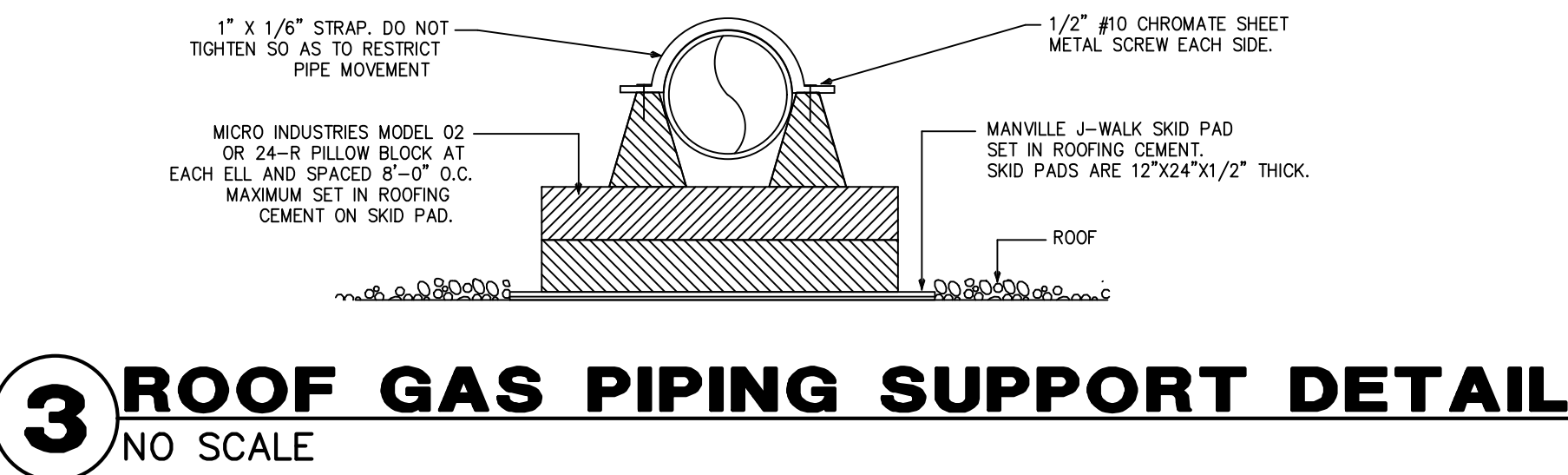
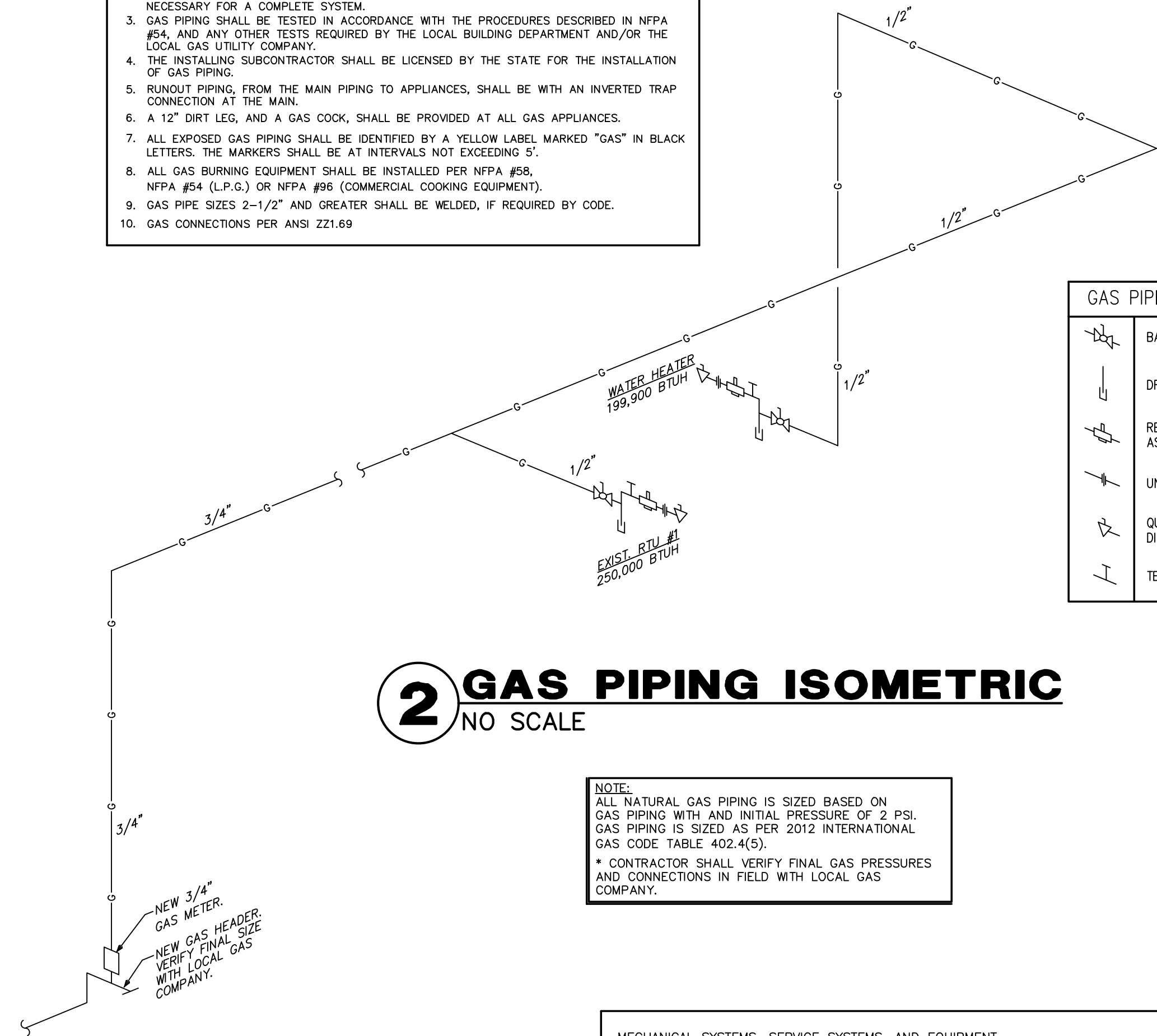




- ### GENERAL GAS PIPING NOTES
1. GAS PIPING AND FITTINGS SHALL BE SEAMLESS BLACK STEEL WITH MALLEABLE IRON FITTINGS. DIELECTRIC COUPLINGS OR UNIONS SHALL BE UTILIZED WHEN PIPING OF DISSIMILAR METAL IS CONNECTED. EXTERIOR GAS PIPING ON ROOF SHALL BE PAINTED WITH YELLOW "RUSTOLEUM" PAINT. EXPOSED GAS PIPING ON BACK WALL SHALL BE "RUSTOLEUM" PAINTED TO MATCH BUILDING. GAS PIPING CONNECTIONS SHALL BE THREADED UNLESS OTHERWISE REQUIRED BY CODE.
 2. GAS PIPING SYSTEM SHALL BE INSTALLED TO THE REQUIREMENTS OF THE AGA PAMPHLET "INSTALLATION OF GAS APPLIANCES AND GAS PIPING" AND THE NFPA STANDARD #54. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS AND PAY ALL FEES WITH THE "LOCAL" GAS COMPANY FOR THE INSTALLATION OF THE GAS METER, GAS SERVICE, AND ITS ACCESSORIES NECESSARY FOR A COMPLETE SYSTEM.
 3. GAS PIPING SHALL BE TESTED IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN NFPA #54, AND ANY OTHER TESTS REQUIRED BY THE LOCAL BUILDING DEPARTMENT AND/OR THE LOCAL GAS UTILITY COMPANY.
 4. THE INSTALLING SUBCONTRACTOR SHALL BE LICENSED BY THE STATE FOR THE INSTALLATION OF GAS PIPING.
 5. RUNOUT PIPING, FROM THE MAIN PIPING TO APPLIANCES, SHALL BE WITH AN INVERTED TRAP CONNECTION AT THE MAIN.
 6. A 1/2" DIRT LEG, AND A GAS COCK, SHALL BE PROVIDED AT ALL GAS APPLIANCES.
 7. ALL EXPOSED GAS PIPING SHALL BE IDENTIFIED BY A YELLOW LABEL MARKED "GAS" IN BLACK LETTERS. THE MARKERS SHALL BE AT INTERVALS NOT EXCEEDING 5'.
 8. ALL GAS BURNING EQUIPMENT SHALL BE INSTALLED PER NFPA #58.
 9. GAS PIPE SIZES 3/4" AND GREATER SHALL BE WELDED, IF REQUIRED BY CODE.
 10. GAS CONNECTIONS PER ANSI Z21.69.



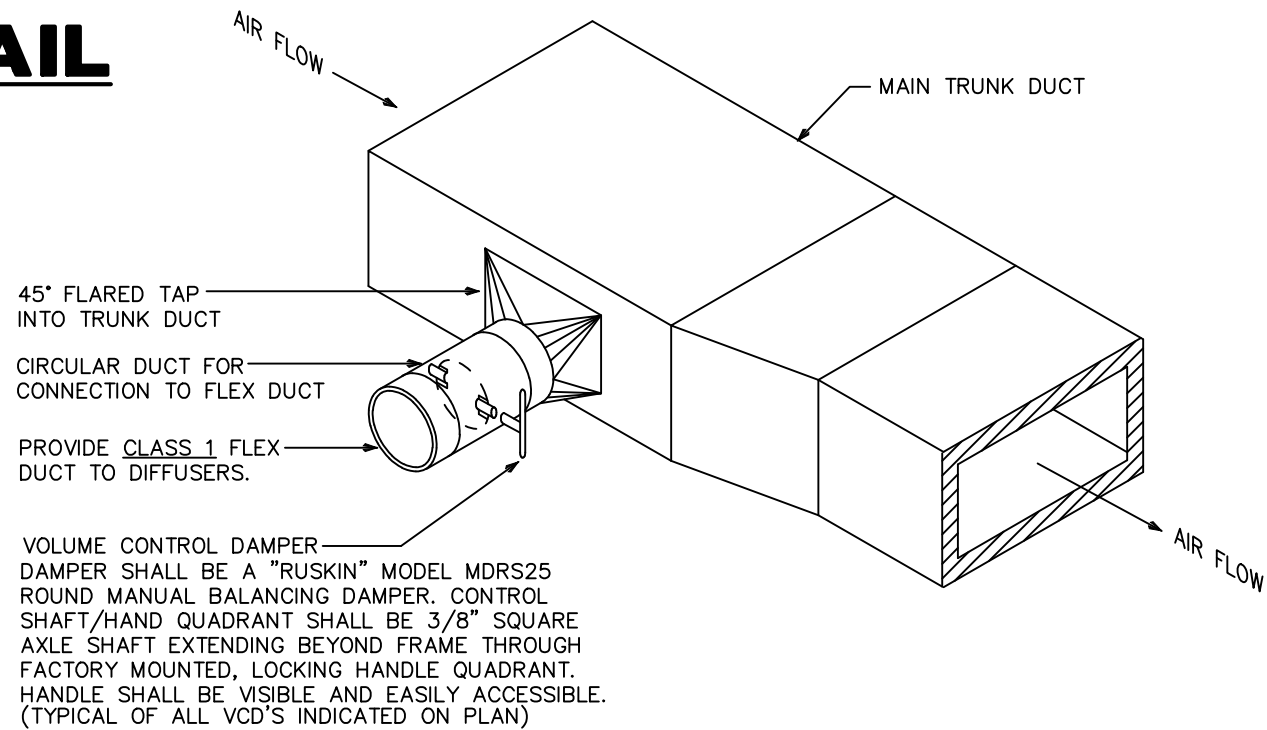
GAS PIPE LEGEND	
	BALL VALVE
	DRILL LEG
	REGULATOR/OPD AS REQUIRED
	UNION
	QUICK DISCONNECT
	TEST TEE

NOTE:
ALL NATURAL GAS PIPING IS SIZED BASED ON GAS PIPING WITH AN INITIAL PRESSURE OF 2 PSI. GAS PIPING IS SIZED AS PER 2012 INTERNATIONAL GAS CODE TABLE 402.4(5).
* CONTRACTOR SHALL VERIFY FINAL GAS PRESSURES AND CONNECTIONS IN FIELD WITH LOCAL GAS COMPANY.

MECHANICAL SYSTEMS, SERVICE SYSTEMS, AND EQUIPMENT
METHOD OF COMPLIANCE:
Prescriptive [X] Performance [] Energy Cost Budget []

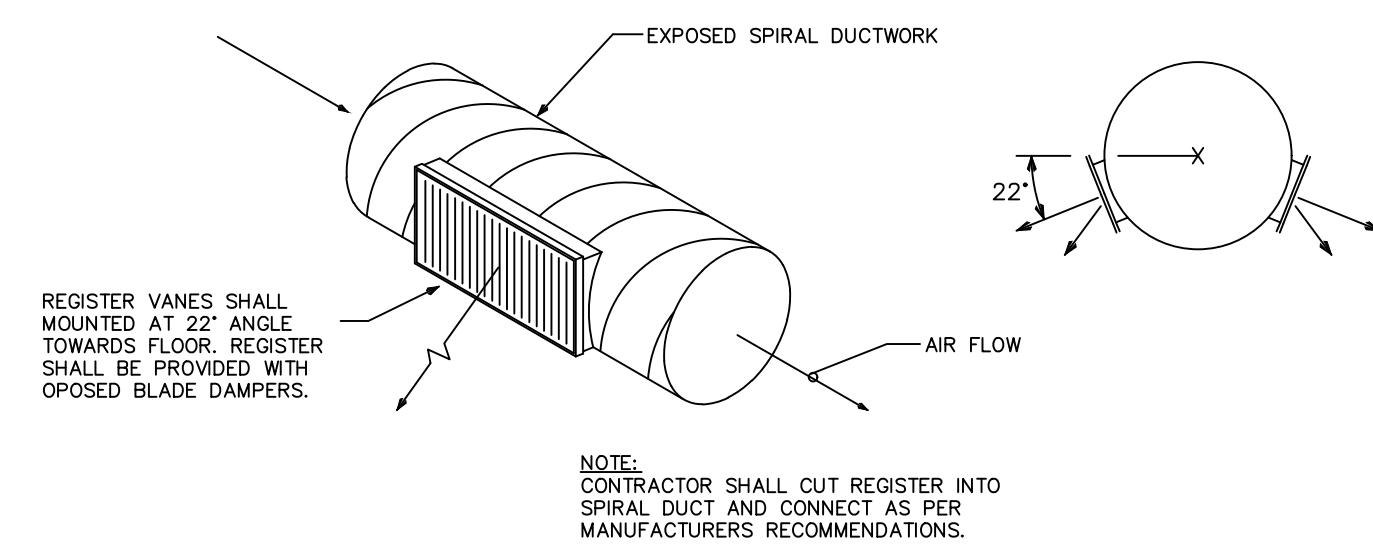
Exterior Design Conditions	
winter dry bulb	20° F
summer dry bulb	97° F
Interior Design Conditions	
winter dry bulb	68° F
summer dry bulb	74° F
relative humidity	52-58%
Building Heating Load	288,000 BTU
Building Cooling Load	290,000 BTU
Mechanical Spacing Conditioning System	
Unitary	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
heating efficiency	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
cooling efficiency	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
heat output of unit	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
cooling output of unit	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
Boiler	N/A
total boiler output, If oversized, state reason.	
Chiller	N/A
total chiller capacity, If oversized, state reason.	
List equipment efficiencies	
Equipment schedules with motors (mechanical systems)	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
motor horsepower	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
number of phases	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
minimum efficiency	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
motor type	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.
# of poles	REFER TO EQUIPMENT SCHEDULES ON THIS SHEET.

DESIGNER STATEMENT:¹
To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems and equipment requirements of IECC (International Energy Conservation Code) 2009 Edition w/2012 Amendments.
SIGNED: _____
NAME: TODD W. CAREY
TITLE: ENGINEER



6 BRANCH DUCT DETAIL

NO SCALE

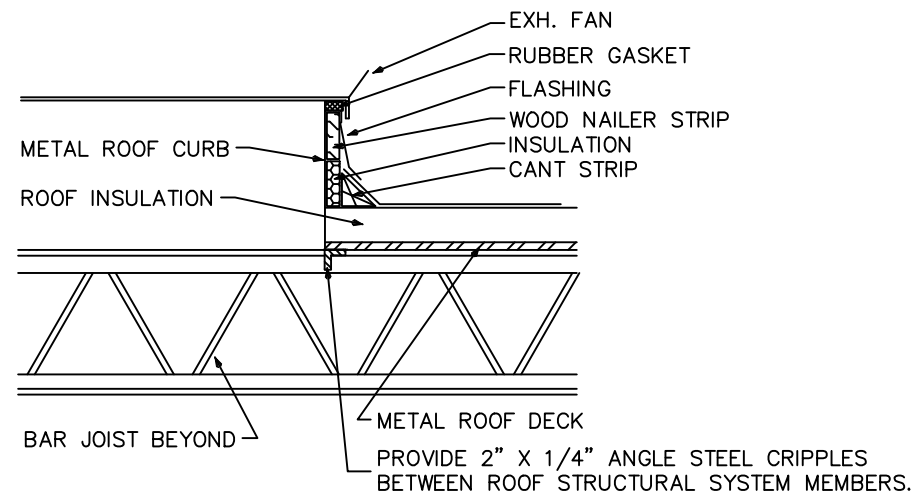
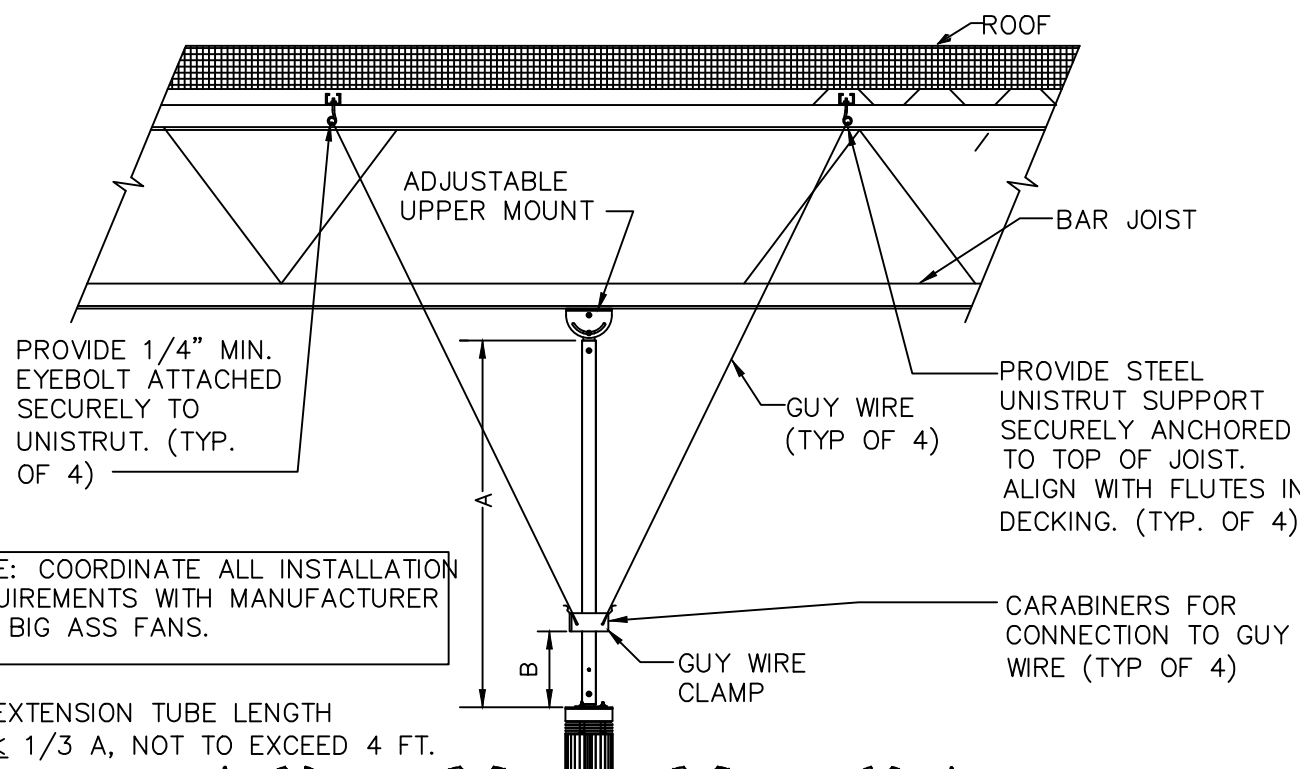


7 SPIRAL DUCT / REGISTER CONNECTION DETAIL

NO SCALE

GENERAL MECHANICAL NOTES

1. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY FOR THE INSTALLATION OF A COMPLETE SYSTEM IN ACCORDANCE WITH THESE DRAWINGS, THE APPLICABLE BUILDING CODE AND ALL OTHER APPLICABLE STATE, COUNTY AND LOCAL ORDINANCES AND THE LATEST EDITION OF THE FOLLOWING PUBLICATIONS: SMACNA, ASHRAE, NFPA 90A, 90B, 91 & ANSI B-9.1 ALL BUILDING SHALL BE FABRICATED, INSTALLED AND SUPPORTED AS PER SMACNA STANDARDS.
2. THE CONTRACTOR SHALL PAY ALL COSTS OF PERMIT, INSPECTIONS AND ALL OTHER COSTS INCIDENTAL TO THE COMPLETION AND TESTING OF THIS WORK.
3. THE CONTRACTOR SHALL VISIT THE SITE AND COORDINATE WORK WITH OTHER TRADES TO INSURE AN ORDERLY PROGRESS OF THIS WORK.
4. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH ONE SET OF "AS-BUILT" DRAWINGS UPON COMPLETION OF THIS PROJECT. CONTRACTOR SHALL ALSO LEAVE FOR ONE AT LEAST ONE SET OF THE MANUFACTURER'S INSTALLATION AND OPERATIONS MANUALS FOR ALL EQUIPMENT PROVIDED ON THE PROJECT.
5. ALL PROVIDED MATERIALS SHALL BE NEW OF GOOD QUALITY. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER BY SKILLED WORKMAN.
6. CONTRACTOR SHALL SUBMIT FOR APPROVAL FIVE (5) COPIES OF MANUFACTURER'S DRAWINGS FOR EACH PIECE OF EQUIPMENT AND CONTROLS INCLUDED IN CONTRACT. IT IS STRONGLY PREFERRED THAT THE SUBMITTALS BE MADE IN THE FORM OF AN ELECTRONIC SUBMITTAL IN A PDF TYPE FORMAT.
7. ALL NEW SUPPLY AND RETURN AIR DUCTWORK SHALL BE GALVANIZED SHEET STEEL EXTERNALLY WRAPPED WITH WITH A MIN. OF R5 INSULATION OR R8 IF DUCTWORK IS LOCATED EXTERIOR TO BLDG INSULATION ENVELOPE. ALL FLEX DUCT SHALL BE "THERMOFLEX" WITH A MINIMUM 4/2 R VALUE, OR APPROVED EQUAL, AND SHALL HAVE EQUIVALENT INSULATION. * ALL EXPOSED ROUND DUCTWORK SHALL BE "SPROSAFE" NON-INSULATED SINGLE WALL SPIRAL DUCTS AS MANUFACTURED BY LINDAS, INC. <http://www.lindasusa.com> OR APPROVED EQUAL.
8. ALL EXHAUST DUCTS AND OUTSIDE AIR DUCTS SHALL BE GALVANIZED SHEET METAL WITH SEALED SEAMS AND JOINTS.
9. DUCT SIZES SHOWN ARE INSIDE DIMENSIONS.
10. ALL AIR DEVICES (DIFFUSERS, REGISTERS AND GRILLS) SHALL BE ALL ALUMINUM CONSTRUCTION WITH EXPOSED SURFACE OFF WHITE BASED ENAMEL FINISH OR AS SPECIFIED BY ARCHITECT. DEVICES SHALL BE TYPUS, METALARE, AIRGUIDE. PROVIDE OPPOSED BLADE DAMPERS AT ALL DIFFUSERS AND REGISTERS.
11. THERMOSTAT SHALL BE COMBINATION COOLING/HEATING, WITH SYSTEM "COOL-AUTO-HEAT-OFF" AND FAN "ON-AUTO" SELECTOR SWITCHES. PROVIDE PROGRAMMABLE TYPE THERMOSTAT. * CONTRACTOR SHALL FULLY INSTRUCT OWNER ON HOW TO PROPERLY PROGRAM INSTALLED THERMOSTATS. * PROGRAMMABLE THERMOSTAT SHALL BE BY MANUFACTURER OF INSTALLED AIR HANDLING UNIT. IT IS RECOMMENDED THAT DURING OCCUPIED HOURS, THE FANS BE SET TO "ON" IN LUD OF "AUTO". * THERMOSTATS SHALL BE MOUNTED A MAX. OF 48" A.F.F.
12. REFRIGERANT LINES SHALL BE COPPER, TYPE "L" HARD DRAWN WITH WROUGHT COPPER SOLDER-JOINT TYPE FITTINGS. USE 90/10 SOLDER. REFRIGERANT LINES SHALL SIZED AS PER MANUFACTURER RECOMMENDATIONS.
13. SPLIT SYSTEMS (IF APPLICABLE) SHALL HAVE A MINIMUM OF 1-1/2" ARMAFLEX INSULATION (OR APPROVED EQUAL) USED FOR SUCTION LINES. INSTALLATION SHALL BE AS PER MANUFACTURERS INSTRUCTIONS. PRE-INSULATED LINES SETS ARE ACCEPTABLE.
14. ALL BRANCH TAKE-OFFS TO BE PROVIDED W/MANUAL VOLUME DAMPERS AND TAPS AS PER PLANS REQUIREMENTS.
15. PROVIDE NEW FILTERS FOR ALL AIR CONDITIONING EQUIPMENT BEFORE STARTING THEM. REPLACE THEM PRIOR TO FINAL ACCEPTANCE BY OWNER.
16. PROVIDE SMOKE DETECTORS WITH ACCESS DOORS IN ALL SUPPLY AIR DUCTS FOR FANS AND AHU'S SERVING A COMMON DESIGN SUPPLY OR RETURN PLENUM OF ABOVE 2000 CFM. ALL SMOKE DETECTORS SHALL BE BY ONE MANUFACTURER, COORDINATE VOLTAGE ETC. WITH ELECTRICAL CONTRACTOR AND THE ALARM SYSTEM BEFORE ORDERING. UPON DETECTION, SMOKE DETECTORS SHUT DOWN ASSOCIATED AIR MOVING EQUIPMENT AND ALL AIR MOVING EQUIPMENT SERVING THAT COMMON PLENUM.
17. HVAC CONTRACTOR SHALL PROVIDE A TEST AND BALANCE REPORT FOR ALL MECHANICAL EQUIPMENT, AIR DEVICES, DAMPERS, AHU'S AND FANS. THE T & B SHALL BE IN ACCORDANCE WITH THE AIR BALANCE COUNCIL STANDARDS, AND SHALL INCLUDE AIR QUANTITIES FOR ALL SUPPLY GRILLS, RETURN GRILLS, AND EXHAUST GRILLS, AND THE LEAVING AND ENTERING AIR TEMPERATURE (T) FROM SUPPLY GRILLS AND EXHAUSTORS.
18. THERMOSTAT LOCATION SHALL BE APPROVED BY OWNER BEFORE INSTALLATION.
19. ALL INSULATION SHALL HAVE FIRE/SMOKE RATING LESS THAN 25/50.
20. MECHANICAL PLANS IN GENERAL ARE DIAGRAMMATIC IN NATURE, AND ARE TO BE READ IN CONJUNCTION WITH ARCH. PLUMBING, ELECTRICAL AND STRUCTURAL PLANS AND SHALL BE CONSIDERED AS ONE SET OF DOCUMENTS. DUCT AND PIPING OFFSETS, BENDS AND TRANSITIONS WILL BE REQUIRED TO PROVIDE AND INSTALL A COMPLETE FUNCTIONAL SYSTEM AND SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
21. CONTRACTOR SHALL INSTALL ALL OUTDOOR EQUIPMENT TO WITHSTAND WIND LOADING FORCES AS REQUIRED BY LOCAL CODES. REFER TO STRUCTURAL PLANS BY OTHERS FOR STRUCTURAL DETAILS.
22. PROVIDE ALL NECESSARY CONTACTORS, RELAYS, ETC., FOR A COMPLETE OPERATING SYSTEM.
23. THROUGHOUT THE COURSE OF THE WORK, MINOR CHANGES AND ADJUSTMENTS TO THE PLANS AND SPECIFICATIONS MAY BE REQUESTED BY THE TENANT. THE CONTRACTOR SHALL MAKE SUCH ADJUSTMENTS WITHOUT ADDITIONAL COST TO THE TENANT. WHERE SUCH ADJUSTMENTS ARE NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OF THE SYSTEMS, AND WITHIN THE INTENT OF THE CONTRACT DOCUMENTS.
24. NOTWITHSTANDING ANY OTHER PROVISIONS OF THE CONTRACT DOCUMENTS, THE CONTRACTOR BEARS ULTIMATE RESPONSIBILITY FOR COMPLIANCE OF THE INSTALLATION WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
25. IF ANY ERRORS, DISCREPANCIES OR OMISSIONS APPEAR IN THE DRAWINGS, SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF SUCH ERROR OR OMISSION. IN THE EVENT OF THE CONTRACTOR FAILING TO GIVE SUCH NOTICE BEFORE CONSTRUCTION OR FABRICATION OF THE WORK, HE WILL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY SUCH ERRORS, DISCREPANCIES OR OMISSIONS AND THE COST OF RECTIFYING SAME.



5 EXHAUST FAN CURB DETAIL

NO SCALE

4 BAF DE-STRATIFICATION FAN DETAIL

NO SCALE

PADDLE FAN SCHEDULE						
LABEL	MANUFACTURER & MODEL NO.	FAN DIA.	MOUNTING ARRANGEMENT	HORSE POWER	VOLTAGE	MOCP
BAF #1,2	BIG ASS FAN - BASIC 6	16"	FROM ROOF STRUCTURE	1.5 HP	480V/3#	10A

NOTES: 1.) REFER TO ELECTRICAL PLANS FOR CONTROL. PRODUCT DATA HERE: <http://goo.gl/UtcPiD>
2.) INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.

FAN SCHEDULE							
LABEL	TYPE OF UNIT - AREA SERVED	MANUFACTURER & MODEL NO.	CFM	SP	MOUNTING ARRANGEMENT	MOTOR H.P.	ENCLOSURE TYPE
EF-1	CABINET FAN - REFER TO PLANS	PENN ZEPHYR 27	190	.125"	CEILING MOUNTED	68 WATTS	OPEN DRIP PROOF
EF-2,7	CABINET FAN - REFER TO PLANS	PENN ZEPHYR 281	300	.125"	CEILING MOUNTED	124 WATTS	OPEN DRIP PROOF
EF-3,4,5,6	AXIAL VANE FAN - REFER TO PLANS	ENERVEK GSV 012 (HI-TEMP)	550	.4"	ROOF MOUNTED	1/8	OPEN DRIP PROOF

NOTES: 1.) REFER TO ELECTRICAL PLANS FOR CONTROL.
2.) PIZZA OVEN FAN, PRODUCT INFORMATION FOR THIS FAN: <http://www.enervefansource.com/pizzaoventfans.htm> EF- 3,4,5,6 FAN INFO: <http://goo.gl/us2B03>
EXHAUST FAN ETL listed to:
UL705 - Standard for Power Ventilators
UL762 - Standard for Power Roof Ventilators for Restaurant Exhaust Appliances.
ULC-5645-03 - Standard for Power Roof Ventilators and Commercial and Institutional Kitchen Exhaust Systems.
3.) FAN TO BE PROVIDED WITH OPTIONAL 5 AMP SPEED CONTROLLER, ENERVEK MODEL FSC. SEE PLANS FOR LOCATION. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.
4.) FAN TO BE PROVIDED WITH OPTIONAL ENERVEK RAIN SHIELD. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.
5.) PROVIDE A 277V TO 120V STEPDOWN TRANSFORMER EQUAL TO A ELCO MODEL ETR-277, 300VA RATED CAPACITY, HVAC CONTRACTOR TO PROVIDE, ELECTRICIAN TO INSTALL.

OUTSIDE AIR CALCULATIONS

THE FOLLOWING IS BASED ON ASHRAE STANDARD 62.1-2010 TABLE 6-1 MINIMUM VENTILATION RATES FOR OUTSIDE AIR REQUIREMENTS				MINIMUM OUTSIDE AIR REQUIRED (CFM)				MAXIMUM OUTSIDE AIR REQUIRED (CFM)			
UNIT LABEL	ROOM	OCCUPANCY CATEGORY	AREA	ESTIMATED MAX. OCCUPANCY	AREA CALC	E ₂	TOTAL	PEOPLE + AREA CALC	E ₂	TOTAL	
RTU #1	INDOOR BENCH SEATING	DINING	3,258	70 PEOPLE PER 1,000 S.F./7.5 CFM PER PERSON	(3,258 X 18) = 586 AREA	0.8	586/0.8 = (732)	(228X7.5) + (3,258 X 18) = 2,296 PEOPLE AREA	0.8	2,296/0.8 = (2,870)	

TOLL-FREE: 844-893-6462 WWW.FIREDUPKITCHENS.COM

ACUNTO ANGOLARE

ACUNTO NAPOLI OVENS

ACUNTO ANGOLARE 130

THE ORIGINAL NEAPOLITAN OVEN

Endorsed by the Vera Pizza Napoletana Association and esteemed by the greatest pizzaiolos in Naples, the Acunto is the definitive Neapolitan pizza oven. The Acunto family has built ovens for over 125 years, passing their expertise down through the generations to achieve the highest quality and most authentic hand-made brick oven.

TRADITION & TECHNOLOGY

The Acunto ovens are built to last, with incredible attention to materials and craftsmanship. Each oven is hand built by the Acunto artisans in their Naples workshop using native materials. With their low-dome and incredible heat retention, these ovens easily bake authentic Neapolitan pizza in seconds.

CLEARANCES:

Minimum clearance of the oven to combustible materials:
Top: 18"
Back & Sides: 1"

Maintain required air space clearance between oven and combustible enclosure.

Do not fill required air space with insulation or other materials.

Non-combustible flooring must extend out at least 36" from oven opening and at least 30" to each side of the opening.

BASIC SPECIFICATIONS:

Baking Surface: 51" ø
 Oven Opening 8.75" x 17"
 12" Pizza Capacity: 6 – 7 pizzas
 Daily Preheat Time: 2 hours
 Weight: 6,175 lb
 External Width: 71"
 External Depth: 75"

WARRANTY INFORMATION:

1 year warranty on internal refractory materials, including floor and dome. See warranty document for details.

Conforms to: UL 2162, NSF-4
 Commercial Wood-Fired Baking Ovens –
 Refractory Type

File #MH48941

MADE IN ITALY

LISTED

ACUNTO ANGolare

TOLL-FREE: 844-689-6462

WWW.FIREPLACETECHS.COM

ACUNTO NAPOLI OVENS

VENTILATION REQUIREMENTS:

❖ Vent Diameter: 10"

Manufacturer recommends direct ventilation via solid-fuel UL103 duct. Direct ventilation ensures proper oven operation.

SIZE DISCLAIMER:

WE MAKE EVERY EFFORT TO PROVIDE ACCURATE INFORMATION REGARDING MANUFACTURER'S REPORTED DIMENSION INFORMATION.

PLEASE NOTE THAT DUE TO THE ARTISANAL NATURE OF THE MANUFACTURING PROCESS, FROM TIME TO TIME PRODUCT SIZING MAY VARY SLIGHTLY.

	Metric	U.S.
	GA 130 mm	GA 130 in.
A	1800	70.9
B	1900	74.8
C	1370	53.9
D	750	29.5
E	1300	51.2
F	1130	44.5
G	350	13.8
H	550	21.7
I	230	9.1
L	250	9.8
M	220	8.7
N	330	13.0
O	1900	74.8
P	1300	51.2
Q	350	13.8

CATALOG

SELKIRK®
COMMERCIAL & INDUSTRIAL

Models PS/IPS

Stainless Steel Double Wall
Positive Pressure Piping Systems

Selkirk Commercial & Industrial Models PS and IPS are modular, prefabricated piping systems which embody flanged joints designed for both quick assembly and pressure-sealing capabilities.

FEATURES

- PS/IPS Boiler Breaching
- Chimney Stack
- Engine Exhaust
- PS/IPS Grease Duct
- Food Service Venting

SELKIRK®

SYSTEM CONCEPT

Selkirk Model PS and IPS are modular, prefabricated piping systems which embody flanged joints designed for both quick assembly and pressure-sealing capabilities. They offer a combination of insulated piping components as well as the structural accessories needed for support and attachment to building structures. Expansion joints are available both in gasket designs and in pressure tight, all-welded bellows designs.

Standard gas-carrying piping parts are usable for a wide variety of applications:

- Chimneys and stacks for all types of building heating equipment.
- Chimneys for industrial ovens, furnaces, and processing equipment.
- Exhaust piping for engines or turbine units.
- Ducting in restaurants for compliance with Type 1 hood requirements.
- Ducting for heated air and combustion products.
- Ducting for light duty pollution control equipment.
- Venting for engine exhaust and other shipboard systems.
- Venting for offshore drilling rigs.

Complete Line of Fittings

Model PS and IPS are available in eighteen sizes, from 5" I.D. to 48" I.D. Fittings include various elbows, tees, supports and terminations, as well as a variety of accessory fittings designed to make installation simple and quick.

Each component is shipped complete and ready for installation. Each ordered part includes Inner Vee Rings, Outer Channel Bands and all the necessary hardware.

All items included with each order are listed in this catalog under the part description.

Exceeding the Requirements

Selkirk, inventor of the positive pressure system concept, far exceeds the requirements of codes and our manufacturers. Results of our testing programs illustrate this fact.

Leak Tests

Selkirk conducted system pressure testing (to 60" w.c.) against leakage in the presence of UL inspectors, and results of these tests are impressive. Using the CSRA occupation standard of leakage rate of 50 parts per million over an eight hour period as criterion for acceptance, Selkirk was tested to a leakage rate of only .144 parts per million, or three-tenths of one percent (.3%) of the maximum allowable leakage rate per UL103 test standard.

Seismic Tests

We further demonstrated the superiority of the Model PS and IPS concept by conducting seismic load tests. These tests proved the structural integrity of our products under severe stress by showing that a gaged stack measuring 20 inches in diameter and exceeding 10 feet above the gaging location (installed in strict accordance with the UL103 listing) could withstand the rigors of all Seismic Zones.

Structural Tests

Selkirk recently tested for greater freestanding limits (termination height above a guide point). These tests, simulating stack performance under 110 mph wind conditions, again demonstrated the superiority of Selkirk products.

Skin Temperature Rise Tests

Among other things, UL103 covers the temperature rise limits of the surrounding combustible materials in an unencased chimney installation and it defines the test set-up to measure the actual temperature rise of those materials at the OEM recommended clearances. Our published Model IPS skin temperatures were obtained during these tests.

1

TOLL-FREE: 844-683-6462

WWW.ACUNTOUKITCHENS.COM

VENTILATION GUIDE

ACUNTO OVENS

DIRECT VENTILATION FOR ACUNTO OVENS

Gianni Acunto Forni SRL intends all ovens to be **direct vented** per Chapters 3 and 4 of ANSI/NFPA 211 and Chapter 14 of ANSI/NFPA 96. Any alterations that do not comply with the installation instructions of this UL-listed commercial cooking appliance will void warranty. Acunto ovens have been investigated by UL for compliance to the commercial wood fired oven standard, UL 2162 (See attached at the end of this document).

AHJ: INTERPRETATION OF THE CODE FOR DIRECT VENTILATION

International Mechanical Code:

Per the "International Mechanical Code", Section 917.1, "Cooking appliances that are designed for permanent installation shall be **listed, labeled and installed in accordance with the manufacturer's installation instructions**."... "Solid-fuel-fired ovens shall be listed and labeled **in accordance with UL 2162**."

UL 2162:

Per UL 2162 (See attached at the end of this document), "This equipment is intended to be installed in accordance with appropriate installation standards, such as the current editions of:

- ◆ ANSI/NFPA 96, "Ventilation Control & Fire Protection of Commercial Cooking Operations"
- ◆ ANSI/NFPA 211, "Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances"
- ◆ ANSI/NFPA 70, "National Electrical Code" (NEC)
- ◆ "Uniform Mechanical Code"
- ◆ "International Mechanical Code"
- ◆ "International Residential Code"
- ◆ Local codes

ANSI/NFPA 96:

Per Chapter 14, "Solid Fuel Cooking Operations" of the NFPA 96 document, 14.1 "Venting Application" states "**Venting requirements** of solid fuel cooking operations **shall be determined in accordance with 14.1.1 through 14.1.7.**"

An examination of the relationship of the applicable elements of 14.1.1 through 14.1.7 and Acunto Forni UL 2162 listed ovens follow;

- ◆ **14.1.1** Where solid fuel cooking equipment is required by the manufacturer to have a natural draft, the vent shall comply with Section 14.4
 - Acunto Forni ovens are designed with a natural draft without an external hood, although powered-exhaust venting systems are recommended for most installations.
- ◆ **14.1.2 & 14.1.3** are unrelated to the issue of direct venting

Rev 2015/11.1

1

TOLL-FREE: 844-683-6462

WWW.FIREPROTECTKITCHENS.COM

VENTILATION GUIDE

ACUNTO OVENS

- ❖ **14.1.4** Natural draft ventilation systems and power-exhausted ventilation systems shall comply with Sections 14.3, 14.4, and 14.6
 - Acunto Formi ovens can and should comply with these Sections.
- ❖ **14.1.5** Where a solid fuel cooking appliance allows effluent to escape from the appliance opening, this opening shall be covered by a hood and an exhaust system that meets the requirements of Sections 14.3, 14.4, and 14.6.
 - Acunto Formi ovens do not allow effluent to escape from the appliance opening. All ovens are built with a natural hood constructed from refractory cement at the oven mouth. A natural draft is created by the movement of air due to the transfer of heat. A powered-exhaust fan can be supplied to aid in the movement of effluent to ensure that all effluent can pass the natural hood of the oven.
- ❖ **14.1.6** Solid fuel cooking operations shall have spark arresters to minimize the passage of airborne sparks and embers into plenums and ducts.
 - Acunto Formi can supply spark arresters to our clients to facilitate this requirement.
- ❖ **14.1.7** Where the solid fuel cooking operation is not located under a hood, a spark arrester shall be provided to minimize the passage of sparks and embers into flues and chimneys.
 - See response to 14.1.6

Section 14.1 and its sub-sections make allowances for the direct vented installation of Acunto Formi ovens. In addition, the following Sections of Chapter 14 provide that fixed automatic fire-extinguishing equipment are not required per the correct installation of Acunto Formi oven per installation instructions:

- ❖ **14.6.1** Exhaust system requirements shall comply with Chapter 8 for hooded operation or shall be installed in accordance with the manufacturer's recommendation for unhooded appliances
 - Acunto Formi ovens shall be installed per Chapters 3 and 4 of NFPA 211 and Chapter 14 of NFPA 96 as an unhooded, direct-vented exhaust system.
- ❖ **14.7.2** Where acceptable to the authority having jurisdiction, solid fuel-burning cooking appliances constructed of solid masonry or reinforced Portland or refractory cement concrete and vented in accordance with Chapters 3 and 4 of NFPA 211, "Standard for Chimney's Fireplaces, Vents, and Solid Fuel-Burning Appliances, shall not require fixed automatic fire-extinguishing equipment.
 - Per UL 2162, Acunto Formi ovens are solid fuel burning wood fired ovens of refractory cement construction. Installation instructions recommend venting per Chapters 3 and 4 of NFPA 211.
- ❖ **14.7.4** Where acceptable to the authority having jurisdiction, solid fuel-burning cooking appliances constructed of solid masonry or reinforced Portland or refractory cement concrete and vented in accordance with Chapters 3 and 4 of NFPA 211, "Standard for Chimney's Fireplaces, Vents, and Solid Fuel-Burning Appliances, shall not require automatic fire-extinguishing equipment for the protection of grease removal devices, hoods and duct systems.
 - Per UL 2162, Acunto Formi ovens are solid fuel burning wood fired ovens of refractory cement construction. Installation instructions recommend venting per Chapters 3 and 4 of NFPA 211.

Rev 2015/11.1

2

TOLL-FREE: 844-683-6462

WWW.FIREDUPKITCHENS.COM

VENTILATION GUIDE

ACUNTO OVENS

HOOD SYSTEMS ENDANGER OVEN EFFICACY

It is **not** recommended to exhaust Acunto ovens through a hood system due to the following reasons:

- ❖ The hood will force a much higher CFM flow than necessary due to the addition of ambient air that enters the hood system. This results in an oven that requires more fuel to maintain the same temperature.
- ❖ The hood will pull gasses out of the oven via the oven mouth, disrupting the natural flow of the oven design. Acunto ovens are already designed with a natural eyebrow hood. A positive pressure system via top draft inducer is more than sufficient to remove the smoke that escapes from the oven mouth via direct venting.
- ❖ The increased spilling of smoke due to the hood system creates an atmospheric health hazard within the restaurant. The oven operator will become exposed to unhealthy levels of particulate matter, which can be avoided by direct venting. The spilling of smoke will also leave a very visible black stain on the front of the oven due to this phenomenon.
- ❖ Most importantly, in the instance of an unexpected power outage, the restaurant will be exposed to smoke without any recourse for ventilation. This would result in both a health and fire hazard, prompting the evacuation of the building.

Install and use only in accordance with Gianni Acunto Forni SRL installation and operating instructions.

Italy:

Gianni Acunto Forni SRL
Via F. Petrosi 20
80141 Campania Na Italy

North America:

Fired Up Kitchens, Inc
631 N Main St
Brewster, NY 10509

Toll-Free Office Phone:
(844) 683 6462

Please contact American representative, Fired Up Kitchens, for further inquiries or concerns

Rev 2015/11.1

3

CERTIFICATE OF COMPLIANCE

Certificate Number:	20141021-MH48941
Report Reference	MH48941-20130129
Issue Date	2014-OCTOBER-21

Issued to:	GIANNI ACUNTO FORNI SRL Via F Persico 20 80141 Campania Na ITALY
-------------------	--

This is to certify that representative samples of	COOKING APPLIANCES, WOOD FIRED
	See addendum page

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

Standard(s) for Safety:	Standard for "Commercial Wood-Fired Baking Ovens - Refractory Type" ANSI/UL 2162 and ULC/ORD-C2162-13.
Additional Information:	See the UL Online Certifications Directory at www.ul.com/database for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

Look for the UL Certification Mark on the product.


Bovale Mechanical, Electrical, Civil Engineer, Other Inspection and Field Services.
N.J.L.I.D.



Any information and documentation involving UL, their services are provided to you solely as a service of UL LLC (UL) or its authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at open.enquiry@ul.com

Page 1 of 2