

## Contractor's Utility Requirements

### STEELHEART™ ZOOM OVEN

#### NATURAL GAS FIRED or PROPANE

#### - INSTALL INSTRUCTIONS -

This Manual is prepared for the use of licensed utility contractors. All gas, electrical, plumbing and venting connections should be made according to local codes.

This manual is not intended to be all encompassing. You should read, in its entirety, the installation procedure you wish to perform to determine if you have the necessary tools, instruments and skills required to perform the procedure. Procedures for which you do not have the necessary tools, instruments and skills should be performed by a trained technician.

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## TMB Baking Steelheart ™ (ZOOM) Gas Deck Oven

#### **Utility Requirements**

Electric Power: 110V / 60 Hz / 20 amp / supply 3 wire including ground. See

enclosed photo (Fig. 1) and spec sheet for details

Natural Gas: 250,000 BTU at 14" WC max, 7" WC min

Flexible gas line is not recommended.

Gas lines should be 3/4" inside diameter from top of oven to gas

valve.

Gas lines must have a shut off valve and union located in burner compartment for ease of servicing the burner. See enclosed

drawing (Fig. 2), picture (Fig. 3) and spec sheet.

Gas line should have drip leg in gas line.

Propane Gas: 250,000 BTU at 14" WC max, 5" WC min

Water: 60 PSI at 4 GPM. Oven usage 2.5 GPH per bake. See enclosed

photo (Fig. 4) and spec sheet.

**Drain:** 3/4" IPS drain connection in front of oven. Floor Sink Required.

Venting Requirements: See spec sheet.

**Wall Clearance**: 0" Clearance fire code rating back and sides.

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### TMB Baking Steelheart™ (ZOOM) Oven

Setting requirements Midco Burner: Natural Gas: Orifice size: 0.358 inches

Model RE 4400 DS Manifold Pressure: 2.9 WC

Propane Gas: Orifice size: 0.219
Manifold Pressure: 3.2 WC

**Draft Requirements:** 0.05 - 0.10 Negative pressure at site hole above burner.

**Exhaust Fan:** An exhaust fan can be installed above the

roof line if required to increase draft. If installed, an

automatic burner shutoff wired to the control panel must be

installed.

Bassanina Zoom Oven Dimensions (Exterior) Height includes burner and steam exhaust

	Width	Depth	Height		
Model	(W)	(D)	(H)	BTU	Weight
Steelheart™					
812	54"	90 5/8"	91"	250	4,079
Steelheart™					
1212	71"	90 5/8"	91"	250	4,960
Steelheart™					
1218	71"	114 ¼"	91"	250	6,504

All dimensions are in inches

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# TMB Baking Steelheart™ ZOOM Oven ELECTRICAL CONNECTIONS

Fig. 1



Photo shows control panel – single phase electrical connection on lower right.



### TMB Baking Steelheart™ ZOOM Oven

#### **Burner Connections**

See accompanying Midco ECONOMITE Model RE 4400 DS Burner Manual

Note: High Pressure regulator used only when low pressure gas is not available in the building (Steelheart 812 oven requires a smaller burner. See spec for Economite DS24A for this model.)

Burner location – Under front panel of oven

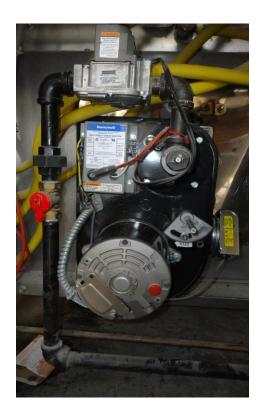


Figure 2

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# TMB Baking Steelheart™ ZOOM Oven WATER SUPPLY

Cold water ½" copper pipe to water solenoid with shut off valve and union installed in burner compartment. Steam floor sink should be located in front or at back of oven.

Figure 3





# TMB Baking Steelheart™ (ZOOM) Oven VENTING INSTRUCTION

All venting must comply with local codes.

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The gas exhaust venting shall be 6" double wall with a Tee and 6" barometric damper. A 24" extension on the Tee is required to attach the barometric damper. See picture and spec sheet for detail.

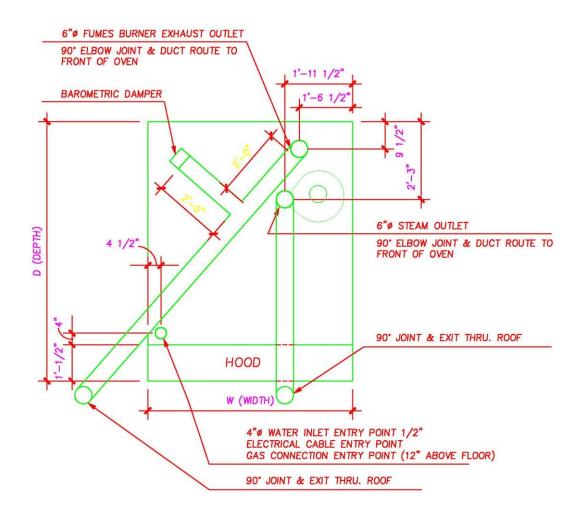
A straight pipe is recommended through the ceiling, but not required. No more than two 45° fittings can be used within a distance of 3 feet. An exhaust fan can be added above the roof, if required to increase draw.

Note: if any of these recommended configurations are not applicable in the building, a draft inducer needs to be calculated by the mechanical engineer to obtain, when the burner is off, a 0.01 - 0.04 WC negative pressure inside the combustion chamber still hot at site hole above burner. Make up air ON and exhaust fan ON, all windows and doors closed.

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#### BACK OF OVEN



#### FRONT OF OVEN

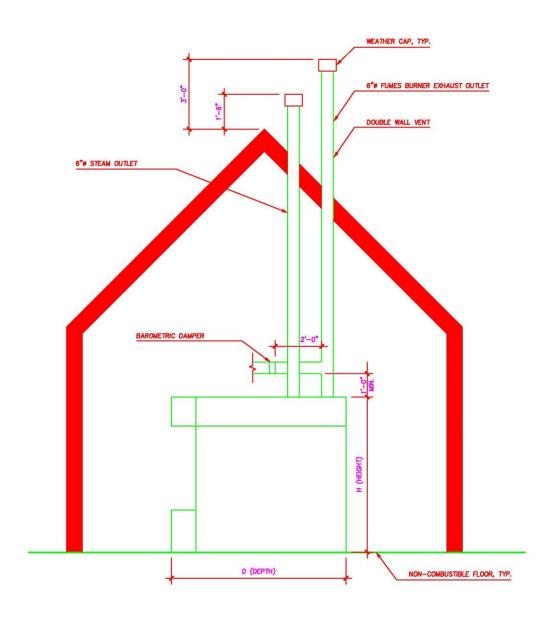
TMB BAKING - ZOOM OVEN (PLAN) 1/2" = 1'-0" 2012.03.30

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Alternative elevation – When venting access above oven not available.

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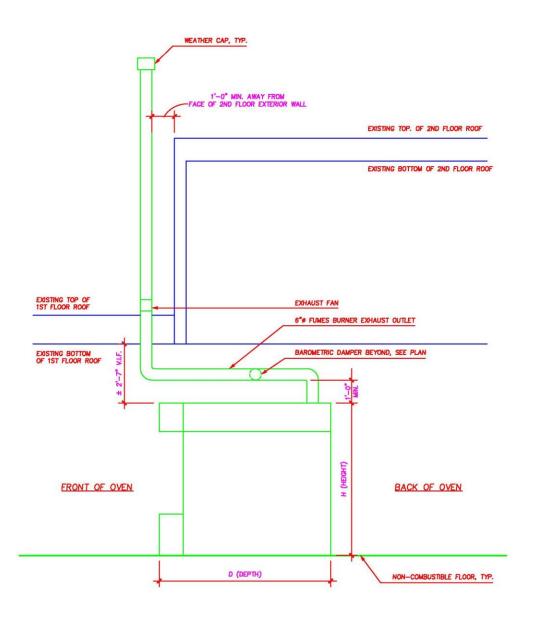




TMB BAKING - ZOOM OVEN (ELEVATION) N.T.S. 2012.03.30

Optimal Ventilation Routing – Straight up and out of bakery.





TMB BAKING - ZOOM OVEN (ALTERNATIVE ELEVATION @ BLDG. W/ VARIOUS ROOF HEIGHTS) N.T.S. 2012.03.30



### TMB Baking Steelheart™ ZOOM Oven

#### STEAM HOOD EXHAUST

8" Diameter single wall. Galvanized is acceptable, but stainless steel recommended only for durability



Adapter on top of oven Vortex Fan supplied by TMB

Steam exhaust and fan (optional), supplied by TMB Baking

Calculations and specs must be performed by mechanical engineer according to local codes requirements. If the fan supplied by TMB Baking is not judged sufficient for your installation, customer responsible for providing replacement unit, such as roof-mounted fan.

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# TMB Baking Steelheart™ ZOOM Oven VENTING DETAILS





Example of gas exhaust with barometric damper. (See schematics for alternative layouts.)