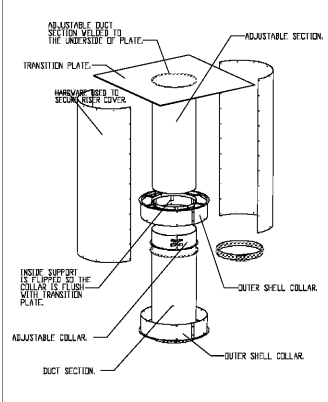
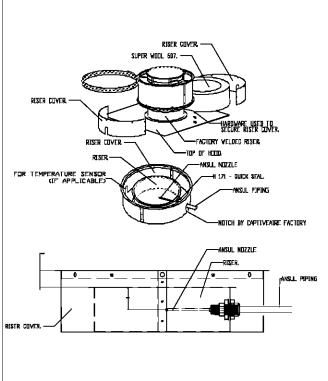


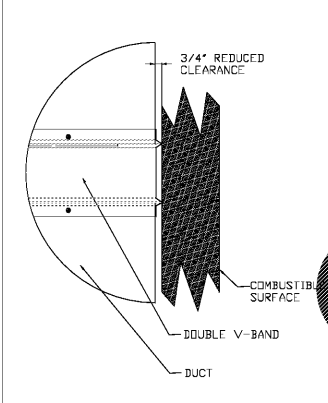
DUCT SUPPORT ASSEMBLY



TRANSITION PLATE DETAIL

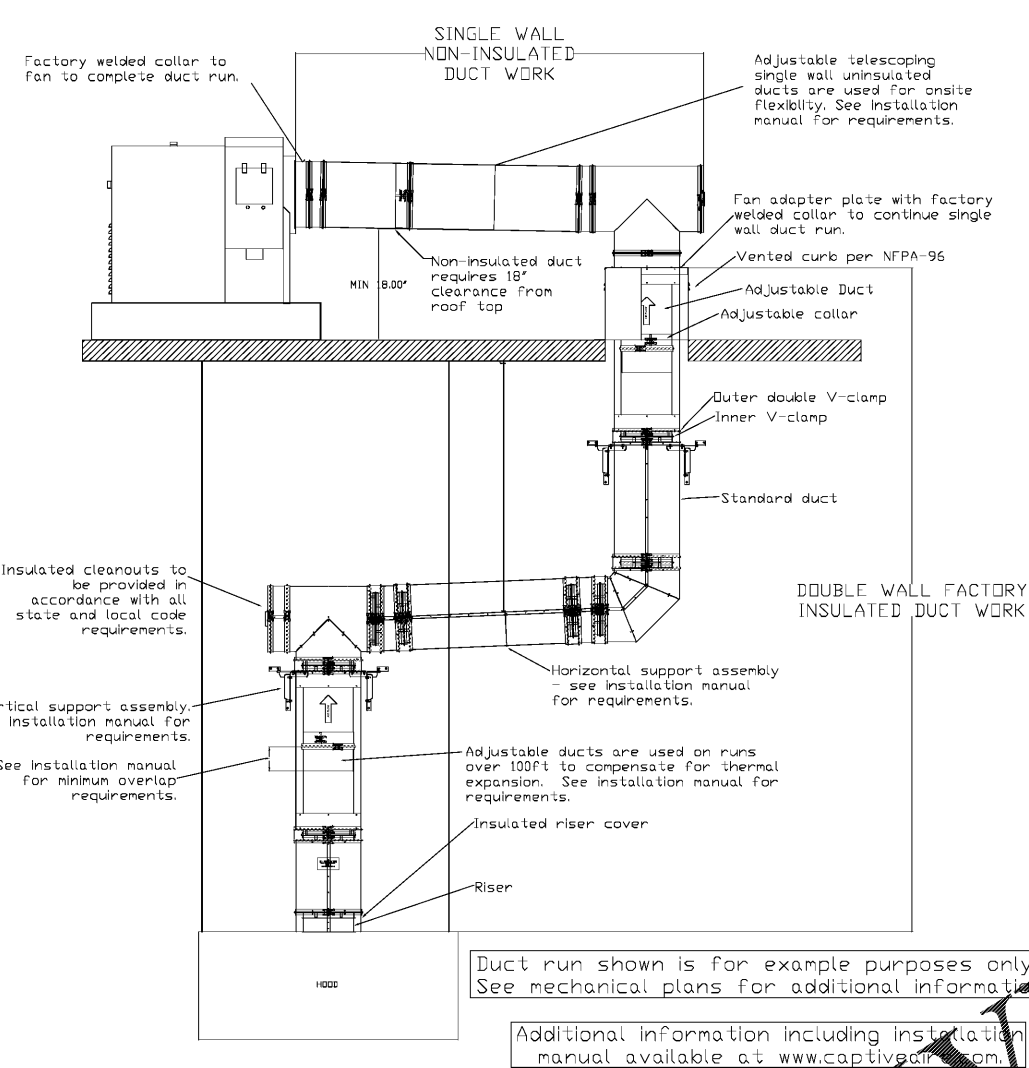


OUTER DUCT BAND DETAIL



REDUCED CLEARANCE DETAIL

- DUCTWORK NOTES**
- DUCT RUN TO BE FIELD VERIFIED. PARTS SUBJECT TO CHANGE.
 - DUCT RUNS TO HAVE CLEANOUTS EVERY 10', AND EVERY CHANGE OF DIRECTION UNLESS SPECIFIED OTHERWISE.
 - VERTICAL HANGING SUPPORTS TO BE EVERY 10', HORIZONTAL SUPPORTS TO BE EVERY 7' FOR INNER DUCT DIA 8" TO 18" AND EVERY 5' FOR INNER DUCT DIA 18" TO 24".
 - ADJUSTABLE DUCT OVERLAP TO BE NO LESS THAN 6", UNLESS INNER DIAMETER IS 8" (4" OVERLAP) OR 10" (5" OVERLAP).
 - 3/4" CLEARANCE TO COMBUSTIBLES IS FROM OUTER SHELL. V-BAND IS LISTED TO BE AGAINST SURFACE.



CAPTIVEAIRE SYSTEMS RECOMMENDS THE USE OF LISTED, PRE-FABRICATED ROUND GREASE EXHAUST DUCT TO REDUCE STATIC PRESSURE IN THE SYSTEM, MINIMIZE INSTALLATION AND INSPECTION TIMES, AND ENSURE DUCT IS LIQUID TIGHT

SUPPORT SPACING FOR 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 ENTIRE 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.

DOUBLE WALL FACTORY BUILT DUCTWORK

HORIZONTAL		VERTICAL			
DUCT DIAMETER	SUPPORT SPACING (ft)	TYPE	WALL SUPPORT (ft)	CURB SUPPORT (ft)	FLOOR SUPPORT (ft)
8"	7'	2R & 2R HT	20'	24'	24'
10"	7'	3R	10'	24'	24'
12"	7'	3Z	10'	24'	24'
14"	7'				
16"	7'				
18"	5'				
20"	5'				
22"	5'				
24"	5'				

SINGLE WALL FACTORY BUILT DUCTWORK

DUCT DIAMETER	HORIZONTAL WALL 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'

GREASE DUCT SPECIFICATIONS:
 PROVIDE GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW" ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "DW" IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "DW" DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER THE MANUFACTURERS INSTALLATION GUIDE.
 PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER. PER MANUFACTURERS LISTING MODEL "DW" HORIZONTAL RUNS LESS THAN 75 FT. CAN BE SLOPED 1/16" PER 12", HORIZONTAL RUNS MORE THAN 75 FT. CAN BE SLOPED 3/16" PER 12". DUCT SHOULD BE SLOPED AS MUCH AS POSSIBLE TO REDUCE THE CHANCE OF GREASE ACCUMULATION IN HORIZONTAL RUNS.
 IF THE DUCT IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE UL-2221 LISTED DOUBLE WALL GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW- 2R, 3R, OR 3Z" ROUND 20 GAUGE 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.

The Double Wall and DW Ductwork Series and 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. Product 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.
 Models DW-2R and DW-3R are ETL Listed under file number 1000082319SAT-006 EEV and comply with UL1978 and UL2221 Standards.
 Model DW-3Z is ETL Listed under file number 1000082319SAT-006 EEV and complies with UL1978, UL2221 and CAN/ULC-S144 Standards.
 Model DW Series is ETL Listed under file number 3114021, and complies with UL-1978, as well as CAN/ULC-S662.

DOUBLE WALL GREASE DUCT WRITTEN SPECIFICATION
 Furnish double 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 and UL-2221 for venting air and grease vapors from commercial cooking operation. Models DW-2R, 3R and 3Z are used for grease duct applications when installed in accordance with these instructions and National Fire Protection Association "NFPA 96"; Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations. Double wall grease ducts are listed for a continuous internal temperature of 500 degrees F and intermittent temperatures of 2000 degrees F.
 The duct sections shall be constructed of an inner duct wall and an outer wall with insulation in between. The inner duct wall shall be constructed of .036 inch thick, 430 type stainless steel and be available in diameters 8" through 24". The outer wall shall be constructed of stainless steel at a minimum of .024 inch thickness. The duct, based on model number, shall include 1/2" of Super Wool 607 Plus insulation between the inner and outer wall. Grease duct joints shall be held together by means of formed V clamps and sealed with 3M Fire Barrier 2000+. The duct wall assembly shall be tested and listed at 3/4" or zero inch clearance, according to classifications.

Classifications and Clearances
 UL 2221: Standard for Fire Resistant Grease Duct Enclosure Assemblies. Chapter 7 of this standard references a test labeled Internal Fire Test. Section 7.1.1 references two installation conditions, Condition A and Condition B. Condition A represents all installation condition except for installation within non-ventilated combustible enclosures. Condition B represents installation within a non-ventilated combustible enclosure.
 Model DW-2R is classified under UL2221 (Test of Fire Resistant Grease Duct Enclosure Assemblies) as an alternate to 2-Hr. fire resistant shaft enclosures with a reduced clearance to combustibles (sizes 8" to 16" diameter). Model 2R is listed in accordance with the requirements for duct enclosure Condition B.

SINGLE WALL GREASE DUCT WRITTEN 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 and CAN/ULC-S662 for venting air and grease vapors from commercial cooking operations as described in NFPA-96.
 The duct wall shall be constructed of .036 or .047 thick type 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 above method. 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.

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

REVISIONS

DESCRIPTION	DATE

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Love's #417 - Remodel
 3150 Grant Street,
 Gary, IN, 46408

DATE: 2/8/2021
DWG.#: 4730504
DRAWN BY: RJH-80
SCALE: 3/4" = 1'-0"
MASTER DRAWING

SHEET NO.
 8