

FIRE BEHAVIOR — USA

Accoya is a modified wood, setting the benchmark for performance, finish and sustainability. Fire performance is a crucial factor in designing wood siding for buildings.

Standard classification

Southwest Research Institute (SwRI) conducted Flame Spread and Smoke Developed Tests following the standard test method for surface burning characteristics of building materials, NFPA 255 (ASTM E84, ANSI, UL 723, and UBC 8-1). The results of the Flame Spread Tests indicate that Accoya wood falls within the range of many standard wood species and qualifies for a Class C rating under the U.S. system.

Additional requirements apply to siding on buildings in designated Wild Urban Interface (WUI) zones. Accoya siding wall constructions have been tested and demonstrated to meet WUI requirements (see details on page 2).

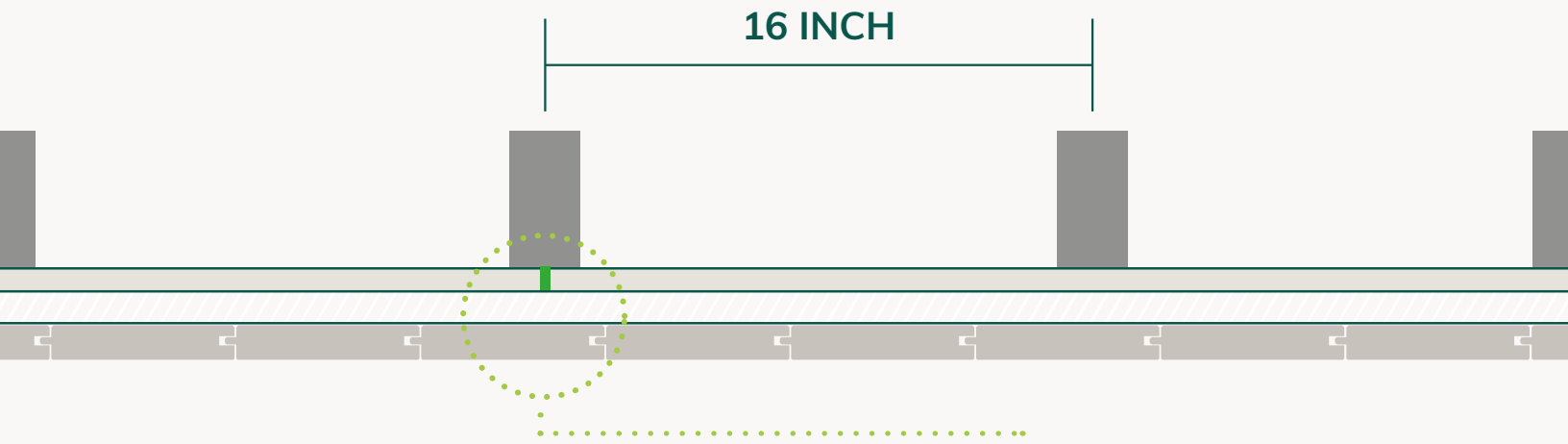
Flame spread classification	Flame spread rating or index
Class I (or A)	0 – 25
Class II (or B)	26 – 75
Class III (or C)	76 – 200

Wood/Species	FSI*	SDI*
Accoya	95	155
Douglas fir	70	80
Eastern white pine	70	110
Lodgepole pine	75	140
Southern yellow pines	70	165
Alaskan yellow cedar	50	115
Western red cedar	45	125

FSI – Flame spread index
SDI – Smoke developed index

* Data Source- USDA United States Dept of Agriculture Wood Handbook (2021 edition). Lower numbers equal a lower flame spread or less smoke.

** Note that the classifications presented on this page are valid for untreated Accoya wood.



Accoya Siding WUI compliance

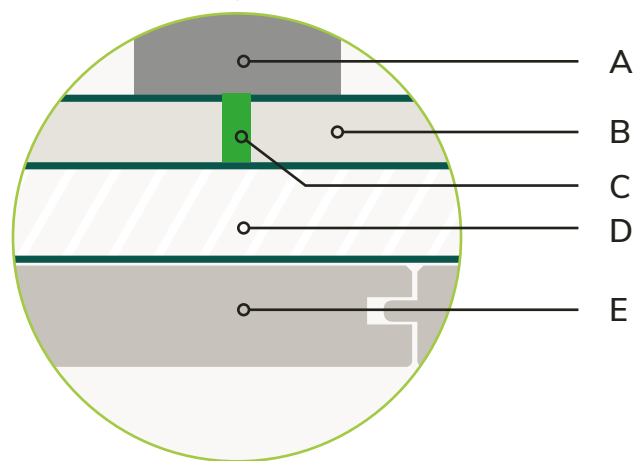
The fire performance of exterior siding materials is especially critical in Wildland-Urban Interface (WUI) zones, where wildfires pose a significant risk to homes and other structures.

The California Building Code (CBC), established by the State of California, outlines general requirements for building design and construction related to fire and life safety, structural safety, and accessibility. It specifically regulates materials, systems, and assemblies used for structural fire resistance and fire-rated construction separations to prevent the spread of fire and smoke within buildings and between structures.

Chapter 707A applies to building materials, systems, and assemblies used in the exterior design and construction of new buildings located within Wildland-Urban Interface (WUI) areas or in any Fire Hazard Severity Zone within State Responsibility Areas. The goal is to set minimum standards to resist the penetration of flames or embers from wildfires.

This section requires that exterior wall assemblies of permitted buildings be tested using the 10-minute direct flame contact exposure test outlined in ASTM E2707.

ICC NTA tested Accoya wood siding at its Bryan Test Lab in Bryan, TX and verified that it met the acceptance criteria for wall or ceiling finishes under ASTM E2707, which assesses fire penetration of exterior wall assemblies using direct flame exposure. The construction summary of the assembly is shown in the illustration above.



- A Wall construction, \geq 2x4" lumber studs
- B $\frac{5}{8}$ " DensGlass Gold sheathing or equivalent
- C All DensGlass butt joints filled with fire resistant caulk
- D Cavity depth is to be a minimum $\frac{3}{8}$ " for WUI compliance. A ventilated cavity is required to maintain the Accoya Warranty. Warranty required cavity depth ranges from $\frac{1}{4}$ to $\frac{3}{4}$ " dependent on climate zone. Refer to map on p3 of the Accoya Siding Guidelines
- E $\frac{3}{4}$ " or 1" Accoya, T&G

TESTING SPECIFICATION DETAILS

Siding boards were selected at random, witnessed by third party auditor TPI from Accoya distributor in North Carolina.

Fire-resistant caulk used for testing was 3M Fire Block Sealant FB 136. Testing was performed at ICC NTA, LLC, an accredited third-party agency headquartered in Nappanee, Indiana, and part of the International Code Council family of solutions.

For more information please refer to the latest version of the Wood Information Guide at: accoya.com



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