

02-3843



Application Completes: Sections I, II, III (optional), IV, VI, and VII

1. Proposed Work Site at: 1582 Carlson St- 1300

2. Name of Owner in Fee: Wilkowski Tel. [REDACTED]

Address _____
street municipality

3. Ownership in Fee: Public _____ Private _____

4. Principal Contractor: A. Bailey Plumbing Tel. (732) 462-4484

Address 919-Hwy 33 Suite 28 Freehold NJ 07728

License No. OR, if new home, Builder Reg. No. 9339 Exp. Date _____

Federal Employee No. 22-319-0891 FAX: (732) 462-5319

5. Architect or Engineer _____ Tel. (_____) _____

Address _____

6. Responsible Person in Charge of Work Same

Tel. (_____) _____ FAX (_____) _____

1. Building
2. Electrical
3. Plumbing
4. Fire Protection
5. Elevator Devices
6. Subtotal
7. Less 20% for State Plan Review

Update

12. Other

13. TOTAL

1. Number of Stories _____
2. Height of Structure _____ ft.
3. Area — Largest Floor _____ sq. ft.
4. New Building Area _____ sq. ft.
5. Volume of New Structure _____ cu. ft.
6. Construction Classification _____
7. Total Land Area Disturbed _____ sq. ft.
8. Flood Hazard Zone _____
9. Base Flood Elevation _____ ft.
10. Wetlands yes _____
 no _____
11. Max. Live Load _____
12. Max. Occupancy Load _____

(office use only)

1. ☐ Minor Work
2. ☐ New Building
3. ☐ Addition
4. ☐ Alteration
5. ☐ Fire Protection
6. ☒ Plumbing
7. ☐ Electrical
8. ☐ Elevator Devices
9. ☐ Asbestos Abat. Subch. 8
10. ☐ Lead Hazard Abatement
11. ☐ Demolition

OPTIONAL (for office use only)Plans
Rec'd by

Date
Rec'd

Rejection
Date

Approval
Date

Re-viewer

Resu
Appro

Resubmission Dates

Approval _____

Re-

viewer

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL

1. ☐ Hotels (R-1)
2. ☐ Multi-Family (R-2)
3. ☐ Two-Family (R-3) BOCA
4. ☐ Two-Family (R-4) CABO
5. ☒ One-Family (R-3) BOCA
6. ☒ One-Family (R-4) CABO

No. of dwelling units:

Before Construction

After Construction

Net Gain or Loss

B. NON-RESIDENTIAL

1. State Specific Use:

2. Use Group:

3. Change in Use Group, Indicate Former:

III. DO YOU WANT: (optional)

- ☐ Partial Releases
- ☐ Prototype Processing

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/
Dumbwaiters/Moving Walks
2. ☐ High Pressure Boilers
3. ☐ Pressure Vessels
4. ☐ Refrigeration Systems
5. ☐ Cross-Connections/Backflow Preventers
6. ☐ Hazardous Uses/Places of Assembly
7. ☐ Sprinklers
8. ☐ Smoke Control Systems in Open Wells
9. ☐ Underground Storage Tanks

LDS BR 10200331

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

- A. ☐ I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

- B. ☐ I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(e)1.vii:
I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

- C. ☐ I further certify that I will perform or supervise the following work:
C.1. ☐ Building C.2. ☐ Fire Protection

I further certify that I will perform the following work:

- C.3. ☐ Electrical C.4. ☐ Plumbing

- D. ☐ I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature _____ Date _____

II. AGENT SECTION (to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the Uniform Construction Code, N.J.A.C. 5:32-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

☐ Check if contractor.

Agent Name A. Bailey Plumbing
Address 919 Hwy 33 Suite 28
Freehold N.J. 07728
Telephone (732) 462-4484
Signature _____

- III. ☐ LEAD HAZARD ABATEMENT: Include Homeowner or Building Owner Affidavit as per N.J.A.C. 5:17.

OFFICE DATE RECEIVED: _____

VIII. PRIOR APPROVALS CHECKLIST (office use only)	LOCAL APPROVAL		COUNTY APPROVAL		REGIONAL APPROVAL		STATE APPROVAL		COMMENTS
	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	
☐ Zoning Officer									
☐ Planning Board									
☐ Zoning Board									
☐ Sewer Authority									
☐ Water Authority									
☐ Police Department									
☐ Health Department									
☐ Soil Conservation									
☐ N.J. Department of Community Affairs									
☐ N.J. Department of Transportation									
☐ N.J. Department of Environmental Protection									
☐ Utility Dig No.									
☐									
☐									

IX. SUBCODES AND SPECIAL REGULATIONS APPLICABLE (office use only—optional)

Name of Code & Edition		Name of Code & Edition		Other	
Building	_____	Energy	_____	_____	
Electrical	_____	Barrier Free	_____	_____	
Plumbing	_____	Flood Hazard	_____	_____	
Fire Protection	_____	As Built Elevation Cert.	_____	_____	
Mechanical	_____	Other	_____	_____	

X. CERTIFICATES ISSUED (office use only)

	DATE ISSUED	DATE EXPIRED	DATE REISSUED	DATE EXPIRED
☐ Temporary Certificate of Occupancy	No. _____	_____	_____	_____
☐ Temporary Certificate of Compliance	No. _____	_____	_____	_____
☐ Continued Certificate of Occupancy	No. _____	_____	_____	_____
☐ Certificate of Compliance	No. _____	_____	_____	_____
☐ Certificate of Occupancy	No. _____	_____	_____	_____
☐ Certificate of Approval	No. _____	_____	_____	_____
☐ Lead Abatement Clearance Certificate	No. _____	_____	_____	_____



CONSTRUCTION PERMIT

Date Issued
Control #
Permit #

IDENTIFICATION Block 819 Lot 1
Work Site Location 1582 LARSEN ST Contractor A. Bailey Plumbing
Brick Address 919-Hwy 23 Suite 28
Owner in Fee Wilkowst. Freehold NJ 07728
Address _____ Tel. (732) 462-4484
Tel. [REDACTED] Lic. No. or Bids. Reg. No. _____
Fed. Emp. No. _____

Is hereby granted permission to perform the following work:

☐ BUILDING ☒ PLUMBING ☐ LEAD HAZARD ABATEMENT
☐ ELECTRICAL ☐ FIRE PROTECTION ☐ DEMOLITION
☐ ELEVATOR DEVICES ☐ ASBESTOS ABATEMENT ☐ OTHER _____
(Subchapter 8 only)

DESCRIPTION OF WORK:

REPLACE 40 GAL GAS
WATER HEATER

NOTE: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$ 617

Construction Official _____

Date _____

U.C.C. F170
(rev. 3/96)

1 WHITE—INSPECTOR COPY 2 CANARY—OFFICE COPY 3 PINK—OFFICE COPY 4 GOLD—APPLICANT COPY

(see reverse side)

PAYMENTS (Office Use Only)

Building _____
Electrical _____
Plumbing _____
Fire Protection _____
Elevator Devices _____
Other _____
DCA Training Fee _____
Cert. of Occupancy _____
Other _____
Total _____
Check No. _____
Cash _____
Collected by _____

REQUIRED INSPECTIONS

Construction work must be inspected in accordance with the State Uniform Construction Code Regulations N.J.A.C. 5:23-2.18. This agency will carry out such periodic inspections during the progress of work as are necessary to insure that work installed conforms to the approved plans and the requirements of the Uniform Construction Code.

The owner or other responsible person in charge of work must notify this agency when work is ready for any required inspections specified below. Requests for inspections must be made at least 24 hours prior to the time the inspection is desired. Inspections will be performed within three business days of the time for which they are requested. The work must not proceed in a manner which will preclude the inspection until it has been made and approval given.

☐ Required inspections for all subcodes for one and two family dwellings are the following:

1. The bottom of footing trenches before placement of footings, except that in the case of pile foundations, inspections shall be made in accordance with the requirements of the building subcode;
2. Foundations and all walls up to grade level prior to back filling;
3. All structural framing and connections prior to covering with finish or infill material; plumbing underground services, rough piping, water service, sewer, septic services and storm drains; electrical rough wiring, panels and service installations; insulation installations;
4. Installation of all finished materials, sealings of exterior joints; plumbing piping, trim and fixtures; electrical wiring, devices and fixtures; mechanical systems equipment.

☐ Required special inspections. The applicant by accepting the permit will be deemed to have consented to these requirements:

☐ A final inspection is required for each applicable subcode area before a final Certificate of Occupancy or Approval may be issued. Any violations of the approved plans and/or permit will be noted and the holder of the permit notified of discrepancies.

☐ A complete copy of approved plans must be kept on the job site.

If you do not understand any of this information, please ask.

TOWNSHIP OF BRICK
401 CHAMBERS BRIDGE RD
DIVISION OF INSPECTIONS

Date Issued 10/07/2002
Control #
Permit # 02-3843

UTC NEW JERSEY
CONSTRUCTION
PERMITE

IDENTIFICATION Block 819 Lot 1 Subl

Work Site Location 1582 LARSEN ST Contractor A BAILEY PLUMBING

Owner in Fee WILKOWSKI REPLACE NHH Address 919 HWY 33 SUITE 28

Address FREEHOLD, NJ, NJ 07728-

Telephone 7321462-4484

Telephone Lic. No. of Bldgs. Reg. No. 9339

Federal Emp. No. 22-3190891

I hereby granted permission to perform the following work:

☐ BUILDING	☐ LEAD HAZARD ABATEMENT
☐ ELECTRICAL	☐ FIRE PROTECTION
☐ ELEVATOR DEVICES	☐ ASBESTOS ABATEMENT
	☐ OTHER <u> </u>

(Subchapter 8 only)

DESCRIPTION OF WORK:
REPLACE NHH

NOTE: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$ 617

Construction Official

U.C.C. F170 (rev. 3/96)

10/07/2002

Date

PAYMENTS (Office Use Only)

Building	0
Electrical	0
Plumbing	35
Fire Protection	0
Elevator Devices	0
Other	0
DCA State Permit Fee	1
Cert. of Occupancy	0
Other	0
Total	36
Check No.	1014
Cash	0
Collected By	JB

#023843
PLUMBING
CHECK

435.00
\$35.00

10/07/02 10:58AM 000000045363
XX06 SERV.006



PLUMBING SUBCODE TECHNICAL SECTION

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION, WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO. 1-800-272-1000.

Block 819 Lot 1
Work Site Location 1582 Larsen St
Brick

Owner In Fee Wilhoist

Address _____

Tele. () _____

Contractor H Bailey Plumbing
Address 919 Hwy 33 Suite 208
Freehold NJ 07728

Tele. (732) 462-4484 Fax (732) 462-5319

Lic. No. 9339

Federal Emp. No. 22-350891

B. PLUMBING CHARACTERISTICS

Use Group Present Proposed _____

Building Sewer Size _____ Public Sewer _____ Private Septic _____

Water Service Size _____ Public Water _____ Private Well _____

Est. Cost of Plumbing Work \$ 617.00

JOB SUMMARY (Office Use Only)

PLAN REVIEW

☒ No Plans Required

Joint Plan Review Required: _____

☐ Building ☐ Electric

☐ Fire ☐ Elevator

☐ Plumbing Plans Approved

Date: 9/25/00

Approved by: [Signature]

SUBCODE APPROVAL

☐ CO ☐ CCO ☐ CA

Date: _____

Approved by: _____

INSPECTIONS

Dates (Month/Day) _____

Type: _____ Failure _____ Approval _____ Initial _____

Slab _____

Rough _____

Water _____

Sewer _____

Fixtures _____

Gas Equipment _____

Gas Piping _____

Solar _____

TCO _____

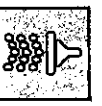
C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent/of) owner of record and am authorized to make this application and perform the work listed on this application.

Signature [Signature]

Contractor's Seal

☐ Licensed Plumbing Contractor ☐ Exempt Applicant



Date Received 10-7-02
Date Issued _____
Control # 02-3843
Permit # _____

D. TECHNICAL SITE DATA (List of all fixtures.)

NO. _____

FIXTURE/EQUIPMENT _____

Water Closet _____

Urinal/Bidet _____

Bath Tub _____

Lavatory _____

Shower _____

Floor Drain _____

Sink _____

Dishwasher _____

Drinking Fountain _____

Washing Machine _____

Hose Bibb _____

Water Heater _____

Fuel Oil Piping _____

Gas Piping _____

Steam Boiler _____

Hot Water Boiler _____

Sewer Pump _____

Interceptor/Separator _____

Backflow Preventer _____

Greasetrapp _____

Sewer Connection _____

Water Service Connection _____

Stacks _____

Other _____

Other _____

Other _____

Administrative Surcharge \$ _____

Minimum Fee \$ _____

DCA Training Fee \$ _____

TOTAL FEE \$ _____

FEE (Office Use Only) \$ _____



**PLUMBING
SUBCODE
TECHNICAL SECTION**



Date Received
Date Issued
Control #
Permit #

10-7-02 J-111
02-3843

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION, WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY/DIG NO: 1-800-272-1000.

Block 819

Work Site Location 1582 Larsen St

Owner in Fee W. H. Housh

Address 1582 Larsen St

Tele. 7339

Contractor A Baker Plumbing

Address 919 Hwy 33 Suite 28

Freehold NJ 07728

Tele. (732) 463-4484

Fax (732) 462-5819

Lic. No. 7339

Federal Emp. No. 22-35089

B. PLUMBING CHARACTERISTICS

Use Group Present

Building Sewer Size Public Sewer

Water Service Size Public Water

Est. Cost of Plumbing Work \$ 617.00

Proposed

Private Septic

Private Well

JOB SUMMARY (Office Use Only)

PLAN REVIEW

☐ No Plans Required

Joint Plan Review Required:

☐ Building ☐ Electric

☐ Fire ☐ Elevator

☐ Plumbing Plans Approved

Date: 9/25/02

Approved by: [Signature]

INSPECTIONS

Type:

Slab

Rough

Water

Sewer

Fixtures

Gas Equipment

Gas Piping

Solar

TCO

Dates (Month/Day)

Failure

Failure

Approval

Initial

Approved by: [Signature]

9/25/02

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

Signature of Contractor's Seal

☐ Licensed Plumbing Contractor ☐ Exempt Applicant

D. TECHNICAL SITE DATA (List of all fixtures.)

NO.

FIXTURE/EQUIPMENT

Water Closet

Urinal/Bidet

Bath Tub

Lavatory

Shower

Floor Drain

Sink

Dishwasher

Drinking Fountain

Washing Machine

Hose Bibb

Water Heater

Fuel Oil Piping

Gas Piping

Steam Boiler

Hot Water Boiler

Sewer Pump

Interceptor/Separator

Backflow Preventer

Greasetrap

Sewer Connection

Water Service Connection

Stacks

Other

Other

Other

FEE (Office Use Only)

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

\$

Administrative Surcharge

Minimum Fee

DCA Training Fee

TOTAL FEE

U.C.C. F130

(rev 3/99)

1 White = Inspector Copy

3 Pink = Office Copy

2 Canary = Office Copy

4 Gold = Applicant Copy

A. BAILEY PLUMBING & HEATING CORP.

CHECK

1014

DATE	DESCRIPTION	AMOUNT	DEDUCTION	NET AMOUNT
9/26/02	092602 1582 Larson ST.	\$36.00	\$0.00	\$36.00
9/30/2002 CHECK DATE 700078	1014 CONTROL NUMBER TOWNSHIP OF BRICK TOTALS ▶	\$36.00	\$0.00	\$36.00

GENERAL OPERATION

▲WARNING

Water heaters are heat producing appliances. To avoid damage or injury there shall be no materials stored against the water heater or vent-air intake system, and proper care shall be taken to avoid unnecessary contact (especially by children) with the water heater and vent-air intake system. UNDER NO CIRCUMSTANCES SHALL FLAMMABLE MATERIALS, SUCH AS GASOLINE OR PAINT THINNER BE USED OR STORED IN THE VICINITY OF THIS WATER HEATER, VENT-AIR INTAKE SYSTEM OR IN ANY LOCATION FROM WHICH FUMES COULD REACH THE WATER HEATER OR VENT-AIR INTAKE SYSTEM.

TO FILL THE WATER HEATER

1. Close the water heater drain valve by turning the knob clockwise.
2. Open the cold water supply shut-off valve.
3. Open several hot water faucets to allow air to escape from the system.
4. When a steady stream of water flows from the faucets, the water heater is filled. Close the faucets and check for water leaks at the water heater drain valve, combination temperature and pressure relief valve and the hot and cold water connections.

TO DRAIN THE WATER HEATER

Should it become necessary to completely drain the water heater, make sure you follow the steps below:

1. Rotate the thermostat dial counter-clockwise  to the lowest possible position.
2. Rotate gas control knob clockwise  to the "OFF" position.
3. Shut off the gas supply to the water heater.
4. Close the cold water supply shut-off valve.
5. Open the drain valve on the water heater by turning the knob counter-clockwise . The drain valve has threads on the end that will allow the connection of a standard hose coupling.
6. Open a hot water faucet to allow air to enter the system.

To refill the water heater, refer to "To Fill the Water Heater."

General Operation (continued)

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

This appliance has a pilot which is lit by a piezo-electric spark gas ignition system. Do not open the inner door and attempt to light the pilot by hand.

BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

WHAT TO DO IF YOU SMELL GAS

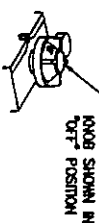
- Do not try to light any appliance.
- Do not touch any electric switch; do not use any telephone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or turn by hand, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above on this label.
2. If applicable, turn off all electric power to appliance.
3. Rotate the thermostat dial counter-clockwise to the lowest possible position.
4. Rotate gas control knob clockwise to the "OFF" position.



5. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.

6. Remove outer door. Remove (or slide open) inner door.

7. Find pilot. Follow aluminum tube from the "right underside" of the gas control. The pilot is adjacent to the burner.



11. Turn gas control knob counter-clockwise  to "ON" position.
12. Rotate the thermostat knob clockwise until the minimal acceptable temperature is obtained.
13. If applicable, turn on all electric power to the appliance.

TO TURN OFF GAS TO APPLIANCE

1. Rotate the thermostat dial counterclockwise  to the lowest possible position.
2. Rotate gas control knob clockwise to  "OFF" position.

THERMOSTAT ADJUSTMENT

The thermostat dial is set to its lowest temperature setting when shipped from the factory. Remember that lower temperature settings are more energy efficient. Adjust the temperature by turning the thermostat dial. It is suggested that the starting point setting not be greater than the " " mark on the thermostat dial (approximately 120°F / 49°C) as indicated below. Rotate the thermostat dial clockwise to increase the temperature setting. Rotate the thermostat dial counter-clockwise to decrease the temperature setting. Adjust the thermostat dial until the minimum acceptable temperature is achieved (See figure below for approximate temperature settings).

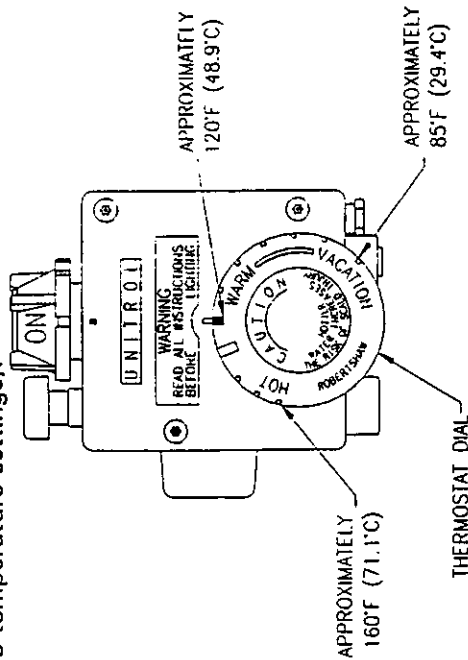


Figure 2

▲ DANGER

Hotter water increases the risk of scald injury. Scalding may occur within five (5) seconds at a temperature setting of 135°F (57°C). To protect against hot water injury, install an anti-scald tempering valve in the water system. This valve will reduce point of discharge temperature by mixing cold and hot water in branch water lines. A licensed plumbing professional or local plumbing authority should be consulted.

Note: This water heater is equipped with an energy cut out device to prevent overheating. Should overheating occur or the gas supply fail to shut off, turn off the manual gas control valve to the appliance and call a qualified service technician.

Note: Whenever the water heater is filled with cold water, condensate will form on the cool tank surface and drops of water will fall on the hot burner and combustion chamber surfaces producing a "sizzling" noise. Condensation is normal and does not indicate a leak. It will disappear when the tank becomes heated.

GAS CONNECTIONS

The gas supply lines must meet all requirements of the National Fuel Gas Code ANSI Z223.1-(Latest Edition) and/or in Canada CAN/CGA B149 Installation Codes - (Latest Editions).

The minimum permissible gas supply pressure for the purpose of input adjustment is 1.0" water column (.25kPa) above the operating manifold pressure. See the rating plate and combination gas control for the manifold pressure and gas type. The maximum permissible gas supply pressure is 14.0" water column (3.5kPa) for natural gas and liquefied petroleum gases/propane gas.

1. Connect this water heater only to the type of gas (Natural or Propane gas) as shown on the rating plate. Use clean 1/2 inch black iron pipe. (Dirt a scale from the pipe can enter the combination control and cause it to malfunction). The inlet gas line must have a minimum length of 3" (7.6 cm) drip leg (*sediment trap*) installed as close to the water heater's combination gas control as possible. A ground joint union must be installed in the gas supply line feeding the water heater to permit service of the water heater. Compounds used on the threaded joints of the gas piping must be resistant to the action of liquefied petroleum gases/propane gas.
2. This water heater and its gas connection must be leak tested before placing the water heater in operation. Check for gas leaks with a soap and water solution and a brush or a commercial leak detector fluid.
NEVER USE A MATCH OR OPEN FLAME FOR TESTING!

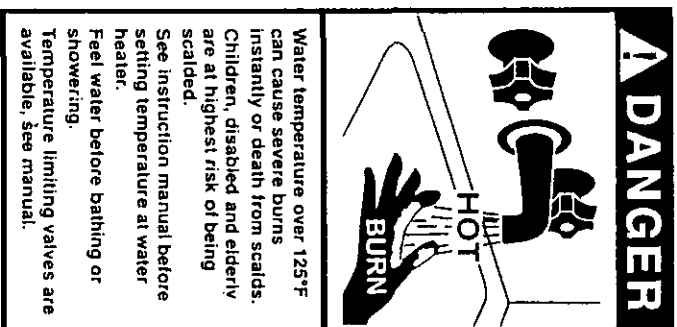
▲ CAUTION

The water heater and individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of 1/2 psi (3.5 kPa). The water heater must be isolated from the gas supply piping system by closing its manual shutoff valve during any pressure testing of the gas supply system at test pressures equal to or less than 1/2 psi (3.5 kPa). The supply line must be capped when not connected to the water heater.

▲WARNING

Hydrogen gas can be produced in an operating water heater that has not had water drawn from the tank for a long period of time (generally two weeks or more). Hydrogen gas is extremely flammable. To prevent the possibility of injury under these conditions, we recommend the hot water faucet to be open for several minutes at the kitchen sink before you use any electrical appliance which is connected to the hot water system. If hydrogen is present, there will be an unusual sound such as air escaping through the pipes as hot water begins to flow. Do not smoke or have open flame near the faucet at the time it is open.

This water heater can deliver scalding temperature water at any faucet in the system. Be careful whenever using hot water to avoid scalding injury. Certain appliances such as dishwashers and automatic clothes washers may require increased temperature water. By setting the thermostat on this water heater to obtain the increased temperature water required by these appliances, the potential for scald injury increases. To protect against injury, an anti-scald tempering valve should be installed in the water system. This valve will reduce point of discharge temperature by mixing cold and hot water in branch supply lines. Such valves are available from the manufacturer of this water heater or a local plumbing supplier. Please consult with a plumbing professional.



BURNER FLAME CHECKS

Cast Iron Burner: At the time of installation and at periodic intervals (not more than 6 months), a visual check of the main burner and pilot flames should be made to determine if they are burning properly. For ideal operation, the gas and air must be properly proportioned. The proper air-gas mixture is obtained by adjusting the air shutter on the mixer face of the main burner (See Figure 4). To adjust for proper burning, loosen the air shutter nut, rotate the shutter to close the opening in the burner then slowly rotate the shutter until the yellow tips disappear and the flame becomes blue. Tighten the air shutter nut. Too much air will cause the flame to lift off the burner ports and create noisy operation. Too little air will result in soot formation. The main burner flame should light smoothly from the pilot.

Steel Burner: These models are equipped with self adjusting air mixture and do not have an adjustable air shutter (See Figure 3). At periodic intervals, a visual check of the main burner and pilot flames should be made to determine if they are burning properly. The main burner flame should light smoothly from the pilot.

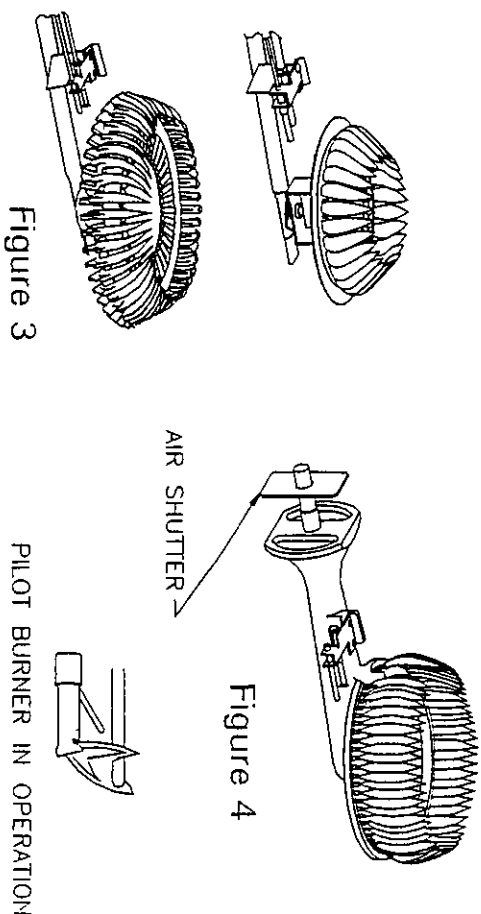


Figure 3

Figure 4

PILOT BURNER IN OPERATION

MAINTENANCE

▲WARNING

Water heaters are heat producing appliances. To avoid damage or injury there shall be no materials stored against the water heater or vent-air intake system, and proper care shall be taken to avoid unnecessary contact (especially by children) with the water heater and vent-air intake system. **UNDER NO CIRCUMSTANCES SHALL FLAMMABLE MATERIALS, SUCH AS GASOLINE OR PAINT THINNER BE USED OR STORED IN THE VICINITY OF THIS WATER HEATER, VENT-AIR INTAKE SYSTEM OR IN ANY LOCATION FROM WHICH FUMES COULD REACH THE WATER HEATER OR VENT-AIR INTAKE SYSTEM.**

IMPORTANT

The water heater should be inspected at a minimum annually by a qualified service technician for damaged components and/or joints not sealed. **DO NOT** operate this water heater if any part is found damaged or if any joint is found not sealed.

The following maintenance should be performed by a qualified service technician at the minimum periodic intervals suggested below. In some installations, the maintenance interval may be more frequent depending on the amount of use and the operating conditions of the water heater. Regular inspection and maintenance of the water heater and vent-air intake system will help to insure safe and reliable operation.

1. Annually check the operation of the thermostat.
2. The flow of combustion and ventilation air **MUST NOT** be restricted. Clear the combustion air openings of any dirt, dust, or other restrictions.
WARNING! The ventilation air system may be **HOT**.
3. At all times keep the water heater area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
4. Bi-annually conduct a visual check of the main and pilot burner flames to determine that they are burning properly. See Burner Flame Check section on page 19.

▲WARNING

For protection against excessive temperatures and pressure, install temperature and pressure protective equipment required by local codes, but not less than a combination temperature and pressure relief valve certified by a nationally recognized testing laboratory that maintains periodic inspection of production of listed equipment or materials as meeting the requirements of the Standard for *Relief Valves and Automatic Gas Shutoff Devices for Hot Water Supply Systems*, ANSI Z21.22 or the Standard CAN1-4.4. *Temperature and Pressure* and the Standard CAN1-4.4. *Temperature, Pressure, Temperature and Pressure Relief Valves and Vacuum Relief Valves*. The combination temperature and pressure relief valve shall be marked with a maximum set pressure not to exceed the maximum working pressure of the water heater. The combination temperature and pressure relief valve shall also have an hourly rated temperature steam BTU discharge capacity not less than the hourly rating of the water heater.

Install the combination temperature and pressure relief valve into the opening provided and marked for this purpose on the water heater.

Note: Some models may already be equipped or supplied with a combination temperature and pressure relief valve. Verify that the combination temperature and pressure relief valve complies with local codes. If the combination temperature and pressure relief valve does not comply with local codes, replace it with one that does. Follow the installation instructions above on this page.

Install a discharge line so that water discharged from the combination temperature and pressure relief valve will exit within six (6) inches (15.2 cm) above, or any distance below the structural floor and cannot contact any live electrical part. The discharge line is to be installed to allow for complete drainage of both the combination temperature and pressure relief valve and the discharge line. The discharge opening must not be subjected to blockage or freezing. **DO NOT** thread, plug or cap the discharge line. It is recommended that a minimum clearance of four (4) inches (10.2 cm) be provided on the side of the water heater for servicing and maintenance of the combination temperature and pressure relief valve.

Do not place a valve between the combination temperature and pressure relief valve and the tank.

WATER CONNECTIONS

Note: BEFORE PROCEEDING WITH THE INSTALLATION, CLOSE THE MAIN WATER SUPPLY VALVE.

After shutting off the main water supply, open a faucet to relieve the water line pressure to prevent any water from leaking out of the pipes while making the water connections to the water heater. After the pressure has been relieved, close the faucet. The COLD water inlet and HOT water outlet are identified on the top of the water heater. The fittings at the cold water inlet and hot water outlet are dielectric watertway fittings with 3/4" NPT male thread. Make the proper plumbing connections between the water heater and the plumbing system to the house. Install a shut-off valve in the cold water supply line.

▲CAUTION

If sweat fittings are to be use, **DO NOT** apply heat to the nipples on top of the water heater. Sweat the tubing to the adapter before fitting the adapter to the water connections. It is imperative that heat is not applied to the nipples containing a plastic liner.

▲WARNING

FAILURE TO INSTALL AND MAINTAIN A NEW, LISTED 3/4" X 3/4" TEMPERATURE AND PRESSURE RELIEF VALVE WILL RELEASE THE MANUFACTURER FROM ANY CLAIM WHICH MIGHT RESULT FROM EXCESSIVE TEMPERATURE AND PRESSURES.

If this water heater is installed in a closed water supply system, such as the one having a back-flow preventer in the cold water supply, provisions shall be made to control thermal expansion. **DO NOT** operate this water heater in a closed system without provisions for controlling thermal expansion. Your water supplier or local plumbing inspector should be contacted on how to control this situation

After installation of the water lines, open the main water supply valve and fill the water heater. While the water heater is filling, open several hot water faucets to allow air to escape from the water system. When a steady stream of water flows through the faucets, close them and check all water connections for possible leaks. **NEVER OPERATE THE WATER HEATER WITHOUT FIRST BEING CERTAIN IT IS FILLED WITH WATER.**

Maintenance (continued)-

- Annually remove the inner door and main burner assembly to clean orifices and related parts of any dirt or other foreign material. Inspect the burner ports for obstructions or debris and clean with a wire brush as needed. Wire brush and/or vacuum clean the combustion chamber as needed to remove scale deposits and debris. **NOTE:** It is imperative for proper operation of the water heater that the inner door be replaced in the original location.

▲WARNING

When lifting lever of the combination temperature and pressure relief valve, hot water will be released under pressure. Be careful that any released water does not result in bodily injury or property damage.

- At least once a year, check the combination temperature and pressure relief valve to insure that the valve has not become encrusted with lime. Lift the lever at the top of the valve several times until the valve seats properly without leaking and operates freely.

- Monthly drain off a gallon of water to remove silt and sediment.

▲WARNING! THIS WATER MAY BE HOT.

- If the combination temperature and pressure relief valve on the appliance discharges periodically, this may be due to thermal expansion in a closed water supply system. Contact the water supplier or local plumbing inspector on how to correct this situation. Do not plug the combination temperature and pressure relief valve outlet.

- A combination sacrificial anode rod/hot water outlet nipple has been installed to extend tank life. The anode rod should be inspected periodically (every 2 years) and replaced when necessary to prolong tank life. Water conditions in your area will influence the time interval for inspection and replacement of the anode rod. Contact the plumbing professional who installed the water heater or the manufacturer listed on the rating plate for anode replacement information. The use of a water softener may increase the speed of anode consumption. More frequent inspection of the anode is needed when using softened (or phosphate treated) water.

▲ CAUTION

FOR YOUR SAFETY, DO NOT ATTEMPT REPAIR OF COMBINATION GAS CONTROL, BURNERS OR GAS PIPING. REFER REPAIRS TO A QUALIFIED SERVICE TECHNICIAN.

Contact your supplier or plumbing professional for replacement parts or contact the company at the address given on the rating plate of the water heater.

Provide the part name, model and serial numbers of the water heater when ordering parts.

READ THE WARRANTY FOR A FULL EXPLANATION OF THE LENGTH OF TIME THAT PARTS AND THE WATER HEATER ARE WARRANTED.

Manufactured under one or more of the following U.S. Patents: Re. 34,534; 4,416,222; 4,628,184; 4,669,448; 4,672,919; 4,808,356; 4,829,983; 4,861,968; 4,904,428; 5,000,893; 5,023,031; 5,052,346; 5,081,696; 5,092,519; 5,115,767; 5,199,385; 5,277,171; B1 5,341,770; 5,372,185; 5,485,879; 5,574,822; 5,596,952; 5,660,165; 5,682,666; 5,761,379; 5,943,984; 5,954,492; 5,988,117. Other U.S. and Foreign patents applications pending. Current Canadian Patents: 1,272,914; 1,280,043; 1,289,832; 2,045,862; 2,112,525.

Complete the following information and retain for future reference:

Model No: _____

Serial No: _____

Service Phone
Days: _____ Nights: _____

Address: _____

Supplier: _____

Supplier Phone No: _____

All Air From Inside the Building: The confined space shall be provided with two permanent openings communicating directly with an additional room(s) sufficient volume so that the combined volume of all spaces meets the criteria for an unconfined space. The total input of all gas

utilization equipment installed in the combined space shall be considered in making this determination. Each opening shall have a minimum free area of square inch per 1000 BTU (2.54cm²/29kw) per hour of the total input rating all gas utilization equipment in the confined space, but not less than 100 square inches (254cm²). One opening shall be within 12 inches (31cm) of the top and one within 12 inches (31cm) of the bottom of the enclosure.

All Air From Outdoors: The confined space shall be provided with two permanent openings, one commencing within 12 inches (31cm) of the top and one commencing within 12 inches (31cm) from the bottom of the enclosure. The openings shall communicate directly, or by ducts, with the outdoors or spaces (crawl or attic) that freely communicate with the outdoors.

1. When directly communicating with the outdoors, each opening shall have a minimum free area of 1 square inch per 4000 BTU (2.54cm²/1.2kw) per hour of total input rating of all equipment in the enclosure.
2. When communicating with the outdoors through vertical ducts, each opening shall have a minimum free area of 1 square inch per 4000 BTU (2.54cm²/1.2kw) per hour of total input rating of all equipment in the enclosure.
3. When communicating with the outdoors through horizontal ducts, each opening shall have a minimum free area of 1 square inch per 2000 BTU (2.54cm²/.6kw) per hour of total input rating of all equipment in the enclosure.
4. When ducts are used, they shall be of the same cross-sectional area as the free area of the openings to which they connect. The minimum dimension of rectangular air ducts shall be not less than 3 inches (7.5cm).

Specially Engineered Installations

The requirements noted under CONFINED SPACES above shall not necessarily govern when special engineering, approved by the authority having jurisdiction, provides an adequate supply of air for combustion, ventilation, and dilution of flue gases.

▲WARNING

Liquefied petroleum gases/propane gas are heavier than air and will remain at floor level if there is a leak. Basements, crawl spaces, closets and areas below ground level will serve as pockets for accumulation of leaking gas. Before lighting, smell all around the appliance area for gas. Be sure to smell next to the floor.

IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any telephone in your building.
- Immediately call your gas supplier from a neighbor's telephone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

DO NOT OPERATE APPLIANCE UNTIL LEAKAGE IS CORRECTED!

IMPORTANT

The flow of combustion and ventilating air must not be obstructed.

Provide adequate air for combustion and ventilation. An insufficient supply of air will cause recirculation of combustion products resulting in air contamination that may be hazardous to life. Such a condition often will result in a yellow, luminous burner flame, causing carboning or sooting of the combustion chamber, burners and flue tubes with possible damage to the water heater.

When an exhaust fan is installed in the same room with a heater, sufficient openings for air must be provided in the walls. Undersized openings will cause air to be drawn into the room through the chimney, causing recirculation of combustion products.

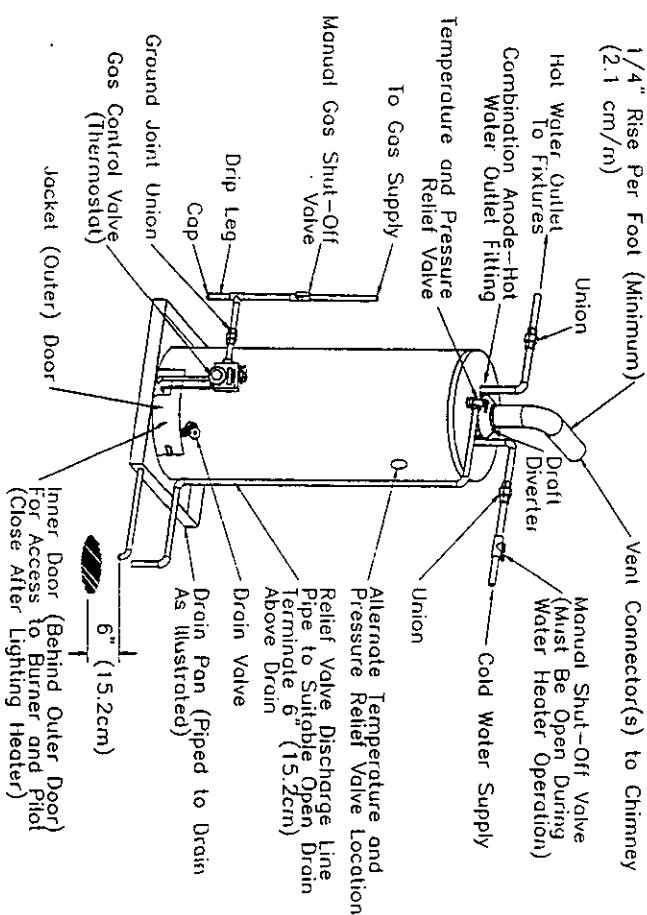
Confined Spaces

Confined spaces are spaces defined as having less than 50 ft.³/1000 BTU (15m³/29kw) per hour.

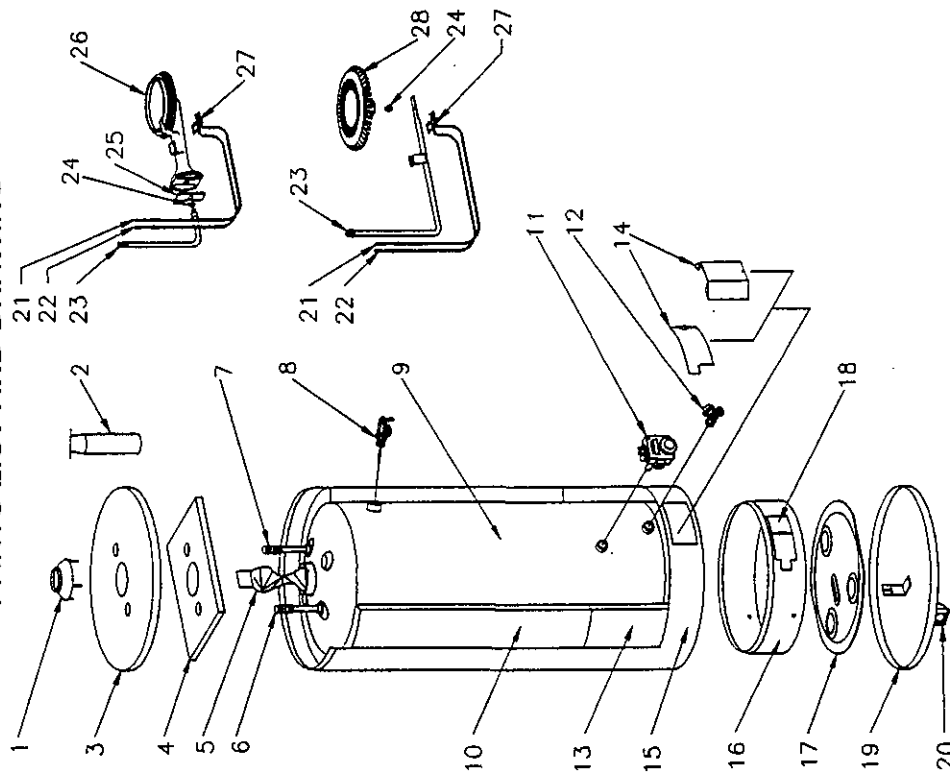
Unconfined Spaces

In unconfined spaces in buildings, infiltration may be adequate to provide air for combustion, ventilation and dilution of flue gases. However, in buildings of tight construction (for example, weather stripping, heavily insulated, caulked, vapor barrier, etc.), additional air may need to be provided using the methods described above under CONFINED SPACES. All Air From Outdoors or SPECIALLY ENGINEERED INSTALLATIONS.

Figure 5



PARTS LIST AND DRAWING



PART NAME AND DESCRIPTION	
1. Draft Diverter	15. Jacket
2. Flue Core Assembly (Certain Models)	16. Combustion Chamber
3. Jacket Head Pan	17. Radiation Shield
4. Fiberglass Head Insulation	18. Combustion Chamber Door
5. Flue Baffle Assembly	19. Jacket Base Pan
6. Magnesium Anode - Hot Water Outlet	20. Heater Leg
7. Dip Tube - Cold Water Inlet	21. Thermocouple Lead
8. Temperature and Pressure Relief Valve	22. Gas Feedline to Pilot
9. Glass Lined Tank	23. Gas Feedline to Burner
10. Foam Insulation	24. Orifice
11. Thermostat with ECO	25. Air Shutter (Cast Iron Burner Only)
12. Drain Valve	26. Cast Iron Burner
13. Fiberglass Insulation	27. Pilot Assembly
14. Outer Door (Varies by Model)	28. Steel Burner (Varies by Model)

24

Installation (continued)-

VENTING

▲WARNING

The vent system must be installed properly. Failure to properly install the vent system could result in property damage, personal injury, or death.

Place the draft diverter over the flue opening at the top of the water heater by inserting the tips of the draft diverter legs into the four (4) holes provided in the water heater top. On some models, line up the holes in the draft diverter legs with the holes provided on top of the water heater. Secure the draft diverter to the water heater with sheet metal screw. (See Figure 5)

Vent piping must be attached to the draft diverter outlet to connect the water heater to the gas vent or chimney. The following minimum clearances must be followed when connecting vent piping:

- The vent connector must be the same nominal size as the draft diverter.
- The vent connector should not exceed 15 feet (4.5m) in length (for power vent appliances, refer to supplemental instructions), must not project into the chimney beyond the inner wall and should contain the least possible number of bends.
- All horizontal runs should have a minimum rise of $\frac{1}{4}$ inch per foot (2.1cm/m).
- Joints of vent connectors shall be securely fastened by sheet metal screws or other approved methods.
- All single wall vent connectors must be at least 6" (15cm) from combustible surfaces.
- Vent connectors made of single-wall metal pipe shall not pass through any attic, inside wall, concealed space, or any floor. When a single-wall metal pipe passes through an exterior wall constructed of combustible material, it shall be guarded at the point of passage by a ventilated metal thimble at least 4" (10cm) larger in diameter than the connector. (Consult National Fuel Gas Code, ANSI Z223.1 and/or CAN/CGA B149, Installation Codes).

A separate vent for each application is strongly recommended. If combined venting of multiple appliances is necessary or if an unusual situation arises, consult the National Fuel Gas Code, ANSI Z223.1 and/or CAN/CGA B149, Installation Codes, for sizing and installation information.

MINIMUM CLEARANCES

▲WARNING

Failure to adhere to these installation and operating instructions may create a hazard to life and property and will nullify the warranty.

This installation shall allow access to the front of the water heater and adequate clearance shall be provided for servicing and operating this water heater. The water heater may be installed on either a combustible or non-combustible floor. If the water heater is to be installed directly on carpeting, it shall be installed on top of a metal or wood panel (or equivalent) extending beyond the full width and depth of the appliance by at least three (3) inches (7.6 cm) in any direction or, if the appliance is to be installed in an alcove or closet, the entire floor shall be covered by the panel. **If the rating plate or the label on the front of the heater specifies minimum clearances less than those listed in the below table, the water heater may be installed in accordance with the minimum clearances listed on the rating plate or the label on the front of the heater.**

If it is necessary to install this water heater in an alcove, use the clearances listed in the following table and Figure 1.

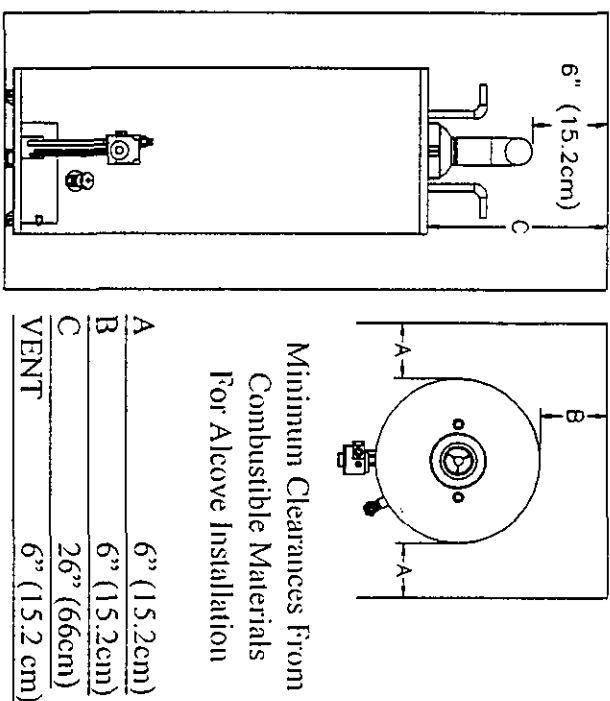


Figure 1

THE FOLLOWING INSTRUCTIONS ARE FOR INSTALLATION OF: GAS WATER HEATERS SUITABLE FOR WATER (POTABLE) HEATING AND SPACE HEATING

1. All piping components connected to this water heater for space heating applications must be suitable for use with potable water.
2. Toxic chemicals, such as those used for boiler treatment, **must not** be introduced into potable water used for space heating.
3. This water heater **must not** be connected to an existing heating system or component(s) previously used with a non-potable water heating appliance.
4. When the system requires water for space heating at temperatures higher than required for other means, such as a tempering valve shall be installed to temper the water for those uses in order to reduce the scald hazard potential.

Please refer to the illustrations for suggested piping arrangements.

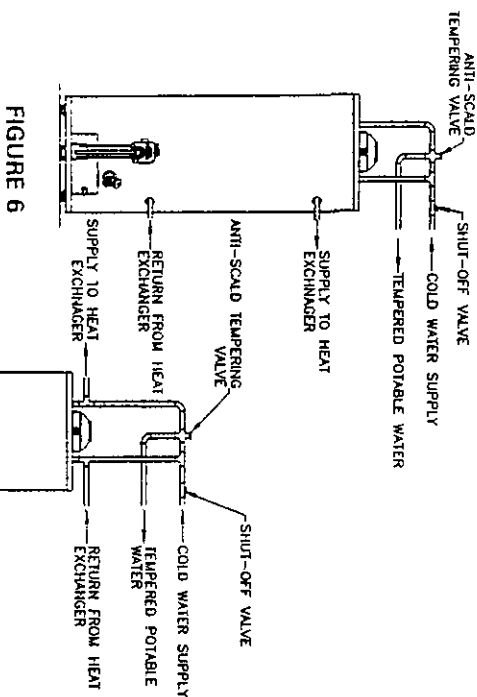


FIGURE 6

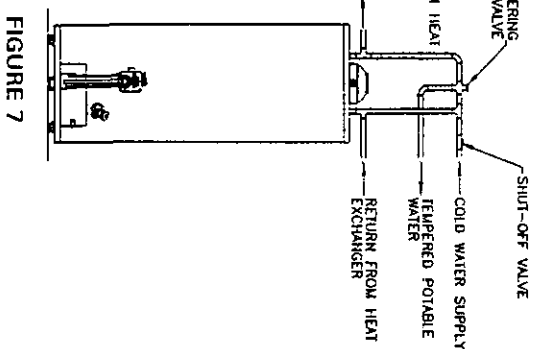


FIGURE 7

▲WARNING**DO NOT ATTEMPT TO LIGHT ANY GAS APPLIANCE IF YOU ARE NOT CERTAIN OF THE FOLLOWING:**

- Liquefied petroleum gases/propane gas and natural gas have an odorant added by the gas supplier that aids in detection of the gas.
- Most people recognize this odor as a "sulfur" or "rotten egg" smell.
- Other conditions, such as "odorant fade" can cause the odorant to diminish in intensity, or "fade", and not be as readily detectable.
- If you have a diminished sense of smell, or are in any way unsure of the presence of gas, immediately contact your gas supplier from a neighbor's telephone.
- Gas detectors are available. Contact your gas supplier or plumbing professional for more information.

Proper venting practices must be considered when selecting a location for this water heater. For exact venting specifications, please consult the Venting section, located on page 9, of these Installation and Operating Instructions.

This water heater must be located in an area where leakage of the tank, water line connections, or the combination temperature and pressure relief valve will not result in damage to the area adjacent to the water heater or to lower floors of the structure. When such locations cannot be avoided, a suitable drain pan must be installed under the water heater. The drain pan must be no greater than 1-½ inches (3.8 cm) deep and have a minimum length and width of at least four (4) inches (10.2 cm) measured from the jacket of the water heater. The drain pan, as described above, can be purchased from your plumbing professional. The drain pan must be piped to an adequate drain. The piping must be at least ¾ inch (1.9 cm) in diameter and pitched for proper drainage.

It is recommended that a minimum clearance of four (4) inches (10.2 cm) be provided on the side of the water heater for servicing and maintenance of the combination temperature and pressure relief valve.

Water heater corrosion and component failure can be caused by the heating and breakdown of airborne chemical vapors. Examples of some typical compounds that are potentially corrosive are: spray can propellants, cleaning solvents, refrigerator and air conditioning refrigerants, swimming pool chemicals, calcium and sodium chloride, waxes and process chemicals. These materials are corrosive at very low concentration levels with little or no odor to reveal their presence. **NOTE: DAMAGE TO THE WATER HEATER CAUSED BY EXPOSURE TO CORROSIVE VAPORS IS NOT COVERED BY THE WARRANTY. DO NOT OPERATE THE WATER HEATER IF EXPOSURE HAS OR WILL OCCUR. DO NOT STORE ANY POTENTIALLY CORROSIVE COMPOUNDS IN THE VICINITY OF THE WATER HEATER.**

▲WARNING

Liquefied petroleum gases/propane gas are heavier than air and will remain at floor level if there is a leak. Basements, crawl spaces, closets and areas below ground level will serve as pockets for accumulation of leaking gas. Before lighting, smell all around the appliance area for gas. Be sure to smell next to the floor.

IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any electric switch; do not use any telephone in your building.
- Immediately call your gas supplier from a neighbor's telephone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

DO NOT OPERATE APPLIANCE UNTIL LEAKAGE IS CORRECTED!

LOCATING THE WATER HEATER

▲WARNING

Water heaters are heat producing appliances. To avoid damage or injury there shall be no materials stored against the water heater or vent-air intake system and proper care shall be taken to avoid unnecessary contact (especially by children) with the water heater and vent-air intake components. **UNDER NO CIRCUMSTANCES SHALL FLAMMABLE MATERIALS, SUCH AS GASOLINE OR PAINT THINNER BE USED OR STORED IN THE VICINITY OF THIS WATER HEATER, VENT-AIR INTAKE SYSTEM OR IN ANY LOCATION FROM WHICH FUMES COULD REACH THE WATER HEATER OR VENT-AIR INTAKE SYSTEM.**

This water heater **MUST NOT** be installed in any location where gasoline or flammable vapors are likely to be present, unless the installation is such to eliminate the probable ignition of gasoline or flammable vapors.

Water heaters in residential garages shall be installed so that all burner(s) and burner ignition device(s) are located not less than 18 inches (45.7 cm) above the floor and be located, or protected, to avoid physical damage. For other installations refer to local codes. In the absence of local codes, the water heater shall be installed in compliance with the National Fuel Gas Code, (ANSI Z223.1- Latest Edition), or in Canada CAN/CGA B149.1 Natural Gas Installation Code (Latest Edition) or CAN/CGA B149.2 Propane Installation Code (Latest Edition).

The location of this water heater is of the utmost importance. Before installing this water heater, you should read the Installation section of these instructions. After reading these Installation and Operating Instructions, select a location for the water heater where the floor is level and is easily accessible to gas and water supply lines. **DO NOT locate the water heater where water lines could be subjected to freezing temperatures. Make sure the cold water pipes are not located directly above the gas control so that condensate during humid weather does not drip on the controls.**

IMPORTANT

Before proceeding, please inspect the water heater and components for possible damage. **DO NOT** install any damaged components. If damage is evident then please contact the supplier where the water heater was purchased or the manufacturer listed on the rating plate for replacement parts.

This water heater has been manufactured for operation at altitudes from sea level to 2000 feet (610m). For use of this appliance at an elevation greater than 2000 feet (610m), contact the dealer or manufacturer listed on the rating plate for information on any necessary modification. Uncorrected operation of this appliance may create a hazard to life and property.

Make sure that you check the rating plate and combination gas control on the water heater to be certain that the type of gas being supplied corresponds with the marking on the rating plate and combination gas control.

A sacrificial anode is used to extend tank life. The removal of this anode, for any reason, will nullify the warranty. In areas where water is unusually active, an odor may occur at the hot water faucet due to a reaction between the sacrificial anode and the impurities in the water. If this should happen, an alternative anode may be purchased from the supplier that installed this water heater. This will minimize the odor while protecting the tank. Additionally, the water heater should be flushed with appropriate dissolvers to eliminate any bacteria.

GENERAL INFORMATION

This gas-fired water heater is design certified by CSA International under the applicable American National Standard, Z21.10.1 or Z21.10.3-(as indicated on the rating plate), or CSA 4.1-(as indicated on the rating plate), available from CSA International, 8501 East Pleasant Valley Road, Cleveland, OH U.S.A. 44131-5575.

This water heater must be installed in accordance with local codes. In the absence of local codes, it must be installed in compliance with the National Fuel Gas Code (ANSI Z223.1-Latest Edition), or in Canada CAN/CGA B149.1 Natural Gas Installation Code (Latest Edition) or CAN/CGA B149.2 Propane Installation Code (Latest Edition). The warranty for this water heater is in effect only when the water heater is installed, adjusted, and operated in accordance with these Installation and Operating Instructions. The manufacturer will not be liable for any damage resulting from alteration and/or failure to comply with these instructions.

This water heater is not design certified for installation in a mobile home. Such an installation may create a hazardous condition and will nullify the warranty.

This water heater has been designed and certified for the purpose of heating potable water. The installation and use of this water heater for any purpose other than the heating of potable water may cause damage to the water heater, create a hazardous condition, and nullify the warranty.

▲ CAUTION

Incorrect operation of this appliance may create a hazard to life and property and will nullify the warranty.

Do not use this appliance if any part has been submerged in water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water. Depending upon the individual circumstances, it may be necessary to replace the entire water heater.

▲ DANGER

Do not store or use gasoline or other flammable, combustible, or corrosive vapors and liquids in the vicinity of this or any other appliance.

TABLE OF CONTENTS

NOTES

	page
GENERAL INFORMATION.....	3
INSTALLATION	
Locating The Water Heater.....	5
Minimum Clearances.....	8
Venting.....	9
Combustion Air Supply.....	10
Water Connections.....	12
Gas Connections.....	15
GENERAL OPERATION.....	16
Lighting and Shutdown Instructions.....	17
Thermostat Adjustment.....	18
Burner Flame Check.....	19
MAINTENANCE.....	20
PARTS LIST.....	24
PARTS LIST DRAWING.....	24
INSTALLATION INSTRUCTIONS FOR POTABLE WATER AND SPACE HEATING.....	25
NOTES.....	26

GAS-FIRED WATER HEATER

A Spanish language version of these instructions is available by contacting the company listed on the rating plate.
La version española de estas instrucciones se puede obtener al escribirle a la fábrica cuyo nombre aparece en la placa de especificaciones.

**INSTALLATION &
OPERATING
INSTRUCTION MANUAL**

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

FOR YOUR SAFETY

– Do not store or use gasoline or other flammable, combustible, or corrosive vapors and liquids in the vicinity of this or any other appliance.

– WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier.

For your family's comfort, safety and convenience, we recommend this water heater be installed and serviced by a plumbing professional.