Home Builders Association of Northern Kentucky

Performance Standards Manual

For Residential Builders and Remodelers

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Introduction

When a homeowner makes the decision to build a new home or remodel an existing home, the homeowner's primary concern is the quality of the services he or she is going to receive. There are often a number of individuals or entities involved in the construction process. Each of the parties involved in the project may have differing expectations as to the level of quality of the work to be provided.

This Performance Standards Manual was designed to provide the parties involved in a home construction or remodeling project with a uniform set of standards to evaluate the quality of the work provided for the project. The performance standards contained in this manual have been developed by The Home Builders Association of Northern Kentucky, Inc. (HBANK), as a service to new home and remodeling homeowners in the Northern Kentucky area. HBANK is a membership trade association representing over 1200 members in Boone, Bracken, Campbell, Carroll, Gallatin, Grant, Kenton, Mason, Owen and Pendleton counties.

This manual provides new and remodeling homeowners with the confidence that they have placed their project in the hands of professional builders and remodelers. Homeowners who employ builders or remodelers who are a member of HBANK can be assured that their project will be handled in a professional manner in light of the performance standards contained in this manual.

About this Performance Standards Manual

The performance standards contained in this manual represent the minimum performance standards to which builders and remodelers who are members of HBANK adhere. Only the most prevalent issues that give rise to quality and performance issues for the builder or remodeler and the homeowner are addressed in this manual. If a performance issue is not addressed in this manual, it simply means that HBANK has not reviewed and established standards for that particular issue.

The performance standards contained in this manual do not constitute a warranty nor are they intended as a substitute for a warranty. The performance standards are separate and distinct from any manufacturer's warranties that may apply to materials and products used in the project. These performance standards apply only to work specified in the contract documents, plans, and specifications for the project as provided by the builder or remodeler. They do not apply to designs, plans, materials, or workmanship that are provided by the homeowner.

In Northern Kentucky, residential construction work must be completed in accordance with locally approved, applicable building and related codes. If any conflict arises between these performance standards and the local building and other related codes, as a matter of law, the code requirements will take precedence over these performance standards. If a conflict arises between these performance standards and a third party warranty, the third party warranty takes precedence over these performance standards.

Use of this Manual
It is recommended that the homeowner consult this manual to evaluate the validity of a particular concern before deciding whether to contact their builder or remodeler. The builder or remodeler should also use this manual to evaluate the validity of a homeowner's complaint and to determine what, if any, corrective action by the builder is required to meet the performance standards set forth in this manual. Where repair or replacement is referred to in this manual, the final option is the builder's choice.

HBANK recommends that the homeowner and the builder or remodeler agree that the performance standards contained in this manual are to be included as part of the construction and/or sales contract for the project. Nevertheless, HBANK is not a party to the transaction between the builder or remodeler and the homeowner.

For convenience and ease of understanding, we have divided each performance standard into some or all of the following categories: (1) the **Issue** which contains a detailed description of the problem at issue; (2) the **Performance Standard**, which specifies the criteria for an acceptable work product; (3) the **Builder's Obligation**, which describes the builder's or remodeler's responsibility for the any repair work that may be necessary to meet the performance standard; (4) the **Homeowner's Maintenance Obligation** which describes the homeowner's maintenance obligations with respect to the problem at issue; and (5) a **Notes** section which contains a discussion of any unique factors relevant to the performance standard.

The performance standards contained in this manual have been promulgated by researching information provided by the National Association of Homebuilders, national and local trade organizations and associations, local industry experts, and a review committee of local builders, suppliers, subcontractors, laborers, manufacturers, and homeowners. HBANK has approved the industry standards in this manual as being reasonable in light of the information HBANK reviewed and considered at the time this publication was written. Any amendments or modifications to this manual will be included in revised copies of this manual as deemed necessary by HBANK in its discretion.

Special Rules for Remodeling Projects
When a remodeling project is involved, deviation from the performance standards contained in this manual may, under certain circumstances, be necessary in order to successfully complete the remodeling project. When reasonable to do so, the remodeler should discuss any problems or required deviations from the performance standards with the homeowner before commencing construction. However, it is not uncommon for a remodeler to discover, during the course of construction, certain conditions that may affect the building process and the construction performance. These conditions may require the remodeler to proceed using different solutions from those suggested by the performance standards contained in this manual. In such situations, the remodeler should always focus on meeting the needs of the homeowner as set forth in the contract documents.

Warranty Period
The warranty period, as used in these performance standards means the one year period from the date of closing and/or final acceptance of the project, unless the homeowner and builder or remodeler otherwise agree in writing.

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SECTION 1.
Bathroom Fixtures & Appliances

Towel Bars

1.1 Issue: Towel bar is not parallel with floor.

Performance Standard: Towel bar shall not be off parallel with the floor by more than 3/16 inch.

Builder's Obligation: The builder will reinstall any towel bar off parallel with the floor by more than 3/16 inch to meet the performance standard. The builder shall also make any necessary repairs to the drywall required by the towel bar repair.

1.2 Issue: Towel bar or toilet tissue holder is not properly secured to the wall or cabinetry.

Performance Standard: The towel bar or toilet tissue holder should be securely fastened to the drywall or cabinetry in such a manner that it does not loosen under normal usage.

Homeowner's Maintenance Obligation: The homeowner should not use towel bars and toilet tissue holders for anything other than their intended use. Towel bars and tissue holders are not designed to be used as grab bars.

Builder's Obligation: The builder will reinstall any towel bar or toilet tissue holder that loosens under normal usage to meet the performance standard. The builder shall also make any necessary repairs to the drywall required by the towel bar or toilet tissue holder repair.

Shower Doors

1.3 Issue: Water is leaking from shower doors into bathroom.

Performance Standard: Leaks from shower doors are unacceptable.

Homeowner's Maintenance Obligation: The homeowner should properly close shower doors to prevent leaks. If shower doors are sliding doors, the inner door should be closed closest to the shower head.

Builder's Obligation: Provided the shower door is not a frameless shower door, the builder will repair or replace the shower door to correct the leak. The homeowner should note that frameless doors will leak simply due to their design.

1.4 Issue: Shower door does not properly open and close.

Performance Standard: Properly installed shower doors should open and close easily and should not open with the force of gravity alone.

Homeowner's Maintenance Obligation: Shower doors are intended only to prevent water from leaking out of the shower. Shower doors are not designed to be used as grab bars.

Builder's Obligation: Provided the defect is not due to the homeowner's actions or negligence, the builder will repair the shower doors to meet the performance standard.

1.5 **Issue:** Sliding shower door comes off track or is difficult to open.

Performance Standard: Properly installed sliding shower doors should slide smoothly on their tracks and not come off track under normal usage.

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to maintain the sliding shower door tracks in a good condition. Shower doors are not designed to be used as grab bars.

Builder's Obligation: The builder will repair or replace the sliding shower doors as necessary to meet the performance standard.

Surface Finishes

1.6 **Issue:** Surface finishes of faucets, acrylic tubs and countertops, plumbing drains, shower doors, bathroom or cabinet fixtures contain scratches, chips or dents.

Performance Standard: At the time of closing, scratches, chips or dents in such finishes should not be visible from a distance of 6 feet under normal lighting conditions.

Homeowner's Maintenance Obligation: The homeowner is responsible for repairing or replacing any scratches, chips or dents which occur after closing.

Builder's Obligation: The builder will repair or replace surface finishes reported at the time of closing to meet the performance standard.

1.7 **Issue:** Surface finishes tarnish or deteriorate.

Performance Standard: At the time of closing, surface finishes should contain no visible tarnishes or deteriorations from a distance of 6 feet under normal lighting conditions.

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to maintain surface finishes by proper cleaning and maintenance. Manufacturers' warranties apply after closing.

Notes: It is important for the homeowner to check the manufacturer's warranty for the surface finishes selected by the homeowner. Some cleaning products may

damage the surface of the finish. Other finishes may simply deteriorate with time and use.

Builder's Obligation: The builder will clean, repair, or replace defective surface finishes reported at or before closing to meet the performance standard.

Mirrors

1.8 Issue: Scratches are present on mirrored surfaces.

Performance Standard: Under normal lighting conditions and a viewing angle of 30-90 degrees, any visible scratch from a distance of 3 feet or more must be corrected at the time of closing.

Builder's Obligation: For scratches reported before closing, the builder will repair or replace mirrors as necessary to meet the performance standard. The Builder shall have no responsibility for scratches reported after closing.

Appliances

1.9 Issue: Surface of kitchen appliance is scratched.

Performance Standard: At the time of closing, scratches on kitchen appliance surfaces shall not be visible from 6 feet or more under normal lighting conditions.

Builder's Obligation: The builder will repair or replace any appliance surface necessary to meet the performance standard.

1.10 Issue: Exterior door hardware or kick plate has tarnished.

Performance Standard: Finishes on door hardware installed by the builder are covered by the manufacturer's warranty.

Builder's Obligation: After closing, the builder is not obligated to repair tarnished hardware or kick plates on exterior doors.

SECTION 2.
Blacktop Driveways

Blacktop driveways, just like concrete driveways, are subject to expansion, shrinkage and contraction. Because of the natural tendency of blacktop to shrink and contract, cracks up to 1/4 inch are acceptable and require no remedial action by the builder. While blacktop driveways are designed to carry normal vehicular traffic, they are not designed to withstand heavy loads such as commercial vehicles, garbage trucks, and school buses. Oil, gas and similar substances spilled on blacktop driveways can cause serious damage. Such substances should be immediately washed away by the homeowner with a mild soap. In periods of particularly hot weather, blacktop driveways may be damaged by certain types of vehicular traffic or by bicycle kickstands.

The homeowner should expect color variations in the blacktop. The homeowner should also annually seal a blacktop driveway with an approved sealer. Typically, the homeowner should wait approximately one year from the date the driveway is installed to apply any sealer.

Standing Water

2.1 **Issue:** Water should not stand in excess of 1/2 inch on the driveway unless standing in a damaged portion of the driveway.

Performance Standard: Water standing in an otherwise undamaged portion of the driveway at a depth of more than 1/2 inch must be corrected.

Builder's Obligation: The builder will correct the issue as necessary to meet the performance standard. The homeowner should expect that the color and texture of the new asphalt will vary from that of the old.

Sinks, Cracks and Chips

2.2 **Issue:** Driveway contains numerous sinks or cracks.

Performance Standard: Under normal circumstances, a blacktop driveway should not sink by more than 1/2 inch and should not contain cracks greater than 1/4 inch in width.

Builder's Obligation: The builder will repair areas of the driveway that sink or chip in excess of the performance standard. The builder will correct cracks to meet the performance standard by patching the cracks. The homeowner should expect that the color and texture of the new asphalt will vary from that of the old when a sink or crack is repaired.

2.3 **Issue:** Chipping is occurring at edges of blacktop driveway.

Performance Standard: It is common for the edges of blacktop to crack more than 1/2 inch and break apart, particularly where the driveway is subject to traffic by heavy vehicles.

Notes: It is normal for the hand-tamped edges of a blacktop driveway to shrink and crack during the drying process. Typically, the final grade of the lot is 1 to 2 inches below the top surface of the driveway, which results in chipping when moisture and dirt particles attach to the edges of the driveway.

Builder's Obligation: The builder has no responsibility to repair or remedy chipping at the edges of blacktop driveways.

Mud and Rust

2.4 **Issue:** Mud or rust is present on blacktop driveway surface.

Performance Standard: Blacktop is a porous substance. Mud and rust can penetrate or form on the surface of the blacktop. This is not uncommon and should be expected by the homeowner.

Builder's Obligation: The builder is not obligated to remove any rust or mud appearing on the surface of a blacktop driveway.

SECTION 3.
Cabinets & Countertops

Preliminary Information

Cabinets can be made of wood, wood products or composite materials. Cabinets made of wood may have graining and shading variations. Cabinets are subject to change in color over time, and are also affected by temperature and humidity changes in the home. It is the homeowner's responsibility to maintain consistent temperature and humidity levels throughout the home.

Cabinets are generally purchased by the builder as complete products which are covered by separate manufacturer's standards and warranties. The standards listed below are designed to assure proper installation and function of the finished product.

Cabinet Installation Issues

3.1 Issue: Cabinets are not flush with ceilings or walls.

Performance Standard: Gaps greater than 1/4 inch between cabinets and ceilings or walls should be corrected.

Builder's Obligation: The builder will repair any gap greater than 1/4 inch in width with caulk, putty or scribe molding or will adjust the cabinets as necessary to meet the performance standard.

3.2 Issue: Adjoining cabinet frames are misaligned.

Performance Standard: Adjoining cabinet frames shall be aligned within 1/8 inch of each other.

Builder's Obligation: The builder will adjust the cabinets as necessary to meet the performance standard.

3.3 Issue: Warping in cabinet door or drawer occurs.

Performance Standard: Warpage shall not be more than 1/4 inch (measured from the face frame to the point of furthermost warping with the door or drawer front in position).

Builder's Obligation: The builder will adjust, repair or replace cabinet doors and drawer fronts as necessary to meet the performance standard.

3.4 **Issue:** The tops of the cabinet doors are uneven.

Performance Standard: The tops of the cabinet doors should not be misaligned by more than 3/16 inch.

Homeowner's Maintenance Obligation: It is the homeowner's obligation to maintain the proper cabinet door alignment after closing by making adjustments to the hinges. Cabinet doors can come out of adjustment with normal use.

Builder's Obligation: The builder is obligated to ensure that all cabinet doors meet the performance standard at the time of closing.

Cabinet Operation Issues

3.5 **Issue:** Cabinet door or drawer sticks.

Performance Standard: Cabinet doors and drawers should not stick and should open and close properly.

Homeowner's Maintenance Obligation: Homeowners should not overload drawers. Excessive weight in cabinet drawers may cause the cabinet drawer to stick.

Builder's Obligation: The builder is obligated to adjust or replace cabinet doors and drawers as necessary to correct sticking problems, provided such sticking is not due to excessive weight in the cabinet.

3.6 **Issue:** Closing mechanism on cabinet door does not function properly.

Performance Standard: Closing mechanisms for cabinet doors should hold the doors closed.

Builder's Obligation: At any one time during the warranty period, the builder will adjust or replace the closing mechanism as necessary to meet the performance standard.

Countertop Surface Deficiencies

3.7 **Issue:** The space between two cabinet doors without a center stile is excessive.

Performance Standard: The spacing between cabinet doors without a center stile should not exceed 3/8 inch.

Homeowner's Maintenance Obligation: Maintain cabinet door spacing after closing.

Notes: Most cabinet doors have hinges that allow for easy realignment. The homeowner can realign doors as needed after the closing.

Builder's Obligation: At the time of closing, cabinet doors should meet the above standard.

3.8 **Issue:** Delamination of laminate countertop has occurred.

Performance Standard: The delamination of laminate countertops is unacceptable.

Homeowner's Maintenance Obligation: Homeowner should not get liquid near the seams.

Notes: Repairs to laminate or solid surface countertops will have a slight variation in color and texture and such variations are acceptable.

Builder's Obligation: The builder will repair or replace delaminated countertops provided the delamination is not caused by the homeowner's negligence or improper usage.

3.9 **Issue:** Scratches, chips or cracks are apparent on the surface of the countertop (including solid surface countertops).

Performance Standard: At the time of closing, such imperfections should not be readily visible from a distance of 6 feet under normal lighting conditions.

Homeowner's Maintenance Obligation: The homeowner is responsible for any cracks, chips or scratches not brought to the builder's attention prior to closing or occurring post-closing.

Builder's Obligation: If brought to the builder's attention prior to closing, the builder will repair or replace cracked, chipped, or scratched countertops as necessary to meet the performance standard.

Countertop Installation Issues

3.10 **Issue:** Countertop is not level.

Performance Standard: Countertops should not be out of level with the floor by more than 3/8 inch in a 10 foot measurement.

Builder's Obligation: The builder will make necessary adjustments to the countertops to meet the performance standard.

3.11 **Issue:** Gaps and unevenness in laminate countertop seams are apparent.

Performance Standard: Gaps in countertop seams of 1/16 inch or less are acceptable.

Homeowner's Maintenance Obligation: The homeowner should not allow liquid to stand near seams in countertops.

Builder's Obligation: At any one time during the warranty period and provided the gaps are not caused by the homeowner's negligence, the builder will repair gaps at seams in excess of 1/16 inch by caulking with materials compatible with the finish.

3.12 Issue: Gap exists between ends or back of countertop and adjoining wall.

Performance Standard: Any gap greater than 1/8 inch should be corrected.

Builder's Obligation: For gaps greater than 1/8 inch but not more than 3/8 inch, the builder shall fill the gaps with caulk to effectuate the repair. For gaps greater than 3/8 inch in width, additional fillers such a floating drywall should be used prior to caulking.

SECTION 4.
Carpeting

Preliminary Information

Properly installed carpeting should not be loose, contain wrinkles or visible gaps. Carpet seams will inevitably show due to the different widths in which carpet is available. However, visible gaps are not acceptable. Excess yarn may appear on the surface of newly installed carpet within the first few months. Such an occurrence is normal and will subside with regularly scheduled vacuuming. In order to preserve and maintain the original appearance of carpet, the homeowner should also promptly remove stains and spots and periodically clean the carpet.

Installation Deficiencies

4.1 Issue: Gaps are present in carpet at seams.

Performance Standard: A visible gap at the seams of carpet should be corrected.

Builder's Obligation: If the installation of carpet was specified in the original contract documents, the builder must correct the visible gaps in the carpet seams.

4.2 Issue: Wall-to-wall carpet comes unfastened from floor or stretches.

Performance Standard: At the time of closing and if properly installed, carpet should not stretch or come unfastened.

Homeowner's Maintenance Obligation: Homeowners should avoid dragging heavy objects across carpet to reduce loosening or stretching of carpet.

Builder's Obligation: If carpet installation was specified in the original contract documents, and the carpet is loose or stretched at the time of closing, the builder is obligated to re-fasten or re-stretch the carpet to meet the performance standard.

4.3 Issue: The padding below the carpet contains holes.

Performance Standard: The padding should fully and consistently cover the floor beneath any carpeted area.

Builder's Obligation: The builder will repair any holes in the padding to meet the performance standard.

4.4 **Issue:** Excessive lippage is present at the threshold or transition area of the carpet.

Performance Standard: Lippage greater than 1/2 inch is not acceptable.

Notes: Lippage is the difference in height between two types of flooring materials at the threshold where they meet. If unacceptable lippage is present, a transition strip may be required.

Builder's Obligation: The builder will repair the carpeting to meet the performance standard.

Color Variations

4.5 **Issue:** Visible areas of fading and spotting are present on the carpet.

Performance Standard: Natural sunlight can cause spots on or fading of the carpet.

Homeowner's Maintenance Obligation: The homeowner should close or draw window coverings during periods of sunlight infiltration to reduce the negative effects on the carpet.

Builder's Obligation: At the time of closing, the builder will take corrective action as necessary to remove stains and spots noted by the homeowner which do not result from natural sunlight.

SECTION 5.
Ceramic Tile & Other Flooring

Preliminary Information

Ceramic tile is decorative, durable, and easy to maintain. Cracks in the concrete or other surface underlying ceramic tile is the primary cause of cracks in the tile and grout. Ceramic tile usually contains inherent shade and color variations. Marble has natural grain cracks and is susceptible to cracking in the grains after installation. The homeowner should expect that marble and any other natural stone finishes will vary in color from piece to piece. These natural finishes will also scratch with normal foot traffic during construction.

Installation Issues

5.1 **Issue:** Tile, brick, marble or stone floor breaks or loosens.

Performance Standard: Under normal circumstances, tile, brick, marble or stone flooring should not break or loosen.

Builder's Obligation: At any one time during the warranty period, the builder is obligated to replace broken tiles or to secure loose tiles provided the breaking or loosening of the tiles was not caused by the homeowner's actions or negligence.

Notes: The builder is not responsible for discontinued patterns or color variations when replacing loose or broken tiles to meet the performance standard.

5.2 **Issue:** Grouting of tile joints and junctures with other materials contains visible cracks such as tubs, shower bases, etc.

Performance Standard: Cracks in grouting or caulking should not be greater than 1/16 inch in width.

Builder's Obligation: At any one time during the warranty period, the builder is obligated to repair cracks in the grouting or caulking to meet the performance standard. The builder is not responsible for color variations or discontinued grout selections.

Notes: Grout in all corners of showers and tubs will crack and should be maintained by homeowner.

5.3 **Issue:** Excessive lippage is present at the threshold or transition area at the time of installation.

Performance Standard: Lippage of more than 1/2 inch is unacceptable.

Notes: Lippage is the difference in height between two types of flooring materials at the threshold where they meet. If unacceptable lippage is present, a transition strip may be required.

Builder's Obligation: The builder will repair any excess lippage to meet the performance standard.

Color Variations

5.4 **Issue:** Variations in the color of grout or mortar joints exist.

Performance Standard: At the time of closing, any color variations that are visible from a distance of 6 feet under normal lighting conditions should be corrected.

Notes: The homeowner should expect that color variations in grout will occur after normal household use. Shower floor grout will discolor due to the water held in the shower pan.

Builder's Obligation: The builder is obligated to repair the grout as necessary to meet the performance standard.

SECTION 6.
Concrete

Preliminary Information:

Concrete is a composite material consisting of limestone or gravel, sand, Portland cement, water and various chemical additives. All of the mixture components, the batching of the ready-mixed concrete, and the placement and workmanship are expected to meet the applicable building codes. These standards vary, depending on the local building codes and the use of concrete in the home.

The three general categories of use for residential concrete are foundation (walls and footings), interior flatwork (basement and garage), and exterior flatwork (sidewalks, patios, steps and driveways). The requirements for mix type, surface finish and homeowner maintenance vary depending on the concrete's use.

The curing of concrete is a chemical reaction, the majority of which takes place over the first year of the life of the concrete. During the first year, size, strength, surface durability and water content of concrete change dramatically. Shrinkage cracks – caused by the curing process and changes in temperature in the concrete – are a normal occurrence and do not affect the structural integrity of the slabs or walls. In some applications, particularly exterior flatwork, control joints are installed in an attempt to control – not prevent – crack formation and to provide a more attractive place for these contraction cracks to occur. Control joints are not always successful, however, and the contraction cracks that occur on occasion outside these joints do not constitute a defect in the concrete.

Likewise, micro cracks occur at the surface of the concrete due to drying. De-icing chemicals, lawn fertilizers, and ethyl-glycol (anti-freeze) can enter into these micro cracks and disrupt the integrity of the concrete surface through either mechanical or chemical means. It is strongly recommended that the homeowner seal new exterior concrete with a commercial-grade, penetrating sealer following the manufacturer's instructions prior to the next freeze-thaw season but no sooner than 30 days after concrete is poured. Maintenance of concrete should include a yearly application of sealer to help prevent widespread surface defects such as scaling and pitting. If the surface is not sealed before exposure to repeated wet-dry, freeze-thaw cycles and/or exposure to the aforementioned chemicals, surface deterioration is more likely to occur.

The texture and color of hardened concrete vary depending on aggregate and brand of cement, mix additives, placement and seasonal temperatures (typically, cold weather concrete is darker in color). Repairs, when required will not match the color of the original concrete. The homeowner should expect color variation.

Practically all surface defects are considered cosmetic rather than structural in nature. The most common surface defects are scaling (shallow indentions usually occurring in groups); pitting (single, deeper indentions with pieces of aggregate visible); and spalling (crescent-shaped indentions occurring along joints). Defects such as scaling, spalling and cracking can be satisfactorily repaired with thin bonding polymer-modified topping materials. They can be sealed effectively, if required, with commercial-grade elastomers in accordance with these Performance Standards.

Exterior flatwork and garage floors are exposed to a broad range of loading weathering and chemical conditions which can affect their appearance and durability. Some of these conditions are described herein to inform the homeowner and to help avoid potential problems.

Contributing factors to scaling that occur during the initial mixing or placement of concrete are the builder's responsibility. These factors include the use of non-air entrained concrete or concrete with too little entrained air.

Other causes of deterioration are beyond the control of the builder and precautions must be taken by the homeowner. New concrete – by definition, concrete in its first year of life – is especially vulnerable to scaling, pitting, and spalling during freeze-thaw cycles. De-icing salts such as calcium or sodium chloride should not be used in the first year and are not recommended thereafter. While these salts alone will not chemically attack your concrete, they can, when mixed with water, dramatically increase the susceptibility of your concrete to scaling, pitting, and spalling, during freeze-thaw cycles. Plain, clean sand should be used for traction rather than chemical de-icers.

Some chemicals and acids cause direct damage to concrete. Fertilizers made with ammonia sulfate or ammonia nitrate can chemically attack, causing severe damage. Any fertilizer, acid or other chemical spilled on concrete should be immediately removed to avoid damage.

It is important to protect new concrete from becoming saturated with water prior to the beginning of the freeze-thaw cycle. Homeowners should seal flatwork surfaces with an approved commercial sealant that can be sprayed or brushed onto dry concrete. Late summer is the ideal time for surface treatment. It is important to apply sealers uniformly, as some sealers may change the color of the concrete.

Concrete failure may also occur from overloading concrete structures beyond their intended use. Concrete in residential structures is designed for residential uses, not heavier uses. One example is that residential driveways are designed to carry normal automobile traffic. They are not designed to carry heavy loads such as moving vans, dump trucks, topsoil deliveries, school buses or garbage trucks. Exposure to these vehicles should be prohibited as it may cause damage to the driveway not covered under the builder's warranty.

Concrete is a versatile and durable material that, with proper care, will provide long-term satisfactory performance.

Cracks in concrete can appear within hours of placement and these standards would apply even prior to closing.

Basement Floors

6.1 Issue: Basement floor cracks.

Performance Standard: Shrinkage cracking is normal and requires no repair by the builder unless either or both of the following facts exist: (a) the two surfaces of the crack vary in height by more than 1/4 inch; and/or (b) the shrinkage is nonuniform (e.g. occurring all in one crack) and exceeds 1/4 inch in average width.

Builder's Obligation: The builder should correct the problem to meet the performance standard by using a latex filler and grinding smooth surfaces, if necessary, or by repairing the affected area by other acceptable methods, determined by the builder in his sole discretion.

Notes: Color variations should be expected by the homeowner. Also, hairline cracks may reappear in the affected area.

6.2 Issue: Water standing on basement floor.

Performance Standard: Measurable water depth exceeding 3/8 inch is unacceptable.

Notes: The drain in the basement floor should be lower than the basement floor.

Builder's Obligation: The builder will make the necessary repairs or adjustments to meet the performance standard by filling in the affected area with a latex or other equivalent filler or grinding the area. The finished area should be feathered or smooth. A variation in the color of the affected area should be expected by the homeowner.

Garage Floors

6.3 Issue: Garage slab cracks.

Performance Standard: Due to weather variations and settling, the homeowner should expect movement in the slab. However, cracks greater than an average of 3/8 inch in plane or width must be remedied.

Builder's Obligation: The builder should correct the problem to meet the performance standard using a latex filler and grinding smooth surfaces, if necessary, or by repairing by other acceptable methods, determined by the builder in his sole discretion.

6.4 Issue: Cracks are present in porches or stoops.

Performance Standard: Shrinkage cracking is normal and requires no repair by the builder unless either or both of the following facts exist: (a) the two surfaces of the crack vary in height by more than 1/4 inch; and/or (b) the shrinkage is nonuniform (e.g. occurring all in one crack) and exceeds 1/4 inch in average width.

Builder's Obligation: The builder should correct the problem to meet the performance standard by using a latex filler and grinding smooth surfaces, if necessary, or by repairing by other acceptable methods, determined by the builder in his sole discretion.

Patios, Walks and Driveways

6.5 Issue: Cracks are present in patios, walks and driveways.

Performance Standard: Due to weather variations and settling, the homeowner should expect movement in the slab. However, cracks greater than an average of 3/8 inch in plane or width must be remedied.

Builder's Obligation: The builder shall repair the minimum section of concrete which exceeds the above performance standard.

6.6 Issue: Patios, walks and driveways are scaling.

Performance Standard: Scaling is generally caused by water penetrating the surface of the concrete due to repeated freeze/thaw cycles that are common during cold weather periods in Northern Kentucky. When chemicals such as de-icers, road salts, or other additives are used, they can greatly increase the scaling of new concrete. Certain factors which contribute to scaling are beyond the builder's control. A visual inspection will not reveal which factors contributed to the scaling problem.

Builder's Obligation: The builder will repair or replace any concrete not initially placed in accordance with applicable building codes. A color and texture variation may be present in the affected area.

6.7 Issue: Concrete patio, walks and driveways are spalling.

Performance Standard: Spalling refers to pieces or chunks of concrete isolated from various cracking patterns within the concrete surface. Spalling is different than scaling and often occurs in control joint areas where cracking is induced in a deliberate pattern. In such areas, the cracking may actually encircle pieces of aggregate and result in spalling.

Builder's Obligation: The builder has no responsibility for spalling of concrete patios, walks and driveways.

6.8 **Issue:** Pitting occurs in concrete patios, walks and driveways.

Notes: Pitting is more accurately thought of as aggregate pop-outs. Unlike scaling, pop-outs occur randomly and usually involve pieces of aggregate as opposed to pastes and fines which are more common with scaling.

Builder's Obligation: The builder has no responsibility to repair or replace pitting in concrete patios, walks and driveways.

6.9 **Issue:** Powdery or chalky substance appears on concrete work.

Performance Standard: Powder or chalk on concrete not attributable to common household or construction dust must be repaired if the concrete surface can be readily gouged with a car key.

Builder's Obligation: The builder will seal the affected area with a concrete sealant to meet the performance standard.

6.10 **Issue:** Low spots are present in driveways or other concrete slabs (excluding stoops and porches).

Performance Standard: Measurable water depth in excess of 3/8 inch is not permissible on driveways or other concrete slabs.

Notes: Any finished repair by the builder shall be feathered or smoothed. The homeowner should expect color and texture variations between the area of repair and the original concrete work.

Builder's Obligation: The builder shall repair the problem to meet the performance standard by filling the affected area with a latex or other equivalent filler or by grinding the area as necessary, or by any other method acceptable to the builder at his discretion.

6.11 **Issue:** Standing water is present on stoops and porches.

Performance Standard: Measurable water depth in excess of 1/4 inch must be addressed by builder.

Notes: The homeowner should expect color variations between the original concrete work and the repaired area.

Builder's Obligation: The builder shall correct the problem to meet the performance standard by filling the affected area with a latex filler or grout, or by grinding the area, as necessary.

Settling and Discoloration

6.12 **Issue:** Stoops, steps or garage floors are settling, heaving or separating from house.

Performance Standard: Stoops, steps or garage floors shall not settle in excess of 1 inch from the house or structure.

Notes: The repaired area should be feathered or smoothed by the builder. The homeowner should expect color variations between the original concrete work and the repaired area.

Builder's Obligation: The builder shall repair the area to meet the performance standard, by filling the affected area with a latex or other equivalent filler.

6.13 Issue: Concrete is uneven or discolored.

Performance Standard: Unevenness of color or discoloration in concrete should be expected by the homeowner.

Notes: Atmospheric and environmental conditions and various protective measures can affect the color of concrete. Also, concrete placed at different times or in areas with varying levels of sun exposure, can be of uneven color or discolored.

Builder's Obligation: The builder is not responsible for unevenness in color or discoloration in concrete.

Mud

6.14 Issue: Mud is present in concrete surface.

Performance Standard: The builder is not required to remedy mud in concrete surfaces.

Note: During the construction process, mud and dirt may likely get into the porous surfaces of the concrete.

Builder's Obligation: The builder has no responsibility to remedy mud in concrete surfaces.

SECTION 7.
Electric

Preliminary Information

The electric in your new home has been installed in accordance with applicable codes. Certain outlets in your home have Ground-Fault Circuit-Interrupters (GFCI's) to monitor the electrical current and any fluctuations in that current. GFCI's are required at all kitchen, bathroom, garage, unfinished and exterior outlets areas at ground level.

The homeowner should know where all GFCI's are located throughout the home. The GFCI's should be tested periodically by pressing the "Test" button. The

circuit will trip when the "Test" button is pushed. By pushing the "Reset" button, electric service should be restored to the affected area.

Arc Fault Circuit Interruptors are required to protect all branch circuits from the breaker to the outlets in dwelling unit bedrooms. These include 120 volt, 15 and 20 amp circuits for receptacles, lights, smoke detectors, etc.

The control box for the electric supply to a home is usually placed on either a garage or basement wall. This box contains all of the electrical circuit breakers that control the power to your home. Certain appliances, such as freezers and refrigerators, must have their own dedicated circuit breaker in the control box.

Because electric is an integral part of the home, the homeowner should have a complete understanding of the home's electric system.

Breakers and Fuses

7.1 **Issue:** A fuse has blown or the circuit breaker has kicked off.

Performance Standard: Under normal conditions and excluding GFCI's, circuit breakers and fuses should not blow or trip.

Builder's Obligation: The builder will ensure that the wiring is in accordance with applicable code requirements and will make any repairs necessary to meet such requirements.

Notes: If the problem is caused by a faulty appliance or a homeowner overloading design circuit or piece of equipment or by the homeowner's misuse, the homeowner is responsible for remedying the issue.

7.2 **Issue:** GFCI kicks off routinely.

Performance Standard: The tripping of GFCI's does not necessarily indicate a defect, unless the tripping is caused by faulty installation of the GFCI. Homeowners often overload GFCI's which are very sensitive.

Builder's Obligation: The builder will install GFCI's in accordance with applicable code requirements. The builder will not repair or replace the GFCI unless the tripping is a direct result of improper installation of the GFCI.

Notes: If the tripping of the GFCI results from the homeowner's equipment, misuse, or negligence, the homeowner shall be responsible for correcting the issue.

Outlets, Switches and Fixtures

7.3 **Issue:** Electrical outlets, switches, or fixtures are not functioning properly.

Performance Standard: Electrical outlets, switches, and fixtures should function properly.

Homeowner's Maintenance Obligation: The homeowner should make sure the switch to the outlet is on, if a GFCI outlet is involved, that the outlet has been reset, that the circuit breaker is on and that an appropriate wattage light bulb is placed in the fixture. Homeowner is responsible for the cost of the service call if the problem is due to items listed in the preceding sentence.

Builder's Obligation: If the builder installed and supplied the fixture, outlet, or switch, the builder will repair or replace any such item that does not function properly. The builder shall have no responsibility for switches, fixtures and outlets not installed by the builder or not provided by the builder.

7.4 **Issue:** Outlets, switches or fixtures are warm or a burning smell is being emitted from the same.

Performance Standard: Dimmers will be warm to the touch. However, outlets, switches, and fixtures should not be warm or smell like smoke.

Homeowner's Maintenance Obligation: The homeowner should be careful not to overload outlets in the home. The homeowner is responsible for any repairs made necessary by the homeowner's equipment, actions, negligence or misuse.

Builder's Obligation: The builder will ensure that the wiring is in accordance with applicable code requirements and make repairs as necessary to meet such requirements.

7.5 **Issue:** Excessive vibrations and noises are coming from ceiling fan.

Performance Standard: Ceiling fans shall be properly installed.

Builder's Obligation: The builder will make any necessary repairs resulting from faulty installation of a ceiling fan. All other issues should be forwarded to the manufacturer to address.

Notes: Ceiling fans will wobble slightly as the rod length increases.

7.6 **Issue:** Outside and inside light fixtures are tarnishing.

Performance Standard: The homeowner should expect that fixtures, especially exterior fixtures, will tarnish with age.

Homeowner's Maintenance Obligation: Homeowner is to properly maintain the fixtures in accordance with the manufacturer's specifications.

Builder's Obligation: The builder is not responsible for tarnished light fixtures.

7.7 **Issue:** Gap appears between the switch plate or receptacle cover and the wall or ceiling surface to which it is attached.

Performance Standard: Receptacle or switch plate covers should be flush with the wall or ceilings to which they are attached within 1/8 inch.

Builder's Obligation: The builder will adjust any switch plate or receptacle cover as necessary to meet the performance standard.

7.8 Issue: Lights flicker in part of home.

Performance Standard: Lights may flicker in the home when certain motor driven equipment is started.

Homeowner's Maintenance Obligation: The homeowner is responsible for any flickering lights caused by the homeowner's equipment, negligence or misuse.

Builder's Obligation: The builder shall check builder-installed motor-driven equipment for proper operation and shall check wiring for installation per electrical codes. The builder shall change or repair builder-installed motor or motor-driven equipment if such equipment is found defective.

7.9 Issue: Lights flicker in entire home.

Performance Standard: Lights should not flicker throughout entire home at one time.

Builder's Obligation: Owner should first check with the local utility company about possible defects in supply sources. If there is no such defect, builder should then check internal wiring as necessary.

7.10 Issue: Recessed electrical fixtures shut off.

Performance Standard: Recessed electrical fixtures are manufactured with a device that forces the unit off should overheating occur.

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to use the appropriate wattage light bulbs in recessed fixtures. If the problem is caused by the homeowner's equipment, negligence or misuse, the homeowner is responsible for paying for and making any necessary repair.

Builder's Obligation: The builder shall remove excess insulation where accessible in an attempt to resolve.

SECTION 8.
Exterior Doors, Garage Doors & Windows

Preliminary Information

Exterior doors, garage doors and windows not only provide the homeowner with security, privacy, and noise reduction, but also protect the inside of the home from the outside elements. All exterior doors are subject to weathering. Homeowners

should refinish stained exterior doors at least once each year. Painted exterior doors can be periodically cleaned with a mild detergent. The homeowner may also want to consider installing a storm door to further guard against the elements. The homeowner should check with manufacturer on use of storm doors with fiberglass units. Intense heat could damage some fiberglass doors.

Exterior doors may be made of wood, metal, fiberglass, or a composite material. The finish of the door depends upon the material used to construct it.

Windows can be constructed of wood, composite materials, vinyl, aluminum or fiberglass. The homeowner should note that the larger a window is, the harder it will be to operate.

Exterior Doors

8.1 **Issue:** Exterior door is warped.

Performance Standard: 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.

Notes: Exterior door warping can be attributed to moisture penetration. All of the edges of the door should be sealed and the surface of the door should be properly painted or varnished.

Builder's Obligation: The builder will repair or replace exterior doors with warpage that cannot be corrected by adjustments in the door jambs, stops or hinges.

8.2 **Issue:** Raw wood shows at the edges of inset panel on exterior door.

Performance Standard: Due to changes in temperature and/or humidity, wood panels shrink and expand. This process may result in the exposure of unpainted wood surfaces and is not uncommon. However, if shrinkage of wood panels results in gaps between the panels and their frame or meeting surface, the shrinkage must be corrected.

Homeowner's Maintenance Obligation: It is the homeowner's obligation to paint or stain exposed areas of raw wood resulting from shrinkage.

Builder's Obligation: At any one time during the warranty period, the builder is obligated to repair and touch-up the wood panels if in excess of the performance standard.

8.3 **Issue:** Splits are present in door panels.

Performance Standard: If light is visible through the splits in the door panel, the split should be repaired.

Builder's Obligation: At any one time during the warranty period, the builder will repair and paint, or stain any split panel that does not meet the performance standard.

8.4 **Issue:** Exterior door is sticking.

Performance Standard: With the exception of wood doors, which may stick during periods of high humidity, exterior doors should not stick.

Notes: Exterior doors will warp to some degree because of moisture penetration or improper or incomplete finishing of the door. In order to prevent warping, all edges of the exterior door should be sealed and the surface properly varnished or painted.

Homeowner's Maintenance Obligation: The homeowner is responsible to raise or lower thresholds when they are adjustable.

Builder's Obligation: The builder will repair or replace the door to meet the performance standard.

8.5 **Issue:** Drafts and visible gaps around exterior doors.

Performance Standard: Exterior doors will be installed in such a manner as to minimize drafts around the doors.

Notes: It is normal to have gaps between the door edge and the frame and the threshold. However, the gaps shall not vary greater than 3/16 inch. Properly installed weather-stripping will minimize drafts. Also, properly sealing the threshold to the sub-floor or concrete can minimize drafts. The homeowner should expect drafts during periods of high winds and cold temperatures.

Builder's Obligation: The builder will repair all drafts caused by improperly installed doors or weather-stripping to meet the performance standard.

8.6 **Issue:** Sliding patio door or screen slides off its track.

Performance Standard: At the time of closing, all sliding patio doors and screens should slide on their tracks.

Homeowner's Maintenance Obligation: It is the homeowner's obligation to clean and maintain the sliding door tracks in a good condition to ensure proper operation.

Builder's Obligation: The builder shall adjust or repair the sliding door as necessary to meet the performance standard.

Garage Doors

8.7 **Issue:** Garage door does not operate properly.

Performance Standard: In a normal setting, the garage door should operate properly.

Notes: The builder has no responsibility for garage door operation where the homeowner installs the garage door or the garage door opener.

Homeowner's Maintenance Obligation: The homeowner should maintain the garage door in accordance with the manufacturer's recommendations.

Builder's Obligation: The builder is obligated to repair all garage doors in accordance with the performance standard.

8.8 Issue: Rain or snow leaks inside garage from garage door.

Performance Standard: Under normal conditions, leaks in garage doors are not acceptable.

Builder's Obligation: The builder will repair leaks resulting from garage doors improperly installed by builder.

Notes: During severe weather conditions, some leakage may occur.

Windows

8.9 Issue: Window is difficult to open or close.

Performance Standard: Windows should open or close with reasonable operating force.

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to maintain the windows in good condition to ensure the windows function properly. Such routine maintenance should include cleaning and lubricating windows.

Builder's Responsibility: The builder will correct or repair windows as necessary to meet the performance standard.

8.10 Issue: Window glass is broken and/or screen is damaged.

Performance Standard: No glass should be broken or screen damaged at the time of closing.

Homeowner's Maintenance Obligation: Broken glass or screens not reported to the builder by final walk-through are the homeowner's maintenance obligation.

Builder's Obligation: At the time of closing, the builder will repair or replace to meet the performance standard.

8.11 Issue: Glass surface is scratched, cracked or broken.

Performance Standard: Any scratches on glass surfaces visible from 10 feet under normal lighting conditions are unacceptable. Any scratched, cracked or broken glass should be noted by homeowner before closing.

Builder's Obligation: The builder has no repair obligation, except to correct defects noted at the time of closing.

8.12 Issue: Condensation and/or frost on interior surfaces of window panes.

Performance Standard: Condensation is a normal occurrence and results from low temperatures outside the home and high humidity inside the home. Condensation on the interior surfaces of window panes is not indicative of a defect in the window.

Notes: It is the homeowner's obligation to maintain a proper relative humidity level inside the home. Variations of the temperature near the windows during extreme weather conditions is to be expected.

Homeowner's Maintenance Obligation: If the homeowner installs a humidifier, the homeowner should closely adhere to the manufacturer's instructions for operating the humidifier.

Builder's Obligation: The builder is obligated only to repair those windows with condensation or frost directly caused by faulty window installation. Where windows have been properly installed and condensation or frost exists, the builder is not required to take any further action to remedy the condensation or frost.

8.13 Issue: Drafts are present around windows.

Performance Standard: Proper installation of windows is required and will help to eliminate drafts.

Notes: Some drafts may occur during periods of high winds and should be expected by the homeowner.

Builder's Obligation: If the draft is caused by improperly installed windows or weather-stripping, the builder will repair the improperly fitted windows or weather-stripping to meet the performance standard.

8.14 Issue: Condensation exists between the window panes.

Performance Standard: Condensation between window panes is unacceptable.

Builder's Obligation: The builder will repair or replace the window to meet the performance standard including any necessary painting or staining.

8.15 Issue: Water in interior corner of glazed window unit.

Performance Standard: Water infiltration is unacceptable if caused by improper window installation.

Builder's Obligation: The builder will repair any deficiencies resulting from any improper window installation.

SECTION 9.
Exterior Trim, Siding, Paint & Varnish

Preliminary Information

There are many different types of exterior siding, including vinyl, aluminum, natural wood, hardboard siding and wood shingles. Each type of siding must be installed according to both the manufacturer's standards and industry standards. The performance standards contained in this Section set forth the level of performance expected of HBANK members with respect to exterior trim and siding as well as paint and varnish. Color variations will exist at repaired areas.

Exterior composite lumber should be installed in accordance with the manufacturer's specifications. Composite exterior trim and decking tend to expand with temperature variations. Some spacing between boards is to be expected by the homeowner.

Wood Trim and Siding

9.1 **Issue:** Visible gaps in exterior wood trim are present.

Performance Standard: Gaps between exterior wood trim and siding or brick veneer should not exceed 1/4 inch in width.

Builder's Obligation: The builder will repair or replace trim having gaps that do not meet the performance standard. Gaps in excess of 3/8 inch should be repaired by replacing and repainting the trim or siding at issue. For gaps greater than 1/4 inch in width to 3/8 inch in width, caulking the gap is an acceptable method of repair by the builder.

9.2 **Issue:** Improperly fitted joints in wood trim.

Performance Standard: Gaps in joints of wood trim that are greater than 3/16 inch in width are unacceptable.

Builder's Obligation: Within the warranty period, the builder will repair or replace trim as necessary to meet the performance standard. Caulking is an acceptable method of repair for those gaps greater than 3/16 inch in width, but less than 5/16 inch in width. Replacement of trim is the acceptable method of repair where the gap in the trim is greater than 5/16 inch.

9.3 **Issue:** Exterior trim board or siding is split.

Performance Standard: Splits in excess of 1/8 inch in width require corrective action.

Builder's Obligation: Within the warranty period, the builder will repair splits that are more than 1/8 inch in width and less than 1/4 inch in width by using permanent filler and painting. Trim or siding with splits greater than 1/4 inch should be replaced and repainted.

9.4 **Issue:** Bows or twists in exterior trim.

Standard: Bows and twists greater than 3/8 inch in an 8 foot measurement should be repaired.

Builder's Obligation: Within the warranty period, the builder will, in accordance with this performance standard, repair or replace trim pieces that are bowed or twisted. Refastening or replacing deformed boards are acceptable methods of repair.

9.5 **Issue:** Exterior trim board is cupped.

Performance Standard: Cups exceeding 3/16 inch in 5 and 1/2 inches should be corrected.

Builder's Obligation: Within the warranty period, the builder will, in accordance with this performance standard, repair or replace trim pieces that are cupped in excess of the performance standard. Refastening or replacing deformed boards are acceptable methods of repair.

9.6 **Issue:** Horizontal lap siding is unevenly installed.

Performance Standard: A piece of lap siding more than 5/8 inch off parallel with contiguous courses in a measurement of 20 feet should be repaired.

Notes: If a remodeling project is involved, the homeowner and the builder may agree to disregard this performance standard in light of pre-existing structural conditions.

Builder's Obligation: During the warranty period, the builder will reinstall and repaint siding in accordance with the performance standard.

9.7 **Issue:** Face nails are excessively countersunk to expose visible fiber of hardboard siding.

Performance Standard: Any countersunk nails which expose visible fiber of hardboard siding should be repaired.

Builder's Obligation: The builder will caulk and paint any visible fiber exposed by countersinking nails in hardboard siding. For nails countersunk in excess of 1/8 inch, an additional nail should be installed flush to the surface of the siding.

9.8 Issue: Siding is bowed.

Performance Standard: Bows in siding exceeding 1/2 inch in 32 inches should be corrected.

Builder's Obligation: During the warranty period, the builder will repair or replace any siding with bows in excess of the performance standard. Some bowing of the exterior siding is to be expected by the homeowner. Such bowing may be due to bowing in studs. Typically, properly nailing the siding will eliminate most bowing.

9.9 Issue: End gap is visible in siding.

Performance Standard: End gaps between two pieces of siding should not be greater than 3/16 inch.

Notes: The homeowner should note that siding is sometimes installed with expansion and contraction gaps.

Builder's Obligation: Within the warranty period, the builder will repair or replace any siding with end gaps that are in excess of this performance standard. Gaps of no more than 5/16 inch may be caulked. Where gaps exceed 5/16 inch, trim pieces should be replaced and repainted.

9.10 Issue: Siding is buckled.

Performance Standard: Siding that projects more than 3/16 inch from the face of adjacent siding should be corrected.

Notes: Buckling can be a result of humidity.

Builder's Obligation: The builder will repair or replace any siding which does not meet the performance standard.

9.11 Issue: Nail has stained siding.

Performance Standard: Provided "natural weathering" or "semi-transparent stain" is not specified in the contract documents, any stains extending more than 1/2 inch from the nail that are visible from a distance of more than 20 feet should be corrected.

Notes: Stains may result from the oxidation of nails or leaching of extractives from the wood. Use of galvanized nails may not prevent staining.

Builder's Obligation: The builder will repair or replace any nail-stained siding in accordance with this performance standard. The builder will touch up paint or stain the affected area once during the warranty period.

Wood Shake Siding

9.12 Issue: Cedar shakes or shingles are bleeding through paint or stain applied by builder.

Performance Standard: Resins and extractives bleeding through paint or stain, or blackening of shakes or shingles should be corrected, provided "natural weathering" or "semi-transparent" stain is not specified in the contract documents.

Builder's Obligation: Once during the warranty period, the builder will treat the shakes in an effort to reasonably prevent further bleeding.

Plywood or Other Veneer Siding

9.13 Issue: Siding has delaminated.

Performance Standard: Siding shall not delaminate.

Builder's Obligation: During the warranty period, the builder will replace delaminated siding unless the delamination was caused by the homeowner's actions or negligence.

9.14 Issue: Siding joints have separated.

Performance Standard: Joint separations greater than 3/16 inch should be corrected.

Builder's Obligation: Within the warranty period, the builder will caulk or repair siding as necessary to satisfy the performance standard. Gaps exceeding 3/16 inch, but less than 5/16 inch may be caulked. Where gaps exceed 5/16 inch, the plywood or other veneer pieces are to be replaced.

9.15 Issue: Siding is bowed or twisted.

Performance Standard: Bows and twists exceeding 1/2 inch in a measurement of 32 inches should be corrected.

Notes: The homeowner should expect some bowing in siding because the studs may be bowed.

Builder's Obligation: Within the warranty period, the builder will re-nail or replace siding as necessary to meet the performance standard.

Aluminum Lap or Vinyl Lap Siding

9.16 Issue: Siding is bowed or wavy.

Performance Standard: Some bowing and waviness in lap siding should be expected by the homeowner due to bows in studs or expansion and contraction of siding panels due to temperature changes. Thermal expansion waves or distortions in aluminum lap or vinyl lap siding should be corrected if they are greater than 1/2 inch in a 32 inches measurement.

Notes: Bowing and waviness can be caused by the siding being nailed too tightly to the house which does not allow adequate room for the siding to expand.

Builder's Obligation: The builder will reinstall or replace siding as necessary to correct any thermal expansion waves or distortions in accordance with this performance standard.

9.17 Issue: Siding is faded in color.

Performance Standard: Any color of siding, when exposed to the ultra violet rays of the sun, will fade. The builder cannot prevent this condition. However, panels installed on the same wall will generally fade at the same rate.

Homeowner's Maintenance Obligation: Annual cleaning of siding by the homeowner in accordance with the manufacturer's recommendations is recommended.

Builder's Obligation: The builder is not obligated to correct color fading on siding.

9.18 Issue: Aluminum or vinyl lap siding courses are not level with eaves or wall openings.

Performance Standard: Any piece of aluminum or vinyl lap siding more than 1/2 inch out of level with contiguous courses, measured in 20 feet, should be corrected.

Notes: This performance standard does not apply if in a remodeling project the remodeler or builder and the homeowner agreed, in light of a preexisting condition, to disregard this performance standard.

Builder's Obligation: The builder or remodeler will reinstall siding to comply with the performance standard and will replace any siding damaged during removal of the uneven siding.

9.19 Issue: Exposure of aluminum or vinyl lap siding trim nail under windows, doors or eaves.

Performance Standard: All face nails should match the color of the trim. It is unacceptable for nail heads in the field of the siding to show.

Notes: Vinyl siding generally should not be face nailed. However, there are appropriate and typical occasions when a face nail may be needed to reinforce a joint or hold the siding to the wall when it is cut to fit around window frames, doors, roofs, or other obstructions on the wall.

Builder's Obligation: The builder will install trim nails in accordance with this performance standard.

9.20 Issue: Aluminum or vinyl lap siding trim accessory separates from caulking at windows or other wall openings.

Performance Standard: Siding trim accessories that separate from caulking at windows or other wall openings by more than 1/4 inch during the warranty period should be corrected.

Builder's Obligation: Within the warranty period the builder will repair or re-caulk trim pieces in accordance with the performance standard. For separations greater than 1/4 inch but less than 3/8 inch, caulking is an acceptable method of repair. For separations greater than 3/8 inch, the trim accessories should be replaced by the builder.

9.21 Issue: Aluminum or vinyl lap siding has been cut in an uneven manner.

Performance Standard: Visible cuts in siding should be straight, plumb and neat. Crooked cuts greater than 1/8 inch from true measurement should be corrected.

Builder's Obligation: The builder will repair or replace siding as necessary to meet the performance standard.

9.22 Issue: Aluminum or vinyl lap siding is not cut tight to moldings.

Performance Standard: Gaps between siding and molding shall not exceed 1/4 inch. For gaps exceeding 1/4 inch but less than 3/8 inch, caulking is an acceptable method of repair. For gaps in excess of 3/8 inch, the siding pieces at issue should be replaced.

Builder's Obligation: The builder will repair gaps between the siding and the molding in accordance with this performance standard.

9.23 Issue: Siding is noisy.

Performance Standard: "Creeping" or noise in aluminum lap or vinyl lap siding is to be expected by the homeowner.

Notes: "Creeping" is a process of expansion and contraction of siding moving across each other or the nails. Noise is the result of the friction of the panels

rubbing and moving together. Both creeping and noise are inherent characteristics in aluminum and vinyl siding.

Builder's Obligation: The builder has no obligation to repair or correct noise or creeping issues with aluminum and vinyl siding.

Exterior Paint and Varnish

9.24 Issue: Exterior paint or stain on non-sheet metal areas peels, chalks or fades.

Performance Standard: During the warranty period, peeling, chalking or fading of exterior non-sheet metal surfaces should not occur, except through the normal oxidation process.

Notes: The greater the sun exposure on the exterior surface, the more frequently the surface will have to be painted and otherwise maintained.

Builder's Obligation: Any exterior paint that chalks, peels or fades, on non-sheet metal surfaces during the warranty period, should be corrected by the builder. In repainting the affected area, the builder will attempt to match the new and existing paint colors as closely as reasonably possible. However, the homeowner should not expect the repainted areas to match the existing areas exactly.

9.25 Issue: Readily visible mildew or fungus is present on exterior painted surfaces.

Performance Standard: Painted and finished exterior surfaces shall not have mildew at the time of closing.

Notes: Mildew and/or fungus may form on painted exterior surfaces as a result of heat and moisture levels.

Homeowner's Maintenance Obligation: It is the homeowner's obligation to clean exterior painted surfaces to prevent or remove the build-up of mold and fungus.

Builder's Obligation: The builder is obligated to remove mold and mildew from exterior painted surfaces at the time of closing. However, the builder is not responsible for subsequent mold and/or fungus growth on exterior painted surfaces.

9.26 Issue: Exterior millwork that has been varnished or stained deteriorates.

Performance Standard: Exposure to sunlight or other harsh weather conditions will deteriorate the varnish or stain on exterior millwork.

Homeowner's Maintenance Obligation: Exterior millwork that has been varnished or stained requires more frequent maintenance by the homeowner than do exterior painted surfaces.

Builder's Obligation: The builder is not obligated to repair or replace exterior millwork that deteriorates after being varnished or stained.

SECTION 10.
Fireplaces & Chimneys

10.1 Issue: Fireplace or chimney does not draw properly.

Performance Standard: The builder should properly construct the chimney or fireplace so that it functions correctly.

Notes: Certain conditions outside the builder's control, such as high winds and downdrafts caused by tree branches, steep hills, adjoining residences or the home furnace may also adversely affect the ability of the fireplace or chimney to draw properly. In such cases, it shall be the homeowner's obligation to extend the chimney to a height necessary for proper draft and to add a downdraft deflector to remove the obstruction.

Builder's Obligation: The builder is obligated to determine the cause of the malfunction of the fireplace or chimney, and to repair the problem to meet the performance standard, if the problem is caused by a construction defect.

10.2 Issue: The chimney cap leaks and water gets inside the home.

Performance Standard: It is not uncommon for masonry caps to crack; however, leaks should not be visible inside the home.

Builder's Obligation: The builder will repair leaks as necessary to meet the performance standard.

10.3 Issue: Paint in firebox is damaged or changed by fire.

Performance Standard: The heat from a fire will alter the paint finish in the firebox. The homeowner should expect such an occurrence.

Builder's Obligation: The builder is not obligated to repair the finish of the firebox.

SECTION 11.
Foundations

Preliminary Information

The weight of a home rests on the foundation of the home. The foundation of any home consists of two main components: the footer, made from poured concrete in a trench or formed, and the foundation walls, made from either poured concrete or cement blocks. The foundation walls rest on the footer.

Structural & Aesthetic Irregularities

11.1 Issue: The foundation is out of square. A foundation is "out of square" when two perpendicular walls meet and the angle created by the walls is not equal to 90 degrees (90º).

Performance Standard: Provided existing walls and corners, if any, are straight and square, the diagonal of a triangle with sides of 12 feet and 16 feet, measuring at the top of the foundation wall, shall not be 1 inch more or 1 inch less than 20 feet.

Notes: The performance standard for square ness is essentially one of aesthetics. This performance standard focuses on creating a satisfactory cosmetic appearance for foundation walls.

Builder's Obligation: If the issue is discovered in time, the builder may make structural changes to create a satisfactory appearance for foundation walls. If the construction is nearly completed when the issue is identified, the builder may, at its option, elect to make cosmetic changes to create a more satisfactory appearance for the foundation walls.

11.2 Issue: The foundation is not level.

Performance Standard: Measuring at the top of the foundation, the foundation shall be no more than 1/2 inch total, higher or lower, than the rest of the foundation within 20 feet of the measuring point.

Builder's Obligation: The builder will make necessary modifications to the foundation to make it comply with the performance standard. The builder may place mortar, shims, or other approved fillers under the mud sill plate or may scribe or plan the mud sill plate.

Notes: There are two aspects of levelness: function and aesthetics. A lack of levelness does not damage the structure; however, it may lead to other problems such as siding or paneling being improperly aligned.

11.3 Issue: Foundation wall is bowed.

Performance Standard: In a finished basement, concrete walls shall not bow in excess of 1 and 1/2 inches in a 10 foot horizontal measurement.

Notes: Bowed walls also present an aesthetic issue. The builder is responsible for correcting bowed walls in areas where finished basement living space is being provided in accordance with the contract documents.

Builder's Obligation: The builder is responsible for correcting any deficiencies in excess of the performance standard. If the wall is to remain unfinished pursuant to the contract documents, and the wall meets applicable building codes

(as evidenced by a passed inspection), then the builder has no further obligation to correct the issue.

11.4 **Issue:** Foundation wall is out of plumb. "Out of plumb" means that when the foundation wall meets the basement floor, the angle created thereby is not 90 degrees (90º).

Performance Standard: Concrete basement walls should not be out of plumb greater than 1 and 1/2 inches in 8 feet when measured from the bottom to the top of the wall.

Notes: Out of plumb walls are typically an aesthetic concern. If a stud wall is used to compensate for an out of plumb foundation, the finished space dimensions will change accordingly.

Builder's Obligation: The builder shall repair any deficiencies in excess of the performance standard. If the wall is to remain unfinished per the contract documents or is designated as a space to be finished in the future, then the builder is required to meet the appropriate building code. The builder is only required to adjust the wall, as necessary, to meet the performance standard, if the wall is to be in a finished living space provided for in the contract documents.

Cracks & Leaks

11.5 **Issue:** Leaks in basement or wet basement.

Performance Standard: No leaks or flow of water are acceptable, except when caused by improper landscaping or subterranean problems where the responsibility is defined as the owner's by the building contract. For further information on these items, refer to the Landscaping and Site Work Performance Standards. Leaking conditions should not be confused with dampness or moisture, which can be expected by the owner during the first year of the settling process, or with condensation during the summer months.

Builder's Obligation: Builder should correct the problem as required. After correction, all openings should be repaired. Color variations in repairs to be expected.

11.6 **Issue:** Cracked basement walls not caused by owner's landscaping.

Performance Standard: Correct all cracks except hairline cracks in mortar joints, case-in-place concrete or block exceeding 1/8 inch average width, providing these cracks do not cause a leaking problem.

Builder's Obligation: Unless structural danger exists, repairs should be made approximately one year after closing to permit normal settling of the home to stabilize conditions. Cracks in mortar joints, poured wall or block should be chiseled out and regrouted or repaired by other acceptable methods. Broken blocks should be removed from the inside and refaced with a 4 inch block. Grout

colors should be matched as closely as possible, but color variations should be expected by the homeowner. Exterior repairs are not made except in cases of major structural damage.

Moisture

11.7 Issue: Basement walls are damp.

Performance Standard: Dampness prevention is a homeowner's maintenance obligation, not the builder's obligation.

Notes: Condensation and the homeowner's failure to maintain a proper grade away from the home can result in dampness in basement walls.

Homeowner's Maintenance Obligation: The homeowner is responsible for keeping basement windows closed during, damp and humid weather and open, during clear, dry weather to regulate the moisture levels in the basement. The homeowner should also ensure that all landscaping contains the proper grade away from the home.

Builder's Obligation: The builder is not obligated to correct dampness in basement walls.

Efflorescence

11.8 Issue: Efflorescence is present on interior concrete walls.

Notes: "Efflorescence" is a white, powdery substance, composed of crystallized soluble salts, which can form on the interior concrete walls.

Performance Standard: The presence of efflorescence does not affect the strength of the foundation and need not be removed.

Homeowner's Maintenance Obligation: Efflorescence may be removed by the homeowner by dry brushing the surface of the concrete and rinsing it with warm water.

Builder's Obligation: The builder has no obligation to repair or alleviate efflorescence.

SECTION 12.
Hardwood Floors

Preliminary Information

Hardwood floors will shrink and expand with changes in moisture levels and temperatures. Hardwood floors will also make cracking and popping noises under normal foot traffic even prior to closing. High heels, pet claws and vacuum cleaners may scratch the surface of hardwood floors. In heavy traffic areas, moisture from damp shoes can cause a white, filmy surface to appear on hardwood floors.

The homeowner should use mats and area rugs to protect hardwood floors from dirt and water. However, the mats and rugs should be moved periodically to avoid color variations in the hardwood floor. Regular cleaning with a damp mop will also go a long way toward preserving the appearance of hardwood floors for many years.

Installation Deficiencies

12.1 Issue: Gaps are present between boards of strip hardwood floor.

Performance Standard: At the time of installation, gaps shall not be more than 1/8 inch in width.

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to maintain appropriate humidity levels in the home to help reduce the fluctuations in the size of gaps between hardwood floor boards.

Builder's Obligation: Any gaps exceeding 1/8 inch in width at the time of installation shall be repaired by the builder. Gaps can be repaired with the proper filler or by face nailing.

12.2 Issue: Cupping is present in strip hardwood floor board.

Performance Standard: Cups in strip hardwood floor boards greater than 1/16 inch in height in a 3 inch maximum span (measured perpendicular to the long axis of the board) and not caused by moisture beyond the builder's control, are unacceptable.

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to maintain appropriate humidity levels in the home to help reduce fluctuations in the hardwood floor boards. The hardwood floor will also make a popping noised under normal foot traffic.

Builder's Obligation: The builder will correct or repair cups not caused by moisture beyond the builder's control to meet the performance standard.

12.3 Issue: Excessive lippage is present at the threshold or transition area at the time of installation.

Performance Standard: Lippage of more than 1/2 inch is unacceptable.

Notes: Lippage is the difference in height between two types of flooring materials at the threshold where they meet. If unacceptable lippage is present, a transition strip may be required. It is common to use a metal transition or reducer strip at the termination of tile to hardwood flooring and carpeting.

Builder's Obligation: The builder will repair any excess lippage to meet the performance standard.

12.4 Issue: Hardwood strip flooring is crowning or warping.

Performance Standard: Hardwood strip flooring shall not crown or warp by more than 1/16 inch in a 3 inch measurement (measured perpendicular to the long axis of the board).

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to maintain appropriate humidity levels in the home to help reduce fluctuations in the hardwood floor boards.

Builder's Obligation: The builder will repair the flooring as necessary to meet the performance standard.

12.5 Issue: Hardwood flooring loosens from its underlying support system.

Performance Standard: The wood flooring should not buckle from its substrate.

Builder's Obligation: The builder is obligated to repair the hardwood flooring to meet the performance standard.

Finishing Deficiencies

12.6 Issue: Hardwood strip flooring contains slivers or splinters.

Performance Standard: Splintering and slivering at the time of closing should be corrected.

Notes: Shaving and filling splinters or slivers and subsequent sanding and finishing is an acceptable method of repair.

Builder's Obligation: The builder is obligated to repair any slivers and splinters existing at the time of closing to meet the performance standard.

12.7 Issue: Hardwood strip flooring contains surface sticker marks or burns.

Performance Standard: Discoloration resulting from sticker marks or burns should be corrected.

Builder's Obligation: The builder shall repair or replace the affected areas to meet the performance standard.

12.8 Issue: The top coat finish of hardwood floor is peeling.

Performance Standard: Under normal circumstances, the top coat finish of hardwood flooring should not peel.

Builder's Obligation: The builder is obligated to refinish any peeling field applied finishes.

Notes: This performance standard does not apply to the peeling of the pre-finish coat. Such an occurrence should be addressed directly with the finish coat manufacturer.

SECTION 13.
HVAC

Preliminary Information

It is extremely important for the homeowner to understand how the heating, ventilation and air conditioning systems in the home work. These systems are often referred to collectively as the HVAC system. Regular and proper maintenance of a home's HVAC system in accordance with the manufacturer's guidelines will reduce the homeowner's energy costs and prolong the life of the HVAC system. The homeowner should also expect temperature variations in different rooms and different levels of the home. A swing factor of 3 to 6 degrees from room to room shall be considered acceptable up to a 6 degree temperature difference in different rooms and from floor to floor is also considered sufficient. Rooms over garages or rooms with extensive exterior glass will have greater temperature variations than other rooms of the home.

Condensation Lines

13.1 Issue: Clog is present in condensation line.

Homeowner's Maintenance Obligation: It is not uncommon for condensation lines to clog under normal use. It is the homeowner's responsibility to maintain the condensation lines in good condition to prevent potential mold or other moisture-related problems.

Builder's Obligation: The builder is not responsible for any clogs in condensation lines.

Inadequate Heating

13.2 Issue: Insufficient heat.

Performance Standard: The builder shall install a heating system capable of maintaining an inside temperature of 70 degrees Fahrenheit when outside temperature is 5 degrees Fahrenheit in original finished living area in home completed by builder or per current ACCA Manual J heating standard, and including any future amendments to the ACCA Manual J standard. Examples of unfinished living space are basements, garages, attic space, patio enclosures, etc. An approximate 6 degree temperature swing in different rooms and/or floors is considered acceptable. *(Revised March 2005)*

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to periodically adjust dampers and registers and make any other airflow balance adjustments and to see that routine maintenance is performed on the system. The homeowner should change filters monthly and run the fan to balance extreme temperatures.

Builder's Obligation: **(a)** The warm air heating installation shall be made in compliance with the standards, practices, and methods set forth in the current manuals of the National Environmental Systems Contractors/Sheet Metal & Air Conditioning Contractor's National Association (NESCA), which represents the national standards of warm air heating industry, and in compliance with all local municipal codes; **(b)** heat loss and heat gain calculations shall be made from the plans and specifications of the specific structure in accordance with manual "J", the current edition, for equipment selection, and the air distribution system designed and installed in accordance with what is currently manual "D"; and **(c)** gas furnaces used shall be approved by the American Gas Association and bear the AGA seal of approval. Oil and electric furnaces and heat pumps shall be approved by Underwriters Laboratories and bear the UL seal of approval; **(d)** each individual room supply register shall be equipped with a damper and it shall be the owner's responsibility to so adjust them to achieve the room condition desired; **(e)** the furnace blower must deliver rated air over the heating surface or cooling coil. In order for the blower to deliver acceptable rated air, clean filters must be replaced by the owner as necessary and cleaned monthly; **(f)** there shall be sufficient air delivered to each room to maintain the condition described in the Acceptable Tolerance above. This condition can be maintained if provision is made to return the same amount of air from each living level as is delivered to it as described in the above Performance Standard;**(g)** the thermostat shall be located so that it reflects the true condition of the house and is not affected by extraneous sources of heat, such as open bathroom or kitchen doors; second floor heat risers; or heat from lights, radio or television sets located close to it. It shall also be located so that it cannot be affected by the radiant heat from a fireplace or sun heat through a window. *(Revised March 2005)*

Inadequate Cooling

13.3 Issue: The home is not cooling at the proper temperature.

Performance Standard: A properly installed and functioning cooling system should be able to produce an interior temperature of 72 degrees Fahrenheit (measured from the center of each room at 5 feet above the floor) when the outside temperature is 90 degrees Fahrenheit or as per current ACCA Manual J cooling standard and including any future amendments to the ACCA Manual J standard. *(Revised March 2005)*

Notes: It is not unusual for the homeowner to experience abnormal temperature variations when large groups of people are in the home. Such variations are outside the builder's control.

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to periodically adjust dampers and registers and make any other airflow balance adjustments and to see that routine maintenance is performed on the system. The homeowner should keep air filter clean and run fan to balance extreme temperature.

Builder's Obligation: It is the builder's responsibility to repair or modify the cooling system as necessary to maintain temperatures in accordance with the performance standard or local energy code, whichever applies.

Ductwork

13.4 Issue: Ductwork separates or detaches.

Performance Standard: Ductwork should not separate or detach.

Builder's Obligation: The builder will repair separated or detached ductwork to meet the performance standard.

13.5 Issue: Noises are present in the ductwork when the furnace or air conditioner is operating.

Performance Standard: (a) When metal is heated it expands and when cooled it contracts. The result is "ticking" or "crackling" which is generally to be expected and shall be considered acceptable; **(b)** in the case of electric forced air heating systems (heat pump), a higher level of air noise is generally to be expected and shall be considered acceptable; **(c)** the gauge of the metal shall be such that supply ducts and plenums do not "oilcan". The booming noise caused by "oilcanning" is not acceptable; and **(d)** with new 78% or higher EFI furnaces today, there is a higher pitch noise from the motor start-up.

Builder's Obligation: The booming noise caused by "oilcanning" is not acceptable and builder must take necessary steps to correct.

Air Handlers

13.6 Issue: Vibrations are detected in the air handler.

Performance Standard: Under normal circumstances, most air handlers should not vibrate.

Notes: In certain circumstances, properly installed air handlers may generate some noise with normal air flow.

Builder's Obligation: The builder will repair the air handler to meet the performance standard.

Refrigeration Lines

13.7 Issue: Leaks are present in the refrigeration lines.

Performance Standard: Under normal circumstances, refrigeration lines should not leak.

Builder's Obligation: Provided the damage is not caused by the owner's actions or negligence, the builder will repair leaky refrigeration lines and will re-charge the air conditioning unit.

Condensation

13.8 Issue: Condensation is present on the exterior of air handlers and ductwork.

Performance Standard: Properly installed air handlers and ductwork will have condensation on the exterior surfaces during periods of extreme temperature variations or high humidity.

Builder's Obligation: The builder is obligated to correct any condensation problems on the exterior of ductwork and air handlers if directly resulting from faulty installation.

13.9 Issue: Condensation is present in gas water heater or gas furnace flue.

Performance Standard: In vented gas appliances such as a gas furnace or water heater, it is not uncommon for condensation to appear. Such moisture is normal and should be expected by the homeowner.

Builder's Obligation: The builder is not responsible for correcting condensation in the flues of gas water heaters or furnaces.

SECTION 14.
Insulation

Preliminary Information

Insulation is the process by which an inert, fire-resistant material is applied to walls, ceilings, and sometimes floors of a structure to act as a barrier to heat flow. The term "R-value" is often used when referring to insulation. R-value means the level of resistance provided by the insulation to any transfer of heat or cold. Because the greatest sources of heat loss are the ceilings and roof of a home, a higher R-value of insulation is used in these areas. In addition to being a heat flow barrier, insulation also serves as a barrier to restrict the migration of moisture between the walls of the home.

Insulation in the home is installed in accordance with applicable energy and building code requirements. The homeowner should contact an insulation contractor before installing additional installation.

Inadequate or Improper Insulation

14.1 Issue: Pipes freeze.

Performance Standard: Pipes should not freeze if properly insulated provided the homeowner takes all necessary precautions to keep the pipes from freezing.

Notes: Maintaining normal temperature in the home during cold weather is very important. If the home is going to be left unattended for an extended period of time, the homeowner should turn off the main water supply valve. Additional homeowner precautions may be needed in extremely cold temperatures. For example, the homeowner should make sure the garage door does not remain open

for long periods of time; the dryer vents are clean so that they close properly and vent, and the vanity and kitchen sink cabinet doors are left open to allow air circulation on extremely cold nights.

Homeowner's Maintenance Obligation: The freezing of exterior hose bibs because the garden hose is attached at below freezing temperatures is the responsibility of the homeowner.

Builder's Obligation: The builder is obligated to correct the situation to prevent pipes from re-freezing. The correction will involve opening the walls for access to the pipe and either adding or replacing insulation that may have moved during the construction process, or leaving a permanent vent into the warmer space to prevent the freeze from recurring.

14.2 **Issue:** Condensation, frost or ice build-up on interior surfaces that could result in deterioration, mildew or discoloration of adjacent surfaces.

Performance Standard: Due to weather conditions and interior humidity factors, condensation, frost, and/or ice build-up may occur.

Builder's Obligation: The builder is not obligated to repair or remedy condensation, frost or ice build-up on interior surfaces.

14.3 **Issue:** Inadequate insulation.

Performance Standard: Insulation shall be installed in accordance with applicable energy and building code requirements and/or the contract between the builder and the homeowner.

Builder's Obligation: The builder will install insulation in amounts necessary to satisfy this performance standard.

14.4 **Issue:** Blown attic insulation has moved.

Performance Standard: Occasionally, blown attic insulation will move.

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to reposition the insulation as necessary.

Builder's Obligation: If the baffles were properly installed, as determined by the builder, the builder is not obligated to reposition or replace any blown attic insulation that moves after installation.

Drafts

14.5 **Issue:** Drafts come from electric outlet.

Performance Standard: The system of electric junction box, conduit or box on exterior walls produces an air flow passage whereby the cold or outside air can be

drawn through the outlet into the room under most heating circumstances, since the outside of the home is at higher pressure than the inside. This problem is virtually uncorrectable, as are certain problems that can result from the many openings that do exist in the home.

Builder's Obligation: The builder is not obligated to correct drafts around outlets. However, the builder should explain to the owner how and why this condition occurs.

14.6 Issue: Drafts exist around doors and windows.

Performance Standard: Additional sources of "cold spots" are roof, kitchen or bathroom vents as well as drafts from the doors and windows. Proper weather-stripping, caulking and insulating around these areas can minimize drafts. Nevertheless, under certain temperature and wind conditions, some drafts will still occur. In these situations, it is the homeowner's responsibility to install storm windows and/or doors as necessary to reduce or eliminate the drafts.

Builder's Obligation: The builder is obligated to check draft areas to make sure the draft is reasonable and minimal and shall correct any drafts as required to satisfy this performance standard.

SECTION 15.
Interior Doors & Stairs

Preliminary Information

Interior doors are usually made of wood or a pressed wood product. As such, interior doors are subject to expansion, contraction, shrinkage and warpage (all of which are natural characteristics of wood). It is the homeowner's responsibility to maintain proper levels of humidity in the home. The installation and proper regulation of a humidifier in the home may help to reduce such problems as shrinkage and warpage.

Warping of Interior Doors

15.1 Issue: Warping is present in interior door.

Performance Standard: Standard height interior doors that warp more than 1/4 inch (measured diagonally from corner to corner) should be repaired.

Homeowner's Maintenance Obligation: The homeowner should use exhaust fans or windows to remove moisture from bathrooms and utility rooms. Such measures will help prevent not only the warping of interior doors, but also mold growth.

Builder's Obligation: The builder will repair or replace and refinish warped doors as necessary to meet the performance standard.

15.2 Issue: Shrinkage or swelling of paneled doors or paneling.

Performance Standard: Shrinkage of recessed panel doors or paneling should not create actual gaps between the panels and their frame or meeting surface. It should be noted by the owner, however, that the panels may shrink in the stabilization process and the unfinished portion of the paneling could be exposed.

Builder's Obligation: It is the builder's responsibility to touch-up gaps between panels during the initial drying stabilization period one time only if painting was part of the builder's contract.

Improperly Operating Doors

15.3 Issue: Bi-fold doors do not slide properly on their track.

Performance Standard: Under normal circumstances, bi-fold doors should not come off track.

Homeowner's Maintenance Obligation: It is the homeowner's obligation to clean and maintain the tracks of bi-fold doors as recommended by the manufacturer.

Builder's Obligation: At any one time during the warranty period, the builder will repair any bi-fold door that comes off track under normal operating circumstances.

15.4 Issue: Door does not latch properly, or rubs on jambs.

Performance Standard: All interior doors should latch and operate properly.

Builder's Obligation: Builder will repair the door and/or latch as necessary to meet the performance standard.

15.5 Issue: Bottom of door drags on carpet or scrapes other floor covering.

Performance Standard: If the bottom of a door drags on carpeting or scrapes another floor covering, the door should be adjusted.

Notes: The builder is not responsible for correcting the issue if the door is dragging or scraping carpeting or other floor coverings not installed by the builder.

Builder's Obligation: Provided the builder installed the carpet or other floor covering upon which the door bottom drags or scrapes, the builder will repair the door to meet the performance standard.

15.6 Issue: Door opens or closes with force of gravity alone.

Performance Standard: Doors that swing open or close by the force of gravity should be adjusted.

Builder's Obligation: The builder will adjust the door as necessary so that the door will not swing open or close with the force of gravity.

15.7 Issue: Splits are present in wooden door panel.

Performance Standard: If light is visible through the split in a wooden door panel, the split should be corrected.

Builder's Obligation: At any one time during the warranty period, the builder will repair splits in wood panel doors to meet this performance standard. Filling splits with appropriate wood filler and matching the original finish as closely as reasonably possible is an acceptable method of repair.

15.8 Issue: Door edge is off parallel with the door jamb.

Performance Standard: For builder-installed door frames and doors, the door edge should be no more than 3/16 inch off parallel to the door jamb.

Notes: This performance standard does not apply if the builder installs the door in an existing frame.

Builder's Obligation: The builder will adjust the door as necessary to meet the performance standard.

Gaps and Squeaks in Interior Stairs

15.9 Issue: Gaps exist between interior stair risers, treads, skirts, and/or other railing parts.

Performance Standard: Gaps between parts that are designed to meet flush should be no greater than 1/16 inch in width. Gaps in excess of 1/16 inch but not to exceed 3/16 inch, may be puttied or caulked. Anything exceeding 3/16 inch will be replaced.

Builder's Obligation: At the time of closing, the builder will repair or replace the parts to fill the gap as necessary to meet the performance standard.

15.10 Issue: Squeaks are present when stair riser or tread is walked upon.

Performance Standard: The builder cannot guarantee squeak-free stair risers and treads. This does occur at times prior to closing.

Builder's Obligation: The builder will refasten any visibly loose stair risers or treads.

Loose Railing

15.11 Issue: Interior stair railing loosens and is not rigid.

Performance Standard: At the time of closing, the interior stair railings should be firmly attached to the structure.

Builder's Obligation: The builder will repair any interior stair railings to meet this performance standard.

SECTION 16.
Interior Finishes

Preliminary Information

The interior finish standards set forth below apply only to finished living areas and not basements or garages. In order to enable the homeowner to understand the drywall and plaster problems that may occur in the home during the first year of the life of the home, it is necessary for the homeowner to understand the nature of drywall and plaster both during and after the construction process. Drywall and plaster are inflexible gypsum materials which are applied in sheets during the rough carpentry phase of construction. The sheets are taped and finished and the surface of the drywall is painted or textured to produce a finished surface. Texture variations are common among the tape, joint compound and wallboard used to complete this process. Such variations may be visible.

Because drywall and plaster are used on wood surfaces, which are subject to shrinkage and expansion, such items can be affected by the stabilization process which occurs in new homes. Generally, if a defect is present in drywall or plaster which is readily noticeable upon visual inspection, the defect should be repaired. A defect is readily noticeable by visual inspection if it is visible under normal lighting conditions from a distance of six feet or more.

Because the entire home will tend to stabilize itself near the end of the warranty period, it is recommended that repairs to drywall and plaster be made by the builder near the end of the warranty period as requested by the homeowners. A builder is not responsible for repairing defects in drywall and plaster more than once during the warranty period.

The builder should attempt to make repaired areas match as closely as reasonably possible in texture; however, the homeowner should not expect exact matches in color and texture. If painting was part of the builder's contract, the builder is responsibly only for touching up the paint in the repaired areas.

Plaster and Drywall

16.1 Issue: Defects caused by poor workmanship during installation, such as blisters in the tape, excess compound in joint or toweling marks.

Performance Standard: Defects which can be readily observed by visual inspection without resorting to intense artificial or natural light placement should be corrected except where normal repainting will cover the defect.

Builder's Obligation: Correct such defects to meet the above performance standard.

16.2 Issue: Hairline cracks and nail pops.

Performance Standard: Hairline cracks and nail pops are a normal part of the stabilization process.

Builder's Obligation: The builder has no obligation to repair hairline cracks and nail pops.

16.3 Issue: Cracks or breaks in tape where walls meet insulated ceiling.

Performance Standard: Cracks or breaks in tape where walls meet insulated ceilings are caused by the bowing of the roof trusses. Roof trusses will rise in the winter, especially when the bottom chord of the truss is surrounded by a thick layer of insulation that prevents the bottom chord from obtaining the same temperature and moisture content as the top chord. This lifts the ceiling drywall and cracks the tape. Short of removing the attic insulation which is not recommended the truss uplift cannot be prevented and the builder has no responsibility to attempt to correct this.

Builder's Obligation: The builder is not obligated to repair cracks or breaks in tape where walls meet on insulated ceiling.

16.4 Issue: Butt joints.

Performance Standard: Butt joints commonly occur in stair wells and 2-story areas where the framing joists have shrunk and caused the drywall to protrude out.

Builder's Obligation: The builder is not obligated to repair butt joints.

16.5 Issue: Textured ceiling or walls not painted originally or after repair.

Performance Standard: Industry standards do not require painting of ceilings and walls unless specified in contract documents. Ceiling drywall repairs do not require painting.

Builder's Obligation: The builder is not obligated to paint textured ceilings or drywall, before or after repair, unless the same is specified in the contract documents.

16.6 Issue: Color variations in repaired textured ceiling or walls exist.

Performance Standard: Color variations between the repaired surface and the existing surface should be expected by the homeowner.

Builder's Obligation: The builder is not obligated to correct color variations in repaired textured ceilings or walls.

Paint and Varnish

16.7 Issue: Painting of areas repaired by builder.

Performance Standard: Where repaired areas require paint touch up or repainting, the builder will be responsible for the touch-up or repainting only if painting was part of the original builder's contract.

Builder's Obligation: Repairs should be repainted to match surrounding areas as close as reasonably possible.

16.8 Issue: Variations in the finishes of exterior and/or interior painted walls are visible from a distance of 6 feet, under normal lighting conditions.

Performance Standard: The builder is responsible for applying as consistently as reasonably possible the number of coats specified in the contract documents. The number of paint and primer coats shall be the same throughout the home unless the contract documents provide otherwise.

Builder's Obligation: The builder will provide the number of paint and primer coats as required by the contract documents. If a primer coat has been omitted an additional final coat may be used in substitution for the omitted primer coat. Some colors require more coats than others to cover evenly. If the particular color chosen by the homeowner requires extra coats than contracted for, the homeowner is expected to pay for the extra costs.

16.9 Issue: Mildew or fungus on painted surfaces.

Performance Standard: Mildew or fungus will form on a painted surface if the structure is subject to abnormal exposures (e.g., rainfall, or lake or river front).

Builder's Obligation: Mildew or fungus formation is a condition the builder cannot control and is a homeowner maintenance item unless it is a result of noncompliance with other sections of this Manual.

16.10 Issue: Washability of flat wall painted surfaces.

Performance Standard: For washable flat wall painted surfaces provided by the homeowner, follow procedures as defined by paint manufacturer.

Builder's Obligation: The builder is not responsible for the washability of flat wall painted surfaces.

16.11 Issue: Stained woodwork varies in color.

Performance Standard: Stain color may vary due to the grain of the wood. The grain may vary in different types of wood and in different portions of the same piece of wood, or in different pieces of wood.

Builder's Obligation: The builder is not obligated to correct any color variations in stained wood work.

16.12 Issue: Paint splatters are present on interior surfaces.

Performance Standard: Paint splatters should not be readily visible on walls, woodwork, floors, or other interior surfaces from a distance of 6 feet, under normal lighting conditions.

Builder's Obligation: The builder will remove any paint splatters necessary to meet this performance standard.

16.13 Issue: Varnished or stained millwork deteriorates during warranty.

Performance Standard: Millwork must be cared for like furniture and cannot be scrubbed. No warranty can be extended on exterior and interior varnished or lacquered doors or other millwork surfaces which deteriorate due to exposure to weather, shrinkage, expansion and contraction. Varnished surfaces require more frequent revarnishing then do painted surfaces.

Builder's Obligation: The builder has no obligation to repair varnished or stained millwork which deteriorates due to exposure to weather, shrinkage, expansion and contraction.

16.14 Issue: Exterior stain or paint is peeling, chalking or fading except gutters, downspouts or other sheet metal areas.

Performance Standard: The occurrences of peeling, chalking or fading, except through the normal oxidation process, should not occur during the warranty period.

Builder's Obligation: Builder shall properly prepare and repaint affected areas, matching color as closely as possible. The owner must understand touch-up paint may not match exactly. Should the paint deterioration affect the majority of a wall or area, the areas should be repainted. The builder shall repaint in accordance with standards of good workmanship, but no warranty will be extended on the newly repainted surfaces.

Wallpaper

16.15 Issue: Wallpaper does not adhere to wall.

Performance Standards: Under normal circumstances, wallpaper should not peel from the wall.

Builder's Obligation: If the contract documents obligated the builder to install the wallpaper, the builder should reattach or replace the loose wallpaper. The builder is not responsible for the discontinuation of any wallpaper patterns. If a patch or repair is made, the builder shall match the repaired area as closely as reasonably possible to the existing wallpaper.

Notes: If the homeowner installs the wallpaper, the builder has no responsibility to repair or replace the wallpaper.

16.16 Issue: Wallpaper patterns do not match at the edges.

Performance Standard: Wallpaper patterns shall match as closely as reasonably possible.

Notes: Some mismatching at the edges may occur and is acceptable. However, defective wallpaper patterns are the responsibility of the wallpaper manufacturer, not the builder.

Builder's Obligation: If the contract documents require the installation of wallpaper, the builder shall match the patterns at the seams as closely as reasonably possible. However, the builder shall not be responsible for defective patterns or variations in wallpaper placed on existing walls as part of a remodeling project.

16.17 Issue: Wall covering installed by homeowner or paint applied by homeowner is affected by related repairs.

Performance Standard: The wall surface should be inspected by the homeowner prior to papering or painting. Since the work was done by the homeowner, the homeowner accepted the surface as satisfactory for the original work at the time of installation. The homeowner is responsible for any subsequent paint and paper repairs to the surface.

Builder's Obligation: The builder has no responsibility for wall coverings installed, or paint applied, by the homeowner which is affected by builder-related repairs.

SECTION 17.
Interior Trim & Molding

Preliminary Information

Trim and moldings are also affected by the settling and shrinking process in the home. As a result of this process, trim and moldings may separate from their adjoining surfaces. Small separations should be expected by the homeowner and are acceptable.

Gaps and Nails

17.1 Issue: Gaps are present at the trim and/or molding joints.

Performance Standard: Gaps in trim and molding joints that are greater than 1/16 inch in width and exist at the time of closing require repair.

Builder's Obligation: Gaps in molding existing at the time of closing which are more than 1/16 inch in width but less than 3/16 inch in width should be puttied or caulked. Gaps existing at the time of closing which are 3/16 or greater require replacement parts.

17.2 Issue: Gap exists between molding and adjoining surface.

Performance Standard: At the time of closing, gaps between molding and an adjoining surface that are greater than 1/8 inch in width should be repaired.

Builder's Obligation: Gaps existing at the time of closing, that are more than 1/8 inch in width but do not exceed 1/4 inch in width should be puttied or caulked by the builder. The builder shall replace the trim with gaps exceeding 1/4 inch in width.

17.3 Issue: Improperly set nails or improperly filled nails are present in trim or molding.

Performance Standard: Painted and finished nail holes should not be readily visible from a distance of 6 feet under normal lighting conditions.

Notes: This performance standard does not apply to trim and molding installed in areas hidden from view such as unfinished basements and the insides of closets.

Builder's Obligation: If painting and finishing was part of the original contract documents, the builder is obligated to ensure that nails in trim or molding meet the performance standard.

Corners and Edges

17.4 Issue: An inside or outside corner of trim is not coped or mitered.

Performance Standard: Inside and outside trim corners should be coped or mitered.

Builder's Obligation: At the time of closing, the builder will finish the trim corners in accordance with the performance standard.

17.5 Issue: Top and bottom edges of molding are misaligned.

Performance Standard: Top or bottom edges of adjoining trim or moldings should be aligned within 1/16 inch.

Builder's Obligation: At the time of closing, the builder will repair or replace the trim or molding in accordance with the performance standard.

Aesthetic Issues

17.6 Issue: Splits, cracking or checking are present in interior trim.

Performance Standard: Splits, cracks or checking greater than 1/16 inch should be repaired. For cracks up to 1/16 inch, puttying or caulking is an acceptable method of repair, provided the putty or caulk is not visible at a distance of 6 feet under normal lighting conditions. Interior trim with splits, cracks or checking greater than 1/16 inch should be replaced and repainted by the builder.

Builder's Obligation: At the time of closing, the builder will repair or replace the trim to meet the performance standard.

17.7 Issue: Visible hammer marks are present on interior trim.

Performance Standard: At the time of closing, hammer marks on interior trim should not be visible from a distance of 6 feet under normal lighting conditions.

Builder's Obligation: At the time of closing, the builder will fill hammer marks and refinish or replace affected trim to meet the performance standard.

SECTION 18.
Landscaping & Decks

Preliminary Information

Generally, most wood decks are made of pressure treated lumber. The process of "pressure-treating" lumber is the process of forcing preservatives deep into the wood fibers. Pressure treated lumber has a greater resistance to decay and termites than non-pressure treated lumber. After exposure to natural weather conditions, pressure treated wood becomes gray in color. When the wood dries out, it can crack, split and warp. There are certain measures homeowners can take to preserve their deck for many years to come. The homeowner will likely want to periodically apply a stain, water repellant or preservative to prolong the life of the homeowner's deck.

Exterior composite lumber should be installed in accordance with the manufacturer's specifications. Composite exterior trim and decking tend to expand with temperature variations. Some spacing between boards is to be expected by the homeowner.

If any landscaping has been installed by the builder, the builder has installed the same in accordance with accepted practices in the Northern Kentucky Area. It is the homeowner's responsibility to maintain any landscaping on the property. The homeowner should be careful not to interfere with the drainage system on the property and not to allow the grade of any landscaping to slope toward the home.

Dead Landscaping

18.1 Issue: Seeding, sod, plants or trees installed by builder are dying.

Performance Standard: Seeding, sod, plants or trees and landscape installed by the builder as required by the contract documents should be in a good condition at the time of closing. The homeowner should promptly notify the builder of any perceived defects in the landscaping at the later of the date of the occupancy inspection or the date of installation of the landscaping.

Notes: The builder assumes no responsibility for sod laid during temperatures above 68 degrees, that is not watered within 2 hours of installation and thereafter, daily.

Builder's Obligation: Defects in landscaping noted by the homeowner prior to closing will be corrected. Notwithstanding the foregoing, the builder is not responsible for those items that are part of a landscape package that are alive at the time of closing and later die.

18.2 **Issue:** Existing trees, bushes, or grasses die during construction or after home is completed.

Performance Standard: During or after the construction process, existing trees, bushes, and grasses existing on the building site could be affected by and die due to the construction process.

Builder's Obligation: The builder is not obligated to repair or replace existing landscaping that dies during construction or after the home is completed.

18.3 **Issue:** Outdoor plants moved during construction die after the project is completed.

Performance Standard: Plants that must be physically transported during construction shall be moved, maintained, and replanted by homeowner.

Builder's Obligation: The builder is not obligated to move, repair, replace, or maintain plants that are moved during the construction process.

18.4 **Issue:** Tree stumps are left in the disturbed portion of the construction site.

Performance Standard: All tree stumps either existing prior to construction or created during the construction process, within the disturbed area of the project, are to be removed by the builder in accordance with the contract documents.

Builder's Obligation: The builder will remove any stump from the disturbed area of construction site to satisfy the performance standard.

Deck Spacing

18.5 **Issue:** Wood deck "springs" or shakes when walked upon.

Performance Standard: All structural members in a wood deck are sized and spaced according to applicable building codes, the National Forest and Paper

Association span tables, or a higher standard of performance agreed upon by the homeowner and the builder prior to construction.

Notes: Deflection may indicate insufficient stiffness in the lumber or may reflect an aesthetic consideration independent of the strength and safety requirements of the lumber. Joists and girders are required to meet standards for both stiffness and strength.

Homeowner's Maintenance Obligation: The homeowner is obligated to maintain the deck from the date of closing forward.

Builder's Obligation: At the time of closing, the builder will reinforce or modify, as necessary, any wood deck not meeting the building code. After closing, the builder is not obligated to remedy springiness.

18.6 Issue: Uneven spacing between decking exists.

Performance Standard: Provided the builder and homeowner do not otherwise agree, the space on opposite sides of individual deck boards should not differ in average width by more than 1/4 inch at the time of installation.

Notes: Due to natural shrinkage and expansion, the spaces between deck boards will change over time. The homeowner can help reduce shrinkage and expansion by properly and periodically sealing the deck.

Builder's Obligation: At the time of installation, the builder will realign or replace deck boards to meet the performance standard. The builder shall not be responsible for correcting spacing other than at the time of installation of the deck.

18.7 Issue: Wood deck is not level.

Performance Standard: No point on the deck surface shall be more that 1/2 inch higher or lower than any other deck surface point within 10 feet on a line parallel to the house, unless the homeowner and builder agree to build a deck that is not level in light of existing structural inaccuracies.

Notes: A slope of approximately 1/8 inch per foot is desirable in the perpendicular direction of the decking to allow for proper water run-off and to decrease the likelihood of ice formation on the deck.

Builder's Obligation: The builder will repair the deck as necessary in accordance with the performance standard.

Deck Finishing

18.8 Issue: Wooden deck is splitting, warping or cupping.

Performance Standard: At the time of installation, deck boards shall not contain splits greater than 1/8 inch, shall not contain cups greater than 1/4 inch in a 5 and 1/2 inch measurement, and shall not contain warps or bows greater than 3/8 inch in an 8 foot measurement.

Notes: Regular and proper sealing of the deck by the homeowner may decrease the likelihood that the deck boards will split, warp or cup.

Builder's Obligation: At the time of installation, the builder will replace any deck boards necessary to meet the performance standard.

18.9 Issue: Variations in stain color are present on wood deck.

Performance Standard: Variations in the color of stain used on wood decks are unacceptable if caused by an improper stain application or the failure to properly mix the stain.

Notes: Variations in the color of stain resulting from the weathering process or the porosity of particular deck boards are not within the scope of this performance standard.

Builder's Obligation: The builder will re-stain deck boards in accordance with the performance standard.

18.10 Issue: Wood deck board has nail head protruding.

Performance Standard: At the time of closing, no nail heads should be protruding from the deck floor.

Builder's Obligation: On or before the date of closing, the builder will refasten nails with heads protruding from the floor of the deck to ensure that the heads are flush with the surface of the deck.

Homeowner's Maintenance Obligation: The homeowner is obligated to periodically check the deck for loose or protruding nails and to re-nail the deck, as necessary, to correct such occurrences.

Notes: Nail pops can result from the natural shrinkage and expansion of wood over time and can cause deck boards to loosen. The homeowner may be required to secure the loose deck boards in addition to re-nailing the deck. However, the homeowner should avoid re-using the same nail holes when re-nailing the deck.

18.11 Issue: Nails are "bleeding" on wood deck.

Performance Standard: Nail stains extending more than 1/2 inch from the nail head and readily visible from a distance of more than 6 feet should be corrected.

Notes: If "natural weathering" or semi-transparent stains are specified in the contract documents, this performance standard shall be inapplicable.

Builder's Obligation: The builder shall repair or replace deck boards as necessary in accordance with the performance standard.

18.12 Issue: Grade stamps on treated wood decks, stairs, etc. are visible.

Performance Standard: Grade stamps will be visible and are to be expected the homeowner.

Builder's Obligation: The builder is not obligated to repair or replace deck boards with visible grade stamps.

SECTION 19.
Masonry (Brick and Stone)

Preliminary Information

Masonry veneers of brick and stone are typically durable and require little maintenance from the homeowner. Nevertheless, such materials are subject to natural conditions such as weathering, freezing, thawing and color variations. There are two main areas of masonry work in a residential structure. The first area is the masonry work that constitutes the exterior veneer of the structure. The second area involves the masonry work for fireplaces and chimneys. The performance standards for fireplaces and chimneys are discussed in Section 9.

Cracks, Crumbling and Efflorescence

19.1 Issue: Cracks are present in masonry walls or veneer.

Performance Standard: Cracks in masonry walls or veneer that exceed 1/8 inch in width are not acceptable.

Builder's Obligation: Toward the end of the warranty period, the builder will repair cracks in excess of the performance standard. Such repairs may be made by tuck pointing or patching. The builder is not responsible for color variations from the original mortar and the mortar utilized in repair work.

Notes: Small, continuous hairline cracks in masonry or veneer are common and should be expected by the homeowner.

19.2 Issue: Brick veneer is crumbling or spalling from chimney surface.

Performance Standard: New brick should not spall. Any new brick that spalls should be repaired. However, the spalling of used brick is acceptable.

Builder's Obligation: The builder is obligated to repair new brick if spalling appears. The builder is under no obligation to repair spalling of used brick because the builder does not provide a warranty for the used brick.

19.3 Issue: Efflorescence appears on the masonry or veneer.

Performance Standard: Such occurrence, usually white in color, results from water soluble salts migrating through the masonry structure where they are deposited on the surface through evaporation. Because it appears on the face of the wall, it is often erroneously assumed to be the brick that are at fault. To the contrary, efflorescence results from chemical compounds inherently found in the various elements of the masonry, i.e. brick mortar, mixing water, etc. and as such, they do not reflect a defect in the brick.

Builder's Obligation: The builder has no obligation to remove efflorescence from the masonry or veneer.

Uneven Courses

19.4 Issue: Brick or masonry veneer course is uneven.

Performance Standard: No point along the bottom of any standard size brick course shall be more than 3/8 inch higher or lower than any other point within 10 feet along the bottom of the same course, or 5/8 inch in any overall length. Notwithstanding this performance standard, the homeowner and the builder may agree to match or otherwise allow for pre-existing conditions in the brick or masonry veneer course.

Notes: Dimensional variations of brick courses vary depending upon the variations in the brick selected. Uneven brick or masonry veneer courses are a matter of aesthetics; however, the builder is obligated to meet the performance standard.

Builder's Obligation: The builder will rebuild the wall or replace bricks as necessary to meet the performance standard.

Stains and Color Variations

19.5 Issue: Mortar stains are present on exterior brick and stone.

Performance Standard: Exterior brick and stone shall generally be free from mortar stains detracting from the appearance of the finished wall when viewed from a distance of 20 feet.

Builder's Obligation: The builder will clean the mortar stains to meet the performance standard.

19.6 Issue: Color variations are present in the mortar joints.

Performance Standard: Weather conditions may cause color variations in the mortar joints. The homeowner should expect such variations as they are normal and acceptable.

Builder's Obligation: The builder is not obligated to remedy color variations in the mortar joints.

Leaks

19.7 Issue: The brick veneer is absorbing water and water is leaking inside the home.

Performance Standard: Water should not leak in the home under normal conditions. During certain weather conditions or lawn sprinkling, the brick veneer may absorb water and penetrate the inside of the exterior foundation walls.

Builder's Obligation: The builder is obligated to check the flashing and caulking of the structure to ensure that all mortar joints are tight.

Homeowner's Maintenance Obligation: In the event the brick were to require waterproofing, such waterproofing is the owner's responsibility rather than the builder's responsibility.

SECTION 20.
Mold

Preliminary Information

Mold is a type of fungus. It occurs naturally in the environment, and it is necessary for the natural decomposition of plant and other organic material. It spreads by means of microscopic spores borne on the wind, and is found everywhere life can be supported. Residential home construction is not, and cannot be, designed to exclude mold spores.

If the growing conditions are right, mold spores can grow in your home. Most homeowners are familiar with mold growth in the form of bread mold, and mold that may grow on bathroom tile.

In order to grow, mold requires a food source. This might be supplied by items found in the home, such as fabric, carpet or even wallpaper, or by building materials, such as drywall, wood and insulation, to name a few. Also, mold growth requires a temperate climate. The best growth occurs at temperatures between 40º F and 100º F. Finally, mold growth requires moisture. Moisture is the only mold growth factor that can be controlled in a residential setting. By minimizing moisture, a homeowner can reduce or eliminate mold growth.

Moisture in the home can have many causes. Spills, leaks, overflows, condensation, and high humidity are common sources of home moisture. Good housekeeping and home maintenance practices are essential in the effort to prevent or eliminate mold growth. If moisture is allowed to remain on the growth medium, mold can develop within 24 to 48 hours.

20.1 Issue: Mold growth is present inside the home.

Performance Standard: Everything within reasonable construction practices that can be done to install materials that are mold-free should be done.

Homeowner's Maintenance Obligation: The homeowner can take positive steps to reduce or eliminate the potential for mold growth in the home. These steps include the following:

1. Before bringing items into the home, check for signs of mold. Potted plants (roots and soil), furnishings, or stored clothing and bedding material, as well as many other household goods, could already contain mold growth.

2. Regular vacuuming and cleaning will help reduce mold levels. Mild bleach solutions and most tile cleaners are effective in eliminating or preventing mold growth.

3. Keep the humidity in the home below 50 percent. Vent clothes dryers to the outdoors. Ventilate kitchens and bathrooms by opening the windows, by using exhaust fans, or by running the air conditioning to remove excess moisture in the air, and to facilitate evaporation of water from wet surfaces. Put a cover on any open aquariums.

4. Promptly clean up spills, condensation and other sources of moisture. Thoroughly dry any wet surfaces or material. Do not let water pool or stand in your home. Use a dehumidifier to curtail moisture in the air. Promptly replace any materials that may not be thoroughly dried, such as drywall or insulation.

5. Inspect for leaks on a regular basis. Look for discolorations or wet spots. Repair any leaks promptly. Inspect condensation pans (refrigerators, dehumidifiers and air conditioners) for mold growth. Take notice of musty odors, and any visible signs of mold. Maintain positive drainage away from the foundation.

6. 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 color safe. Porous materials, such as fabric, upholstery or carpet should be discarded. Should the mold growth be severe, call on the services of a qualified professional cleaner.

7. Properly ventilate your basement. Do not store boxes on basement floors as they can be a potential source for moisture. Condition your basement as you would other areas of the house to reduce moisture levels.

Notes: All mold does not necessarily have harmful consequences, but certain strains of mold may have adverse health effects in susceptible persons. The most documented effects are allergic reactions, including skin irritation, watery eyes, runny nose, coughing, sneezing, congestion, sore throat and headache. Some

experts contend that mold causes serious symptoms and diseases. However, experts disagree about the level of mold exposure that may cause health problems, and about the exact nature and extent of the health problems that may be caused by mold. The Center for Disease Control states that a causal link between the presence of toxic mold and serious health conditions has not been proven.

Builder's Obligation: The builder has made no analysis or verification of mold growth, and assumes no responsibility for such a determination. The builder shall not be responsible for the detection, containment, or remediation of any mold growth, when reasonable construction standards are followed.

SECTION 21.
Plumbing

Preliminary Information

The plumbing system of a home consists of several components: the water supply and drain lines, the septic system (if any), and the plumbing fixtures.

Water Supply and Drain Lines

The following standards apply to issues with the water supply and drain lines only to the extent the builder is responsible for the service of such lines.

21.1 Issue: Leaky pipes.

Performance Standard: Plumbing pipes should not leak.

Notes: A build-up of condensation on the pipe itself is not a leak and is not a defect.

Builder's Obligation: The builder is obligated to repair leaky pipes as necessary to eliminate the leak.

21.2 Issue: Condensation is present on exterior surface of pipes.

Performance Standard: Condensation on pipes is not uncommon and requires no action by the builder.

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to maintain appropriate humidity levels in the home to reduce the likelihood of condensation forming on pipes.

Builder's Obligation: The builder is not obligated to remedy condensation on pipes.

21.3 Issue: Valve or faucet contains a leak.

Performance Standard: Properly installed valves and faucets should not leak unless the valve or faucet itself is defective.

Homeowner's Maintenance Obligation: If leaking is due to a worn washer, its replacement is the homeowner's responsibility.

Builder's Obligation: The builder is obligated to repair or replace an improperly installed or defective valve or faucet that leaks.

21.4 Issue: Pipes freeze and burst.

Performance Standard: Properly installed pipes should be adequately protected or insulated to prevent freezing and bursting.

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to drain and/or otherwise insulate or protect exterior faucets from freezing. The homeowner is also obligated to maintain reasonable temperatures during cold weather to reduce the likelihood of pipes freezing. The homeowner should open cabinet doors and keep garage door closed during extremely cold weather.

Builder's Obligation: The builder will repair pipes that freeze and burst to meet the performance standard.

21.5 Issue: Inadequate or complete failure of delivery of water to the home from the water supply system.

Performance Standard: Connections to municipal or county water systems should deliver an appropriate water supply to the home.

Notes: The builder has no responsibility for conditions beyond the builder's control that affect the water supply to the home.

Builder's Obligation: The builder will properly connect the water supply system of the home to the appropriate city or county water supply system to ensure that an appropriate supply of water will be provided to the home.

21.6 Issue: Noise is present in pipes.

Performance Standard: It is not uncommon for pipes in the home to be noisy. However, pipes that make a pounding noise (known as a "water hammer") should be repaired.

Builder's Obligation: It the water hammer results from water pipes that are not properly secured, the builder will adjust or repair the pipe to meet the performance standard.

21.7 Issue: Exterior faucet freezes.

Performance Standard: If installed properly and properly maintained, the exterior faucet should not freeze.

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to remove the hose and any attachments from the exterior faucet, to shut off the water supply to the faucet, and to drain the pipe to the exterior faucet during cold weather. The homeowner's negligence could result in a subcontractor or contractor invoicing for the service call.

Builder's Obligation: The builder will replace improperly installed exterior faucets to meet the performance standard.

Fixtures

21.8 Issue: Water is leaking from bathtub or shower.

Performance Standard: Leaks from showers and tubs are not acceptable.

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to maintain the grout and caulking in and around showers and tubs in a good conditions.

Builders Responsibility: If the leak is caused by something other than deteriorated caulking (i.e. shrinking or pulling away), the builder will repair the bathtub or shower as necessary to meet the performance standard.

21.9 Issue: Fixtures, appliances or trim contains defects.

Performance Standard: Defective fixtures, appliances, or trim is unacceptable.

Builder's Obligation: The builder will repair or replace defects in fixtures, appliances, or trim as necessary to meet the performance standard.

21.10 Issue: Cracks, chips or scratches are present on the surface of porcelain, marble or fiberglass fixtures.

Performance Standard: If such items are visible from a distance of 6 feet under normal lighting conditions, the items should be corrected.

Homeowner's Obligation: The homeowner is responsible for repairing any cracks, scratches or chips not noted at time of closing.

Builder's Obligation: If such items are reported to the builder prior to closing, the builder is responsible for repairing the scratches, chips, and cracks in order to meet the performance standard.

21.11 Issue: Utility tub is cracked.

Performance Standard: Utility tubs should not leak at the time of closing.

Builder's Obligation: If the homeowner notes the crack at or before the time of closing, the builder shall repair or replace the tub as necessary to meet the performance standard.

Homeowner's Maintenance Obligation: The homeowner is responsible for repairing any cracks not noted at closing or occurring subsequent to closing.

Sewers and Sump Pumps

21.12 Issue: Sewer is clogged.

Performance Standard: The home's sewer system (including any fixtures or drains) should function properly.

Builder's Obligation: Within the first 30 days of occupancy, the builder will make any necessary repairs to restore sewers, fixtures, and drains to proper operating condition, provided the clog is not attributable to the homeowner's actions, negligence or misuse.

21.13 Issue: Sump pump is not properly functioning.

Performance Standard: A properly installed and operating sump should pump water from the sump pit in accordance with the manufacturer's specifications.

Homeowner's Maintenance Obligation: It is the homeowner's responsibility to maintain the sump pit and the discharge pipe in a good condition. Obstructions or debris in the sump pit area or an obstructed discharge pipe can impede the function of the sump pump. The homeowner is also responsible for maintaining a safe and continuous power supply to the sump pump and for following all other manufacturer's guidelines with respect to the use and maintenance of the sump pump.

Notes: The homeowner should understand that water will accumulate at discharge site and the builder is not obligated to correct or remedy the accumulation of water at the discharge site.

Builder's Obligation: The builder will repair or replace any sump pump defect as necessary to meet the performance standard.

SECTION 22.
Roofing System

Preliminary Information

The roofing system of a home serves as a weatherproofing barrier which protects the home from the elements. Roofing systems can be comprised of several types of roofing material, including asphalt, fiberglass, wood, tile and slate. The roofing material on most homes is of asphalt composition.

The shingle manufacturer holds all warranties for shingles used in the roofing systems. Homeowners should familiarize themselves with the shingle warranties.

After severe weather conditions occur, the homeowner should have the roofing system visually inspected for damage and should notify the homeowner's insurance carrier of any damage noted by the inspector.

The gutter and downspout system of the roofing system is designed to keep water away from the shingles and the foundation of the home. In order for the gutters and downspouts to work properly, they must be maintained free of debris.

Roof flashing is made of galvanized metal, aluminum or copper. The flashing serves to keep water from infiltrating the structure at the point were the shingles meet other building materials such as siding or brick.

Structural Deficiencies

22.1 Issue: Roof ridge beam sags or bows.

Performance Standard: The roof ridge beam should not sag or bow more than 1 inch in 10 feet, and not to exceed a 2 and 1/2 inch deflection on any one continuous ridge.

Builder's Obligation: The builder will repair the roof as necessary to meet the performance standard.

22.2 Issue: Roof rafter is bowed.

Performance Standard: Rafters shall not be bowed more than 1 inch in 8 feet.

Builder's Obligation: The builder will repair any deficiencies in the rafters to meet the performance standard.

22.3 Issue: Roof sheathing is wavy or bowed.

Performance Standard: Roof sheathing should not bow or wave more than 1/2 inch in 4 feet.

Builder's Obligation: The builder will straighten bowed roof sheathing as necessary to meet the performance standard.

Leaks from Vents and Louvers

22.4 Issue: Leak from roof vent or attic louver.

Performance Standard: Roof vents and attic louvers should not leak. For purposes of this performance standard, the infiltration of wind-driven rain and snow are not considered "leaks" and the builder shall have no responsibility for such occurrences.

Notes: Attics must be vented in accordance with the applicable building code. If the homeowner alters the original ventilation system installed by the builder, the builder is not responsible for any problems resulting from the homeowner's actions.

Builder's Obligation: The builder will repair or replace the roof vents or attic louvers as necessary to meet the performance standard.

Leaks from Shingles and Flashing

22.5 Issue: Leaks are present in the roof or flashing.

Performance Standard: Under normal circumstances and in the absence of negligence on behalf of the homeowner, the roof system and shingles should not leak. Occasionally, rain, or snow blowing at certain angle in relation to the shingles, or ice build-up may result in a temporary leak.

Homeowner's Maintenance Obligation: It is the homeowner's obligation to maintain the roof drains, gutters, and downspouts in a good condition and free of debris and ice.

Builder's Obligation: The builder will repair any verified roof or flashing leaks not caused by wind-driven rains or snows, ice build-up, leaves, debris, or the homeowner's actions or neglect.

22.6 Issue: Ice build-up is present on the roof.

Performance Standard: During prolonged cold spells, ice will likely build-up on the roof due to gutters and downspouts being frozen.

Notes: Northern Kentucky experiences more freeze-thaw cycles than many other areas of the country. Variations in temperatures can result in more frequent build-up of ice on the roofing system and can result in leaks in the roofing system.

Homeowner's Maintenance Obligation: The homeowner is obligated to prevent the build-up of ice on the roofing system.

Builder's Obligation: The builder is not obligated to prevent the build-up of ice on the roofing system.

Installation and Warranty Deficiencies

22.7 Issue: Shingles have blown off the roofing system.

Performance Standard: The shingles should withstand wind speeds as specified in the manufacturer's warranty. If shingles do not perform as specified in the manufacturer's warranty, the homeowner should consult the manufacturer's warranty for the prescribed course of action.

Builder's Obligation: The builder is obligated only to ensure that the shingles of the roofing system are properly installed.

22.8 Issue: Shingles are misaligned horizontally.

Performance Standard: The builder should install the shingles in accordance with the manufacturer's specifications in order to ensure the proper appearance of the shingles in the roofing system.

Builder's Obligation: The builder will remove shingles that do not meet the performance standard and replace them with properly aligned shingles.

Deficiencies in Appearance of Shingles

22.9 Issue: Color variations between new and old shingles.

Performance Standard: Neither the shingle manufacturer nor the builder guarantees uniform color between new and old shingles. The homeowner should expect color variations in the shingles.

Builder's Obligation: The builder is not obligated to repair or replace color variations in shingles.

22.10 Issue: Shingle edges are not flat.

Performance Standard: Shingle edges and corners should be flat.

Builder's Obligation: The builder will ensure that all shingles in the roofing system lay flat.

22.11 Issue: Shingles do not properly overhang roof edges.

Performance Standard: Shingles shall overhang roof edges by not less than 1/2 inch and not more than 1 inch.

Builder's Obligation: The builder will reposition or replace shingles in accordance with the performance standard.

22.12 Issue: Surface of shingle is buckling.

Performance Standard: Surface buckling of more than 1/4 inch should be corrected.

Builder's Obligation: The builder will repair any shingles not meeting the performance standard.

22.13 Issue: Raised shingles resulting from loose sheathing nails.

Performance Standard: Nails should not loosen from roof sheathing and raise shingles from surface.

Builder's Obligation: The builder will repair all raised shingles caused by loose sheathing nails to meet the performance standard.

22.14 Issue: Roofing nails are visible at roof's edge.

Performance Standard: The nail heads shall be sealed to prevent water infiltration.

Builder's Obligation: The builder will repair the affected areas to meet the performance standard.

22.15 Issue: Holes from walk boards are visible in shingles.

Performance Standard: Holes in shingles from walk boards should be flashed and sealed below the shingle tab to prevent water infiltration. If the patch in the shingle is large enough so as to be visible from the ground, the shingle should be replaced.

Builder's Obligation: The builder will repair or replace any shingles which do not meet the performance standard.

Leaks and Drainage Issues with Roll Roofing

22.16 Issue: Water under roll roofing causes leak.

Performance Standard: Water should not be trapped under roll roofing.

Builder's Obligation: If, during the warranty period, water is trapped under the roll roofing, the builder will repair or replace the roll roofing as necessary to satisfy the performance standard.

22.17 Issue: Roof is blistered but does not leak.

Performance Standard: Blistering, bubbling or wrinkling of the surface of roll roofing is caused by unusual heat and humidity on the asphalt and is outside the control of the builder.

Builder's Obligation: The builder is not obligated to repair or replace blisters, bubbles or wrinkles in roll roofing.

22.18 Issue: Water does not run off flat roof.

Performance Standard: Water should drain from a flat roof. However, minor ponding is acceptable within the first 48 hours following a rainfall.

Builder's Obligation: The builder will engage in corrective measures to assure the roof meets the performance standard.

Flashing

22.19 Issue: New chimney flashing leaks.

Performance Standard: Under normal conditions and provided the leak is not caused by the homeowner's negligence or ice-build up, new chimney flashing should not leak.

Homeowner's Maintenance Obligation: It is the homeowner's obligation to maintain chimney flashing and chimney caps in a good condition.

Builder's Obligation: The builder will repair leaks in new chimney flashing which do not result from ice build-up or the homeowner's actions or negligence.

Gutters and Downspouts

22.20 Issue: Leaks are present in gutters or downspouts.

Performance Standard: During the warranty period, gutters and downspouts should not leak.

Homeowner's Maintenance Obligation: It is the homeowner's obligation to maintain all gutters and downspouts in a good condition and free from debris. Because aluminum gutters are caulked and riveted, gutters require continued homeowner maintenance after the warranty period expires.

Builder's Obligation: During the warranty period, the builder is obligated to repair leaks in gutters and downspouts.

22.21 Issue: Gutters overflow during a heavy rain.

Performance Standard: Gutters may overflow during a heavy rain.

Homeowner's Maintenance Obligation: The homeowner is obligated to maintain the gutters in a good condition, free from debris that could cause overflow.

Builder's Obligation: The builder will repair any gutter overflow occurring during periods of normal rainfall to meet the performance standard.

22.22 Issue: Standing water in gutter after rainfall.

Performance Standard: When gutter is unobstructed by debris, the water level shall not exceed 1 inch in depth. Industry practice is to install gutters approximately level. Consequently, it is entirely possible that some amounts of water will stand in certain sectors of gutter immediately after a rain.

Builder's Obligation: Builder will correct to meet the performance standard.

Skylights

22.23 Issue: Water leaks from skylight.

Performance Standard: Properly installed skylights should not leak. Any leaks resulting from improper installation shall be corrected.

Notes: For purposes of this performance standard, condensation on the interior surfaces of skylights does not constitute a "leak".

Builder's Obligation: The builder will repair the leaky skylight to meet the performance standard.

SECTION 23.
Site Work

Preliminary Information:

Because each construction site is unique, the term "Site Work" can encompass a variety of issues. Some common problems relating to Site Work include, settling of the ground at the site, erosion, improper drainage and standing water on the site. These issues are discussed in more detail below.

Soil Erosion

23.1 Issue: Lawn and/or landscaped areas are washing away or eroding.

Performance Standard: Seeded or sodded areas such as slopes and downspout discharge areas will wash away, depending on the amount of rain or drainage occurring prior to closing and grass taking root.

Homeowner's Maintenance Obligation: It is the homeowner's obligation to replace seed or sod in washed areas once the finished seeding, sod and/or mulch has been installed. Washing away or erosion occurs as a result of water run-off on the property and/or from adjoining properties. The homeowner is responsible for replacing seed and sod in washed out or eroded areas from time to time, even if the erosion occurs prior to closing.

Builder's Obligation: The builder is responsible for providing the proper drainage around the house and maintaining the proper existing drainage swales at the time of the finish grade. After that time, the homeowner is responsible for maintaining drainage swales. It is a normal situation to have drainage from one building lot onto another and this is to be expected by the homeowner.

Standing Water

23.2 Issue: Water is standing in yard areas graded by the builder other than designated drainage retention areas.

Performance Standard: After normal rainfall, water should not stand in a yard for more that 48 hours in excess of 1 inch in depth.

Notes: No decision regarding standing water will be made while frost, snow, or saturation exists on the ground. The possibility of standing water for more than

24 hours and up to 48 hours after an unusually heavy rainfall shall be anticipated by the homeowner.

Homeowner's Maintenance Obligation: The homeowner is responsible for the maintenance of water discharge areas beginning from the date of installation.

Builder's Obligation: If standing water exceeding the above standards occurs, it is the builder's obligation to re-grade the affected area, and re-seed and/or re-sod (if the initial lawn was sod). The builder is not responsible for any corrections if the source of the standing water stems from flow of water from an adjoining property, gutter and downspout outlet discharge areas, sump pump outlets, footing and foundation drains, or work performed by others.

Settlement

23.3 **Issue:** The ground settles around the foundation and prevents proper drainage.

Performance Standard: Settling of the ground at the site should not disrupt water drainage away from the house. However, settlement around the foundation of up to 6 inches should be expected by the homeowner provided it does not prevent proper drainage.

Homeowner's Maintenance Obligation: After the builder corrects the situation once, the homeowner should continue to ensure that a positive drainage slope away from the foundation exists and that all downspouts or sump pump discharge lines are directed away from the foundation to prevent subsequent water problems.

Notes: Backfilled ground will settle. Backfilled ground means soil that is placed around the exterior of a foundation using mechanical equipment. The soil may be soil that is displaced from the site excavation or it can be additional fill. Finished grading means the final grading of the ground in preparation for seed, sod, and/or landscaping, and the positive drainage requirements of the local building code. If finished grading is not included in the contract documents, the builder must notify the homeowner that the homeowner must satisfy his or her obligation to positively grade the property away from the foundation and that failure to do so could result in water infiltration that will not be the builder's responsibility.

Builder's Obligation: If the contract documents include finish grading, the builder is obligated, at any one time during the warranty period, to supply the soil and all labor necessary to properly replace the soil and to raise any landscaping in areas within 10 feet of the foundation to satisfy positive drainage requirements.

23.4 **Issue:** The ground around the foundation settles but does not prevent proper drainage or settlement of water, sewer, or other utility trenches or septic fields.

Performance Standard: Any settlement in the above-mentioned areas in excess of 6 inches requires further action by the builder.

Homeowner's Maintenance Obligation: Once the builder has supplied the soil, the homeowner shall supply the labor to move the soil and properly fill in the affected areas. It is the homeowner's obligation to direct all downspouts and sump pump discharge lines away from the foundation. It is recommended that the homeowner fill in depressions, as they occur, to avoid future problems.

Builder's Obligation: If the contract documents include finish grading, then the builder is responsible for, at any one time during the warranty period, supplying soil sufficient to properly fill the affected areas. The builder's obligation is limited solely to supplying the soil. The builder is not responsible for supplying the labor to properly fill the affected areas.

SECTION 24.
Synthetic Finishing Systems

Preliminary Information

A synthetic finishing system is an exterior wall building skin made up of various components, including reinforcing fabric, primus/adhesive, synthetic plaster finish, and/or insulation board.

Cracks

24.1 Issue: Insulation board in synthetic finishing system cracks, buckles, wrinkles or delaminates.

Performance Standard: Under normal conditions, and unless damaged by impact or penetration, the insulation board and substrates should not crack, buckle, wrinkle or delaminate.

Homeowner's Maintenance Obligation: The homeowner should regularly maintain the expansion joint calking to keep moisture from penetrating the synthetic finishing system.

Builder's Obligation: If not damaged by penetration or impact, the builder will repair affected areas, matching texture and color to the extent reasonably possible. The builder shall make the repairs in accordance with good workmanship standards; however, no warranty will be extended on the newly repaired surfaces.

24.2 Issue: Stucco wall surface of synthetic finishing system is cracked.

Performance Standard: Cracks in exterior stucco wall surfaces shall be no greater than 1/8 inch in width.

Notes: "Stucco" includes cement coatings and similar synthetic finishes.

Builder's Obligation: At any one time during the warranty period, the builder will repair those cracks in the stucco surface which are more than 1/8 inch in width.

Separation and Mismatching

24.3 Issue: The coating on the exterior stucco wall separates from the base.

Performance Standard: During the warranty period, the coating on the exterior wall shall not separate from the base.

Notes: The homeowner should be aware that it is impossible to perfectly match stucco coatings applied at different times. The homeowner should not expect the color of new stucco or other synthetic finish system walls to match the color of the existing stucco walls.

Builder's Obligation: At any one time during the warranty period, the builder will repair those areas where the coating has separated from the base of the exterior stucco wall.

24.4 Issue: Finish textures of exterior stucco or synthetic finishes are mismatched.

Performance Standard: The texture of new exterior stucco walls may not perfectly match the textures of existing exterior stucco walls and other synthetic finishes which are applied at different times. It is impossible to perfectly match the texture of synthetic finishes applied at different times.

Builder's Obligation: The builder is not obligated to repair variations in texture of synthetic finishes applied at different times.

Dirt and Moisture

24.5 Issue: Dirt splashes on synthetic finish.

Performance Standard: Precaution should be taken to help minimize the amount of staining from dirt splashes; however, it is impossible to fully prevent such staining.

Notes: Dirt staining is impossible to completely prevent and remove, and can be expected with synthetic finishes.

Builder's Obligation: At any one time during the warranty period, the builder will lightly clean soiled areas with water and a brush.

24.6 Issue: Moisture intrusion through synthetic finish due to lack of proper flashing.

Performance Standard: All windows, doors, roof/wall intersections, and decks require proper flashings per the manufacturer's specifications. Window and door headers require a cap flashing; sill flashings are required under all windows and doors. At roof/wall intersections, a kick out flashing is required to divert water into the gutter. All decks require flashing behind band board with ends turned out to prevent moisture intrusion behind deck and synthetic finish system.

Builder's Obligation: The builder is obligated to install all flashings in accordance with the manufacturer's specifications.

SECTION 25.
Wood Carpentry

Preliminary Information

The size, species and grade of lumber in your house have been selected to provide a safe flooring system to support normal conditions. The homeowner must avoid overloading the flooring system by placing extra heavy furniture and appliances on the floor. Provided the problems exceed the performance standards set forth in this manual, problems resulting during the lumber stabilization process should be remedied as late in the warranty period as possible to allow maximum time for stabilization.

Wood Floors

25.1 Issue: Wood sub-floors are uneven.

Performance Standard: Sub-floor should not be more than 3/8 inch off level in 32 inches as measured perpendicular with the floor joists.

Builder's Obligation: The builder is obligated to level the floors in accordance with this performance standard and the applicable building code.

25.2 Issue: Wood floor sags, springs, shakes or bounces when walked upon.

Performance Standard: Some movement of floor is normal. Floors shall be built with materials and spans in accordance with the local building codes.

Builder's Obligation: The builder will repair any floor not meeting the performance standard.

25.3 Issue: Hardwood cracking or popping under normal foot traffic.

Performance Standard: Because of the nature of the product, some cracking or popping is normal.

Builder's Obligation: The builder is not responsible for cracks and pops from hardwood floor under normal foot traffic.

Wood Beams

25.4 Issue: Bowed, cracked or twisted wood beams.

Performance Standard: Bows and twists greater than 3/4 inch in an 8 foot measurement are aesthetically unacceptable.

Notes: This performance standard addresses only aesthetic concerns caused by bowing and twisting. Any structural concerns are governed by the applicable building code.

Builder's Obligation: The builder will repair any beam or post that does not meet the performance standard.

Walls

25.5 Issue: Wood framed walls are out of plumb.

Performance Standard: The wall should not be out of plumb by more than 1/2 inch for every 8 foot vertical measurement.

Builder's Obligation: The builder will repair or replace the wall to meet the performance standard.

25.6 Issue: Wall is bowed.

Performance Standard: Bowing of interior and exterior walls of more than 3/8 inch within any 32 inch horizontal measurement, or a total of 3/4 inch on any overall horizontal wall measurement, or more than 1/2 inch within any 8 foot vertical measurement, or a total of 3/4 inch on any overall vertical wall measurement, shall be corrected.

Builder's Obligation: The builder shall repair the wall to meet the performance standard.

Ceilings

25.7 Issue: Ceilings are not level.

Performance Standard: The ceiling should not be more than 1/2 inch off level in a 48 inch span measured perpendicular to the framing members.

Builder's Obligation: The builder will correct the problem as necessary to meet the performance standard.

SECTION 26.
Vinyl, Linoleum, Asphalt & Rubber

Vinyl, linoleum, asphalt and rubber are types of resilient floors. Most resilient floors are "no-wax" floors, which means the floor contains a clear, tough surface coating. Resilient floors are subject to their manufacturer's limitations and also to variations in the dye lots. Variations in color, texture or pattern may be present in the same dye lot and can also vary among dye lots. If a partial repair of a resilient floor is required, the homeowner should realize that it may be impossible for the builder to exactly match the new flooring to the old or to even obtain the same floor pattern, if the pattern has been discontinued.

Nail Pops and Depressions

26.1 Issue: Resilient floor contains nail pops which are visible from the floor surface.

Performance Standard: Visible nail pops in resilient floors should be repaired.

Builder's Obligation: The builder, at the builder's option, will repair or replace the affected portion of the resilient floor as necessary to meet the performance standard. The builder will use reasonable efforts to repair or replace the affected area with similar materials; however, the builder is not responsible for color variations or the discontinuation of any pattern.

26.2 Issue: Sub-floor irregularities have caused visible depressions or ridges in resilient floor.

Performance Standard: Visible depressions or ridges of more than 1/8 inch are unacceptable. 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 depression or ridge.

Builder's Obligation: The builder will correct the issue as necessary to meet this performance standard. The builder will use reasonable efforts to repair or replace the affected area with similar materials; however, the builder is not responsible for color variations or the discontinuation of any pattern.

Installation Deficiencies

26.3 Issue: Resilient floor comes unglued.

Performance Standard: A resilient floor should not lift or detach from the surface to which it adheres.

Builder's Obligation: The builder will correct the issue as necessary to meet this performance standard. The builder will use reasonable efforts to repair or replace the affected area with similar materials; however, the builder is not responsible for color variations or the discontinuation of any pattern.

26.4 Issue: Joints of resilient sheet floor contain seams or gaps.

Performance Standard: Some seaming is acceptable; however, gaps at seams of similar materials must be corrected and gaps of more than 1/8 inch at seams of dissimilar materials must be corrected.

Builder's Obligation: The builder will correct the issue as necessary to meet this performance standard. The builder will use reasonable efforts to repair or replace the affected area with similar materials; however, the builder is not responsible for color variations or the discontinuation of any pattern.

26.5 Issue: Roll vinyl flooring contains bubbles.

Performance Standard: Provided the floor is not a perimeter attached vinyl floor, bubbles greater than 1/16 inch in height must be repaired.

Notes: This performance standard is inapplicable to perimeter attached vinyl floors.

Builder's Obligation: The builder is obligated to correct the affected area as necessary to meet the performance standard.

26.6 Issue: Patterns on roll vinyl flooring are not properly aligned.

Performance Standard: Patterns at seams between adjoining pieces of flooring shall not be misaligned by more than 1/16 inch.

Builder's Obligation: The builder will correct the issue as necessary to meet this performance standard.

26.7 Issue: Loose floor tiles are present in resilient floor.

Performance Standard: Resilient floor tiles must be properly secured to the floor.

Builder's Obligation: The builder is obligated to properly secure loose resilient floor tiles. Preexisting adhesive should be removed by the builder as necessary to effectuate the repair.

26.8 Issue: Corners or patterns of resilient floor tiles are not properly aligned.

Performance Standard: The corners of adjacent resilient floor tiles shall not be misaligned by more than 1/8 inch.

Notes: Improperly aligned patterns do not fall within the scope of this performance standard unless the improper alignment results from improper orientation of floor tiles.

Builder's Obligation: The builder will correct resilient floor tiles with improperly aligned corners as necessary to meet the performance standard.

How to Contact Us

HBANK is available to answer any questions you may have regarding these performance standards. Homeowners, builders and remodelers are encouraged to provide comments and suggestions regarding their experiences with the performance standards to HBANK. Responses should be in writing and submitted via regular mail to the following address: Home Builders Association of Northern Kentucky, Inc., 209 Grandview Drive, Fort Mitchell, KY 41017, (859) 331-9500. Visit the HBA web site at www.hbanky.com for future Performance Standards Manual updates. Any comments received may be considered for future editions of this manual. This manual is sold with the understanding that HBANK is not engaged in rendering legal, accounting, or other professional advice. If legal advice or other expert assistance is required, the services, of a competent attorney or other professional should be sought.