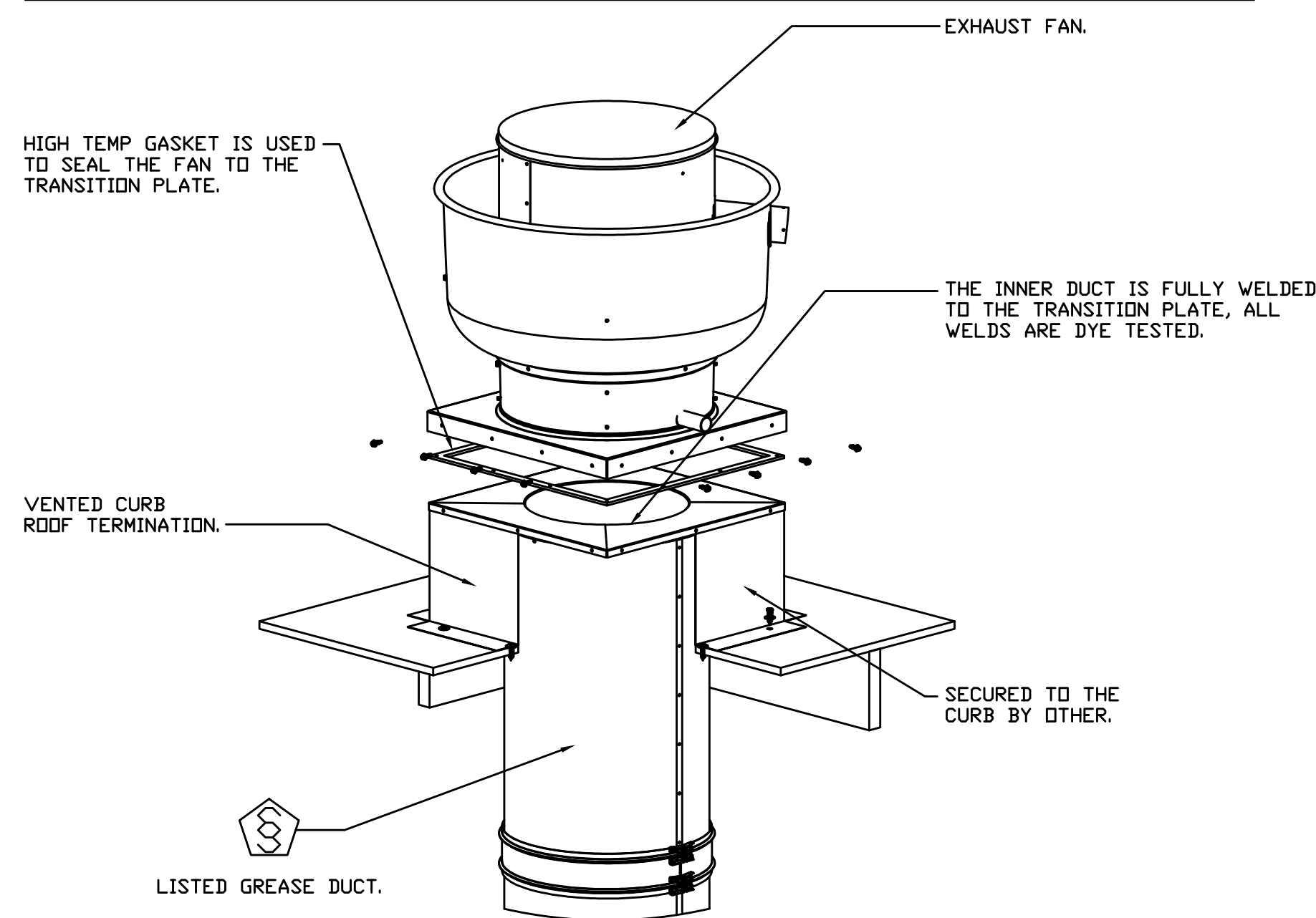


**GREASE DUCT & CHIMNEY SPECIFICATIONS:**  
 PROVIDE GREASE DUCT EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW"  
 ROUND 20 GAUGE 430 STAINLESS STEEL DUCTWORK. MODEL "DW"  
 IS LISTED TO UL-1978 AND IS INSTALLED USING "V" CLAMP LOCKING  
 CONNECTIONS SEALED WITH 3M FIRE BARRIER 2000 PLUS. MODEL "DW"  
 DOES NOT REQUIRE WELDING PROVIDING IT HAS BEEN INSTALLED PER  
 THE MANUFACTURES INSTALLATION GUIDE.  
 PROVIDE RATED ACCESS DOORS AT EVERY CHANGE IN DIRECTION AND EVERY 12' ON CENTER.  
 PER MANUFACTURES 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 OR CHIMNEY IS WITHIN 18 INCHES OF COMBUSTIBLE MATERIAL, PROVIDE  
 UL-2221 OR UL-103 HT LISTED DOUBLE WALL GREASE DUCT OR DOUBLE WALL CHIMNEY  
 EQUAL TO CAPTIVEAIRE SYSTEMS MODEL "DW- 2R, 2R TYPE HT, 3R, OR 3Z" ROUND 20 GAUGE  
 430 STAINLESS INNER DUCT INSULATED WITH A 24 GAUGE 430 STAINLESS OUTER SHELL.

**CUSTOMER APPROVAL TO MANUFACTURE:**

Approved as Noted   
 Approved with NO Exception Taken   
 Revise and Resubmit   
 SIGNATURE \_\_\_\_\_  
 Your Title \_\_\_\_\_ Date \_\_\_\_\_



**DuctWork #1 Parts - Job#3338996 KITCHEN**

Tag	Part #	CFM	S.P.	Weight	Velocity	QTY	Description
P1	DW1414DWLT-2R-S	1378	-0.003	25.39	1289.04	1	Double Wall Duct - 14' Inner Duct, 14' long - 2 Layers Reduced Clearance - 18' Stainless Steel Outer Shell.
P2	DW144550DWLTP-2R-S	1378	-0.011	69.47	1289.04	1	Double Wall Duct - 14' Inner Duct, 45.5' long - 2 Layers Reduced Clearance - 18' Stainless Steel Outer Shell - Used With Transition Plate.
P3	DW2314TPDBEX	1378	0	9.00	1289.04	1	Duct to Curb Transition 3/4' Down Turn, 23' Curb to 14' Duct, 16 GA Aluminized. Used on NCA14FA & NCA14HPFA. Transition Plate DD is 23.5' Designed For Use With Exhaust Fan. Non-Standard Part.
System at P3		1378	-0.515				
P4	DW1414DWLT-2R-S	1378	-0.003	25.39	1289.04	1	Double Wall Duct - 14' Inner Duct, 14' long - 2 Layers Reduced Clearance - 18' Stainless Steel Outer Shell.
P5	DW144550DWLTP-2R-S	1378	-0.011	69.47	1289.04	1	Double Wall Duct - 14' Inner Duct, 45.5' long - 2 Layers Reduced Clearance - 18' Stainless Steel Outer Shell - Used With Transition Plate.
P6	DW2314TPDBEX	1378	0	9.00	1289.04	1	Duct to Curb Transition 3/4' Down Turn, 23' Curb to 14' Duct, 16 GA Aluminized. Used on NCA14FA & NCA14HPFA. Transition Plate DD is 23.5' Designed For Use With Exhaust Fan. Non-Standard Part.
System at P6		1378	-0.515				
	3M-2000PLUS			0.80		2	Duct - 3M Fire Barrier 2000 Plus Silicone - Used as sealant to Seal Duct Joints.
	DW14DWCLASY-2R-S			7.71		2	Duct - 14' Duct - 18' Double "V" Clamp - 2R Insulation & Single "V" Clamp Included - Reduced Clearance.
	DW18DWRISER-2R-S			9.50		2	Double Wall Riser Cover - Used On 14' Inner Riser, 4' long - 2 Layers Reduced Clearance - 18' Stainless Steel Outer Riser Shell Assembly. Includes Insulation & Single V Clamps For Inner & Outer Connections.
Total Weight				243.74			

**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'

"AMERICAN MANUFACTURED IS PREFERRED"

RECORD DRAWING:  
 THIS DRAWING HAS BEEN UPDATED TO REFLECT CHANGES MADE TO PERMITS. CONSTRUCTION BASED UPON INFORMATION FURNISHED TO THE ENGINEER BY THE INSTALLATION CONTRACTOR. NO WARRANTY, EITHER EXPLICIT OR IMPLIED, IS GIVEN BY MFA, INC. AS TO THE ACCURACY AND/OR COMPLETENESS OF THIS INFORMATION.

AS-BUILT PREPARED 1.22.2020

FOSTER SHELTER  
 6144 SE FOSTER RD., PORTLAND, OREGON 97206  
 CLIENT: MULTNOMAH COUNTY

MBA MERRYMAN BARNES ARCHITECTS 4715 N ALBINA AVE. SUITE 304 PORTLAND, OREGON 97217 P-503.222.3753

PROJECT NO. 17-0918	ISSUE DATE 05.04.2018
REVISIONS	
△	CHECKSHEET 5.23.2018
△	OWNER CHANGES 2.26.2019

SHEET

CAPTIVE AIR  
 DETAILS  
**M5.2**

PERMIT SET  
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