

WARRANTY CERTIFICATE

This certificate signed by the Builder entitles Inc. Standard Warranty for:	to Hultquist Homes,
Legal:	
Address:	
Terms of the Warranty are outlined in the Hu	ltquist Homes, Inc. Warranty Documents.
Hultquist Homes, Inc. Agent or Representativ	re .
	POTENTIAL CLAIMS MUST IDED WITHIN ONE YEAR
BEFORE YOU MAY FILE A COURT ACTION FOR DEF DESIGNER, BUILDER, OR REMODELER OF YOUR HO CONSTRUCTION, OR REMODELING DEFECT, BEFOR DESIGNER, BUILDER, OR REMODELER A WRITTEN CONDITIONS YOU ALLEGE ARE DEFECTIVE IN ORD THE OPPORTUNITY TO MAKE AN OFFER TO REPAI ACCEPT ANY OFFER MADE BY THE DESIGNER, BUILDER STATE LAW, AND FAILURE TO ACTION. ALASKA LAW AT AS 09.45.895 CONTAINS RECOVERED IN A COURT ACTION FOR DEFECTIVE	AINS IMPORTANT REQUIREMENTS THAT YOU MUST FOLLOW ECTIVE DESIGN, CONSTRUCTION, OR REMODELING AGAINST THE OME. WITHIN ONE YEAR OF THE DISCOVERY OF A DESIGN, RE YOU FILE A COURT ACTION, YOU MUST DELIVER TO THE NOTICE OF DESIGN, CONSTRUCTION, OR REMODELING FOR TO PROVIDE YOUR DESIGNER, BUILDER, OR REMODELER WITH R OR PAY FOR THE DEFECTS. YOU ARE NOT OBLIGATED TO LDER, OR REMODELER. THERE ARE STRICT DEADLINES AND TO FOLLOW THEM MAY AFFECT YOUR RIGHT TO FILE A COURT IS LIMITATIONS TO THE AMOUNT OF DAMAGES THAT MAY BE DESIGN, CONSTRUCTION, OR REMODELING. WEETS THE REQUIREMENTS IN ALASKA STATUTE 09.45.893
Purchaser Initial	-
Purchaser Initial	-
Pages requiring signatures/initials: - Page 1 - Page 2 - Page 15 - Initial all pages	



RECEIPT OF WARRANTY DOCUMENTS

ACCEPTANCE

In order to promote home buyer confidence and satisfaction, as well as, to define contractor warranty responsibility, this Home Warranty Agreement is granted by the "Company" to the Buyer(s) on the date of occupancy. The commencement date of this warranty is the date of occupancy.

HOME WARRANTED

This warranty applies to the home located at the legal description to wit:	

WALK-THROUGH OF HOME

Buyer has made a complete and thorough inspection of the new home and agrees that the home meets with Buyer's approval as of the commencement date of this warranty, except as listed on the walk-through list.

Hultquist Homes, Inc. disclaims, and purchaser waives, unless otherwise expressly provided for in this new construction limited warranty or the other contract documents, all other warranties, express or implied, including but not limited to the warranties of good workmanship, habitability, merchantability, and fitness of purpose, and including any warranties that could be construed to cover the presence of radon or other environmental pollutants. Builder disclaims all liability for consequential or incidental damages, and further excludes damages for economic, property, or personal injury loss and Buyer(s) agrees to accept this disclaimer and to waive the right to any such claim.

Specifically excluded if the home is used as a rental property for ANY length of time within the warranty period, or if anyone other than the purchaser resides, without the purchaser, in the home for more than 30 days within the warranty period, the following items are not covered by the HHI limited warranty:

- 1) Drywall damage of any kind including flaws, cracks, dings and any cosmetic imperfections.
- 2) HHI will NOT touch up paint surfaces.
- 3) Door adjustments of any kind.
- 4) Damage or imperfections in millwork and cabinetry of any kind.
- 5) Any adjustment or replacement of any item that does not carry a manufacturer's warranty.
- 6) Any exterior grading after the final inspection has been passed.
- 7) Driveways, walks, decks, stairs and deck railings.
- 8) Any adjustment or replacement of items not specifically identified and duly noted at the walkthrough.
- 9) Any damage done to any portion of the home caused by the occupant or owner as determined by HHI.

Any reference, in this agreement, to Purchaser, Homeowner, or Buyer shall be one in the same and refer to the Buyer as listed above. Buyer has read, understands, and accepts all pages of this document.

				_
Buyer		Date		
Buyer		Date		-
前	- 2 - REV 8/202	1	/ Purchaser	 Purchaser

HOW TO REQUEST LIMITED WARRANTY SERVICE

This limited warranty agreement requires that any warranty request be in writing and submitted through the HHI website with the following information provided:

- Homeowner Name
- Address
- Contact Information
- Purchase Date
- Original Purchaser Confirmation
- Detailed Claim (The detailed claim for warranty must include the date of onset or when first noted by owner.)



Purchaser Purchase

I. INTRODUCTION: WAIVER OF IMPLIED WARRANTIES AND RELINQUISHMENT OF CLAIMS

ALASKA LAW IMPOSES CERTAIN WARRANTY OBLIGATIONS ON BUILDERS IN THIS STATE BY IMPLICATION. THESE WARRANTIES ARE SOMETIMES CALLED 'IMPLIED WARRANTIES' BECAUSE THEY ARE NOT SPECIFICALLY SET FORTH IN ANY STATUTE, BUT EXIST ONLY IN COMMON LAW WHICH IS THE LAW AS STATED IN THE APPELLATE COURT DECISIONS OF THE STATE. IMPLIED WARRANTIES WHICH THE COURTS OF THIS STATE MAY INDICATE APPLY TO THE SALE OF NEWLY CONSTRUCTED RESIDENTIAL PROPERTY MAY INCLUDE BUT MAY NOT NECESSARILY BE LIMITED TO, THE IMPLIED WARRANTY OF HABITABILITY, THE IMPLIED WARRANTY OF WORKMANLIKE CONSTRUCTION, THE IMPLIED WARRANTY FITNESS FOR A PARTICULAR PURPOSE, AND THE IMPLIED WARRANTY OF MERCHANTABILITY. THE COURT MAY HOLD THAT ONE OR MORE OF THESE IMPLIED WARRANTIES ALSO APPLY TO RESIDENTIAL REMODELING WORK IN ADDITION TO NEW RESIDENTIAL BUILDING CONSTRUCTION.

UNDER CERTAIN CIRCUMSTANCES A PURCHASER MAY WAIVE IMPLIED WARRANTIES AND RELINQUISH CLAIMS THAT HE OR SHE MAY HAVE IF THE WAIVER AND RELINQUISHMENT ARE ACCOMPLISHED VOLUNTARILY AND WITH THE KNOWLEDGE OF THE PERSON WAIVING THE WARRANTIES AND RELINQUISHING THE CLAIMS. HULTQUIST HOMES, INC. IS NOT REQUIRED TO PROVIDE PURCHASERS AN EXPRESS WARRANTY CONCERNING WORKMANSHIP AND MATERIAL AND AGAINST DEFECTS AND DEFICIENCIES, BUT AGREES TO PROVIDE THIS EXPRESS NEW CONSTRUCTION LIMITED WARRANTY IN THE PLACE OF ALL OTHER WARRANTIES IMPLIED BY LAW OR CONTRACT, AND OLY IN EXCHANGE FOR PURCHASERS' VOLUNTARY WAIVER OF ALL SUCH IMPLIED WARRANTIES AND RELINQUISHMENT OF ALL CLAIMS AGAINST HULTQUIST HOMES, INC. FOR CONSEQUENTIAL DAMAGES, PERSONAL INJURY OR DEATH ARISING AFTER THE DATE OF CLOSING EXCEPTING ONLY CLAIMS FOR REPAIRS AND MODIFICATIONS SPECIFICALLY COVERED BY THIS NEW CONSTRUCTION LIMITED WARRANTY. THIS WAIVER AND RELINQUISHMENT SHALL BE BINDING UPON THE PURCHASER(S), AND THEIR HEIRS, SUCCESSORS, ASSIGNS, GRANTEES, GUESTS AND INVITEES. PURCHASER(S) ACKNOWLEDGE THAT HULTQUIST HOMES, INC. SHALL BE ENTITLED TO RELY UPON THIS WAIVER AS A COMPLETE BAR AND DEFENSE AGAINST ANY CLAIM ASSERTED BY PURCHASER(S) OR ANYONE CLAIMING THROUGH PURCHASER(S) EXCEPT FOR CLAIMS COVERED BY THIS NEW CONSTRUCTION LIMITED WARRANTY. THE DEED CONVEYING THE PROPERTY TO PURCHASERS SHALL CONTAIN A REFERENCE TO THIS WAIVER AND RELINQUISHMENT.

AS USED HEREIN "PURCHASERS" AND "HOMEOWNERS" SHALL INCLUDE PURCHASERS OF REMODELING SERVICES, AND "NEW CONSTRUCTION" SHALL INCLUDE REMODELING WORK PERFORMED ON EXISTING RESIDENTIAL BUILDINGS WHEN THIS NEW CONSTRUCTION LIMITED WARRANTY IS PROVIDED BY "BUILDER" IN CONNECTION WITH SUCH REMODELING WORK.

II. NEW CONSTRUCTION LIMITED WARRANTY AGREEMENT

This New Construction Limited Warranty Agreement (hereinafter "Agreement"), together with the Approved Standards referenced in Appendix A hereto and incorporated herein define the obligations of Hultquist Homes, Inc. (hereafter "Builder") to repair or replace anything covered by this Agreement during the warranty period for construction defects or deficiencies. Under this Agreement, the home is covered against faulty workmanship and materials, defects in wiring, piping and duct work, electrical, plumbing and heating systems for 1 (one) year. "Major structural defects" as defined hereafter are covered for a period of 10 (ten) years.



To help define "defect" or "faulty workmanship and materials", this agreement relies both upon the Building Codes adopted by the Municipality of Anchorage which were in effect on the date the building permit for the subject construction was issued, and upon a set of national building standards issued by the National Association of Home Builders (NAHB) called "Residential Construction Performance Guidelines." Together with the adopted Building Codes, the NAHB Performance Guidelines constitute the Approved Standards, unless excluded within this Agreement.

Although the NAHB Performance Guidelines rest on published codes, they established performance standards that sometimes exceed the local building codes. The purpose of Approved Standards is:

- 1. To state minimum performance standards for specific items.
- 2. To state the Builder's responsibility to correct specific defects.
- 3. To outline the corrective action required.

Because the Approved Standards explain what performance standards the Homeowner should expect and what the Builder's responsibilities are, it is a useful document for both the Homeowner and Builder.

The Approved Standards (Appendix A) are divided into two parts: "Part I: Codes" which references the Building Codes adopted by the Municipality of Anchorage on the date the building permit for the subject construction was issued, and "Part II: Performance Guidelines" which generally come from NAHB industry practices with regard to specific defects as stated in the "Residential Construction Performance Guidelines", Second Edition. These standards are reproduced with permission from the NAHB through the local Anchorage chapter, Anchorage Home Builders Association. Where the actual book conflicts with this document, this document supersedes.

If there is any conflict between these standards (Part I and Part II), the higher standard shall govern.

III. CODE STANDARDS FOR STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL SYSTEMS

The structural, mechanical, plumbing, and electrical standards are contained in one of the several code manuals adopted by the Municipality of Anchorage and are amended from time to time.

The International Building Code, International Mechanical Code, Uniform Plumbing Code, and National Electrical Code establish minimal acceptable standards for home construction within the Municipality of Anchorage. (For a listing of such Codes, see Appendix A Part I: Codes). The Municipality regularly inspects home construction to ensure that applicable codes are adhered to during the building process.

IV: PERFORMANCE GUIDELINES

This Agreement covers workmanship and materials for 1 (one) year from the date of occupancy, or sale, whichever occurs first. The Performance Guidelines (see Appendix A, Part II) lists defects that may be found in new homes and outlines the extent of a Builder's responsibility for each of the defects.

These guidelines are intended to specify performance criteria for home construction and to determine the validity of Homeowner complaints related to defective workmanship and materials during the warranty period.



If a specific defect has not been listed in the Performance Guidelines, this indicates that a performance criterion or specific tolerance for such a defect has not been created.

When minimum performance guidelines of specific tolerances of construction have not been given in their Performance Guidelines, homes shall be constructed in accordance with accepted industry practice in this locality which will assure quality of materials and workmanship. The validity of any Homeowner complaint for defects for which a Performance Guideline has been listed shall be determined on the basis of the listed performance criteria and Corrective Measure set forth in the Performance Guidelines which assure quality of materials and workmanship. Any conciliation or litigation of Homeowner's complaints shall also be conducted using the Performance Guidelines and the "Corrective Measures" set forth therein to determine the validity of any complaint and the Builder's responsibility to correct alleged defects or deficiencies. Complaints of defects not addressed in the Performance Guidelines shall be resolved based on evidence of the custom and trade practice of the homebuilding industry as it exists in Anchorage, Alaska. To the extent an applicable building code section adopted in Anchorage, Alaska provides a higher standard than either the Performance Guidelines or local customs and trade practices, it will control.

V. DEFINITIONS

Within this agreement certain terms have clearly defined meanings.

These include but are not limited to the following:

A. APPLIANCES, FIXTURES & EQUIPMENT

The term "Appliances, Fixtures, and Equipment" (including their fittings, attachments, controls, appurtenances) shall include, but not be limited to, furnaces, air handling equipment, ventilating fans, water heaters and pumps, stoves, garbage disposals, compactors, dishwashers, automatic door openers, bathtubs, sinks, toilets, faucets and fittings, light switches, convenience outlets, circuit breakers, thermostats and controls.

The warranty period for appliances, fixtures and equipment (including their fittings, attachments, controls, and appurtenances) is 1 (one) year, or the term of the manufacturer's written warranty, whichever is less.

Builder hereby assigns to Purchaser all manufacturers' written warranties for appliances, fixtures and equipment. Purchaser is authorized and agrees to deal directly with the supplier or manufacturer regarding any problems or defects with appliances, fixtures and equipment, excepting problems or defects with furnaces, water heaters and pumps which Builder shall address during the warranty period and not to redress from Builder if a manufacturer's warranty may apply.

B. SYSTEMS

The term "systems" (exclusive of appliances, fixtures and equipment as specified above) means the following:

- 1. Plumbing Systems all supply, waste and vent pipes and their fittings; water service piping; and their extensions to the tie-in of a public utility connection.
- 2. Electrical Systems all wiring, electrical boxes and connections up to the public utility connection.



3. Heating and Cooling Systems – all ductwork, steam and water pipes, refrigerant lines, registers, convectors and dampers.

The warranty period for systems (excluding appliances, fixtures and equipment) is 1 (one) year.

C. MAJOR STRUCTURAL DEFECTS

If a Major Structural Defect first occurs during the first ten (10) years of ownership BY THE ORIGINAL OWNER, the Builder will repair, replace or pay the Homeowner the reasonable cost of repairing or replacing the Major Structural Defect. Repair of a Major Structural Defect under this Limited Warranty is limited; (1) to the repair of damage to the load-bearing portions of the home which is necessary to restore their load-bearing function; and (2) to the repair of those items of the home damaged by the Major Structural Defect which made the home unsafe, unsanitary or otherwise unlivable. If the home is more than two (2) year old the repair specifically EXCLUDES interior painting.

"Major Structural Defect" as defined by this Agreement means actual damage to the load-bearing function of the home which vitally affects or is imminently likely to vitally affect the use of the home for residential purposes and not be the result of earthquake, flood, other acts of God, prolonged exposure to the elements causing deterioration, or any cause unrelated to faulty design, materials or workmanship.

1. The Load-Bearing

Load-Bearing as used in the Agreement means the load-bearing portion of the home defined as the framing members and other structural elements that transmit the dead and live loads to the supporting ground.

Examples of load-bearing elements:

- a. Roof rafters and trusses
- b. Ceiling and floor joists
- c. Structural floor systems and slabs in the living area of the home
- d. Load-bearing partitions and walls
- e. Supporting beams and headers
- f. Columns
- g. Foundation systems and footings

Examples of non load-bearing elements:

- a. Roof shingles and sheathing
- b. Drywall and plaster
- c. Exterior siding
- d. Brick and stone veneer
- e. Subfloor and flooring materials
- f. Wall tile or other wall coverings
- g. Non load-bearing partitions
- h. Non structural concrete floors in attached garages, utility and laundry areas or other areas not finished by the Builder as living space
- i. Electrical, heating, cooling and plumbing systems, appliances, equipment, fixtures, paint, doors, windows, trim, cabinets, hardware and insulation



- 2. "Actual Damage" in Section V.C. of this Agreement means that the defect must represent a structural failure of some part of the load-bearing system. The actual damage must affect the ability of the home to remain stable and to maintain its capacity to transmit the imposed live and dead load to the ground. It must endanger the above-referenced capacity.
- 3. "Vitally affects the use of the home for residential purposes" as used in Section V.C. of this Agreement means that the defect in the load-bearing portion of the home must be of such serious nature that it would potentially affect the health and safety of occupants during normal use of the home. Examples of conditions which meet the above criteria include damage to the structural capacity of the load transmission system of the home which brings into question its ability to withstand vertical snow loads or lateral wind loads; or a condition which will cause substantial further detrimental movement of the load-bearing system. Examples of conditions which do not meet the foregoing criteria include minor damage to load-bearing portions of the home which have occurred and are not likely to worsen, but do not affect the stability of the home; or damage which has affected the value of the home but is not of such serious nature that the use of the home for residential purposes has been vitally affected.

VI. EXCLUSIONS

THE FOLLOWING ARE EXCLUDED FROM THIS AGREEMENT

The following shall be excluded from this Agreement whether they are or are not listed in the "Residential Construction Performance Guidelines" in Appendix A.

A. Defects in outbuildings (except that outbuildings which contain the plumbing, electrical, heating, or cooling systems serving the homes are covered); recreational parking and other recreational facilities; driveways, walkways; decks except to the extent that specific defects and corrective measures are listed in Appendix A Part II Section 11; privacy screens; retaining walls which are not necessary for the home's structural stability; fences; landscaping (including sodding, seeding, shrubs, trees, and other plantings) except to the extent that specific defects and corrective measures are listed in Appendix A Part II Section 12; offsite improvements; or any other improvements not a part of the home itself.

- B. Damage to personal property, or damage to real property which was not part of the premises purchased with the home.
- C. Any damage to the extent it is caused or made worse by:
 - 1. Negligence, improper maintenance or improper operation by anyone other than the Builder or his employees, agents or subcontractors.
 - 2. Failure of anyone other than the Builder or his employees, agents or subcontractors to comply with the warranty requirements of manufacturers of appliances, equipment or fixtures.
 - 3. Changes in grading of the ground by anyone other than the Builder or his employees, agents or subcontractors.
 - 4. Failure of Purchaser to maintain a positive grade around the perimeter of the home to insure drainage of surface water away from foundation.
- D. Any defect in, or caused by, materials or work (including, but not limited to, items which may be shown on any attached "Addendum to Home Warranty Agreement") supplied by anyone other than the Builder or his employees, agents or subcontractors.



- E. Normal wear and tear or normal deterioration.
- F. Loss or damage not caused by a defect in the construction of the home by the Builder or his employees, agents or subcontractors, but resulting from accidents or acts of God including, but not limited to; fire, explosion, smoke, water escape, changes which are not reasonably foreseeable in the level of the underground water table, glass breakage, wind storm, hail, lightening, falling trees, aircraft, vehicles, flood and earthquake.
- G. Any defect caused by soil movement for which compensation is approved by legislation or which is covered by other insurance.
- H. Loss caused by pets, pests or insect damage, exclusive of members treated or designed to resist insect attack, including the foundation system. Members of the foundation system are specifically warranted for structural durability as specified herein.
- I. Any loss or damage which arises while the home is being used primarily for non-residential purposes including residential rental use.
- J. Any defect which does not result in actual loss or damage.
- K. Death, disability, illness, or bodily injury, emotional distress, loss of consortium, loss of income and all other consequential damages allegedly caused by or contributed to by any defect or faulty workmanship or materials, whether or not the alleged defect, faulty workmanship or materials failed to meet an approved standard.
- L. Mold, mildew, fungus, and any resulting damage, consequential damages, or effect proximately caused by mold, mildew or fungus including, but not limited to, property damage, personal injury, loss of income, emotional distress, death, loss of use, loss of value, adverse health effects or any other effects. It is the homeowners responsibility to maintain proper ventilation in the crawl space. Hultquist Homes, Inc. suggests that the vents be opened in the summer and closed in the winter.
- M. This agreement may have an "Addendum to New Construction Limited Warranty Agreement" attached hereto to indicate all items supplied by others and therefore excluded from the Agreement. (See VI. D above). For example, work performed by the homeowner or persons hired by homeowner other than the Builder for such items as interior or exterior painting, floor coverings, finishing a recreation room, grading and landscaping and other similar items, are not covered.
- N. Variations in cabinet wood grain and color and/or stain.
- O. Any warranty work performed by Hultquist Homes, Inc. does not extend the warranty period any further than the original warranty period.
- P. This warranty agreement is extended to you as the owner of the home identified on the certificate and closing documents and is not transferable to subsequent owners.
- Q. This limited warranty does not cover consequential damages.



R. Ice Damming: It is the homeowner's responsibility to clear snow from the roof and the roof vents, especially valleys susceptible to ice damming. The homeowner named above defends and hold Hultquist Homes, Inc. harmless for any damages resulting from ice damming.

- S. Sump Pump Malfunction/Replacement: It is Hultquist Homes, Inc. policy to install a sump pump during construction or during the first year warranty period if there is water accumulation in the crawl space. Hultquist Homes, Inc. is not responsible for replacement of sump pumps outside of the one year warranty period regardless of when it is installed.
- T. Crawl Space: The crawl space under your new home is used for the placement of heating ducts, plumbing pipes, and electrical wiring. The Municipality of Anchorage (MOA) requires that this space is to be free of any other items and left accessible for maintenance. This area is NOT defined as a habitable space or storage space. Hultquist Homes, Inc. strongly recommends that you do not use your crawl space for storage. Hultquist Homes, Inc. is not liable for any damages experienced by homeowners using their crawl space for storage. It is the homeowner's responsibility to maintain adequate ventilation in the crawl space. This involves opening and closing crawl space vents during the year. Hultquist Homes, Inc. suggests that vents be opened in the spring time as soon as the temperature remains above freezing and closed in the fall when temperatures remain near or below freezing.
- U. Loss or damage, which the homeowner has not taken timely action to minimize.
- V. Costs of shelter, transportation, food, moving, storage, or other incidental expenses related to inconvenience or relocation during repairs.
- W. Removal of tree stumps left in the yard are the responsibility of the buyer/homeowner.

VII. WALK-THROUGH AND DECLARATION OF ACCEPTANCE

A New Home Orientation will be made prior to closing and a walk-through list will be prepared mutually by the Builder and Purchaser, and signed by both parties. This walk-through list should list and describe all items which remain to be corrected. ITEMS ON THIS LIST ARE NOT A REASON FOR DELAYING CLOSING. Items identified on the walk-through list are customarily fixed within 48 hours, however, due to the variable nature of some work, HHI has up to 45 days to complete the items on the list. All other items for which warranty work is requested must be submitted in writing to the Builder as described herein.

VIII. HOMEOWNER RESPONSBILITY

New homes require an active Homeowner maintenance effort to reduce the likelihood of damage due to neglect, improper maintenance, or abnormal use.

One of the more typical problems encountered by new Homeowners is water damage to exterior walls and basements. Damage of this sort may be caused by the location and type or Homeowner, or Homeowner's Association, installed trees and shrubbery. The build-up of snow and ice causing water damming resulting in the failure or need of the Homeowner to maintain the proper drainage away from the house.



It is the responsibility of the Homeowner to maintain, in this instance, a proper grade around the home that will ensure the continued movement of water away from the house. Excessive entrance of water around the foundation can cause soil movement and serious damage. Such damage caused by the Homeowner, or Homeowner's Association, changing the grade, not properly maintaining it, or cultivating and landscaping areas near the foundation which result in excessive water entrance, are excluded from this agreement under Section VI. C. hereof.

It is the responsibility of the Homeowner to take positive steps to reduce or eliminate the occurrence of mold, mildew, or fungus growth in the home, and thereby minimize possible adverse effects that may be caused by mold, mildew, or fungus. These steps include the following:

- A. Do not bring items with mold, mildew, or fungus into the home. Before bringing items into the home, check for signs of mold. Potted plants (roots and soil), furnishings, or stored clothing and bedding materials, as well as, many other household goods, could readily contain mold growth.
- B. Regularly vacuuming and cleaning will help reduce mold levels. Mild bleach solutions and most tile cleaners are effective in eliminating or preventing mold.
- C. Keeping the humidity in the home low. Venting clothes dryers to the outdoors. Ventilating kitchens and bathrooms by opening windows and using exhaust fans, or by running the air conditioning (if provided) to remove excess moisture in the air, and to facilitate evaporation of water from wet surfaces. If you have a humidifier, correctly adjust it for temperature changes (see operation manual).
- D. Promptly clean up spills, condensation, and other sources of moisture. Thoroughly dry any wet surfaces or materials. Do not let water pool or stand in your home. Promptly replace any materials that cannot be thoroughly dried, such as drywall or insulation.
- E. Inspect for leaks on a regular basis. Look for discoloration or wet spots. Repair any leaks promptly. Inspect condensation pans (refrigerators and air conditioners) for mold growth. Take notice of musty odors and any visible signs of mold.
- F. Should mold develop, thoroughly clean the affected area with a mild solution of bleach. First test to see if the affected material or surface is colorsafe. Porous material such as fabric, upholstery, or carpet should be discarded. Should the mold growth be severe, call on the services of a qualified professional cleaner.

Various regional areas of the country have local maintenance problems. Homeowners are encouraged to discuss specific maintenance responsibilities with the Builder.

Whether or not you as the homeowner experience mold growth depends largely on how you manage and maintain your home. Our responsibility as the Builder must be limited to things that we can control. As explained by our written warranty, provided by separate instrument, we will repair or replace defects in our construction (defects defined as failure to comply with reasonable standards of residential construction) for a period of 1 (one) year. We, the Builder, will not be responsible for any damages caused by mold or mildew agents that may be present as a result of the occupants standard of living, occupants negligence in correctly maintaining the home or caused by the occupants negligence in timely reporting or repairing failed fixtures or equipment to include, but not limited to, property damage, personal injury, loss of income, emotional distress, death, loss of use, loss of value, and adverse health effects, or any other conditions. Any implied warranties, including an implied warranty of workmanlike construction, an implied warranty of habitability, or implied warranty of fitness for a particular use, are hereby waived and disclaimed.



This notice, disclosure and disclaimer was included in the HHI addendum and was appended and made part of the contract sales agreement. The consideration for this agreement shall be the same consideration as stated in the contract sale. Should a court of competent jurisdiction rule any term or provision of this agreement invalid or unenforceable, the remainder of this agreement shall nonetheless stand in full force and effect.

CAUSE OF ICE DAMMING AND ICICLES ALONG THE ROOF EAVE LINE

Your roof has been designed and constructed to meet or exceed municipal codes both in structure and in ventilation. There are a couple of things that are important to understand when you encounter ice build-up and icicles at the eave line of your new home. The most common cause of ice damming is poor attic ventilation and is usually most prevalent under extreme snowy conditions. The insulation and ventilation are designed to keep the space between the ceiling and the bottom of the roof cold. When vents, such as roof ridge vents, get plugged up with snow the air in the attic becomes stagnant and the space warms from heat loss even though there is insulation. No matter how well you ceiling has been insulated, expect a certain amount of heat loss from your home into your attic. When the snow covered or snow plugged vents on your roof prevent air movement, the warm air eventually melts the snow closest to the roof and closest to the ridge (warm air rises). The melted snow, or water, trickles down the roof, under the snow, toward the eave line and as it gets closer to the edge, it freezes. This creates dams as it moves its way back up the roof, and even under the shingles, causing leaks into the attic and into your home. This typically occurs when the air temperature warms for part of the day and then freezes.

Snow and ice removal are the homeowners responsibility. You as the homeowner are responsible to keep all roof vents functioning as they are designed in order to minimize ice damming.

An ice and water shield membrane is installed on all of our homes from the edge of the roof eaves up thirty six (36) inches. In extreme weather conditions ice can build beyond this allowing the potential for melted ice to enter the home.

Removal of snow and ice accumulation from the roof and vent areas will help reduce the probability of damage to your home. Hultquist Homes, Inc. does not warrant any damage that is a result of the homeowner neglecting to keep the ventilation functioning properly and neglecting to remove ice dams from the roof.

NOTE: THIS AGREEMENT MAY BE RENDERED NULL AND VOID BY HOMEOWNER NEGLIGENCE, IMPORPER MAINTENANCE, AND/OR OPERATION.

IX. SERVICE PROCEDURES

A. Routine Service:

Except for items noted on the walk-through list, all other requests for warranty work should be made in writing via the Builder's website which is provided at the end of this agreement. Written notice must be received by the Builder within two weeks of the expiration of the applicable warranty period. It is the Homeowner's responsibility to arrange for a service representative of the Builder to have access to the home during normal business hours, Monday through Friday 8:30am to 4:30pm.



Not later than 10 (ten) business days after receipt of written notice of a defect, the Builder will cause the problem to be investigated and will promptly advise the Homeowner of the corrective measure which is the Builder's responsibility. If the Builder and Homeowner agree, the company shall discharge its warranty obligation by promptly undertaking and completing the agreed corrective measure.

B. Emergency Service:

Water, sewer, and heat supply may require emergency service. In an emergency please contact the applicable subcontractor by phone. Each Homeowner is furnished with a list of emergency contact numbers at closing. This list may also be adhered to the wall in the garage. If it is after hours, the applicable subcontractor may have made provisions for emergency service. If the subcontractor or Builder cannot be reached, it is recommended that the owner call an available contractor to correct the emergency only and notify the Builder the next business day for further instructions. In the event the corrective measure requested is not covered under this Agreement, the Homeowner must pay the responding contractor.

C. Warranty Claim Dispute:

NOTICE OF POTENTIAL CLAIMS MUST BE PROVIDED WITHIN ONE YEAR

ALASKA LAW AT AS 09.45.881 -09.45.899 CONTAINS IMPORTANT REQUIREMENTS THAT YOU MUST FOLLOW BEFORE YOU MAY FILE A COURT ACTION FOR DEFECTIVE DESIGN, CONSTRUCTION, OR REMODELING AGAINST THE DESIGNER, BUILDER, OR REMODELER OF YOUR HOME. WITHIN ONE YEAR OF THE DISCOVERY OF A DESIGN, CONSTRUCTION, OR REMODELING DEFECT, BEFORE YOU FILE A COURT ACTION, YOU MUST DELIVER TO THE DESIGNER, BUILDER, OR REMODELER A WRITTEN NOTICE OF ANY DESIGN, CONSTRUCTION, OR REMODELING CONDITIONS YOU ALLEGE ARE DEFECTIVE IN ORDER TO PROVIDE YOUR DESIGNER, BUILDER, OR REMODELER WITH THE OPPORTUNITY TO MAKE AN OFFER TO REPAIR OR PAY FOR THE DEFECTS. YOU ARE NOT OBLIGATED TO ACCEPT ANY OFFER MADE BY THE DESIGNER, BUILDER, OR REMODELER. THERE ARE STRICT DEADLINES AND PROCEDURES UNDER STATE LAW, AND FAILURE TO FOLLOW THEM MAY AFFECT YOUR RIGHT TO FILE A COURT ACTION.

Prior to any damage for COURT ACTION by Homeowner, Homeowner shall provide to Builder a WRITTEN Notice of Claim in the manner required under AS 09.45.881 and the Builder and Homeowner shall follow the procedures set forth in A 09.45.881-899, the full text of which is attached in Appendix B.

Should the Homeowner and the Builder be unable to agree to Builder's responsibility under this Agreement, for any alleged defect or deficiency, or disagree as to the meaning, interpretation, and/or enforcement of this Agreement, the parties may, by mutual agreement, submit the dispute to mediation before an agreed person or group. If the Homeowner and Builder cannot agree to such informal resolution of any warranty claim dispute, then the same shall be decided in a court of law. In any event, both parties in a dispute agree to pay their own legal fees and costs regardless of outcome.

By accepting the home and signing this warranty document, the homeowner specifically relinquishes his rights to any form of arbitration required under any statute or law.

D. Hultquist Homes, Inc. has the right, at its option and in its sole discretion, in order to settle any dispute with Buyer(s), the right to purchase the home back from the Buyer(s) for the original sales price. In the event that Hultquist Homes, Inc. makes a written offer for such a purchase, and if the Buyer(s) rejects



such an offer, either by failing to accept the offer, by rejecting the offer, or by placing restrictions or conditions on the offer, then Hultquist Homes, Inc. shall have no liability of any type or kind to the Buyer(s) thereafter, and Hultquist Homes, Inc.'s warranty obligations thereafter shall conclusively be presumed to be satisfied in full.

X. SEVERABILITY

Should any provision of this Agreement be deemed by a court of competent jurisdiction to be unenforceable, that determination will not affect the enforceability of the remaining provisions. This Agreement is to be construed in accordance with the laws of the State of Alaska.

XI. TRANSFERABILITY

The warranty obligations of this Agreement extend only to the first Purchaser to occupy the new home and to that Homeowner's immediate family, but the Waiver of Implied Warranty and Relinquishment of Claims extends to the heirs, successors, assigns, grantees, guests, invitees, and subsequent buyers.

XII. PURCAHSE CONTRACT

Contract disputes which are not warranty disputes shall not be governed by the provisions of this Agreement. Nothing contained, other than stated above, in the purchase contract or any other contract between the Homeowner and the Builder will restrict or override the provisions of this Agreement. In the event of contradictory provisions, the terms of this agreement shall control.

XIII. CONSIDERATION/WAIVER OF WARRANTIES IMPLIED BY LAW AND RELINQUISHMENT OF CLAIMS

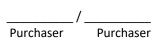
IN CONSIDERATION OF THIS EXPRESS NEW CONSTRUCTION LIMITED WARRANTY AGREEMENT, THE HOMEOWNER HEREBY WAIVES, TO THE MAXIMUM EXTENT PERMITTED BY LAW, ANY AND ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED BY CONTRACT OR LAW, INCLUDING BUT NOT LIMITED TO THE WARRANTY OF HABITABILITY, THE WARRANTY OF WORKMANLIKE CONSTRUCTION, THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, THE WARRANTY OF MERCHANTABILITY AND FURTHER AGREES THAT THE SAME ARE SUPERCEDED BY THE TERMS OF THIS WARRANTY AGREEMENT. HOMEOWNER FURTHER AGREES TO WAIVE AND RELINQUISH ANY AND ALL CLAIMS AGAINST BUILDER FOR CONSEQUENTIAL DAMAGES, PERSONAL INJURY OR DEATH ALLEGEDLY ARISING OUT OF THE WORKMANSHIP AND MATERIALS PROVIDED BY BUILDER AND/OR DEFECTS AND/OR DEFICIENCIES CAUSED BY BUILDER.



XIV. HOME WARRANTED

This New Construction Limited Warranty applies to the home located at the following legal description to wit:					
The commencement date of this Warranty is the	day of	, 20			
XV. ACCEPTANCE OF HOME AT CLOSING					
Purchaser has made a complete and thorough inspectments Purchaser's approval as of the commencement		_			
Builder shall complete repairs or adjustments of interthan 45 days after New Home Orientation. Items left completed as soon as practical; Builder shall complet any typically escrowed items) as soon as weather and	incomplete due to lacl e repairs or adjustmen	k of access to home shall be its of exterior items listed (if			
XVI. ACCEPTANCE OF WARRANTY					
Homeowners acknowledge that they have read, under LIMITED WARRANTY AGREEMENT, including specifical RELINQUISHMENT OF CLAIMS.	·				
Homeowner	 Date				
Homeowner	 Date				
Builder	 Date				





APPENDIX "A" APPROVED STANDARDS PART 1 AND PART 2 APPENDIX "B" AS 09.45.881 – 09.45.899

PART 1

CHAPTER	CODE
23.10	Anchorage Administrative Code
23.15	International Building Code
23.20	International Mechanical Code
23.25	Uniform Plumbing Code
23.30	National Electric Code
23.35	Solar Energy Code
23.45	International Fire Code
23.55	Fire Protection Service Outside Service Areas
23.60	Energy Conservation
23.65	Anchorage Existing Building Codes
23.75	ANSI Elevator and Escalators
23.85	International Residential Code
23.90	Building Construction Contractor
23.95	Relocatable Ancillary Buildings
23.100	Mobile Aircraft Shelters
23.105	Grading Excavation and Fill
23.110	International Fuel Gas Code

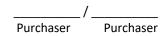
PART 2

APPROVED STANDARDS

Hultquist Homes, Inc. uses the "Residential Construction Performance Guidelines for Professional Builders and Remodelers, Second Edition" ISBN 0-86718-495-7 as its basis for approved standards in connection with this warranty document.

Below are the standards adopted by Hultquist Homes, Inc. These standards are reproduced with permission from the NAHB through the local Anchorage chapter, Anchorage Home Builders Association. Where the actual book conflicts with this Agreement, this agreement shall supersede.





SITE WORK

1-1 Observation: The Ground has settled around the foundation, over utility trenches, or in other areas.

Performance Guideline: Settling of ground around foundation walls, over utility trenches, or in other filled areas shall not interfere with water drainage away from the home.

Corrective Measure: If the contractor has provided final grading, upon request by the owner, the contractor will fill settled areas affecting proper drainage in excess of 6 inches, one time only during warranty period. The owner will be responsible for removal and replacement of shrubs and other landscaping affected by placement of such fill.

1-2 Observation: The site does not drain properly.

Performance Guideline: The necessary grades and swales shall have been established by the contractor to ensure proper drainage away from the home. Standing of ponding water shall not remain for the extended periods in the immediate area of the house after a rain (generally no more than 24 hours), except in swales that drain other areas or in areas where sump pumps discharge. In these areas a longer period can be anticipated (generally no more than 48 hours). The possibility of standing water after an unusually heavy rainfall should be anticipated by the owner. No grading determination shall be made while frost or snow is on the ground or while the ground is saturated.

Corrective Measure: The contractor is responsible only for initially establishing the proper grades and swales. The owner is responsible for maintaining such grades and swales once they have been properly established by the contractor.

1-3 Observation: The site has soil erosion.

Performance Guideline: Contractor is not responsible for soil erosion due to acts of God, or other conditions beyond the contractor's control. **Corrective Measure:** No action required.

FOUNDATION

2-1 Observation: The foundation is out of square.

Performance Guideline: As measured at the top of the foundation wall, the diagonal of a triangle with sides of 12 feet and 16 feet shall be no more than 1 inch more or less than 20 feet, unless the owner and contractor agree to intentionally build an addition to an existing structure out of square in order to match or compensate for inaccuracies in the existing structure.

Corrective Measure: The contractor will make necessary modifications to any foundation not complying with the performance guidelines for squareness to provide a satisfactory appearance. The contractor may square the first floor deck by cantilevering over the foundation where out of square.

Discussion: Squareness is primarily an aesthetic consideration. Regularly repeated geometric patterns in floor and ceiling coverings show how a gradually increasing or decreasing pattern along an out of square wall. The guideline tolerance of plus or minus 1 inch in the diagonal allows maximum increasing or decreasing portion of about 3/8 inch in a 12 foot wall of a 12x16 foot room. However, a contractor and client may agree to build an addition out of square in order to keep a new exterior wall on line with an existing wall of an out of square house.

The corrective measure emphasizes the primarily aesthetic nature of squareness and makes the criteria for correction "a satisfactory appearance." This criteria allows the contractor to make either a structural change, if the defect is discovered in time or some cosmetic change to hide the defect, if the construction is in the finishing stages when the defect is discovered.

2-2 Observation: The foundation is out of level.

Performance Guideline: As measured at the top of the foundation wall, no point shall be more than ½ inch higher or lower than any point within 20 feet, unless the owner and contractor agree to intentionally build an addition to an existing structure out of level in order to match or compensate for inaccuracies in the existing structure.

Corrective Measure: The contractor will make the necessary modifications to any foundation not complying with the performance guidelines for levelness to comply with the performance guideline. This can be affected by leveling the sills with shims, mortar, or appropriate fillers.

Discussion: Levelness is both an aesthetic and functional consideration. Out of level floors can cause "stair stepping" of 4x8 foot sheathing, siding, paneling and cabinets, and square walls must be "racked" into parallelograms when plumbing is installed. Liquids can run off counter tops, and, in extreme cases, people will perceive that they are walking uphill or downhill. The contractor and owner may agree to build an addition out of level in order to keep the floor of an addition on the same plane, and the roof ridge on the same line, as those an existing, out of level structure.

2-3 Observation: Efflorescence is present on surface of basement floor.

Performance Guideline: This is a normal condition.

Corrective Measure: None.

2-4 Observation: Crack in concrete footing.

Performance Guideline: Cracks greater than ¼ inch in width are considered excessive.

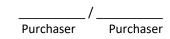
Corrective Measure: The contractor shall repair any cracks in excess of the performance guideline.

CONCRETE SLAB

2-5 Observation: Concrete slab within the structure has separated or moved at expansion and contraction joints. **Performance Guideline:** Concrete slab within the structure are designed to move at expansion and contraction joints.

Corrective Measure: None.





2-6 Observation: Concrete slab is uneven.

Performance Guideline: Except for basement floors or where a floor or portion of floor has bee designed for specific drainage purposes, concrete floors in rooms designed for habitability shall not have pit, depressions, or areas of unevenness exceeding 3/8 inch in 32 inches.

Corrective Measure: Contractor will correct or repair the floor to meet the performance guideline.

Discussion: Proper repair can be affected by thoroughly cleaning, filling, and toweling the surface level using a latex fortified cement mixture or other materials designed to fill cracks and bond concrete.

2-7 Observation: The concrete floor slab is cracked.

Performance Guideline: Minor cracks in concrete basement floors are normal. Cracks exceeding 3/16 inch in width or 3/16 inch in vertical displacement shall be repaired if the slab is in conditioned space.

Corrective Measure: The contractor will repair cracks that do not meet the performance guideline.

Discussion: Proper repair can be affected by thoroughly cleaning, filling, and toweling the surface level using a latex fortified cement mixture or other materials designed to fill cracks and bond concrete.

2-8 Observation: Interior concrete work is pilling, scaling, or spalling.

Performance Guideline: Interior concrete surfaces shall not disintegrate. Aggregate pops are normal; minor scaling is not controllable at all. Exterior surfaces may not be warranted.

Corrective Measure: The contractor will take whatever corrective measures are necessary to repair or replace defective concrete surfaces. The contractor is not responsible for deterioration caused by salt, chemicals, mechanical implements, or other factors beyond the contractor's control.

BASEMENT WALL

CONCRETE BLOCK

2-9 Observation: Concrete block basement wall is cracked.

Performance Guideline: Cracks in concrete block basement walls shall not exceed ¼ inch in width.

Corrective Measure: The contractor will repair cracks to meet the performance guideline.

Discussion: Proper repair can be affected by thoroughly cleaning, filling, and toweling the surface level using a latex fortified cement mixture or other materials designed to fill cracks and bond concrete.

2-10 Observation: Concrete block basement wall is out of plumb.

Performance Guideline: Block concrete walls shall not be out of plumb greater than 1 ½ inches in 8 feet when measured from the base to the top of the wall.

Corrective Measure: The contractor shall repair any deficiencies in excess of the performance guideline. If the wall is to remain unfinished per contract, and the wall meets building codes as evidenced by passed inspections, then no corrective action is required.

2-11 Observation: Concrete block basement wall is bowed.

Performance Guideline: Block concrete walls shall not bow in excess of 1 inch in 8 feet when measured from the base to the top of the wall. **Corrective Measure:** The contractor shall repair any deficiencies in excess of the performance guideline. If the wall is to remain unfinished per contract, and the wall meets building codes as evidenced by passed inspections, then no corrective action is required.

POURED CONCRETE

2-12 Observation: Exposed concrete wall has holes in it.

Performance Guideline: Holes larger than 1 inch in diameter or 1 inch in depth are unacceptable.

Corrective Measure: The contractor will repair holes that do not meet performance guidelines.

Discussion: Proper repair can be affected by thoroughly filling the hole. The repaired holes will not match the color of the surrounding concrete.

2-13 Observation: Poured concrete basement wall is out of plumb.

Performance Guideline: Concrete walls shall not be out of plumb greater than 1 ½ inches of 8 feet when measured from the base to the top of the wall

Corrective Measure: The contractor shall repair any deficiencies in excess of the performance guideline. If the wall is to remain unfinished per contract, and the wall meets building codes as evidenced by passed inspections, then no corrective action is required.

2-14 Observation: Poured concrete basement wall is bowed.

Performance Guideline: Concrete wall shall not bow in excess of 1 inch in 8 feet when measured from the base to the top of the wall.

Corrective Measure: The contractor shall repair any deficiencies in excess of the performance guideline. If the wall is to remain unfinished per contact, and the wall meets building codes as evidenced by passed inspections, then no corrective action is required.

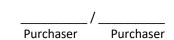
2-15 Observation: The basement wall is cracked (horizontal or vertical separation).

Performance Guideline: Cracks in basement walls shall not allow exterior water to leak into the basement.

Corrective Measure: The contractor will repair cracks that do not meet the performance guideline when leaks are present.

BASEMENT FLOOR AND WALLS





MOISTURE LEAKS

2-16 Observation: Dampness is evident on basement wall or floor.

Performance Guideline: Dampness caused by wicking through the basement walls or floor and condensation of water vapor on cool walls and floor are not the responsibility of the contractor.

Corrective Measure: None. Dampness prevention is the responsibility of the owner.

Discussion: The owner's failure to maintain a proper grade away from the house can contribute to dampness. Condensation also contributes to dampness.

2-17 Observation: The basement leaks.

Performance Guideline: Leaks resulting in actual trickling of water shall be repaired. Leaks caused by landscaping improperly installed by the owner, or by the failure of the owner to maintain proper grades, are not the contractor's responsibility. Walls and floors of new construction may become damp as concrete, mortar, and other materials dry, and dampness alone is not considered a deficiency.

Corrective Measure: The contractor will take action as necessary to correct basement leaks, except where the cause is determined to result from the owner's actions or negligence.

CRAWL SPACE

2-18 Observation: Flowing or trickling water appears on interior crawl space surfaces.

Performance Measure: Crawlspaces should be graded and drained properly to prevent water from accumulating deeper than ¾ inch and larger than 36 inch in diameter in the crawl space area.

Corrective Measure: The contractor will take the necessary corrective measures to create positive flow within the crawl space to discharge to the exterior of the structure.

2-19 Observation: Condensation is evident on the walls, earth, or floor insulation in the crawl space.

Performance Guideline: Condensation in the crawl space shall not result from lack of adequate ventilation as required by code. Condensation resulting from other causes is not the responsibility of the contractor.

Corrective Measure: The contractor will ensure that ventilation meets the appropriate code requirements. Further reduction of condensation is an owner maintenance responsibility.

Discussion: Temporary conditions may cause condensation that cannot be eliminated by ventilation and a vapor barrier because:

- 1. Night air gradually cools the interior surfaces of the crawl space. In the morning, moister picked up by the sun-warmed air is carried into the crawl space and condenses on cool surfaces.
- 2. At night, outside air may become rapidly cool foundation walls and provide a cool surface on which moisture may condense.
- **3.** If the house is left unheated in the winter, the floors and walls may provide cold surfaces on which moisture in the warmer crawl space air may condense.
- **4.** Excessive moisture inside a heated house may hit the dew point within or on the colder bottom surface of vapor-permeable floor insulation. The condensation can be reduced, by placing a vapor barrier between the insulation and the floor sheathing. If condensation must be entirely eliminated, the owner can do so by sealing and dehumidifying the crawl space, or by heating and dehumidifying the house.

COLUMNS

2-20 Observation: Wood column is bowed or out of plumb.

Performance Guideline: Wood columns shall not bow in excess of ½ inch in 8 feet or be out of plumb in excess of 1/8 inch in 12 inches when measured from the base to the top of the column, not to exceed ¾ inches in 8 feet.

Corrective Measure: The contractor shall repair any deficiencies in excess of the performance guideline.

Corrective Measure: The contractor shall repair any deficiencies in excess of the performance guideline.

2-21 Observation: Concrete column is installed bowed or out of plumb.

Performance Guideline: Concrete columns shall not be installed with a bow in excess of one inch in 8 feet. They should not be installed out of plumb in excess of ¼ inch in 12 inches when measured from base to the top of the column, not to exceed 1-½ inches in 8 feet.

2-22 Observation: Masonry column is out of plumb.

Performance Guideline: Masonry columns should not be out of plumb in excess of ¼ inch in12 inches when measured from the base to the top of the column, not to exceed 1- ¼ inch in 8 feet.

Corrective Measure: The contractor shall repair any deficiencies in excess of the performance guideline

2-23 Observation: Steel column is out of plumb.

Performance Guideline: Steel columns shall not be out of plumb in excess of 1/8 inch in 12 inches when measured from the base to the top of

Corrective Measure: The contractor shall repair any deficiencies in excess of the performance guideline.

WOOD FLOOR FRAMING

BEAMS



3-1 Observation: Springiness, bounce, shaking, or visible sag is observed in floor or roof.

Performance Guideline: All beams, joists, rafters, headers, and other structural members shall be sized, and fasteners spaced, according to the national forest products association span tables, or local building codes.

Corrective Measure: The contractor will reinforce or modify, as necessary, any floor, wall, ceiling, or roof not meeting the performance guideline.

Discussion: Deflection may indicate insufficient stiffness in the lumber, or may reflect an aesthetic consideration independent of the strength and safely requirements of the lumber. Joists and rafters are required to meet standards for both stiffness and strength. The span tables allow, under full design loading, a maximum defection equal to 1/360 of the span for floor and ceiling joists (3/8 inch in 12 feet), 1/240 for rafters up to 3/12 in pitch (½ inch in 12 feet), and 1/180 for rafters over 3/12 in pitch (3/4 inch in 12 feet). Individual clients may not be satisfied with the deflection limits built into the tables. When a customer's preference is made known before construction, a higher standard may be agreed upon, by the contractor and the owner.

3-2 Observation: Wood beam or post is split.

Performance Guideline: Beams and posts, especially those 2 ½ inches or greater in thickness (which normally are not kiln dried), will sometimes split as they dry subsequent to construction. Such splitting is usually not a structural concern if posts and beams have been sized according to national forest and paper association span tables. Unfilled splits exceeding ¼ inch in width and all splits exceeding 3/8-inch width are unacceptable.

Corrective Measure: The contractor will repair or replace any beam or post with a defect that does not meet the guideline. Filling splits is acceptable for widths up to 3/8-inch.

Discussion: Some characteristics of drying wood are beyond the control of the contractor and cannot be prevented. Compensation is made in span tables for the probable reduction in strength resulting from splitting caused by drying. Therefore, splitting is primarily an aesthetic concern rather than a structural problem. Checks and splits that occur during the drying of lumber have the effect of reducing the area in the plane of shear resistance. Consequently, laboratory data developed for shear parallel to grain are reduced substantially for design purposes in order to accommodate the probability of the occurrence of checks and splits after drying

3-3 Observation: Wood beam or post is twisted or bowed.

Performance Guideline: Beams and posts, especially those 3-1/2 inches or greater in thickness (which normally are not kiln dried) will sometimes twist or bow as they dry subsequent to construction. Twisting or bowing are usually not a structural concern if posts and beams have been sized according to national forest and paper association span tables. Bows and twists exceeding ¾ inch in an 8-foot section are unacceptable.

Corrective Measure: The contractor will repair of replace any beam or post with a defect that exceeds the guideline.

3-4 Observation: Wood beam or post is cupped.

Performance Guideline: Beams and posts, especially those 3-1/2 inches or greater in thickness (which normally are not kiln dried) will sometimes cup as they dry subsequent to construction. Cupping is usually not a structural concern if posts and beams have been sized according to National Forest and Paper Association span tables. Cups exceeding ¼ inch in 5-1/2 inches are unacceptable. **Corrective Measure:** The contractor will repair or replace any beam or post with a defect that exceed the guideline.

PLYWOOD AND JOISTS

3-5 Observation: Floor squeaks or the sub floor appears loose.

Performance Guideline: Squeaks caused by a loose sub floor are unacceptable, but totally squeak-proof floors cannot be guaranteed. **Corrective Measure:** The contractor will refasten any loose sub floor or take other corrective action to eliminate squeaking to the extent possible within reasonable repair capability with out removing floor and ceiling finishes.

Discussion: Floor squeaks may occur when a sub floor that has come loose from the joists is defected by the weight of a person and rubs against the nails that hold it in place. The subfloor or joists may be bowed, and the nails also may be expelled from the wood during drying. Movement may occur between the joist and bridging or other floor members when one joist is deflected while the other members remain stationary. Gluing the sub floor is an acceptable method of code compliance in certain jurisdictions. Re-nailing floor joists with ring-shank nails will also substantially reduce severe floor squeaks. Because the performance guideline requires the contractor to make a reasonable attempt to eliminate squeaks without requiring removal of floor and ceiling finishes, nailing loose sub flooring with casing nails into the carpet surface and countersinking the head is acceptable practice.

3-6 Observation: Wood floor is uneven.

Performance Guideline: Floors shall not have more than a ¼ inch ridge or depression within any 32-inch measurement. Allowable floor and ceiling joist deflections are governed by the local approved building codes.

Corrective Measure: The contractor will correct or repair to meet the performance guideline.

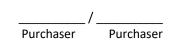
3-7 Observation: Wood floor is out of square.

Performance Guideline: The diagonal of a triangle with sides of 12 feet and 16 feet along the edges of the floor shall be no more than ½ inch more nor less than 20 feet. For remodeling projects, the owner and the contractor may agree to build a wood floor out of square in order to match or otherwise compensate for preexisting conditions.

Corrective Measure: The contractor will make the necessary modifications to any floor not complying with the performance guideline for squareness.

Discussion: Squareness is primarily an aesthetic consideration. Regularly repeated geometric patterns in floor and ceiling coverings show a gradually increasing or decreasing pattern along an out of square wall. The guideline tolerance of plus or minus 1/2 inch in the diagonal allows a





maximum increasing or decreasing portion of about 3/8 inch in a 12-foot wall of a 12x16 foot room. However, a contractor and client may agree to build an addition out of square in order to keep a new exterior wall on line with an existing wall of an out square house.

The corrective measure emphasizes the primarily aesthetic natures of squareness and makes the criteria for correction "a satisfactory appearance." This criteria allows the contractor to make either a structural change, if the defect is discovered in time, or some cosmetic change to hide the defect, if the construction is in finishing stages when the defect is discovered.

3-8 Observation: Wood floor is out of level.

Performance Guideline: No point on the surface of a wood floor shall be more than ½ inch higher or lower than any other point on the surface within 20 feet, or proportional multiples of the preceding dimensions. For remodeling projects, the owner and the contractor may agree to build a wood floor out of level in order to match or otherwise compensate for pre-existing conditions.

Corrective Measure: The contractor will make the necessary modifications to any floor not complying with the performance guideline for levelness. Allowances should be allowed for shrinkage, cantilevers and concentrated loads.

Discussion: Levelness is both an aesthetic and functional consideration. Out of level floors can cause "stair stepping" of 4X8- foot sheeting, siding, paneling and cabinets, and square walls must be "racked" into parallelograms when plumbing is installed. Liquids can run off counter tops and, in extreme cases, people will perceive that they are walking uphill or downhill. The contractor and the owner may agree to build an addition put of level in order to keep the floor of an addition on the same plane, and the roof ridge on the same lane, as those of an existing, out of level structure.

3-9 Observation: Excessive deflection observed in floor or roof constructed of wood I-Joists.

Performance Guideline: All beams joists, rafters, headers, and other structural members constructed of wood I-joists shall be sized, and fasteners spaced, according to manufacture's specifications for size, length, and spacing.

Corrective Measure: The contractor will reinforce or modify as necessary, any floor, wall, ceiling, or roof not meeting the performance guideline.

Discussion: Deflection may indicate an aesthetic consideration independent of the strength and safety requirements of the lumber. When a customer's preference is made known before construction, a higher standard may be agreed upon in writing by the contractor and the owner.

WALLS

STRUCTURAL

4-1 Observation: Wood framed wall is out of plumb.

Performance Guideline: Wood framed walls shall not be more than 3/8 inch out of plumb for and 32 inches in any vertical measurement. **Corrective Measure:** The contractor will repair to meet the performance guideline.

4-2 Observation: The wall is bowed.

Performance Guideline: All interior and exteriors walls have slight variances in their finished surface. Walls shall not bow more than 1/12 inch out of line within any 32-inch, horizontal measurement, or ½ inch within any 8-foot vertical measurement.

4-3 Observation: Exterior wall leaks because of inadequate caulking.

Corrective Measure: The contractor will repair to meet the performance guideline.

Performance Guideline: Joints and cracks in exterior wall surfaces and around openings shall be properly caulked to prevent the entry of water. Corrective Measure: the contractor will repair or caulk joints and cracks in exterior wall surfaces, as required to correct deficiencies, one time only during the warranty period. Even when properly installed, caulking will shrink and must be maintained by the owner. Insulation

4-4 Observation: Insulation is insufficient.

Performance Guideline: The contractor shall install insulation according to R-values designed in the contract documents.

Corrective Measure: The contractor will install insulation to meet the performance guideline.

Discussion: Proper installation shall include correct placement behind electrical boxes, backing studs, corner framing, and wiring.

WINDOWS

4-5 Observation: Window is difficult to open or close.

Performance Guideline: Window should require no greater operating force than that described in manufacturer's specifications. **Corrective Measure:** The contractor will correct or repair as required to meet the performance guideline.

4-6 Observation: Window Glass is broken and/or screen is damaged.

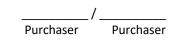
Performance Guideline: None.

Corrective Measure: Broken glass or screens reported to the contractor before closing will be replaced. Broken glass or screens not reported to the contractor prior to acceptance of the job are the owner's responsibility.

4-7 Observation: Scratches appear on surface of glass and mirrors.

Performance Guideline: Glass or mirror surfaces shall not have scratches visible from 10 feet under normal lightning conditions. **Corrective Measure:** The contractor shall replace any scratched glass or mirror surface if noted at or before acceptance of the project.





4-8 Observation: During rains, water appears on interior corner of glazed window unit. **Performance Guideline:** Water leakage from improper installation is unacceptable. **Discussion:** Leakage at the glazing interface is covered under the manufacturer's warranty.

EXTERIOR DOORS

4-9 Observation: Exterior door is warped.

Performance Guideline: Exterior doors shall not warp to the extent that they become inoperable, cease to be weather resistant, or exceed national wood window and door association standards of ¼ inch measured diagonally from corner to corner.

Corrective Measure: The contractor will correct or replace exterior doors that do not meet the performance guideline.

Discussion: Exterior doors will warp some degree because of the difference in the temperature between inside and outside surfaces. Warping may also be caused by improper or incomplete finishing of the door including sides, top, and bottom. The contractor is not responsible for warpage if painting of doors is not within contractor's scope of work.

4-10 Observation: Raw wood shows at the edges of inset panel on exterior door.

Performance Guideline: Wooden panels will shrink and expand because of temperature and/or humidity changes, and may expose unpainted

surfaces. This does not constitute a defect.

Corrective Measure: None

4-11 Observation: Door panel is split.

Performance Guideline: Split panels shall not allow lights to be visible through the door.

Corrective Measure: The contactors will repair, paint, or stain the split panel that does not meet the performance guideline once during the warranty period.

4-12 Observation: Exterior door sticks.

Performance Guideline: Exterior doors shall operate smoothly, except that wooden exterior doors may stick during occasional periods of high

humidity.

Corrective Measure: The contractor will adjust or replace the door to meet the performance guideline.

Discussion: Exterior doors will warp to some degree because of the difference in temperature between inside and outside surfaces. Warping may also be caused by improper or incomplete finishing of the door including sides, top and bottom. The contractor is not responsible for warpage if painting of doors is not within contractor's scope of work.

4-13 Observation: Exterior door will not shut completely. **Performance Guideline:** Exterior doors shall shut completely

Corrective Measure: The contractor will adjust or replace the door to meet the performance guidelines.

Discussions: Exterior doors will warp to some degree because of the difference in the temperature between the outside and inside surfaces. Warping may also be caused by improper or incomplete finishing of the door including the sides, top, and bottom. The contractor is not responsible for warpage if painting of doors is not within contractor's scope of work.

4-14 Observation: Plastic molding behind storm door melts from exposure to sunlight

Performance Guideline: The plastic moldings behind storm doors should not melt if the storm panel is removed and reinstalled by the owner during normal maintenance operations.

Corrective Measure: None.

Discussion: Plastic moldings may melt if the prime door is covered by a storm door panel, during a warm season, or if it faces the sun. This is not a defect of the door, but a problem caused by the addition of the storm panels. The owner is also cautioned to follow manufacturer's recommendations on painting on the moldings with a dark color, with or with out the use of a storm panel. Dark color molding is likely to sag and should be avoided.

4-15 Observation: Door swings open and closed by the force of gravity.

Performance Guideline: Exterior doors shall not swing open or closed by the force of gravity alone. For remodeling projects, this guideline does not apply where a new door is installed in an existing wall that is out of plumb.

Corrective Measure: The contractor will adjust the door to prevent it from swinging open or closed by the force of gravity.

4-16 Observation: Gaps are visible around exterior of door edge, door jam, and threshold.

Performance Guideline: Gaps shall not be greater than 3/16 inch.

 $\textbf{Corrective Measure:} \ \textbf{The contractor will repair existing unit to meet performance guideline.}$

4-17 Observation: Exterior door hardware or kickplate has tarnished.

Performance Guideline: Finishes on door hardware installed by contractor are covered by manufacturer's warranty.

Corrective Measure: None. Owner to contact manufacturer.

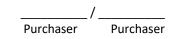
4-18 Observation: Sliding patio door or screen will not stay on track.

Performance Guideline: Sliding patio doors and screens shall slide properly on their tracks at the time job is accepted. The cleaning and maintenance necessary to preserve proper operation are an owner responsibility.

Corrective Measure: The contractor shall repair once during warranty period.

Discussion: Proper operation should be verified by the owner and the contractor at the time job is accepted.





4-19 Observation: Sliding patio door does not roll smoothly.

Performance Guideline: Sliding patio doors shall roll smoothly at the time the job is accepted. Cleaning and maintenance necessary to preserve

proper operation are an owner responsibility.

Corrective Measure: The contractor shall repair once during the warranty period.

Discussion: Proper operation should be verified by the owner and the contractor at the time the job is accepted.

EXTERIOR FINISH

WOOD AND HARDBOARD LAP SIDING

4-20 Observation: Siding is bowed.

Performance Guideline: Bows exceeding ½ inch in 32 inches are unacceptable.

Corrective Measure: The contractor will replace any wood lap siding with bows that does not meet the performance guideline, and finish

replacement siding to match the existing siding as closely as practical.

Discussion: If the siding is held by nails into studs, expansion caused by increasing relative humidity may cause bulges or waves. Even with

proper installation, siding will tend to bow inward and outward in adjacent stud spaces.

4-21 Observation: Siding end gap is visible.

Performance Guideline: End gaps wider than 3/16 inch are unacceptable.

Corrective Measure: The contractor will repair end gaps that do not meet the performance guideline.

Discussion: Proper repair can be affected be providing joint covers or by caulking the gap. This is important if the gaps were intentionally made

for expansion joints. If siding is painted the contractor will paint new caulking to match existing as close as possible.

4-22 Observation: Siding is not installed on a straight line.

Performance Guideline: Any piece of lap siding more than ½ inch off parallel in 20 feet with contiguous courses is unacceptable, unless the owner and the contractor have previously agreed to disregard the performance guideline to match a pre-existing structural condition. **Corrective Measure:** The contractor will reinstall siding to meet the performance guideline for straightness, and replace any siding damaged

during removal with new siding

4-23 Observation: Face nails are excessively countersunk into hardboard surface.

Performance Guideline: Siding nails should not be countersunk to expose visible fiber of hardboard siding.

Corrective Measure: The contractor shall repair as necessary to meet performance guideline.

Discussion: If visible fiber of hardboard siding is exposed, paint surface to coat fiber; if nail is countersunk 1/16 to 1/8 inch, caulk and touch-up paint; if countersunk in excess of 1/8 inch, caulk and additional nail to flush surface.

TONGUE AND GROOVE WOOD SIDING

4-24 Observation: Siding is buckled.

Performance Guideline: Siding that projects more than 3/16-inch from the face of adjacent siding is unacceptable.

Corrective Measure: The contractor will repair or replace any siding not meeting the performance guideline.

Discussion: Buckling is caused by increasing relative humidity, which causes siding to expand. It can be prevented by leaving spacing between the tongues and grooves for siding to expand, and by leaving the siding outside for a few days to allow is to adjust to the ambient humidity prior to installation.

4-25 Observation: Nail has stained siding.

Performance Guideline: Stains exceeding more than ½ inch from the nail readily visible from a distance of more than 20 feet are unacceptable. This performance guideline does not apply if 'natural weathering' of semi-transparent stain is specified for the job.

Corrective Measure: The contractor can choose either to remove stains that do not meet the performance guideline, or to touch—up, paint, or stain the affected area.

Discussion: Stains may be from oxidation of nails or leaching of extractives from the wood. Use of galvanized nails (even doubled hot –dipped) will not necessarily prevent staining. Clear water-repellent sealer applied immediately after installation of siding will retard leaching and rusting.

WOOD SHAKE SIDING

4-26 Observation: Cedar shakes or shingles have "bled' through paint or stain applied by contractor.

Performance Guideline: Resins and extractives bleeding through paint or stain, or blackening of shakes or shingles are unacceptable. This performance guideline does not apply if 'natural weathering' or semi-transparent stain is specified for the job.

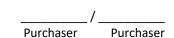
Corrective measure: One time during the warranty period the contractor will clean and treat shakes to provide a reasonable appearance and prevent farther bleeding.

PLYWOOD OR OTHER VENEER SIDING

4-27 Observation: Siding has delaminated.

Performance Guideline: Siding shall not delaminate.





Corrective Measure: The contractor will replace delaminated siding that is not covered under manufacturer's warranty, unless the delaminating was caused by owner's actions or negligence. The repaired area may not precisely match the original siding.

4-28 Observation: Joints between siding have separated.

Performance Guideline: Joint separations exceeding 3/16 inch are unacceptable.

Corrective Measure: The contractor will caulk or repair siding as necessary to fill the joint. The repaired area may not match the original siding precisely.

4-29 Observation: Siding is bowed.

Performance Guideline: Bows exceeding ½ inch in 32 inches are unacceptable.

Corrective Measure: The contractor will install additional nails in siding to meet acceptable nailing schedules and will replace any siding that does not meet the guideline because of bows.

Discussion: Some waviness in siding is to be expected because of bows in studs. However, proper nailing of siding will straighten most bows.

ALUMINUM OR VINYL SIDING

4-30 Observation: Siding is bowed or wavy.

Performance Guideline: Some waviness in lap siding is to be expected because of bows in studs. Thermal expansion waves or distortions in aluminum or vinyl lap siding, sometimes called oil canning, are unacceptable if they exceed ¼ inch in 16 inches.

Corrective Measure: The contractor will correct any thermal expansion waves or distortions to comply with the performance guideline by reinstalling or replacing siding as necessary.

Discussion: This problem is caused by the siding being nailed too tightly to the house instead of loosely 'hung' in the center of the nail slots, or by not allowing adequate room for the siding to expand at the ends.

4-31 Observation: Siding color is faded.

Performance Guideline: Any color siding, when exposed to the ultra-violet rays of the sun, will fade and this condition cannot be prevented by

the contractor. However, panels installed on the same wall shall fade at the same rate.

Corrective Measure: None

4-32 Observation: Aluminum or vinyl lap siding trim is loose from house.

Performance Guideline: Trim shall not separate more than ¼ inch from the house.

Corrective Measure: The contractor will reinstall trim or caulk separations as necessary to comply with the performance.

4-33 Observation: Aluminum or Vinyl lap siding courses are not parallel with eaves or wall openings.

Performance Guideline: Any piece of aluminum or vinyl lap siding more than 1/2 inch off parallel in 20 feet with contiguous courses, or contiguous break such as a soffit line, is unacceptable, unless the owner and the contractor have previously agreed to disregard the performance guideline to match a pre-existing structural condition.

Corrective Measure: The contractor will reinstall siding to comply with the performance guideline and replace any siding damaged during removal with new siding.

Discussion: For remodeling projects, if the contractor and the owner agree that the floor of an addition is to be on a different plane from the existing floor (for ex. a pre-existing out of level condition), the siding on the addition, may not be parallel and in line with existing siding.

4-34 Observation: Aluminum or vinyl lap siding nail show under window, door, or eave.

Performance Guideline: All facing nails shall be of a color to match the trim they affix. No nail heads in the field of the siding shall be exposed. **Discussion:** Vinyl siding generally should not be face nailed. However, there are appropriate and typical occasions when a single face nail may be needed to reinforce a joint or hold the siding to the wall when it is cut to fit around windows frames, Doors, roofs, or other obstructions on the wall.

4-35 Observation: Aluminum or vinyl lap siding trim accessory is loose from caulking at windows or other wall openings.

Performance Guideline: Siding trim accessories shall not separate from caulking at windows or other wall openings during the warranty period. **Corrective Measure:** The contractor will repair or re-caulk as necessary to eliminate the separation.

4-36 Observation: Aluminum or Vinyl lap siding is cut crooked.

Performance Guideline: Visible cuts in siding shall be straight, plumb, and neat. Crooked cuts greater than 1/8 inch from true are not

acceptable.

Corrective Measure: The contractor will repair or replace siding with visible crooked cuts.

Discussion: Crooked cuts may cause the panel to have insufficient dimension for expansion with temperature change.

4-37 Observation: Aluminum or vinyl lap siding in not cut tight to moldings.

Performance Guideline: Gaps between siding and moldings shall not exceed ¼ inch.

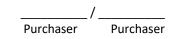
Corrective Measure: The contractor will correct to meet the guideline.

MASONRY AND VENEER

4-38 Observation: Masonry or veneer wall is cracked.

Performance Guideline: Cracks visible from 20 feet or larger than ¼ inch are not acceptable.





Corrective Measure: The contractor will repair cracks in excess of the performance guideline by tuck pointing, patching, or painting. The contractor will not be responsible for color variation between original and new mortar.

Discussion: Small hairline cracks resulting from shrinkage are common to mortar joints in masonry construction.

4-39 Observation: Exterior cut bricks are of different thickness below openings.

Performance Guideline: Cut bricks used in the course directly below an opening shall not vary from one another in thickness by more than ¼ inch. The smallest dimension of a cut brick should be greater than 1 inch.

Corrective Measure: The contractor will repair the wall to meet the performance guidelines.

Discussion: Bricks are cut to achieve required dimensions at openings and ends of walls when it is not possible to match unit/mortar coursing.

4-40 Observation: Masonry or brick veneer course is not straight.

Performance Guideline: No point along the bottom of any course shall be more than 1/4 inch higher or lower than any other point within 10 feet along the bottom of the same course, or ½ inch in any length, except that the owner and the contractor may agree to match or otherwise compensate for pre-existing conditions.

Corrective Measure: The contractor will rebuild the wall as necessary to meet the performance guideline.

Discussion: Dimensional variations of the courses depend upon the variations in the brick selected.

4-41 Observation: Mortar stain on exterior brick or stone.

Performance Guideline: Exterior brick and stone shall be free from mortar stains detracting from the appearance of the finished wall when

viewed from a distance of 20 feet.

Corrective Measure: The contactor will clean the mortar stains to meet the performance guideline.

4-42 Observation: Efflorescence is present on masonry or mortar surface.

Performance Guideline: This sometimes occurs on new construction and is normal condition beyond the contractor's control.

Corrective Measure: None

STUCCO AND PARGE

4-43 Observation: Exterior stucco wall surface is cracked.

Performance Guideline: Cracks in exterior stucco wall surfaces shall not exceed 1/8 inch in width.

Corrective Measure: The contractor will repair the cracks exceeding 1/8 inch in width once during the warranty period.

Discussion: 'Stucco' includes cementitious coatings and similar synthetically-based finishes.

4-44 Observation: Colors of exterior stucco walls do not match.

Performance Guideline: The colors of new exterior stucco walls may not perfectly match the colors of old exterior stucco walls.

Corrective Measure: None.

Discussion: Coloring of stucco is unique to field variables and it is impractical to achieve a color match between stucco coatings applied at

different times.

4-45 Observation: Textures of finishes of exterior stucco walls do not match.

Performance Guideline: Texture of new exterior stucco walls may not perfectly match the textures of old exterior stucco walls.

Corrective Measure: None.

Discussion: 'Stucco' includes cementitious coatings and similar synthetically based finishes.

4-46 Observations: Separation of coating from base on exterior stucco wall.

Performance Guideline: The coating shall not separate from the base on an exterior stucco wall during the warranty period.

Corrective Measure: The contractor will repair areas where the coating has separated from the base.

Discussion: Coloring of stucco is unique to field variables and it is impractical to expect to achieve a color match between stucco coatings

applied at different times.

EXTERIOR TRIM

4-47 Observation: Gaps show in exterior trim

Performance Guideline: Joints between exterior trim elements, including siding and masonry, shall not result in joints opened wider than ¼

inch. In all cases the exterior trim shall perform its function of excluding the elements.

Corrective Measure: The contractor will repair open joints that do not meet the performance guideline. Caulking is acceptable

4-48 Observation: Exterior trim board is split.

Performance Guideline: Splits wider than 1/8 inch are unacceptable.

Corrective Measure: The contractor will repair splits by filling with permanent filler.

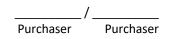
4-49 Observations: Exterior trim board is bowed or twisted.

Performance Guideline: Bows and twists exceeding 3/8 inch in 8 feet are unacceptable.

Corrective Measure: The contractor will repair defects that do not meet the performance guideline by refastening or replacing deformed

boards.





4-50 Observation: Exterior trim board is cupped.

Performance Guideline: Cups exceeding 3/16 inch in 5 ½ inches are unacceptable.

Corrective Measure: The contractor will repair defects that do not meet the performance guideline by refastening or replacing deformed

boards.

PAINT, STAIN, AND VARNISH

4-51 Observation: Exterior painting, staining or refinishing is required because of repair work.

Performance Guideline: Repairs required under these performance guidelines shall be finished to match the immediate surrounding areas as

closely as practical.

Corrective Measure: The contractor will finish repaired areas as indicated.

4-52 Observation: Exterior paint or stain has peeled or physically deteriorated.

Performance Guideline: Exterior paints and stains shall not fail during the warranty period.

Corrective Measure: If exterior paint or stain has peeled, developed an alligator pattern, or blistered, the contractor will properly prepare and refinish affected areas and match the color as closely as practical. Where deterioration of the finish affects more than 50 percent of the wall area, the contractor will refinish the entire wall.

4-53 Observation: Exterior paint or stain has faded.

Performance Guideline: Fading of exterior paints and stains is normal and the degree of fading depends on climatic conditions.

Corrective Measure: None.

4-54 Observation: Mildew or fungus is visible on exterior painted surfaces.

Performance Guideline: Painted or finished surfaces shall be free of observable mildew and fungus at the time the job is completed. However, mildew or fungus my form on painted surfaces over time because of warmth and moisture.

Corrective Measure: The contractor will remove mildew and fungus before completion of the job, subsequent mildew or fungus formation is a condition the contractor cannot control. The owner is responsible for future cleaning of the painted item as necessary to prevent or remove mildew and fungus.

4-55 Observation: Varnish or lacquer finishes have deteriorated.

Performance Measure: Clear finishes on exterior surfaces may deteriorate rapidly. This is beyond the control of the contractor.

Corrective Measure: None

ROOFS

ROOF STRUCTURE

5-1 Observation: Roof ridge beam deflects.

Performance Guideline: Roof ridge beam deflection greater than 1 inch in 8 feet is considered excessive. **Corrective Measure:** The contractor shall repair any deficiencies that do no meet the performance guideline.

5-2 Observation: Roof ceiling rafter bows.

Performance Guideline: Rafters that bow greater than 1 inch in 8 feet are considered excessive.

Corrective Measure: The contractor shall repair any deficiencies that do not meet performance guideline.

ROOF SHEATHING

5-3 Observation: Roof sheathing is wavy or appears bowed.

Performance Guideline: Roof sheathing shall not bow more that ½ inch in 2 feet.

Corrective Measure: The contractor will straighten bowed roof sheathing or correct swollen joints as necessary to meet the performance guideline.

Discussion: The contractor usually can meet this performance guideline by using thicker plywood sheathing (either ½ inch or 15/32 inch spanrated, not 3/8 inch) with more plies (4 or 5, rather than 3) or oriented strand board and plywood clips (a) to align adjacent sheets between trusses or rafters and (b)ensure room for expansion of the sheets. In rare instances the contractor might have to install blocking between the trusses to straighten the sheathing.

ROOF VENTS

5-4 Observations: An attic vent or louver leaks.

Performance Guideline: Attic vents and louvers shall not leak. However, infiltration of wind-driven rain and snow are not considered leaks and are beyond the control of the contractor.

Corrective Measure: the contractor shall repair or replace the roof vents as necessary to meet the performance guidelines.

ROOF INSTALLATION AND LEAKS

ASPHALT SHINGLES



5-5 Observation: The roof or flashing leaks.

Performance Guideline: Roofs and flashing shall not leak under normal conditions, except where the cause is determined to result from ice build-up or the owner actions or negligence.

Corrective Measure: The contractor will repair any verified roof or flashing leaks not caused by ice build-up, leaves, debris, or the owner's actions or negligence. It is the owner's responsibility to keep the roof drains, gutters, and downspouts free of debris.

5-6 Observation: Ice builds up on the roof.

Performance Guideline: During prolonged cold spells, ice is likely to build up at the eaves of a roof. This condition can naturally occur when snow and ice accumulates.

Corrective Measurements: None. Prevention of ice build-up on the roof is an owner maintenance item.

5-7 Observation: Shingles have blown off.

Performance Guideline: Shingles shall not blow off in winds less than manufacturers' standards/specifications.

Corrective Measure: If shingles blow of in winds less than the manufacturer's standards/ specifications, see manufacturer's warranty

5-8 Observation: Shingles are not horizontally aligned.

Performance Guideline: Shingles should be installed according to the manufacturer's standards/specifications.

Corrective Measure: The contractor will remove shingles that do not meet the performance guideline, and replace them with new shingles that are properly aligned.

Discussion: For remodeling only: the owner and the contractor may agree prior to installation that the horizontal line of shingles on the roof of an addition need not line up with those of the existing structure if the floors (and hence, the eaves and ridge) are not to be built on the same plane.

5-9 Observation: New singles do not match existing shingles.

Performance Guideline: Because of weathering and manufacturing variations, the color of new shingles will not exactly match the color of existing shingles.

Corrective Measure: The contractor is not responsible for precisely matching the color of existing shingles.

5-10 Observation: Asphalt shingle edges or corners are curled or cupped.

Performance Guideline: Asphalt shingle edges and corners need not be perfectly flat. Appearance of shingles should be within manufacturer's standards/specifications.

Corrective Measure: None. The owner should contact the manufacturer of the roofing shingle.

5-11 Observation: Asphalt shingles do not overhang edges of roof or hang too far over edges of roof.

Performance Guideline: Asphalt shingles shall overhang roof edges by not less than ¼ inch, and not more than ¾ inch unless the manufacture's standards/specifications indicate otherwise.

Corrective Measure: The contractor will reposition or replace shingles as necessary to meet the performance guideline.

5-12 Observation: Shading or shadowing pattern appears on new shingle roof.

Performance Guideline: Shading or shadowing is a defect only if it results from failure to use shingles of the type specified in the contract.

Corrective Measure: The contractor will replace shingles not conforming to the contractual requirements.

5-13 Observation: Asphalt shingles have developed surface buckling.

Performance Guideline: Asphalt shingle surfaces need not be perfectly flat. Buckling higher than ¼ inch is considered excessive.

Corrective Measure: The contractor will fix the affected shingles to meet the performance guideline.

 $\textbf{5-14 Observation:} \ Sheathing \ nails \ have \ loosened \ from \ the \ framing \ and \ raised \ asphalt \ shingles.$

Performance Guideline: Nails shall not loosen from roof sheathing to raise asphalt shingles from surface. **Corrective Measure:** The contractor shall repair all areas as necessary to meet the performance guideline.

5-15 Observation: Roofing nails are exposed at ridge of roof.

Performance Guideline: Nail heads shall be sealed to prevent leakage.

Corrective Measure: The contractor shall repair areas to meet performance guideline.

 $\textbf{5-16 Observation:} \ \ \text{Holes from walk boards are visible in asphalt shingles}.$

Performance Guideline: Holes from walk boards shall be flashed and sealed below the asphalt shingle tab to prevent leakage. If patch is visible

from ground, the shingle should be replaced.

Corrective Measure: The contractor shall repair to meet the performance guideline.

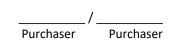
5-17 Observation: Existing roof shingles telegraphing through new asphalt shingles.

Performance Guideline: Some telegraphing is normal when reproofing over existing roofing

Corrective Measure: None.

ROLL ROOFING





5-18 Observation: Water is trapped under the roll roofing.

Performance Guideline: Water shall not become trapped under roll roofing.

Corrective Measure: If water becomes trapped under roll roofing during the warranty period, the contractor will repair or replace the roofing as necessary to meet the performance guidelines.

5-19 Observation: Roofing is blistered but does not admit water.

Performance Guideline: Surface blistering of roll roofing is caused by unusual conditions of heat and humidity acting on the asphalt and cannot

be controlled by the contractor. **Corrective Measure:** None.

5-20 Observation: Water is standing on flat roof.

Performance Guideline: Water shall drain from a flat roof except for minor ponding within 24 hours or a rainfall.

Corrective measure: The contractor will take corrective action to assure proper drainage of the roof.

CHIMNEY

5-21 Observation: Crack in masonry chimney cap or crown causes leakage.

Performance Guideline: It is normal for caps to crack due to expansion and contraction, however unacceptable leaks may occur with cracking.

Corrective measure: If cracking causes leakage the contractor will repair.

5-22 Observation: Brick veneer spalling from chimney surface.

Performance Guideline: Spalling of newly manufactured brick should not occur and is unacceptable. Spalling of used brick is acceptable.

Corrective Measure: Contractor will repair newly manufactured brick when spalling occurs.

5-23 Observation: New chimney flashing leaks.

Performance Guideline: New chimney flashing shall not leak under normal conditions except where the cause is determined to result from ice

build-up or the owner actions or negligence.

Corrective Measure: The contractor will repair leaks in new chimney flashing not caused by ice build-up or the owner's actions or negligence.

5-24 Observation: Gutter or downspout leaks.

Performance Guideline: Gutter and downspouts shall not leak

Corrective Measure: The contractor will repair leaks in gutter and downspouts.

5-25 Observation: Gutter overflows during heavy rain.

Performance Guideline: Gutters may overflow during heavy rain.

Corrective Measure: The contractor shall repair if gutters overflow during normal rain.

Discussion: The owner is responsible for keeping gutter and downspouts free from debris that could cause overflow.

5-26 Observation: Water remains in the gutter after a rain.

Performance Guideline: When a gutter is unobstructed by debris, the water level shall not exceed ½ inch in depth.

Corrective Measure: The contractor will repair the gutter to meet the performance guideline.

Discussion: Installing gutter with a minimum 1/32-inch drop in 1 foot will generally prevent water from standing in the gutter. Even so, small amounts of water may remain in some sections of gutter for a short time after rain. In areas with heavy rainfall and/or ice build-up the contractor may consider increasing pitch/fall or adding additional downspouts.

5-27 Observation: Skylight leaks.

Performance Guideline: Skylight shall be installed in accordance with manufacturer's specifications. Leaks resulting from improper installation

are unacceptable. Condensation on interior surfaces is not a leak and not considered a defect.

Corrective Measure: The contractor will repair any improperly installed skylight to meet the performance guideline.

PLUMBING

WATER SUPPLY SYSTEM

6-1 Observation: Pipe leaks.

Performance Guideline: No leaks of any kind shall exist in any soil, waste, vent, or water pipe.

Corrective Measure: The contractor will make repairs to eliminate leakage.

6-2 Observation: Condensation appears on pipes, toilets and plumbing supply lines.

Performance Guideline: Condensation on pipes, toilets, and plumbing supply lines may result in certain combinations of temperature and

indoor humidity.

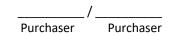
Corrective Measure: None

6-3 Observation: A faucet or valve leaks.

Performance Guideline: No faucet or valve shall leak because of defects in material or workmanship.

 $\textbf{Corrective Measure:} \ \textbf{The contractor will repair or replace the leaking faucet or valve}.$





6-4 Observations: Water in Plumbing pipe freezes, and the pipe bursts.

Performance Guideline: Drain, waste, vent and water pipes shall be adequately protected to prevent freezing as required by the applicable plumbing code for normally anticipated cold weather and in accordance with the design temperatures established by the American Society of Heating, Refrigerating and Air-Conditioning Engineers.

Corrective Measure: The contractor will correct situations not meeting the applicable code. The owner is responsible for draining or otherwise protecting pipes and exterior faucets exposed to freezing temperatures.

6-5 Observation: The water supply system fails to deliver water.

Performance Guideline: All on-site service connections to the municipal water main or private water supply are the responsibility of the contractor.

Corrective Measure: The contractor will repair the water supply system if the failure results from defective installation or materials. Conditions beyond the control of the contractor that disrupt or eliminate the water supply are not covered.

6-6 Observation: Water pipe is noisy.

Performance Guideline: Because of the flow of water and pipe expansion the water pipe system will emit some noise. However, the pipes should not make the pounding noise called 'water hammer'

Corrective Measure: The contractor cannot remove all noises caused by water flow and pipe expansion. However, the contractor will correct the system to eliminate 'water hammer.'

PLUMBING FIXTURES

6-7 Observation: The bathtub or shower leaks.

Performance Guideline: Bathtubs and showers shall not leak.

Corrective Measure: The contractor will repair bathtub or shower leaks as necessary to meet the performance guideline.

Discussion: Proper repair can be affected by sealing areas around tubs and showers. Maintenance of caulk seals is an owner responsibility.

6-8 Observation: Plumbing fixtures, appliances, or trim fitting is defective.

Performance Guideline: Plumbing fixtures, appliances, and trim fittings shall comply with their manufacturer's guidelines. **Corrective Measure:** None. Defective trim fittings, appliances, and fixtures are covered under manufacturer's warranty.

6-9 Observation: The surface of a porcelain or fiberglass plumbing fixtures is cracked or chipped.

Performance Guideline: Cracks and chips in surfaces of bathtubs and sinks are unacceptable if visible from 3 feet in normal light.

Corrective Measure: The contractor will not be responsible for repairs unless the damage is reported to the contractor prior to acceptance of the job. If the problem resulted from improper manufacture, then the manufacture's warranty will take precedence over the contractor's responsibilities.

6-10 Observation: Fiberglass tub or shower enclosure base flexes.

Performance Guideline: To be installed according manufacture's specifications. **Corrective Measure:** Contractors shall repair to meet performance guideline.

6-11 Observation: Vanity tops shall not crack when installed with proper sealants at drain connections

Corrective Measure: The contractor shall repair any warranty deficiencies to meet the performance guideline within warranty period.

SANITARY SEWER OR SEPTIC SYSTEM

6-12 Observation: Sewer, fixture, or drain is clogged.

Performance Guideline: Sewers, fixtures, and drains shall operate properly.

Corrective Measure: The contractor will not be responsible for sewer, fixtures, and drains that are clogged because of the owner's actions or negligence. If the problem occurs, the owner should consult the contractor for the corrective action. If the defective installation is the cause, the contractor is responsible for correcting the problem. If the owner's actions or negligence is the cause, the owner is responsible for the problem.

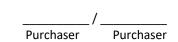
With respect to the septic systems, owner actions that constitute negligence under this guideline include but are not limited to the following:

- 1. Connection of sump pump, roof drains, or backwash from a water conditioner into the system.
- $\textbf{2.} \ \textbf{Placement of non-biodegradable items into the system}.$
- **3.** Use of a food waste disposer not supplied or approved by the contractor.
- **4.** Placement of surfaces not permeable to water over the disposal area of the system.
- 5. Allowing vehicles to drive or park over the disposal are of the system.
- 6. Failure to pump out the septic tank periodically as required.
- 7. Use that exceeds the systems design standards.

ELECTRICAL

FUSE AND CIRCUIT BREAKERS





7-1 Observation: Fuse blows or circuit breaker trips.

Performance Guideline: Fuses and circuit breaker shall not be triggered by normal usage.

Corrective Measure: The contractor will check wiring circuits for conformity with applicable national, state, or local electrical code

requirements. The contractor will correct circuitry not conforming to applicable code specifications.

7-2 Observation: Ground fault interrupter trips frequently.

Performance Guideline: Ground fault interrupters are safety devices installed as part of the electrical system to provide protection against

electrical shock. These sensitive devices can be tripped very easily.

Corrective Measure: The contractor will install ground fault interrupters in accordance with approved electrical codes. Tripping is to be expected and is not covered unless it is caused by defective installation.

OUTLETS AND LIGHTS

7-3 Observation: Electrical outlets, switches, or fixtures malfunction.

Performance Guideline: All electrical outlets, switches, and fixtures shall operate as designed.

Corrective Measure: The contractor will repair or replace malfunctioning electrical outlets, switches, and fixtures, if supplied and installed by

the contractor.

7-4 Observation: Wiring fails to carry its designed load.

Performance Guideline: Wiring shall be capable of carrying the designed load for normal residential use.

Corrective Measure: The contractor will check the wiring for conformity to applicable local, state or approved national electrical code

requirements. The contractor will repair wiring not conforming to code specifications.

7-5 Observation: Ceiling fan vibrates excessively and is noisy.

Performance Guideline: The contractor shall install fans per the manufacturer's specifications including blade balances.

Corrective Measure: The contractor shall repair any fan installation not in accordance with performance guideline if supplied and installed by

the contractor.

7-6 Observations: Exhaust fan is ducted to attic or crawl space. **Performance Guideline:** Fans shall be ducted as per applicable codes.

Corrective Measure: The contractor shall repair to meet performance guideline.

7-7 Observation: Interior light fixture tarnishes.

Performance Guideline: Finishes on light fixtures may be covered under manufacturer's warranty.

Corrective Measure: None.

7-8 Observation: Receptacle/switch too far off wall.

Performance guide: Receptacle/switch should not be more than 1/8-inch from the adjoining wall surface.

Corrective Measure: Contractor will repair to meet performance guideline.

INTERIOR CLIMATE CONTROAL

AIR INFILRATION AND DRAFTS

8-1 Observation: Air infiltrates around door or window.

Performance Guideline: Some infiltration is usually noticeable around doors and windows especially during high winds. No daylight shall be visible around frame when door or window is closed.

Corrective Measure: The contractors shall repair to meet the performance guideline.

Discussion: Proper repair can be affected by adjusting or installing weather stripping around doors and windows. In high-wind areas, the owner may need to have storm windows and doors installed to eliminate drafts.

8-2 Observations: Draft comes through electrical outlet.

Performance Guideline: Electrical junction boxes on exterior walls may allow cold air to flow through or around an outlet into a room. It may not be possible to eliminate this completely.

Corrective Measure: None

Discussion: The owner may need to install foam insulation pads under switch and outlet plates to help decrease drafts.

VENTILATION

8-3 Observation: The attic or crawl space is inadequately ventilated.

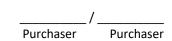
Performance Guideline: The attic and crawl space shall be ventilated as required by the applicable building code.

Corrective Measure: The contractor will provide for adequate ventilation. The contractor is not responsible for action by the owner that

interferes with the ventilation.

HUMIDITY CONTROL AND CONDENSATION





8-4 Observation: Condensation or frost appears on window.

Performance Guideline: Windows will collect condensation on their interior surfaces when extreme temperature differences and high humidity levels occur. Condensation usually results from humid conditions within the home that are created by the owner or during the curing process in a new space.

Corrective Measure: Unless the window condensation or frost is directly attributed to faulty installation, it usually results from conditions beyond the control of the contractor. No corrective action is required.

Discussion: Occasional condensation in the kitchen, bath or laundry area is common and is therefore not a defect. It is the homeowner's responsibility to maintain proper humidity.

AIR-DISTRIBUTION SYSTEM

8-5 Observations: The ductwork makes noises.

Performance Guideline: When metal is heated, it expands, and when cooled, it contracts. The resulting 'ticking' or "cracking' sounds generally

are to be expected and do not constitute a defect.

Corrective Measure: None

8-6 Observation: The ductwork produces excessively loud noises commonly known as oil canning.

Performance Guideline: The stiffening of the ductwork and the gauge of metal used shall be such that ducks do not 'oil can.' The booming noise

caused by oil canning is not acceptable.

Corrective Measure: The contractor will correct the ductwork to eliminate nose caused by oil canning.

8-7 Observations: Noise can be heard at the register.

Performance Guideline: Product should be correctly installed according to manufacture's specifications.

Corrective Measure: None, if installed correctly. If installed incorrectly, contractors will correct according to manufacture's specifications.

8-8 Observation: The air handler vibrates.

Performance Guideline: Product should be correctly installed.

Corrective Measure: None, if installed correctly. If installed incorrectly, contractor will correct accordingly to manufacture's specifications. **Discussion:** Under certain conditions, some noise may be experienced with normal flow of air when product is installed correctly. See manufacture's specifications.

8-9 Observations: The ductworks separate or detaches.

Performance Guideline: Ductwork shall remain intact and securely fastened.

Corrective Measure: The contractor will reattach and resecure all separated or unattached ductwork.

HEATING SYSTEM

8-10 Observation: The heating system is inadequate.

Performance Guideline: The heating system shall be capable of producing an inside temperature of 70 degrees Fahrenheit, as measured in the center of each room at the height of 5 feet above the floor under local, outdoor winter design condition as specified in the ASHRAE Handbook: Fundamentals. National, state, or local energy codes shall supersede this performance guideline where such codes have been locally adopted. **Corrective Measure:** The contractor will correct heating system to provide the required temperature in accordance with the performance guideline or applicable code specifications. However, the owner will be responsible for balancing dampers and registers and for making other minor adjustments.

Discussion: For new living spaces created by remodeling jobs, heating guidelines may not apply to areas where living space had been created without resizing the HVAC system.

CENTRAL AIR-CONDITIONING SYSTEM

8-11 Observation: Cooling of rooms is inadequate.

Performance Guideline: If air conditioning is installed by the contractor, the cooling system shall be capable of maintaining a temperature of 78 degree Fahrenheit, as measured in the center of each room at a height of 5 feet above the floor under local outdoor summer design conditions as specified in the ASHREA Handbook: Fundamentals. In the case of outside temperatures exceeding 95 degrees Fahrenheit, the system shall keep the inside temperature 15 degrees Fahrenheit cooler than the out side temperature. National, state, or local codes shall supersede this guideline where such codes have been locally adopted.

Corrective Measure: The contractor will correct the cooling system to provide the required temperature in accordance with the performance guideline or applicable code specifications.

Discussion: For new living spaces created by remodeling jobs, cooling guidelines may not apply to areas where living space has been created without resizing the HVAC system.

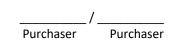
8-12 Observation: Condensation line clogs.

Performance Guideline: None.

Corrective Measure: Condensation lines will eventually clog under normal use. Contractor will provide unobstructed condensation lines at the time of the job is accepted. The owner is responsible for maintaining them in that condition.

8-13 Observation: Refrigerant line leaks.





Performance Guideline: Refrigerant lines shall not leak during normal operation.

Corrective Measure: The contractor will repair leaking refrigerant lines and recharge the air conditioning unit unless the damage was caused by the owner's actions or negligence.

8-14 Observation: There is condensation on the outside of the air handlers and ducts.

Performance standard: Air handlers and ducts will collect condensation on their exterior surfaces when extreme temperature differences and high humidity levels occur. Condensation usually results from humid conditions within the home that are created by the owner or during the curing process of a new space.

Corrective Measure: Unless the condensation or frost is directly attributed to the faulty installation, it usually results from conditions beyond the control of the contractor. No corrective action is required.

8-15 Observation: Kitchen or bath fans allow cold air infiltration.

Performance standard: This is a normal condition beyond the contractor's control.

Corrective Measure: None.

Discussion: It is possible for cold air to leak into the house through a vent fan. By their very nature, vent fans are somewhat open to outside air. It is possible for the damper to be lodged open due to animal activity, including nesting in the outside opening. Cleanup for this condition is an owner's maintenance item.

8-16 Observation: There are gaps between HVAC vent or register covers and the wall or ceiling

Performance Guideline: This is a normal condition beyond the contractor's control.

Corrective Measure: None.

Discussion: It is the inherent nature of the heating and cooling system to cause vents and registers to bend over time. This can result in gaps occurring between the vent or register cover and the wall. As long at the vent or register is securely attached, this is not a maintenance item.

INTERIOR

INTERIOR DOORS

9-1 Observation: Interior door is warped.

Performance Guideline: Interiors doors (full openings) shall not warp in excess of ¼ inch.

Corrective Measure: The contractor will correct or replace and refinish defective doors to match existing doors as nearly as practical during the warranty period.

Discussion: In bathroom or utility areas, exhaust fans or an open window must be used to remove moister to prevent warpage of door units. If customer is responsible for painting the door, the builder is not responsible if the door is not painted to manufacture's specifications.

9-2 Observation: Bifold doors come off tracks during normal operation

Performance Guideline: Bifold doors shall slide properly on their tracks at the time the job is accepted. Cleaning and maintenance necessary to preserve proper operation are the owner's responsibility.

Corrective Measure: The contractor will repair any bifold door that will not stay in its track during normal operation, one time during warranty period

Discussion: Proper operation should be verified by the owner and the contractor at the time the job is accepted.

9-3 Observation: Pocket door rubs in pocket during normal operation.

Performance Guideline: Pocket doors shall not rub in their pockets during normal operation.

Corrective Measure: The contractor will repair the pocket door to meet the performance guideline, one time during the warranty period.

9-4 Observation: Wooden door panel shrinks and splits.

Performance Guideline: Wooden door panels shall not split to the point where light is visible through the door.

Corrective Measure: The contractor will fill splits in the door panel with wood filler and match paint or stain as closely as practical.

9-5 Observation: Door rubs on jambs or contractor-installed floor covering, or latch does not work.

Performance Guideline: Doors shall operate smoothly and door latches shall operate correctly.

Corrective Measure: The contractor will repair the door and the door latch as necessary to meet the performance guideline.

9-6 Observation: Door drags on carpet.

Performance Guideline: Doors shall not drag on carpet.

Corrective Measure: The contractor will repair the door to meet the performance guideline if the contractor installed the carpet as part of the contract.

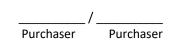
Discussion: If the contractor installs the door over pre-existing carpeting, the contractor is responsible for meeting the performance guideline.

9-7 Observation: Door edge is not parallel to doorjamb.

Performance Guideline: Where the contractor installs the doorframe and door, the door edge shall be within 3/16 inch of parallel to the doorjamb. Where the contractor installs the door in an existing frame that is out of square, the guideline does not apply. **Corrective Measure:** The contractor will adjust the door as necessary to meet the guideline.

9-8 Observation: Door swings open or closed by force of gravity,





Performance Guideline: Doors shall not swing open or closed by the force of gravity alone. For remodeling projects, this guideline does not apply where a door is installed in an existing wall that is out of plumb.

Corrective Measure: The contractor will adjust the door as necessary to meet the guideline.

9-9 Observation: Interior pre-hung doors are hinge-bound.

Performance Guideline: Doors shall move smoothly with limited resistance.

Corrective Measure: The contractor shall repair door operation to match performance guideline.

INTERIOR STAIRS

9-10 Observation: Interior stair tread deflects too much.

Performance Guideline: The maximum vertical deflection of an interior stair tread shall not exceed 1/8-inch at 200 pounds.

Corrective Measure: The contractor will repair the stair to meet the performance guideline.

9-11 Observation: Gaps exist between interior stair risers, treads, and /or skirts.

Performance Guideline: Gaps between adjoining parts that are designed to meet flush shall not exceed 1/8-inch width. **Corrective Measure:** The contractor will fix the gap with filler or replace parts as necessary to meet the performance guideline.

9-12 Observation: Squeaking stair riser or tread.

Performance Guideline: Loud squeaks caused by loud stair riser or tread are unacceptable, but totally squeak-proof stair riser or treads cannot be guaranteed.

Corrective Measure: The contractor will refasten any loose risers or treads or take other corrective action to eliminate squeaking to the extent possible within reasonable repair capability with out removing treads or ceiling finishes.

Discussion: Squeaks in risers or treads may occur when a riser has come loose from the tread, and is deflected by the weight of a person and rubs against the nails that hold it in place. Movement may occur between the riser and the tread or other stairway members when one tread is deflected while the other remain stationary. Using trim screws to fasten the tread to the riser from above will sometimes reduce the riser to the tread or shimming will reduce squeaks but total elimination of squeaks is practically impossible.

The performance guideline requires the contractor to make a reasonable attempt to eliminate squeaks without requiring removal of treads or ceiling finishes.

9-13 Observation: Gaps exist between interior stair railing parts.

Performance Guideline: Gaps between interior stair railing parts shall not exceed 1/8 inch in width.

Corrective Measure: The contractor will ensure that individual parts of railing are securely mounted. Any remaining gaps will be filled or parts replaced to meet the performance guideline.

9-14 Observation: Interior stair railing lacks rigidity.

Performance Guideline: Interior stair railing shall be attached to structural member in accordance with applicable codes.

Corrective Measure: The contractor will repair any stair railing as necessary to comply with applicable codes.

9-15 Observation: Gaps at non-mitered joints of trim and modeling.

Performance Guideline: Openings at joints in trim and moldings, and at joints between molding and adjacent surfaces shall not exceed 1/8-inch width at time of installation.

Corrective Measure: The contractor will repair defective joints to meet performance guideline.

Discussion: Separation of trim and molding can be caused by lack of control of indoor relative humidity by the owner and in such cases will therefore be excluded

9-16 Observation: Nails are not properly set or, where puttied, nail holes are not properly filled.

Performance Guideline: Setting nails and filling nail holes are considered part of painting and finishing. After painting or finishing, nails and nail holes shall not be readily visible from a distance of 6 feet under normal lighting conditions.

Corrective Measure: Where the contractor is responsible for painting, the contractor shall take action necessary to meet the performance guideline.

Discussion: Puttying of nail holes in base and trim molding installed in unfinished rooms and areas not exposed to view (such as Inside closets) are not included in this guideline.

9-17 Observation: Inside corner is not coped or mitered.

Performance Guideline: Trim edges at inside corners shall be coped or mitered. However, square edge trim may be butted.

Corrective Measure: The contractor will finish inside corners to meet the performance guideline.

9-18 Observation: Trim or molding miter edges does not meet.

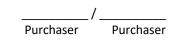
Performance Guideline: Gaps between miter edges in trim and molding shall not exceed 1/8 inch at a time of installation.

Corrective Measure: The contractor will repair gaps that do not meet the performance guideline. Caulking or puttying with materials compatible to finish is acceptable.

9-19 Observation: Interior trim is split.

Performance Guideline: Splits, cracks, and checking are inherent characteristics of all wood products, and are not a defect.





Corrective Measure: None.

9-20 Observation: Hammer marks are visible on interior trim.

Performance Guideline: Hammer marks on interior trim shall not be readily visible from a distance of 6 feet under normal lighting conditions. **Corrective Measure:** The contractor will fill hammer marks and refinish or replace affected trim to meet the performance guideline. Refinished or replaced areas may not match surrounding surfaces exactly.

CABINETS AND COUNTERTOPS

9-21 Observation: Cabinets do not meet ceiling or walls.

Performance Guideline: Gaps in excess of ¼ inch are unacceptable.

Corrective Measure: The contractor will repair the gap with caulk, putty, or scribe molding, or he will reposition/reinstall cabinets to meet the performance guideline.

Discussion: When remodeling in rooms with out of plumb walls or out of level floor and ceiling, 'Square' cabinets cannot be installed parallel to walk and ceilings and still keep the cabinets on line. For example, if the floor is not level and the installer measures up from it, 'snaps" a line on which to place the tops of the wall cabinets, then plumbs the first cabinet, one corner of the cabinet will leave the line, and the bottom corners of successive cabinets will not be in line. Similarly, cabinets will not line up with each other if they are installed on a level line, starting against an out of plumb wall instead of being plumbed. The contractor should explain the aesthetic options and let the owner decide which one is preferred.

9-22 Observation: Cabinets do not line up with each other.

Performance Guideline: Cabinet faces more than 1/8 inch out if line and cabinet corners more than 3/16-inch out of line, are unacceptable, unless the owner and the contractor agree to disregard the guideline in order to match or otherwise compensate for pre-existing conditions. **Corrective Measure:** The contractor will make necessary adjustments to meet the performance guideline.

Discussion: In rooms with out of plumb walls or out of level floor and ceiling, 'Square' cabinets cannot be installed parallel to walk and ceilings and still keep the cabinets on line. For example, if the floor is not level and the installer measures up from it, 'snaps" a line on which to place the tops of the wall cabinets, then plumbs the first cabinet, one corner of the cabinet will leave the line, and the bottom corners of successive cabinets will not be in line. Similarly, cabinets will not line up with each other if they are installed on a level line, starting against an out of plumb wall instead of being plumbed. The contractor should explain the aesthetic options and lets the owner decide which one is preferred.

9-23 Observation: Cabinet is warped.

Performance Guideline: Cabinet warpage shall not exceed ¼ inch as measured from the face frame to the point of furthermost warpage, with the door or drawer front in closed position.

Corrective Measure: The contractor will correct or replace doors and drawer fronts as necessary to meet the performance guide.

9-24 Observation: Cabinet door or drawer binds.

Performance Guideline: Cabinet doors and drawers shall open and close with reasonable ease.

Corrective Measure: The contractor will adjust or replace doors and drawers as necessary to meet the performance guideline.

9-25 Observation: Cabinet door will not stay closed.

Performance Guideline: The catches or closing mechanisms for cabinet shall be adequate to hold the doors in a closed position. **Corrective Measure:** The contractor will adjust or replace the door catches or closing mechanisms as necessary to meet the performance guideline.

9-26 Observation: The joints of high pressure laminate on countertop is delaminated.

Performance Guideline: Countertops fabricated with high-pressure laminate coverings shall not delaminate.

Corrective Measure: The contractor will repair or replace delaminated coverings.

9-27 Observation: The surface of high pressure laminate on countertop is cracked or chipped.

Performance Guideline: Countertops shall be free of cracks and a chip at the time the job is accepted. Crack or chips occurring after acceptance of the job are the owner's responsibility.

Corrective Measure: The contractor will repair or replace cracked or chipped countertops only if they are reported prior to acceptance of the job.

9-28 Observation: Scratches on solid surface countertops.

Performance Guideline: Solid surface countertops shall be free of scratches at time of the acceptance of the project.

Corrective Measure: The contractor shall repair to meet the performance guideline.

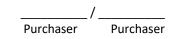
9-29 Observation: Countertop is not level.

Performance Guideline: Countertops shall be no more than 3/8 in 10 feet out of parallel with floor. For remodeling projects where floor is out of level, the countertop may be installed proportionately out of level.

Corrective Measure: The contractor will make necessary adjustments to meet the performance guideline.

Discussion: For remodeling projects, countertops are almost always on a plane parallel to the floor and ceiling because the cabinets supporting the top are exactly the same height. Shimming and leveling the tops when the floor is out of level may be aesthetically unacceptable to the owner. Prior to construction, the contractor should explain the problem and allow the owner to decide between tops that are out of level or not parallel to the floor.





INTERIOR WALL FINISH

LATH AND PLASTER

9-30 Observation: Cracks are visible on finished wall or ceiling **Performance Guideline:** Cracks shall not exceed 1/16 inch in width.

Corrective Measure: The contractor will repair cracks exceeding 1/16 inch in width only once during the warranty period. The contractor will touch up paint-repaired areas if the contractor was responsible for the original interior painting. A perfect match between original and new paint cannot be expected and the contractor is not required to paint an entire wall or room.

GYPSUM WALLBOARD

9-31 Observation: Nail pop, blister, or other blemish is visible on finished wall or ceiling.

Performance Guideline: Any such blemishes that are readily visible from a distance of 6 feet under normal lighting conditions are unacceptable. **Corrective Measure:** The contractor will repair such blemishes only once during the warranty period. The contractor will touch up paint-repaired areas, if the contractor was responsible for the original interior painting. A perfect match between original and new paint cannot be expected, and the contractor is not required to paint an entire wall or room. The contractor is not required to repair defects that are covered by wall paper and, therefore not visible.

9-32 Observation: Cracked corner bead, excess joint compound, trowel marks or blister in tape joints on drywall surface.

Performance Guideline: Defects resulting in cracked corner bead, trowel marks, excess joint compound or blisters in tape are unacceptable.

Corrective Measure: The contractor shall repair to meet the performance guideline one time within warranty period.

9-33 Observation: Texture of gypsum wallboard does not match

Performance Guideline: A slight variation in texture is normal and will occur randomly.

Corrective Measure: None.

9-34 Observation: Angular gypsum wallboard joints are uneven.

Performance Guideline: This is a natural condition that occurs with randomly applied materials.

Corrective Measure: None.

PAINT, STAIN, AND VARNISH

9-35 Observation: Mildew or fungus is visible on interior painted surfaces.

Performance Guideline: Painted and finished surfaces shall be free of observable mildew and fungus at the time the job is completed.

However, mildew and fungus may form on painted surfaces over time because of heat and moisture.

Corrective Measure: The contractor will remove mildew and fungus before completion of the job. Subsequent mildew or fungus formation is a condition the contractor cannot control. The owner is responsible for the future cleaning of the painted item as necessary to prevent or remove mildew or fungus.

9-36 Observation: Varnish or lacquer finishes have deteriorated.

Performance Guideline: Clear finishes on interior woodwork shall not deteriorate during the warranty period.

Corrective Measure: The contractor will retouch affected areas of clear-finish interior woodwork and match the original finish as closely as

practical

Discussion: Finishes on window sills with south facing exposure may deteriorate due to climatic condition.

9-37 Observation: Interior paint does not 'cover' underlying surface.

Performance Guideline: The surface being painted shall not show through new paint when viewed from a distance of 6 feet under normal lighting conditions

Corrective Measure: The contractor will recoat as necessary to meet guideline and match surrounding areas as closely as practical.

9-38 Observation: Interior surface is paint spattered.

Performance Guideline: Paint spatters shall not be readily visible on walls, woodwork, floors or other interior surfaces when viewed from a distance of 6 feet under normal lighting conditions.

Corrective Measure: The contractor will remove paint spatters to meet the guideline.

9-39 Observation: Brush marks show on interior painted surface.

Performance Guideline: Brush marks shall not be readily visible on interior painted surfaces when viewed from a distance of 6 feet under

normal lighting conditions.

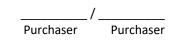
Corrective Measure: The contractor will refinish as necessary to meet the guideline and match surrounding areas as closely as practical.

9-40 Observation: Lap marks show on interior paint or stain.

Performance Guideline: Lap marks shall not be readily visible on interior paint or stain when viewed forms a distance of 6 feet under normal lighting

Corrective Measure: The contractor will refinish as necessary to meet the guideline and match surrounding areas as closely as practical.





9-41 Observation: Interior painting, staining or refinishing, is required because of repair work.

Performance Guideline: A perfect match between original and new paint cannot be expected. Repairs required under these performance guidelines shall be finished to match the immediate surrounding areas as closely as practical.

Corrective Measure: The contractor is only responsible for painting if it is part or the original contract. Where the majority of the wall or ceiling area is affected the area will be painted from the breakline to breakline. The contractor is not required to paint an entire room. The contractor is only responsible if they painted the home in the original contract.

9-42 Observation: Texture on blown ceiling is uneven.

Performance Guideline: This is a normal condition that occurs with randomly applied materials.

Corrective Measure: None.

9-43 Observation: Resin bleeds through on interior trim.

Performance Guideline: This is a normal condition that can be expected to occur with natural materials such as wood.

Corrective Measure: None.

WALLPAPER AND VINYL COVERINGS

9-44 Observation: The wall covering is peeling.

Performance Guideline: The wall shall not peel off the walls. Note: wallpaper applied in high moisture areas is exempt from this guideline

because the problem results from conditions beyond the contractor's control.

Corrective Measure: The contractor will reattach or replace the loose wall covering if the contractor installed the covering.

9-45 Observation: Patterns in wall covering are mismatched at the edges.

Performance Guideline: Patterns in wall covering shall match unless installed on existing (remodeling jobs only) out if plumb walls or where

trim is not square with corners. Defects in the patterns themselves are the manufacture's responsibility.

Corrective Measure: None

FLOOR FINISHES

CARPETING

10-1 Observation: Carpet does not meet at the seams.

Performance Guideline: It is not unusual for carpet seams to show. However, a visible gap at the seams is not acceptable. **Corrective Measure:** If the carpet was installed by the contractor, the contractor will eliminate visible gaps at carpet seams.

10-2 Observation: Carpeting loosens, or carpet stretches.

Performance Guideline: When stretched and secured properly, wall-to-wall carpeting installed as the primary floor covering shall not come up, loosen, or separate from the points of attachment.

Corrective Measure: If the carpeting was installed by the contractor, the contractor will re-stretch or re-secure the carpeting as necessary to meet guideline.

10-3 Observation: Spots or minor fading visible on the carpet.

Performance Guideline: Exposure to natural light may cause spot on and minor fading of the carpet.

Corrective Measure: None

10-4 Observation: Dead spots appear in padding areas below carpet surface.

Performance Guideline: Carpeted areas shall have full coverage of pad consistent throughout flooring area.

 $\textbf{Corrective Measure:} \ \textbf{The contractor will repair any deficiencies to meet performance guideline.}$

ROLL VINYL AND RESILIENT TILE FLOORING

10-5 Observation: Nail pops appear on the surface of resilient flooring.

 $\label{performance Guideline: Readily visible nail pops on resilient flooring are not acceptable.$

Corrective Measure: The contractor will repair the nail pops that are readily visible.

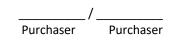
Discussion: The contractor will repair or replace, at the contractor's option, the resilient floor covering in the affected areas with similar materials. The contractor is not responsible for the discontinued patterns or color variation when replacing the floor covering

10-6 Observation: Depressions or ridges appear in the resilient flooring because of the subfloor irregularities.

Performance Guideline: Readily apparent depressions or ridges exceeding 1/8 inch shall be repaired. The ridge or depression measurement is taken with the gap at one end of a 6 inch straightedge centered over the depression or ridge with 3 inches of the straightedge held tightly to the floor on one side of the defect.

Corrective Measure: The contractor will make the corrective action as necessary to bring the defect within the acceptable tolerance so that the depression or ridge is not readily visible and is not more that 1/8-inch. The contractor will not be responsible for discontinued patterns or color variations when replacing floor covering.





10-7 Observation: Resilient flooring loses adhesion.

Performance Guideline: Resilient flooring shall not lift, bubble, or detach.

Corrective Measure: At the contractor's option, the contractor will repair or replace the affected resilient flooring as necessary. The contractor is not responsible for discontinued patterns or color variation when replacing the floor covering.

10-8 Observation: Seams or shrinkage gaps show at resilient sheet flooring joints.

Performance Measure: Gaps at joints in resilient sheet flooring shall not exceed 1/16 inch in width. Where dissimilar materials abut, the gap shall not exceed 1/8 inch.

Corrective Measure: At the contractor's option, the contractor will repair or replace the resilient flooring as necessary to meet the performance guideline. The contractor will not be responsible for discontinued patterns or color variations when replacing the floor covering. **Discussion:** Proper repair can be affected by sealing gap with seam sealer.

10-9 Observation: Bubbles appear on roll vinyl flooring.

Performance Guideline: Bubbles resulting from trapped air that protrude higher than 1/16 inch from the floor are not acceptable.

Corrective Measure: The contractor will repair the floor to meet the guideline.

Discussion: The performance guideline does not apply to perimeter attached vinyl floors.

10-10 Observation: Patterns on roll vinyl flooring are misaligned.

Performance Guideline: Patterns at seams between adjoining pieces shall be aligned to within 1/8 inch. **Corrective Measure:** The contractor will correct the flooring to meet the performance guideline.

10-11 Observation: Resilient floor tile is loose.

Performance Guideline: Resilient floor tiles shall be securely attached to the floor.

Corrective Measure: The contractor will attach loose resilient floor tiles securely to the floor. The old adhesive will be removed if necessary to re-secure the tiles.

10-12 Observation: Corners or patterns of resilient floor tile are misaligned.

Performance Guideline: The corners of adjoining resilient floor tiles shall be aligned to within 1/8 inch. Misaligned patterns are not covered unless they result from improper orientation of the floor tiles.

Corrective Measure: The contractor will correct the resilient floor tiles with misaligned corners to meet the performance guideline.

10-13 Observation: Yellowing appears on the surface of vinyl sheet goods.

Performance Guideline: The contractor shall install vinyl flooring per manufacturer's specifications.

Corrective Measure: Yellowing from a manufacturer's defect is not covered by the contractor.

Discussion: Some chemical compounds such as the tar residue form a recently paved asphalt driveway, may cause a chemical reaction with the flooring material and result in permanent damage to the floor. The homeowner should be familiar with the proper use and care of their floors. Defects traced to owner's inappropriate use or care are not the contractor's or the manufacturer's responsibility.

WOOD FLOORING

10-14 Observation: Gaps exist between strip hardwood floorboards.

Performance Guideline: Gaps between strip hardwood floorboards shall not exceed 1/8 inch in the width at time of installation.

Corrective Measure: The contractor will repair gaps that do not meet the performance guidelines.

Discussion: Proper repair can be affected by filling the gap. Relative humidity of the home can cause noticeable fluctuations in gaps between floorboards. This is a normal phenomenon in spaces that experience significant shifts in humidity; the owner is responsible for maintaining proper humidity levels in the home.

10-15 Observation: Strip hardwood floorboard is cupped.

Performance Guideline: Cups in strip hardwood floorboards shall not exceed 1/16 inch in height in a 3-inch maximum span measured perpendicular to the long axis of the board. Cupping is caused by exposure to moisture beyond the control of the contractor and is not covered. **Corrective Measure:** The contractor will correct or repair to meet the guideline

10-16 Observation: Excessive lippage is located at junction of pre-finished wood flooring products.

Performance Guideline: Lippage greater than 1/16 inch is considered excessive. **Corrective Measure:** The contractor will repair to meet performance guideline.

Discussion: Lippage is the vertical distance between two floor types at the point where they meet.

10-17 Observation: Voids in the floor finish.

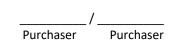
Performance Guideline: Voids or 'holidays' that are readily visible from a distance of 6 feet under normal lighting conditions are unacceptable. **Corrective Measure:** The contractor will repair to meet performance guidelines.

10-18 Observation: Top coating on hardwood flooring has peeled.

Performance Guideline: Field applied coating shall not peel during normal usage. Pre-finished coatings are the manufacturer's responsibility. **Corrective Measure:** The contractor shall refinish any field applied finishes that have peeled.

10-19 Observation: Crowning of strip flooring has occurred.





Performance Guideline: Crowning in strip flooring shall not exceed 1/16 in depth in a 3 inch maximum span when measured perpendicular to the long axis of the board.

Corrective Measure: The contractor will repair to meet the performance guideline.

10-20 Observation: Excessive knots and color variation of strip hardwood flooring.

Performance Guideline: The contractor will install the grade of hardwood as specified by the project. All wood should be consistent with

grading stamp as specified.

Corrective Measure: The contractor shall replace any improperly graded wood.

10-22 Observation: Slivers or splinters appear in strip flooring

Performance Guideline: Slivers or splinters that occur during the installation of the flooring are unacceptable.

Corrective Measure: The contractor will repair to meet guideline.

Discussion: The imperfections that occur during installation can be shaved and the area filled prior to sanding and finishing.

10-23 Observation: 'Sticker burn" appears on surface of strip.

Performance Guideline: Discoloration from stacking strips in hard wood flooring is unacceptable in certain grades of flooring **Corrective Measure:** The contractor shall repair pr replace areas with stickers burn is not permitted in grade of wood specified.

TILE, BRICK, MARBLE, AND STONE FLOORING

10-24 Observation: Tile, brick, marble, or stone flooring is broken or loose.

Performance Guideline: Tile, brick, marble and stone flooring shall not break or loosen.

Corrective Measure: The contractor will replace broken tiles, bricks, marble, and stone and re-secure loose tiles, bricks marble and stone unless the defects were caused by the owner's actions or negligence. The contractor is not responsible for discontinued patterns or color variations when replacing tile, brick marble or stone flooring.

10-25 Observation: Cracks appear in grouting of tile joints or at junctures with other material such as a bathtub.

Performance Guideline: Cracks in grouting of ceramic tile joints commonly result from normal shrinkage conditions.

Corrective Measure: The contractor will repair grouting, if necessary, one time during the warranty period. The contractor will not be responsible for color variations or discontinued colored grout. The owner is responsible for re-grouting these joints during the life of the home. **Discussion:** Use of an elastic substance at junctures between tile and other materials is often more effective than grout.

10-26 Observation: There is excessive "lippage" of adjoining marble or ceramic tile.

Performance Guideline: 'Lippage' greater than1/16 inch is considered excessive, except where the materials are designed with an irregular height (such as hand –made tile).

Corrective Measure: The contractor will repair to meet the performance guideline.

Discussion: Lippage is the vertical distance between two floor types at the point where they meet.

10-27 Observation: Grout or mortar joint is not a uniform color.

Performance Guideline: Any color variation that is readily visible from a distance of 6 feet under normal lighting conditions is unacceptable. **Corrective Measure:** The contractor will repair to meet the performance guideline.

MISCELLANEOUS

FIREPLACE AND WOOD STOVE

11-1 Observation: Fireplace or chimney does not consistently draw properly.

Performance Guideline: A properly designed and constructed fireplace and chimney shall function correctly. High winds can cause temporary negative or down drafts. Negative drafts can also be caused be obstructions such as tree branches, steep hillsides, adjoining homes, and interior furnaces. Some homes that have been constructed to meet stringent energy criteria may need to have a nearby window open slightly to create an effective draft.

Corrective Measure: The contractor shall correct as necessary if the problem is caused by a design or construction flaw.

11-2 Observation: The chimney is separated from, the structure.

Performance Guideline: Newly built fireplaces will open incur slight amounts of separation. The rate of separation from the main structure shall not exceed ½ inch in any 10-foot vertical measurement.

Corrective Measure: The contractor will repair gaps that do not meet the performance guideline.

Discussion: Proper repair can be affected by caulking unless the cause of the separation is due to a structural failure of the chimney foundation itself. In that case caulking is unacceptable.

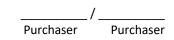
11-3 Observation: Firebox paint is damaged by a fire in the fireplace. **Performance Guideline:** None. Heat and flames may cause discoloration.

Corrective Measure: None.

11-4 Observation: Firebrick or mortar joint is cracked.

Performance Guideline: Heat and flames from normal fires can cause cracking.





Corrective Measure: None.

11-5 Observation: Simulated firebrick panel develops cracks.

Performance Guideline: This is a normal condition.

Corrective Measure: None.

11-6 Observation: Rust appears on the fireplace damper.

Performance Guideline: This is a normal condition

Corrective Measure: None. **Concrete Stoops and Steps**

11-7 Observation: Stoops or steps have settled, heaved or separated from the house structure.

Performance Guideline: Stoops and steps shall not settle, heave, or separate in excess of 1 inch from the house structure. **Corrective Measure:** The contractor will take whatever corrective action is required to meet the performance guideline.

11-8 Observation: Water remains on stoops or steps after rain has stopped.

Performance Guideline: Water shall drain off outdoor stoops and steps. Minor amounts of water can be expected to remain on stoops and

steps for up to 24 hours after rain.

Corrective Measure: The contractor will take corrective action to assure proper drainage of stoops and steps.

11-9 Observation: Garage floor slab is cracked.

Performance Guideline: Cracks in concrete garage floor greater than 3/16 inch in width or 1/8 inch vertical displacement are excessive.

Corrective Measure: The contractor shall repair to meet the performance guideline.

Discussion: Proper repair can be affected by thoroughly cleaning, filling, and troweling the surface using latex- fortified cement mixture or

other materials designed to fill cracks and bond concrete.

11-10 Observation: Garage concrete floor has settled, heaved, or separated.

Performance Guideline: The garage floor shall not settle, heave, or separate in excess of 1-inch from the structure. **Corrective Measure:** The contractor will take whatever corrective action is required to meet the performance guideline.

11-11 Observation: Garage doors fail to operate properly under normal use.

Performance Guideline: Garage doors shall operate properly.

Corrective Measure: The contractor will correct or adjust garage door as required, except where the owner's actions or negligence caused the

problem.

Discussion: The contractor is not responsible for the door operation if the owner has installed a garage door opener.

11-12 Observation: Garage doors allow entry of snow or water.

Performance Guideline: Garage door shall be installed as recommended by the manufacturer. Some snow of water can be expected to enter

under usual conditions.

Corrective Measure: The contractor will adjust or correct garage doors to meet the manufacturer's recommendations

DRIVEWAYS

11-13 Observation: Asphalt driveway develops cracks. **Performance Guideline:** This is a normal condition.

Corrective Measure: None.

WOOD DECKS

11-14 Observation: Wood deck is springy or shaky.

Performance Guideline: All structural members in a wood deck shall be sized, and fasteners spaced, according to appropriate building codes, national forest and paper association span tables, or higher guideline agreed upon before construction by the owner and the contractor.

Corrective Measure: The contractor will reinforce or modify, as necessary, any wood deck no meeting the guideline.

Discussion: Deflection may indicate insufficient stiffness in the lumber, or may reflect an aesthetic consideration independent of the strength and safety requirements of lumber. Joists and rafters are required to meet standards for both stiffness and strength. The span tables allow, under full design loading, a maximum deflection equal to 1/360 span for floor and ceiling joists (3/8 in 12 feet), 1/240 for rafters up to 3/12 in pitch (½ inch in 12 feet), and 1/180 for rafters over 3/12 in pitch (3/4 inch in 12 feet). Individual clients may not be satisfied with the deflection limits built into tables. When a customer's preference is made known before construction, a higher standard may be agreed by contractor and the owner.

11-15 Observation: Spaces between decking are not uniform.

Performance Guideline: The spaces on opposite sides of individual deck boards shall not differ in average width by more than 3/16 inch at the time the project is accepted unless otherwise specified by owner.

Corrective Measure: The contractor will realign or replace decking boards to meet the guidelines.

Discussion: The space will naturally tend to change over time because of shrinkage and expansion of individual boards. The contractor is only responsible for correct spacing at the tome of installation.



11-16 Observation: railings on wood decking contain slivers in exposed areas.

Performance Guideline: Railings on wood decks shall not contain slivers longer than 1/8 inch in exposed areas at the time the job is accepted, **Corrective Measure:** The contractor will repair railing as necessary to remove slivers prior to acceptance of the job. Repair of slivers after acceptance of the job is an owner maintenance responsibility.

Discussion: Slivers can develop from weathering of unprotected wood. Proper finishing of wood surfaces helps prevent slivers from forming.

11-17 Observation: Wood deck is out of level.

Performance Guideline: No point on the deck surface shall be more than ½ inch higher or lower than any other deck surface point within 10 feet on a line parallel to the house, or proportional multiples of the proceeding dimensions, unless the owner and contractor agree to intentionally build a wood deck out of level in order to match or compensate for inaccuracies in the existing structure.

Corrective Measure: The contractor will repair the deck as necessary to meet the performance guideline.

Discussion: A slope of approximately 1/8 inch per foot is desirable in the perpendicular direction to shed water and prevent ice build-up.

11-18 Observation: Wood decking boards are split, warped, or cupped.

Performance Guideline: At the time a job is accepted, splits, warps, and cups in wood decking boards shall not exceed the allowances established by the official grading rules issued by the agency responsible for the lumber species used for the deck boards, including but not limited to Southern Pine Inspection Bureau, Western Wood Products Association, West Coast Lumber Inspection Bureau, Redwood Inspection Service, and Northeastern Lumber Manufacturer's Association.

Corrective Measure: The contractor will replace decking boards as necessary to meet the performance guideline.

11-19 Observation: Stain color variations are on wood deck.

Performance Measure: Stain color variations are not acceptable if they result from improper stain application or failure to mix the stain properly. Stain color variations resulting from other causes- such as weathering or varying porosity of the wood used to build the deck- are normal and are not covered by this guideline.

Corrective Measure: The contractor will re-stain to meet the performance guideline.

11-20 Observation: Wood decking board has nail head protruding.

Performance Guideline: Nail heads shall not protrude from the floor of the wood deck during the warranty period.

Corrective Measure: The contractor will refasten nails with heads protruding from the floor of the deck so that heads are flush with the surface. **Discussion:** Nails should be driven flush when the deck is installed, but they may pop from deck over time as the wood shrinks and expands.

11-21 Observation: Nails on wood deck are "bleeding."

Performance Guideline: Nail stains extending more than ½ inch from the nail and readily visible from a distance of more that 3 feet are not accentable

Corrective Measure: The contractor will eliminate nail stains to meet the performance guideline.

Discussion: This guideline does not apply if "natural weathering" or semi-transparent stains are specified.

11-22 Observation: Wood deck railing lacks rigidity.

Performance Guideline: Wood deck railings shall be attached to structural members in accordance with applicable codes.

Corrective Measure: The contractor will repair wood deck railings as necessary to comply with applicable codes

LANDSCAPING

12-2 Observation: Dead shrubs, plants, trees or sod planted in disturbed are of property.

Performance Guideline: Any dead shrub, plant, tree, or sod planted by the contractor as part of the landscape package that are alive as of the acceptance of the project and die after that acceptance are not the responsibility of the contractor.

Corrective Measure: None.

12-3 Observation: Grass seed does not germinate within 30 days of the acceptance of the project. **Corrective Measure:** The contractor will reseed affected areas unless specifically excluded in contract.

12-4 Observation: Outdoors plants moved during work die after project is completed.

Performance Guideline: Plants that must be physically transported during the work shall be moved, maintained, and replanted.

Corrective Measure: None.

Discussion: The contractor shall not be responsible for delays in the schedule when plants are moved by the owner.



