

2021 Virginia Construction Code

CHAPTER 14 EXTERIOR WALLS

SECTION 1405 COMBUSTIBLE MATERIALS ON THE EXTERIOR SIDE OF EXTERIOR WALLS

1405.1 Combustible exterior wall coverings.

Combustible *exterior wall coverings* shall comply with this section.

Exception: Plastics complying with [Chapter 26](#).

1405.1.1 Types I, II, III and IV construction.

On buildings of Types I, II, III and IV construction, *exterior wall coverings* shall be permitted to be constructed of combustible materials, complying with the following limitations:

1. Combustible *exterior wall coverings* shall not exceed 10 percent of an *exterior wall* surface area where the *fire separation distance* is 5 feet (1524 mm) or less.
2. Combustible *exterior wall coverings* shall be limited to 40 feet (12 192 mm) in height above *grade plane*.
3. Combustible *exterior wall coverings* constructed of *fire-retardant-treated wood* complying with [Section 2303.2](#) for exterior installation shall not be limited in wall surface area where the *fire separation distance* is 5 feet (1524 mm) or less and shall be permitted up to 60 feet (18 288 mm) in height above *grade plane* regardless of the *fire separation distance*.
4. Wood veneers shall comply with [Section 1404.5](#).

1405.1.1.1 Ignition resistance.

Where permitted by [Section 1405.1.1](#), combustible *exterior wall coverings* shall be tested in accordance with [NFPA 268](#).

Exceptions:

1. Wood or wood-based products.
2. Other combustible materials covered with an exterior weather covering, other than vinyl sidings, included in and complying with the thickness requirements of [Table 1404.2](#).
3. Aluminum having a minimum thickness of 0.019 inch (0.48 mm).

1405.1.1.1.1 Fire separation 5 feet or less.

Where installed on *exterior walls* having a *fire separation distance* of 5 feet (1524 mm) or less, combustible *exterior wall coverings* shall not exhibit sustained flaming as defined in [NFPA 268](#).

1405.1.1.1.2 Fire separation greater than 5 feet.

For *fire separation distances* greater than 5 feet (1524 mm), any *exterior wall covering* shall be permitted that has been exposed to a reduced level of incident radiant heat flux in accordance with the [NFPA 268](#) test method without exhibiting sustained flaming. The minimum *fire separation distance* required for the *exterior wall covering* shall be determined from [Table 1405.1.1.1.2](#) based on the maximum tolerable level of incident radiant heat flux that does not cause sustained flaming of the *exterior wall covering*.

TABLE 1405.1.1.1.2
MINIMUM FIRE SEPARATION FOR COMBUSTIBLE EXTERIOR WALL COVERINGS

FIRE SEPARATION DISTANCE (feet)	TOLERABLE LEVEL INCIDENT RADIANT HEAT ENERGY (kW/m ²)
5	12.5
6	11.8
7	11.0
8	10.3
9	9.6
10	8.9
11	8.3
12	7.7
13	7.2
14	6.7
15	6.3
16	5.9
17	5.5

Copyright © 2024 International Code Council, Inc., or its licensors (ALL RIGHTS RESERVED).

Accessed by Venkatesh Shanmugam on 11/14/2024 pursuant to License Agreement with ICC. No further reproduction or distribution authorized. Any Unauthorized reproduction or distribution is a violation of the federal copyright, and subject to civil and criminal penalties thereunder.

18	5.2
19	4.9
20	4.6
21	4.4
22	4.1
23	3.9
24	3.7
25	3.5

For SI: 1 foot = 304.8 mm, 1 Btu/H² × °F = 0.0057 kW/m² × K.

1405.1.2 Location.

Combustible *exterior wall coverings* located along the top of *exterior walls* shall be completely backed up by the *exterior wall* and shall not extend over or above the top of the *exterior wall*.

1405.1.3 Fireblocking.

Where the combustible *exterior wall covering* is furred out from the *exterior wall* and forms a solid surface, the distance between the back of the *exterior wall covering* and the *exterior wall* shall not exceed 1⁵/₈ inches (41 mm). The concealed space thereby created shall be fireblocked in accordance with [Section 718](#).

Exception: The distance between the back of the *exterior wall covering* and the *exterior wall* shall be permitted to exceed 1⁵/₈ inches (41 mm) where the concealed space is not required to be fireblocked by [Section 718](#).