



The Commonwealth of Massachusetts

527 CMR 4.00 Form 1

Application for Permit, Permit, and Certificate of Completion for the Installation or Alteration of Fuel Oil Burning Equipment and the Storage of Fuel Oil

FP-056
527 CMR 4 Form 1
(Rev. 01/09)

(City or Town) (Date)

Permit #'s: FD Elec. FDID#: Fee Paid: \$

Owner/Occupant Name: Tel.:

Installation Address: Serviced Floor or Unit #:

Heating Unit Domestic Water Heater Power Vent Other

Burner: New Existing Location:

Trade Name: Mfg:

Type: Model # or Size: Nozzle size:

Fuel Oil Kerosene Waste Oil

Storage Tank: New Existing Location:

Type: Capacity: gallons No. of Tanks:

Special requirements (or additional safety devices)

OSV valve Oil Line Protected Sheet Rock Sprinkler AFUE: yes no EF: yes no

Co. Name: Tel #

Address: City: Zip:

Completion Date:

Combustion Test: Gross Stack Temp.: Net Stack Temp.:

CO2 Test: Breech Draft:

Smoke: Overfire Draft: Efficiency Rating %:

I, the undersigned certify that the installation of fuel burning equipment has been made in accordance with M.G.L. Chapter 148 and 527 CMR 4.00 currently in effect.

Installer: Print Name Cert of C# Signature (no Stamp)

Address: City:

Once signed by the fire department, this is a PERMIT for the storage of fuel oil and use of the oil burning equipment.

Approved by: Date:

## ALL INSTALLATIONS

- 4.03 (1)d All applications must be on Form 1
- 4.03 (1)e Over 10,000 gallons on site requires License & Permit from local community
- 4.03 (1)g Certificate of Competency required, no other license acceptable, plumbing, electrical, etc.
- 4.04 (3)a Verify emergency shut-off is outside burner room
- 4.04 (4)b Verify separate circuit for oil burner
- 4.04 (4)e Verify presence of overhead thermal switch
- 4.04 (4)c Verify presence of service switch within 3' of burner
- 4.04 (3)b Verify presence of high limit controller
- 4.04 (3)c(1) Primary control has safety timing of 45 secs. (max.)
- 4.04 (4)d Stack type primary may be easily removed
- 4.04 (3)d Steam boiler equipped with low-water cut-off
- 4.04 (4)f Clear access to clean out and services panels
- 4.04 (5)b No oil leaks present at burner
- 4.04 (5)d Installation instructions present on site
- 4.04 (5)f Overhead combustible clearances within 5 feet over unit Gypsum board or sprinkler required unless unit is AFUE (Furnace or Boiler) rated or EF (water heater)
- 4.04 (5)g Combustion test results on Form 1
- 4.04 (9)b(12) Three metal screws at each joint in chimney
- 4.04 (9)b(7) Thimble present at chimney connection
- 4.04 (9)d IF POWER VENTER IS USED: Check air pressure switch, post purge control and secondary control. Installation instructions present.
- 4.04 (9)f Draft regulator is present unless exempted
- 4.04 (5)m Adequate air is present for combustion
- 4.04 (5)o Adequate clearances per manufacturers listing
- 4.04 (2)i Thermal valves at burner and tanks
- 4.04 (1)b Listed flexible hose may be used.
- 4.04 (1)c No Teflon tape on oil line or on oil line fittings
- 4.04 (1)c No compression fittings are permitted
- 4.04 (1)c Solder joints made with 500 degree F solder or greater
- 4.04 (1)e All oil lines must be protected from injury. All new lines must be continuously sleeved with non metallic tubing. Oil safety valves may be used on existing lines not exposed to freezing. Overhead lines require no sleeve and are permitted
- 4.04 (1)f Oil lines exposed to freezing temperatures must come off the top of tanks  
Lines for kerosene, and range oil (#1) are exempt -
- 4.04 (1)i No oil leaks present at tank
- 4.04 (1)j Listed oil filter is present
- 4.03 (5)b Tank is UL80 or (DIB+) PV-VI 321 (under 660 gal) or UL 142 (over 600 gal)
- 4.03 (5)e Shutoff valve located at bottom of tank
- 4.03 (5)f Size of vent as per Table 4.03A
- 4.03 (5)g Oil tank gauge must be present to determine oil level
- 4.03 (11)c Inside tanks have audible fill device (vent alarm)
- 4.03 (5)j Outlet cross connection at bottom of tanks must be 1/2" pipe or tubing.
- 4.03 (5)l Non-combustible tank supports, tank secure.

**Note To Installer: Inspections will be conducted using this checklist as a guideline. Current regulations will apply.**

## UNENCLOSED TANKS

- 4.03 (6)b Single tanks shall not be larger than 660 gallons
- 4.03 (6)b Maximum aggregate capacity of unenclosed multiple tanks is 1320 gallons
- 4.03 (6)d Unenclosed tanks shall be at least five feet from an internal or external flame
- 4.03 (6)d Unenclosed tanks shall not obstruct service meters, service panels and shutoff valves
- 4.03 (6)e Bottom outlet tanks pitched to the opening 1/4" per ft.
- 4.03 (6)f Tanks exposed to vehicles will be protected by barriers

## ENCLOSED TANKS

- 4.03 (7)a Over 660 gallon tanks enclosed by two hour fire resistive assembly
- 4.03 (7)b Tank enclosures provided with 6" high tight sills or ramps
- 4.03 (7)d Tank is 4" above floor supported by 12" thick masonry saddles spaced not more than eight feet on centers and 15" from top and walls of enclosure
- 4.03 (7)e All oil must be transferred by pump, and connections must be at the top of the tank

## ALL TANKS

- 4.03 (9)d Two tanks may be cross-connected as shown in Fig. 4.03 1.
- 4.03 (10)b Return lines must enter the top of tanks
- 4.03 (9)c Vent pipes must be two feet from building openings
- 4.03 (9)c Vent pipes must terminate 3 ft. above grade min.
- 4.03 (9)c Vent pipes must have weatherproof caps
- 4.03 (10)a Fill pipes must be two feet from building openings
- 4.03 (10)a Fill pipes must have tamper proof identifying caps
- 4.04 (9)d IF POWER VENTER IS USED:

All outside connections sealed Vent terminal must be three feet above all air inlets within 10ft. Burner air intake is exempted Vent terminal must be four feet from doors and windows. Vent must be one foot above finished grade. Three foot clearance from inside corners. Not above or within three feet of an oil tank. Seven feet above a public walkway.

IF UNDER PORCH OR DECK: Heating use only, no hot water. Four feet below deck AND not enclosed under deck

## OUTSIDE TANKS

- 4.03 (8)a All UST's and tanks over 660 gallons must be installed as per CMR 9.00
- 4.03 (8)c Tank protected from physical damage
- 4.03 (8)c Tanks exterior coated with organic alkyd resin or asphalt paint
- 4.03 (8)c Damaged protective coatings must be recovered
- 4.03 (8)c Tank does not block means of egress
- 4.03 (8)d Tank mounted on continuous 4" thick slab that extends 8" beyond tank perimeter
- 4.03 (8)d Tank is supported by rigid non-combustible supports