

## SQUARE DUCT TRAVERSE FORM

PROJECT Blue Ash Rec. Center SYSTEM \_\_\_\_\_  
 LOCATION Duct 2 SERVICE \_\_\_\_\_  
 ALTITUDE - DENSITY - FACTOR -

DUCT S.P. 0.56" TEMP -65°F REQUIRED SCFM - ACTUAL SCFM -  
 SIZE 28" x 20" (internal) FPM \_\_\_\_\_ FPM 1141.5 FPM AVE  
 AREA 3.89 Ft<sup>2</sup> CFM \_\_\_\_\_ CFM 4440 CFM

DISTANCE FROM BOTTOM	POSITION	1	2	3	4	5	6	7	8	9	10	11	12
16 1/2"	1	971	1033	1040	1165	1086	1076	1186	995				
14 1/2"	2	1062	1040	1168	1162	1199	1210	1219	1153				
10"	3	1131	1275	1210	1159	1150	1230	1266	1198				
6 1/2"	4	1006	1226	1195	1227	1224	1208	1158	1143				
2 1/2"	5	849	1087	1206	1182	1218	1142	1222	984				
	6												
	7												
	8												
	9												
	10												
	11												
	12												
	13												
DISTANCE FROM DUCT EDGE		3"	6"	9"	12"	15"	18"	21"	24"				
VELOCITY SUB-TOTALS													

**REMARKS:**

Above velocity measurements @ 40Hz fan speed. Approximate CFM at 49Hz: 5439  
 RTU Pressures: Mixed Air: -0.23", Prefilter P.D.: 0.10", CHW. coil P.D.: 1.24"  
 Fan Suction: -1.59", Fan Discharge: 0.63"  
 Total Exp.: 0.86", Fan total: 2.22"

Electrical Data  
On PG 2

## SQUARE DUCT TRAVERSE FORM

PROJECT <u>Blue Ash Rec Center</u>	SYSTEM _____
LOCATION <u>Duct 2</u>	SERVICE _____
ALTITUDE - _____	DENSITY - _____
	FACTOR - _____

DUCT	REQUIRED	ACTUAL
S.P. <u>0.56"</u>	TEMP <u>-65°F</u>	SCFM - _____
SIZE <u>48" x 22" (external)</u>	FPM _____	FPM <u>620.6 FPM</u>
AREA <u>7.33 FT<sup>2</sup></u>	CFM _____	CFM <u>4549.0 CFM</u>

DISTANCE FROM BOTTOM	POSITION	1	2	3	4	5	6	7	8	9	10	11	12
19"	1	503	509	472	533	654	646	761	771	726	693	812	
15"	2	439	506	470	581	650	707	698	749	733	801	804	
11"	3	316	501	604	609	635	696	711	747	754	606	740	
7"	4	524	459	375	445	516	544	681	623	702	703	698	
3"	5	374	380	435	562	602	639	685	692	750	730	816	
	6												
	7												
	8												
	9												
	10												
	11												
	12												
	13												
DISTANCE FROM DUCT EDGE		4"	8"	12"	16"	20"	24"	28"	32"	36"	40"	44"	
VELOCITY SUB - TOTALS													

**REMARKS:**

Above velocity measurements @ 40Hz Fan Speed. Approximate CFM at 49Hz: 5573

Motor RPM: 1449 (via VFD)      UNIT Total Flow: 15499 CFM  
 Motor Amps: 28.9 (via VFD)      OA Manually set: 2361 CFM  
 Voltage: 439 (via VFD)  
 Power: 20.9 HP

## SQUARE DUCT TRAVERSE FORM

PROJECT <u>Blue Ash Rec Center</u>	SYSTEM _____
LOCATION <u>Duct 3</u>	SERVICE _____
ALTITUDE - _____	DENSITY - _____
	FACTOR - _____

DUCT	REQUIRED	ACTUAL
S.P. <u>0.56"</u>	TEMP <u>-65°F</u>	SCFM - _____
SIZE <u>16" x 40" (Internal)</u>	FPM _____	FPM <u>825.4 FPM Ave</u>
AREA <u>4.44 FT<sup>2</sup></u>	CFM _____	CFM <u>3663 CFM</u>

DISTANCE FROM BOTTOM	POSITION	1	2	3	4	5	6	7	8	9	10	11	12
14"	1	784	882	1031	969	493	473	446					
12"	2	687	1040	1032	890	854	726	606					
9½"	3	763	996	1140	967	847	729	701					
7"	4	541	781	1103	1017	968	785	766					
4½"	5	638	840	1004	1090	950	828	707					
2"	6	682	671	742	930	953	855	727					
	7												
	8												
	9												
	10												
	11												
	12												
	13												
DISTANCE FROM DUCT EDGE		5"	10"	15"	20"	25"	30"	35"					
VELOCITY SUB - TOTALS													

**REMARKS:**

Above velocity measurements @ 40Hz fan speed. Approximate CFM @ 49Hz: 4487