ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name:	SERVICE NOW	Address:	4200 CARILLON POINT
Unit ID:	EF-403	City/State:	KIRKLAND, WA 98033
Location:	SATELITE COFFEE 323	Mfg & Model:	FANTECH FG12
Unit Type:	INLINE EXHAUST FAN	Serial No.:	40412

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N)	NA	Clean Fltr? (Y/N)	NA
Belt Drive? (Y/N)	NA		

		PAT:	
Rated Total S.P.:		RAT:	
Actual Lvg S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:	
Model #:	

Gas Service

Manifold pressure:	NA
Burner Pressure:	NA

Ht. Calc Airflow:	

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	400	575	470	405		405	101%
2								NA
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	400	575	470	405	0	405	101%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments:

Unit air flow is 101% of design CFM.
Technician: JOE HRYCIUK

Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: EF-404
Location: BREAKROOM 4TH FLOOR
Unit Type: EXHAUST FAN

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):		400	

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	400	370	575	405		405	101%
2								NA
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	400	370	575	405	0	405	101%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments:

Unit air flow is 101% of design CFM.
Technician: JOE HRYCIUK

Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: HP-32
Location: TRAINING ROOM 309
Unit Type: WATER SOURCE HEAT PUMP

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	12"	500	425	400	410	420	420	84%
2*	12"	500	390	350	350	365	390	78%
3	12"	500	405	520	475	450	425	85%
4	12"	500	465	460	470	450	430	86%
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	2000	1685	1730	1705	1685	1665	83%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: HP SET TO FULL COOLING. OUTLETS ARE PROPORTIONATE

Unit air flow is 83% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-301
Location: CONFERENCE 320
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N)	NA	Clean Fltr? (Y/N)	NA
Belt Drive? (Y/N)	NA		

		PAT:	
Rated Total S.P.:		RAT:	
Actual Lvg S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:	
Model #:	

Gas Service

Manifold pressure:	NA
Burner Pressure:	NA

Ht. Calc Airflow:	

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	8"	200						0%
2	8"	200						0%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	400	0	0	0	0	0	0%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: BOX RECEIVES 24 VOLTS FROM VAV-310 WHICH HAS A BAD TRANSFORMER

Unit air flow is 0% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-302
Location: OPEN OFFICE 319
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	300	550				410	137%
2	10"	300	260				380	127%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	600	810	0	0	0	790	132%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV IS SET TO MAX COOLING CFM. BOX SEEMS TO BE OUT OF CALIBRATION. OUTLETS ARE PROPORTIONATE.

Unit air flow is 132% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-303
Location: OPEN OFFICE 319
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):		600	

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	300	400	215			400	133%
2	10"	300	390	205			390	130%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	600	790	420	0	0	790	132%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: OUTLETS ARE PROPORTIONATE

Unit air flow is 132% of design CFM.

Technician: JOE HRYCIUK

Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-304
Location: OPEN OFFICE 319
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	12"	400	495	460	440		440	110%
2	12"	400	480	470	450		450	113%
3	12"	400	495	460	440		440	110%
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	1200	1470	1390	1330	0	1330	111%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV BALANCED WITH PRIMARY AIR DAMPER SET OPEN AT MAX.

Unit air flow is 111% of design CFM.

Technician: JOE HRYCIUK

Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-305
Location: CONFERENCE 313
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	12"	430	465	430			430	100%
2	12"	430	400	420			420	98%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	860	865	850	0	0	850	99%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments:

Unit air flow is 99% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-306
Location: OFFICES 314-317
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	8"	120	265	220			220	183%
2	8"	120	160	220			220	183%
3	6"	90	160	105			105	117%
4	8"	90	180	105			105	117%
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	420	765	650	0	0	650	155%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: BOX IS SET TO FULL COOLING, OUTLETS PROPORTIONATE FOR ROOM SIZES

Unit air flow is 155% of design CFM.

Technician: JOE HRYCIUK

Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-307
Location: CONFERENCE 312
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	300	365	425			425	142%
2	10"	300	475	400			400	133%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	600	840	825	0	0	825	138%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: BOX SET AT FULL COOLING, OUTLETS ARE PROPORTIONATE

Unit air flow is 138% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-308
Location: OPEN OFFICE 319
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	12"	400	440				440	110%
2	12"	400	465				465	116%
3	12"	400	440				440	110%
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	1200	1345	0	0	0	1345	112%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV BALANCED IN FULL COOLING MODE. NO ACCESS TO FRONT END CONTROLS

Unit air flow is 112% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-309
Location: OFFICE 322
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1*	6"	100	160	175	165		175	175%
2	6'	100	180	160	190		180	180%
3	6"	100	180	160	190		180	180%
4	10"	250	370	350	375		450	180%
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	550	890	845	920	0	985	179%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV IS SET TO MAX CFM COOLING FROM SENSOR. BOX IS NOT CALIBRATED, OUTLETS ARE PROPORTIONATELY BALANCED

Unit air flow is 179% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-310
Location: SATELITE COFFEE 323
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	12"	250						0%
2	12"	250						0%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	500	0	0	0	0	0	0%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: UNIT HAS A BAD TRANSFORMER. UNIT PROVIDES 24 VOLTS TO UNITS 301 AND 311. ALL BOXES CANNOT BE BALANCED UNTIL TRANSFORMER IS REPLACED.

Unit air flow is 0% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-311
Location: OPEN OFFICE 326
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	8"	190						0%
2	8"	190						0%
3	8"	190						0%
4	8"	190						0%
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	760	0	0	0	0	0	0%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: BOX RECEIVES 24 VOLTS FROM VAV-310 WHICH HAS A BAD TRANSFORMER

Unit air flow is 0% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-312
Location: OPEN OFFICE 326
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	190	550	560			560	295%
2	10"	190	570	560			560	295%
3	10"	190	565	565			565	297%
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	570	1685	1685	0	0	1685	296%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV SET AT MAX CFM COOLING. BOX SEEMS TO BE OUT OF CALIBRATION, OUTLETS ARE PROPORTIONATE.

Unit air flow is 296% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-313
Location: OPEN OFFICE 301 AND 337,338
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	250	240	360	305		315	126%
2	10"	250	475	400	300		330	132%
3*	8"	150	90	120	170		180	120%
4	8"	150	250	175	270		200	133%
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	800	1055	1055	1045	0	1025	128%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: OUTLETS ARE PROPORTIONATE, VAV BALANCED IN FULL COOLING CFM.

Unit air flow is 128% of design CFM.

Technician: JOE HRYCIUK

Date: 3/21/2014

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430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-314
Location: OPEN OFFICE 301
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	285	380	340	290	260	260	91%
2*	10"	285	190	230	240	260	260	91%
3	10"	285	200	240	250	275	275	96%
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	855	770	810	780	795	795	93%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments:

Unit air flow is 93% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-315
Location: OPEN OFFICE 301
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

Gas Service

Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	400	385				385	96%
2								NA
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	400	385	0	0	0	385	96%
Return Air								
1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments:

Unit air flow is 96% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-316
Location: OPEN OFFICE 301
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	285	400	250	250		250	88%
2	10"	285	380	230	245		245	86%
3	10"	285	540	265	250		250	88%
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	855	1320	745	745	0	745	87%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV SET AT FULL COOLING, AIR FLOW IS LOW, OUTLETS ARE PROPORTIONATE.

Unit air flow is 87% of design CFM.

Technician: JOE HRYCIUK

Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-317
Location: OPEN OFFICE 307
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10'	300						0%
2	10"	300						0%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	600	0	0	0	0	0	0%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV IS NOT OPERABLE, BOX CANNOT BE BALANCED

Unit air flow is 0% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-318
Location: OPEN OFFICE 307
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	250	290	315	315		315	126%
2	10"	250	300	325	315		315	126%
3	10"	250	300	315	315		315	126%
4	10"	250	315	305	315		315	126%
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	1000	1205	1260	1260	0	1260	126%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: BOX SET IN FULL COOLING, OUTLETS ARE PROPORTIONATE

Unit air flow is 126% of design CFM.

Technician: JOE HRYCIUK

Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-319
Location: OPEN OFFICE 307
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10'	300	290	310			310	103%
2	10"	300	330	310			310	103%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	600	620	620	0	0	620	103%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: BOX SET TO FULL COOLING, OUTLETS ARE PROPORTIONATE

Unit air flow is 103% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-320
Location: OPEN OFFICE 307
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	300	390				390	130%
2	10"	300	430				430	143%
3	10"	300	400				400	133%
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	900	1220	0	0	0	1220	136%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV BALANCED IN FULL COOLING. OUTLETS ARE HIGH BUT PROPORTIONATE

Unit air flow is 136% of design CFM.

Technician: JOE HRYCIUK

Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-321
Location: OPEN OFFICE 307
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10'	300	340	405			405	135%
2	10"	300	460	410			410	137%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	600	800	815	0	0	815	136%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: BOX SET TO FULL COOLING. OUTLETS ARE PROPORTIONATE

Unit air flow is 136% of design CFM.

Technician: JOE HRYCIUK

Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-322
Location: INTERIOR OFFICE NORTH
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
Supply Air								
1	6"	65	70	60	60	70	70	108%
2*	6'	65	40	40	40	55	60	92%
3	6"	65	20	60	60	65	65	100%
4	6"	50	70	60	65	45	45	90%
5	6"	50	90	65	70	50	50	100%
6	6"	65	75	70	75	80	75	115%
7	6"	50	40	80	45	50	50	100%
8								NA
9								NA
								NA
	Totals	410	405	435	415	415	415	101%
Return Air								
1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments:

Unit air flow is 101% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-323
Location: CONFERENCE 325
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	12"	410						0%
2	12"	410						0%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	820	0	0	0	0	0	0%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV HAS A BAD THERMOSTAT, CANNOT BALANCE.

Unit air flow is 0% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-324
Location: OPEN OFFICE 326
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	190	210	200	190		190	100%
2	8"	190	230	195	195		190	100%
3	10"	190	200	205	1190		190	100%
4*	8"	190	130	150	170		175	92%
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	760	770	750	1745	0	745	98%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV SET AT FULL COOLING CFM. OUTLETS ARE PROPORTIONATELY BALANCED

Unit air flow is 98% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-325
Location: OPEN OFFICE 326
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
Supply Air								
1	10"	290	375				380	131%
2	10"	290	400				400	138%
3	10"	290	405				405	140%
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	870	1180	0	0	0	1185	136%
Return Air								
1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV IS SET AT MAX COOLING CFM. BOX SEEMS TO BE OUT OF CALIBRATION, OUTLETS ARE PROPORTIONATE.

Unit air flow is 136% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-326
Location: OPEN OFFICE 326
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
Supply Air								
1	10"	225						0%
2	10"	225						0%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	450	0	0	0	0	0	0%
Return Air								
1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV HAS A BAD TRANSFORMER, CANNOT BALANCE

Unit air flow is 0% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-327
Location: OPEN OFFICE 301
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
Supply Air								
1	10"	200	260	240			240	120%
2	10"	200	220	240			240	120%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	400	480	480	0	0	480	120%
Return Air								
1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments:

Unit air flow is 120% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-329
Location: INTERIOR OFFICES SOUTH
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10" (slot)	200	420				425	213%
2	8"	100	240				210	210%
3*	8"	100	190				210	210%
4	6"	50	190	115			100	200%
5	6"	50	175	115			100	200%
6	8"	100	240				210	210%
7								NA
8								NA
9								NA
								NA
	Totals	600	1455	230	0	0	1255	209%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV SET TO FULL COOLING MAX CFM. BOX VERY HIGH, PRIMARY AIR DAMPER MAY NEED TO BE CALIBRATED. OUTLETS ARE PROPORTIONATE

Unit air flow is 209% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-330
Location: CONFERENCE 311
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
Supply Air								
1	10"	300	360	325	285	270	280	93%
2	10"	300	330	290	285	265	270	90%
3	10"	300	230	265	280	300	280	93%
4*	10"	300	200	230	245	260	275	92%
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	1200	1120	1110	1095	1095	1105	92%
Return Air								
1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: BOX IS WITHIN 10%, OUTLETS ARE PROPORTIONATE

Unit air flow is 92% of design CFM.

Technician: JOE HRYCIUK

Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-331
Location: CORRIDOR
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10'	250						0%
2	10'	250						0%
3	10"	250						0%
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	750	0	0	0	0	0	0%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: CANNOT LOCATE SENSOR/TSTAT FOR VAV. CANNOT BALANCE

Unit air flow is 0% of design CFM.
Technician: JOE HRYCIUK
Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-340
Location: CONFERENCE 336
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	12"	440	575	490			490	111%
2	12"	440	385	490			490	111%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	880	960	980	0	0	980	111%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: OUTLETS ARE PROPORTIONATE

Unit air flow is 111% of design CFM.

Technician: JOE HRYCIUK

Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/21/2014
Project Number: SP-13-945

Air Balance Report

Project Name:	SERVICE NOW	Address:	4200 CARILLON POINT
Unit ID:	VAV-341	City/State:	KIRKLAND, WA 98033
Location:	CONFERENCE 318	Mfg & Model:	NAILOR D3001
Unit Type:	VARIABLE AIR VOLUME BOX	Serial No.:	452942-6.01

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N)	NA	Clean Fltr? (Y/N)	NA
Belt Drive? (Y/N)	NA		
		PAT:	
Rated Total S.P.:		RAT:	
Actual Lvg S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:	
Model #:	

Gas Service

Manifold pressure:	NA
Burner Pressure:	NA

Ht. Calc Airflow:	

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	8"	200	430	420	390		390	195%
2	8"	200	415	425	390		390	195%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	400	845	845	780	0	780	195%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV FORCED OPEN TO 100% PRIMARY AIR. OUTLETS ARE PROPORTIONATLEY BALANCED

Unit air flow is 195% of design CFM.

Technician: JOE HRYCIUK Date: 3/21/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-401
Location: OFFICES 421, 422
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
Supply Air								
1	8"	125	155				155	124%
2	8"	125	145				145	116%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	250	300	0	0	0	300	120%
Return Air								
1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: PROGRAMMED TO DELIVER 255 CFM. READING 173 CFM

Unit air flow is 120% of design CFM.

Technician: JOE HRYCIUK

Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-402
Location: OPEN OFFICE 426
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	240	390				380	158%
2	10"	240	380				390	163%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	480	770	0	0	0	770	160%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments:

Unit air flow is 160% of design CFM.
Technician: JOE HRYCIUK
Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-403
Location: OPEN OFFICE 426 / STORAGE 410
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	8"	100	90	185	100		100	100%
2	10"	300	220	290	310		315	105%
3	10"	300	400	305	340		340	113%
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	700	710	780	750	0	755	108%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: BOX SET AT FULL COOLING, OUTLETS ARE PROPORTIONATE

Unit air flow is 108% of design CFM.

Technician: JOE HRYCIUK

Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-404
Location: OPEN OFFICE 426
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	12"	325	600	600			600	185%
2	12"	325	560	590			590	182%
3	12"	325	590	585			595	183%
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	975	1750	1775	0	0	1785	183%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: BOX SET TO FULL COOLING, OUTLETS ARE PROPORTIONATE

Unit air flow is 183% of design CFM.

Technician: JOE HRYCIUK

Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-405
Location: CONFERENCE 413
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	12'	400	355	385			385	96%
2	12"	400	440	400			400	100%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	800	795	785	0	0	785	98%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV BALANCED IN FULL COOLING, OUTLETS ARE PROPORTIONATE

Unit air flow is 98% of design CFM.

Technician: JOE HRYCIUK

Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-406
Location: GYM 409
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
Supply Air								
1	10"	300	360	330	350	305	305	102%
2	10"	300	260	280	275	300	300	100%
3	10"	300	365	320	330	325	325	108%
4	10"	300	320	355	315	330	330	110%
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	1200	1305	1285	1270	1260	1260	105%
Return Air								
1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: PROGRAMMED TO DELIVER 1200 CFM. READING 632 CFM

Unit air flow is 105% of design CFM.

Technician: JOE HRYCIUK

Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-407
Location: CONFERENCE 412
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	250	555	530			530	212%
2	10"	250	490	540			540	216%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	500	1045	1070	0	0	1070	214%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV SET AT FULL COOLING, OUTLETS ARE PROPORTIONATE

Unit air flow is 214% of design CFM.

Technician: JOE HRYCIUK

Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-413
Location: CONFERENCE 401
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	12"	375	405	470	440	410	410	109%
2	12"	375	405	450	410	410	410	109%
3	12"	375	275	350	415	430	430	115%
4	12"	375	655	425	415	400	400	107%
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	1500	1740	1695	1680	1650	1650	110%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: PROGRAMMED TO DELIVER 1400 CFM. READING 1350 CFM

Unit air flow is 110% of design CFM.

Technician: JOE HRYCIUK

Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-416
Location: OPEN OFFICE 406
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	12"	380	400				400	105%
2	12"	380	405				405	107%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	760	805	0	0	0	805	106%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV IS PROGRAMMED TO DELIVER 860 CFM. FRONT END READING 850 CFM FROM VAV.

Unit air flow is 106% of design CFM.
Technician: JOE HRYCIUK
Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-417
Location: OPEN OFFICE 406 / INTERVIEWING
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	170	335	370	400		400	235%
2	10"	170	510	545	465		470	276%
3	6"	170	160	120	125		120	71%
4	6"	170	200	120	130		130	76%
5	6"	170	120	120	115		115	68%
6	6"	170	125	120	140		120	71%
7								NA
8								NA
9								NA
								NA
	Totals	1020	1450	1395	1375	0	1355	133%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: RUNS IN OPEN WORK AREA ARE ACTUALLY 10". 8"ON PRINTS. OFFICE RUNS ARE ACTUALLY 6". 8" ON PRINTS. VAV PROGRAMMED TO DELIVER 1020. READING 905

Unit air flow is 133% of design CFM.
Technician: JOE HRYCIUK
Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-418
Location: OPEN OFFICE 406 / 407
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
Supply Air								
1	12"	350	340	350			350	100%
2	12"	350	415	355			355	101%
3	12"	350	375	330			330	94%
4*	12"	350	410	335			335	96%
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	1400	1540	1370	0	0	1370	98%
Return Air								
1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: OUTLETS ARE PROPORTIONATE

Unit air flow is 98% of design CFM.
Technician: JOE HRYCIUK
Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-419
Location: CONFERENCE 411
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
Supply Air								
1	10"	300	415	410	370		370	123%
2	6"	125	115	145	160		160	128%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	425	530	555	530	0	530	125%
Return Air								
1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV BALANCED IN FULL COOLING, OUTLETS ARE PROPORTIONATE.

Unit air flow is 125% of design CFM.
Technician: JOE HRYCIUK
Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-420
Location: OPEN OFFICE 407
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	300	340	370			370	123%
2	10"	300	380	365			365	122%
3	10"	300	370	365			365	122%
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	900	1090	1100	0	0	1100	122%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: VAV SET TO FULL COOLING, OUTLETS ARE PROPORTIONATELY BALANCED.

Unit air flow is 122% of design CFM.

Technician: JOE HRYCIUK

Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-423
Location: OPEN OFFICE NORTH
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Clean Fltr? (Y/N): NA
Belt Drive? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	10"	280	300	235	245		245	88%
2	10"	280	350	235	240		240	86%
3	10"	280	190	255	245		245	88%
4	10"	280	175	235	235		235	84%
5	10"	280	170	220	235		235	84%
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	1400	1185	1180	1200	0	1200	86%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: PROGRAMMED TO DELIVER 1430 CFM. READING 1445 CFM.

Unit air flow is 86% of design CFM.
Technician: JOE HRYCIUK
Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-428
Location: CONFERENCE 414
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
Supply Air								
1	12"	375						0%
2	12"	375						0%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	750	0	0	0	0	0	0%
Return Air								
1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: TSTAT READS ROOM TEMP AT 999 DEGREES AND OSA -99 DEGRESS. CANNOT CHANGE VARIABLES ON STAT. CANNOT BALANCE BOX

Unit air flow is 0% of design CFM.
Technician: JOE HRYCIUK
Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-430
Location: CONFERENCE 435
Unit Type: FAN POWERED TERMINAL UNIT

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
Supply Air								
1	10"	300	430				430	143%
2	10"	300	410				410	137%
3								NA
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	600	840	0	0	0	840	140%
Return Air								
1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: PROGRAMMED TO DELIVER 600 CFM. READING 615 CFM.

Unit air flow is 140% of design CFM.
Technician: JOE HRYCIUK
Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name: SERVICE NOW
Unit ID: VAV-431
Location: OFFICES 416 - 418
Unit Type: VARIABLE AIR VOLUME BOX

Address: 4200 CARILLON POINT
City/State: KIRKLAND, WA 98033
Mfg & Model:
Serial No.:

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N): NA
Belt Drive? (Y/N): NA
Clean Fltr? (Y/N): NA

Rated Total S.P.:		PAT:	
Actual Lvg S.P.:		RAT:	
Actual Ent S.P.:		DAT:	
Actual Total S.P.:		MAT:	
		Temp Diff:	

Motor Mfg:
Model #:

Gas Service
Manifold pressure: NA
Burner Pressure: NA

Ht. Calc Airflow:

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air

No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	8"	200	230	220			220	110%
2	8"	200	195	190			190	95%
3	8"	200	135	200			200	100%
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	600	560	610	0	0	610	102%

Return Air

1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: PROGRAMMED TO DELIVER 600 CFM. READING 615 CFM

Unit air flow is 102% of design CFM.

Technician: JOE HRYCIUK

Date: 3/24/2014

ENVIROMECH

430 SW 153rd St
Burien, WA 98166
206-762-1960

Record Date: 3/24/2014
Project Number: SP-13-945

Air Balance Report

Project Name:	SERVICE NOW	Address:	4200 CARILLON POINT
Unit ID:	VAV-434	City/State:	KIRKLAND, WA 98033
Location:	GYM 409	Mfg & Model:	
Unit Type:	VARIABLE AIR VOLUME BOX	Serial No.:	

	Low	Medium	High
Arflow Setting:			
Design Airflow (CFM):			

Direct Drive? (Y/N)	NA	Clean Fltr? (Y/N)	NA
Belt Drive? (Y/N)	NA		
		PAT:	
Rated Total S.P.:		RAT:	
Actual Lvg S.P.:		DAT:	
Actual Ent S.P.:		MAT:	
Actual Total S.P.:		Temp Diff:	

Motor Mfg:	
Model #:	

Gas Service

Manifold pressure:	NA
Burner Pressure:	NA
Ht. Calc Airflow:	

	Rated	Actual
Motor HP:		
Voltage:		
Frame Size:	NA	
RPM:	NA	
FLA:	NA	
Shaft Size:	NA	
Motor Sheave Dia:	NA	
Blower Sheave Dia:	NA	
Blower RPM:	NA	
Shaft Size:	NA	
Belt Size:	NA	
C/L Distance:	NA	

	Design	Actual
Heating BTU's:	NA	
Cooling BTU's:	NA	
Tons Cooling:	NA	

	Design	Actual
OSA Quantity:	NA	
Pct of Total Airflow:	NA	

Outlet Test Report

Supply Air								
No.	Size	Design CFM	Initial	Test 1	Test 2	Test 3	Final	% of Design
1	8"	300	200				220	73%
2	10"	300	370				370	123%
3	10"	300	365				365	122%
4								NA
5								NA
6								NA
7								NA
8								NA
9								NA
								NA
	Totals	900	935	0	0	0	955	106%
Return Air								
1								NA
2								NA
								NA
	Totals	0	0	0	0	0	0	NA

Comments: PROGRAMMED TO DELIVER 400 CFM. READING 395 CFM

Unit air flow is 106% of design CFM.

Technician: JOE HRYCIUK Date: 3/24/2014