

## 2018 CODE UPDATE CYCLE – SIGNIFICANT CHANGES

### VIRGINIA CONSTRUCTION CODE (VCC)

- **[P] School barricade devices.** Adds language to both the Uniform Statewide Building Code (USBC) and the Statewide Fire Prevention Code (SFPC) that would allow limited use of special barricade devices in schools (Group E and Group B educational occupancies) only in the event of an active shooter or hostile threat situation. Conditions were added to ensure the door can be released from the outside, the inability to move devices from door to door, notification and consultation requirements and the requirement to only use one type of device per school.
- **[P] Nationally recognized guidelines.** Adds provisions to allow the use of nationally recognized guidelines under the modification or alternative methods and materials Sections of Ch. 1. Guidelines such as CC G5-2019 "Guideline for the Safe Use of ISO Intermodal Shipping Containers Repurposed as Buildings and Building Components", can be useful tools in substantiating a modification or approving an alternative method or material where the code is silent.
- **[P] Elevator testing.** Adds a requirement for the name and certification number of the elevator mechanic performing the test to be included on the inspection report, when the test is being witnessed by a third-party inspector. Also added to Virginia Maintenance Code (VMC).
- **[P] Energy certificate.** Brings in International Residential Code (IRC) and International Energy Conservation Code (IECC) requirement for residential buildings that a certificate listing key building efficiency information to be posted in an approved location. This requirement has been in the International Codes (I-Codes) for the last few editions and provides useful information to current and future owners of residential buildings.
- **[P] Blower door testing.** Removes the visual option for verifying building envelope air tightness, requiring blower door testing for residential buildings. Maintains the 2015 leakage rate of 5 Air Changes per Hour (ACH).
- **[P] Sewer relining.** Adds a new section for relining existing sewers and drains in the Virginia Residential Code (VRC) and Virginia Plumbing Code (VPC). Adds references to ASTM F1871 and F1504 for specifications.
- **[P] Rainwater harvesting.** Brings in CSA B805/ICC 805 Standard as an alternative compliance path for rainwater to be used in non-potable applications. This method was approved on the national level to be incorporated into the 2021 International Plumbing Code (IPC) and IRC.
- **[P] Tiny houses.** Incorporates an IRC appendix with provisions specific to tiny homes as an alternative compliance path for homes 400 square feet or less. The appendix from the 2018 IRC is utilized with some amendments to bring in improvements that have been approved for the 2021 IRC.
- **[P] Impervious surface slope.** Decreases the minimum required slope of impervious sidewalks, patios, driveways and landings adjacent to houses from 2% to 1%.
- **[F] Order of precedence.** Trade codes supersede energy codes when addressing same subject matter.
- **[F] Engineering details.** Requires specific engineering details when dry flood proofing is provided.
- **[F] Flood hazard areas documentation.** Buildings and structures in flood hazard areas require documentation of the elevation of the lowest floor to be submitted to the building official.
- **[F] Review board guidance.** Adds Code of Virginia language to VCC, VMC and SFPC to guide the State Building Code Technical Review Board.
- **[F] Updated definitions.** Accessory Dwelling Unit, Dwelling, Substantial Damage, Substantial Improvement and Permit Holder.
- **[F] Residential uses.** Overhaul of residential uses classification sections to provide clarity and simplification.

**Note:** Items preceded by **[P]** are changes that were approved during the Proposed Regulations Phase and items preceded by **[F]** are changes that were approved during the Final Regulations Phase.



- **[F] Tall wood.** Adds alternative provisions for the inclusion of considering tall wood buildings/mass timber as a construction option.
- **[F] Smoke/heat detection.** New section requiring an automatic smoke or heat detection system where special locking systems are installed on means of egress doors.
- **[F] Gender-neutral facilities.** Updated provisions to incorporate multi-user gender-neutral facilities.
- **[F] Dock safety.** Code requirements for Marinas, Boatyards, and Commercial and Noncommercial Dock Facilities fall under the 2020 edition of NFPA 70.
- **[F] IPC provisions in IBC.** Removes duplicated sections from the International Building Code (IBC) that are found in the IPC and provides pointers.
- **[F] Airport facilities.** Increases female fixture requirements for airport terminals.
- **[F] Wind zone/maps.** Updates the component and cladding values, wind maps, wind zones.
- **[F] Sprinkler pipes in common walls.** Allows water-filled sprinkler piping in common walls separating townhouses.
- **[F] Structural independence exception.** Provides an exception to structural independence where a townhouse is protected by a fire sprinkler system.
- **[F] Carbon monoxide alarms.** Required to be interconnected much like fire alarm systems.
- **[F] Flood hazard areas.** Many updates to buildings constructed in flood hazard areas.
- **[F] Accessory dwelling units.** Adds provisions for accessory dwelling units.
- **[F] Ceiling insulation.** Increases minimum ceiling insulation to R-49 which is a major enhancement in energy efficiency.
- **[F] Arc-fault.** Requires arc-fault circuit interrupters (AFCIs) in locations same as the IRC, with an exception for locations where Ground Fault Circuit Interrupters (GFCIs) are already required.
- **[F] Access for backflow prevention assemblies.** Expands access requirements for backflow prevention assemblies.

#### VIRGINIA EXISTING BUILDING CODE (VEBC)

- **[P] Alterations.** Many correlation changes and changes related to alterations of existing buildings to eliminate conflicts, or remove requirements to “retrofit” parts of an existing building that are not part of the alterations being performed.
- **[F] New definition.** Roof covering.
- **[F] Additional toilet and bathing facilities.** Additional facilities in assembly and mercantile occupancies shall have not fewer than one accessible family or assisted-use toilet room. Same with recreational facilities.
- **[F] Existing building provisions in the International Energy Conservation Code (IECC).** Moved existing building energy provisions from IECC to the VEBC.
- **[F] Alterations.** Provides multiple provisions for how certain alterations are to comply with the Virginia Energy Conservation Code (VECC) or VRC.
- **[F] Roofing.** Provides multiple provisions for reroofing, roof replacement, roof recovering, and reinstallation of roofing materials.
- **[F] Additions.** Provides multiple provisions by which additions shall conform to the VECC.

#### VIRGINIA MAINTENANCE CODE (VMC)

- **[P] Elevator testing.** Adds a requirement for the name and certification number of the elevator mechanic performing the test to be included on the inspection report, when the test is being witnessed by a third-party inspector. (Also added to VCC).

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- **[P] Rodents and insects.** Generally prohibits any rodent harborage and insect infestation, and requires extermination. Previous editions of the code limited requirements for extermination of rodents and insects to those that were causing structure damage.
- **[F] Notice to owner.** Notice must be delivered to owner even when the owner is not the responsible party.
- **[F] Notice to tenant.** Provides provisions by which the tenant must be notified

#### VIRGINIA STATEWIDE FIRE PREVENTION CODE (SFPC)

- **[P] Fire code edits.** The Fire Code Edits were revisited during the 2018 code update cycle. Over a thousand changes were reviewed by the stakeholders and consensus was reached on 99% of the changes.

#### VIRGINIA INDUSTRIALIZED BUILDING SAFETY REGULATIONS (IBSR)

- **[P] Shipping containers.** Adds language to provide a clear path for approval of intermodal freight containers to be used as building components in industrialized buildings.
- **[P] Panelized construction.** Adds a definition and fee structure for closed-panel construction to ensure equitable application of registration seal fees to this type of off-site construction method.

#### VIRGINIA AMUSEMENT DEVICE REGULATIONS (VADR)

- **[P] Trampoline parks.** Adds trampoline courts as regulated amusement devices. References ASTM F2970 Standard for the design, manufacture, installation, operation, maintenance, inspection and major modification of trampoline courts.
- **[P/F] ASTM Standard Updates.** Incorporates newest available editions of all VADR referenced ASTM standards for amusement devices.
- **[F] Fee schedules.** Adds fee schedules for concession go-karts, zip-lines, and coasters exceeding 60 ft. in height.
- **[F] Reinspection fees.** Allows local building departments to increase fees 50% when a reinspection is required.

#### VIRGINIA MANUFACTURED HOUSING SAFETY REGULATIONS (MHSR)

- **[P] Certificates of installation.** Clarifies the requirements for completion and submission of a certificate of installation and requires a copy to be provided to the homeowner and when requested to the building official. The U.S. Department of Housing and Urban Development (HUD) regulations require a licensed installer to certify that each installation complies with HUD installation standards.

#### VIRGINIA CERTIFICATION STANDARDS (VCS)

- **[F] New definitions.** Active certificate and inactive certificate
- **[F] Certification status.** Specifies that certificates will either be “active” or “inactive”. “Lapsed” is no longer a certificate category. Provides clarity on circumstances that lead to an “inactive” certificate.
- **[F] Board sanctions.** Clarifies when the Board will issue sanctions.
- **[F] Noncompliance notification.** Places noncompliance notification for certificate holders under the purview of the Virginia Building Code Academy.

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#### ITEMS CARRIED OVER TO (OR TO BE CONTINUED IN) THE 2021 CODE UPDATE CYCLE

- In-Building Emergency Communications – Subworkgroup to convene for 2021 code update cycle.
- Both the Energy and Resiliency subworkgroups will continue for the 2021 code update cycle.
- Automatic Sprinklers in R-5 Townhouses – Subworkgroup to convene for 2021 code update cycle. This was a major area where the Board of Housing had differing opinions and has asked DHCD to work with all due haste to convene a workgroup to study the issue and make recommendations as soon as possible.
- Active Shooter Barricade Devices in Public Buildings (Not schools) – Subworkgroup to convene for 2021 code update cycle as required by 2020 legislation.
- On-Demand Mobile Fueling – The Mobile Fueling Study Group report was sent to the General Assembly House Transportation Chair, January 2021.
- Continued advancement in increasing resiliency and energy efficiency will be major priorities of the next cycle along with considering options to increase housing affordability through building technology.