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# Final Regulation Agency Background Document

Agency Name:	Board of Housing and Community Development
VAC Chapter Number:	13 VAC 5-62-10 et seq.
Regulation Title:	Virginia Uniform Statewide Building Code
Action Title:	Final Regulation
Date:	May 15, 2003

Please refer to the Administrative Process Act (§ 9-6.14:9.1 *et seq.* of the *Code of Virginia*), Executive Order Twenty-Five (98), Executive Order Fifty-Eight (99), and the *Virginia Register Form,Style and Procedure Manual* for more information and other materials required to be submitted in the final regulatory action package.

## Summary

Please provide a brief summary of the new regulation, amendments to an existing regulation, or the regulation being repealed. There is no need to state each provision or amendment; instead give a summary of the regulatory action. If applicable, generally describe the existing regulation. Do not restate the regulation or the purpose and intent of the regulation in the summary. Rather, alert the reader to all substantive matters or changes contained in the proposed new regulation, amendments to an existing regulation, or the regulation being repealed. Please briefly and generally summarize any substantive changes made since the proposed action was published.

The final regulation (1) re-establishes requirements from previous editions relative to (i) code official and inspector certification requirements, (ii) small swimming pools, (iii) wind zones for roofing and siding permit exceptions, (iv) floor material permit exceptions, (v) approval of third party plan review, (vi) compliance with related laws and ordinances, (vii) radon-resistant construction, (viii) design wind loads, (ix) riser height in residential and correctional facility stairs, (x) use of air admittance valves, (xi) trap sizes for washing machines and showers, (xii) shaft enclosures and the use of sliding doors in correctional facilities, (xiii) requirements for non-sprinklered small churches, (xiv) fire extinguishers, (xv) special inspections for concrete formwork, and (xvi) lead-based paint requirements, (2) reduces the impact on regulated entities relative to (i) notification when inspectors are terminated, (ii) use of the previous edition of the regulation after the effective date of changes, (iii) training programs of the Virginia Building Code Academy, (iv) installation of small prefabricated building by public utility companies, (v)

the permit exemption for fences and small retaining walls, (vi) identification of lots during construction, (vii) criteria for acceptance of special inspectors, (viii) guidance for acceptance of test reports, (ix) additional information from the Department, (x) existing assisted living facilities, (xi) appendices of the International Building Code, (xii) use of sprinklers instead of window openings, (xiii) toilet facilities for workers, (xiv) elevator sizes, and (xv) unsafe and unfit conditions in existing buildings, (3) updates to the newest available model codes and standards relative to requirements for accessibility for persons with disabilities and the use of arc-fault circuit interrupter devices, (4) clarifies existing requirements relative to (i) the location of regulations for residential construction, (ii) the relationship between manufacturer's installation instructions and regulatory administrative provisions, (iii) the installation of low voltage wiring and equipment by franchised cable television operators, (iv) sanctions against code officials and inspectors, (v) the replacement of the administrative provisions in the model codes, including testing requirements and the submittal of plans, (vi) permitting requirements for renovations were lead is present, (vii) relocation of duplicate plan requirements, (viii) enforcing agency inspection of flue liners when fuel sources are changed, (ix) the responsibility for enforcement of functional design requirements, (x) the relocation of the requirements for sallyports in correction facilities, (xi) licensed residential group homes, (xii) expansive soil testing and residential foundation design, (xiii) water and sewer system approval, (xiv) marking of fire rated assemblies, and (xv) tradeoffs for residential sprinkler systems, (5) implements minimum requirements for the health, safety and welfare of persons relative to (i) the issuance of notices of violation for unsafe buildings, (ii) permit requirements for alarm and door locking system wiring, (iii) the number of sets of construction documents (plans) required by the locality, (iv) the fire separation distance between houses, (v) abandoned home heating oil tanks, and (vi) new standards for high pressure water service piping, and (6) comports with requirements of state law relative to requirements for rodent infestation, rubbish and garbage accumulation and occupancy limitations.

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## Statement of Final Agency Action

Please provide a statement of the final action taken by the agency: including the date the action was taken, the name of the agency taking the action, and the title of the regulation.

The Board of Housing and Community Development adopted final regulations for the Virginia Uniform Statewide Building Code on April 7, 2003.

#### **Basis**

Please identify the state and/or federal source of legal authority to promulgate the regulation. The discussion of this statutory authority should: 1) describe its scope and the extent to which it is mandatory or discretionary; and 2) include a brief statement relating the content of the statutory authority to the specific regulation. In addition, where applicable, please describe the extent to which proposed changes exceed federal minimum requirements. Full citations of legal authority and, if available, web site addresses for locating the text of the cited authority, shall be provided. If the final text differs from that of the proposed, please state that the Office of the Attorney General has certified that the agency has the statutory authority to promulgate the final regulation and that it comports with applicable state and/or federal law.

Section 36-98 of the Code of Virginia directs and empowers the Board of Housing and Community Development (board) to adopt and promulgate the Virginia Uniform Statewide Building Code (USBC) and provides that the USBC supercedes the building codes and building regulations of the counties, municipalities and other political subdivisions and state agencies. The final regulations adopted by the board have been reviewed by the Office of the Attorney General and are certified to be within the statutory authority granted to the board.

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## Purpose

Please provide a statement explaining the need for the new or amended regulation. This statement must include the rationale or justification of the final regulatory action and detail the specific reasons it is essential to protect the health, safety or welfare of citizens. A statement of a general nature is not acceptable, particular rationales must be explicitly discussed. Please include a discussion of the goals of the proposal and the problems the proposal is intended to solve.

The Virginia Uniform Statewide Building Code (USBC) establishes minimum regulations for the construction and maintenance of building and structures to protect the health, safety and welfare of the citizens of the Commonwealth and users and occupants of buildings and structures. The final regulations complete the review of nationally recognized standards (the International Codes) which are incorporated by reference to be an enforceable part of the regulation. This scheme assures that the USBC permits buildings and structures to be constructed at the least possible cost consistent with recognized standards of health, safety, energy and water conservation and accessibility for persons with disabilities.

#### Substance

Please identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. Please note that a more detailed discussion is required under the statement of the regulatory action's detail.

#### The final regulation:

(1) Changes provisions of the International Codes to achieve consistency with past requirements of the Virginia Uniform Statewide Building Code (USBC) where determined necessary by the Board of Housing and Community Development (board) due to the more restrictive nature of the International Codes. The International Codes were developed from a compilation of three nationally recognized model codes, the BOCA National Building Code, the Standard Building Code and the Uniform Building Code. In past editions, the USBC has been based solely on the BOCA Code, consequently some provisions of the International Codes taken from the Standard and Uniform Codes are more restrictive than the BOCA provisions. The board solicited public comment relative to the differences between the codes and, in some cases,

modifications to the International Codes were determined appropriate to continue the level of regulation consistent with past editions of the USBC instead of using the more restrictive provisions of the International Codes.

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- (2) Reduces the impact of the use of the International Codes to regulated entities by removing conflicting provisions left over from previous editions of the USBC and better correlating existing provisions of the USBC to eliminate confusion and create a more uniform application of the regulation.
- (3) Uses the newest editions and versions of the model codes and standards which have completed the national review process to assure the acceptance of the latest methods and innovations by the construction industry while assuring minimum standards of quality are met.
- (4) Clarifies existing provisions to eliminate conflicting provisions and to correlate the use of the model codes and standards with the administrative provisions to achieve a more uniform application of the regulation.
- (5) Implements those minimum necessary requirements to protect the health, safety and welfare of the users and occupants of buildings and structures and those affected by potential unsafe conditions relative to building and structures.
- (6) Comports with changes to state law relative to rodent infestations, accumulations of rubbish and garage and overcrowding.

#### **Issues**

Please provide a statement identifying the issues associated with the final regulatory action. The term "issues" means: 1) the advantages and disadvantages to the public of implementing the new provisions; 2) the advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, please include a sentence to that effect.

The final regulation provides advantages to the public by protecting the health, safety and welfare of users and occupants of buildings and structures with minimum necessary regulations for the construction of new buildings and structures and minimum requirements for the maintenance of existing buildings and structures and for addressing unsafe conditions and situations in existing buildings and structures. The final regulation is advantageous to the Department in that it creates uniform procedures for local governments in their enforcement activities. The benefits to the Commonwealth are reduced accidents and costs associated with faulty construction and unsafe building and structures.

## Statement of Changes Made Since the Proposed Stage

Please highlight any changes, other than strictly editorial changes, made to the text of the proposed regulation since its publication.

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The primary purpose of the proposed regulation was to incorporate by reference the newest editions of the International Codes to implement the statutory mandate to permit buildings and structures to be constructed at the least possible cost consistent with recognized standards of health, safety, energy and water conservation and accessibility for persons with disabilities. The final regulation reflects the review of the International Codes during the public comment period, reaction to public comment received during the public comment period and at the public hearing and efforts to coordinate the administrative provisions of the regulation with the use of the new International Codes.

The changes made to the text of the proposed regulation since its publication are categorized as follows:

- (1) Sections 40 E, 40 J (exception), 110 A (exceptions 5, 7 b and 7 g), 110 K, 120 A, 190 A, 260 (I, J 1, J 11, J 24 and J 25), 270 C, 290 (B and D), 300 (C and I), 310 G, 340 C, 345 (A C) and 480 (9) are changed to align provisions with past editions of the regulation.
- (2) Sections 40 H, 70 B, 100 A, 110 A (exceptions 2 and 4), 120 G, 130 B, 150 J, 220 E, 230 (E G, I and P), 240 J, 260 J (9), 380 B, 390 B, 405, 415 and 430 (B and C) are changed to reduce the impact on regulated entities.
- (3) Sections 240 (A I), 260 J (deleted 18), 260 J (deleted 20), 310 (deleted A) and 360 B are changed to update the final regulation to the newest available codes and standards.
- (4) Sections 10 (B, H and I), 40 (A and G), 80 (D and F), 110 (J, Q and R), 250 B, 260 (D, J 17 and J 22), 290 A, 300 B, 390 A and 440 B are changed to clarify existing provisions of the regulation.
- (5) Sections 50 B, 110 (A exception 1 and F) and 260 J (3 5, 21, 23 and 27) are changed to implement the minimum necessary requirements for the health, safety and welfare of the occupants and users of buildings and structures and those affected by potential unsafe conditions relative to building and structures.
- (6) Sections 480 (4, 7, 10 and 11) are changed to comport with changes in state law.

### **Public Comment**

Please summarize all public comment received during the public comment period and provide the agency response. If no public comment was received, please include a statement indicating that fact.

The public comment received generally supported the purpose of the proposed regulation in incorporating the International Codes by reference. Specific comment addressed differences

between the proposed regulation and past editions of the regulation. The Board of Housing and Community Development (board) changed the regulation where necessary to conform to past requirements. The board also received comment to use the latest codes and standards available. The final regulation incorporates provisions of the 2002 Accumulative Supplement to the International Codes and uses the latest editions of the sprinkler and fire alarm standards. Additional comments resulted in the clarification of provisions and the elimination of redundant and conflicting requirements. A number of new provisions were added as the result of public comment which were determined to be minimum changes necessary to protect the health, safety and welfare of the citizens of the Commonwealth. Those changes are:

- (1) The elimination of a requirement in the previous edition of the regulation for violators under the maintenance and unsafe conditions provisions to be required to be given the opportunity to correct the problem prior to the locality seeking a remedy. The board determined that there would be circumstances in which immediate action would need to be taken.
- (2) Adding a requirement that permits are necessary for the installation of fire alarm and door locking systems. The previous edition of the regulation had exempted such installations from the permitting requirements under the low voltage wiring exemption, which had been intended to relate only to telephone wiring. The board determined the need for safe installations of fire alarms and door locking systems outweighs the expense and time consumed to obtain permits for such work.
- (3) Authorizing enforcing agencies to require as many sets of construction documents (plans) as may be necessary for evaluating proposed construction. The previous edition of the regulation required only two sets of plans. The board determined the burden on developers and designers to provide additional sets of plans does not outweigh the need for expedient review of the projects by multiple agencies within a government, which is facilitated by the submission of additional sets of plans.
- (4) Increasing the separation distance between houses in subdivisions with unprotected exterior walls from three feet to five feet. This is an interim measure while the board continues to study the problem of fire spread in subdivisions with high density housing. Some materials used on exterior walls appears to contribute to the spread of fire from house to house. The five foot standard is used in commercial construction and is recognized as being preventative in similar arrangements.
- (5) Adding a requirement for the removal or capping of piping and equipment associated with heating oil tanks no longer being used in residential installations. The board determined that abandoned tanks could represent a fire hazard and contribute to the flooding of basements if precautions are not taken.
- (6) Requiring water service piping to conform to standards for high pressure systems when the municipal water systems serving residential construction exceeds 160 pounds per square inch. The pressure reducers installed to protect the houses typically are installed after the water service piping enters the house and does not protect the outside piping.

The board determined the costs associated with the repairing of buried piping offsets the need to comply with a more restrictive standard in the initial installation.

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# Detail of Changes

Please detail any changes, other than strictly editorial changes, that are being proposed. Please detail new substantive provisions, all substantive changes to existing sections, or both where appropriate. This statement should provide a section-by-section description - or crosswalk - of changes implemented by the proposed regulatory action. Include citations to the specific sections of an existing regulation being amended and explain the consequences of the changes.

The changes from the proposed regulation to the final regulation are detailed as follows:

- (1) 13 VAC 5-62-10 B A note is added to make users of the regulation aware that a difficulty in correlating the commercial construction requirements and the residential construction requirements in the International Codes has been addressed. The note provides reference to the provision where the correlation was added. Consequence: The final regulation is clearer and less likely to be misapplied.
- (2) 13 VAC 5-62-10 H The language stating that the manufacturer's installation instructions for equipment and appliances supercedes requirements of the regulation is deleted as it could lead to installations which do not comply with the requirements of the regulation. Consequence: The final regulation provides for safer installations of equipment and appliances.
- (3) 13 VAC 5-62-10 I An exemption is added for wiring and equipment under the control of franchised cable television operators. Such operators are already regulated by the State Corporation Commission. Consequence: The final regulation removes a redundant and unnecessary inspection requirement.
- (4) 13 VAC 5-62-40 A The language permitting sanctions against enforcement officials is deleted as that requirement is in the Virginia Certification Standards. In conjunction, a note is added to reference the certification standards. Consequence: The final regulation does not contain a duplicative requirement and adds necessary information.
- (5) 13 VAC 5-62-40 E New language is added to provide the correct exemption date for the requirement for certification of officials enforcing the maintenance requirements. The date was inadvertently omitted from the proposed regulation. Consequence: The final regulation provides a continuation of past requirements.
- (6) 13 VAC 5-62-40 G Same as (4) above except applying to inspectors instead of officials.
- (7) 13 VAC 5-62-40 H A requirement is added to notify the Department upon the termination of a code enforcement inspector. Consequence: The final regulation reduces

the need for Department staff to have to contact localities to determine whether inspectors are properly certified and have attended required training.

- (8) 13 VAC 5-62-40 J The requirement in the proposed regulation for inspectors to be certified within one and one half years of the date of employment is changed back to within three years based on the previous edition of the regulation. A provision to clarify when additional certificates are required to be obtained is also added. Consequence: The final regulation provides a continuation of past requirements and adds clarification of an existing requirement.
- (9) 13 VAC 5-62-40 J (Exception) Same as (5) above except applying to inspectors enforcing the maintenance requirements instead of officials.
- (10) 13 VAC 5-62-50 B New language is added to separate the requirements for when to issue a notice of violation relative to provisions relating to construction versus those relating to maintenance and to delete the requirement that owners must be given an opportunity to correct maintenance violations prior to the issuance of the notice of violation. Consequence: The final regulation permits local governments to take action sooner when addressing unsafe conditions in existing buildings.
- (11) 13 VAC 5-62-70 B New language is added to insure that the provision permitting the use of the previous edition of the regulation for a time period after the new regulation becomes effective also applies to future changes to the regulation. Consequence: The final regulation will not subject designers and contractors to new requirements of the regulation midway through a construction project.
- (12) 13 VAC 5-62-80 D New language is added to clarify that the administrative provisions of the International Building Code, which is incorporated by reference in the regulation, are deleted and replaced by the administrative provisions of the regulation instead of just being deleted entirely and not replaced by anything. Consequence: The final regulation provides a more complete set of administrative provisions.
- (13) 13 VAC 5-62-80 F An exception is added to the general rule of deleting administrative provisions of the model codes to allow the testing requirements and the requirements for the submittal of construction documents (plans) in the administrative provisions of the model codes to be enforceable. Consequence: The final regulation provides a more complete set of administrative provisions.
- (14) 13 VAC 5-62-100 A The existing fee levy of up to two percent authorized by § 36-107(7) of the Code of Virginia is changed from one percent to one and three quarters of a percent to support training programs of the Virginia Building Code Academy. Consequence: The final regulation provides for the necessary training for inspectors to receive their certifications without delays resulting from insufficient funds.
- (15) 13 VAC 5-62-110 A –The requirement that a building permit be obtained prior to removing or disturbing lead containing materials during construction activities in existing

buildings is deleted since permits are already required for alterations to existing buildings. Consequence: The final regulation does not contain a duplicative requirement.

- (16) 13 VAC 5-62-110 A (Exception 1) New language is added to require a permit to be obtained for the installation of wiring and equipment which is a component of fire safety and door locking systems. Consequence: The final regulation contains requirements applicable to the type of construction necessary to ensure the safety of occupants of buildings during emergency situations.
- (17) 13 VAC 5-62-110 A (Exception 2) An exemption is added to the permit requirements for small prefabricated buildings housing equipment of public utilities since the public utility companies are regulated by the State Corporation Commission and the hazards associated with these types of buildings are minimal. Consequence: The final regulation removes an unnecessary requirement.
- (18) 13 VAC 5-62-110 A (Exception 4) The exception from not requiring permits for fences under six feet in height is changed to not requiring permits for all fences not part of a swimming pool barrier and the exception from not requiring permits for non-retaining walls less than four feet in height is changed to not requiring permits for retaining walls less than four feet in height given the low level of hazard relative to the construction of fences and small retaining walls. Consequence: The final regulation removes unnecessary requirements.
- (19) 13 VAC 5-62-110 A (Exception 5) An exemption is added to the permit requirements for swimming pools which are cumulatively less than 150 square feet, 5,000 gallons and 24 inches in depth. Consequence: The final regulation is correlated with past editions.
- (20) 13 VAC 5-62-110 A (Exception 7b) –The threshold for when a permit is not necessary for residential roofing and siding replacement is changed from 90 mph or less to 100 mph or less to match the common application of the wind speed contour map in the previous edition of the regulation. Consequence: The final regulation is correlated with the previous edition.
- (21) 13 VAC 5-62-110 A (Exception 7g) A limitation in the permit exemption for the replacement of floor materials is deleted. Consequence: The final regulation is correlated with the previous edition.
- (22) 13 VAC 5-62-110 F –The number of sets of construction documents (plans) which must be submitted to obtain a building permit is changed from two to a number set by the locality as the number required may differ depending on the complexity of the construction project. Consequence: The final regulation provides authority for a locality to require the number of sets of plans which are necessary.
- (23) 13 VAC 5-62-110 F (Exception) –The exemption for the submission of construction documents (plans) when matching plans are already on file in the locality is relocated and

clarified to 13 VAC 5-62-110 J. Consequence: The final regulation is better correlated and easier to understand.

- (24) 13 VAC 5-62-110 J See (23) above.
- (25) 13 VAC 5-62-110 K The requirement for the acceptance of plans reviewed by third parties is changed from mandatory to permissive. Consequence: The final regulation is correlated with the previous edition.
- (26) 13 VAC 5-62-110 Q –The requirements for flue liner certification when fuel sources are changed is clarified to state that certification is not required when an inspection is performed by the enforcing agency. New language is also added to clarify the criteria that the flue liner must meet. Consequence: The final regulation is better correlated and provides clear criteria for determining whether such flue liners would be approved.
- (27) 13 VAC 5-62-110 R A statement is added to the functional design requirements to make it clear that while other agencies may prevent the issuance of permits, the local building department does not have authority to enforce the other agencies' requirements. Consequence: The final regulation adds clarification of an existing requirement.
- (28) 13 VAC 5-62-120 A –Language limiting the types of related laws and ordinances which must be complied with to obtain a building permit is deleted in favor of language from the previous regulation and language specifying a specific timeframe for approving permits for residential construction is deleted since it is impractical to enforce. New language is added specifically prohibiting the delay of approval of permits in order to slow the pace of construction. Consequence: The final regulation is correlated with the previous edition and adds clarification of an existing requirement.
- (29) 13 VAC 5-62-120 G –Language is added to require a readable street or lot number to be posted with the building permit to save time and effort in locating jobsites. Consequence: The final regulation results in more efficient inspections.
- (30) 13 VAC 5-62-130 B –Specific criteria is added for the approval of special inspectors to replace the general, subjective existing language. Consequence: The final regulation will be applied more uniformly.
- (31) 13 VAC 5-62-150 J A new note is added for guidance outlining the types of submittals from third party inspectors which may be considered as reports or tests. Consequence: The final regulation will be applied more uniformly.
- (32) 13 VAC 5-62-190 A Deletes text necessary for correlation with the change made to 13 VAC 5-62-120 A. See (28) above. Consequence: The final regulation's provisions are properly correlated.

(33) 13 VAC 5-62-220 E – New language is added to an existing note to inform of additional information available from the Department of Housing and Community Development. Consequence: The final regulation will be applied more uniformly.

- (34) 13 VAC 5-62-230(E)(F)(G)(I)(P) Text in the proposed regulation is deleted and new language is added to address the statutory renaming of adult care residences to assisted living facilities and to separate the existing requirements for the retrofitting of assisted living facilities, nursing homes and adult day care centers to clarify the application of the regulation to each. Consequence: The final regulation will be applied more uniformly.
- (35) 13 VAC 5-62-240 A New language is added to reference the 2002 Accumulative Supplement to the International Codes and to clarify that certain provisions of that supplement along with the 2001 Supplement will be used as part of the regulation. Consequence: The final regulation utilizes the newest available standards.
- (36) 13 VAC 5-62-240(B)(C)(D)(E)(F)(G)(H)(I) New language is added incorporating provisions from the 2002 Accumulative Supplement to the International Codes to be part of the regulation since the 2002 Accumulative Supplement became available for review during the regulatory amendment process. Consequence: The final regulation utilizes the newest available standards.
- (37) 13 VAC 5-62-240 J New language is added to clarify which appendices in the International Building Code are to be used as part of the regulation. Consequence: The final regulation will be applied more uniformly.
- (38) 13 VAC 5-62-250 B (Definition of Sallyport) –The definition of the term "Sallyport" is deleted as the term is adequately defined in 13 VAC 5-62-270 C. See (54) below. Consequence: The final regulation does not contain a redundant provision.
- (39) 13 VAC 5-62-260 D Conflicting language which was the result of adding facilities licensed by the Virginia Department of Social Services to this provision in a previous edition of the regulation is deleted. The former provision applied only to facilities licensed by the Virginia Department of Mental Health, Mental Retardation and Substance Abuse Services and therefore used language associated with those facilities. Also removes the ambiguous term "some" from the proposed regulation. Consequence: The final regulation does not contain conflicting and unclear provisions.
- (40) 13 VAC 5-62-260 I A new requirement for Group R-3 and Group R-4 buildings constructed under the International Building Code to use radon-resistant construction is added for when a locality has implemented the radon-resistant construction requirements. This authorization was already contained in the past edition of the regulation, however the difference in classification categories under the International Building Code led to the Group R-3 and Group R-4 categories being inadvertently left out of the proposed regulation's provisions for radon-resistant construction. Consequence: The final regulation is correlated with the previous edition.

(41) 13 VAC 5-62-260 J(1) – Text is moved to correct the reference to the placement of certain localities in the wind zones of the International Residential Code as some tidewater area localities were inadvertently added to the special wind region which is associated with the mountainous areas. Consequence: The final regulation is correlated with the previous edition.

- (42) 13 VAC 5-62-260 J(3)(4)(5) New language is added to change the fire separation distance between the outside walls of new residential construction and adjacent property lines from three feet to five feet for the use of regular construction methods. Walls closer than five feet must have fire rated construction and no openings. Consequence: The final regulation will reduce the potential spread of fire from house to house in subdivisions where houses are permitted to be less than five feet from the property lines.
- (43) 13 VAC 5-62-260 J(9) New language is added to clarify that tilt-out type windows may be used in residential construction to provide the opening requirements for emergency windows and a new provision is added to permit emergency openings to be omitted if a sprinkler system is installed. The sprinkler system allowance or tradeoff would have to have been achieved through the requesting of a modification in previous editions of the regulation. Consequence: Relative to the use of tilt-out windows, the final regulation is correlated with the previous edition; and, relative to the use of the sprinkler system tradeoff, the final regulation provides for the approval of an alternative method without the necessity of submitting or evaluating a modification request.
- (44) 13 VAC 5-62-260 J(11) –The requirement in residential construction for the maximum height between steps in a stairway is changed from seven and three quarters in the proposed regulation to eight and one quarter in the final regulation. The eight and one quarter dimension was in the previous edition of the regulation. Consequence: The final regulation is correlated with the previous edition.
- (45) 13 VAC 5-62-260 J(17) New language is added to provide criteria for the testing of soils for residential construction to determine if expansive soil exists and new criteria is added for the design of foundations when such soil is found to be present. Consequence: The final regulation provides more uniform criteria for the prevention of unstable foundation conditions.
- (46) 13 VAC 5-62-260 J(Deleted 18) The definition of "Arc-Fault Circuit Interrupter" is reinstated in the International Residential Code in conjunction with the requirements for the use of these circuit breakers which have been determined to be safe and necessary. See 13 VAC 5-62-240 E(3), outlined at (36) above. Consequence: The final regulation utilizes the newest available standards.
- (47) 13 VAC 5-62-260 J(21) New language is added addressing the hazards from abandoned heating oil tanks in residential buildings. Consequence: The final regulation reduces the potential for fires in residential buildings.

(48) 13 VAC 5-62-260 J(22) – Language from the International Residential Code which addresses when new residential construction is required to be connected to public water and sewer systems is deleted since an administrative provision based on state law is already contained in 13 VAC 5-62-260 J(8) of the proposed regulation. Consequence: The final regulation does not contain conflicting requirements.

- (49) 13 VAC 5-62-260 J(23) New language is added from the International Plumbing Code to the International Residential Code to address the use of water service pipe in residential construction where the water pressure from a municipal water system exceeds 160 pounds per square inch and a new standard (AWWA C104), also from the International Plumbing Code, is referenced for the use of ductile iron water service pipe. Consequence: The final regulation provides for safe water connections to municipal water systems in residential construction.
- (50) 13 VAC 5-62-260 J(24) The reference to a standard in the International Residential Code for the use of air admittance valves (venting devices) in plumbing stack vents (ASSE 1050) is deleted since the standard is still in the developmental stages. The requirements for the approval of air admittance valves will remain the same as the previous edition of the regulation and be consistent with the International Plumbing code until such time as the new standard is complete. Consequence: The final regulation is correlated with the previous edition.
- (51) 13 VAC 5-62-260 J(25) The trap sizes for washing machines and showers in residential construction are changed to be consistent with the previous edition of the regulation as the change in the International Residential Code which required a larger sized trap could not be substantiated. Consequence: The final regulation is correlated with the previous edition.
- (52) 13 VAC 5-62-260 J(Deleted 20) The change to the International Residential Code in the proposed regulation to remove the reference to arc-fault circuit interrupter devices by changing the section title to ground-fault circuit interrupter only is deleted as arc-fault devices were determined to be safe and necessary. See also the change at 13 VAC 5-62-240 E(3), outlined at (36) above. Consequence: The final regulation utilizes the newest available standards.
- (53) 13 VAC 5-62-260 J(27) A standard from the International Plumbing Code for the use of ductile iron water service pipe is referenced for the International Residential Code to address the use of higher pressure water services associated with municipal water systems. See also the change at 13 VAC 5-62-260 J(23), which is (49) above. Consequence: The final regulation provides for safe water connections to municipal water systems in residential construction.
- (54) 13 VAC 5-62-270 C A provision is added to permit security vestibules (sallyports) at correctional facilities to be used for the emergency egress so long as they provide continuous and unobstructed passage. This provision has been in past editions of the

regulation but was not contained in the International Building Code. See (38) above. Consequence: The final regulation is correlated with previous editions.

- (55) 13 VAC 5-62-290 A Clarifying language is added to the requirement that fire rated construction walls be marked for future identification. The new language requires the type of fire assembly and the hourly rating to be specified. A note is added with suggested language for the markings. Consequence: The final regulation provides for more uniform application of an existing requirement.
- (56) 13 VAC 5-62-290 B Clarifying language is added to make it clear that shaft enclosures are not required in correctional facilities provided they comply with the special requirements for correctional facilities in Section 408 of the International Building Code. This provision has been in past editions of the regulation. Consequence: The final regulation is correlated with previous editions.
- (57) 13 VAC 5-62-290 D New language is added to permit sliding doors to be used as a means of egress in correctional facilities. The International Building Code permits sliding doors to be used but would require a specific type of gasket at the bottom which would be difficult to install and maintain. Sliding doors have been permitted without the gaskets in past editions of the regulation. Consequence: The final regulation is correlated with previous editions.
- (58) 13 VAC 5-62-300 B A provision in the International Building Code which prohibits allowances or tradeoffs to be given when residential sprinkler systems are installed is deleted to be consistent with the same deletion in the Virginia Statewide Fire Prevention Code. Any tradeoffs permitted would still have to be approved by the local enforcing agency. Consequence: The final regulation can be applied more flexibly and is correlated with the fire code.
- (59) 13 VAC 5-62-300 C The requirements of the International Building Code establishing when a sprinkler system is required in assembly buildings (theaters, churches, dancehalls, etc.) is modified to exempt churches under 12,000 square feet, even if the occupant load is greater than 300 persons. The exemption was in previous editions of the regulation and is for the small country church where typically no water source is available for the sprinkler system. Consequence: The final regulation is correlated with previous editions.
- (60) 13 VAC 5-62-300 I The provision of the International Building Code requiring the installation of fire extinguishers is modified to exclude Group R-2 buildings (apartments and townhouses without property lines between them) since the previous editions of the regulation did not require fire extinguishers in this group. Fire extinguishers in apartments can be dangerous because of being vandalized or being used for the wrong purpose. Consequence: The final regulation is correlated with previous editions.
- (61) 13 VAC 5-62-310 (Deleted A) The definition of "Floor Area, Net" in the proposed regulation, which differed from that of the International Building Code (IBC) by permitting exit access areas to be included in calculations for occupant loads in buildings,

is deleted since exit access areas are too difficult to identify. The IBC definition is to be used instead. Consequence: The final regulation matches the nationally recognized model code language.

- (62) 13 VAC 5-62-310 G An exception to the International Building Code (IBC) requirements for stairways is added to permit stairs serving small observation stations and guard towers in correctional facilities to have steeper steps. This requirement was in previous editions of the regulation since it was in the BOCA Code, which was the model code used in the past; however, the IBC did not contain the allowance. Consequence: The final regulation is correlated with previous editions.
- (63) 13 VAC 5-62-340 C Text is moved to correct the reference to the placement of certain localities in the wind zones of the International Building Code as some tidewater area localities were inadvertently added to the special wind region which is associated with the mountainous areas. Consequence: The final regulation is correlated with the previous edition.
- (64) 13 VAC 5-62-345(A)(B)(C) The special inspections criteria of the International Building Code (IBC) is modified to provide correlating references to administrative provisions of the regulation (in subsections A and B), and in subsection C, a new requirement is added to require periodic inspection of concrete formwork during construction. This requirement was in previous editions of the regulation since it was in the BOCA Code, which was the model code used in the past; however, the IBC did not contain the requirement. Consequence: The final regulation contains consistent text and is correlated with previous editions.
- (65) 13 VAC 5-62-360 B The requirements for arc-fault circuit interrupters, which were deleted in the proposed regulation, are reinstated as the use of these circuit breakers has been determined to be safe and necessary. Consequence: The final regulation utilizes the newest available standards.
- (66) 13 VAC 5-62-380 B A section of the International Plumbing Code addressing toilet facilities for workers is deleted since it is outside of the scope of the regulation. Consequence: The final regulation does not have requirements which may be invalid or in conflict with other regulatory agencies' requirements.
- (67) 13 VAC 5-62-390 A This provision is a rewrite of the provision in the International Building Code with an added requirement for platform lifts. However, the printing of the International Building Code (IBC) which was copied had an incorrect reference to the standard for automotive lifts (ALI-B153.1). The reference in the IBC is corrected to the ALCTV standard in the International Code Council's published errata, however since the provision is rewritten in this regulation, the correction also has to be made. Consequence: The final regulation does not contain an incorrectly referenced standard.
- (68) 13 VAC 5-62-390 B A clarification is added to the proposed regulation to clearly exclude elevators in dwelling units from the ambulance stretcher size requirement.

Consequence: The final regulation provides for more uniform application of a requirement.

- (69) 13 VAC 5-62-405 A section of the International Building Code referencing the requirements of the International Plumbing Code for toilet facilities for workers is deleted since it is outside of the scope of the regulation. See (66) above. Consequence: The final regulation does not have requirements which may be invalid or in conflict with other regulatory agencies' requirements.
- (70) 13 VAC 5-62-415 A new referenced standard is inserted to implement the requirements for special inspector approval in 13 VAC 5-62-130 B. See (30) above. Consequence: The final regulation will be applied more uniformly.
- (71) 13 VAC 5-62-430 B The term "unhealthy" in the section addressing buildings constructed prior to the first edition of the regulation is changed to "unfit" to match language in the section addressing unsafe buildings (13 VAC 5-62-470). Consequence: The final regulation will be applied more uniformly.
- (72) 13 VAC 5-62-430 C The term "unhealthy" in the section addressing buildings constructed after the first edition of the regulation is changed to "unfit" to match language in the section addressing unsafe buildings (13 VAC 5-62-470). Consequence: The final regulation will be applied more uniformly.
- (73) 13 VAC 5-62-440 B New language is added to clarify that the administrative provisions of the International Property Maintenance Code, which is incorporated by reference in the regulation, are deleted and replaced by the administrative provisions of the regulation instead of just being deleted entirely and not replaced by anything. See (12) above at 13 VAC 6-62-80 D. Consequence: The final regulation provides a more complete set of administrative provisions.
- (74) 13 VAC 5-62-480(4) The proposed regulation is changed to retain the requirements for rodent infestations (302.5), rubbish and garbage (305) and occupancy limitations (404.4.1, 404.5, table 404.5, 404.5.1 and 404.5.2) as the Board has been directed under legislation (Chapter 901, 2003 Acts of Assembly) to further study and address these issues. Further clarification of these provisions is made in 13 VAC 5-62-480(7)(10)(11). See (75), (77) and (78) below. Consequence: The final regulation implements a statutory mandate.
- (75) 13 VAC 5-62-480(7) Language is added to clarify that the provisions for rodent harborage are only applicable to structures when such harborage adversely affects the structures, as opposed to being applicable to empty lots and other premises. The change is in conjunction with (74) above and is to assure that the regulation is applied within its statutory scope. Consequence: The final regulation does not contain conflicting requirements.

(76) 13 VAC 5-62-480(9) – Language is added to reinsert the requirements for lead-based paint which have been in the previous editions of the regulation. In previous editions, the requirements were contained in the BOCA National Property Maintenance Code, the nationally recognized standard incorporated by reference. The International Property Maintenance Code is the comparable model code, however, it does not contain lead-based paint provisions. This discrepancy was not discovered until after the proposed regulation was published and therefore is being corrected in the final regulation. Consequence: The final regulation is correlated with previous editions.

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- (77) 13 VAC 5-62-480(10) Language is added to clarify that the provisions for accumulation of rubbish and garbage are only applicable to structures when such accumulation is excessive. The change is in conjunction with (74) above and (78) below and is to assure that the regulation is applied within its statutory scope. Consequence: The final regulation does not contain conflicting requirements.
- (78) 13 VAC 5-62-480(11) Language in the International Property Maintenance Code addressing aspects of rubbish and garbage which may be outside of the scope of the regulation is deleted while the Board continues to study the issue. The change is in conjunction with (74) and (77) above. Consequence: The final regulation does not contain conflicting requirements.

## Family Impact Statement

Please provide an analysis of the regulatory action that assesses the impact on the institution of the family and family stability including the extent to which the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

The nature of this regulation is such that issues of concern under this category do not exist.