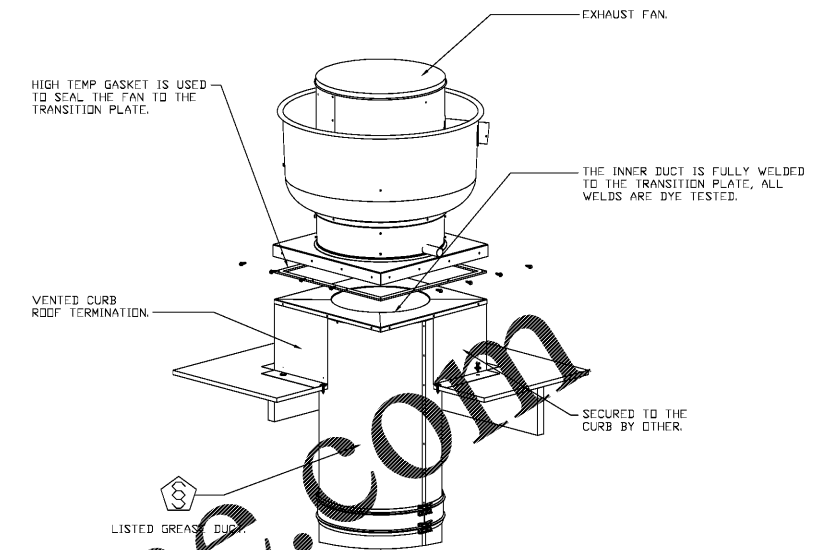
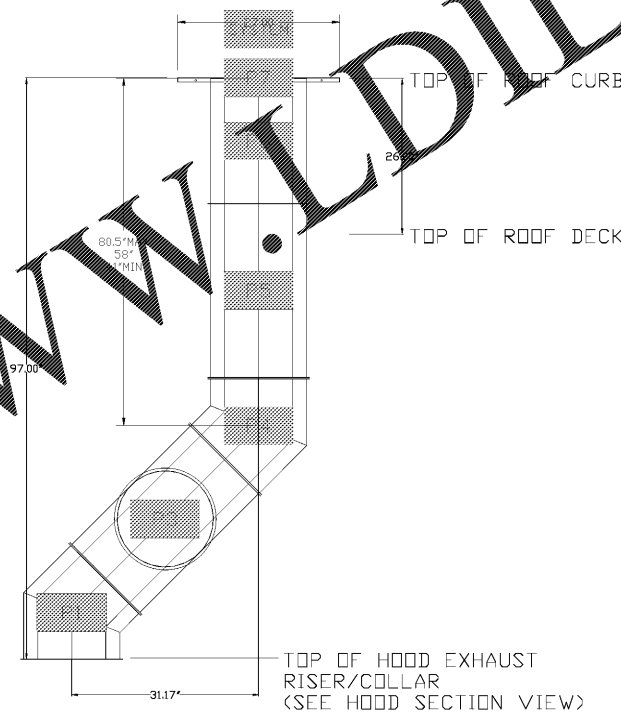


DuctWork #1 Parts - Job#3741775 FOR 15.5" ROOF DECK

Tag	Part #	CFM	S.P.	Weight	Velocity	QTY	Description
P1	DW1645ASY	2700	-0.0613	9.60	1933.73	1	Single Wall Duct 45 Degree Elbow, 16' Duct, Assembly.
P2	DW16TEASY	2700	-0.014	19.23	1933.73	1	Single Wall Duct Tee, 16' Duct, Assembly.
Assembled w/P3							
P3	DW1617ADIASY			16.57		1	Duct Access Door - Insulated - Used With 16' Duct - Grease Dam Included - Assembly.
Assembled w/P2							
P4	DW1645ASY	2700	-0.0875	9.60	1933.73	1	Single Wall Duct 45 Degree Elbow, 16' Duct, Assembly.
P5	DW1629LT	2700	-0.014	15.68	1933.73	1	Single Wall Duct 16' diameter, 29' long, flange at both ends. Stainless Steel.
P6	DW1648AJDKIT	2700	-0.01	30.39	1933.73	1	Single Wall Duct Adjustable, 16' diameter, 47.5' long, flange at one end With a 16' Adjustable Collar - Stainless Steel.
Assembled w/P7							
P7	DW2616TPDBEX	2700	0	9.00	1933.73	1	Duct to Curb Transition 3/4" Down Turn, 26.5' Curb to 16' Duct, 16 GA Aluminized. Used on NCA16FA / NCA16HPFA & NCA18FA / NCA18HPFA. Transition Plate OD is 27.00" Designed For Use With Exhaust Fan. Non-Standard Part.
Assembled w/P6							
System at P7		2700	-1.1948				
	3M-2000PLUS			0.80		2	Duct - 3M Fire Barrier 2000 Plus Silicone - Used as sealant to Seal Duct Joints.
	834680600587XL			52.00		4	Duct - Duct insulation for zero clearance to combustibles - 300" x 24" x 1-1/2" Roll. Pyroscat Wrap.
	BANDING5			5.00		1	Duct - Fire Barrier Wrap Stainless Steel Banding .5' Width - 200 FT Per Roll.
	DW16CLASY			1.50		6	Duct *V' Clamp With new design 14 Ga Brackets, 16' Duct, Assembly.
	SEAL50-50			0.50		2	Duct - Fire Barrier Wrap Stainless Steel Banding Seal .5' Width. Quantity of 50.
	TAPEALUM			0.25		1	Duct - Fire Barrier Wrap Aluminum Foil Tape - 3' x 150' Roll.
Additional Parts							
	DW1607LT			4.14		2	Single Wall Duct 16' diameter, 7' long, flange at both ends. Stainless Steel.
	DW16CLASY			1.50		2	Duct *V' Clamp With new design 14 Ga Brackets, 16' Duct, Assembly.
Total Weight				346.20			



DuctWork #1 Front View FOR 15.5' ROOF DECK



SINGLE WALL FACTORY BUILT DUCTWORK

- ALL DUCTWORK IS REQUIRED TO BE INSTALLED WITH THE MAXIMUM SUPPORT SPACING LISTED BELOW.
- FOR A COMPLETE LIST OF APPROVED SUPPORT METHODS, SEE THE INSTALLATION AND OPERATION MANUAL.
- DUCTWORK SHALL SLOPE NOT LESS THAN 1/16" PER LINEAR FOOT TOWARDS THE HOOD OR AN APPROVED GREASE COLLECTION RESERVOIR.
- WHERE HORIZONTAL DUCTS EXCEED 75 FEET IN LENGTH, THE SLOPE SHALL NOT BE LESS THAN 3/16" PER LINEAR FOOT.

DUCT DIAMETER	HORIZONTAL SUPPORT (Ft)	VERTICAL WALL SUPPORT (Ft)	VERTICAL CURB SUPPORT (Ft)
8"	10'	10'	24'
10"	10'	10'	24'
12"	10'	10'	24'
14"	10'	10'	24'
16"	10'	10'	24'
18"	10'	10'	24'
20"	10'	10'	24'
22"	10'	10'	24'
24"	10'	10'	24'

CAPTIVE-AIRE HOOD PACKAGE AS SHOWN IS OWNER PROVIDED

GREASE DUCT SPECIFICATION

Furnish single-wall, factory built, grease duct for use with Type I kitchen hoods, which conforms to the requirements of NFPA-96. Products shall be ETL listed to UL-1978 for venting air and grease vapors from commercial cooking operations as described in NFPA-96. The duct wall shall be constructed of .036 thick type 430 stainless steel and be available in diameters 8" through 24". All supports, fan adapters, hood connections, fittings and expansion joints required to install grease duct shall be included. Roof penetrations shall comply with listed clearance to combustibles, see "Clearance to Combustibles" guide for details. The grease duct will terminate at the fan adapter plate, will be fully welded to the fan adapter plate and the fan adapter plate will be fastened to the curb using a suitably sized fastener provided by others; see page 12 of the "Installation, Operation and Maintenance Manual" for details. Grease duct joints shall be held together by means of formed vee clamps and sealed with 3M Fire Barrier 2000+. Screws used to secure the vee clamps shall be of the hex-head type with flanged stops and tapered "lead in" threads for easy starting. Nuts shall be retained by means of a free-floating cage to allow easy alignment. Single-Wall Grease Duct shall be installed in accordance with the manufacturer's "Installation, Operation and Maintenance Manual", ETL listing and state and local codes. Grease duct installed outside of the building shall be protected against accidental damage or vandalism. Support vertically installed grease duct from the building structure using rigid structural supports. Anchor supports to the structure by welding or bolting steel expansion anchors or concrete inserts. Support horizontally installed grease duct from the building structure using approved method or use Duct Mate, Wire Rope & Clutchers, part numbers WR20 & CL20. 1/2" threaded rod and saddles may also be used for the support of horizontal grease duct. Fans shall be supported independently from the grease duct sections. Protect grease duct from twisting or movement caused by fan torque or vibration.

MINIMUM CLEARANCE TO COMBUSTIBLES

DUCT DIAMETER	COMBUSTIBLES	LIMITED COMBUSTIBLES	NON COMBUSTIBLES
8"	18"	3"	0"
10"	18"	3"	0"
12"	18"	3"	0"
14"	18"	3"	0"
16"	18"	3"	0"
18"	18"	3"	0"
20"	18"	3"	0"
24"	18"	3"	0"

FIRE WRAP SPECIFICATION - Pyroscat

Thermal Ceramics' new Pyroscat(R) Duct Wrap XL is the thinnest and lightest flexible wrap material available that passes the ASTM E 2336 test standard required by the 2006 IMC and NFPA 96 for reduced clearance enclosure materials used to provide 1 or 2 hour fire rating for kitchen exhaust ducts. Duct Wrap XL is also UL Classified and Labeled per ISD 614 as an alternative to a 1 or 2 hour rated enclosure for ventilation ducts. The Duct Wrap XL core binder is manufactured using Thermal Ceramics patented Super-Site, a non-toxic, rated, non-combustible, alkaline earth silicate with low blower resistance. Duct Wrap XL is the product of extensive research and development resulting in breakthrough improvements in fiberization technology with significant enhancements in thermal properties beneficial for fire protection applications. Duct Wrap XL when used in conjunction with an approved Firestop sealant provides an effective barrier through penetration Firestop in rated floor and wall assemblies. Duct Wrap XL is UL Classified and is part of UL's Listing and Follow-Up Service Program to ensure the consistent quality essential to the critical nature of this life-safety application.

FIRE WRAP SPECIFICATION - Unifrax

Unifrax's FyreWrap@Elite@1.5 Duct Insulation is a two-layer flexible enclosure for two-hour rated commercial kitchen grease ducts. FyreWrap Elite 1.5 Duct Insulation is tested per ASTM E2336 and is acceptable as an alternate to a traditional fire-rated shaft. Installed as a two-layer system, FyreWrap Elite 1.5 complies with the International Mechanical Code (IMC) and Uniform Mechanical Code (UMC). FyreWrap Elite 1.5 Duct Insulation offers the following product features:

- 2-hour fire-resistance rating
- Alternate to shaft enclosure
- Complies with IMC and UMC
- Tested per ASTM E2336
- Two-layer system
- High-temperature, biosoluble insulation
- Zero clearance to combustibles, at any location
- GREENGUARD listed for Microbial Resistance

DUCT SEALANT & FIREWRAP PROVIDED BY CAPTIVE-AIRE

Model DW Series is ETL Listed under file number 3114021, and complies with UL-1978, as well as CAN/ULC-S662.

The DW Series has been certified by ITS. This certification mark indicates that the product has been tested to and has met the minimum requirements of a widely recognized (consensus) U.S. and Canadian products safety standard, that the manufacturing site has been audited, and that the applicant has agreed to a program of periodic factory follow-up inspections to verify continued performance.



UL 1978 - Standard for Grease Duct
 UL 2221 - Fire Resistive Grease Duct Enclosure Assemblies
 NFPA 96 - Installation Standard
 ASTM E2336 - Test Method for Fire Resistive Grease Duct Enclosure System

REVISIONS

DESCRIPTION	DATE

CAPTIVE-AIRE

www.captiveaire.com

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 10125 Ulmerton Rd. Suite C,
 LARGO, FL, 33771

DATE: 3/5/2019

DWG.#: 3741775

DRAWN BY: CJP-REG45

SCALE: 3/4" = 1'-0"

MASTER DRAWING

SHEET NO. 5