

316.4

Obstructions on Roofs

CHANGE TYPE: New

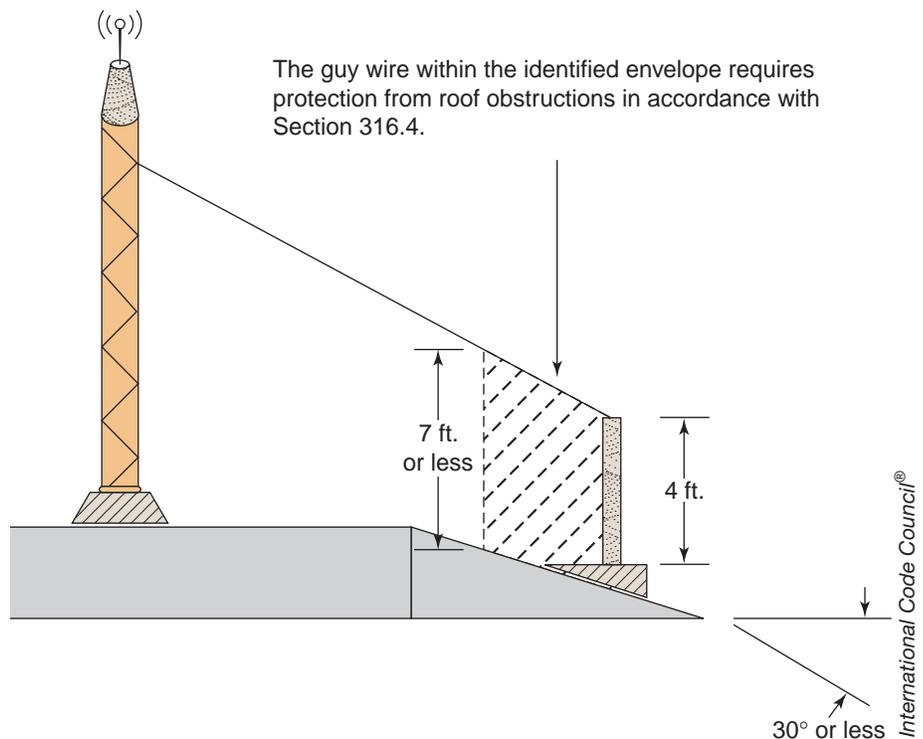
CHANGE SUMMARY: A physical guard is required for certain obstructions on roofs with a less than 30 degree slope.

2012 CODE: 316.4 Obstructions On Roofs. Wires, cables, ropes, antennas, or other suspended obstructions installed on the roof of a building having a roof slope of less than 30 degrees shall not create an obstruction that is less than 7 feet (2133 mm) high above the surface of the roof.

Exceptions:

1. Such obstruction shall be permitted where the wire, cable, rope, antennae or suspended obstruction is encased in a white 2" minimum diameter plastic pipe or an approved equivalent.
2. Such obstruction shall be permitted where there is a solid obstruction below such that accidentally walking into the wire, cable, rope, antennae or suspended obstruction is not possible.

CHANGE SIGNIFICANCE: Part of the IFC's intent in Section 101.2 is to control conditions that can affect the safety of firefighters and emergency responders during operations. One condition is obstructions on the roofs of buildings. A primary concern is poorly identified or unidentified obstructions on building roofs that can become entanglement hazards or, in the case of equipment such as cellular or wireless communication



IFC requirement for obstructions on roofs

antennas, can be potential pathways for stray current if the electrical ground is somehow compromised and an emergency responder comes into contact with it.

Section 316.4 is a new provision that addresses obstructions on building roofs. This requirement was developed to establish criteria for roof obstructions that must be arranged so emergency responders are not accidentally injured by their presence. It is applicable on roofs with a slope of 30 degrees or less—it is not applicable on roofs with a slope of more than 30 degrees. Under this new requirement a means of identification, a barrier, or some other form of obstruction must be provided when a guy wire, cable, or rope is less than 7 feet above the roof level. The 7-foot value is based on the potential of a firefighter in a smoke-obscured environment striking the cable or wire, especially in the head, neck, or torso area. A common fire service slang term for such an event is “being clothes-lined,” and these events have resulted in permanent paralysis of firefighters and other emergency responders.

If the obstruction is located in the plane that is 7 feet or less below the roof surface, Exception 1 allows the use of a protective collar such as a 2-inch-diameter plastic pipe that is sleeved over the cable. Other options include illuminating the cable or providing reflective marking of the cable, wire, or rope. Any method that offers equivalency to the prescribed pipe sleeve can be approved by the fire code official if it demonstrates equivalency.

Exception 2 recognizes that solid obstructions such as screen walls or fencing can provide a physical barrier and can eliminate the need for protecting the emergency responders from roof obstructions that are less than 7 feet above the roof level.