

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.: L-645 DATE OF TEST: 12/22/87
 SIZE: 48 X 48 X 6 TEST TYPE: AIR FLOW TEST
 DEVICE TYPE: LOUVER, NON-DRAINABLE EXHAUST 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	WATER CARRYOVER			CFM	AIR FLOW VELOCITY THROUGH FREE AREA
	DENSITY	OUNCES	OUNCES/SQ.FT. 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