



Fire Installation Permit Application



SITE LOCATION	Office Use Only
Site address: _____	PROJ: _____ DATE: _____
Project name/Tenant: _____	BLDG: _____ APP EXPIRES: _____
Associated Permits: _____	FIRE: _____ ACCEPTED BY: _____
Property owner: _____	PAYMENT METHOD: _____ TYPE: _____

APPLICANT INFORMATION

Contact Person: _____	Address: _____
Company Name: _____	City: _____
Phone: _____ Fax: _____	State: _____ Zip: _____
E-mail: _____	

CONTRACTOR

Contractor Name: _____	State Contractors License #: _____
Contact Person: _____	Expiration Date: _____
Business address: _____	Redmond Business License #: _____
City: _____	Phone: _____ Fax: _____
State: _____ Zip: _____	E-mail: _____

DESCRIPTION OF WORK

TYPE OF PERMIT

Note: Check the appropriate scope of work to determine which permit you are applying for. **ONLY ONE PERMIT TYPE IS ALLOWED PER APPLICATION.** BOTH A PERMIT APPLICATION AND ASSOCIATED SUBMITTAL CHECKLIST WHERE APPLICABLE ARE REQUIRED AT TIME OF PERMIT APPLICATION. (Submittal Checklists for each Permit Type can be found at www.redmond.gov/prevention under "Quick Links", Forms and Fire Codes/Standards)

Battery Systems:
 Quantity: _____

Cryogenic Fluids:
 Quantity: _____

Industrial Ovens:
 Quantity: _____

Emergency Responder Radio:
 Quantity: _____

Solar Photovoltaic Power Systems:
 Quantity: _____

HPM Facilities (check only one):
No submittal checklist required. See Deputy Fire Marshal.

Level 1: 1 to 4 ct. specialized equipment

Level 2: 5 to 8 ct. specialized equipment

Level 3: Any new facility

Compressed Gases:
No submittal checklist required.

Quantity: _____

Private Fire Hydrants:
No submittal checklist required.

Quantity: _____

TYPE OF PERMIT (CONTINUED)

LP gas Store/Handle/Use/Dispense *(check only one):*

- Level 1: $\leq 1,000$ # aggregate
- Level 2: $> 1,000 \leq 4,000$ # aggregate
- Level 3: $> 4,000$ # aggregate

Places of Assembly *(check only one):*

- Level 1: $> 50 \leq 100$ occupant load
- Level 2: $> 100 \leq 500$ occupant load
- Level 3: > 500 occupant load

Refrigeration Equipment *(check only one):*

- Level 1: Min. 220# Group A1; 30# other refrigerant not level 2 or 3
- Level 2: Refrigerant machinery room
- Level 3: Equipped with treatment/flaring/ammonia diffusion system

Spraying and Dipping *(check only one):*

- Level 1: 1 spray area, dip tank, powder coating ops/fire area
- Level 2: $> 1 \leq 3$ spray areas, dip tanks, powder coating ops/fire areas
- Level 3: > 3 spray area, dip tanks, powder coating ops/fire areas

Flammable/Combustible Liquids *(check only one):*

(To install, alter, remove, or abandon a tank storing flammable/combustible liquids)

- Level 1: $>$ Permit amount & ≤ 500 gallons
- Level 2: > 500 gallons $\leq 1,000$ gallons
- Level 3: $> 1,000$ gallons

Hazardous Materials *(check only one):*

- Level 1: $>$ Permit amount of 1 to 5 materials
- Level 2: $>$ Permit amount of 6 to 10 materials
- Level 3: $>$ Permit amount of more than 10 materials

High Piled Storage *(check only one):*

- Level 1: $>$ Permit amount to 2,500 sf
- Level 2: $> 2,500$ sf to 12,000 sf
- Level 3: $> 12,000$ sf

Smoke Control Systems *(check only one):*

- Level 1: Modify Existing
- Level 2: Prescriptive System
- Level 3: Performance-Based Design

I understand that all applicable codes 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 of Redmond ordinances and laws of the State of Washington.

APPLICANT NAME

SIGNATURE



Cryogenic Liquids Submittal Checklist

Updated Sep. 2, 2016 to the 2015 International Fire Code



Electronic Plan Standards

File Naming Standards:

Electronic plans and documents shall be named as specified in **bold type** under "Permitting Requirements". For example, the site plan must be named "**Site Plan**".

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.

Document Orientation:

All **plans** must be uploaded in **landscape** orientation. All other documents can be portrait.

PROJECT INFO

Site Address: _____ Associated Permits: _____
 Project Name/Tenant: _____ Property Owner: _____

PERMITTING REQUIREMENTS

An IFC fire installation permit is required for installation of cryogenic storage tanks and piping **exceeding amounts specified in IFC Table 105.6.11**. A SEPARATE FIRE INSTALLATION PERMIT IS REQUIRED FOR EACH CRYOGENIC TANK/SYSTEM. **The following information is required at time of application for the fire installation permit:**

- Completed **fire installation permit application**
- Completed **cryogenic liquid submittal checklist**. Check all checkboxes that are applicable to your project.
- Site plan**
- Product cut sheets**
- Construction documents**

PLANS

The following is a list of information required on all plan submittals for review of a **cryogenic liquid tank or system**. The plan shall be drawn to 1/8" scale, minimum. The applicant is required to submit all of this information so an accurate and timely review may be done.

- Site plan indicating the location and size of the proposed tank(s) and piping system
- Type and use of container, equipment or device
- Material to be stored, used or transported
- Description showing dimensions and materials used in construction
- Design pressure, maximum operating pressure and test pressure of vessels and associated piping
- Type, size, setting and location of pressure relief devices, vents and emergency shutoff locations.
- Details to show proper construction of the foundation supporting the tank

PLANS (CONTINUED)

General Requirements:

- Pressure relief devices on containers shall be arranged so escaping gas will discharge to the open air and not impinge on personnel, containers, equipment and adjacent structures or enter enclosed spaces (IFC 5503.2.5).
- Pressure relief device vent piping and drains in vent lines on shall be arranged so escaping gas will discharge to the open air and not impinge on personnel, containers, equipment and adjacent structures or enter enclosed spaces. Pressure relief device vent lines shall be installed in such a manner to exclude or remove moisture and condensation and prevent malfunction of the pressure relief device because of freezing or ice accumulation (IFC 5503.2).
- Buildings, rooms, containers and piping systems containing cryogenic liquids shall be labeled in accordance with IFC 5503.4, NFPA 704 and ASME A13.1.
- Cryogenic containers shall be secured against accidental dislodgement and unauthorized access in accordance with IFC 5503.5.
- Cryogenic containers and systems in storage or use shall be separated from materials and conditions which pose exposure hazards in accordance with IFC 5504.3.1. Stationary containers shall be separated from exposure hazards in accordance with the provisions applicable to the type of fluid contained and the separation distances indicated in IFC Table 5504.3.1.1.
- Shutoff valves shall be provided on all container connections except for pressure relief devices. Shutoff valves shall be provided with access thereto and located as close as practical to the container (IFC 5505.1.2.3.1).
- Shutoff valves shall be installed in piping containing cryogenic fluids where needed to limit the volume of liquid discharged in the event of piping or equipment failure. Pressure relief valves shall be installed where liquid is capable of being trapped between shutoff valves in the piping system (IFC 5505.1.2.3.2).
- Piping systems shall be tested and proven free of leaks after installation as required by the standards to which they were designed and constructed. Test pressures shall not be less than 150 percent of the maximum allowable working pressure when hydraulic testing is conducted or 110 percent when testing is conducted pneumatically (IFC 5505.1.2.6).