

DRAIN LINE DESIGN:
ENGINEER IS RESPONSIBLE FOR DRAIN LINE DESIGN BEYOND THE UNIT. DRAIN LINE MUST BE INSTALLED PER LOCAL CODES. DRAIN LINE MUST BE SLOPED (MINIMUM 1/4 INCH PER FOOT). AVOID ANY UNNECESSARY 90 DEGREE TURNS. IF COMBINED WITH OTHER DRAIN LINES, THEN PIPE SIZE SHOULD BE INCREASED ACCORDINGLY. P-TRAPS SHOULD NOT BE USED IN THE GREASE DRAIN LINE AND HEAT TAPE MUST BE USED WHERE DRAIN LINE IS RUN IN ENVIRONMENTS THAT WOULD SOLIDIFY GREASE.

SPECIFICATION OF SMOKE ZAPPER UNIT:
THE SPECIFICATION OF THE APPROPRIATE SMOKE ZAPPER UNIT IS DEPENDENT UPON THE CFM FLOW OF THE DUCT SYSTEM. FOR BEST RESULTS IN HEAVY DUTY APPLICATIONS (SUCH AS SOLID FUEL APPLIANCES OR ODOR-HEAVY COOKING), DESIGN A CFM FLOW AT LEAST 20% BELOW THE MAX CFM RATE LISTED FOR THE UNIT.

FAN SPECIFICATION:
IN INSTALLATIONS WHERE THE TOTAL DUCT RUN EXCEEDS 25 FEET, A FAN WITH VARIABLE SPEED CONTROL SHOULD BE SPECIFIED TO AID IN THE NATURAL DRAFT ALREADY CREATED BY THE SMOKE ZAPPER. WHEN SPECIFYING A FAN, CONSULT A SMOKI USA REPRESENTATIVE FOR FURTHER INFORMATION VIA EMAIL OR PHONE.

VARIABLE SPEED CONTROL:
THE FAN MUST BE EQUIPPED WITH AN EASILY ACCESSED VARIABLE SPEED CONTROL. THE BALANCE IN CFM FLOW IS ESSENTIAL TO THE EFFECTIVENESS OF AIR SCRUBBING. IF THE CFM FLOW IS ABOVE THE MAX CFM FLOW RATED BY THE SMOKE ZAPPER, THE UNIT WILL BE INCAPABLE OF CLEANING THE SMOKE FULLY, AND MAY PULL EXCESS WATER INTO THE DUCT STREAM. THE SMOKE ZAPPER ALREADY CREATES ITS OWN DRAFT INDUCTION. THE FAN MUST HAVE A LOW MINIMUM FAN SPEED (BELOW 90 CFM). THIS IS ESPECIALLY IMPORTANT IN INSTALLATIONS WHERE THE TOTAL EXHAUST DUCT DOES NOT EXCEED 40 FEET. THE VARIABLE SPEED CONTROL ALSO ALLOWS FOR VARIATION IN DRAFT PRESSURE, WHICH MAY BE AFFECTED BY MANY VARIABLES IN A LIVE KITCHEN SETTING.

BASIC FAN REQUIREMENTS:
- IN-LINE TOP DRAFT INDUCER
- AT LEAST AN IP54 PROTECTION CLASS
- VARIABLE SPEED CONTROL
- MINIMUM FAN SPEED OF 90 CFM

SPECIAL NOTES TO ENGINEER OF RECORD

SMOKE ZAPPER 250

CHOOSE AN INSTALLATION LOCATION WHICH ALLOWS FOR EASY AND REGULAR UNIT ACCESS/MAINTENANCE.
PLACING POSITIONS – NOTE: IT IS MOST BENEFICIAL TO INSTALL THE UNIT AS NEAR TO THE COOKING APPLIANCE AS POSSIBLE. THIS REDUCES PARTICULATE AND GREASE BUILD UP WITHIN THE DUCT SYSTEM.
A: HANG ON WALL
B: PLACE ON FLOOR
C: PLACE ON ROOF
D: SUSPEND FROM CEILING

MECHANICAL:

1. CONNECT THE CHIMNEY LINE TO THE SMOKE ZAPPER INTAKE PORT IN A CONTINUOUS WELDED CONNECTION. USE APPROPRIATE CHIMNEY PIPE THAT FOLLOWS LOCAL CODES FOR THE COOKING APPLIANCE(S).
2. CONNECT OUTTAKE PORT IN A CONTINUOUS WELDED CONNECTION.
3. IF TOP DRAFT INDUCER IS USED (TO BE PROVIDED BY ENGINEER OF RECORD) IT MUST BE CALIBRATED TO A BALANCED CFM RATE ACCORDING TO THE REQUIRED CFM FLOW AND CALCULATED STATIC PRESSURE. CONSULT MAX CFM RATE OF SMOKE ZAPPER UNIT TO ENSURE EFFICIENT SMOKE SCRUBBING OPERATION. CONSULT "SPECIAL NOTES TO ENGINEER OF RECORD" FOR MORE INFORMATION

ON FAN SPECIFICATION AND CALIBRATION. FAILURE TO SPECIFY AND INSTALL FAN CORRECTLY CAN RESULT IN DIMINISHED SCRUBBING ABILITY AND EXCESS WATER IN THE DUCTWORK.
4. THE EXHAUST DUCT MUST MAINTAIN AT LEAST A 2 DEGREE INCLINE FROM THE EXHAUST PORT OF THE SMOKE ZAPPER ONWARDS. THIS WILL ALLOW EXCESS MOISTURE TO DRAIN BACK INTO THE UNIT. IF THIS IS NOT POSSIBLE, A WATER DRAIN MUST BE INSTALLED AT THE LOWEST POINT OF WATER COLLECTION IN THE DUCT.

ELECTRICAL:

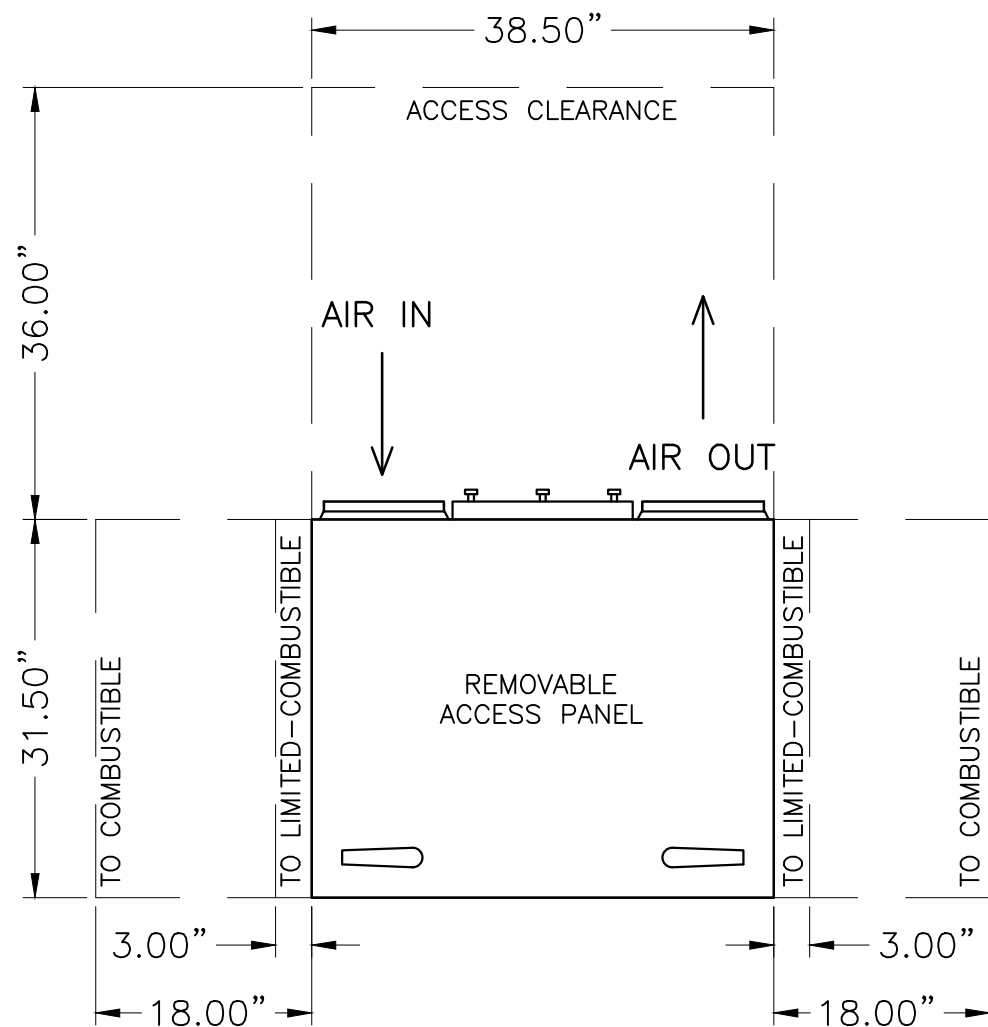
1. A CERTIFIED ELECTRICIAN SHOULD SUPPLY AND CONNECT THE ELECTRICAL LINE PER LOCAL CODE.
2. CONSULT THE "WIRING DIAGRAM", "ELECTRICAL CONNECTION SCHEDULE" AND "SCOPE OF WORK" LOCATED ON THE SECOND PAGE OF THIS DOCUMENT FOR DETAILED ELECTRICAL REQUIREMENTS.

PLUMBING:

1. DIRECT CONNECT THE SMOKE ZAPPER DRAIN TO A GREASE TRAP. IF EXISTING GREASE TRAP IS LOCATED IN AN INCONVENIENT LOCATION, AN EXTERNAL DEDICATED GREASE TRAP SHOULD BE SUPPLIED.
2. CONNECT THE 1/2" COLD FRESH WATER LINE. IF THE WATER PRESSURE READS ABOVE 1.5 BAR, INSTALL A WATER PRESSURE REDUCER TO BRING THE PRESSURE TO 1 BAR.

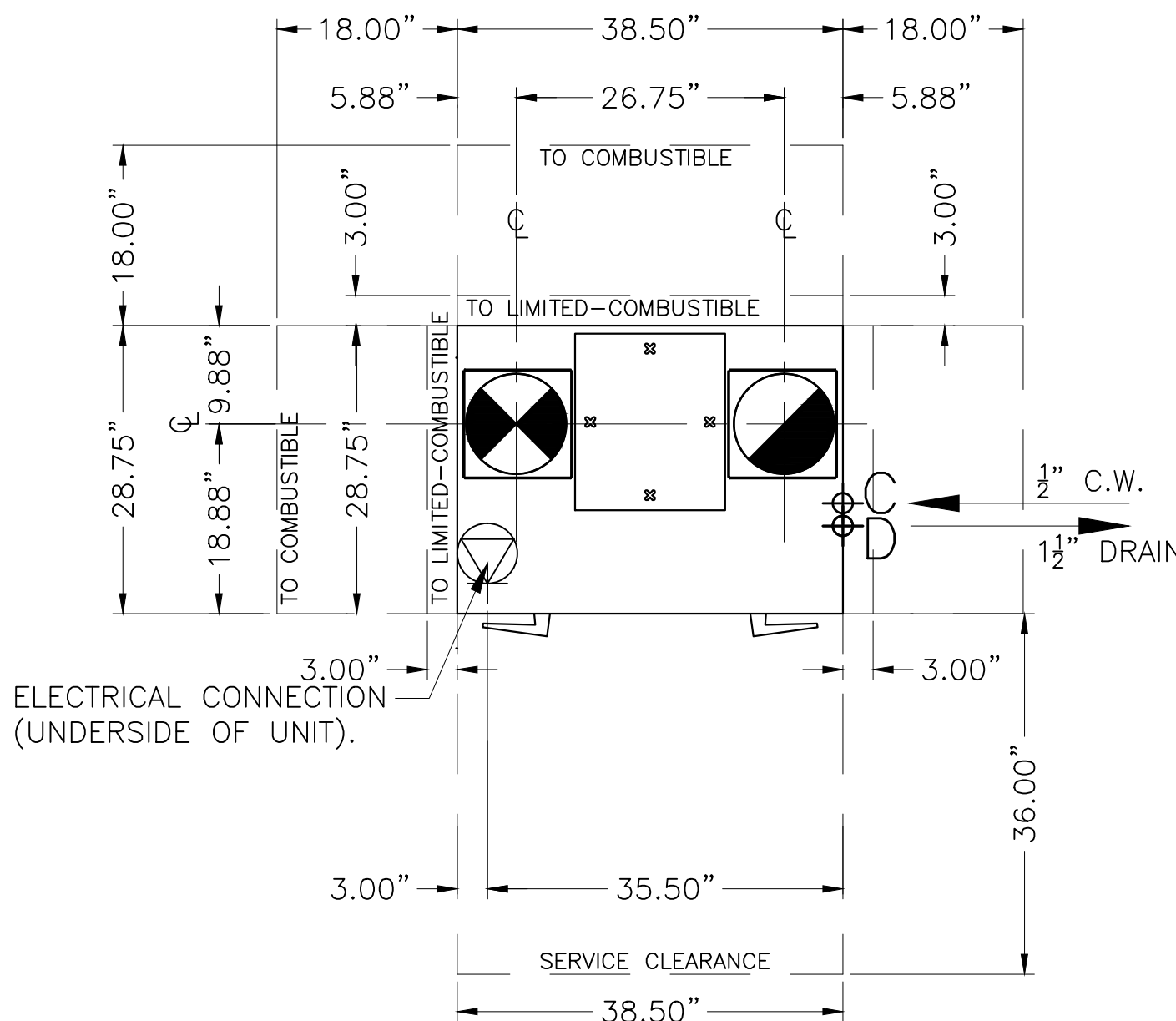
GENERAL INFORMATION:

1. IF THE SMOKE ZAPPER IS LOCATED OUTSIDE IN AN ENVIRONMENT THAT REACHES FREEZING TEMPERATURES, THE ELECTRICIAN MUST HEAT WRAP THE FRESH WATER INTAKE LINE UP TO THE WATER FILTER PRESSURE GAUGE.
2. THE SMOKE ZAPPER IS RATED FOR OPERATION AT AS LOW AS 14°F. DO NOT TURN THE UNIT OFF IN TEMPERATURES BELOW 32°F WITHOUT FIRST DRAINING THE TANK. IF SWITCHED OFF MORE THAN 12 HOURS, WRAP THE UNIT IN A PROTECTIVE MATERIAL TO GUARD AGAINST WEATHER.



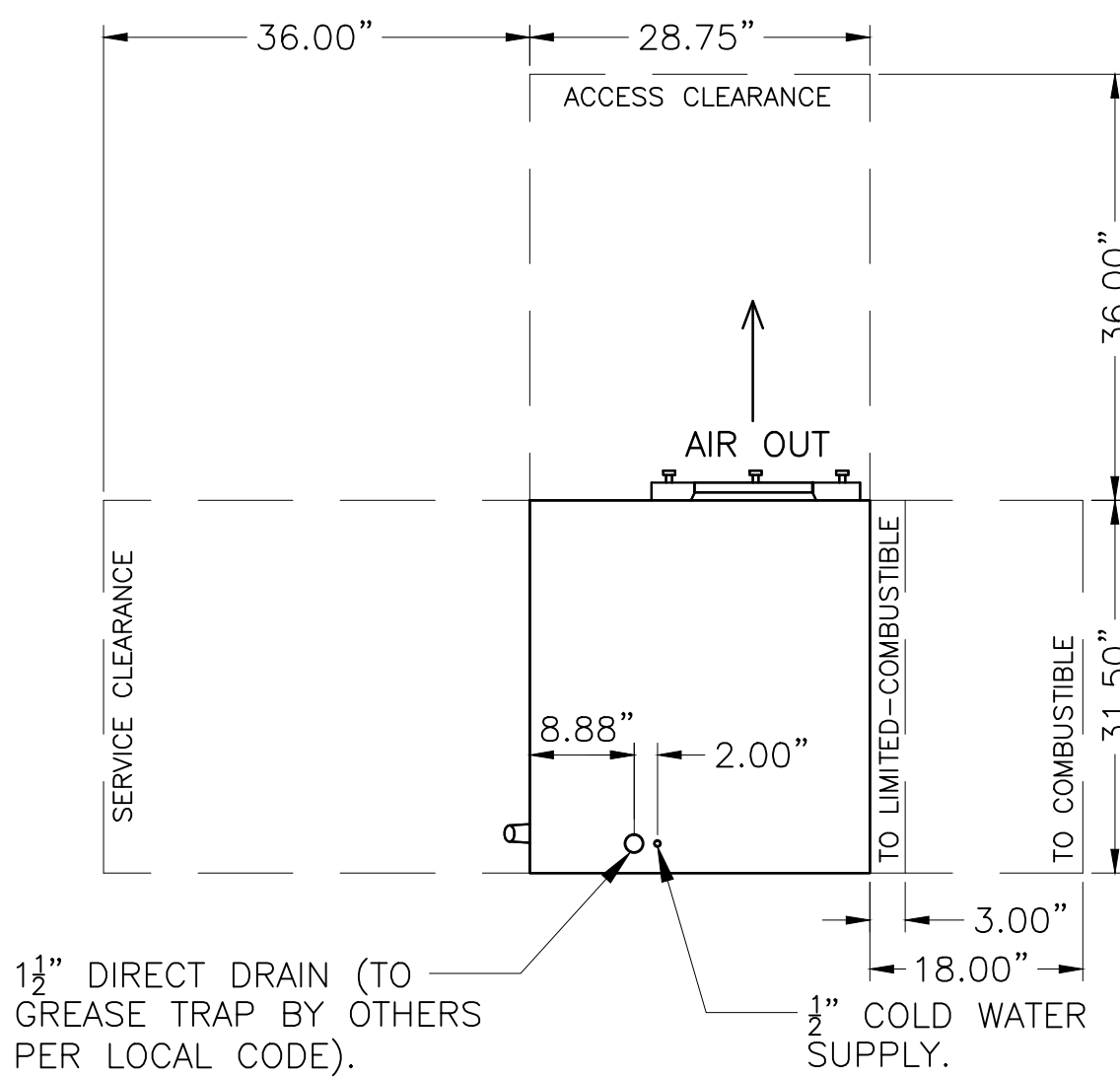
FRONT ELEVATION

SCALE : $\frac{3}{4}$ " = 1'-0"



PLAN

SCALE : $\frac{3}{4}$ " = 1'-0"



RIGHT ELEVATION

SCALE : $\frac{3}{4}$ " = 1'-0"

General Notes

THIS DRAWING MUST BE CHECKED SIGNED AND RETURNED TO APPROPRIATE FACTORY. PLEASE VERIFY THE FOLLOWING:

1. ALL DIMENSIONAL INFORMATION. AIR FLOW DIRECTIONS AND CLEARANCES.

NOTICE TO REVIEWER:
ANY CHANGES TO THE COOKING EQUIPMENT SPECIFICATIONS SUCH AS INCREASED EXHAUST AIRFLOW. SMOKI USA MUST BE NOTIFIED IN ORDER TO RECALCULATE THE THE EXHAUST AIRFLOW NECESSARY TO SATISFY THE NEW NEED.

☐ REVISE & RESUBMIT

APPROVED FOR FABRICATION

☐ W/ NO REVISIONS

☐ W/ REVISIONS AS NOTED

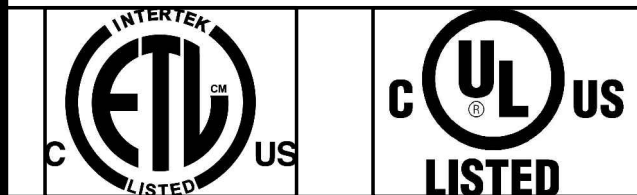
APPROVED BY: _____ DATE: _____

SEND APPROVED DRAWINGS TO:

MAIL:
SMOKI USA
P.O. BOX 698
BEDFORD HILLS, NY 10507

EMAIL:
APPROVALS@SMOKIUSA.COM

SMOKI USA POLLUTION CONTROL UNITS ARE LISTED BY:
INTERTEK LISTED – UL 73
UL LISTED – UL 1978 FILE #MH60726



1	ISSUE FOR REVIEW	3/30/15
No.	Revision/Issue	Date

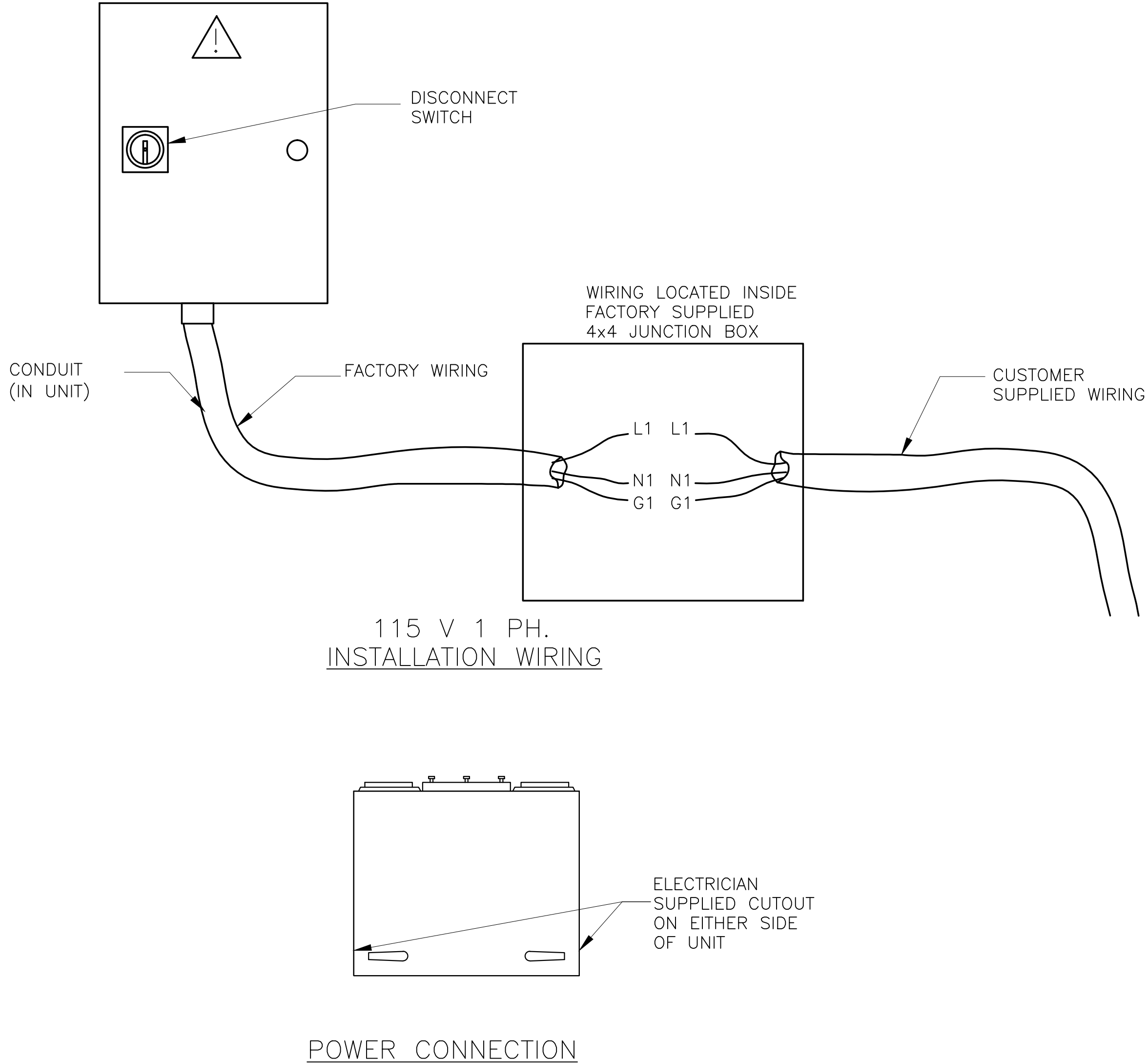
Firm Name and Address
SMOKI USA
PO BOX 698
BEDFORD HILLS, NY 10507

Project Name and Address

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Project: #####
Date: 9/8/2015
Scale: As Noted
Sheet: SZ1

SMOKE ZAPPER 250	
SCOPE OF WORK	
<u>RESPONSIBILITY TO BE DESIGNATED BY THE GENERAL CONTRACTOR</u>	
<u>DEFINITIONS FOR REFERENCE:</u>	
CONNECTION LOCATIONS WILL VARY PER SYSTEM, REFER TO SMOKI USA DIAGRAMS FOR SPECIFICATIONS.	
1. APPLICABLE CONTRACTOR TO SUPPLY AND INSTALL 115V (14.6A) ON A DEDICATED MINIMUM 20A CIRCUIT AT SMOKE ZAPPER UNIT.	
2. APPLICABLE CONTRACTOR TO SUPPLY AND INSTALL (1) SINGLE PHASE POWER FEED FROM CIRCUIT BREAKER TO SMOKE ZAPPER UNIT.	
3. SMOKI USA REPRESENTATIVE/AFFILIATE TO PERFORM FINAL INSPECTION ONCE ALL RESPONSIBILITIES HAVE BEEN COMPLETED.	



WIRING DIAGRAM

SCALE: N.T.S.

	SMOKE ZAPPER 250
	SEQUENCE OF OPERATION
	<u>RED ON/OFF DIAL — LOCATED ON ELECTRICAL BOX COVER — "ON" POSITION.</u> 1. WATER PUMP ON. 2. HIGH PRESSURE WATER SPRAY SYSTEM ON. 3. SLOW WATER INTAKE SOLENOID ON. <u>OFF MODE — RED ON/OFF DIAL SET TO OFF POSITION.</u> 1. WATER PUMP OFF. 2. HIGH PRESSURE WATER SPRAY SYSTEM OFF. 3. SLOW WATER INTAKE SOLENOID OFF.

	SMOKE ZAPPER 250
	ELECTRICAL CONNECTION SCHEDULE
	<u>POWER CONNECTIONS:</u>
L-1	115V, 14.6 AMP – SMOKE ZAPPER POWER – 1 WIRE
N-1	NEUTRAL – SMOKE ZAPPER – 1 WIRE
G-1	GROUND – SMOKE ZAPPER – 1 WIRE

NOTE:
ALL CABLING AND WIRING TO BE PROVIDED BY ELECTRICAL
CONTRACTOR UNLESS OTHERWISE STATED.

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SMOKI USA POLLUTION CONTROL UNITS ARE LISTED BY: INTERTEK LISTED - UL 73 UL LISTED - UL 1978 FILE #MH60726  ETL LISTED  UL US LISTED		
1	ISSUE FOR REVIEW	3/30/15
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<u>Firm Name and Address</u>  SMOKI USA PO BOX 698 BEDFORD HILLS, NY 10507		
<u>Project Name and Address</u> 		
<u>Project</u> ##### <u>Date</u> 9/8/2015 <u>Scale</u> As Noted	<u>Sheet</u> SZ2	