

Redmond View Townhomes

Owner Manual



Ichijo USA Homeowner Manual

Congratulations!

You are now the proud owner of an Ichijo USA home!

Welcome home! We are honored that you have chosen to purchase an Ichijo home. We take great pride in building sustainable, quality homes and hope that you will have many wonderful years in your new home.

Your Customer Service Manager will provide an initial orientation to your home, prior to closing, walking you through the home, educating you on the systems, maintenance and finishes.

To ensure your satisfaction after closing, we offer a comprehensive new home warranty and customer service program. Please review our Homeowner Maintenance Manual and the Warranty, included with your warranty documents, to obtain an understanding of your coverage.

Making Contact

Report any item under warranty regarding your home to our warranty department.

Email: warranty@ichijousa.com

Emergency Service

Please contact our subcontractors directly for emergency service. A list of 24-hour emergency contacts is provided in your documents.

How the Process Works

We will assign your request to a Project Manager who will schedule a visit to address your concerns. Please note that the service work is performed between the hours of 8:00 am and 4:00 pm on weekdays.

You will be asked to sign your Customer Service or Warranty Request upon completion of the work. This will indicate that you are satisfied with the resolution of the items on your request.

We stand behind our product and are very happy to welcome you into your new home. Feel free to contact us with any questions or concerns.

Sincerely,

Ichijo USA

Warrantable Issues - Timetable

Sod/Trees/Landscaping	30 days (from date of close)
Irrigation (sprinkler system)	30 days coverage, 1-year coverage on timeclock
Paint and Caulking	Interior and exterior touch up paint kit provided. Any imperfections must be noted at the home orientation.
Touch Up Paint Kit	Interior and Exterior Paint Touch-up Kit has been provided and left on the premises.
Countertops	Any defects must be noted at the home orientation.
Tile Flooring/Walls	Cracks, chips, scratches, color variations in tile and/or grout must be noted on home orientation. There is a 1-year manufacturer/installation warranty. No guarantee dye lot of tile will match.
Carpet	1-year manufacturer/installation warranty and no guarantee dye lot of carpet will match.
Exterior Flatwork	1-year assessment of cracks with one time repair Any settlement crack exceeding 1/8" after the 1- year will be reviewed.
Drainage guidelines	Will be reviewed – meeting code standard
Bathtub/Windows/Mirrors	Any imperfections, scratches, cracks must be noted on home orientation, any imperfections noted after the home orientation are not warrantable.
Drywall	Any cosmetic imperfections need to be documented at the home orientation. A crack exceeding 1/4" will be addressed for installation error.
Vinyl Flooring	Scratches, nicks, and any defects must be noted at the home orientation. There is a 1- Year on manufacturer defects and/or installation

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Important Information

Your New Home

We are interested in providing you complete, accurate information regarding your new home. The following pages point out important facts about your new home, the materials used in the construction and other important details that will offer you more knowledge about your new home. Please review this section carefully; it includes many maintenance tips that will help you keep your new home in good condition

In addition to the following information, it is possible that there are specific items that pertain only to your home. Your sales representative and the Customer Service Department are your best sources of additional information about your new home.

If you have any questions about your home before you close escrow, please speak to your sales representative. After moving into your new home, please direct your questions to our Customer Service Department at warranty@ichijousa.com.

Architectural Control Committee

An Architectural Control Committee has approval authority over any changes, alterations or additions to your home, fence, landscaping, exterior colors, trim, etc. Always consult the Declaration of Restrictions for approval procedures and other information prior to making any additions, alterations or improvements to your home, including the installation of antennas, fences, storage buildings, yard art and gazebos. The Architectural Control Committee, Ichijo USA, or if applicable, your Homeowners Association typically will have the power under the Declaration of Restrictions to remove, at your expense, any unapproved additions, alterations or improvements.

Construction Dangers

Ichijo USA recommends that you contact your Sales Representative or Project manager to have them accompany you on any of our job sites. Job sites are hazardous areas since there is usually a lot of activity going on during the day. After-hours, when the workers are no longer on the jobsites, can be just as hazardous if not more so. If you choose to visit one of our jobsites without one of our representatives to accompany you, Ichijo USA does not assume any liability for any injuries or damages that you may incur.

Construction Methods

Ichijo USA builds homes that meet or exceed local building codes. Construction methods can differ from home to home due to variations in plans, elevations and the requirements of local building codes.

Declaration of Restrictions

A Declaration of Covenants, Conditions and Restrictions (sometimes referred to as Deed Restrictions or CC&R's), if applicable, govern the activities within your community. Parking restrictions use restrictions, building restrictions and, in some cases, the creation and powers of a Homeowners Association are described in your Declaration of Restrictions (a copy is included in the closing packet). Also consult your Declaration of Restrictions and, if applicable, your Homeowners Association before making any structural or cosmetic changes to your home.

Drainage and Wetlands

Wetlands serve many important functions. Many plats will show areas designated as; "Wetlands", "Jurisdictional Wetlands" or "Conservation Areas." These areas are under the control of one or more agencies which are responsible for their protection. Before making any alterations or changes to these areas it is the homeowners responsibility to contact the appropriate agency responsible for these areas and make sure such alterations will not be a violation. Violations are subject to heavy fines and penalties in many cases! The same guidelines should be used for any alterations or usage to adjacent property.

Easements and Utilities

Your property may be subject to certain easements that should be reflected on your title policy or the lot survey that will be given to you at your closing. Consult your title policy or a professional before any alterations are made to your new home or lot. In some cases, your Declaration of Restrictions will also describe present or future easements.

Additionally, in most cases, the municipality governing your community requires the first fifteen to twenty feet behind the curb in front of your home as right-of-way. You do not own this fifteen to twenty-foot right-of-way; utilities are often located in this footage. Your final survey will show the exact locations of your property lines.

Homeowners Association

Every homeowner in your neighborhood is a member of a Homeowners Association. The purpose of the association is to assure that the neighborhood is maintained in an attractive and safe manner. A Declaration of Covenants, Conditions and Restrictions have been recorded to establish a set of regulations intended to preserve the appearance and character of your neighborhood. Among other provisions, the Covenants require you to properly maintain your home and your yard and require you to receive approval from the association before making any changes to the exterior of

your home or your lot. This includes any additions, remodeling, accessory structures or changes to landscaping drainage.

The association is usually responsible for maintaining entry signs and landscaping as well as any community parks or amenities and may be responsible for maintaining drainage ponds or other facilities.

Most associations are managed by an independent management company. You are responsible for paying dues to the association, which are used to pay for the management and operation of the association, and for maintenance.

Please take time to read the Covenants and call the management company with any questions you may have.

Lot & Site Changes

The layout of each lot is unique and there will be differences in size, locations of sidewalks and driveways, and drainage that may not be exactly the same as the models. The shape and contour of certain lots may require that Ichijo USA adapt foundations, decks, patios, driveways walkways and garages to provide reasonable access, adequate drainage and aesthetic appeal. Ichijo USA reserves the right to make changes and alterations to the property and remove native trees to provide for the construction of the home. See the section on "Drainage and Wetlands" for further information regarding adjacent property and its usage.

Model Homes

Model homes have several functions. They are used as sales offices, to demonstrate products in the home and as a showcase. These multiple uses can require larger air conditioners and other types of equipment that are neither appropriate nor desirable for residential usage. The model homes also may display a variety of features, finishes, materials, colors and products that are not included in your home. The following was prepared to clarify some items and features in your new home that may differ from that in the models. Please ask your sales representative for an explanation of any differences.

- Color Variances

Color Variations occur in all manufactured products. Although every effort is made to provide consistent color, variances may be noticeable in paint, brick, stone, tile, mortar, carpet and other colored surfaces. Exposure to sun and water will alter the color more rapidly. These variances may be especially noticeable where a repair has been made. An exact color match of materials during the initial construction of your home or during repairs is not an item that is covered by your Warranty.

- Design

Your home can have design features that differ from those in the model homes. The

differences could be in materials, interior and exterior colors, surface coverings, doors, windows, garage doors and other features. Also, certain changes to the design of the home may have occurred since construction of the model homes.

- Dimensions

Your home can have different interior and exterior dimensions than those of the model homes. The differences can result from variations in the lots, changes in design that are made after the models are completed and other such factors. The differences can be seen in ceilings, windows, room sizes, placement of your home on the lot and in other areas.

- Entrances and Walkways

The entrances and walkways of the model homes can vary in size and location from your home.

- Interior Features

The model homes are used as sales offices. Therefore, the models may have features such as window coverings, window tinting, security systems, built-in features, slight plan changes, music systems and other differences from the production homes.

- Marketing

The representation of features, settings, finishes and other items that are used in advertising and sales materials may differ from those in your home.

- Substitution

Substitute materials that may differ from those in the model homes may have been made in the construction of your home due to situations beyond the control of Ichijo USA. Also, substitute materials may differ from model homes where the new materials do not alter the quality or function of your home.

Plans

Ichijo USA reserves the right to change plans, specifications and prices without notice.

Private Home Inspectors

Ichijo USA does not allow any Private Home Inspector on or about any property that is under construction without prior authorization from our office. Any Private Home Inspectors wishing to perform inspections on any of our homes must first provide us with the required proof of insurance and any other required documentation in order to be on our jobsites.

Soils

Any homeowner changes in the foundation, the grading and the landscaping of your home and lot can result in severe damage to your property and to neighboring properties. Consult a professional before any such changes are made. Architectural Control Committee approval will be required before making any changes to your property that may affect the drainage. County approval may also be required. See Grading and Drainage section for additional information.

Surrounding Property

No representation or warranty is made with respect to the use or construction of improvements on property adjacent or in the vicinity of your community. Even as to adjacent property owned by Ichijo USA, future use or construction may be altered for any reason. Please consult the municipality or county having jurisdiction over your community to determine the type of development that may occur in your area.

Trees

While Ichijo USA seeks to preserve trees, they can deteriorate and die due to a number of factors, including disease and disturbance to root systems. Over or under watering can harm trees. No representation or warranty is made regarding the trees located on your lot. You may wish to consult with an arborist to determine appropriate actions to preserve your trees.

Unauthorized Options and Upgrades by Buyers

Ichijo USA does not permit the installation of options by anyone other than Ichijo USA and its subcontractors and suppliers prior to the close of escrow. The unauthorized use of independent contractors, other than those who are under contract with Ichijo USA, or any work or changes made by the buyer, will void any warranty, implied or written, with respect to any and all damage caused, directly or indirectly, as a result of the work, and is a direct violation of your contract! Ichijo USA reserves the right to remove and destroy any alterations, materials or furnishings and possessions of the buyer, made by you or any unauthorized sub-contractor, prior to the closing of escrow, at the sole expense of the buyer.

Views

No representation or warranty is made with respect to the presence or absence of objects or items that are visible from your new home but are not located on your property. Such objects and items can be blocked or changed by future development, the growth of plants and other activities. Lot premiums, which take views into consideration, are only applicable at the time of purchase and no further warranties or representations

are implied. Ichijo USA does not assume liability for any views that are not located on the property you are purchasing.

Water Pressure

Your Ichijo USA Limited Warranty does not include any representation or warranty that the current water pressure level will prevail in the future. Please contact your water utility provider if you experience any problems after closing.

Glossary of Terms

AERATOR: Located at the end of the kitchen and bathroom faucets. It mixes air with the water in order to provide a smooth, splash-free flow of water. Occasionally, debris may collect in the aerator and restrict the flow of water. If this happens, unscrew the aerator and remove the debris.

ARCHITECTURAL CONTROL COMMITTEE: See "Pertinent Information" section of this manual.

BASEBOARD: The strip of molding or trim at the bottom of walls. The baseboard adds an attractive finish and protects the wall from scuffs and damage from furniture or vacuum cleaners.

BERM: A small ridge of soil which may direct the flow of rain and irrigation water toward drains or sewers.

CAULKING: This material is used as a sealant around sinks, tubs and showers. Other applications for caulking include sealing window and doorframes.

CEMENTITIOUS FINISH: The mortar-like material that covers the foundation and/or exterior walls of your home. This is commonly referred to as "stucco" in the building industry. Typically in residential construction this is a two (2) step process. This material is relatively brittle so you should avoid sharp blows to the walls. Its use is strictly cosmetic. Any references in our documentation to "stucco" is meant to describe this (2) step process cementitious veneer.

CIRCUIT: The electrical system in your home is separated into individual units referred to as circuits. Depending upon the layout of your home and electrical codes in your area, each circuit may be designed for a room, an area of the home or a single appliance.

CIRCUIT BREAKERS: Prevent electrical overload or shorting. The circuit breaker opens the circuit when an overload or short occurs, thereby breaking the flow of electricity. It can be reset manually by moving the circuit breaker lever to the "off" position and then to the "on" position once the source of overload has been corrected. Refer to the "Use and Care of Your Home" section of this manual for more information.

COMMON AREAS: Many neighborhoods have areas that are common property, which is owned by a homeowners association or other entity. These areas may include streets, parking areas, walkways, slopes and recreational areas. In some cases, these common areas are maintained and their use is governed by the homeowners association. Please refer to the Declaration of Restrictions.

CONDENSATION: The conversion of moisture in air to water, as on the warm room side of a cold wall; the forming of water on a surface can usually be prevented by insulating the inner wall so that its surface is kept warmer.

CONDENSER: The unit of a heating and air conditioning system that is located outside the home.

CULTURED MARBLE: This is a man-made product that has much of the durability and beauty of natural marble.

DECLARATION OF RESTRICTIONS: See "Pertinent Information" section of this manual.

DEFLECTION: Bending of a beam or any part of a structure under an applied load.

ICHIJO USA'S LIMITED WARRANTY: The one-year limited warranty made by Ichijo USA to you described in the "Warranty Procedures" section of this manual.

DRYWALL: The interior walls of a home are usually constructed of drywall. This material also is called gypsum board or sheetrock. The material is functional and can be textured and painted to complement the style of any home.

EFFLORESCENCE: The white, powdery substance that sometimes accumulates on stucco, masonry, concrete and brick. Excessive efflorescence can be removed by scrubbing with a strong vinegar solution or a commercial product.

EROSION: The flow of water from irrigation systems or rain can erode landscaping and change the drainage pattern of the yard. Most erosion can be prevented by maintaining the original grading of the yard.

EXPANSION JOINT: A break or space in construction to allow for thermal expansion and contraction of the materials used in the structure.

FLATWORK: A concrete surface usually four to six inches thick used for patios, walkways, driveways, etc.

FLUORESCENT: The lighting fixtures that provide even, soft illumination in kitchens, bathrooms and other areas of the home.

GFCI: Abbreviation for Ground Fault Circuit Interrupter. Similar to a circuit breaker, it is designed to interrupt the flow of electricity. GFCI's are usually located in the kitchen, bathrooms, garage and exterior. In the event of a short circuit, the GFCI is designed to break the electrical circuit immediately and reduce the chance of serious electrical shock.

GROUT: Grout is the cement-like material visible between squares of ceramic tile.

HARDWARE: The hinges, locks, handles and other metal attachments to doors, cabinets and drawers are commonly referred to as hardware.

HEADER: The header is a relatively heavy, structural wood piece that spans open spaces such as doors and window frames. The header supports other structural lumber.

HOMEOWNER MAINTENANCE: As a new homeowner you need to routinely maintain the various features of your home. Some of these maintenance items have been indicated in the "Use and Care of Your Home" section of this manual. This continuing maintenance is your responsibility.

HOMEOWNERS ASSOCIATION: See "Important Information" section of this manual.

INCANDESCENT: Lighting fixtures that use traditional light bulbs are called incandescent fixtures. Incandescent lighting is used for lamps, spot lighting and exterior lighting.

MANUFACTURER'S WARRANTY: The appliances and certain other components of your new home are covered by warranties that are supplied by the original manufacturers. These warranties are passed on to you. They include components of the plumbing and electrical systems, heating and air conditioning system, water heater and other manufactured items.

MASONRY: The stonework and brickwork on a home.

MILDEW: Mildew results when moisture accumulates in a confined area. Excessive watering of landscaping can cause mildew. Due to humidity, mildew can also form on the underside of eaves, porches or box windows. Moisture can also cause mildew to form on bathroom walls.

NAIL POPS: The natural expansion and contraction of wood can cause the nails that hold the wall surfaces in place to move or pop out of place. The nails can be reset and, if necessary, touchup paint can be applied.

PORCELAIN ENAMEL: Your tubs and sinks may be constructed of porcelain enamel. Made of a silicate paint that is fired onto steel at high temperatures, it forms a durable smooth and shiny surface much like glass.

RETURN AIR VENT: Because modern homes feature almost airtight seals, the heating and air conditioning systems require return air vents to draw air back to the heating and cooling system.

SETTLING: In the first months and years after a new home is built, some settling can occur. Minor settling is normal, particularly in the first months after a new home is built. Small shrinkage cracks do not affect the structural integrity of

SILICONE: Any of a group of semi-organic polymers of siloxane, characterized by high lubricity and thermal stability, extreme water repellence, and physiological inertness. It is used in adhesives, lubricants, paints, insulation, and synthetic rubber.

SPACKLE: The puttylike material that is used to fill surface irregularities in drywall. Its most common use is to fill nail holes in walls before repainting.

SPALLING: The cracking or flaking of particles from a surface.

SUBCONTRACTOR: Most homes in our area are built by specialized trades people, or independent contractors, who contract with larger builders or developers to perform their area of specialization. This allows the builder to select those trades with the highest standards and the best reputation. Examples of subcontractors are plumbers, roofers and electricians.

Project Manager: The person who oversees the construction of homes is called the project manager. The project manager is responsible for making sure that the subcontractors perform their work on time and to the standards established by Ichijo USA.

SWALE: A swale is similar in purpose to a berm, but it is a depression in the ground. It is designed to channel rain and irrigation water away from structures and toward sewers and drains.

TACK STRIPS: The devices between the flooring and carpeting that are used to hold wall-to-wall carpeting in place.

THERMOSTAT: The wall-mounted device that controls the heating and air conditioning units is a thermostat. By cycling the heating or air conditioning units on and off, it will maintain a desired temperature in the home.

TUCK POINTING: The filling in with fresh mortar of cut-out or defective mortar joints in old masonry.

VITREOUS CHINA: The kiln-fired, pottery material that is used in most toilet bowls and tanks. It is very durable and impervious to water but can be broken by sharp blows from hard objects.

WARP: Shape distorted by twisting, especially in too rapidly dried wood.

WEEP HOLES: Small holes in door, masonry and window frames that allow water to drain away are called weep holes. They should be kept free of dirt and debris.

Quality Control

Ichijo USA Quality Control Inspections

Ichijo USA performs a variety of Quality Control Inspections on every home throughout the entire construction process. This is to ensure that each home meets or exceeds the quality level that each buyer sees in our models and spec homes when selecting their home for purchase.

Ichijo USA makes sure each home meets or exceeds the "Residential Performance Guidelines" established by the "National Association of Home Builders." These guidelines set up standards by which the building community can establish certain quality levels in their construction. Building codes only address health, safety and welfare issues regarding new home construction.

The "National Association of Home Builders" is recognized as an objective and qualified source for setting up these standards. These standards are objective, credible and uniform and spell out the minimum performance for acceptable workmanship and product performance. Ichijo USA seeks to meet or exceed these standards on each home that we build.

Frequently asked questions about your new Ichijo USA Home Performance and Warranty

Congratulations and thank you for allowing Ichijo USA to build your home. We understand that your new home is a major investment so we would like to answer the most frequently asked questions about the warranty on your home and set realistic expectations for the performance of your home. Prior to closing, your home receives a 200+ point Quality Control Inspection from our in-house professionals to insure that it meets or exceeds the Residential Construction Standards established by the National Association of Home Builders as modified for our area.

When your home is completed and ready for closing, we will introduce you to the features and functions of your new home with an Orientation process. This usually takes between 30 minutes to an hour to complete and gives us a chance to note any final touch ups that may need to be completed prior to your closing. Then we explain homeowner responsibilities and general maintenance of your new home. Refer to your Warranty Booklet for further information. All warranty documents will be provided at

the Orientation. The final step prior to closing is to do a final walk through, to verify that all items listed on the Orientation Checklist are complete and your new home is ready for you to enjoy after closing. Once this Orientation process is complete and signed off, this signifies your acceptance of the home and that all required features or upgrades have been installed or completed. Remember, in addition to our 1 Year Builder Warranty, your home is also covered by a 10 Year Structural Warranty from Residential Warranty Corporation!

Q. What is Ichijo USA's warranty policy concerning scratched window glass, damaged countertops, damaged cabinets, or other similar damages after I close?

A. Damages such as scratched glass, cuts in vinyl flooring, damaged countertops, drywall repairs & paint touch-ups are not warranted after closing. These items must be noted on the Orientation Builders Checklist and taken care of prior to closing. Ichijo USA will not be responsible for paint touch matches after closing; however, we will match with the closest available standard color.

Q. What is Ichijo USA's policy concerning concrete?

A. Concrete surfaces will sometimes crack due to normal expansion and contraction and temperature changes; they may also develop cracks from soil movement underneath due to rain, evaporation, etc. Most cracks have no structural significance and are of no concern. Cracks in garage, driveway, walkway and patio that are in excess of 1/4 inch in width or vertical displacement will be repaired. Foundation cracks greater than 1/8 inch will be repaired. In accordance with our warranty policy, we will make any necessary repairs to correct these conditions. Ichijo USA will not be responsible for color variations when repairs are required.

Q. What are Ichijo USA's policies covering roof issues?

A. Roof issues will be covered for the first year as outlined in the warranty documents. A Materials Warranty will be provided and covered by the manufacturer; this is usually 15 to 20 years depending on the shingles used.

Q. What is Ichijo USA's warranty policies for ceramic tile?

A. Ceramic tile issue will be covered for the first year as outlined in the warranty documents. If tiles are to be replaced, Ichijo USA does not assume the responsible for color variations or die lot matches on tile that has been discontinued. Wall tiles will be also covered for one year from the date of closing.

Q. What should I do if I have a Plumbing emergency after hours?

A. Ichijo USA provides 24 hour 7 days a week emergency service through our plumbing contractor. You will be provided an emergency number for this purpose. We would like for you to contact our warranty department the next business day as well so that we may make any necessary visits to evaluate the problem and reduce the chance of other concerns.

Q. How will I know where my property lines are if I want to do make any alterations to my property after I close?

A. We will provide you with property pins on the corners of your lot, which will enable your contractor to locate the lot lines prior to his installation. It is your responsibility to provide this information to your contractors as well as your contractor's responsibility to verify these measurements prior to making any improvements to your property. Be sure to check the Covenants and Restrictions for your neighborhood prior to making any alterations to your property, as a written architectural approval is usually required.

OTHER INFORMATION:

1. Be sure to read and understand the Warranty Documents completely.
2. Be sure to contact our warranty department as soon as possible to report any leaks that you may notice. This will help reduce the chance of a small problem turning into a larger one.
3. Driveways, walks, patios and exterior walls can be pressure washed. Avoid high pressures to reduce the chance of damage to the surface being cleaned. It is not recommended that you Pressure Wash your windows as this could result in damage that might void the warranty.
4. Check your roof shingles after heavy storms or high winds to make sure that there are no damaged or missing shingles.
5. Change A/C filters monthly. Have unit serviced at least once a year for proper operation.
6. Know where all major shut-off valves are located.
7. Some items on your new home may have extended warranties that will be provided by the manufacturer. Please consult these documents for further information.
8. Ichijo USA does not assume responsible for conditions that are beyond our control.
9. Personal property including furnishings are not covered by this warranty.

How to Submit a Warranty Claim

Normal Procedures

Prior to submitting your request, please review the Ichijo Warranty on the following pages to verify that your claim is covered.

To submit your warranty request, visit the Ichijo website at: www.ichijousa.com and click on the "Homeowners" tab or email warranty@ichijousa.com directly. Please be advised that someone will respond to your request within 3 business days.

Emergency Service

<u>Problem</u>	<u>Solution</u>
Total loss of heating or air conditioning	Contact the HVAC (AirConditioning) Co.
Total loss of electricity	Check with utility company for outages
Plumbing leak or plumbing backup	Shutoff entire water supply to home
Total of loss water	Check with utility company for outages

In case of emergency, your first step should be to protect your family from harm. Once you are sure of their safety, and if you safety will not be jeopardized, you should take steps to correct or lessen the effects of the emergency.

Damage from a water leak can be minimized by turning off the water to a particular fixture or turning off the water main to your home. The water main shut-off valve is located at the water meter box, which is generally located at the property line. Please refer to the "Plumbing" section of this manual for further discussion of the water shut-off locations.

Please notify our office as soon as possible if a roof leak is experienced. Failure to notify us promptly could exacerbate the situation creating a much greater chance of further damage.

Do not delay in reporting an emergency. Subsequent damage caused by a delay in reporting an emergency will not be the responsibility of Ichijo USA. Damage to personal property is not covered by Ichijo USA's Limited Warranty

If your situation does not fall within the emergency guidelines, please use the procedures outline for requesting routine warranty service.

Ichijo Limited Warranty

1 Coverage period

ICHIJO to provide Limited Warranty for 1 year, 2 year and 10 year respectively depending on the building components and elements. (attached hereto as Appendix A) This Limited Warranty commences on the date of closing, or the date of Home Owner's occupancy whichever occurs first. This Limited Warranty is in effect only if ICHIJO is in receipt of entire contracted/purchase price.

2 Request for warranty services

Warranty inquiries have to be in writing to be considered by ICHIJO. No Limited Warranty work will be performed nor guaranteed until request has been received in writing, unless designated an emergency.

3 Remedy

ICHIJO will, within a reasonable time, examine an alleged defect to determine if it is covered by this Limited Warranty. A defect covered by this Warranty will be repaired, replaced, or replaced with item of like kind, at ICHIJO's expense. Home Owner agreed to bear the cost for the water, gas and electricity necessary for the Warranty work for using tools and/or equipment, washing, drying, cleaning and such. Any repair or replacement shall not extend the Warranty term. The total liability of Warranty is limited and shall not exceed the purchase price of the home in the Purchase and Sale Agreement.

4 Right of access

Homeowner to provide ICHIJO access to property to perform its work under this Warranty. Failure to provide such access may relieve ICHIJO of its obligations.

5 Exclusions

- 1) Damages or losses resulting from accidents; civil commotion; acts of God or Nature – including, but not limited to wind storms, wind driven water, floods, sink holes, hail, lightning, fallen trees, earthquakes, explosions, fire, smoke, water escape, or changes in underground water table.
- 2) Defects or damages caused by animal droppings, rubbing, eating or infestation.
- 3) Any condition which does not result in actual physical damage to the Home including, but not limited to uninhabitability or health risk due to presence or consequence of unacceptable levels of radon gas, formaldehyde, mold, carcinogenic substances, or other pollutants and contaminants, or the presence of hazardous or toxic materials.
- 4) Any soil erosion/sedimentation or storm water control management systems that are approved by a governing jurisdiction.
- 5) Expenses a Home Owner may incur as a consequence of defects or warranty repair include but are not limited to the cost of having to move out while repairs are being made, household appliances, or personal properties.
- 6) Any consequential, indirect, punitive damages which may arise from defects or warranty repair including but not limited to bodily injury, loss of use, loss of data, loss of income or profit, and/or claims of third parties.
- 7) Any defects, damage, or loss which is caused by negligence including but not limited to unattended water leak or visible mold growth, insufficient maintenance, or improper use of Home Owner or anyone other than ICHIJO or its employees, agents, or subcontractors.

6 Regarding warranty for any appliance or equipment provided by ICHIJO, including but not limited to water heaters, pumps, stoves, ranges, ovens, garbage disposals, dishwashers, furnaces, air conditioning units, heat pumps, photovoltaic systems and other similar items, Home Owner shall refer to the manufacturer's warranties to the Home Owner, which require registration by Homeowner to uphold manufacturer's specific warranty.

7 Discoloring

Repairing, repainting or replacement of interior or exterior surface, including driveways and sidewalks, shall be limited to the defective area.

8 Transfer of Ichijo Warranty

One (1) year Materials & Workmanship Warranty will automatically terminate if the property is leased, vacated or sold by original Home Owner. Only two (2) year System Warranty and ten (10) year Structural Warranty will stay with the home and automatically transfer to the new owner upon change of ownership.

Appendix A

■ 1 Year Materials & Workmanship Warranty

This warranty covers material defects and general workmanship for interior and exterior finishes. Warranty standard and coverage are as follows;

1. Finishes (Drywall, Paint, Carpet, etc.)
The Warranty provides protection against defects in finishes in the home, including drywall, lath and plaster walls and ceilings, hard-surface flooring, bathtubs, showers and countertops, resilient and finished-wood flooring, trims, interior and exterior painting and carpeting.
2. Nail pops and drywall cracks
The Warranty provides repair for nail pops and drywall cracks caused by acclimation to the temperature and humidity of the seasons.
3. Roof
The Warranty covers roof leaks that are caused by rain, normal wear or natural deterioration on a well-maintained roof. The leak caused by buildup of snow, ice, leaves, bird droppings or other build up that prevents rainwater drainage shall not be considered a defect and such water penetration shall not be covered.
4. Doors & Windows
For proper fit and smooth operation, interior, exterior and garage doors, doorknobs, deadbolts and locksets, wood, plastic and metal windows, glass and glazing; and storm doors, windows and screens are covered.
5. Concrete
For protection against defects in concrete surfaces, warranty coverage includes concrete basement and attached garage floors, slab-on-grade floors with finish flooring, stoops and steps, and interior concrete work. Small cracks not affecting structural stability are not unusual on the surface of the concrete. Cracks greater than 1/4 inch will be repaired by concrete caulk.
6. Cabinets & Vanities
To keep kitchens and bathrooms functional, warranty coverage includes defects in kitchen and vanity cabinet doors and drawers, as well as high-pressure laminated kitchen and vanity countertops.

7. Electrical Components
The Warranty provides coverage against defects in receptacles, fixtures, fuses, ground-fault circuit interrupters (GFCI) and circuit breakers. This excludes light bulbs and batteries.
8. Masonry
The Warranty coverage includes workmanship on masonry, brick and stone veneer, concrete block basement walls, stucco and cement plaster walls. Due to lime content and porous property, discoloration, efflorescence, chemical reaction or water absorption shall not be covered.
9. Thermal & Moisture Protection
The Warranty coverage provides protection against defects in waterproofing, moisture control and ventilation in basements, attics and roofs; insulation around living areas; exterior wall caulking, and siding, gutters and downspouts.
10. Mechanical
The Warranty coverage is provided for plumbing and water supply fixtures such as faucets, valves and water pipes, as well as operation of the heating and cooling system.
11. Site Work
The warranty includes protection against defects in the grading established by the builder in backfilled areas of the foundation so surface water drains away from the home. There should be no standing water in the yard 48 hours after no rainfall.

■ 2 year System Warranty

This warranty protects a home from defects in the electrical, plumbing and mechanical distribution systems for a full two years.

1. Mechanical (Waste Piping)
For smooth-flowing pipes, the systems warranty covers repairs to sanitary sewers, fixtures, and waste and drain lines to prevent clogs or poor drainage.
2. Electrical System
The systems warranty covers wiring and electrical conductors, ensuring that the home's wiring carries its designed load
3. Mechanical (Duct Work)
To provide a temperature-controlled environment all year long, systems warranty

coverage includes repairs to the home's heating and cooling ductwork if it separates or detaches.

4. Mechanical (Plumbing)

To keep water flowing in and out of the home, systems warranty coverage includes waste, vent and water pipe leaks and bursts; heating and air conditioning refrigerant lineleaks; and water supply and septic tank system operation.

■ 10 year Structural Warranty

Structural defects are defined as physical damage to a home's designated load-bearing elements described below caused by failure that affects their load-bearing function to the extent that the home becomes unsafe, unsanitary or otherwise unlivable.

1. Roof Framing Systems
2. Floor Framing
3. Load-Bearing Walls & Partitions
4. Beams, Girders
5. Columns
6. Footing & Foundation Systems.
7. Window structural and glazing units

USE AND CARE OF YOUR HOME

Your home has been constructed with quality materials and the labor of experienced craftsmen. Prior to our using any material, it must meet our specifications for quality and durability. All work is done under our supervision to attain the best possible results.

A home is one of the last hand-built products left in the world. Homebuilding is part art, part science and part hard labor. No two homes, even of the same plan, will be constructed exactly alike. Once the natural and man-made materials have been assembled, the components interact with each other and the environment. Although quality materials and workmanship have been used in your home, this does not mean that it will be free from care and maintenance. A home, like an automobile, requires care and regular maintenance. This is essential to providing a quality home for a lifetime. Please refer to the schedule in this manual for maintenance guidelines.

We are proud of the product we build and the neighborhoods in which we build. We strive to create long lasting value. This cannot be achieved unless you, as the homeowner, properly maintain your home and all of its components. Periodic maintenance is necessary because of a number of factors such as 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 can also impact your home.

Many times a minor adjustment or repair done immediately by you saves a more serious time consuming and sometimes costly repair later. Note also that negligence of routine maintenance can void applicable limited warranty coverage on all or part of your home.

We recognize that it is impossible to anticipate and describe every attention that may be needed for good home care; however, we have covered many important details. The subjects covered include components of homes we build, listed in alphabetical order. Each topic includes suggestions for use and care. Some components may be discussed here which are not present in your home.

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

We make every effort to keep our information current and accurate. However, if any detail in our discussion conflicts with the manufacturer's recommendations, the manufacturer's recommendations should be followed. Activate specific manufacturer warranties by completing and mailing the registration cards included with their materials. In some cases, manufacturer warranties may extend beyond the first year; it is in your best interest to be familiar with such coverage. By caring for your home attentively, you insure your enjoyment of it for years to come. The attention provided by each homeowner contributes significantly to the overall desirability of the community.

While we strive to build a defect free home, we are realistic enough to know that we may make mistakes or that something in the home may not perform as intended. When either occurs, we will make the necessary corrections. In support of this commitment, Ichijo USA provides you with a one year limited warranty.

**For your protection, for accuracy, and for efficient operation of our service activities, non-emergency items must be reported in writing.
We do not accept reports for routine warranty items over the phone.**

Recommended Maintenance Schedule

Maintenance (scheduling & cost) is the responsibility of the Homeowner

Item	Monthly Interval (1 thru 6)					
	1	2	3	4	5	6
Air Filter-HVAC System			Replace			Replace
Backflow Preventer (where applicable)						
Caulking – Exterior (entrances & windows)			Inspect			Inspect
Caulking – Interior (wet areas)			Inspect/Replace			Inspect/Replace
Clothes Dryer Lint Duct & Filter						Clean Out Vent
Condensation Line – HVAC System	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect
Exterior Drainage						Inspect
Faucet Aerator			Clean			Clean
Fireplace Flue/Chimney						Inspect/Clean
Front Door Finish Metal/Fiberglass	Clean	Clean	Clean	Clean	Clean	Clean
Garage Doors			Lubricate			Lubricate/Inspect
Garbage Disposal	Flush/Clean	Flush/Clea	Flush/Clean	Flush/Clean	Flush/Clean	Flush/Clean
Gutters/Downspouts			Inspect/Clean			Inspect/Clean
HVAC System Check *						Inspect
Plumbing Drains			Inspect/Clean			Inspect/Clean
Range Hood Fan Filter		Clean		Clean		Clean
Screens (doors & windows)			Inspect			Inspect/Clean
Smoke Detectors	Test	Test	Test	Test	Test	Test
Sprinklers (where applicable)						
Water Heater						Flush
Water Heater (tankless)						
Weep Holes (windows & sliding doors)						Inspect, Clean
Whole House Fan						

Item	Monthly Interval (7 thru 12)					
	7	8	9	10	11	12
Air Filter-HVAC System			Replace			Replace
Backflow Preventer (where applicable)						Inspect
Caulking – Exterior (entrances & windows)			Inspect			Inspect
Caulking – Interior (wet areas)			Inspect/Replace			Inspect/Replace
Clothes Dryer Lint Duct & Filter						Clean
Condensation Line – HVAC System	Inspect	Inspect	Inspect	Inspect	Inspect	Inspect
Exterior Drainage						Inspect
Faucet Aerator			Clean			Clean
Fireplace Flue/Chimney						Inspect/Clean
Front Door Finish Metal	Clean	Clean	Clean	Clean	Clean	Clean/Repaint
Garage Doors			Lubricate			Lubricate/Inspect
Garbage Disposal	Flush/Clean	Flush/Clea	Flush/Clean	Flush/Clean	Flush/Clean	Flush/Clean
Gutters/Downspouts			Inspect/Clean			Inspect/Clean
HVAC System Check *						Inspect
Plumbing Drains			Inspect/Clean			Inspect/Clean
Range Hood Fan Filter		Clean		Clean		Clean
Screens (doors & windows)			Inspect			Inspect/Clean
Smoke Detectors	Test	Test	Test	Test	Test	Test
Sprinklers (where applicable)						Inspect
Water Heater						Flush
Water Heater (tankless)						Inspect
Weep Holes						Inspect, Clean
Whole House Fan						Inspect

* Call a Licensed HVAC Contractor to service your Air Conditioning and Heating system at least once a year!

Appliances

Read and follow all manufacturer requirements for each appliance in your home.

Manufacturer Service

If a problem arises with an appliance after the one year limited warranty period, contact the Customer Service number listed in the manufacturer's warranty booklet. When reporting warranty items to the appliance manufacturer, be prepared to supply the following:

- the date of purchase (closing date)
- the serial number and model number (found on a metal plate on the side or bottom of each appliance)
- a description of the problem

Registration

Mail warranty registration cards directly to the manufacturer.

Appliance Warranties

All appliance warranties are assigned to you at the closing. The appliances are warranted directly to you in accordance with the terms and conditions of the written warranties supplied by their manufacturers.

Attic Access and Insulation

The attic space is not intended for storage of any kind (excessive weight could jeopardize the integrity of the trusses and void your warranty). Access is provided for purposes of maintaining mechanical equipment that may traverse the attic space. When performing any needed tasks in the attic, caution should be used not to step off wooden members onto the drywall. This can result in personal injury and/or damage to the ceiling below. Such injury or damage is not covered by your limited warranty.

Insulation

The effectiveness of blown insulation is diminished if it is uneven. The last step in any work done in your attic should be to confirm that the insulation lies smoothly and evenly. Do not step on drywall ceilings; personal injury or damage to drywall can result.

Building Codes

Insulation installed in your home meets or exceeds the building codes applicable to your home at the time of construction.

Cabinetry

The best practice for preserving your cabinet surfaces is to always keep them dry and clean. Leaving water, spills, & splatter on your cabinetry for prolonged periods may lead to spotting, clouding, and discoloration.

Cleaning and Maintaining Cabinetry Doors:

“Piano Finish” cabinet doors literally receive a mirror-like coating comparable to pianos. While designed to be low and easy maintenance, certain precautions are necessary to preserve the original finish. To prevent scratching, only use clean, soft fabrics such as those used to clean eye wear. For everyday maintenance, a slightly dampened cloth is sufficient, followed by drying- off excess moisture. For stubborn cleaning, use of small amounts of mild detergent or rubbing alcohol is acceptable. Actual piano cleaner/polishes are also available which are ideal as they not only clean but protect and enhance the finish.



PRECAUTIONS:

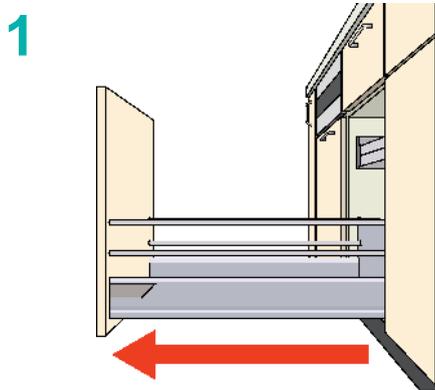
Do not use abrasives and strong chemicals such as cleansers, paint thinners, bleach, and mold/mildew removers as they can scratch and discolor the finish

Kitchen Cabinets

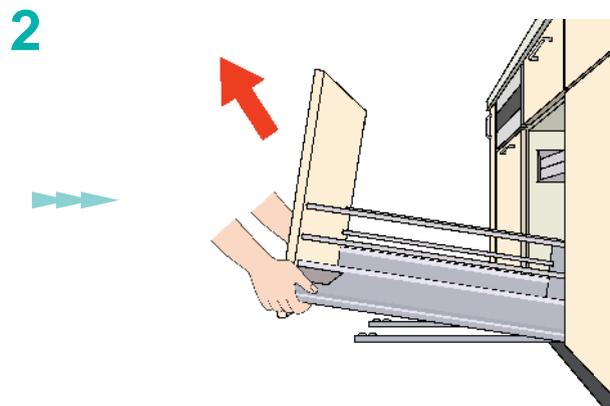
DRAWER REMOVAL AND INSTALLATION

Begin by first removing everything inside the drawer box. Then follow the steps below. To prevent scratching or denting your floor, lay down floor protection such as heavy cardboard under the area of work.

■ Drawer Removal

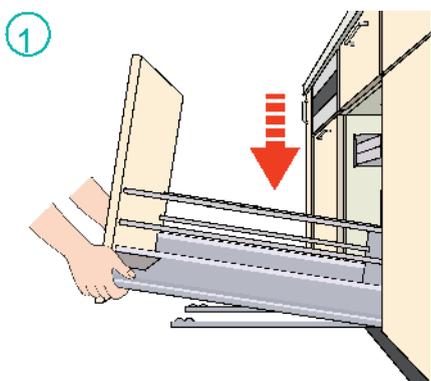


Fully extend the drawer

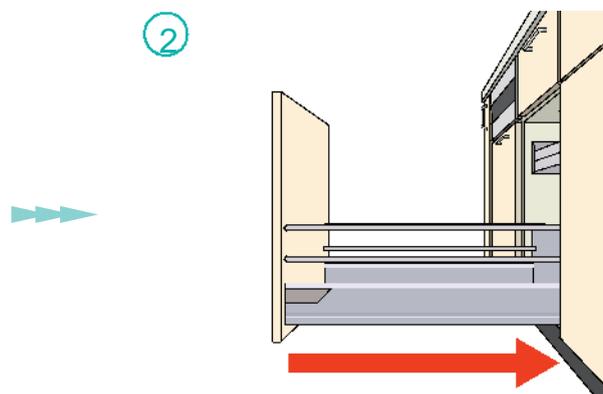


Using two hands, grasp the left and right front bottom corners of the drawer. The drawer will easily disconnect from the guides by tilting the drawer up and toward yourself

■ Drawer Installation



Pull the drawer guides (rails) in the cabinet all the way out. Place the drawer on the guides angled forward as illustrated.



Once the drawer is correctly positioned in the guides, as you push the drawer into the cabinet, the drawer will "click" into position and smoothly close.

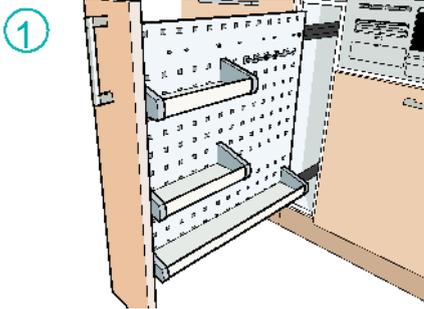
PRECAUTIONS:

- As drawers may be heavy, it is recommended that two people perform drawer removal & installation.
- It may take a few tries before you get a feel for how the drawer needs to be seated in the drawer guides. Open and closes a few times to confirm correct installation.

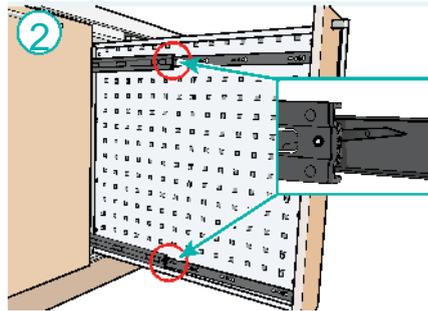
Kitchen Cabinetry Removal & Installation

Multi-purpose slide-out rack: Removal & Installation

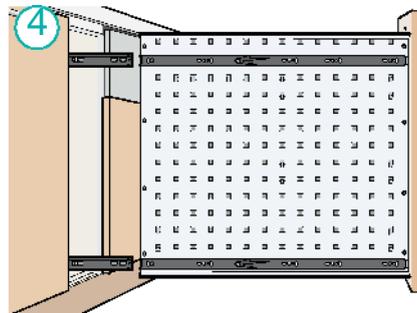
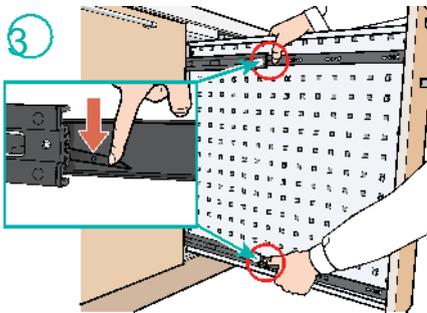
Fully open the slide-out rack. Locate tracks & release lever on the rear side. Using your thumbs, push the lever attached to both the top and bottom tracks simultaneously and pull out the drawer. This will release the track from the cabinet, allowing the drawer to be removed from the cabinet.



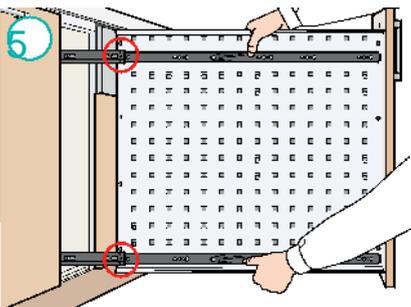
1 First completely remove all contents in the slide-out rack



2 Engage the lever on both tracks



4 While depressing the levers, slide the drawer all-the-way out



5 To reinstall the slide-out rack, simply align the rails into the tracks and push the drawer back inside

PRECAUTIONS:

- Make sure to remove contents before attempting slide-out rack removal
- After reinstalling the slide-out rack, make certain the rails are once again locked into the tracks by pulling the drawer all the way out and back in, before placing items back into storage and ordinary use.

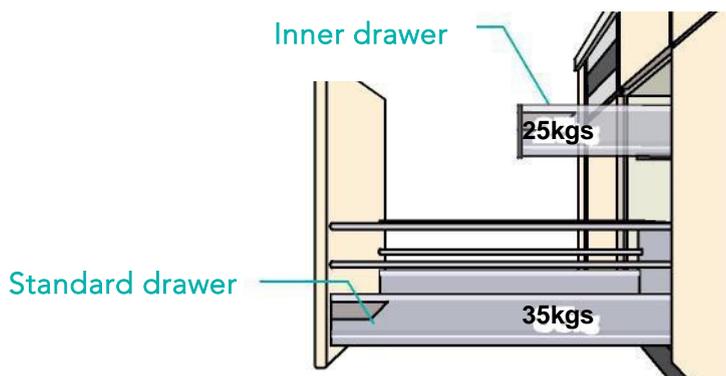
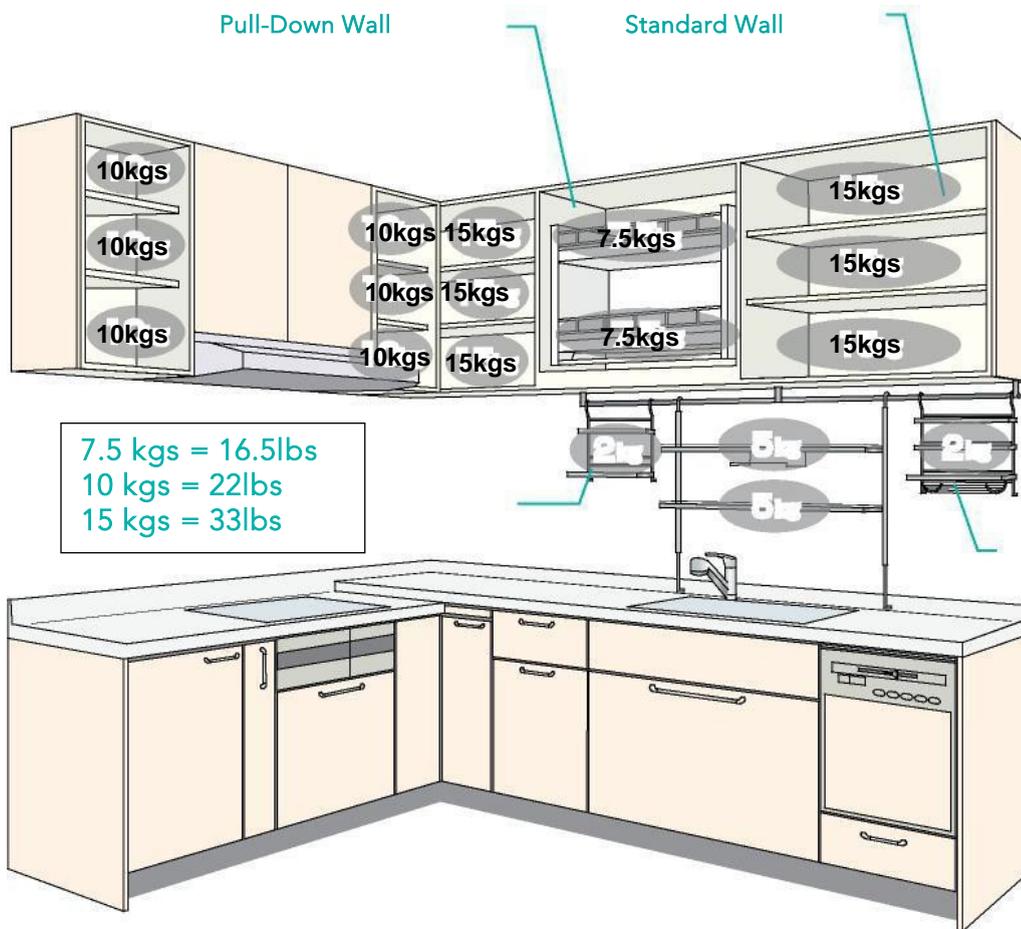
Kitchen Cabinetry

STORAGE WEIGHT CAPACITIES

Please do not exceed storage weight capacities. Your cabinetry was designed and manufactured with set weight limits. Over-loading could result in damaging your cabinets and possessions, as well as possible injury if a cabinet falls off.

□ Maximum Load Capacities

Especially wall cabinets tend to be over-loaded. Please see the chart below and observe the listed weight limits.



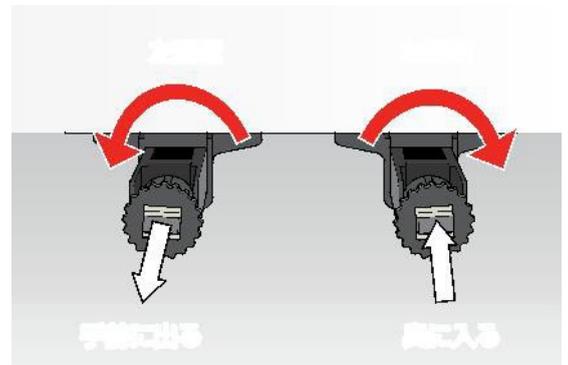
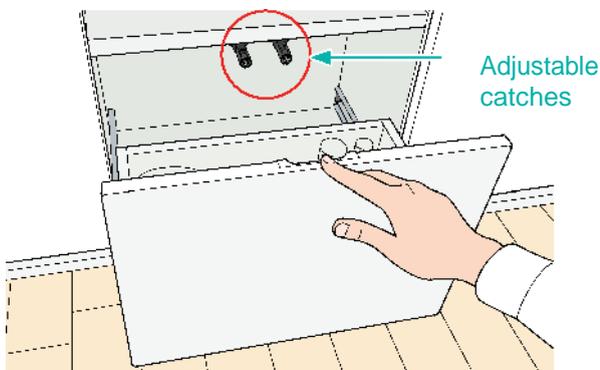
All inner drawers 25 kgs / 55 lbs
All standard drawers 35 kgs / 77lbs

Vanity Cabinetry

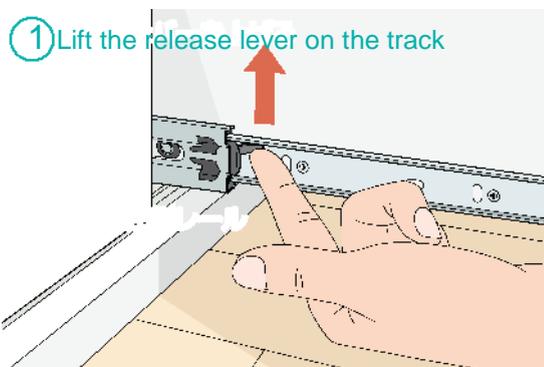
Push Latch Drawer Adjustment & Removal

Powder Rooms furnished with a push latch drawer, which opens by a simple light push without the need for pulls or knobs: Follow the steps below for adjustment and drawer removal and reinstallation.

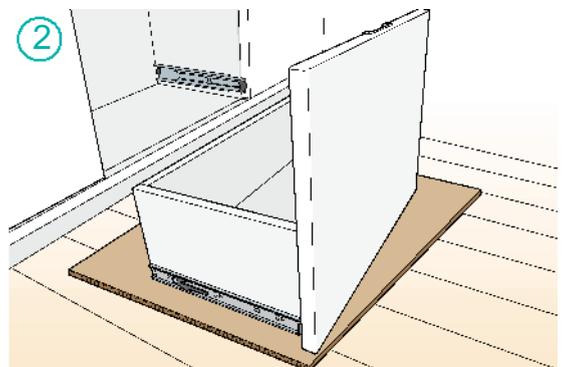
If the push latch drawer fails to operate smoothly, open the drawer and locate the two magnetic catch mechanisms. Turning the dials either to the left or right adjusts the distance of the magnet latches to the metal plate on the inside of the drawer panel. The ideal setting is for both magnets to catch simultaneously. Turn the dials in small increments until smooth operation is restored.



□ Drawer Removal



Fully extend the drawer. Push the release lever on the left rail up, push the release lever on the right down.



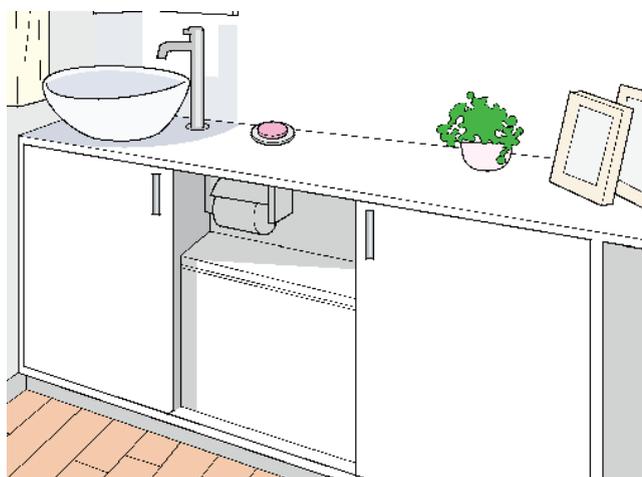
While depressing both levers, slide the drawer out and set on something which protects your floor.

Precautions:

- Remove contents in the drawer before removing/installing drawers
- Set the drawer on a sheet of thick cardboard to prevent scratching or denting your floor

Powder Room vanity usage tips

Your powder room maybe furnished with a vessel sink. Typical to vessel sinks, it may not have an overflow. When using a drain stopper, do not leave water running unattended to prevent overflows.



□Cleaning the countertop and cabinet doors:

Using a clean soft damp cloth, wipe countertops and door surfaces. Only use mild non- abrasive household detergents for more aggressive cleaning.

Concrete

Foundation

The foundation of your home has been designed and installed in accordance with the recommendations of our consulting engineer. Even though the foundation has been designed by an engineer and constructed in accordance with engineering requirements, cracks can still develop in the wall. Unless there is water seepage coming through such a crack, it is most likely a surface crack and will not be detrimental to the structural integrity of your home. Unless cracks exceed 1/8" in width they are not covered by the Limited Warranty.

By maintaining good drainage, your home's foundation is protected as well as the concrete flatwork (e.g., porch, patio, driveway, sidewalks, entry walks, etc.).

Concrete Slab

The concrete slab in your home has been designed and installed in accordance with the recommendations of our consulting engineer. Even though the slab has been designed by an engineer and constructed in accordance with engineering requirements, cracks can still develop. Unless the cracks are significant enough to affect the finished floor appearance they are usually not of concern. If cracks develop within the area designed as living space and exceed 1/4" in width or vertical displacement they are not covered by the Limited Warranty.

Flatwork

To properly care for your exterior concrete, always be aware of areas where water is collecting and fill these in. Do not allow downspouts to drain in such a way that the water can get under the concrete.

Cracks in Flatwork

Although we use accepted construction procedures for the installation of concrete flatwork, this does not guarantee there will be no cracking. Due to normal expansion and contraction, some cracking in concrete occurs in almost all homes. Cracks do not mean that your foundation or flatwork is not operating properly. Cracks that do not exceed 1/4" are not covered by the limited homeowner warranty. When cracks are covered, the repair provided is sealing the crack. Concrete is not replaced due to cracking.

By maintaining good drainage away from your home, you are protecting your home's foundation. Maintenance of drainage away from all concrete slabs will minimize cracking and other forms of movement.

Expansion Joints

Expansion joints have been used to help control expansion; however, concrete is also susceptible to shrinking. If the concrete shrinks, moisture can penetrate underneath the concrete and lift the expansion joint. If this occurs, the gap can be filled with a gray

silicone sealant, which can be purchased at most hardware stores.

Heavy Vehicles

Do not permit heavy vehicles (e.g., moving vans, concrete trucks, etc.) to drive on your concrete work. This concrete is not intended to bear the weight of these types of vehicles.

Spalling

Repeated hosing of concrete for cleaning animal urine, radiator overflow, fertilizer, ice melting agents and/or road salts are some of the causes of spalling (e.g., chipping or flaking). Ichijo USA is not responsible for the repair of spalling.

Cleaning of the garage floor by hosing can also cause settling and increase soil movement by allowing water to penetrate any existing cracks. Ichijo USA will not be responsible for repairs needed due to such action.

Sweeping/Cleaning

Do not wash patios, porches, drives, etc. with cold water from an outside faucet when temperatures are extremely high and the hot sun has been shining on the concrete. The abrupt change in temperature can damage the surface bond of the concrete. Sweeping is the recommended method of keeping exterior concrete clean. If washing is necessary, do this when temperatures are moderate.

Settling or Heaving of Flatwork

Excessive settling or heaving (over one inch) should be reported in writing so that an inspection can be made. Please refer to your warranties to determine coverage.

Concrete Flatwork

Concrete flatwork is in essence a "floating slab" -- it is not attached to your home's foundation. The concrete flatwork is not a structural (load bearing) element of your home and is not covered by warranties covering your home's foundation. Concrete flatwork will move due to expansion/contraction of soils on which it rests; cracks in such flatwork are normal.

Condensation

Condensation on interior surfaces of the windows and frames is normal and results from high humidity within the home and low outside temperatures and inadequate ventilation. These conditions are significantly influenced by family lifestyle. If your home includes a humidifier, closely observe manufacturer's directions, especially during periods of cooler temperatures. Please see the section on "Mold & Mildew" in this manual as well as the "Mold Disclosure" in your contract for further information.

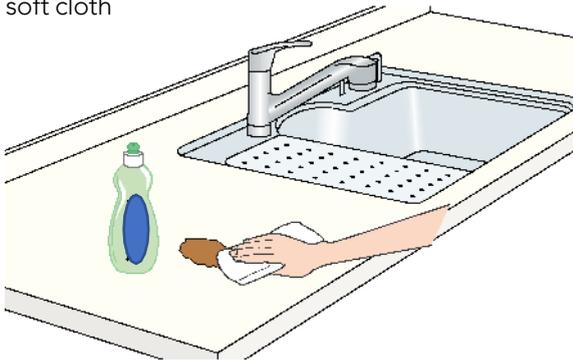
Countertops: Vanity (bathroom) & Quartz

Promptly wipe up all drips and spills which may discolor or stain your countertop, wiping it clean with a damp, soft, clean cloth. Doing so will help preserve the original look of your countertop.

■ Cleaning your countertops

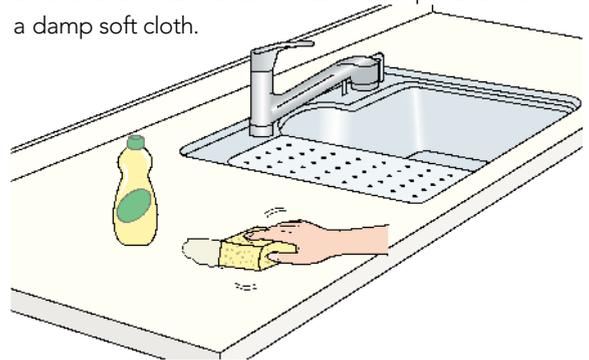
□ Light spills

Light spills made by items such as coffee or tea can be cleaned by applying a small amount of ordinary hand-wash dish soap to a moistened soft cloth



□ Stubborn spills

Apply a small amount of ordinary toothpaste over the area. Using a non-abrasive sponge, scrub the area until the stain is removed. Then wipe clean with a damp soft cloth.



□ Scratch marks

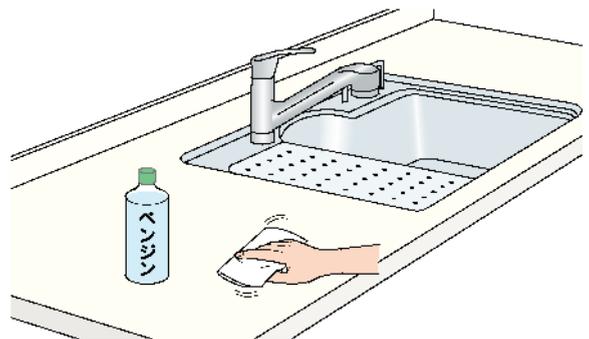
Only after unsuccessfully trying milder cleaners, apply a small amount of nail polish remover to a soft cloth, and scrub the area clean. Wipe up the remaining material immediately with a water damp soft cloth

※ Sandpaper is NOT recommended as it can leave mineral swirl marks on the surface



□ Heavy stains

※ Always test strong chemical & abrasive cleaning agents on less noticeable areas first, since they can discolor and/or scratch countertop surfaces



⚠ PRECAUTIONS

- Your countertop is a hard surface by design. Gently place fragile items such as glass and porcelain to prevent breakage.
- Never lay scalding hot items on your countertop as they can burn and discolor the surface.



www.tufdek.com

MAINTENANCE INSTRUCTIONS

FOR TUFDEK™ VINYL DECKING

All exposed vinyl deck membranes get dirty over the life of the vinyl from airborne pollutants, dirt and foot traffic. The type of dirt accumulation is related to the location of the installed product, type of use and the surrounding environment. Each type of “dirt” requires a slightly different approach and level of effort to remove it from the textured surface of the TUFDEK™ vinyl deck membrane. These Instructions are in addition to, and do not replace, the Required Maintenance instructions contained in the Limited Product and Workmanship Warranty.

Detailed maintenance instructions for your TUFDEK™ vinyl deck membrane.

1. Regularly broom clean the deck surface. This will remove loose dirt and debris that might clog the drains or abrade the membrane surface during washing.
2. Wet the deck surface and allow to “soak” for five minutes to soften any dried debris.
3. Loosen the dirt from the membrane surface with a stiff bristle brush scrubbing in a circular motion which will help lift any dirt at the bottom of the textured surface.
4. Rinse the area of the membrane being worked with clean water to assess the effectiveness of the cleaning.
5. If there is still dirt in the texture of the membrane, thoroughly re-wet the deck surface with hot water from your household tap (no hotter than 49 C / 120 F) and allow to soak for five minutes.
6. While soaking, re-scrub the membrane surface with a stiff bristle brush.
7. Rinse the area of the membrane being worked with clean water to assess the effectiveness of the cleaning.
8. The above steps will remove most forms of dirt. If one washing does not remove the dirt, you may need to repeat steps 1-7 numerous times.



Pressure washing equipment can severely damage vinyl deck membranes if not used with caution. If a pressure washer is used please keep the following items in mind:

1. Do not use any pressure washer tip with less than a 30° arc. Tips with a concentration angle smaller than 30° can damage the vinyl decking membrane.
2. Do not use a rotating tip apparatus.
3. Maintain a minimum of 24” (60 cm) between the pressure washer nozzle tip and the vinyl membrane.
4. Do not use a pressure washer rated higher than 2500 psi (17 MPa).

Tougher Stains:

Tuff Industries Inc. can provide no advice on alternate cleaning solutions. Many household chemicals and cleaning products will leave a residue which can alter the performance and / or appearance of the vinyl membrane product. If you choose to clean Tuff vinyl membranes with any cleaning solution other than clean fresh water Tuff Industries Inc. will not be held responsible for damages caused from these cleaning solutions.

If you suspect the vinyl deck membrane system may have been damaged during the cleaning process, contact the installation contractor who installed the membrane.





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CAUTIONS & WARNINGS

- Damage to Tuff vinyl deck membranes during washing operations is not covered under the warranty. The building owner assumes all risk for damage to the vinyl deck membrane during the cleaning process. Use extreme caution in performing the work.
- If damage occurs during the cleaning process, it is the responsibility of the owner to repair.
- Do not abrade, cut or scrape the surface of the vinyl deck membrane.
- Seams are typically laid shingle fashion towards the drain or gutter. Do not agitate, power wash or scrub against the seam, instead go over the top or parallel to it.
- Perform a visual inspection of the vinyl deck system before and after cleaning to identify any pre-existing damage and to verify the effectiveness of the cleaning process.
- Do not use, or allow others to use, an electric or gas powered floor polisher on the vinyl membrane.
- It is the owner's responsibility to become familiar with, and abide by, local and regional codes and laws regarding the proper disposal of cleaning water.
- Protect your vinyl deck membrane from scuffs, tears or excessive wear, refrain from dragging heavy and / or sharp objects across the deck and be aware of jagged edges that can damage the vinyl membrane.
- Wipe up all spills as soon as they occur and rinse area thoroughly with clean water.



- Be very cautious when using mats or throw rugs at doorways and landings, some of these materials are not compatible with vinyl and might discolor your Tuff vinyl membrane.
- Use of a plastic shovel to remove snow is acceptable, inspect the shovel for sharp edges or burrs before use.
- De-icing salt products can be used on Tuff vinyl deck membranes, however all products available in the market have not been tested. Some products may cause premature fading or discoloring of the vinyl membrane. Clean the vinyl deck membrane thoroughly in the spring to remove any leftover residue from the De-icer.
- BBQ areas should have a throw mat made of the Tuff vinyl membrane placed under and in front of the BBQ to prevent hot grease spills and burns.
- Vegetative matter such as leaves left in contact with your vinyl membrane can be especially difficult to clean. It is recommended that you periodically move such items as flower pots and patio furniture to prevent dirt buildup around these objects.
- Do not extinguish cigarettes on your vinyl membrane.
- Never permit pressure treated lumber products or pressure treated lumber residue from staircases, planters, railings, posts or foot traffic to come in contact with your Tuff vinyl deck membrane.

YOU SHOULD KNOW

Cleaning methods other than those listed in this document have not been tested by Tuff Industries Inc. All household cleaners, abrasives, steel wool, lacquer solvents, waxes and cleaning products or powders may cause permanent damage or discoloration to the membrane and therefore are NOT recommended.

Under no circumstances are Acids, Ketones, Turpentine, Solvents, Ammonias or other unnamed chemicals to be used.

The continual use and buildup of various cleaning products combined with long term exposure to heat and ultra violet light can cause permanent discoloration to Tuff vinyl membranes. Although these non-authorized cleaning methods may not show any immediate signs of discoloring, over time they could cause permanent damage.



AUTHORIZED DEALER, 15 YEAR PRODUCT WARRANTY

Tuff Industries Inc.
9570 Bottom Wood Lake Rd.
Lake Country BC V4V 1S7
(hereinafter known as "Tuff")

AND

CHINOOK ROOFING & GUTTERS

5113 PACIFIC HWY E SUITE 8 FIFE, WA 98424

(Tufdek® Authorized Dealer hereinafter known as the "Company")

LIMITED WORKMANSHIP AND PRODUCT WARRANTY

THE LIABILITY OF TUFF AND THE COMPANY UNDER THIS WARRANTY IS LIMITED.

PLEASE READ AND UNDERSTAND THE CONDITIONS APPEARING HEREIN.

For the purposes of this Warranty reference to "Recipient" means the original customer of the Work (as hereinafter defined) performed by the Company and this Warranty is not assignable or transferable by the original customer of the Work. For the purposes of this Warranty, the term "original customer" is limited to, as applicable, a contractor which has retained the Company to perform the Work, the purchaser of the Property (as defined below) from a contractor if a contractor owns the Property at the time of the Work or the owner of the Property at the time that the Work is performed on the Property.

LIMITED WORKMANSHIP WARRANTY

The Company warrants to the Recipient (hereinafter referred to as the "Workmanship Warranty") to repair, free of charge, any component of the Project (as defined below) which has failed solely due to defective installation workmanship performed by the Company or its employees or authorized agents or contractors, for a period of five (5) years from the completion of the Work, which completion shall be deemed to be the date of the Invoice (as defined below), specifically excepting any defects in any materials or components relating to or of the Project or the Work (which materials or components may be covered by separate manufacturers' warranties), provided that the Recipient strictly adheres to all of the terms and conditions set out in this Warranty and performs the requirements of the Maintenance Program, as set out below. "Work" means, and is limited to, the work and labour performed by the Company, or its employees or authorized agents or contractors, for the benefit of the Recipient and relating to the installation (the "Project") of the Product (as defined below) at the Recipient's property (the "Property") as indicated in the Company's invoice (the "Invoice") rendered in connection with the Work.

LIMITED PRODUCT WARRANTY

Tuff warrants (hereinafter referred to as the "Product Warranty"), subject to the terms, conditions and limitations contained in this Warranty, to the Recipient, in connection with the Recipient's purchase of the Tufdek® Professional Series vinyl decking membrane product (the "Product"), for a period of fifteen (15) years (the "Product Warranty Period"), that under normal use the Product shall be free from manufacturing defects which result in water leakage, provided that the Recipient strictly adheres to all of the terms and conditions set out in this Warranty and performs the requirements of the Maintenance Program, as set out below. If water leakage occurs within the Product Warranty Period, Tuff will, at its sole option: (i) repair or replace any portion of the Product which is determined by Tuff to be defective; or (ii) refund to the Recipient a prorated portion of the original Purchase Price (as defined below) for the Product (the "Pro Rata Refund") determined by multiplying the original Purchase Price by the number of remaining months of the Product Warranty Period (at the time that Tuff receives the Notice (as defined below)) divided by the total number of months of the Product Warranty Period. For the purposes of this Warranty reference to "Purchase Price" means the original purchase price for the Product paid by the authorized dealer of Tuff to Tuff. Provided, however, that in the event that the original Purchase Price cannot be determined, Tuff, at its sole discretion, shall be entitled to establish a fair value to be used in lieu of the original Purchase Price, which fair value so determined shall not exceed the then "list" price of Tuff as at the date of sale of the Product to the Recipient.

"The Product Warranty Period commences from the later of the: (i) date of installation of the Product at the Project, which installation date shall be deemed to be the date of the Invoice rendered to the Recipient in connection with the installation of the Product; or (ii) date of completion of the Project, which completion is evidenced by the issuance of a Certificate of Completion by a Payment Certifier pursuant to the British Columbia Builders Lien Act or issuance of an equivalent certificate or document in another jurisdiction in the event that the Property is located outside British Columbia.

REQUIRED MAINTENANCE

Once each year during the Recipient's ownership of the Project the Recipient agrees to inspect the Project and the Product and perform the following maintenance tasks:

- Check and repair, or cause to be repaired, all caulking, seams, fasteners and sealants to confirm proper adhesion. Repair or replace, or cause to be repaired or replaced, questionable areas with approved products and by qualified professionals.
- Do a complete visual inspection of deck surface to confirm the absence of cuts or abrasions. Contact Company and Tuff if any suspect areas are located.
- Never allow pressure treated lumber or any raw wood materials to come in contact with vinyl
- Any and all leaks or water penetration of the Project or the Product are to be reported to the Company and Tuff immediately.
- In connection with the Workmanship Warranty, service charges by the Company for customer-caused repairs are, as at the date of this Warranty, \$_____ per hour (1 hour minimum); provided, however, the Recipient acknowledges and agrees that these charges may be changed by the Company upon prior notification by the Company.
- Check all components of the Project and the Product for evidence of corrosion and clean, repair or replace, as applicable, components as required including, without limitation, as caused by accident, abuse, misuse, negligence, fire or act of God or if damaged by modifications, alterations or attachments made by, or other acts of, the Recipient which have not been authorized by the Company and Tuff.

This is a two page document, please read the entire warranty to understand your rights and responsibilities.

The Workmanship Warranty and the Product Warranty, as applicable, do not apply if:

- The Project or the Product, or any part thereof, has been damaged by accident, vandalism, abnormal usage or abuse, misuse, negligence, fire, natural disasters (including, but not limited to, lightning, wind, hail, floods, earthquakes, gales, hurricanes, tornadoes) or other act of God, settlement, warping, distortion, failure, normal weathering, cracking or movement of any deck, wall or foundation of building(s) on the Property, any damage by traffic on or about the Project or by impact of foreign objects or by contamination of the Product or of any membrane (in the case of the Workmanship Warranty) by corrosive chemicals, oils, greases, gases or any misuse, neglect or improper handling of the Project or the Product, infiltration or condensation or moisture in, through, around or above the walls, copings, HVAC systems or any part of any buildings or structures, ponding water caused by inadequate slope, improperly positioned drains or settling of any building or structure, lack of venting or the failure of the building or structure to prevent ingress of wind, vapour diffusion or precipitation into the Project or the Product or by other causes beyond the control of the Company or Tuff;
- The Project, the Product or any part thereof has been damaged by delivery or transport damage or work, modifications, alterations, repairs or attachments made by, or other acts of, the Recipient or third parties which have not been authorized by the Company and Tuff or by any separate manufacturer of materials or components;
- Any problems arising from the use of pressure treated lumber in conjunction or connection to the deck. Note: Never allow treated lumber to contact vinyl membrane.
- The Project, or any part or any materials or components thereof or the Product, has not been maintained in accordance with any instructions supplied by the Company or Tuff or any separate manufacturer;
- The Product was not installed in accordance with Tuff's standards or the Product was not installed by or on behalf of an authorized dealer of Tuff;
- The Product was installed or used in a commercial or industrial application or any other application which is not residential.

This Warranty excludes:

- Any problems arising as a result of improper preparation of the surface upon which the Project or the Product is installed or constructed, the structure of such surface or the materials used in connection with such surface or, in the case of the Product Warranty, the installation or workmanship relating to the installation of the Product;
- Any damage to the exterior or interior of structures or building(s) on the Property upon or in connection with which the Work was performed;
- Problems due to moisture including, without limitation, growth of mold, fungus, bacteria, spores, mycotoxins and the like, discoloration, alkali, condensation or hydrostatic pressure;
- Appearance problems such as color variations from samples or printed illustrations compared to actual production runs, fading, reduction of gloss or discoloration resulting from, but not limited to: weathering; puddling; pedestrian traffic; misuse; neglect; hydrostatic pressure; fungus or bacterial growth; biodegradable matter; problems due to inadequate slope of the surface, improperly positioned drains or building or structure settling or joint expansion which results in ponding water, lifting or nails, screws or substrate seams or cracks which become visible;
- Any imperfections (e.g., plywood joints, nails or screws, substrate delamination, telegraphing) which are not seen or visible to the human eye under the high noon sun from a minimum distance of five (5) feet;
- In the event a claim is approved under this Warranty: (i) the costs and expenses associated with the removal and replacement of siding, stucco, railings, hot tubs, planters, furniture, carpeting or any other materials either permanently or temporarily attached to the building or structure on which the Work was performed or the Product was installed; (ii) cleaning the building or structure on which the Work was performed or the Product was installed (since the repair or replacement of the Product or of any defective workmanship may require the application of a sealer); it is the responsibility of the Recipient to provide a clean surface for maximum adhesion; (iii) color matching of the Product or any other products; and (iv) the costs and expenses associated with the repair, removal or replacement of any and all overburden installed, placed or located on top of or near the Project or the Product and which shall include, without limitation, rooftop gardens, earth, soil, pavers, decks, patio and walking surface materials, planters, furniture, carpeting or any other materials either permanently or temporarily attached to the building or structure on which the Work was performed or the Product was installed.

QUALIFICATIONS FOR, AND CONDITIONS TO, WARRANTY COVERAGE

Warranty coverage hereunder shall only be provided by the Company and Tuff, as applicable, in accordance with the following:

- If the full purchase price for the Work performed by the Company has been paid to the Company and if the full purchase price for the Product and its installation and related services, has been paid to Tuff or its authorized dealer, as applicable.
- All claims under this Warranty are to be made by the Recipient in writing to the Company and Tuff, as applicable (the "Notice"), within thirty (30) days of the discovery of the alleged defect in workmanship or in the Product and within the period covered by this Warranty. All claims shall include a copy of this Warranty and a copy of the Invoice or contract establishing the date of performance of the Work by the Company, the date of purchase and installation of the Product at the Property and the original cost of the Product. The Company and Tuff, as applicable, must be allowed a reasonable opportunity to inspect, as contemplated below, any alleged defect before any warranty claim is processed or any repairs, replacements or Pro Rata Refunds are made hereunder. The Company and Tuff, as applicable, must also, as a result of such inspection, acknowledge in writing that the alleged defect in workmanship or in the Product is covered by this Warranty.
- Any defective Product may, at Tuff's sole option, become Tuff's property or be disposed of by the Recipient.
- At Tuff's sole option, either Tuff's own employees or agents or an authorized dealer (including the Company) may make the repair or replacement of a defect covered by the Product Warranty. The Recipient acknowledges and understands that Tuff and the Company (the latter of which sold the Product to the Recipient) are two separate entities. The Recipient further understands that the Company is solely liable for all installation-related repairs and defects.

LIMITATION OF LIABILITY

Workmanship Warranty

The Company's workmanship or any part thereof in connection with the Work claimed to be defective shall be held until inspected by an authorized representative of the Company and, upon his specific instructions, the Company's workmanship or any part thereof found to be defective will be repaired by the Company as provided herein. The Company's obligations hereunder shall be limited solely to furnishing labour to repair any defective installation or construction workmanship. Any such repair by the Company hereunder shall not extend the Workmanship Warranty period. THE LIABILITY OF THE COMPANY, ITS OFFICERS, DIRECTORS, AGENTS AND SERVANTS AND ITS AFFILIATES AND THEIR RESPECTIVE OFFICERS, DIRECTORS, AGENTS AND SERVANTS TO THE RECIPIENT WITH RESPECT TO THE WORKMANSHIP OF THE COMPANY RELATING TO THE WORK SHALL BE LIMITED TO REPAIR AS PROVIDED HEREIN TO A MAXIMUM OF THE COST OF THE WORK PERFORMED BY THE COMPANY, AS INDICATED ON THE INVOICE, AND DOES NOT INCLUDE ANY COST OF REMOVAL OR REINSTALLATION OR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND WHETHER BASED UPON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE, SUCH DAMAGES INCLUDE, BUT ARE NOT LIMITED TO, LOSS OF PROFIT, LOSS OF REVENUE, LOSS OF USE OF ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF LABOUR, COST OF SUBSTITUTE OR REPLACEMENT EQUIPMENT, FACILITIES OR SERVICES, DOWN TIME, RECIPIENT'S TIME AND CLAIMS OF THIRD PARTIES.

Product Warranty

Tuff's Product or any part thereof claimed to be defective shall be held until inspected by an authorized representative of Tuff or an authorized dealer of Tuff and, upon written approval from Tuff to proceed with such representative's specific instructions, Tuff's Product or any part thereof found to be defective will be repaired or replaced or the Pro Rata Refund made, at the sole option of, and by, Tuff, as provided herein and, in the case of repair or replacement, with the same, or substantially similar, to the extent reasonably possible, color design or grade of Product. Any replacement Product is subject to the availability of same from Tuff's inventory or to the availability of same from Tuff's suppliers. Tuff reserves the right to repair or replace defective Product with Product of the nearest color, gauge or pattern available at the time of repair or replacement. Tuff shall not be responsible for differences in color between replacement Product and the original Product. Any such repair or replacement or Pro Rata Refund by Tuff hereunder shall not extend the Product Warranty Period and all Product provided by Tuff as a result of a warranty claim hereunder is warranted under the terms and conditions of this Warranty only for the balance of the Product Warranty Period for the Product which was the subject of the warranty claim. Tuff's obligations hereunder shall be limited solely to repair or replacement of any defective Product or Pro Rata Refund as provided herein. THE LIABILITY OF TUFF, ITS OFFICERS, DIRECTORS, AGENTS AND SERVANTS AND ITS AFFILIATES AND THEIR RESPECTIVE OFFICERS, DIRECTORS, AGENTS AND SERVANTS TO THE RECIPIENT WITH RESPECT TO THE PRODUCT HEREIN SHALL BE LIMITED TO REPAIR OR REPLACEMENT OR PRO RATA REFUND AS PROVIDED HEREIN TO A MAXIMUM OF THE COST OF THE PRODUCT INSTALLED AT THE PROPERTY, AS INDICATED ON THE INVOICE, AND DOES NOT INCLUDE ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND WHETHER BASED UPON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT LIABILITY OR OTHERWISE. SUCH DAMAGES INCLUDE, BUT ARE NOT LIMITED TO, LOSS OF PROFITS, LOSS OF REVENUE, LOSS OF USE OF ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF LABOUR, COST OF SUBSTITUTE OR REPLACEMENT EQUIPMENT, FACILITIES OR SERVICES, DOWN TIME, RECIPIENT'S TIME AND CLAIMS OF THIRD PARTIES.

IN CONNECTION WITH THIS WARRANTY TUFF, THE COMPANY, THEIR RESPECTIVE OFFICERS, DIRECTORS, AGENTS AND SERVANTS AND THEIR RESPECTIVE AFFILIATES AND THEIR RESPECTIVE OFFICERS, DIRECTORS, AGENTS AND SERVANTS SHALL NOT BE LIABLE FOR PERSONAL INJURIES OR DEATH TO ANY PERSON OR FOR ANY LOSS, DAMAGE, LIABILITY, CLAIM OR EXPENSE OF ANY KIND OR NATURE WHETHER TO OR RELATED TO THE PROJECT, THE PRODUCT, THE PROPERTY, THE RECIPIENT OR ANY OTHER PROPERTY, CAUSED OR CONTRIBUTED TO, DIRECTLY OR INDIRECTLY, BY THE COMPANY'S PERFORMANCE OF THE WORK OR THE WARRANTY WORK UNDER THIS WARRANTY, BY THE OWNERSHIP, DELIVERY, INSTALLATION OR POSSESSION OF THE PROJECT, THE PRODUCT, BY THE PROJECT, THE PRODUCT OR ANY INADEQUACY THEREOF FOR ANY PURPOSE OR ANY DEFICIENCY OR DEFECT THEREIN, THE USE OR MAINTENANCE THEREOF, ANY REPAIRS, SERVICING OR ADJUSTMENTS THERETO OR ANY INTERRUPTION OR LOSS OF SERVICE OR USE THEREOF OR ANY LOSS OF BUSINESS, OR BY ANY OTHER CAUSE OR REASON WHATSOEVER OR HOWSOEVER CAUSED, CONSEQUENTIAL OR NOT, INCLUDING THE NEGLIGENCE OR DEFAULT OF THE COMPANY OR TUFF, AS ALL SUCH RISKS AS BETWEEN THE COMPANY, TUFF AND THE RECIPIENT ARE TO BE BORNE BY THE RECIPIENT.

THIS WARRANTY GIVES THE RECIPIENT SPECIFIC LEGAL RIGHTS AND THE RECIPIENT MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE (OR JURISDICTION TO JURISDICTION), SOME STATES (OR JURISDICTIONS) DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE EXCLUSION OR LIMITATION MAY NOT APPLY TO CERTAIN RECIPIENTS.

DISCLAIMER OF WARRANTIES

THIS WARRANTY IS IN SUBSTITUTION FOR DAMAGES TO WHICH THE RECIPIENT MIGHT OTHERWISE BE ENTITLED AT LAW OR IN EQUITY AND, IN PARTICULAR, IN LIEU OF AN ACTION FOR FUNDAMENTAL BREACH OF CONTRACT, THE RECIPIENT WILL BE BOUND BY THE PROVISIONS OF THIS WARRANTY. THE WARRANTY SET FORTH ABOVE IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, AGREEMENTS, REPRESENTATIONS OR CONDITIONS OF THE COMPANY AND TUFF WHETHER WRITTEN, ORAL, COLLATERAL, STATUTORY, EXPRESSED, IMPLIED OR OTHERWISE INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND THE COMPANY AND TUFF SHALL NOT BE VIRTUOUSLY, AS APPLICABLE, HAVING PERFORMED THE WORK IN CONNECTION WITH THE PROJECT OR BY VIRTUE OF HAVING SUPPLIED THE PRODUCT OR PERFORMED THE WORK IN CONNECTION WITH A CLAIM UNDER THIS WARRANTY BE DEEMED TO HAVE MADE ANY OTHER WARRANTY, AGREEMENT, REPRESENTATION OR CONDITION WHATSOEVER, NO REPRESENTATIVE, EMPLOYEE, AGENT OR CONTRACTOR OF THE COMPANY, OF TUFF OR ANY OTHER PERSON IS AUTHORIZED TO ASSUME ANY ADDITIONAL LIABILITY OR RESPONSIBILITY IN CONNECTION WITH THE WORK PERFORMED BY THE COMPANY EXCEPT AS DESCRIBED HEREIN OR IN CONNECTION WITH THE PRODUCT OR THE WORK PERFORMED BY TUFF HEREUNDER EXCEPT AS DESCRIBED HEREIN. SOME STATES (OR JURISDICTIONS) DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO CERTAIN RECIPIENTS.

OTHER INFORMATION

This Warranty is conclusively deemed to be a contract made under the laws of the Province of British Columbia and for all purposes is to be governed by, and construed and enforced in accordance with, the laws of the Province of British Columbia without regard to principles of conflicts of law that would impose a law of another jurisdiction. Any and all disputes arising under this Warranty, whether as to interpretation, performance or otherwise, shall be subject to the exclusive jurisdiction of the courts of the Province of British Columbia. The parties hereby irrevocably and unconditionally attach to the exclusive jurisdiction of the courts of the Province of British Columbia and all courts competent to hear appeals therefrom.

If two or more individuals, corporations, partnerships or other entities (or any combination of two or more thereof) shall be subject to the terms and conditions of this Warranty as the Recipient, the liability of each of them under this Warranty shall be deemed to be joint and several.

No condoning, excusing or waiver by Tuff or the Company of any default, breach or non-observance by the Recipient at any time or times in respect of any covenant, proviso or condition herein contained shall operate as a waiver of the rights of Tuff or the Company hereunder in respect of any continuing or subsequent default, breach or non-observance, or so as to defeat or affect in any way the rights of Tuff or the Company in respect of any such continuing or subsequent default breach or non-observance, and no waiver shall be inferred from or implied by anything done or omitted to be done by Tuff or the Company.

ANY REPRESENTATIONS, WARRANTIES, COVENANTS, CONDITIONS, INDEMNITIES OR AGREEMENTS MADE BY TUFF AND THE COMPANY HEREUNDER SHALL BE CONSTRUED AS SEVERAL ONLY (NOT JOINT AND SEVERAL) AND IN ACCORDANCE WITH, AND LIMITED TO: (i) IN RESPECT OF SUCH REPRESENTATIONS, WARRANTIES, COVENANTS, CONDITIONS, INDEMNITIES OR AGREEMENTS MADE IN CONNECTION WITH THE PRODUCT WARRANTY, SUCH REPRESENTATIONS, WARRANTIES, COVENANTS, CONDITIONS, INDEMNITIES OR AGREEMENTS SHALL BE DEEMED TO HAVE BEEN MADE SOLELY BY TUFF; AND (ii) IN RESPECT OF SUCH REPRESENTATIONS, WARRANTIES, COVENANTS, CONDITIONS, INDEMNITIES OR AGREEMENTS MADE IN CONNECTION WITH THE WORKMANSHIP WARRANTY, SUCH REPRESENTATIONS, WARRANTIES, COVENANTS, CONDITIONS, INDEMNITIES OR AGREEMENTS SHALL BE DEEMED TO HAVE BEEN MADE SOLELY BY THE COMPANY.

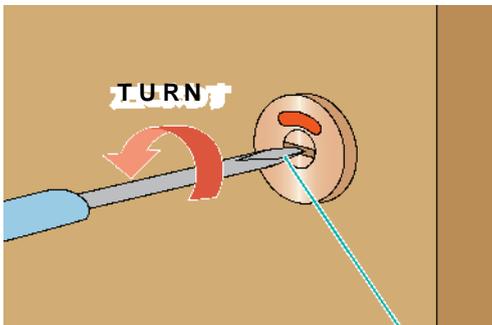
This is a two page document, please read the entire Warranty to understand your rights and responsibilities.

WARNING: Various products can discolor vinyl decking, specifically but not limited to pressure treated lumber and rubber or bitumen based products. Ensure all materials are compatible before leaving them in contact with your new vinyl deck surface.

Doors: Interior & Exterior

UNLOCKING PRIVACY DOOR LEVERS FROM THE OUTSIDE OF ROOMS:

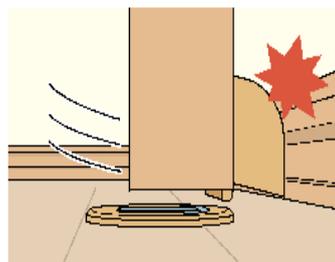
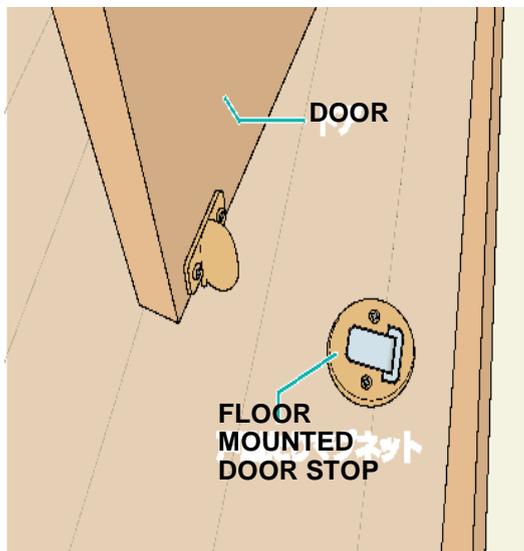
Doors installed with privacy door levers (such as bathrooms & certain bedrooms) can be unlocked from the outside of the room using a flat-head screw driver or thin coin. Simply rotate the slot on the outside of the room to unlock the door illustrated below.



Rotate slot

MAGNETIC CATCH DOOR STOPS:

How it works: As the door is opened and approaches the stop, a magnet lifts a lever, activating the door stop mechanism.



PRECAUTIONS:

Due to heavy floor wax build-up, or dirt accumulated inside the floor stop assembly, it is possible for the stop lever to become stuck in the down position. Keeping the door stop clear of build-up will ensure proper operation.

Forcefully slamming doors open may override the functionality of the stop, allowing the door swing into the wall behind. While the door stop will function properly under normal use, it is not recommended to forcefully slam doors in general.

Doors: Exterior and Locks

The doors installed in your home are typically steel, fiberglass and wood products subject to the natural characteristics of each material such as shrinkage and warpage. Due to natural fluctuations of humidity and the use of forced air furnaces, showers, and dishwashers, and so on, doors may require minor adjustments from time to time by the homeowner. Putty, filler, or latex caulk can be used to fill any minor separations that develop at mitered joints in door trim. Follow this with painting that is a homeowner responsibility.

Door Adjustments

Due to normal settling of the home, doors may require minor adjustments for proper fit. It is a homeowner's responsibility to touch up paint and make these minor adjustments.

Exterior Finish

To insure longer life for your exterior doors, plan to repaint them at least once a year.

Failure to Latch

If a door will not latch due to minor settling, this can be corrected by making a new opening in the jamb for the latch plate and raising or lowering the plate accordingly.

Hinges

A squeaky door hinge can be remedied by removing the hinge pin and applying a silicone lubricant. Do not use oil as it can gum up; graphite works 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 himself/herself in a room. The top edge of the door casing is often used as a place to keep the key. Some types of privacy locks can be opened with a small screw driver or similarly shaped device.

Locks

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

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 can work hardware loose and cause the door to sag.

Sticking

The most common cause of a sticking door is the natural expansion of lumber due to changes in humidity. When sticking is due to swelling during a damp season, do not plane the door unless it continues to stick after the weather changes. Use sandpaper to smooth the door. Be certain to repaint the area of the door where it was sanded to seal against moisture.

Before planning a door due to 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.

Warping

If a door warps slightly, keep it closed as much as possible; this often helps return it to normal.

Weather Stripping

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

Doors: Garage

Since the garage door is a large, moving object, periodic maintenance along with following the manufacturer's instructions will insure safe and reliable operation.

Thirty (30) Weight Oil

Every six (6) months, apply a thirty (30) weight automobile oil or similar lubricant to all moving parts -- track, rollers, hinges, pulleys and springs. At this same interval, check to see that all hardware is tight and operating as intended without binding or scraping. Avoid over lubricating to prevent dripping on cars and the concrete flooring.

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.

Opener

To prevent damage to the garage door opener, be sure the door is completely unlocked and the rope pull has been removed before using the operator.

Painting

The garage door should be repainted when the home is repainted or more often if needed to maintain a satisfactory appearance.

Safety

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 limited 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 surfacing. Have the door inspected by a professional garage door technician after any significant impact to the door.

Sag

The garage door may sag slightly due to its weight and span.

Wax

Paraffin wax, rubbed on the side jambs, will help the door operate smoothly.

Drywall

Slight cracking, nail “pops” or seams may become visible in walls and ceilings. These are caused by the normal shrinkage of the wood and normal deflection of rafters to which the drywall is attached. The standards used to judge the appearance acceptability for drywall has been established by the National Association of Home Builders. It states “Any such blemishes that are readily visible from a distance of 6 feet under normal lighting conditions are unacceptable.” Ichijo USA will repair such blemishes only once during the warranty period. Ichijo USA will touch up the paint in the repaired areas, however, an exact match between original and new paint cannot be expected.

Repairs

Most drywall repairs can be easily made. This work is best done when the room is to be redecorated. 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 it is dry, sand the surface with fine grain sandpaper, texture and repaint. Indentations caused by sharp objects can be filled with spackle in the same manner. Hairline cracks can be repaired with a coat of paint; slightly larger cracks can be repaired with spackle or caulk and repainting.

Electrical

The master control panel located by the electric meter contains the electrical breakers for your home. The control panel includes a main shut-off that controls all the electrical power to the home. In addition, there is a sub panel typically in the garage with individual breakers that control the separate circuits. Be certain you are familiar with the location of the master control panel and sub panel.

Each breaker is marked to help you identify which breaker is connected to which major appliance, outlet or other service. Should a failure occur in any part of your home, always check the breakers in the panel boxes first.

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 the tripped position to the on position will not restore service.

Outlets

If an outlet is not working, check first to see if it is one that is controlled by a wall switch or the ground fault interrupter converter (GFCI). It may also be necessary to check the main breaker as well as another appliance.

Breaker Tripping

Breakers will often trip due to overloads caused by plugging too many appliances into the circuit, a worn cord, a defective item or operating an appliance with too high of a voltage requirement for the circuit. The starting up 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, an electrician is needed. If the circuit remains on, one of the items that was unplugged is defective and requires repair or replacement.

Buzzing

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

Flickering Lights

Any flickering of an individual light other than fluorescent lights should be reported to the electrical contractor. In the event all of your lights are flickering repeatedly, please contact your local utility provider.

GFCI (Ground Fault Circuit Interrupter)

GFCI receptacles have a built-in element that senses fluctuations in power. Quite simply, the GFCI is an indoor circuit breaker. Installation of these receptacles is required by building codes in the bathrooms, kitchen, outside and garage (areas where an individual can come into contact with water while holding an electrical appliance or tool). Heavy appliances such as refrigerators, freezers or power tools will trip the GFCI breaker. Do not plug a refrigerator or food freezer into a GFCI controlled outlet because it is likely that the GFCI will trip and ruin the contents.

Each GFCI receptacle 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 usage, it may be an indication of a faulty appliance and some investigation is in order. Please remember that 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 any burned out bulbs other than those noted on the walk through list.

Light Fixtures

Some fixtures have an on/off switch located on the fixture. If a hanging light fixture does not work, make sure the switch is on. If your fixture does not have a switch, reset any tripped circuit breakers.

If a luminous light fixture does not work, make sure all fluorescent bulbs are installed

properly. Adjust any tubes that are flickering or buzzing. Check wall switches, circuit breakers and GFCI breakers.

Modifications

Do not tamper with or add to your electrical system. For any modification that is needed, contact an electrical contractor that is listed on your "Neighborhood Information" section of this manual. Tampering with the electrical system will void your warranty. If any changes are made to the electrical system, we must assume that any warranty issues that arise are the result of the changes made and the responsibility will fall on the person or contractor who made the changes.

Power Surges

Power surges can result in damages to sensitive electronic equipment such as televisions, alarm systems, computer and the like. Ichijo USA does not warrant against damages caused by power surges and recommends you install surge protectors (available at retail stores) for added protection.

Unused Outlets

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

Underground Cables

In areas with underground utilities, check the location of buried service by contacting your local utility 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 this service.

Expansion & Contraction

All building materials are subject to expansion and contraction caused by changes in temperature and humidity. Dissimilar materials expand or contract at different rates. This movement results in separation between materials, particularly dissimilar ones. The effects can be seen in small cracks in drywall and paint, especially where moldings meet drywall, at mitered corners, where tile grout meets the tub or sink and so on. This can be alarming to an uninformed homeowner, but, in fact, it is very normal.

Flooring

Pets and Floor Coverings

Pets can do considerable damage to all floor coverings. Ceramic flooring is less likely to be damaged by a pet; however, the grouting is easily stained and discolored if not taken care of properly. Follow manufacturer's recommendations for maintenance.

Do not allow pets to dig and paw at floor coverings. This will damage to appearance of the flooring and will not be covered under the "Limited Warranty". Abnormal wear and tear, stained areas, etc. are homeowner's responsibilities.

Owners of even the best-trained pets will occasionally encounter pet accidents. Often, the urine is not discovered until long after the accident. The types of damage from pet stains can be diverse and are dependent upon the makeup of the urine. Urine content will change over the pet's life because of the pet's diet, medications, age, health, sex, and reproductive cycles. Because of these variables, some urine stains may not be removable.

To treat urine-stained areas:

1. Blot damp areas as soon as the urine is detected, with plain white paper toweling.
2. Apply a solution of ¼ teaspoon of a liquid dishwashing detergent (non-bleach and non-lanolin) with one cup of lukewarm water. Do not use dishwashing detergent or laundry detergent.
3. Absorb the moisture with the paper towel, rinse with warm water and repeat the application of detergent. Continue rinsing and blotting with the detergent solution and water as long as there is a transfer to the toweling or improvement in the spot.
4. Follow the detergent application with a solution of one cup white vinegar to two cups water, and blot dry.
5. Apply a half-inch layer of paper towels to the affected area, and weigh down with a flat, heavy, non-fading object. Continue to change paper towels until completely dry.

Urine can affect the dyes used in carpets, although not all occurrences will result in a permanent stain. Success is dependent upon the content of the urine, the dyes and finish used, and the time elapsed after the deposit. Some urine spots may be immediately noticeable, while others may take weeks or months for a reaction. The dyes may change color immediately after contact with urine.

When urine spots develop slowly and are noticed after much time has elapsed, the dyes and carpet fibers may be permanently damaged. In beige carpet, blue dyes are attacked by pet urine, leaving behind the red and yellow dyes with a resulting stain appearing red,

yellow, or orange.

Pet urine, left unattended, can damage carpet in several ways. Moisture can weaken the layers of the carpet, allowing separation or delamination of the backing material. Seam areas can be particularly damaged and can separate.

Another problem, especially with cats, is odor. Unless the cat urine can be completely removed, complete odor removal is unlikely. A number of products are available to combat odor, but may simply mask the odor, and, in times of high humidity, the odor may reappear. Recently, enzymes, available at pet stores and veterinary offices, have been developed that are more effective; but they may be better used by a carpet cleaning professional. If odor cannot be removed, the damaged area of carpet can be replaced with a piece from reserved scrap. If carpet replacement is necessary, then replacement of padding and sub flooring may also be necessary.

Some carpet manufacturers have developed backings that resist spills and even prevent the spillage from penetrating the carpet into the carpet pad and, perhaps, the sub floor. Check with our Design Studio about these products.

Always follow manufacturer's recommendations as far as maintenance and cleaning of your floor coverings.

Carpet

Cleaning

Refer to the manufacturer's recommendations for additional information on the care of all floor covering products. Color selection sheets provide a record of the brand, style and color of floor coverings in your home. Please retain this information for future reference.

One can add years to the life of carpeting with regular care. A carpet wears out because of foot traffic and dirt particles that become trampled deep into the pile beyond the suction of the vacuum. The dirt particles abrade the fibers like sandpaper and dull the carpet.

Vacuuming high traffic areas daily helps to keep them clean and helps to maintain the upright position of the carpet nap. Wipe spills and clean stains immediately. For best results, blot or dab the spill or stain; avoid rubbing it. Test stain removers first on "out of the way" area of the carpet, such as a closet, to check for any undesirable effects. Professional cleaning should be performed regularly.

Carpet Seams

Carpet seams will be visible, especially in Berber and other tight weave carpets. Edges of carpet along moldings and edges of stairs should be held firmly in place. In some areas, metal or other edging material may be used where carpet meets another floor covering.

Ceramic Tile

Cleaning

The ceramic tile installed on walls or countertops in your home may be washed with any non-abrasive soap or detergent; abrasive cleansers will dull the finish.

Ceramic tile floors are one of the easiest floor coverings to maintain. Simply vacuum as needed. Occasionally 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 dishwashing liquid. Rinse thoroughly.

Grout Discoloration

Grout that becomes yellowed or stained can be cleaned with a fiber brush, cleanser and water. Grout cleansers and whiteners are available at most hardware stores. Also, be careful what you use to clean the flooring; it may have a tendency to stain the grout since it is not sealed.

Separations

Expect slight separations to occur in the grout between tiles. These slight separations in the grout are commonly due to normal shrinkage conditions. This grout is for decorative purposes only; it does not hold the tile in place. Cracks in the grout can be filled by using "tub caulk" or premixed grout that can be purchased from flooring or hardware stores. Follow package directions. This maintenance is important to protect the underlying surface from water damage.

Sealing Grout

Sealing grout is a homeowner's decision. Once sealed, ongoing homeowner maintenance of that seal will be necessary. Please be aware that sealing grout will void the warranty coverage on such grout.

Caulking

Time and weather will shrink caulking and dry it out so that it no longer provides a good seal against moisture and air infiltration. As a matter of routine maintenance, check the caulking and make repairs as needed. Caulking compounds and dispenser guns are available at hardware stores. Recaulking is a routine homeowner maintenance item.

Latex Caulk

Latex caulk is appropriate for an area that requires painting (along the stair stringer or where a countertop backsplash meets the wall).

Silicone Caulk

Silicone caulking that will not accept paint but works best where water is present.

Wet Areas

Homeowner maintenance of caulking around tubs and showers (especially at joints with protective wall coverings such as tile or marble panels) is absolutely necessary to prevent damage to wood and other materials behind and below these wet areas.

Hardwood Floors

In caring for hardwood floors, a routine of preventive maintenance is the primary goal. The homeowner is responsible for this routine maintenance.

Cleaning

Sweep on a daily basis or as needed. Never wet mop a hardwood floor. Excessive water causes wood to expand, possibly damaging the floor; it is imperative that water be cleaned up immediately. Do not use water-based detergents, bleach or one-step floor cleaners on hardwood floors.

Humidity

Wood floors will respond noticeably to changes in the humidity level in the home especially in the winter.

Mats

Use protective mats at the exterior doors to help prevent sand and grit from getting on the floor. Gritty sand is one of wood flooring's worst enemies.

New Wood Floors

When new, splinters of wood may appear. Dimples or scratches can be caused by moving furniture, dropping heavy or sharp objects, high heels, etc. Some shrinkage or warping can be expected, especially around heat vents or any heat producing appliances. Warping will occur if the floor becomes wet repeatedly or is thoroughly soaked even one time. A dulling of the finish in heavy traffic areas is likely; a white, filmy appearance is caused by moisture (often from wet shoes).

Recoat

If the floors are coated with a polyurethane finish, in six months to a year you may want to have an extra coat of polyurethane applied. This should be done by a qualified contractor. The exact timing will depend on your particular lifestyle. If another finish was used (Glitza, for example), please refer to the manufacturer's recommendations.

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 is high enough to damage hardened concrete; it will mark your wooden flooring!

Spills

Food spills should be cleaned up immediately using a very dry cloth. Use a vinegar and warm water solution for tough food spills.

Wax

Waxing and the use of products like Murphy's Oil Soap are neither necessary nor recommended. Once you wax a polyurethane finish floor, recoating is difficult because the new finish will not adhere to the wax. The preferred maintenance is preventive cleaning and annual recoating to maintain the desired level of luster.

Furniture Legs

Install proper floor protectors on furniture used on hardwood flooring. Protectors will allow chairs to move easily over the floor without scuffing. Clean the protectors on a regular basis to remove any grit that may accumulate.

Burns

Burns from cigarettes can be difficult or impossible to remove from your hardwood flooring. Small burns can be removed by sanding lightly and staining the area with commercial wood stain. Large burns should be referred to a flooring professional.

Yellowing and Warping

Be aware that yellowing and warping of the surface can result from rubber backing on area rugs or mats.

Vinyl Flooring

Refer to manufacturer's recommendations for additional information on the care of all floor covering products. Color selection sheets (which you received at the Design Studio) provide a record of the brand, style and color of the floor coverings in the home. Please retain this information for future reference.

Although resilient floors are designed for minimum care, they do vary in maintenance needs. Some resilient floors require regular application of a good floor finish. This assures you of retaining a high gloss. However, no cleaning or finishing agents should be used on the new floor until the adhesive has set thoroughly. This takes about two weeks. Because of its relatively soft texture, vinyl flooring can be damaged by heavy appliances, dropped objects, high-heeled shoes and by rough usage. This damage is permanent and cannot be repaired.

Limit Water

Wipe up spills immediately to avoid staining and vacuum crumbs instead of washing resilient floors frequently with water. Mopping or washing with water should be limited; excessive amounts of water on resilient floors can penetrate seams and get under edges causing the material to lift and curl. Maintain the caulking in all wet areas such as toilets, tubs, etc.

Moving Furniture

Use extreme caution when moving appliances across resilient floor covering. Tears and

wrinkles can result. Coasters should be installed under furniture legs to prevent permanent damage. Dimples and scratches can be caused by moving furniture, dropping heavy or sharp objects, high heels. Etc.

Shrinkage or Warping

Some shrinkage or warping can be expected, especially around heat vents or any heat providing appliances.

No Wax

The resilient flooring installed in your home is the no-wax type. No-wax means it is coated with a clear, tough coating which provides both a shiny appearance and a wearing surface. Even this surface will scuff or mark. Follow all manufacturers' specific recommendations for care and cleaning of all your hard surface floors. Do not use abrasive cleaners or full strength bleach on vinyl flooring. Abrasives will dull the finish and can cause permanent damage. Full strength bleach can etch and destroy the surface of the flooring.

Raised Nail Heads

Raised nail heads are the result of movements of the floor joist caused by natural shrinkage and deflection. Special nails have been used to nail down your sub floor. If a nail head becomes visible through resilient flooring, place a block of wood over it and hit the block with a hammer to reset the nail. Flooring of any type can shrink and seams may separate slightly due to this shrinkage.

Ridges

The joints of underlayment (sheets 4' x 8') have been sanded and filled to minimize the possibility of ridges showing through resilient floor coverings. Some ridging is unavoidable, however, and there is no recommended maintenance for this condition.

Scrubbing & Buffing

Frequent scrubbing or electric buffing is harder on floors than regular foot traffic. Use acrylic finishes often if you scrub or buff. Clean vinyl flooring with a solution of warm water and a commercial vinyl floor cleaner.

Seam Lifting

Seams can lift or curl if excessive moisture is allowed on the floor. A special caulking can be used at tub or floor joints to seal seams at those locations. Avoid getting large amounts of water on the floor from baths and showers.

Yellowing and Warping

Be aware that yellowing and warping of the surface can result from rubber backing on area rugs or mats.

Gas Fireplaces

Available in select floor plans is a ventless (no chimney) fireplace unit. Ventless fireplaces are designed for gas logs only. These manufactured logs do not actually burn, but give the appearance of a "real" fire. The heat source of this unit is natural gas. A porcelain log set is provided with your home purchase. Do not, under any circumstances, burn wood in this type of fireplace. This type of unit requires special operation and maintenance procedures that are different from those of wood burning fireplaces. Please refer to the fireplace instructions to determine the proper use of this ventless unit.

Gas Shut Off

There is a shut-off on the gas line near its connection to each item in your home that operates on gas. In addition, there is a main shut-off at the meter. These are pointed out during the homeowner orientation. If you suspect a gas leak, leave the home and call the gas company immediately for emergency service.

Grading and Drainage

The final grades around your home have been inspected and approved for proper drainage. Each property has been graded per county approved drainage engineering and is inspected by the local building authorities as well as Ichijo USA. It is your responsibility, as the homeowner, to maintain the drainage as established at the time of your closing. Keep earth from direct contact with wood to reduce the chance of termite infestation.

Positive Drainage

It is essential that you maintain the slopes around your home to permit the water to drain away from the foundation. Failure to do so can result in major structural damage and will void warranty.

Roof Water

If you have gutters, do not remove the splash blocks or downspout extensions from underneath the downspouts. Keep these in place and sloped at all times; this enables the water to drain away from your home quickly.

Rototilling

Be cautious when rototilling. This can significantly change drainage swales. If rototilling is done, it should be done parallel to the swales rather than across them.

Backfill Settlement

Backfilled or excavated areas around the foundation and at utility trenches should not interfere with the drainage away from your home. If these areas settle, Ichijo USA will correct them one time during the one year limited warranty period.

Erosion

Ichijo USA is not responsible for weather related damage to yards after the closing date.

New Sod

New sod installation and the extra watering that accompanies it can cause temporary drainage problems, as can unusually severe weather conditions.

Recommendations

Ichijo USA will inspect problems in writing during the one year limited warranty period and advise you as to corrective actions.

Swales

In many cases, drainage swales do follow property boundaries. Ichijo USA will not alter drainage patterns to suit individual landscape plans. Typically a lot receives water from and/or passes water on to other lots. For this reason, homeowner changes in grade often affect those adjacent or nearby. Ichijo USA advises against making such changes.

Landscaping

Landscaping can change the drainage pattern of your lot. Consult a professional landscape contractor in the event you desire to add landscaping to your lot.

Watering

Watering should be done in a uniform systematic manner as equally as possible on all sides of the foundation to keep the soil moist, not saturated. Areas of soil that do not have ground cover may require more moisture as they are more susceptible to evaporation, causing a moisture content imbalance.

During extreme hot and dry periods, close observations should be made around the foundation to insure adequate watering is being provided, preventing soil from separating or pulling back from the foundation.

During periods of frequent rains, watering should be limited, and/or stopped as necessary and monitored closely. The rule for drainage is; "water should dissipate from areas in immediate location to the home within 24 hours after a normal rain and within 48 hours after a rain in swales that are designed for drainage purposes." After a period of abnormally heavy rains, or daily rains, it may take longer for the water to dissipate in these areas. Ichijo USA does not assume liability for drainage or soggy ground when sprinklers are used during periods of frequent rain.

Trees

Trees planted within five feet of the foundation can damage the structural integrity of the foundation. Trees planted in close proximity to the foundation can develop a root system that can penetrate beneath the foundation and draw moisture from the soil. Precautionary measures such as the installation of a root shield injection system must be taken to maintain moisture equilibrium.

Gutters and Downspouts

Check gutters periodically and remove leaves or other debris (twice a year and after each heavy rain or wind storm). Materials that accumulate in gutters can slow down the draining of water from the roof, cause overflows or clog the downspouts.

Extensions and Splash blocks

Extensions should discharge outside of the 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 gutters drips, caulk the inside joint using a commercial gutter caulking compound, which is available at hardware stores.

Free from Debris

As part of normal maintenance, the homeowner should keep gutters clear of debris which might clog them and cause the water to run over the downspout or the gutter's edge. It is the homeowner's responsibility to check gutters periodically to insure proper functioning.

Overflow

Gutters are installed with a slight slope so that roof water will flow to the downspouts. Gutters may overflow during periods of excessive heavy rain. Small amounts of water (up to 1 inch) will stand for short periods of time in gutters immediately after rain. No correction is required for these conditions.

Downspouts

Downspouts are placed to carry water to the ground and in extensions, which then direct the flow away from the foundation of the home. These extensions are for protection of the foundation and it is the homeowner's responsibility to maintain them. They should discharge water away from the foundation without eroding any of the ground around them.

Heating and Air Conditioning

Good maintenance of the Heat Pump or furnace can save energy dollars as well as prolong the life of the HVAC system itself. Carefully read and follow the manufacturer's literature on use and care. The guidelines here include general information.

Modifications

Do not tamper with or add to your Heat Pump/Furnace system. For any modification that is needed, contact an HVAC contractor that is listed on your "Neighborhood Information" section of this manual. Tampering with the Heat Pump/Furnace system will void your warranty. If any changes are made to the Heat Pump/Furnace system, we must assume that any warranty issues that arise are the result of the changes made and the responsibility will fall on the person or contractor who made the changes.

Adjust Vents

Experiment with the adjustable registers in your home to establish the best heat flow for your lifestyle. Generally, heat can be diminished in seldom used or interior rooms. In a two-story home, with one Heat Pump or furnace, the heat flow can be balanced by restricting the registers in the top story and opening the registers on the lower story. Rooms farther away from the Heat Pump or furnace will usually need to have their vents opened more depending on your needs.

Avoid Overheating

Do not overheat your new home. Overheating can cause excessive shrinkage in framing lumber and may materially damage the home. In the beginning, use as little heat as possible and increase it gradually.

Filters

Remember to change or clean the filter every month. A clogged filter can slow air flow and cause cold spots in your home. Although it takes less than one minute to change the filter, this is one of the most frequently overlooked details of normal furnace care. Buy filters in large quantities for the sake of convenience.

Furnished Home

The heating system design was planned with a furnished home in mind. For example, draperies, blinds, screens and the like will contribute to the efficiency of your system. If you move in during the cooler part of the year and have not yet acquired all of your draperies and furnishings, the home may seem cooler to you than you would expect.

Odor

The heating system typically emits an odor for a few moments when it is first turned on after an extended period of not being used (such as after the summer months if you do not use air conditioning). This is caused by dust that has settled in the ducts and should pass quickly.

Return Air Vents

For maximum comfort and efficient energy use, arrange furniture and draperies to allow unobstructed air flow from registers and cold air returns.

Temperature

Normal temperature variations from floor to floor (depending upon the style of home) can be as much as 10° or more on extremely cold days. The Heat Pump or furnace blower will typically cycle on and off more frequently and for shorter periods of time during severe cold spells.

Trial Run

Have a trial run early in the fall to test the Heat Pump or furnace. (The same rule applies to air conditioners in the spring.) If service is needed, it is much less inconvenient to discover it prior to the heating season.

The breaker for the HVAC system blower is located in the Main breaker box.

Thermostats

The HVAC system will come on automatically when the temperature at the thermostat registers below the setting you have selected. Once the HVAC system is on, setting the thermostat to a higher temperature will not heat the home any faster.

Duct Placement

The exact placement of heating ducts will vary from those positions shown in similar floor plans or in the model homes.

Building Codes

HVAC systems will be installed in accordance with local building codes, as well as engineering designs of the particular home. The Florida Energy Efficiency Code for Building Construction specifies the minimum and maximum requirements for each home and is state mandated.

Furnaces

Gas Odor

If you smell gas, call the gas company immediately

Combustion Air

Furnaces have combustion air vents to run to them. Never cover these or block the cold air in any way. Outside air is needed to supply the furnace with sufficient oxygen. Blocking the combustion air vent will cause the furnace to draw air down the vent pipe and pull poisonous gasses back into your home. If the air vents become loose, Ichijo USA will secure as needed during the first year of ownership.

Furnace Pilot

The furnace is equipped with a Hot Surface Ignition System (electronic ignition) that eliminates the waste of a constantly burning pilot. The radiant sensor ignition control lights the main burners upon a demand for heat from the thermostat. If the unit fails to function, please contact your heating contractor.

Troubleshooting

One of the primary reasons that a furnace does not work is the pilot light is off. This, however, is not the only reason. First, the furnace has an on/off blower switch. This switch looks like a regular light switch and is located in a metal box outside of the furnace. When turned off, this switch overrides all furnace commands and shuts down the blower. This is usually done when maintenance service is being performed although children have been known to turn the furnace off using this switch. The furnace will not operate if the gas valve in the furnace closet is turned off. It is the red knob on the metal gas pipe. It should be "in line" with the pipe itself to be in the "on" position. The lower panel door must be positioned correctly for the furnace blower to operate. This panel compresses a button that tells the blower it is safe to operate. If this panel is not on tightly, the fan will not come on. Heat Pumps have Auxiliary heating in case of Emergency heating needs or compressor failure.

Furnace Sounds

You may hear some sounds through your registers that are actually generated from your furnace. They should be very slight and almost unnoticeable. These sounds are normal.

Air Conditioning/Heat Pump

Your home may be equipped with a Heat pump system or a traditional Air Conditioning system. A Heat Pump is designed to provide both Air Conditioning and Heating as needed. A Heat Pump system is also equipped with Auxiliary heating for additional heat or as a backup. A conventional Air Conditioner system only supplies cooling. If you have a conventional Air Conditioning system, please also refer to the section on Furnaces. The manufacturer's maintenance suggestions should be reviewed and followed. Air conditioning can add much to the comfort of your home, but it can be used improperly or inefficiently, resulting in wasted energy and frustrations. These hints and suggestions are provided to help you maximize your air conditioning system.

Modifications

Do not tamper with or add to your air conditioning/heat pump system. For any modification that is needed, contact an HVAC contractor that is listed on your "Neighborhood Information" section of this manual. Tampering with the air conditioning/heat pump system will void your warranty. If any changes are made to the air conditioning/heat pump system, we must assume that any warranty issues that arise are the result of the changes made and the responsibility will fall on the person or contractor who made the changes.

Whole House System

To fully and efficiently utilize your air conditioning system, you must understand that it is a total, whole-house system. The air conditioner unit is the mechanism in your home that produces cooler air. The air conditioning system involves everything inside your home including, for example, drapes and windows. The heating and cooling system in your home is designed and sized using the Florida Energy Efficiency Code for Residential Construction. This is state regulated and all homes in Florida must meet these requirements. These requirements may also not be exceeded by more than 20%. A big part of the Air Conditioners job is to remove excess humidity from within the home. Units must be capable of maintaining a 17 degree temperature differential within the home from the outside temperature. On extremely hot days your system may not appear to be cooling as well since they are designed only to maintain this 17 degree differential. This is not a system failure!

Closed System

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 in 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. Your air conditioning design also contemplates that all interior doors should remain open for air circulation.

Time

Time is of paramount importance 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 a thermostat.

Landscaping

Additions

Prior to the installation of patio additions or other personal improvements, review the soils and take soil conditions into consideration in the design or engineering of your addition. You are responsible for maintaining the drainage that has been set up for your lot and accepted by the county.

Backfill

In some cases the area around your foundation may have been backfilled. Soil in this area is not as compact and dense as undisturbed ground. Water can penetrate through the backfill area to the foundation. This can cause potentially severe problems such as cracks in the foundation walls and floor slab movement. Avoid this problem through proper installation of landscaping and good maintenance of drainage patterns. See also "Grading and Drainage" section of this manual.

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

Downspout extensions should be kept in the down position so that roof run-off is channeled well away from the foundation area of the home. Routine inspection of downspouts, backfill areas and other drainage components is an excellent maintenance habit.

Bark or Rock Beds

Do not allow edgings around decorative rock or bark beds to dam the free flow of water away from the home. A non-woven membrane, such as Typar or Mirafi, can be used between the soil and rock or bark to restrict weed growth while still permitting normal evaporation of ground moisture.

Irrigation

Make provisions for efficient irrigation. Conduct operational checks on a weekly basis to ensure proper performance of the system. Sprinkler heads should be directed away from the home. Drain and service sprinkler systems on a regular basis.

Planting

Locate plants and irrigation heads out of the way of pedestrian and bicycle traffic and car bumpers. Space groves of trees or single trees to allow for efficient mowing and growth. Prune woody plants as needed. Do not plant trees near the home. Group plants with similar water, sun and space requirements together.

Requirements

Check with your local building department, your Architectural Control Committee and

your Homeowners Association, if applicable, prior to designing, installing or changing landscaping for any regulations you may be required to follow.

Utility Lines

Settlement will not disturb your utility lines; however, you may see a slight depression develop in the front lawn along the line of the utility trench. To correct this, roll back the sod and spread top soil underneath to level the area, then replace the sod.

Waiting to Landscape

Unlandscaped ground erodes. Correcting erosion that occurs after closing is the homeowner's responsibility. Damages to neighboring property caused by unlandscaped ground on your lot will be your responsibility.

Maintenance

Plants, trees, shrubs, and lawn sod or hydromulch are not covered by any warranty and are the homeowner's sole responsibility to maintain.

Drainage

Always maintain a proper slope away from your home to maintain efficient drainage. See "Grading and Drainage" section of this manual for additional information.

Masonry, Brick and Stone

Masonry is an extremely low maintenance material; however, periodic inspection is necessary to check for cracks resulting from normal settling. Small weep holes were created at regular intervals at the bottom of masonry walls to allow moisture which accumulates between the interior surface of the masonry and the sheathing material behind the masonry to escape. These holes must be kept open.

Brick is one of the most durable and lowest maintenance finishes for a home's exterior.

Tuck-pointing

After several years, face brick may require tuck-pointing (repairing the mortar between the bricks). Otherwise, no regular maintenance is required.

Weep Holes

You may notice small holes in the mortar along the lower row of bricks or over the door and window openings. This allows moisture to escape if any has accumulated behind the brick. Do not fill these weep holes or permit landscaping materials to cover them.

Settlement Cracks

Settlement cracks are common and should be expected within certain tolerances in bricks and mortar joints.

Color Variations

If any repairs or changes are made to your brick, variations in the color of the brick and/or mortar may result.

Mirrors

To clean your mirrors use any reliable liquid glass cleaner or polisher available at most hardware or grocery stores. Avoid splashing water under the mirror. The moisture will cause the silvering to deteriorate. Also, avoid pushing or leaning on your mirrors. This can cause chips or cracks at the mounting brackets.

Mold and Mildew

While some types of mold may cause health concerns in some people, the general perception appears to be that exposure to any mold, in any amount, for any time period, will cause health problems in anyone. That simply is not the case. Everyone is exposed to mold on a daily basis. It is even in the air we breathe. Exposure to some types of mold may cause varying health concerns but the most common types of mold are generally not hazardous.

Mold: Molds are fungi that occur naturally in the environment, and are found both indoors and outdoors in varying concentrations. In order to grow, mold requires (1) a food source (or "growth medium") -which may be any number of common household items or building materials (such as carpet, fabric, drywall, wood, etc.), (2) a temperate climate, between 40°F and 100°F and (3) moisture. If the growing conditions are right, mold can easily occur in your home.

Moisture is the only mold growth factor that can be controlled in a residential setting. Excessive moisture in the home can have many causes, including poor ventilation, high humidity, water intrusion, spills, leaks, overflows, and condensation. Residential home construction is not, and cannot be, designed or built to exclude all the conditions needed for mold to grow and spread. Good housekeeping and home maintenance practices by Buyer after closing are essential to control excessive moisture levels and mold growth, because if moisture is allowed to remain on the growth medium, mold can develop within 24 to 48 hours. Steps to be taken in this regard include:

- Indoor humidity levels should be kept below 40% and adequate ventilation should be maintained. Some recommendations include using the air conditioning and/or a dehumidifier during humid months, ventilating kitchens and bathrooms by opening windows or running exhaust fans, and maintaining and properly servicing your air conditioning and ventilation systems.
- Before bringing any item into the home that may have been stored in a damp location (such as potted plants, furnishings, stored clothing and bedding, etc.) perform a visual check for signs of mold; avoid storing organic material in damp locations;

- Regularly vacuum, dust, and clean. Mild bleach solutions and most tile cleaners are effective in eliminating or preventing mold growth;
- Inspect regularly for signs of leaks or water intrusion such as discoloration or wet spots and take notice of musty odors or any visible signs of mold. Inspect and clean condensation pans for refrigerators, air conditioners and other appliances frequently;
- Promptly clean up and thoroughly dry spills, condensation and other sources of moisture. Replace any materials that cannot be properly and thoroughly dried, such as drywall, insulation, carpets and upholstery;
- In severe cases involving flooding or other significant accumulation of moisture the homeowner should contact a qualified professional;
- Individuals with health issues who are prone to the effects of mold should limit exposure to problem areas of the home where humid, wet conditions dominate.
- Seek to prevent water intrusion into the home by regular caulking and painting and maintaining the appropriate grade to allow water to drain away from the house. Keep irrigation systems the proper distance from the home.
- Should mold develop, small areas can be thoroughly cleaned with a mild bleach solution. Porous materials, such as fabric, upholstery or carpet should be discarded. Should the mold growth be severe, call on the services of a qualified professional.

If mold does develop in your home, please review the terms of your homeowner's insurance policy as the losses arising from such a condition may be covered by the terms of that document.

Consequences of Mold

All mold is not necessarily harmful, but certain strains of mold have been shown to have adverse health effects in susceptible persons, and a limited number of mold strains are believed to be hazardous in certain concentrations (such as *Stachybotrys atra*). Individuals with weakened immune systems or respiratory diseases such as asthma may be subject to special risks.

The most common symptoms of exposure to mold are allergic reactions such as skin irritation, watery eyes, runny noses, coughing, sneezing, congestion, sore throats and headaches. While some experts contend that mold exposure causes serious symptoms and diseases which may even be life threatening, there is currently no consensus among medical experts regarding (1) the level of mold exposure necessary to cause adverse health effects and (2) the exact nature and extent of the potential health problems associated with such exposure. The Center for Disease Control has stated that there is no proven causal link between the presence of hazardous mold and the emergence of serious health conditions.

Further information regarding mold prevention, best practices and/or cleanup procedures is readily available from a variety of sources. A partial listing of agencies, which can be contacted through the identified websites or by mail, is included for your convenience

- United States Environmental Protection Agency (http://www.epa.gov/iaq_);
- Center for Disease Control and Prevention (CDC) (<http://www.cdc.gov>);

Exterior surfaces will develop mold or mildew – this is a homeowner maintenance issue and is not covered by the limited warranty nor is it a health concern.

Mold growth can be attributed to the following factors:

- Moisture – water leaks, high humidity
- Nutrients – cellulose-based materials
- Fungal spores – mold spores
- Temperature - 50°F to 100°F
- Time – mold growth will occur within 24 – 48 hours

Of these factors, the only component that can be reasonably controlled is moisture. Mold needs moisture to get established, grow, and reproduce. Mold problems and long standing moisture or high humidity conditions go hand and hand.

The following will insure better air quality by reducing the chances of mold growth:

- When taking a shower/bath turn on your vent fan. If you do not have a fan, crack your window.
- When cooking turn on your vent hood.
- Check for leaks at water lines, i.e. refrigerator icemaker, washing machine, dishwasher, etc.

If you suspect a water leak:

- Turn off the water either under the cabinets or the main water line that is generally located at the front left or right property line about 10 feet from the street.
- Clean up any standing water.

Mold will not destroy a house, but it can make it look, feel, and smell bad if left undetected even for a short period of time. Mold can be cleaned by using a common bleach and water mix (1 part bleach to 10 parts water).

Paint and Stain

Interior

The interior woodwork has been painted with latex enamel that can be cleaned with a wet sponge. Walls have been painted with a flat latex paint and should be touched up with matching paint rather than being wiped with a wet sponge. Spackle may be used to cover any small defects prior to paint touch-up. Do not use soaps, abrasive cleansers, scouring pads or brushes.

Exterior

Regular painting and repair will preserve the beauty of and add value to your home. Check the painted/stained surfaces of your home's exterior annually. Repaint before much chipping or wearing away of the original finish occurs; this saves the cost of extensive surface preparation. Plan to refinish the exterior surface of your home approximately every three years or as often as your paint manufacturer suggests for your area and climate. The chemical structure of the paint used on the exterior is governed by the climatic conditions. Over a period of time, this finish will fade and dull a bit.

Fading

Fading due to sun and weather is normal. Periodic repainting will be required.

Maintenance

When you wish to repaint exterior wood work on your home, popped nails should be reset; the blistered or peeling portions should be wire-brushed or scraped with a putty knife, sanded and spotted with primer. The entire area can then be repainted. Be certain to apply a top quality exterior paint that has been formulated for local climate conditions. Do not allow sprinklers to spray water on the exterior walls of your home. This will cause blistering, peeling, splintering, mold/mildew and other types of damage to the home. Trim painted white or light colors will more readily show grain and cracks and, therefore, requires additional maintenance.

Severe Weather

Hail and wind can cause a great deal of damage in a severe storm, and your home should be inspected after such weather. Report damage caused by severe weather to your insurance company promptly.

Stain

For interior stain touch-ups, Old English Furniture Polish and Scratch Cover are inexpensive, easy to use and blend in with the wood grain. Follow directions on the bottle when using.

Touch-Up

When doing paint touch-up, use a small brush and apply paint only to the damaged area. 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. Do not scrub the walls with excessive pressure; do this very gently.

Wall Cracks

Wait until after the first heating season to repair drywall cracks or other separations due to shrinkage. See the "Drywall" section of this manual for additional information concerning repairs.

Phone Jacks

Each home is equipped with telephone jacks as shown on the blueprints and selection sheets. Initiating phone service, additions to phone service and/or moving phone outlets is the homeowner's responsibility.

Plumbing

Your main water shut-off is located on the of your home as well as in the front of your meter box. This is helpful to know if you install a sprinkler system or if you plan an addition to your home. It is also important to know and remember the location of the shut-off for emergencies such as a water line freeze or break. Other water shut-offs are located under the sinks in the bathroom and the kitchen. Each toilet has a shut-off valve behind the toilet bowl on the wall.

Modifications

Do not tamper with or add to your plumbing system. For any modification that is needed, contact a plumbing contractor that is listed on your "Neighborhood Information" section of this manual. Tampering with the plumbing system will void your warranty. If any changes are made to the plumbing system, we must assume that any warranty issues that arise are the result of the changes made and the responsibility will fall on the person or contractor who made the changes.

Debris in Pipes

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. However, minerals, etc. caught in these aerators may cause the faucets to drip because washers wear more rapidly when they come in contact with foreign matter. Any tampering or alterations to the plumbing will be considered the cause of the debris in the pipes and will not be covered by the limited warranty. See "Dripping Faucets" section of this manual for additional information.

Care and Cleaning

Follow manufacturers' directions for cleaning fixtures. Avoid abrasive cleansers as they remove the shiny finish leaving behind a porous surface that is difficult to keep clean. Clean plumbing fixtures with a soft sponge and soapy water, (a non-abrasive cleanser such as Spic-N-Span or a liquid detergent is usually recommended by manufacturers) then polish with a dry cloth to prevent water spots.

Clogs

Many plumbing clogs are caused by improper garbage disposal usage. Always use plenty of cold water when running the disposal. This applies to grease also. Supplied with a steady flow of cold water, the grease congeals and is cut up by the blades. If hot water is used, the grease remains a liquid and then cools and solidifies in the sewer line. Allow the water to run a minimum of 15 seconds after shutting off the disposal. Any charges for sending the plumber to unclog a drain that have been caused by the homeowner will be the homeowner's responsibility to pay.

Clogged traps (P-traps) can usually be cleared with a 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, pull out the rod attached to the plunger and lift the stopper. Clean and return the mechanism to its original position.

The main causes of toilet clogs are various domestic items such as disposable diapers, excessive amounts of toilet paper, sanitary supplies, Q-tips, dental floss, toys, etc.

Dripping Faucets

A dripping faucet may be repaired by shutting off the water at the valve directly under the sink, then remove the faucet stem, change the washer and reinstall the faucet stem. The shower head is repaired in the same manner. 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.

Freezing Pipes

Provided your home is heated at a normal level, pipes should not freeze at temperatures above 0° Fahrenheit. Heat should be set at 65° if you are away during the winter months. Keep garage doors closed to protect plumbing lines that may run through this area from freezing temperatures.

Garbage Disposal

Do not load the disposal unit with food items before turning it on. For proper operation, turn on the cold water and start the disposal unit. Then, drop the food items slowly into the unit.

When the unit sounds clear, turn it off and leave the water running for several seconds. This allows the food waste to be carried into your sewer lines.

Only foods that are non-fibrous and easily pulverized should be placed into the disposal unit. Examples of foods not to place in the disposal unit are corn husks, celery, onion skins, olive pits, bones and solid or liquid grease. These items may cause your unit to overload or jam. If this happens, follow these correctivemeasures.

Turn off the disposal unit and the cold water. Wait three minutes for the disposal unit to cool, then press the reset button usually located on the bottom of the unit.

If this does not correct the problem, your disposal unit is probably obstructed. Follow these steps for proper removal.

Always verify that the disposal unit switch on the wall is in the "off" position before attempting a repair yourself.

Check the circuit breakers. An overload of this type may have tripped the circuit. Reset any tripped circuit breakers.

If your disposal unit has a service wrench, insert one end of the wrench into the bottom of the unit. Work back and forth until the disposal unit turns freely. If your disposal unit does not have a service wrench, insert a broom handle or mop handle into the throat of the unit and rotate the impeller back and forth. The obstruction will be loosened so that it can be removed.

After verifying that the disposal unit switch is in the "off" position, remove the obstruction, press the reset button and proceed with the above steps for proper use.

Laundry Tub

If you have a laundry tub, the faucet does not have an aerator. This enables the 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 plumbing contractor. If possible, the water should be gotten up as quickly as possible. Any delays in contacting Ichijo USA or allowing water to stand will reduce our liability for repairs.

If a leak is noticed under a sink or toilet, turn off the water to the fixture by using the shut-off valves located under or behind the unit. The next step would be to arrange for service.

If you notice a leak in the tub or shower, turn off the water at the main shut-off valve and do not use the shower or tub until service can be provided.

If there is a leak in the water heater, turn the shut-off valve on top of the heater to "off". Turn off the gas if your water heater is powered by gas or the circuit breaker if you have an electric water heater; then drain the water heater.

If you notice water spots (darkened areas) on your walls or ceilings, you may have a water leak. Determine the source of water if possible and take steps to prevent further damage. If the leak can be traced to one location (one toilet, sink or tub), turn off the water to that particular fixture.

Low Pressure

It will occasionally be necessary to remove and clean the aerators on faucets to allow the proper flow of water; normally every three or four months is sufficient.

Exterior Faucets

Outside faucets are not freeze proof; therefore, it is recommended that you remove garden hoses during cold weather and leave faucets open to drip. If a hose is left attached, the water that remains in the hose can freeze and expand back into the pipe causing a break in the line. Repair of a broken line that feeds an exterior faucet is a homeowner maintenance item. Ichijo USA does not warrant exterior faucets against freezing.

Porcelain

A sharp blow from a heavy object can damage porcelain enamel. It can also be scratched. Do not stand in the bathtub wearing shoes unless you have placed a protective layer of newspaper over the bottom of the tub. If paint is splattered onto the porcelain enamel surfaces during redecorating, it should be wiped up immediately. If some spots are dry before being noticed, use a recommended solvent. Clean porcelain finishes with a non-abrasive cleanser designed for bathroom usage.

Running Toilets

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, adjust the set screws on top of the valve until the shut-off float 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.

Stainless Steel

Stainless steel sinks should be cleaned with soap and water to preserve their luster. Avoid abrasive cleaners; these will damage the finish. An occasional cleaning with a good stainless steel cleaner will enhance the finish. Avoid leaving produce on a stainless steel surface since prolonged contact with produce can stain the finish.

Tank/Bowl Care

Toilets are made of vitreous china, a glasslike material that is almost impervious to staining. Clean your toilets with a toilet bowl cleaner and a brush or cloth. Vitreous china is brittle and will easily break or shatter if hit with a hard object. Do not stand on your toilets. Uneven pressure applied to the toilet can break the wax seal at the base of the toilet, thereby causing a leak.

Toilets which are designed to use less water, approximately 1.6 gallons, have been installed in your home in an effort to reduce the amount of water used and the amount of wastewater treated and returned to our water sources. All of this result in a lower utility cost to you and an improvement to our environment.

Since these toilets use approximately 50% of the water that older, traditional toilets use, you need to be aware of a few inconveniences you may experience. The toilets have a tendency to become clogged more frequently than a traditional toilet because of the newer toilet's reduced water flush capacity. On the occasions where one needs to dispose of a large amount of tissue, it is advisable to flush the toilet prior to the disposal of all tissue. Educating your family members as to the capacity of the toilet will help avoid unnecessary stoppages. Do not place objects other than toilet paper in the toilet.

Always keep a plumber's plunger on hand to use in the event of a stoppage of a toilet. If a stoppage occurs, close the shut-off valve on the back side of the toilet. Usually a few vigorous pumps with the plunger will free the obstruction. Stoppages that are not construction related are the homeowner's responsibility. If you are unable to clear the obstruction yourself, we suggest that you call a plumber.

Do not use drain cleaners in toilets. The harsh chemicals in drain cleaners can damage the toilet seals and cause a leak.

The flush valve in your toilet should last for many years. If it fails or begins to leak, a new flush valve can be purchased at a home center or hardware store. If you are not entirely comfortable with this do-it-yourself project, a plumber can perform this task.

Toilet Seat Cover

Do not stand on the toilet seat cover. It is not designed for this purpose and may crack.

Water Heaters

Carefully read and follow the manufacturer's literature for your specific model of water heater.

Electric Water Heaters

Temperature

Set the water heater thermostat at the recommended setting; higher settings waste energy. The recommended setting for normal use is 140 degrees on electric models.

No Hot Water

If you discover you have no hot water, check the electrical breaker, temperature setting, and water supply valve before calling for service. Refer to the manufacturer's literature for specific locations of these items and other trouble shooting information.

Gas Water Heaters

Temperature

Set the water heater thermostat at the recommended setting; higher settings waste energy. The recommended thermostat setting for normal everyday use is "normal" on gas models.

No Hot Water

If you discover you have no hot water, check the pilot, temperature setting, and water supply valve before calling for service. Refer to the manufacturer's literature for specific locations of these items and other trouble shooting information.

Condensation

Condensation inside your new water heater may drip onto the burner flame. This causes no harm and in most cases will disappear in a short period of time.

Roof

Clean Gutters

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

Leaks

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

Limit Walking

Limit walking on your roof. The weight and movement can loosen the roofing material and break the integrity of the roofing material, which can, in turn, result in leaks. Never attempt to walk on the roof of your home when the shingles are wet--they are extremely slippery.

Severe Weather

After severe storms, do a visual inspection of the roof for damages. Notify your homeowner insurance company if damage is noted. Even when properly installed, wind driven rain may enter through vents. This is not a defect.

Siding

Caulking

All caulking shrinks and replacement is a homeowner maintenance item. Separation at the joints in the exterior trim and between the trim and the surfaces of exterior siding or masonry should not exceed 1/4 of an inch. Siding, trim and masonry must be capable of excluding the elements. Ichijo USA will correct if necessary.

Also see "Paint and Stain" section and "Wood Trim" on section.

Smoke Detectors

Read the manufacturer's manual for detailed information on the care of your smoke detectors. Maintain fresh fully charged batteries.

Cleaning

Once a quarter, smoke alarms should be cleaned (vacuumed) to prevent a false alarm or lack of response to a fire. After cleaning, push the red button to test; the alarm should sound. For your safety, it is important that these devices be kept clean and in good operating condition.

No Representation

Ichijo USA does not represent that the smoke detection device will provide the protection for which it is installed. The homeowner is responsible for obtaining insurance.

Vents

Range Hood

Remove and clean the filter. Clean accumulated grease deposits from the fan housing.

Dryer Vent

Remove the dryer hose from the dryer vent stack. Check for lint build up or blockage. This will help increase the life expectancy of the dryer.

Windows & Sliding Doors

Cleaning & General Maintenance

General window cleaning:

Dilute ordinary hand-washing dish soap with lukewarm water. Moisten a soft cloth or non-abrasive sponge to clean the window surfaces. Wipe-off dirt and excess moisture with a soft dry cloth or sponge. The bottom track area is especially prone to dust and dirt accumulation. Vacuum the area with a soft detail nozzle. For more stubborn dirt accumulation, use a small bristle brush like an old retired toothbrush to get into the track area. Wipe clean.

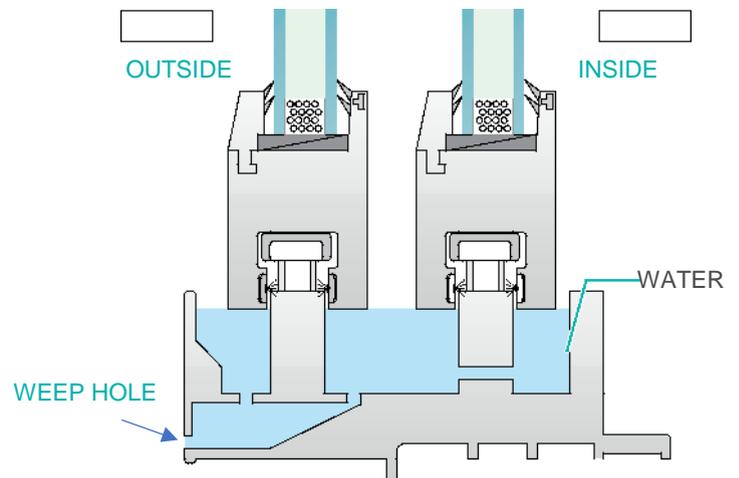
PRECAUTIONS:

Vinyl is a widely used and effective product for window manufacturing. However, under extremely high temperatures vinyl is prone to warp or melt. To avoid possible fires, do not set items such as stoves, clothes irons, or hair dryers near windows.

Also, vinyl components can be adversely affected by extremely harsh chemicals and solvents. Do not allow items such as paint thinners, solvents, insecticides, or mold and mildew removers to come into contact with vinyl components.

Water accumulation in the bottom track area:

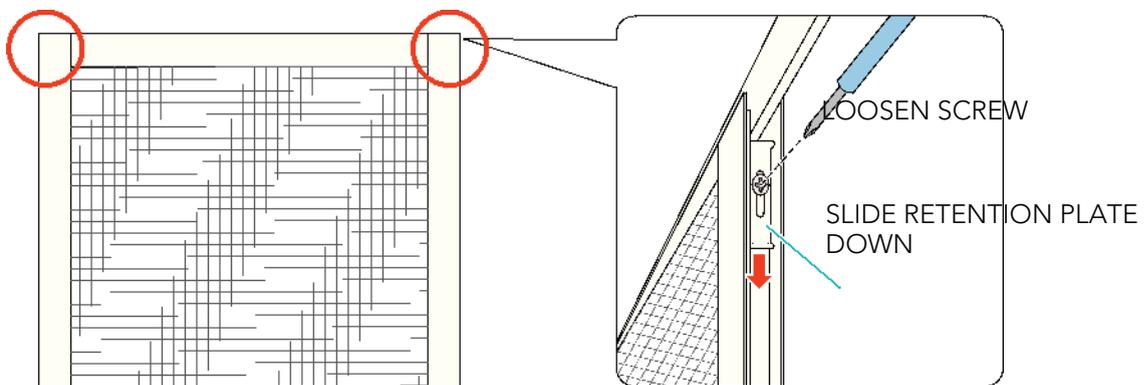
Ichijo vinyl horizontal sliding windows and patio doors are designed in a way that during torrential rain and sustained strong wind, water from the exterior of the home accumulates in the track area, creating a pressure barrier to prevent wind and water from actually entering the home. Once harsh weather subsides, water in the track area is designed to flow back out and naturally dries out. If water in the track does not dissipate, check to make certain weep holes built into the bottom of the window frame are not clogged and clear of dirt or debris.



Window Screen Removal & Replacement

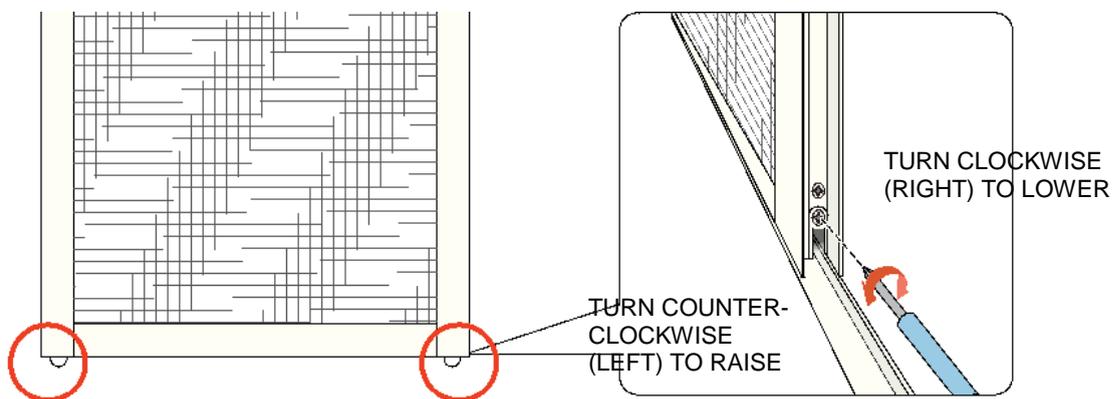
Horizontal sliding windows are furnished with insect screens. To remove the screen from the window: 1) Locate a screw on the upper edge of the screen frame 2) Loosen the screw 3) Slide the metal retention plate under the screw down 4) Lift the screen frame out of the window frame track. To reinstall, reverse the process.

66



SCREEN FRAME ADJUSTMENT

If the screen fails to slide smoothly across the window frame track, adjust the rollers located in the screen frame. Two rollers are located on the bottom at each end of the screen frame. The adjustment screws are located at the lower edges of the screen frame. Turn clockwise to lower, counter-clockwise to raise. Smooth operation is achieved when both rollers are level across the window frame track.



PRECAUTIONS

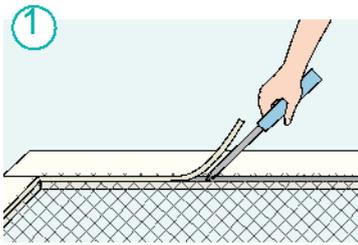
To prevent the screen from detaching from the window during extremely high winds, always engage the retention plate by sliding it to the "up" position before tightening the screw over the plate. Take care not to force the plate up to the point where it creates friction and scratches the window track.

Window Screen Replacement

Insect screens can be replaced relatively easily, and all parts and tools are readily available at home centers. If a screen begins to appear “wavy” due to continued use, it can be stretched to appear taut once again.

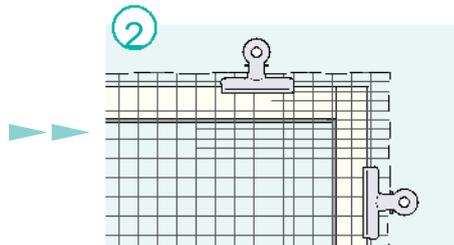
Materials and tools checklist:

Insect screen, 3.5mm or equivalent spline (flexible nylon tubing in a coil to hold the screen in place), flathead screwdriver, light duty clamps, utility knife, insect screen roller tool



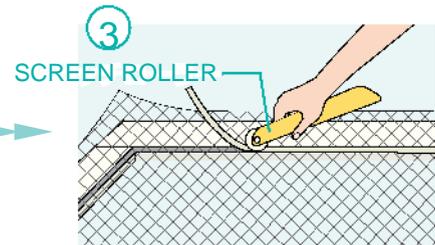
Remove the old material

Find where the spline ends meet. Using a flathead screwdriver, gently pry out a small section of spline. Using your hands, remove the remaining spline and screen.



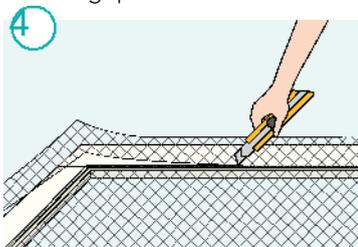
Position the new screen

Cut screen slightly larger than it needs to be in both directions. Position the screen over the frame, and temporarily clamp to secure



Install new screen

Push spline and screen together into the groove. With your other hand, apply slight and steady pressure, to keep the screen taut as it is being inserted into the screen frame groove.

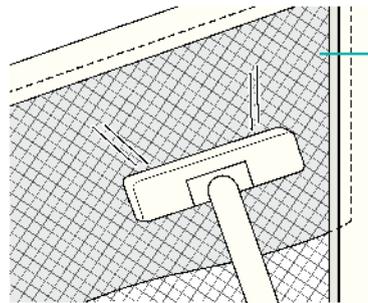
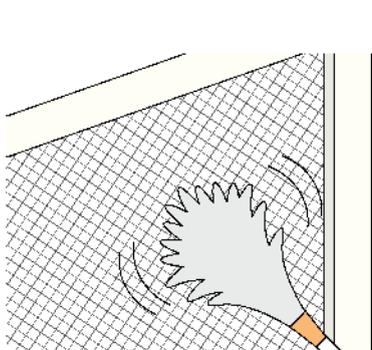


Remove excess screen

Confirm that the screen is evenly and fully seated in the frame to your satisfaction. If not, repeat previous steps. Once satisfied, cut-away the excess screen along the outside perimeter of the spline.

Cleaning Window Screens

Screens can be cleaned using a variety of methods: Using a soft feather duster, gentle tap the screen surface releasing dust accumulation. A vacuum cleaner with a soft bristle brush attachment can be used right over the screen. Screens can also be wiped clean using a warm damp cloth. For tough dirt accumulation, removing screens from windows and washing them with soap and water using a sponge or soft bristle brush may be necessary.

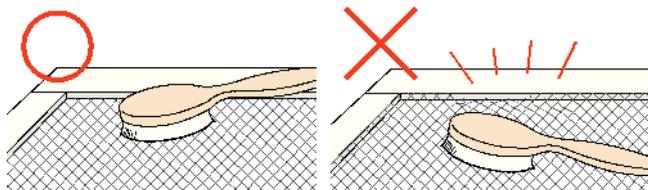


NEWSPAPER
BEHIND SCREEN

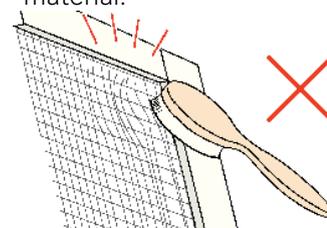
Placing newspaper behind the screen will enhance the suction and performance of the vacuum cleaner method.

□ When screens are removed from windows, lay the screen down horizontally

Lay the mohair side facing opposite to the side cleaned to prevent damage or detachment from the screen frame. When using a brush, do not pound on the screen because you may damage, detach, or loosen the screen from the frame.



When cleaning the screen removed from the window, always lay down the screen horizontally. Do not clean vertically, because you increase the chances of damaging the screen and frame, as well as possibly stretching out the screen material.





The Management Trust

AN EMPLOYEE OWNED COMPANY

Welcome to your new Ichijo USA home!

As an owner in this new neighborhood you are automatically a member of the homeowners association. A brochure entitled “A Strong Community Begins With You” is included in your Ichijo USA homeowner’s manual. The pamphlet provides an overview of the services your association provides, and your responsibilities as an owner. Together, you and your neighbors will maintain a vibrant community and enhance the appearance of this special enclave.

The Management Trust is proud to have been selected as your association manager. We look forward to helping each of you feel at home. You will receive a packet of critical association information in the near future. Until then, feel free to contact us with any related questions. Your association manager is Kate Bostwick. She may be reached by calling (425) 897-3506, or by emailing Kate.Bostwick@managementtrust.com. You may also reach us through our website www.managementtrust.com. Simply select the “Contact Us” link for Washington.

Once again, welcome to the neighborhood!

Redmond View Townhomes Utility Contacts

Once your closing date has been confirmed by our Project Manager during your walkthrough, please take a moment to contact the utility providers to give them your name, address and your closing date to ensure continued service. Thank you!

Electricity/Gas

Puget Sound Energy

1-888-225-5773, customercare@pse.com

Homeowner's Association

The Management Trust

Phone: 425-897-3506

Water/Sewer

City of Redmond

Phone: 425-556-2152

Fax: 425-556-2909

UtilityBilling@redmond.gov

King County

Sewer Capacity Charges

Phone: 206-296-1450

Fax: 206-263-6073

Garbage/Recycling/Food Waste Containers

Waste Management

Phone: 1 (800) 592-9995

Service Day: Thursday

Cable/Internet

Comcast

Phone: 1-800-934-6489

www.xfinity.com

Redmond Townhomes Emergency Contact List

SYSTEM	CONTRACTOR	CONTACT
Heating & Hot Water	Bob's Heating and Ventilation	800-840-3346
Ventilation	Bob's Heating and Ventilation	800-840-3346
Plumbing	Lakeside Plumbing	206-363-4513
Line Voltage - Service	Garner Electric	253-288-2155
Line Voltage - Electrical	Garner Electric	253-288-2155
Low Voltage - Electrical	Garner Electric	253-288-2155
Cable	Comcast	800-266-2278
Phone	Centry-Link	877-348-9007
Fire/Sprinkler System	NorTech Fire	425-898-9111
Roofing and PVC Roof	R & C Roofing/Chinook Roofing	253-922-6902

FIREX®

SIGNALING



Smoke Alarm User Guide

i4618AC, i4718AC, i5000AC Series

Model: i4618AC



- 120 Volt Smoke Alarm with 9 Volt Battery Back-up
- Front Load Battery
- Test and Hush® Button

⚠ ATTENTION: Please take a few minutes to thoroughly read this user guide which should be saved for future reference and passed on to any subsequent owner.

What to do When the Alarm Sounds!

Smoke Alarm Procedure

NEVER IGNORE THE SOUND OF THE ALARM!

Smoke alarms are designed to minimize false alarms. Cigarette smoke will not normally set off the alarm, unless the smoke is blown directly into the alarm. Combustion particles from cooking may set off the alarm if it is located too close to the cooking area. Large quantities of combustion particles are generated from spills or when broiling. Using the fan on a range hood which vents to the outside (non-recirculating type) will also help remove these combustion particles from the kitchen.

If the alarm sounds, check for fires first. If a fire is discovered, follow these steps. Become thoroughly familiar with these steps and review with all family members:

- Alert small children in the home.
- Leave immediately by your escape plan. Every second counts, so don't waste time getting dressed or picking up valuables.
- In leaving, don't open any inside door without first feeling its surface. If hot, or if you see smoke seeping through cracks, don't open that door! Instead, use your alternate exit. If the inside of the door is cool, place your shoulder against it, open it slightly and be ready to slam it shut if heat and smoke rush in.
- If the air is smoky, stay close to the floor. Breathe shallowly through a cloth, wet if possible.
- Once outside, go to your selected meeting place and make sure everyone is there.
- Call the fire department from your cell phone outside or neighbor's home - not from yours!
- Don't return to your home until the fire officials say that it is all right to do so.

A.C. Wire-in Single and/or Multiple Station (up to 24 Devices) Ionization Smoke Alarm with 9 Volt Battery Back Up and HUSH™ Control to temporarily silence nuisance alarms.

Thank you for purchasing this smoke alarm. It is an important part of your family's home safety plan. You can trust this product to provide the highest quality safety protection. We know you expect nothing less when the lives of your family are at stake. Firex alarms and accessories CAN ONLY BE interconnected with other Kidde and FireX alarms and accessories as well as specified brands and models of interconnect compatible alarms. Connection of Firex products to a non-specified manufacturer's interconnect system, or connection with non-specified equipment from another manufacturer into an existing Firex system could result in nuisance alarming, failure to alarm, or damage to one or all of the devices in the interconnect system. Refer to the User Guide supplied with each Firex product for interconnect compatible models, brands, and devices. Refer to the wiring instructions in section 3 for NFPA initiating device limits.

This alarm detects products of combustion using the ionization technique. It contains 0.9 microcurie of Americium 241, a radioactive material (see Section 9). Distributed under U.S. NRC License No. 32-23858-01E. Manufactured in compliance with U.S. NRC safety criteria in 10 CFR 32.27. The purchaser is exempt from any regulatory requirements. Do not try to repair the smoke alarm yourself. Refer to the instructions in Section 12 for service.

IMPORTANT! READ ALL INSTRUCTIONS BEFORE INSTALLATION AND KEEP THIS USER GUIDE NEAR THE ALARM FOR FUTURE REFERENCE.

CONTENTS OF THIS USER GUIDE

- 1 -- RECOMMENDED LOCATIONS FOR SMOKE ALARMS
- 2 -- LOCATIONS TO AVOID
- 3 -- INSTALLATION INSTRUCTIONS
- 4 -- OPERATION AND TESTING
- 5 -- NUISANCE ALARMS
- 6 -- MAINTENANCE
- 7 -- LIMITATIONS OF SMOKE ALARMS
- 8 -- GOOD SAFETY HABITS
- 9 -- NRC INFORMATION
- 10 -- NFPA PROTECTION STANDARD 72
- 11 -- CALIFORNIA STATE FIRE MARSHAL REQUIRED INFORMATION
- 12 -- SERVICE AND WARRANTY

⚠ WARNING! REMOVAL OF THE SMOKE ALARM BATTERY AND DISCONNECTING or LOSS OF A.C. POWER WILL RENDER THE SMOKE ALARM INOPERATIVE.

ELECTRICAL RATING: 120 VAC, 60HZ, 80mA maximum per alarm (maximum 80mA for originating unit with 24 devices interconnected).

1. RECOMMENDED LOCATIONS FOR ALARMS

- Locate the first alarm in the immediate area of the bedrooms. Try to monitor the exit path as the bedrooms are usually farthest from the exit. If more than one sleeping area exists, locate additional alarms in each sleeping area.
- Locate additional alarms to monitor any stairway as stairways act like chimneys for smoke and heat.
- Locate at least one alarm on every floor level.
- Locate an alarm in every sleeping room.
- Locate an alarm in every room where electrical appliances are operated (i.e. portable heaters or humidifiers).
- Locate an alarm in every room where someone sleeps with the door closed. The closed door may prevent an alarm not located in that room from waking the sleeper.
- Smoke, heat, and combustion products rise to the ceiling and spread horizontally. Mounting the smoke alarm on the ceiling in the center of the room places it closest to all points in the room. Ceiling mounting is preferred in ordinary residential construction.
- For mobile home installation, select locations carefully to avoid thermal barriers that may form at the ceiling. For more details, see MOBILE HOME INSTALLATION.
- When mounting an alarm on the ceiling, locate it at a minimum of 4" (10 cm) from the side wall (see FIGURE 1).
- When mounting the alarm on the wall, use an inside wall with the top edge of the alarm at a minimum of 4" (10 cm) and a maximum of 12" (30.5 cm) below the ceiling (see FIGURE 1).
- Put smoke alarms at both ends of a bedroom hallway or large room if the hallway or room is more than 30 feet (9.1 m) long.
- Install Smoke Alarms on sloped, peaked or cathedral ceilings at or within 3ft (0.9m) of the highest point (measured horizontally). NFPA 72 states: "Smoke alarms in rooms with ceiling slopes greater than 1 foot in 8 feet (.3m in 2.4 m) horizontally shall be located on the high side of the room." NFPA 72 states: "A row of detectors shall be spaced and located within 3 ft (0.9m) of the peak of the ceiling measured horizontally" (see FIGURE 3).

- Install Smoke Alarms on tray-shaped ceilings (coffered ceilings) on the highest portion of the ceiling or on the sloped portion of the ceiling within 12" (305mm) vertically down from the highest point (see figure 4).

MOBILE HOME INSTALLATION

Modern mobile homes have been designed and built to be energy efficient. Install smoke alarms as recommended above (refer to RECOMMENDED LOCATIONS and FIGURES 1 and 2).

In older mobile homes that are not well insulated compared to present standards, extreme heat or cold can be transferred from the outside to the inside through poorly insulated walls and roof. This may create a thermal barrier which can prevent the smoke from reaching an alarm mounted on the ceiling. In such units, install the smoke alarm on an inside wall with the top edge of the alarm at a minimum of 4" (10 cm) and a maximum of 12" (30.5 cm) below the ceiling (see FIGURE 1).

If you are not sure about the insulation in your mobile home, or if you notice that the outer walls and ceiling are either hot or cold, install the alarm on an inside wall. For minimum protection, install at least one alarm close to the bedrooms. For additional protection, see SINGLE FLOOR PLAN in FIGURE 2.

⚠ WARNING: TEST YOUR SMOKE ALARM OPERATION AFTER MOBILE HOME VEHICLE HAS BEEN IN STORAGE, BEFORE EACH TRIP AND AT LEAST ONCE A WEEK DURING USE.

2. LOCATIONS TO AVOID

- In the garage. Products of combustion are present when you start your automobile.
- Less than 4" (10cm) from the peak of an "A" frame type ceiling.
- In an area where the temperature may fall below 40°F (4.4°C) or rise above 100°F (37.8°C), such as garages and unfinished attics.

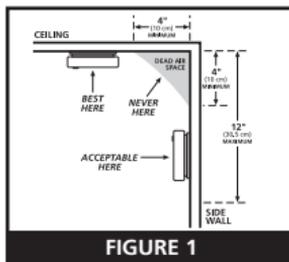


FIGURE 1

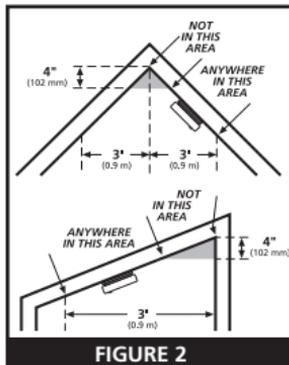


FIGURE 2

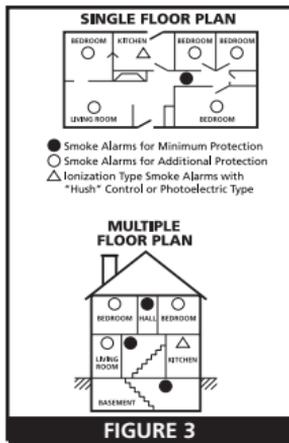


FIGURE 3

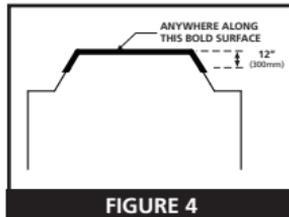


FIGURE 4

- In dusty areas. Dust particles may cause nuisance alarm or failure to alarm.
- In very humid areas (greater than 95% R.H.). Moisture or steam can cause nuisance alarms.
- In insect-infested areas.
- Smoke alarms should not be installed within 3 ft (.9m) of the following: the door to a kitchen, the door to a bathroom containing a tub or shower, forced air supply ducts used for heating or cooling, ceiling or whole house ventilating fans, or other high air flow areas.
- Kitchens. Normal cooking may cause nuisance alarms. If a kitchen alarm is desired, it should have an alarm silence feature or be a photoelectric type.
- Near fluorescent lights. Electronic "noise" may cause nuisance alarms.
- Smoke alarms are not to be used with detector guards unless the combination (alarm and guard) has been evaluated and found suitable for that purpose..

3. INSTALLATION INSTRUCTIONS

WIRING REQUIREMENTS

- This smoke alarm should be installed on a U.L. listed or recognized junction box. All connections should be made by a qualified electrician and all wiring used shall be in accordance with articles 210 and 300.3(B) of the U.S. National Electrical Code ANSI/NFPA 70, NFPA 72 and/or any other codes having jurisdiction in your area. The multiple station interconnect wiring to the alarms must be run in the same raceway or cable as the AC power wiring. In addition, the resistance of the interconnect wiring shall be a maximum of 10 ohms.
- The appropriate power source is 120 Volt A.C. Single Phase supplied from a non-switchable circuit which is not protected by a ground fault interrupter.

⚠ WARNING: This alarm cannot be operated from power derived from a square wave, modified square wave or modified sine wave inverters. These types of inverters are sometimes used to supply power to the structure in off grid installations, such as solar or wind derived power sources. These power sources produce high peak voltages that will damage the alarm.

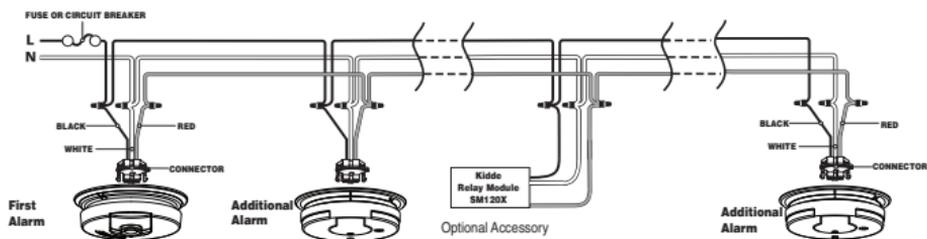
WIRING INSTRUCTIONS FOR A.C. QUICK CONNECT HARNESS

⚠ CAUTION! TURN OFF THE MAIN POWER TO THE CIRCUIT BEFORE WIRING THE ALARM.

- For alarms that are used as single station, DO NOT CONNECT THE RED WIRE TO ANYTHING. Leave the red wire insulating cap in place to make certain that the red wire cannot contact any metal parts or the electrical box.
- When alarms are interconnected, all interconnected units must be powered from a single circuit.

- A maximum of 24 Kidde and/or FireX devices may be interconnected in a multiple station arrangement. The interconnect system should not exceed the NFPA interconnect limit of 12 smoke alarms and/or 18 alarms total (smoke, heat, carbon monoxide, etc.). With 18 alarms interconnected, it is still possible to interconnect up to a total of 6 remote signaling devices and/or relay modules.
- When mixing models which have battery backup (1275, 1276, 1285, i12040, i12040A, i12060, i12060A, i12080, i12080A, i4618, i4618A, i4618AC, i4718A, i4718AC, i5000A, i5000AC, PE120, P12040, Pi2000, Pi2010, KN-COPE-I, KN-SM-FM-I, KN-COSM-IB, KN-COSM-IBA, HD135F, KN-COB-IC, KN-COP-IC, i12010S, i12010SCO, RF-SM-ACDC) with models without battery backup, (1235, i12020, i12020A, KN-COSM-I, SM120X, CO120X, SL177i, SLED177i) be advised that the models without battery backup will not respond during an AC power failure.
- For more information about compatible interconnect units and their functionality in an interconnect system, visit our web site at: www.Kidde.com
- The maximum wire run distance between the first and last unit in an interconnected system is 1000 feet.
- **NOTE:** This alarm is not compatible with Kidde CO-relays and Strobes manufactured before Nov. 1, 2011.
- Figure 5 illustrates interconnection wiring. Improper connection will result in damage to the alarm, failure to operate, or a shock hazard.
- Make certain alarms are wired to a continuous (non-switched) power line. NOTE: Use standard UL listed household wire (as required by local codes) available at all electrical supply stores and most hardware stores.

FIGURE 5 INTERCONNECT WIRING DIAGRAM



WIRES ON ALARM HARNESS

Black
White
Red

CONNECTED TO

Hot Side of A.C. Line
Neutral Side of A.C. Line
Interconnect Lines (Red Wires) of Other
Units in the Multiple Station Set up

BATTERY INSTALLATION

See MAINTENANCE (Section 6) for battery installation.

⚠ CAUTION! THIS UNIT WILL NOT FUNCTION WITHOUT A PROPERLY INSTALLED BATTERY, AND IS EQUIPPED WITH A BATTERY LOCKOUT FEATURE WHICH PREVENTS THE BATTERY DOOR FROM CLOSING IF A BATTERY IS NOT INSTALLED CORRECTLY.

MOUNTING INSTRUCTIONS

⚠ CAUTION: THIS UNIT IS SEALED. THE COVER IS NOT REMOVABLE!

1. Remove the trim ring from the back of the alarm by holding the trim ring and twisting the alarm counter-clockwise.
2. After selecting the proper smoke alarm location as described in Section 1 and wiring the AC Quick Connector as described in the WIRING INSTRUCTIONS, attach the trim ring to the electrical box (see Figure 6). To ensure aesthetic alignment of the alarm with the hallway or wall, the "A" line on the mounting bracket must be parallel with the hallway when ceiling mounted, or horizontal when wall mounted.

When mounting in a hallway, the "A" line should be parallel with the hallway.



When wall mounting, the "A" line should be horizontal.

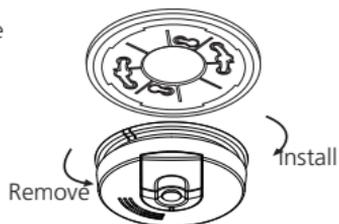


FIGURE 6

Alignment Marks

3. Pull the AC QUICK CONNECTOR through the center hole in the mounting bracket and secure the bracket, making sure that the mounting screws are positioned in the small ends of the keyholes before tightening the screws.
4. Plug the AC QUICK CONNECTOR into the back of the alarm (see Figure 7), making sure that the locks on the connector snap into place. Then push the excess wire back into the electrical box through the hole in the center of the mounting bracket.
5. Install the alarm on the mounting bracket and rotate the alarm clockwise until the alarm ratchets into place (this ratcheting function allows for aesthetic alignment).



FIGURE 7

NOTE: The alarm will mount to the bracket in 4 positions (every 90 degrees). When wall mounting, make sure the battery box is at the bottom of the unit. (see Figure 5).

6. Pull the Battery Pull Tab completely out of the unit. This will automatically connect the battery.

⚠ CAUTION: Due to the loudness (85 decibels) of the alarm, always stand an arms length away from the unit when testing.

7. Turn on the AC power. The green Power On Indicator should be lit when the alarm is operating from AC power. Confirm unit operation by pressing the Test/Hush button.

8. Test the unit to ensure proper operation by pressing the Test/Hush Button for a minimum of 5 seconds. (All interconnected, battery backed up, alarms should respond).

TAMPER RESIST FEATURES

Smoke Alarm Tamper Resist Feature

This alarm has a tamper resist feature, which helps prevent someone from removing the unit from the mounting bracket. It can be very effective in preventing smoke alarm tampering.

Activate the smoke alarm tamper resist feature by breaking off the four posts in the square holes in the mounting bracket (see Figure 8A). When the posts are broken off, the tamper resist tab on the base is allowed to engage the mounting bracket. Rotate the alarm onto the mounting bracket until you hear the tamper resist tab snap into place, locking the alarm on the mounting bracket. Using the tamper resist feature will help deter children and others from removing the alarm from the bracket. NOTE: To remove the alarm when the tamper resist tab is engaged, press down on the tamper resist tab, and rotate the alarm off the bracket (see Figure 8B).

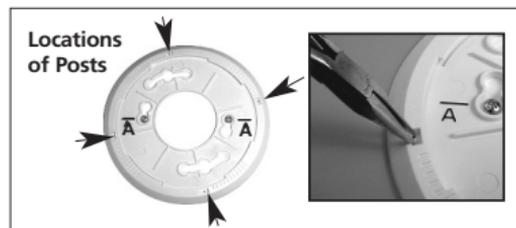


FIGURE 8A



FIGURE 8B

4. OPERATION AND TESTING

OPERATION: The smoke alarm is operating once A.C. power is applied, a fresh battery is installed and testing is complete. When the smoke alarm ionization chamber senses products of combustion, the horn will sound a loud (85db) temporal alarm until the sensing chamber is cleared of smoke particles.

HUSH™ CONTROL: The "HUSH" feature has the capability of temporarily desensitizing the alarm circuit for up to 8 minutes. This feature is to be used only when a known alarm condition, such as smoke from cooking, activates the alarm. The smoke alarm is desensitized by pushing the "TEST/HUSH" button on the smoke alarm cover. If the smoke is not too dense, the alarm will silence immediately. The red LED will illuminate for 1.5 seconds every 8-10 seconds while in hush. This indicates that the alarm is in a temporarily desensitized condition. The smoke alarm will automatically reset after approximately 8 minutes and sound the alarm if particles of combustion are still present. The "HUSH" feature can be used repeatedly until the air has been cleared of the condition causing the alarm. Pushing the Test/Hush button on the alarm will end the hush period.

This alarm has a low battery HUSH feature. If the alarm is sounding a low battery warning chirp, you can silence this chirp for approximately 13 hours by pressing the Test/Hush button.

NOTE: DENSE SMOKE WILL OVERRIDE THE HUSH CONTROL FEATURE AND SOUND A CONTINUOUS ALARM.

⚠ CAUTION: BEFORE USING THE ALARM HUSH FEATURE, IDENTIFY THE SOURCE OF THE SMOKE AND BE CERTAIN A SAFE CONDITION EXISTS.

LED INDICATORS: This smoke alarm is equipped with red and green LED indicators. The green LED (when illuminated) indicates the presence of AC power. The red LED has four modes of operation:

Standby Condition: The red LED will flash every 40 seconds to indicate that the smoke alarm is operating properly.

Alarm Condition: When the alarm senses products of combustion and goes into alarm, the red LED will flash one flash per second. The flashing LED and pulsating alarm will continue until the air is cleared.

WHEN UNITS ARE INTERCONNECTED, only the red LED of the alarm which senses the smoke or is being tested (the originating unit) will flash. All other units in the interconnect system will sound an alarm but their red LED's will NOT be flashing.

- Alarm Memory:** This smoke alarm is equipped with an alarm memory, which provides a visual indication when an alarm has been activated. The red LED will illuminate for about 1.5 seconds every 16-20 seconds to indicate the memory condition. The memory will remain activated until pushing the Test/Hush Button resets it or will time-out between 11 to 13 hours. In an interconnected installation only the memory of the originating alarm will be activated.
- Hush® mode:** The red LED will illuminate for 1.5 seconds every 8-10 seconds, indicating the smoke alarm is in the Hush® mode.

TESTING: Test by pushing the Test/Hush button on the cover and hold it down for a minimum of 5 seconds. This will sound the alarm if all the electronic circuitry, horn and battery are working. In an interconnected installation all interconnected alarms should sound when the test feature on any one of the interconnected alarms is activated. If no alarm sounds, check the fuse or circuit breaker supplying power to the alarm circuit. If the alarm still does not sound, the unit has defective batteries or other failure. **DO NOT** use an open flame to test your alarm, you could damage the alarm or ignite combustible materials and start a structure fire.

TEST THE ALARM WEEKLY TO ENSURE PROPER OPERATION. Erratic or low sound coming from your alarm may indicate a defective alarm, and it should be returned for service (see Section 12).

5. NUISANCE ALARMS

Smoke alarms are designed to minimize nuisance alarms. Cigarette smoke will not normally set off the alarm, unless the smoke is blown directly into the alarm. Combustion particles from cooking may set off the alarm if the alarm is located close to the cooking area. Large quantities of combustible particles are generated from spills or when broiling. Using the fan on a range hood which vents to the outside (non-recirculating type) will also help remove these combustible products from the kitchen.

Model i4618AC has a "HUSH" feature that is extremely useful in a kitchen area or other areas prone to nuisance alarms. For more information, refer to Section 4 OPERATION AND TESTING.

If the alarm does sound, check for fires first. If a fire is discovered, get out and call the fire department. If no fire is present, check to see if one of the reasons listed in Section 2 may have caused the alarm.

6. MAINTENANCE / TROUBLESHOOTING

ALARM REMOVAL

IF SMOKE ALARM TAMPER RESIST FEATURE HAS BEEN ACTIVATED, REFER TO SMOKE ALARM TAMPER RESIST FEATURE IN SECTION 3 FOR REMOVAL INSTRUCTIONS.

To remove the alarm from the trim ring, rotate the alarm counter clockwise in the direction of the "OFF" arrow on the cover. To disconnect the A.C. power harness, squeeze the locking arms on the sides of the Quick Connector while pulling the connector away from the bottom of the alarm (see Section 3, Figure 7).

BATTERY INSTALLATION AND REMOVAL

To replace or install the battery slide the battery door in the direction indicated on the cover of the alarm. The battery can then be pulled out of the carrier. When installing a new battery into the carrier, make sure that the polarity matches the markings printed on the inside of the battery compartment. Completely slide the battery door to the closed position.

A missing or improperly installed battery will prevent the battery door from closing and result in improper alarm operation.



SLIDE



OPEN



INSERT

This smoke alarm uses a 9V carbon zinc battery (alkaline batteries may also be used). A fresh battery should last for one year under normal operating conditions.

This alarm has a low/missing battery monitor circuit which will cause the alarm to "chirp" approximately every 30-40 seconds for a minimum of seven (7) days when the battery gets low. Replace the battery when this condition occurs.

NOTE: Low/missing battery monitor circuit WILL cause the unit to chirp while replacing the battery. This function will cease once the new battery has been installed. To avoid this "chirp" the unit can be removed from the base and disconnected from the AC power when replacing the battery, but it is not necessary.

USE ONLY THE FOLLOWING 9 VOLT BATTERIES FOR SMOKE ALARM

BATTERY REPLACEMENT.

Carbon-zinc type EVEREADY 1222; GOLD PEAK 1604P OR 1604S
GOLDEN POWER G6F22M

Alkaline type ENERGIZER 522; DURACELL MN1604 OR MX1604; GOLD PEAK 1604A PANASONIC 6AM6, 6AM-6, 6AM-6PI, 6AM6X, AND 6LR61 (GA)

NOTE: Do not use lithium batteries in this unit.

These batteries can be purchased at your local retailer.

NOTE: WEEKLY TESTING IS REQUIRED!

⚠ WARNING! BE SURE TO FOLLOW BATTERY INSTALLATION INSTRUCTIONS PRINTED ON THE BACK OF THE ALARM AND USE ONLY THE BATTERIES SPECIFIED. USE OF DIFFERENT BATTERIES MAY HAVE A DETRIMENTAL EFFECT ON THE SMOKE ALARM.

⚠ WARNING: THIS ALARM WILL "CHIRP" IF ABNORMAL OPERATION OF THE SMOKE-SENSING CHAMBER IS DETECTED. THIS CHIRP WILL OCCUR APPROXIMATELY 20 SECONDS AFTER THE RED LED FLASH. REPLACE THE ALARM IF THIS CONDITION OCCURS.

CLEANING YOUR ALARM

YOUR ALARM SHOULD BE CLEANED AT LEAST ONCE A YEAR

To clean your alarm, remove it from the mounting bracket as outlined in the beginning of this section. You can clean the interior of your alarm (sensing chamber) by using compressed air or a vacuum cleaner hose and blowing or vacuuming through the openings around the perimeter of the alarm. The outside of the alarm can be wiped with a damp cloth. After cleaning, reinstall your alarm, verify the green LED is on and test your alarm by using the Test/Hush Button. If cleaning does not restore the alarm to normal operation the alarm should be replaced.

7. LIMITATIONS OF SMOKE ALARMS

⚠ WARNING: PLEASE READ CAREFULLY AND THOROUGHLY

- NFPA 72 states: Life safety from fire in residential occupancies is based primarily on early notification to occupants of the need to escape, followed by the appropriate egress actions by those occupants. Fire warning systems for

dwelling units are capable of protecting about half of the occupants in potentially fatal fires. Victims are often intimate with the fire, too old or young, or physically or mentally impaired such that they cannot escape even when warned early enough that escape should be possible. For these people, other strategies such as protection-in-place or assisted escape or rescue are necessary.

- Leading authorities recommend that both ionization and photoelectric smoke alarms be installed to help insure maximum detection of the various types of fires that can occur within the home. Ionization sensing alarms may detect invisible fire particles (associated with fast flaming fires) sooner than photoelectric alarms. Photoelectric sensing alarms may detect visible fire particles (associated with slow smoldering fires) sooner than ionization alarms.
- A battery powered alarm must have a battery of the specified type, in good condition and installed properly.
- A.C. powered alarms (without battery backup) will not operate if the A.C. power has been cut off, such as by an electrical fire or an open fuse.
- Smoke alarms must be tested regularly to make sure the batteries and the alarm circuits are in good operating condition.
- Smoke alarms cannot provide an alarm if smoke does not reach the alarm. Therefore, smoke alarms may not sense fires starting in chimneys, walls, on roofs, on the other side of a closed door or on a different floor.
- If the alarm is located outside the bedroom or on a different floor, it may not wake up a sound sleeper.
- The use of alcohol or drugs may also impair one's ability to hear the smoke alarm. For maximum protection, a smoke alarm should be installed in each sleeping area on every level of a home.
- Although smoke alarms can help save lives by providing an early warning of a fire, they are not a substitute for an insurance policy. Home owners and renters should have adequate insurance to protect their lives and property.

8. GOOD SAFETY HABITS

DEVELOP AND PRACTICE A PLAN OF ESCAPE

- Install and maintain Fire extinguishers on every level of the home and in the kitchen, basement and garage. Know how to use a fire extinguisher prior to an emergency.
- Make a floor plan indicating all doors and windows and at least two (2) escape routes from each room. Second story windows may need a rope or chain ladder.

- Have a family meeting and discuss your escape plan, showing everyone what to do in case of fire.
- Determine a place outside your home where you all can meet if a fire occurs.
- Familiarize everyone with the sound of the smoke alarm and train them to leave your home when they hear it.
- Practice a fire drill at least every six months, including fire drills at night. Ensure that small children hear the alarm and wake when it sounds. They must wake up in order to execute the escape plan. Practice allows all occupants to test your plan before an emergency. You may not be able to reach your children. It is important they know what to do.
- Current studies have shown smoke alarms may not awaken all sleeping individuals, and that it is the responsibility of individuals in the household that are capable of assisting others to provide assistance to those who may not be awakened by the alarm sound, or to those who may be incapable of safely evacuating the area unassisted.

WHAT TO DO WHEN THE ALARM SOUNDS

- Alert small children in the home.
- Leave immediately by your escape plan. Every second counts, so don't waste time getting dressed or picking up valuables.
- In leaving, don't open any inside door without first feeling its surface. If hot, or if you see smoke seeping through cracks, don't open that door! Instead, use your alternate exit. If the inside of the door is cool, place your shoulder against it, open it slightly and be ready to slam it shut if heat and smoke rush in.
- Stay close to the floor if the air is smoky. Breathe shallowly through a cloth, wet if possible.
- Once outside, go to your selected meeting place and make sure everyone is there.
- Call the fire department from your cell phone outside or neighbor's home - not from yours!
- Don't return to your home until the fire officials say that it is all right to do so.

There are situations where a smoke alarm may not be effective to protect against fire. For instance:

- Smoking in bed.
- Leaving children unsupervised.

- Cleaning with flammable liquids, such as gasoline.
- Fires where the victim is intimate with a flaming initiated fire; for example, when a person's clothes catch fire while cooking.
- Fires where the smoke is prevented from reaching the detector due to a closed door or other obstruction.
- Incendiary fires where the fire grows so rapidly that an occupant's egress is blocked even with properly located detectors

9. NRC INFORMATION

Ionization type smoke alarms use a very small amount of a radioactive element in the sensing chamber to enable detection of visible and invisible combustion products. The radioactive element is safely contained in the chamber and requires no adjustments or maintenance. This smoke alarm meets or exceeds all government standards. It is manufactured and distributed under license from the U.S. Nuclear Regulatory Commission.

10. NFPA REQUIRED PROTECTION

The National Fire Protection Association's Standard 72 provides the following information:

Smoke Detection – Where required by applicable laws, codes, or standards for the specified occupancy, approved single- and multiple-station smoke alarms shall be installed as follows:

- (1) In all sleeping rooms and guest rooms.
- (2) Outside of each separate dwelling unit sleeping area, within 21 ft (6.4 m) of any door to a sleeping room, with the distance measured along a path of travel.
- (3) On every level of a dwelling unit, including basements.
- (4) On every level of a residential board and care occupancy (small facility), including basements and excluding crawl spaces and unfinished attics.
- (5) In the living area(s) of a guest suite.
- (6) In the living area(s) of a residential board and care occupancy (small facility).

Smoke Detection – Are More Smoke Alarms Desirable? The required number of smoke alarms might not provide reliable early warning protection for those areas

separated by a door from the areas protected by the required smoke alarms. For this reason, it is recommended that the householder consider the use of additional smoke alarms for those areas for increased protection. The additional areas include the basement, bedrooms, dining room, furnace room, utility room, and hallways not protected by the required smoke alarms. The installation of the smoke alarms in the kitchen, attic (finished or unfinished), or garage is normally not recommended, as these locations occasionally experience conditions that can result in improper operation.

This equipment should be installed in accordance with the National Fire Protection Association's Standard 72 (NFPA, Batterymarch Park, Quincy, MA 02269).

NOTIFY YOUR LOCAL FIRE DEPARTMENT AND INSURANCE COMPANY OF YOUR SMOKE ALARM INSTALLATION.

11. CAUTION (AS REQUIRED BY THE CALIFORNIA STATE FIRE MARSHAL)

"Early warning fire detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows. A smoke alarm installed in each separate sleeping area (in the vicinity of, but outside of the bedrooms), and heat or smoke detectors in the living rooms, dining rooms, bedrooms, kitchens, hallways, attics, furnace rooms, closets, utility and storage rooms, basements and attached garages."

12. SERVICE AND WARRANTY

If after reviewing this user guide you feel that your smoke alarm is defective in any way, do not tamper with the unit.

Return it for servicing to: KIDDE, 1016 Corporate Park Dr., Mebane, NC 27302. 1-800-880-6788 (See Warranty for in-warranty returns).

FIVE YEAR LIMITED WARRANTY (i4618AC, i4718AC Series)

Kidde warrants to the original purchaser that the enclosed smoke alarm (but not the battery) will be free from defects in material and workmanship or design under normal use and service for a period of five years from the date of purchase. The obligation of Kidde under this warranty is limited to repairing or replacing the smoke alarm or any part which we find to be defective in material, workmanship or design, free of charge to the customer, upon sending the smoke alarm with proof of date of purchase, postage and return postage prepaid, to Warranty Service Department, Kidde, 1016 Corporate Park Dr., Mebane, NC 27302.

This warranty shall not apply to the smoke alarm if it has been damaged, modified, abused or altered after the date of purchase or if it fails to operate due to improper maintenance or inadequate A.C. or D.C. electrical power.

THE LIABILITY OF KIDDE OR ANY OF ITS PARENT OR SUBSIDIARY CORPORATIONS ARISING FROM THE SALE OF THIS SMOKE ALARM OR UNDER THE TERMS OF THIS LIMITED WARRANTY SHALL NOT IN ANY CASE EXCEED THE COST OF REPLACEMENT OF SMOKE ALARM AND, IN NO CASE, SHALL KIDDE OR ANY OF ITS PARENT OR SUBSIDIARY CORPORATIONS BE LIABLE FOR CONSEQUENTIAL LOSS OR DAMAGES RESULTING FROM THE FAILURE OF THE SMOKE ALARM OR FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE COMPANY'S NEGLIGENCE OR FAULT.

Since some states do not allow limitations on the duration of an implied warranty or do not allow the exclusion or limitation of incidental or consequential damages, the above limitations or exclusions may not apply to you. While this warranty gives you specific legal rights, you may also have other rights which vary from state to state.

Also, Kidde makes no warranty, express or implied, written or oral, including that of merchantability or fitness for any particular purpose, with respect to the battery.

The above warranty may not be altered except in writing signed by both parties hereto.

TEN YEAR LIMITED WARRANTY (i5000AC Series)

Kidde warrants to the original purchaser that the enclosed smoke alarm (but not the battery) will be free from defects in material and workmanship or design under normal use and service for a period of ten years from the date of purchase. The obligation of Kidde under this warranty is limited to repairing or replacing the smoke alarm or any part which we find to be defective in material, workmanship or design, free of charge to the customer, upon sending the smoke alarm with proof of date of purchase, postage and return postage prepaid, to Warranty Service Department, Kidde, 1016 Corporate Park Dr., Mebane, NC 27302.

This warranty shall not apply to the smoke alarm if it has been damaged, modified, abused or altered after the date of purchase or if it fails to operate due to improper maintenance or inadequate A.C. or D.C. electrical power.

THE LIABILITY OF KIDDE OR ANY OF ITS PARENT OR SUBSIDIARY CORPORATIONS ARISING FROM THE SALE OF THIS SMOKE ALARM OR UNDER THE TERMS OF THIS LIMITED WARRANTY SHALL NOT IN ANY CASE EXCEED THE COST OF REPLACEMENT OF SMOKE ALARM AND, IN NO CASE, SHALL KIDDE OR ANY OF ITS PARENT OR SUBSIDIARY CORPORATIONS BE LIABLE FOR CONSEQUENTIAL LOSS OR DAMAGES RESULTING FROM THE FAILURE OF THE SMOKE ALARM OR FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, EVEN IF THE LOSS OR DAMAGE IS CAUSED BY THE COMPANY'S NEGLIGENCE OR FAULT.

Since some states do not allow limitations on the duration of an implied warranty or do not allow the exclusion or limitation of incidental or consequential damages, the above limitations or exclusions may not apply to you. While this warranty gives you specific legal rights, you may also have other rights which vary from state to state.

Also, Kidde makes no warranty, express or implied, written or oral, including that of merchantability or fitness for any particular purpose, with respect to the battery.

The above warranty may not be altered except in writing signed by both parties hereto.

QUESTIONS OR FOR MORE INFORMATION

Call our Consumer Hotline at **1-800-880-6788** or contact us at our website at **www.kidde.com**

FIREX[®]

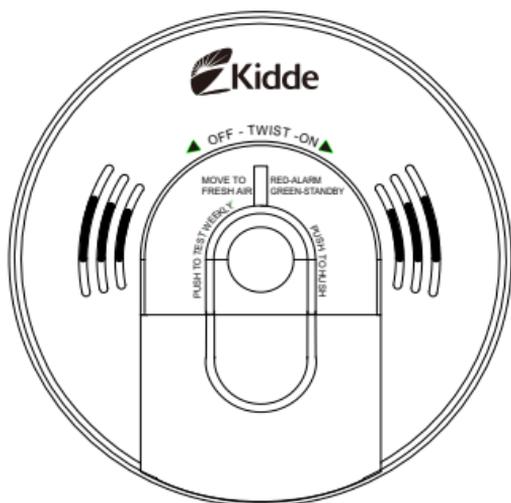
Kidde 1016 Corporate Park Drive, Mebane, NC 27302
Made in China



User Guide for Model KN-COSM-IBA

Combination Smoke and Carbon Monoxide Alarm

- 120V AC
- 2 - AA Battery Backup
- 2-LED Display
- Peak Level Memory
- Test/Hush® button
- Voice Message System



SIGNALING



For questions concerning your Smoke and Carbon Monoxide Alarm, please call our Product Support Line at 1-800-880-6788.

For your convenience, write down the following information. If you call our Product Support Line, these are the first questions you will be asked:

Alarm Model Number
(located on back of the alarm):

Date of Manufacture
(located on back of the alarm):

Date of Purchase:

Where Purchased:

READ AND SAVE THIS USER GUIDE

P/N 2544-7201-01 EN

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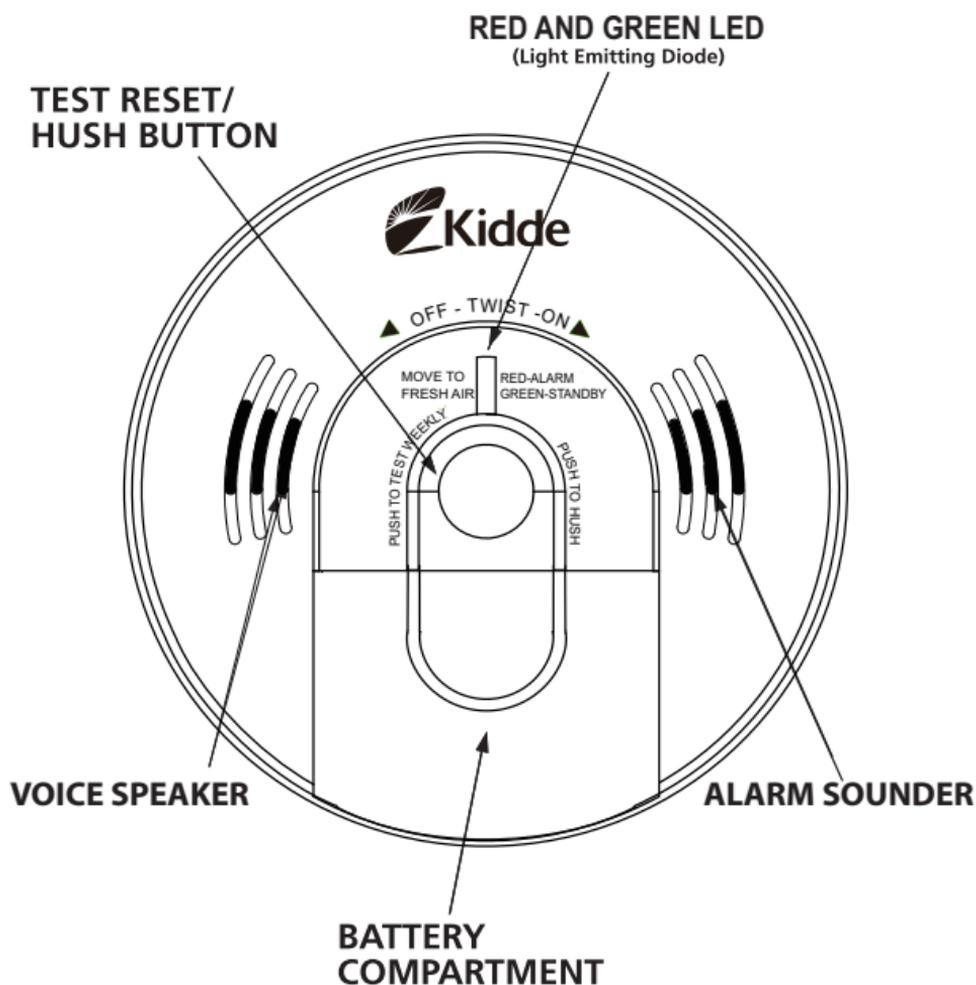
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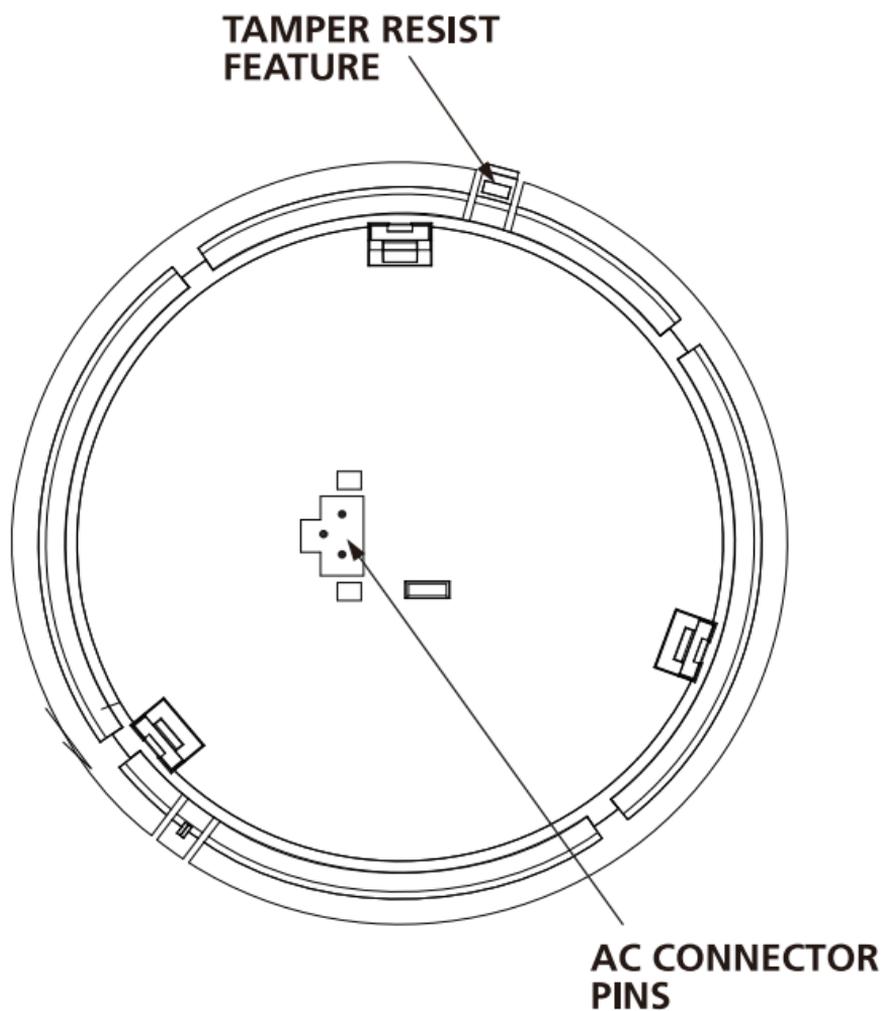
Introduction

Thank you for purchasing the Kidde Combination Smoke and Carbon Monoxide Alarm model # KN-COSM-IBA. This alarm is suitable as a Single Station and/or Multiple Station (24 devices) alarm. This alarm has a ten-year limited warranty. Please take a few minutes to thoroughly read this user guide, and save for future reference. Teach children how to respond to the alarms, and that they should never play with the unit. Your Kidde Smoke/CO Alarm was designed to detect both smoke and carbon monoxide from any source of combustion in a residential environment. It is not designed for use in a recreational vehicle (RV) or boat. If you have any questions about the operation or installation of your alarm, please call our toll free Product Support Line at 1-800-880-6788. The guide on Page 27 will help you determine the correct location of safety products that will help keep your home a safer place.

Product View

FRONT





Features

- Loud 85 decibel alarm.
- Permanent independent smoke and carbon monoxide sensors.
- **Smoke alarm takes precedence** when **both** smoke and carbon monoxide are present.
- Powered by 120V AC (60 Hz, 45mA max) wire-in connector and two AA battery backup.
- Interconnectable to other Kidde/Nighthawk brand smoke and CO alarms (see page 15 for details).
- Alarm/Voice message warning system that alerts you of the following conditions in the manner described below, thus eliminating any confusion over which alarm is sounding:

FIRE: The alarm/voice pattern is three long alarm beeps followed by the verbal warning message "FIRE!" This pattern is repeated until the smoke is eliminated. The red LED light will flash while in alarm/voice mode.

CARBON MONOXIDE: The alarm/voice pattern is four short alarm beeps followed by the verbal warning message "WARNING! CARBON MONOXIDE!". This continues until the unit is reset or the CO is eliminated. While powered by battery only, after four minutes the alarm/voice pattern will sound once every minute. The red Light Emitting Diode (LED) light will flash while in alarm/voice mode.

LOW BATTERY: When the batteries are low and need replacing the red LED light will flash and the unit will "chirp" one time, followed by the warning message "LOW BATTERY." This cycle will occur once every minute and will continue for at least seven days. Under battery power, the "LOW BATTERY" voice only occurs once every 15 minutes.

- Voice Message System that alerts user to the following conditions:
 - Only for smoke alarm Hush
System announces "HUSH MODE ACTIVATED" when the unit is first put into HUSH Mode.
 - Only for smoke alarm Hush

Features

System announces "HUSH MODE CANCELLED" when unit resumes normal operation after Hush Mode has been cancelled.

- Only if button is pushed

System announces "CAUTION, CARBON CONOXIDE PREVIOUSLY DETECTED" when the unit has detected CO concentrations of 100 ppm or higher.

- System announces "PUSH TEST BUTTON" when the unit is powered up, reminding user to activate the Test Button.
- End of Life Hush. At end of product life, the button can be pushed to silence the end of life "chirp" for approximately 3 days at a time, for a maximum of 30 days life extension.
- One "chirp" every 30 seconds coupled with a green LED flash twice a second is an indication that the alarm is malfunctioning. If this occurs call the Product Support Line at 1-800-880-6788.
- Test/Reset button performs functions.(See page 14).
- HUSH Control Feature that silences the unit during nuisance alarm situations (see page 15).
- Peak Level Memory Feature which alerts user when the unit has detected CO concentrations of 100 ppm or greater (see page 16).
- Alarm Memory Feature that gives visual indication when an alarm has sensed a hazardous condition.
- Green and red LED lights that indicate normal operation and alarm status (see page 16 and 17 for details).
- Tamper Resist Feature that deters children and others from removing the alarm (see page 17).
- Battery reminder flag that prohibits installation when batteries are not present.

Features and General Information

Smoke Alarm

The smoke alarm monitors the air for products of combustion that are produced when something is burning or smoldering. When smoke particles in the smoke sensor reach a specified concentration, the alarm/voice message warning system will sound, and be accompanied by the flashing red LED light. The smoke alarm takes precedence when both smoke and carbon monoxide are present.

 **WARNING: PLEASE READ CAREFULLY AND THOROUGHLY**

NFPA 72 states: Life safety from fire in residential occupancies is based primarily on early notification to occupants of the need to escape, followed by the appropriate egress actions by those occupants. Fire warning systems for dwelling units are capable of protecting about half of the occupants in potentially fatal fires. Victims are often intimate with the fire, too old or young, or physically or mentally impaired such that they cannot escape even when warned early enough that escape should be possible. For these people, other strategies such as protection-in-place or assisted escape or rescue are necessary.

- Smoke alarms are devices that can provide early warning of possible fires at a reasonable cost; however, alarms have sensing limitations. Ionization sensing alarms may detect invisible fire particles (associated with fast flaming fires) sooner than photoelectric alarms. Photoelectric sensing alarms may detect visible fire particles (associated with slow smoldering fires) sooner than ionization alarms. Home fires develop in different ways and are often unpredictable. For maximum protection, Kidde recommends that both Ionization and Photoelectric alarms be installed.
- A battery powered alarm must have a battery of the specified type, in good condition and installed properly.
- Smoke alarms must be tested regularly to make sure the batteries and the alarm circuits are in good operating condition.
- Smoke alarms cannot provide an alarm if smoke does not reach the alarm. Therefore, smoke alarms may not sense fires starting in chimneys, walls, on roofs, on the other side of a closed door or on a different floor.

Features and General Information

- If the alarm is located outside the bedroom or on a different floor, it may not wake up a sound sleeper.
- The use of alcohol or drugs may also impair one's ability to hear the smoke alarm. For maximum protection, a smoke alarm should be installed in each sleeping area on every level of a home.
- Although smoke alarms can help save lives by providing an early warning of a fire, they are not a substitute for an insurance policy. Home owners and renters should have adequate insurance to protect their lives and property.

Carbon Monoxide (CO) Alarm

The Carbon Monoxide (CO) alarm monitors the air for the presence of CO. It will alarm when there are high levels of CO present, and when there are low levels of CO present over a longer period of time (see page 21 for alarm times). When a CO condition matches either of these situations, the alarm/voice message warning system will sound, and be accompanied by the flashing red LED light. The carbon monoxide sensor uses an electrochemical technology.

 CAUTION: This alarm will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas.

Individuals with medical problems may consider using warning devices which provide audible and visual signals for carbon monoxide concentrations under 30 ppm.

Installation Instructions

Step 1

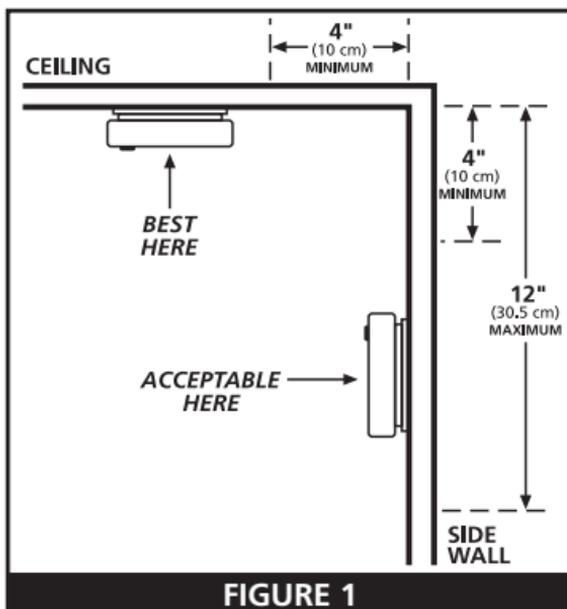
Installation Guide:

IMPORTANT: THIS ALARM MUST BE MOUNTED ON A CEILING OR WALL. IT WAS NOT DESIGNED FOR USE AS A TABLETOP DEVICE! INSTALL ONLY AS DETAILED!

A. Recommended Installation Locations:

Kidde Safety recommends the installation of a Smoke/CO Alarm in the following locations. For maximum protection we suggest an alarm be installed on each level of a multilevel home, including every bedroom, hallways, finished attics and basements. Put alarms at both ends of bedroom, hallway or large room if hallway or room is more than 30 ft (9.1m) long. If you have only one alarm, ensure it is placed in the hallway outside of the main sleeping area, or in the main bedroom. Verify the alarm can be heard in all sleeping areas.

Locate an alarm in every room where someone sleeps with the door closed. The closed door may prevent an alarm not located in that room from waking the sleeper. Smoke, heat and combustion products rise to the ceiling and spread horizontally. Mounting the alarm on the ceiling in the center of the room places it closest to all points in the room. Ceiling mounting is preferred in ordinary residential construction. When mounting an alarm on the ceiling, locate it at a minimum of 4" (10cm) from the side wall (see figure 1). If installing the alarm on the wall, use an inside wall with the top edge of the alarm at a minimum of 4" (10cm) and a maximum of 12" (30.5cm) below the ceiling (see figure 1).



Installation Instructions

Sloped Ceiling Installation:

The following information is from the National Fire Protection Association and is listed in Fire Code 72.

Install Smoke Alarms on sloped, peaked or cathedral ceilings at, or within 3 ft (0.9m) of the highest point (measured horizontally). NFPA 72 states "Smoke alarms in rooms with ceiling slopes greater than 1 ft to 8 ft (.3 m-2.4 m) horizontally shall be located on the high side of the room".

NFPA 72 states "A row of alarms shall be spaced and located within 3 ft (0.9 m) of the peak of the ceiling measured horizontally" (see figure 2).

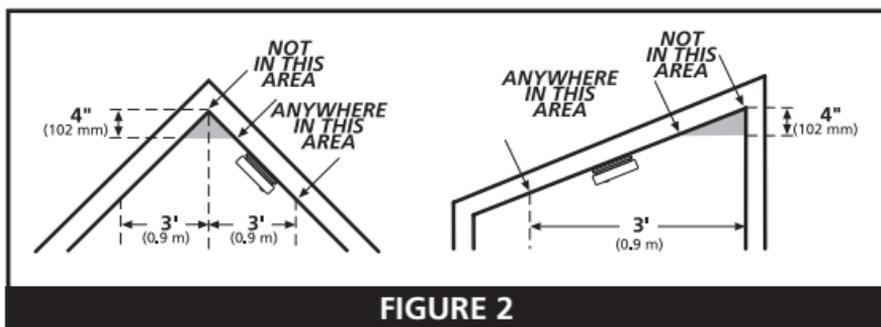


FIGURE 2

Mobile Homes:

Modern mobile homes have been designed and built to be energy efficient. Install Smoke/CO alarms as recommended above (refer to Recommended Installation Instructions and figure 1). In older mobile homes that are not well insulated, extreme heat or cold can be transferred from the outside to the inside through poorly insulated walls and roof. This may cause a thermal barrier, which can prevent smoke from reaching an alarm mounted on the ceiling. In such mobile homes install your Smoke/CO Alarm on an inside wall with the top edge of the alarm at a minimum of 4 inches (10cm) and a maximum of 12 inches (30.5cm) below the ceiling (see figure 2). If you are not sure about the insulation in your mobile home, or if you notice that the outer walls and ceiling are either hot or cold, install your alarm on an inside wall **ONLY!**

Installation Instructions

THIS EQUIPMENT SHOULD BE INSTALLED IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION'S STANDARD 72 (National Fire Protection Association, Batterymarch Park, Quincy, MA 02269).



WARNING - This product is intended for use in ordinary indoor locations of family living units. It is not designed to measure compliance with Occupational Safety and Health Administration (OSHA) commercial or industrial standards.

B. Where Not to Install:

Do not install in garages, kitchens, furnace rooms or bathrooms! INSTALL AT LEAST 5 FEET AWAY FROM ANY FUEL BURNING APPLIANCE.

Do not install within 3 ft (.9m) of the following: The door to a kitchen, or a bathroom that contains a tub or shower, forced air supply ducts used for heating or cooling, ceiling or whole house ventilating fans, or other high air areas. Avoid excessively dusty, dirty or greasy areas. Dust, grease or household chemicals can contaminate the alarm's sensors, causing it to not operate properly.

Place the alarm where drapes or other objects will not block the sensor. Smoke and CO must be able to reach the sensors to accurately detect these conditions. Do not install in peaks of vaulted ceilings, "A" frame ceilings or gabled roofs. Keep out of damp and humid areas.

Install at least one (1) foot away from fluorescent lights, electronic noise may cause nuisance alarms. Do not place in direct sunlight and keep out of insect infested areas. Extreme temperatures will effect the sensitivity of the Smoke/CO Alarm. Do not install in areas where the temperature is colder than 40 degrees Fahrenheit (4.4° Celsius) or hotter than 100 degrees Fahrenheit (37.8° Celsius), such as garages and unfinished attics. Do not install in areas where the relative humidity (RH) is above 85%. Place away from doors and windows that open to the outside.

Installation Instructions

Step 2

Wiring Instructions:

WIRING REQUIREMENTS

- This smoke alarm should be installed on a U.L. listed or recognized junction box. All connections should be made by a qualified electrician and all wiring used shall be in accordance with articles 210 and 300.3(B) of the U.S. National Electrical Code ANSI/NFPA 70, NFPA 72 and/or any other codes having jurisdiction in your area. The multiple station interconnect wiring to the alarms must be run in the same raceway or cable as the AC power wiring. In addition, the resistance of the interconnect wiring shall be a maximum of 10 ohms.
- The appropriate power source is 120 Volt AC Single Phase supplied from a non-switchable circuit, which is not protected by a ground fault interrupter.
- Smoke alarms are not to be used with detector guards unless the combination (alarm and detector guard) have been evaluated and found suitable for that purpose.
-  **WARNING:** The alarm cannot be operated from power derived from a square wave, modified square wave or modified sine wave, inverter. These types of inverters are sometimes used to supply power to the structure in off grid installations, such as solar or wind derived power sources. These power sources produce high peak voltages that will damage the alarm.

WIRING INSTRUCTIONS FOR AC QUICK CONNECT HARNESS

CAUTION! TURN OFF THE MAIN POWER TO THE CIRCUIT BEFORE WIRING THE ALARM.

- For alarms that are used as single station, **DO NOT CONNECT THE RED WIRE TO ANYTHING.** Leave the red wire insulating cap in place to make certain that the red wire cannot contact any metal parts or the electrical box.
- When alarms are interconnected, all interconnected units must be powered from a single circuit.

Installation Instructions

- A maximum of 24 Kidde Safety devices may be interconnected in a multiple station arrangement. The interconnect system should not exceed the NFPA interconnect limit of 12 smoke alarms and/or 18 alarms total (smoke, CO, Smoke/ CO Combination, heat, etc.). This Smoke/CO combination alarm must be counted as a smoke alarm when determining the number of units on an interconnect line. With 18 alarms interconnected, it is still possible to interconnect up to a total of 6 remote signaling devices and /or relay modules (see page 15 for details on interconnecting Kidde devices).
- The maximum wire run distance between the first and last unit in an interconnected system is 1000 feet.
- Figure 3 illustrates interconnection wiring. Improper connection will result in damage to the alarm, failure to operate, or a shock hazard.
- Make certain alarms are wired to a continuous (non-switched) power line. NOTE: Use standard UL Listed household wire (as required by local codes) available at all electrical supply stores and most hardware stores.

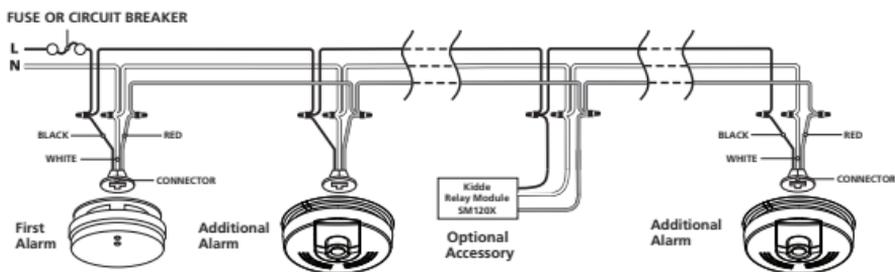


FIGURE 3 Interconnect Wiring Diagram

WIRES ON ALARM HARNESS

- Black
- White
- Red

CONNECTED TO

- Hot Side of AC Line
- Neutral Side of AC Line
- Interconnect Lines (Red Wires) of Other Units in the Multiple Station Set up

Installation Instructions

Step 3

Mounting Instructions:

⚠ CAUTION: YOUR SMOKE/CO ALARM IS SEALED AND THE COVER IS NOT REMOVABLE!

1. To help identify the date to replace the unit, write the "Replace by" date (10 years from initial power up) in permanent marker in the space provided on the side of the alarm. See Alarm Replacement section for additional information.
2. Remove the mounting bracket from the back of the alarm by holding the mounting bracket and twisting the alarm in the direction indicated by the "OFF" arrow on the alarm cover.
3. After selecting the proper location for your Smoke/CO Alarm, as described on Pages 8-10, and wiring the AC QUICK CONNECT harness as described in the WIRING INSTRUCTIONS (NOTE: AC power should be turned off at this stage), attach the mounting bracket to the electrical box. To ensure aesthetic alignment of the alarm with the hallway, or wall, the "A" line on the mounting bracket must be parallel with the hallway when ceiling mounted, or horizontal when wall mounted.

4. Pull the AC QUICK CONNECT through the center hole in the mounting bracket and secure the bracket, making sure that the mounting screws are positioned in the small ends of the keyholes before tightening the screws.

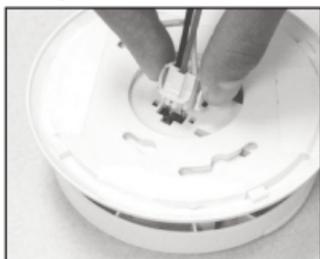


FIGURE 4
Installing AC Quick Connect

5. Remove the cardboard square from the connector pins and plug the AC QUICK CONNECT into the back of the alarm (see figure 4), making sure that the locks on the connector snap into place. Then push the excess wire back into the electrical box through the hole in the center of the mounting bracket.
6. Install the alarm on the mounting bracket and rotate the alarm in the direction of the "ON" arrow on the cover until the alarm ratchets into place (this ratcheting function allows for aesthetic alignment). Note: The alarm will mount to the bracket in 4 positions (every 90 degrees).

Installation Instructions

7. Turn on the AC power. The green AC Power On Indicator should be lit when the alarm is operating from AC power.
8. Two labels are included with your alarm. They have important information on what to do in case of an alarm. Add the phone number of your emergency service provider (Fire Department or 911) in the space provided. Place one label next to the alarm after it is mounted, and one label near a fresh air source such as a door or window.
9. Remove the red cardboard from the battery compartment, install batteries, close battery door.

Step 4

Testing the Alarm

 **CAUTION: Due to the loudness (85 decibels) of the alarm, always stand an arms length away from the unit when testing.**

After installation, TEST THE UNIT'S ELECTRONICS by pressing and releasing the test/reset button. You will then hear the following sequence of "beeps" and verbal warnings:

Three long beeps.

Verbal warning: "FIRE!"

Three long beeps.

Four quick beeps.

Verbal warning: "WARNING! CARBON MONOXIDE"

Four quick beeps

Single beep to reset

Weekly testing is required! If at anytime it does not perform as described, verify power is connected correctly and that the battery doesn't need replacing. Clean dust and other buildup off the unit. If it still doesn't operate properly call the Product Support Line at 1-800-880-6788.

Interconnect Feature

Your Combination Smoke/CO Alarm is interconnectable to other multiple station Kidde, Nighthawk and Kidde/Fyrnetics products:

- When compatible smoke alarms and heat alarms are interconnected to your Smoke/CO Alarm, they will only respond to a smoke related event.

Operating Instructions

- When mixing compatible models with battery backup with models without battery backup, be advised that the models without battery backup will not respond during an AC power failure.
- This unit is only approved to interconnect with other Kidde/Nighthawk products. It is NOT approved to interconnect with any other brand of detection product.
- This alarm is interconnect compatible with the following alarms and accessories:
 - Smoke alarms: 1235, 1275, 1276, 1285, i12020, i12020A, i12040, i12040A, i12060, i12060A, i4618, i4618A, KN-SMFM-I, RF-SM-ACDC, PE120, P12040, Pi2000, Pi2010, KN-COSM-I, KN-COSM-IB,
Kidde/Firex: i4618, i4618A
 - Heat alarm: HD135F
 - CO alarms: KN-COB-IC, KN-COP-IC, KN-COPE-I
 - Relay modules: SM120X, CO120X
 - Strobe Light: SL177i, SLED177i
- For more information about compatible interconnect units and their functionality in an interconnect system, visit our web site at www.kidde.com.

Smoke HUSH Control Feature

The HUSH feature has the capability of temporarily desensitizing the smoke alarm circuit for approximately 9 minutes. This feature is to be used only when a known alarm condition, such as smoke from cooking, activates the alarm. When the unit is in alarm, You can put your Smoke/CO Alarm in HUSH mode by pushing the test/reset button. If the smoke is not too dense, the alarm will silence immediately, the unit will verbally announce "HUSH MODE ACTIVATED", and the green LED will flash every 2 seconds for approximately 9 minutes. This indicates that the smoke alarm is in a temporarily desensitized condition. Your Smoke/CO Alarm will automatically reset after approximately 9 minutes. When the unit returns to normal operation after being in HUSH mode, it will verbally announce "HUSH MODE CANCELLED", and sound the alarm if smoke is still present. The HUSH feature can be used repeatedly until the air has been cleared of the condition causing the alarm. While the unit is in HUSH mode, pushing the test/reset button on the alarm will also end the HUSH period.

NOTE: DENSE SMOKE WILL OVERRIDE THE HUSH CONTROL FEATURE AND SOUND A CONTINUOUS ALARM.

Operating Instructions

⚠ CAUTION: BEFORE USING THE ALARM HUSH FEATURE, IDENTIFY THE SOURCE OF THE SMOKE AND BE CERTAIN A SAFE CONDITION EXISTS.

Reset Feature

If the the Smoke/CO Alarm is sounding a CO alarm, pressing the test/reset button will silence the alarm.

If the CO condition that caused the alert continues, the alarm will reactivate within 200 seconds (follow the action plan on page 20).

CO Peak Level Memory

If the green LED is blinking once every 10 seconds, the unit has detected a hazardous CO condition. If the CO sensor has detected a CO level of 100 PPM or higher since last reset, it will be recorded by the Peak Level Memory function. To access the Peak Level Memory press the test/reset button. If a reading of 100 PPM or higher has been recorded, the unit will announce "Caution,Carbon Monoxide Previously Detected." If you've been away from home this feature allows you to check if there was a CO reading of 100, or higher, during your absence. Pushing the test/reset button resets the memory. It's also reset when the power is removed. Note: the green LED blinking portion of CO Peak Level Memory is disabled when the unit is on battery power only.

LED Indicator Operation

Red LED

The red LED will flash as described below under the following conditions:

- During smoke or CO alarm, with every beep
- During testing (same as alarm)
- Low battery, single flash with chirp
- End of product life, double flash every 30 seconds with chirp
- Unit error mode, single flash with chirp every 30 seconds
- Unit error mode, a Fault Code is flashed every 30 seconds (can be observed and reported to customer service for troubleshooting).

Operating Instructions

Green LED

The green LED will flash as described below under the following conditions:

- Standby Condition (powered by AC and battery backup):
The LED will be constantly on.
- Standby Condition (powered by only battery backup):
The LED will flash every 60 seconds..
- Alarm Memory Condition: The LED will flash every second during alarm. When the alarm condition goes away, the originating alarm unit will flash the LED every 16 seconds until the test/reset button is pressed, thus resetting the alarm.
- CO Peak Memory (10 second flash rate), AC powered only. Indicates CO greater than 100PPM was detected. Press Test button to announce Peak message and clear Peak Memory.
- Initiating Alarm condition (1 second flash rate), indicates the unit initiated an alarm.
- Trouble Fault/Error mode (1/2 second flash rate), AC powered only. Helps owner locate the mysterious chirping unit
- HUSH MODE Condition: The LED will flash every 2 seconds while the alarm is in HUSH mode.

Tamper Resist Feature

To make your smoke/CO alarm tamper resistant, a tamper resist feature has been provided. Activate the tamper resist feature by breaking off the four posts in the square holes in the trim ring (see figure 5A). When the posts are broken off, the tamper resist tab on the base is allowed to engage the mounting bracket. Rotate the alarm onto the mounting bracket until you hear the tamper resist tab snap into place, locking the alarm on the mounting bracket. Using the tamper resist feature will help deter children and others from removing the alarm from bracket. NOTE: To remove the alarm when the tamper resist tab is

Operating Instructions

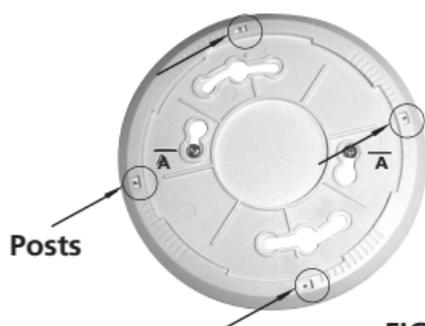


FIGURE 5A

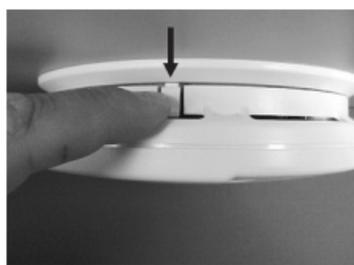


FIGURE 5B

engaged, press down on the tamper resist tab, and rotate the alarm off of the bracket (see figure 5B).

NEVER IGNORE THE SOUND OF THE ALARM!

Determining what type of alarm has sounded is easy with your Combination Smoke/CO Alarm. The voice message warning system will inform you of the type of situation occurring. Refer to the Features section on pages 4-7 for a detailed description of each alarm pattern.

What To Do If The Alarm Sounds When the smoke alarm sounds:

Smoke alarms are designed to minimize false alarms. Cigarette smoke will not normally set off the alarm, unless the smoke is blown directly into the alarm. Combustion particles from cooking may set off the alarm if located too close to the cooking area. Large quantities of combustible particles are generated from spills or when broiling. Using the fan on a range hood which vents to the outside (non recirculating type) will also help remove these combustible products from the kitchen.

What To Do If The Alarm Sounds

If the alarm sounds, check for fires first. If a fire is discovered follow these steps. Become thoroughly familiar with these items, and review with all family members!

- Alert small children in the home.
- Leave immediately using one of your planned escape routes (see page 26). Every second counts, don't stop to get dressed or pick up valuables.
- Before opening inside doors look for smoke seeping in around the edges, and feel with the back of your hand. If the door is hot use your second exit. If you feel it's safe, open the door very slowly and be prepared to close immediately if smoke and heat rush in.
- If the escape route requires you to go through smoke, crawl low under the smoke where the air is clearer.
- Go to your predetermined meeting place. When two people have arrived one should leave to call 911 from a neighbor's home, and the other should stay to perform a head count.
- **Do not reenter under any circumstance until fire officials give the go ahead.**
- There are situations where a smoke alarm may not be effective to protect against fire as stated in the NFPA Standard 72. For instance:
 - a) smoking in bed
 - b) leaving children unsupervised
 - c) cleaning with flammable liquids, such as gasoline

The CO sensor meets the alarm response time requirements of UL standard 2034. Standard alarm times are as follows:

At 70 PPM, the unit must alarm within 60-240 minutes.

At 150 PPM, the unit must alarm within 10-50 minutes.

At 400 PPM, the unit must alarm within 4-15 minutes.

This carbon monoxide alarm is designed to detect carbon monoxide gas from ANY source of combustion. It is NOT designed to detect any other gas.

Fire Departments, most utility companies and HVAC contractors will perform CO inspections, some may charge for this service. It's advisable to inquire about any applicable fees prior to having the service performed. Kidde Safety will not pay for, or reimburse, the owner or user of this product, for any repair or dispatch calls related to the alarm sounding.

What To Do If The Alarm Sounds

When the carbon monoxide alarm sounds:



WARNING - Actuation of your CO Alarm indicates the presence of Carbon Monoxide (CO) which can kill you.

If alarm signal sounds:

1) Operate the test/reset button

2) Call your emergency

services (Fire Dept. or 911)

PHONE NUMBER

3) Immediately move to fresh air - outdoors or by an open door/window. Do a head count to check that all persons are accounted for. Do not reenter the premises nor move away from the open door/window until the emergency services responders have arrived, the premises has been aired out, and your alarm remains in its normal condition.

4) After following steps 1-3, if your alarm reactivates within a 24 hour period, repeat steps 1-3 and call a qualified appliance technician

PHONE NUMBER

to investigate for sources of CO from fuel burning equipment and appliances, and inspect for proper operation of this equipment. If problems are identified during this inspection have the equipment serviced immediately. Note any combustion equipment not inspected by the technician and consult the manufacturer's instructions, or contact the manufacturer's directly, for more information about CO safety and this equipment. Make sure that motor vehicles are not, and have not been, operating in an attached garage or adjacent to the residence.

Never restart the source of a CO problem until it has been fixed. **NEVER IGNORE THE ALARM!**

Battery Replacement

Alarm Removal

IF TAMPER RESIST FEATURE HAS BEEN ACTIVATED, REFER TO TAMPER RESIST FEATURE DESCRIPTION ON PAGE 17 FOR REMOVAL INSTRUCTIONS.

Remove the alarm from the mounting bracket by rotating the alarm in the direction of the "OFF" arrow on the cover.

Battery Replacement

If any form of battery failure is detected the red LED light will flash and the unit will "chirp" one time, followed by the warning message "LOW BATTERY". This cycle will occur once every minute, and will continue for at least seven days. On battery power, the "LOW BATTERY" voice occurs once every 15 minutes.

If the red LED light flashes along with a chirp every 30 seconds, and is not followed by the voice message "LOW BATTERY" as described above, and if the green LED flashes twice per second (AC power only) your unit has malfunctioned. Call our toll free Product Support Line at 1-800-880-6788 for instructions on how to return the unit.

BATTERY INSTALLATION AND REMOVAL

To replace or install the batteries slide the battery door in the direction indicated on the cover of the alarm. When installing new batteries into the carrier, make sure that the polarity matches the markings printed on the inside of the battery compartment, press the battery reminder finger down into the battery compartment and install the battery (see Figure 6). Completely slide the battery door to the closed position. A missing or improperly installed battery will prevent the battery door from closing and result in improper alarm operation.



Battery finger

FIGURE 6



SLIDE



OPEN



INSERT

Battery Replacement

Replace batteries with one of the following approved brands: Duracell MN1500, MX1500, Energizer E91, Gold Peak 15A or Golden Power GLR6A . These batteries can be purchased at your local retailer.

⚠ WARNING! Use only the batteries specified. Use of different batteries may have a detrimental effect on the Smoke/CO alarm. A good safety measure is to replace the batteries twice a year, at the same time. A good safety measure is to replace the batteries twice a year, at the same time you change your clocks for daylight saving time.

End of Life Notification

Ten (10) years after unit is first powered, this alarm will beep two times every 30 seconds to indicate it is time to replace the alarm.

REPLACE IMMEDIATELY! IT WILL NOT DETECT CO IN THIS CONDITION.

End of Life Hush can be activated by pushing the test button to silence the End of Life chirp for approximately 3 days at a time for a maximum of 30 day life extension.

General Maintenance

To keep your Smoke/CO Alarm in good working order, please follow these simple steps:

- Verify the unit's alarm and LED lights operation by pushing the test/reset button once a week.
- Remove the unit from mounting bracket and vacuum the alarm cover and vents with a soft brush attachment once a month to remove dust and dirt. REINSTALL IMMEDIATELY AFTER CLEANING AND THEN TEST USING THE TEST/RESET BUTTON!
- Never use detergents or other solvents to clean the unit.
- Avoid spraying air fresheners, hair spray, or other aerosols near the Smoke/CO Alarm.

Do not paint the unit. Paint will seal the vents and interfere with the sensor's ability to detect smoke and CO. Never attempt to disassemble the unit or clean inside. This action will void your warranty.

Move the Smoke/CO Alarm and place in another location prior to performing any of the following:

- Staining or stripping wood floors or furniture
- Painting
- Wall papering
- Using adhesives

Storing the unit in a plastic bag during any of the above projects will protect the sensors from damage. Do not place near a diaper pail.

 **WARNING:** Reinstall the Smoke/CO Alarm as soon as possible to assure continuous protection.

When household cleaning supplies or similar contaminants are used, the area must be well ventilated. The following substances can effect the CO sensor and may cause false readings and damage to the sensor:

Methane, propane, iso-butane, iso-propanol, ethyl acetate, hydrogen sulfide, sulfide dioxides, alcohol based products, paints, thinner, solvents, adhesives, hair spray, after shave, perfume, and some cleaning agents.

General Maintenance

Carbon Monoxide Safety Information

General CO Information

Carbon monoxide (CO) is a colorless, odorless, and tasteless poison gas that can be fatal when inhaled. CO inhibits the blood's capacity to carry oxygen.

Possible Sources

CO can be produced when burning any fossil fuel: gasoline, propane, natural gas, oil and wood. It can be produced by any fuel-burning appliance that is malfunctioning, improperly installed, or not ventilated correctly. Possible sources include furnaces, gas ranges/stoves, gas clothes dryers, water heaters, portable fuel burning space heaters, fireplaces, wood-burning stoves and certain swimming pool heaters. Blocked chimneys or flues, back drafting and changes in air pressure, corroded or disconnected vent pipes, and a loose or cracked furnace exchanger can also cause CO. Vehicles and other combustion engines running in an attached garage and using a charcoal/gas grill or hibachi in an enclosed area are all possible sources of CO.

The following conditions can result in transient CO situations: Excessive spillage or reverse venting of fuel-burning appliances caused by outdoor ambient conditions such as: Wind direction and/or velocity, including high gusts of wind, heavy air in the vent pipes (cold/humid air with extended periods between cycles), negative pressure differential resulting from the use of exhaust fans, simultaneous operation of several fuel-burning appliances competing for limited internal air, vent pipe connections vibrating loose from clothes dryers, furnaces, or water heaters, obstructions in, or unconventional, vent pipe designs which can amplify the above situations, extended operation of unvented fuel-burning devices (range, oven, fireplace, etc.), temperature inversions which can trap exhaust gasses near the ground, car idling in an open or closed attached garage, or near a home.

Carbon Monoxide Safety Information

CO Safety Tips

Every year have the heating system, vents, chimney and flue inspected and cleaned by a qualified technician. Always install appliances according to manufacturer's instructions and adhere to local building codes. Most appliances should be installed by professionals and inspected after installation. Regularly examine vents and chimneys for improper connections, visible rust, or stains, and check for cracks in furnace heat exchangers. Verify the color of flame on pilot lights and burners is blue. A yellow or orange flame is a sign that the fuel is not burning completely. Teach all household members what the alarm sounds like and how to respond.

Symptoms of CO Poisoning

Initial carbon monoxide poisoning symptoms are similar to the flu with no fever and can include dizziness, severe headaches, nausea, vomiting and disorientation. Everyone is susceptible but experts agree that unborn babies, pregnant women, senior citizens and people with heart or respiratory problems are especially vulnerable. If symptoms of carbon monoxide poisoning are experienced seek medical attention immediately. CO poisoning can be determined by a carboxyhemoglobin test.

The following symptoms are related to CARBON MONOXIDE POISONING and should be discussed with ALL members of the household:

1. **Mild Exposure:** Slight headache, nausea, vomiting, fatigue (often described as "Flu-like" symptoms).
2. **Medium Exposure:** Severe throbbing headache, drowsiness, confusion, fast heart rate.
3. **Extreme Exposure:** Unconsciousness, convulsions, cardiorespiratory failure, death.

The above levels of exposure relate to healthy adults. Levels differ for those at high risk. Exposure to high levels of carbon monoxide can be fatal or cause permanent damage and disabilities. Many cases of reported carbon monoxide poisoning indicate that while victims are aware they are not well, they

Carbon Monoxide Safety Information

become so disoriented they are unable to save themselves by either exiting the building, or calling for assistance. Also, young children and household pets may be the first effected. Familiarization with the effects of each level is important.

Fire Safety Information

Escape Plan

Familiarize everyone with the sound of the smoke alarm and train them to leave the home when they hear it. Practice a fire drill at least every six months, including fire drills at night. Ensure that small children hear the alarm and wake when it sounds. They must wake up in order to execute the escape plan. Practice allows all occupants to test your plan before an emergency. You may not be able to reach your children. It is important they know what to do. Know two ways out of every room (door & window) and identify a meeting place outside the home where everyone will gather once they have exited the residence. When two people have reached the meeting place, one should leave to call 911 while the second person stays to account for additional family members.

Establish a rule that once you're out, you never reenter under any circumstance!

Current studies have shown smoke alarms may not awaken all sleeping individuals, and that it is the responsibility of individuals in the household that are capable of assisting others to provide assistance to those who may not be awakened by the alarm sound, or to those who may be incapable of safely evacuating the area unassisted.

Fire Prevention

Never smoke in bed, or leave cooking food unattended. Teach children never to play with matches or lighters!

Train everyone in the home to recognize the alarm pattern, voice message warning and to leave the home using their escape plan when it's heard.

Know how to do "Stop, Drop and Roll" if clothes catch on fire, and how to crawl low under smoke. Install and maintain fire extinguishers on every level of the home and in the kitchen, basement and garage. Know how to use a fire extinguisher prior to an emergency. Second level and higher occupied rooms with windows, should have an escape ladder.

Fire Safety Information

Industry Safety Standards

NFPA (National Fire Protection Association)

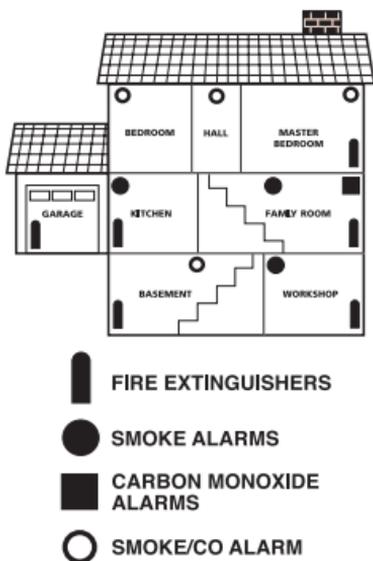
For your information, the National Fire Protection Association's Standard 72, reads as follows:

Smoke Detection. Where required by applicable laws, codes, or standards for the specified occupancy, approved single- and multiple-station smoke alarms shall be installed as follows: (1) In all sleeping rooms Exception: Smoke alarms shall not be required in sleeping rooms in existing one- and two-family dwelling units. (2) Outside of each separate sleeping area, in immediate vicinity of the sleeping rooms. (3) On each level of the dwelling unit, including basements Exception: In existing one- and two-family dwelling units, approved smoke alarms powered by batteries are permitted.

Smoke Detection - Are More Smoke Alarms Desirable? The required number of smoke alarms might not provide reliable early warning protection for those areas separated by a door from the areas protected by the required smoke alarms. For this reason, it is recommended that the householder consider the use of additional smoke alarms for those areas for increased protection. The additional areas include the basement, bedrooms, dining room, furnace room, utility room, and hallways not protected by the required smoke alarms. The installation of smoke alarms in kitchens, attics (finished or unfinished), or garages is not normally recommended, as these locations occasionally experience conditions that can result in improper operation.

California State Fire Marshall

Early warning fire detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows: A smoke alarm installed in each separate sleeping area (in the vicinity, but outside the bedrooms), heat or smoke detectors in the living rooms, dining rooms, bedrooms, kitchens, hallways, attics, furnace rooms, closets, utility and storage rooms, basements and attached garages.



Industry Safety Standards

Consumer Product Safety Commission

The Consumer Product Safety Commission (CPSC) recommends the use of at least one CO Alarm per household, located near the sleeping area.

NRC

Ionization type smoke alarms use a very small amount of a radioactive element in the sensing chamber to enable detection of visible and invisible combustion products. The radioactive element is safely contained in the chamber and requires no adjustments or maintenance. This smoke alarm meets or exceeds all government standards. It is manufactured and distributed under license from the U.S. Nuclear Regulatory Commission.

FCC COMPLIANCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

Warranty and Service Information

Limited Warranty

TEN YEAR LIMITED WARRANTY

KIDDE warrants that the enclosed alarm (but not the battery) will be free from defects in material and workmanship or design under normal use and service for a period of ten years from the date of purchase. The obligation of KIDDE under this warranty is limited to repairing or replacing the alarm or any part which we find to be defective in material, workmanship or design, free of charge, upon sending the alarm with proof of date of purchase, postage and return postage prepaid, to Warranty Service Department, KIDDE, 1016 Corporate Park Dr., Mebane, NC 27302.

This warranty shall not apply to the alarm if it has been damaged, modified, abused or altered after the date of purchase or if it fails to operate due to improper maintenance or inadequate AC or DC power. Any implied warranties arising out of this sale, including but not limited to the implied warranties of description, merchantability and fitness for a particular purpose, are limited in duration to the above warranty period. In no event shall the Manufacturer be liable for loss of use of this product or for any indirect, special, incidental or consequential damages, or costs, or expenses incurred by the consumer or any other user of this product, whether due to a breach of contract, negligence, strict liability in tort or otherwise. The Manufacturer shall have no liability for any personal injury, property damage or any special, incidental, contingent or consequential damage of any kind resulting from gas leakage, fire or explosion.

Since some states do not allow limitations of the duration of an implied warranty or do not allow the exclusion or limitation of incidental or consequential damages, the above limitations or exclusions may not apply to you. While this warranty gives you specific legal rights, you may also have other rights which vary from state to state.

Also, KIDDE makes no warranty, express or implied, written or oral, including that of merchantability or fitness for any particular purpose, with respect to the battery.

Warranty and Service Information

The above warranty may not be altered except in writing signed by both parties hereto.

Your Kidde Combination Smoke & CO Alarm is not a substitute for property, fire, disability, life or other insurance of any kind. Appropriate insurance coverage is your responsibility. Consult your insurance agent.

Removal of the front cover will void the warranty.

This alarm is not intended to alert hearing impaired individuals.

During the specified warranty period Kidde Products will repair or replace, at its discretion any defective Kidde Combination Smoke & CO Alarms that are returned in a postage paid package to the following address: Kidde Products Attn: Warranty Returns, 1016 Corporate Park Dr., Mebane, NC 27302, USA. Please include your name, address and phone number along with a brief description of what is wrong with the unit. For further assistance please call our toll free Product Support Line at 1-800-880-6788. Damage from neglect, abuse or failure to adhere to any of the enclosed instructions will result in termination of the warranty, and the unit will not be replaced or repaired.

This user guide and the products described herein are copyrighted, with all rights reserved. Under these copyright laws, no part of this user guide may be copied for use without the written consent of Kidde. If you require further information please contact our Product Support Line at 1-800-880-6788 or write us at: Kidde Products, 1016 Corporate Park Dr., Mebane, NC 27302.

Our internet address is www.kidde.com.

QUESTIONS OR FOR MORE INFORMATION

Call our Product Support Line at **1-800-880-6788** or contact us at our website at **www.kidde.com**



Kidde 1016 Corporate Park Drive, Mebane, NC 27302

Custom Assembled in China with U.S. and Foreign Components