

CALIFORNIA DEPARTMENT of
FORESTRY and FIRE PROTECTION

WILDLAND URBAN INTERFACE
FIRE AREA

CONSTRUCTION PRODUCTS HANDBOOK

Edited by County of Santa Clara, CA

Revised 04/17/08

<http://osfm.fire.ca.gov/pdf/fireengineering/bml/wuiproducts.pdf>

Background

On January 1, 2008, the 2007 California Building Code (CBC) became effective. In the Wildland Urban Interface (WUI) Fire Area, regulations require that construction products shall comply with specific fire-resistant standards.

The Office of the State Fire Marshal (OSFM) wrote this “Wildland Urban Interface Fire Area Construction Products Handbook” to provide property owners, contractors, building design professionals, and local building and fire officials with a reliable and readily available source of information.

All construction products in this handbook have been reviewed by OSFM staff and found to be in compliance with specific fire-resistant standards. Only products submitted to the OSFM and determined to be in compliance are included. It should be noted that products that are not in this handbook may comply with the standards, but have not yet been submitted for review. It is not a requirement for all complying products to be in this handbook. Also, the handbook may contain other products that are not in the main categories listed below.

The SFM reserves the right to remove any product in this handbook for cause. Also, the local fire and building officials have the right to approve or disapprove construction products for used within their jurisdiction.

This list of approved materials is divided into four main categories:

1. Exterior Wall Siding and Sheathing (SFM Standard 12-7A-1)
2. Exterior Window (SFM Standard 12-7A-2)
3. Under Eave (SFM Standard 12-7A-3)
4. Decking (SFM Standard 12-7A-4)

Building Standards and Materials for Chapter 7A, 2007 California Building Code

The California Building Standards Commission adopted a code for the Wildland-Urban Interface Fire Area in late 2005, with the majority of the new requirements taking effect on January 1, 2008. These codes include provisions for fire-resistant construction standards in the Wildland-Urban Interface Fire Area. Building officials will use the updated Fire Hazard Severity zones to determine appropriate construction materials for new buildings in the Wildland-Urban Interface Fire Area. Property owners will use the updated Fire Hazard Severity zones to comply with the natural hazards disclosure requirements at time of property sale. Local governments may use the Fire Hazard Severity zones when updating the Safety Element of their General Plan.

Building officials will enforce the building standards for the Fire Hazard Severity Zones as part of the building permit plan checking process. To best assist them in determining if a product meets the code requirements, the State Fire Marshal's Building Materials Listing (BML) Program is accepting applications for materials for listing or for the review of meeting the standards. These materials are posted on the OSFM BML website at:

<http://osfm.fire.ca.gov/bml.html>

and the California's Wildland-Urban Interface Building Code Information page of the OSFM Wildland-Urban Building Codes website at:

http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_codes.php

The OSFM listing service provides property owners, contractors, building design professionals, and local building and fire officials with a reliable and readily available source of information.

Since the materials under Wildland-Urban Interface Building Codes (except wood shakes and shingles) are not required by law to be listed by the SFM, the listings for these products are strictly voluntary. Materials not listed by the SFM may still qualify for use provided they met all the requirements under Chapter 7A. If not listed on the SFM site, all documentation and testing certificates showing compliance must be submitted to the local building official for final approval.

For product listing information, please contact:

Ben Ho, Chief
Fire Engineering Division
1131 S Street
Sacramento, CA 95811
(916) 445- 8312
ben.ho@fire.ca.gov

Information regarding the listing application, regulations and publications can be downloaded at:

<http://osfm.fire.ca.gov/bml.html>

For questions relative to Wildland Hazards and Wildland-Urban Interface issues, please contact:

Ernylee Chamlee, Chief
Wildland Fire Prevention Engineering
1131 S Street
Sacramento, CA 958111
(916) 445-8200
ernylee.chamlee@fire.ca.gov

Information regarding all Wildland Urban Interface issues can be downloaded from:

http://www.fire.ca.gov/fire_prevention/fire_prevention_wildland_codes.php

All SFM Wildland-Urban Interface standards can be downloaded from the following links:

Testing Standards CA SFM 12-7A-1, Exterior Wall Siding and Sheathing

http://www.fire.ca.gov/fire_prevention/downloads/Part_12_CA_SFM_12-7A-1_Test_Standards.pdf

Testing Standards CA SFM 12-7A-2, Exterior Window

http://www.fire.ca.gov/fire_prevention/downloads/Part_12_CA_SFM_12-7A-2_Test_Standards.pdf

Testing Standards CA SFM 12-7A-3, Under Eave

http://www.fire.ca.gov/fire_prevention/downloads/Part_12_CA_SFM_12-7A-3_Test_Standards.pdf

Testing Standards CA SFM 12-7A-4, Decking

http://www.fire.ca.gov/fire_prevention/downloads/Part_12_CA_SFM_12-7A-4_Test_Standards.pdf

Wildland-Urban Interface Fire Area Construction Product Listing

Exterior Wall Siding and Sheathing (SFM Standard 12-7A-1)

Company Name: APA-The Engineered Wood Association
7011 South 19th Street, Tacoma, WA 98466

Product Description: "APA 303®" plywood siding with shiplap edges, nominal 19/32" thick and grooves spaced 4" on center, manufactured with veneers of all Southern Pine or Douglas Fir face, back and center with Hemlock or Douglas fir cross plies, 4'x8' panel

Company Name: APA-The Engineered Wood Association
7011 South 19th Street, Tacoma, WA 98466

Product Description: "APA 303®" plywood siding with reverse-board and batten, nominal 19/32" thick and shiplap edges, grooves spaced 12" on center, manufactured with face, back and center of Douglas Fir veneers and cross ply veneers of Hemlock or Douglas, 4'x8' panel

Company Name: JAMES HARDIE BUILDING PRODUCTS, INC.
10901 Elm Avenue, Fontana, CA 92337

Product Description: "Artisan®" lap siding, fiber-cement, 5/8" thick

Company Name: JAMES HARDIE BUILDING PRODUCTS, INC.
10901 Elm Avenue, Fontana, CA 92337

Product Description: "Cemplank®" lap siding, fiber-cement, 5/16" thick

Company Name: JAMES HARDIE BUILDING PRODUCTS, INC.
10901 Elm Avenue, Fontana, CA 92337

Product Description: "Cempanel®" vertical siding, fiber-cement, 5/16" thick

Company Name: JAMES HARDIE BUILDING PRODUCTS, INC.
10901 Elm Avenue, Fontana, CA 92337

Product Description: "HardieShingle™" panel, fiber-cement, 1/4" thick "HardieShingle™" lap siding, fiber-cement, 1/4" thick

Company Name: JAMES HARDIE BUILDING PRODUCTS, INC.
10901 Elm Avenue, Fontana, CA 92337

Product Description: "HardiePlank™" lap siding, fiber-cement, 5/16" thick "HardiePanel™" vertical siding, fiber-cement, 5/16" thick

Company Name: LOUISIANA-PACIFIC
414 Union Street, Suite 2000, Nashville, TN 37219

Product Description: "LP SmartSide® Precision Series" exterior lap siding, oriented strand back-bone, 3/8" thick

Company Name: LOUISIANA-PACIFIC
414 Union Street, Suite 2000, Nashville, TN 37219

Product Description: "LP SmartSide® Precision Series" exterior panel siding, oriented strand back-bone, 7/16" thick

Company Name: LOUISIANA-PACIFIC
414 Union Street, Suite 2000, Nashville, TN 37219

Product Description: "LP SmartSide® Foundation Series" exterior lap siding, wet process fiber backbone, 1/2" thick

Company Name: LOUISIANA-PACIFIC
414 Union Street, Suite 2000, Nashville, TN 37219

Product Description: "LP SmartSide® Foundation Series" exterior panel siding, wet process fiber backbone, 7/16" thick

Company Name: ROSEBURG FOREST PRODUCTS Co.
P.O. Box 1088, Roseburg, OR 97470

Product Description: "Breckenridge" Siding, 19/32" thick, plain square edge, APA certified siding

Company Name: ROSEBURG FOREST PRODUCTS Co.
P.O. Box 1088, Roseburg, OR 97470

Product Description: "Douglas Fir" siding, 11/32" thick, 12" groove spacing, 1.5" groove width, 3/8" groove depth, shiplap, APA certified siding

Company Name: ROSEBURG FOREST PRODUCTS Co.
P.O. Box 1088, Roseburg, OR 97470

Product Description: "DuraTemp" siding, 15/32" thick, 4 ply, 8" groove spacing, 3/8" groove width, lap edge, APA certified siding.

Company Name: Various Manufacturers

Product Description: Solid "Wood" siding: "Redwood", "Western Red Cedar", "Incense Cedar", "Port Orford Cedar", and "Alaska Yellow Cedar", interlocking joint profiles of shiplap, tongued-and-grooved, or rabbeted bevel patterns.

Sizes: Minimum nominal 1" thickness in basic profile by minimum nominal 6" width. (American Softwood Lumber Standard PS 20).

Lumber grades: No through holes or loose knots.

Special instructions: solid wood siding shall be installed horizontally over 15/32" minimum thickness structural plywood or oriented strand board (OSB) for shiplap and tongued-and-grooved patterns and plywood for rabbeted bevel patterns. The recommended installation practice for solid wood siding in wall construction regarding butt and overlapping joints is:

Butt joints between pieces should be staggered a minimum of 12" and all butt joints should be flush with no gap. Nail joints into the studs or blocking members. One nail at each crossing with the wood frame support member shall be used for nominal 6" siding and 2 nails for nominal 8" or wider siding.

Exterior Windows (SFM Standard 12-7A-2)

None

Under Eave (SFM Standard 12-7A-3)

Company Name: JAMES HARDIE BUILDING PRODUCTS, INC.
10901 Elm Avenue, Fontana, CA 92337

Product Description: "CemSoffit®" un-vented, fiber-cement soffit, 3/16" thick and 1/4" thick.

Company Name: JAMES HARDIE BUILDING PRODUCTS, INC.
10901 Elm Avenue, Fontana, CA 92337

Product Description: "HardieSoffit®" un-vented, fiber-cement soffit, 3/16" thick and 1/4" thick.

Decking (SFM Standard 12-7A-4)

Company Name: ELK COMPOSITE BUILDING PRODUCTS, INC.

Product Description: "CrossTimbers FR" composite deck board, 1" thick x 5.5" width (nominal 1" x 6").
Test Protocol 12-7A-4, Part A only, Accelerated weathering.
Flame Spread Class B

Company Name: EPOCH COMPOSITE PRODUCTS, INC., A TAMKO COMPANY
Product Description: "EverGrain" composite deck board, 15/16" thick x 5.5" width
Test Protocol 12-7A-4, Part A only, Accelerated weathering.
Flame Spread Class C

Company Name: EPOCH COMPOSITE PRODUCTS, INC., A TAMKO COMPANY
Product Description: "EverGrain" composite deck board, 1- 7/16" thick x 5.5" width
Test Protocol 12-7A-4, Part A only, Accelerated weathering.
Flame Spread Class C

Company Name: FIBER COMPOSITES, LLC
Product Description: "Gray Meridian" composite deck board, 1" thick x 5 1/8" width.
Test Protocol 12-7A-4, Part A only, Accelerated weathering.
Flame Spread Class B

Company Name: FIBER COMPOSITES, LLC
Product Description: "Brown Selma" composite deck board, 1" thick x 5 1/2" width.
Test Protocol 12-7A-4, Part A only, Accelerated weathering.
Flame Spread Class C (Refer to Exception of 704A.4.1.1(b))

Company Name: TREX COMPANY, INC.
Product Description: "Trex Accents: Fire Defense" wood and polyethylene composite deck board,
nominal 5/4" thick x 5.5" width, nominal density of 0.036 lb/in³.
Test Protocol 12-7A-4, Part A only, Accelerated weathering.
Flame Spread Class B

Company Name: Various Manufacturers
Product Description: Solid "Wood" decking: "Redwood", "Western Red Cedar", "Incense Cedar", "Port
Orford Cedar", and "Alaska Yellow Cedar".
Sizes: Minimum nominal 2" thickness (American Softwood Lumber Standard PS 20).
Lumber grades: Construction Common and better grades for Redwood, 3 Common and better grades for
Cedars, and Commercial decking or better grades for both Redwood and Cedars.
Special instructions: solid wood decking shall be installed over solid wood joists spacing 24" or less on
center.

Ignition-Resistant Materials (ASTM E84 for 30 Minutes with Accelerated Weathering Test)

Company Name: CHEMCO INC.
Product Description: Type "FRX" and "Thermex-FR" fire-retardant-treated lumber. Products are Douglas
Fir, Southern Yellow Pine, Western Red Cedar, White Spruce and Western Hemlock pressure
impregnated with "FRX" and "Thermex-FR" fire retardant chemical.

Company Name: CHEMCO INC.
Product Description: Type "FRX" and "Thermex-FR" fire-retardant-treated plywood. The plywood is
Structural I grade, exterior plywood complying with PS1. Products are pressure impregnated with
"FRX" and "Thermex-FR" fire retardant chemical.

Company Name: HOOVER TREATED WOOD PRODUCTS, INC.

Product Description: "EXTERIOR FIRE X" pressured impregnated treated lumbers. Products are Douglas Fir, Southern Yellow Pine, Western Red Cedar and Redwood. (CSFM Listing No. 2520-1701:100)

Company Name: HOOVER TREATED WOOD PRODUCTS, INC.

Product Description: "EXTERIOR FIRE X" pressured impregnated treated plywood. Products are Douglas Fir, Micro-Lam Douglas Fir, Southern Yellow Pine, Gang-Lam Southern Yellow Pine, Micro-Lam Southern Yellow Pine and Spruce Master Plank. (CSFM Listing No. 2580-1701:101)

Wood Shakes and Shingles Roofing Materials (UBC 15-2)

Company Name: CHEMCO INC.

Product Description: "FTX" and "CedarPlus" pressured treated, No. 1 Grade Western Red Cedar Shakes and Shingles. (CSFM Listing No. 4150-1450:100)