

AHU-ATE-1

Serves Atrium 1st Floor

REGION FILL OUT													
Building name	AHU-ATE-1												
AHU number	AHU-ATE-1												
Current BAS	Siemens Desigo CC 4.2												
Current BAS contractor (technician)	Siemens - Chad Richman (301-440-2982)												
O&M Name and Number													
Areas / floors serviced	1st floor Atrium												
space type(s) served	Open												
Standard and New Extended Operating Hours													
>Standard Start	6 AM												
>Standard End	6 PM												
>New Start													
>New End													
Design OA Minimum (from existing drawings)	2500												
Design OA Maximum (from existing drawings)													
ASHRAE MIN CFM of OA (calculated)	0	0	0	0	0	0	0	0	0	0	0	0	0
Sq ft of serviced area													
Occupant Population													
CONTRACTOR FILL OUT													
Operating CFM	8180												
Confirm DCV Disabled (yes or no)													
Confirm operating hours in the BAS													
Measured Return CFM	5757												
Measured Maximum OA CFM	2423												
Measured Minimum OA CFM													
OA Meas. Method (Direct PT or SA-RA PT)													
>(If SA-RA) Measured Supply Air													
>(If SA-RA) Measured Return Air													
Pre-filter MERV Rating (or N/A)	10												
Pre-filter size	3/20x16x2												
Final Filter MERV Rating	15												
Final Filter size	3/20x16x4												
Comments / Corrective actions													

AHU - ATE - 1

**SENECA BALANCE OF MARYLAND, INC.**  
 TESTING AND BALANCING CONTRACTORS  
 8019 Belair Road, Suite 9, Baltimore, Maryland 21236  
 Telephone: (410) 665-1281 Fax: (410) 665-2985

**Air Handling Unit**

PROJECT: GSA - 1800 F Street  
 LOCATION: Washington, DC  
 PROJECT #: 12-006

DATE: 6/19/2014  
 CONTACT:

~~SYSTEM/UNIT: AHU-AO (Cont.)~~  
~~AREA: Admin Office 6th Flr~~

REF # 87  
 Tested By: Pete Golumbek  
 Test Date: June 16, 2013

* Notes	AHU-AO / Outlet-02	5-Jun-13	Pete Golumbek	Existing pneumatic damper found in closed position disconnected Seneca removed motor and Set manually
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SYSTEM/UNIT: AHU-ATE1  
 AREA: East Atrium 1st Flr

REF # 88  
 Tested By: John Pierce  
 Test Date: May 07, 2014

Unit Data	
Location	Gr Flr
Service	East Atrium 1st Flr
Manufacturer	York
Model Number	XTI-045X078
Serial Number	CAYMXT0154

Motor Data	
Motor Manufacturer	Baldor
Frame	254T
Horsepower	15
Volts Rated	460
Phase	3
Hertz	60
Amps Rated	17.7
Service Factor	1.15
Nominal Efficiency	93
Power Factor	86
Motor RPM Rated	1765
Motor RPM Actual	1264
-	-
Volts T1-T2	312
Volts T2-T3	312
Volts T1-T3	312
Amps T1	10.1
Amps T2	10.1
Amps T3	10.1
Hertz Actual	42

Final Test Data	
Total Air Design	8000 CFM
Total Air Actual	8180 CFM
Return Air Design	5500 CFM
Return Air Actual	5757 CFM
Outside Air Design	2500 CFM
Outside Air Actual	2423 CFM
----	-
Design TSP	5.63 in. wc
Actual TSP	1.57 in. wc
Design ESP	2.5 in. wc
Actual ESP	0.34 in. wc

Test Data	
Fin. Filter SP In	-0.21 in. wc
Fin. Filter SP Out	-.71 in. wc
Heat. Coil SP In	-.71 in. wc
Heat. Coil SP Out	-.76 in. wc
Cool. Coil SP In	-.76 in. wc
Cool. Coil SP Out	-1.23 in. wc
Post Cool. Coil SP In	-1.23 in. wc
Post Cool. Coil SP Out	-1.44 in. wc
Supply Fan SP In	-1.44 in. wc
Supply Fan SP Out	+.13 in. wc
Actual System SP	+.31 in. wc.

Sheave Data	
Motor Sheave Model	2VP75
Motor Sheave Bore	1 5/8 in.
Fan Sheave Model	2B5V48
Fan Sheave Bore	1 3/16 in.
Belt Qty	2
Belt Size	BX51
Sheave Center Line	17 in.
-----	-
Fan RPM Design	2294

Filter Data	
Pre Filter Type	Pleated (2")
Pre Filter Qty/Size	3/20x16, 3/20x20
Final Filter Type	Box (12")
Final Filter Qty/Size	3/20x16, 3/20x20
Filter Condition	New

\* Notes



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TESTING AND BALANCING CONTRACTORS

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Telephone: (410) 665-1281 Fax: (410) 665-2985

AHU-2 SE

## Air Handling Unit

**PROJECT:** GSA - 1800 F Street

**LOCATION:** Washington, DC

**PROJECT #:** 12-006

**DATE:** 6/19/2014

**CONTACT:**

**SYSTEM/UNIT:** AHU-2 SE

**AREA:** 2nd Flr Infill Offices SE

**REF #** 1

Tested By: Pete Golumbek

Test Date: May 31, 2013

Unit Data	
Location	2nd Flr
Service	Infill Offices SE
Manufacturer	York
Model Number	XT1-042X066KAK
Serial Number	CAYMXT0083
Discharge	Horizontal/Top

Final Test Data	
Total Air Design	6000 CFM
Total Air Actual	5869 CFM
Return Air Design	5310 CFM
Return Air Actual	5181 CFM
Outside Air Design	690 CFM
Outside Air Actual	688 CFM
---	-
System Total Design	6835 CFM
----	-
Design TSP	3.83 in. wc
Actual TSP	3.94 in. wc
Design ESP	2.1 in. wc
Actual ESP	1.8 in. wc

Test Data	
Pre-Filter SP In	-.52 in. wc
Fin. Filter SP Out	-1.71 in. wc
Cool. Coil SP In	-1.71 in. wc
Cool. Coil SP Out	-2.35 in. wc
Supply Fan SP In	-2.35 in. wc
Supply Fan SP Out	+1.59 in. wc
Unit Discharge SP	+1.28 in. wc.
Operating SP Stpt	.60 in. wc.
Actual System SP	.62 in. wc.

Motor Data	
Motor Manufacturer	Baldor
Frame	215T
Horsepower	10
Volts Rated	460
Phase	3
Hertz	60
Amps Rated	12.5
Service Factor	1.15
Motor RPM Rated	1770
Motor RPM Actual	1625
-	-
Volts T1-T2	420
Amps T1	10.5
Hertz Actual	55.4

Sheave Data	
Motor Sheave Model	2VP62
Motor Sheave Diam.	6 in.
Motor Sheave Bore	1 3/8 in.
Fan Sheave Model	2B5V44
Fan Sheave Diam.	4 3/4 in.
Fan Sheave Bore	1 1/2 in.
Belt Qty	2
Belt Size	5VX630
Sheave Center Line	23 1/4 in.
-----	-
Fan RPM Design	2049
Fan RPM Actual	2053

Filter Data	
Pre Filter Type	Pleated (2")
Pre Filter Qty/Size	2/12x24, 2/24x20
Final Filter Type	Box (12")
Final Filter Qty/Size	2/12x24, 2/24x20
Filter Condition	New

Miscellaneous Data	
Critical Terminal Unit	9
System Diversity	12 %

\* Notes



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Telephone: (410) 665-1281 Fax: (410) 665-2985

AHU-3 SE

## Air Handling Unit

**PROJECT:** GSA - 1800 F Street  
**LOCATION:** Washington, DC  
**PROJECT #:** 12-006

**DATE:** 6/19/2014  
**CONTACT:**

**SYSTEM/UNIT:** AHU-3 SE  
**AREA:** 3rd Flr Infill Offices SE

**REF #** 17  
 Tested By: Pete Golumbek  
 Test Date: May 29, 2013

Unit Data	
Location	3rd Flr
Service	Infill Offices SE
Manufacturer	York
Model Number	XTI-042X066KAK
Serial Number	CAYMXT0084
Discharge	Horizontal/Top

Final Test Data	
Total Air Design	6000 CFM
Total Air Actual	5652 CFM
Return Air Design	5310 CFM
Return Air Actual	4964 CFM
Outside Air Design	690 CFM
Outside Air Actual	688 CFM
---	-
System Total Design	6835 CFM
----	-
Design TSP	3.83 in. wc
Actual TSP	4.02 in. wc
Design ESP	2.1 in. wc
Actual ESP	1.63 in. wc

Test Data	
Pre-Filter SP In	-.50 in. wc
Fin. Filter SP Out	-2.16 in. wc
Cool. Coil SP In	-2.16 in. wc
Cool. Coil SP Out	-2.89 in. wc
Supply Fan SP In	-2.89 in. wc
Supply Fan SP Out	+1.13 in. wc
Unit Discharge SP	.58 in. wc.
Operating SP Stpt	.75 in. wc.
Actual System SP	.17 in. wc.

Motor Data	
Motor Manufacturer	Baldor
Frame	215T
Horsepower	10
Volts Rated	460
Phase	3
Hertz	60
Amps Rated	12.5
Service Factor	1.15
Motor RPM Rated	1770
Motor RPM Actual	1753
-	-
Volts T1-T2	454
Amps T1	12.0
Hertz Actual	59.3

Sheave Data	
Motor Sheave Model	2VP62
Motor Sheave Diam.	6 in.
Motor Sheave Bore	1 3/8 in.
Fan Sheave Model	2B5V44
Fan Sheave Diam.	4 3/4 in.
Fan Sheave Bore	1 1/2 in.
Belt Qty	2
Belt Size	5VX630
Sheave Center Line	23 1/4 in.
-----	-
Fan RPM Design	2049
Fan RPM Actual	2077

Filter Data	
Pre Filter Type	Pleated (2")
Pre Filter Qty/Size	2/12x24, 2/24x20
Final Filter Type	Box (12")
Final Filter Qty/Size	2/12x24, 2/24x20
Filter Condition	New

Miscellaneous Data	
Critical Terminal Unit	9
System Diversity	12 %

\* Notes

AHU-4 SE 4th Floor Feed in-fill area

REGION FILL OUT												
Building name	AHU-4 SE											
AHU number	Siemens Design CC 4.2											
Current BAS	Siemens - Chad Richman (301-440-2982)											
O&M Name and Number	4400 In fill area											
Areas / floors serviced	Open Office space											
space (sqft) served	6 Am											
Standard and New Extended Operating Hours	6 pm											
>Standard Start												
>Standard End												
>New Start												
>New End												
Design OA Minimum (from existing drawings)	690											
Design OA Maximum (from existing drawings)	7200											
ASHRAE MIN CFM of OA (calculated)	0	0	0	0	0	0	0	0	0	0	0	0
Sq. ft. of serviced area	CONTRACTOR FILL OUT											
Occupant Population												
Operating CFM	5760											
Confirm DCV Disabled (yes or no)												
Confirm operating hours in the BAS												
Measured Return CFM	575											
Measured Maximum OA CFM	675											
Measured Minimum OA CFM												
OA Meas. Method (Direct PT or SA-RA PT)												
>(If SA-RA) Measured Supply Air												
>(If SA-RA) Measured Return Air												
Pre-filter MERV Rating (or N/A)	10											
Pre-filter size	2/12x24x2											
Final Filter MERV Rating	15											
Final Filter size	2/12x24x4											
Comments / Corrective actions	2/24x20x12											

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AHU-4 SE

## Air Handling Unit

**PROJECT:** GSA - 1800 F Street

**LOCATION:** Washington, DC

**PROJECT #:** 12-006

**DATE:** 6/19/2014

**CONTACT:**

**REF # 33**

**SYSTEM/UNIT:** AHU-4 SE

**AREA:** 4th Flr Infill Offices SE

Tested By: Pete Golumbek

Test Date: May 24, 2013

Unit Data	
Location	4th Flr
Service	Infill Offices SE
Manufacturer	York
Model Number	XT1-042X066KAK
Serial Number	CAYMXT0085
Discharge	Horizontal/Top

Final Test Data	
Total Air Design	6000 CFM
Total Air Actual	5860 CFM
Return Air Design	5310 CFM
Return Air Actual	5175 CFM
Outside Air Design	690 CFM
Outside Air Actual	685 CFM
---	-
System Total Design	6835 CFM
----	-
Design TSP	3.83 in. wc
Actual TSP	4.14 in. wc
Design ESP	2.1 in. wc
Actual ESP	2.29 in. wc

Test Data	
Pre-Filter SP In	-.43 in. wc
Fin. Filter SP Out	-1.72 in. wc
Cool. Coil SP In	-1.72 in. wc
Cool. Coil SP Out	-2.28 in. wc
Supply Fan SP In	-2.28 in. wc
Supply Fan SP Out	+1.86 in. wc

Motor Data	
Motor Manufacturer	Baldor
Frame	215T
Horsepower	10
Volts Rated	460
Phase	3
Hertz	60
Amps Rated	12.5
Service Factor	1.15
Motor RPM Rated	1770
Motor RPM Actual	1678
-	-
Volts T1-T2	435
Amps T1	11.0
Hertz Actual	56.7

Sheave Data	
Motor Sheave Model	2VP62
Motor Sheave Diam.	6 in.
Motor Sheave Bore	1 3/8 in.
Fan Sheave Model	2B5V44
Fan Sheave Diam.	4 3/4 in.
Fan Sheave Bore	1 1/2 in.
Belt Qty	2
Belt Size	5VX630
Sheave Center Line	23 1/2 in.
-----	-
Fan RPM Design	2049
Fan RPM Actual	2112

Filter Data	
Pre Filter Type	Pleated (2")
Pre Filter Qty/Size	2/12x24, 2/24x20
Final Filter Type	Box (12")
Final Filter Qty/Size	2/12x24, 2/24x20
Filter Condition	New

Miscellaneous Data	
Critical Terminal Unit	9
System Diversity	12 %

\* Notes

AHU-5SE 5th floor feeds infill area

REGION FILL OUT												
Building name	AHU-5SE											
AHU number	AHU-5SE											
Current BAS	Siemens Design CC 4.2											
O&M Name and Number	Siemens - Chad Richman (301-440-2982)											
Areas / floors serviced	5400 Infill office space											
space type(s) served	open office space											
Standard and New Extended Operating Hours												
>Standard Start	6 Am											
>Standard End	6 pm											
>New Start												
>New End												
Design OA Minimum (from existing drawings)	640											
Design OA Maximum (from existing drawings)												
ASHRAE MIN CFM of OA (calculated)	0											
Sq ft of serviced area	72000											
Occupant Population												
CONTRACTOR FILL OUT												
Operating CFM	5921											
Confirm DCV Disabled (yes or no)												
Confirm operating hours in the BAS												
Measured Return CFM	5228											
Measured Maximum OA CFM	640											
Measured Minimum OA CFM												
OA Meas. Method (Direct PT or SA-RA PT)												
>(If SA-RA) Measured Supply Air												
>(If SA-RA) Measured Return Air												
Pre-filter MERV Rating (or N/A)	10											
Pre-filter size	2/12x24x2											
Final Filter MERV Rating	15											
Final Filter size	2/12x24x4											
Comments / Corrective actions	2/24x20x2											
	2/20x24x4											

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Telephone: (410) 665-1281 Fax: (410) 665-2985

AHU-5SE

## Air Handling Unit

PROJECT: GSA - 1800 F Street

LOCATION: Washington, DC

PROJECT #: 12-006

DATE: 6/19/2014

CONTACT:

**REF # 49**

SYSTEM/UNIT: AHU-5 SE

AREA: 5th Flr Infill Offices SE

Tested By: Pete Golumbek

Test Date: May 24, 2013

Unit Data	
Location	5th Flr
Service	Infill Offices SE
Manufacturer	York
Model Number	XTI-042X066KAK
Serial Number	CAYMXT0086
Discharge	Horizontal/Top

Final Test Data	
Total Air Design	6000 CFM
Total Air Actual	5921 CFM
Return Air Design	5310 CFM
Return Air Actual	5228 CFM
Outside Air Design	690 CFM
Outside Air Actual	693 CFM
---	-
System Total Design	6835 CFM
----	-
Design TSP	3.83 in. wc
Actual TSP	4.09 in. wc
Design ESP	2.1 in. wc
Actual ESP	2.03 in. wc

Test Data	
Pre-Filter SP In	-.46 in. wc
Fin. Filter SP Out	-2.07 in. wc
Cool. Coil SP In	-2.07 in. wc
Cool. Coil SP Out	-2.52 in. wc
Supply Fan SP In	-2.52 in. wc
Supply Fan SP Out	+1.57 in. wc
Unit Discharge SP	+1.57 in. wc.
Operating SP Stpt	.60 in. wc.
Actual System SP	.60 in. wc.

Motor Data	
Motor Manufacturer	Baldor
Frame	215T
Horsepower	10
Volts Rated	460
Phase	3
Hertz	60
Amps Rated	12.5
Service Factor	1.15
Motor RPM Rated	1770
Motor RPM Actual	1706
-	-
Volts T1-T2	442
Amps T1	11.0
Hertz Actual	57.7

Sheave Data	
Motor Sheave Model	2VP62
Motor Sheave Diam.	6 in.
Motor Sheave Bore	1 3/8 in.
Fan Sheave Model	2B5V44
Fan Sheave Diam.	4 3/4 in.
Fan Sheave Bore	1 1/2 in.
Belt Qty	2
Belt Size	5VX630
Sheave Center Line	23 1/2 in.
-----	-
Fan RPM Design	2049
Fan RPM Actual	2147

Filter Data	
Pre Filter Type	Pleated (2")
Pre Filter Qty/Size	2/12x24, 2/24x20
Final Filter Type	Box (12")
Final Filter Qty/Size	2/12x24, 2/24x20
Filter Condition	New

Miscellaneous Data	
Critical Terminal Unit	9
System Diversity	12 %

\* Notes

AHU-6 SE 6<sup>th</sup> floor Feeds infill area

REGION FILL OUT									
Building Name	AHU-6 SE								
AHU number	Siemens Desigo CC 4.2								
Current BAS	Siemens - Chad Richman (301-440-2982)								
Current BAS contractor (Technician)	6400 Infill Area Open Office Space								
O&M Name and Number	6 AM 6 PM								
Areas / floors serviced	690								
space type(s) served	7200								
Standard and New Extended Operating Hours	CONTRACTOR FILL OUT								
>Standard Start									
>Standard End									
>New Start									
>New End									
Design OA Minimum (from existing drawings)									
Design OA Maximum (from existing drawings)									
ASHRAE MIN CFM of OA (calculated)									
So ft of serviced area									
Occupant Population									
Operating CFM	5546								
Confirm DCV Disabled (yes or no)									
Confirm operating hours in the BAS	4924								
Measured Return CFM	672								
Measured Maximum OA CFM									
Measured Minimum OA CFM									
OA Meas. Method (Direct PT or SA-RA PT)									
>(If SA-RA) Measured Supply Air	10 2/24/20 2								
>(If SA-RA) Measured Return Air	15 2/24/20 4								
Pre-filter MERV Rating (or N/A)									
Pre-filter size									
Final Filter MERV Rating									
Final Filter size									
Comments / Corrective actions									

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AHU - 6 SE

## Air Handling Unit

PROJECT: GSA - 1800 F Street  
 LOCATION: Washington, DC  
 PROJECT #: 12-006

DATE: 6/19/2014  
 CONTACT:

SYSTEM/UNIT: AHU-6 SE  
 AREA: 6th Flr Infill Offices SE

REF # 65  
 Tested By: Pete Golumbek  
 Test Date: April 09, 2013

Unit Data	
Location	6th Flr
Service	Infill Offices SE
Manufacturer	York
Model Number	XTI-042X066KAK
Serial Number	CAYMXT10087
Discharge	Horizontal/Top

Final Test Data	
Total Air Design	6000 CFM
Total Air Actual	5596 CFM
Return Air Design	5310 CFM
Return Air Actual	4924 CFM
Outside Air Design	690 CFM
Outside Air Actual	672 CFM
---	-
System Total Design	6835 CFM
----	-
Design TSP	3.83 in. wc
Actual TSP	4.03 in. wc
Design ESP	2.1 in. wc
Actual ESP	2.08 in. wc

Test Data	
Pre-Filter SP In	-.52 in. wc
Fin. Filter SP Out	-2.05 in. wc
Cool. Coil SP In	-2.05 in. wc
Cool. Coil SP Out	-2.47 in. wc
Supply Fan SP In	-2.47 in. wc
Supply Fan SP Out	+1.56 in. wc
Operating SP Stpt	.60 in. wc.
Actual System SP	.61 in. wc.

Motor Data	
Motor Manufacturer	Baldor
Frame	215T
Horsepower	10
Volts Rated	460
Phase	3
Hertz	60
Amps Rated	12.5
Service Factor	1.15
Motor RPM Rated	1770
Motor RPM Actual	1662
-	-
Volts T1-T2	430
Amps T1	10.8
Hertz Actual	56.1

Sheave Data	
Motor Sheave Model	2VP62
Motor Sheave Diam.	6 in.
Motor Sheave Bore	1-3/8 in.
Fan Sheave Model	2B5V44
Fan Sheave Diam.	4 3/4 in.
Fan Sheave Bore	1-1/2 in.
Belt Qty	2
Belt Size	5VX630
Sheave Center Line	29 in.
-----	-
Fan RPM Design	2049
Fan RPM Actual	2092

Filter Data	
Pre Filter Type	Pleated (2")
Pre Filter Qty/Size	2/12x24, 2/24x20
Final Filter Type	Box (12")
Final Filter Qty/Size	2/12x24, 2/24x20
Filter Condition	New

Miscellaneous Data	
Critical Terminal Unit	9
System Diversity	12 %

\* Notes



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TESTING AND BALANCING CONTRACTORS

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Telephone: (410) 665-1281 Fax: (410) 665-2985

AHU-7SE

## Air Handling Unit

PROJECT: GSA - 1800 F Street

LOCATION: Washington, DC

PROJECT #: 12-006

DATE: 6/19/2014

CONTACT:

REF # 81

SYSTEM/UNIT: AHU-7 SE

AREA: 7th Fl. Infill Offices SE

Tested By: Pete Golumbek

Test Date: May 09, 2013

Unit Data	
Location	7th Flr
Service	Infill Offices SE
Manufacturer	York
Model Number	XT1-033X051
Serial Number	CAYMXT0140
Discharge	Horizontal/Top

Final Test Data	
Total Air Design	3000 CFM
Total Air Actual	3213 CFM
Return Air Design	2690 CFM
Return Air Actual	2900 CFM
Outside Air Design	310 CFM
Outside Air Actual	313 CFM
---	-
System Total Design	4445 CFM
----	-
Design TSP	4.77 in. wc
Actual TSP	3.39 in. wc
Design ESP	2.1 in. wc
Actual ESP	2.2 in. wc

Test Data	
Pre-Filter SP In	-0.84 in. wc
Fin. Filter SP Out	-1.61 in. wc
Cool. Coil SP In	-1.61 in. wc
Cool. Coil SP Out	-2.03 in. wc
Supply Fan SP In	-2.03 in. wc
Supply Fan SP Out	+1.36 in. wc
Unit Discharge SP	+1.36 in. wc.
Operating SP Stpt	1.20 in. wc.
Actual System SP	1.17 in. wc.

Motor Data	
Motor Manufacturer	Baldor
Frame	213T
Horsepower	7-1/2
Volts Rated	460
Phase	3
Hertz	60
Amps Rated	9.7
Service Factor	1.15
Motor RPM Rated	1770 RPM
Motor RPM Actual	1601 RPM
-	-
Volts T1-T2	395
Amps T1	6.0
Hertz Actual	53.9 Hz.

Sheave Data	
Motor Sheave Model	2AK54
Motor Sheave Bore	1 3/8 in.
Fan Sheave Model	2AK30
Fan Sheave Bore	1 in.
Belt Qty	2
Belt Size	AX47
Sheave Center Line	18 in.
-----	-
Fan RPM Design	3066 RPM
Fan RPM Actual	2918

Filter Data	
Pre Filter Type	Pleated (2")
Pre Filter Qty/Size	2/20x24
Final Filter Type	Box (12")
Final Filter Qty/Size	2/20x24
Filter Condition	New

Miscellaneous Data	
Critical Terminal Unit	2
System Diversity	33 %

\* Notes

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# SENECA BALANCE OF MARYLAND, INC.

TESTING AND BALANCING CONTRACTORS

3019 Belair Road, Suite 9, Baltimore, Maryland 21236

Telephone: (410) 665-1281 Fax: (410) 665-2985

AHU-AO

## Air Handling Unit

PROJECT: GSA - 1800 F Street

LOCATION: Washington, DC

PROJECT #: 12-006

DATE: 6/19/2014

CONTACT:

REF # 87

SYSTEM/UNIT: AHU-AO

AREA: Admin Office 6th Flr

Tested By: Pete Golumbek

Test Date: June 16, 2013

Unit Data	
Location	7th Flr
Service	Admin Office 6th Flr
Manufacturer	York
Model Number	XTI-033X054-KAJA046A
Serial Number	CAYMXT0141

Final Test Data	
Total Air Design	3200 CFM
Total Air Actual	3063 CFM
Return Air Design	2800 CFM
Outside Air Design	400 CFM
Outside Air Actual	TBD CFM
----	----
Design TSP	4.71 in. wc
Actual TSP	2.69 in. wc
Design ESP	2.1 in. wc
Actual ESP	.83 in. wc

Test Data	
Pre-Filter SP In	-.24 in. wc
Fin. Filter SP Out	-1.60 in. wc
Cool. Coil SP In	-1.60 in. wc
Cool. Coil SP Out	-2.10 in. wc
Supply Fan SP In	-2.10 in. wc
Supply Fan SP Out	+.59 in. wc

Motor Data	
Motor Manufacturer	Baldor
Frame	213T
Horsepower	7-1/2
Volts Rated	460
Phase	3
Hertz	60
Amps Rated	9.7
Service Factor	1.15
Nominal Efficiency	91%
Power Factor	79%
Motor RPM Rated	1770
Motor RPM Actual	1545
-----	-----
Volts T1-T2	361
Amps T1	5.6
Hertz Actual	52.0

Sheave Data	
Motor Sheave Model	2AK56
Motor Sheave Diam.	5.5 in.
Motor Sheave Bore	1 3/8 in.
Fan Sheave Model	2AK32
Fan Sheave Diam.	3 in.
Belt Qty	2
Belt Size	AX45
Sheave Center Line	17 in.
-----	-----
Fan RPM Design	3058
Fan RPM Actual	2713

Filter Data	
Pre Filter Type	Pleated (2")
Pre Filter Qty/Size	1/20x24, 1/24x24
Final Filter Type	Box (12")
Final Filter Qty/Size	1/20x24, 1/24x24
Filter Condition	New

### AHU-AO Supply Outlet Summary

System / Unit	Area Served	Type	Size	Inst Used	Eff. Area	Design FPM	Design CFM	Prelim FPM	Prelim CFM	Final FPM	Final CFM
Outlet-01	61-48	LD	10' 2 Slot	traverse	1	-	600	-	658	-	658
Outlet-02 *	61-50C	CD	24x24/6	FH	1	-	100	-	36	-	109
Outlet-03	61-50A	CD	24x24/6	FH	1	-	100	-	76	-	93
Outlet-04	61-59	LD	10' Slot	FH	1	-	1200	-	798	-	1075
Outlet-05	61-59	LD	10' Slot	FH	1	-	1200	-	895	-	1098
Totals :		-	-	-	-	-	3,200	-	2,463	-	3,033

AHU-52

Ground Level

South Lobby

REGION FILL OUT

Building name	AHU-52												
AHU number	AHU-52												
Current BAS	Siemens Design CC 4.2												
O&M Name and Number	Siemens - Chad Richman (301-440-2982)												
Areas / floors serviced	Sevens South Lobby												
space type(s) served													
Standard and New Extended Operating Hours													
>Standard Start	6 Am												
>Standard End													
>New Start													
>New End													
Design OA Minimum (from existing drawings)	500												
Design OA Maximum (from existing drawings)	0												
ASHRAE MIN CFM of OA (calculated)	0												
Sq ft of serviced area	0												
Occupant Population	0												
CONTRACTOR FILL OUT													
Operating CFM	7500												
Confirm DCV Disabled (yes or no)													
Confirm operating hours in the BAS													
Measured Return CFM	7100												
Measured Maximum OA CFM	514												
Measured Minimum OA CFM													
OA Meas. Method (Direct PT or SA-RA PT)													
>(If SA-RA) Measured Supply Air													
>(If SA-RA) Measured Return Air	10												
Pre-filter MERV Rating (or N/A)	6/20x20x2												
Pre-filter size	15												
Final Filter MERV Rating	6/20x20x4												
Final Filter size													
Comments / Corrective actions													

# SENECA BALANCE OF MARYLAND, INC.

TESTING AND BALANCING CONTRACTORS

*8019 Belair Road, Suite 9, Baltimore, Maryland 21236*

*Telephone: (410) 665-1281 Fax: (410) 665-2985*

AHU-SL

## Air Handling Unit

**PROJECT:** GSA - 1800 F Street

**LOCATION:** Washington, DC

**PROJECT #:** 12-006

**DATE:** 6/19/2014

**CONTACT:**

**SYSTEM/UNIT:** AHU-SL

**AREA:** South Lobby

**REF # 106**

Tested By: Pete Golumbek

Test Date: February 11, 2014

Unit Data	
Location	Gr Flr
Service	South Lobby
Manufacturer	York
Model Number	XTI-051X072
Serial Number	CAYMXT0119
Discharge	Horizontal/Top

Motor Data	
Motor Manufacturer	baldor
Frame	254T
Horsepower	15
Volts Rated	460
Phase	3
Hertz	60
Amps Rated	17.7
Service Factor	1.15
Nominal Efficiency	93
Power Factor	86
Motor RPM Rated	1765
Motor RPM Actual	1627
-	-
Volts T1-T2	422
Amps T1	13.5
Hertz Actual	55

Final Test Data	
Total Air Design	8600 CFM
Total Air Actual	8500 CFM
Return Air Design	8100 CFM
Outside Air Design	500 CFM
Outside Air Actual	519 CFM
----	-
Design ESP	2.0 in. wc
Actual ESP	1.23 in. wc

Sheave Data	
Motor Sheave Model	3TB58
Motor Sheave Bore	1 5/8 in.
Fan Sheave Model	3B40SH
Fan Sheave Bore	1 1/2 in.
Belt Qty	3
Belt Size	BX60
Sheave Center Line	23 1/2 in.

Test Data	
Pre-Filter SP In	-.27 in. wc
Fin. Filter SP Out	-1.55 in. wc
Heat. Coil SP In	-1.55 in. wc
Cool. Coil SP Out	-2.00 in. wc
Supply Fan SP In	-2.00 in. wc
Supply Fan SP Out	.96 in. wc
Unit Discharge SP	.48 in. wc.

Filter Data	
Pre Filter Type	Pleated (2")
Pre Filter Qty/Size	6/20x20
Final Filter Type	Box (12")
Final Filter Qty/Size	6/20x20
Filter Condition	Dirty

<b>* Notes</b>	AHU-SL	11-Feb-14	Pete Golumbek	Fan discharge door leaking.
	AHU-SL	11-Feb-14	Pete Golumbek	Tested total flow only due to access of diffusers will require scissor lift on multiple levels system serves common area and is comfortable

AHU - KON

1st

Fuels 1st Floor Conference Center

REGION FILL OUT

Building name	AHU - KON												
AHU number	AHU - KON												
Current BAS	Siemens Design CC 4.2												
Current BAS contractor (technician)	Siemens - Chad Richmond (301-440-2982)												
O&M Name and Number	1st Floor Conference Center - 1st Floor Conference Area												
Areas / floors serviced													
space type(s) served													
Standard and New Extended Operating Hours													
>Standard Start	6 Am												
>Standard End	6 Pm												
>New Start													
>New End													
Design OA Minimum (from existing drawings)	2200												
Design OA Maximum (from existing drawings)	0												
ASHRAE MIN CFM of OA (calculated)	0												
Sq. Ft. of serviced area	0												
Occupant Population	0												
CONTRACTOR FILL OUT													
Operating CFM	11175												
Confirm DCV Disabled (yes or no)													
Confirm operating hours in the BAS													
Measured Return CFM	2929												
Measured Maximum OA CFM	2246												
Measured Minimum OA CFM	2246												
OA Meas. Method (Direct PT or SA-RA PT)	>(If SA-RA) Measured Supply Air												
>(If SA-RA) Measured Return Air	>(If SA-RA) Measured Return Air												
Pre-filter MERV Rating (or N/A)	10												
Pre-filter size													
Final Filter MERV Rating	15												
Final Filter size													
Comments / Corrective actions													

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AHU-KON

## Air Handling Unit

**PROJECT:** GSA - 1800 F Street  
**LOCATION:** Washington, DC  
**PROJECT #:** 12-006

**DATE:** 6/19/2014  
**CONTACT:**

**SYSTEM/UNIT:** AHU-KON  
**AREA:** 1st Flr Conference Ctr SE

**REF #** 90  
Tested By: Pete Golumbek  
Test Date: November 15, 2013

Unit Data	
Location	1st Flr
Service	1st Flr Conference Ctr SE
Manufacturer	York
Model Number	XTI-054X084-NALA046A
Serial Number	CCYMXT0037

Motor Data	
Motor Manufacturer	BALDOR
Frame	254T
Horsepower	15
Volts Rated	460
Phase	3
Hertz	60
Amps Rated	17.7
Service Factor	1.15
Motor RPM Rated	1765
Motor RPM Actual	1765
Volts T1-T2	460
Amps T1	19.7
Hertz Actual	60

Final Test Data	
Total Air Design	11100 CFM
Total Air Actual	11175 CFM
Return Air Design	8900 CFM
Return Air Actual	8929 CFM
Outside Air Design	2200 CFM
Outside Air Actual	2246 CFM
-----	-----
Design TSP	5.44 in. wc
Actual TSP	4.01 in. wc
Design ESP	2.3 in. wc
Actual ESP	2.3 in. wc

Sheave Data	
Motor Sheave Model	2B5V94
Motor Sheave Bore	1-5/8 in.
Fan Sheave Model	2TB110
Fan Sheave Bore	2 in.
Belt Qty	2
Belt Size	BX95
Sheave Center Line	32 1/2 in.
-----	-----
Fan RPM Design	1529
Fan RPM Actual	1510

Test Data	
Pre-Filter SP In	-0.05 in. wc
Fin. Filter SP Out	-1.02 in. wc
Heat. Coil SP In	-1.73 in. wc
Heat. Coil SP Out	-1.76 in. wc
Cool. Coil SP In	-1.02 in. wc
Cool. Coil SP Out	-1.73 in. wc
Supply Fan SP In	-1.76 in. wc
Supply Fan SP Out	2.25 at traverse in. wc
Operating SP Stpt	1.75 in. wc.
Actual System SP	1.75 in. wc.

\* Notes



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AHU-MH

## Air Handling Unit

PROJECT: GSA - 1800 F Street

LOCATION: Washington, DC

PROJECT #: 12-006

DATE: 6/19/2014

CONTACT:

REF # 105

SYSTEM/UNIT: AHU-MH

AREA: Bsmt Mail Handling Rm

Tested By: Pete Golumbek

Test Date: October 30, 2013

Unit Data	
Location	Bsmt
Service	Bsmt Mail Handling Rm
Manufacturer	York
Model Number	XTI-030X030
Serial Number	CAYMXT0142
Discharge	Horizontal/Top

Motor Data	
Motor Manufacturer	Baldor
Frame	182T
Horsepower	3
Volts Rated	460
Phase	3
Hertz	60
Amps Rated	4.2
Service Factor	1.15
Nominal Efficiency	88.5
Power Factor	74
Motor RPM Rated	1765
Motor RPM Actual	1207
-	-
Volts T1-T2	264
Amps T1	2.8
Hertz Actual	41.0

Final Test Data	
Total Air Design	1090 CFM
Total Air Actual	1125 CFM
Return Air Design	890 CFM
Return Air Actual	905 CFM
Outside Air Design	200 CFM
----	-
Design TSP	5.56 in. wc
Actual TSP	2.5 in. wc
Design ESP	2.0 in. wc
Actual ESP	1.05 in. wc

Sheave Data	
Motor Sheave Model	2BK55
Motor Sheave Bore	1 1/8 in.
Fan Sheave Model	2AK25
Fan Sheave Bore	3/4 in.
Belt Qty	2
Belt Size	AX44
Sheave Center Line	18 in.
-----	-
Fan RPM Design	3223

Test Data	
Pre-Filter SP In	-0.79 in. wc
Fin. Filter SP Out	-1.36 in. wc
Heat. Coil SP In	-1.36 in. wc
Cool. Coil SP Out	-2.24 in. wc
Supply Fan SP In	-2.24 in. wc
Supply Fan SP Out	.26 in. wc

Filter Data	
Pre Filter Type	Pleated (2")
Pre Filter Qty/Size	1/20x20
Final Filter Type	Box (12")
Final Filter Qty/Size	1/20x20
Filter Condition	New

### AHU-MH Supply Outlet Summary

System / Unit	Area Served	Type	Size	Inst Used	Eff. Area	Design FPM	Design CFM	Prelim FPM	Prelim CFM	Final FPM	Final CFM
Outlet-01	B2-33	CD-2	24x24/8	FH	1.0	-	235	-	346	-	256
Outlet-02	B2-33	CD-2	24x24/8	FH	1.0	-	235	-	0	-	259
Outlet-03	B2-33	CD-2	24x24/8	FH	1.0	-	235	-	251	-	211
Outlet-04	B2-33	CD-2	24x24/8	FH	1.0	-	235	-	419	-	241
Outlet-05	B2-45A	CD-1	24x24/6	FH	1.0	-	75	-	172	-	76
Outlet-06		CD-1	24x24/6	FH	1.0	-	75	-	94	-	82
<b>Totals :</b>		-	-	-	-	-	<b>1,090</b>	-	<b>1,282</b>	-	<b>1,125</b>