

Two-hour fire-rated zero clearance rectangular grease duct

TESTING, CLASSIFICATION & APPLICATION

GRZA Series has been tested in accordance with the procedures and methods as set forth by UL 2221 / ULC S144 (Tests for Fire Resistive Grease Duct Enclosure Assemblies) and UL 1978 / ULC S662 (Standard for Grease Ducts). Through penetration firestops have been tested in accordance with ASTM E814 and ULC S115. GRZA Series is classified for a maximum 2-hour fire resistance rating 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. GRZA Series grease ducts are suitable for the removal of smoke and grease laden vapors from commercial, industrial, institutional, and similar cooking applications. This grease duct is suitable for interior and exterior installations.

LISTING & CODE COMPLIANCE

GRZA Series grease ducts are listed by Intertek file VPC/FMF 120-03 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 local and national code requirements and our installation instructions.

WARRANTY

Standard and extended warranties are available. Specific terms and conditions apply. Contact Van-Packer for additional information.

MATERIALS

Liners (inner walls) are constructed from 20 gauge (0.035") materials. Shells (outer walls), where all sides are 36" or less, are constructed from 24 gauge (0.025") materials and, where any sides are over 36", are constructed from 20 gauge (0.035") materials.

Standard liner material is type 304 S.S. Standard shell materials are aluminized steel and type 430 S.S. Consult Van-Packer for availability of additional material types and thicknesses.

The system utilizes 10 pound density ceramic fiber insulation within a 3-inch annular space.

PART IDENTIFICATION NOMENCLATURE

For GRZA Series, all part numbers have the letters “GRZA” as a prefix, followed by the duct size (liner width X liner height), the part description code, special qualifier code (if applicable), a liner material code and a shell material code.

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 sizes, or the large end size of increasers.

Examples of part numbers with their associated description and part number breakdown are shown below:

GRZA20X10STR30AL

Refers to a 20"x10", straight section, 30" long constructed with a 304 S.S. liner and an aluminized steel shell.

GRZA	GRZA Series prefix
20X10	Section width X section height
STR	Part type (straight section)
30	Length / qualifier code
A	Liner material code (Type 304 S.S.)
L	Shell material code (aluminized steel)

GRZA36X3690T36X18AC

Refers to a 36"x36" bodied 90° tee section with a 36"x18" projection constructed with a 304 S.S. liner and a 430 S.S. shell.

GRZA	GRZA Series prefix
36X36	Liner width X liner height / tee body size
90T	Part type (90° “T” section)
36X18	Tee projection size / qualifier code
A	Liner material code (Type 304 S.S.)
A	Liner material code (Type 304 S.S.)

LINER MATERIAL CODES

A =	Type 304 S.S.
B =	Type 316 S.S.

SHELL MATERIAL CODES

A =	Type 304 S.S.
B =	Type 316 S.S.
C =	Type 430 S.S.
L =	Aluminized steel

CAPACITIES & WEIGHTS (Common Sizes)

CFM*	WIDTH	HEIGHT	LB/FT**	CFM*	WIDTH	HEIGHT	LB/FT**	CFM*	WIDTH	HEIGHT	LB/FT**
700	6"	10"	23.1	3,800	34"	10"	52.3	7,600	38"	18"	69.6
900	8"	10"	25.1	4,000	36"	10"	54.4	8,000	40"	18"	71.8
1,100	10"	10"	27.2	4,200	38"	10"	60.7	8,400	42"	18"	74.0
1,300	12"	10"	29.3	4,400	40"	10"	62.9	8,900	40"	20"	74.0
1,600	14"	10"	31.4	4,700	30"	14"	52.3	9,300	42"	20"	76.2
1,800	16"	10"	33.5	5,000	32"	14"	54.4	9,800	44"	20"	78.5
2,000	18"	10"	35.6	5,300	34"	14"	56.5	10,300	42"	22"	78.5
2,200	20"	10"	37.7	5,600	36"	14"	58.6	10,800	44"	22"	80.7
2,400	22"	10"	39.8	5,900	38"	14"	65.1	11,200	46"	22"	82.9
2,700	24"	10"	41.9	6,200	40"	14"	67.3	11,700	48"	22"	85.2
2,900	26"	10"	44.0	6,400	36"	16"	60.7	12,300	46"	24"	85.2
3,100	28"	10"	46.1	6,800	38"	16"	67.3	12,800	48"	24"	87.4
3,300	30"	10"	48.1	7,100	40"	16"	69.6	13,300	46"	26"	87.4
3,600	32"	10"	50.2	7,500	42"	16"	71.8	14,400	48"	27"	90.7

* Capacity (CFM) is approximate, based on a velocity of 1600 feet per minute. Additional sizes not shown above are available. Sizes range from 6"x6" to 48"x27". Contact Van-Packer for additional information.

** Weights are approximate based on assembled pounds per foot.

PARTS

GRZA Series catalogued parts include straight duct sections in standard (from 12" to 42") or custom lengths; 1° to 90° elbows; 45° and 90° tees; wyes (pant legs); fan and hood adapters; supports, including vertical support plates and guides, horizontal hangers and wall brackets; floor and wall through penetration firestop assemblies; nozzle attachment fittings; access doors; rectangular to round fittings and attachments. For non-catalogued parts, please contact Van-Packer.

INSTALLATION CONSIDERATIONS

Each part of the grease duct system must be assembled and installed correctly. Improper installation of or lack of required parts may result in the improper function of the grease duct system. Installation must be performed in accordance with local and national code requirements and our installation instructions.

Refer to NFPA 96 (Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations)

and additional 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.

SALES, SERVICE & MANUFACTURING

Van-Packer welcomes the opportunity to assist you with your commercial kitchen ventilation needs. We are a one-stop shop, offering complete engineered kitchen ventilation systems including grease ducts for hoods, exhaust fans, make-up air systems, ecology units and demand control systems. Contact the technical solutions department for assistance with quotations, sketches or submittal drawings, kitchen ventilation system design, and much more. For more information, please call or visit us online at vpstack.com.