



# Operational Permit Application

## Rooftop Heliports



[www.cityofvancouver.us/departments/fire-department](http://www.cityofvancouver.us/departments/fire-department)

International Fire Code as adopted by VMC 16.04 (Washington State Fire Code)

### Permitting Requirements

An **operational permit** is required for the operation of a rooftop heliport on any structure, including but not limited to, hospitals, office buildings, government buildings, residential buildings, hotels, corporate campuses, tourist attractions, and all public safety facilities. (WSFC 105.5.46) See also WSFC 2007.

### Project Information

Site Address		Owner Name	
Other			

### Applicant Information

Company Name		Address		
Contact Name				
Office Phone		Cellular		Email

### Contractor

Company Name		Address		
Contact Name				
Office Phone		Cellular		Email
Related Permits:	RES _____	CMI _____	DEF _____	MPE _____

### Description of Work


### Electronic Plan Standards

#### File Naming Standards:

Electronic plans and documents shall be named as specified in the City of Vancouver [ePLANS](#) system:

<https://www.cityofvancouver.us/business/permits-licenses-and-inspections/eplans/>



#### Acceptable File Types:

Plans, calculations, specifications and supporting documents shall be uploaded as a PDF file.

#### Plan Sheet Standards:

All plans shall be drawn to scale, as identified in the checklist, and each sheet shall state the scale and show a measurable scale on the page for measurement calibrations.

#### Document Orientation:

All plans must be uploaded in "Landscape" format in the horizontal position with a north indicator. All other documents can be in "Portrait" format.

#### Stamped:

Where documentation contains a code analysis or engineering calculations, such documents shall be stamped by the design professional.

### Minimum Submittal Checklist for Upload to ePLANS

- Completed Operational Permit Application – Rooftop Heliports (this document) Check all *Permit Conditions* checkboxes that are applicable to your project
- Supporting documents listed below (See *Document Details* below)
- Site plans and floor plans (see *Plan Details* below)
- Stamped rooftop structural engineering for helicopter loads

### Document Details

- A copy of the approval from the Federal Aviation Administration.
- An emergency response plan outlining the procedures for coordinating the response of required agencies or services (e.g., air traffic services unit, firefighting services, administration, medical and ambulance services, aircraft operators, security services, and police) and the response of agencies in the surrounding community (fire departments, police, medical and ambulance services, hospitals, military, and harbor patrol or Coast Guard) that could be of assistance in responding to the emergency.
- Details of fire protection equipment including standpipes and foam protection systems.

### Plan Details

The following is a list of information required on all plan submittals for review of a spraying or dipping permit. The plan shall be drawn to 1/8" = 1'-0" minimum scale. The applicant is required to submit all applicable information so an accurate and timely review may be done:

#### **General :**

- Site plan to include a north arrow, a measurable scale for calibration purposes, emergency access lanes and doors, vehicle gates, Fire Department Connection, points of assembly/accountability for evacuees, standpipe system access, exits, fire alarm control panel, Knox Box, and roof access.
- Fire extinguisher types and locations.
- Location of surrounding structures, obstacles, and any nearby hazards.
- Detailed drawing showing the touchdown area is encircled on all sides by the necessary clear area at any point.
- Location of all fire protection systems in the immediate proximity of the heliport area, including standpipes and foam systems.
- Identification of the measures that are put in place to control spillage of flammable or class II combustible liquids.
- Construction type and load bearing surface engineering in accordance with the IBC
- Landing pad pitch at .05% to 2% unless the pad consists of a passive fire protection grid surface designed and listed for fuel catchment and containment.

## Permit Conditions

The following is a list of WSFC requirements related to rooftop heliports. Use this form to confirm that all applicable requirements are met. Non-applicable requirements can be left blank.

### General:

- The touchdown area shall be surrounded on all sides by a clear area having minimum average width at roof level of 15 feet and not less than 5 feet at any point (2007.2).
- Landing areas on structures shall be maintained to confine flammable or Class II combustible liquid spillage to the landing area itself, and provisions shall be made to drain such spillage away from exits or stairways serving the helicopter landing area or from a structure housing such exit or stairway (2007.3).
- A building with a rooftop helistop or heliport shall be provided with a Class I or III standpipe system extended to the roof level on which the helistop or heliport is located. All portions of the helistop and heliport area shall be within 150 feet of a 2 ½ inch outlet on the standpipe system (905.5.6 and 2007.5).
- Foam fire-protection capabilities shall be provided for rooftop heliports. Such systems shall be designed, installed, and maintained in accordance with the applicable provisions of WSFC 903, 904, 905 and NFPA 418 Section 7.7 (2007.6).
  - The fixed foam discharge outlet system shall be tested to determine coverage of the rooftop landing pad using water, foam, or an alternative test fluid acceptable to the City of Vancouver. The system shall cover 95 percent of the rooftop landing pad during the test (NFPA 418 Section 7.7.10).
- Not less than one portable fire extinguisher having a minimum 80-B:C rating shall be provided for each permanent takeoff and landing area and for the aircraft parking areas. Installation, inspection, and maintenance of these extinguishers shall be in accordance with WSFC 906 (2007.7).
- Two means of egress from the rooftop landing pad to the building's egress system shall be provided (NFPA 418 Section 7.5)
  - The egress points shall be located at least 90 degrees from each other as measured from the center of the landing pad.
  - The egress points shall be remotely located from each other, not less than 30 ft apart.
  - No two egress points shall be located on the same side of the rooftop landing pad.
  - Means of egress from the landing pad shall not obstruct flight operations.
- Before operating helicopters from helistops and heliports, approval shall be obtained from the Federal Aviation Administration (2007.8).

### Fire Alarm:

- A means of communication shall be provided from the roof area to notify the fire department of emergencies (NFPA 418 Section 7.7.9.1).
- Where buildings are provided with a fire alarm system, a manual pull station shall be provided for each designated means of egress from the roof (NFPA 418 Section 7.7.9.2).

### Fire Protection:

- Fixed Foam Fire-Extinguishing Systems. The fixed foam discharge outlet system shall be tested with foam to determine the coverage of the rooftop landing pad. The system shall cover 95% of the landing pad surface and access points for firefighting and egress (NFPA 418 5.7.8.1).
- Inspection, testing and maintenance shall be in accordance with NFPA 11, 14, 16 and 25 as applicable for the fire protection equipment.

### Construction:

- Main structural support members that could be exposed to a fuel spill shall be made fire resistant using listed materials and methods to provide a fire-resistance rating of not less than two hours (NFPA 418 Section 7.2).
- The rooftop landing pad surface shall be constructed of approved noncombustible, nonporous materials meeting the requirements of NFPA 418 Section 7.4.1.

- The contiguous building roof covering within 50 ft of the landing pad edge shall have a Class A fire rating for exterior fire exposure and shall be listed according to FM 4470, UL 790, or ASTM E108.
- Stamped engineering required based on the heaviest potential imposed dead and live loads.
- Building construction shall be a minimum of Type II construction with a minimum 2-hour fire resistance rating for floors.

**NOTE:** *This is not intended to be an all-inclusive list. The WSFC requirements listed are intended to ensure that we have adequate information to begin a review of the application. Additional information may be required.*

**I understand that all applicable codes apply and that other regulatory codes may also apply. Errors and/or omissions on the plans and corrections from field inspections are the responsibility of the owner/contractor. All work is subject to compliance with City Vancouver ordinances and laws of the State of Washington.**

APPLICANT NAME: \_\_\_\_\_ APPLICATION DATE: \_\_\_\_\_

APPLICANT SIGNATURE: \_\_\_\_\_