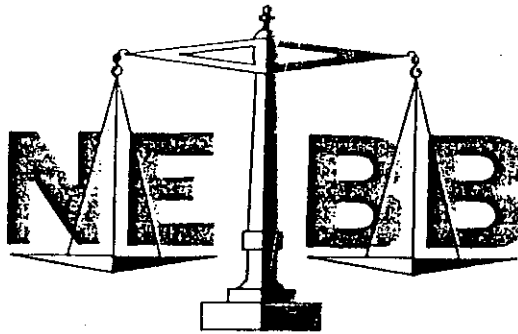




CERTIFIED TEST, ADJUST, AND BALANCE REPORT

DATE May 2001

PROJECT Helen L. Beeler School

ADDRESS Evesham Township

Burlington County, New Jersey

ARCHITECT Wayne Allan Neville, AIA

West Berlin, New Jersey

ENGINEER EMC Consulting Engineers, Inc.

Cinnaminson, New Jersey

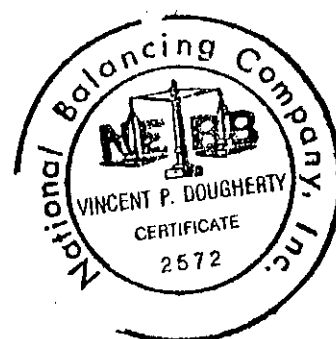
HVAC CONTRACTOR B and S Sheetmetal Mechanical

Morrisville, PA

NEBB TAB FIRM National Balancing Company, Inc.

ADDRESS 408 Oak Ave.

Cherry Hill, NJ





CERTIFICATION

PROJECT Helen L. Beeler School
ADDRESS Evesham Township
Burlington County, New Jersey

THE DATA PRESENTED IN THIS REPORT IS AN EXACT RECORD OF SYSTEM PERFORMANCE AND WAS OBTAINED IN ACCORDANCE WITH NEBB STANDARD PROCEDURES. ANY VARIANCES FROM DESIGN QUANTITIES WHICH EXCEED NEBB TOLERANCES ARE NOTED THROUGHOUT THIS REPORT.

THE AIR DISTRIBUTION SYSTEMS HAVE BEEN TESTED & BALANCED AND FINAL ADJUSTMENTS HAVE BEEN MADE IN ACCORDANCE WITH NEBB "PROCEDURAL STANDARDS FOR TESTING, ADJUSTING, BALANCING OF ENVIRONMENTAL SYSTEMS" AND THE PROJECT SPECIFICATIONS.

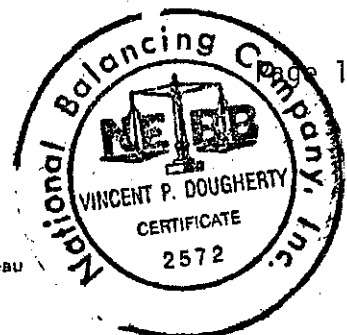
NEBB TAB FIRM National Balancing Company, Inc.
REG. NO. 2572 CERTIFIED BY Vincent P. Dougherty DATE Aug. 2000
(Air TAB Supervisor)

THE HYDRONIC DISTRIBUTION SYSTEMS HAVE BEEN TESTED & BALANCED AND FINAL ADJUSTMENTS HAVE BEEN MADE IN ACCORDANCE WITH NEBB "PROCEDURAL STANDARDS FOR TESTING, ADJUSTING, BALANCING OF ENVIRONMENTAL SYSTEMS" AND THE PROJECT SPECIFICATIONS.

NEBB TAB FIRM National Balancing Company, Inc.
REG. NO. 2572 CERTIFIED BY Vincent P. Dougherty DATE Aug. 2000
(Hydronic TAB Supervisor)

SUBMITTED & CERTIFIED BY:

NEBB TAB FIRM National Balancing Company, Inc.
TAB SUPERVISOR Vincent P. Dougherty
REG. NO. 2572 SIGNATURE Vincent P. Dougherty
DATE Aug. 2000 CERTIFICATION EXPIRATION DATE Dec. 2000



PROJECT HELEN B. BRELLER SCHOOL

FAN DATA	FAN NO. <u>HP #48</u>	FAN NO.	FAN NO.			
Location	<u>Comp. LAB 169</u>					
Service	<u>Comp. LAB 169</u>					
Manufacturer	<u>McQUAY</u>					
Model Number	<u>CC H048C</u>					
Serial Number	<u>AUBRO 22879</u>					
Type/Class	<u>HORIZ. /WSHP</u>					
Motor Make/Style	<u>GE / TP</u>					
Motor H.P./RPM/Frame	<u>3/4 / 1085 / ---</u>					
Volts/Phase/Hertz	<u>460 / 1 / 60</u>					
F.L. Amps/S.F.	<u>2.5 / ---</u>					
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>					
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>					
<u>FILTER</u>	<u>FILTER MEDIA</u>					
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1600</u>	<u>1680</u>				
Fan RPM	<u>---</u>	<u>LOW SPD</u>				
S.P. In/Out	<u>---</u>	<u>0.52</u>				
Total S.P.	<u>---</u>	<u>0.16</u>				
Voltage T_1, T_2, T_3 T_3, T_1	<u>460</u>	<u>460</u>				
Ampereage T_1, T_2, T_3	<u>2.5</u>	<u>1.8</u>				

REMARKS:

EST DATE AUG 2000 READINGS BY VPD

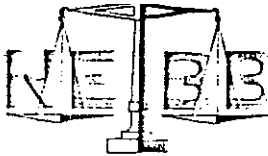


SYSTEM HP 48 COMPUTER LAB 169

TEST APPARATUS flow hood

REMARKS:

PAGE 3 OF 27

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP#36</u>	FAN NO.	FAN NO. <u>HP#36</u>			
Location	<u>CL. Rm 181</u>		<u>CL. Rm 180</u>			
Service	<u>CL. Rm 181</u>		<u>CL. Rm 180</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CC H036C</u>		<u>CC H036C</u>			
Serial Number	<u>AUBAD22774</u>		<u>AUBAD22775</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>GE / TP</u>		<u>GE / TP</u>			
Motor H.P./RPM/Frame	<u>1/2 / 1875 / ---</u>		<u>1/2 / 1875 / ---</u>			
Volts/Phase/Hertz	<u>460 / 1 / 60</u>		<u>460 / 1 / 60</u>			
F.L. Amps/S.F.	<u>1.6 / ---</u>		<u>1.6 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>35x16 1/2 x 1 Filt. media</u>		<u>35x16 1/2 x 1 Filt. media</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1200</u>	<u>1150</u>			<u>1200</u>	<u>1120</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>High SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.48</u>			<u>---</u>	<u>0.49</u>
Total S.P.	<u>---</u>	<u>+0.16</u>			<u>---</u>	<u>+0.14</u>
Voltage T_1-T_2 T_2-T_3 T_3-T_1	<u>460</u>	<u>460</u>			<u>460</u>	<u>460</u>
Amperage T_1 T_2 T_3	<u>1.6</u>	<u>1.2</u>			<u>1.6</u>	<u>1.2</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY UPD



SYSTEM HP[#] 36 PL Rms 181 & 180

TEST APPARATUS Flow hood

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD



PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP#36</u>	FAN NO.	FAN NO. <u>HP#36</u>			
Location	<u>CL. Rm 179</u>		<u>CL Rm 178</u>			
Service	<u>CL Rm 179</u>		<u>CL Rm 178</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CC H036C</u>		<u>CC H036C</u>			
Serial Number	<u>AUBAD17023</u>		<u>AUBAD22776</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>GE / TP</u>		<u>GE / TP</u>			
Motor H.P./RPM/Frame	<u>1/2 ¹⁰⁷⁵ 2570 / ---</u>		<u>1/2 ¹⁰⁷⁵ 2570 / ---</u>			
Volts/Phase/Hertz	<u>460 / 1 / 60</u>		<u>460 / 1 / 60</u>			
F.L. Amps/S.F.	<u>1.6 / ---</u>		<u>1.6 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>35x16 1/2 x 1 Filt media</u>		<u>35x16 1/2 x 1 Filt media</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1200</u>	<u>1135</u>			<u>1200</u>	<u>1125</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>High SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.52</u>			<u>---</u>	<u>0.53</u>
Total S.P.	<u>---</u>	<u>0.67</u>			<u>---</u>	<u>0.70</u>
Voltage ^{T₁T₂ T₂T₃} _{T₃T₁}	<u>460</u>	<u>460</u>			<u>460</u>	<u>460</u>
Amperage T ₁ T ₂ T ₃	<u>1.6</u>	<u>1.2</u>			<u>1.6</u>	<u>1.3</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY UPD



FAN TEST REPORT

PROJECT: HELEN L. BREUER School

FAN DATA	FAN NO. <u>HP 36</u>	FAN NO.	FAN NO.			
Location	<u>CL. Rm 176</u>					
Service	<u>CL. Rm 176</u>					
Manufacturer	<u>M'Quay</u>					
Model Number	<u>CC H036C</u>					
Serial Number	<u>AUBRO 22779</u>					
Type/Class	<u>Horiz. / WSHF</u>					
Motor Make/Style	<u>GE / TP</u>					
Motor H.P./RPM/Frame	<u>1/2 / 1075</u>					
Volts/Phase/Hertz	<u>460 / 1 / 60</u>					
F.L. Amps/S.F.	<u>1.6 / ---</u>					
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>					
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>					
<u>FILTER</u>	<u>35x16x1 Filtr. media</u>					
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1200</u>	<u>1135</u>				
Fan RPM	<u>---</u>	<u>High SPD</u>				
S.P. In/Out	<u>---</u>	<u>0.51</u>				
Total S.P.	<u>---</u>	<u>0.16</u>				
Voltage $T_1 T_2 T_3$ $T_3 T_1$	<u>460</u>	<u>460</u>				
Amperage $T_1 T_2 T_3$	<u>1.6</u>	<u>1.3</u>				

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD



OUTLET MANUFACTURER TITUS TEST APPARATUS Flow hood

REMARKS:

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PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP#19</u>	FAN NO.	FAN NO. <u>HP#19</u>			
Location	<u>CL Rm 177</u>		<u>CL Rm 175</u>			
Service	<u>CL Rm 177</u>		<u>CL Rm 175</u>			
Manufacturer	<u>M^cQuay</u>		<u>M^cQuay</u>			
Model Number	<u>CC H019C</u>		<u>CC H019C</u>			
Serial Number	<u>AUBAD 22573</u>		<u>AUBAD 22567</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>Fasco / TA</u>		<u>Fasco / TA</u>			
Motor H.P./RPM/Frame	<u>1/8 / 1075/970 / ---</u>		<u>1/8 / 1075/970 / ---</u>			
Volts/Phase/Hertz	<u>265 / 1 / 60</u>		<u>265 / 1 / 60</u>			
F.L. Amps/S.F.	<u>0.80 / ---</u>		<u>0.80 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave ϕ Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>15x23x1/TA</u>		<u>15x23x1/TA</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>630</u>	<u>640</u>			<u>630</u>	<u>650</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>High SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.31 / 0.24</u>			<u>---</u>	<u>0.32 / 0.24</u>
Total S.P.	<u>---</u>	<u>0.55</u>			<u>---</u>	<u>0.56</u>
Voltage T_1, T_2, T_3	<u>265</u>	<u>265</u>			<u>265</u>	<u>265</u>
Amperage T_1, T_2, T_3	<u>0.80</u>	<u>0.80</u>			<u>0.80</u>	<u>0.80</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY UPD



PROJECT HELEN L. DEELER School

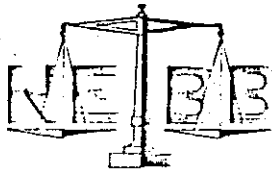
SYSTEM HP 19 CL RMS 177 & 175

OUTLET MANUFACTURER TITUS

TEST APPARATUS Flow hood

REMARKS:

TEST DATE HYC 2000 READINGS BY VPD



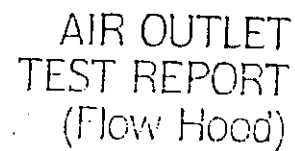
FAN TEST REPORT

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP^H 36</u>	FAN NO.	FAN NO. <u>HP^H 36</u>			
Location	<u>CL RM 173</u>		<u>CL RM 171</u>			
Service	<u>CL RM 173</u>		<u>CL RM 171</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CC H019C</u>		<u>CC H019C</u>			
Serial Number	<u>AUBAD 54118</u>		<u>AUBAD 46554</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>FASCO / TA</u>		<u>FASCO / TA</u>			
Motor H.P./RPM/Frame	<u>1/8 / 1075/570 / ---</u>		<u>1/8 / 1075/570 / ---</u>			
Volts/Phase/Hertz	<u>265 / 1 / 60</u>		<u>265 / 1 / 60</u>			
F.L. Amps/S.F.	<u>0.80 / ---</u>		<u>0.80 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>15x23x1 / TA</u>		<u>15x23x1 / TA</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>630</u>	<u>640</u>			<u>630</u>	<u>660</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>high SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.31 / 0.23</u>			<u>---</u>	<u>0.43 / 0.11</u>
Total S.P.	<u>---</u>	<u>0.54</u>			<u>---</u>	<u>0.54</u>
Voltage T_1, T_2, T_3	<u>265</u>	<u>265</u>			<u>265</u>	<u>265</u>
Amperage T_1, T_2, T_3	<u>0.80</u>	<u>0.80</u>			<u>0.80</u>	<u>0.85</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD



OUTLET MANUFACTURER TITUS TEST APPARATUS Flow hood

REMARKS:

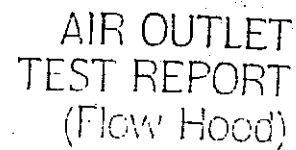
PAGE 13 OF 27

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP#12</u>	FAN NO.	FAN NO. <u>HP#12</u>			
Location	<u>CORR 301 BYRM 178</u>		<u>CORR 301 BY LAB 169</u>			
Service	<u>CORR 301</u>		<u>CORR. 301</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CC H012C</u>		<u>CC H012C</u>			
Serial Number	<u>AUBA022486</u>		<u>AUBA022485</u>			
Type/Class	<u>horiz. / w.s.h.p.</u>		<u>horiz. / w.s.h.p.</u>			
Motor Make/Style	<u>FASCO ITP</u>		<u>FASCO ITP</u>			
Motor H.P./RPM/Frame	<u>1/8 / 1400/1550</u> <u>2 SPD / ---</u>		<u>1/8 / 1400/1550</u> <u>2 SPD / ---</u>			
Volts/Phase/Hertz	<u>265 / 1 / 60</u>		<u>265 / 1 / 60</u>			
F.L. Amps/S.F.	<u>0.65 / ---</u>		<u>0.65 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>10x24x1 / TA</u>		<u>10x24x1 / TA</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>400</u>	<u>410</u>			<u>400</u>	<u>395</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>High SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.31</u> <u>40.11</u>			<u>---</u>	<u>0.30</u> <u>40.14</u>
Total S.P.	<u>---</u>	<u>0.42</u>			<u>---</u>	<u>0.44</u>
Voltage T_1, T_2, T_3 T_3, T_1	<u>265</u>	<u>265</u>			<u>265</u>	<u>265</u>
Amperage T_1, T_2, T_3	<u>0.65</u>	<u>0.65</u>			<u>0.65</u>	<u>0.60</u>

REMARKS:

TEST DATE AUG 2000 READINGS BY UPD



PROJECT HELEN L. DEELER School SYSTEM HP[#] 12 CORR 301
OUTLET MANUFACTURER TITUS TEST APPARATUS Flow hood

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD



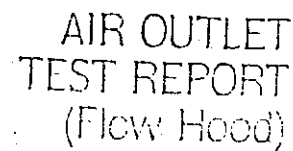
FAN TEST REPORT

PROJECT HELEN L. BREWER SCHOOL

FAN DATA	FAN NO. <u>HP 12</u>	FAN NO.	FAN NO.			
Location	<u>STORAGE RM 165</u>					
Service	<u>STORAGE RM 165</u>					
Manufacturer	<u>McQUAY</u>					
Model Number	<u>CC H012C</u>					
Serial Number	<u>AUBRO 22449</u>					
Type/Class	<u>HORIZ. / WSHF</u>					
Motor Make/Style	<u>FASCO / TP</u>					
Motor H.P./RPM/Frame	<u>1/2 / 1400/550 / ---</u>					
Volts/Phase/Hertz	<u>205 / 1 / 60</u>					
F.L. Amps/S.F.	<u>0.65 / ---</u>					
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>					
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>					
<u>FILTER</u>	<u>10x24x1 / TA</u>					
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>400</u>	<u>435</u>				
Fan RPM	<u>---</u>	<u>High SPd</u>				
S.P. In/Out	<u>---</u>	<u>0.43</u>				
Total S.P.	<u>---</u>	<u>0.59</u>				
Voltage T_1, T_2, T_3	<u>265</u>	<u>265</u>				
Amperage T_1, T_2, T_3	<u>0.65</u>	<u>0.60</u>				

REMARKS:

TEST DATE AUG 2000 READINGS BY VPD

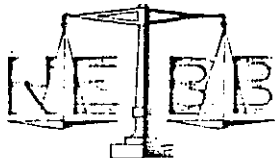


SYSTEM AV 12

TEST APPARATUS Flow hood

REMARKS:

READINGS BY VPD



PROJECT HELEN L. BELLER SCHOOL

FAN DATA	FAN NO. <u>HP#9</u>	FAN NO.	FAN NO. <u>HP#9</u>			
Location	<u>COAL 301 B5 Rm 176</u>		<u>IDF Rm 168</u>			
Service	<u>COAL 301</u>		<u>IDF Rm 168</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CCH009C</u>		<u>CCH009C</u>			
Serial Number	<u>AUBA022434</u>		<u>AUBA022443</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>FASCO 1TP</u>		<u>FASCO 1TP</u>			
Motor H.P./RPM/Frame	<u>1/8 / 1400/1550 / ---</u>		<u>1/8 / 1400/1550 / ---</u>			
Volts/Phase/Hertz	<u>265/1/60</u>		<u>265/1/60</u>			
F.L. Amps/S.F.	<u>0.65 / ---</u>		<u>0.65 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>10x24x1 1TA</u>		<u>10x24x1 1TA</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>300</u>	<u>320</u>			<u>300</u>	<u>325</u>
Fan RPM	<u>---</u>	<u>Low SPD.</u>			<u>---</u>	<u>Low SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.27 / 0.12</u>			<u>---</u>	<u>0.32 / 0.12</u>
Total S.P.	<u>---</u>	<u>0.39</u>			<u>---</u>	<u>0.44</u>
Voltage T_1, T_2, T_3	<u>265</u>	<u>265</u>			<u>265</u>	<u>265</u>
Amperage T_1, T_2, T_3	<u>0.65</u>	<u>0.50</u>			<u>0.65</u>	<u>0.60</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY UPD



OUTLET MANUFACTURER TITUS TEST APPARATUS flow hood

REMARKS:

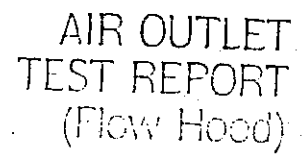
PAGE 19 OF 22

PROJECT HELEN L. BRELLER SCHOOL

FAN DATA	FAN NO. <u>HP #</u>	FAN NO.	FAN NO.			
Location	<u>CORR 300</u>					
Service	<u>CORR 300</u>					
Manufacturer	<u>McQUAY</u>					
Model Number	<u>CC H007C</u>					
Serial Number	<u>AUBA022417</u>					
Type/Class	<u>HORIZ. /WSHP</u>					
Motor Make/Style	<u>FASCO /TP</u>					
Motor H.P./RPM/Frame	<u>.05 / 1550 / 350A / ---</u>					
Volts/Phase/Hertz	<u>265 / 1 / 60</u>					
F.L. Amps/S.F.	<u>0.30 / ---</u>					
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>					
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave ϕ Distance	<u>DIRECT DRIVE</u>					
<u>FILTER</u>	<u>10 X 24 X 1 /TA</u>					
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>230</u>	<u>230</u>				
Fan RPM	<u>---</u>	<u>LOW SPD.</u>				
S.P. In/Out	<u>---</u>	<u>0.24</u>				
Total S.P.	<u>---</u>	<u>10.09</u>				
Voltage T_1, T_2, T_3	<u>265</u>	<u>265</u>				
Amperage T_1, T_2, T_3	<u>0.30</u>	<u>0.30</u>				

REMARKS:

TEST DATE AUG 2000 READINGS BY VPD



SYSTEM HP#7 Conn 300

TEST APPARATUS Flow hood

REMARKS:

PAGE 21 OF 27

PROJECT ALLEN L. BEEVER School

FAN DATA	FAN NO. <u>HRV #1</u>	FAN NO.	FAN NO. <u>HRV #2</u>			
Location	<u>Roof</u>		<u>Roof</u>			
Service	<u>SUPPLY</u>		<u>EXHAUST</u>			
Manufacturer	<u>SEMCO</u>		<u>SEMCO</u>			
Model Number	<u>FV2000</u>		<u>FV2000</u>			
Serial Number	<u>19267/32409-000</u>		<u>19267/32409-000</u>			
Type/Class	<u>HRV UNIT</u>		<u>HRV UNIT</u>			
Motor Make/Style	<u>LESSON 1DP</u>		<u>LESSON 1DP</u>			
Motor H.P./RPM/Frame	<u>1.5/1725/E56H</u>		<u>1.5/1725/E56H</u>			
Volts/Phase/Hertz	<u>460/3/60</u>		<u>460/3/60</u>			
F.L. Amps/S.F.	<u>2.8/1.15</u>		<u>2.8/1.15</u>			
Motor Sheave Make/Model	<u>Browning/AK3.0</u>		<u>Browning/AK3.4</u>			
Motor Sheave Diam./Bore	<u>AK3.0 / 5/8"</u>		<u>AK3.4 / 5/8"</u>			
Fan Sheave Make	<u>Browning</u>		<u>Browning</u>			
Fan Sheave Diam./Bore	<u>AK3.9 / 3/4"</u>		<u>AK4.4 / 3/4"</u>			
No. Belts/Make/Size	<u>1/PowerTwist/9333</u>		<u>1/PowerTwist/9333</u>			
Sheave ϕ Distance	<u>14 3/4"</u>		<u>5 1/4"</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1660</u>	<u>1730</u>			<u>1460</u>	<u>1523</u>
Fan RPM	<u>---</u>	<u>1330</u>			<u>---</u>	<u>1418</u>
S.P. In/Out	<u>---</u>	<u>1.14</u>			<u>---</u>	<u>0.30</u>
Total S.P.	<u>---</u>	<u>1.16</u>			<u>---</u>	<u>0.32</u>
Voltage T_1-T_2 T_2-T_3 T_3-T_1	<u>460</u>	<u>460/460/460</u>			<u>460</u>	<u>460/460/460</u>
Amperage T_1 T_2 T_3	<u>2.8</u>	<u>2.6/2.7/2.6</u>			<u>2.8</u>	<u>2.6/2.7/2.8</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY VDD



OUTLET MANUFACTURER _____ TEST APPARATUS Digital Anemometer

[illegible]

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD



OUTLET MANUFACTURER - - - - TEST APPARATUS DIGITAL ANEMOMETER

[illegible]

REMARKS:

TEST DATE 11/19/2000 READINGS BY VPD

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HRV #2</u>	FAN NO.	FAN NO. <u>HRV #2</u>			
Location	<u>ROOF</u>		<u>ROOF</u>			
Service	<u>SUPPLY</u>		<u>EXHAUST</u>			
Manufacturer	<u>SEMCO</u>		<u>SEMCO</u>			
Model Number	<u>FV 2000</u>		<u>FV 2000</u>			
Serial Number	<u>19267/32410-000</u>		<u>19267/32410-000</u>			
Type/Class	<u>HRV UNIT</u>		<u>HRV UNIT</u>			
Motor Make/Style	<u>KECSON 12P</u>		<u>KECSON 12P</u>			
Motor H.P./RPM/Frame	<u>1.5/1725/56H</u>		<u>2.0/1725/56H-80</u>			
Volts/Phase/Hertz	<u>460/3/60</u>		<u>460/3/60</u>			
F.L. Amps/S.F.	<u>2.8/1.15</u>		<u>3.1/1.15</u>			
Motor Sheave Make/Model	<u>BROWNING/AK 3.0</u>		<u>BROWNING/1VL4.4</u>			
Motor Sheave Diam./Bore	<u>AK 3.0 / 5/8"</u>		<u>1VL4.4 / 5/8"</u>			
Fan Sheave Make	<u>BROWNING</u>		<u>BROWNING</u>			
Fan Sheave Diam./Bore	<u>AK 3.9 / 3/4"</u>		<u>AK 3.2 / 3/4"</u>			
No. Belts/Make/Size	<u>1/POWER TWIST/19333</u>		<u>1/POWER TWIST/---</u>			
Sheave Φ Distance	<u>14 3/4"</u>		<u>5 1/2"</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>2030</u>	<u>2043</u>			<u>1825</u>	<u>1690</u>
Fan RPM	<u>---</u>	<u>2043</u> <u>1330</u>			<u>---</u>	<u>1702</u>
S.P. In/Out	<u>---</u>	<u>-1.10</u> <u>+0.03</u>			<u>---</u>	<u>-0.86</u> <u>+0.04</u>
Total S.P.	<u>---</u>	<u>1.13</u>			<u>---</u>	<u>0.90</u>
Voltage $T_1 T_2 T_3 T_1$	<u>460</u>	<u>480/480/480</u>			<u>460</u>	<u>480/480/480</u>
Amperage $T_1 T_2 T_3$	<u>2.8</u>	<u>2.8/2.8/2.8</u>			<u>3.1</u>	<u>3.0/2.9/2.8</u>

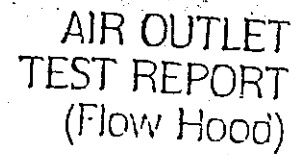
REMARKS: REVISEDTEST DATE April 2001 READINGS BY V/PD/PB



OUTLET MANUFACTURER _____ TEST APPARATUS DIGITAL ANCHOMETER

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD



OUTLET MANUFACTURER TITUS TEST APPARATUS Flow hood

[illegible]REMARKS: *REVISED*

TEST DATE April 2001 READINGS BY VPD/PB



CERT. No. 2572

NATIONAL BALANCING COMPANY, INC.

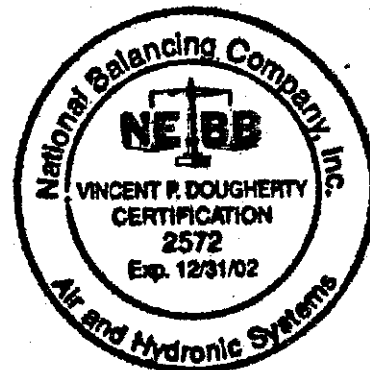
408 OAK AVENUE
CHERRY HILL, NJ 08002

(856) 667-5100 FAX (856) 667-1099

HELEN L. BEELER SCHOOL

EVESHAM TOWNSHIP

HYDRONICS





PUMP TEST REPORT

PROJECT HELEN L. BECKER SCHOOL

DATA		PUMP NO. <u>LWP-1</u>	PUMP NO.	PUMP NO. <u>LWP-2</u>	PUMP NO.	PUMP NO.
DESIGN	Location	<u>Boiler Room</u>		<u>Boiler Room</u>		
	Service	<u>boiler water</u>		<u>boiler water</u>		
	Manufacturer	<u>PEARLESS</u>		<u>PEARLESS</u>		
	Model Number	<u>P1-1030ARB</u>		<u>P1-1030ARB</u>		
	Serial Number	<u>510579-B</u>		<u>510579-B</u>		
	GPM/Head	<u>334/-</u>		<u>334/-</u>		
	Req. NPSH	<u>- - -</u>		<u>- - -</u>		
	Pump RPM	<u>1760</u>		<u>1760</u>		
	Impeller Diam.	<u>9.2</u>		<u>9.2</u>		
	Motor Mfr./Frame	<u>BALDOR/215T</u>		<u>BALDOR/215T</u>		
	Motor HP/RPM	<u>10/1760</u>		<u>10/1760</u>		
	Volts/Phase/Hertz	<u>460/3/60</u>		<u>460/3/60</u>		
	F.L. Amps/S.F.	<u>14.0/1.15</u>		<u>14.0/1.15</u>		
	Seal Type	<u>MECHANICAL</u>		<u>MECHANICAL</u>		
ACTUAL	Pump Off-Press.	<u>0</u>		<u>0</u>		
	Valve Shut Diff.	<u>37 PSI/85'</u>		<u>37 PSI/85'</u>		
	Act. Impeller Diam.	<u>9.2</u>		<u>9.2</u>		
	Valve Open Diff.	<u>29 PSI/67'</u>		<u>29 PSI/67'</u>		
	Valve Open GPM	<u>APPROX 500</u>		<u>APPROX 500</u>		
	Final Dischg. Press.	<u>50.0 PSI</u>		<u>50.0 PSI</u>		
	Final Suction Press.	<u>17.0 PSI</u>		<u>17.0 PSI</u>		
	Final ΔP	<u>33.0 PSI</u>		<u>33.0 PSI</u>		
	Final GPM	<u>350</u>		<u>350</u>		
	Voltage $T_1 T_2 T_3$ $T_3 T_1$	<u>480/480/480</u>		<u>480/480/480</u>		
	Amperage $T_1 T_2 T_3$	<u>13.2/12.2/12.2</u>		<u>11.9/12.6/13.3</u>		

REMARKS:

TEST DATE Nov, 2000 READINGS BY UPD



SYSTEM/UNIT LOOP WATER

[illegible]

REMARKS:

READINGS BY VPO



PUMP TEST REPORT

PROJECT HELEN L. BREIER SCHOOL

	DATA	PUMP NO. <u>CWP-1</u>	PUMP NO.	PUMP NO. <u>CWP-2</u>	PUMP NO.	PUMP NO.
DESIGN	Location	<u>BUICK RM.</u>		<u>BUICK RM.</u>		
	Service	<u>CONDENSER WATER</u>		<u>CONDENSER WATER</u>		
	Manufacturer	<u>PEERLESS</u>		<u>PEERLESS</u>		
	Model Number	<u>F1-840AMB</u>		<u>F1-840AMB</u>		
	Serial Number	<u>51056-B</u>		<u>51056-A</u>		
	GPM/Head	<u>500/35</u>		<u>500/35</u>		
	Req. NPSH	<u>---</u>		<u>---</u>		
	Pump RPM	<u>1760</u>		<u>1760</u>		
	Impeller Diam.	<u>7.0</u>		<u>7.0</u>		
	Motor Mfr./Frame	<u>UP/ELCC/21BT</u>		<u>UP/ELCC/21BT</u>		
	Motor HP/RPM	<u>7.5/1760</u>		<u>7.5/1760</u>		
	Volts/Phase/Hertz	<u>460/3/60</u>		<u>460/3/60</u>		
	F.L. Amps/S.F.	<u>9.6/1.15</u>		<u>9.6/1.15</u>		
	Seal Type	<u>MECHANICAL</u>		<u>MECHANICAL</u>		
ACTUAL	Pump Off-Press.	<u>0</u>		<u>0</u>		
	Valve Shut Diff.	<u>20 PSI/46'</u>		<u>20 PSI/46'</u>		
	Act. Impeller Diam.	<u>7.0</u>		<u>7.0</u>		
	Valve Open Diff.	<u>14.4 PSI/33'</u>		<u>14.4 PSI/33'</u>		
	Valve Open GPM	<u>540 APPROX.</u>		<u>540 APPROX.</u>		
	Final Dischg. Press.	<u>22.5 PSI</u>		<u>22.5 PSI</u>		
	Final Suction Press.	<u>7.5 PSI</u>		<u>7.5 PSI</u>		
	Final Δ P	<u>15.0 PSI</u>		<u>15.0 PSI</u>		
	Final GPM	<u>510</u>		<u>510</u>		
	Voltage T_1, T_2, T_3, T_1	<u>480/482/480</u>		<u>480/482/480</u>		
	Amperage T_1, T_2, T_3	<u>7.3/7.7/7.3</u>		<u>7.3/7.3/7.2</u>		

REMARKS:

TEST DATE NOV 2000 READINGS BY VMD



SYSTEM/UNIT CONDENSED WATER

LOCATION Evesham Township

REMARKS:

READINGS BY UPD



PUMP TEST REPORT

PROJECT HELEN L. BREWER School

DATA		PUMP NO. <u>HWP-1</u>	PUMP NO.	PUMP NO. <u>HWP-2</u>	PUMP NO.	PUMP NO.
DESIGN	Location	<u>BRUCE Rm.</u>		<u>BRUCE Rm.</u>		
	Service	<u>HOT WATER</u>		<u>HOT WATER</u>		
	Manufacturer	<u>UNIDUCSAC/ BELL & GOSSETT</u>		<u>UNIDUCSAC/ BELL & GOSSETT</u>		
	Model Number <u>CAT #</u>	<u>V-4T</u>		<u>V-4T</u>		
	Serial Number <u>FAC #</u>	<u>PAGE 2-109-9-12</u>		<u>PAGE 2-109-9-12</u>		
	GPM/Head	<u>152/-</u>		<u>152/-</u>		
	Req. NPSH	<u>- - - -</u>		<u>- - - -</u>		
	Pump RPM	<u>1730</u>		<u>1750</u>		
	Impeller Diam.	<u>- - - -</u>		<u>- - - -</u>		
	Motor Mfr./Frame	<u>UPBELLCT/185T</u>		<u>MARBLE FUL/213</u>		
	Motor HP/RPM	<u>3.0/1730</u>		<u>3.0/1750</u>		
	Volts/Phase/Hertz	<u>208/3/60</u>		<u>208/3/60</u>		
	F.L. Amps/S.F.	<u>9.5/1.15</u>		<u>9.1/-</u>		
	Seal Type	<u>- - - -</u>		<u>- - - -</u>		
ACTUAL	Pump Off-Press.	<u>0</u>		<u>0</u>		
	Valve Shut Diff.	<u>19.0 PSI</u>		<u>19.0 PSI</u>		
	Act. Impeller Diam.	<u>- - - -</u>		<u>- - - -</u>		
	Valve Open Diff.	<u>16.0 PSI</u>		<u>16.0 PSI</u>		
	Valve Open GPM	<u>- - - -</u>		<u>- - - -</u>		
	Final Dischg. Press.	<u>35.8 PSI</u>		<u>35.8 PSI</u>		
	Final Suction Press.	<u>20.5 PSI</u>		<u>20.5 PSI</u>		
	Final ΔP	<u>15.3 PSI</u>		<u>15.3 PSI</u>		
	Final GPM	<u>155 / $\frac{T_1 T_2}{T_3 T_1}$ $\frac{206}{207}$</u>		<u>155 / $\frac{T_1 T_2}{T_3 T_1}$ $\frac{207}{208}$</u>		
	Voltage $\frac{T_1 T_2}{T_3 T_1}$	<u>206/207/208</u>		<u>207/208/207</u>		
	Amperage $T_1 T_2 T_3$	<u>9.5/9.0/9.2</u>		<u>9.1/9.0/9.0</u>		

REMARKS: No Pump CurveTEST DATE Nov 2000 READINGS BY VPD

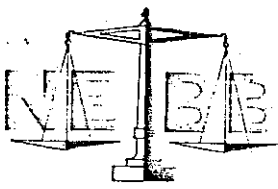
SYSTEM/UNIT HOT WATER

LOCATION Evesham Township

REMARKS:

READINGS BY

PAGE 6 OF 7



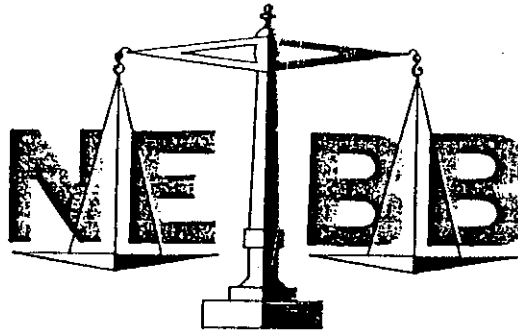
BALANCE VALVE/FLOW METER TEST REPORT

PROJECT HELEN L. BECKER SCHOOL SYSTEM/UNIT HEAT PUMP / COOL WATER
LOCATION EVESHAM TOWNSHIP

SERVICE OR DESIGNATION	SIZE	MODEL	DESIGN GPM (l/s)	ACTUAL VALVE SETPOINT (DEGREE)	ACTUAL VALVE P.D. P.S.I.	ACTUAL GPM (l/s)	NOTES
COIL LAB 169	3/4	GRISWOLD	9.6	AUTO BALANCING	13.0	9.6	HP-48
Rm 181			7.5		10.0	7.5	HP-36
Rm 180			7.5		10.0	7.5	HP-36
Rm 179			7.5		10.0	7.5	HP-36
Rm 178			7.5		9.6	7.5	HP-36
Rm 176	3/4		7.5		11.0	7.5	HP-36
Rm 177	1/2		3.8		8.0	3.8	HP-19
Rm 175			3.8		7.0	3.8	HP-19
Rm 173			3.8		7.0	3.8	HP-19
Rm 171			3.8		6.0	3.8	HP-19
COIL 301 (Rm 178)			2.6		12.0	2.6	HP-12
COIL 301 (LAB 169)			2.6		7.0	2.6	HP-12
STORAGE 165			2.6		5.0	2.6	HP-12
COIL 301 (176)			1.8		12.0	1.8	HP-09
IDF 168			1.8		13.0	1.8	HP-09
COIL 300	1/2	GRISWOLD	1.4	AUTO BALANCING	13.0	1.4	HP-07

REMARKS:

TEST DATE OCT 2000 READINGS BY VPD



CERTIFIED TEST, ADJUST, AND BALANCE REPORT

DATE May 2001

PROJECT Helen L. Beeler School

ADDRESS Evesham Township

Burlington County, New Jersey

ARCHITECT Wayne Allan Neville, AIA

West Berlin, New Jersey

ENGINEER EMC Consulting Engineers, Inc.

Cinnaminson, New Jersey

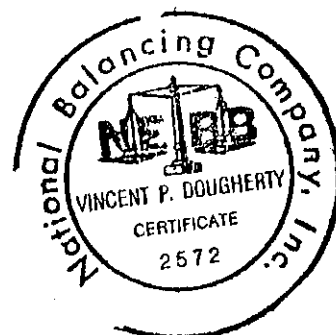
HVAC CONTRACTOR B and S Sheetmetal Mechanical

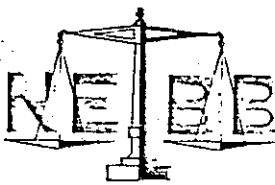
Morrisville, PA

NEBB TAB FIRM National Balancing Company, Inc.

ADDRESS 408 Oak Ave.

Cherry Hill, NJ





CERTIFICATION

PROJECT Helen L. Beeler School
ADDRESS Evesham Township
Burlington County, New Jersey

THE DATA PRESENTED IN THIS REPORT IS AN EXACT RECORD OF SYSTEM PERFORMANCE AND WAS OBTAINED IN ACCORDANCE WITH NEBB STANDARD PROCEDURES. ANY VARIANCES FROM DESIGN QUANTITIES WHICH EXCEED NEBB TOLERANCES ARE NOTED THROUGHOUT THIS REPORT.

THE AIR DISTRIBUTION SYSTEMS HAVE BEEN TESTED & BALANCED AND FINAL ADJUSTMENTS HAVE BEEN MADE IN ACCORDANCE WITH NEBB "PROCEDURAL STANDARDS FOR TESTING, ADJUSTING, BALANCING OF ENVIRONMENTAL SYSTEMS" AND THE PROJECT SPECIFICATIONS.

NEBB TAB FIRM National Balancing Company, Inc.

REG. NO. 2572 CERTIFIED BY Vincent P. Dougherty DATE Aug. 2000
(Air TAB Supervisor)

THE HYDRONIC DISTRIBUTION SYSTEMS HAVE BEEN TESTED & BALANCED AND FINAL ADJUSTMENTS HAVE BEEN MADE IN ACCORDANCE WITH NEBB "PROCEDURAL STANDARDS FOR TESTING, ADJUSTING, BALANCING OF ENVIRONMENTAL SYSTEMS" AND THE PROJECT SPECIFICATIONS.

NEBB TAB FIRM National Balancing Company, Inc.

REG. NO. 2572 CERTIFIED BY Vincent P. Dougherty DATE Aug. 2000
(Hydronic TAB Supervisor)

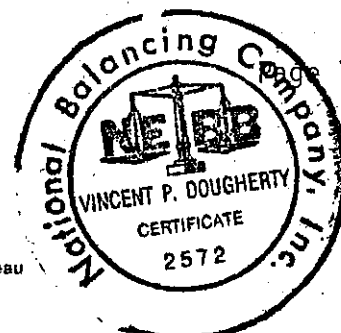
SUBMITTED & CERTIFIED BY:

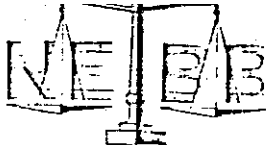
NEBB TAB FIRM National Balancing Company, Inc.

TAB SUPERVISOR Vincent P. Dougherty

REG. NO. 2572 SIGNATURE Vincent P. Dougherty

DATE Aug. 2000 CERTIFICATION EXPIRATION DATE Dec. 2000



PROJECT HELEN L. BRELLER SCHOOL

FAN DATA	FAN NO. [#] <u>HP 48</u>	FAN NO.	FAN NO.			
Location	<u>Comp. LAB 169</u>					
Service	<u>Comp. LAB 169</u>					
Manufacturer	<u>McQUAY</u>					
Model Number	<u>CC H048C</u>					
Serial Number	<u>AUBRO 22879</u>					
Type/Class	<u>Horiz. /WSHP</u>					
Motor Make/Style	<u>GE / TP</u>					
Motor H.P./RPM/Frame	<u>3/4 / 1085 / ---</u>					
Volts/Phase/Hertz	<u>460 / 1 / 60</u>					
F.L. Amps/S.F.	<u>2.5 / ---</u>					
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>					
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>					
<u>FILTER</u>	<u>FILTER MEDIA</u>					
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1600</u>	<u>1680</u>				
Fan RPM	<u>---</u>	<u>LOW SPD</u>				
S.P. In/Out	<u>---</u>	<u>0.52 / 0.16</u>				
Total S.P.	<u>---</u>	<u>0.68</u>				
Voltage ^{T₁T₂T₃} _{T₃T₁}	<u>460</u>	<u>460</u>				
Amperage T ₁ T ₂ T ₃	<u>2.5</u>	<u>1.8</u>				

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP#36</u>	FAN NO.	FAN NO. <u>HP#36</u>			
Location	<u>CL. Rm 181</u>		<u>CL. Rm 180</u>			
Service	<u>CL. Rm 181</u>		<u>CL. Rm 180</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CC H036C</u>		<u>CC H036C</u>			
Serial Number	<u>AUBA022774</u>		<u>AUBA022775</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>GE / TP</u>		<u>GE / TP</u>			
Motor H.P./RPM/Frame	<u>1/2 / 1875 / ---</u>		<u>1/2 / 1875 / ---</u>			
Volts/Phase/Hertz	<u>460 / 1 / 60</u>		<u>460 / 1 / 60</u>			
F.L. Amps/S.F.	<u>1.6 / ---</u>		<u>1.6 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>35X16 1/2 X1 Filt. media</u>		<u>35X16 1/2 X1 Filt. media</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1200</u>	<u>1150</u>			<u>1200</u>	<u>1120</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>High SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.48 / 0.16</u>			<u>---</u>	<u>0.49 / 0.14</u>
Total S.P.	<u>---</u>	<u>0.64</u>			<u>---</u>	<u>0.63</u>
Voltage T_1, T_2, T_3	<u>460</u>	<u>460</u>			<u>460</u>	<u>460</u>
Amperage T_1, T_2, T_3	<u>1.6</u>	<u>1.2</u>			<u>1.6</u>	<u>1.2</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY UPD



SYSTEM HP 36 Cl. Rms 181 & 180

TEST APPARATUS Flow hood

REMARKS:

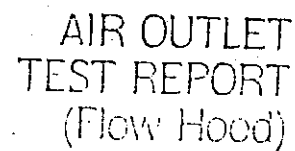
TEST DATE Aug 2000 READINGS BY VPD

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP# 36</u>	FAN NO.	FAN NO. <u>HP# 36</u>			
Location	<u>CL. Rm 179</u>		<u>CL Rm 178</u>			
Service	<u>CL Rm 179</u>		<u>CL Rm 178</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CC H036C</u>		<u>CC H036C</u>			
Serial Number	<u>AUBA017023</u>		<u>AUBA022776</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>GE / TP</u>		<u>GE / TP</u>			
Motor H.P./RPM/Frame	<u>1/2 / 1075 / 35MD / ---</u>		<u>1/2 / 1075 / 35MD / ---</u>			
Volts/Phase/Hertz	<u>460 / 1 / 60</u>		<u>460 / 1 / 60</u>			
F.L. Amps/S.F.	<u>1.6 / ---</u>		<u>1.6 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>35x16 1/2 x 1 Filt media</u>		<u>35x16 1/2 x 1 Filt media</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1200</u>	<u>1135</u>			<u>1200</u>	<u>1125</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>High SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.52</u>			<u>---</u>	<u>0.53</u>
Total S.P.	<u>---</u>	<u>0.67</u>			<u>---</u>	<u>0.70</u>
Voltage T_1, T_2, T_3	<u>460</u>	<u>460</u>			<u>460.</u>	<u>460</u>
Amperage T_1, T_2, T_3	<u>1.6</u>	<u>1.2</u>			<u>1.6</u>	<u>1.3</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY UPD



SYSTEM HP[#] 36 C.R. 179 & 178

TEST APPARATUS Flow hood

REMARKS:

TAB 11A-91
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FAN TEST REPORT

PROJECT HELEN L. BELLER SCHOOL

FAN DATA	FAN NO. [#] <u>HP36</u>	FAN NO.	FAN NO.			
Location	<u>CL. RM 176</u>					
Service	<u>CL. RM 176</u>					
Manufacturer	<u>M^cQUART</u>					
Model Number	<u>CC H036C</u>					
Serial Number	<u>AUBA022779</u>					
Type/Class	<u>HORIZ. / W SHP</u>					
Motor Make/Style	<u>GE / TP</u>					
Motor H.P./RPM/Frame	<u>1/2 / 1875 / 2510 / ---</u>					
Volts/Phase/Hertz	<u>460 / 1 / 60</u>					
F.L. Amps/S.F.	<u>1.6 / ---</u>					
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>					
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>					
<u>FILTER</u>	<u>35x16 1/2 x 1 FICT. MEDIA</u>					
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1200</u>	<u>1135</u>				
Fan RPM	<u>---</u>	<u>HIGH SPD</u>				
S.P. In/Out	<u>---</u>	<u>0.51 / 0.16</u>				
Total S.P.	<u>---</u>	<u>0.67</u>				
Voltage T_1-T_2 T_2-T_3 T_3-T_1	<u>460</u>	<u>460</u>				
Amperage T_1 T_2 T_3	<u>1.6</u>	<u>1.3</u>				

REMARKS:

TEST DATE AUG 2000 READINGS BY VPD

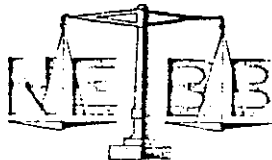


OUTLET MANUFACTURER Titus TEST APPARATUS flow hood

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REMARKS:

TEST DATE Aug 2000 READINGS BY VPD



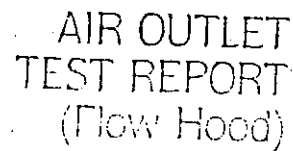
FAN TEST REPORT

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP# 19</u>	FAN NO.	FAN NO. <u>HP# 19</u>			
Location	<u>CL Rm 177</u>		<u>CL Rm 175</u>			
Service	<u>CL Rm 177</u>		<u>CL Rm 175</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CCH019C</u>		<u>CCH019C</u>			
Serial Number	<u>AUBAD 22573</u>		<u>AUBAD 22567</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>Fasco 1TA</u>		<u>Fasco 1TA</u>			
Motor H.P./RPM/Frame	<u>1/8 / 1075/170 / ---</u>		<u>1/8 / 1075/170 / ---</u>			
Volts/Phase/Hertz	<u>265 / 1 / 60</u>		<u>265 / 1 / 60</u>			
F.L. Amps/S.F.	<u>0.80 / ---</u>		<u>0.80 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>15x23x1/TA</u>		<u>15x23x1/TA</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>630</u>	<u>640</u>			<u>630</u>	<u>650</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>High SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.31 / 0.24</u>			<u>---</u>	<u>0.32 / 0.24</u>
Total S.P.	<u>---</u>	<u>0.55</u>			<u>---</u>	<u>0.56</u>
Voltage T_1, T_2, T_3 T_2, T_1	<u>265</u>	<u>265</u>			<u>265</u>	<u>265</u>
Amperage T_1, T_2, T_3	<u>0.80</u>	<u>0.80</u>			<u>0.80</u>	<u>0.80</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD



PROJECT HELEN L. DEELER School

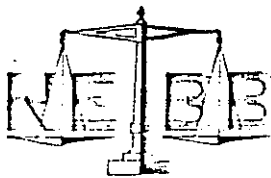
SYSTEM AV 19 CL Rms 177 & 175

OUTLET MANUFACTURER TITUS

TEST APPARATUS Flow hood

REMARKS:

TEST DATE AUG 2000 READINGS BY VRD



FAN TEST REPORT

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP# 36</u>	FAN NO.	FAN NO. <u>HP# 36</u>			
Location	<u>CL Rm 173</u>		<u>CL Rm 171</u>			
Service	<u>CL Rm 173</u>		<u>CL Rm 171</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CC H019C</u>		<u>CC H019C</u>			
Serial Number	<u>AUBAD 54118</u>		<u>AUBAD 46554</u>			
Type/Class	<u>horiz. / w.s.h.p.</u>		<u>horiz. / w.s.h.p.</u>			
Motor Make/Style	<u>FASCO / TA</u>		<u>FASCO / TA</u>			
Motor H.P./RPM/Frame	<u>1/8 / 1075/570 / ---</u>		<u>1/8 / 1075/570 / ---</u>			
Volts/Phase/Hertz	<u>265 / 1 / 60</u>		<u>265 / 1 / 60</u>			
F.L. Amps/S.F.	<u>0.80 / ---</u>		<u>0.80 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>15x23x1 / TA</u>		<u>15x23x1 / TA</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>630</u>	<u>640</u>			<u>630</u>	<u>660</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>high SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.31 / 0.23</u>			<u>---</u>	<u>0.43 / 0.11</u>
Total S.P.	<u>---</u>	<u>0.54</u>			<u>---</u>	<u>0.54</u>
Voltage T_1, T_2, T_3 T_3, T_1	<u>265</u>	<u>265</u>			<u>265</u>	<u>265</u>
Amperage T_1, T_2, T_3	<u>0.80</u>	<u>0.80</u>			<u>0.80</u>	<u>0.85</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY UPD

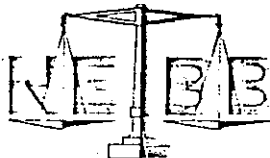


PROJECT HELEN L. BEELER School SYSTEM HP# 19 C.C. Rms 1734/171
OUTLET MANUFACTURER TITUS TEST APPARATUS Flow hood

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REMARKS:

TEST DATE AUG 2000 READINGS BY VPD

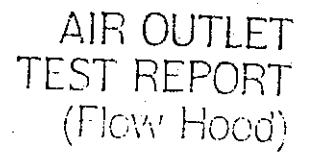


PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP#12</u>	FAN NO.	FAN NO. <u>HP#12</u>			
Location	<u>CORR 301 BYRM 178</u>		<u>CORR 301 BY LAB 169</u>			
Service	<u>CORR 301</u>		<u>CORR. 301</u>			
Manufacturer	<u>M^cQUAY</u>		<u>M^cQUAY</u>			
Model Number	<u>CC H012C</u>		<u>CC H012C</u>			
Serial Number	<u>AUBAD 22486</u>		<u>AUBAD 22485</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>FASCO 1TP</u>		<u>FASCO 1TP</u>			
Motor H.P./RPM/Frame	<u>1/8 / 1400 / 550</u>		<u>1/8 / 1400 / 550</u>			
Volts/Phase/Hertz	<u>265 / 1 / 60</u>		<u>265 / 1 / 60</u>			
F.L. Amps/S.F.	<u>0.65 / ---</u>		<u>0.65 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>10x24x1 / TA</u>		<u>10x24x1 / TA</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>400</u>	<u>410</u>			<u>400</u>	<u>395</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>High SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.31 / 0.11</u>			<u>---</u>	<u>0.30 / 0.14</u>
Total S.P.	<u>---</u>	<u>0.42</u>			<u>---</u>	<u>0.44</u>
Voltage T_1, T_2, T_3	<u>265</u>	<u>265</u>			<u>265</u>	<u>265</u>
Amperage T_1, T_2, T_3	<u>0.65</u>	<u>0.65</u>			<u>0.65</u>	<u>0.60</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY UPD



SYSTEM HP# 12 CORR 301

TEST APPARATUS Flow hood

REMARKS:

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PROJECT HELEN L. BRELLER SCHOOL

FAN DATA	FAN NO. <u>HP #12</u>	FAN NO.	FAN NO.			
Location	<u>STORAGE RM 165</u>					
Service	<u>STORAGE RM 165</u>					
Manufacturer	<u>McQUAY</u>					
Model Number	<u>CC H012C</u>					
Serial Number	<u>AUBA022449</u>					
Type/Class	<u>HORIZ. / WSHF</u>					
Motor Make/Style	<u>FASCO / TP</u>					
Motor H.P./RPM/Frame	<u>1/8 / 1400/1550 / ---</u>					
Volts/Phase/Hertz	<u>265 / 1 / 60</u>					
F.L. Amps/S.F.	<u>0.65 / ---</u>					
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>					
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>					
<u>FILTER</u>	<u>10x24x1 / FA</u>					
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>400</u>	<u>435</u>				
Fan RPM	<u>---</u>	<u>High SPD</u>				
S.P. In/Out	<u>---</u>	<u>0.43</u>				
Total S.P.	<u>---</u>	<u>0.59</u>				
Voltage $\frac{T_1-T_2}{T_3-T_1}$	<u>265</u>	<u>265</u>				
Amperage $T_1 T_2 T_3$	<u>0.65</u>	<u>0.60</u>				

REMARKS:

TEST DATE AUG 2000 READINGS BY VPD



SYSTEM HP#12

TEST APPARATUS Flow hood

REMARKS:

READINGS BY VPD



FAN TEST REPORT

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP#9</u>	FAN NO.	FAN NO. <u>HP#9</u>			
Location	<u>CORR 301 B3 Rm 176</u>		<u>IDF Rm 168</u>			
Service	<u>CORR 301</u>		<u>IDF Rm 168</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CC H 0096</u>		<u>CC H 0096</u>			
Serial Number	<u>AUBAD 22434</u>		<u>AUBAD 22443</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>FASCO / TP</u>		<u>FASCO / TP</u>			
Motor H.P./RPM/Frame	<u>1/8 / 1400/1550 / ---</u>		<u>1/8 / 1400/1550 / ---</u>			
Volts/Phase/Hertz	<u>265 / 1 / 60</u>		<u>265 / 1 / 60</u>			
F.L. Amps/S.F.	<u>0.65 / ---</u>		<u>0.65 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>10x24x1 1TA</u>		<u>10x24x1 1TA</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>300</u>	<u>320</u>			<u>300</u>	<u>325</u>
Fan RPM	<u>---</u>	<u>Low SPD.</u>			<u>---</u>	<u>Low SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.37 / 0.12</u>			<u>---</u>	<u>0.32 / 0.12</u>
Total S.P.	<u>---</u>	<u>0.39</u>			<u>---</u>	<u>0.44</u>
Voltage $T_1 T_2 T_3$	<u>265</u>	<u>265</u>			<u>265</u>	<u>265</u>
Amperage $T_1 T_2 T_3$	<u>0.65</u>	<u>0.50</u>			<u>0.65</u>	<u>0.60</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD

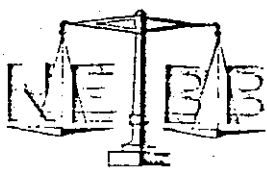


SYSTEM HP #9 Conn 301 & RA 168

TEST APPARATUS Flow hood

REMARKS:

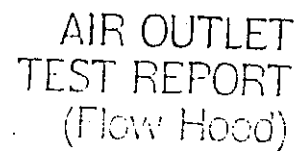
TEST DATE Aug 2000 READINGS BY VPD

PROJECT HELEN L. BRELLER SCHOOL

FAN DATA	FAN NO. <u>HP 7</u>	FAN NO.	FAN NO.			
Location	<u>CORR 300</u>					
Service	<u>CORR 300</u>					
Manufacturer	<u>McQuay</u>					
Model Number	<u>CC4007C</u>					
Serial Number	<u>AUBA022417</u>					
Type/Class	<u>Horiz. / WSHF</u>					
Motor Make/Style	<u>FASCO / TP</u>					
Motor H.P./RPM/Frame	<u>.05 / 1550 / 280A / ---</u>					
Volts/Phase/Hertz	<u>265 / 1 / 60</u>					
F.L. Amps/S.F.	<u>0.30 / ---</u>					
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>					
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>					
<u>FILTER</u>	<u>10 X 24 X 1 / TA</u>					
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>230</u>	<u>230</u>				
Fan RPM	<u>---</u>	<u>low SPD.</u>				
S.P. In/Out	<u>---</u>	<u>0.24 / 0.09</u>				
Total S.P.	<u>---</u>	<u>0.33</u>				
Voltage $\frac{T_1-T_2}{T_3-T_1}$	<u>265</u>	<u>265</u>				
Amperage $T_1 T_2 T_3$	<u>0.30</u>	<u>0.30</u>				

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD



SYSTEM HP#7 CORR 300

TEST APPARATUS Flow hood

REMARKS:

PAGE 21 OF 27

PROJECT ALLEN L. BEEVER School

FAN DATA	FAN NO. <u>HRV #1</u>	FAN NO.	FAN NO. <u>HRV #1</u>			
Location	<u>ROOF</u>		<u>ROOF</u>			
Service	<u>SUPPLY</u>		<u>EXHAUST</u>			
Manufacturer	<u>SEMCO</u>		<u>SEMCO</u>			
Model Number	<u>FV 2000</u>		<u>FV 2000</u>			
Serial Number	<u>19267/32409-000</u>		<u>19267/32409-000</u>			
Type/Class	<u>HRV UNIT</u>		<u>HRV UNIT</u>			
Motor Make/Style	<u>LEESON 1DP</u>		<u>LEESON 1DP</u>			
Motor H.P./RPM/Frame	<u>1.5/1725/E56H</u>		<u>1.5/1725/E56H</u>			
Volts/Phase/Hertz	<u>460/3/60</u>		<u>460/3/60</u>			
F.L. Amps/S.F.	<u>2.8/1.15</u>		<u>2.8/1.15</u>			
Motor Sheave Make/Model	<u>Browning / AK3.0</u>		<u>Browning / AK3.4</u>			
Motor Sheave Diam./Bore	<u>AK3.0 / 5/8"</u>		<u>AK3.4 / 5/8"</u>			
Fan Sheave Make	<u>Browning</u>		<u>Browning</u>			
Fan Sheave Diam./Bore	<u>AK3.9 / 3/4"</u>		<u>AK4.4 / 3/4"</u>			
No. Belts/Make/Size	<u>1/PowerTwist/4333</u>		<u>1/PowerTwist/4333</u>			
Sheave & Distance	<u>14 3/4"</u>		<u>5 1/4"</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1660</u>	<u>1730</u>			<u>1460</u>	<u>1523</u>
Fan RPM	<u>---</u>	<u>CALC. 1330</u>			<u>---</u>	<u>1418</u>
S.P. In/Out	<u>---</u>	<u>1.14 10.02</u>			<u>---</u>	<u>0.30 10.02</u>
Total S.P.	<u>---</u>	<u>1.16</u>			<u>---</u>	<u>0.32</u>
Voltage T_1, T_2, T_3 T_3, T_1	<u>460</u>	<u>460/460/460</u>			<u>460</u>	<u>460/460/460</u>
Amperage T_1, T_2, T_3	<u>2.8</u>	<u>2.6/2.7/2.6</u>			<u>2.8</u>	<u>2.6/2.7/2.8</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY VDD



OUTLET MANUFACTURER _____ TEST APPARATUS DIGITAL ANEMOMETER

[illegible]

REMARKS:

TEST DATE Aug 2000 READINGS BY UPD

[illegible]

REMARKS:

TEST DATE 11/19/2000 READINGS BY VPD



FAN TEST REPORT

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HRV #2</u>	FAN NO.	FAN NO. <u>HRV #2</u>			
Location	<u>ROOF</u>		<u>ROOF</u>			
Service	<u>SUPPLY</u>		<u>EXHAUST</u>			
Manufacturer	<u>SEMCO</u>		<u>SEMCO</u>			
Model Number	<u>FV 2000</u>		<u>FV 2000</u>			
Serial Number	<u>19267/32410-000</u>		<u>19267/32410-000</u>			
Type/Class	<u>HRV UNIT</u>		<u>HRV UNIT</u>			
Motor Make/Style	<u>KEESON /DP</u>		<u>KEESON /DP</u>			
Motor H.P./RPM/Frame	<u>1.5 /1725 /E56H</u>		<u>2.0 /1725 /56H-80</u>			
Volts/Phase/Hertz	<u>460 /3 /60</u>		<u>460 /3 /60</u>			
F.L. Amps/S.F.	<u>2.8 /1.15</u>		<u>3.1 /1.15</u>			
Motor Sheave Make/Model	<u>Browning /AK 3.0</u>		<u>Browning /1VL4.4</u>			
Motor Sheave Diam./Bore	<u>AK 3.0 /5/8"</u>		<u>1VL4.4 /5/8"</u>			
Fan Sheave Make	<u>Browning</u>		<u>Browning</u>			
Fan Sheave Diam./Bore	<u>AK3.9 /3/4"</u>		<u>AK3.2 /3/4"</u>			
No. Belts/Make/Size	<u>1 /Power twist /9333</u>		<u>1 /Power twist /---</u>			
Sheave Distance	<u>14 3/4"</u>		<u>5 1/2"</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>2030</u>	<u>2043</u>			<u>1825</u>	<u>1690</u>
Fan RPM	<u>---</u>	<u>CALC. 1330</u>			<u>---</u>	<u>1702</u>
S.P. In/Out	<u>---</u>	<u>-1.10 /-0.03</u>			<u>---</u>	<u>-0.86 /-0.04</u>
Total S.P.	<u>---</u>	<u>1.13</u>			<u>---</u>	<u>0.90</u>
Voltage T_1, T_2, T_3	<u>460</u>	<u>480/480/480</u>			<u>460</u>	<u>480/480/480</u>
Amperage T_1, T_2, T_3	<u>2.8</u>	<u>2.8/2.8/2.8</u>			<u>3.1</u>	<u>3.0/2.9/2.8</u>

REMARKS: REVISED

TEST DATE APRIL 2001 READINGS BY VAD/PB

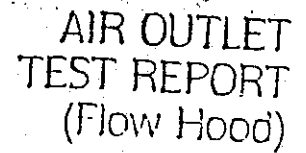


PROJECT HELEN L. BEELER SCHOOL SYSTEM HRV #2 SUPPLY
OUTLET MANUFACTURER - - - - - TEST APPARATUS DIGITAL ANEMOMETER

[illegible]

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD



OUTLET MANUFACTURER TITUS TEST APPARATUS Flood hood

[illegible]REMARKS: *REVISED*

TEST DATE April 2001 READINGS BY VPD/PB



CERT. No. 2572

NATIONAL BALANCING COMPANY, INC.

408 OAK AVENUE
CHERRY HILL, NJ 08002

(856) 667-5100 FAX (856) 667-1099

HELEN L. BEELER SCHOOL

EVESHAM TOWNSHIP

HYDRONICS





PUMP TEST REPORT

PROJECT HELEN L. BECKER School

DATA		PUMP NO. <u>LWP-1</u>	PUMP NO.	PUMP NO. <u>LWP-2</u>	PUMP NO.	PUMP NO.
DESIGN	Location	<u>Boiler Room</u>		<u>Boiler Room</u>		
	Service	<u>Hot Water</u>		<u>Hot Water</u>		
	Manufacturer	<u>PEARLESS</u>		<u>PEARLESS</u>		
	Model Number	<u>P1-1030AMB</u>		<u>P1-1030AMB</u>		
	Serial Number	<u>510579-B</u>		<u>510579-B</u>		
	GPM/Head	<u>334/-</u>		<u>334/-</u>		
	Req. NPSH	<u>- - - -</u>		<u>- - - -</u>		
	Pump RPM	<u>1760</u>		<u>1760</u>		
	Impeller Diam.	<u>9.2</u>		<u>9.2</u>		
	Motor Mfr./Frame	<u>Baldor/215T</u>		<u>Baldor/215T</u>		
	Motor HP/RPM	<u>10/1760</u>		<u>10/1760</u>		
	Volts/Phase/Hertz	<u>460/3/60</u>		<u>460/3/60</u>		
	F.L. Amps/S.F.	<u>14.0/1.15</u>		<u>14.0/1.15</u>		
	Seal Type	<u>mechanical</u>		<u>mechanical</u>		
ACTUAL	Pump Off-Press.	<u>0</u>		<u>0</u>		
	Valve Shut Diff.	<u>37 PSI/85'</u>		<u>37 PSI/85'</u>		
	Act. Impeller Diam.	<u>9.2</u>		<u>9.2</u>		
	Valve Open Diff.	<u>29 PSI/67'</u>		<u>29 PSI/67'</u>		
	Valve Open GPM	<u>APPROX 500</u>		<u>APPROX 500</u>		
	Final Dischg. Press.	<u>50.0 PSI</u>		<u>50.0 PSI</u>		
	Final Suction Press.	<u>17.0 PSI</u>		<u>17.0 PSI</u>		
	Final ΔP	<u>33.0 PSI</u>		<u>33.0 PSI</u>		
	Final GPM	<u>350</u>		<u>350</u>		
	Voltage $\begin{smallmatrix} T_1-T_2 & T_2-T_3 \\ T_3-T_1 \end{smallmatrix}$	<u>480/479/480</u>		<u>480/480/480</u>		
	Amperage $T_1 T_2 T_3$	<u>13.2/12.2/13.2</u>		<u>11.9/12.6/13.3</u>		

REMARKS:

TEST DATE Nov, 2000 READINGS BY UPD



LOCATION Evesham Township

REMARKS:

TEST DATE Nov 2000

READINGS BY VPO



PUMP TEST REPORT

PROJECT HELEN L. BEELER SCHOOL

DATA		PUMP NO. <u>CWP-1</u>	PUMP NO.	PUMP NO. <u>CWP-2</u>	PUMP NO.	PUMP NO.
DESIGN	Location	<u>Boiler RM.</u>		<u>Boiler RM.</u>		
	Service	<u>CONDENSED WATER</u>		<u>CONDENSED WATER</u>		
	Manufacturer	<u>PEERLESS</u>		<u>PEERLESS</u>		
	Model Number	<u>F1-840AMB</u>		<u>F1-840AMB</u>		
	Serial Number	<u>51056-B</u>		<u>51056-A</u>		
	GPM/Head	<u>500/35</u>		<u>500/35</u>		
	Req. NPSH	<u>---</u>		<u>---</u>		
	Pump RPM	<u>1760</u>		<u>1760</u>		
	Impeller Diam.	<u>7.0</u>		<u>7.0</u>		
	Motor Mfr./Frame	<u>UP/ELCC/213T</u>		<u>UP/ELCC/213T</u>		
	Motor HP/RPM	<u>7.5/1760</u>		<u>7.5/1760</u>		
	Volts/Phase/Hertz	<u>460/3/60</u>		<u>460/3/60</u>		
ACTUAL	F.L. Amps/S.F.	<u>9.6/1.15</u>		<u>9.6/1.15</u>		
	Seal Type	<u>MECHANICAL</u>		<u>MECHANICAL</u>		
	Pump Off-Press.	<u>0</u>		<u>0</u>		
	Valve Shut Diff.	<u>20 PSI/46'</u>		<u>20 PSI/46'</u>		
	Act. Impeller Diam.	<u>7.0</u>		<u>7.0</u>		
	Valve Open Diff.	<u>14.4 PSI/33'</u>		<u>14.4 PSI/33'</u>		
	Valve Open GPM	<u>540 APPROX.</u>		<u>540 APPROX.</u>		
	Final Dischg. Press.	<u>22.5 PSI</u>		<u>22.5 PSI</u>		
	Final Suction Press.	<u>7.5 PSI</u>		<u>7.5 PSI</u>		
	Final Δ P	<u>15.0 PSI</u>		<u>15.0 PSI</u>		
	Final GPM	<u>510</u>		<u>510</u>		
	Voltage $\frac{T_1-T_2}{T_3-T_1}$	<u>480/482/480</u>		<u>480/482/480</u>		
	Amperage $T_1 T_2 T_3$	<u>7.3/7.2/7.3</u>		<u>7.3/7.3/7.2</u>		

REMARKS:

TEST DATE Nov 2000 READINGS BY VPD



PROJECT HELEN L. BREWER School SYSTEM/UNIT CONDENSED WATER
LOCATION Evesham Township

[illegible]

REMARKS:

TEST DATE Nov 2000 READINGS BY UPD



PUMP TEST REPORT

PROJECT HELEN L. BRELEN School

DATA		PUMP NO. <u>HWT-1</u>	PUMP NO.	PUMP NO. <u>HWT-2</u>	PUMP NO.	PUMP NO.
DESIGN	Location	<u>Boiler Room</u>		<u>Boiler Room</u>		
	Service	<u>HOT WATER</u>		<u>HOT WATER</u>		
	Manufacturer	<u>UNICO SAC / BELL & GOSSETT</u>		<u>UNICO SAC / BELL & GOSSETT</u>		
	Model Number <u>CAT #</u>	<u>V-4T</u>		<u>V-4T</u>		
	Serial Number <u>FAC #</u>	<u>PAGE 2-109-9-12</u>		<u>PAGE 2-109-9-12</u>		
	GPM/Head	<u>152 / - - -</u>		<u>152 / - - -</u>		
	Req. NPSH	<u>- - - -</u>		<u>- - - -</u>		
	Pump RPM	<u>1730</u>		<u>1750</u>		
	Impeller Diam.	<u>- - - -</u>		<u>- - - -</u>		
	Motor Mfr./Frame	<u>UNICO SAC / 100T</u>		<u>UNICO SAC / 100T</u>		
	Motor HP/RPM	<u>3.0 / 1730</u>		<u>3.0 / 1750</u>		
	Volts/Phase/Hertz	<u>208 / 3 / 60</u>		<u>208 / 3 / 60</u>		
	F.L. Amps/S.F.	<u>9.5 / 1.15</u>		<u>9.1 / - - -</u>		
	Seal Type	<u>- - - -</u>		<u>- - - -</u>		
ACTUAL	Pump Off-Press.	<u>0</u>		<u>0</u>		
	Valve Shut Diff.	<u>19.0 PSI</u>		<u>19.0 PSI</u>		
	Act. Impeller Diam.	<u>- - - -</u>		<u>- - - -</u>		
	Valve Open Diff.	<u>16.0 PSI</u>		<u>16.0 PSI</u>		
	Valve Open GPM	<u>- - - -</u>		<u>- - - -</u>		
	Final Dischg. Press.	<u>35.8 PSI</u>		<u>35.8 PSI</u>		
	Final Suction Press.	<u>20.5 PSI</u>		<u>20.5 PSI</u>		
	Final Δ P	<u>15.3 PSI</u>		<u>15.3 PSI</u>		
	Final GPM	<u>155 / TRIM 0</u>		<u>155 / TRIM 0</u>		
	Voltage $T_1-T_2 T_2-T_3$	<u>206 / 207 / 208</u>		<u>207 / 208 / 207</u>		
	Amperage $T_1 T_2 T_3$	<u>9.5 / 9.0 / 9.2</u>		<u>9.1 / 9.0 / 9.0</u>		

REMARKS: No Pump Curve

TEST DATE Nov 2000 READINGS BY VPD



PROJECT HELEN L. BEECHER SCHOOL

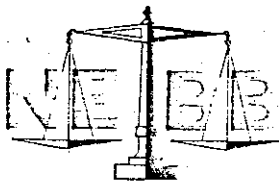
SYSTEM/UNIT ACT WATER

LOCATION Evesham Township

REMARKS:

TEST DATE Nov 2000

READINGS BY JPD



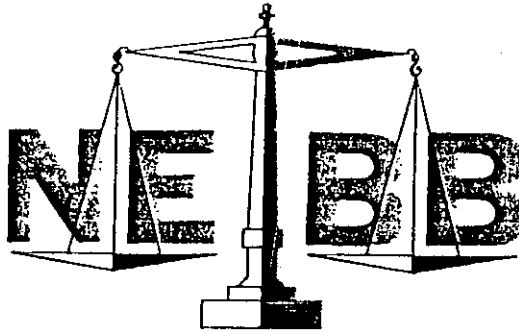
BALANCE VALVE/FLOW METER TEST REPORT

PROJECT HELEN L. BREWER SCHOOL SYSTEM/UNIT HEAT PUMP LOOP WATER
LOCATION EDENSHAM TOWNSHIP

SERVICE OR DESIGNATION	SIZE	MODEL	DESIGN GPM (l/s)	ACTUAL VALVE SETPOINT (DEGREE)	ACTUAL VALVE RD. <i>PST.</i>	ACTUAL GPM (l/s)	NOTES
CONF LAB 169	3/4	GRISWOLD	9.6	AUTO BALANCING	13.0	9.6	HP-48
Rm 181			7.5		10.0	7.5	HP-36
Rm 180			7.5		10.0	7.5	HP-36
Rm 179			7.5		10.0	7.5	HP-36
Rm 178			7.5		9.0	7.5	HP-36
Rm 176	3/4		7.5		11.0	7.5	HP-36
Rm 177	1/2		3.8		8.0	3.8	HP-19
Rm 175			3.8		7.0	3.8	HP-19
Rm 173			3.8		7.0	3.8	HP-19
Rm 171			3.8		6.0	3.8	HP-19
CONF 301 (Rm 178)			2.6		12.0	2.6	HP-12
CONF 301 (LAB 169)			2.6		7.0	2.6	HP-12
STORAGE 165			2.6		5.0	2.6	HP-12
CONF 301 (176)			1.8		12.0	1.8	HP-09
IDF 168			1.8		13.0	1.8	HP-09
CONF 300	1/2	GRISWOLD	1.4	AUTO BALANCING	13.0	1.4	HP-07

REMARKS:

TEST DATE OCT 2000 READINGS BY UPD



CERTIFIED TEST, ADJUST, AND BALANCE REPORT

DATE May 2001

PROJECT Helen L. Beeler School

ADDRESS Evesham Township

Burlington County, New Jersey

ARCHITECT Wayne Allan Neville, AIA

West Berlin, New Jersey

ENGINEER EMC Consulting Engineers, Inc.

Cinnaminson, New Jersey

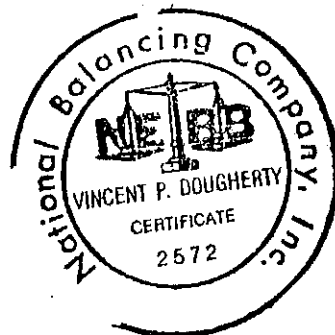
HVAC CONTRACTOR B and S Sheetmetal Mechanical

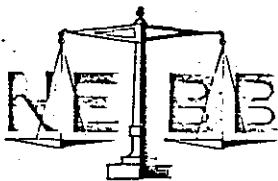
Morrisville, PA

NEBB TAB FIRM National Balancing Company, Inc.

ADDRESS 408 Oak Ave.

Cherry Hill, NJ





CERTIFICATION

PROJECT Helen L. Beeler School
ADDRESS Evesham Township
Burlington County, New Jersey

THE DATA PRESENTED IN THIS REPORT IS AN EXACT RECORD OF SYSTEM PERFORMANCE AND WAS OBTAINED IN ACCORDANCE WITH NEBB STANDARD PROCEDURES. ANY VARIANCES FROM DESIGN QUANTITIES WHICH EXCEED NEBB TOLERANCES ARE NOTED THROUGHOUT THIS REPORT.

THE AIR DISTRIBUTION SYSTEMS HAVE BEEN TESTED & BALANCED AND FINAL ADJUSTMENTS HAVE BEEN MADE IN ACCORDANCE WITH NEBB "PROCEDURAL STANDARDS FOR TESTING, ADJUSTING, BALANCING OF ENVIRONMENTAL SYSTEMS" AND THE PROJECT SPECIFICATIONS.

NEBB TAB FIRM National Balancing Company, Inc.

REG. NO. 2572 CERTIFIED BY Vincent P. Dougherty DATE Aug. 2000
(Air TAB Supervisor)

THE HYDRONIC DISTRIBUTION SYSTEMS HAVE BEEN TESTED & BALANCED AND FINAL ADJUSTMENTS HAVE BEEN MADE IN ACCORDANCE WITH NEBB "PROCEDURAL STANDARDS FOR TESTING, ADJUSTING, BALANCING OF ENVIRONMENTAL SYSTEMS" AND THE PROJECT SPECIFICATIONS.

NEBB TAB FIRM National Balancing Company, Inc.

REG. NO. 2572 CERTIFIED BY Vincent P. Dougherty DATE Aug. 2000
(Hydronic TAB Supervisor)

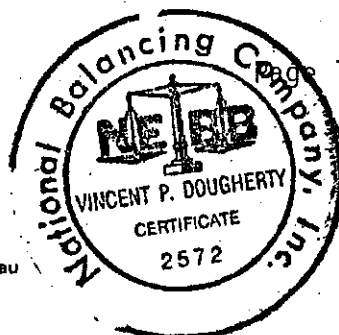
SUBMITTED & CERTIFIED BY:

NEBB TAB FIRM National Balancing Company, Inc.

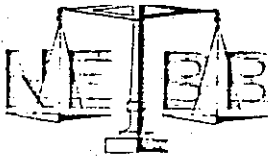
TAB SUPERVISOR Vincent P. Dougherty

REG. NO. 2572 SIGNATURE Vincent P. Dougherty

DATE Aug. 2000 CERTIFICATION EXPIRATION DATE Dec. 2000



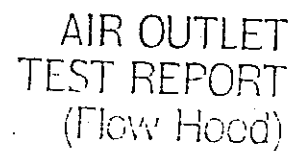
Page 1 of 27

PROJECT HELEN L. BEELER SCHOOL

FAN DATA	FAN NO. <u>HP #48</u>	FAN NO.	FAN NO.			
Location	<u>Comp. LAB 169</u>					
Service	<u>Comp. LAB 169</u>					
Manufacturer	<u>McQuay</u>					
Model Number	<u>CC H04BC</u>					
Serial Number	<u>AUBRO 22879</u>					
Type/Class	<u>HORIZ. / WSHF</u>					
Motor Make/Style	<u>GE / TD</u>					
Motor H.P./RPM/Frame	<u>3/4 1085 1---</u>					
Volts/Phase/Hertz	<u>460/1/60</u>					
F.L. Amps/S.F.	<u>2.5/---</u>					
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>					
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave ϕ Distance	<u>DIRECT DRIVE</u>					
<u>FILTER</u>	<u>FILTER MEDIA</u>					
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1600</u>	<u>1680</u>				
Fan RPM	<u>---</u>	<u>low SPD</u>				
S.P. In/Out	<u>---</u>	<u>0.52</u> <u>0.16</u>				
Total S.P.	<u>---</u>	<u>0.68</u>				
Voltage T_1-T_2 T_2-T_3 T_3-T_1	<u>460</u>	<u>460</u>				
Amperage T_1 T_2 T_3	<u>2.5</u>	<u>1.8</u>				

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD

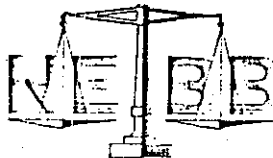


SYSTEM HP[#] 48 COMPUTER LAB 169

TEST APPARATUS Flow hood

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD

PROJECT HELEN L. BECKER School

FAN DATA	FAN NO. <u>HP#36</u>	FAN NO.	FAN NO. <u>HP#36</u>			
Location	<u>CL. Rm 181</u>		<u>CL. Rm 180</u>			
Service	<u>CL. Rm 181</u>		<u>CL. Rm 180</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CC H036C</u>		<u>CC H036C</u>			
Serial Number	<u>AUBA022774</u>		<u>AUBA022775</u>			
Type/Class	<u>horiz. / w.s.h.p.</u>		<u>horiz. / w.s.h.p.</u>			
Motor Make/Style	<u>GE / TP</u>		<u>GE / TP</u>			
Motor H.P./RPM/Frame	<u>1/2 / 1875 / ---</u>		<u>1/2 / 1875 / ---</u>			
Volts/Phase/Hertz	<u>460 / 1 / 60</u>		<u>460 / 1 / 60</u>			
F.L. Amps/S.F.	<u>1.6 / ---</u>		<u>1.6 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>35X16 1/2 X1 Filt. media</u>		<u>35X16 1/2 X1 Filt. media</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1200</u>	<u>1150</u>			<u>1200</u>	<u>1120</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>High SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.48</u>			<u>---</u>	<u>0.49</u>
Total S.P.	<u>---</u>	<u>0.64</u>			<u>---</u>	<u>0.63</u>
Voltage $T_1 T_2 T_3$	<u>460</u>	<u>460</u>			<u>460</u>	<u>460</u>
Amperage $T_1 T_2 T_3$	<u>1.6</u>	<u>1.2</u>			<u>1.6</u>	<u>1.2</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY UPD



PROJECT HELEN L. BEELER School SYSTEM HP[#] 36 CL Rms 181 & 180
OUTLET MANUFACTURER TITUS TEST APPARATUS Flowloop

[illegible]

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP#36</u>	FAN NO.	FAN NO. <u>HP#36</u>			
Location	<u>CL. Rm 179</u>		<u>CL Rm 178</u>			
Service	<u>CL Rm 179</u>		<u>CL Rm 178</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CC H036C</u>		<u>CC H036C</u>			
Serial Number	<u>AUBAD17023</u>		<u>AUBAD22776</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>GE / TP</u>		<u>GE / TP</u>			
Motor H.P./RPM/Frame	<u>1/2 / 1075 / 25AD / ---</u>		<u>1/2 / 1075 / 25AD / ---</u>			
Volts/Phase/Hertz	<u>460 / 1 / 60</u>		<u>460 / 1 / 60</u>			
F.L. Amps/S.F.	<u>1.6 / ---</u>		<u>1.6 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>35x16 1/2 x 1 Filt media</u>		<u>35x16 1/2 x 1 Filt media</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1200</u>	<u>1135</u>			<u>1200</u>	<u>1185</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>High SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.52 / 0.15</u>			<u>---</u>	<u>0.53 / 0.17</u>
Total S.P.	<u>---</u>	<u>0.67</u>			<u>---</u>	<u>0.70</u>
Voltage T_1, T_2, T_3	<u>460</u>	<u>460</u>			<u>460.</u>	<u>460</u>
Amperage T_1, T_2, T_3	<u>1.6</u>	<u>1.2</u>			<u>1.6</u>	<u>1.3</u>

REMARKS:

TEST DATE Aug 2000READINGS BY UPD



SYSTEM HP[#] 36 Cl. Rms 179 & 178

TEST APPARATUS *Flowmeter*

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD



FAN TEST REPORT

PROJECT HELEN L. BELLER SCHOOL

FAN DATA	FAN NO. <u>HP36</u>	FAN NO.	FAN NO.			
Location	<u>CL. Rm 176</u>					
Service	<u>CL. Rm 176</u>					
Manufacturer	<u>McQuay</u>					
Model Number	<u>CC H036C</u>					
Serial Number	<u>AUBA022779</u>					
Type/Class	<u>Horiz. /WSHP</u>					
Motor Make/Style	<u>GE / TP</u>					
Motor H.P./RPM/Frame	<u>1/2 / 1075 / ---</u>					
Volts/Phase/Hertz	<u>460 / 1 / 60</u>					
F.L. Amps/S.F.	<u>1.6 / ---</u>					
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>					
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>					
<u>FILTER</u>	<u>35x16 1/2 x 1 Filt. media</u>					
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1200</u>	<u>1135</u>				
Fan RPM	<u>---</u>	<u>High SPD</u>				
S.P. In/Out	<u>---</u>	<u>0.51 / 0.16</u>				
Total S.P.	<u>---</u>	<u>0.67</u>				
Voltage T_1, T_2, T_3 T_3, T_1	<u>460</u>	<u>460</u>				
Amperage T_1, T_2, T_3	<u>1.6</u>	<u>1.3</u>				

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD

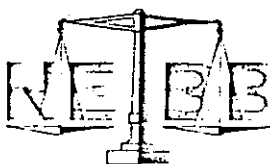


SYSTEM HP[#] 36 Cl. Rm 176

TEST APPARATUS Flow hood

REMARKS:

TAB 11A-91
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FAN TEST REPORT

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP#19</u>	FAN NO.	FAN NO. <u>HP#19</u>			
Location	<u>CL Rm 177</u>		<u>CL Rm 175</u>			
Service	<u>CL Rm 177</u>		<u>CL Rm 175</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CC H019C</u>		<u>CC H019C</u>			
Serial Number	<u>AUBAD 22573</u>		<u>AUBAD 22567</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>Fasco / TA</u>		<u>Fasco / TA</u>			
Motor H.P./RPM/Frame	<u>1/8 / 1075/1770 / ---</u>		<u>1/8 / 1075/1770 / ---</u>			
Volts/Phase/Hertz	<u>265 / 1 / 60</u>		<u>265 / 1 / 60</u>			
F.L. Amps/S.F.	<u>0.80 / ---</u>		<u>0.80 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>15x23x1/TA</u>		<u>15x23x1/TA</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>630</u>	<u>640</u>			<u>630</u>	<u>650</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>High SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.31 / 0.24</u>			<u>---</u>	<u>0.32 / 0.24</u>
Total S.P.	<u>---</u>	<u>0.55</u>			<u>---</u>	<u>0.56</u>
Voltage $T_1 T_2 T_3$	<u>265</u>	<u>265</u>			<u>265</u>	<u>265</u>
Amperage $T_1 T_2 T_3$	<u>0.80</u>	<u>0.80</u>			<u>0.80</u>	<u>0.80</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY UPD

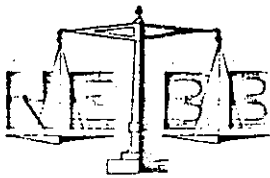


SYSTEM HP 19 CL RMS 1774175

TEST APPARATUS Flow hood

REMARKS:

TEST DATE Aug 2000 READINGS BY VRD



FAN TEST REPORT

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP#36</u>	FAN NO.	FAN NO. <u>HP#36</u>			
Location	<u>CL RM 173</u>		<u>CL RM 171</u>			
Service	<u>CL RM 173</u>		<u>CL RM 171</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CC H019C</u>		<u>CC H019C</u>			
Serial Number	<u>AUBA054118</u>		<u>AUBA046554</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>FASCO / TP</u>		<u>FASCO / TP</u>			
Motor H.P./RPM/Frame	<u>1/8 / 1075/570 / ---</u>		<u>1/8 / 1075/570 / ---</u>			
Volts/Phase/Hertz	<u>265 / 1 / 60</u>		<u>265 / 1 / 60</u>			
F.L. Amps/S.F.	<u>0.80 / ---</u>		<u>0.80 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>15x23x1 / TA</u>		<u>15x23x1 / TA</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>630</u>	<u>640</u>			<u>630</u>	<u>660</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>high SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.31 / 0.23</u>			<u>---</u>	<u>0.43 / 0.11</u>
Total S.P.	<u>---</u>	<u>0.54</u>			<u>---</u>	<u>0.54</u>
Voltage T_1, T_2, T_3 T_3, T_1	<u>265</u>	<u>265</u>			<u>265</u>	<u>265</u>
Amperage T_1, T_2, T_3	<u>0.80</u>	<u>0.80</u>			<u>0.80</u>	<u>0.85</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY UPD

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TEST DATE AUG 2000 READINGS BY VPD

PROJECT HELEN L. BELLER School

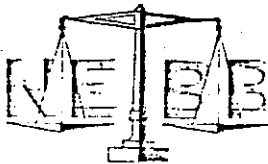
FAN DATA	FAN NO. <u>HP#12</u>	FAN NO.	FAN NO. <u>HP#12</u>			
Location	<u>CORR 301 BYRM 178</u>		<u>CORR 301 BY LAB 169</u>			
Service	<u>CORR 301</u>		<u>CORR. 301</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CC H012C</u>		<u>CC H012C</u>			
Serial Number	<u>AUBA022486</u>		<u>AUBA022485</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>FASCO ITP</u>		<u>FASCO ITP</u>			
Motor H.P./RPM/Frame	<u>1/8 / 1400/1550</u>		<u>1/8 / 1400/1550</u>			
Volts/Phase/Hertz	<u>265 / 1 / 60</u>		<u>265 / 1 / 60</u>			
F.L. Amps/S.F.	<u>0.65 / ---</u>		<u>0.65 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>10x24x1 / TA</u>		<u>10x24x1 / TA</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>400</u>	<u>410</u>			<u>400</u>	<u>395</u>
Fan RPM	<u>---</u>	<u>High SPD.</u>			<u>---</u>	<u>High SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.31 / 0.11</u>			<u>---</u>	<u>0.30 / 0.14</u>
Total S.P.	<u>---</u>	<u>0.42</u>			<u>---</u>	<u>0.44</u>
Voltage T_1, T_2, T_3	<u>265</u>	<u>265</u>			<u>265</u>	<u>265</u>
Amperage T_1, T_2, T_3	<u>0.65</u>	<u>0.65</u>			<u>0.65</u>	<u>0.60</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY UPD

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TEST DATE Aug 2000 READINGS BY VPD



FAN TEST REPORT

PROJECT HELEN L. BRELLER SCHOOL

FAN DATA	FAN NO. <u>HP 12</u>	FAN NO.	FAN NO.			
Location	<u>STORAGE RM 165</u>					
Service	<u>STORAGE RM 165</u>					
Manufacturer	<u>McQUART</u>					
Model Number	<u>CC H012C</u>					
Serial Number	<u>AUBAD 22449</u>					
Type/Class	<u>HORIZ. / WSHF</u>					
Motor Make/Style	<u>FASCO / TP</u>					
Motor H.P./RPM/Frame	<u>1/2 / 1400/550 / ---</u>					
Volts/Phase/Hertz	<u>265 / 1 / 60</u>					
F.L. Amps/S.F.	<u>0.65 / ---</u>					
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>					
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>					
<u>FILTER</u>	<u>10x24x1 / FA</u>					
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>400</u>	<u>435</u>				
Fan RPM	<u>---</u>	<u>High SPD</u>				
S.P. In/Out	<u>---</u>	<u>0.43</u> <u>10.16</u>				
Total S.P.	<u>---</u>	<u>0.59</u>				
Voltage $T_1 T_2 T_3$ $T_3 T_1$	<u>265</u>	<u>265</u>				
Amperage $T_1 T_2 T_3$	<u>0.65</u>	<u>0.60</u>				

REMARKS:

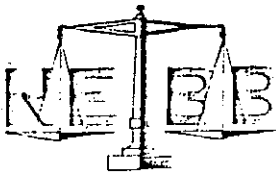
TEST DATE AUG 2000 READINGS BY VPD



OUTLET MANUFACTURER Titus TEST APPARATUS flow hood

REMARKS:

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FAN TEST REPORT

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HP#9</u>	FAN NO.	FAN NO. <u>HP#9</u>			
Location	<u>Coll 301 B5 Rm 176</u>		<u>IDF Rm 168</u>			
Service	<u>Coll 301</u>		<u>IDF Rm 168</u>			
Manufacturer	<u>McQuay</u>		<u>McQuay</u>			
Model Number	<u>CC H 0096</u>		<u>CC H 0096</u>			
Serial Number	<u>AUBAD 22434</u>		<u>AUBAD 22443</u>			
Type/Class	<u>horiz. / W.S.H.P.</u>		<u>horiz. / W.S.H.P.</u>			
Motor Make/Style	<u>FASCO 1TP</u>		<u>FASCO 1TP</u>			
Motor H.P./RPM/Frame	<u>1/8 / 1400/1550 / 2SPD / ---</u>		<u>1/8 / 1400/1550 / 2SPD / ---</u>			
Volts/Phase/Hertz	<u>265 / 1 / 60</u>		<u>265 / 1 / 60</u>			
F.L. Amps/S.F.	<u>0.65 / ---</u>		<u>0.65 / ---</u>			
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>		<u>DIRECT DRIVE</u>			
<u>FILTER</u>	<u>10x24 x 1 1TA</u>		<u>10x24 x 1 1TA</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>300</u>	<u>320</u>			<u>300</u>	<u>325</u>
Fan RPM	<u>---</u>	<u>Low SPD.</u>			<u>---</u>	<u>Low SPD.</u>
S.P. In/Out	<u>---</u>	<u>0.37 / 0.12</u>			<u>---</u>	<u>0.32 / 0.12</u>
Total S.P.	<u>---</u>	<u>0.39</u>			<u>---</u>	<u>0.44</u>
Voltage T_1, T_2, T_3 T_3, T_1	<u>265</u>	<u>265</u>			<u>265</u>	<u>265</u>
Amperage T_1, T_2, T_3	<u>0.65</u>	<u>0.50</u>			<u>0.65</u>	<u>0.60</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY UPD



PROJECT HELEN L. DEELER School

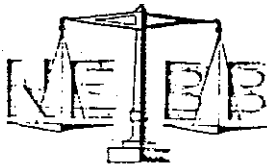
SYSTEM HP #9 Conn 301 & Rm 168

OUTLET MANUFACTURER TITUS

TEST APPARATUS Flow hood

REMARKS:

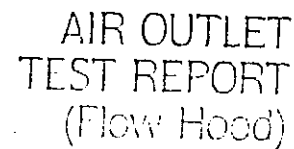
TEST DATE Aug 2000 READINGS BY VPD

PROJECT HELEN L. BRELLER School

FAN DATA	FAN NO. <u>HP 7</u>	FAN NO.	FAN NO.			
Location	<u>CORR 300</u>					
Service	<u>CORR 300</u>					
Manufacturer	<u>McQUAY</u>					
Model Number	<u>CC H007C</u>					
Serial Number	<u>AUBA022417</u>					
Type/Class	<u>HORIZ. /WSHP</u>					
Motor Make/Style	<u>FASCO /TP</u>					
Motor H.P./RPM/Frame	<u>1.05 / 1550 / 35M / ---</u>					
Volts/Phase/Hertz	<u>265 / 1 / 60</u>					
F.L. Amps/S.F.	<u>0.30 / ---</u>					
Motor Sheave Make/Model	<u>DIRECT DRIVE</u>					
Motor Sheave Diam./Bore						
Fan Sheave Make						
Fan Sheave Diam./Bore						
No. Belts/Make/Size						
Sheave & Distance	<u>DIRECT DRIVE</u>					
<u>FILTER</u>	<u>10 X 24 X 1 / 1A</u>					
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>230</u>	<u>230</u>				
Fan RPM	<u>---</u>	<u>LOW SPD.</u>				
S.P. In/Out	<u>---</u>	<u>0.24 / 10.09</u>				
Total S.P.	<u>---</u>	<u>0.33</u>				
Voltage $T_1 T_2 T_3$ $T_3 T_1$	<u>265</u>	<u>265</u>				
Amperage $T_1 T_2 T_3$	<u>0.30</u>	<u>0.30</u>				

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD

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TEST DATE Aug 2000 READINGS BY VPD

PROJECT HELEN L. BEEER School

FAN DATA	FAN NO. <u>HRV #1</u>	FAN NO.	FAN NO. <u>HRV #2</u>			
Location	<u>Roof</u>		<u>Roof</u>			
Service	<u>SUPPLY</u>		<u>EXHAUST</u>			
Manufacturer	<u>SEMCO</u>		<u>SEMCO</u>			
Model Number	<u>FV 2000</u>		<u>FV 2000</u>			
Serial Number	<u>19267/32409-000</u>		<u>19267/32409-000</u>			
Type/Class	<u>HRV UNIT</u>		<u>HRV UNIT</u>			
Motor Make/Style	<u>KEESON / DP</u>		<u>KEESON / DP</u>			
Motor H.P./RPM/Frame	<u>1.5 / 1725 / E56H</u>		<u>1.5 / 1725 / E56H</u>			
Volts/Phase/Hertz	<u>460 / 3 / 60</u>		<u>460 / 3 / 60</u>			
F.L. Amps/S.F.	<u>2.8 / 1.15</u>		<u>2.8 / 1.15</u>			
Motor Sheave Make/Model	<u>Browning / AK3.0</u>		<u>Browning / AK3.4</u>			
Motor Sheave Diam./Bore	<u>AK3.0 / 5/8"</u>		<u>AK3.4 / 5/8"</u>			
Fan Sheave Make	<u>Browning</u>		<u>Browning</u>			
Fan Sheave Diam./Bore	<u>AK3.9 / 3/4"</u>		<u>AK4.4 / 3/4"</u>			
No. Belts/Make/Size	<u>1 / PowerTwist / 9333</u>		<u>1 / PowerTwist / 9333</u>			
Sheave & Distance	<u>14 3/4"</u>		<u>5 1/4"</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>1460</u>	<u>1730</u>			<u>1460</u>	<u>1523</u>
Fan RPM	<u>---</u>	<u>1330</u>			<u>---</u>	<u>1418</u>
S.P. In/Out	<u>---</u>	<u>1.14</u>			<u>---</u>	<u>0.30</u>
Total S.P.	<u>---</u>	<u>1.16</u>			<u>---</u>	<u>0.32</u>
Voltage $\frac{T_1-T_2}{T_3-T_1}$	<u>460</u>	<u>480/480/480</u>			<u>460</u>	<u>480/480/480</u>
Amperage $T_1 T_2 T_3$	<u>2.8</u>	<u>2.6/2.7/2.6</u>			<u>2.8</u>	<u>2.6/2.7/2.8</u>

REMARKS:

TEST DATE Aug 2000 READINGS BY VDD

[illegible]

REMARKS:

TEST DATE Aug 2000 READINGS BY VPD



OUTLET MANUFACTURER - - - - - TEST APPARATUS DIGITAL ANEMOMETER

[illegible]

REMARKS:

TEST DATE 11/9/2000 READINGS BY VPD



FAN TEST REPORT

PROJECT HELEN L. BEELER School

FAN DATA	FAN NO. <u>HRV #2</u>	FAN NO.	FAN NO. <u>HRV #2</u>			
Location	<u>ROOF</u>		<u>ROOF</u>			
Service	<u>SUPPLY</u>		<u>EXHAUST</u>			
Manufacturer	<u>SEMCO</u>		<u>SEMCO</u>			
Model Number	<u>FV 2000</u>		<u>FV 2000</u>			
Serial Number	<u>19267/32410-000</u>		<u>19267/32410-000</u>			
Type/Class	<u>HRV UNIT</u>		<u>HRV UNIT</u>			
Motor Make/Style	<u>Leeson 1DP</u>		<u>Leeson 1DP</u>			
Motor H.P./RPM/Frame	<u>1.5/1725/56H</u>		<u>2.0/1725/56H-80</u>			
Volts/Phase/Hertz	<u>460/3/60</u>		<u>460/3/60</u>			
F.L. Amps/S.F.	<u>2.8/1.15</u>		<u>3.1/1.15</u>			
Motor Sheave Make/Model	<u>Browning/AK 3.0</u>		<u>Browning/1VL4.4</u>			
Motor Sheave Diam./Bore	<u>AK 3.0 / 5/8"</u>		<u>1VL4.4 / 5/8"</u>			
Fan Sheave Make	<u>Browning</u>		<u>Browning</u>			
Fan Sheave Diam./Bore	<u>AK 3.9 / 3/4"</u>		<u>AK 3.2 / 3/4"</u>			
No. Belts/Make/Size	<u>1/PowerTwist/19333</u>		<u>1/PowerTwist/---</u>			
Sheave & Distance	<u>14 3/4"</u>		<u>5 1/2"</u>			
TEST DATA	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
CFM	<u>2030</u>	<u>2043</u>			<u>1825</u>	<u>1690</u>
Fan RPM	<u>---</u>	<u>CALL. 1330</u>			<u>---</u>	<u>1702</u>
S.P. In/Out	<u>---</u>	<u>-1.10 / -0.63</u>			<u>---</u>	<u>-0.86 / -0.04</u>
Total S.P.	<u>---</u>	<u>1.13</u>			<u>---</u>	<u>0.90</u>
Voltage $T_1 T_2 T_3$ $T_3 T_1$	<u>460</u>	<u>480/480/480</u>			<u>460</u>	<u>480/480/480</u>
Amperage $T_1 T_2 T_3$	<u>2.8</u>	<u>2.8/2.8/2.8</u>			<u>3.1</u>	<u>3.0/2.9/2.8</u>

REMARKS: REVISED

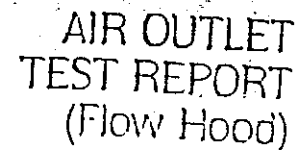
TEST DATE APRIL 2001 READINGS BY VAD/PB



OUTLET MANUFACTURER _____ TEST APPARATUS DIGITAL ANEMOMETER

REMARKS:

8.16



OUTLET MANUFACTURER TITUS TEST APPARATUS Flow hood

[illegible]REMARKS: *REVISED*

EST DATE April 2001 READINGS BY UPD/PB



CERT. No. 2572

NATIONAL BALANCING COMPANY, INC.

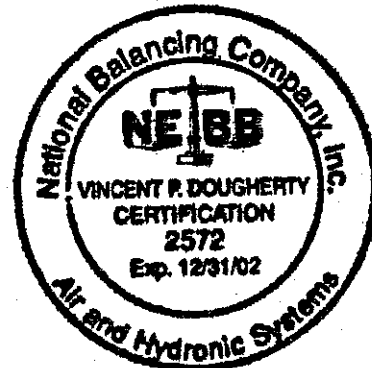
408 OAK AVENUE
CHERRY HILL, NJ 08002

(856) 667-5100 FAX (856) 667-1099

HELEN L. BEELER SCHOOL

EVESHAM TOWNSHIP

HYDRONICS





PUMP TEST REPORT

PROJECT HELEN L. BECKER SCHOOL

	DATA	PUMP NO. <u>LWP-1</u>	PUMP NO.	PUMP NO. <u>LWP-2</u>	PUMP NO.	PUMP NO.
DESIGN	Location	<u>Boiler Room</u>		<u>Boiler Room</u>		
	Service	<u>Hot Water</u>		<u>Hot Water</u>		
	Manufacturer	<u>PEARLESS</u>		<u>PEARLESS</u>		
	Model Number	<u>F1-1030AMB</u>		<u>F1-1030AMB</u>		
	Serial Number	<u>510579-B</u>		<u>510579-B</u>		
	GPM/Head	<u>334/---</u>		<u>334/---</u>		
	Req. NPSH	<u>---</u>		<u>---</u>		
	Pump RPM	<u>1760</u>		<u>1760</u>		
	Impeller Diam.	<u>9.2</u>		<u>9.2</u>		
	Motor Mfr./Frame	<u>Baldor/215T</u>		<u>Baldor/215T</u>		
	Motor HP/RPM	<u>10/1760</u>		<u>10/1760</u>		
	Volts/Phase/Hertz	<u>460/3/60</u>		<u>460/3/60</u>		
	F.L. Amps/S.F.	<u>14.0/1.15</u>		<u>14.0/1.15</u>		
	Seal Type	<u>mechanical</u>		<u>mechanical</u>		
ACTUAL	Pump Off-Press.	<u>0</u>		<u>0</u>		
	Valve Shut Diff.	<u>37 PSI/85'</u>		<u>37 PSI/85'</u>		
	Act. Impeller Diam.	<u>9.2</u>		<u>9.2</u>		
	Valve Open Diff.	<u>29 PSI/67'</u>		<u>29 PSI/67'</u>		
	Valve Open GPM	<u>APPROX 500</u>		<u>APPROX 500</u>		
	Final Dischg. Press.	<u>50.0 PSI</u>		<u>50.0 PSI</u>		
	Final Suction Press.	<u>17.0 PSI</u>		<u>17.0 PSI</u>		
	Final Δ P	<u>33.0 PSI</u>		<u>33.0 PSI</u>		
	Final GPM	<u>350</u>		<u>350</u>		
	Voltage $\frac{T_1-T_2}{T_3-T_1}$	<u>480/479/480</u>		<u>480/480/480</u>		
	Amperage $T_1 T_2 T_3$	<u>13.2/12.2/12.2</u>		<u>11.9/12.6/13.3</u>		

REMARKS:

TEST DATE Nov, 2000 READINGS BY UPD



SYSTEM/UNIT LOOP WATER

LOCATION Evesham Township

REMARKS:

TEST DATE Nov 2000

READINGS BY VPO



PUMP TEST REPORT

PROJECT

HELEN L. BEELER SCHOOL

DATA		PUMP NO. <u>CWP-1</u>	PUMP NO.	PUMP NO. <u>CWP-2</u>	PUMP NO.	PUMP NO.
DESIGN	Location	<u>Burien Rm.</u>		<u>Burien Rm.</u>		
	Service	<u>CONDENSED WATER</u>		<u>CONDENSED WATER</u>		
	Manufacturer	<u>FEEDLESS</u>		<u>FEEDLESS</u>		
	Model Number	<u>F1-840AMB</u>		<u>F1-840AMB</u>		
	Serial Number	<u>51056-B</u>		<u>51056-A</u>		
	GPM/Head	<u>500/35</u>		<u>500/35</u>		
	Req. NPSH	<u>---</u>		<u>---</u>		
	Pump RPM	<u>1760</u>		<u>1760</u>		
	Impeller Diam.	<u>7.0</u>		<u>7.0</u>		
	Motor Mfr./Frame	<u>W/ELCCT/213T</u>		<u>W/ELCCT/213T</u>		
	Motor HP/RPM	<u>7.5/1760</u>		<u>7.5/1760</u>		
	Volts/Phase/Hertz	<u>460/3/60</u>		<u>460/3/60</u>		
	F.L. Amps/S.F.	<u>9.6/1.15</u>		<u>9.6/1.15</u>		
	Seal Type	<u>MECHANICAL</u>		<u>MECHANICAL</u>		
ACTUAL	Pump Off-Press.	<u>0</u>		<u>0</u>		
	Valve Shut Diff.	<u>20 PSI/46'</u>		<u>20 PSI/46'</u>		
	Act. Impeller Diam.	<u>7.0</u>		<u>7.0</u>		
	Valve Open Diff.	<u>14.4 PSI/33'</u>		<u>14.4 PSI/33'</u>		
	Valve Open GPM	<u>540 APPROX.</u>		<u>540 APPROX.</u>		
	Final Dischg. Press.	<u>22.5 PSI</u>		<u>22.5 PSI</u>		
	Final Suction Press.	<u>7.5 PSI</u>		<u>7.5 PSI</u>		
	Final ΔP	<u>15.0 PSI</u>		<u>15.0 PSI</u>		
	Final GPM	<u>510</u>		<u>510</u>		
	Voltage T_1, T_2, T_3	<u>480/482/480</u>		<u>480/482/480</u>		
	Amperage T_1, T_2, T_3	<u>7.3/7.2/7.3</u>		<u>7.3/7.3/7.2</u>		

REMARKS:

TEST DATE

Nov 2000

READINGS BY

VJD



LOCATION Evesham Township

REMARKS:

TEST DATE Nov 2000

8.27



PUMP TEST REPORT

PROJECT HELEN L. BRELEN School

DATA		PUMP NO. <u>HWP-1</u>	PUMP NO.	PUMP NO. <u>HWP-2</u>	PUMP NO.	PUMP NO.
DESIGN	Location	<u>Boulevard Ave.</u>		<u>Boulevard Ave.</u>		
	Service	<u>HOTWATER</u>		<u>HOTWATER</u>		
	Manufacturer	<u>UNIMODSAC/ BELL & GOSSETT</u>		<u>UNIMODSAC BELL & GOSSETT</u>		
	Model Number <u>CAT #</u>	<u>15-4T</u>		<u>15-4T</u>		
	Serial Number <u>TRC #</u>	<u>PA02-109-9-12</u>		<u>PA02-109-9-12</u>		
	GPM/Head	<u>152/-</u>		<u>152/-</u>		
	Req. NPSH	<u>- - - -</u>		<u>- - - -</u>		
	Pump RPM	<u>1730</u>		<u>1750</u>		
	Impeller Diam.	<u>- - - -</u>		<u>- - - -</u>		
	Motor Mfr./Frame	<u>UNISELECT. 1/83T</u>		<u>UNISELECT. 1/83T</u>		
	Motor HP/RPM	<u>3.0/1730</u>		<u>3.0/1750</u>		
	Volts/Phase/Hertz	<u>208/3/60</u>		<u>208/3/60</u>		
	F.L. Amps/S.F.	<u>9.5/1.15</u>		<u>9.1/-</u>		
	Seal Type	<u>- - - -</u>		<u>- - - -</u>		
ACTUAL	Pump Off-Press.	<u>0</u>		<u>0</u>		
	Valve Shut Diff.	<u>19.0 PSI</u>		<u>19.0 PSI</u>		
	Act. Impeller Diam.	<u>- - - -</u>		<u>- - - -</u>		
	Valve Open Diff.	<u>16.0 PSI</u>		<u>16.0 PSI</u>		
	Valve Open GPM	<u>- - - -</u>		<u>- - - -</u>		
	Final Dischg. Press.	<u>35.8 PSI</u>		<u>35.8 PSI</u>		
	Final Suction Press.	<u>20.5 PSI</u>		<u>20.5 PSI</u>		
	Final ΔP	<u>15.3 PSI</u>		<u>15.3 PSI</u>		
	Final GPM	<u>155 / $\frac{T_1 T_2}{T_3 T_1}$</u>		<u>155 / $\frac{T_1 T_2}{T_3 T_1}$</u>		
	Voltage $\frac{T_1 T_2}{T_3 T_1}$	<u>206/207/208</u>		<u>207/208/207</u>		
	Amperage $T_1 T_2 T_3$	<u>9.5/9.0/9.2</u>		<u>9.1/9.0/9.0</u>		

REMARKS: NO PUMP CORRETEST DATE Nov 2000 READINGS BY VPD

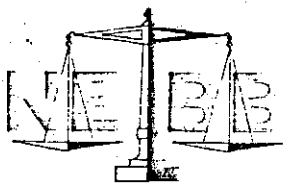


SYSTEM/UNIT HOT WATER

LOCATION Evesham Township

REMARKS:

READINGS BY W.D.



BALANCE VALVE/FLOW METER TEST REPORT

PROJECT HELEN L. BEECHER SCHOOL SYSTEM/UNIT HEAT PUMP LOOP WATER
LOCATION EVESHAM TOWNSHIP

SERVICE OR DESIGNATION	SIZE	MODEL	DESIGN GPM (l/s)	ACTUAL VALVE SETPOINT (DEGREE)	ACTUAL VALVE P.D. P.S.I.	ACTUAL GPM (l/s)	NOTES
CONN LAB 169	3/4	GRISWOLD	9.6	AUTO BALANCING	13.0	9.6	HP-48
Rm 181			7.5		10.0	7.5	HP-36
Rm 180			7.5		10.0	7.5	HP-36
Rm 179			7.5		10.0	7.5	HP-36
Rm 178			7.5		9.0	7.5	HP-36
Rm 176	3/4		7.5		11.0	7.5	HP-36
Rm 177	1/2		3.8		8.0	3.8	HP-19
Rm 175			3.8		7.0	3.8	HP-19
Rm 173			3.8		7.0	3.8	HP-19
Rm 171			3.8		6.0	3.8	HP-19
CONN 301 (Rm 178)			2.6		12.0	2.6	HP-12
CONN 301 (LAB 169)			2.6		7.0	2.6	HP-12
STORAGE 165			2.6		5.0	2.6	HP-12
CONN 301 (176)			1.8		12.0	1.8	HP-09
IDF 168			1.8		13.0	1.8	HP-09
CONN 300	1/2	GRISWOLD	1.4	AUTO BALANCING	13.0	1.4	HP-07

REMARKS:

TEST DATE OCT 2000 READINGS BY UPD