VAN-PACKER® CO., INC.

MODEL

TWO-HOUR FIRE RATED ZERO CLEARANCE GRI

Date: 09/16/14

RESURGAM CITY OF PORTLAND, MAINE
Reviewed for Code Compliance
Inspections Division
Approved with Conditions

TESTING, CLASSIFICATION, & APPLICATIONS

Model GZ has been tested in accordance with the procedures and methods as set forth by U.L. 2221 *(Tests for Fire Resistive Grease Duct Enclosure Assemblies)* and U.L. 1978 *(Standard for Grease Ducts)*. Model GZ is classified for a maximum 2 hour fire resistance rating per U.L. 2221 and may be installed at zero clearance to combustibles. This rating qualifies the insulation and outer shell wall as an alternate to a specified hourly rated fire resistive shaft enclosure; effectively eliminating, in most applications, the requirement for a separate fire resistive enclosure. Model GZ grease ducts are suitable for the removal of smoke and grease laden vapors from commercial, industrial, institutional, and similar cooking applications where continuous operating temperatures are 500° F (260° C) or less and for intermittent temperatures not exceeding 2000° F (1093° C). Model GZ grease ducts are intended to be part of a complete grease duct system which connects the hood or grease extractor with the outdoors by means of an exhauster or blower system.

LISTING & CODE COMPLIANCE

Van-Packer's Model GZ grease ducts are "listed" by Intertek file VPC/FMF 120-01 as a *"two hour fire rated, zero clearance grease duct enclosure assembly"* and as *"Grease Ducts for Restaurant Cooking Appliances"* when installed in accordance with our installation instructions and the National Fire Protection Association's standard NFPA 96 *"Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations."*

WARRANTY

Standard and extended are available. Specific terms & conditions apply, contact factory for additional information.

STANDARD SIZES

6" I.D. to 10" I.D. available in 1" increments and from 10" I.D. to 36" I.D. available in 2" increments.

MATERIALS

Liner diameters (duct I.D.) from 6" to 36" are constructed from 20 gauge (0.035") materials. Shell diameters (duct O.D.) from 12" to 26" are constructed from 24 gauge (0.025") materials and 28" to 44" are constructed from 20 gauge (0.035") materials. Standard liner materials are type 304 S.S. and type 316 S.S. Standard shell materials are aluminized steel, type 430 S.S., type 304 S.S., and type 316 S.S. Consult the factory for availability of additional material types and thicknesses.

INSULATION

Ceramic fiber insulation in a 4" annular space.

PART IDENTIFICATION

For Model GZ, all part numbers have the letter "G" prefix, followed by the duct size inside diameter (I.D.), then by the part description code, next by the liner/shell designation, and last by special qualifier code(s). Part description codes are typically three characters and are either alpha or alpha numeric. Qualifier codes are most often used to designate section lengths, tee projection diameters, and the large end I.D. of increasers. The following are a couple examples of part numbers with their associated description and part number breakdown.

G10STRA30

Refers to a Model GZ 10" I.D., 30" long straight section constructed with a 304 S.S. liner and an aluminized steel shell.

G	=	Model GZ Product Code
10	=	Section I.D.
STR	=	Part Code (Straight Section)
A	=	Liner / Shell Code (304 S.S. Liner / ALZ Steel Shell)
30	=	Qualifier Code (30" Long)

G12BTTH08

Refers to a Model GZ 12" I.D. bodied boot tee section with an 8" I.D. projection constructed with a 304 S.S. liner and a 430 S.S. shell.

G	=	Model GZ Product Code
12	=	Tee Body I.D.
BTT	=	Part Code (Boot Tee Section)
H	=	Liner / Shell Code (304 S.S. Liner / 430 S.S. Shell)
08	=	Qualifier Code (8" I.D. Projection)

LINER / SHELL MATERIAL CODES

A	=	304 S.S. Liner / ALZ Steel Shell	B	=	316 S.S. Liner / ALZ Steel Shell
C	=	316 S.S. Liner / 316 S.S. Shell	D	=	304 S.S. Liner / 304 S.S. Shell
E	=	316 S.S. Liner / 304 S.S. Shell	F	=	304 S.S. Liner / 316 S.S. Shell
H	=	304 S.S. Liner / 430 S.S. Shell	J	=	316 S.S. Liner / 430 S.S. Shell

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DUCT SECTIONS & FITTINGS, SUPPORTS & GUIDES, PENETRATIONS & FIRESTOPS

We offer a wide variety of components to complete virtually any grease duct system. Standard straight se in 18", 30", and 42" lengths. Adjustable expansion and variable length sections will accommodate lengtl to 19-1/2." We have a variety of sections available with factory installed couplings and pipe nipple: drainage, fire suppression, and wash down systems. Standard elbows: 15°, 30°, and 45°. Several typ 90° centered, boot, 45°, and double 45°. Supports & guides include: plate supports, full angle rings, guides, and roof supports. Penetrations & firestops: Our floor and wall penetrations will accommodate botl rough openings and we offer a variety of roof penetration thimbles, flashings, and counter flashings. O includes adapters, access panel sections, terminations, transitions, etc.

WEIGHT PER FOOT

I.D.	O.D.	Approx. Assembled Weight per Foot
6"	14"	14.6 lbs
7"	15"	15.9 lbs
8"	16"	17.3 lbs
9"	17"	18.7 lbs
10"	18"	20.1 lbs
12"	20"	22.9 lbs
14"	22"	25.7 lbs
16"	24"	28.5 lbs
18"	26"	31.4 lbs

I.D.	O.D.	Approx. Assembled Weight per Foot
20"	28"	37.6 lbs
22"	30"	41.0 lbs
24"	32"	44.0 lbs
26"	34"	47.0 lbs
28"	36"	50.0 lbs
30"	38"	53.0 lbs
32"	40"	56.3 lbs
34"	42"	59.4 lbs
36"	44"	62.4 lbs

GENERAL LIMITATIONS

Where the duct is outside the building, the maximum height above a top lateral brace or guy for 12" I.D. duct and less is 10 feet. For duct sizes of 14" I.D. and greater, the maximum height above a top lateral brace or guy is 15 feet. Subsequent lateral braces, guys, or supports must be spaced at not more than 30 feet for all duct sizes.

The maximum spacing between horizontal (breeching) supports is 7 feet for all duct sizes.

For specific component limitations; e.g., maximum height above plate support assemblies, etc. please contact the factory.

INSTALLATION CONSIDERATIONS

Each part of the grease duct system must be assembled and installed correctly. Improper or lack of installation of required parts may result in the improper function of the grease duct system. Installation must be made in accordance with local and national code requirements. Refer to NFPA 96 *(Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations)* and additional NFPA standards as required. Consult authorities having jurisdiction to determine the need to obtain any required permits.

The grease duct layout should be carefully planned to allow adequate space for assembly, installation of supports, connection of support framing, access for cleanouts, accommodate standard fitting dimensions, rough openings for penetrations, etc. Do not assume all equipment producing smoke or grease laden vapors within a facility can be exhausted with a single grease duct system. Before multiple hoods, collectors, etc. are manifolded together verify compatibility of the equipment, vapors being vented, fan requirements, etc. with their respective providers. Consult a grease duct design professional as required.

One prime coat and finish coat of appropriate paint is recommended on installations which are subject to routine cleaning *(e.g. kitchen area)* and wherever exposed to the weather when the outer shell of components or accessories is constructed from aluminized steel.

Sealing of draw bands, overlapped or butted seams, etc. with an appropriate sealant is recommended on installations which are subject to routine cleaning *(e.g. kitchen area)* and wherever exposed to the weather in order to avoid moisture from entering the space between the grease duct shell and liner.

SALES, SERVICE & MANUFACTURING

Van-Packer welcomes the opportunity to assist you with your venting needs. For nearly seventy years Van-Packer has been supplying the commercial and industrial market with venting products. From our double wall stainless steel, to refractory lined, to free standing engineered chimneys, Van-Packer is a one stop shop that offers a product to fit your requirements. Call the technical service department for assistance with job specific price quotations, sketches or submittal drawings, chimney sizing and draft analyses, thermal analyses, and much more. For more information, please call or visit our website www.vpstack.com.

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PRODUCT SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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