BUILDING INDUSTRY ASSOCIATION OF CENTRAL OHIO

MINIMUM QUANTIFIABLE STANDARDS TO DEFINE WORKMANLIKE MANNER OF CONSTRUCTION SERVICES

PREFACE

Pursuant to Ohio revised Code § 4722.01(G), the Ohio Home Builders Association is designated as the authority to adopt Minimum Quantifiable Standards that define Workmanlike Manner for all home construction service suppliers as set forth in Chapter 4722. As stated in the Ohio Revised Code, OHBA solely adopts the Standards, and is not an enforcement authority, under the law. A home construction service supplier means a person who contracts with an owner to provide for the construction of a one, two, or three family residential building for compensation and who maintains in force a general liability insurance policy in an amount of not less than two hundred fifty thousand dollars.

"Workmanlike Manner" means the home construction service supplier has engaged in construction that meets or exceeds the minimum quantifiable standards promulgated by the Ohio home builders association.

The purpose of these standards is to set forth the definition of workmanlike manner of residential construction services. The standards that are set forth herein have been adopted by the Ohio Home Builders Association. The terms used herein have the same meaning as defined in Ohio Revised Code § 4722.01.

These Minimum Quantifiable Standards have been promulgated by the Ohio Home Builders and are hereby adopted as the Sixth Edition Copyright 2024 and shall go into effect January 1, 2024.

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THE MINIMUM STANDARDS

All Home Construction Services shall be supplied to the following standards and in the following order of priority:

(A) in compliance with the standards contained in the Residential Code of Ohio (the "RCO"), as adopted by the Ohio Board of Building Standards;

(B) if not contained in the RCO, then in accordance with the written manufacturer's instructions and specifications of Manufactured Products installed by the Home Construction Service Supplier;

(C) if an element or component of home construction is not contained in (A) or (B), then the element or component shall be constructed in accordance with the standards of construction as set forth herein.

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I. Site Work

(A) Ground shall be graded around the foundation walls, over utility trenches, or in other filled areas to provide for proper drainage away from the home in accordance with the RCO.

(B) Yards shall have grades and swales that provide for proper drainage away from the home in accordance with the RCO.

II. Foundation

(A) *General*

(1) 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 when measured from the top of the foundation wall at the time of installation.

(2) No point in the level of a foundation shall be more than ½ inch higher or lower than any point within 20 feet when measured from the top of the foundation wall at the time of installation.

(B) *Concrete Slabs*

(1) Concrete slabs within the structure shall be designed to move at control joints.

(2) Concrete floors in living areas shall not have pits, depressions, or areas of unevenness that exceeds 3/8 inch in 32 inches at the time of installation, except where the floor or a portion of the floor has been designated for drainage purposes.

(C) *Concrete Block Basement and Crawl Space Walls*

(1) 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 at the time of installation.

(2) Block concrete walls shall not bow in excess of 1 inch in 8 feet at the time of installation.

(D) *Poured Concrete Basement and Crawl Space Walls*

(1) Finished concrete walls shall not be out of plumb greater than 1 inch in 8 feet when measured vertically at the time of installation.

(2) Concrete walls shall not bow in excess of 1 inch in 8 feet when measured from the base to the top of the wall at the time of installation.

(E) *Structural Columns, Posts or Piers*

(1) Exposed wood columns shall not bow or be out of plumb for more than ¾ inch in 8 feet at the time of installation.

(2) Exposed concrete columns shall not be installed with a bow in excess 1 inch in 8 feet or be out of plumb in excess 1 inch in 8 feet at the time of installation.

(3) Masonry columns or piers shall not be constructed out of plumb in excess 1 inch in 8 feet at the time of installation.

(4) A steel post shall not be constructed out of plumb in excess 3/8 inch in 8 feet when measured vertically at the time of installation.

III. Interior Floor Construction

(A) *Subfloors*

(1) Subfloors will not have more than a 1/4 inch ridge or depression within any 32-inch measurement at the time of installation.

(2) The subfloor should not slope more than 1/2 inch in 20 feet at the time of installation.

(B) *Finished Flooring*

(1) Finished floors shall not have a depression that equals or exceeds 3/8 inch in any 32 inch measurement.

(2) Finished floors shall not be discolored, stained or spotted due to the construction activities.

(3) Finished floors shall not be scratched, gouged, cut or torn due to construction activities.

IV. Walls/Framing

(A) *Walls*

(1) Walls shall not be installed resulting in a bow or depressions that equal or exceed 1/2 of an inch out of line within any 32-inch horizontal measurement as measured from the center of the bow or depression or 1/2 of an inch within any eight-foot vertical measurement at the time of installation.

(2) Walls shall be installed to be level, plumb and square to all adjoining openings or other walls within 3/8 of an inch in any 32-inch measurement at the time of installation.

(B) *Drywall*

(1) A drywall surface shall not have a bow or depression that equals or exceeds 1/4 of an inch out of line within any 32-inch horizontal measurement as measured from the center of the bow or depression or 1/2 of an inch within any eight-foot vertical measurement at the time of installation.

(2) A ceiling made of drywall shall not have bows or depressions that equal or exceed 1/2 of an inch out of line within a 32-inch measurement as measured from the center of the bow or depression running parallel with a ceiling joist or within 1/2 of an inch deviation from the plane of the ceiling within any eight-foot measurement at the time of installation.

(3) A drywall surface shall not be out of level (horizontal), plumb (vertical) or square (perpendicular at a 90-degree angle) such that there are variations in those measurements

to wall or surface edges at any opening, corner, sill, shelf, etc. shall not equal or exceed 3/8 of an inch in any 32-inch measurement along the wall or surface at the time of installation.

(C) *Exterior Doors*
Due to the variety of products offered for exterior doors, exterior doors shall be installed in accordance with the written installation instructions of the manufacturer.

V. Exterior Finish

Masonry including Brick, Block and Stone

(A) A masonry wall shall not bow in an amount equal to or in excess of one inch when measured from the base to the top of the wall, unless the 1" variation was a design decision. The standard set forth in this subsection does not apply to natural stone products or man made products such as cultured stone.

(B) A masonry unit or mortar shall not be broken or loose.

(C) Masonry shall not have dirt, stain or debris on the surface due to construction activities.

(D) Mortar shall not obstruct a functional opening, such as a vent, weep hole or plumbing cleanout, or flashing drain.

(E) Masonry shall be cleaned in accordance with the written installation instructions of the manufacturer.

VI. Roof

(A) A gutter or downspout shall not contain a leak or retain standing water at the time of installation. After cessation of rainfall, standing water in an unobstructed gutter shall not equal or exceed 1/2 of an inch in depth at the time of installation.

(B) Water shall drain from a built-up roof within two hours after cessation of rainfall at the time of installation. The standard does not require that the roof dry completely within the time period.

(C) A roof tile shall not be cracked or broken and no shingle shall be broken so that it detracts from the overall appearance of the home at the time of installation.

VII. Plumbing

Plumbing standards, as detailed in the Residential Code of Ohio, shall apply when applicable according to the RCO.

VIII. Electrical

Electrical standards, as detailed in the Residential Code of Ohio, shall apply when applicable according to the RCO.

IX. Interior Climate Control

Interior Climate Control standards, as detailed in the Residential Code of Ohio, shall apply when applicable according to the RCO.

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X. Interior Finish

(A) *Interior Doors and Windows*

(1) Glass in doors and windows shall not be broken due to improper installation or construction activities.

(2) A door shall be installed so it operates freely.

(3) A door shall not have a warp in a door panel equal or exceeding 1/4 of an inch from original dimension measured vertically, horizontally or diagonally from corner to corner, at the time of installation.

(4) A door shall be installed so it is plumb and level.

(5) A metal door shall not be dented or scratched due to construction activities.

(B) *Interior Stairs*

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

(2) Gaps between adjoining parts that are designed to meet flush shall not exceed 1/8 inch in width.

(3) Gaps between interior stair railing parts shall fit tight without gaps.

(C) *Trim and Moldings*

(1) An interior trim shall be installed with all joints tight and sealed smooth if necessary and with no more than a 1/8" gap between it and the adjacent surface upon which it is applied.

(2) Gaps between mitered edges in trim and molding shall not exceed 1/8 inch, due to construction activity.

(3) The interior trim shall not have surface damage, such as scratches, chips, dents, gouges, splits, cracks, warping or cupping, at the time of installation.

(4) All nail holes shall be filled and finished, unless the nails holes were left unfinished due to a design decision or were intended to be left unfinished.

(D) *Cabinets*

(1) Where cabinets meet ceiling or walls, gaps shall not exceed ¼ inch in width.

(2) Cabinet faces shall not exceed 1/8 inch out of line, and cabinet corners shall not exceed 3/16 inch out of line.

(3) Door or drawer warpage shall not exceed ¼ inch as measured from face to frame or the point of furthermost warpage, with the door or drawer in closed position, at the time of installation.

(4) The catches or closing hardware for cabinet doors shall be adequate to hold the doors in a closed position.

(5) Cabinet doors and drawer fronts shall not have cracks, at the time of installation.

(6) Individual cabinets shall not have a deviation of more than 3/16 inch out of level at the time of installation.

(7) A cabinet frame, when measured diagonally from corner to corner, shall not exceed a difference of more than ¼ inch, at the time of installation.

(E) *Countertops*

(1) Countertops shall be free of cracks, chips, stains, spots, scratches, discoloration, bubbles, or burns due to construction activity.

(F) *Interior Wall Finish*

(1) Paint, Stain, and Varnish

(a) The surface being painted shall not show through new paint when viewed from a standing position facing the surface at distance of 6 feet under normal lighting conditions.

(b) Paint spatters shall not be readily visible on walls, woodwork, floors, or other interior surfaces when viewed from a standing position facing the surface at distance of 6 feet under normal lighting conditions.

(c) Brush marks, roller marks, and lap marks will not be readily visible on interior painted surfaces when viewed from a standing position facing the surface at distance of 6 feet under normal lighting conditions.

(d) Interior painted, varnished or finished surface shall not be scratched, dented, nicked or gouged due to construction activities.

(2) Wallpaper and Vinyl Wall Coverings

(a) A wall covering shall be properly secured to the wall surface and shall not peel or bubble at the time of installation.

(b) Pattern repeats in wall coverings shall match. Wall coverings shall be installed square to the most visible wall. Pattern repeats shall not vary in an amount equal to or exceeding 1/4 of an inch in any six-foot run at the time of installation.

(c) A wall covering seam shall not separate or gap at the time of installation.

(d) Lumps or ridges in a wall covering shall not be detectable from a distance of six feet or more in normal light.

(e) Wall coverings shall not be discolored, stained or spotted due to construction activities.

(f) Wall coverings shall not be scratched, gouged, cut or torn due to construction activities.

XI. Miscellaneous

(A) *Fireplace and Wood Stove*

(1) A masonry chimney shall be installed with the amount of separation from the main structure not exceeding ½ inch in any 10-foot vertical measurement.

(2) A fireplace door shall operate properly. Fireplace doors shall meet evenly and shall not be out of alignment from one another in an amount equal to or exceeding 1/8 of an inch in any direction.

(3) A fireplace shall not have a gas leak, at the time of installation.

(4) Gas logs shall be positioned in accordance with the manufacturer's specifications.

(5) A fireplace or chimney shall draw properly, at the time of installation.

(B) *Garage Doors*

(1) A metal garage door shall not be dented or scratched due to construction activities.

(2) A garage door opener, if provided, shall operate properly in accordance with manufacturer's specifications.

(3) A garage door shall remain in place at any open position, operate smoothly and not be off track, at the time of installation.

(C) *Driveways and Sidewalks*

(1) There shall not be standing water greater than 3/8 inch in depth remaining on the surface 24 hours after a rain, at the time of installation.

(2) Cracks (outside of control joints) shall not exceed ¼ inch in width, at the time of installation.

(3) Adjoining exterior concrete flatwork sections shall not deviate in height by more than ½ inch unless the deviation is intentional at specific locations such as garage door openings.

(4) Standing water shall not exceed 3/8 inch deep on a sidewalk 24 hours after the end of a rain, at the time of installation.

XII. Glossary

The following words and terms when used in the standards shall have the following meanings, unless the context clearly indicates otherwise.

(1) Code—The Residential Code of Ohio in effect at the time of service, as adopted by the Ohio Board of Building Standards.

(2) Manufactured Product – A component of the home that was manufactured away from the site of the home and that was installed in the home without significant modifications to the product as manufactured. Manufactured products commonly installed in residential construction include but are not limited to dishwashers, cook tops, ovens, refrigerators, trash compactors, microwave ovens, kitchen vent fans, central air conditioning coils and compressors, furnace heat exchangers, water heaters, carpet, windows, doors, light fixtures, fireplace inserts, pipes and electrical wires.