review your concerns and determine whether our requirements have been met. While complaints of this type are infrequent, about 50 percent of the time we find the homeowner is correct and more attention is needed.

Missed Appointments

Good communication is one key to successful completion of warranty items. The builder will strive to keep homeowners informed and to protect them from inconvenience. One of the challenges in this regard is when unexpected events sometimes result in missed appointments.

If a builder's employee or a trade person will be late, he or she should contact you as soon as the delay is recognized, offering you a choice of a later time the same day or a completely different appointment. If you must miss an appointment, we appreciate being alerted as soon as you realize your schedule has changed.

Warranty Service Summary

The many details of warranty coverage can be confusing. We hope this summary of key points will help. If you do not know whom to contact, call us and we will guide you.

Warranty and Maintenance Hours

- ▶ Administrative staff: Monday through Friday, 8:00 a.m. until 4:00 p.m.
- ▶ Inspection appointments: Monday through Friday, 7:00 a.m. until 4:00 p.m.
- ▶ Work appointments: Monday through Friday, 7:00 a.m. until 4:00 p.m.

Appliances

Contact the manufacturer directly with model and serial number, closing date, and description of problem. Refer to your Appliance Service information sheet.

Emergency

First, check the troubleshooting tips under several individual headings in this manual. If those tips do not solve the problem, during our business hours (Monday through Friday, 8:00 a.m. until 4:00 p.m.), contact Mark Development, LLC:

(808) 735-9099

After business hours or on weekends or holidays, contact the trade or appropriate utility company directly using the emergency numbers in *Section 3 Utility and Service Information*.

Non-emergency

Mail, fax, or drop off your list of items. You will find *Warranty Service Request* forms at the end of this manual or you can request copies by calling our office.

Mark Development, LLC.

Ke Ola O Pokai Bay

3165 Waiālae Avenue, Ste 200

Honolulu, Hawaii 96816

Ph: (808) 735-9099

Fax: (808) 737-5633

Storm Damage or Other Natural Disaster

Contact your homeowner's insurance agent immediately. Contain damage as much as possible with out endangering yourself. In extreme situations, photograph the damage.

Fire Prevention

Fire safety should be practiced by all family members. Awareness of potential dangers and preventive actions are preferable to even the fastest response. Keep these hints in mind and add your own reminders in the space provided on the next page.

Train Family Members

- Ensure that all family members know what escape routes exist in your home.
- Conduct a fire drill with family members.
- Test the smoke detectors to assure they function and so that everyone recognizes the sound. Follow the manufacturer's directions for cleaning and servicing all of your smoke detectors.
- As soon as possible, teach young children how and why to dial 911.
- Have a general use fire extinguisher and instruct all family members in its location and use.
- Teach children the safe use of appliances such as irons and toasters.

Practice Prevention

- Store matches away from children and heat sources.
- Avoid smoking in bed.
- Avoid leaving small children home alone, even for a short time.
- Maintain appliances in clean and safe working condition.
- Avoid overloading electrical outlets.
- Ensure that all electrical cords are in good repair.
- Use correctly sized circuit breakers.
- Avoid having any flammable objects or materials near the stove.
- Keep the range hood filter clean to prevent a build up of grease.
- Allow space for cooling around electrical equipment.
- Unplug the iron when it is not in use. Do not leave an iron that is on unattended.
- Use electric blankets with care, following manufacturer directions.
- Store volatile materials (paint, gasoline for the lawn mower, and so on) in appropriate containers, away from flames (such as pilot lights) or heat sources. Many trash collection services offer a means for you to dispose of hazardous items. Check with your service provider for details.
- Keep the barbeque clear of flammable objects and materials.
- During holidays, ensure that all cords and connections are in good condition and of appropriate capacity for electrical decorations.
- If you decide to remodel or add onto your home, obtain a building permit and work with trained professionals. Ensure that all building department inspections occur and that the work complies with all applicable codes. This also applies to installing a gas line for an outdoor barbeque, a gas fireplace, clothes dryer, and so on.

Extended Absences

Whether for a vacation, business travel, or other reasons, nearly all of us occasionally leave our homes for days or weeks at a time. With some preparation, such absences can be managed uneventfully. Keep these guidelines in mind and add additional reminders that are appropriate to your situation.

Plan in Advance

- Ask a neighbor to keep an eye on the property. If possible, provide them with a way to reach you while you are away.
- If you will be gone an especially long time (over two weeks) consider arranging for a house sitter.
- Arrange for someone to mow the lawn or shovel snow.
- Notify local security personnel or police of the dates you will be away.
- Stop mail, newspapers, and other deliveries.
- Use lighting timers (available at hardware stores for \$10 to \$20).
- Confirm that all insurance policies that cover your property and belongings are current and provide sufficient coverage.
- Mark valuable items with identifying information. Consider whether you have irreplaceable items that should be stored in a bank vault or security box.

As You Leave

- Forward phone calls to a relative or close friend.
- Unplug computers and other electronic devices that might be harmed in an electric storm.
- Leave window coverings in their most typical positions.
- Confirm that all doors and windows are locked and the deadbolts are engaged.
- Shut off the main water supply. Set the thermostat on the water heater to "vacation" to save energy.
- Store items such as your lawn mower, bicycles, or ladders in the garage.
- Disengage the garage door opener (pull on the rope that hangs from the mechanism). Use the manufacturer's lock to bolt the overhead door. *Caution:* Attempting to operate the garage door opener when the manufacturer's lock is bolted will burn out the motor of your opener. Upon your return, unlock the garage door first, then re-engage the motor (simply push the button to operate the opener and it will reconnect) to restore normal operation.
- Leave a second car in the drive.
- Summer: Turn your air conditioner fan to on. Set the thermostat to 78.
- Arm your security system, if applicable.

Energy and Water Conservation

Good planning and thoughtful everyday habits can save significant amounts of energy and water. In the process of conserving, you also save money as an additional benefit. Keep these hints in mind as you select and use your home's features:

Cooling

- Maintain all your home's systems in clean and good working order to prevent inconvenience and maximize efficiency. Arrange for a professional to service heat and air conditioning systems a minimum of once every two years.
- Keep filters clean or replace them regularly.
- Learn how to use your programmable thermostat for comfort and efficient energy use.
- Ceiling fans cost little to operate and the moving air allows you to feel comfortable at temperatures several degrees higher.
- On hot days, close all windows and the window coverings on windows facing the sun to minimize solar heating and reduce demands on your air conditioner.
- Plan landscaping elements that support efficient energy use:
 - Deciduous trees provide shade during the summer and permit solar warming in winter.
 - Evergreen trees and shrubs can create a windbreak and reduce heating costs.
 - Position trees to shade the roof and still allow good air flow around the home.
 - Plant shrubs and trees to shade the air conditioner without obstructing air flow around the unit.

Water and Water Heater

- Keep your solar water heater timer switch set properly. Power outages will cause the timer clock to be incorrect. Thermostatic mixing valve on the water heater keeps hot water supply at 120 degrees for better use and efficiency of the solar hot water.
- Wash clothing using cold water whenever possible.
- Follow the steps outlined in the manufacturer's directions for draining water from your water heater in order to remove accumulated hard-water scale that builds up inside the tank. Timing will depend on the nature of your water supply.
- Correct plumbing leaks, running toilets, or dripping faucets ASAP.
- Keep aerators clean.

Appliances

- In selecting new appliance, look for ENERGY STAR certified products and compare the information on the (yellow and black) Energy Guide sticker. Sometimes spending a bit more up front can reduce operating costs over the life of the appliance, conserving energy at the same time.
- Use cold water when operating your disposal. This not only saves hot water you pay to heat, it preserves the disposal motor.
- When baking, preheat your oven just five minutes before you use it. When possible, bake several items at the same time or at least consecutively. Turn the oven off a few minutes before baking time is done.
- Microwave rather than using the range when possible, especially during hot weather.

- ❑ Run the dishwasher when it has a full load and use the air-dry cycle. Avoid regular use of the rinse and hold cycle.
- ❑ Turn electric burners off a few minutes before cooking is complete.

Electrical

- ❑ Use compact fluorescent bulbs or fluorescent tubes where possible. Incandescent bulbs are the least efficient source of light.
- ❑ Turn lights and other electric items off when you finish using them or leave the room.

Maintenance

- ❑ Caulk in dry weather when temperatures are moderate. Check all locations, such as:
 - ▶ Foundation penetrations (electrical, phone, water, cable tv, and gas line entrances)
 - ▶ Around fans and vents
 - ▶ Joints between door or window frames and siding
- ❑ Check weatherstripping on all exterior doors and adjust as needed. Ensure that door thresholds are a good fit—most are adjustable.
- ❑ After any activity in the attic, check that the insulation is evenly distributed.

Appliance Service

This sheet is for your convenience. For warranty service on an appliance, contact the appropriate manufacturer directly at the service number provided in the appliance literature. You will need to supply the model and serial number (usually located on a small metal plate or seal attached to the appliance in an inconspicuous location), and the date of purchase (your closing date).

Closing Date _____

<i>Appliance</i>	<i>Manufacturer</i>	<i>Model #</i>	<i>Serial #</i>	<i>Service Phone #</i>
Refrigerator				
Range/Oven				
Microwave Hood				
Disposal				
Dishwasher				
Disposal				
Washer				
Dryer				

Home-Care Supplies

You will find that caring for your home is much easier if you have necessary tools and supplies on hand. As you review the maintenance information in this manual and in the manufacturer materials, note the materials and tools you will need. The following are common items that will make home care and maintenance easier.

ITEM	USE
Tub Seal/Silicon Sealant	Resealing around bathtubs, shower stalls and vanities.
Grout	Re-grouting between kitchen and vanity tile (if applicable).
Spackle/Caulking	Fill small holes and filling stress cracks on walls and joints.
Paraffin Wax/Silicone Spray	Lubricate sliding door and window tracks and rollers.
Graphite	Lubricate door hinges and locksets
Stainless Steel Cleaner	Maintaining stainless steel sink.
Paste Wax/Cleaner-Polish	Maintaining door hardware, plumbing fixtures, door pulls and other metal hardware
Plumber's Helper (Plunger)	Clearing plugged toilet.
Touch-up Paint	Interior and exterior painted surfaces.
WD-40 with scotch-brite pad	Cleaning chrome and stainless steel.
Citrus Cleaner (Orange Clean)	Cleaning adhesive residue from laminates and vinyl surfaces. Do Not use abrasive cleaning agents.
Mild Bathroom Cleaners	Weekly cleaning of Vikrell tub or shower, vitreous china fixture, toilet and cultured marble vanity. Do Not use abrasive cleaning agents.
Clorox/Bleach	Diluted solution will kill mildew.

Section 5: A-Z Home Items

Air Conditioning

Homeowner Use and Maintenance Guidelines

Air conditioning can greatly enhance the comfort of your home, but if it is used improperly or inefficiently, wasted energy and frustration will result. These hints and suggestions are provided to help you maximize your air conditioning system.

Your air conditioning system is a whole-house system. The air conditioning unit is the mechanism that produces cooler air. The air conditioning system involves everything inside your home including, for example, drapes, blinds, and windows.

Your home air conditioning is a closed system, which means that the interior air is continually recycled and cooled until the desired air temperature is reached. Warm outside air disrupts the system and makes cooling impossible. Therefore, you should keep all windows closed. The heat from the sun shining through windows with open drapes is intense enough to overcome the cooling effect of the air conditioning unit. For best results, close the drapes on these windows.

Time is very important in your expectations of an air conditioning system. Unlike a light bulb, which reacts instantly when you turn on a switch, the air conditioning unit only begins a process when you set the thermostat.

For example, if you come home at 6:00 p.m. when the temperature has reached 90 degrees F and set your thermostat to 75 degrees, the air conditioning unit will begin cooling, but will take much longer to reach the desired temperature. During the whole day, the sun has been heating not only the air in the house, but the walls, the carpet, and the furniture. At 6:00 p.m. the air conditioning unit starts cooling the air, but the walls, carpet, and furniture release heat and nullify this cooling. By the time the air conditioning unit has cooled the walls, carpet, and furniture, you may well have lost patience.

If evening cooling is your primary goal, set the thermostat at a moderate temperature in the morning while the house is cooler, allowing the system to maintain the cooler temperature. The temperature setting may then be lowered slightly when you arrive home, with better results. Once the system is operating, setting the thermostat at 60 degrees will *not* cool the home any faster and can result in the unit freezing up and not performing at all. Extended use under these conditions can damage the unit.

Adjust Vents

Maximize air flow to occupied parts of your home by adjusting the vents. Likewise, when the seasons change, readjust them for comfortable heating.

Manufacturer's Instructions

The manufacturer's manual specifies maintenance for the condenser. Review and follow these points carefully. Since the air conditioning system is combined with the heating system, follow the maintenance instructions for your furnace as part of maintaining your air conditioning system.

Programmable Thermostat

The manufacturer's manual details operating and programming instructions. The lowest temperature has been pre-programmed and locked at 70 degrees Fahrenheit. Programming the systems temperature lower than 70 degrees can potentially damage the system by causing excess condensation and refrigerant coils to freeze over. Proper operation programming and temperature settings will keep your home cool and allow your system to run efficiently.

Temperature Variations

Temperatures may vary from room to room by several degrees Fahrenheit. This is due to such variables as floor plan, orientation of the home on the lot, type and use of window coverings, and traffic through the home.

Troubleshooting Tips: No Air Conditioning

Before calling for service, check to confirm that the:

- ▶ Thermostat is set to "cool" and the temperature is set below the room temperature.
- ▶ Blower panel cover is installed correctly for the furnace blower (fan) to operate. Similar to the way a clothes dryer door operates, this panel pushes in a button that lets the fan motor know it is safe to come on. If that button is not pushed in, the furnace will not operate.
- ▶ Air conditioner and furnace breakers on the main electrical panel are on. (Remember if a breaker trips you must turn it from the tripped position to the off position before you can turn it back on.)
- ▶ 220 switch on the outside wall near the air conditioner is on.
- ▶ Switch on the side of the furnace is on.
- ▶ Fuse in furnace is good. (See manufacturer literature for size and location.)
- ▶ Filter is clean to allow air flow.
- ▶ Vents in individual rooms are open.
- ▶ Air returns are unobstructed.
- ▶ Air conditioner has not frozen from overuse.

Even if the troubleshooting tips do not identify a solution, the information you gather will be useful to the service provider you call.

Non-emergency

Lack of air conditioning service is not an emergency. Air conditioning contractors in our region respond to air conditioning service requests during normal business hours and in the order received.

Alarm System

Homeowner Use and Maintenance Guidelines

If your home selections included prewire for an alarm system, you will arrange for the final connection and activation after you move-in. The alarm company will demonstrate the system, instruct you in its use, and provide identification codes for your family. We recommend that you test the system each month.

Appliances

Homeowner Use and Maintenance Guidelines

Please see page 8.5 and your *Appliance Service* information sheet.

Attic Access

Homeowner Use and Maintenance Guidelines

The attic space is neither designed nor intended for storage. We provide access to this area for maintenance of mechanical equipment that may traverse the attic space. When you perform needed tasks in the attic, use caution and avoid stepping off wood members onto the drywall. This can result in personal injury or damage to the ceiling below. Your limited warranty does not cover such injury or damage.

Cabinets

Homeowner Use and Maintenance Guidelines

Your selection sheets are your record of the brand, style, and color of cabinets in your home. If you selected wood or wood veneer cabinets, expect differences in grain and color between and within the cabinet components due to natural variations in wood and the way it takes stain.

Cleaning

Products such as lemon oil or polishes that include scratch cover are suggested for wood cabinet care. Follow container directions. Use such products a maximum of once every 3 to 6 months to avoid excessive build-up. Avoid paraffin-based spray waxes and washing cabinets with water, as both will damage the luster of the finish.

Hinges

If hinges catch or drawer glides become sluggish, a small amount of silicone lubricant will improve their performance.

Moisture

Damage to cabinet surfaces and warping can result from operating appliances that generate large amounts of moisture (such as a crockpot) too near the cabinet. When operating such appliances, place them in a location that is not directly under a cabinet.

Warping

If doors or drawer fronts warp in excess of 1/4 inch within 24 inches, we will correct this by adjustment or replacement.

Carpet

Homeowner Use and Maintenance Guidelines

Your selection sheets provide a record of the brand, style, and color of floor coverings in your home. Please retain this information for future reference. Refer to the various manufacturers' recommendations for additional information on the care of your floor coverings.

Burns

Take care of any kind of burn immediately. First snip off the darkened fibers. Then use a soapless cleaner and sponge with water. If the burn is extensive, talk with a professional about replacing the damaged area.

Cleaning

You can add years to the life of your carpet with regular care. Carpet wears out because of foot traffic and dirt particles that get trampled deep into the pile beyond the suction of the vacuum. The dirt particles wear down the fibers like sandpaper and dull the carpet. The most important thing you can do to protect your carpet is to vacuum it frequently.

Vacuum twice each week lightly and once a week thoroughly. Heavy traffic areas may require more frequent cleaning. A light vacuuming is three passes; a thorough job may need seven passes. A vacuum cleaner with a beater-bar agitates the pile and is more effective in bringing dirt to the surface for easy removal.

Vacuuming high-traffic areas daily helps keep them clean and maintains the upright position of the nap. Wipe spills and clean stains immediately. For best results, blot or dab any spill or stain; avoid rubbing. Test stain removers on an out-of-the-way area of the carpet, such as in a closet, to check for any undesirable effects.

Have your carpet professionally cleaned regularly, usually after 18 months in your home and then once a year after that.

Crushing

Furniture and traffic may crush a carpet's pile fibers. Frequent vacuuming in high-traffic areas and glides or cups under heavy pieces of furniture can help prevent this. Rotating your furniture to change the traffic pattern in a room promotes more even wear. Some carpets resist matting and crushing because of their level of fiber, but this does not imply or guarantee that no matting or crushing will occur. Heavy traffic areas such as halls and stairways are more susceptible to wear and crushing. This is considered normal wear.

Fading

Science has yet to develop a color that will not fade with time. All carpets will slowly lose some color due to natural and artificial forces in the environment. You can delay this process by frequently removing soil with vacuuming,

regularly changing air filters in heating and air conditioning systems, keeping humidity and room temperature from getting too high, and reducing sunlight exposure with window coverings.

Filtration

If interior doors are kept closed while the air conditioning is operating, air circulation from the closed room flows through the small space at the bottom of the door. This forces the air over the carpet fibers, which in turn act as a filter, catching particulate pollution. Over time, a noticeable stain develops at the threshold.

See also Ghosting.

Fuzzing

In loop carpets, fibers may break. Simply clip the excess fibers. If it continues, call a professional.

Pilling

Pilling or small balls of fiber can appear on your carpet, depending on the type of carpet fiber and the type of traffic. If this occurs, clip off the pills. If they cover a large area, seek professional advice.

Rippling

With wall-to-wall carpeting, high humidity may cause rippling. If the carpet remains rippled after the humidity has left, have a professional restretch the carpeting using a power stretcher, not a knee-kicker.

Seams

Carpet usually comes in 12-foot widths, making seams necessary in most rooms. Visible seams are not a defect unless they have been improperly made or unless the material has a defect, making the seam appear more pronounced than normal. The more dense and uniform the carpet texture, the more visible the seams will be.

Carpet styles with low, tight naps result in the most visible seams. Seams are never more visible than when the carpet is first installed. Usually with time, use, and vacuuming the seams become less visible. You can see examples in the model homes of how carpet seams diminish after they have been vacuumed repeatedly and have experienced traffic.

Shading

Shading is an inherent quality of fine-cut pile carpets. Household traffic causes pile fibers to assume different angles; as a result, the carpet appears darker or lighter in these areas. A good vacuuming, which makes the pile all go in the same direction, provides a temporary remedy.

Shedding

New carpeting, especially pile, sheds bits of fiber for a period of time. Eventually these loose fibers are removed by vacuuming. Shedding usually occurs more with wool carpeting than with nylon or other synthetics.

Snags

Sharp-edged objects can grab or snag the carpet fiber. When this occurs, cut off the snag. If the snag is especially large, call a professional.

Sprouting

Occasionally you may find small tufts of fiber sprouting above carpet surface. Simply use scissors to cut off the sprout. Do not attempt to pull it, because other fibers will come out in the process.

Stains

No carpet is stain-proof. Although your carpet manufacturer designates your carpet as stain-resistant, some substances may still cause permanent staining. These include hair dyes, shoe polish, paints, and India ink. Some substances destroy or change the color of carpets, including bleaches, acne medications, drain cleaners, plant food, insecticides, and food or beverages with strongly colored natural dyes as found in some brands of mustard and herbal tea.

Refer to your care and maintenance brochures for recommended cleaning procedures for your particular fiber. Pretest any spot-removal solution in an inconspicuous area before using it in a large area. Apply several drops of the solution, hold a white tissue on the area, and count to ten. Examine both tissue and carpet for dye transfer and check for carpet damage.

Caulking

Homeowner Use and Maintenance Guidelines

Time and weather will shrink and dry caulking so that it no longer provides a good seal. As routine maintenance, check the caulking and make needed repairs. Caulking compounds and dispenser guns are available at hardware stores. Read the manufacturer's instructions carefully to be certain that you select an appropriate caulk for the intended purpose.

Colored Caulk

Colored caulking is available where larger selections are provided. As with any colored material, dye lots can vary.

Latex Caulk

Latex caulking is appropriate for an area that requires painting, such as along the stair stringer or where wood trim meets the wall.

Silicone Caulk

Caulking that contains silicone will not accept paint; it works best where water is present, for example, where tub meets tile or a sink meets a countertop.

See also Countertops, Expansion and Contraction, Stairs, and Wood Trim.

Ceramic Tile

Homeowner Use and Maintenance Guidelines

Your selection sheets include the brand and color of your ceramic tile.

Cleaning

Ceramic tile is one of the easiest floor coverings to maintain. Simply vacuum when needed. Occasionally, a wet mopping with warm water may be appropriate. Avoid adding detergent to the water. If you feel a cleaning agent is required, use a mild solution of warm water and dishwasher crystals (they will not result in a heavy, difficult-to-remove lather on the grout). Rinse thoroughly.

The ceramic tile installed on walls or countertops in your home may be washed with any nonabrasive soap, detergent, or tile cleaner. Abrasive cleaners will dull the finish.

Grout Discoloration

Clean grout that becomes yellowed or stained with a fiber brush, cleanser, and water. Grout cleansers and whiteners are available at most hardware stores.

Sealing Grout

Sealing grout is your decision and responsibility. Once grout has been sealed, ongoing maintenance of that seal is necessary and limited warranty coverage on grout that has been sealed is void.

Separations

Expect slight separations to occur in the grout between tiles. This grout is for decorative purposes only; it does not hold the tile in place. Cracks in the grout can be filled using premixed grout purchased from flooring or hardware stores. Follow package directions.

Tile around bathtubs or countertops may appear to be pulling up after a time. This is caused by normal shrinkage of grout or caulk and shrinkage of wood members as they dry out. If this occurs, the best remedy is to purchase tub caulk or premixed grout from a hardware store. Follow directions on the container. This maintenance is important to protect the underlying surface from water damage.

Concrete Flatwork

Homeowner Use and Maintenance Guidelines

By maintaining good drainage, you protect your home's foundation and the concrete flatwork: the porch, driveway, garage floor, pads and walkways.

Concrete slabs are floating—they are not attached to the home's foundation walls. These are not a structural (load-bearing) element of the home and are covered by the one year material and workmanship warranty.

Minimize this movement by following landscaping recommendations, the objective of which is to prevent moisture from reaching soils around and under the home.

Cleaning

Avoid washing exterior concrete slabs with cold water from an outside faucet when temperatures are high and the sun has been shining on the concrete. The abrupt change in temperature can damage the surface bond of the concrete. We recommend sweeping for keeping exterior concrete clean. If washing is necessary, do this when temperatures are moderate. Repeated cleaning of the garage floor by hosing can increase soil movement by allowing water to penetrate any existing cracks. We recommend sweeping to clean the garage floor.

Cracks

A concrete slab 10 feet across shrinks approximately 5/8 inch as it cures. Some of this shrinkage shows up as cracks. Cracking of concrete flatwork also results from temperature changes that cause expansion and contraction. As cracks occur, seal them with a waterproof concrete caulk (available at hardware or home improvement stores) to prevent moisture from penetrating to the soil beneath.

If concrete cracks reach 3/16 of an inch in width or vertical displacement, builder will generally patch or repair them one time during the warranty period. Subsequently, concrete slab maintenance is your responsibility.

Expansion Joints

We install expansion joints to help control expansion. However, as the concrete shrinks during the curing process, moisture can penetrate under the concrete and lift the expansion joint. When this occurs, fill the resulting gap with a gray silicone sealant, which you can purchase at most hardware stores.

Heavy Vehicles

Prohibit commercial or other extremely heavy vehicles such as moving vans and other large delivery trucks from pulling onto your driveway. We design and install concrete drives for conventional residential vehicle use only: family cars, vans, light trucks, bicycles, and so on.

Chemicals

Protect concrete from abuse by chemical agents such as pet urine, fertilizers, radiator overflow, repeated hosing, or oil can drip from vehicles. All of these items can cause spalling (chipping of the surface) of concrete.

Sealer

A concrete sealer, available at paint stores, will help you keep an unpainted concrete floor clean. Do not use soap on unpainted concrete. Instead, use plain water and washing soda or, if necessary, a scouring powder.

Condensation

Homeowner Use and Maintenance Guidelines

When warm, moist air comes into contact with cooler surfaces, the moisture condenses. Outside we see this as dew; inside you may see it as a layer of moisture on glass windows and doors. This condensation comes from high humidity within the home combined with low outside temperatures and inadequate ventilation. Family lifestyle significantly influences two out of three of these conditions.

Normal Activities

As you live in your home, your daily lifestyle contributes to the moisture in the air also. Cooking, laundry, baths and showers, aquariums, plants, and so on all add water to the air in your home. Likewise, your daily routine can mitigate the amount of moisture in your home and reduce condensation on interior surfaces.

Ventilation

Develop the habit of using exhaust fans in bathrooms and over the stove. When weather conditions permit, open windows so fresh air can circulate through your home. Keep the dryer exhaust hose clean and securely connected.

See also Ventilation.

Countertops

Homeowner Use and Maintenance Guidelines

Use a cutting board to protect your counters when you cut or chop. Protect the counter from heat and from extremely hot pans. If you cannot put your hand on it, do not put it on the counter. Do not use countertops as ironing boards and do not set lighted cigarettes on the edge of the counter.

Caulking

The caulking between the countertop and the wall, along the joint at the backsplash (the section of counter that extends a few inches up the wall along the counter area), and around the sink may shrink, leaving a slight gap. Maintaining a good seal in these locations is important to keep moisture from reaching the wood under the laminates and to prevent warping.

Cleaning

Avoid abrasive cleaners that will damage the luster of the surface.

Mats

Rubber drain mats can trap moisture beneath them, causing the laminated plastic to warp and blister. Dry the surface as needed.

Doors and Locks

Homeowner Use and Maintenance Guidelines

The exterior doors installed in your home are fiberglass or vinyl products and are durable and not prone to warpage. The interior doors installed in your home are wood products subject to such natural characteristics of wood as shrinkage and warpage. Natural fluctuations caused by humidity and the use of air conditioners, showers, and dishwashers, interior doors may occasionally require minor adjustments.

Bifold Doors

Interior bifolds sometimes stick or warp because of weather conditions. Apply a silicone lubricant to the tracks to minimize this inconvenience.

Exterior Finish

To ensure longer life for your exterior fiberglass doors, paint every 5-years or if finish is worn.

Failure to Latch

If a door will not latch because of minor settling, you can correct this by making a new opening in the jamb for the latch plate (remortising) and raising or lowering the plate accordingly.

Hinges

You can remedy a squeaky door hinge by removing the hinge pin and applying a silicone lubricant to it. Avoid using oil, as it can gum up or attract dirt. Graphite works well as a lubricant but can create a gray smudge on the door or floor covering beneath the hinge if too much is applied.

Keys

Keep a duplicate privacy lock key where children cannot reach it in the event a youngster locks him- or herself in a room. The top edge of the door casing is often used as a place to keep the key. A small screwdriver or similarly shaped device can open some types of privacy locks.

Locks

Lubricate door locks with graphite or other waterproof lubricant. Avoid oil, as it will gum up.

Shrinkage

Use putty, filler, or latex caulk to fill any minor separations that develop at mitered joints in door trim. Follow with painting. Panels of wood doors shrink and expand in response to changes in temperature and humidity. Touching up the paint or stain on unfinished exposed areas is your home maintenance responsibility.

Slamming

Slamming doors can damage both doors and jambs and can even cause cracking in walls. Teach children not to hang on the doorknob and swing back and forth; this works loose the hardware and causes the door to sag.

Sticking

The most common cause of a sticking door is the natural expansion of lumber caused by changes in humidity. When sticking is caused by swelling during a damp season, do not plane the door unless it continues to stick after the weather changes.

Before planing a door because of sticking, try two other steps: first, apply either a paste wax, light coat of paraffin, or candle wax to the sticking surface; or second, tighten the screws that hold the door jamb or door frame. If planing is necessary even after these measures, use sandpaper to smooth the door and paint the sanded area to seal against moisture.

Warping

If a door warps slightly, keeping it closed as much as possible often returns it to normal.

Weather Stripping

Weather stripping and exterior door thresholds occasionally require adjustment or replacement.

Drywall

Homeowner Use and Maintenance Guidelines

Slight cracking, nail pops, or seams may become visible in walls and ceilings. These are caused by the shrinkage of the wood and normal deflection of rafters to which the drywall is attached.

Ceilings

The ceilings in your home are easy to maintain: periodically remove dust or cobwebs as part of your normal cleaning and repaint as needed.

Repairs

With the exception of the repair service provided under the builder's warranty, care of drywall is your maintenance responsibility. Most drywall repairs can be easily made. This work is best done when you redecorate the room.

Repair hairline cracks with a coat of paint. You can repair slightly larger cracks with spackle or caulk. To correct a nail pop, reset the nail with a hammer and punch. Cover it with spackle, which is available at paint and hardware stores. Apply two or three thin coats. When dry, sand the surface with fine-grain sandpaper, and then paint. You can fill indentations caused by sharp objects in the same manner.

Easements

Homeowner Use and Care Guidelines

Easements are areas where such things as utility supply lines can pass through your property. They permit service to your lot and adjacent lots, now and in the future. Your lot will also include drainage easements, meaning the runoff from adjacent lots pass across your property. Likewise, water from your property may run across a neighboring lot. Easements are recorded and are permanent.

Trees, shrubs, gardens, play equipment, storage sheds, fences or other items which you install in or across these easements may be disturbed if service entities—such as the gas, electric, or phone companies—need access to lines for repairs or to connect service to nearby homesites.

Utility companies, the United States Postal Service, and others have the right to install equipment in easements. These might include streetlights, mailboxes, or junction boxes to name a few. Neither the developer, builder nor you as the homeowner, have the authority to prevent, interfere with, or alter these installations. Plans for the location of such items are subject to change by the various entities involved.

See also Property Boundaries.

Electrical System

Homeowner Use and Maintenance Guidelines

Know the location of the breaker panel; it includes a main shut-off that controls all the electrical power to the home. Individual breakers control the separate circuits. Each breaker is marked to help you identify which breaker is connected to which major appliances, outlets, or other service. Should a failure occur in any part of your home, always check the breakers in the main panel box.

Breakers

Circuit breakers have three positions: on, off, and tripped. When a circuit breaker trips, it must first be turned off before it can be turned on. Switching the breaker directly from tripped to on will not restore service.

Breakers Tripping

Breakers trip because of overloads caused by plugging too many appliances into the circuit, a worn cord or defective appliance, or operating an appliance with too high a voltage requirement for the circuit. The starting of an electric motor can also trip a breaker.

If any circuit trips repeatedly, unplug all items connected to it and reset. If it trips when nothing is connected to it, you need an electrician. If the circuit remains on, one of the items you unplugged is defective and will require repair or replacement.

Buzzing

Fluorescent fixtures use transformer action to operate. This action sometimes causes a buzzing.

Fixture Location

We install light fixtures in the locations indicated on the plans. Moving fixtures to accommodate specific furniture arrangements or room use is your responsibility.

GFCI (Ground-Fault Circuit-Interrupters)

GFCI receptacles have a built-in element that senses fluctuations in power. Quite simply, the GFCI is a circuit breaker. Building codes require installation of these receptacles in bathrooms, the kitchen, outside, and the garage

(areas where an individual can come into contact with water while holding an electric appliance or tool). Heavy appliances such as freezers or power tools will trip the GFCI breaker.

Caution: Never plug a refrigerator or food freezer into a GFCI-controlled outlet. The likelihood of the contents being ruined is high and the limited warranty does not cover such damage.

Each GFCI circuit has a test and reset button. Once each month, press the test button. This will trip the circuit. To return service, press the reset button. If a GFCI breaker trips during normal use, it may indicate a faulty appliance and you will need to investigate the problem. One GFCI breaker can control up to three or four outlets.

Grounded System

Your electrical system is a three-wire grounded system. Never remove the bare wire that connects to the box or device.

Light Bulbs

You are responsible for replacing burned-out bulbs other than those noted during your orientation.

Luminous Light Panels

Translucent panels covering ceiling lights are made of polystyrene plastic. To clean, gently push up, tilting the panel slightly and remove it from the fixture frame. Wash with a diluted (1 to 2 percent) solution of mild detergent and warm water. Do not rinse; the soap film that remains reduces static electricity that attracts dust.

Over time, the plastic panel may yellow and will become brittle and may need to be replaced if it cracks or breaks. Replacement material can be found at home center and hardware stores. Most suppliers will cut the panel to fit so if you need to purchase a replacement, be sure to note the size you need.

Bulbs for these fixtures can be purchased at home centers or hardware stores. Avoid exceeding the wattage indicated inside the fixture.

Modifications

If you wish to make any modifications, contact the builder to determine if warranty coverage will be voided. Having another electrician modify your electrical system during the warranty period can void that portion of your limited warranty.

Outlets

If an outlet is not working, check first to see if it is controlled by a wall switch or GFCI. Next, check the breaker.

If there are small children in the home, install safety plugs to cover unused outlets. This also minimizes the air infiltration that sometimes occurs with these outlets. Teach children to never touch electrical outlets, sockets, or fixtures.

Underground Cables

Before digging, check the location of buried service leads by calling the local utility locating service. In most cases, wires run in a straight line from the service panel to the nearest public utility pad. Maintain positive drainage around the foundation to protect electrical service connections.

TROUBLESHOOTING TIPS: NO ELECTRICAL SERVICE

No Electrical Service Anywhere in the Home

Before calling for service, check to confirm that the:

- Service is not out in the entire area. If so, contact the utility company.
- Main breaker and individual breakers are all in the on position.

No Electrical to One or More Outlets

Before calling for service, check to confirm that the

- Main breaker and individual breakers are all in the on position.
- Applicable wall switch is on
- GFCI is set (see details on GFCIs, earlier in this section)
- Item you want to use is plugged in
- Item you want to use works in other outlets
- Bulb in the lamp is good

Even if the troubleshooting tips do not identify a solution, the information you gather will be useful to the service provider you call.

Expansion and Contraction

Homeowner Use and Maintenance Guidelines

Changes in temperature and humidity cause all building materials to expand and contract. Dissimilar materials expand or contract at different rates. This movement results in separation between materials, particularly dissimilar ones. You will see the effects in small cracks in drywall and in paint, especially where moldings meet drywall, at mitered corners, and where tile grout meets tub or sink. While this can alarm an uninformed homeowner, it is normal.

Shrinkage of the wood members of your home is inevitable and occurs in every new home. Although this is most noticeable during the first year, it may continue beyond that time. In most cases, caulk and paint are all that you need to conceal this minor evidence of a natural phenomenon. Even though properly installed, caulking shrinks and cracks. Maintenance of caulking is your responsibility.

Fencing

Homeowner Use and Maintenance Guidelines

Fencing is an item you may consider adding after your move-in. All types of fencing require some routine attention.

Drainage

In planning, installing, and maintaining fencing, allow existing drainage patterns to function unimpeded. When installing a fence, use caution in distributing soil removed to set posts to avoid blocking drainage swales. Plan enough space under the bottom of a wood fence for water to pass through.

DCC&R's

If you choose to add fencing after moving into your new home, keep in mind the fencing need to be in compliance with the DCC&R's of your community. Specific requirements about style, height, position on the lot are described in the DCC&R's. Special requirements may apply to homes on corner lots where drivers must have adequate visibility and site-line set-backs are required. Additionally, in some communities, zoning laws may impact private fencing. Your responsibilities include checking on such details.

We recommend that you engage the services of professionals to install your fence. Be certain to inform a fence installer of all design review requirements.

See also Property Boundaries.

Foundation

Homeowner Use and Maintenance Guidelines

We install the foundation of your home according to the recommendations of our consulting engineer. The walls of the foundation are poured concrete with steel reinforcing rods. To protect your home's foundation, follow guidelines for installation and maintenance of landscaping and drainage in this manual.

Cracks

Even though an engineer designed the foundation and we constructed it according to engineering requirements, surface cracks can still develop in the wall. Surface cracks are not detrimental to the structural integrity of your home. If a crack develops in a foundation wall that allows water to come through, follow the procedures for submitting a warranty claim.

Garage Overhead Door

Homeowner Use and Maintenance Guidelines

Since the garage door is a large, moving object, periodic maintenance is necessary.

Light Visible

Garage overhead doors cannot be airtight. Some light will be visible around the edges and across the top of the door. Weather conditions may result in some precipitation entering around the door as well as some dust especially until most homes in the community have landscaping installed.

Lock

If the lock becomes stiff, apply a silicone or graphite lubricant. Do not use oil on a lock, as it will stiffen in winter and make the lock difficult to operate.

Lubrication

Every 6 months, apply a lubricant such as silicone spray to all moving parts: track, rollers, hinges, pulleys, and springs. Avoid over lubricating to prevent drips on vehicles or the concrete floor. At the same time, check to see that all hardware is tight and operating as intended without binding or scraping.

Opener

To prevent damage to a garage door opener, be sure the door is completely unlocked and the rope-pull has been removed before using the operator. If you have an opener installed after closing on your home, we suggest that you order it from the company that provided and installed the garage door to assure uninterrupted warranty coverage. Be familiar with the steps for manual operation of the door in the event of a power failure.

The electronic safety sensor that provides is a safety stop in the event someone crosses through the opening while the overhead door is in motion. Use care not to place tools or other stored items where they interfere with the function of the electronic safety sensor.

Painting

Repaint the garage door when you repaint your home, or more often if needed to maintain a satisfactory appearance.

Safety

Follow the manufacturer's instructions for safe and reliable operation. Do not allow anyone except the operator near the door when it is in motion. Keep hands and fingers away from all parts of the door except the handle. Do not allow children to play with or around the door.

For your safety, after the expiration of the one-year warranty, have any needed adjustments made by a qualified specialist. The door springs are under a considerable amount of tension and require special tools and knowledge for accurate and safe servicing. Have the door inspected by a professional garage door technician after any significant impact to the door.

Grading and Drainage

Homeowner Use and Maintenance Guidelines

The final grades around your home have been inspected and approved for proper drainage of your lot. Our surveyor completes a lot certification and then the local building authorities as well as builder inspect the site. Use caution when installing landscaping, fencing, or additions to your home to prevent causing water problems on adjacent lots.

Drainage

Typically, the grade around your home should slope toward the street or a drainage easement. In most cases, drainage swales follow property boundaries. Maintain the slopes around your home to permit the water to drain away from the home as rapidly as possible. This is essential to protect your foundation. Failure to do so can result in major structural damage and will void your warranty.

Exterior Finish Materials

Maintain soil levels 6 inches below siding, or other exterior finish materials. Contact with the soil can cause deterioration of the exterior finish material and encourages pest infestations.

Roof Water

Do not remove the splash blocks or downspout extensions from under the downspouts. Keep these in place at all times, sloped so the water drains away from your home quickly.

Rototilling

Rototilling can significantly change drainage swales. You can minimize this by rototilling parallel to the swales rather than across them.

Settling

The area we excavated for your home's foundation was larger than the home to allow room to work. In addition, some trenching is necessary for installation of utility lines. Although we replaced and compacted the soil, it does not return to its original density. Some settling will occur, especially after prolonged or heavy rainfall or melting of large amounts of snow. Settling can continue for several years. Inspect the perimeter of your home regularly for signs of settling and fill settled areas as needed to maintain positive drainage.

See also Landscaping.

Gutters and Downspouts

Homeowner Use and Maintenance Guidelines

Gutters and downspouts are an item you may consider adding after your move-in. All types of gutters and downspouts require some routine attention. Check gutters periodically and remove leaves or other debris. Materials that accumulate in gutters can slow water drainage from the roof, cause overflows, and clog the downspouts.

Extensions or Splashblocks

Extensions should discharge outside of rock or bark beds so that water is not dammed behind the edging materials that might be used.

Ladders

Use caution when leaning ladders against gutters, as this may cause dents.

Leaks

If a joint between sections of gutter drips, caulk the inside joint using a commercial gutter caulking compound available at hardware stores.

Paint

Gutters and downspouts are painted to match your home. You should repaint them when you repaint your home.

Overflow

Gutters may overflow during periods of excessively heavy rain. This is expected and requires no repair.

Standing Water

Small amounts of water (up to one inch) will stand for short periods of time in gutters immediately after rain. No correction is required for these conditions.

Hardware

Homeowner Use and Maintenance Guidelines

Doorknobs and locks should operate correctly with little attention. Over time, they may need slight adjustments due to normal shrinkage of the framing. Occasionally, you may need to tighten screws or lubrication.

Insulation

Homeowner Use and Maintenance Guidelines

The effectiveness of insulation is diminished if it is uneven. As the last step in any work done in your attic (for example, the installation of speaker wire), you should confirm that the insulation lays smooth and even. Do not step on drywall ceilings, because this can result in personal injury or damage to the drywall.

Laminate Floors

Homeowner Use and Maintenance Guidelines

In daily care of laminate floor, preventive maintenance is the primary goal.

Cleaning

Sweep on a daily basis or as needed. Never wet-mop a laminate floor. Excessive water causes flooring to expand and can possibly damage the floor. Follow manufacturer's recommendations for care and maintenance.

Dimples

Placing heavy furniture or dropping heavy or sharp objects on floors can result in dimples.

Furniture Legs

Install proper floor protectors on furniture placed on floors. Protectors will allow chairs to move easily over the floor without scuffing. Regularly clean the protectors to remove any grit that may have accumulated.

Mats and Area Rugs

Use protective mats at the exterior doors to help prevent sand and grit from getting on the floor. Gritty sand is wood flooring's worst enemy. However, be aware that rubber backing on area rugs or mats can cause yellowing of the floor surface.

Shoes

Keep high heels in good repair. Heels that have lost their protective cap (thus exposing the fastening nail) will exert over 8,000 pounds of pressure per square inch on the floor. That's enough to damage hardened concrete; it will mark your laminate floor.

Spills

Clean up food spills immediately with a dry cloth. Use a vinegar-and-warm-water solution for tough food spills.

Traffic Paths

A dulling of the finish in heavy traffic areas is likely.

Warping

Warping will occur if the floor repeatedly becomes wet or is thoroughly soaked even once. Clean up water or spills immediately with a dry cloth.

Landscaping

Homeowner Use and Maintenance Guidelines

Landscaping and irrigation is an item you may consider adding after your move-in. Providing complete details on landscape design is beyond the scope of this manual. Many excellent books, videos, and computer software

programs are available that offer your this information. Local nurseries and landscape professionals can also assist you.

In planning your landscaping, think of proportion, texture, color, mature size, maintenance needs, soft and hard surfaces, lighting, fencing, edging, and water requirements. A beautiful yard requires considerable planning and regular attention. Most homeowners take years to achieve the yard they want. Planning to install items in stages can spread the cost and work over several seasons. *See also Termites.*

Whatever the source of your design, plan to install the basic components of your landscaping after closing as soon as weather permits. In addition to meeting your homeowner association requirements to landscape in a timely manner, well-designed landscaping prevents erosion and protects the foundation of your home.

Additions

Before installing patio additions or other permanent improvements, consider soil conditions in the design and engineering of your addition. Check termite warranty requirements.

See also Termites.

Backfill

We construct the foundation of your home beginning with an excavation into the earth. When the foundation walls are complete, the area surrounding them is backfilled. Soil in this area is not as compact as undisturbed ground. Water can penetrate through the backfill area to the lower areas of your foundation. This can cause potentially severe problems such as wet basements, cracks in foundation walls, and floor slab movement. Avoid this through proper installation of landscaping and good maintenance of drainage.

Backfill areas will settle and require prompt attention to avoid damage to your home and voiding of the structural warranty.

Keep downspout extensions in the down position to channel roof runoff away from the foundation area of your home. Routine inspection of downspouts, backfill areas, and other drainage components is an excellent maintenance habit.

See also Grading and Drainage.

Bark or Rock Beds

Do not allow edging around decorative rock or bark beds to dam the free flow of water away from the home. You can use a nonwoven landscape fabric between the soil and rock or bark to restrict weed growth while still permitting normal evaporation of ground moisture.

Erosion

Until your yard is established and stable, erosion will be a potential concern. Heavy rains or roof runoff can erode soil. The sooner you restore the grade to its original condition, the less damage will occur.

Erosion is of special concern in drainage swales. If swales become filled with soil runoff, they may not drain the rest of the yard, causing further problems. Correcting erosion is your responsibility. You may need to protect newly planted seed with erosion matting or reseed to establish grass in swales. It can take several years to fully establish your lawn in such challenging areas.

First Two (2) Feet

Place no plants of any type or sprinkler heads within two feet of your home. Check termite warranty requirements.

See also Termites.

Hired Contractors

You are responsible for changes to the drainage pattern made by any landscape, concrete, deck, or pool contractor. Discuss drainage with any company you hire to do an installation in your yard.

Natural Areas

During construction, we remove construction debris from natural areas. Removing dead wood, tree limbs, fallen trees, or other natural items is your responsibility.

Planning

Locate plants and irrigation heads out of the way of pedestrian or bicycle traffic and car bumpers. Space trees to allow for efficient mowing and growth. Group plants with similar water, sun, and space requirements together.

Plant Selection

Plant with regard to your local climate. Favor native over exotic species. Consider ultimate size, shape, and growth of the species.

See also Property Lines.

Requirements

Check with your local building department and DCC&R's before designing, installing, or changing landscaping for any regulations that they require you to follow.

Sod

Newly placed sod requires extra water for several weeks. Water in the cool part of the day (ideally just before sunrise) at regular intervals for the first three weeks. Be aware that new sod and the extra watering it requires can sometimes create drainage concerns (in your yard or your neighbor's) that will disappear when the yard is established and requires normal watering.

Soil Mix

Provide good soil mixes with sufficient organic material. Use mulch at least 3 inches deep to hold soil moisture and to help prevent weeds and soil compaction.

In areas with high clay content, prepare the soil before installing your grass. First cover the soil with 2 inches of sand and 1 inch of manure that is treated and odorless. Rototill this into the soil to a depth of 6 inches (rototill parallel to the swales). Whether you use seed or sod, this preparation helps your lawn to retain moisture and require less water. Installing a lawn over hard soil permits water to run off with little or no penetration and your lawn will derive minimal benefit from watering or rain.

Apply appropriate fertilizer and weed and pest controls as needed for optimal growth. Investigate organic compounds for additional protection of the environment.

Sprinkler System

You are responsible for routine cleaning and adjusting of sprinkler heads and maintenance of valves and controllers.

Conduct periodic operational checks to ensure proper performance of the system. Direct sprinkler heads away from the home.

Automatic timers permit you to water at optimum times whether you are at home, away, awake, or asleep. The amount of water provided to each zone can be accurately and consistently controlled and easily adjusted with a timed system. Check the system after a power outage and keep a battery in place if your system offers that as a backup.

Topsoil

Lots have been prepared without topsoil in order to mitigate environmental impacts before you install landscaping improvements. You will need to have your landscape contractor furnish topsoil for healthy landscaping. We recommend four inches of topsoil.

Trees

Remember to water trees during the summer or during warm dry periods. Mulch around trees and avoid tilling or planting flower beds around trees. This is especially important while trees are recovering from the construction process.

Trees and other plant materials that exist on the lot when construction begins and are not part of any landscaping installed by builder and are excluded from warranty coverage.

Utility Lines

A slight depression may develop in the front lawn along the line of the utility trench. To correct this, roll back the sod, spread topsoil underneath to level the area, and then relay the sod.

Before any significant digging, check the location of buried service leads by calling the local utility locating service. In most cases, wires and pipes run in a straight line from the main service to the public supply.

See also Easements.

Waiting to Landscape

If you leave ground unlandscaped, it erodes. Correcting erosion that occurs after closing is your responsibility.

Weeds

Weed swill appear in your new lawn whether seed or sod is used. Left unlandscaped, your yard will quickly begin to show weeds. When soil is disturbed, dormant seeds come to the surface and germinate. The best control is a healthy lawn, achieved through regular care and attention.

Xeriscape®

We recommend careful consideration of landscape design and selection of planting materials to minimize the demands of your yard on water supplies. Detailed information about Xeriscape® is available from reputable nurseries. This has the triple benefit of helping the environment, saving on water bills, and reducing the amount of moisture that can reach your foundation.

Mildew

Homeowner Use and Maintenance Guidelines

Mildew is a fungus that spreads through the air in microscopic spores. They love moisture and feed on surfaces or dirt. On siding, they look like a layer of dirt. To determine whether you are dealing with mildew or dirt, wipe the surface with a cloth or sponge dampened with bleach. If the bleach causes the surface to lose its dark appearance, you are most likely seeing mildew.

Cleaning mildew from your home is your responsibility. Solutions that remove mildew are available from local paint or home improvement stores. Wear protective eyewear and rubber gloves for this task; the chemicals that remove mildew are unfriendly to humans.

Mirrors

Homeowner Use and Maintenance Guidelines

To clean your mirrors use any reliable liquid glass cleaner or polisher available at most hardware or grocery stores. Avoid acidic cleaners and splashing water under the mirror; either can cause the silvering to deteriorate. Acidic cleaners are usually those that contain ammonia or vinegar. Avoid getting glass cleaners on plumbing fixtures as some formulas can deteriorate the finish.

Paint

Homeowner Use and Maintenance Guidelines

Because of changes in the formula for paint, painted surfaces must be washed gently using mild soap and as little water as possible. Avoid abrasive cleaners, scouring pads, or scrub brushes. Flat paints show washing marks more easily than gloss paints do. Often better results come from touching up rather than washing the paint.

Exterior

Regular attention will preserve the beauty and value of your home. Check the painted surfaces of your home's exterior annually. Repaint before much chipping or wearing away of the original finish occurs; this will save the cost of extensive surface preparation.

Plan on refinishing the exterior surface of your home approximately every five to seven years or as often as your paint manufacturer suggests for your area and climate. Climatic conditions control the chemical structure of the paint used on the exterior. Over time, this finish will fade and dull a bit. Depending on the exposure to weather of each surface, the paint on some parts of your home may begin to show signs of deterioration sooner than others.

When you repaint the exterior of your home, begin by resetting popped nails and removing blistered or peeling portions of paint with a wire brush or putty knife. Sand, spot with primer, and then paint the entire area. Use a quality exterior paint formulated for local climate conditions.

Avoid having sprinklers spray water on the exterior walls of your home. This will cause blistering, peeling, splintering, and other damage to the home.

Severe Weather

Wind can cause a great deal of damage in a severe storm, so inspect the house after such weather. Promptly report damage caused by severe weather to your insurance company.

Touch-Up

When doing paint touch-ups, use a small brush, applying paint only to the damaged spot. Touch-up may not match the surrounding area exactly, even if the same paint mix is used. When it is time to repaint a room, prepare the wall surfaces first by cleaning with a mild soap and water mixture or a reliable cleaning product.

We provide samples of each paint used on your home. Store these with the lids tightly in place and in a location where they are not subjected to extreme temperatures.

Pests and Wildlife

Homeowner Use and Maintenance Guidelines

Insects such as ants, spiders, wasps, and bees, and animal life may fail to recognize that your home belongs to you. Addressing concerns involving these pests and wildlife goes with being a homeowner. Informational resources include, among others, the state wildlife service, animal control authorities, the county extension service, pest control professionals, Internet, and public library.

Phone Jacks

Homeowner Use and Maintenance Guidelines

Your home is equipped with telephone jacks. Initiating phone service, additions to phone service, and moving phone outlets for decorating purposes or convenience are your responsibility.

Plumbing

Homeowner Use and Maintenance Guidelines

Your plumbing system has many parts, most of which require little maintenance. Proper cleaning, occasional minor attention, and preventive care will assure many years of good service from this system.

Aerators

Even though your plumbing lines have been flushed to remove dirt and foreign matter, small amounts of minerals may enter the line. Aerators on the faucets strain much of this from your water. Minerals caught in these aerators may cause the faucets to drip because washers wear more rapidly when they come in contact with foreign matter.

See also Dripping Faucet.

Cleaning

Follow manufacturer's directions for cleaning fixtures. Avoid abrasive cleansers. They remove the shiny finish and leave behind a porous surface that is difficult to keep clean. Clean plumbing fixtures with a soft sponge and soapy water (a nonabrasive cleaner or a liquid detergent is usually recommended by manufacturers). Then polish the fixtures with a dry cloth to prevent water spots. Care for brass fixtures with a good-quality brass cleaner, available at most hardware stores.

Clogs

The main causes of toilet clogs are domestic items such as disposable diapers, excessive amounts of toilet paper, sanitary supplies, Q-tips, dental floss, and children's toys. Improper garbage disposal use also causes many plumbing clogs. Always use plenty of cold water when running the disposal. This recommendation also applies to grease; supplied with a steady flow of cold water, the grease congeals and is cut up by the blades. If you use hot water, the grease remains a liquid, then cools and solidifies in the sewer line. Allow the water to run 10 to 15 seconds after shutting off the disposal.

You can usually clear clogged traps with a plumber's helper (plunger). If you use chemical agents, follow directions carefully to avoid personal injury or damage to the fixtures.

Clean a plunger drain stopper—usually found in bathroom sinks—by loosening the nut under the sink at the back, pulling out the rod attached to the plunger, and lifting the stopper. Clean and return the mechanism to its original position.

Dripping Faucet

You can repair a dripping faucet by shutting off the water at the valve directly under the sink, then removing the faucet stem, changing the washer, and reinstalling the faucet stem. The shower head is repaired the same way. Replace the washer with another of the same type and size. You can minimize the frequency of this repair by remembering not to turn faucets off with excessive force. (Please note that some manufacturers do not use rubber washers.)

Extended Absence

If you plan to be away for an extended period, you should drain your water supply lines. To do this, shut off the main supply line and open the faucets to relieve pressure in the lines. You may also wish to shut off the water heater. Do this by turning off the cold water supply valve on top and the gas control at the bottom. Drain the tank by running a hose from the spigot on the bottom to the basement floor drain. If you leave the tank full, keep the pilot on and set the temperature to its lowest or "vacation" setting. Check manufacturer's directions for additional hints and instructions.

See also Extended Absence checklist.

Fiberglass Fixtures

For normal cleaning use a nonabrasive bathroom cleanser and sponge or nylon cleaning pad. Avoid steel wool, scrapers, and scouring pads. Auto wax can provide a shine and restore an attractive appearance.

Laundry Tub

If you have a laundry room tub, the faucet does not have an aerator. This is to allow the laundry tub faucet to accept a hose connection.

Leaks

If a major plumbing leak occurs, the first step is to turn off the supply of water to the area involved. This may mean shutting off the water to the entire home. Then contact the appropriate contractor.

Low Flush Toilets

We want to draw your attention to a water-saving regulation that went into effect in 1993, which prohibits the manufacture of toilets that use more than 1.6 gallons of water per flush. In the search for a balance among comfort, convenience, and sensible use of natural resources, the government conducted several studies. The 1.6-gallon toilet turned out to be the size that overall consistently saves water.

As a result of implementing this standard, hold down flushing mechanism for a full flush or flushing twice is occasionally necessary to completely empty the toilet bowl. Even though you flush twice on occasion, rest assured that overall you are saving water and we have complied with the law. Similarly, flow restrictors are manufactured into most faucets and all shower heads and cannot be removed. We apologize for any inconvenience this may cause.

Low Pressure

Occasional cleaning of the aerators on your faucets (normally every three to four months) will allow proper flow of water. The water department controls the overall water pressure.

Main Shut-Off

The water supply to your home can be shut-off entirely in two locations. The first is at the street and the second is at the meter. We will point both of these out during your orientation.

Marble or Cultured Marble

Marble and cultured marble will not chip as readily as porcelain enamel but can be damaged by a sharp blow. Avoid abrasive cleansers or razor blades on manufactured marble; both damage the surface.

Porcelain

You can damage porcelain enamel with a sharp blow from a heavy object or by scratching. Do not stand in the bathtub wearing shoes unless you have placed a protective layer of newspaper over the bottom of the tub. If you splatter paint onto the porcelain enamel surfaces during redecorating, wipe it up immediately. If a spot dries before you notice it, use a recommended solvent.

Running Toilet

To stop running water, check the shut-off float in the tank. You will most likely find it has lifted too high in the tank, preventing the valve from shutting off completely. In this case, gently bend the float rod down until it stops the water at the correct level. The float should be free and not rub the side of the tank or any other parts. Also check the chain on the flush handle. If it is too tight, it will prevent the rubber stopper at the bottom of the tank from sealing, resulting in running water.

Shut-Offs

Your main water shut-off is located near your meter. An additional shut-off is conveniently located near the corner of the garage. You use this shut-off for major water emergencies such as a water line break or when you install a sprinkler system or build an addition to your home. Each toilet has a shut-off on the water line under the tank. Hot and cold shut-offs for each sink are on the water lines under the sink.

Sprinklers

You should routinely inspect sprinkler heads and provide seasonal service to maintain proper functioning.

See also Landscaping/Sprinkler.

Stainless Steel

Clean stainless steel sinks with soap and water to preserve their luster. Avoid using abrasive cleaners or steel wool pads; these will damage the finish. Prevent bleach from coming into prolonged contact with the sink as it can pit the surface. An occasional cleaning with a good stainless steel cleaner will enhance the finish. Rub in the direction of the polish or grain lines and dry the sink to prevent water spots.

Avoid leaving produce on a stainless steel surface, since prolonged contact with produce can stain the finish. Also avoid using the sink as a cutting board; sharp knives will gouge the finish.

Local water conditions affect the appearance of stainless steel. A white film can develop on the sink if you have over-softened water or water with a high concentration of minerals. In hard water areas, a brown surface stain can form appearing like rust.

Tank Care

Avoid exposing the toilet to blows from sharp or heavy objects, which can cause chipping or cracking. Avoid abnormal pressures against the sides of the tank. It is possible to crack the tank at the points where it is attached to the bowl.

Water Filter or Softener

If you install either a water filter or a water softener, carefully read the manufacturer's literature and warranty for your specific model.

TROUBLESHOOTING TIPS: PLUMBING

No Water Anywhere in the Home

Before calling for service, check to confirm that the:

- ▶ Main shut off on the meter inside your home is open.
- ▶ Main shut off at the street is open.
- ▶ Individual shut-offs for each water-using item is open.

No Hot Water

See Water Heater

Leak Involving One Sink, Tub, or Toilet

- ▶ Check caulking and grout.
- ▶ Confirm shower door or tub enclosure was properly closed.
- ▶ Turn water supply off to that item.
- ▶ Use other facilities in your home and report problem on next business day.

Leak Involving a Main Line

- ▶ Turn water off at the meter in your home.
- ▶ Call emergency number for service.

Back Up at One Toilet

If only one toilet is affected, corrections occur during normal business hours.

- ▶ Shut off the water supply to the toilet involved.
- ▶ Use a plunger to clear the blockage.
- ▶ Use a snake to clear the blockage.
- ▶ If you've been in your home fewer than 30 days, contact the builder or the plumber listed on your Utility and Services Information sheets.
- ▶ If you've been in your home over 30 days, contact a router service.

Sewer Back Up Affecting Entire Home

- ▶ If you've been in your home fewer than 30 days, contact the builder or the plumber listed on your Utility and Services Information sheets.
- ▶ If you've been in your home over 30 days, contact a router service.
- ▶ Remove personal belongings to a safe location. If items are soiled, contact your homeowner insurance company.

Even if the troubleshooting tips do not identify a solution, the information you gather will be useful to the service provider you call.

Property Boundaries

Homeowner Use and Maintenance Guidelines

At closing you will receive a copy of a survey that shows your lot and the location of your home on the lot.

During construction, some of the monuments that mark the lot corners may be affected or covered up by grading, excavation, installation of utility lines and other typical construction activities. If you wish to install a fence, swimming pool, add a deck or patio to your home, or otherwise establish a permanent structure, we advise that you have professional surveyors locate and mark property boundaries to be certain they are accurate and you have found all corners.

See also Easements.

Railings

Homeowner Use and Maintenance Guidelines

Protect railings from sharp objects or moisture. Cover them during move-in so large pieces of furniture do not cause dents or scratches.

Roof

Homeowner Use and Maintenance Guidelines

The shingles on your roof do not require any treatment or sealer. The less activity your roof experiences, the less likely it is that problems will occur.

Clean Gutters

Maintain the gutters and downspouts so that they are free of debris and able to quickly drain precipitation from the roof.

Leaks

If a leak occurs, try to detect the exact location. This will greatly simplify finding the area that requires repair when the roof is dry.

Limit Walking

Limit walking on your roof. Your weight and movement can loosen the roofing material and in turn result in leaks. Never walk on the roof of your home when the shingles are wet—they are slippery.

Severe Weather

After severe storms, do a visual inspection of the roof for damages. Notify your insurance company if you find pieces of shingle in the yard or shingle edges lifted on the roof.

TROUBLESHOOTING TIPS: ROOF LEAK

Please keep in mind that roof leaks cannot be repaired while the roof is wet. However, you can get on the schedule to be in line when conditions dry out, so do call in your roof leak.

- ▶ Confirm the source of the water is the roof rather than from a
 - Plumbing leak
 - Open window on a higher floor
 - Clogged gutter or downspout
 - Blowing rain coming in through code required roof vents
 - Gap in caulking
- ▶ Where practical, place a container under dripping water.
- ▶ If a ceiling is involved, use a screwdriver to poke a small hole in the drywall to release the water.
- ▶ Even if the troubleshooting tips do not identify a solution, the information you gather will be useful to the service provider you call.

- ▶ Remove personal belongings to prevent damage to them. If damage occurs, contact your homeowner insurance company to submit a claim.
- ▶ Report the leak to builder during builder's warranty period following warranty procedures.
- ▶ Report the leak to roofer after the builder's initial warranty period and during the extended roofing warranty period. Contact the roofer listed on your Utility and Services Information sheets.

Shower Curtain and Rod

Resident Use and Maintenance Guidelines

Shower curtain and rods require minimal care. Periodic washing of the shower curtain will remove any soap or mildew. Following manufacturers recommended cleaning procedures. Shower rod expands by turning the end piece. Periodically check that rod is secure.

Avoid hanging wet towels on or other items on the shower rod as it may damage rod or cause it to fall.

Siding

Homeowner Use and Maintenance Guidelines

Siding expands and contracts in response to changes in humidity and temperature. Slight waves are visible in siding under moist weather conditions; shrinkage and separations will be more noticeable under dry conditions. These behaviors cannot be entirely eliminated.

Wood and Wood Products

Wood or wood-product siding will require routine refinishing. The timing will vary with climatic conditions. Maintain caulking to minimize moisture entry into the siding. Note that some paint colors will require more maintenance than others and some sides of the home may show signs of wear sooner based on their exposure to the elements. Some wood siding, such as cedar, is subject to more cracking and will require more maintenance attention.

Cement Based Products

Cement based siding will require routine refinishing. The timing will vary with climatic conditions. Maintain caulking to minimize moisture entry into the siding. Note that some paint colors will require more maintenance than others and some sides of the home may show signs of wear sooner based on their exposure to the elements.

See also Paint and Wood Trim.

Smoke Detectors

Homeowner Use and Maintenance Guidelines

Read the manufacturer's manual for detailed information on the care of your smoke detectors.

Battery

If a smoke detector makes a chirping sound that is a sign that the battery needs to be replaced. Follow manufacturer instructions for installing a new battery. Most smoke detectors use a 9 volt battery.

Cleaning

For your safety, clean each smoke detector monthly to prevent a false alarm or lack of response in a fire. After cleaning, push the test button to confirm the alarm is working.

Locations

Smoke detectors are installed in accordance with building codes, which dictate locations. You should not remove or disable any smoke detector.

Solar Water Heating System

Resident Care and Maintenance

Carefully read the Solar Water Heating System information. As with any mechanical device, routine maintenance and proper care help to avoid problems and extend the operating life of a solar water heating system. There are simple maintenance requirements for a solar system.

Hawaiian Electric Company approved solar hot water heating systems are designed to provide your home with sufficient hot water capacity during the evening hours. During the daytime, the system will produce hot water for use at night. Hot water consumption during the day may will lower the temperature and reduce the availability of hot water during the evening. If hot water is low you can manually turn on the electric hot water heater with the switch located on the water heater timer switch. Timer switch is set to automatically turn off the electric water heater in the morning so the solar system can take over and make hot water during the day.

Drain sediment form the bottom of the storage tank since draining will prevent sediment from building up and entering the collector loop.

- ▶ Solar Collectors may benefit from occasional washing with mild soap and water applied when the collectors are cool.
- ▶ Check with your solar dealer for directions on maintenance schedules and requirements.

Drain Tank, Anode Rod Replacement

See Water Heater: Electric.

Pressure Relief Valve at Collector

At least once each year, manually operate the pressure relief valve. Stay clear of the discharge line to avoid injury. See manufacturer's literature for diagrams and detailed instructions.

Safety

Keep the area around a water heater clear of stored household items. Keep children away from exposed pipes, valves and pumps. Exposed metals may get hot and cause burns. Never use the top of the water heater as a storage shelf. Never place objects on top of solar collector. Never hang or secure items to piping.

Temperature

Temperature settings on the controller should be approximately as listed below:

High Limit	150 degrees F
Low Limit	100 degrees F

Normal operating temperature of the solar system produces hot water range between 140-150 degrees.

TROUBLE SHOOTING TIPS: NO HOT WATER

Before calling for service, check to confirm that the

- ▶ Rainy or overcast days will not provide enough solar energy to make hot water. Use manual switch at timer box to turn on electric water heater.
- ▶ Check that all ball valves are open and none have been accidentally closed.
- ▶ Check if there is air in the solar collector panel.

Refer to the manufacturer's literature for specific locations of these items and possibly other troubleshooting tips.

Even if the trouble-shooting tips do not identify a solution, the information you gather will be useful to the service provider you call.

Hawaiian Electric Company provides a five-year warranty on approved solar hot water systems. Contact HECO after the builder's initial warranty period.

Air in Solar Collector Panel

Air in solar collector panel may cause a loss of hot water. To air from the solar collector panel, follow the steps below:

1. Close ball valve below hose bib on return line from solar collector (supply line has the pump).
2. Attach to hose to hose bib on return line and place other end in laundry tray.
3. Open hose bib and allow water to run for 1 to 2 minutes, flushing out any air in the solar collector. Caution: hot water will be coming out from the hose bib. Stay clear of the discharge line to avoid injury.
4. Close hose bib and remove hose.
5. Open ball valve.
6. Allow solar system to operate to verify if hot water is produced.

Stairs

Homeowner Use and Maintenance Guidelines

No known method of installation prevents all vibration or squeaks in a staircase. A shrinkage crack will develop where the stairs meet the wall. When this occurs, apply a thin bead of latex caulk and, when dry, touch up with paint.

Termites

Homeowner Use and Maintenance Guidelines

We treat the foundation of your home for subterranean termites and provide you with a certificate confirming that treatment. Plan to renew this treatment as directed by the literature that accompanies the certificate. Treatment for other types of insects or animal infestations is your responsibility.

10-Year Protection Plan.

Your home comes with a 10-year subterranean termite protection plan through our termite protection provider Terminix/Hauoli Termite and Pest Control. Please carefully read the terms and conditions of the warranty to ensure that you maintain your warranty coverage and do not void it in any manner.

The Provider will extend service annually during the warranty period. During the term of this warranty, any further treatment found necessary by Provider will be performed free of charge. Terminix/Hauoli Termite and Pest Control will reinspect the identified property annually or at any time the Owner requests requests it or if Provider believes it necessary.

The warranty plan provides protection against new subterranean termite damage to the structure and contents, occurring subsequent to the effective date of the warranty. If new damage occurs during the term of the warranty period, Provider will, upon notification and inspection, arrange for necessary repairs or replacement by a contractor chosen by Provider and pay the entire cost of labor and materials. New damage is defined as damage done by covered subterranean termites subsequent to the effective date of the warranty; the definition excludes damage existing to that date. Unless live termites are found in the damaged area, the damage discovered is old damage and is not covered under this warranty.

- ▶ **Water Leakage.** Water leakage in treated areas around the perimeter of you home, may destroy the effectiveness the treatment by the Provider and is conducive to new infestation. Owner is responsible for making timely repairs as necessary to stop the leakage. Owner's failure make timely repairs will terminate the warranty automatically without further notice.
- ▶ **Additions, Alterations.** In the event the premises are structurally modified, altered or otherwise changed or if soil is removed or added around the foundation, Owner will notify Provider prior to such event and will purchase additional treatment required by the changes incurred. Failure to do so will terminate the warranty automatically without further notice. In the event of any such change, the Provider reserves the right to adjust the annual extension charge. The failure of the Provider to notice any such changes does not release the owner form the obligation set forth in the warranty.

Dos and Don'ts

- If you add onto or change the exterior of your home or landscape, be sure to have the areas treated by Terminix/Hauoli Termite and Pest Control to ensure that you preserve your warranty.
- Before installing stepping stones, river rock, concrete, landscaping, or so on, against the home, be sure to have the areas treated by Terminix/Hauoli Termite and Pest Control to ensure that you preserve your warranty.
- Maintain a safe zone of at least two feet in width around the perimeter of your home. Avoid planting grass or shrubs, installing any sprinkler device, or digging of any kind in this area. If you disturb this area, have it re-treated by Terminix/Hauoli Termite and Pest Control to ensure that you preserve your warranty and to restore protection.
- Keep soil away from any wood parts of your home.
- Be certain all roof water and precipitation moves quickly away from your home's foundation.
- Avoid storing wood on the ground and against your home.

Regular Inspections

Regularly inspect your home for signs of termites or conditions that would allow their attack.

- Watch for tubes of dirt, called mud tubes that extend from the soil up to your home.
- Check for signs of termite droppings.
- Check for wrinkles or waves in wood trim.
- Tap wood to see if it sounds or feels hollow.

- If you believe you see signs of termites or if you have any questions, contact Terminix/Hauoli Termite and Pest Control for guidance.

Terminix/Hauoli Termite & Pest Control

650 Kakoi Street, Unit 100
Honolulu, Hawaii 96819
Ph.: (808) 836-0272

Ventilation

Homeowner Use and Maintenance Guidelines

Homes today are built more tightly than ever. This saves energy dollars but creates a potential concern. Condensation, cooking odors, indoor pollutants, radon, and carbon monoxide may all accumulate. We provide mechanical and passive methods for ventilating homes. Your attention to ventilation is important to health and safety. Building codes require attic vents to minimize accumulation of moisture.

Attic Vents

Attic ventilation occurs through vents in the soffit (the underside of the overhangs) or on gable ends. Driving rain or snow sometimes enters the attic through these vents. Do not cover them to prevent this. Instead, cover the insulation in front of the vent. When you do this, precipitation that blows in safely evaporates and ventilation can still occur.

Daily Habits

Your daily habits can help keep your home well ventilated:

- Develop the habit of running the hood fan when you are cooking.
- Ditto the bath fans when bathrooms are in use.
- Air your house by opening windows for a time when weather permits.

Proper ventilation will prevent excessive moisture from forming on the inside of the windows. This helps reduce cleaning chores considerably.

Water Heater: Electric

Homeowner Care and Maintenance

Carefully read the manufacturer's literature and warranty for your specific model of solar system and electric water heater. Hawaiian Electric Company approved solar hot water heating systems are designed to provide your home

with sufficient hot water capacity during the evening hours. During the daytime, the system will produce hot water for use at night. Hot water consumption during the day may will lower the temperature and reduce the availability of hot water during the evening. If hot water is low you can manually turn on the electric hot water heater with the switch located on the water heater timer switch. Timer switch is set to automatically turn off the electric water heater in the morning so the solar system can take over and make hot water during the day.

Drain Tank

Review and follow the manufacturer's timetable and instructions for draining several gallons of water from the bottom of the water heater. This reduces build-up of chemical deposits from the water, thereby prolonging the life of the tank as well as saving energy dollars. Also drain the tank if it is being shut down during periods of freezing temperatures. Carefully follow the instructions in the manufacturer's literature.

Element Cleaning or Replacement

The heating elements in the water heater will require periodic cleaning. The frequency is determined in part by the quality of the water in your area. Again, refer to the manufacturer's literature for step-by-step instructions and drawings, or contact an authorized service company.

Pressure Relief Valve

At least once each year, manually operate the pressure relief valve. Stay clear of the discharge line to avoid injury. See manufacturer's literature for diagrams and detailed instructions.

Safety

Keep the area around a water heater clear of stored household items. Never use the top of the water heater as a storage shelf.

Solar System Components

See also Solar Water Heating System

Temperature

Temperature settings on an electric water heater will produce approximately the temperatures listed below:

Hot	120 degrees F
A	130 degrees F
B	140 degrees F
C	150 degrees F
Very Hot	160 degrees F

The recommended setting for operation of a dishwasher is B, or 140 degrees. Higher settings can waste energy dollars and increase the danger of injury from scalding. Hot water will take longer to arrive at sinks, tubs, and showers that are farther from the water heater.

TROUBLE SHOOTING TIPS: NO HOT WATER

Before calling for service, check to confirm that the

- ▶ Solar System is operational and day was sunny. Overcast and rainy days will reduce the effectiveness of the solar system.
- ▶ Turn electric water heater on at timer switch.
- ▶ Water heater breaker on your main electric panel is in the on position. (Remember if a breaker trips you must turn it from the tripped position to the off position before you can turn it back on.)
- ▶ Water supply valve is open. Supply and return valves to the solar collector are open.

Refer to the manufacturer's literature for specific locations of these items and possibly other troubleshooting tips.

Even if the trouble shooting tips do not identify a solution, the information you gather will be useful to the service provider you call.

Hawaiian Electric Company provides a five-year warranty on approved solar hot water systems. Contact HECO after the builder's initial warranty period.

Windows, Screens, and Sliding Glass Doors

Homeowner Use and Maintenance Guidelines

Contact a glass company for reglazing of any windows that break. Glass is difficult to install without special tools.

Condensation

Condensation on interior surfaces of the window and frame is the result of high humidity within the home and low outside temperatures. Your family's lifestyle controls the humidity level within your home. If your home includes a humidifier, closely observe the manufacturer's directions for its use.

Sliding Glass Doors

Sliding glass doors are made with tempered glass which is more difficult to break than ordinary glass. If broken, tempered glass breaks into small circular pieces rather than large splinters which can easily cause injury.

Keep sliding door tracks clean for smooth operation and to prevent damage to the door frame. Silicone lubricants work well for these tracks. Acquaint yourself with the operation of sliding door hardware for maximum security.

Under certain lighting conditions, door glass may be hard to see. If you keep the screen fully closed when the glass door is open, your family will be accustomed to opening something before going through. You may want to apply a decal to the glass door to make it readily visible.

Sticking Windows

Most sliding windows (both vertical and horizontal) are designed for a 10-pound pull. If sticking occurs or excessive pressure is required to open or close a window, apply a silicone lubricant. This is available at hardware stores. Avoid petroleum-based products.

Tinting

Applying tinting of foil lining to dual pane windows can result in broken windows due to heat build-up. Some manufacturers void their warranty on the windows if you apply tinting or foil lining. Contact the manufacturer to check on their current policy before you apply such coatings. Also check the DCC&R's for provisions and requirements.

Weep Holes

In heavy rains, water may collect in the bottom channel of window frames. Weep holes are provided to allow excess water to escape to the outside. Keep the bottom window channels and weep holes free of dirt and debris for proper operation.

See also Ventilation

Wood Trim

Homeowner Use and Maintenance Guidelines

Shrinkage of wood trim occurs during the first two years or longer, depending on temperature and humidity. All lumber is more vulnerable to shrinkage during the heating season. Maintaining a moderate and stable temperature helps to minimize the effects of shrinkage. Wood will shrink less lengthwise than across the grain. Wood shrinkage can result in separation at joints of trim pieces. You can usually correct this with caulking and touch-up painting.

Shrinkage may also cause a piece of trim to pull away from the wall. If this occurs, drive in another nail close to, but not exactly in, the existing nail hole. Fill the old nail hole with putty and touch up with paint as needed. If the base shoe (small trim between base molding and the floor) appears to be lifting from the floor, this is probably due to slight shrinkage of the floor joists below. Again, you can correct this condition by removing the old nails and

renailing. You may prefer to wait until after the first heating season to make any needed repairs at one time when redecorating.

See also Expansion and Contraction

- END OF SECTION-

