



Installation Guidelines for R44 Helipad

This guideline highlights typical building code and FAA airspace requirements for installation of a Robinson rooftop helipad for an R44 helicopter. Check with local building codes for specific requirements. Figure 1 shows the requirements for rooftop placement; Figure 2 shows the construction and measurements of the helipad.

The helipad is limited to a maximum helicopter gross weight of 3,000 pounds when supported on three beams. IBC structural load requirements include:

1. Dead load plus gross weight of helicopter plus snow load.
2. Dead load plus two single concentrated impact loads spaced 8 feet apart, each having a magnitude of 0.75 times gross weight of helicopter.
3. Dead Load plus a uniform live load of 40 psf.

Safety netting is normally not required if the top of the helipad is no more than 30 inches above the roof and the edges of the helipad are at least 5 feet from the inside face of the roof parapet (Figure 2).

Rooftop Access – Both a stairway and a fire escape or ladder leading from the roof to the floor below is typically required. A set of steps from the helipad to the roof is also required. If the stairwell is covered or rises above the helipad then the stairwell must remain outside the Final Approach and Take of Area (FATO), Safety Area, and Transitional Surfaces (see Note 2 on Figure 1).

Fuel Containment – Any fuel spills or leaks are required to be confined to the helipad and drain away from any exit or stairway serving the helipad. Some local building codes may require a fuel water separator to trap and separate fuel spills from water.

Fire Protection – The helipad and supporting structure are typically required to be of noncombustible construction. Check local building codes regarding any occupancy/fire separation requirements. A minimum of one portable fire extinguisher with an 80-B:C rating is required. Two portable foam extinguishers, each with a 20-A:160-B rating, are required if the helipad is subject to the National Fire Protection Association (NFPA) 418, “Standard for Heliports”.

Airspace – Figure 1 illustrates requirements for an R44 helicopter operating from a 20 ft by 20 ft helipad under FAA advisory circular AC 150/5390-2B (www.faa.gov).

Approvals – Approvals vary, but typically require:

1. Federal – FAA Form 7480-1
2. State (if applicable)
3. Local airport Land use commission or similar agency (if applicable)
4. Local planning and building department