



TRANE

Submittal

Prepared For: Dean Grant

Date: January 12, 2018

Customer P.O. Number:
Customer Project Number:

Sold To: Airtemp

Job Number:
Job Name:
City of Portland - Public Works 109 District Road

Trane U.S. Inc. dba Trane is pleased to provide the enclosed submittal for your review and approval.

Product Summary

Qty	Product
6	Indoor Gas Heating Products Tagged UH 1-6

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The attached information describes the equipment we propose to furnish for this project, and is submitted for your approval.

Product performance and submittal data is valid for a period of 6 months from the date of submittal generation. If six months or more has elapsed between submittal generation and equipment release, the product performance and submittal data will need to be verified. It is the customer's responsibility to obtain such verification.

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Tag Data - Indoor Gas Heating Products (Qty: 6)

Item	Tag(s)	Qty	Description	Model Number
A1	UH-5	1	Indoor Gas Heating Products	GAPE010ATA10000---G-000#-----5
A2	UH-1, 6	2	Indoor Gas Heating Products	GAPE012ATA10000---G-000#-----5
A3	UH-2, 3, 4	3	Indoor Gas Heating Products	GAPE015ATA10000---G-000#-----5

Product Data - Indoor Gas Heating Products**All Units**

Separated combustion propeller fan gas unit heater
 LP gas (propane)
 115/60/1 main power supply
 Single stage, direct spark ignition
 Aluminized steel heat exchanger
 Open Drip Proof (ODP)
 Single Stage, 24 Volt, T822K T-stat
 Horizontal and vertical louvers (Fld)
 Vertical combustion air inlet kit (Fld)

Item: A1 Qty: 1

100 MBH input/83 MBH output

Item: A2 Qty: 2

125 MBH input/103 MBH output

Item: A3 Qty: 3

150 MBH input/124 MBH output

Mechanical Specifications - Indoor Gas Heating Products**Item: A1 - A3 Qty: 6****Genera**

Unit is completely factory assembled, piped, wired, and test fired. Unit is ETL Certified, and conforms with the latest ANSI Z83.8/CSA 2.6 Standards for safe and efficient performance. Unit is provided with two point suspension hangers.

Casing - A, B, C, H, K & P

Casing is die-formed, 20 gauge [1.0 mm] cold rolled steel and finished in baked enamel. The bottom panel is easily removed to provide service access to the burners, direct spark ignition and orifices. Unit provided with independently adjustable horizontal louvers with stops to prevent total closure.

Tubular Heat Exchanger-Aluminized steel

Heat exchanger construction consists of 20 gauge aluminized steel tubes. Tubes shall be of a curved, non-welded serpentine design. Unit shall have a minimum of 82% thermal efficiency.

Flue Collector- Aluminized steel

Flue Collector construction is corrosion resistant aluminized steel.

Burners - 409 Stainless

Burners shall be of the "in-shot" design constructed of corrosion resistant aluminized steel.

Flue Vent Fan

Flue vent fan provides power venting. Provided factory assembled to a sealed flue collection chamber. A combustion air pressure switch is provided as standard to verify proper powered vent flow prior to allowing the gas valve to operate.

Combustion Chamber-Separated Combustion Unit

Combustion chamber shall be completely sealed to prevent infiltration of air from the space into the combustion burner.

Fan - Propeller

Fan blades are constructed of aluminum with an aerodynamic contour. All fans are dynamically balanced for quiet, efficient operation and supplied with a protective type fan guard. Rubber-in-shear isolators provide isolation between the fan/motor combination and the unit heater casing.

Unit-115 volt

Unit shall be 115 volt, 60 hertz, single phase

Motor-ODP

Motor is open drip proof with built in thermal overload protection.

Control - Separated Combustion/Hi-Eff Unit Heater

A factory installed junction box is provided for all power connections. Standard unit is provided with a 24-volt combination single-stage redundant gas valve, consisting of a combination, automatic electric gas valve, pressure regulator, and manual shutoff. A flue vent fan relay and combustion air proving switch is also provided. Equipment includes direct spark-ignition with electronic flame supervision. A 24-volt control transformer, high limit and fan time delay relay are provided. The fan time delay relay delays the fan start until the heat exchanger reaches a predetermined temperature. It also allows the fan to operate after burner shutdown, removing residual heat from the heat exchanger.

Concentric Vent Kit

The concentric vent kit utilizes one termination in which both the discharge flue gas and the combustion air inlet passes. Standard two pipe venting and concentric vent kits are certified by ETL as venting methods for Trane Separated Combustion Propeller and Centrifugal Unit Heaters and Separated Combustion Duct Furnaces. No other venting arrangements are approved or certified for use with Trane Separated Combustion Unit Heaters and Duct Furnaces. All vent pipes are field supplied; UL 1738 listed single wall galvanized steel is recommended. All joints must be sealed with either high temperature silicone or aluminum foil tape. The maximum vent length for the combustion air inlet is 50 equivalent feet [15.3 m]. The maximum vent length for the flue gas outlet is also 50 equivalent feet [15.3 m]. Allow 10 equivalent feet [3.1 m] for each 90 degree elbow, and 5 equivalent feet [1.5 m] for each 45 degree elbow.

Vertical Concentric Vent Kit

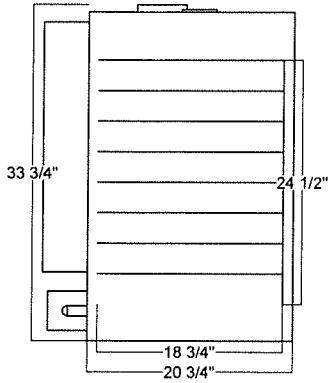
Kit includes flue vent terminal with special attached non-recirculation deflector disc, air inlet cap/screen with hole and concentric vent box.

Unit Dimensions - Indoor Gas Heating Products

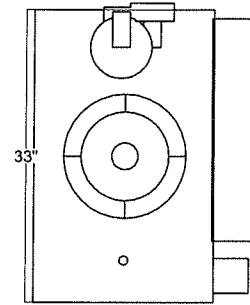
Item: A1 Qty: 1

CLEARANCE	SIDE	TOP	BTM	CTL/BOX	FAN	FLUE
GA	6"	6"	12"	18"	18"	6"

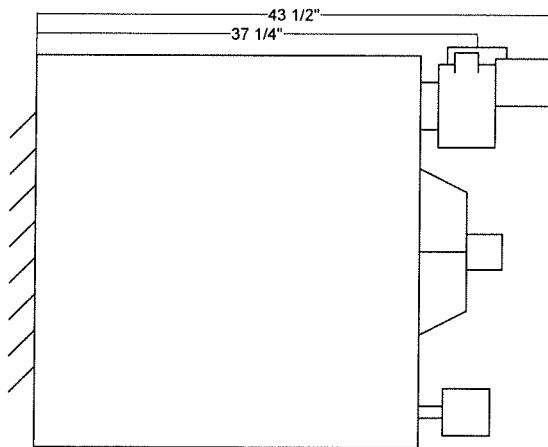
MBH	WEIGHT
100	135.0 lb



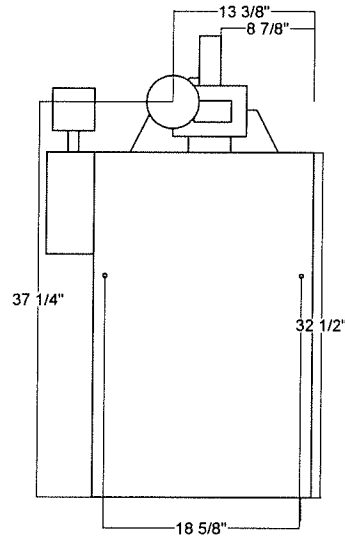
FRONT



BACK



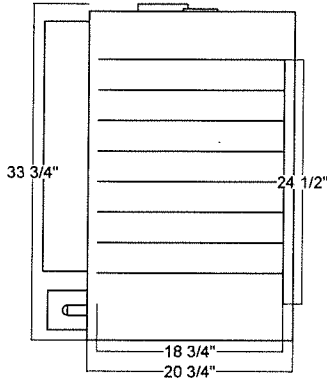
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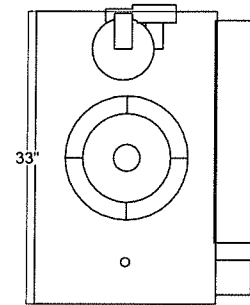
TOP

CLEARANCE	SIDE	TOP	BTM	CTL/BOX	FAN	FLUE
GA	6"	6"	12"	18"	18"	6"

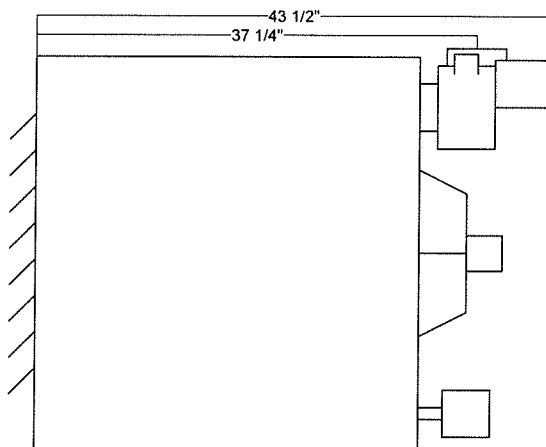
MBH	WEIGHT



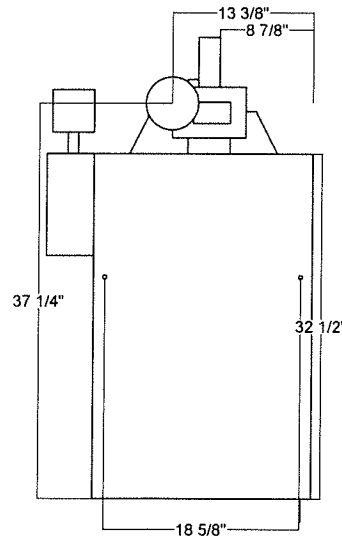
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BACK



RIGHT



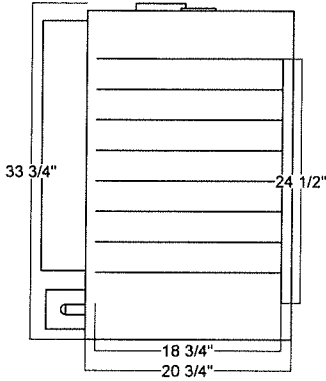
TOP

Unit Dimensions - Indoor Gas Heating Products

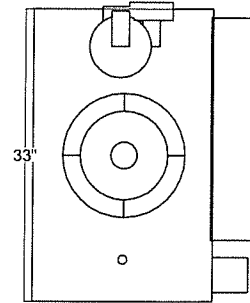
Item: A3 Qty: 3

CLEARANCE	SIDE	TOP	BTM	CTL/BOX	FAN	FLUE
GA	6"	6"	12"	18"	18"	6"

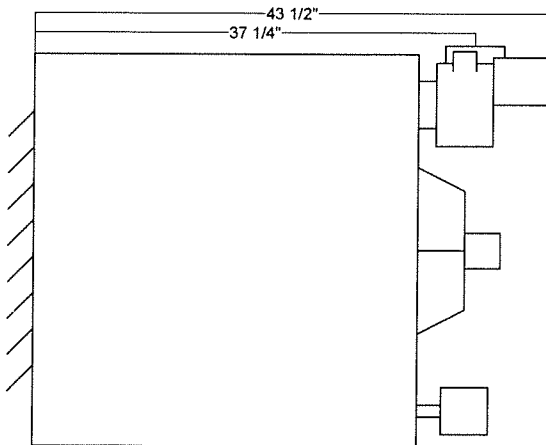
MBH	WEIGHT
150	157.0 lb



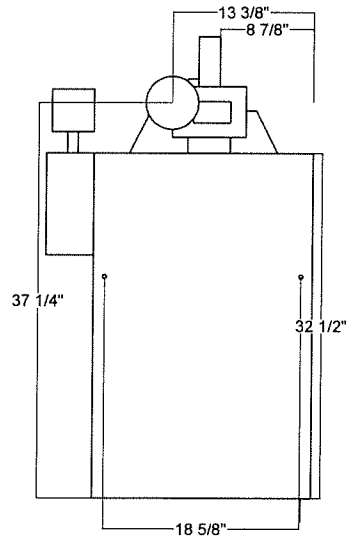
FRONT



BACK



RIGHT



TOP

Field Installed Options - Part/Order Number Summary

This is a report to help you locate field installed options that arrive at the jobsite. This report provides part or order numbers for each field installed option, and references it to a specific product tag. It is NOT intended as a bill of material for the job.

Product Family - Indoor Gas Heating Products

Item	Tag(s)	Qty	Description	Model Number
A1	No Tag	1	Indoor Gas Heating Products	GAPE010ATA10000---G-000#-----5
A2	No Tag	2	Indoor Gas Heating Products	GAPE012ATA10000---G-000#-----5
A3	No Tag	3	Indoor Gas Heating Products	GAPE015ATA10000---G-000#-----5

Field Installed Option Description	Part/Ordering Number
Vertical combustion air inlet kit	0135-11AS-X7-V5
Horizontal and vertical louvers	0135-11AS-X5-104