



Farabaugh Engineering and Testing Inc.

Project No. T133-18

Report Date: March 15, 2018

No. of Pages: 7 (inclusive)

PERFORMANCE TEST REPORT

AIR FLOW TEST

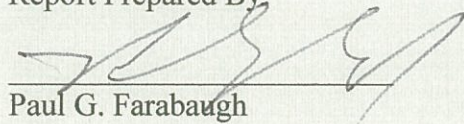
ON

ROOF VENTS

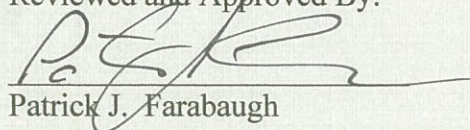
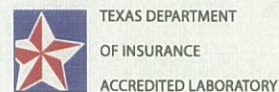
FOR

LIFETIME TOOL & BUILDING PRODUCTS LLC
250 AIRPORT ROAD
WINCHESTER, VA 22602

Report Prepared By:


Paul G. Farabaugh

Reviewed and Approved By:


Patrick J. Farabaugh

Objective:

The purpose of this testing was to determine the air flow thru the multiple roof vents at various test pressures.

Test Specimen

Manufacturer: Lifetime Tool & Building Products LLC
250 Airport Road
Winchester, VA. 22602

Specimens: Multiple roof vents from various manufacturers.

Test Date Finished:

3/15/18

Installation

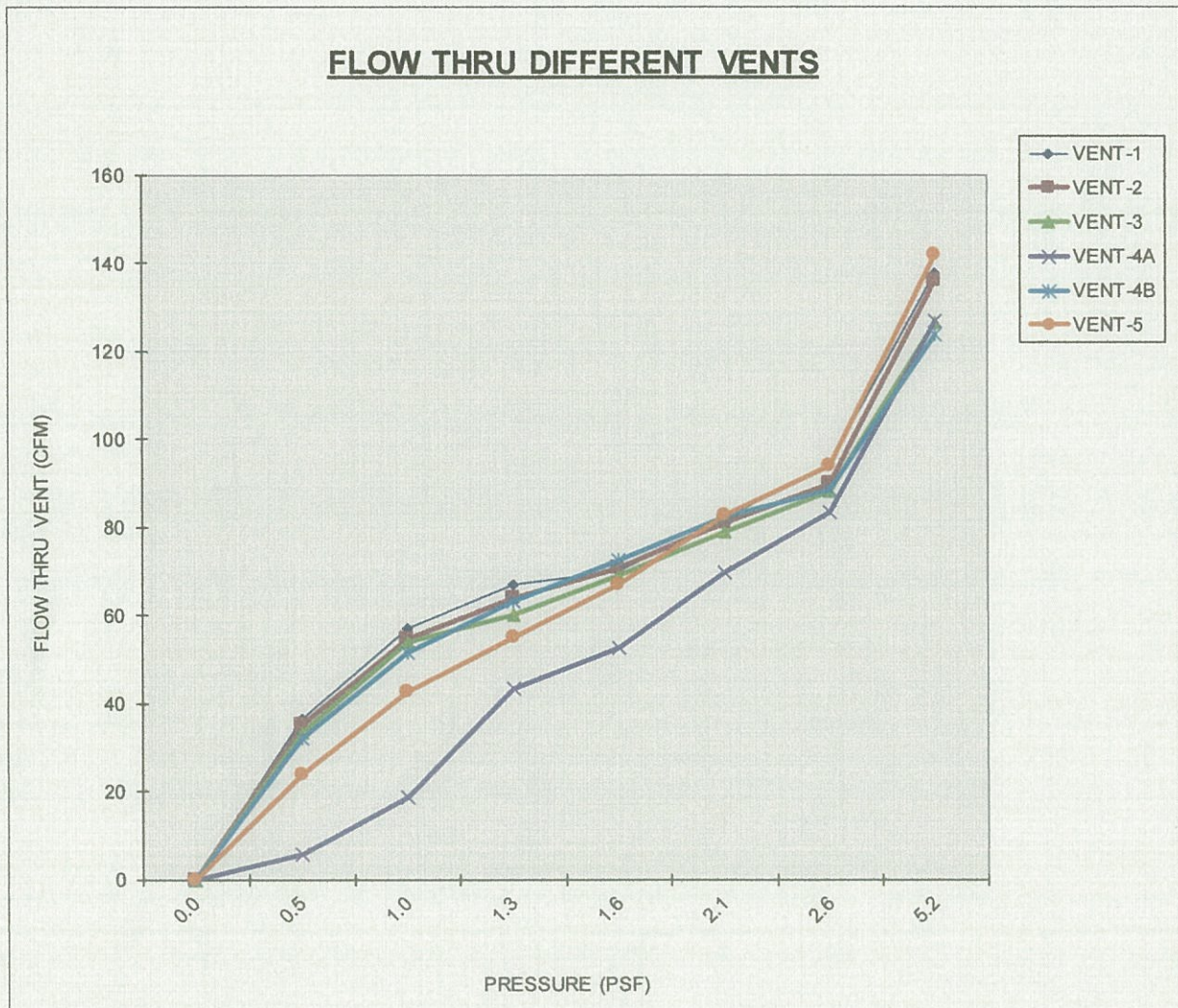
Each roof vent was mounted to the top of a test chamber using a 4" diameter pipe located below each roof vent. All joints below flashing plate were sealed with tape so as to assume all air flow was thru the exhaust opening of the vent where a flap opened to release pressure that was applied from a blower source.

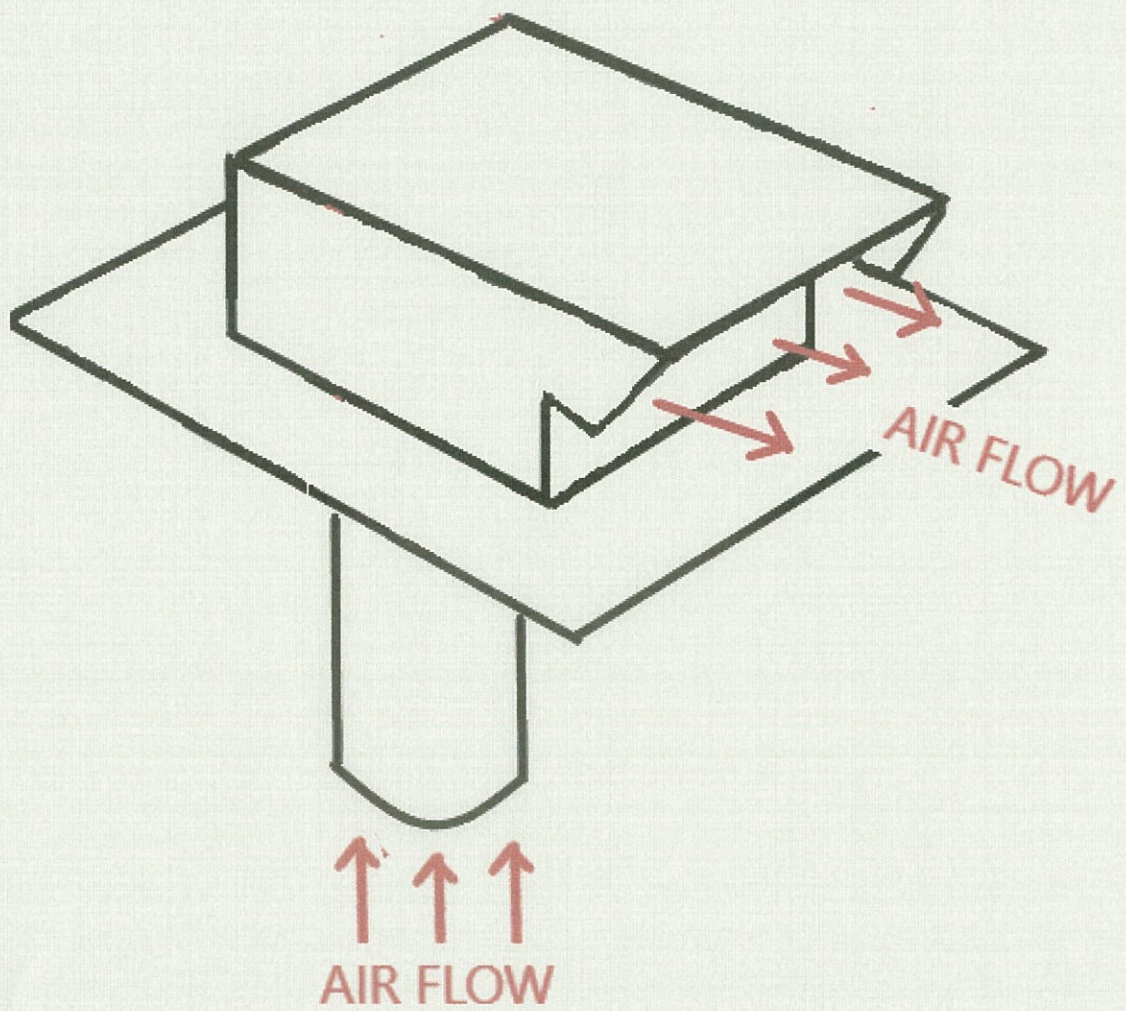
Testing Apparatus

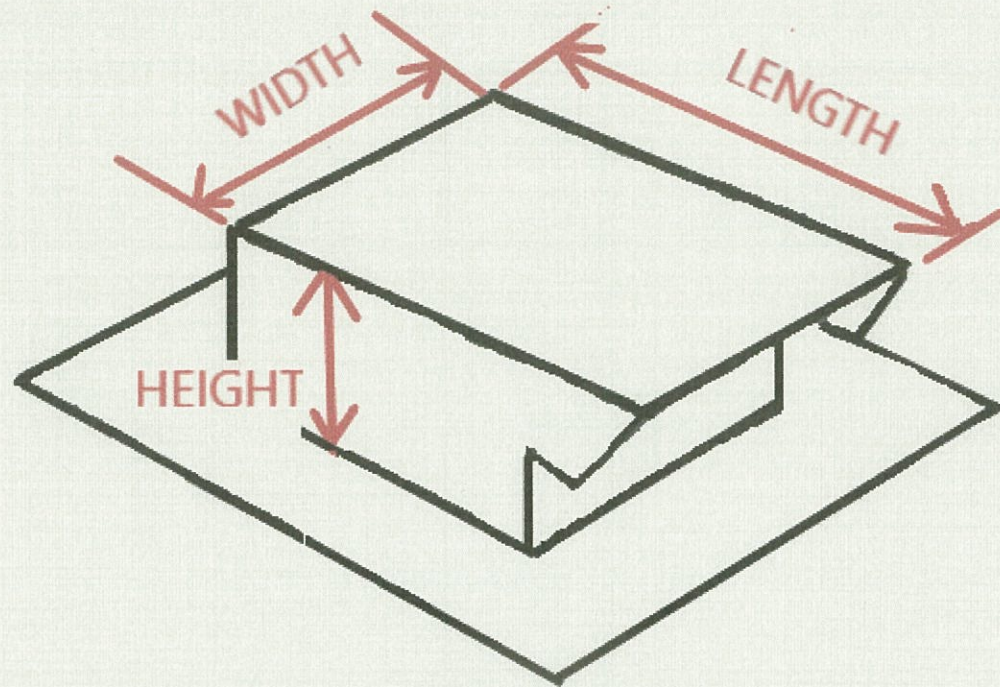
A test chamber was used with static pressure taps. A controlled blower provided a uniform pressure load to the specimen mock-up. Calibrated manometer was used to measure the pressure at pressure tap. A uniform load pressure was performed in the negative direction to monitor air flow releasing thru each vent. Calibrated flow meter was attached to monitor the amount of flow (cfm) thru the air vent at various test pressures.

TEST DATA

VENT TESTING						
AIR FLOW THRU VENT (CFM)						
LOAD (PSF)	VENT-1 BROAN	VENT-2 DURAFLO	VENT-3 ABC VENT	VENT-4A B.D. VENT (ALUMINUM FLAP)	VENT-4B B.D. VENT (STEEL FLAP)	VENT-5 DRYER JACK
0.0	0	0	0	0	0	0
0.5	36.6	35	33.4	5.7	32	23.7
1.0	57.1	54.6	53.9	18.7	51.4	42.8
1.3	66.8	63.9	60.2	43.3	63.2	54.8
1.6	70.1	70.6	69	52.7	72.3	67
2.1	81.9	80.8	78.8	69.7	82.2	82.7
2.6	94.2	89.9	88	83.5	88.5	94.1
5.2	137.7	136.2	126.5	126.7	123.8	142







DIMENSION OF SPECIMENS

SPECIMEN # / NAME	DIMENSIONS	MATERIAL
#1 - BROAN	5-1/4" W. X 8-1/4" LENGTH X 4-3/8" HT.	STEEL
#2 - DURAFLO	5-3/4" W. X 7-3/4" LENGTH X 3-1/4" HT.	PLASTIC
#3 - ABC VENT	5-1/2" W. X 8-1/4" LENGTH X 4-3/8" HT.	STEEL
#4A - B.D. VENT (STEEL FLAP)	7-1/2" W. X 9-3/4" LENGTH X 4-7/8" HT.	PLASTIC HOOD W/METAL COVER
#4B - B.D. VENT (ALUM. FLAP)	7-1/4" W. X 10-1/4" LENGTH X 5-7/8" HT.	PLASTIC HOOD W/METAL COVER
#5 - DRYER JACK	6-3/8" W. X 9-1/4" LENGTH X 6-3/4" HT.	STEEL



SPECIMEN #1 - BROAN



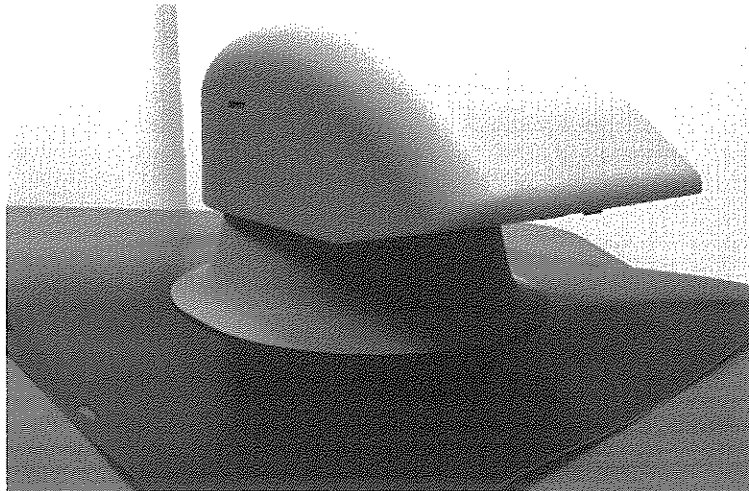
SPECIMEN #2 - DURAFLO



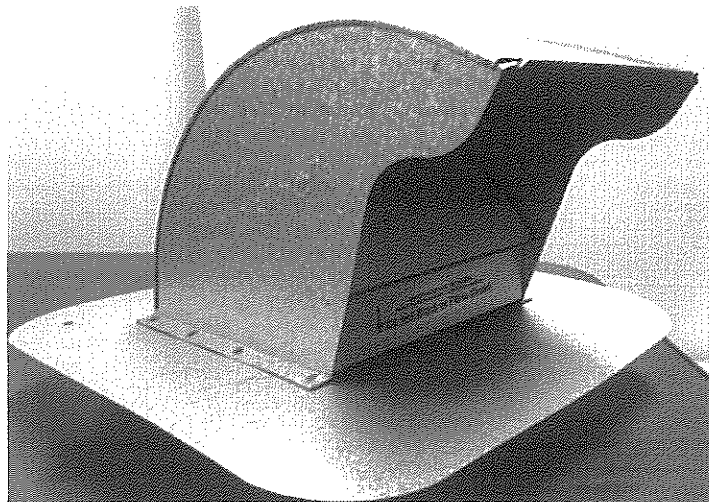
SPECIMEN #3 – ABC VENT



SPECIMEN #4A – B.D. VENT (PLASTIC HOOD/METAL COVER)



SPECIMEN #4B – B.D. VENT (PLASTIC HOOD)



SPECIMEN #5 – DRYERJACK