

Seattle Fire Department Permit Conditions

7901

Annual Roofing Operations

IMPORTANT—BEFORE YOU BEGIN!!

Explicit permission, in the form of a validation number, must be obtained from the Fire Marshal's Office prior to commencement of any regulated roofing operation outside the Fire District (see attached map).

If a validation number is required, but cannot be reasonably obtained beforehand due to an emergency, the request must be submitted to the Fire Marshal's Office the next business day. (SFC 105.1.4)

A separate temporary permit or validation number is required as follows:

1. for any roofing operation conducted inside the Fire District,
2. prior to placement of any tar kettle, melter, or bituminous membrane machine on a roof, and
3. for any roofing operation conducted outside the Fire District that will exceed 20 consecutive days.

Validation numbers may be obtained, and temporary permits can be applied for, by contacting the Fire Department Permit Section at (206) 386-1450 or permits@seattle.gov weekdays from 8:00 am to 4:30 pm.

Failure to obtain the required validation number or comply with any of the following permit conditions may result in a stop work order of not less than 24 hours and legal action.

For a copy of these conditions in Spanish, please contact us at permits@seattle.gov or (206) 386-1450. Para obtener este documento en español, por favor contáctenos a permits@seattle.gov o (206) 386-1450.

GENERAL REQUIREMENTS FOR ALL ROOFING OPERATIONS:

1. Permits shall be kept at all times at locations where regulated roofing operations are conducted in the City and shall be made available to Fire Department personnel upon request. (SFC 105.3.5)
2. The work area shall be cleared of all accumulations of combustible material at the end of each workday. All refuse must be promptly removed from the job site. (SFC 105.3)
3. All fires shall be immediately reported to the Seattle Fire Department by dialing 911. (SFC 401.3.1)
4. All LP-Gas shall be removed from the roof at the end of each shift of work. (SFC 3305.1.7)
5. A charged hose line of not less than 3/4-inch diameter and of sufficient length to reach all areas of the operation shall be provided. The charged hose line shall be available all times during the operation and until the fire watch is no longer required. (SFC 105.3)
6. At least one portable fire extinguisher with a minimum rating of **3A 40-B:C** is required during roofing operations. **Additional portable fire extinguishers may be required based on the type of operation (see below).** The fire extinguisher shall be located within 30 feet of the location where work is in progress. Each extinguisher shall be inspected at least annually and shall display a tag indicating when it was last inspected. (SFC 105.3, 906.2)

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Common LP-Gas Containers

Approximate height:
46.6" 29.4" 18"

- 100 lbs LP-Gas Capacity
- 23 gallons LP-Gas Capacity
- 240 lbs Water Capacity



- 20 lbs LP-Gas Capacity
- 5 gallons LP-Gas Capacity
- 47.7 lbs Water Capacity

- 40 lbs LP-Gas Capacity
- 10 gallons LP-Gas Capacity
- 95.4 lbs Water Capacity

REQUIREMENTS FOR USE OF A TORCH/HOT-AIR HAND GUN/HOT-AIR WELDING MACHINE ON A ROOF:

- At least one portable fire extinguisher with a minimum rating of **3A 40-B:C** is required for each burner (torch) or hot-air hand gun/hot-air welding machine that is located on the roof and shall be located within 30 feet of the location where work is in progress. Each extinguisher shall be inspected at least annually and shall display a tag indicating when it was last inspected. (SFC 105.3 and 906.2)

Note: "Dragon wagons", a rod with numerous flame ports mounted on wheels which directs the heat horizontally at the underside of an unrolling supply of roofing membrane attached to the device is considered to be a single burner if it is operated by one individual and fueled by a single liquefied petroleum gas (LPG) cylinder.

- LP-gas used in conjunction with a torch on a roof shall be limited to the following: (SFC 105.3)

Location	Maximum Individual Cylinder	Maximum Aggregate Quantity On a Roof
Occupied Buildings	10 gal or 43.5lb LP-Gas capacity/103.6lb water capacity	30 gal or 120lb LP-Gas capacity/286.2lb water capacity
Unoccupied Buildings	10 gal or 43.5lb LP-Gas capacity/103.6lb water capacity	60 gal or 261lb LP-Gas capacity/621.6lb water capacity

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9. No more than two (2) torches or six (6) hot-air hand guns/hot-air welding machines shall be in operation at the same time on an occupied building, and no more than five (5) torches or twelve (12) hot-air hand guns/hot-air welding machines shall be in operation at the same time on an unoccupied building. (SFC 105.3)
10. A fire watch shall be designated whenever a torch or hot-air hand gun/hot-air welding machine is used on a roof. A fire watch may be a member of the work crew, or another person designated by the individual in charge of the operation. (SFC 105.3 and 3303.5.2)
11. Individuals using a torch or hot-air hand gun/hot-air welding machine may not serve as their own fire watch. (SFC 105.3 & 3303.5.2)
12. Each designated fire watch shall:
 1. Be present continuously whenever the torch or hot-air hand gun/hot-air welding machine is in operation to watch for fire and operate fire-extinguishing equipment to extinguish spot fires.
 2. Be maintained for at least 2 hours after completion or interruption of work, to detect and extinguish smoldering fires.
 3. Check attic spaces below the work areas for smoldering fire prior to leaving the site.
 4. Be trained in the use of available fire extinguishing equipment.
 5. Be capable of transmitting an alarm to the Emergency - 911 Center via telephone.
 6. Be able to identify the specific address where the work is being performed.
 7. Have read and understand the Seattle Fire Department permit conditions. (SFC 105.3 & 3303.7)
13. When several workers are performing torch or hot-air hand gun/hot-air welding machine operations on a single roof, the fire watch shall have a clear view of, and immediate access to, each worker. **No more than three workers** performing torch or hot-air hand gun/hot-air welding machine operations shall be attended by a single fire watch. (SFC 105.3)
14. Fire protection shall be provided for each opening into the building or an adjacent space (e.g., use of fiberglass blankets may be required in accordance with manufacturer's instructions). (SFC 105.3)
15. Combustible material in close proximity of torches using open flame or hot-air hand guns/hot-air welding machines shall be protected from ignition by shielding or wetting with water. (SFC 105.3)

REQUIREMENTS FOR HOT-TAR TANK TRUCKS , TAR KETTLES, AND MELTERS:

16. Tar kettles, melters, or tank trucks shall be located on a non-combustible surface and shall not be located within 20 feet of any combustible material, including but not limited to, product replenishing (roofing) materials, combustible building surfaces or building openings. (SFC 105.3 & 3305.10.1.1)
17. Tar kettles, melters, or tank trucks shall be located so as **not** to impede building egress routes or Fire Department access lanes. (SFC 3305.10.1.2)
18. LP-gas containers shall be supported upright and they shall be separated from the burner and kettle/melter/truck by a minimum of 10 feet. (SFC 3305.10.1.3)
EXCEPTION: Containers, properly insulated from heat or flame, are allowed to be within 2 feet of the burner.
19. Only containers bearing a Department of Transportation (DOT) approval marking or ASME approved LP-gas containers shall be used. (SFC 6103)

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20. Roof-top delivery lines shall be constructed of rigid metal piping, except that flexible lines may be used to cross parapets when the metal pipe is secured or tied to the building. (SFC 105.3)
21. Piping, hoses and spare fuel containers shall be adequately protected against physical and vehicular damage. (SFC 105.3)
22. LP-gas containers shall not be refilled while burner units are in use. (SFC 105.3)
23. An attendant shall be within 25 feet of the kettle/melter/truck and shall have the kettle/melter/truck in sight when the heat source is operating. Ladders or similar obstacles shall not be located in the path between the attendant and the kettle/melter/truck. (SFC 3305.10.1.4)
24. At least one portable fire extinguisher with a minimum rating of **3A 40-B:C** shall be located within 25 feet of each tar kettle, melter, or hot-tar tank truck when the heat source is operating. At least one additional extinguisher with a minimum **3A 40-B:C** rating shall be located on the roof being covered. Each extinguisher shall be inspected at least annually and shall display a tag indicating when it was last inspected. (SFC 3305.10.2)
25. Tar kettles, melters, or tank trucks shall not be transported on a highway, road or street when the heat source for the kettle or melter is in use. (SFC 105.3)
EXCEPTION: Tar kettles in the process of patching road surfaces.

ADDITIONAL REQUIREMENTS FOR TAR KETTLES, MELTERS, AND/OR BITUMINOUS MEMBRANE INSTALLATION MACHINE OPERATIONS:

26. Tar kettles or melters shall be equipped with a tight-fitting cover, maintained in sound mechanical condition and kept reasonably free of spill residue. (SFC 105.3 and 3305.10.1.6)
27. **At locations outside the Fire District** (see attached map), LP-gas containers serving tar kettles at the job site shall not exceed a maximum individual capacity of 300 gallons LP-gas capacity (1,260 pounds LP-gas capacity) and a maximum aggregate quantity of 500 gallons LP-gas Capacity (2,100 pounds LP-gas capacity) is allowed. (SFC 105.3)
28. **At locations inside the Fire District** (see attached map), a separate temporary permit (7901-T) is required to conduct any roofing operation. LP-gas containers serving tar kettles in the Fire District shall not exceed a maximum individual capacity of 239 lbs water capacity (100 pounds LP-gas capacity) and a maximum aggregate quantity of 478 lbs water capacity (200 pounds LP-gas capacity) is allowed at the job site. (SFC 105.3 and 6104.2)
29. Tar kettles, melters and bituminous membrane machines shall not be used inside or on the roof of a building. (SFC 105.3 & 3305.10.1.2)
EXCEPTIONS:
 1. Rubberized Asphalt Melters may be located on structures undergoing construction or on the roof of a building only when authorized by a separate temporary (7901-T) permit. A Structural Engineer's Certified (Stamped) Report verifying structural integrity of the supporting structure with additional live load calculated is required and the report should indicate the location or locations that the melter is allowed to be used.
 2. Bituminous membrane installation machines may be located on the roof of a building only when authorized by a separate temporary (7901-T) permit. A Structural Engineer's Certified (Stamped) Report verifying structural integrity of the supporting structure with additional live load calculated is required and

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the report should indicate the location or locations that the bituminous membrane machine is allowed to be used.

3. Melters located on structures undergoing construction shall have maximum individual container size of 103.6 lbs water capacity (10 gals or 43.5 pounds LP-gas capacity) and a maximum aggregate quantity of 518 lbs water capacity (50 gals or 217.5 pounds LP-gas capacity).

4. Melters, or bituminous membrane installation machines located on a roof in an unoccupied building shall have a maximum individual container size of 103.6 lbs water capacity (10 gals or 43.5 pounds LP-Gas capacity) and a maximum aggregate quantity in use of 518 lbs water capacity (50 gals or 217.5 pounds LP-gas capacity).

ADDITIONAL REQUIREMENTS FOR HOT-TAR TANK TRUCK OPERATIONS:

30. Hot-tar tank trucks shall display visible placards in accordance with DOT requirements to identify the hazard. (SFC 105.3)
31. Controls shall automatically prevent product temperature from exceeding 550 degrees Fahrenheit. (SFC 105.3)
32. The exterior of the tank truck shall be clean and substantially free of combustible product before heating is commenced. (SFC 105.3)
33. Tank trucks shall not enter buildings, except repair garages, and then only when the contents have been cooled to ambient temperature. (SFC 105.3)
34. Tank trucks shall be in movable condition at all times except when parked in the contractor's yard. Tractors must be left with trailer-type units, except when parked in the contractor's yard. (SFC 105.3)
35. **At locations outside the Fire District** (see attached map) LP-gas containers serving tank trucks shall not exceed 500 gallons LP-Gas Capacity (2,100 pounds LP-Gas Capacity) and a maximum aggregate quantity of 500 gallons LP-Gas Capacity (2,100 pounds LP-Gas Capacity) is allowed at any job site. (SFC 105.3 & 6104.2)
36. **At locations inside the Fire District** (see attached map), a separate temporary permit (7901-T) is required to conduct any roofing operation. LP-gas containers serving hot tar tank trucks in the Fire District shall not exceed a maximum individual capacity of 239 lbs water capacity (100 pounds LP-gas capacity) and a maximum aggregate quantity of 480 lbs water capacity (200 pounds LP-gas capacity) is allowed at the job site. (SFC 105.3 & 6104.2)

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City of Seattle Map of Fire District

Black Region

Fire District (Temporary Permit Required)

Grey Region

Outside the Fire District (Validation Number Required)

