Report By:

National TAB
1329 E. KEMPER ROAD
SUITE 4210
CINCINNATI, OH 45246

Report: TAB REPORT

Function: Test, Adjust, & Balance

Date: 07/06/2023

PROJECT

05-22-23 NIKE - LA COSTA (CARLSBAD, CA)

2121 LAKE AVE

FORT WAYNE, IN 46805

Client

National Contractors Inc. (NCI)

2500 ORCHARD LN

EXCELSIOR, MN 55331

Project Summary

The summary below provides a quick understanding of our scope of work and general testing procedures. Enclosed in the report is further detail about your building performance including recommendations, asset data, and pictures. Our focus is to work with the trades to remedy any issues or deficiencies during the actual field balancing and not after the balancing has occurred to achieve a positive environment and outcome. The level of success is determined by the availability of the trades, possible parts needed, or time constraints.

RTU's

Each of the RTU's were measured at their terminal devices utilizing a flow hood. The sum of these readings is equal to the total flow for that particular unit. The total flow of each RTU was then adjusted within tolerance of the specified design. Each terminal diffuser was balanced to within tolerance of the engineer's design volume utilizing the provided hand damper located at the takeoff of the main & branch trunk line(s). Any equipment that fell outside of this tolerance is noted throughout the report.

Variable Air Volume (VAV) Terminals

The VAV's were calibrated in a call for max cooling and the correction factors are reported on the individual asset. While in a call for full cooling, the individual air devices were then balanced within design tolerance. The VAVs were then stroked to minimum cool and the airflow values reported. The VAV was then stroked to heating and the airflow values reported. It was verified that there was a sufficient temp rise on each VAV.

General Exhaust Fans

The general exhaust fans were measured by reading each air device with a flow hood. The total airflow for each fan is equivalent to the sum of these readings. Fan speed was then adjusted so that the airflow was within tolerance of design. Each terminal device was balanced to within tolerance of the design volume using the installed volume dampers. Any equipment that fell outside of this tolerance is noted throughout the report.

Final Building Tests

After completing the test and balance the final building pressure was measured. It was confirmed that the building pressure fell within acceptable tolerances of -0.02" wc to +0.02" wc and that the pressure measurement coincides with the actual and design net airflow. Any deviations from these standards are noted throughout the report.

NATIONAL TAB

AIR BALANCE SCHEDULE

UNIT	AREA SERVED	HVAC SUPPLY		HVAC RETURN		HVAC OUTDOOR		OA %		HOOD MAKE-UP		HOOD EXHAUST		GENERAL EXH.	
		DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL	DESIGN	ACTUAL
RTU-2	SALES	5400	5234	4475	5234	925	0	17.1%	0.0%						
RTU-3	BOH/STOCK	2200	2174	1800	1752	400	422	18.2%	19.4%						
EF-1														275	277
TOTALS		7600	7408	6275	6986	1325	422			0	0	0	0	275	277

NET BUILDING AIRFLOW CALCULATION

TOTALS	DESIGN	ACTUAL
TOTAL OA	1325	422
TOTAL EXHAUST	275	277
NET AIRFLOW	1050	145

NOTES:

Issue List

- EF-1 - Balancing dampers are not installed. Grille 1 slightly high
- RTU-2 economizer not installed

05-22-23 NIKE - LA COSTA (CARLSBAD, CA)

Project Issue Information

Issue Name :	EF-1 - Balancing dampers are not installed. Grille 1 slightly high		
Description :	EF-1 total flow is balanced to design, but grille 1 in the janitors closet is slightly high (85 CFM out of 75 CFM). Dampers not installed and could not balance the individual grilles.		
Created By :	National TAB	**Assigned To :**	National TAB - Will Turnbough
Status :	Open		
Originated Date :	07/06/2023 - Will Turnbough - National TAB		

05-22-23 NIKE - LA COSTA (CARLSBAD, CA)

Project Issue Information

Issue Name :	RTU-2 economizer not installed		
Description :	RTU-2 economizer is not installed. Unable to set the outside air on this unit. Per the site superintendent this unit is to be swapped out in 3-4 months.		
Created By :	National TAB	**Assigned To :**	National TAB - Will Turnbough
Status :	Open		
Originated Date :	07/06/2023 - Will Turnbough - National TAB		

Air Apparatus

PROJECT: Nike #477
LOCATION: Carlsbad, CA
PROJECT #: 23181

DATE: 6/2/2023
CONTACT: Steve Burns

SYSTEM/UNIT: RTU-02

Tested By: Guy Nunez
Date: 5/26/2023

Design Airflow (CFM)	
Design Total	5400
Design Grille Total	5400
Design Return	4475
Design Min O/A	925

Unit Design Data	
Submittal Make	Not Provided
Submittal Model #	Not Provided
Submittal Airflow	Not Provided
Sched./Sub. Volts	480
Sched./Sub. Phase	3
Sched./Sub. HP	Not Listed
Submittal BHP	Not Provided
Filter MERV Rating (Sched/Sub)	2

Design Static Pressures (in wg)	
Design Ext SP	1.2
Submittal Total SP	Not Provided
Submittal Clg Coil Δ SP	Not Provided

Design Temperatures (°F)	
RTU-02/Cooling	
Des. Ent. DB (°F)	74.2
Des. Ent. WB (°F)	60.6
Design LAT DB (°F)	55.2
Design LAT WB (°F)	53.0

Filter Data	
Condition	Clean
Filter Type	Pleated
MERV Rating	13
Filter Size Set 1 (in)	20x25x2
# Filters Set 1	8
Filter Size Set 2 (in)	-
# Filters Set 2	-

Motor Nameplate Data	
Motor Make	Marathon
Motor Frame	56HZ
Motor HP	3.50
Motor RPM	1725
Motor Volts	460
Motor Phase	3
Motor Amps	4.6
Motor S.F.	1.15
Motor % PF	71.1
Motor % Eff.	Not Listed
Other Motor Data	-

Drive Data

Final Airflow (CFM)	
Actual Total CFM	5234
Actual Grille Total CFM	5234
Actual Return Air CFM	5234
Actual Min O/A CFM	0
Fan CFM Test Method	Supply outlet total and VAV summation
OA Method/Instrument	Not Applicable
OA Ak (sq ft)	Not Applicable
OA Damper Position	Not Applicable
RA Damper Position	Not Applicable

Unit Data	
Make (tag)	Trane
Model # (tag)	WSD150E4RGD
Serial # (tag)	224510012D
Location	Roof
Unit Discharge	Downblast
Cooling Coil Location	Unit / Drawthru
Coil Area (sq ft)	Not Accessible
Clg Coil Vel (FPM)	
Fan Service	Supply
Fan Type	Centrifugal (BI)
Fan Discharge	Horizontal
Fan Arrangement	SWSI

Fan Design Data	
Submittal Motor RPM	Not Provided
Submittal Fan RPM	Not Provided

Fan Data	
Actual Fan RPM/Speed	737
Actual Motor RPM	1725

Electrical Data	
Measurement Method	V/A Meter
Motor Volts 1	462
Motor Volts 2	462
Motor Volts 3	461
Motor Amps 1	2.0
Motor Amps 2	1.9
Motor Amps 3	2.0
Operating HZ	60.00
Approx. BHP	1.5
Corr. Nameplate Amps	4.6
Starter Data	Internal to ECM
VFD Reference	Not Applicable

Actual Temperatures (°F)	
RTU-02/Cooling	
Outside Air DB	67.1

Air Apparatus

PROJECT: Nike #477
LOCATION: Carlsbad, CA
PROJECT #: 23181

DATE: 6/2/2023
CONTACT: Steve Burns

SYSTEM/UNIT: RTU-02

Tested By: Guy Nunez
Date: 5/26/2023

Drive Data	
Drive Type	Belt Drive
Sheave Type	Variable
Fan Sheave Make	Not Listed
Fan Shv Mod# or Size (in)	9 1/2 in
Fan Sheave Bore (in)	1 3/16 in
Motor Sheave Make	Not Listed
Mtr Shv Mod# or Size (in)	3 3/4 in
Motor Sheave Bore (in)	5/8 in
VP Range	Mid Range
Center Distance (in)	22.0 in
No of Belts	1
Belt Make	Continental
Belt Size	BX 64
Other Data	Idler Tension Pulley

Actual Temperatures (°F)	
RTU-02/Cooling	
Outside Air WB	52.5
Entering Air DB	71.7
Entering Air WB	62.2
Leaving Air DB	52.7
Leaving Air WB	51.1

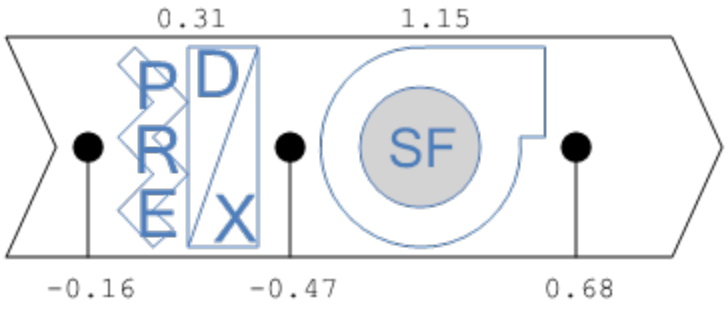
Log:

RTU-02	No economizer installed on unit. Unable to set minimum OSA. Per superintendent this unit to be swapped out in 3-4 months.

SYSTEM/UNIT: RTU-02/Static Profile

Tested By: William Clayton
Date: 6/2/2023

Static Pressure Profile



Air Apparatus

PROJECT: Nike #477
LOCATION: Carlsbad, CA
PROJECT #: 23181

DATE: 6/2/2023
CONTACT: Steve Burns

RTU-02 Supply Outlet Summary

System/Unit	Area Served	Type	Size / Area (in)	Design CFM	Prelim CFM	Final CFM	% Final	Instrument	Ak	Open (sq ft)	Final FPM
S-01	1/02 Footwear Area	CD	10	300	210	284	95	Capture Hood	1.000	1.000	284
S-02	1/02 Footwear Area	CD	10	300	218	295	98	Capture Hood	1.000	1.000	295
S-03	1/02 Footwear Area	SW	10/6	275	236	268	97	Capture Hood	1.000	1.000	268
S-04	1/02 Footwear Area	SW	10/6	275	228	263	96	Capture Hood	1.000	1.000	263
S-05	1/01 Sales Area	SW	10/6	275	251	281	102	Capture Hood	1.000	1.000	281
S-06	1/01 Sales Area	SW	10/6	275	238	267	97	Capture Hood	1.000	1.000	267
S-07	1/01 Sales Area	SW	10/6	275	246	272	99	Capture Hood	1.000	1.000	272
S-08	1/01 Sales Area	SW	10/6	275	252	284	103	Capture Hood	1.000	1.000	284
S-09	1/00 Welcome Aea	SW	10/6	275	232	269	98	Capture Hood	1.000	1.000	269
S-10	1/00 Welcome Aea	SW	10/6	275	240	266	97	Capture Hood	1.000	1.000	266
S-11	1/00 Welcome Aea	SW	10/6	275	225	261	95	Capture Hood	1.000	1.000	261
S-12	1/02 Footwear Area	SW	10/6	275	236	264	96	Capture Hood	1.000	1.000	264
S-13	1/02 Footwear Area	SW	10/6	275	221	251	91	Capture Hood	1.000	1.000	251
S-14	1/02 Footwear Area	SW	10/6	275	207	249	91	Capture Hood	1.000	1.000	249
VAV-01	Fitting	VAV	8	500	262	482	96	See VAV	-	-	
VAV-02	Sales	VAV	12	1000	738	978	98	See VAV	-	-	
	Totals:	**-**	**-**	**5400**	**4240**	**5234**	**97**	**-**	**-**	**-**	**-**

SYSTEM/UNIT: RTU-02/VAV-01

Tested By: Guy Nunez
Date: 5/25/2023

Design Airflow (CFM)	
Design Prim. Max (Sched/Sub)	500
Design Prim. Min. (Sched/Sub)	150
Design Prim. Heat (Sched/Sub)	Not Applicable
Design Fan (Sched/Sub)	Not Applicable
Inlet Size (in.) (Sched/Sub)	8

Final Airflow (CFM)	
Actual Prim. Max CFM	482
Actual Prim. Min. CFM	146
Actual Prim. Heat. CFM	Not Applicable
Actual Fan CFM	Not Applicable

Box Data	
Box Type	VAV
Motor/Fan Type	Not Applicable
Coil Description	None
DDC Address	Not Applicable

Test Data	
Calibration Factor 1	1.0
Calibration Factor 2	Not Applicable
Fan Speed	Not Applicable
DDC Actual Max CFM	489
DDC Actual Min CFM	149

RTU-02/VAV-01 Supply Outlet Summary

System/Unit	Area Served	Type	Size / Area (in)	Design CFM	Prelim CFM	Final CFM	% Final	Instrument	Ak	Open (sq ft)	Final FPM
S-01	1/05 Fitting RM1	SW	10/6	125	57	115	92	Capture Hood	1.000	1.000	115
S-02	1/04 Fitting Lounge	SW	10/6	125	64	118	94	Capture Hood	1.000	1.000	118
S-03	1/04 Fitting Lounge	SW	10/6	125	61	122	98	Capture Hood	1.000	1.000	122
S-04	1-06 Fitting RM2	SW	10/6	125	80	127	102	Capture Hood	1.000	1.000	127
	Totals:	**-**	**-**	**500**	**262**	**482**	**96**	**-**	**-**	**-**	**-**

Air Apparatus

PROJECT: Nike #477
LOCATION: Carlsbad, CA
PROJECT #: 23181

DATE: 6/2/2023
CONTACT: Steve Burns

SYSTEM/UNIT: RTU-02/VAV-02

Tested By: Guy Nunez
Date: 5/25/2023

Design Airflow (CFM)	
Design Prim. Max (Sched/Sub)	1000
Design Prim. Min. (Sched/Sub)	300
Design Prim. Heat (Sched/Sub)	Not Applicable
Design Fan (Sched/Sub)	Not Applicable
Inlet Size (in.) (Sched/Sub)	12

Box Data	
Box Type	VAV
Motor/Fan Type	Not Applicable
Coil Description	None
DDC Address	Not Applicable

Final Airflow (CFM)	
Actual Prim. Max CFM	978
Actual Prim. Min. CFM	294
Actual Prim. Heat. CFM	Not Applicable
Actual Fan CFM	Not Applicable

Test Data	
Calibration Factor 1	1.65
Calibration Factor 2	Not Applicable
Fan Speed	Not Applicable
DDC Actual Max CFM	991
DDC Actual Min CFM	296

RTU-02/VAV-02 Supply Outlet Summary

System/Unit	Area Served	Type	Size / Area (in)	Design CFM	Prelim CFM	Final CFM	% Final	Instrument	Ak	Open (sq ft)	Final FPM
S-01	1/01 Sales Area	SW	10/6	175	142	171	98	Capture Hood	1.000	1.000	171
S-02	1/01 Sales Area	SW	10/6	175	131	168	96	Capture Hood	1.000	1.000	168
S-03	1/01 Sales Area	SW	10/6	150	126	143	95	Capture Hood	1.000	1.000	143
S-04	1/01 Sales Area	SW	10/6	150	119	155	103	Capture Hood	1.000	1.000	155
S-05	1/00 Welcome Aea	SW	10/6	175	112	177	101	Capture Hood	1.000	1.000	177
S-06	1/00 Welcome Aea	SW	10/6	175	108	164	94	Capture Hood	1.000	1.000	164
	Totals:	-	-	**1000**	**738**	**978**	**98**	-	-	-	-

Air Apparatus

PROJECT: Nike #477
LOCATION: Carlsbad, CA
PROJECT #: 23181

DATE: 6/2/2023
CONTACT: Steve Burns

SYSTEM/UNIT: RTU-03

Tested By: Guy Nunez
Date: 5/26/2023

Design Airflow (CFM)	
Design Total	2200
Design Grille Total	2200
Design Return	1800
Design Min O/A	400

Unit Design Data	
Submittal Make	Not Provided
Submittal Model #	Not Provided
Submittal Airflow	Not Provided
Sched./Sub. Volts	480
Sched./Sub. Phase	3
Sched./Sub. HP	Not Listed
Submittal BHP	Not Provided
Filter MERV Rating (Sched/Sub)	2

Design Static Pressures (in wg)	
Design Ext SP	1.2
Submittal Total SP	Not Provided
Submittal Clg Coil Δ SP	Not Provided

Design Temperatures (°F)	
RTU-03/Cooling	
Des. Ent. DB (°F)	74.1
Des. Ent. WB (°F)	60.5
Design LAT DB (°F)	54.8
Design LAT WB (°F)	52.4

Filter Data	
Condition	Clean
Filter Type	Pleated
MERV Rating	13
Filter Size Set 1 (in)	16x25x1
# Filters Set 1	8
Filter Size Set 2 (in)	-
# Filters Set 2	-

Motor Nameplate Data	
Motor Make	Marathon
Motor Frame	48
Motor HP	1.50
Motor RPM	1600
Motor Volts	460
Motor Phase	3
Motor Amps	1.9
Motor S.F.	Not Listed
Motor % PF	85
Motor % Eff.	86%
Other Motor Data	-

Drive Data

Final Airflow (CFM)	
Actual Total CFM	2174
Actual Grille Total CFM	2174
Actual Return Air CFM	1752
Actual Min O/A CFM	422
Fan CFM Test Method	Supply Outlet Total
OA Method/Instrument	Face Velocity/RVA
OA Ak (sq ft)	4.100
OA Damper Position	20% Open / 35% Open
RA Damper Position	Not Applicable

Unit Data	
Make (tag)	Trane
Model # (tag)	WHC060H4ROA29
Serial # (tag)	230411981L
Location	Roof
Unit Discharge	Downblast
Cooling Coil Location	Unit / Drawthru
Coil Area (sq ft)	Not Accessible
Clg Coil Vel (FPM)	
Fan Service	Supply
Fan Type	Centrifugal (BI)
Fan Discharge	Horizontal
Fan Arrangement	SWSI

Fan Design Data	
Submittal Motor RPM	Not Provided
Submittal Fan RPM	Not Provided

Fan Data	
Actual Fan RPM/Speed	Not Accessible
Actual Motor RPM	Not Accessible

Electrical Data	
Measurement Method	V/A Meter
Motor Volts 1	462
Motor Volts 2	461
Motor Volts 3	462
Motor Amps 1	0.9
Motor Amps 2	0.8
Motor Amps 3	0.8
Operating HZ	60.00
Approx. BHP	0.7
Corr. Nameplate Amps	1.9
Starter Data	Internal to ECM
VFD Reference	Not Applicable

Actual Temperatures (°F)	
RTU-03/Cooling	
Outside Air DB	67.1
Outside Air WB	52.5

Air Apparatus

PROJECT: Nike #477
LOCATION: Carlsbad, CA
PROJECT #: 23181

DATE: 6/2/2023
CONTACT: Steve Burns

SYSTEM/UNIT: RTU-03

Tested By: Guy Nunez
Date: 5/26/2023

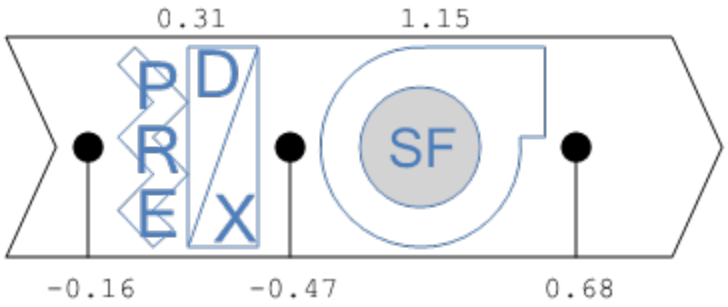
Drive Data	
Drive Type	Direct Drive
Sheave Type	-
Fan Sheave Make	-
Fan Shv Mod# or Size (in)	- in
Fan Sheave Bore (in)	- in
Motor Sheave Make	-
Mtr Shv Mod# or Size (in)	- in
Motor Sheave Bore (in)	- ft
VP Range	-
Center Distance (in)	-
No of Belts	-
Belt Make	-
Belt Size	-
Other Data	-

Actual Temperatures (°F)	
RTU-03/Cooling	
Entering Air DB	71.3
Entering Air WB	59.5
Leaving Air DB	52.4
Leaving Air WB	50.6

SYSTEM/UNIT: RTU-03/Static Profile

Tested By: Guy Nunez
Date: 5/25/2023

Static Pressure Profile



Air Apparatus

PROJECT: Nike #477
LOCATION: Carlsbad, CA
PROJECT #: 23181

DATE: 6/2/2023
CONTACT: Steve Burns

RTU-03 Supply Outlet Summary

System/Unit	Area Served	Type	Size / Area (in)	Design CFM	Prelim CFM	Final CFM	% Final	Instrument	Ak	Open (sq ft)	Final FPM
S-01	1-15 BOH	CD	8	200	296	204	102	Capture Hood	1.000	1.000	204
S-02	1-15 BOH	CD	8	200	310	208	104	Capture Hood	1.000	1.000	208
S-03	1-15 BOH	CD	8	200	277	190	95	Capture Hood	1.000	1.000	190
S-04	1-15 BOH	CD	8	200	262	194	97	Capture Hood	1.000	1.000	194
S-05	1-13 Coach Office	CD	8	225	66	231	103	Capture Hood	1.000	1.000	231
S-06	1/14 IT	CD	8	250	70	227	91	Capture Hood	1.000	1.000	227
S-07	1/10 Break RM	CD	10	300	60	282	94	Capture Hood	1.000	1.000	282
S-08	1/10 Break RM	CD	10	300	110	304	101	Capture Hood	1.000	1.000	304
S-09	1/11 Quiet RM	CD	8	125	75	121	97	Capture Hood	1.000	1.000	121
S-10	1/08 ADA RR	CD	6	50	134	54	108	Capture Hood	1.000	1.000	54
S-11	1-09 ADA RR	CD	6	50	95	52	104	Capture Hood	1.000	1.000	52
S-12	1/17 Corr	CD	6	100	178	107	107	Capture Hood	1.000	1.000	107
	Totals:	-	-	**2200**	**1933**	**2174**	**99**	-	-	-	-

Fan

PROJECT: Nike #477
LOCATION: Carlsbad, CA
PROJECT #: 23181

DATE: 6/2/2023
CONTACT: Steve Burns

SYSTEM/UNIT: EF-01

Tested By: Guy Nunez
Date: 5/24/2023

Design Airflow (CFM)	
Design Airflow	275
Design Grille Airflow	275

Unit Design Data	
Submittal Make	Not Provided
Submittal Model #	Not Provided
Submittal Airflow	Not Provided
Sched./Sub. Volts	120
Sched./Sub. Phase	1
Sched./Sub. HP	1/10
Submittal BHP	Not Provided

Design Static Pressures (in wg)	
Design External SP	.5
Submittal Total SP	Not Provided

Motor Nameplate Data	
Motor Make (tag)	No Access - Embedded Motor
Motor Frame (tag)	-
Motor HP (tag)	-
Motor RPM (tag)	-
Motor Volts (tag)	115
Motor Phase (tag)	1
Motor Amps (tag)	-
Motor S.F. (tag)	-
Mtr % PF (tag)	-
Mtr % Eff. (tag)	-
Other Motor Data	Above data from unit tag

Drive Data	
Drive Type	Direct Drive
Sheave Type	-
Fan Sheave Make	-
Fan Shv Mod# or Size (in)	-
Fan Sheave Bore (in.)	-
Motor Sheave Make	-
Mtr Shv Mod# or Size (in)	-
Motor Sheave Bore (in.)	-
VP Range	-
Center Distance (in.)	-
No of Belts	-
Belt Make	-
Belt Size	-
Other Data	-

Final Airflow (CFM)	
Actual Airflow	277
Actual Grille Airflow	277
Fan CFM Test Method	Inlet Total
Test Method Ak (sq ft)	1.000

Unit Data	
Make (tag)	Greenheck
Model # (tag)	SQ-80-VG-X
Serial # (tag)	22006920
Unit Location	Ceiling
Unit Discharge	Horizontal
Fan Service	Exhaust
Fan Type	Centrifugal (BI)
Fan Discharge	Horizontal
Fan Arrangement	SWSI

Fan Design Data	
Submittal Motor RPM	Not Provided
Submittal Fan RPM	Not Provided

Fan Data	
Actual Fan RPM/Speed	Not Accessible
Actual Motor RPM	Not Accessible
Speed Cont. Position	Not Accessible

Electrical Data	
Measurement Method	Not Accessible
Motor Volts 1	-
Motor Volts 2	-
Motor Volts 3	-
Motor Amps 1	-
Motor Amps 2	-
Motor Amps 3	-
Operating HZ	60.0
Starter Data	Internal to ECM
Approx. BHP	
Corr. Nameplate Amps	

Fan

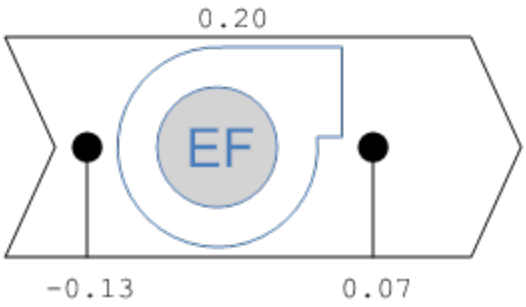
PROJECT: Nike #477
LOCATION: Carlsbad, CA
PROJECT #: 23181

DATE: 6/2/2023
CONTACT: Steve Burns

SYSTEM/UNIT: EF-01/Static Profile

Tested By: Guy Nunez
Date: 5/24/2023

Static Pressure Profile



EF-01 Exhaust Inlet Summary

System/Unit	Area Served	Type	Size / Area (in)	Design CFM	Prelim CFM	Final CFM	% Final	Instrument	Ak	Open (sq ft)	Final FPM
E-01*	1-12 Janitors	CD	6	75	85	85	113	Capture Hood	1.000	1.000	85
E-02	1-09 ADA RR	CD	8	100	93	93	93	Capture Hood	1.000	1.000	93
E-03	1-08 ADA RR	CD	8	100	99	99	99	Capture Hood	1.000	1.000	99
	Totals:	-	-	**275**	**277**	**277**	**101**	-	-	-	-

Log:

EF-01/E-01	No balancing dampers installed. Unable to proportion to design CFM

Fan

PROJECT: Nike #477
LOCATION: Carlsbad, CA
PROJECT #: 23181

DATE: 6/2/2023
CONTACT: Steve Burns

SYSTEM/UNIT: EF-02

Tested By: Guy Nunez
Date: 5/25/2023

Design Airflow (CFM)	
Design Airflow	1000
Design Grille Airflow	1000

Unit Design Data	
Submittal Make	Not Provided
Submittal Model #	Not Provided
Submittal Airflow	Not Provided
Sched./Sub. Volts	120
Sched./Sub. Phase	1
Sched./Sub. HP	1/4
Submittal BHP	Not Provided

Design Static Pressures (in wg)	
Design External SP	.3
Submittal Total SP	Not Provided

Motor Nameplate Data	
Motor Make (tag)	No Access - Embedded Motor
Motor Frame (tag)	-
Motor HP (tag)	-
Motor RPM (tag)	-
Motor Volts (tag)	115
Motor Phase (tag)	1
Motor Amps (tag)	-
Motor S.F. (tag)	-
Mtr % PF (tag)	-
Mtr % Eff. (tag)	-
Other Motor Data	Above data from unit tag

Drive Data	
Drive Type	Direct Drive
Sheave Type	-
Fan Sheave Make	-
Fan Shv Mod# or Size (in)	-
Fan Sheave Bore (in.)	-
Motor Sheave Make	-
Mtr Shv Mod# or Size (in)	-
Motor Sheave Bore (in.)	-
VP Range	-
Center Distance (in.)	-
No of Belts	-
Belt Make	-
Belt Size	-
Other Data	-

Final Airflow (CFM)	
Actual Airflow	941
Actual Grille Airflow	Not Applicable
Fan CFM Test Method	Capture Hood
Test Method Ak (sq ft)	1.000

Unit Data	
Make (tag)	Greenheck
Model # (tag)	SQ-100-VG-X
Serial # (tag)	22006925
Unit Location	Ceiling
Unit Discharge	Horizontal
Fan Service	Exhaust
Fan Type	Centrifugal (BI)
Fan Discharge	Horizontal
Fan Arrangement	In-line

Fan Design Data	
Submittal Motor RPM	Not Provided
Submittal Fan RPM	Not Provided

Fan Data	
Actual Fan RPM/Speed	Not Accessible
Actual Motor RPM	Not Accessible
Speed Cont. Position	100%

Electrical Data	
Measurement Method	Not Accessible
Motor Volts 1	-
Motor Volts 2	-
Motor Volts 3	-
Motor Amps 1	-
Motor Amps 2	-
Motor Amps 3	-
Operating HZ	60.0
Starter Data	Internal to ECM
Approx. BHP	
Corr. Nameplate Amps	

Fan

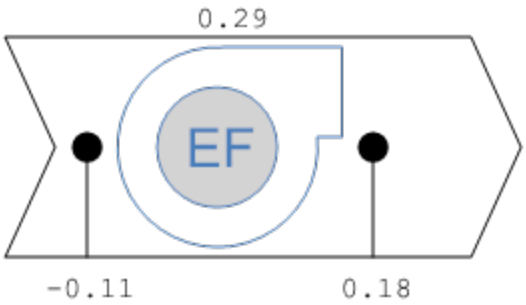
PROJECT: Nike #477
LOCATION: Carlsbad, CA
PROJECT #: 23181

DATE: 6/2/2023
CONTACT: Steve Burns

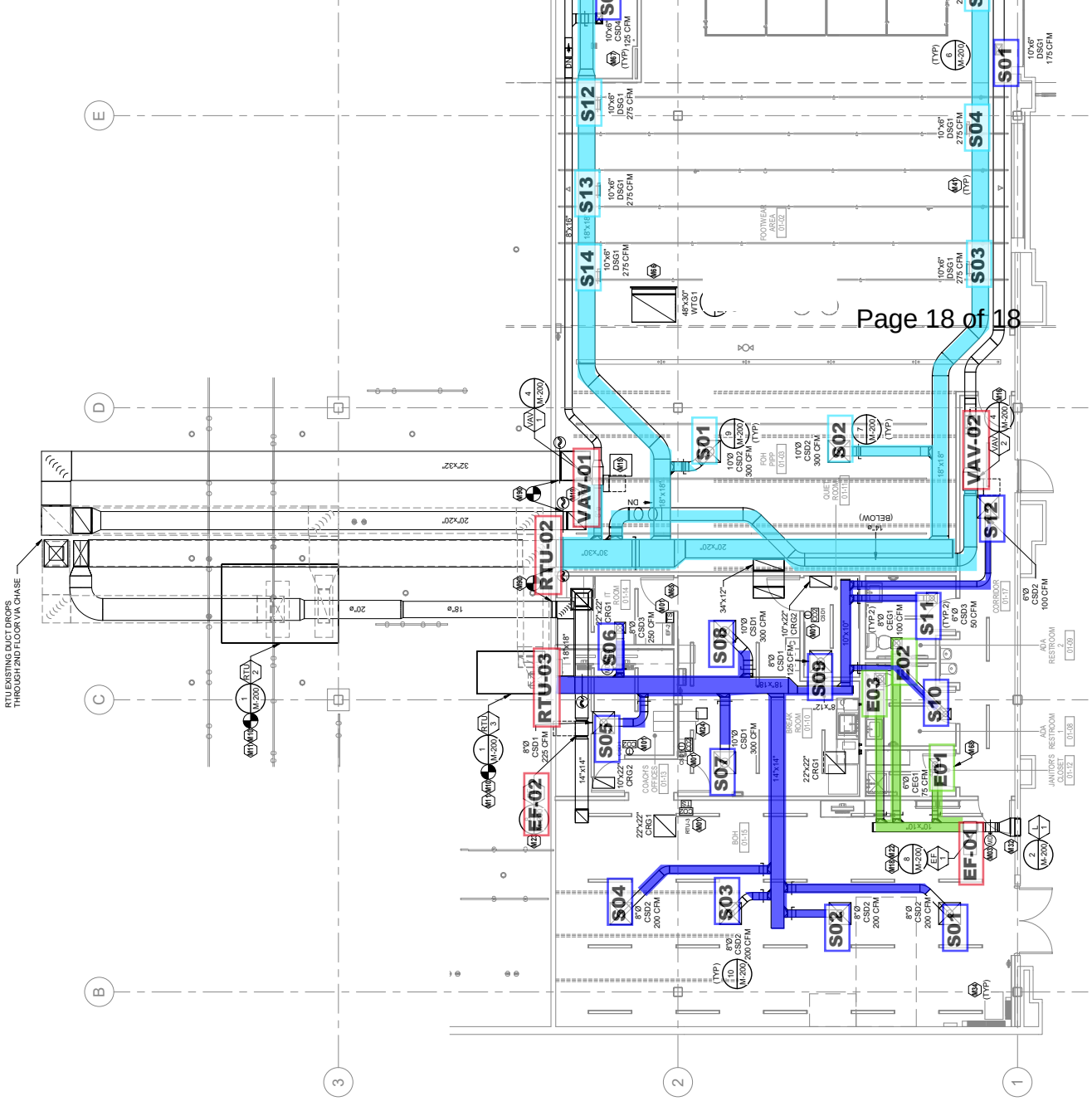
SYSTEM/UNIT: EF-02/Static Profile

Tested By: Guy Nunez
Date: 5/24/2023

Static Pressure Profile



Date: 7/6/2023


RTU EXISTING DUCT DROPS THROUGH 2ND FLOOR VIA CHASE
RTU-02
RTU-03
VAV-01
VAV-02
EF-02
EF-01
S01
S02
S03
S04
S05
S06
S07
S08
S09
S10
S11
S12
S13
S14
E01
E02
E03
1 HVAC PLAN
3/16" = 1'-0"