

2021 Virginia Construction Code

CHAPTER 6 TYPES OF CONSTRUCTION

SECTION 603 COMBUSTIBLE MATERIAL IN TYPES I AND II CONSTRUCTION

603.1 Allowable materials.

Combustible materials shall be permitted in buildings of Type I or II construction in the following applications and in accordance with [Sections 603.1.1 through 603.1.3](#):

1. *Fire-retardant-treated wood* shall be permitted in:
 - 1.1. Nonbearing partitions where the required *fire-resistance rating* is 2 hours or less [except in shaft enclosures within Group I-2 occupancies and ambulatory care facilities](#).
 - 1.2. Nonbearing *exterior walls* where fire-resistance-rated construction is not required.
 - 1.3. Roof construction, including girders, trusses, framing and decking.

Exceptions:

1. In buildings of Type IA construction exceeding *two stories above grade plane*, *fire-retardant-treated wood* is not permitted in roof construction where the vertical distance from the upper floor to the roof is less than 20 feet (6096 mm).
 2. [Group I-2, roof construction containing fire-retardant-treated wood shall be covered by not less than a Class A roof covering or roof assembly, and the roof assembly shall have a fire-resistance rating where required by the construction type.](#)
- 1.4. Balconies, porches, decks and exterior *stairways* not used as required exits on buildings *three stories or less* above grade plane.
2. Thermal and acoustical insulation, other than foam plastics, having a *flame spread index* of not more than 25.

Exceptions:

1. Insulation placed between two layers of noncombustible materials without an intervening airspace shall be allowed to have a *flame spread index* of not more than 100.
 2. Insulation installed between a finished floor and solid decking without intervening airspace shall be allowed to have a *flame spread index* of not more than 200.
3. Foam plastics in accordance with [Chapter 26](#).
4. *Roof coverings* that have an A, B or C classification.
5. *Interior floor finish* and floor covering materials installed in accordance with [Section 804](#).
6. Millwork such as doors, door frames, window sashes and frames.
7. *Interior wall and ceiling finishes* installed in accordance with [Section 803](#).
8. *Trim* installed in accordance with [Section 806](#).
9. Where not installed greater than 15 feet (4572 mm) above grade, show windows, nailing or furring strips and wooden bulkheads below show windows, including their frames, aprons and show cases.
10. Finish flooring installed in accordance with [Section 805](#).
11. Partitions dividing portions of stores, offices or similar places occupied by one tenant only and that do not establish a *corridor* serving an *occupant load* of 30 or more shall be permitted to be constructed of *fire-retardant-treated wood*, 1-hour fire-resistance-rated construction or of wood panels or similar light construction up to 6 feet (1829 mm) in height.
12. *Stages and platforms* constructed in accordance with [Sections 410.2 and 410.3](#), respectively.
13. Combustible *exterior wall coverings*, balconies and similar projections and bay or oriel windows in accordance with [Chapter 14](#) and [Section 705.2.3.1](#).
14. Blocking such as for handrails, millwork, cabinets and window and door frames.
15. Light-transmitting plastics as permitted by [Chapter 26](#).
16. Mastics and caulking materials applied to provide flexible seals between components of *exterior wall* construction.
17. Exterior plastic *veneer* installed in accordance with [Section 2605.2](#).
18. Nailing or furring strips as permitted by [Section 803.15](#).
19. Heavy timber as permitted by Note c to [Table 601](#) and [Sections 602.4.4.4 and 705.2.3.1](#).
20. Aggregates, component materials and admixtures as permitted by [Section 703.2.1.2](#).
21. Sprayed fire-resistant materials and intumescent and mastic fire-resistant coatings, determined on the basis of *fire resistance* tests in accordance with [Section 703.2](#) and installed in accordance with [Sections 1705.15 and 1705.16](#), respectively.

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22. Materials used to protect penetrations in fire-resistance-rated assemblies in accordance with [Section 714](#).
23. Materials used to protect *joints* in fire-resistance-rated assemblies in accordance with [Section 715](#).
24. Materials allowed in the concealed spaces of buildings of Types I and II construction in accordance with [Section 718.5](#).
25. Materials exposed within plenums complying with [Section 602](#) of the *International Mechanical Code*.
26. Wall construction of freezers and coolers of less than 1,000 square feet (92.9 m²), in size, lined on both sides with noncombustible materials and the building is protected throughout with an *automatic sprinkler system* in accordance with [Section 903.3.1.1](#).
27. [Wood nailers for parapet flashing and roof cants](#).

603.1.1 Ducts.

The use of nonmetallic ducts shall be permitted where installed in accordance with the limitations of the *International Mechanical Code*.

603.1.2 Piping.

The use of combustible piping materials shall be permitted where installed in accordance with the limitations of the *International Mechanical Code* and the *International Plumbing Code*.

603.1.3 Electrical.

The use of electrical wiring methods with combustible insulation, tubing, raceways and related components shall be permitted where installed in accordance with the limitations of this code.