



and
Affiliates

Warranty
Manual

Site Work	Pg 1
Foundation	
1. General	Pg 3
2. Interior Concrete Slab	Pg 4
3. Basement & Crawl Space Concrete Block Walls	Pg 5
4. Basement & Crawl Space Poured Walls	Pg 6
Moisture and Leaks	
1. Basement Floor & Walls	Pg 8
2. Crawl Spaces	Pg 8
Columns	Pg 10
Wood Floor Framing	
1. Floor Systems	Pg 10
2. Beams, Columns, & Posts	Pg 11
3. Plywood & Joists	Pg 12
Walls	
1. Wall Framing	Pg 16
2. Wall Insulation	Pg 16
3. Windows	Pg 17
4. Exterior Doors	Pg 18
Exterior Finish	
1. Wood & Hardboard Siding	Pg 22
2. Aluminum or Vinyl Lap Siding	Pg 24
3. Cement Boards Siding	Pg 27
4. Stucco & Parge	Pg 29
5. Exterior Trim	Pg 30
6. Paint, Stain, & Varnish	Pg 31

Roofs

- 1. Roof Structure Pg 33
- 2. Roof Sheathing Pg 33
- 3. Roof Vents Pg 33
- 4. Roof Installation & Leaks Pg 33
- 5. Roll Roofing Pg 36
- 6. Chimney Pg 37
- 7. Gutters & Downspouts Pg 37
- 8. Skylights Pg 38

Plumbing

- 1. Water Supply System Pg 39
- 2. Plumbing Fixtures Pg 40
- 3. Sanitary Sewer or Septic Systems Pg 41

Electrical

- 1. Fuses & Circuit Breakers Pg 42
- 2. Outlets & Lights Pg 42
- 3. Fans Pg 43
- 4. Smoke Detectors Pg 44

Interior Climate Control

- 1. Air Infiltration Drafts Pg 45
- 2. Humidity Control & Condensation Pg 45
- 3. Heating System Pg 47

Central Air- Conditioning System Pg 47

Interior

- 1. Interior Doors Pg 50
- 2. Interior Stairs Pg 51
- 3. Trim Molding Pg 53
- 4. Cabinets Pg 54
- 5. Countertops Pg 56

Interior Wall Finish

- 1. Lath & Plaster Pg 59
- 2. Gypsum Wallboard Pg 59
- 3. Paint, Stain, & Varnish Pg 60
- 4. Wallpaper & Vinyl Wall Coverings Pg 62

Floor Finishes

- 1. Carpeting Pg 63
- 2. Roll Vinyl & Resilient Tile Flooring Pg 63
- 3. Wood Flooring Pg 66
- 4. Tile, Brick, Marble, & Stone Flooring Pg 68

Miscellaneous

- 1. Fireplace & Wood Stove Pg 70
- 2. Concrete Stoops & Steps Pg 71
- 3. Garage Pg 71
- 4. Driveways & Sidewalks Pg 72
- 5. Wood Decks Pg 74
- 6. Landscaping Pg 76

Glossary of Common Terms Pg 78

Site Work

1.100 Issue: The ground has settled around the foundation, over utility trenches, or in other areas.

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

Repairs: If the contractor provided final grading, one time only the contractor will fill areas that settle more than 6 inches and that affect proper drainage. The consumer will be responsible for removal and replacement of shrubs, grass, other landscaping, pavement, sidewalks, or other improvements affected by placement of such fill.

1.101 Issue: The site does not drain properly.

Standard: To ensure proper drainage in the immediate area around the home, the contractor shall establish the necessary grades and swales if the work is included in the contract. Standing water or ponds of water shall not remain for extended period in the immediate area of the house after a rain (generally no more than 24 hours), except in swales that drain other areas or in areas where sump pumps receive discharge. In these areas a longer period can be anticipated (generally no more than 48 hours). Water may stand longer during periods of heavy rains, especially when heavy rains occur on successive days. No grading determination shall be made while frost or snow is on the ground or while the ground is saturated.

Repairs: If the grading is part of the construction or purchase agreement, the contractor is responsible for initially establishing the proper grades and swales.

Discussion: Grass and other landscaping are integral components of the storm water management practice needed to minimize erosion from the site. It is the consumer's responsibility to maintain such grass and other landscaping to help ensure proper functioning of the site drainage system. The consumer is responsible for maintaining such grades and swales once the contractor has properly established them.

1.102 Issue: The site has soil erosion.

Standard: The contractor is not responsible for soil erosion due to acts of God, or other conditions beyond the contractor's control.

Repairs: No action is required. The contractor is not responsible for erosion due to acts of God, exceptional weather conditions, site alterations by the consumer,

lack of maintenance by the consumer, or other conditions beyond the contractor's control.

1.103 Issue: Water from a nearby or adjacent property flows onto the consumer's lot.

Standard: The contractor is responsible for providing a reasonable means of draining off the lot water that is created (rain, melting snow or ice) on the lot, but is not responsible for water flowing from a nearby or adjacent property or on which no dwelling has been erected other than providing proper slopes around the newly erected dwelling.

Repairs: It is the contractor's responsibility to control water only in the immediate area of the new dwelling.

1.104 Issue: Existing trees, shrubs, or other vegetation may be damaged in the course of construction.

Standard: The contractor will review the existing condition of the landscape with the consumer. The contractor will make a reasonable and cost-effective effort to preserve existing landscaping, but the survival of existing landscaping cannot be guaranteed.

Repairs: No contractor action is needed.

Foundation

General

2.100 Issue: The foundation is out of square.

Standard: As measured at the top of the foundation wall, the diagonal of a triangle with sides of 12 feet and 16 feet shall be no more than 1 inch more or less than 20 feet.

Repairs: The contractor will make necessary modifications to the foundation not complying with the performance guidelines for squareness to provide a satisfactory appearance. The contractor may square the first-floor deck or walls by cantilevering over the foundation or locating the deck or walls inset from the outside face of the foundation.

Discussion: Squareness is primarily an aesthetic consideration. The corrective measure emphasizes the primarily aesthetic nature of squareness and makes the criterion for correction “a satisfactory appearance.” This allows the contractor to make either a structural change or some cosmetic modification as most appropriate. There are many instances in which the squareness of a foundation is not of consequence because subsequent construction provides an opportunity to make corrections.

2.101 Issue: the foundation is not level.

Standard: This guideline applies only when the levelness of the foundation adversely impacts subsequent construction. As measured at the top of the foundation wall, no point shall be more than ½ inch higher or lower than any point within 20 feet. Remodeling specific: The contractor and the consumer may agree to build an addition out of level in order to keep the floor of an addition on the same plane, and the roof ridge on the same line, as those of an existing, out-of-level structure.

Repairs: The contractor will make necessary modifications to any part of the foundation or to subsequent construction to meet the performance guideline for levelness. This can be effected by leveling the sills with shims, mortar, appropriate filler, or other methods.

Discussion: There are many instances in which the levelness of a foundation is not of consequence because subsequent construction provides an opportunity to make corrections. Levelness is both an aesthetic and functional consideration. Out-of-level floors can cause “stair stepping” of 4x8 foot sheathing, siding, paneling, and cabinets, and square walls must be “racked” into parallelograms when plumbing is installed. Liquids can run off countertops, and, in extreme

cases, consumers will perceive that they are walking uphill or downhill. The contractor and the consumer may agree to build an addition out of level in order to keep the floor of an addition on the same plane, and/or the roof ridge on the same line, as those of an existing, out-of-level structure.

2.102 Issue: There is a crack in a concrete footing.

Standard: Cracks greater than ¼-inch width are considered excessive.

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

Interior Concrete Slab

2.200 Issue: A concrete slab within the structure has separated or moved at control (expansion and contraction) joints.

Standard: Concrete slabs within the structure are designed to move at control joints.

Repairs: Because this is normal, no corrective action is required.

Discussion: Control joints are placed in concrete for the very purpose of encouraging cracking to take place at the joints instead of in random places.

2.201 Issue: Efflorescence is present on the surface of the basement floor.

Standard: This is a typical condition caused by moisture reacting with the soluble salts in concrete and forming harmless carbonate compounds.

Repairs: Because efflorescence is a typical chemical reaction within concrete, no corrective measures are required of the contractor.

Discussion: Efflorescence is evidenced by the presence of a white film on the surface of the concrete. It is a particularly common occurrence where masonry or concrete are in contact with high moisture levels as may be found in basements.

2.202 Issue: The concrete floor or slab is uneven.

Standard: Except where the floor or portion of the floor has been designed for specific drainage purposes, concrete floors in living areas shall not have pits, depressions, or areas of unevenness exceeding 3/8-inch in 32 inches.

Repairs: The contractor will correct or repair the floor to meet the performance guideline.

Discussion: A repair can be accomplished by leveling the surface with a material designed to repair uneven concrete.

2.203 Issue: The concrete floor slab is cracked.

Standard: Minor cracks in concrete floor slabs are normal. Cracks exceeding 3/16-inch in width or 3/16-inch in vertical displacement shall be repaired if the slab is in conditioned space or the crack interferes with the installation of finish flooring.

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

Discussion: Repairs can be made by using a material designed to fill cracks in concrete.

2.204 Issue: Interior concrete work is pitting or spalling. Pitting is evidenced by concrete that has flaked or peeled from the outer surface. Spalling is evidenced by concrete that has chipped.

Standard: Interior concrete surfaces shall not pit or spall.

Repairs: The contractor will repair defective concrete surfaces using materials designed for this purpose.

2.205 Issue: The interior concrete slab has a loose, sandy surface. This is called “dusting.”

Standard: The surface shall not be so sandy as to cause a problem for the finish flooring to be applied.

Repairs: The surface shall be corrected so as to be suitable for the finish flooring that the contractor had reason to anticipate would be applied.

Basement and Crawl Space Concrete Block Walls

2.300 Issue: A concrete block basement or crawl space wall is cracked.

Standard: Cracks in concrete block basement or crawl space walls shall not exceed 1/4-inch in width.

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

Discussion: Shrinkage cracks are common in concrete block masonry and should be expected in crawl space and basement walls. Cracks may be vertical, diagonal,

horizontal, or stepped-in masonry joints. Repairs can be made by using a material designed to fill cracks in concrete.

2.301 Issue: A concrete block basement wall is out of plumb.

Standard: Block concrete walls shall not be out of plumb greater than 1 inch in 8 feet when measured from the base to the top of the wall. **Remodeling Specific:** If tying into an existing foundation that is out of plumb, the contractor and consumer will review the existing conditions and scope of work. The contractor will make a reasonable and cost-effective effort to meet the performance guideline while complying with the existing building code.

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

2.302 Issue: A concrete block basement wall is bowed.

Standard: Concrete block walls shall not bow in excess of 1 inch in 8 feet.

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

Basement and Crawl Space Poured Walls

2.400 Issue: A poured concrete basement wall is out of plumb.

Standard: Finished concrete walls shall not be out of plumb greater than 1 inch in 8 feet when measured vertically.

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

2.401 Issue: An exposed concrete wall has pits, surface voids, or similar imperfections in it.

Standard: Surface imperfections larger than 1 inch in diameter or 1 inch in depth are considered excessive.

Repairs: The contractor will repair holes that do not meet the performance guideline.

Discussion: Pits, surface voids, and similar imperfections are sometimes called “bug holes.” More technically, they are called “air surface voids” and are caused by air entrapped at the concrete and concrete form interface. The technical term for larger voids is “honeycomb” and must be dealt with in accordance with this guideline. One method of repair is to fill the hole or void with a suitable product. The repaired area is unlikely to match the color or texture of the surrounding concrete.

2.402 Issue: A poured concrete basement wall is bowed.

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

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

2.403 Issue: A poured concrete basement or crawl space wall is cracked.

Standard: Cracks in poured walls shall not exceed ¼-inch in width.

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

Discussion: Shrinkage crack and other cracks are common and are inherent in the drying process of poured concrete walls. They should be expected in these walls due to the nature of concrete. The only cracks considered under warranty claims are cracks that permit water penetration or horizontal cracks that cause a bow in the wall.

2.404 Issue: A cold joint is visible on exposed poured concrete foundation walls.

Standard: A cold joint is a visible joint that indicates where the pour terminated and continued. Cold joints are normal and should be expected to be visible. Cold joint should not be an actual separation or a crack that exceeds ¼-inch in width.

Repairs: The contractor will cosmetically repair any cold joint that exceeds ¼-inch in width.

Moisture and Leaks

Basement Floor and Walls

2.500 Issue: Dampness is evident on basement walls or the floor.

Standard: Dampness caused by condensation of water vapor on cool walls and floors is not the responsibility of the contractor.

Repairs: Dampness due to condensation is caused by high moisture content in the air. It is the consumer's responsibility to control the humidity.

Discussion: The consumer should maintain proper grade away from the dwelling.

2.501 Issue: The basement leaks.

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

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

Crawl Spaces

2.502 Issue: Water accumulates in the interior crawl space.

Standard: Crawl spaces should be graded and proper exterior foundation drains be provided to prevent water from accumulating deeper than ¾-inch and greater than 9 square feet in the crawl space area.

Repairs: The contractor will take corrective measures to meet the performance guideline. The contractor is not responsible if the exterior grading was provided by the consumer or the consumer failed to maintain grades established by the contractor.

2.503 Issue: Condensation is evident on the crawl space surface

Standard: The contractor shall install the ventilation required by the prevailing building code.

Repairs: If the crawl space is ventilated as required by applicable building codes, then the contractor need make no further corrective actions. Further reduction of condensation is a consumer maintenance responsibility.

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

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

Columns

2.600 Issue: An exposed wood column is bowed or is out of plumb.

Standard: Exposed wood columns shall not bow or be out of plumb more than $\frac{3}{4}$ -inch in 8 feet.

Repairs: Exposed wood columns out of plumb in excess of $\frac{3}{4}$ -inch in 8 feet when measured vertically shall be replaced or repaired.

Discussion: Wood columns may become distorted as part of the drying process. Bows and other imperfections that develop after installation cannot be prevented or controlled by the contractor.

2.601 Issue: An exposed concrete column is installed bowed or out of plumb.

Standard: Exposed concrete columns shall not be installed with a bow in excess of 1 inch in 8 feet. They should not be installed out of plumb in excess of 1 inch in 8 feet.

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

2.602 Issue: A masonry column is out of plumb.

Standard: Masonry columns should not be constructed out of plumb in excess of 1 inch in 8 feet.

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

2.603 Issue: A steel column is out of plumb.

Standard: Steel columns shall not be out of plumb in excess of $\frac{3}{8}$ -inch in 8 feet when measured vertically.

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

Wood Floor Framing

Floor System

3.100 Issue: Springiness, bounce, shaking, or visible sag is present in the floor system.

Standard: All beams, joists, headers, and other structural members shall be sized according to the manufacturers' specifications or local building codes.

Repairs: The contractor will reinforce or modify, as necessary, any member of the floor system not meeting the performance guideline.

Discussion: Deflection may indicate insufficient stiffness in the lumber, or may reflect aesthetic consideration independent of the strength and safety requirements of the lumber. Structural members are required to meet standards for both stiffness and strength. When a consumer's preference is made known before construction, the contractor and the consumer may agree upon a higher standard.

Beams, Columns, and Posts

3.200 Issue: An exposed wood column or post is split.

Standard: Sawn wood columns or posts shall meet the grading standard for the species used. Splits that exceed 3/8-inch in width and more than 4 inches in length at time of installation or that develop during the warranty period are considered excessive.

Repairs: The contractor will repair or replace any beam or post that does not meet the guideline. Filling splits is acceptable to have structural members meet the guideline.

Discussion: Columns and posts will sometimes split as they dry after installation. Splitting is acceptable and is not a structural concern if columns or posts have been sized according to manufacturers' specifications or local building codes. Splitting is primarily an aesthetic rather than a structural concern.

3.201 Issue: An exposed wood beam is split.

Standard: Sawn wood beams shall meet the grading standard for the species used. Splits that exceed 3/8-inch in width and 4 inches in length at time of installation or that develop during the warranty period are considered excessive.

Repairs: The contractor will repair or replace any sawn wood beam that does not meet the guideline. Filling splits is acceptable to have structural members meet the guideline.

Discussion: Beams 2 ½ inches or greater in thickness (which normally are not kiln dried) will sometimes split as they dry after installation. Splitting is acceptable and is not a structural concern if the sawn lumber beams have been sized according to manufacturers' specifications or local building codes. Splitting is primarily an aesthetic rather than a structural concern.

3.202 Issue: An exposed wood beam or post is twisted or bowed.

Standard: Exposed wood posts and beams shall meet the grading standard for the species used. Posts and beams with bows and twists exceeding ¾-inch in an 8-foot section shall not be installed, and those that develop bows and twists exceeding ¾-inch in an 8-foot section are considered excessive.

Repairs: The contractor will repair or replace any beam or post with a bow or twist that exceeds the guideline.

Discussion: Beams and posts, especially those 3 ½ inches or greater in thickness (which normally are not kiln dried) will sometimes twist or bow as they dry after milling or installation. Twisting or bowing is usually not a structural concern if posts and beams have been sized according to manufacturers' specifications or local building codes.

3.203 Issue: An exposed wood beam or post is cupped.

Standard: Cups exceeding ¼-inch in 5 ½ inches are considered excessive.

Repairs: The contractor will repair or replace any beam or post with a defect that does not meet the guideline.

Discussion: Cupped lumber is lumber that has warped or cupped across the grain in a concave or convex shape. Beams and posts, especially those 3 ½ inches or greater in thickness (which normally are not kiln dried), will sometimes cup as they dry after milling or installation.

Plywood and Joists

3.300 Issue: The wood floor squeaks or the subfloor appears loose.

Standard: Squeaks caused by a loose subfloor are unacceptable, but totally squeak-proof floors cannot be guaranteed.

Repairs: The contractor will refasten any loose subfloor or take other corrective action to attempt to reduce squeaking to the extent possible within reasonable repair capability without removing floor or ceiling finishes.

Discussion: There are many possible causes of floor squeaks. One of the more common sources of squeaks is wood moving along the shank of a nail. Squeaking frequently occurs when lumber, plywood, or boards move slightly when someone walks over them. Boards and plywood may become loose due to shrinkage of the floor structure or subfloor as it dries after installation or seasonal changes in temperature and humidity. Nails used to fasten metal connectors (joist hangers, tie-down straps, etc.) may cause squeaks. Because of the nature of wood and construction methods, it is practically impossible to eliminate all squeaks during all seasons. Clearly, some squeaks are more objectionable than others.

3.301 Issue: A wood subfloor is uneven.

Standard: Subfloors shall not have more than a ¼-inch ridge or depression within any 32-inch measurement. Measurements should not be made at imperfections that are characteristic of the code-approved material used. This guideline does not cover transition points between different materials.

Repairs: The contractor will correct or repair the subfloor to meet the performance guideline.

3.302 Issue: A wood floor is out of square.

Standard: The diagonal of a triangle with sides of 12 feet and 16 feet along the edges of the floor shall be no more than ½-inch more nor less than 20 feet.

Repairs: The contractor will make the necessary modifications to any floor not complying with the performance guideline for squareness. The modification will produce a satisfactory appearance and may be either structural or cosmetic.

Discussion: Squareness is primarily an aesthetic consideration. Regularly repeated geometric patterns in floor and ceiling coverings show a gradually increasing or decreasing pattern along an out-of-square wall. The guideline tolerance of plus or minus ½-inch in the diagonal allows a maximum increasing or decreasing portion of about 3/8-inch in a 12-foot wall of a 12x16-foot room. However, a contractor and consumer may agree to build an addition out of square in order to keep a new exterior wall in line with an existing wall of an out-of-square house. The corrective measure permits the contractor to make the modification in the most practical manner as long as “a satisfactory appearance” results.

3.303 Issue: A wood floor is out of level.

Standard: The floor should not slope more than ½-inch in 20 feet. Crowns and other lumber characteristics that meet the standards of the applicable grading organization for the grade and species used are not defects. Deflections due to overloading by the consumer are not the contractor’s responsibility.

Repairs: The contractor will make a reasonable and cost-effective effort to modify the floor that does not comply with the performance guideline.

Discussion: Sloped floors have both an aesthetic and functional consideration. Measurements for slope should be made across the room, not in a small area.

3.304 Issue: Deflection is observed in a floor system constructed of wood I-joists, floor trusses, or similar products.

Standard: All wood I-joists and other manufactured structural components in the floor system shall be sized and installed as provided in the manufacturers' instructions and code requirements.

Repairs: The contractor will reinforce or modify as necessary any floor component not meeting the performance guideline.

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

3.305 Issue: Wood flooring is not level at the transition of an existing floor to a room addition floor.

Standard: Flooring at a transition area shall not slope more than 1/8-inch over 6 inches unless a threshold is added. Overall step-down, unless previously agreed upon with the consumer, shall not exceed 1 1/8 inches. Variations caused by seasonal or temperature changes are not a defect.

Repairs: The flooring transition shall be corrected to meet the performance guideline.

Discussion: All wood members shrink and expand seasonally, with variations in temperature and humidity, and with aging. After installation, 2x dimensional lumber can shrink up to 1/2-inch. If the flooring, subfloor, or underlayment was not purposely overlapped onto the existing floor, the resulting irregularity is not a defect, but a natural result and characteristic of the wood's aging process. The drier the house becomes, the more shrinkage may be experienced. Either the old or the new floors may slope along the floor joist span. Joists in older homes may have deflected under load. This and other conditions may cause a hump at the juncture of the old to new. If old and new flooring joists meet perpendicularly to each other, the first new floor joist running parallel to the old outside wall can fall that 1/2-inch out to the first parallel joist (14 1/2 inches into the new floor).

3.306 Issue: The floor pitches to one side in the door opening between the existing construction and the addition.

Standard: If the pitch is the result of the floor of the existing dwelling not being level, then in most situations a transition threshold may be the most appropriate and acceptable means of addressing the condition.

Repairs: The contractor will make a reasonable and cost-effective effort to meet the performance guidelines.

Walls

Wall Framing

4.100 Issue: A framed wall is not plumb.

Standard: The interior face of wood-framed walls shall not be more than 3/8-inch out of plumb for any 32 inches in any vertical measurement.

Repairs: The contractor will repair the wall to meet the performance guideline.

4.101 Issue: The wall is bowed.

Standard: Walls shall not bow more than 1/2-inch out of line within any 32-inch horizontal measurement, or 1/2-inch out of line within any 8-foot vertical measurement.

Repairs: The contractor will repair the wall to meet the performance guideline.

Discussion: All interior and exterior walls have slight variances in their finished surface. On occasion, the underlying framing may warp, twist, or bow after installation.

4.102 Issue: An exterior wall leaks because of improper caulking installation or failure of the caulking material.

Standard: Joints and cracks in exterior wall surfaces and around openings shall be caulked to prevent the entry of water.

Repairs: One time only, the contractor will repair or caulk joints and cracks in exterior wall surfaces as required to correct deficiencies.

Discussion: Even when properly installed, caulking eventually will shrink and crack. Maintenance of caulking is the consumer's responsibility.

Wall Insulation

4.200 Issue: Wall insulation is insufficient.

Standard: The contractor shall install insulation according to R-values designated in the contract documents or local code, as applicable. Insulation shall be installed according to locally accepted practices.

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

Windows

4.300 Issue: A window is difficult to open or close.

Standard: Windows should require no greater operating force than that described in the manufacturer's instructions.

Repair: The contractor will correct or repair the window as required to meet the performance guideline.

4.301 Issue: Window glass is broken and/or a screen is missing or damaged.

Standard: Glass should not be broken and screens should not be damaged at the time of substantial completion of the project. Screens required by the contract shall be installed.

Repairs: Broken glass and/or missing or damaged screens reported to the contractor before closing will be installed or replaced. Broken glass and/or screens not reported prior to substantial completion of the project are the consumer's responsibility.

4.302 Issue: Mirror or glass surfaces are scratched.

Standard: Glass or mirror surfaces shall not have scratches visible from 10 feet under normal lighting conditions at the time of substantial completion of the project.

Repairs: The contractor shall replace any scratched glass or mirror surface if noted prior to substantial completion of the project.

4.303 Issue: During rains, water is observed on the interior corner of a glazed window unit.

Standard: Water leakage from improper installation is considered excessive. leakage due to the manufacturer's design specifications is acceptable.

Repairs: The contractor shall repair any deficiencies attributable to improper installation.

Discussion: Leakage at the glazing interface is covered under the manufacturer's warranty.

4.304 Issue: Window grids (muntins) fall or become out of level.

Standard: Window grids shall not disconnect, fall, or become out of level.

Repairs: Window grids will be repaired or replaced at the contractor's discretion one time only.

4.305 Issue: A mirror backing is deteriorating.

Standard: While looking at the mirror, there should be no noticeable imperfections in the mirror as a result of damage to the mirror backing at the time of substantial completion of the project.

Repairs: The contractor will replace or repair the mirror.

Exterior Door

4.400 Issue: An exterior door is warped.

Standard: Exterior doors shall not warp to the extent that they become inoperable or cease to be weather-resistant. A 1/4-inch tolerance as measured diagonally from corner to corner is acceptable.

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

Discussion: Most exterior doors will warp to some degree due to the difference in the temperature and humidity between inside and outside surfaces; 1/4-inch across the plane of the door measured diagonally from corner to corner is an acceptable tolerance. Warping may also be caused by improper or incomplete finishing of the door including sides, top, and bottom. The contractor is not responsible for warpage if painting of doors is not within the contractor's scope of work.

4.401 Issue: Raw wood shows at the edges of an inset panel inserted into a wood exterior door during the manufacturing process.

Standard: This is a common occurrence in wood doors with panels.

Repairs: Since this occurrence is common, no correction is required.

Discussion: Wood products expand and contract with changes in temperature and humidity. Wooden inserts are often loosely fitted into the rails to allow the inserts to move; this minimizes splitting of the panel or other damage to the door. The consumer is responsible for controlling temperature and humidity in the home to minimize these occurrences.

4.402 Issue: A wooden door panel is split

Standard: A split in a panel shall not allow light to be visible through the door.

Repairs: One time only, the contractor will repair, paint, or stain the split panel that does not meet the performance guideline. Caulking and fillers are acceptable. The repainted area may not match the remainder of the door or other doors on the house.

Discussion: Wooden inserts are loosely fitted into the door to allow the inserts to move; this minimizes splitting of the panel or other damage to the door. On occasion, a panel may become “locked” by paint or expansion of the edges with changes in temperature and humidity and no longer “float” between the rails. This may result in the panel splitting.

4.403 Issue: An exterior door sticks.

Standard: Exterior doors shall operate smoothly, except that doors may stick during occasional periods of high humidity or with variations in temperature.

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

Discussion: Exterior doors may warp or bind to some degree because of the difference in the temperature and/or humidity between inside and outside surfaces. The contractor is not responsible for warpage if painting of doors is not within the contractor’s scope of work.

4.404 Issue: An exterior door will not shut completely.

Standard: Exterior doors shall shut completely.

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

Discussion: Exterior doors may warp or bind to some degree because of the difference in the temperature and/or humidity between inside and outside surfaces. The contractor is not responsible for warpage if painting of doors is not within the contractor’s scope of work.

4.405 Issue: The plastic molding on the primary door behind the storm door melts from exposure to sunlight.

Standard: The plastic moldings behind storm doors should not melt if the storm panel is removed and reinstalled by the consumer as a part of normal seasonal maintenance operations (i.e., removed in the spring and reinstalled in the fall).

Repairs: No corrective action is required.

Discussion: Plastic moldings may melt or deform if the exterior door is covered by a storm door panel during a warm season, or if it faces the sun. This is not a defect of the door, but a problem caused by the trapping of heat between the storm panel and the door. The consumer is also cautioned to follow the manufacturer's recommendations on painting the moldings with a dark color, with or without the use of a storm panel. Dark colors should be avoided.

4.406 Issue: Caulking or glazing on the primary door behind the storm door cracks or peels.

Standard: Glazing or caulking behind storm doors should not crack or peel if the storm panel is removed and installed by consumer as part of seasonal maintenance operations (i.e., removed in the spring and reinstalled in the fall).

Repairs: No corrective measure is required.

Discussion: High temperatures may cause glazing and caulking to harden and/or fail prematurely if the door is covered by a storm panel during a warm season or if it faces the sun. This is not a defect of the door, caulking, or glazing, but a problem caused by the trapping of heat between the door and the storm panel. The consumer is reminded that dark colors tend to accumulate heat and are more likely to cause problems.

4.407 Issue: A door swings open or closed by the force of gravity.

Standard: Exterior doors shall not swing open or closed by the force of gravity alone.

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

4.408 Issue: Gaps are visible around an exterior door edge, doorjamb, and/or threshold.

Standard: Gaps between adjacent components shall not vary by more than 3/16-inch.

Repairs: The contractor will repair existing unit to meet performance guideline.

Discussion: Doors must have gaps at their perimeter to accommodate expansion/contraction due to variations in temperature and/or humidity and to enable the door to operate over a wide range of environmental conditions.

4.409 Issue: Exterior door hardware or kickplate has tarnished.

Standard: Finishes on door hardware or kickplates installed by the contractor are covered by the manufacturer's warranty.

Repairs: The consumer should contact the manufacturer.

4.410 Issue: A sliding patio door or screen will not stay on track.

Standard: Sliding patio doors and screens shall slide properly on their tracks at the time of substantial completion of the project. The cleaning and maintenance necessary to preserve proper operation are consumer responsibilities.

Repairs: The contractor shall repair the door or screen one time only.

Discussion: Proper operation should be verified by the consumer and the contractor at the time of substantial completion of the project.

4.411 Issue: A sliding patio door does not roll smoothly.

Standard: Sliding patio doors shall roll smoothly at the time of substantial completion of the project. The cleaning and maintenance necessary to preserve proper operation are consumer responsibilities.

Repairs: The contractor shall repair the door one time only.

Discussion: Proper operation should be verified by the consumer and the contractor at the time of substantial completion of the project.

4.412 Issue: A doorknob, deadbolt, or lockset does not operate smoothly.

Standard: A doorknob, deadbolt, or lockset should not stick or bind during operation.

Repairs: One time only, the contractor will adjust, repair, or replace knobs that are not damaged by abuse.

Exterior Finish

Wood and Hardboard Siding

4.500 Issue: Siding is bowed.

Standard: Bows exceeding 1/2-inch in 32 inches are considered excessive.

Repairs: The contractor will replace any wood lap siding with bows that does not meet the performance guideline, and will finish the replacement siding to match the existing siding as closely as practical.

Discussion: If the siding is fastened by nails driven into studs, expansion caused by changing relative temperatures and/or humidity may cause bulges or waves. Even with proper installation, siding will tend to bow inward and outward in adjacent stud spaces.

4.501 Issue: An edge or gap is visible between adjacent pieces of siding or siding panels and other materials.

Standard: Gaps wider than 3/16-inch are considered excessive. This guideline does not apply to adjacent pieces or panels that have shiplap or similar joints.

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

Discussion: Proper repair can be effected by providing joint covers or by caulking the gap. This is important if the gaps were intentionally made for expansion joints. If the siding is painted, the contractor will paint the new caulking to match the existing caulking as closely as practical, but an exact match cannot be ensured.

4.502 Issue: Lap siding is not parallel with the course above or below.

Standard: A piece of lap siding may not be more than 1/2-inch off parallel with contiguous courses in any 20-foot measurement, unless the consumer and the contractor have previously agreed to disregard the performance guideline to match a pre-existing condition.

Repairs: The contractor will reinstall siding to meet the performance guideline for straightness, and will replace with new siding any siding damaged during removal.

Discussion: For remodeling project, if the contractor and the consumer have agreed that the floor of an addition is to be on a different plane from an existing

floor (e.g., out of level), the siding on the addition may not be parallel and in line with the existing siding.

4.503 Issue: Face nails are driven below the surface of the hardboard siding.

Standard: Siding nails should not be driven below the surface of hardboard siding such that visible fiber of the siding is exposed.

Repairs: The contractor shall repair as necessary to meet performance guideline. The following repairs are appropriate in most instances: If visible fiber of hardboard siding is exposed, paint surface to coat fiber. If nail is 1/16 to 1/8-inch below the surface, fill or caulk and touch-up paint. If nail is more than 1/8-inch below the surface, fill or caulk and add an additional nail flush to the surface.

4.504 Issue: Siding boards have buckled.

Standard: Boards that project more than 3/16-inch from the face of adjacent boards are considered excessive.

Repairs: The contractor will repair or replace any boards that don't meet the performance guideline.

Discussion: Buckling is caused by wood expanding as a result of increased temperature and/or relative humidity. It can be minimized by leaving space between the tongues and grooves to allow room for expansion and by storing the product outside for a few days to allow it to adjust to the ambient condition prior to installation.

4.505 Issue: Cedar shakes or shingles have "bled" through paint or stain applied by the contractor.

Standard: Resins and extractives bleeding through paint or stain, or blackening of shakes or shingles is considered excessive. This performance guideline does not apply if "natural weathering" or semi-transparent stain is specified for the project.

Repairs: One time only, the contractor will clean and treat shakes to provide a reasonable appearance and prevent further bleeding.

4.506 Issue: Siding has delaminated.

Standard: Siding shall not delaminate.

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

4.507 Issue: Joints between siding have separated.

Standard: Joint separations exceeding 3/16-inch are considered excessive.

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

Discussion: Plywood siding, like all wood products, will expand and contract with changes in temperature and/or humidity.

4.508 Issue: Siding is bowed.

Standard: Some waviness in siding is to be expected because of bows in studs. Bows exceeding 1/2-inch in 32 inches are considered excessive.

Repairs: The contractor will repair or replace the siding to meet the guideline.

Discussion: Additional nails or screws may be installed to remove the bow.

Aluminum or Vinyl Lap Siding

4.509 Issue: Aluminum or vinyl siding is bowed or wavy.

Standard: Some waviness in aluminum or vinyl lap siding is to be expected because of bows in studs. Waves or similar distortions in aluminum or vinyl lap siding are considered excessive if they exceed 1/2-inch in 32 inches.

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

Discussion: This problem can be caused by the siding being nailed too tightly to the house instead of loosely “hung” near the center of the nail slots, or by not allowing adequate room for the siding to expand. Siding fasteners should be installed in the center of the nail slot with a 1/32-inch spacing (thickness of a dime) between the siding and the fastener to allow for expansion and contraction.

4.510 Issue: Nail stains are visible on siding or ceiling boards.

Standard: Stains exceeding 1/2-inch from the nail and readily visible from a distance in excess of 20 feet are considered excessive.

Repairs: The contractor can choose to remove stains that do not meet the performance guideline.

Discussion: Stains can be caused by oxidation of nails or leaching of extractives from the wood. Use of galvanized nails (even double hot-dipped) will not necessarily prevent staining.

4.511 Issue: Siding is faded.

Standard: Any color siding, when exposed to the ultra-violet rays of the sun, will fade. Fading cannot be prevented by the contractor. However, panels installed on the same wall and under the same conditions should fade at the same rate.

Repairs: No corrective action is required of the contractor. The consumer should contact the siding manufacturer.

Discussion: Color warranties are provided by the siding manufacturer. The consumer should contact the manufacturer with questions or claims regarding changes in color of vinyl or aluminum siding. Color and fade imperfections beyond an expected degree may be covered by the manufacturer's warranty, except where siding is shaded differently from the rest of the wall, such as under shutters or behind vegetation.

4.512 Issue: Aluminum or vinyl lap siding trim is loose.

Standard: Trim shall not separate from the house by more than ¼-inch.

Repairs: The contractor will reinstall trim as necessary to comply with the performance guideline.

Discussion: Vinyl siding and accessories should not be caulked in most circumstances, as it could impact the products, contraction and expansion characteristics.

4.513 Issue: Aluminum or vinyl lap siding courses are not parallel with eaves or wall openings.

Standard: Any piece of aluminum or vinyl lap siding more than ½-inch off parallel in 20 feet with a break such as an eave or wall opening is considered excessive.

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

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

4.514 Issue: Nail heads show in aluminum or vinyl lap siding.

Standard: No nail heads in the field of the siding shall be exposed.

Repairs: The contractor will install trim as necessary to cover the nails. Contractor will install proper trim accessories to avoid face nailing.

Discussion: Vinyl siding generally should not be face nailed. However, there are appropriate and typical occasions when a single face nail may be needed to reinforce a joint or fasten the siding to the wall when it is cut to fit around window frames, doors, roofs, or other obstructions on the wall. In most cases (the only exception would be the top piece on a gable end), vinyl siding should never need to be face nailed when proper accessory products are used. For example, under a window application the trim (J-channel) can be utilized in conjunction with utility trim and snap-punching the top of the modified vinyl siding. If face nailing is the only option, a 1/8-inch diameter hole should be pre-drilled to allow for expansion and contraction.

4.515 Issue: An aluminum or vinyl lap siding trim accessory is loose from caulking at windows or other wall openings.

Standard: Siding trim accessories shall not separate from caulking at windows or other wall openings during the warranty period.

Repairs: The contractor will repair or recaulk as necessary to eliminate the separation.

4.516 Issue: Aluminum or vinyl lap siding is cut crookedly

Standard: Gaps shall comply with the manufacturer's guidelines unless the existing building is out of square or plumb. Cut edges of vinyl siding should always be covered by trim or receiving channels and should not be visible. Cuts should be made so that when properly installed in trim, edges are not visible.

Repairs: The contractor will ensure that the appropriate trim/accessory is installed to eliminate potentially revealing site cuts. If cuts in siding panels are so uneven that they are not concealed by trim, the panel shall be replaced.

Discussion: Cut edges of vinyl siding should never be visible when proper trim and accessories are used.

4.517 Issue: Aluminum or vinyl lap siding is not correctly spaced from moldings.

Standard: Prescribed spacing between siding and accessory trim is typically 1/4-inch, or should comply with the manufacturer's installation instructions.

Repairs: The contractor will correct the spacing to meet the guideline.

Cement Board Siding

4.518 Issue: Cement board siding is cracked or chipped.

Standard: A cement product, this siding is susceptible to the same characteristic limitations as other cement products. Cracks more than 2 inches in length and 1/8-inch in width are considered excessive. Chips or dents not reported at time of substantial completion of the project are not covered.

Repairs: Cracked or chipped cement board will be repaired or replaced as necessary, as determined by the contractor.

4.519 Issue: Cement board siding is improperly fastened.

Standard: Siding shall be nailed flush and perpendicular per the manufacturer's instruction. Staples shall not be used.

Repairs: Overdriven nail heads or nails driven at an angle shall be filled with cementitious patching compound to match the existing area as closely as possible.

Discussion: The manufacturer's instructions include guidelines to reduce chipping or cracking of siding.

4.520 Issue: A masonry or veneer wall is cracked.

Standard: Cracks visible from distances in excess of 20 feet or larger than 1/4-inch in width are not acceptable.

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

Discussion: Hairline cracks resulting from shrinkage and cracks due to minor settlement are common in masonry or veneer and do not necessarily represent a defect.

4.521 Issue: Cut bricks below openings in masonry walls are of different thickness.

Standard: Cut bricks used in the course directly below an opening shall not vary from one another in thickness by more than 1/4-inch. The smallest dimension of a cut brick should be greater than 1 inch.

Repairs: The contractor will repair the wall to meet the performance guideline.

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

4.522 Issue: A masonry or brick veneer course is not straight.

Standard: No point along the bottom of any course shall be more than ¼-inch higher or lower than any other point within 10 feet along the bottom of the same course, or ½-inch in any length.

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

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

4.523 Issue: Brick veneer is spalling.

Standard: Spalling of newly manufactured brick should not occur and is considered excessive. Spalling of used brick is acceptable.

Repairs: The contractor will repair or replace newly manufactured bricks that have spalled. An exact match of brick and mortar cannot be assured.

4.524 Issue: Mortar stains are observed on exterior brick or stone.

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

Repairs: The contractor will clean the mortar stains to meet the performance guideline.

4.525 Issue: Efflorescence is present on the surface of masonry or mortar.

Standard: This is a common condition caused by moisture reacting with the soluble salts in the mortar.

Repairs: No corrective actions are required of the contractor.

Discussion: Efflorescence is evidenced by the presence of a white film on the surface of masonry or mortar. It is a particularly common occurrence where masonry or concrete are in contact with high moisture levels as may be found in basements.

Stucco and Parge

4.526 Issue: An exterior stucco wall surface is cracked

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

Repairs: One time only, the contractor will repair cracks exceeding 1/8-inch in width. Caulking and touch-up painting are acceptable. An exact color or texture match may not be unattainable.

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

4.527 Issue: The colors of exterior stucco walls do not match.

Standard: The colors of new exterior stucco walls may not perfectly match the colors of old exterior stucco wall, nor is it expected that exact matches will be attained for the same material that is applied on different days or under differing environmental conditions (e.g., temperature, humidity, etc.).

Repairs: No corrective measure is required. Because of the unique nature of stucco finishes, exact match of color may not be possible.

Discussion: Coloring of stucco is affected by a number of variables. It is impractical to achieve a color match between stucco coatings applied at different times.

4.528 Issue: The textures of exterior stucco wall finishes do not match.

Standard: The texture of new exterior stucco walls may not perfectly match the textures of old exterior stucco walls.

Repairs: No corrective measure is required. Because of the unique nature of stucco finishes, exact match of texture finish may not be possible.

Discussion: “Stucco” includes cementitious coatings and similar synthetically based finishes. Approved samples prior to installation can minimize misunderstandings about color and texture.

4.529 Issue: Coating has separated from the base on an exterior stucco wall.

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

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

Discussion: Coloring of stucco is affected by a number of variables. It is impractical to achieve a color match between stucco coatings applied at different times.

4.530 Issue: Lath is visible through stucco.

Standard: Lath should not be visible through stucco, nor should the lath protrude through any portion of the stucco surface.

Repairs: The contractor will make necessary corrections so that lath is not visible. The finish colors may not match.

4.531 Issue: Rust marks are observed on the stucco finish coat.

Standard: Rust marks on the stucco surface are considered excessive if more than 5 marks measuring more than 1 inch long occur per 100 square feet.

Repairs: The contractor may repair or replace affected subsurface components, or seal the rusted areas and recolor the wall.

4.532 Issue: There is water damage to interior walls as a result of a leak in the stucco wall system.

Standard: Stucco walls should be constructed and flashed to prevent water penetration to the interior of the structure under normal weather and water conditions. Damage to the stucco system caused by external factors out of the contractor's control that result in water penetration are not the contractor's responsibility.

Repairs: If water penetration is the result of a system failure and doesn't result from external factors, the contractor will make necessary repairs to prevent water penetration through the stucco wall system.

Discussion: Water penetration resulting from external factors such as windblown moisture or sprinkler systems are not the contractor's responsibility.

Exterior Trim

4.600 Issue: Gaps show in exterior trim.

Standard: Joints between exterior trim elements, including siding and masonry, shall not result in joints opened wider than ¼-inch. In all cases, the exterior trim shall perform its function of excluding the elements.

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

4.601 Issue: Exterior trim board is split.

Standard: Splits wider than 1/8-inch are considered excessive.

Repairs: The contractor will repair splits by filling with a durable filler. Touch-up painting may not match the surrounding area.

4.602 Issue: Exterior trim board is bowed or twisted.

Standard: Bows and twists exceeding 3/8-inch in 8 feet are considered excessive.

Repairs: The contractor will repair defects that do not meet the performance guideline by refastening or replacing deformed boards. Touch-up painting may not match the surrounding area.

4.603 Issue: Exterior trim board is cupped.

Standard: Cups exceeding 3/16-inch in 5 ½ inches are considered excessive.

Repairs: The contractor will repair defects that do not meet the performance guideline by refastening or replacing deformed boards. Touch-up painting may not match the surrounding area.

Paint, Stain, and Varnish

4.700 Issue: Exterior painting, staining, or refinishing is required because of repair work.

Standard: Repairs required under these performance guidelines shall be finished to match the immediate surrounding areas as closely as practical.

Repairs: The contractor will finish repaired areas as indicated.

Discussion: Touch-up painting, staining, or refinishing may not match the surrounding area.

4.701 Issue: Exterior paint or stain has peeled, flaked, or physically deteriorated.

Standard: Exterior paints and stains shall not fail during the paint manufacturer's warranty period.

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

4.702 Issue: Exterior paint or stain has faded.

Standard: Fading of exterior paints and stains is common. The degree of fading depends on environmental conditions.

Repairs: Because fading is a common occurrence in paint and stains, no corrective action is required.

4.703 Issue: Varnish or lacquer finishes have deteriorated.

Standard: Clear finishes used on exterior surfaces may deteriorate rapidly. This is beyond the contractor's control.

Repairs: Heat and sunlight can cause rapid deterioration of clear finishes. Maintenance is the consumer's responsibility. No corrective action is required of the contractor.

4.704 Issue: There is paint or stain overspray on surfaces not intended for paint or stain.

Standard: Paint or stain overspray on surfaces not intended for paint or stain that is visible at a distance of 6 feet under normal natural lighting conditions is not acceptable.

Repairs: The contractor shall clean affected surfaces without damaging the surface.

4.705 Issue: Cabinet stain is uneven. Cabinet paint is not uniform or is mismatched.

Standard: Uneven stain color on wood cabinets is considered acceptable and is a result of the natural wood grain. Painted cabinets should appear uniform under normal lighting conditions at a distance of 6 feet.

Repairs: The contractor will stain or paint the area as required to meet the performance guideline.

Roofs

Roof Structure

5.100 Issue: The roof ridge beam has deflected.

Standard: Roof ridge beam deflection greater than 1 inch in 8 feet is considered excessive.

Repairs: The contractor shall repair affected ridge beams that do not meet the performance guideline.

5.101 Issue: A rafter or ceiling joist bows (up or down).

Standard: Bows greater than 1 inch in 8 feet are excessive.

Repairs: The contractor shall repair affected rafters or joists that bow in excess of the performance guideline.

Roof Sheathing

5.200 Issue: Roof sheathing is wavy or appears bowed.

Standard: Roof sheathing shall not bow more than ½-inch in 2 feet.

Repairs: The contractor will straighten bowed roof sheathing as necessary to meet the performance guideline.

Discussion: In rare instances, the contractor might have to install blocking between the framing members to straighten the sheathing.

Roof Vents

5.300 Issue: An attic vent or louver leaks.

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

Repairs: The contractor shall repair or replace the roof vents as necessary to meet the performance guideline.

Roof Installation and Leaks

5.400 Issue: The roof or flashing leaks.

Standard: Roofs and flashing shall not leak under normal conditions.

Repairs: The contractor will repair any verified roof or flashing leaks not caused by ice build-up, leaves, debris, abnormal conditions, or the consumer's actions or negligence.

Discussion: It is the consumer's responsibility to keep the roof drains, gutters, and downspouts free of ice and debris.

5.401 Issue: Ice builds up on the roof.

Standard: During prolonged cold spells ice is likely to build up on a roof, especially at the eaves. This condition naturally can occur when snow and ice accumulated.

Repairs: No action is required of the contractor. Prevention of ice build-up on the roof is a consumer maintenance item.

5.402 Issue: Shingles have blown off.

Standard: Shingles shall not blow off in winds less than the manufacturer's warranty statement or applicable building codes.

Repairs: If shingles were not installed properly, they will be repaired or replaced in the affected area.

5.403 Issue: Shingles slide off the roof.

Standard: The contractor shall ensure that shingles are installed in accordance with the manufacturer's instruction.

Repair: The contractor shall evaluate and replace shingles that slide off the roof.

Discussion: Correctly installed shingles are covered by the manufacturer's warranty.

5.404 Issue: Shingles are not horizontally aligned.

Standard: Shingles should be installed according to the manufacturer's instructions.

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

Discussion: The bottom edge of dimensional shingles may be irregular; the irregularity is an inherent part of the design.

5.405 Issue: New shingles do not match existing shingles.

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

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

5.406 Issue: Asphalt shingle edges or corners are curled or cupped.

Standard: Asphalt shingle edges and corners shall not curl or cup more than ½-inch.

Repairs: No corrective action is required of the contractor. Cupping in excess of ½-inch should be reported to the manufacturer.

5.407 Issue: Asphalt shingles do not overhang the edges of the roof, or hang too far over the edges of the roof.

Standard: Asphalt shingles shall overhang roof edges by not less than ¼-inch, and not more than ¾-inch unless the manufacturer's instruction indicate otherwise.

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

5.408 Issue: Shading or a shadowing pattern is observed on a new shingle roof.

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

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

5.409 Issue: Asphalt shingles have developed surface buckling.

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

Repairs: The contractor will repair or replace the affected shingles to meet the performance guideline.

5.410 Issue: Sheathing nails have loosened from framing and raised asphalt shingles.

Standard: Nails shall not loosen from roof sheathing to raise asphalt shingles from surface.

Repairs: The contractor shall repair all areas as necessary to meet the performance guideline.

Discussion: It is not uncommon for nails to “work themselves out” due to variations in temperature. The contractor can re-drive or remove and replace fasteners that withdraw from the framing. Any resulting holes should be sealed or the shingle should be replaced (a perfect color/shade match cannot be assured).

5.411 Issue: Roofing nails are exposed at the ridge or hip of a roof.

Standard: Nail heads shall be sealed.

Repairs: The contractor shall repair areas to meet the performance guideline.

5.412 Issue: Holes from construction activities are found in asphalt shingles.

Standard: Holes from construction activities shall be flashed or sealed below the asphalt shingle tab to prevent leakage. If the patch is visible from the ground, the shingle should be replaced.

Repairs: The contractor will repair or replace the affected shingles to meet the performance guideline.

5.413 Issue: Existing roof shingles are telegraphing through new asphalt shingles.

Standard: Some telegraphing is common when re-roofing over existing roofing.

Repairs: Because this is a common occurrence, no corrective action is required.

Roll Roofing

5.414 Issue: Water is trapped under roll roofing.

Standard: Water shall not become trapped under roll roofing.

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

5.415 Issue: Roofing is blistered but does not leak.

Standard: Surface blistering of roll roofing is caused by unusual conditions of heat and humidity acting on the asphalt and is a common occurrence.

Repairs: Because this is a common occurrence, no action is required.

5.416 Issue: Water is standing on a flat roof.

Standard: Water shall drain from a flat roof except for minor ponding within 24 hours of a rainfall. Minor ponding shall not exceed 3/8-inch in depth

Repairs: The contractor will take corrective action to ensure proper drainage of the roof.

Chimney

5.500 Issue: A crack in a masonry chimney cap or crown causes leakage.

Standard: It is common for caps to crack due to expansion and contraction. As a result, leaks may occur.

Repairs: If cracking causes leakage the contractor will repair the cap or crown. Caulking or other sealant is acceptable.

5.501 Issue: New chimney flashing leaks.

Standard: New chimney flashing shall not leak under normal conditions.

Repairs: The contractor will repair leaks in new chimney flashing that are not caused by ice build-up, other common occurrences, or by the consumer's actions or negligence.

Discussion: The accumulation of ice and snow on the roof is a natural occurrence and cannot be prevented by the contractor.

Gutters and Downspouts

5.600 Issue: The gutter or downspout leaks.

Standard: Gutters and downspouts shall not leak.

Repairs: The contractor will repair leaks in gutters and downspouts. Sealants are acceptable.

5.601 Issue: The gutter overflows during a heavy rain.

Standard: Gutters may overflow during a heavy rain.

Repairs: The contractor shall repair the gutter if it overflows during normal rains.

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

5.602 Issue: Water remains in the gutter after a rain.

Standard: The water level shall not exceed ½-inch in depth if the gutter is unobstructed by ice, snow, or debris.

Repairs: The contractor will repair the gutter to meet the performance guideline. The consumer is responsible for maintaining gutters and downspouts and keeping the unobstructed.

Discussion: Contractors usually install residential gutters with minimal slope in order to maintain an attractive appearance. Installing gutters with 1/32-inch drop in 1 foot generally will prevent water from standing in the gutters. Even so, small amounts of water may remain in some sections of the gutter for a time after a rain. In areas with heavy rainfall and/or ice build-up, a steeper pitch or additional downspouts may be desirable.

Skylights

5.700 Issue: A skylight leaks.

Standard: Skylights shall be installed in accordance with the manufacturer's instructions. Leaks resulting from improper installation are considered excessive. Condensation on interior surfaces is not a leak and is not considered a defect.

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

Discussion: Condensation on interior surfaces is not a leak.

Plumbing

Water Supply System

6.100 Issue: A pipe or fitting leaks.

Standard: No leaks of any kind shall exist in any water pipe or fitting.

Repairs: The contractor will make repairs to eliminate leakage.

6.101 Issue: Condensation is observed on pipes, fixtures, and plumbing supply lines.

Standard: Condensation on pipes, fixtures, and plumbing supply lines may occur at certain combinations of temperature and indoor humidity.

Repairs: The consumer is responsible for controlling humidity in the home.

Discussion: The consumer may insulate pipes and supply lines.

6.102 Issue: A faucet or valve leaks.

Standard: No faucet or valve shall leak as a result of defects in material or workmanship.

Repairs: The contractor will repair or replace the leaking faucet or valve.

6.103 Issue: Water in a plumbing pipe freezes, and the pipe bursts.

Standard: Drain, waste, vent, and water pipes shall be adequately protected to reduce the possibility of freezing at the design temperatures and based on the applicable building or plumbing code.

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

6.104 Issue: The water supply system fails to deliver water.

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

Repairs: The contractor will repair the water supply system if the failure results from improper installation or failure of materials and if the connections are a part of the construction agreement. Conditions beyond the control of the contractor that disrupt or eliminate the water supply are not covered.

6.105 Issue: A water pipe is noisy.

Standard: Because of the flow of water and pipe expansion/contraction, the water piping system will emit some noise. However, the pipes should not make the pounding noise called “water hammer.”

Repairs: The contractor cannot eliminate all noises caused by water flow and pipe expansion/contraction. However, the contractor will provide the “water hammer” protection required by the applicable plumbing code.

Plumbing Fixtures

6.200 Issue: The bathtub or shower leaks.

Standard: Bathtubs and showers shall not leak.

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

Discussion: Proper repair can be effected by sealing areas around tubs and showers. The consumer is responsible for maintaining caulk seals from occupancy onward.

6.201 Issue: A plumbing fixture, appliance, or trim fitting is defective.

Standard: Plumbing fixtures, appliances, and trim fittings shall not be damaged at the time of substantial completion of the project.

Repairs: No action is required of the contractor. Defective trim fittings, appliances, and fixtures are covered under the manufacturer’s warranty.

6.202 Issue: The surface of a plumbing fixture is cracked or chipped.

Standard: Cracks and chips in surfaces of bathtubs and sinks are considered excessive if they are visible from 3 feet in normal lighting conditions.

Repairs: The contractor is not responsible for repairs unless the damage is reported to the contractor prior to substantial completion of the project. If the problem is the result of a manufacturing defect, the manufacturer’s warranty is in effect.

Discussion: Fiberglass and acrylic fixtures often can be repaired.

6.203 Issue: A fiberglass tub or shower enclosure base flexes.

Standard: The tub or showers are to be installed according to the manufacturer's instructions.

Repairs: The contractor shall repair the base to meet the performance guideline.

6.204 Issue: A vanity top is cracked.

Standard: Vanity tops shall not have cracks when installed with proper sealants.

Repairs: The contractor shall repair or replace the vanity top to meet the performance guidelines. Cracks must be noted prior to substantial completion of the project.

Sanitary Sewer or Septic System

6.300 Issue: A sewer, fixture, or drain is clogged.

Standard: Sewers, Fixtures, and drains shall drain.

Repairs: The contractor is not responsible for sewers, fixtures, and drains that are clogged because of the consumer's actions or negligence. If a problem occurs, the consumer should consult the contractor for corrective action. If defective installation is the cause, the contractor is responsible for correcting the problem. If the consumer's actions or negligence is the cause, the consumer is responsible for correcting the problem.

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

- Connection of sump pump, roof drains, or backwash from a water conditioner into the system.
- Placement of non-biodegradable items into the system.
- Use of a food waste disposer not supplied or approved by the contractor.
- Placement of surfaces not permeable to water over the disposal area of the system.
- Allowing vehicles to drive or park over the disposal area of the system.
- Failure to pump out the septic tank periodically, as required.
- Use that exceeds the system's design standards.
- Allowing water to pond over the disposal area.

Electrical

Fuses and Circuit Breakers

7.100 Issue: A fuse blows or a circuit breaker trips.

Standard: Fuses and circuit breakers shall not be tripped by normal usage.

Repairs: The contractor will check wiring circuits and components for conformity with applicable electrical code requirements. The contractor will correct noncompliant elements.

Discussion: Blown fuses and tripped breakers are symptoms of a problem in some part of the electrical system in the home or some consumer product connected to the system. Although defective components are possible, most electrical malfunctions are caused by consumer-owned fixtures and appliances. The consumer should unplug or disconnect fixtures and appliances on the circuit and then replace the fuse or reset the breaker. If the problem recurs, the contractor should be notified.

7.101 Issue: A ground fault circuit interrupter (GFCI) or arc fault circuit interrupter (AFCI) trips frequently.

Standard: Ground fault and arc fault circuit interrupters shall perform as designed.

Repairs: The contractor will install ground fault and arc fault circuit interrupters in accordance with applicable electrical codes. Tripping is to be expected and is not covered unless it is caused by a component failure or incorrect installation.

Discussion: Both ground fault and arc fault circuit interrupters are very sensitive devices and are easily tripped. GFCIs protect outlets in wet areas (for example, bathrooms, kitchens, garages, exterior, etc.). Outlets protected by GFCIs may be connected in series; it may not be readily apparent that an inoperative convenience outlet is the result of a tripped GFCI in another room (and not necessarily in the electrical panel). AFCIs sometimes are installed to protect bedroom circuits. The most common cause of tripping by AFCIs is damaged cords or plugs on consumers' lamps, small appliances, or other devices. AFCIs are usually found in the electrical panel.

Outlets and Lights

7.200 Issue: Electrical outlets, switches, or fixtures malfunction.

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

Repairs: The contractor will repair or replace malfunctioning electrical outlets, switches, and fixtures, if supplied and installed by the contractor.

7.201 Issue: Wiring fails to carry its designed load.

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

Repairs: The contractor will verify that wiring conforms to applicable electrical code requirements. The contractor will repair wiring not conforming to code.

7.202 Issue: A light fixture is tarnished

Standard: Finishes on light fixtures may be covered under the manufacturer's warranty.

Repairs: No action is required of the contractor. Consumer should contact manufacturer.

7.203 Issue: Receptacle or switch covers protrude from the wall.

Standard: Receptacle or switch covers should not be more than 1/16-inch from the adjoining wall surface.

Repairs: The contractor will adjust the covers to meet performance guideline.

7.204 Issue: The consumer's 220-volt appliance cord does not fit the outlet provided by the contractor.

Standard: The contractor shall install electrical outlets required by applicable electrical code.

Repairs: No action is required of the contractor.

Discussion: The consumer is responsible for obtaining an appliance cord that fits the outlets provided by the contractor.

Fans

7.300 Issue: A ceiling fan vibrates excessively and/or is noisy.

Standard: The contractor shall install ceiling fans in accordance with the manufacturer's instructions (including blade balances).

Repairs: The contractor shall correct any fan installation not in accordance with the performance guideline if the fan was supplied and installed by the contractor.

7.301 Issue: An exhaust fan discharges into attic or crawl space.

Standard: Fans shall discharge as required by applicable codes.

Repairs: The contractor shall repair to meet performance guideline.

Smoke Detectors

7.400 Issue: A smoke detector “chirps”

Standard: A smoke detector should not “chirp” at substantial completion of the project.

Repairs: The contractor will repair or replace the smoke detector to eliminate chirping.

Discussion: Most smoke detectors are powered by both the home’s electrical power and a backup battery. “Chirping” is an indication that the battery is weak or is not installed. If the chirping occurs on a new smoke detector, the contractor will check the battery, verify that the detector is wired correctly, and replace the device if necessary. Safety officials recommend that consumers change the batteries in smoke detectors semi-annually when daylight-saving time begins and ends.

Interior Climate Control

Air Infiltration and Drafts

8.100 Issue: Air infiltrates around exterior doors or windows.

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

Repairs: The contractor shall repair to meet the performance guideline.

Discussion: Proper repair can be performed by adjusting or installing weather stripping around doors and windows. In high-wind areas, the consumer may elect to have storm windows and doors installed to further reduce drafts.

8.101 Issue: A draft comes through an electrical outlet.

Standard: Electrical outlets and switch boxes on exterior walls may allow cold air to flow through or around an outlet into a room.

Repairs: No action is required of the contractor. The consumer may elect to install foam insulation pads under switch and outlet plates to help decrease drafts.

Humidity Control and Condensation

8.200 Issue: Water, ice, or frost is observed on a window.

Standard: Windows will be installed in accordance with the manufacturer's instructions and applicable building code.

Repairs: No action is required of the contractor unless the water, ice, or frost is directly attributed to faulty installation (i.e., that deviates from the manufacturer's instructions and/or applicable building code).

Discussion: Condensation usually results from conditions beyond the contractor's control. Moisture in the air can condense into water and collect on cold surfaces, particularly in the winter months when the outside temperature is low. Blinds and drapes can prevent air within the building envelope from moving across the cold surface and picking up the moisture. Occasional condensation (water) in the kitchen, bath, or laundry area is common. It is the consumer's responsibility to maintain proper humidity by properly operating heating and cooling systems and allowing moving air within the home to flow over the interior surface of the windows.

8.201 Issue: The ductwork makes noises.

Standard: Ductwork will be constructed and installed in accordance with applicable mechanical code requirements.

Repairs: Unless the duct is not in compliance with the local code, no corrective action is required.

Discussion: Metal expands when it is heated and contracts when it cools. The “ticking” or “crackling” sounds caused by the metal’s movement are common.

8.202 Issue: The ductwork produces excessively loud noises commonly known as “oil canning.”

Standard: The stiffening of the ductwork and the thickness of the metal used shall be such that ducts do not “oil can.” The booming noise caused by oil canning is considered excessive.

Repair: The contractor will correct the ductwork to eliminate noise caused by oil canning.

8.203 Issue: There is airflow noise at a register.

Standard: The register should be correctly installed according to the manufacturer’s instruction.

Repairs: No action is required unless registers are not installed in accordance with manufacturer’s instruction.

Discussion: Under certain conditions, some noise may be experienced with the normal flow of air, even when registers are installed correctly. See the manufacturer’s instructions

8.204 Issue: The air handler or furnace vibrates.

Standard: These items shall be installed in accordance with the manufacturer’s instructions and applicable codes.

Repairs: If installed incorrectly, the contractor will correct the items according to the manufacturer’s instructions and code requirements.

Discussion: Under certain conditions some vibrating may be experienced with the normal flow of air, even when air handlers and furnaces are installed correctly. See the manufacturer’s instructions.

8.205 Issue: The ductwork is separated or detached.

Standard: Ductwork shall remain intact and securely fastened.

Repairs: The contractor will reattach and secure all separated or unattached ductwork.

Heating System

8.300 Issue: The heating system is inadequate.

Standard: The heating system shall be capable of producing an inside temperature of 70 degrees Fahrenheit, as measured in the center of each room at a height of 5 feet above the floor under local, outdoor winter design conditions. National, state, or local energy codes shall supersede this performance guideline where such codes have been locally adopted.

Repairs: The contractor will correct the heating system to provide the required temperature in accordance with the performance guideline or applicable code requirements. However, the consumer will be responsible for balancing dampers and registers and for making other necessary minor adjustments.

Discussion: For new living spaces created by remodeling jobs, heating guidelines may not apply to areas where living space has been created without providing additional heating and/or resizing the ductwork.

Central Air-Conditioning System

8.400 Issue: The cooling of rooms is inadequate.

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

Repairs: The contractor will correct the cooling system to provide the required temperature in accordance with the applicable code requirements.

Discussion: For new living spaces created by remodeling jobs, cooling guidelines may not apply to areas where living space has been created without providing additional cooling and/or resizing the ductwork.

8.401 Issue: A condensate line is clogged.

Standard: Condensate lines must be free of all clogs to operate properly.

Repairs: Condensate lines will eventually clog under normal use. The contractor will provide unobstructed condensate lines at the time of substantial completion of the project. The consumer is responsible for maintaining them in that condition.

8.402 Issue: There is a refrigerant leak.

Standard: Refrigerant lines and fittings shall not leak during normal operation.

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

8.403 Issue: There is condensation on the outside of air handlers and ducts.

Standard: Moisture may condense on the exterior surfaces of air handlers and ducts under some temperature differences and high humidity levels.

Repairs: No action is required of the contractor, unless the condensation is directly attributed to faulty installation

Discussion: Condensation usually results from conditions beyond the contractor's control. Moisture in the air can condense (to form water) and collect on cold duct surfaces, particularly in the summer months when the outside humidity is high.

8.404 Issue: Kitchen or bath fans allow air infiltration.

Standard: Bath and kitchen fans shall be installed in accordance with the manufacturer's instructions and code requirements.

Repairs: No action is required of the contractor if fans meet the guideline.

Discussion: It is possible for outside air to enter the house through a ventilation fan. The dampers in most fans do not seal tightly. It is possible for the damper to be lodged open due to animal activity (including nesting in the outside opening), or the accumulation of grease, lint, and other debris. Maintenance of ventilating fans is the consumer's responsibility.

8,405 Issue: HVAC vent or register covers protrude more than 1/26-inch from a smooth wall or ceiling surface.

Standard: Registers shall not protrude more than 1/16-inch from the wall surface at the time of substantial completion of the project.

Repairs: The contractor shall comply with the performance guideline.

Discussion: Registers and grills may deflect over time. This can result in gaps occurring between the grill or register and the wall or ceiling. As long as the vent or register is securely attached, this is not a warranty item.

Interior

Interior Doors

9.100 Issue: An interior door is warped.

Standard: Interior doors (full openings) shall not warp in excess of ¼-inch.

Repairs: The contractor will correct or replace and refinish defective doors to match existing doors as nearly as practical.

Discussion: In bathroom or utility areas, exhaust fans or an open window must be used to minimize moisture to prevent warpage of door units. If the consumer is responsible for painting the door, the contractor is not responsible.

9.101 Issue: Bifold doors come off their tracks during normal operation.

Standard: Bifold doors shall slide properly on their tracks at the time of substantial completion of the project. Cleaning and maintenance necessary to preserve proper operations are consumer responsibilities.

Repairs: One time only, the contractor will repair any bifold door that will not stay on its track during normal operation.

Discussion: Proper operation should be verified by the consumer and the contractor at the time of substantial completion of the project.

9.102 Issue: A pocket door rubs in its pocket during normal operation.

Standard: Pocket doors shall not rub in their pockets during normal operations if they are installed according to the manufacturer's instructions.

Repairs: One time only, the contractor will repair the pocket door to meet the performance guideline.

Discussion: Pocket doors commonly rub, stick, or derail due to the inherent nature of the product. It is common, however, for the door to operate against the guides provided by the manufacturer.

9.103 Issue: A wooden door panel has shrunk or split.

Standard: Wooden door panels shall not split to the point that light is visible through the door.

Repairs: One time only, the contractor will fill splits in the door panel with wood filler and will match the paint or stain as closely as practical.

9.104 Issue: A door rubs on jambs or contractor-installed floor covering.

Standard: Doors shall operate smoothly.

Repairs: One time only, the contractor will repair the door as necessary to meet the performance guideline.

9.105 Issue: A door edge is not parallel to the door jamb.

Standard: When the contractor installs the door frame and door, the door edge shall be within 3/16-inch of parallel to the door jamb.

Repairs: The contractor will adjust the door as necessary to meet the guideline one time.

9.106 Issue: A door swings open or closed by the force of gravity.

Standard: Doors shall not swing open or closed by the force of gravity alone.

Repairs: The contractor will adjust the door as necessary to meet the guideline one time.

9.107 Issue: Interior doors do not operate smoothly.

Standard: Doors shall move smoothly with limited resistance.

Repairs: The contractor shall repair door operation to meet the performance guideline one time.

9.108 Issue: A door knob or latch does not operate smoothly.

Standard: A door knob or latch should not stick or bind during operation

Repairs: The contractor will adjust, repair, or replace knobs or latches that are not damaged by abuse one time.

Interior Stairs

9.200 Issue: An interior stair tread deflects too much.

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

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

9.201 Issue: Gaps exist between interior stair risers, treads, and/or skirts.

Standard: Gaps between adjoining parts that are designed to meet flush shall not exceed 1/8-inch in width.

Repairs: The contractor will repair the gap with filler or will replace the parts as necessary to meet the performance guideline.

9.202 Issue: A stair riser or tread squeaks.

Standard: Loud squeaks caused by a loose stair riser or tread are considered excessive; however, totally squeak-proof stair risers or treads cannot be guaranteed.

Repairs: The contractor will refasten any loose risers or treads or take other reasonable and cost-effective corrective action to eliminate squeaking without removing treads or ceiling finishes.

Discussion: Squeaks in risers or treads may occur when a riser has come loose from the tread, and is deflected by the weight of a person and rubs against the nails that hold it in place. Movement may occur between the riser and the tread or other stairway members when one tread is deflected while the other members remain stationary. Using trim screws to fasten the tread to the riser form above sometimes will reduce squeaking. If there is no ceiling below, gluing or renailing the riser to the tread or shimming will reduce squeaks but the complete elimination of squeaks is practically impossible.

9.203 Issue: Gaps exist between interior stair railing parts.

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

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

9.204 Issue: An interior stair railing lacks rigidity.

Standard: Interior stair railings shall be attached to structural members in accordance with applicable building codes.

Repairs: The contractor will repair any stair railings as necessary to comply with applicable building codes.

Trim and Moldings

9.300 Issue: There are gaps at non-mitered trim and molding joints.

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

Repairs: The contractor will repair joints to meet the performance guideline.

Discussion: Separation of trim and moldings in excess of the performance guidelines may be caused by lack of control of indoor relative humidity. Joints that separate under these conditions are not considered defective. It is the consumer's responsibility to control temperature and humidity in the home.

9.301 Issue: Nails are not properly set or, where puttied, nail holes are not properly filled.

Standard: Setting nails and filling nail holes are considered part of painting and finishing. After finishing, nails and nail holes shall not be readily visible from a distance of 6 feet under normal lighting conditions. After painting or staining, putty colors will not exactly match variations in wood color.

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

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

9.302 Issue: An inside corner is not coped or mitered.

Standard: Trim and molding edges at inside corners shall be coped or mitered. However, square-edge trim and molding may be butted.

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

9.303 Issue: Trim or molding mitered edges do not meet.

Standard: Gaps between mitered edges in trim and molding shall not exceed 1/8-inch at the time of installation/

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

9.304 Issue: Interior trim is split

Standard: Splits, cracks, and checking greater than 1/8-inch in width are considered excessive.

Repairs: One time only, the contractor will repair the affected area to meet the guideline.

9.305 Issue: Hammer marks are visible on interior trim.

Standard: Hammer marks on interior trim shall not be readily visible from a distance of 6 feet under normal lighting conditions

Repairs: The contractor will fill hammer marks and refinish or replace affected rim to meet the performance guideline. Refinished or replaced areas may not match surrounding surfaces exactly.

Cabinets

9.400 Issue: Cabinets do not meet the ceiling or walls.

Standard: Gaps greater than 1/4-inch in width are considered excessive.

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

9.401 Issue: Cabinets do not line up with each other.

Standard: Cabinet faces more than 1/8-inch out of line, and cabinet corners more than 3/16-inch out of line, are considered excessive, unless the consumer and the contractor agree to disregard the guideline in order to match or otherwise compensate for pre-existing conditions.

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

9.402 Issue: A cabinet is warped.

Standard: Cabinet warpage shall not exceed 1/4-inch as measured from the face frame to the point of furthest warpage, with the door or drawer front in closed position.

Repairs: The contractor will correct or replace doors and drawer fronts as necessary to meet the performance guideline.

9.403 Issue: A cabinet door or drawer binds.

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

Repairs: The contractor will adjust or replace cabinet doors and drawers as necessary to meet the performance guideline

9.404 Issue: A cabinet door will not stay closed.

Standard: The catches or closing hardware for cabinet doors shall be adequate to hold the doors in a closed position.

Repairs: The contractor will adjust or replace the door catches or closing hardware as necessary to meet the performance guideline

9.405 Issue: Cabinet doors or drawers are cracked.

Standard: Panels and drawer fronts shall not crack.

Repairs: The contractor may replace or repair cracked panels and drawer fronts. No contractor action is required if the cracked drawer fronts or panels result from the consumer's abuse.

Discussion: Paint or stain on the repaired or replaced panel or drawer front may not match the stain on the existing panels or drawer fronts.

9.406 Issue: Cabinet units are not level.

Standard: Individual cabinets should not have a deviation of more than 3/16-inch out of level.

Repairs: The contractor will level cabinets to meet the performance guideline.

9.407 Issue: A cabinet door is warped.

Standard: Cabinet door warpage shall not exceed 1/8-inch as measured diagonally from corner to corner.

Repairs: The contractor may replace or repair warped doors to meet the performance guideline.

9.408 Issue: Cabinet doors do not align when closed.

Standard: Gaps between doors should not exceed 1/8-inch.

Repairs: The contractor shall adjust doors to meet the performance guideline.

Countertops

9.500 Issue: High-pressure laminate on a countertop is delaminated.

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

Repairs: The contractor will repair or replace delaminated coverings, unless the delamination was caused by the consumer's misuse or negligence.

Discussion: Consumers should refrain from leaving any liquids near the countertop seams or allowing the surface to become excessively hot.

9.501 Issue: The surface of high pressure laminate on a countertop is cracked or chipped.

Standard: Cracks or chips greater than 1/16-inch in width are considered excessive.

Repairs: The contractor will repair or replace cracked or chipped countertops to meet the performance guideline only if they are reported at the time of substantial completion of the project.

9.502 Issue: Solid surface countertops are visibly scratched.

Standard: At the time of substantial completion of the project, solid surface countertops shall be free of scratches visible from 6 feet under normal lighting conditions.

Repairs: The contractor shall repair scratches in the countertop to meet the performance guideline.

9.503 Issue: A countertop is not level.

Standard: Countertops shall be no more than 3/8-inch in 10 feet out of parallel with the floor.

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

9.504 Issue: A tile countertop has uneven grout lines.

Standard: Grout lines should not vary more than 1/16-inch from the widest to the narrowest.

Repairs: The contractor shall make corrections as necessary to bring the grout lines into compliance with the performance guideline.

Discussion: Different tiles require different widths of grout lines. Some tiles are designed to have varied-width grout lines.

9.505 Issue: Tile countertop grout lines are cracked.

Standard: Tile grout is a cement product and is subject to cracking. Cracks that result in loose tiles or gaps in excess of 1/16-inch shall be repaired.

Repairs: The contractor will repair the grout lines by adding grout, caulking, or replacing grout one time.

9.506 Issue: A granite, marble, stone, or solid surface countertop is cracked at the time of substantial completion of the project

Standard: Cracks greater than 1/32-inch in width are considered excessive.

Repairs: If the crack is found to be caused as a result of faulty installation or product, the contractor will repair or replace the countertop. Patching is an acceptable repair.

9.507 Issue: A granite, marble, stone, or solid surface countertop has texture or color variations.

Standard: Color variations are acceptable. The contractor has no responsibility for countertop texture or color variations when the consumer selects the material.

Repairs: No action is required of the contractor.

9.508 Issue: A granite, marble, stone, or solid surface countertop is chipped at the time of substantial completion of the project.

Standard: Chips greater than 1/32-inch in width are considered excessive.

Repairs: The contractor will repair or replace affected areas to meet the performance guidelines.

9.509 Issue: The surface of countertop tile has excessive lippage of adjoining tile.

Standard: Lippage greater than 1/16-inch is considered excessive, except for materials that are designed with an irregular height (such as hand-made tile).

Repairs: The contractor will repair or replace the tile to meet the performance guideline.

9.510 Issue: A solid surface or laminate countertop has a bubble, burn, stain, or other damage.

Standard: Solid surface or laminate countertops shall be free of bubbles, burns, or stains at the time of substantial completion of the project.

Repairs: The contractor will repair or replace the countertop to meet the performance guideline.

Discussion: Solid surface and laminate products may be subject to damage by hot surfaces placed on or near the product. The consumer is responsible for maintaining the countertop and protecting it from damage.

Interior Wall Finish

Lath and Plaster

9.600 Issue: Cracks are visible on a finished wall or ceiling.

Standard: Cracks shall not exceed 1/16-inch in width.

Repairs: One time only, the contractor will repair cracks exceeding 1/16-inch in width. The contractor will touch up paint on repaired areas if the contractor was responsible for the original interior painting. A perfect match between original and new paint cannot be expected and the contractor is not required to pain an entire wall or room.

Gypsum Wallboard

9.601 Issue: A nail pop, blister, or other blemish is visible on a finished wall or ceiling.

Standard: Any such blemishes that are readily visible from a distance of 6 feet under normal lighting conditions are considered excessive.

Repairs: One time only, the contractor will repair such blemishes. The contractor will touch up paint on repaired areas if the contractor was responsible for the original interior painting. A perfect match between original and new paint cannot be expected, and the contractor is not required to paint an entire wall or room. The contractor is not required to repair defects that are covered by wallpaper and, therefore, are not visible.

Discussion: When drywall has been placed on lumber surfaces which are subject to shrinkage and warpage and which are not perfectly level and plumb, problems may often occur through stress and strain placed on drywall during the stabilization of the lumber, which is inherent in the construction of the home. Due to the initial stabilization problem that exists with the new home, it is impossible to correct each effect as it occurs, and it is essentially useless to do so. The entire house will tend to stabilize itself.

9.602 Issue: Cracked corner bead, excess joint compound, trowel marks, or blisters in tape joints are observed on the drywall surface.

Standard: Defects resulting in cracked corner bead, trowel marks, excess joint compound or blisters in tape are considered excessive.

Repairs: The contractor shall repair the affected area of the wall to meet the performance guideline one time within the warranty period.

9.603 Issue: Joints protrude from the surface.

Standard: Any joints that are visible from a distance of 6 feet under normal lighting conditions are considered excessive.

Repairs: One time only, the contractor will repair affected areas.

Discussion: Joints often occur in long walls, stairwells, and areas of two-story homes where framing members have shrunk and caused the drywall to protrude.

9.604 Issue: The texture of gypsum wallboard does not match.

Standard: Any variations that are readily visible from a distance of 6 feet under normal lighting conditions are considered excessive.

Repairs: The contractor will repair the affected area to meet the guideline.

9.605 Issue: Angular gypsum wallboard joints are uneven.

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

Repairs: No action is required of the contractor. This is a common condition.

9.606 Issue: Drywall is cracked.

Standard: Drywall cracks greater than 1/16-inch in width are considered excessive.

Repairs: One time only, the contractor will repair cracks and touch up paint in affected areas. The texture and paint color may not exactly match the existing texture and paint color.

9.607 Issue: Blown or textured ceiling have uneven textures.

Standard: This is a common condition that occurs with randomly applied materials.

Repairs: No action is required of the contractor. This is a common condition

Paint, Stain, and Varnish

9.608 Issue: Interior paint does not “cover” the underlying surface.

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

Repairs: The contractor will recoat affected areas as necessary to meet the guidelines as closely as practical.

9.609 Issue: An interior surface is spattered with paint.

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

Repairs: The contractor will remove paint spatters to meet the performance guideline.

9.610 Issue: Brush marks show on interior painted surface.

Standard: Brush marks shall not be readily visible on interior painted surfaces when viewed from a distance of 6 feet under normal lighting conditions

Repairs: The contractor will refinish as necessary to meet the performance guideline and match affected areas as closely as practical.

9.611 Issue: Lap marks show on interior painted or stained areas

Standard: Lap marks shall not be readily visible on interior painted or stained areas when viewed from a distance of 6 feet under normal lighting conditions

Repairs: The contractor will refinish as necessary to meet the guideline and match affected areas as closely as practical.

9.612 Issue: Interior painting, staining, or refinishing is required because of repair work.

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

Repairs: Where the majority of the wall or ceiling area is affected, the area will be painted from breakline to breakline. The contractor is not required to paint an entire room.

Discussion: The contractor is only responsible if he or she painted the home as part of the original contract.

9.613 Issue: Resin has bled through the paint on interior trim

Standard: This is a common condition that can be expected to occur with natural materials such as wood.

Repairs: No action is required of the contractor. This is a common condition.

Wallpaper and Vinyl Wall Coverings

9.614 Issue: The wall covering has peeled.

Standard: The wall covering shall not peel off the walls.

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

Discussion: Wallpaper applied in high moisture areas is exempted from this guideline because the problem results from conditions beyond the contractor's control.

9.615 Issue: Patterns in wall covering are mismatched.

Standard: Patterns in wall coverings shall match. Irregularities in the patterns themselves are the manufacturer's responsibility.

Repairs: The contractor shall correct the wall covering to meet the performance guidelines.

Floor Finishes

Carpeting

10.100 Issue: Carpet does not meet at the seams.

Standard: It is not unusual for carpet seams to show. However, a visible gap at the seams is considered excessive.

Repairs: If the carpet was installed by the contractor, the contractor will eliminate visible gaps at carpet seams.

10.101 Issue: Carpeting stretches or loosens.

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

Repairs: If the carpeting was installed by the contractor, the contractor will restretch or resecure the carpeting as necessary to meet the guideline.

10.102 Issue: Carpeting is faded or discolored.

Standard: Fading or discoloration of carpet is a manufacturer's responsibility.

Repairs: No action is required of the contractor.

Discussion: Fading or discoloration may result from the consumer spilling liquids on the carpet, exposure to sunlight, or the consumer's failure to properly maintain the carpet.

10.103 Issue: Dead spots are observed in padding areas below the carpet surface.

Standard: Carpeted areas shall have full coverage of padding consistently throughout the flooring area.

Repairs: The contractor will repair/replace padding in the affected areas to meet the performance guidelines.

Roll Vinyl and Resilient Tile Flooring

10.200 Issue: Nail pops are observed on the surface of resilient flooring.

Standard: Readily visible nail pops on resilient flooring are considered excessive.

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

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

10.201 Issue: Depressions or ridges are observed in resilient flooring because of subfloor irregularities.

Standard: Readily apparent depressions or ridges exceeding 1/8-inch shall be repaired. The ridge or depression measurement is taken at the 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 affected area. Measure under the straightedge to determine the depth of the depression or height of the ridge.

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

10.202 Issue: Resilient flooring has lost adhesion.

Standard: Resilient flooring shall not lift, bubble, or detach.

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

10.203 Issue: Seams or shrinkage gaps show at vinyl flooring joints.

Standard: Gaps at joints/seams in vinyl flooring shall not exceed 1/32-inch in width. Where dissimilar materials abut, the gaps shall not exceed 1/16-inch.

Repairs: At the contractor's option, the contractor will repair or replace the vinyl flooring as necessary to meet the performance guideline. The contractor will not be responsible for discontinued patterns or color variations when replacing the floor covering.

Discussion: Proper repair can be accomplished by sealing the gap with seam sealer.

10.204 Issue: Bubbles are observed on roll vinyl flooring.

Standard: Bubbles resulting from trapped air and that protrude higher than 1/16-inch from the floor are considered excessive.

Repairs: The contractor will repair the floor to meet the guideline.

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

10.205 Issue: The patterns on roll vinyl flooring are misaligned

Standard: Patterns at seams between adjoining pieces shall be aligned to within 1/8-inch.

Repairs: The contractor will correct the flooring to meet the performance guideline.

10.206 Issue: A resilient floor tile is loose.

Standard: The contractor will attach loose resilient floor tiles securely to the floor. The old adhesive will be removed if necessary to resecure the tiles.

10.207 Issue: The corners or patterns of resilient floor tiles are misaligned.

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

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

10.208 Issue: Yellowing is observed on the surface of vinyl sheet goods.

Standard: The contractor shall install vinyl flooring per the manufacturer's instructions.

Repairs: Yellowing resulting from a manufacturer's defect or from the consumer's misuse or lack of maintenance is not covered by the contractor.

Discussion: Some chemical compounds, such as the tar residue from a recently paved asphalt driveway, may cause a chemical reaction with the flooring material and result in permanent damage to the floor. The consumer is responsible for the proper use and maintenance of the floor. Yellowing caused by the consumer's improper use of or inadequate maintenance of the floor is not the contractor's or manufacturer's responsibility.

Wood Flooring

10.300 Issue: Gaps exist between strip hardwood floor boards.

Standard: Gaps between strip hardwood floor boards shall not exceed 1/8-inch in width at the time of installation.

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

Discussion: Proper repair can be effected by filling the gap. Relative humidity in the home can cause noticeable fluctuations in gaps between floor boards. This is a common phenomenon in climates and areas of the home that experience significant shift in humidity. The consumer is responsible for maintaining proper humidity levels in the home.

10.301 Issue: Strip hardwood floor boards are cupped.

Standard: Cups in strip hardwood floor boards shall not exceed 1/16-inch in height in a 3-inch maximum span measured perpendicular to the long axis of the board. Cupping caused by exposure to moisture beyond the contractor's control is not covered.

Repairs: The contractor will correct or repair cupped boards to meet the performance guideline.

Discussion: The consumer is responsible for proper maintenance of the floor and for maintaining proper humidity levels in the home.

10.302 Issue: Excessive lippage is observed at the junction of prefinished wood flooring products.

Standard: Lippage greater than 1/16-inch is considered excessive.

Repairs: The contractor will repair lippage in the affected areas to meet the performance guideline.

10.303 Issue: Voids ("holidays") are observed in the floor finish.

Standard: Voids that are readily visible from a distance of 6 feet under normal lighting conditions are considered excessive.

Repairs: The contractor will repair the floor finish in the affected area(s) to meet the performance guideline.

10.304 Issue: The top coating on hardwood flooring has peeled.

Standard: Field-applied coating shall not peel during normal usage. Prefinished coatings are the manufacturer's responsibility.

Repairs: The contractor shall refinish any field-applied finishes that have peeled.

Discussion: The consumer should contact the manufacturer regarding factory-applied finishes that have peeled

10.305 Issue: Strip flooring has crowned.

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

Repairs: The contractor will repair the affected area to meet the performance guideline.

10.306 Issue: Hardwood flooring has buckled from the substrate.

Standard: Hardwood floor should not become loose from the substrate.

Repairs: The contractor will repair the affected area to meet the performance guideline.

10.307 Issue: Excessive knots and color variations are observed in strip hardwood flooring.

Standard: The contractor will install the grade of hardwood specified for the project. All wood should be consistent with the grading stamp as specified.

Repairs: The contractor shall replace any improperly graded wood.

Discussion: Hardwood is a natural product and consequently can be expected to exhibit variations in color, grain, and stain acceptance.

10.308 Issue: Silvers or splinters are observed in strip flooring.

Standard: Silvers or splinters that occur during the installation of the flooring are considered excessive.

Repairs: The contractor will repair flooring in the affected areas to meet the performance guideline.

Discussion: Silvers or splinters that occur during installation can be shaved and the area filled prior to sanding and finishing.

10.309 Issue: “Sticker burn” is observed on the surface of strip flooring.

Standard: Discoloration from stacking strips in hardwood flooring is considered excessive in certain grades of flooring.

Repairs: The contractor shall repair or replace areas with sticker burn if they are not permitted in the grade of wood specified for the project.

Tile, Brick, Marble, and Stone Flooring

10.400 Issue: Tile, brick, marble, or stone flooring is broken or loosened.

Standard: Tile, brick, marble, and stone flooring shall not be broken or loose.

Repairs: The contractor will replace broken tiles, bricks, marble, and stone flooring, and resecure loose tiles, bricks, marble, and stone, unless the flooring was damaged by the consumer’s actions or negligence. The contractor is not responsible for discontinued pattern or color variations when replacing tile, brick, marble, or stone flooring.

10.401 Issue: Cracks are observed in the grouting of tile joints or at the junctures with other materials, such as a bathtub.

Standard: Cracks in grouting of ceramic tile joints commonly result from normal shrinkage conditions. Cracks that result in loose tiles or gaps in excess of 1/16-inch shall be repaired.

Repairs: The contractor will repair grouting, if necessary, one time only. The contractor is not responsible for color variations or discontinued colored grout. The consumer is responsible for regrouting these joints after the contractor’s one-time repair.

Discussion: The use of an elastic substance at junctures between tile and other materials is often more effective than grout.

10.402 Issue: There is excessive lippage of adjoining marble or ceramic tile.

Standard: Lippage greater than 1/16-inch is considered excessive, except where the materials are designed with an irregular height (such as hand-made tile).

Repairs: The contractor will repair lippage in the affected areas to meet the performance guideline.

10.403 Issue: A grout or mortar joint is not a uniform color.

Standard: After the grout has cured, any color variation that is readily visible from a distance of 6 feet under normal lighting conditions is considered excessive.

Repairs: One time only, the contractor will repair the joint to meet the performance guideline.

Miscellaneous

Fireplace and Wood Stove

11.100 Issue: A fireplace or chimney does not consistently draw properly.

Standard: A properly designed and constructed fireplace and chimney shall function correctly. Some homes that have been constructed to meet stringent energy criteria may need to have a nearby window opened slightly to create an effective draft.

Repairs: One time only, the contractor shall repair the chimney, based on the manufacturer's specifications or the design specifications, to draw correctly.

Discussion: High winds can cause temporary negative or down drafts. Negative drafts can also be caused by obstructions such as tree branches, steep hillsides, adjoining homes, and interior furnaces.

11.101 Issue: The chimney is separated from the structure.

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

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

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

11.102 Issue: The firebox pain is damaged by a fire in the fireplace.

Standard: Heat and discoloration is a common occurrence.

Repairs: No action is required of the contractor.

Discussion: The consumer should obtain the proper paint from the manufacturer if he or she chooses to touch up the interior of the firebox for aesthetic reasons.

11.103 Issue: A firebrick or mortar joint is cracked.

Standard: heat and flames from normal fires can cause cracking.

Repairs: No corrective action is required of the contractor.

11.104 Issue: A simulated firebrick panel has cracked.

Standard: This is a common condition.

Repairs: No corrective action is required of the contractor.

11.105 Issue: Rust is observed on the fireplace damper.

Standard: This is a common condition

Repairs: No corrective action is required of the contractor.

Concrete Stoops and Steps

11.200 Issue: Stoops or steps have settled, heaved, or separated from the house structure.

Standard: Stoops and steps shall not settle, heave, or separate in excess of 1 inch from the house structure.

Repairs: The contractor will make a reasonable and cost-effective effort to meet the performance guideline.

11.201 Issue: Water remains on stoops or steps after rain has stopped.

Standard: Water shall drain off outdoor stoops and steps. Minor amounts of water can be expected to remain on stoops and steps for up to 24 hours after rain.

Repairs: The contractor will take corrective action to ensure proper drainage of stoops and steps.

Garage

11.300 Issue: The garage floor slab is cracked.

Standard: Cracks in a concrete garage floor greater than 3/16-inch in width or 3/16-inch in vertical displacement are considered excessive.

Repairs: The contractor shall repair cracks in the slab to meet the performance guideline.

Discussion: The repaired area may not match the existing floor in color and texture.

11.301 Issue: A garage concrete floor has settled, heaved, or separated.

Standard: The garage floor shall not settle, heave, or separate in excess of 1 inch from the structure.

Repairs: The contractor will make a reasonable and cost-effective effort to meet the performance guideline.

Discussion: The repaired area may not match the existing floor in color and texture.

11.302 Issue: Garage doors fail to operate properly under normal use.

Standard: Garage doors shall operate as designed.

Repairs: The contractor will correct or adjust garage doors as required, unless the consumer's actions or negligence caused the problem.

11.303 Issue: Garage doors allow the entry of snow or water.

Standard: Garage doors shall be installed as recommended by the manufacturer. Some snow or water can be expected to enter under normal conditions.

Repairs: The contractor will adjust or correct the garage doors to meet the manufacturer's installation instructions.

Driveways and Sidewalks

11.400 Issue: An asphalt driveway has cracked.

Standard: Longitudinal or transverse cracks greater than 1/16-inch in width or vertical displacement are considered excessive.

Repairs: The contractor shall repair the affected area to meet the guideline.

Discussion: If commercial-grade filler is chosen for repair, cracks should be routed to a minimum depth of 1/4-inch.

11.401 Issue: Standing water is observed on an asphalt pavement surface.

Standard: Standing water greater than 1/8-inch in depth shall not remain on the surface 24 hours after a rain.

Repairs: The contractor shall repair or replace the affected area to meet the guideline.

11.402 Issue: The aggregate of asphalt pavement is raveling.

Standard: Asphalt pavement shall not ravel.

Repairs: The contractor shall repair or replace the affected area to meet the guideline.

11.403 Issue: A concrete driveway or sidewalk is cracked.

Standard: Cracks (outside of control joints) that exceed ¼-inch in width or ¼-inch in vertical displacement shall be repaired.

Repairs: The contractor shall repair/replace affected areas to eliminate cracks that exceed the performance guidelines.

Discussion: Concrete products normally have some cracking and shrinkage. Minor cracking is normal. Cracking can be caused by elements outside of the contractor's control. Control joints are placed in the concrete to help control cracks and provide a less visible area for them to occur. The repaired area may not match the existing area in color and texture

11.404 Issue: Adjoining exterior concrete flatwork sections deviate in height from one section to another.

Standard: Adjoining concrete sections shall not differ in height by more than 1/2inch.

Repairs: The contractor shall repair deviations to meet the performance guidelines.

Discussion: Some areas of the country experience lift or settlement at the junction of the garage floor and the driveway. The repaired area may not match the existing area in color and texture.

11.405 Issue: A sidewalk and other exterior concrete flatwork have settled.

Standard: Adjoining concrete sections shall not differ in height by more than ½-inch.

Repairs: The contractor shall repair the affected areas to meet the performance guideline.

Discussion: Some areas of the country experience lift or settlement at the junction of the garage floor and the driveway. The repaired area may not match the existing area in color and texture.

11.406 Issue: Water collects (ponds) on the sidewalk.

Standard: Standing water that is 3/8-inch deep on a sidewalk 24 hours after the end of a rain is considered excessive.

Repairs: The contractor shall repair or replace the affected area to meet performance guideline.

Wood Decks

11.500 Issue: A wood deck is springy or shaky.

Standard: All structural members in a wood deck shall be sized, and fasteners spaced, according to appropriate building codes and manufacturers' instructions.

Repairs: The contractor will reinforce or modify, as necessary, any wood deck not meeting the performance guidelines.

Discussion: Deflection may indicate insufficient stiffness in the lumber, or may reflect an aesthetic consideration independent of the strength and safety requirements of the lumber. Structural members are required to meet standards for both stiffness and strength. When a consumer's preference is made known before construction, the contractor and the consumer may agree upon a higher standard.

11.501 Issue: The spaces between decking boards are not uniform.

Standard: The spaces on opposite sides of individual deck boards shall not differ in average width by more than 3/16-in at the time of substantial completion of the project, unless otherwise agreed upon by the consumer and the contractor.

Repairs: One time only, the contractor will realign or replace decking boards to meet the performance guideline.

Discussion: The spaces will naturally tend to change over time because of shrinkage and expansion of individual boards. The contractor is only responsible for correct spacing at the time of substantial completion of the project.

11.502 Issue: The railings on wood decking contain slivers in exposed areas.

Standard: Railings on wood decks shall not contain slivers longer than 1/8-inch in exposed areas at the time of substantial completion of the project.

Repairs: One time only, the contractor will repair railings as necessary to remove slivers prior to substantial completion of the project. Repair of slivers after that time is a consumer maintenance responsibility.

Discussion: Slivers can develop when unprotected wood weathers. The proper finishing of wood surfaces helps prevent slivers from forming.

11.503 Issue: A wood deck is out of level.

Standard: No point on the deck surface shall be more than ½-inch higher or lower than any other deck surface point within 1- feet on a line parallel to the house, or in proportional multiples of the preceding dimensions (unless a slope is incorporated in the design).

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

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

11.504 Issue: Wood decking boards are split, warped, or cupped.

Standard: At the time of substantial completion of the project, splits, warps, and cups in wood decking boards shall not exceed the allowances established by the official grading rules issued by the agency responsible for the lumber species specified for the deck boards.

Repairs: The contractor will replace decking boards as necessary to meet the performance guidelines.

11.505 Issue: A wood deck has stain color variations.

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

Repairs: The contractor will restrain the affected area to meet the performance guideline.

11.506 Issue: A nail head protrudes from a wood decking board.

Standard: Nail heads shall not protrude from the floor of the wood deck at the time of substantial completion of the project.

Repairs: The contractor will refasten nails whose heads protrude from the floor of the deck so that the heads are flush with the surface.

Discussion: Nails should be driven flush when the deck is installed, but they may pop from the deck over time as the wood shrinks and expands.

11.507 Issue: Nails on a wood deck are “bleeding.”

Standard: Nail stains extending more than ½-inch from the nail and readily visible from a distance of more than 3 feet are not acceptable.

Repairs: The contractor will eliminate nail stains to meet the performance guideline

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

11.508 Issue: A wood deck railing lacks rigidity.

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

Repairs: The contractor will repair wood deck railings as necessary to comply with applicable building codes.

Landscaping

12.100 Issue: Tree stumps have been left in a disturbed area of the property.

Standard: If tree stumps were on the property in the disturbed area prior to the substantial completion of the project, the contractor is responsible for their removal.

Repairs: The contractor will remove the stumps from the area.

12.101 Issue: Sod, shrubs, plants, or trees that have been planted in a disturbed area of the property as part of the contract have died.

Standard: Any shrub, plant, tree, or sod planted by the contractor as part of the contract are to be alive at the time of substantial completion of the project.

Repairs: Any shrub, plant, tree, or sod planted by the contractor as part of the contract shall be replaced to meet the performance guideline.

12.102 Issue: Grass seed does not germinate.

Standard: Germination is dependent on certain climatic conditions, which are beyond the contractor’s control.

Repairs: The contractor is only responsible for seeding per the manufacturer’s instruction.

Discussion: After installation, proper lawn and landscape care are the consumer's responsibility.

12.103 Issue: Outdoor plants moved during work die after substantial completion of the project.

Standard: Plants that must be physically transported during the work shall be moved, maintained, and replanted by the consumer.

Repairs: No action is required of the contractor.

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

Glossary of Common Terms

AFCI (arc fault circuit interrupter) – A type of circuit breaker that is designed to reduce the likelihood of fire caused by electrical arcing faults.

beam – A structural member that transversely supports a load.

bifold doors – Doors that are hinged at the center and guided by an overhead track.

blocking – A solid, tight closure used between framing members.

breakline – A dividing point between two or more surfaces.

brick veneer – A non-structural outer covering of brick.

bridging – Wood or metal structural members between horizontal (joists) or vertical (studs) framing that provide lateral rigidity to the members to which applied.

bug holes – Pits, surface voids, and similar imperfections in a concrete wall. Bug holes generally are up to 1 inch wide or deep.

cantilever – Construction that is unsupported at one end and that projects outward from the site of the structure to carry loads from above or below.

ceiling joist – The horizontal structural members to which the ceiling is fastened. Some members may support a floor above.

checking – Cracks in wood.

chimney cap – A metal or masonry surface that covers the top portion of a chimney that prevents the penetration of water.

circuit – The complete path of electricity away from and back to its source.

circuit breaker – A device that automatically interrupts an electrical circuit when it becomes overloaded.

cold joint – A joint in poured concrete that indicates where the pour terminated and continued.

control joint – A joint that is molded or cut in concrete to allow for expansion and contraction and to attempt to control random cracking.

corner bead – A strip of wood or metal fastened over a corner for protection.

crawl space – An area under a home which is not a basement or cellar.

damper – A device used to regulate draft in a furnace or fireplace chimney.

dead spots – Areas below a carpeted surface where padding appears to be missing or improperly installed.

deflection – The amount a truss or beam bends under a load.

dew point – The temperature at which moisture in the air condenses into drops

disturbed area – Any area adjacent to a dwelling where original vegetation has been altered or removed.

downspout – A pipe that carries rainwater from the roof to the ground or to a sewer connection.

drywall – Gypsum wallboard.

duct – A round or rectangular pipe used to transmit and distribute warm or cool air from a central heating or cooling unit.

eave – The lower or outer edge of a roof that projects over the side walls of a structure.

efflorescence – A white powder that appears on the surface of masonry walls. It is usually caused by moisture reacting with the soluble salts in concrete and forming harmless carbonate compounds.

finish flooring – The top flooring material that covers the subflooring surface; usually carpeting, hardwood, tile, vinyl, etc.

flashing – Strips of metal or plastic material used to prevent moisture from entering roofs, walls, windows, doors, and foundations.

floor joist – A horizontal framing member to which flooring is attached.

footing – A flange-like part at the base of a foundation wall which ties and distributes loads from the foundation into the ground and prevents shifting and settling.

foundation – That part of a building which is below the surface of the ground and on which the superstructure rests.

frost lift – A condition caused by water freezing and causing soil to expand, which can cause two overlying, adjoining surfaces to separate from each other. Frost lift sometimes occurs at the junction of a garage floor and driveway.

GFCI (ground fault circuit interrupter) – A type of circuit breaker that is extremely sensitive to moisture and changes in resistance to an electrical current flow. A GFCI protects against electrical shock or damage.

gypsum – Hydrous calcium sulphate mineral rock.

gypsum wallboard – See “drywall.”

hardboard – A wood fiber panel with a density range of 50 to 80 pounds per cubic foot. It is made of wood fibers pressed into solid boards by heat and pressure.

header – A structural member placed across the top of an opening to support loads above.

hinge-bound – A condition of a passage or entry door where hinge function impedes proper operation.

holidays – Voids or inconsistencies in a finished surface.

honeycomb – Voids in a concrete wall that are larger than bus holes (see “bug holes”).

HVAC – The abbreviation for heating, ventilating, and air conditioning systems.

jamb – The side framing or finish material of a window, door, or other opening.

joist – An-on-edge-horizontal lumber member, such as a 2x6, 2x8, 2x10, or 2x12, which spans from wall to wall or beam to provide main support for flooring, ceiling, or roofing systems.

junction box – A box that forms junctions between sections of house wiring.

lath – Any material used as a base for plastering or stucco surface

lippage – The difference in surface alignment between two materials.

mortar – An adhesive and leveling material used in brickwork, stone, block, and similar masonry construction.

muntins – Strips of wood, metal, or plastic that divide a window into panes. Muntins can be installed within two pieces of glass or on the surface of the glass.

paring – A rough coat of mortar applied over a masonry wall.

pitch – The degree of incline in a sloped roof or structure.

plumb – A measurement of true vertical.

rafter – Structural members which shape and form the support for the roof deck and the roof covering.

raveling – A condition in which aggregate is loose from asphalt pavement.

register – A louvered device that allows air travel from the ducts into a room.

riser (stairway) – A vertical stair member that supports a tread.

riser (plumbing) – A water pipe that extends vertically one full story or more to convey water to branches or to a group of fixtures.

roof ridge – The apex of a roof system.

scaling – The flaking or peeling away of a surface portion of hardened concrete.

setting – The driving of a fastener flush or below the surface of a material.

shakes – Split wooden shingles that are random in thickness.

sheathing – The application of panels to the face of framing members. Also known as “decking.”

shim – A thin, tapered piece of material (usually wood) that is used to adjust or provide support for a member.

sill – A framing member placed on top of and around a foundation to serve as a level base on which to support exterior wall studs.

slab – A concrete floor/surface.

soffit – The enclosed under surface of an eave.

spalling - The breaking away of a small piece of concrete.

stair skirt – A finishing board that may cover the outside staircase edge.

stud – A vertical framing member.

subflooring – A floor decking material laid on top of the floor joists.

substantial completion of the project – A project has met substantial completion where the areas are functional for their intended use as stated by the contract (except for items noted prior to final presentation), and clean-up on the site has been completed.

sump pump – A pump that is installed in a crawl space, basement, or other low area to discharge water that might collect.

swale – A shallow depression in the ground that is used as a drainway for water.

telegraphing – A condition of a subsurface projecting through the finish material

tread – A horizontal stair member. A tread is the part you step on when walking up or down the stairs.

truss – An engineered assembly of wood or metal components that generally is used to support roofs or floors.

vapor retarder – Plastic film or other material used to limit the amount of moisture vapor that passes through a material or wall assembly.

warranty period – The duration of the applicable warranty provided by the contractor or any other period agreed to by the parties.

weather stripping – Material placed around doors, windows, and other openings to prevent the infiltration of air, dust, rain, etc.