

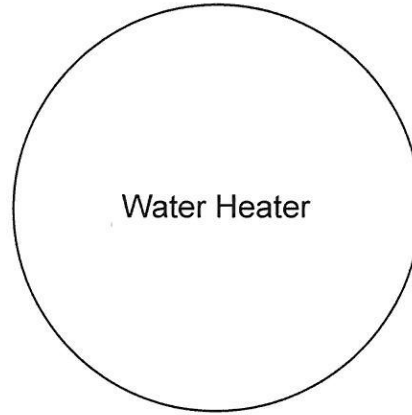
Boiler room at 25 Pya Road



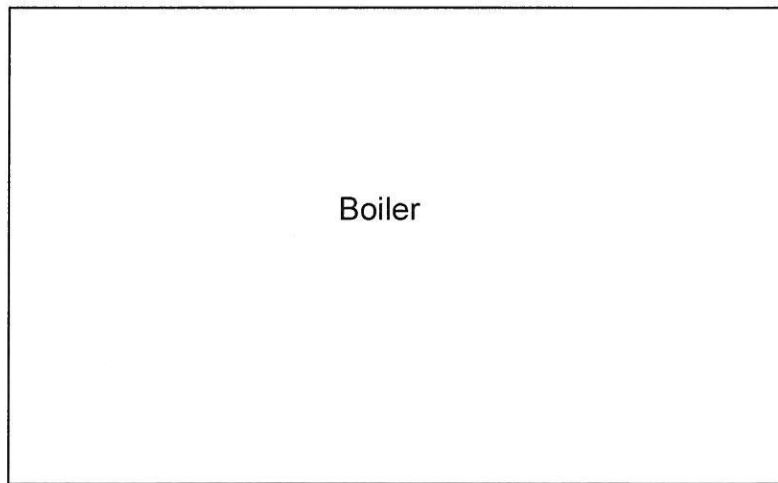
Inspections Division
Date: 10/21/14

80 in

100 in



Water Heater



Boiler

Chimney
flue



Scale
1 in = 10 in



10 in

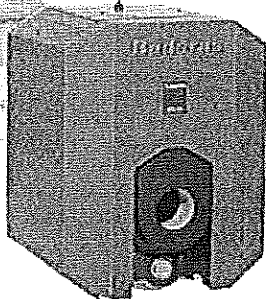
20 in



Inspections Division
Date: 10/21/14

BUDERUS

Cast Iron Residential
G115WS



The G115WS—designed and engineered to extract and deliver more heat from every fuel dollar.

Increase Comfort and Reduce Heating Costs.

Comfortable. Efficient. Intelligent Heating.

Buderus



G115WS Series

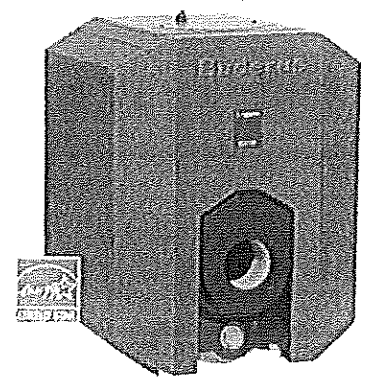
A better way to heat your home

The Buderus G115WS boiler is based on the highly successful G115, the world's best selling boiler. The G115WS has been redesigned and reengineered to extract and deliver more heat from every fuel dollar, and now has higher outputs at less cost per BTU. Acknowledged as the leader in high-efficiency, low emission hydronic heating, Buderus offers innovative design and quality manufacturing with exceptional efficiency and performance.

A G115WS cast iron oil boiler is ideal for new installations or as a replacement for virtually any make or model of boiler. They are compatible with most hot water tanks. Constructed with superior materials and designed by the industry's leading engineers, the G115WS boiler is raising the standard for the industry. With two ETL approved venting options, either into a chimney or directly through the wall, the G115WS allows a wide range of installation possibilities.

Comfortable

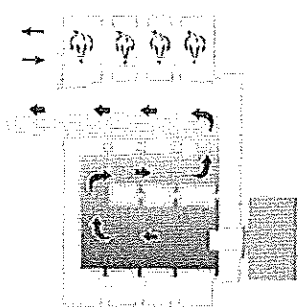
Keeping your home comfortable and warm is a high priority—but it doesn't have to come at a high cost. Whether you heat by baseboard, panel radiators, hydro-air systems or radiant flooring, our advanced heating systems will provide many years of exceptional comfort and economy. A conventional boiler heats and circulates water at only one temperature—typically 170° to 180° F until the thermostat signals it to stop. A Buderus boiler, especially when paired with the Logomatic control, eliminates these room temperature swings by adjusting the boiler water temperature to the current conditions, saving fuel while keeping you warm and comfortable.



Special compounds provide a gas-tight seal for safe and efficient operation. And, thanks to the GL-180M cast iron's amazing flexibility, this boiler resists thermal shock under conditions of rapid temperature change without the need for additional piping or controls.

The three-pass boiler is designed for

- Optimized combustion with positive pressure-fired boilers and tailored chamber geometry — no need for a heat-consuming refractory or target wall eliminating the need for costly repairs.
- Minimal stack losses with the modified three-pass flue design's large heat transfer areas.
- Low standby losses with a full 3" jacket of thermal insulation around the entire block—even underneath the boiler!



How it works

The flame fires into the first chamber. Then the flue products flow through the second pass to the front of the boiler. From there they reverse direction again—moving through the third pass to the back, and finally exiting via the flue connection into the chimney. Because the gases are held in the boiler longer this allows the cast iron to absorb the maximum amount of heat, resulting in a lower stack temperature and a higher efficiency.

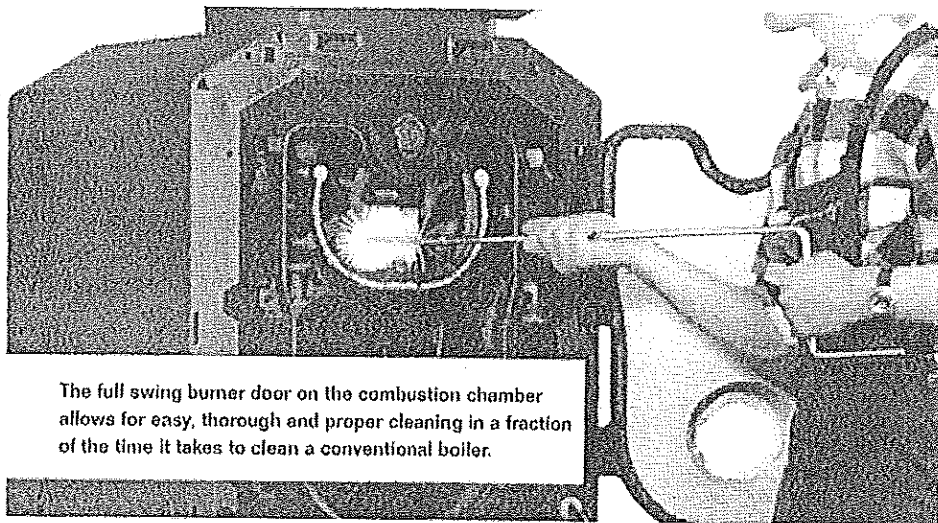
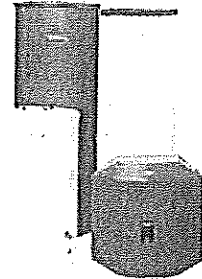
BUDERUS

Cast Iron Residential Off Boi G115WS

Efficient

Energy Star ratings for boilers are based on an Annual Fuel Utilization Efficiency (AFUE) rating, which is a ratio of the heat produced to the energy consumed on an annual basis. Not only is the Buderus G115WS boiler ENERGY STAR certified, but it is also designed for ease of installation and maintenance. With features like compact dimension and integrated handles for ease of transporting, adjustable leveling legs, rear tapings and flue connection, baffles and clips for adjusting stack temperatures and a heavy gauge blue enameled jacket, a Buderus boiler is not only efficient, but it is easy to install.

A full swing burner door, which can be hinged on either the left or the right, and front access plugs which permit flushing of the boiler's interior, allow the G115WS to be thoroughly and properly cleaned in a fraction of the time it takes to clean a conventional boiler.



The full swing burner door on the combustion chamber allows for easy, thorough and proper cleaning in a fraction of the time it takes to clean a conventional boiler.

Domestic Hot Water Tanks

Need domestic hot water? Then combine your Buderus boiler with a Buderus indirect hot water tank. A Buderus tank is well insulated for minimal stand-by heat loss. Available in a vertical, or a horizontal space saving model that installs under the boiler, these tanks have a higher recovery rate than stand alone or tankless coil models. While a Buderus boiler works great with any hot water tank—you can be sure of increased boiler efficiency, system longevity, and minimized service calls when you insist on a Buderus tank and boiler.

Intelligent heating—by design

The G115WS is designed in Germany where fuel costs are significantly higher and environmental regulations are more stringent. Using state of the art techniques in the design and manufacturing process, the G115WS is built to maximize the heating value of every ounce of fuel and is constructed with the highest quality materials.

Manufactured without a heat-consuming refractory or target wall, service and maintenance calls are minimized, while fuel efficiency and heat transfer is maximized. The patented Buderus GL-180M flexible cast iron ensures that the boiler resists thermal shock under conditions of rapid temperature change. Sections are securely joined together and sealed by profiled, beveled steel push nipples, ensuring a long life with no leakage. Special compounds provide a gas-tight seal for safe and efficient operation. The full 3" thermal insulation around the boiler, including underneath, increases efficiency by almost eliminating standby and stack temperature losses.

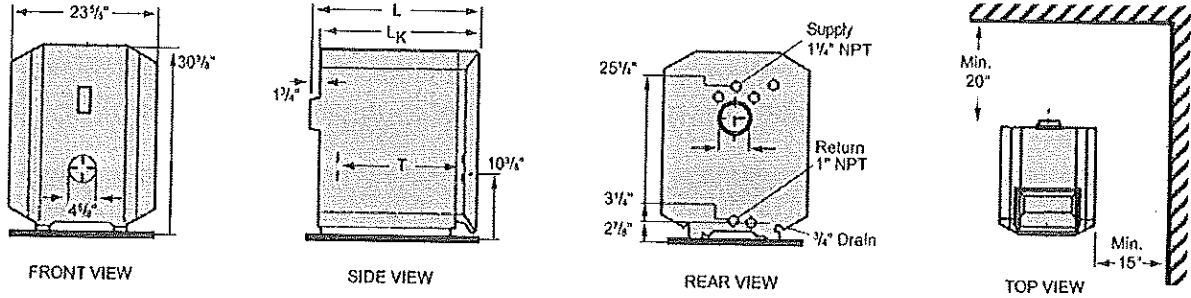
Buderus, the world leader in heating technology, manufactures the highest quality boilers based on two centuries of experience. With its innovative design and quality manufacturing, a Buderus boiler will outlast and out-perform virtually any other residential hot-water system in the world.



Convenient Logamatic Control

Adding a Buderus Logamatic control will give you the ultimate in comfort and fuel savings. Microprocessor-based controls allow the Logamatic to intelligently manage both your home heating and domestic hot water. The Logamatic has 16 standard functions including day/night setback, automatic summer/winter changeover and even a vacation mode. Set it once and relax in the comfort of your warm home.

G115WS Series



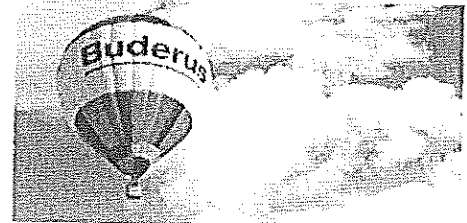
Model	G115WS/3		G115WS/4		G115WS/5	
Gross Output (BTU/Hr)	85,000	74,000	109,000	98,000	136,000	120,000
Net IBR (BTU/Hr)	74,000	64,000	95,000	85,000	119,000	104,000
Firing Rate (GPH)	0.70	0.60	0.90	0.80	1.10	1.0
AFUE	86.7%	86.5%	86.9%	86.8%	87%	86%
Vent Connection Size	5"		5"		5"	
Supply	1 1/4"		1 1/4"		1 1/4"	
Return	1"		1"		1"	
Number of Sections	3		4		5	
Overall Boiler Length (L)	23 1/2"		28 1/2"		33 1/2"	
Boiler Block Length (LK)	21 1/2"		25 1/2"		30 1/2"	
Minimum Boiler Width	18"		18"		18"	
Boiler Width	23 1/2"		23 1/2"		23 1/2"	
Minimum Boiler Height	33 1/2"		33 1/2"		33 1/2"	
Height	34 1/2"		34 1/2"		34 1/2"	
Boiler Feet Spacing	10 1/2"		16 1/2"		20 1/2"	
Fire Box Depth (D)	16"		20 1/2"		25 1/2"	
Fire Box Volume (cu. ft.)	1.20		1.75		2.21	
Dry Weight (lbs.)	330		403		476	
Water Content (gal.)	8.7		10.8		12.9	
Side	15"		15"		15"	
Rear	20"		20"		20"	

The G115WS comes with B-Kit with Tridicator and Pressure Relief Valve.

The burner kits are available with oil burner control, flexible oil liner, circulator and flanges.



Approval numbers are subject to periodic changes and updates. Please visit www.buderus.us for the most up-to-date approval numbers.



A Tradition of Excellence

The world leader in heating technologies since 1825, Buderus produced the first low-temperature hydronic heating systems. Today, Buderus products are acknowledged as the global standard in high-efficiency, low emissions hydronic heating. All Buderus products are designed to meet strict safety and environmental regulations.

Buderus boilers are quick and easy to install and will outlast and outperform virtually any other hot water heating system. They are designed for easy access and service. With appropriate maintenance, Buderus boilers deliver the highest efficiencies throughout the lifespan of operation. Buderus is a member of Bosch Thermotechnology.

G115WS Direct Vent Installation Tips

ETL approved with two 4' 90° elbows, and up to 6' of 4" regular flue pipe for short vent runs. For longer runs, use up to 10' of flexible stainless steel insulated oil vent. Use 4" metal pipe for air intake. Use at least 6" to 8" of 4" metal pipe for air intake in conditioned space in cold climates (below -20°F). Direct vent burners are equipped with pre-and post-purge cycles for safe, complete exhaust of all combustion products, while cooling oil burner nozzle for positive shut-off. Buderus recommends the use of Beckett, Carlin and Rieko burners. Please refer to the Buderus trade price list for models.

Front	Side	Rear	Top	Galvanized Vent Pipe	Flex Insulated Oil Vent	AT-4 Exhaust Only Termination	FT-4 Concentric Termination
24"	6"	18"	6"	18"	1"	1"	1"

AT-4 Aerosol Termination

FT-4 Concentric Pipe-in-Pipe Termination

One of the two ETL certified terminations are required for use with G115WS series boilers for direct vent applications. Both terminations are "zero clearance" systems for easy versatile applications.



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life • www.portlandmaine.gov

Jeff Levine, AICP, Director
Director of Planning and Urban Development

Tammy Munson
Director, Inspections Division

Electronic Signature and Fee Payment Confirmation

Notice: Your electronic signature is considered a legal signature per state law.

By digitally signing the attached document(s), you are signifying your understanding this is a legal document and your electronic signature is considered a **legal signature** per Maine state law. You are also signifying your intent on paying your fees by the opportunities below.

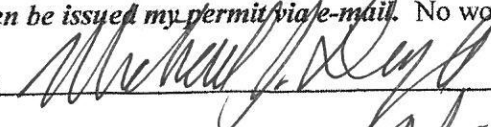
I, the undersigned, intend and acknowledge that no permit application can be reviewed until payment of appropriate permit fees are **paid in full** to the Inspections Office, City of Portland Maine by method noted below:

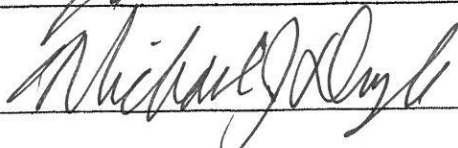
Within 24-48 hours, upon receipt of an e-mailed invoice from Building Inspections, which signifies that my electronic permit application and corresponding paperwork have been received, determined complete, entered by an administrative representative, and assigned a permit number, I then have the following four (4) payment options:

- to provide an on-line electronic check or credit/debit card (we now accept American Express, Discover, VISA, and MasterCard) payment (along with applicable fees beginning July 1, 2014),
- call the Inspections Office at (207) 874-8703 and speak to an administrative representative to provide a credit/debit card payment over the phone,
- hand-deliver a payment method to the Inspections Office, Room 315, Portland City Hall,
- or deliver a payment method through the U.S. Postal Service, at the following address:

City of Portland
Inspections Division
389 Congress Street, Room 315
Portland, Maine 04101

Once my payment has been received, this then starts the review process of my permit. **After all approvals have been met and completed, I will then be issued my permit via e-mail.** No work shall be started until I have received my permit.

Applicant Signature:  Date: 10/15/14

I have provided digital copies and sent them on:  Date: 10/15/14

NOTE: All electronic paperwork must be delivered to buildinginspections@portlandmaine.gov or by physical means ie; a thumb drive or CD to the office.

Room 315 - 389 Congress Street- Portland, Maine 04101 (207) 874-8703 - Fax: 874-8716 - TTY: 874-8936



Acknowledgment of Code Compliance Responsibility- Fast Track Project



I, Michael J. Doyle am the owner or duly **authorized owner's agent** of the property listed below
Print Legal Name

25 Pye Road
Physical Address

I am seeking a permit for the construction or installation of:

New boiler/burner and indirect water heater
Proposed Project Description

I understand that the permits obtained pursuant to this acknowledgement of code compliance responsibility will be in my name and that I am acting as the **general contractor** for this project. I accept full responsibility for the work performed.

I am submitting for a permit authorized by the **State of Maine Uniform Building and Energy Code (MUBEC), Fuel Board Laws and Rules and all locally adopted codes and standards applying to Plumbing, Electrical, Fire Prevention and Protection in anticipation of having it approved or approved with conditions.** I have read the following statement and understand that **failure to comply with all conditions once construction is begun may necessitate an immediate work stoppage until such time as compliance with the stipulated conditions is attained.** I certify that I have made a diligent inquiry regarding the need for concurrent state or federal permits to engage in the work requested under this building permit, and no such permits are required or I will have obtained the required permits prior to issuance of this permit. I understand that the granting of this permit shall not be construed as satisfying the requirements of other applicable Federal, State or Local laws or regulations, including City of Portland historic preservation requirements, if applicable. I understand and agree that this permit does not authorize the violation of regulations.

In addition, I understand and agree that this building permit does not authorize the violation of the **12 M.R.S. § 12801 et seq. - Endangered Species.**

I certify under penalty of perjury and under the laws of the State of Maine the foregoing is true and correct. I further certify that all easements, deed restrictions, or other encumbrances restricting the use of the property are shown on the site plans submitted with this application.

I hereby apply for a permit as a owner of the below listed property and by so doing will assume responsibility for compliance with all applicable codes, bylaws, rules and regulations.
Owner or Owner's Agent

I further understand that it is my responsibility to schedule inspections of the work as required and that the City's inspections will, at that time, check the work for code compliance. The City's inspectors may require modifications to the work completed if it does not meet applicable codes. mpj INITIAL HERE

Sign Here: Michael J. Doyle
Owner or Owner's Authorized Agent

Date: 10/14/14

PLEASE ALSO FILL OUT AND SIGN SECOND PAGE



Acknowledgment of Code Compliance Responsibility- Fast Track Project

OFFICE USE ONLY

PERMIT# _____

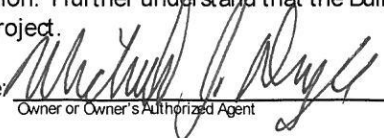
OSL# _____



THIS PROJECT IS ELIGIBLE FOR FAST TRACK PERMITTING BECAUSE IT IS IN THE FOLLOWING CATEGORY / CATEGORIES (CHECK ALL THAT APPLY):

- One/Two Family Swimming Pools, Spas or Hot Tubs
- One/Two Family Decks, Stairs and Porches (attached or detached) First Floor Only
- One/Two Family Detached One Story Accessory Structures (garages, sheds, etc.) not to exceed 600sq ft with no habitable space
- Home Occupations (excluding day cares)
- One/Two Family Renovation/Rehabilitation (within the existing shell)
- Attached One /Two Family Garages / Additions/ Dormers bearing the seal of a licensed design professional
- New Sprinklered One and Two Family Homes (bearing the seal of a licensed design professional stating code compliance) – MUST STILL RECEIVE LEVEL 1 SITE PLAN APPROVAL FROM PLANNING
- One/Two Family HVAC (including boilers, furnaces, heating appliances, pellet and wood stoves)
- Interior office renovations with no change of use (no expansions; no site work; no load bearing structural changes are eligible) bearing the seal of a licensed design professional stating code compliance
- Interior Demolition with no load bearing demolition
- Amendments to existing permits
- Commercial HVAC systems (with structural and mechanical plans bearing the seal of a licensed design professional stating code compliance)
- Commercial HVAC for Boilers/Furnaces/Heating Appliances
- Commercial Signs or Awnings
- Exterior Propane Tanks
- Residential or Commercial Subsurface Waste Water Systems (No Rule Variance Only)
- Renewal of Outdoor Dining Areas
- Temporary Outdoor Tents and stages under 750 sq ft per tent or stage
- Fire Suppression Systems (Both non-water and water based installations)
- Fences over 6'-0" in height
- Site work only
- Retaining walls over 4ft in height with stamped plans (or approval from inspection staff)

I understand that if the property is located in a historic district this application will also be reviewed by Historic Preservation. I further understand that the Building Inspections Division reserves the right to deny a fast track eligible project.

Sign Here: 
Owner or Owner's Authorized Agent

Date: 10/24/14



FILL IN AND SIGN WITH INK



HVAC / Power Equipment Checklist

All of the following information is required and must be submitted. Checking off each item as you prepare your application package will ensure your package is complete and will help to expedite the permitting process.

- A floor plan that includes structural details, size and dimensions of the floor the equipment is going to be installed.
- Information on how the unit is being vented & hanging details if appropriate.
- Details of the specific equipment being installed; ie; specifications and any heating technical specifications. Often this information can be obtained from the manufacturer's spec sheet or retail advertisements.
- A plot plan showing the shape and dimension of the lot, with the distance from the actual property lines, and the principal structure.
- Proof of ownership is required if it is inconsistent with the assessors records.

**All HVAC installations must be conducted in compliance with the
IRC 2009 Building Code**

Separate permits are required for plumbing and electrical installations, as required.

Separate permits are also required based on different properties (different Chart, Block and Lot.)

Permit Fee: \$25.00 for the first \$1000.00 construction cost, \$11.00 per additional \$1000.00 cost

This is not a Permit; you may not commence any work until the Permit is issued.



FILL IN AND SIGN WITH INK



Inspections Division
Date: 10/21/14

Application for Heating, Ventilation, Air Condition (HVAC) Cooking or Power Equipment

To the Inspector of Buildings, Portland Maine:

The undersigned hereby applies for a permit to install the following HVAC, cooking or power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:

Address/CBL: 25 PVA RD Use of Building: RESIDENCE Date: 10/3/14
Name and Address of Owner: MICHAEL DOYLE
Phone Number Owner: 232-2720 E-Mail: Owner: MICHAEL@MAINEYOGA.COM
Name and Address of Installer: GEORGE F. DOUGHTY P+H, INC.
Phone Number Installer: 207-298-5991 E-Mail: Installer: GFDOUTHTY7@GMAIL.COM

<p>Location of Appliance:</p> <p><input checked="" type="checkbox"/> Basement <input type="checkbox"/> Floor</p> <p><input type="checkbox"/> Attic <input type="checkbox"/> Roof</p> <p>Type of Fuel:</p> <p><input type="checkbox"/> Gas <input checked="" type="checkbox"/> Oil <input type="checkbox"/> Solid</p> <p>Appliance Name: <u>BUPERUS 6115/4</u></p> <p>UL Approved: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Will appliance be installed in accordance with the manufacturer's installation instructions? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Type of License of Installer:</p> <p>Master Plumber #: _____</p> <p>Solid Fuel #: _____</p> <p>Oil #: <u>MS 30011525</u></p> <p>Gas #: _____</p> <p>Other: _____</p>	<p>Type of Venting: (Plan required for submittal)</p> <p><input checked="" type="checkbox"/> Masonry Lined</p> <p><input type="checkbox"/> Factory Built: _____</p> <p><input type="checkbox"/> Metal</p> <p><input type="checkbox"/> Factory Built UL Listing: _____</p> <p><input type="checkbox"/> Direct Vent</p> <p>Type: _____ UL #: _____</p> <p># of Tanks: <u>1</u></p> <p>Type of Fuel Tank:</p> <p><input type="checkbox"/> Gas <input checked="" type="checkbox"/> Oil</p> <p>Size of Tank: <u>275</u></p> <p>Distance from tank to center of flame: <u>32'</u></p> <p>Cost of Work: \$ <u>9000</u></p> <p>Permit Fee: \$ <u>113</u></p>
---	--

Signature of Installer: George Doughty E-Mail: GFDOUTHTY7@GMA Co.



New boiler venting

The new boiler will be vented through the existing masonry lined chimney.



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life • www.portlandmaine.gov

Jeff Levine, AICP, Director
Director of Planning and Urban Development

Tammy Munson
Director, Inspections Division

Electronic Signature and Fee Payment Confirmation

Notice: Your electronic signature is considered a legal signature per state law.

By digitally signing the attached document(s), you are signifying your understanding this is a legal document and your electronic signature is considered a **legal signature** per Maine state law. You are also signifying your intent on paying your fees by the opportunities below.

I, the undersigned, intend and acknowledge that no permit application can be reviewed until payment of appropriate permit fees are **paid in full** to the Inspections Office, City of Portland Maine by method noted below:

Within 24-48 hours, upon receipt of an e-mailed invoice from Building Inspections, which signifies that my electronic permit application and corresponding paperwork have been received, determined complete, entered by an administrative representative, and assigned a permit number, I then have the following four (4) payment options:

- to provide an on-line electronic check or credit/debit card (we now accept American Express, Discover, VISA, and MasterCard) payment (along with applicable fees beginning July 1, 2014),
- call the Inspections Office at (207) 874-8703 and speak to an administrative representative to provide a credit/debit card payment over the phone,
- hand-deliver a payment method to the Inspections Office, Room 315, Portland City Hall,
- or deliver a payment method through the U.S. Postal Service, at the following address:

City of Portland
Inspections Division
389 Congress Street, Room 315
Portland, Maine 04101

Once my payment has been received, this then starts the review process of my permit. **After all approvals have been met and completed, I will then be issued my permit via email.** No work shall be started until I have received my permit.

Applicant Signature: Michael J. Doyle Date: 10/15/14

I have provided digital copies and sent them on: Michael J. Doyle Date: 10/15/14

NOTE: All electronic paperwork must be delivered to buildinginspections@portlandmaine.gov or by physical means ie; a thumb drive or CD to the office.

Room 315 - 389 Congress Street- Portland, Maine 04101 (207) 874-8703 - Fax: 874-8716 - TTY: 874-8936



PLUMBING PERMIT APPLICATION

Inspections Division
Date: 10/21/14

PROPERTY ADDRESS	
Street:	25 PYA RD
CBL:	140 E01900/
PROPERTY OWNER(S) NAME	
OWNER NAME:	MICHAEL DOYLE
Applicant Name:	GEORGE DOUGHTY
Mailing Address of Owner/Applicant (if Different)	
E Mail:	MICHAEL@MAINEYOGA.COM
Owner/Applicant Statement	
I certify that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Local Plumbing Inspector(s) to deny a permit.	
Signature of Owner/Applicant	Date: 10/3/14

Town/City **PORTLAND** Permit # _____
 Date Permit Issued / / Fee: \$ _____ Double Fee Charged
 L.P.I. # **360**
 Local Plumbing Inspector Signature _____

The Internal Plumbing Fixtures and Piping shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the plumbing system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Caution: Inspection Required

I have inspected the installation authorized above and found it to be in compliance with the Maine Plumbing Rules Application.

LPI Signature _____

Date Approved (Final) _____

PERMIT INFORMATION

This Application is for 1. <input checked="" type="checkbox"/> NEW PLUMBING 2. <input type="checkbox"/> RELOCATED PLUMBING	Type of Structure to be Served 1. <input checked="" type="checkbox"/> SINGLE FAMILY RESIDENCE 2. <input type="checkbox"/> MODULAR OR MOBILE HOME 3. <input type="checkbox"/> MULTIPLE FAMILY DWELLING 4. <input type="checkbox"/> OTHER-SPECIFY _____ Please call 874-8703 with your permit # to schedule inspections!	Plumbing to be Installed by: NAME: <u>George Doughty</u> E Mail: <u>gfdoughty@gmail.com</u> 1. <input checked="" type="checkbox"/> MASTER PLUMBER 2. <input type="checkbox"/> OIL BURNERMAN 3. <input type="checkbox"/> MFG'D HOUSING DEALER / MECHANIC 4. <input type="checkbox"/> PUBLIC UTILITY EMPLOYEE 5. <input type="checkbox"/> PROPERTY OWNER LICENSE # <u>2011</u>																																								
		<table border="1"> <thead> <tr> <th>Hook-Up & Piping Relocation Maximum of 1 Hook-Up</th> <th>Column 2 Number Type of Fixture</th> <th>Column 1 Number Type of Fixture</th> </tr> </thead> <tbody> <tr> <td rowspan="5"> <input type="checkbox"/> HOOK-UP: to public sewer by those cases where the connection is not regulated and inspected by the local sanitary district. </td> <td> Hosebib / Sillcock</td> <td> Bathtub (and Shower)</td> </tr> <tr> <td> Floor Drain</td> <td> Shower (separate)</td> </tr> <tr> <td> Urinal</td> <td> Sink</td> </tr> <tr> <td> Drinking Fountain</td> <td> Wash Basin</td> </tr> <tr> <td> Indirect Waste</td> <td> Water Closet (Toilet)</td> </tr> <tr> <td rowspan="3"> <input type="checkbox"/> HOOK-UP: to an existing subsurface wastewater disposal system </td> <td> Water Treatment Softener, Filter, Etc.</td> <td> Clothes Washer</td> </tr> <tr> <td> Grease / Oil Separator</td> <td> Dish Washer</td> </tr> <tr> <td> Roof Drain</td> <td> Garbage Disposal</td> </tr> <tr> <td rowspan="3"> <input type="checkbox"/> PIPING RELOCATION: of sanitary lines, drains, and piping without new fixtures. </td> <td> Bidet</td> <td> Laundry Tub</td> </tr> <tr> <td> Other: _____</td> <td> Water Heater</td> </tr> <tr> <td> Fixtures (Subtotal) Column 2</td> <td> Fixtures (Subtotal) Column 1</td> </tr> <tr> <td align="center">OR</td> <td></td> <td> TOTAL FIXTURES</td> </tr> <tr> <td rowspan="2"> <input type="checkbox"/> TRANSFER FEE (\$10.00) </td> <td align="center"> Fees by fixture: First 4 fixtures = \$40 Over 4 = \$10/per fixture </td> <td> Fixture Fee</td> </tr> <tr> <td></td> <td> Transfer Fee</td> </tr> <tr> <td></td> <td></td> <td> Hook-Up & Relocation Fee</td> </tr> <tr> <td colspan="2"> Please call 874-8703 with your permit # to schedule inspections! </td> <td> \$40 PERMIT FEE (TOTAL) </td> </tr> </tbody> </table>	Hook-Up & Piping Relocation Maximum of 1 Hook-Up	Column 2 Number Type of Fixture	Column 1 Number Type of Fixture	<input type="checkbox"/> HOOK-UP: to public sewer by those cases where the connection is not regulated and inspected by the local sanitary district.	Hosebib / Sillcock	Bathtub (and Shower)	Floor Drain	Shower (separate)	Urinal	Sink	Drinking Fountain	Wash Basin	Indirect Waste	Water Closet (Toilet)	<input type="checkbox"/> HOOK-UP: to an existing subsurface wastewater disposal system	Water Treatment Softener, Filter, Etc.	Clothes Washer	Grease / Oil Separator	Dish Washer	Roof Drain	Garbage Disposal	<input type="checkbox"/> PIPING RELOCATION: of sanitary lines, drains, and piping without new fixtures.	Bidet	Laundry Tub	Other: _____	Water Heater	Fixtures (Subtotal) Column 2	Fixtures (Subtotal) Column 1	OR		TOTAL FIXTURES	<input type="checkbox"/> TRANSFER FEE (\$10.00)	Fees by fixture: First 4 fixtures = \$40 Over 4 = \$10/per fixture	Fixture Fee		Transfer Fee			Hook-Up & Relocation Fee	Please call 874-8703 with your permit # to schedule inspections!
Hook-Up & Piping Relocation Maximum of 1 Hook-Up	Column 2 Number Type of Fixture	Column 1 Number Type of Fixture																																								
<input type="checkbox"/> HOOK-UP: to public sewer by those cases where the connection is not regulated and inspected by the local sanitary district.	Hosebib / Sillcock	Bathtub (and Shower)																																								
	Floor Drain	Shower (separate)																																								
	Urinal	Sink																																								
	Drinking Fountain	Wash Basin																																								
	Indirect Waste	Water Closet (Toilet)																																								
<input type="checkbox"/> HOOK-UP: to an existing subsurface wastewater disposal system	Water Treatment Softener, Filter, Etc.	Clothes Washer																																								
	Grease / Oil Separator	Dish Washer																																								
	Roof Drain	Garbage Disposal																																								
<input type="checkbox"/> PIPING RELOCATION: of sanitary lines, drains, and piping without new fixtures.	Bidet	Laundry Tub																																								
	Other: _____	Water Heater																																								
	Fixtures (Subtotal) Column 2	Fixtures (Subtotal) Column 1																																								
OR		TOTAL FIXTURES																																								
<input type="checkbox"/> TRANSFER FEE (\$10.00)	Fees by fixture: First 4 fixtures = \$40 Over 4 = \$10/per fixture	Fixture Fee																																								
		Transfer Fee																																								
		Hook-Up & Relocation Fee																																								
Please call 874-8703 with your permit # to schedule inspections!		\$40 PERMIT FEE (TOTAL)																																								



BUDERUS

Indirect Fired Domestic
Hot Water Tanks



Inspections Division
Date: 10/21/14



S, SU, and LT Thermoglaze Single Coil Tanks
SM Thermoglaze Dual Coil Tanks
SST Stainless Steel Single-Coil Tanks

Clean, Pure, Reliable Hot Water

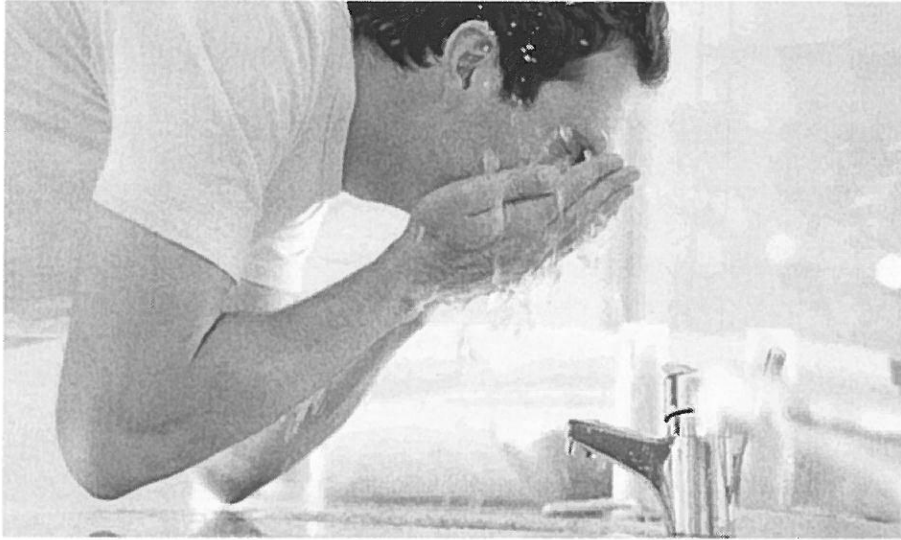


Comfortable. Efficient. Intelligent Heating.

Buderus

The Buderus Hot Water Advantage

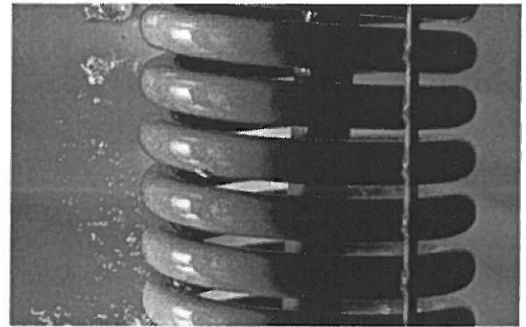
In North America the average household spends around 30% of their energy costs on domestic hot water. Buderus designs its hot water tanks to work more economically and efficiently. Buderus pioneered new methods of producing and storing domestic hot water, so you are assured of greater operating efficiencies, lower fuel consumption and consistent hot water while saving money.



Buderus water tanks are a reliable and clean way to store hot water. From small residences to large commercial operations, there is a Buderus domestic hot water tank that is just right for your application.

Simple Maintenance and Reliable Operation

Buderus domestic hot water tanks offer features that provide for ease of installation, simple maintenance and reliable operation. All Thermoglaze models are equipped with a magnesium anode rod for protection against corrosion, a drain for easy maintenance, and have adjustable screw-on feet for leveling. An easy-access cover aids in cleaning and maintaining the coil and tank interior.



Thermoglaze Tank Features and Benefits

Buderus' patented Thermoglaze® is a ceramic material which is thermally bonded to the internal components of the tank to provide a glass-like coating to protect against the corrosive effects of minerals naturally existing in water. All Thermoglaze tanks are equipped with the following additional features:

- Corrosion Protection – the Buderus Thermoglaze® process and standard magnesium anode rod(s) protect tank interior from corrosion caused by most types of water
- Economical – high density insulation for better temperature maintenance of stored hot water
- Heat exchanger has large surface area for excellent hot water recovery rates

NEW



S and SU Series – Buderus Thermoglaze Single-Coil Tanks

Buderus' four single coil indirect DHW storage tank models S32, SU54, SU80 and SU100 offer easy installation and simple maintenance to provide excellent value at a competitive price.

- All tanks feature an aesthetic white cover design, patented Thermoglaze® enamel interior and magnesium anode rod for optimal service life
- Models SU80 and SU100 have a large front clean out port for easy maintenance and a second magnesium anode rod for extended tank life*
- Screw-on feet enable easy leveling of the tank
- Available capacities 30, 51, 77 and 98 gallons

*Consult Installation and Service Instructions for recommended maintenance



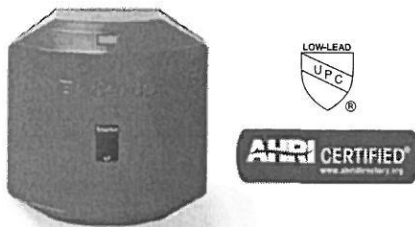


SM Series – Buderus Thermoglaze Dual-Coil Tanks

Buderus' dual coil indirect DHW storage tanks, SM80 and SM100, are designed for solar and high performance applications.

- Tanks have two internal coils for connection to two heat sources such as one solar thermal system and one boiler
- Features a blue or universal white cover design, patented Thermoglaze® enamel interior and magnesium anode rod for optimal service life
- Second magnesium anode rod for extended tank life and a large front clean out port for easy service*
- Screw-on feet enable easy leveling of the tank
- Available capacities 75 and 97 gallons

*Consult Installation and Service Instructions for recommended maintenance



LT Series – Buderus Thermoglaze Horizontal Single-Coil Tanks

Short on space? The LT horizontal tanks are designed to fit under Buderus boilers resulting in a smaller footprint.

- Horizontal design for small footprint
- Constant hot water at the turn of the tap
- Available capacities in 42, 52 and 76 gallons



SST Series – Buderus Stainless Steel Single-Coil Tanks

The SST stainless steel indirect hot water tank has a welded and passivated 316L stainless steel interior and a 316L stainless steel single coil heat exchanger. This provides durability and resistance to the corrosive tendencies of domestic water.

- Stainless steel heating coil efficiently transfers high volumes of BTU's from the heat source to domestic water stored in the tank
- Two inches of high density CFC/HCFC-free polyurethane foam with a tested R Value of 13.4 provide economical standby losses
- Available capacities 40, 67, 82 and 113 gallons



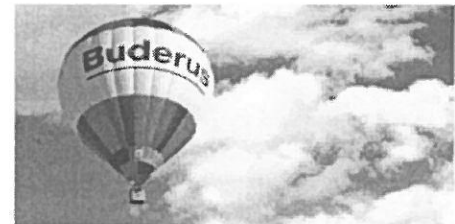
Configuration	Vertical Single Coil Models				Vertical Dual Coil Models								Horizontal Single Coil Models		
	S32	SU54	SU80	SU100	SM80				SM100				LT160	LT200	LT300
Physical Data															
Tank Capacity, gal	30.0	51.3	77.4	98.4	75.4				96.9				42.6	52.5	76.0
Diameter, in.	21 ³ / ₄	21 ³ / ₄	26 ³ / ₈	26 ³ / ₈	26 ³ / ₈				26 ³ / ₈				25 ³ / ₄	25 ³ / ₄	25 ³ / ₄
Height, in.	38 ⁵ / ₈	60 ¹ / ₄	58 ⁷ / ₈	72 ¹ / ₄	58 ⁷ / ₈				72 ¹ / ₄				25 ³ / ₄	25 ³ / ₄	25 ³ / ₄
Length, in.	-	-	-	-	-				-				36 ¹ / ₄	42 ¹ / ₄	57 ³ / ₄
Connection Heat Exchanger Coil, in.	³ / ₄	1	1	1	1				1				1	1	1
Connection DHW outlet, in.	³ / ₄	1	1	1	1				1				1	1	1
Connection Cold Water Inlet, in.	³ / ₄	1	1	1	1				1				1 ¹ / ₄	1 ¹ / ₄	1 ¹ / ₄
Connection Recirculation, in.	³ / ₄	³ / ₄	³ / ₄	³ / ₄	³ / ₄				³ / ₄				³ / ₄	³ / ₄	³ / ₄
Approx. Dry Weight, lbs	160	170	231.5	282	260				298				220	247	364
Max. DHW Temperature, °F	203	203	203	203	203				203				203	203	203
Max. DHW Operating Pressure, psi	150	150	150	150	150				150				150	150	150
Standby Heat Loss, °F/h	1.0	0.4	0.5	0.4	0.6				0.5				0.6	0.6	0.4
Max. Heat Exchanger Coil Water Temperature, °F	230	230	230	230	230				230				212	212	212
Max. Heat Exchanger Coil Pressure, psi	232	232	232	232	232				232				232	232	232
Performance Data*															
Heat Input to Tank, MBH	88.0	84.9	119.2	143.9	112.4	78.2	178.8	156.7	169.1	87.9	235.4	202.9	76.1	83.0	126.3
Continuous Rating: (gph)	137	130	189	218	185	135	298	278	265	153	376	344	122	128	208
First Hour Rating: (gph)	165	180	264	312	257	135	363	345	356	153	462	434	163	176	276
Boiler Water Flow Rate, gpm	8.0	11.4	11.4	14.0	11.4	11.4	11.4	11.4	14.0	14.0	14.0	14.0	14.0	14.0	14.0
Coil Pressure Drop: ft of Head:	1.9	2.4	2.7	3.8	2.5	1.8	3.2	1.4	5.8	3.5	10.2	2.1	2.4	2.8	3.3

Configuration	Stainless Steel Models			
	SST150-40	SST250-65	SST300-80	SST450-119
Physical Data				
Tank Capacity, gal	40	67	81.5	113.4
Diameter, in.	20	24	24	28
Height, in.	56	60	70	69
Length, in.	-	-	-	-
Connection Heat Exchanger Coil, in.	1	1	1	1
Connection DHW outlet, in.	1	1.5	1.5	1.5
Connection Cold Water Inlet, in.	1	1.5	1.5	1.5
Approx. Dry Weight, lbs (5% higher including packaging)	105	147	177	213
Max. DHW Temperature, °F	194			
Max. DHW Operating Pressure, psi	150			
Standby Heat Loss, °F/h*	0.9	0.7	0.6	0.5
Performance Data*				
Heat Input to Tank, MBH	115	154	171	216
Continuous Rating: (gph)	181	263	285	349
First Hour Rating: (gph)	208	327	358	459
Boiler Water Flow Rate, gpm	14	14	14	14
Coil Pressure Drop: ft of Head	4.5	5.7	6.1	6.5

* Performance data tested at 180°F (82.2°C) Boiler Supply Temperature, 58°F (14.4°C) Cold Water Inlet Temperature, 135°F (57.2°C) DHW Outlet Temp

NOTES:

1. All AHRI Certified ratings are in **BLUE Boldface type**
2. SM80 & SM100 are UPC, USEC and Low-Lead Certified by IAPMO R & T
3. S32, SU54, SU80, SU100, LT160, LT200, LT300 have UPC and Low-Lead Certification by IAPMO Research & Testing
4. Ratings in BLACK are outside the scope of AHRI-IWH Certification Program



A Tradition of Excellence

The world leader in heating technologies since 1825, Buderus produced the first low-temperature hydronic heating systems. Today, Buderus products are acknowledged as the global standard in high-efficiency, low emissions hydronic heating. All Buderus products are designed to meet strict safety and environmental regulations.

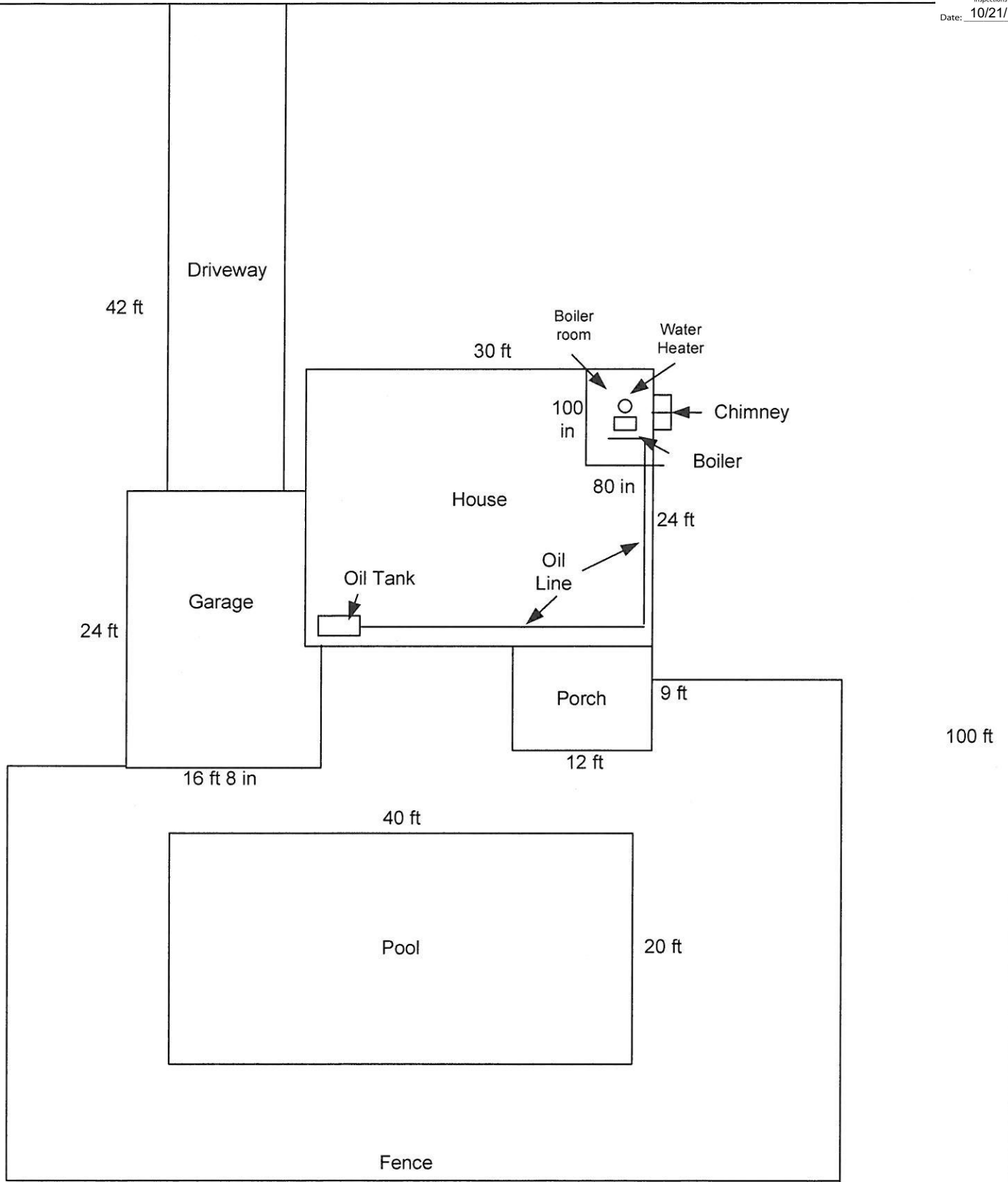
Buderus boilers are quick and easy to install and will outlast and outperform virtually any other hot water heating system. They are designed for easy access and service. With appropriate maintenance, Buderus boilers deliver the highest efficiencies throughout the lifespan of operation. Buderus is a member of Bosch Thermotechnology.

25 Pya Road

80 ft



Inspections Division
Date: 10/21/14



Scale
1 in = 1 ft



1 ft 2 ft