

called
2-10-94
JF



RECEIVED
FEB 8 1994
DIV. OF INSPECTION

1. Proposed Work-site at: 1675 Forge Pond Rd.

2. Name of Owner in Fee: Rizzo, William [REDACTED]

Address 1675 Forge Pond Rd Brick 08724
street municipality zip code

3. Ownership in Fee: Public ☐ Private ☒

4. Principal Contractor: Solar Heaven, Inc Tel. (908) 364-0664

Address 2190 4th Bldg. B Toms River 08755

License No. OR, if new home, Builder Reg. No. 6210 Exp. Date _____

Federal Emp. No. 22-2849999 Social Security No. _____

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

Address _____

6. Responsible Person Solar Heaven, Inc Tel. (908) 364-0664
in Charge of Work

Est. Cost

7000

Emergency/Elect Gas Workforce

III. DO YOU WANT: (optional) 1 ☐ Partial Releases 2. ☐ Prototype Processing

1. ☐ Elevators/Escalators/Lifts/
Dumbwaiters/Moving Walks

2. ☐ High Pressure Boilers

3. ☐ Pressure Vessels

4. ☐ Refrigeration Systems

5. ☐ Cross-Connections/Backflow
Preventers

6. ☐ Hazardous Uses/Places of Assembly

7. ☐ Sprinklers

8. ☐ Smoke Control Systems in Open Wells

9. ☐ Underground Storage Tanks

		Update	Update
1. Building	\$		
2. Electrical			
3. Plumbing		45	/
4. Fire Protection		33	/
5. Elevator Devices			
6. Subtotal	\$	78	/
7. Less 20% for State Plan Review			
8. Subtotal	\$		/
9. DCA Training Fee		6	/
10. Subtotal	\$		/
11. Cert. of Occupancy		20	/
12. Other			
13. TOTAL	\$	104	09

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

{office use only}

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

No of dwelling units:

Before Construction _____

After Construction _____

Net gain or loss _____

1. State Specific Use:

2. Use Group:

**3. Change in Use Group,
Indicate Former:**

LDS BR 10103498

CERTIFICATION IN LIEU OF OATH

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

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

Mark the following applicable boxes:

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

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

- B. () I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(e)1.vii:

I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

- C. () I further certify that I will perform or supervise the following work:

C.1. () Building C.2. () Fire Protection

I further certify that I will perform the following work:

C.3. () Electrical C.4. () Plumbing

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

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

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

Signature _____ Date _____

II. AGENT SECTION

(to be completed if the applicant is not the owner in fee)

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

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

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

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

(☒) Check if contractor.

Agent Name Solar Heaven, Inc

Address 2190 Rt 9 Bldg. B
Tom's River N.J. 08755

Telephone (908) 364-0664

Signature [Signature] Date _____

OFFICE DATE RECEIVED: _____

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

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

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

X. CERTIFICATES ISSUED (office use only)	DATE ISSUED	DATE EXPIRED	DATE REISSUED	DATE EXPIRED
☐ Temporary Certificate of Occupancy	No. _____	_____	_____	_____
☐ Temporary Certificate of Compliance	No. _____	_____	_____	_____
☐ Continued Certificate of Occupancy	No. _____	_____	_____	_____
☐ Certificate of Compliance	No. _____	_____	_____	_____
☐ Certificate of Occupancy	No. _____	_____	_____	_____
☐ Certificate of Approval	No. _____	_____	_____	_____



CONSTRUCTION PERMIT

Date Issued 2-15-94
Control #
Permit # 189-94

IDENTIFICATION Block 839 Lot 11
Work Site Location 1675 FORGE POND RD Contractor Solar Heenan Inc.
Owner in Fee William Rizzo Address _____
Address same Tele. (____) _____
Lic. No. or Bldrs. Reg. No. _____ Exp. Date 10/94
Federal Emp. No. _____ or Social Security No. 039 H

is hereby granted permission to perform the following work:

[] BUILDING ☒ PLUMBING [] OTHER _____
[] ELECTRICAL ☒ FIRE PROTECTION

DESCRIPTION OF WORK:

elec. to gas

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 \$ 7000,

[Signature]
CONSTRUCTION OFFICIAL

PAYMENTS (Office Use Only)		0.00
Building	<u>11 #</u>	
Plumbing	<u>4.5. PLUMBING</u>	15.00
Electrical	<u>FIRE</u>	3.00
Fire Protection	<u>33; D.C.A.</u>	6.00
Other	<u>C / D</u>	10.00
Other	<u>TOTAL</u>	14.00
DCA Training Fee	<u>6 CASH</u>	14.00
Cert. of Occ.	<u>20- CHARGE</u>	0.00
Other	<u>2/15/94 NO. 5 0016A005</u>	6.19
Total	<u>104.</u>	
Check No.	_____	
Cash	_____	
Collected By:	_____	



**FIRE PROTECTION
SUBCODE
TECHNICAL SECTION**



Date Received _____
Date Issued 2-15-94
Control # _____
Permit # 189-94

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

Block 839 Lot 11
Work Site Location 1675 Forge Road
Owner in Fee Rizzio William
Address Same as Above
Tele [REDACTED]
Contractor JOHN HEAVEN INC
Address 2190 E 9th St B
Tele 808-364-0664 N.J. 08205
Lic. No. 6210
Federal Emp. No. 2849999 or Social Security No. _____

B. FIRE PROTECTION CHARACTERISTICS

Use Group _____ Present _____ Proposed _____
Constr. Class. _____ Present _____ Proposed _____
Heating Systems ☐ New ☐ Existing
Type: ☐ Gas ☐ Oil ☐ Electrical ☐ Solar
Location: Barnett
Total Est. Cost of Fire Prot. Work \$ _____ ☐ Other _____

JOB SUMMARY (Office Use Only)

PLAN REVIEW:	INSPECTIONS:	Dates (Month/Day)
☐ No Plans Required	Type:	Failure Failure Approval Initial
Joint Plan Review Required:	Suppression Test	
☐ Bldg. ☐ Plumb.	Fire Alarm Test	
☐ Elec. ☐ Elevator	Smoke Test	
☐ Fire Plans Approved	Mechanical	
Date: _____	TCO	
Approved by: <u>[Signature]</u>	Other	
SUBCODE APPROVAL	Other	
☐ CO ☐ CCO <u>1/1/94</u>	Other	
Date: <u>5/10/94</u>	Other	
Approved by: <u>[Signature]</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.

[Signature]
SIGNATURE

D. TECHNICAL SITE DATA

Description of Work etc BB to Gas B.B.
Water Supply Source _____
Method of Valve Supervision _____
Local Alarm Supervision _____
Central Supervision _____
Proprietary Supervision _____
Flammable Liquid Storage Tanks () Capacity _____ Fuel _____
Combustible Liquid Storage Tanks () Capacity _____ Fuel _____
L.P.G. Storage Tanks () Capacity _____ Fuel _____
L.N.G. Storage Tanks () Capacity _____ Fuel _____

FEE (Office Use Only)

Wet Sprinkler Heads _____
Dry Sprinkler Heads _____
TOTAL _____
Smoke Detectors _____
Heat Detectors _____
TOTAL _____
Stand Pipes _____
Kitchen Hood Exhaust Systems _____
Pre-Engineered Systems _____
CO₂ Suppression _____
Halon Suppression _____
Foam Suppression _____
Dry Chemical _____
Wet Chemical _____
Gas or Oil Fired Appliance _____
OTHER _____

Paid ☐ Check # _____
Collected by: _____
Administrative Surcharge \$ _____
Minimum Fee \$ _____
DCA Training Fee \$ _____
TOTAL FEE \$ _____



FIRE PROTECTION SUBCODE TECHNICAL SECTION



Date Received _____
Date Issued 2.15.94
Control # 189-94
Permit # _____

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

Block 833 Lot 11
Work Site Location 1475 Pange Road Area
Owner in Fee 1220 Edlin
Address 1100 N. J. 4103
Tele. 624-6664
Lic. No. 6210
Federal Emp. No. 284999 or Social Security No. _____

B. FIRE PROTECTION CHARACTERISTICS

Use Group _____ Present _____ Proposed _____
Const. Class. _____ Present _____ Proposed _____
Heating Systems ☐ New ☐ Existing
Type: ☐ Gas ☐ Oil ☐ Electrical ☐ Solar
☐ Other _____
Location: _____
Total Est. Cost of Fire Prot. Work \$ _____ ☐ Other _____

JOB SUMMARY (Office Use Only)

PLAN REVIEW: _____
☐ No Plans Required
Joint Plan Review Required: _____
☐ Bldg. ☐ Plumb.
☐ Elec. ☐ Elevator
☐ Fire Plans Approved
Date: _____
Approved by: _____
SUBCODE APPROVAL
☐ CO ☐ CCO ☐ CA
Date: _____
Approved by: _____

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.

SIGNATURE

D. TECHNICAL SITE DATA

Description of Work CKE 68 to 640 D.B.
Water Supply Source _____
Method of Valve Supervision _____
Local Alarm Supervision _____
Central Supervision _____
Proprietary Supervision _____
Flammable Liquid Storage Tanks _____
Combustible Liquid Storage Tanks _____
L.P.G. Storage Tanks _____
L.N.G. Storage Tanks _____
Fuel _____
() Capacity _____
() Capacity _____
() Capacity _____
Fuel _____

FEE (Office Use Only)

Wet Sprinkler Heads _____
Dry Sprinkler Heads _____
TOTAL _____
Smoke Detectors _____
Heat Detectors _____
TOTAL _____
Stand Pipes _____
Kitchen Hood Exhaust Systems _____
Pre-Engineered Systems _____
CO₂ Suppression _____
Halon Suppression _____
Foam Suppression _____
Dry Chemical _____
Wet Chemical _____
Gas or Oil Fired Appliance _____
OTHER _____
33

Paid ☐ Check # _____
Collected by: _____
Administrative Surcharge \$ _____
Minimum Fee \$ _____
DCA Training Fee \$ _____
TOTAL FEE \$ _____



**PLUMBING
SUBCODE
TECHNICAL SECTION**



Date Received
Date Issued
Control #
Permit #

2-15-94
189-94

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

Block 839 Lot 1675
Work Site Location Reich Horse And Rd.
Owner in Fee Rizzo William
Address Same as Above
Tele. [REDACTED]
Contractor JOE HEAVEN INC (Joe Hastes Plumber)
Address 2190 25 Bldg. B
Toms River NJ 08735
Tele. (908) 364-0664
Lic. No. 6213
Federal Emp. No. 22-284559 or Social Security No. _____

B. PLUMBING CHARACTERISTICS

Use Group Present _____ Proposed _____
Building Sewer Size _____ Public Sewer _____ Private Septic _____
Water Service Size _____ Public Water _____ Private Well _____
Estimated Cost of Plumbing Work \$ 7000

JOB SUMMARY (Office Use Only)

PLAN REVIEW:		INSPECTIONS		Dates (Month/Day)		
		Type:	Failure	Failure	Approval	Initial
☐ No Plans Required		Slab				
☐ Joint Plan Review Required:		Rough				
☐ Bldg. ☐ Elec.		Water				
☐ Fire ☐ Elevator		Sewer				
☐ Plumb. ☐ Piping		Fixtures				
Date: <u>2/8/94</u>		Gas Equipment				
Approved by: <u>[Signature]</u>		Gas Piping				
		Solar				
SUBCODE APPROVAL:		TCO				
☐ CO ☐ CCO ☒ CA						
Approved By: <u>[Signature]</u>						
Date: <u>5-10-94</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.

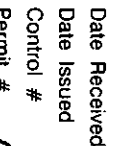
Signature—Contractor Seal

☐ Licensed Plumbing Contractor ☐ Exempt Applicant

D. TECHNICAL SITE DATA (List all fixtures.)

NO.	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	
	Steam Boiler	
	Hot Water Boiler	
	Sewer Pump	
	Interceptor/Separator	
	Backflow Preventer	
	Greasetrap	
	Water Cooled A/C	
	or Refrigeration Unit	
	Sewer Connection	
	Water Service Connection	
	Active Solar System	
	Other	

Paid ☐ Check # _____ Administrative Surcharge \$ 45-
Minimum Fee \$ _____
DCA Training Fee \$ _____
Collected by: _____ TOTAL \$ _____



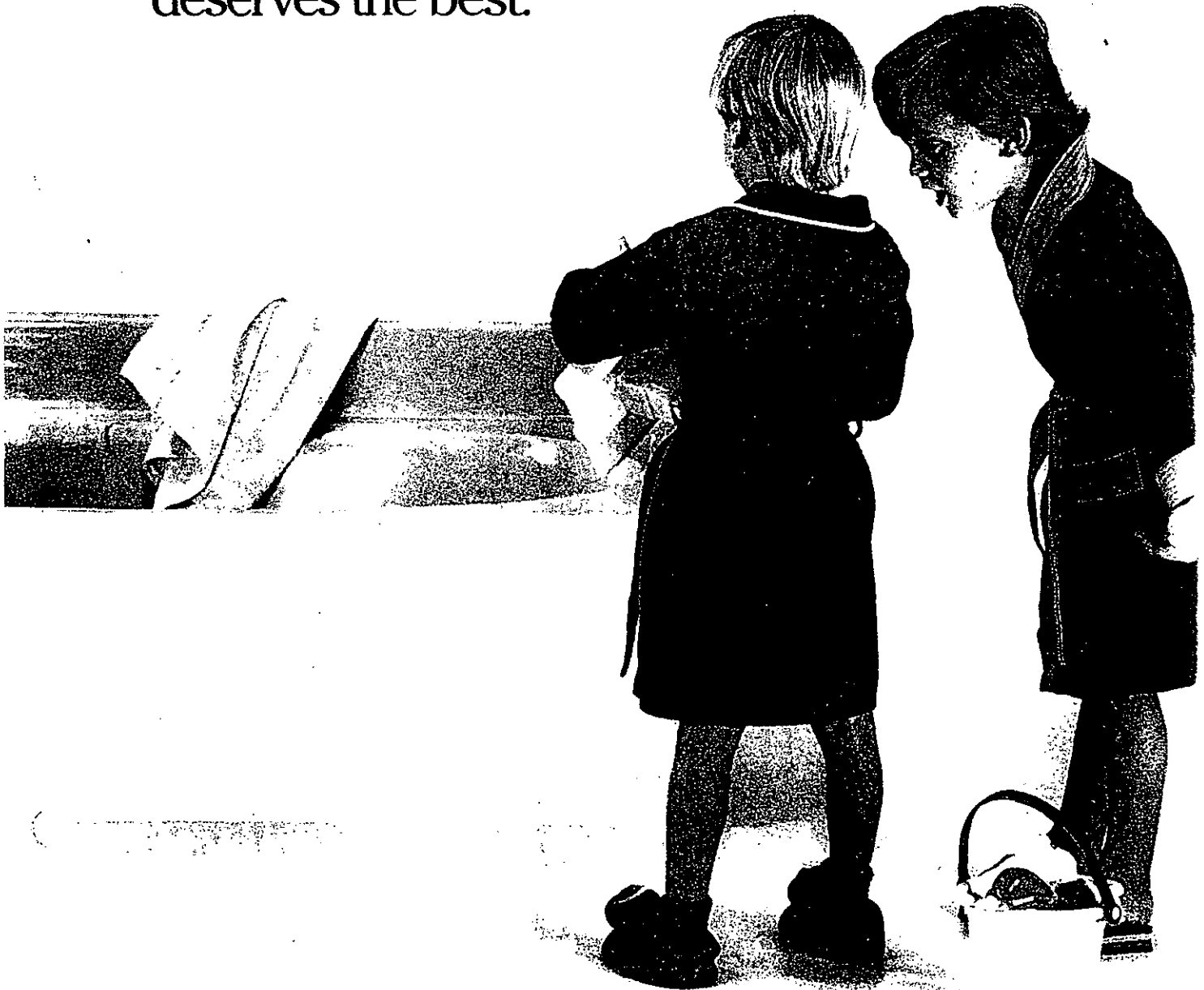
Date Received	Date Issued	Control #	Permit #
	2-15-94		184-94

[] Licensed Plumbing Contractor [] Exempt Applicant

Table 1

A.O. SMITH RESIDENTIAL GAS WATER HEATERS

Because your family
deserves the best.



ENERGY SAVER WATER HEATERS

**A.O. Smith's most affordable
energy efficient models.**

A. O. Smith Energy Saver gas water heaters live up to their name.

Built to meet the new Federal efficiency standards of 1990, these water heaters offer many of the same quality features of our Conservationist models, such as an energy-saving pilot, a thermostat that permits you to "dial down" while on vacation to conserve fuel, and energy-efficient foam insulation on most models.

Built-in durability.

All Energy Saver models feature a high quality glass-lined tank, anodic corrosion protection and a baked enamel finish in attractive colors.

High input "big family" models.

High input Energy Saver models produce

hot water at a much faster rate than standard energy-saving models. This means more hot water when you need it. And, there are eight models to choose from.

Economy Energy Saver models.

You have a choice of five FSG upright models to meet every need, ranging from 30 to 100 gallon storage capacities.

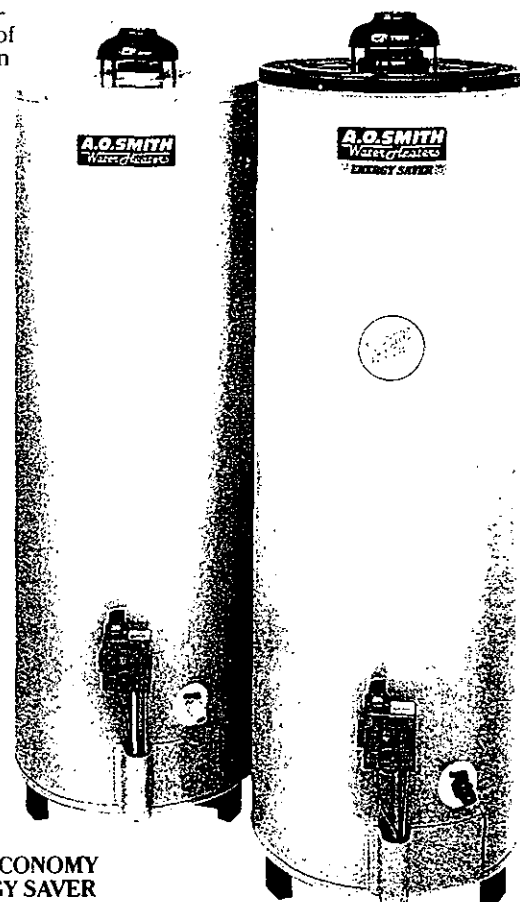
Space-saving Low Boy Models.

Ideal for tight spots, or when space is at a premium, these Low Boy Energy Saver models can be installed practically anywhere for a dependable, steady supply of hot water. Choose from 30 and 40 gallon sizes for both natural and propane gas usage.

5-YEAR WARRANTY MODELS	10-YEAR WARRANTY MODELS	GAL. CAP.	NATURAL GAS		PROPANE GAS	
			BTU INPUT PER HR.	GAL/HR.* RECOVERY 90' RISE	BTU INPUT PER HR.	GAL/HR.* RECOVERY 90' RISE
ENERGY SAVER UPRIGHT MODELS						
FSG-30	PGX-30	30	30,000	30.3	30,000	30.3
FSG-40	PGX-40	40	32,500	32.8	32,500	32.8
FSG-50	PGX-50	50	40,000	40.4	40,000	40.4
ENERGY SAVER LOWBOY MODELS						
FSGL-30	PGXL-30	30	30,000	30.3	27,000	27.3
FSGL-40	PGXL-40	40	32,500	32.8	32,500	32.8
ENERGY SAVER HIGH INPUT UPRIGHT MODELS						
FSGH-30	PGXH-30	30	40,000	40.9	37,000	37.9
FSGH-40	PGXH-40	40	40,000	40.9	37,000	37.9
FSGH-50	PGXH-50	50	50,000	51.2	50,000	51.2
FSG-75	—	75	75,100	75.9	75,100	75.9
FSG-100	—	100	80,000	80.8	75,100	75.9

NOTE: To compensate for the effects of high altitude areas above 2,000 feet, recovery capacity should be reduced approximately 4% for each 1,000 feet above sea level.

*Recovery capacities based on DOE method of test.

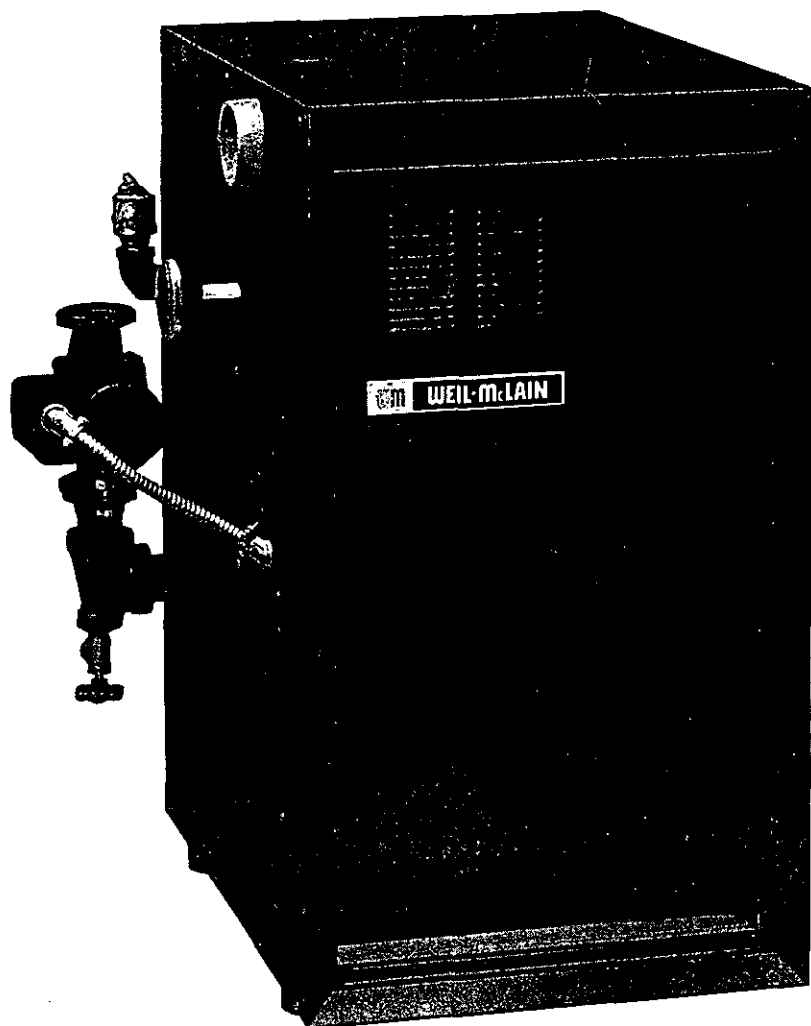


**ECONOMY
ENERGY SAVER
MODEL FSG**

**HIGH INPUT
ENERGY SAVER
MODEL PGXH**



WEIL-McLAIN



AMERICA'S MOST COMPLETE LINE OF CAST IRON BOILERS
RESIDENTIAL... COMMERCIAL... INDUSTRIAL... INSTITUTIONAL

TYPE HE

SERIES 3

HIGH-EFFICIENCY GAS BOILER

NET LOAD RANGE

HOT WATER:
48,000 to
119,000 BTU/Hr.



Design certified by
American Gas Association



Net ratings are approved by
The Hydronics Institute

DOE

Heating capacities based on
standard test procedures
prescribed by the United States
Department of Energy



Built in accordance
with the requirements
of the ASME Boiler and
Pressure Vessel Code

Before purchasing this
appliance, read important energy
cost and efficiency information
available from your retailer.

TYPE HE

HIGH-EFFICIENCY GAS BOILER

WEIL-McLAIN
MICHIGAN CITY, INDIANA

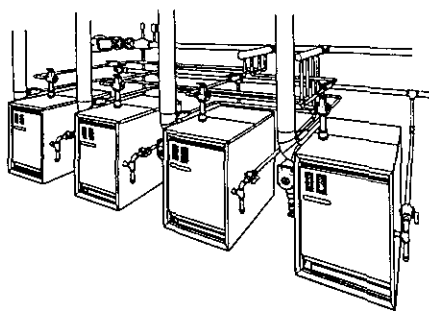
The Weil-McLain HE boiler represents a notable improvement in cast iron gas boiler design and engineering. The unit incorporates an induced draft combustion system, pilotless ignition, and other energy-saving features to attain over 82% seasonal operating efficiency. This compares to a typical installed boiler that may operate at only 60% seasonal efficiency. The HE boiler can pay for itself in fuel savings in a few short years!

The unit is available in four sizes with net I-B-R ratings from 48,000 to 119,000 BTU/Hr. It is designed for forced hot water heating systems in new homes ... or for replacement of older, inefficient heating equipment. The boiler is also ideally suited for individual metering in apartments and condominiums.

The HE boiler features high operating efficiency *without* compromising quality and dependability. Outstanding features include modern, compact design; proven combustion technology; standard, uncomplicated controls; direct venting; factory testing; and durable cast iron construction.

Most important, the HE is made by Weil-McLain, the leading name in cast iron boilers for over 100 years.

MULTIPLE BOILER SYSTEMS

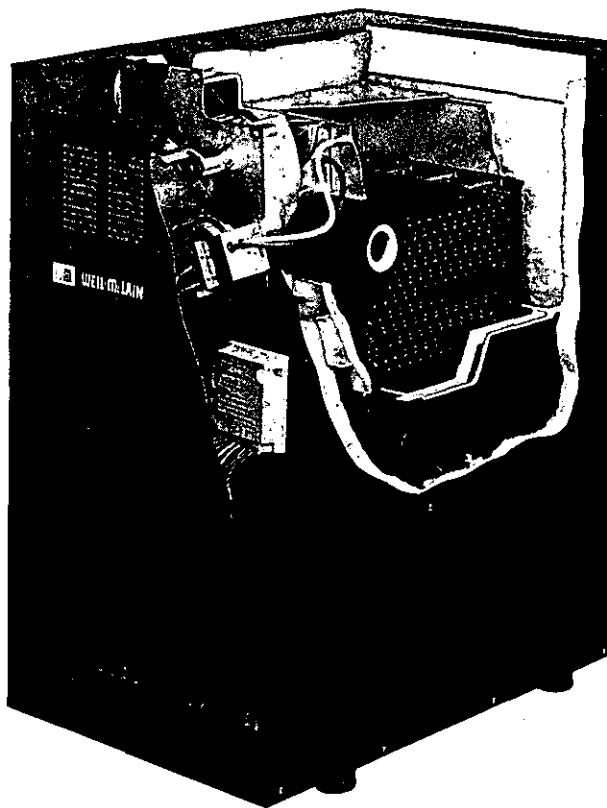


Two or more HE boilers can be used in place of one large-capacity boiler to meet the space heating requirements of larger buildings.

With multiple HE boilers, system operating efficiency is increased since the boilers can be sequenced so only those required to meet the heating load are fired. In addition, individual boilers may be isolated from the system if service is ever required and additional boilers may be added if heating requirements increase.

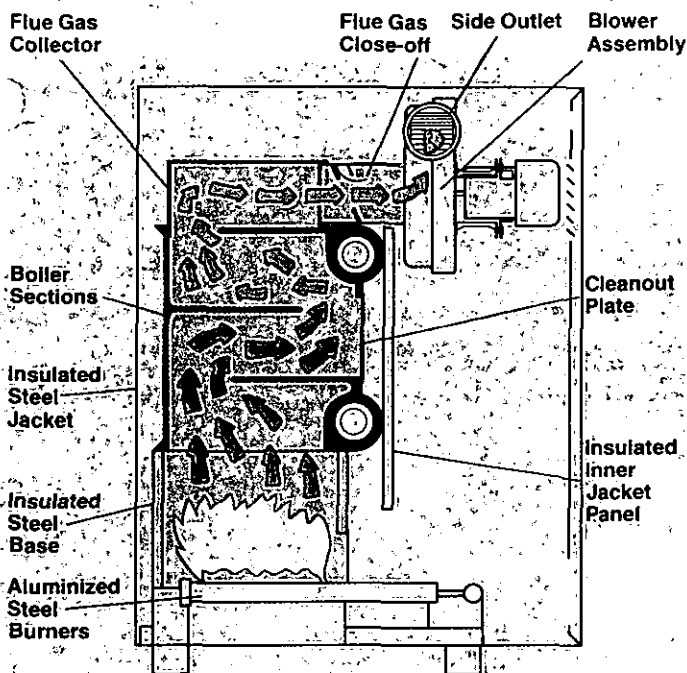
Contact the Weil-McLain Applications Engineering Department for information on multiple boiler systems.

DESIGN FEATURES



- 1** **82% OPERATING EFFICIENCY** can save 15% or more on annual gas consumption.
- 2** **INDUCED DRAFT COMBUSTION SYSTEM** Power venting increases flue gas velocity through the boiler for greater heat transfer, higher efficiency. No automatic vent damper required.
- 3** **NO CHIMNEY REQUIRED** HE boiler may be vented directly through an outside wall or through the roof. It also may be vented into a chimney.
- 4** **HOT-SURFACE IGNITION SYSTEM** saves energy. No pilot required.
- 5** **COMPACT DESIGN** saves valuable living space. Boiler is only 32 inches high, 25 inches deep. Power venting eliminates the need for a draft hood.
- 6** **CONVENIENT SERVICING** Accessible controls, simplified wiring, front cleanout plate, vertical flueways.
- 7** **FACTORY-TESTED** Each boiler is water and fire tested before shipping to assure reliable operation. Factory assembly of all parts saves installation time and cost.
- 8** **INDUSTRY APPROVED** Design certified by the American Gas Association for natural and propane gas. Built in accordance with the requirements of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code. Heating capacities based on standard test procedures prescribed by the U.S. Department of Energy. Ratings approved by The Hydronics Institute.
- 9** **STEEL JACKET** finished in attractive blue enamel. Insulated to retain heat and clear of the floor to prevent rust.
- 10** **ALUMINIZED STEEL BURNERS** feature quiet ignition and extinction. Burners provide fixed primary air. No adjustment required.
- 11** **CAST-IN AIR ELIMINATOR** saves the cost of a separate device.
- 12** **TOP-QUALITY ACCESSORY EQUIPMENT** for fully automatic, trouble-free operation. Available with Fill-Trol package.

HIGH EFFICIENCY



The induced draft combustion system increases flue gas velocity through the boiler sections, resulting in rapid heat transfer to the circulating water for higher efficiency and lower fuel consumption.

As shown in the diagram, gases are *pulled* through the boiler sections and flue gas collector and are discharged through the side outlet into the venting system.

The flue gas close-off automatically shuts when the blower fan is not operating. This exclusive feature retains heat in the boiler, increases efficiency, and eliminates the need for a mechanical vent-damper.

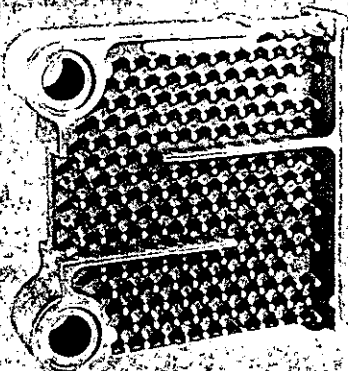
CAST IRON CONSTRUCTION

Boiler sections are made of cast iron for strength and long life. It's not uncommon for Weil-McLain cast iron boilers to last 35 years or more.

The integral baffles in the vertical flue passages increase flue gas velocity for greater heat transfer and improved efficiency.

A special high-temperature sealant between boiler sections assures a gastight assembly and consistently high efficiency.

The flexible sealant allows for expansion and contraction, is impervious to heat and moisture, and will last the life of the boiler. A flexible elastomer sealing ring in each port opening assures a permanent, watertight seal.



STEEL BASE

The cast iron sections are mounted on a heavy steel base. The inner sides are insulated to protect the base from flame radiation and to retain heat in the combustion area for greater efficiency.

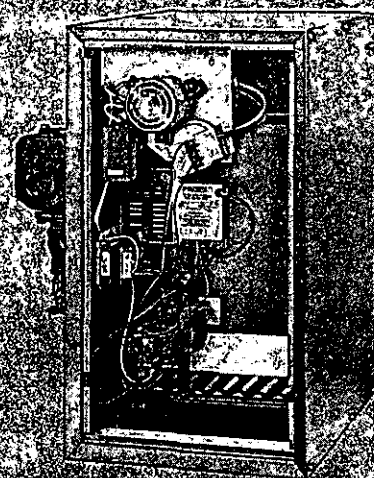
HOT SURFACE IGNITION

The HE features a hot surface ignition system—no pilot required.

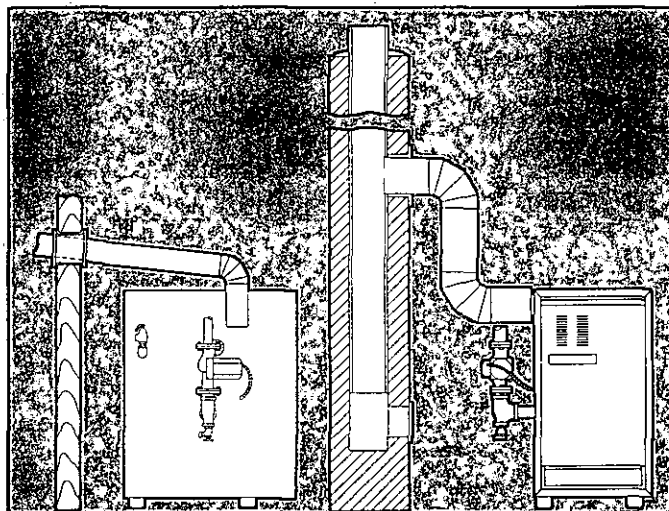
When the thermostat calls for heat, the circulator and blower start. After the pressure switch proves safe airflow, the ignition control energizes the ignitor. After 45-second warm-up, the step opening gas valve opens to the low fire position and the ignitor lights the main burners. Flame is proven through flame rectification and the gas valve switches to the high fire position.

When the thermostat is satisfied, burners, blower, and circulator stop. If boiler water temperature reaches the high limit setting, the burners and blower stop, but the circulator runs as long as there is a call for heat. Burners and blower recycle as necessary.

The hot surface ignition system assures fail-safe operation with 100% non-recycling shutoff in the event of flame failure during trial(s) for main flame ignition. The system has been design certified by A.G.A. and all components are U.L. listed.



VENTING



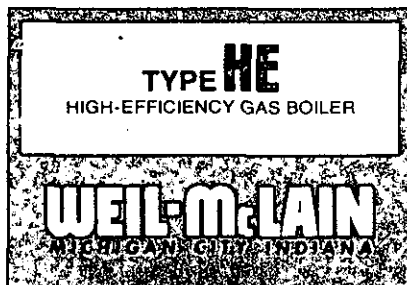
Direct Venting

Chimney Venting

The HE boiler may be vented directly through an outside wall or through the roof using standard 3-inch single-wall galvanized vent pipe. This feature is particularly valuable for new homes and apartments.

In addition, the boiler may be vented into a chimney inside the building, with or without other gas appliances, using 5-inch single-wall galvanized vent pipe.

For extended runs through cold areas—or when venting into a chimney on an outside wall—Type 304 or 316 stainless steel vent pipe must be used. When venting into an outside chimney, the stainless steel vent pipe must run through the entire length of the chimney.



RATINGS



DOE



Water Boiler Number	A.G.A. Input BTU/Hr.	DOE Heating Capacity BTU/Hr.†	Net I-B-R Ratings-Water BTU/Hr.*	DOE Seasonal Efficiency Percent (AFUE)	Chimney Size**
▲ HE-3	67,000	55,000	48,000	82.4	4" x 20'
▲ HE-4	100,000	82,000	71,000	82.3	5" x 20'
▲ HE-5	133,000	109,000	95,000	82.2	5" x 20'
▲ HE-6	167,000	137,000	119,000	82.2	5" x 20'

▲ Add "P-" to designator for boiler with Fill-Trol system (Example: P-HE-3).

† Based on standard test procedures prescribed by the United States Department of Energy.

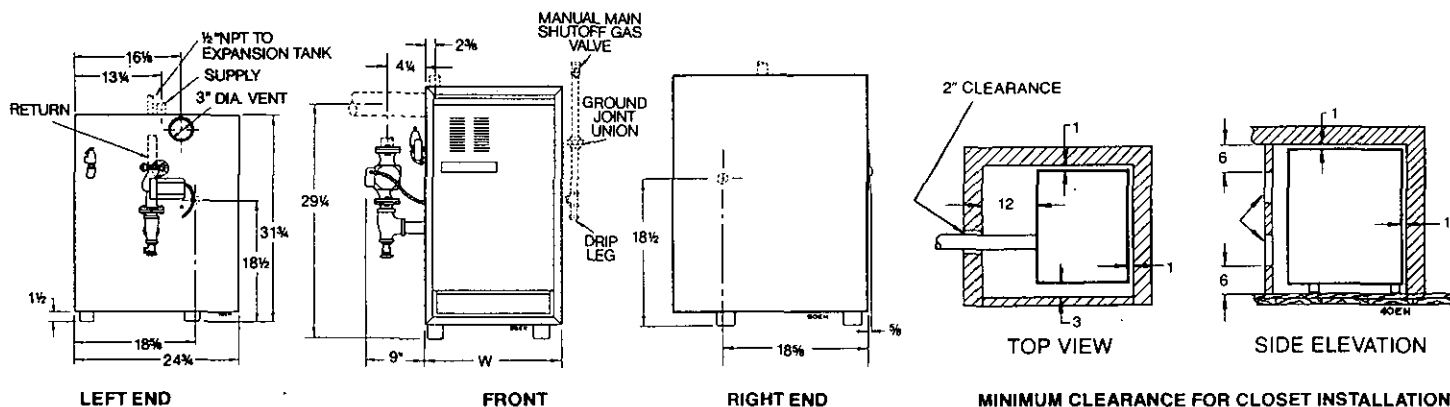
* Net I-B-R ratings are based on net installed radiation of sufficient quantity for the requirements of the building and nothing need be added for normal piping and pick-up. Ratings are based on a piping and pick-up allowance of 1.15. An additional allowance should be made for unusual piping and pick-up loads.

** In special cases where surrounding conditions permit, chimney height may be reduced to 10 feet. HE boiler may also be vented directly outside using 3-inch-diameter galvanized vent pipe.

NOTE: HE boilers for residential radiant panel systems, converted gravity heating systems, or other low-water temperature applications should be installed with by-pass piping equal to the supply and return size, with balancing valves to avoid excessive flue gas condensation due to lower operating water temperatures.

NOTE: HE boilers not available for millivolt systems. A.G.A. design certified for installation on combustible flooring. Tested for 50 PSI working pressure. Available for natural and propane gas.

DIMENSIONS



*With Fill-Trol tank, add 4 1/4" (HE-6 only).

Water Boiler Number	Supply (NPT)	Return (in circulator)	Boiler Width W	Natural Gas Connection Size*	Crate Dimensions (outside measurements-in.)			Approx. Shipping Wt.-Lbs.
					Length	Width	Height	
HE-3	1 1/4"	1"	11 1/4"	1/2"	28	34	35	195
HE-4	1 1/4"	1"	14 1/4"	1/2"	28	34	35	240
HE-5	1 1/4"	1"	17 1/4"	1/2"	28	34	35	280
HE-6	1 1/4"	1"	20 1/4"	1/2"	28	34	35	325

*Gas piping from meter to boiler to be sized according to local utility requirements.

STANDARD EQUIPMENT

Insulated Steel Jacket
Flue Gas Collector Assembly with Close-off
Blower and Motor Assembly
Aluminized Steel Burners
Combination Step-Opening Gas Control Valve (includes main valve, redundant valve, pressure regulator, pilot filter, and manual main shutoff valve) for 24 Volt
Hot Surface Ignition System
Pressure Switch
Electrical Junction Box
Combination Relay Receptacle and 40 VA Transformer
Plug-in Circulator Relay
High-Limit Temperature Control
Circulator—1-Inch, All Sizes
Built-in Air Eliminator

30 PSI ASME Safety Relief Valve
Combination Pressure-Temperature Gauge
Drain Valve
Fill-Trol System (compression tank, fill and check valve, automatic air vent, and fittings—#109 Sizes 3 through 5; #110 Size 6) for P-HE
Only—Shipped in Separate Carton

ADDITIONAL EQUIPMENT

Weil-McLain DWS Domestic Water Heating System (includes heat exchanger and circulator/adaptor)

In the interest of continual improvement in products and performance, Weil-McLain reserves the right to change specifications without notice.

WEIL-McLAIN
In Canada: Marley Fluid Systems, 126 East Dr., Brampton, Ontario L6T 1C2

Michigan City, Indiana 46360 ■ A Marley Company



I=B=R CALCULATION SHEET 1502

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OWNER Rizzio / Finley

ADDRESS 1675 Forge Pond Rd Brit

DATE

DESIGN TEMPERATURE DIFFERENCE F

COL. A											
1	ROOM										
2	ROOM DIMENSIONS, FT.										
3	LENGTH EXPOSED WALLS, FT.										
4	GROSS WALL AREA, SQ. FT.										
5	GLASS AREA, SQ. FT.										
6	NET WALL AREA, SQ. FT.										
7	CEILING AREA, SQ. FT.										
8	FLOOR AREA, SQ. FT.										
9	ROOM VOLUME FOR INFILTRATION										
10	TOTAL BTU/H AT 70° TEMP. DIFFERENCE*										
11	TOTAL BTU/H AT DESIGN TEMP. DIFFERENCE										
12	HEAT DISTRIBUTING UNITS										

COL. B				COL. C				COL. D				COL. E				COL. F			
Utilizing (1)		Bath (1)		Den (1)		Office (1)		Living (2)											
H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L	H	L		
8	10	10	8	10	10	8	10	10	10	8	10	10	10	8	10	10	10		
BTU/H REQUIRED		BTU/H REQUIRED		BTU/H REQUIRED		BTU/H REQUIRED		BTU/H REQUIRED		BTU/H REQUIRED		BTU/H REQUIRED		BTU/H REQUIRED		BTU/H REQUIRED			
200	700	80	300	40	200	40	200	40	200	40	200	40	200	40	200	40	200		
20	700	10	300	63	2500	20	800	47	1400	23	800	23	800	23	800	23	800		
10x10	400	10x8	300	23x20	1600	10x10	400	23x12	1000	10x10	300	23x12	800	23x12	800	23x12	800		
10x10	300	10x8	200	23x20	1200	10x10	300	23x12	800	10x10	300	23x12	800	10x10	300	23x12	800		
x	700	x	500	x	4600	x	700	x	700	x	700	x	700	x	700	x	700		
cu. ft.	827																		
2800		1600		1400		2500		8800											
6'		4'		14'		5'		18'											

COL. A		COL. G			COL. H			COL. I			COL. J			COL. K		
1 ROOM		K&L (2)			Dining room			Bed 2			Bed 1			Bed 3		
2 ROOM DIMENSIONS, FT.		H	L	W	H	L	W	H	L	W	H	L	W	H	L	W
3 LENGTH EXPOSED WALLS, FT.		8	12	12	8	12	12	8	21	24	8	12	12	8	12	12
4 GROSS WALL AREA, SQ. FT.				BTUH REQUIRED			BTUH REQUIRED			BTUH REQUIRED			BTUH REQUIRED			BTUH REQUIRED
5 GLASS AREA, SQ. FT.		3.3		1100	24'		900	48'		1700	24'		800	24'		800
6 NET WALL AREA, SQ. FT.		24'		900	24'		900	69'		2800	24'		900	24'		900
7 CEILING AREA, SQ. FT.		12x12		500	12x12		500	21x24		900	12x12		500	12x12		500
8 FLOOR AREA, SQ. FT.		12x12		400	12x12		400	21x24		700	12x12		400	12x12		400
9 ROOM VOLUME FOR INFILTRATION		X		1500	X		1500	X		5000	X		1500	X		1500
10 TOTAL BTUH AT 70° TEMP. DIFFERENCE		4400			4800			11100			4100			4100		
11 TOTAL BTUH AT DESIGN TEMP. DIFFERENCE		9'			9'			22'			9'			9'		
12 HEAT DISTRIBUTING UNITS																

INCREASE BATHROOM TOTAL 20%

FOR CONCRETE FLOOR ON GROUND OR FILL AT GRADE LEVEL

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L-B-R CALCULATION SHEET 1502

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OWNER _____ ADDRESS _____
 TYPE OF BUILDING _____ CONSTRUCTION _____
 DATE _____

DESIGN TEMPERATURE DIFFERENCE _____ F

1	ROOM	COL. A			COL. B			COL. C			COL. D			COL. E			COL. F		
		H	L	W	H	L	W	H	L	W	H	L	W	H	L	W	H	L	W
2	ROOM DIMENSIONS, FT.	8	10	8	8	10	8	8	10	8									
3	LENGTH EXPOSED WALLS, FT.																		
4	GROSS WALL AREA, SQ. FT.																		
5	GLASS AREA, SQ. FT.																		
6	NET WALL AREA, SQ. FT.																		
7	CEILING AREA, SQ. FT.																		
8	FLOOR AREA, SQ. FT.																		
9	ROOM VOLUME FOR INFLTRATION																		
10	TOTAL BTU/H AT 70°F TEMP. DIFFERENCE																		
11	TOTAL BTU/H AT DESIGN TEMP. DIFFERENCE																		
12	HEAT DISTRIBUTING UNITS																		

ROOM TOTALS FROM LINE 11.

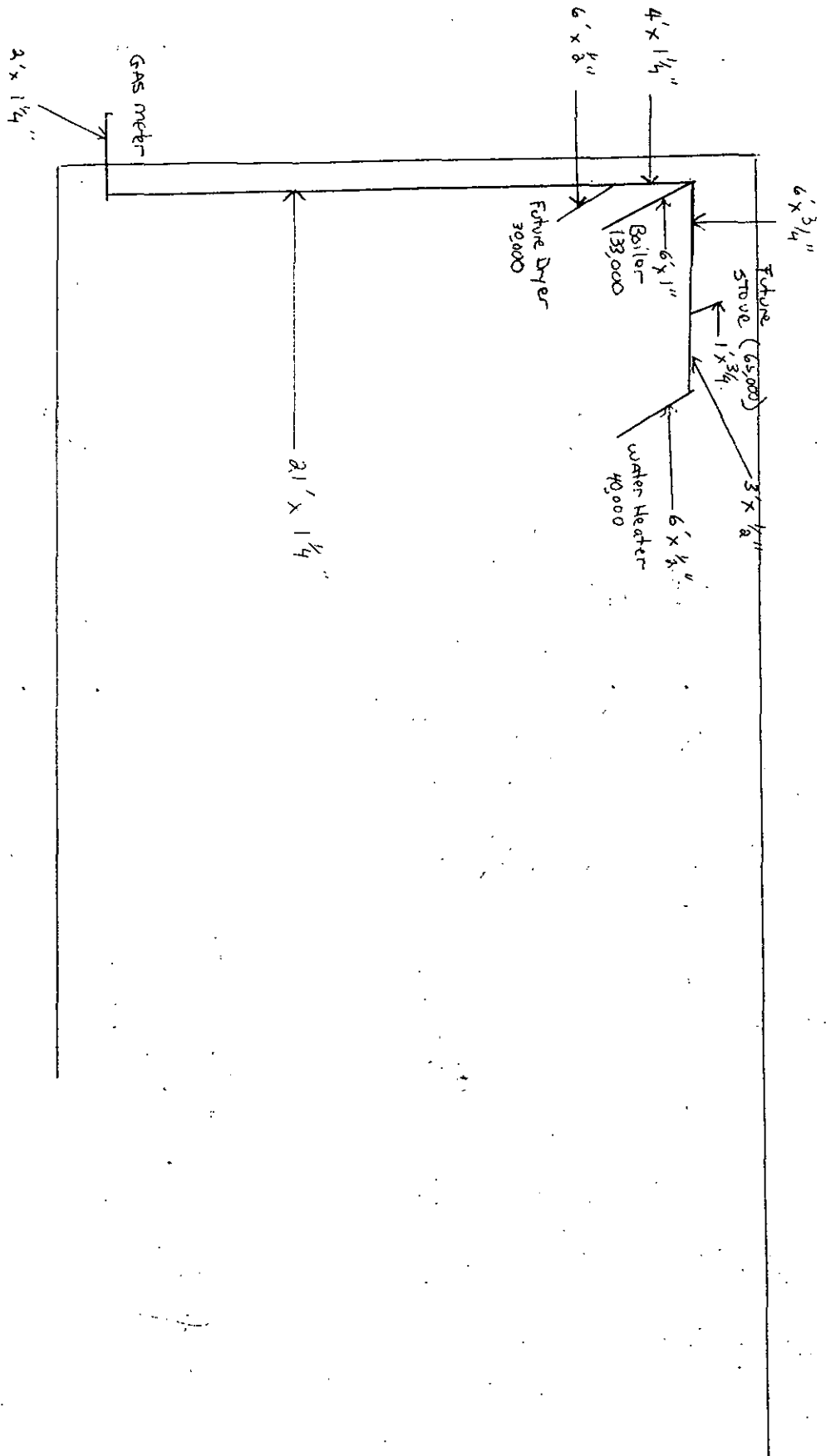
1	ROOM	COL. A			COL. G			COL. H			COL. I			COL. J			COL. K		
		H	L	W	H	L	W	H	L	W	H	L	W	H	L	W	H	L	W
2	ROOM DIMENSIONS, FT.																		
3	LENGTH EXPOSED WALLS, FT.																		
4	GROSS WALL AREA, SQ. FT.																		
5	GLASS AREA, SQ. FT.																		
6	NET WALL AREA, SQ. FT.																		
7	CEILING AREA, SQ. FT.																		
8	FLOOR AREA, SQ. FT.																		
9	ROOM VOLUME FOR INFLTRATION																		
10	TOTAL BTU/H AT 70°F TEMP. DIFFERENCE																		
11	TOTAL BTU/H AT DESIGN TEMP. DIFFERENCE																		
12	HEAT DISTRIBUTING UNITS																		

GROSS BATHROOM TOTAL 20%.

FOR CONCRETE FLOOR ON GROUND OR FILL AT GRADE LEVEL.

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Rizzio
1675 Forgy Pond Rd
Berk



Longest Run - 40'
Total Load - 268,000 BTU