

BLOCK 1170 LOT 18.03 QUALIFICATION CODEMERIDIAN NURSING + REHAB
ADDRESS (SITE)PERMIT NO. 12-2583

CONSTRUCTION PERMIT APPLICATION

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

C12-UD 2240

I. IDENTIFICATION

1. Proposed Work Site at: 415 Jack Martin Blvd, Brick, NJ 08724

2. Name of Owner in Fee: Meridian Nursing + Rehabilitation @ Brick
Tel. (732) 206-8000 e-mail _____
Address same
street _____ municipality _____ zip code _____

3. Ownership in Fee: MARK GANNON PLUMBING, HEATING & COOLING L.L.C.
P.O. BOX 353
108 SOUTH MAIN STREET
OCEAN GROVE, NJ 07756
Tel. (732) 774-5098 e-mail _____
License No. OR, if new home, Builder Reg. No.: BI 07365 Exp. Date 6/30/13

Home Improvement Contractor Registration No. or Exemption Reason (if applicable): _____
Federal Emp. ID No. 54-2141049 FAX: 732, 776-6521

5. Architect or Engineer _____ Contact _____
Address _____ e-mail _____
Tel. (_____) _____ FAX: (_____) _____

6. Responsible Person in Charge once Work has Begun Mark Gannon
Tel. (732) 774-5098 FAX: (732) 776-6521

V. FEE SUMMARY (for office use only)

		Update	Update
1. Building	\$		
2. Electrical			
3. Plumbing		140 ✓	
4. Fire Protection		90 ✓	
5. Elevator Devices			
6. Subtotal			
7. Less 20% for State Plan Review	\$		
8. Subtotal	\$		
9. State Permit Surcharge Fee			
10. Subtotal	\$		
11. Cert. of Occupancy		17	
12. Other			
13. TOTAL	\$	247	

VI. BUILDING/SITE CHARACTERISTICS

		(office use only)
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. Max. Live Load		
7. Max. Occupancy Load		
8. If Industrialized Building: State Approved	HUD	
9. Total Land Area Disturbed	sq. ft.	
10. Flood Hazard Zone		
11. Base Flood Elevation	ft.	
12. Wetlands	yes _____ no _____	

IIa. PROPOSED WORK

- ☐ Minor Work ☐ New Building ☐ Addition ☐ Demolition
☐ Repair ☐ Alteration ☐ Renovation ☐ Reconstruction
☐ Asbestos Abat. -Subch. 8 ☐ Lead Hazard Abatement ☐ Radon Remediation ☐ Annual Permit

IIb. SUBCODES

(Check all that apply)

- ☐ Building
☐ Electrical
☐ Plumbing
☒ Fire Protection
☐ Elevator

FOR OFFICE USE ONLY (Optional)

Est. Cost	Plans Rec'd by	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates Approval	Rejection	Re-viewer
		6/21/12						
				6-21-12	23			
				6/21/12	23			

TOTAL COST

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL (primary use)

1. State Specific Use: _____
2. Use Group, Proposed: _____
3. Change in Use Group, Indicate Present: _____
4. No. of dwelling units: Total Units Income-restricted
- Gained, Sale _____
- Gained, Rental _____
- Lost, Sale _____
- Lost, Rental _____

B. NON-RESIDENTIAL (primary use)

1. State Specific Use: _____
2. Use Group, Proposed: _____
3. Change in Use Group, Indicate Present: _____
- C. MIXED USE -List secondary use(s): _____
- D. Construct. Classification: Present _____ Proposed _____

III. PLAN REVIEW (optional)

DO YOU WANT:

- ☐ Partial Releases
☐ Prototype Processing

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

- ☐ Elevators/Escalators/Lifts/ Dumbwaiters/Moving Walks
☐ High Pressure Boilers
☐ Pressure Vessels
☐ Refrigeration Systems
☐ Cross-Connections/Backflow Preventers
☐ Hazardous Uses/Places of Assembly
☐ Sprinklers/Standpipes
☐ Smoke Control Systems in Open Wells
☐ Underground Storage Tanks
☐ Swimming Pools, Spas and Hot Tubs
☐ LPGas Tanks
☐ Fire Alarm

COMMERCIAL

COMMERCIAL

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(f)1.ix:

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. 5:23-2.15(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.

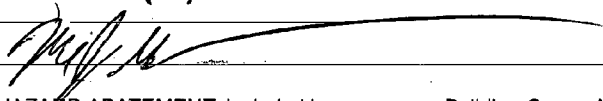
I understand that if any of the above statements are willfully false, I am subject to punishment.

☒ Check if contractor.

Agent Name MARK GANNON PLUMBING,
HEATING & COOLING L.L.C.

Address P.O. BOX 353
108 SOUTH MAIN STREET
OCEAN GROVE, NJ 07756
(732)774-5098

Telephone (_____) _____

Signature 

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



Brick Township
401 Chambersbridge Rd
Brick, NJ 08723

Date Issued 9/27/2012
Control Number C-12-002240
Permit Number 12-2583
Permit Issue Date 9/12/2012
Certificate Number 12-2583

Certificate

Construction Code Division

(Certificate of Approval)

Identification

Work Site Location: 415 JACK MARTIN BLVD Brick Township, NJ Block: 1170 Lot: 18.03 Qual: _____
Owner in Fee: MERIDIAN NURSING & REHAB INC.
Owner Address: 415 JACK MARTIN BLVD BRICK NJ 08724
Telephone: 7322068000
Contractor: MARK GANNON PLUMBING, HEATING & COOLING L.L.C.
Address: 108 SOUTH MAIN STREET P.O. BOX 353 OCEAN GROVE NJ
Telephone: 7327745098 Fax: 7327766521
License Number or Builders Registration Number: 7365 Federal Emp. Number: _____

Home Warranty Number: _____

Type of Warranty Plan: ☐ State ☐ Private

Use Group: I-2 Construction Classification: _____

Maximum Live Load: 0 Maximum Occupancy Load: 0

Description of Work/Use: REPLACEMENT WATER HEATER

Certificate Comments:

☐ **Certificate of Occupancy**

This serves notice that said building or structure has been constructed in accordance with the New Jersey Uniform Construction Code and is approved for occupancy.

☒ **Certificate of Approval**

This serves notice that the work completed has been constructed or installed in accordance with the New Jersey Uniform Construction Code and is approved. If the permit was issued for minor work, this certificate was based upon what was visible at the time of inspection.

☐ **Certificate of Continued Occupancy**

This serves notice that based on a general inspection of the visible parts of the building there are no imminent hazards and the building is approved for continued occupancy.

☐ **Temporary Certificate of Compliance**

The following conditions must be met no later than _____ or the owner will be subject to fine or order to vacate:

This certificate has an expiration date of: _____

Conditions to be met:

☐ **Certificate of Clearance - Lead Abatement 5:17**

This serves notice that based on written certification, lead abatement was performed as per NJAC5:17 to the following extent.

- ☐ Total removal of lead-based paint hazards in scope of work
☐ Partial or limited time period (_____ years); see file

☐ **Certificate of Clearance - Asbestos Abatement**

This serves notice that based on written certification, asbestos abatement was performed to the following extent.

- ☐ Total removal of asbestos hazards in scope of work
☐ Partial or limited time period (_____ years); see file

☐ **Certificate of Compliance**

This serves notice that said potentially hazardous equipment has been installed and/or maintained in accordance with the New Jersey Uniform Construction Code and is approved for use until _____

☐ **Temporary Certificate of Occupancy**

The following conditions must be met no later than: _____ or the owner will be subject to fine or order to vacate:

This certificate has an expiration date of: _____

Conditions to be met:

Construction Official

Fee: \$0.00

Check Number: _____

Collected By: _____

Date Printed: 9/27/2012

U.C.C. F260 (rev. 08/05)

Page 1



CONSTRUCTION PERMIT

9-13-12
12-2583
Date Issued
Control # C-12-002240
Permit #

IDENTIFICATION Block: 1170 Lot: 18.03 Qualifier
Work Site Location: 415 JACK MARTIN BLVD Brick Township, NJ Contractor MARK GANNON PLUMBING, HEATING & COOLING
Owner in Fee MERIDIAN NURSING & REHAB INC. Address 108 SOUTH MAIN STREET P.O. BOX 353 OCEAN GROVE NJ
415 JACK MARTIN BLVD BRICK NJ 08724 Telephone: (732) 774-5098
Telephone: (732) 206-8000 Lic. No. or Bldrs. Reg. No. 7365
Federal Employee. No.

Is hereby granted permission to perform the following work:

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

DESCRIPTION OF WORK:

REPLACEMENT 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 \$10,200

Construction Official

Date

U.C.C. F170
equiv (rev 8/03)

1 WHITE - INSPECTOR

2 CANARY - OFFICE

3 PINK - TAX ASSESSOR

4 GOLD - APPLICANT

PAYMENTS (Office Use Only)

Building	\$0
Electrical	\$0
Plumbing	\$140
Fire Protection	\$90
Elevator Devices	\$0
Other	\$0.00
DCA Training Fee	\$17
CO Fee	
Other	\$0
Total	\$247
Check No.	7702
Cash	\$0
Credit	\$0
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 the work installed conforms with 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 granted.

☒ Required inspections for all subcodes for one- and two-family dwellings are as follows:

1. The bottom of footing trenches before placement of footings, except that in cases 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, connections, wall and roof sheathing and insulation; electrical rough wiring, panel and service installation; rough plumbing. The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and/or air conditioning duct system. The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.
4. Installation of all finished materials, sealings of exterior joints, plumbing piping, trim and fixtures; electrical wiring, devices and fixtures; mechanical systems equipment.

Additional required inspections for all subcodes of construction, for other than one- and two-family dwellings, are fire suppression systems, heat producing devices and Barrier Free subcode accessibility, if applicable.

☐ 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. The final inspections include the installation of all interior and exterior finish materials, sealing of exterior joints, mechanical system and other required equipment; electrical wiring, devices and fixtures; plumbing pipes, trim and fixtures; tests required by any provision of the adopted subcodes, Barrier Free accessibility, if applicable; and verification of compliance with NJAC 5:23-3.5, "Posting structures".

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

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



FIRE PROTECTION 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 1170 Lot 18.03 Qualification Code _____

Work Site Location 415 Jack Martin Blvd.,

Owner in Fee: Meridian Nursing & Rehabilitation @ Brick

Tel. (732) 206-8000 e-mail _____

Address Same

Contractor: MARK GANNON PLUMBING, municipality zip code

Address HEATING & COOLING L.L.C. Tel. (732) 774-5098

Address P.O. BOX 353 e-mail _____

Fire Protection Equipment, (732) 774-5098 Safety Permit No. _____

Fire Alarm Contractor No. _____ Exp. Date _____

Home Improvement Contractor Registration No. or Exemption Reason (if applicable): _____

Federal Emp. ID No. 54-2141049 FAX: (732) 776-6521

B. FIRE PROTECTION CHARACTERISTICS

Use Group: Present _____ Proposed _____

Constr. Class: Present _____ Proposed _____

Heating System: [] New OR [] Modification to Existing [] New OR [] Existing

Fuel Type: [] Gas [] Oil [] Electric [] Solar [] Flammable OR [] Combustible

Location: _____

Fuel Storage Tank: _____

Fuel Type: [] Flammable OR [] Combustible

Capacity _____

Fire Alarm System: [] New OR [] Existing

Location of Panel: _____

Fire Suppression/Standpipe System: _____

[] New OR [] Existing

Location of Main Control Valve: _____

Total Cost of Fire Protection Work \$ 200

JOB SUMMARY (Office Use Only)		INSPECTIONS		Dates (Month/Day)	
PLAN REVIEW	Type:	Failure	Approval	Initial	
[] No Plans Required	Alarm System				
[] Partial: Underslab Utilities Approved	Suppression Sys.				
Date: _____	Approved by: _____				
[] Fire Protection Plans Approved	Standpipe				
Date: <u>4/24/12</u>	Approved by: <u>VED</u>				
[] Joint Plan Review Required	Fire Pump				
[] Bldg. [] Elec. [] Plumb. [] Elev.	Pre-Eng. System				
SUBCODE APPROVAL for PERMIT	Mechanical				
Date: <u>6/25/12</u>	Smoke Control				
Approved by: <u>VED</u>	TCO				
[] CO [] LCCO [] CA	Flam/Combust Tanks				
Date: <u>4/25/12</u>	Fireplace Venting				
Approved by: <u>VED</u>	Final				
	Other				

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the owner of record and am authorized to make this application.

[] Certified Contractor [] Exempt Applicant

Applicant's Signature/Contractor's Signature

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK: Installation of 2 Hot water heaters, AO Smith BTF 740A

Water Supply Source _____

Method of Alarm/Suppression System Supervision _____

NUMBER _____

FEE (Office Use Only) _____

Flammable/Combustible Tanks _____

Alarm Systems _____

[] System _____

[] 110v Interconnected _____

[] CO Detectors/110v _____

Alarm Devices (i.e., smoke, heat, pulls, water/flow) _____

Supervisory Devices (i.e., tampers, low/high air) _____

Signaling Devices (i.e., horn/strobes, bells) _____

Other Devices _____

TOTAL _____

Suppression Systems _____

Fire Pump _____ GPM Type _____

Dry Pipe/Alarm Valves _____

Pre-action Valves _____

Sprinkler Heads (Dry and Wet) _____

Standpipes _____

Pre-engineered Systems _____

Wet Chemical _____

Dry Chemical _____

CO₂ Suppression _____

Foam Suppression _____

FM200 Suppression _____

Other _____

Other Systems _____

Kitchen Hood Exhaust System _____

Smoke Control System _____

Fuel-Fired Appliances [] Gas [] Oil [] Solid _____

Fireplace Venting/Metal Chimney _____

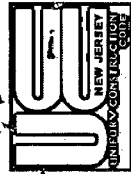
Other _____

Administrative Surcharge \$ _____

Minimum Fee \$ _____

State Permit Surcharge Fee \$ _____

TOTAL FEE \$ _____



FIRE PROTECTION 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 1170 Lot 18.03 *Qualification Code
Work Site Location MERIDIAN HEALTH NURSING + REHABILITATION
415 JACK MARTIN BLVD, TOWNSHIP OF BRICK, N.J. 08724
Owner in Fee: GREG MATSKO
Tel. (732) 206-8036 e-mail GREGMATSKO@MIDLANDHEALTH.COM
Address 415 JACK MARTIN BLVD. TOWNSHIP OF BRICK 08724
Contractor: GAC ELECTRONICS Tel. (732) 657-7007
Address 317 CHURCH STREET e-mail KEVIN@MYCESPRO.COM
LAKE HURST, NEW JERSEY 08733

Fire Protection Equipment, NJ Div of Fire Safety Permit No. _____
Fire Protection Equipment, NJ Div of Fire Safety Installer No. _____
Fire Alarm Contractor No. 34BF00020000 Exp. Date 01/31/2014

Home Improvement Contractor Registration No. or Exemption Reason (if applicable) _____
Federal Emp. ID No. 22-3399683 **COMMERCIAL**
B. FIRE PROTECTION CHARACTERISTICS

Use Group: Present _____ Proposed _____
Constr. Class: Present _____ Proposed _____
Fuel Storage Tank: _____
Fuel Type: [] Flammable OR [] Combustible Capacity _____

Heating System: [] New OR [] Modification to Existing Fire Alarm System: [] New OR [] Existing
OR [] Conversion OR [] Replacement Location of Panel: _____

Fuel Type: [] Gas [] Oil [] Electric [] Solar Fire Suppression/Standpipe System:
[] New OR [] Existing
Other _____

Location: _____
Total Cost of Fire Protection Work \$ 1575.00

JOB SUMMARY (Office Use Only)		INSPECTIONS		Dates (Month/Day)	
PLAN REVIEW	Type:	Failure	Approval	Initial	
☒ No Plans Required	Alarm System				
☐ Partial - Underslab Utilities Approved	Suppression Sys.				
Date: <u>5-3-11</u> Approved by: <u>KEV</u>	Standpipe				
☐ Fire Protection Plans Approved	Fire Pump				
Date: _____ Approved by: _____	Pre-Eng. System				
Joint Plan Review Required:	Mechanical				
[] Bldg. [] Elec. [] Plumb. [] Elev.	Smoke Control				
SUBCODE APPROVAL for PERMIT		TCO			
Date: <u>5-3-11</u>	Flam/Combust Tanks				
Approved by: <u>KEV</u>	Fireplace Venting				
SUBCODE APPROVAL for CERTIFICATE		Final			
[] CO [] CSP-10 CA	Other				
Date: <u>5-25-10</u>					
Approved by: <u>KEV</u>					

C. CERTIFICATION IN LIEU OF OATH
I hereby certify that I am the (agent/owner) of record and am authorized to make this application.

Applicant's Signature/Contractor's Signature
[] Exempt Applicant

D. TECHNICAL SITE DATA EMERGENCY REPAIR REQUIRED
DESCRIPTION OF WORK: AFTER FIRE DRILL. SIMPLEX 4020 HAS BAD BELL CARD. RELOCATED EXISTING BELL CIRCUITS TO NEW FIRE LITE FCPS-24FS8 REMOTE POWER SUPPLY
Water Supply Source: _____

Method of Alarm/Suppression System Supervision: _____

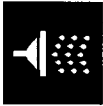
Flammable/Combustible Tanks	NUMBER	FEE (Office Use Only)
Alarm Systems		
☒ System		
[] 110v Interconnected		
[] CO Detectors/110v		
Alarm Devices (i.e., smoke, heat, pulls, water/flow)		
Supervisory Devices (i.e., tampers, low/high air)		
Signaling Devices (i.e., horns/strobes, bells)		
Other Devices <u>NAC Power Supply</u>	<u>4</u>	
TOTAL		
Suppression Systems		
Fire Pump _____ GPM Type _____		
Dry Pipe/Alarm Valves		
Pre-action Valves		
Sprinkler Heads (Dry and Wet)		
Standpipes		
Pre-engineered Systems		
Wet Chemical		
Dry Chemical		
CO ₂ Suppression		
Foam Suppression		
FM200 Suppression		
Other _____		
Other Systems		
Kitchen Hood Exhaust System		
Smoke Control System		
Fuel-Fired Appliances [] Gas [] Oil [] Solid		
Fireplace Venting/Metal Chimney		
Other _____		

Administrative Surcharge \$ _____
Minimum Fee \$ _____
State Permit Surcharge Fee \$ _____
TOTAL FEE \$ _____

Date Received Control # 11-1286
Date Issued Permit # 05/06/11



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 1170 Lot 18.03 Qualification Code _____
Work Site Location 415 Jack Martin Blvd.
Brick, N.J. 08724
Owner in Fee: Meridian Nursing + Rehabilitation @ Brick
Tel. (732) 206-8800 e-mail _____

Address MARK GANNON PLUMBING, municipality
Contractor: HEATING & COOLING L.L.C. Tel. (732) 774-5098 zip code
Address P.O. BOX 353 e-mail _____
108 SOUTH MAIN STREET
OCEAN GROVE, NJ 07756
Contractor License No. 732774-5098 Exp. Date 6/30/13

Home Improvement Contractor Registration No. or Exemption Reason (if applicable):
Federal Emp. ID No. 54-2141049 FAX: (732) 776-6521

B. PLUMBING CHARACTERISTICS

Building Sewer Size _____ Proposed _____
Water Service Size _____ Public Sewer _____ Public Septic _____
Est. Cost of Plumbing Work \$ 10,000 Private Well _____

JOB SUMMARY (Office Use Only)

PLAN REVIEW		DATES (Month/Day)	
Failure	Approval	Initial	
☐ No Plans Required			
☐ Partial - Underlab Utilities Approved			
Date _____ Approved by _____			
☐ Plumbing Plans Approved			
Date _____ Approved by _____			
Joint Plan Review Required			
☐ Bldg. ☐ Elec. ☐ Fire ☐ Elev.			
SUBCODE APPROVAL FOR PERMIT			
Date <u>6-21-12</u>			
Approved by: <u>EW</u>			
SUBCODE APPROVAL FOR CERTIFICATE			
☐ CO ☐ CCO ☒ CA			
Date <u>9-25-12</u>			
Approved by: <u>EW</u>			

U.C.C. F130 (rev. 11/09)
Internal version

For reorder call: (609) 390-1400 Allegra Marketing • Print • Mail (formerly OCS Printing) order on the website: www.AllegraMarmora.com

Date Received _____
Control # _____
Date Issued _____
Permit # _____

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.

Applicant sign/Contractor sign and seal here: _____

Print name here: Mark S. Gannon

☒ Licensed Plumbing Contractor ☐ Exempt Applicant

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK

Water heater room. Run gas line from meter to water heater room. Replac 80 gallon 750 BTU with 40 Smith BTP 740A. One Hot water. Newly installed

QTY. 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	_____
LPGas Tank	_____
Steam Boiler	_____
Hot Water Boiler	_____
Sewer Pump	_____
Interceptor/Separator	_____
Backflow Preventer	_____
Greasetrap	_____
Sewer Connection	_____
Water Service Connection	_____
Stacks	_____
Other	_____

FEE (Office Use Only)

Administrative Surcharge \$ _____
Minimum Fee \$ _____
State Permit Surcharge Fee \$ _____
TOTAL FEE \$ _____

CYCLONE[®] Xi

UP TO 96% THERMAL EFFICIENCY, DIRECT VENT FEATURES

The A. O. Smith Cyclone Xi family of products represents the industry's most technologically advanced commercial water heaters. The innovative Cyclone Xi design takes performance to its highest level with efficiencies of 95% and 96%. Models are available from 120,000 BTUs up to 500,000 BTUs. In addition, the Cyclone Xi features an Intelligent Control System making it the smartest water heater in the industry.

Cyclone Xi provides outstanding hot water output, with dramatic savings on operating costs compared to units with standard 80% efficiency. A. O. Smith's leading-edge engineering delivers conventional power-vent or power direct-vent versatility, low NOx emissions and excellent space-saving characteristics. Powered anodes, standard on all Cyclone Xi models, provide superior tank protection for years of trouble free operation.

INTELLIGENT CONTROL SYSTEM WITH LCD DISPLAY

- Exclusive A. O. Smith designed control system
- Provides detailed water heater status information
- Precise temperature control
- Built-in diagnostics
- Run history information
- Cyclone water heaters are iCOMM™ compatible and can be monitored from remote locations. Call 1.888.WATER02 for more information.



SUBMERGED COMBUSTION CHAMBER, WITH HELICAL HEAT EXCHANGER COIL

- Positioned in center of tank, surrounded by water to virtually eliminate radiant heat loss from chamber
- Spiral heat exchanger keeps hot burner gases swirling, uses centrifugal force to maximize efficiency of heat transfer to water in tank
- Spiral shaped heat exchanger reduces the accumulation of lime scale; maintains higher efficiency performance over time.

POWERED ANODES STANDARD ON ALL MODELS

- Provides long-lasting tank protection in varying water conditions
- Anodes are of a permanent design and do not require replacement unless damaged

PERMAGLAS[®] ULTRA COAT™ GLASS LINING

- Exclusive process provides superior protection against corrosion
- Both sides of heat exchanger coil are lined for protection against flue gas condensate inside coil

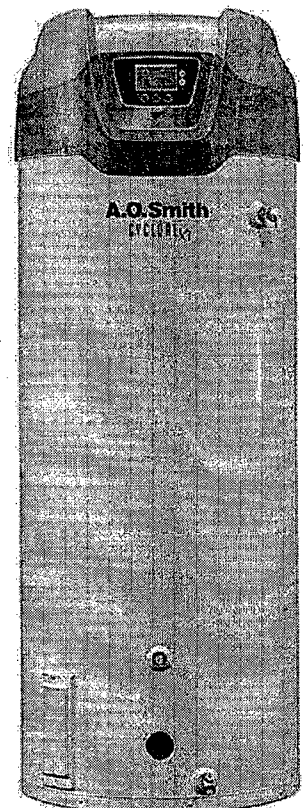
MECHANICAL VENTING VERSATILITY

- Conventional power-venting or power-direct venting
- Vents vertically or through sidewall
- Direct-vent intake and exhaust pipe can terminate separately outside building, or through single opening, using concentric vent assembly
- Uses inexpensive PVC, CPVC or ABS pipe for intake and exhaust. Canadian installations require ULC S636 listed PVC or CPVC pipe for intake and exhaust.

HIGH EFFICIENCY PRE-MIX POWERED BURNER

- Down-fired pre-mix burner provides optimum efficiency and quiet operation
- Top-mounted radial burner design ensures optimum combustion efficiency

BTH-120 through BTH-500



BTH-120-250



ASME
(OPTIONAL)



BTH-300-500





Commercial Gas Water Heaters

OTHER CYCLONE Xi FEATURES

SPACE-SAVING DESIGN FOR INSTALLATION FLEXIBILITY

- Reduced footprint, ease of service, protection from water damage in case of flooding
- Easy to remove top cover for convenient access to serviceable parts
- 0" installation clearances on sides and rear, 1-1/2" installation clearance on top, 4" alcove installation clearance in front
- Handhole Cleanout of unit
- Handhole cleanout allows easy access to tank interior for cleaning
- 0" clearance to combustibles, approved for installation on combustible floors

CODES AND STANDARDS

- CSA certified and ASME rated T&P relief valve
- Maximum hydrostatic working pressure: 160 PSI
- BTH-120-250 Models are design-certified by CSA International, according to ANSI Z21.10.3 - CSA 4.3 Standards governing storage-type water heaters.
- BTH-300-500 Models are design-certified by Underwriter's Laboratories (UL), Inc., according to ANSI Z21.10.3 - CSA 4.3 standards governing storage-type water heaters.
- Meets or exceeds the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition ASHRAE/IESNA 90.1
- Design-certified by Underwriter's Laboratories (UL), Inc. to NSF standard 5
- Complies with SCAQMD Rule 1146.2 and other Air Quality Management Districts with similar requirements for low NOx emissions
- ASME tank construction optional on all models.

THREE-YEAR LIMITED TANK WARRANTY

- For complete warranty details, consult written warranty shipped with heater, or contact A. O. Smith (5-year extended warranty is optional).

INSTALLATION CONSIDERATIONS

1. Condensate Drain – This is a fully condensing water heater and should be located near a drain to permit proper disposal of condensate.
2. Vent Termination – Exhaust gases of this water heater are less than 140°F. In cold climates water vapor in flue gases will condense into a cloud of vapor where the vent exits the building. This vapor can gradually discolor exterior building surfaces. Vent termination should be located where this vapor cloud and potential discoloration are not a concern. Extending the vent termination up to 6" from the wall helps vapor from being trapped along a building's face. To avoid this problem, the vent can be terminated on the roof. Always locate vent termination above the maximum snowline, and do not locate vent termination above a walkway.
3. Air Intake – In cold climates, air intake should be located at least four feet from the vent termination of the water heater and any other appliance vents that discharge moisture-laden air (such as clothes dryers). This will help prevent freeze-over of the intake screen required to prevent foreign objects from entering the intake pipe. Air intake should be located above the maximum snowline.
4. Blockage Sensors – The water heater is equipped with sensors to shut it down if blockage of vent or air intake occurs. The water heater control system will display detailed diagnostic information on the LCD screen to help service technicians quickly locate and correct the problem.
5. Noise – Vent terminal should be located away from bedroom windows or other areas where blower noise will be objectionable. Avoid venting into corners or confined areas, which will amplify sound. Anchoring intake or vent pipe to walls or ceilings can cause noise to be transmitted to living areas, and isolation mounts should be used where anchoring is required.
6. Optional Concentric Vent Kit - Helps to minimize unsightly wall/roof penetrations.
BTH-120 - 300 vent kit p/n 9006328005
BTH-400 - 500 vent kit p/n 9006144005

For Technical Information and Automated Fax Service, call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.

Commercial Gas Water Heaters



MAXIMUM EQUIVALENT VENT LENGTHS BTH 120 - 250

*Number of 90° Elbows Installed	3 Inch Pipe	4 Inch Pipe
	Maximum Feet (Meters)	Maximum Feet (Meters)
One (1)	45 feet (13.7 meters)	115 feet (35.0 meters)
Two (2)	40 feet (12.2 meters)	110 feet (33.5 meters)
Three (3)	35 feet (10.7 meters)	105 feet (32.0 meters)
Four (4)	30 feet (9.1 meters)	100 feet (30.5 meters)
Five (5)	-----	95 feet (29.0 meters)
Six (6)	-----	90 feet (27.4 meters)

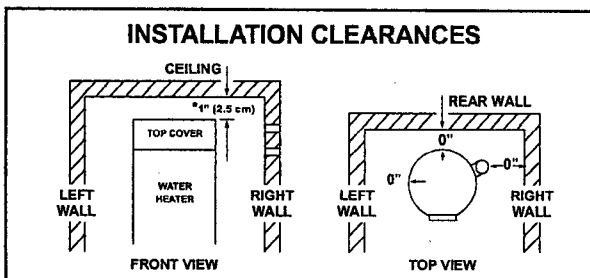
* Maximum number of 90° elbows allowed for the vent (exhaust) pipe is four (4) when installing 3 inch pipe and six (6) when installing 4 inch pipe. Maximum number of 90° elbows allowed for intake air pipe is four (4) when installing 3 inch pipe and six (6) when installing 4 inch pipe. Two (2) 45° elbows equal one (1) 90° elbow.

MAXIMUM EQUIVALENT VENT LENGTHS BTH 300 - 500

*Number of 90° Elbows Installed	4 Inch Pipe	6 Inch Pipe
	Maximum Feet (Meters)	Maximum Feet (Meters)
One (1)	65 feet (19.8 meters)	115 feet (35.0 meters)
Two (2)	60 feet (18.2 meters)	110 feet (33.5 meters)
Three (3)	55 feet (16.8 meters)	105 feet (32.0 meters)
Four (4)	50 feet (15.2 meters)	100 feet (30.5 meters)
Five (5)	45 feet (13.7 meters)	95 feet (29.0 meters)
Six (6)	40 feet (12.2 meters)	90 feet (27.4 meters)

* Maximum number of 90° elbows allowed for the vent (exhaust) pipe is six (6). Maximum number of 90° elbows allowed on the intake air pipe is six (6). Two (2) 45° elbows equal one (1) 90° elbow.

MINIMUM SUPPLY GAS LINE SIZE		
MODEL	NATURAL GAS	PROPANE GAS
BTH 120	1/2" NPT	1/2" NPT
BTH 150	3/4" NPT	3/4" NPT
BTH 199	3/4" NPT	3/4" NPT
BTH 250	3/4" NPT	3/4" NPT
BTH 300	1 1/4" NPT	1 1/4" NPT
BTH 400	1 1/4" NPT	1 1/4" NPT
BTH 500	1 1/2" NPT	1 1/4" NPT



*Minimum clearance to remove top cover

RECOVERY CAPACITY

MODEL	TYPE OF GAS	INPUT		Thermal Efficiency	U.S. Gallons/Hr and Litres/Hr at TEMPERATURE RISE INDICATED													
					Approx. Capacity													
		BTUH	KW			F°	30F°	40F°	50F°	60F°	70F°	80F°	90F°	100F°	110F°	120F°	130F°	140F°
						C°	17C°	22C°	28C°	33C°	39C°	44C°	50C°	56C°	61C°	67C°	72C°	78C°
BTH 120	NATURAL/PROPANE	120,000	35	95%	60 U.S. Gal	GPH	461	345	276	230	197	173	154	138	126	115	106	99
					227 Litres	LPH	1744	1308	1046	872	747	654	581	523	476	436	402	374
BTH 150	NATURAL/PROPANE	150,000	44	95%	100 U.S. Gal	GPH	576	432	345	288	247	216	192	173	157	144	133	123
					379 Litres	LPH	2179	1635	1308	1090	934	817	726	654	594	545	503	467
BTH 199	NATURAL/PROPANE	199,900	58	95%	100 U.S. Gal	GPH	767	575	460	384	329	288	256	230	209	192	177	164
					379 Litres	LPH	2904	2178	1743	1452	1245	1089	968	871	792	726	670	622
BTH 250	NATURAL/PROPANE	250,000	73	95%	100 U.S. Gal	GPH	960	720	576	480	411	360	320	288	262	240	221	206
					379 Litres	LPH	3632	2724	2179	1816	1557	1362	1211	1090	991	908	838	778
BTH 300	NATURAL/PROPANE	300,000	88	96%	130 U.S. Gal	GPH	1164	873	699	582	499	436	388	349	318	291	269	250
					492 Litres	LPH	4406	3304	2644	2203	1888	1652	1469	1322	1201	1102	1017	945
BTH 400	NATURAL/PROPANE	399,900	117	96%	130 U.S. Gal	GPH	1552	1164	931	776	665	582	517	466	423	388	359	332
					492 Litres	LPH	5875	4406	3525	2938	2518	2203	1958	1763	1602	1469	1356	1259
BTH 500	NATURAL/PROPANE	499,900	146	95%	130 U.S. Gal	GPH	1919	1439	1151	959	822	720	640	576	523	480	443	411
					492 Litres	LPH	7263	5447	4358	3631	3113	2724	2421	2179	1981	1816	1676	1556

Recovery capacities are based on heater performance at 95% and 96% thermal efficiency.

Add "A" to model number when ordering ASME.

Maximum gas supply pressure for 120-250: 10.5" W.C. natural gas 14" W.C. propane. Maximum gas supply pressure for 300-500 10.0" W.C. natural gas 12.0" W.C. propane. Electrical requirements: 120 VAC/60Hz, Blower 2.2 Amps FL, Igniter 4.0 Amps.

For Technical Information and Automated Fax Service, call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.



Commercial Gas Water Heaters

SUGGESTED SPECIFICATION

(Natural or Propane) gas water heater(s) shall be A. O. Smith Cyclone Xi model # _____ or equal, with up to 96% thermal efficiency, a storage capacity of _____ gallons, an input rating of _____ BTUs per hour, a recovery rating of _____ gallons per hour (gph) at 100°F rise and a maximum hydrostatic working pressure of 160 PSI. Water heater(s) shall: 1. Have seamless glasslined steel tank construction, with glass lining applied to all water-side surfaces after the tank has been assembled and welded; 2. Meet the thermal efficiency and standby loss requirements of the U. S. Department of Energy and current edition of ASHRAE/IESNA 90.1. 3. Have foam insulation and a CSA Certified and ASME rated T&P relief valve; 4. Have a down-fired power burner designed for precise mixing of air and gas for optimum efficiency, requiring no special calibration on start-up; 5. Be approved for 0" clearance to combustibles.

Heater shall be supplied with maintenance-free powered anode.

The control shall be an integrated solid-state temperature and ignition control device with integral diagnostics, graphic user interface, fault history display, and shall have digital temperature readout.

1. The BTH-120-250 models are design-certified by CSA International, according to ANSI Z21.10.3 - CSA 4.3 standards governing storage-type water heaters. The BTH-300-500 models are design-certified by Underwriter's Laboratories (UL), Inc., according to ANSI Z21.10.3 - CSA 4.3 standards governing storage type water heaters; 2. Meet the thermal efficiency and standby loss requirements of the U. S. Department of Energy and current edition ASHRAE/IESNA 90.1. Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for low NOx emissions.

120K-250K BTU Input:

For Standard Power Venting: Water heater(s) shall be suitable for standard power venting using a (3" or 4") _____ diameter PVC pipe for a total distance of (50ft. or 120 ft.) _____ equivalent feet of vent piping.

For Power Direct Venting: Water heater(s) shall be suitable for power direct venting using a (3" or 4") _____ diameter PVC pipe for a total distance of (50ft. or 120 ft.) _____ equivalent feet of vent piping and (50ft. or 120 ft.) _____ equivalent feet of intake air piping.

300K - 500K BTU Input:

For Standard Power Venting: Water heater(s) shall be suitable for standard power venting using a (4" or 6") _____ diameter PVC pipe for a total distance of (70ft. or 120 ft.) _____ equivalent feet of vent piping.

For Power Direct Venting: Water heater(s) shall be suitable for power direct venting using a (4" or 6") _____ diameter PVC pipe for a total distance of (70ft. or 120 ft.) _____ equivalent feet of vent piping and (70ft. or 120 ft.) _____ equivalent feet of intake air piping.

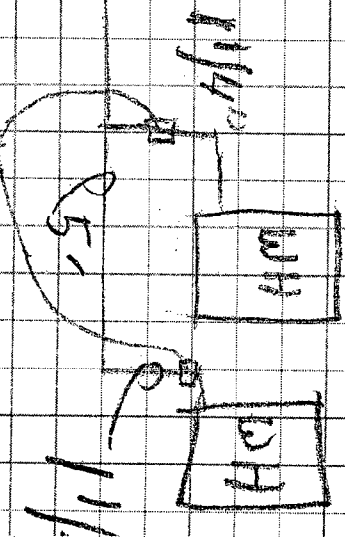
Operation of the water heater(s) in a closed system where thermal expansion has not been compensated for (with a properly sized thermal expansion tank) will void the warranty.

Water heater should incorporate the iCOMM™ system for remote monitoring, leak detection and fault alert.

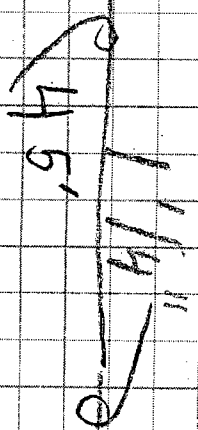
TOWNSHIP OF BRICK
RELEASED FOR PERMIT **INITIAL** **DATE**

Building Subcode _____
 Plumbing Subcode 83 6-22-
 Fire Subcode _____
 Electrical Subcode _____
 Plan Reviewer _____
 Plans Released _____
 Construction Official _____

740K 7401

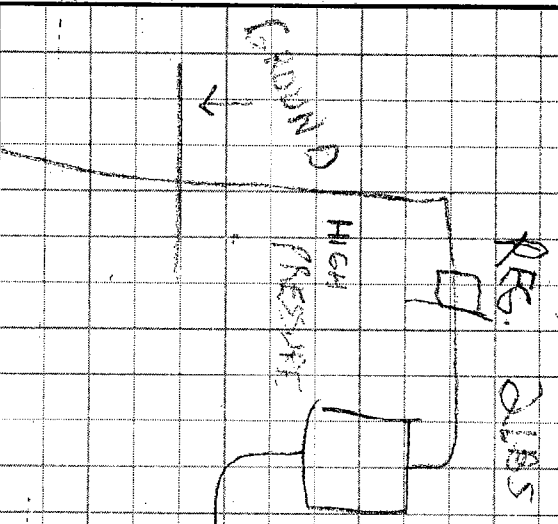


2- 1 1/4" 21BS
 REGULATOR STEP DOWN



21BS REG.

TO EXISTING
 REG 21BS - 125 LBS
 STEP DOWN



REG. 21BS

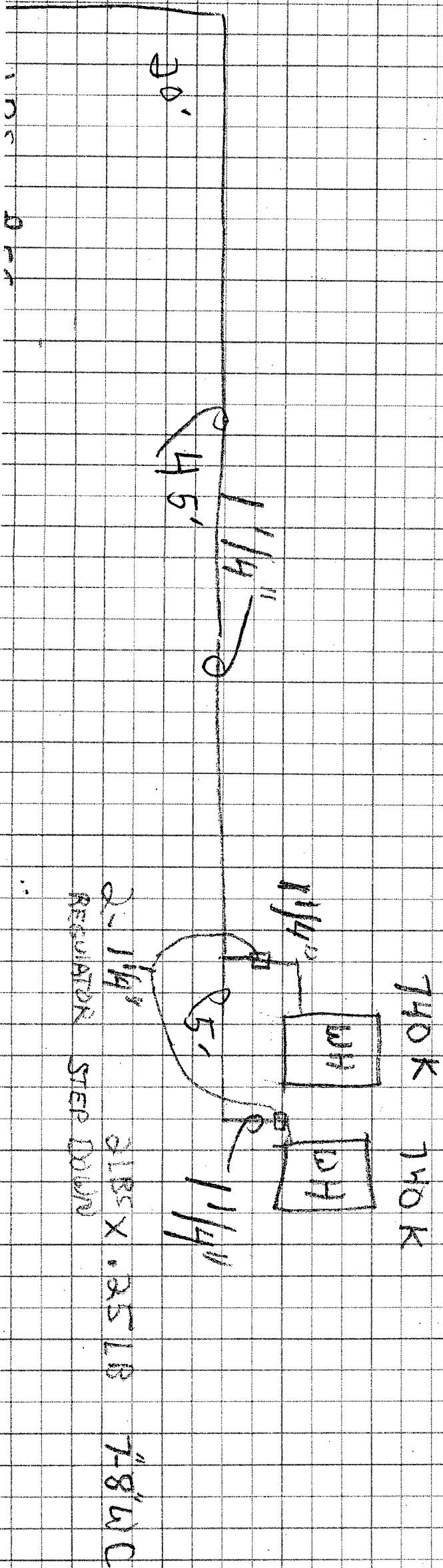
HIGH PRESSURE

MARK GANNON PLUMBING,
 HEATING & COOLING, L.L.C.
 108 S. MAIN STREET
 PO BOX 353
 OCEAN GROVE, NJ 07756

1. _____
 EET NO. _____
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 ECKED BY _____
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TOWNSHIP OF BRICK
RELEASED FOR PERMIT **INITIAL** **DATE**

Building Subcode _____
 Plumbing Subcode _____
 Fire Subcode _____
 Electrical Subcode _____
 Plan Reviewer _____
 Plans Released _____
 Construction Official _____



MAXITROL®

325 Series Line Pressure Regulators

New Reg on each New Boiler 2012



9/18/12

For 2 PSI Piping Systems

TABLE OF CONTENTS

Description	1
Specifications	1, 2
Pressure Drop	2
Capacities	3
Dimensions	3
Spring Range Selection	4
Sizing Instructions	4

DESCRIPTION

325 Series pounds to inches regulators are for use on residential, commercial, and industrial applications.

The 325 Series features a high leverage valve linkage assembly to deliver positive dead-end lock-up. The regulators are capable of precise regulating control from full flow down to pilot flow.

B Models: Imblue Technology™ increases corrosion resistance and provides extra protection against the elements for regulators used in outdoor applications.

NOTE: (B) in model number designates Imblue Technology™.

NOTICE

These regulators provide no downstream over-pressure protection in the event of failure. At supply pressures in excess of 2 psi, they should not be used. For Technical Support contact a Maxitrol Technical Support Representative. See Maxitrol Safety Warning Instructions, GPR_CSA_2PSI_MI_EN.FR

SPECIFICATIONS

Gases

Suitable for natural, manufactured, mixed gases, liquefied petroleum gases, and LP gas-air mixtures.

Approvals

CSA: ANSI Z21.80/CAN 6.22

Maximum Inlet Pressure

Model	CSA Certified
325-3(B)L	2 psi (13.8 kPa)
325-5A(B)L	
325-7A(B)L	

Minimum Inlet Pressure

CSA Certified..... 1 psi (7 kPa)

Outlet Pressure Range

Certified Spring 7 - 11" w.c.

Emergency Exposure Limits

All Models (Inlet Side Only) 65 psi (450 kPa)

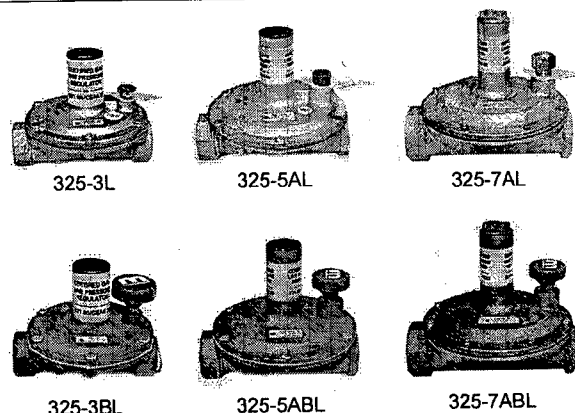


Figure 1: 325 Series Line Pressure Regulators

Maximum Individual Load

Largest single appliance served by the regulator.

325-3(B)L	140,000 Btu/hr
325-5A(B)L	300,000 Btu/hr
325-7A(B)L	1,250,000 Btu/hr

Capacity

Total load of multiple appliances combined.

325-3(B)L (3/8", 1/2")	250,000 Btu/hr
325-5A(B)L (1/2")	425,000 Btu/hr
325-5A(B)L (3/4", 1")	550,000 Btu/hr
325-7A(B)L (1 1/4", 1 1/2")	1,250,000 Btu/hr

NOTE: Capacity table is used to determine the maximum multiple appliance load. The largest single appliance served by the regulator should not exceed the maximum individual load specified above.

Ambient Temperature Limits

All Models -40°F to 205°F (-40°C to 96°C)

Vent Pipe Connections

325-3(B)L	1/8" NPT
325-5A(B)L	3/8" NPT
325-7A(B)L	1/2" NPT

Mounting Position

The 325 Series is suitable for multi-poise mounting, but when used with a vent limiting device, the regulator must be mounted in a horizontal upright position (see Figure 2). Install the regulator properly with gas flowing as indicated by the arrow on the casting. (See Maxitrol Safety Warning Instructions, GPR_CSA_2PSI_MI_EN.FR).

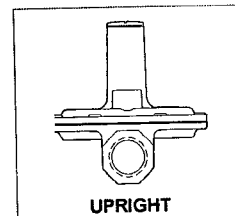
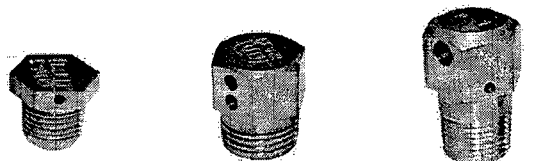


Figure 2: 325 Regulator in Upright Position

325 Series Line Pressure Regulators

✓Limiter® Vent Limiting Devices



12A09 (1/8" NPT)

12A39 (3/8" NPT)

12A49 (1/2" NPT)

✓Protector® Vent Protectors



13A15 (1/8" NPT)

13A15-5 (3/8" NPT)

13A25 (1/2" NPT)

✓Limiter® Vent Limiting Devices for Indoor Applications

325-3(B)L	12A09
325-5A(B)L	12A39
325-7A(B)L	12A49

NOTICE

Maxitrol vent limiting devices eliminate the need to run vent piping to the outside. Vent limiting devices are designed for use indoors and in spaces where limiting the amount of gas escapement due to diaphragm failure is critical. **Vent limiting devices should not be used outdoors if they are exposed to the environment.** Vent protectors are available for all outdoor applications to ensure proper vent protection.

✓Protector® Vent Protectors for Outdoor Applications

325-3(B)L	13A15
325-5A(B)L	13A15-5
325-7A(B)L	13A25

Figure 3: Vent Accessories

PRESSURE DROP: 0.64 sp gr gas expressed in CFH (m³/h) (for system pressure drop calculations)

Model Number	Pressure Drop			
	7.0" w.c. (1.7 kPa)	1/2 psi (3.4 kPa)	3/4 psi (5 kPa)	1 psi (7 kPa)
325-3(B)L	145 (4.0)	204 (5.8)	250 (7.0)	289 (8.2)
325-5A(B)L	339 (9.6)	476 (13.5)	583 (16.5)	673 (19.1)
325-7A(B)L	815 (23.1)	1149 (32.5)	1405 (39.8)	1624 (46.0)

NOTE: All Maxitrol line pressure regulators must be installed and operated in accordance with Maxitrol's Safety Warning Instructions.

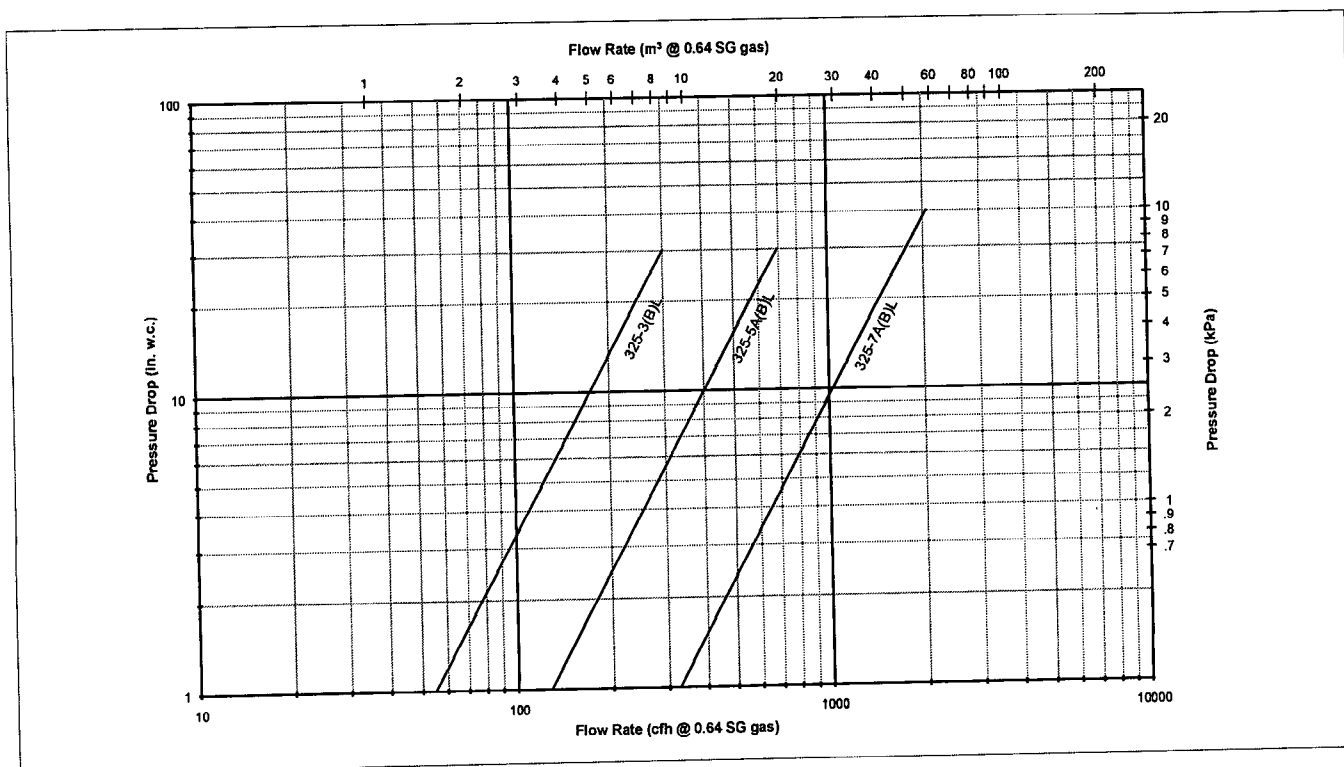


Figure 4: Pressure Drop Chart

325 Series Line Pressure Regulators

CAPACITIES: 0.64 sp gr gas expressed in CFH (m³/h)

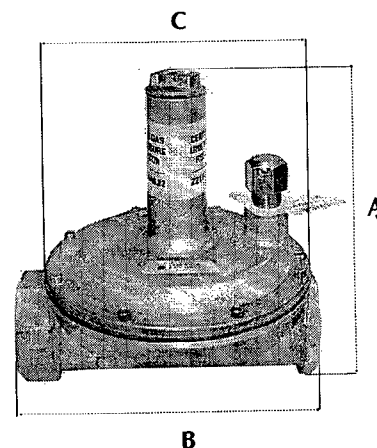
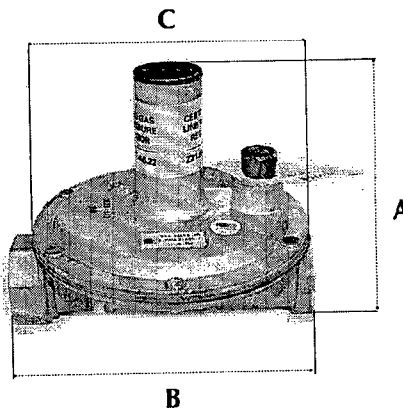
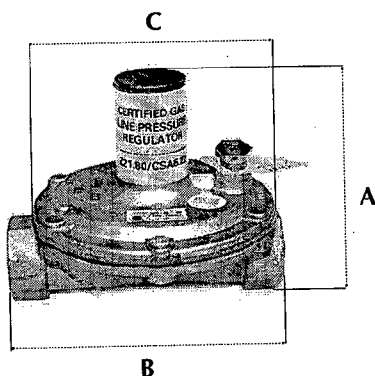
Model Number (pipe size)	Outlet Pressure Set Point	Operating Inlet Pressure		
		1 psi (7 kPa)	1 1/2 psi (10 kPa)	2 psi (13.8 kPa)
325-3(B)L (3/8", 1/2")	7.0" w.c. (1.7 kPa)	250 (7.1)	250 (7.1)	250 (7.1)
	10.0" w.c. (2.5 kPa)	230 (6.5)	250 (7.1)	250 (7.1)
325-5A(B)L (1/2")	7.0" w.c. (1.7 kPa)	425 (12.0)	425 (12.0)	425 (12.0)
	10.0" w.c. (2.5 kPa)	425 (12.0)	425 (12.0)	425 (12.0)
325-5A(B)L (3/4", 1")	7.0" w.c. (1.7 kPa)	550 (15.6)	550 (15.6)	550 (15.6)
	10.0" w.c. (2.5 kPa)	535 (15.1)	550 (15.6)	550 (15.6)
325-7A(B)L (1 1/4", 1 1/2")	7.0" w.c. (1.7 kPa)	1250 (35.4)	1250 (35.4)	1250 (35.4)
	10.0" w.c. (2.5 kPa)	1125 (31.9)	1250 (35.4)	1250 (35.4)

DIMENSIONS: Expressed in inches (mm)

Model Number	Pipe Size*	Swing Radius	Dimensions		
			A	B	C
325-3(B)L	3/8", 1/2"	3 (76)	3 1/2 (89)	4 1/4 (108)	3 7/8 (98)
325-5A(B)L	1/2", 3/4", 1"	4 7/8 (124)	5 1/4 (133)	5 7/8 (149)	5 7/16 (138)
325-7A(B)L	1 1/4", 1 1/2"	6 1/8 (156)	7 1/4 (184)	8 (203)	7 (178)

NOTE: Dimensions are to be used only as an aid in designing clearance for the regulator. Actual production dimensions may vary somewhat from those shown.

* Standard models NPT threads



325-3(B)L

325-5A(B)L

325-7A(B)L

325 Series Line Pressure Regulators

SPRING RANGE SELECTION

Outlet Pressure Range (all models):

Certified Spring 7 - 11" w.c.

SIZING INSTRUCTIONS

When 325 Series regulators are used on 2 psi piping systems, often times the 2 psi systems are sized with a 1 psi pressure drop through the copper or stainless steel tubing. This means there will be 2 psi at the inlet of the regulator under no flow conditions, and 1 psi at the regulator inlet under maximum flow conditions.

TO SELECT A LINE PRESSURE REGULATOR OF SUFFICIENT FLOW - ONE MUST KNOW:

1. Available inlet pressure (maximum static/minimum operating).
2. Desired outlet pressure.
3. Required maximum capacity (total load, all appliances combined) and maximum individual load.
4. Pipe size.

Example: To select a 325 series regulator of sufficient capacity to handle flow...

KNOWN:

- A. Required: 1/2" NPT line regulator, outlet pressure of 7" w.c., with static pressure of 2 psi, and a minimum operating inlet pressure of 1 psi.
- B. Combined BTU rating of all appliances to be served by the regulator: 145,000 Btu/hr.
- C. Largest single appliance's BTU rating: 90,000 Btu/hr

SOLUTION:

- A. In the Capacities Table (page 3), locate rows where 1/2" (pipe size) models with 7" w.c. outlet pressure intersect with 1 psi operating inlet pressure column. (325-3L = 250 CFH, 325-5AL = 425 CFH).
- B. The total BTU load requirement cannot exceed the requirement, and does not exceed either model's capacity.
- C. The 90,000 Btu/hr single largest appliance rating is below the 325-3L maximum individual load capacity of 140,000 Btu/hr.
- D. The 325-3L is the correct line regulator for this application.

MAXITROL



Commercial Gas Water Heaters

LOW NO_x POWER BURNER MODELS

FEATURES

BTP and BTPV commercial water heaters offer precise power burner performance for commercial applications, plus the flexibility of conventional atmospheric venting, sidewall venting or direct venting. To help ensure optimum performance, A. O. Smith provides a FREE professional start-up that is required on the BTP and BTPV models.

VENTING OPTIONS

- BTP models designed for conventional atmospheric vertical venting. Barometric draft regulating damper provided. Order Vent Kit Part # 9500007350.
- BTPV models designed for horizontal atmospheric sidewall venting or direct venting, using optional vent kits.
- For sidewall venting order Vent Kit Part # 9500007229.
- For direct venting order Vent Kit Part # 9910001005.

LOW NO_x POWER GAS BURNER (NATURAL GAS ONLY)

- Pre-mix design with internal Flue Gas Recirculation (FGR)
- Safety features include internal blocked flue sensor, separate pilot system, internal thermal cutoff and anti-flashback barrier

FULLY AUTOMATIC CONTROLS

- Including safety shut-off, high-temperature limit control
- Dual thermostat, adjustable from 120° F to 180° F

DRAFT EQUALIZING COMBUSTION CHAMBER

- Patented dome system ensures optimum flue loading and efficient heat transfer by balancing pressure inside combustion chamber

ASME TANK CONSTRUCTION ON ALL MODELS

- Rated working pressure: 160 PSI

CSA CERTIFIED AND ASME RATED T&P RELIEF VALVE

GLASSLINED TANK WITH MULTIPLE ANODE RODS

- For optimum protection against tank corrosion

FLAME INSPECTION PORT/HANDHOLE CLEANOUT

- For easy cleanout of sediment from tank bottom

HIGH ALTITUDE INSTALLATION

- Adjustable air intake damper easily reset for high-altitude installation by authorized start-up agent

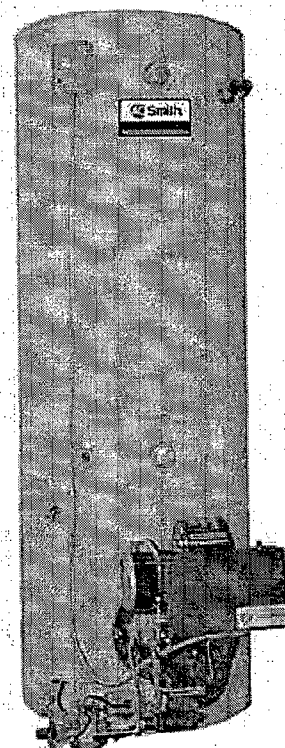
CODES AND STANDARDS

- Meets the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IESNA 90.1
- Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for low NO_x emissions

WARRANTY

- Factory Start-Up is required for activating warranty and assuring maximum operating performance. Contact your local sales representative or Authorized Start-Up Agent to arrange a FREE Certified Start-Up.
- Three-year limited tank warranty
- For complete warranty information, consult written warranty shipped with water heater, or contact A. O. Smith

BTP(V)-540A through BTP(V)-740A



ASME/CRN



GAS-FIRED



CAPACITY, INPUT AND RECOVERY

MODEL NUMBER	BTU INPUT PER HOUR	Gallons or Litres	TANK SIZE	FIRST HOUR RATING 100°F RISE	GPH or LPH	RECOVERY-GALLONS PER HOUR AT 100°F TEMPERATURE RISE		
						40°F	100°F	140°F
						4°C	56°C	78°C
BTP 540A BTPV 540A	540,000	US. Gallons	85	583	GPH	1309	523	374
		Litres	321.7	2206.7	LPH	4954.6	1979.6	1415.6
BTP 650A BTPV 650A	650,000	US. Gallons	85	690	GPH	1579	630	450
		Litres	321.7	2611.7	LPH	5976.5	2384.6	1703.3
BTP 740A BTPV 740A	740,000	US. Gallons	85	778	GPH	1794	718	512
		Litres	321.7	2944.7	LPH	6790.3	2717.6	1937.9

Based on 80% Thermal Efficiency. To compensate for effects of high altitude above 2,000', recovery ratings should be reduced approximately 4% for every 1,000 feet above sea level. Current Draw (120V, 60Hz, 1 Phase): 6.0 Amps

DIMENSIONS AND WEIGHT - ALL MODELS

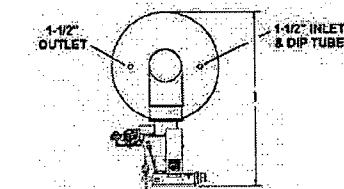
Inches or CM	DIMENSIONS									GAS CONN.***	SHIPPING WEIGHT
	A	B	C	D	E	F	G	H	I		
Inches	80-3/4	73	32-1/4	9	26-1/2	26-1/2	93	29-1/2	48-1/2	1"	950 Lbs.
CM	205.1	185.4	81.9	22.9	67.3	67.3	236.2	74.9	123.2	-	431.8 Kg

*D dimension is for atmospheric vent size (BTP models).

**E dimension is for direct and sidewall vent size (BTPV models).

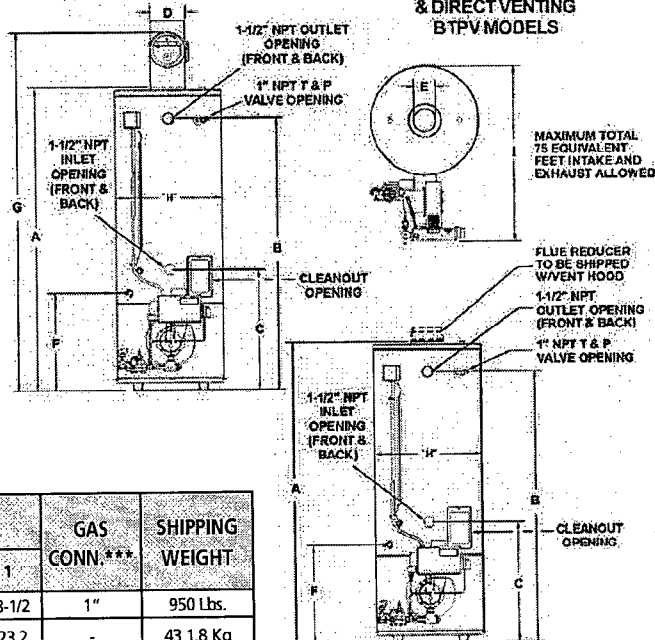
***Minimum gas supply pipe is 1-1/2". See Reference Manual, Table 7 for gas supply pipe size.

STANDARD BAROMETRIC DRAFT CONTROL BTP MODELS



8" WC Minimal Gas Supply Pressure Required For All Models!

HORIZONTAL & DIRECT VENTING BTPV MODELS



SUGGESTED SPECIFICATION

Water heater(s) shall be A. O. Smith Model _____ or equal, with maximum storage capacity of 85 gallons, an input rating of _____ BTU/Hr., a recovery rating of _____ GPH at 100° F temperature rise, and minimum thermal efficiency of 80%. Heater(s) shall meet the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition of ASHRAE/IESNA 90.1, comply with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for low NOx emissions. In addition, heater(s) shall: 1) Include a powered gas burner, redundant main gas valves, gas pressure regulator and flame inspection port. 2) Include a high temperature limit control, dual-bulb thermostat for accurate temperature control and anti-stacking compensation and a CSA certified and ASME rated T&P relief valve. 3) Be equipped with 1-1/2" NPT water inlet and outlet and a boiler-type handhole cleanout. 4) Shall be constructed and stamped in accordance with ASME Boiler and Pressure Vessel Code and be so marked for a maximum working pressure of 160 PSI. 5) Have a glass-lined steel tank with multiple anodes for corrosion protection, and polyurethane foam insulation. 6) Tank shall have a 3-year limited warranty against corrosion as outlined in the written warranty. Venting: BTP heater(s) shall be supplied with a Barometric Draft Regulator for conventional atmospheric venting. BTPV heater(s) shall be supplied with an optional vent kit allowing for horizontal sidewall venting or direct venting. Burner and Controls: Burner(s) shall be pre-mix design, with internal FGR and thermal cut off, separate spark pilot ignition system, integral blocked flue sensor, glass view port, main gas regulator, automatic gas valve, manual test cock and manual gas shutoff. Burner(s) must be factory-installed, tested and started by an A. O. Smith Authorized BTP Start-up Agent before being placed into operation.

For Technical Information and Automated Fax Service, call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.



Commercial Gas Water Heaters

CYCLONE[®] Xi

UP TO 96% THERMAL EFFICIENCY, DIRECT VENT

FEATURES

The A. O. Smith Cyclone Xi family of products represents the industry's most technologically advanced commercial water heaters. The innovative Cyclone Xi design takes performance to its highest level with efficiencies of 95% and 96%. Models are available from 120,000 BTUs up to 500,000 BTUs. In addition, the Cyclone Xi features an Intelligent Control System making it the smartest water heater in the industry.

Cyclone Xi provides outstanding hot water output, with dramatic savings on operating costs compared to units with standard 80% efficiency. A. O. Smith's leading-edge engineering delivers conventional power-vent or power direct-vent versatility, low NOx emissions and excellent space-saving characteristics. Powered anodes, standard on all Cyclone Xi models, provide superior tank protection for years of trouble free operation.

INTELLIGENT CONTROL SYSTEM WITH LCD DISPLAY

- Exclusive A. O. Smith designed control system
- Provides detailed water heater status information
- Precise temperature control
- Built-in diagnostics
- Run history information
- Cyclone water heaters are iCOMM[™] compatible and can be monitored from remote locations. Call 1.888.WATER02 for more information.



SUBMERGED COMBUSTION CHAMBER, WITH HELICAL HEAT EXCHANGER COIL

- Positioned in center of tank, surrounded by water to virtually eliminate radiant heat loss from chamber
- Spiral heat exchanger keeps hot burner gases swirling, uses centrifugal force to maximize efficiency of heat transfer to water in tank
- Spiral shaped heat exchanger reduces the accumulation of lime scale; maintains higher efficiency performance over time.

POWERED ANODES STANDARD ON ALL MODELS

- Provides long-lasting tank protection in varying water conditions
- Anodes are of a permanent design and do not require replacement unless damaged

PERMAGLAS[®] ULTRA COAT[™] GLASS LINING

- Exclusive process provides superior protection against corrosion
- Both sides of heat exchanger coil are lined for protection against flue gas condensate inside coil

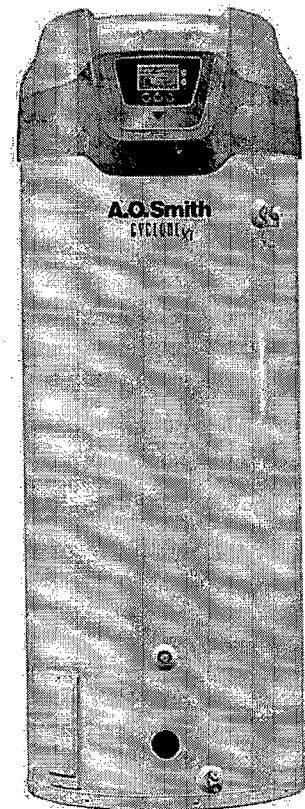
MECHANICAL VENTING VERSATILITY

- Conventional power-venting or power-direct venting
- Vents vertically or through sidewall
- Direct-vent intake and exhaust pipe can terminate separately outside building, or through single opening, using concentric vent assembly
- Uses inexpensive PVC, CPVC or ABS pipe for intake and exhaust. Canadian installations require ULC 5636 listed PVC or CPVC pipe for intake and exhaust.

HIGH EFFICIENCY PRE-MIX POWERED BURNER

- Down-fired pre-mix burner provides optimum efficiency and quiet operation
- Top-mounted radial burner design ensures optimum combustion efficiency

**BTH-120
through
BTH-500**



BTH-120-250



**ASME
(OPTIONAL)**



BTH-300-500





Commercial Gas Water Heaters

OTHER CYCLONE Xi FEATURES

SPACE-SAVING DESIGN FOR INSTALLATION FLEXIBILITY

- Reduced footprint, ease of service, protection from water damage in case of flooding
- Easy to remove top cover for convenient access to serviceable parts
- 0" installation clearances on sides and rear, 1-1/2" installation clearance on top, 4" alcove installation clearance in front
- Handhole Cleanout of unit
- Handhole cleanout allows easy access to tank interior for cleaning
- 0" clearance to combustibles, approved for installation on combustible floors

CODES AND STANDARDS

- CSA certified and ASME rated T&P relief valve
- Maximum hydrostatic working pressure: 160 PSI
- BTH-120-250 Models are design-certified by CSA International, according to ANSI Z21.10.3 - CSA 4.3 Standards governing storage-type water heaters.
- BTH-300-500 Models are design-certified by Underwriter's Laboratories (UL), Inc., according to ANSI Z21.10.3 - CSA 4.3 standards governing storage-type water heaters.
- Meets or exceeds the thermal efficiency and standby loss requirements of the U.S. Department of Energy and current edition ASHRAE/IESNA 90.1
- Design-certified by Underwriter's Laboratories (UL), Inc. to NSF standard 5
- Complies with SCAQMD Rule 1146.2 and other Air Quality Management Districts with similar requirements for low NOx emissions
- ASME tank construction optional on all models.

THREE-YEAR LIMITED TANK WARRANTY

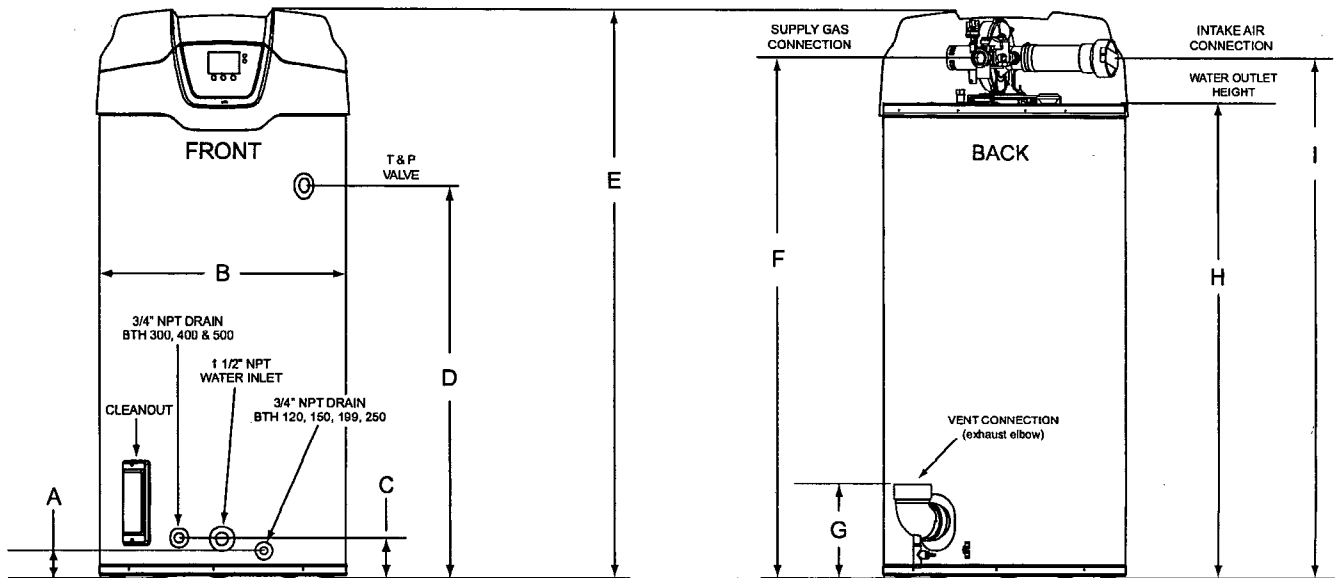
- For complete warranty details, consult written warranty shipped with heater, or contact A. O. Smith (5-year extended warranty is optional).

INSTALLATION CONSIDERATIONS

1. Condensate Drain – This is a fully condensing water heater and should be located near a drain to permit proper disposal of condensate.
2. Vent Termination – Exhaust gases of this water heater are less than 140°F. In cold climates water vapor in flue gases will condense into a cloud of vapor where the vent exits the building. This vapor can gradually discolor exterior building surfaces. Vent termination should be located where this vapor cloud and potential discoloration are not a concern. Extending the vent termination up to 6" from the wall helps vapor from being trapped along a building's face. To avoid this problem, the vent can be terminated on the roof. Always locate vent termination above the maximum snowline, and do not locate vent termination above a walkway.
3. Air Intake – In cold climates, air intake should be located at least four feet from the vent termination of the water heater and any other appliance vents that discharge moisture-laden air (such as clothes dryers). This will help prevent freeze-over of the intake screen required to prevent foreign objects from entering the intake pipe. Air intake should be located above the maximum snowline.
4. Blockage Sensors – The water heater is equipped with sensors to shut it down if blockage of vent or air intake occurs. The water heater control system will display detailed diagnostic information on the LCD screen to help service technicians quickly locate and correct the problem.
5. Noise – Vent terminal should be located away from bedroom windows or other areas where blower noise will be objectionable. Avoid venting into corners or confined areas, which will amplify sound. Anchoring intake or vent pipe to walls or ceilings can cause noise to be transmitted to living areas, and isolation mounts should be used where anchoring is required.
6. Optional Concentric Vent Kit - Helps to minimize unsightly wall/roof penetrations.
BTH-120 - 300 vent kit p/n 9006328005
BTH-400 - 500 vent kit p/n 9006144005

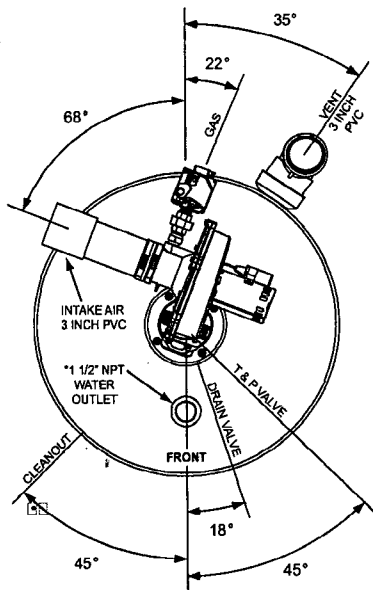
For Technical Information and Automated Fax Service, call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.

Commercial Gas Water Heaters

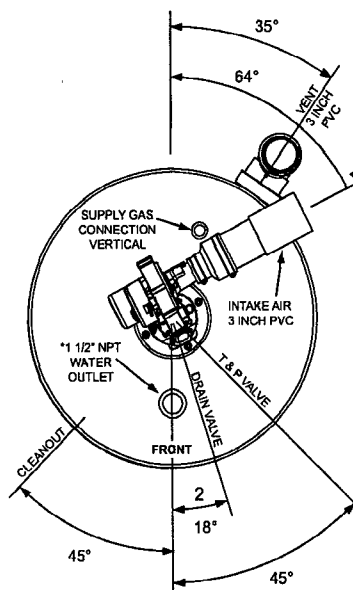


MODEL	DIMENSIONS									SHIP WEIGHT STD	SHIP WEIGHT ASME
	A	B	C	D	E	F	G	H	I		
	INCHES/CM	INCHES/CM	INCHES/CM	INCHES/CM	INCHES/CM	INCHES/CM	INCHES/CM	INCHES/CM	INCHES/CM	LBS/KG	LBS/KG
BTH 120	3/7.62	27.75/70.5	6.3/16	35/88.9	55.5/141	48/121.9	11/27.9	42/106.7	47.5/120.6	460/208	490/222
BTH 150	3/7.62	27.75/70.5	6.3/16	55.5/141	75.5/191.8	68.5/174	11/27.9	63/160	69/175.3	555/252	595/270
BTH 199, 250	3/7.62	27.75/70.5	6.3/16	55.5/141	75.5/191.8	75.5/191.8	11/27.9	63/160	69/175.3	555/252	595/270
BTH 300, 400, 500	N/A	33.12/84.1	4.86/12.34	50.77/129	75.5/191.8	69/175.3	12/30.5	63/160	69/175.3	855/408	855/408

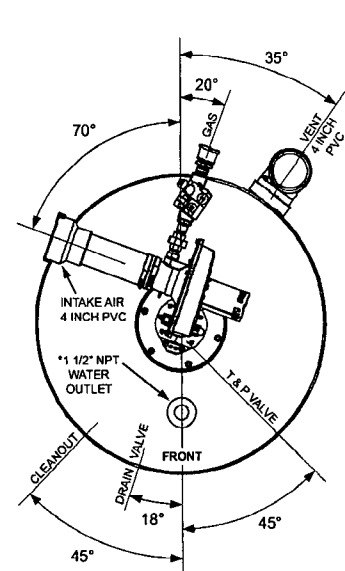
BTH 120 & 150



BTH 199 & 250



BTH 300, 400 & 500



* Center line of water outlet on top of the water heaters is approximately 7 inches from the front edge of the water heater

For Technical Information and Automated Fax Service, call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.

Commercial Gas Water Heaters



MAXIMUM EQUIVALENT VENT LENGTHS BTH 120 - 250

*Number of 90° Elbows Installed	3 Inch Pipe	4 Inch Pipe
	Maximum Feet (Meters)	Maximum Feet (Meters)
One (1)	45 feet (13.7 meters)	115 feet (35.0 meters)
Two (2)	40 feet (12.2 meters)	110 feet (33.5 meters)
Three (3)	35 feet (10.7 meters)	105 feet (32.0 meters)
Four (4)	30 feet (9.1 meters)	100 feet (30.5 meters)
Five (5)	-----	95 feet (29.0 meters)
Six (6)	-----	90 feet (27.4 meters)

* Maximum number of 90° elbows allowed for the vent (exhaust) pipe is four (4) when installing 3 inch pipe and six (6) when installing 4 inch pipe. Maximum number of 90° elbows allowed for intake air pipe is four (4) when installing 3 inch pipe and six (6) when installing 4 inch pipe. Two (2) 45° elbows equal one (1) 90° elbow.

MAXIMUM EQUIVALENT VENT LENGTHS BTH 300 - 500

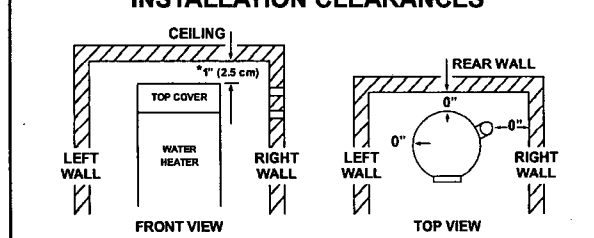
*Number of 90° Elbows Installed	4 Inch Pipe	6 Inch Pipe
	Maximum Feet (Meters)	Maximum Feet (Meters)
One (1)	65 feet (19.8 meters)	115 feet (35.0 meters)
Two (2)	60 feet (18.2 meters)	110 feet (33.5 meters)
Three (3)	55 feet (16.8 meters)	105 feet (32.0 meters)
Four (4)	50 feet (15.2 meters)	100 feet (30.5 meters)
Five (5)	45 feet (13.7 meters)	95 feet (29.0 meters)
Six (6)	40 feet (12.2 meters)	90 feet (27.4 meters)

* Maximum number of 90° elbows allowed for the vent (exhaust) pipe is six (6). Maximum number of 90° elbows allowed on the intake air pipe is six (6). Two (2) 45° elbows equal one (1) 90° elbow.

MINIMUM SUPPLY GAS LINE SIZE

MODEL	NATURAL GAS	PROPANE GAS
BTH 120	1/2" NPT	1/2" NPT
BTH 150	3/4" NPT	3/4" NPT
BTH 199	3/4" NPT	3/4" NPT
BTH 250	3/4" NPT	3/4" NPT
BTH 300	1 1/4" NPT	1 1/4" NPT
BTH 400	1 1/4" NPT	1 1/4" NPT
BTH 500	1 1/2" NPT	1 1/4" NPT

INSTALLATION CLEARANCES



*Minimum clearance to remove top cover

RECOVERY CAPACITY

				U.S. Gallons/Hr and Litres/Hr at TEMPERATURE RISE INDICATED														
MODEL	TYPE OF GAS	INPUT		Thermal Efficiency	Approx. Capacity	F°	30F°	40F°	50F°	60F°	70F°	80F°	90F°	100F°	110F°	120F°	130F°	140F°
		BTUH	KW			C°	17C°	22C°	28C°	33C°	39C°	44C°	50C°	56C°	61C°	67C°	72C°	78C°
BTH 120	NATURAL/ PROPANE	120,000	35	95%	60 U.S. Gal	GPH	461	345	276	230	197	173	154	138	126	115	106	99
					227 Litres	LPH	1744	1308	1046	872	747	654	581	523	476	436	402	374
BTH 150	NATURAL/ PROPANE	150,000	44	95%	100 U.S. Gal	GPH	576	432	345	288	247	216	192	173	157	144	133	123
					379 Litres	LPH	2179	1635	1308	1090	934	817	726	654	594	545	503	467
BTH 199	NATURAL/ PROPANE	199,900	58	95%	100 U.S. Gal	GPH	767	575	460	384	329	288	256	230	209	192	177	164
					379 Litres	LPH	2904	2178	1743	1452	1245	1089	968	871	792	726	670	622
BTH 250	NATURAL/ PROPANE	250,000	73	95%	100 U.S. Gal	GPH	960	720	576	480	411	360	320	288	262	240	221	206
					379 Litres	LPH	3632	2724	2179	1816	1557	1362	1211	1090	991	908	838	778
BTH 300	NATURAL/ PROPANE	300,000	88	96%	130 U.S. Gal	GPH	1164	873	699	582	499	436	388	349	318	291	269	250
					492 Litres	LPH	4406	3304	2644	2203	1888	1652	1469	1322	1201	1102	1017	945
BTH 400	NATURAL/ PROPANE	399,900	117	96%	130 U.S. Gal	GPH	1552	1164	931	776	665	582	517	466	423	388	359	332
					492 Litres	LPH	5875	4406	3525	2938	2518	2203	1958	1763	1602	1469	1356	1259
BTH 500	NATURAL/ PROPANE	499,900	146	95%	130 U.S. Gal	GPH	1919	1439	1151	959	822	720	640	576	523	480	443	411
					492 Litres	LPH	7263	5447	4358	3631	3113	2724	2421	2179	1981	1816	1676	1556

Recovery capacities are based on heater performance at 95% and 96% thermal efficiency.

Add "A" to model number when ordering ASME.

Maximum gas supply pressure for 120-250: 10.5" W.C. natural gas 14" W.C. propane. Maximum gas supply pressure for 300-500 10.0" W.C. natural gas 12.0" W.C. propane. Electrical requirements: 120 VAC/60Hz, Blower 2.2 Amps FL, Igniter 4.0 Amps.

For Technical Information and Automated Fax Service, call 800-527-1953. A. O. Smith Corporation reserves the right to make product changes or improvements without prior notice.



Commercial Gas Water Heaters

SUGGESTED SPECIFICATION

(Natural or Propane) gas water heater(s) shall be A. O. Smith Cyclone Xi model # _____ or equal, with up to 96% thermal efficiency, a storage capacity of _____ gallons, an input rating of _____ BTUs per hour, a recovery rating of _____ gallons per hour (gph) at 100°F rise and a maximum hydrostatic working pressure of 160 PSI. Water heater(s) shall: 1. Have seamless glasslined steel tank construction, with glass lining applied to all water-side surfaces after the tank has been assembled and welded; 2. Meet the thermal efficiency and standby loss requirements of the U. S. Department of Energy and current edition of ASHRAE/IESNA 90.1 3. Have foam insulation and a CSA Certified and ASME rated T&P relief valve; 4. Have a down-fired power burner designed for precise mixing of air and gas for optimum efficiency, requiring no special calibration on start-up; 5. Be approved for 0" clearance to combustibles.

Heater shall be supplied with maintenance-free powered anode.

The control shall be an integrated solid-state temperature and ignition control device with integral diagnostics, graphic user interface, fault history display, and shall have digital temperature readout.

1. The BTH-120-250 models are design-certified by CSA International, according to ANSI Z21.10.3 - CSA 4.3 standards governing storage-type water heaters. The BTH-300-500 models are design-certified by Underwriter's Laboratories (UL), Inc., according to ANSI Z21.10.3 - CSA 4.3 standards governing storage type water heaters; 2. Meet the thermal efficiency and standby loss requirements of the U. S. Department of Energy and current edition ASHRAE/IESNA 90.1. Complies with SCAQMD Rule 1146.2 and other air quality management districts with similar requirements for low NOx emissions.

120K-250K BTU Input:

For Standard Power Venting: Water heater(s) shall be suitable for standard power venting using a (3" or 4") _____ diameter PVC pipe for a total distance of (50ft. or 120 ft.) _____ equivalent feet of vent piping.

For Power Direct Venting: Water heater(s) shall be suitable for power direct venting using a (3" or 4") _____ diameter PVC pipe for a total distance of (50ft. or 120 ft.) _____ equivalent feet of vent piping and (50ft. or 120 ft.) _____ equivalent feet of intake air piping.

300K - 500K BTU Input:

For Standard Power Venting: Water heater(s) shall be suitable for standard power venting using a (4" or 6") _____ diameter PVC pipe for a total distance of (70ft. or 120 ft.) _____ equivalent feet of vent piping.

For Power Direct Venting: Water heater(s) shall be suitable for power direct venting using a (4" or 6") _____ diameter PVC pipe for a total distance of (70ft. or 120 ft.) _____ equivalent feet of vent piping and (70ft. or 120 ft.) _____ equivalent feet of intake air piping.

Operation of the water heater(s) in a closed system where thermal expansion has not been compensated for (with a properly sized thermal expansion tank) will void the warranty.

Water heater should incorporate the iCOMM™ system for remote monitoring, leak detection and fault alert.



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 1170 Lot 18.03 Qualification Code 18.03

Work Site Location Brick NJ 08724

Owner in Fee: Meridian Nursing + Rehabilitation @ Brick

Tel. (732) 206-8000 e-mail

Address MARK GANNON PLUMBING

Contractor: HEATING & COOLING L.L.C.

Address 108 SOUTH MAIN STREET

OCEAN GROVE, NJ 07756

Contractor License No. 732/774-5098

BT07345

Exp. Date 6/30/13

Home Improvement Contractor Registration No. or Exemption Reason (if applicable):

Federal Emp. ID No. 54-2141049

FAX: (732) 776-6521

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 \$ 15,000

JOB SUMMARY (Office Use Only)

PLAN REVIEW		INSPECTIONS		DATES (Month/Day)		INITIAL	
		Type	Failure	Failure	Approval		
☐ No Plans Required		Slab					
☐ Partial-Underslab Utilities Approved		Rough					
Date: <u></u> Approved by: <u></u>		Water					
☐ Plumbing Plans Approved		Sewer					
Date: <u></u> Approved by: <u></u>		Fixtures					
Joint Plan Review Required:		Gas Equipment					
☐ Bldg. ☐ Elec. ☐ Fire ☐ Elev.		Gas Piping					
SUBCODE APPROVAL FOR PERMIT		LP Gas Tank					
Date: <u></u>		Fuel Oil Piping					
Approved by: <u></u>		Solar					
SUBCODE APPROVAL FOR CERTIFICATE		TCO					
☐ CO ☐ CCO ☐ CA		Final					
Date: <u></u>							
Approved by: <u></u>							

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.

Applicant sign/Contractor

sign and seal here:

Print name here: Mark J. Gannon

☒ Licensed Plumbing Contractor ☐ Exempt Applicant

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK

Water main break in Gas line En. Meter 13
with Ab Smith 870-7404. One Hot water Newlin

QTY.

13

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

LP Gas Tank

Steam Boiler

Hot Water Boiler

Sewer Pump

Interceptor/Separator

Backflow Preventer

Greasetrap

Sewer Connection

Water Service Connection

Stacks

Other

Administrative Surcharge \$

Minimum Fee \$

State Permit Surcharge Fee \$

TOTAL FEE \$



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 119D Lot 18.63 Qualification Code 18.63

Work Site Location 445 Oak Mountain Blvd

Owner in Fee: Meredith Plumbing & Rehabilitation (a) Brick

Tel. (732) 206-9000 e-mail

Address 108 South Main Street Municipality Ocean Grove, NJ 07756 Zip code 07756

Contractor MARK GANNON PLUMBING, HEATING & COOLING L.L.C. Tel. (732) 774-5098

Address P.O. BOX 353 e-mail

Contractor License No. (732)774-5098 Exp. Date 6/30/15

Home Improvement Contractor Registration No. or Exemption Reason (if applicable):

Federal Emp. ID No. 54-2141049 FAX: (732) 776-6521

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 \$ 1,000

JOB SUMMARY (Office Use Only)

PLAN REVIEW		INSPECTIONS		Dates (Month/Day)	
		Type	Failure	Failure	Approval
☐ No Plans Required					
☐ Partial - Underslab Utilities Approved		Slab			
Date: <u></u> Approved by: <u></u>		Rough			
☐ Plumbing Plans Approved		Water			
Date: <u></u> Approved by: <u></u>		Sewer			
Joint Plan Review Required		Fixtures			
☐ Bldg. ☐ Elec. ☐ Fire ☐ Elev.		Gas Equipment			
SUBCODE APPROVAL FOR PERMIT		Gas Piping			
Date: <u></u>		LPG Gas Tank			
Approved by: <u></u>		Fuel Oil Piping			
SUBCODE APPROVAL FOR CERTIFICATE		Solar			
☐ CO ☐ CCO ☐ CA		TCO			
Date: <u></u>		Final			
Approved by: <u></u>					

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.

Applicant sign/Contractor sign and seal here: Mark S. Gannon

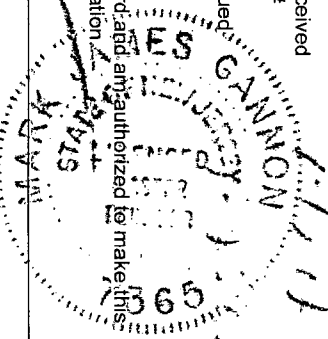
Print name here: Mark S. Gannon

[☒] Licensed Plumbing Contractor [☐] Exempt Applicant

D. TECHNICAL SITE DATA

QTY.	DESCRIPTION OF WORK	FIXTURE/EQUIPMENT	FEE (Office Use Only)
	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		
	LPG Gas Tank		
	Steam Boiler		
	Hot Water Boiler		
	Sewer Pump		
	Interceptor/Separator		
	Backflow Preventer		
	Grease trap		
	Sewer Connection		
	Water Service Connection		
	Stacks		
	Other		

Date Received 11/11/14
Control # 1111
Date Issued 11/11/14
Permit # 1111



Administrative Surcharge	\$	
Minimum Fee	\$	
State Permit Surcharge Fee	\$	
TOTAL FEE	\$	



FIRE PROTECTION SUBCODE TECHNICAL SECTION



A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-212-4000.

Block 1170 Lot 18.03 Qualification Code 18.03

Work Site Location 415 Jack Martin Blvd.

Brick, NJ, 08724

Owner in Fee: Meridian Nursing & Rehabilitation @ Brick

Tel. (732) 206-8000 e-mail _____

Address 54 MARK GANNON PLUMBING,

HEATING & COOLING L.L.C.

Contractor: P.O. BOX 353 Tel. (732) 774-5098

108 SOUTH MAIN STREET e-mail _____

OCEAN GROVE, NJ 07756

Fire Protection Equipment, NJ Div of Fire Safety Permit No. _____

Fire Alarm Contractor No. _____ Exp. Date _____

Home Improvement Contractor Registration No. or Exemption Reason (if applicable): _____

Federal Emp. ID No. 54-2141049 FAX: (732) 776-6521

B. FIRE PROTECTION CHARACTERISTICS

Use Group: Present _____ Proposed _____

Constr. Class: Present _____ Proposed _____

Heating System: ☐ New or ☐ Modification to Existing

OR ☐ Conversion OR ☐ Replacement

Fuel Type: ☐ Gas ☐ Oil ☐ Electric ☐ Solar

Other _____

Location: _____

Total Cost of Fire Protection Work \$ 200

JOB SUMMARY (Office Use Only)

PLAN REVIEW

☐ No Plans Required

☐ Partial - Underslab Utilities Approved

Date: _____ Approved by: _____

☒ Fire Protection Plans Approved

Date: 4/21/12 Approved by: ES

Joint Plan Review Required: ☐ Bldg. ☐ Elec. ☐ Plumb. ☐ Elev.

SUBCODE APPROVAL for PERMIT

Date: 6-27-12

Approved by: [Signature]

SUBCODE APPROVAL for CERTIFICATE

☐ CO ☐ CCO ☐ CA

Date: _____

Approved by: _____

INSPECTIONS

Type: _____

Alarm System _____

Suppression Sys. _____

Standpipe _____

Fire Pump _____

Pre-Eng. System _____

Mechanical _____

Smoke Control _____

TCO _____

Flam/Combust Tanks _____

Fireplace Venting _____

Final _____

Other _____

Dates (Month/Day)

Failure _____

Failure _____

Approval _____

Initial _____

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the owner of the property and am authorized to make this application.

☐ Certified Contractor ☒ Applicant's Signature/Contractor's Signature

☐ Exempt Applicant

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK: Installation of 2 1/4" water heaters, 180 Smith B.T.R. 740A

Water Supply Source _____

Method of Alarm/Suppression System Supervision _____

Flammable/Combustible Tanks _____

Alarm Systems _____

☐ System _____

☐ 110v Interconnected _____

☐ CO Detectors/110v _____

Alarm Devices (i.e., smoke, heat, pulls, water/flow) _____

Supervisory Devices (i.e., tampers, low/high air) _____

Signaling Devices (i.e., horn/strobes, bells) _____

Other Devices _____

TOTAL _____

Suppression Systems _____

Fire Pump _____ GPM Type _____

Dry Pipe/Alarm Valves _____

Pre-action Valves _____

Sprinkler Heads (Dry and Wet) _____

Standpipes _____

Pre-engineered Systems _____

Wet Chemical _____

Dry Chemical _____

CO₂ Suppression _____

Foam Suppression _____

FM200 Suppression _____

Other _____

Other Systems _____

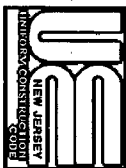
Kitchen Hood Exhaust System _____

Smoke Control System _____

Fuel-Fired Appliances ☒ Gas ☐ Oil ☐ Solid _____

Fireplace Venting/Metal Chimney _____

Date Received 9-12-12
Control # _____
Date Issued 12-2583
Permit # _____



FIRE PROTECTION 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 1170 Lot 18.03 Qualification Code 10

Work Site Location 415 Jack Martin Blvd.

Owner in Fee: Meridian Nursing & Rehabilitation @ Brick

Tel. (732) 206-8000

e-mail

Address same

Contractor: MARK GANNON PLUMBING

HEATING & COOLING L.L.C.

Address 108 SOUTH MAIN STREET

P.O. BOX 353

e-mail

OCEAN GROVE, NJ 07736

Fire Protection Equipment, NJ Permit No. 174321745008

Fire Alarm Contractor No. 174321745008

Home Improvement Contractor Registration No. or Exemption Reason (if applicable):

Federal Emp. ID No. 54-2141049 FAX: (732) 776-6581

B. FIRE PROTECTION CHARACTERISTICS

Use Group: Present

Constr. Class: Present

Heating System: [] New OR [] Modification to Existing

Fuel Type: [] Gas [] Oil [] Electric [] Solar

Location: Other

Location of Main Control Valve: Other

Total Cost of Fire Protection Work \$ 000

Location of Main Control Valve: Other

Location of Main Control Valve: Other

Location of Main Control Valve: Other

Location of Main Control Valve: Other

Location of Main Control Valve: Other

Location of Main Control Valve: Other

Location of Main Control Valve: Other

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Location of Main Control Valve: Other

Location of Main Control Valve: Other

Location of Main Control Valve: Other

Location of Main Control Valve: Other

Location of Main Control Valve: Other

Location of Main Control Valve: Other

C. CERTIFICATION IN LIEU OF OATH
I hereby certify that I am the agent of owner or record and am authorized to make this application.

[] Certified Contractor [] Exempt Applicant

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK: Installation of 2 1/2 inch water meters, NO Smith PT, 7400

Water Supply Source

Method of Alarm/Suppression System Supervision

Flammable/Combustible Tanks

Alarm Systems

[] System

[] 110V Interconnected

[] CO Detectors/110V

Alarm Devices (i.e., smoke, heat, pulls, water/flow)

Supervisory Devices (i.e., tamper, low/high air)

Signaling Devices (i.e., horn/strobes, bells)

Other Devices

TOTAL

Suppression Systems

Fire Pump GPM Type

Dry Pipe/Alarm Valves

Pre-action Valves

Sprinkler Heads (Dry and Wet)

Standpipes

Pre-engineered Systems

Wet Chemical

Dry Chemical

CO₂ Suppression

Foam Suppression

FM200 Suppression

Other

Other Systems

Kitchen Hood Exhaust System

Smoke Control System

Fuel-Fired Appliances [] Gas [] Oil [] Solid

Fireplace Venting/Metal Chimney

Other

Other

Date Received 12-12-12
Control # 18-2583
Date Issued 12-12-12
Permit # 18-2583

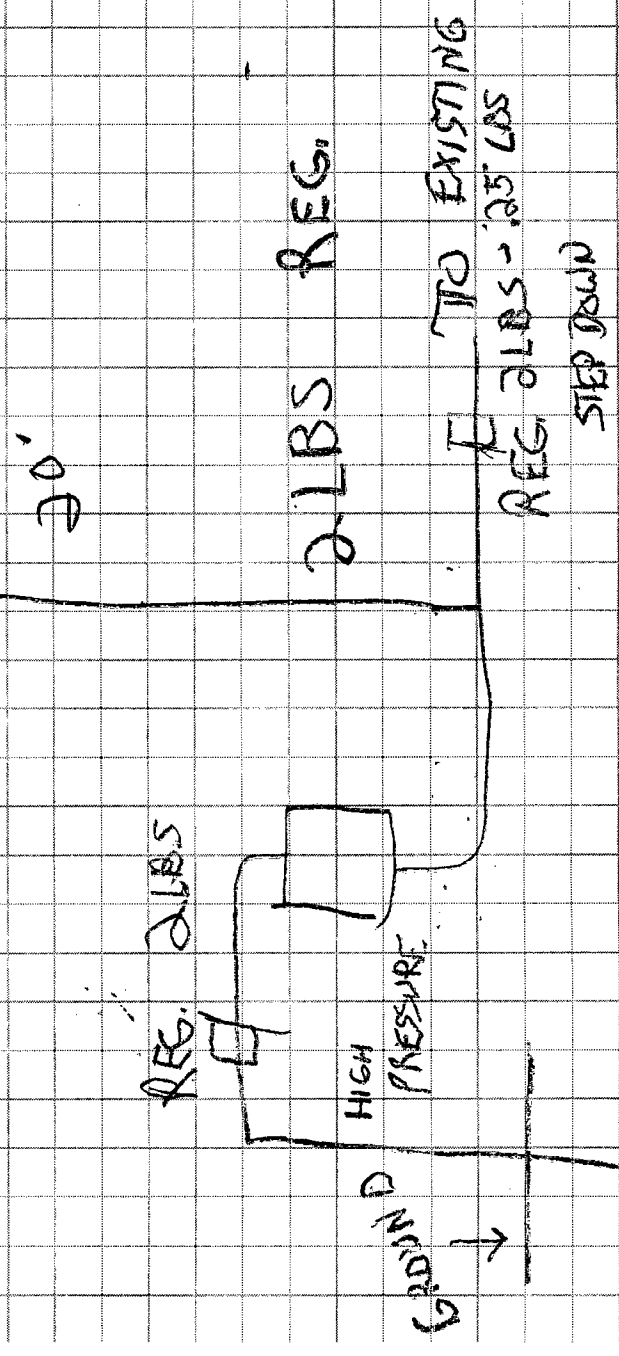
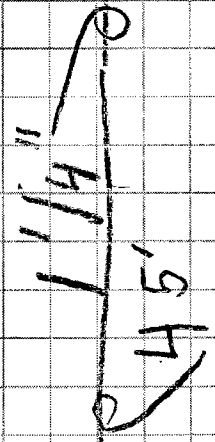
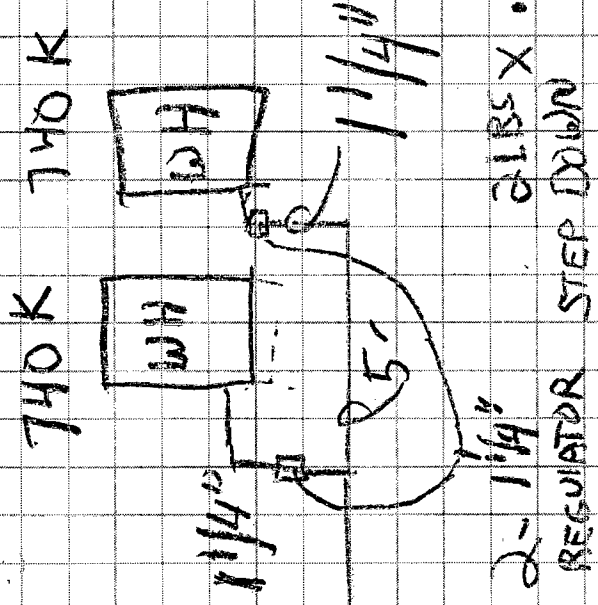
Applicant's Signature/Contractor's Signature

NUMBER FEE (Office Use Only)

Administrative Surcharge \$
Minimum Fee \$
State Permit Surcharge Fee \$
TOTAL FEE \$

TOWNSHIP OF BRICK
RELEASED FOR PERMIT

Building Subcode _____
Plumbing Subcode _____
Fire Subcode _____
Electrical Subcode _____
Plan Reviewer _____
Plans Released _____
Construction Official _____



MARK GANNON PLUMBING,
HEATING & COOLING, L.L.C.
108 S. MAIN STREET
PO BOX 353
OCEAN GROVE, NJ 07756

Meridian Nursing 415 Jack Martin Dr.
EET NO. _____ OF _____
CULATED BY _____ DATE _____
ECKED BY _____ DATE _____
ALE _____



CHIMNEY VERIFICATION FOR REPLACEMENT OF FUEL-FIRED EQUIPMENT

BLOCK 1170 LOT 18.03 QUALIFICATION CODE _____ PERMIT # _____

WORK SITE ADDRESS 415 Jack Martin Blvd. Brick, NJ 08724

Owner in Fee Meridian Nursing & Rehabilitation @ Brick

Verifying Individual MARK GANNON PLUMBING, Company

Address HEATING & COOLING L.L.C.

Street P.O. BOX 353 City _____ State _____ Zip Code _____

Tel: (____) 108 SOUTH MAIN STREET Fax: (732) 776-6521

OCEAN GROVE, NJ 07758

Check the Appropriate Box(es): (732) 774-5098

Type of Replacement: Existing Vent/Chimney: Size 10" x 14" SS

☐ Oil to Gas Conversion	☒ "B" Label Vent	☐ Chimney-Interior
☐ Gas to Oil Conversion	☐ "L" Label Vent	☐ Chimney-Exterior
☒ Gas Appliance Replacement	☐ Flexible Liner	☐ Masonry Chimney-Tile Lined
☐ Oil to Oil Replacement	☐ Power Vent/Exhauster	☐ Masonry Chimney-Unlined
☐ Other _____		☐ Other _____

Type _____ Fuel Type _____ BTU Rating (input/hour) _____

Appliance 1: Hot Water Heater Oil / Gas / Other: _____ 740 K

Appliance 2: Hot water Heater Oil / Gas / Other: _____ 740 K

Appliance 3: _____ Oil / Gas / Other: _____

CHIMNEY LINER

If a chimney liner is being installed, all documentation on the liner must accompany the Permit application.

Manufacturer: _____ Model: _____ UL Listing: _____

Material of Liner: Stainless Steel _____ Aluminum _____

Size of Appliance Vent: _____ Size of Liner: _____ Height of Chimney: _____

Length of Connector: _____ Vent Connector Rise: _____

How does the appliance vent? ☐ Natural Draft ☐ Fan-assisted ☐ Other: _____

PLEASE SIGN ONE OF THE FOLLOWING VERIFICATION STATEMENTS

For Oil or Coal to Gas Conversions:

I have verified that the chimney/vent is in good repair and clear of obstruction and is substantially clean of residue from its previous use serving an oil or coal appliance. I have verified that the chimney/vent is appropriately lined and sized for the appliance(s) being installed.

Signature _____ Date _____

Oil to Oil or Gas to Gas Replacements or New/Additional Appliances:

I have verified that the existing chimney/vent is in good repair and clear of obstruction. I have verified that the existing chimney/vent is appropriately lined and sized for the appliance(s) being installed and/or remaining.

Signature [Signature] Date 6-21-12

Direct Vent Appliance:

I hereby verify that the appliance(s) being installed is a direct vent appliance. I further verify that the existing chimney/vent is appropriately lined and sized for any remaining appliances.

Signature _____ Date _____

Verification Not Submitted:

I choose not to submit verification. I understand that I will be required to be present for the inspection to remove and reinstall the chimney vent connector.

Signature _____ Date _____

FOR MINOR AND EMERGENCY WORK, THIS FORM MUST BE PROVIDED WITH YOUR PERMIT APPLICATION. FOR ALL OTHER WORK, THIS FORM MUST BE PRESENTED TO THE CODE OFFICIAL PRIOR TO FINAL INSPECTION.

All applicable information requested on this form must be supplied.

This form may not be submitted by a homeowner in lieu of the required inspection.