<b>Resource Management Agency</b> <b>Building and Safety Division</b>		Policies and Interpretations Policy No.: 2023-B001
Topic: Accessory Structures in Hazardous Fire Areas Page 1 of 3	REVISED:	Ruben M. Barrera, County Building Official

Policy No. 2023-B001:

# Approved Materials for Accessory Buildings and Structures in Hazardous Fire Areas

### Purpose

The purpose of this policy is to establish approved Alternate Materials and Method of Construction for the design and construction of accessory structures in Hazardous Fire Areas in Ventura County, as specified in California Building Code Chapter 7A, to allow for heavy timber construction or 1-hour fire-resistance-rated construction in lieu of ignition-resistant materials.

### Background

Chapter 7A of the California Building Code (CBC) and pertinent sections of the California Residential Code (CRC) provide for the protection of buildings and accessory structures in Hazardous Fire Areas by requiring that they be constructed with exterior materials that are ignition-resistant, as defined.

When other design/construction methods are preferred instead of ignition-resistant materials, due to cost, construction scheduling, or architectural considerations, the Code allows for the use of alternate protection methods and materials for certain building components, like exterior porch ceilings, exterior walls, and eaves and soffits. The approved options are explicitly listed in Chapter 7A for each of these building components. These alternate materials are generally considered to offer equivalent protection when constructed as specified.

For example, materials approved for 1-hour fire-resistance-rated construction, as defined, are allowed in lieu of ignition-resistant materials for porch ceilings, exterior walls, and eaves and soffits. Other options are also permitted.

However, the chapter is silent about using 1-hour fire-resistant materials or other options, in lieu of ignition-resistant or combustible materials, for accessory structures.

The absence of an explicit reference allowing the use of other materials in accessory structures has been problematic in the enforcement of Chapter 7A provisions. Customers have expressed a continued interest in having similar options for accessory structures as those allowed for other building components.

It is important to make available reasonable options for customers to allow for construction of accessory structures so that they meet or exceed minimum safety standards. Making additional

<b>Resource Management Agency</b> <b>Building and Safety Division</b>		Policies and Interpretations Policy No.: 2023-B001
Topic: Accessory Structures in Hazardous Fire Areas Page 2 of 3	REVISED:	Ruben M., Barrera, County Building Official

options available that meet the intent of the Code also discourages unpermitted construction and uninspected work, which can result in potential safety hazards and/or other code violations, and an incomplete building permit record.

The absence of alternate material options for accessory structures in Chapter 7A appears to be a benign omission and not a purposeful prohibition against using 1-hour fire-resistant materials or equivalent options. 1-hour fire-resistance-rated construction is an approved alternative to ignition resistant materials for other building components, like walls and soffits. But this type of construction can be costly and less practical for use with small accessory structures, which may explain why these alternate options were listed for various building components in CBC 707A but not for accessory structures in CBC 710A.

Materials approved for 1-hour fire-resistant construction as allowed by 707A are generally deemed equivalent to fire resistive materials used for protecting against the spread of fire, as expressed by the Code's allowance for these materials in specified building components. Indeed, current practice in Ventura County allows for 7/8" plaster to be used simply as an ignition-resistant material. It is also allowed for use as part of a fire resistant assembly for achieving a 1-hour fire resistant rating. Both approaches for using plaster are approved. Using it as a 1-hour fire-resistant material requires more careful specifications for its method of installation but in both cases the spread of fire on its surface is minimal.

Additionally, the use of heavy timber construction is frequently used in lieu of 1-hour fireresistant ratings for roofs and their primary structural frames. This is approved by CBC Table 601, footnote "c." Heavy timber components must be designed and constructed in accordance with the provisions of CBC 2304.11. The intent for allowing the use of heavy timber in lieu of 1hour fire-resistance-rated construction is also corroborated by Chapter 7A's allowance for the use of heavy timber nominal dimensions for exterior log walls and other exterior walls.

# Findings

Patio covers, pergolas, and similar shade structures are popular in Ventura County. These projects are commonly constructed by property owners who wish to ameliorate the effects of the sun and weather on the immediate outdoor areas of the rear and/or side yards of their home.

Chapter 7A approves 1-hour fire-resistance-rated construction in lieu of fire-resistant materials for most building components. Chapter 6 allows the use of heavy timber construction for the roofs and frames of Type V buildings when 1-hour fire-resistance-rated construction is required

<b>RESOURCE MANAGEMENT AGENCY</b> Building and Safety Division		Policies and Interpretations Policy No.: 2023-B001
Topic: Accessory Structures in Hazardous Fire Areas Page 3 of 3	REVISED:	Ruben M. Barrera, County Building Official

for these structural components. Furthermore, Section 707A.10, Exception, allows the use of sawn lumber having a minimum nominal dimension of 4 inches for columns and beams under building appendages when required by the enforcing agency.

Therefore, accessory structures, such as patio covers, shade structures, and similar building appendages are allowed to be constructed in the unincorporated areas of Ventura County with heavy timber materials as described in this policy. These materials are deemed adequate for protecting the structure during a wildland fire in an equivalent fashion to those methods and materials otherwise specified in Chapter 7A for other building components.

Accepting these materials for use in accessory structures is consistent with the intent of the code and generally follows current construction standards and practices in the industry.

# Policy

Ventura County will accept the following materials, or combination thereof, to be used for construction of the roof or deck of accessory structures when otherwise required to have non-combustible or ignition-resistant materials per CBC 710A:

- 1. Ignition-resistant materials or non-combustible materials, as defined and referenced in CBC 710A, or
- 2. Materials having a 1-hour fire-resistant rating, as specified in CBC Chapter 7, or
- 3. Heavy timber construction as specified in CBC 2304.11, or
- 4. Construction having the following minimum nominal dimensions:
  - a. Beams: 6 inches
  - b. Columns: 6 inches
  - C. Ledgers for attached patio covers: 4 inches
  - d. Underside of floor deck: Per 707A.9
  - e. Underside of roof deck: Per 707A.10
  - f. Floor decking: Per 709A
  - g. Roofing, or trellis/shade bar/lattice < 50% open:
    - i. 4 inches, or
    - ii. Roofing per 705A
  - h. Trellis/shade bar/lattice  $\geq$  50%: 4 inches
  - i. Fascia boards and other architectural trim and embellishments: Exempt