

TEST UNIT: APPLICATION: 7027
 MANUFACTURER: WONDER METALS CORPORATION TEST NO.: 7027-I1
 MODEL NO.: EX-645 DATE OF TEST: 12/22/87
 SIZE: 48 X 48 X 6 TEST TYPE: AIR FLOW TEST
 DEVICE TYPE: LOUVER, NON-DRAINABLE INTAKE MODE
 APPURTENANCES: NONE
 TEST METHOD PER AMCA STANDARD 500-83
 TEST SETUP: PER FIGURE 5.5
 AIR FLOW MEASUREMENT: PER FIGURE 6.5
 BLADE OPENING: FIXED OPEN
 TORQUE: NONE
 AMCA FREE AREA SQ. FT.: 6.92
 REMARKS: CONTRACT TEST

RESULTS AT TEST CONDITIONS

RESULTS AT STANDARD AIR DENSITY

DET	DENSITY	PS	VELOCITY	CFM	PS	VELOCITY	CFM
1	0.07231	.445	1528.1	10574.7	.462	1528.1	10574.7
2	0.07228	.282	1217.1	8422.1	.293	1217.1	8422.1
3	0.07226	.160	915.5	6335.2	.166	915.5	6335.2
4	0.07224	.071	608.9	4213.4	.074	608.9	4213.4
5	0.07223	.017	306.2	2119	.018	306.2	2119

INPUT DATA FOR TEST NUMBER: 7027-I1

DET	D6	DN	PS	PD	DB2	DB5	DBO	WBO	PB	DBB
1	1.24997	.76364	.445	4.565	71.4	71.5	70.1	55.1	29.17	75.0
2	1.24997	.76364	.282	2.900	71.4	71.5	70.1	55.1	29.17	75.0
3	1.24997	.76364	.160	1.645	71.4	71.5	70.1	55.1	29.17	75.0
4	1.24997	.76364	.071	.731	71.4	71.5	70.1	55.1	29.17	75.0
5	.93181	.71375	.017	.600	71.4	71.5	70.1	55.1	29.17	75.0

TEST UNIT: APPLICATION: 7027
 MANUFACTURER: WONDER METALS CORPORATION TEST NO.: 7027-E1
 MODEL NO.: EX-645 DATE OF TEST: 12/22/87
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 DEVICE TYPE: LOUVER, NON-DRAINABLE INTAKE MODE
 APPURTENANCES: NONE
 TEST METHOD PER AMCA STANDARD 500-83
 TEST SETUP: PER FIGURE 5.5
 AIR FLOW MEASUREMENT: PER FIGURE 6.5
 BLADE OPENING: FIXED OPEN
 TORQUE: NONE
 AMCA FREE AREA SQ. FT.: 6.92
 REMARKS: CONTRACT TEST

RESULTS AT TEST CONDITIONS

RESULTS AT STANDARD AIR DENSITY

DET	DENSITY	PS	VELOCITY	CFM	PS	VELOCITY	CFM
1	0.07252	.390	1513.9	10475.8	.403	1513.9	10475.8
2	0.07250	.250	1210.8	8379.0	.259	1210.8	8379.0
3	0.07248	.138	895.6	6197.7	.143	895.6	6197.7
4	0.07246	.059	581.8	4025.8	.061	581.8	4025.8
5	0.07245	.017	305.7	2115.4	.018	305.7	2115.4

INPUT DATA FOR TEST NUMBER: 7027-E1

DET	D6	DN	PS	PD	DB2	DB5	DBO	WBO	PB	DBB
1	1.24997	.76364	.390	4.495	69.7	70.0	68.1	54.1	29.16	73.8

2	1.24997	.76364	.250	2.880	69.7	70.0	68.1	54.1	29.16	73.8
3	1.24997	.76364	.138	1.580	69.7	70.0	68.1	54.1	29.16	73.8
4	1.24997	.76364	.059	.670	69.7	70.0	68.1	54.1	29.16	73.8
5	.93181	.71375	.017	.600	69.7	70.0	68.1	54.1	29.16	73.8

TEST UNIT: APPLICATION: 7027 TEST NO.: 7027-W1
 MANUFACTURER: WONDER METALS CORPORATION DATE OF TEST: 12/16/87
 MODEL NO.: EX-645
 SIZE: 48 X 48 X 6 TEST TYPE: WATER PENETRATION
 DEVICE TYPE: LOUVER, NON-DRAINABLE
 APPURTENANCES: NONE
 TEST METHOD PER AMCA STANDARD 500-83
 TEST SETUP: PER FIGURE 5.6
 AIR FLOW MEASUREMENT: PER FIGURE 6.3
 WATER DROP RATE (INCHES/HR): 4.0
 WETTED WALL WATER FLOW RATE (GPM/FT): 0.25

DURATION OF EACH DETERMINATION (MINUTES): 15

AMCA FREE AREA SQ. FT.: 6.92

REMARKS:
 CONTRACT TEST
 AMCA FREE AREA USED TO COMPUTE FREE AREA VELOCITY
 CAULK APPLIED AT LOWER JAMB AND SILL JOINTS

RESULTS

DET	DENSITY	WATER CARRYOVER OUNCES	OUNCES/SQ.FT. FREE AREA	CFM	AIR FLOW VELOCITY THROUGH FREE AREA
1	0.07361	.011	.002	4136	597.6
2	0.07361	.025	.004	4844	700.1
3	0.07361	.071	.010	5520	797.7
4	0.07361	1.880	.272	6275	906.8
5	0.07361	9.340	1.350	6572	949.8
6	0.07361	29.700	4.292	6926	1000.8

INPUT DATA FOR TEST NUMBER: 7027-W1

D6 = 1.34112: EQUIVALENT NOZZLE DIAMETER IN FEET

DN = 1.04143: MULTIPLE NOZZLE CONSTANT FOR 14 AND 8 INCH NOZZLES

DET	PS	PD	DB1	DBO	WBO	PB	DBB	TOTAL WT. GRAMS	TARE WT. GRAMS
1	.070	.540	65.0	66.0	53.0	29.42	75.7	15.80	15.10
2	.100	.740	65.0	66.0	53.0	29.42	75.7	20.10	19.40
3	.140	.960	65.0	66.0	53.0	29.42	75.7	29.40	27.70
4	.180	1.240	65.0	66.0	53.0	29.42	75.7	104.00	50.70
5	.180	1.360	65.0	66.0	53.0	29.42	75.7	429.70	164.90
6	.200	1.510	65.0	66.0	53.0	29.42	75.7	1388.10	546.10