General:

Section 1505 of the Los Angeles Building Code requires the roof covering of every building to be fire-retardant. An exception can be applied for a trellis or similar structure that has no roof covering, which is to be located on the roof deck or at ground level, and serves as an accessory use to a Single Family Dwelling and complies with the following types of construction:

A. “Open egg-crate roof” constructed of lattice members so that a sphere of 10 inches minimum in diameter can pass through. All lattice members must have a minimum nominal width of 2 inches. (see diagram #1)

B. “Spaced roof” constructed of members running in one direction only with a minimum clear spacing between the members of not less than 4 inches. In addition, beams supporting and placed perpendicular to the members shall be spaced not less than 24” on center. All members or beams must have a minimum nominal width of 2 inches. (see diagram #2)

Section 1503 of the Los Angeles Building Code also requires the covering of the walking surface of a deck to be fire-retardant except for the following conditions:

1. Space below the unroofed walking deck (open or enclosed) shall have no use other than landscaping, walking surface or placement of small items such as pool equipment.

2. Any cantilevered balcony, provided the space below the balcony is not enclosed.

Special requirements within the Very High Fire Hazard Severity Zone (VHFHSZ):

A. A detached trellis or a trellis attached to a new building located in the VHFHSZ are not permitted per Section 710A of the Los Angeles Building Code (LABC) and Section R337.5 of the Los Angeles Residential Code (LARC).

Exception: A trellis that serves as an accessory use to a Single Family Dwelling and meets one of the following conditions:

Trellis constructed of non-combustible members.

(1) Trellis constructed of pressure treated members. Coating for fire retardant treatment is not acceptable.

(2) Trellis made of heavy timbers per Section 602.4.4 of the LABC and Section R337.10 of LARC. The columns shall be of 6 x 6 minimum and the roof framing shall be of 4x 6 minimum.
B. For decks located in the VHFHSZ, the area under unroofed walking decks shall be completely enclosed per Section 7207.1, and if the deck is within 10 feet of the primary structure, the walking surface of the deck shall be protected per Section 709A of the Los Angeles Building Code and Section R37.9 of LARC.

Diagram # 1 - Open egg-crate roof

Members with a min. clear spacing of 4 inches

Beam below spaced 24 inches on center minimum.

Diagram # 2 - Spaced roof