Letter:	**YS-006-2018**
Date:	**October 13, 2020**
To:	**All Ducted Systems Channel Partners**
Subject:	**Premier Air Flow Station Sensor Location Change**
Product:	**All Premier 25-50T units with Outdoor Airflow Measurement Stations**
Effective:	**October 13, 2020** Expires**:** **October 13, 2021**

Summary: **Sensor array locations and programing have changed to produce more reliable and accurate outdoor CFM measurements. In cases where outdoor air CFM cannot be controlled to the desired value, relocation of the sensor array and programming changes to the air flow controller may be required.**

Sensor locations are broken down by unit cabinet size as well as right or left side OA. Be sure to use the correct drawings that match equipment orientation. Control cabinet side is the right side, supply fan motor access is the left side. The instructions and measurements for each are below. Programming is separated by cabinet size only, 25-30T and 40-50T. Be sure to use the correct programming values that match the equipment tonnage. Tonnage can be identified in the installation manual nomenclature section.

A labor allotment of 3 hours per unit at standard warranty rates will be allowed for relocation of sensor array and re-programming of AFMS. No materials. Follow proper warranty claim procedures using this letter as authorization for reimbursement. If there are any questions please contact our team at the number below for assistance.

We apologize for any inconvenience this may have caused.

Victor Panicci
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5005 York Dr. Norman, OK. 73069
Email: victor.panicci@jci.com
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Section 1
25-30T Relocation

1. Remove OA hood to access compartment and sensor array.
2. Locate the AFMS (Air Flow Measurement Station) sensor array in OA hood.

Note: All pictures and drawings represent new sensor array locations.

AFMS Sensor Array

3. Remove screws securing sensor array in place and set array to the side.

4. Use below measurements to mark new foot location. **Orange line parallel with OA hood represents edge of angle, add 1" for measurement to wall. Orange line perpendicular to OA hood represents seam in floor.**

25-30T Right OA Foot

3-3/16

18-15/16

20-1/8

4-1/8

F-EXH-VERT_25-30
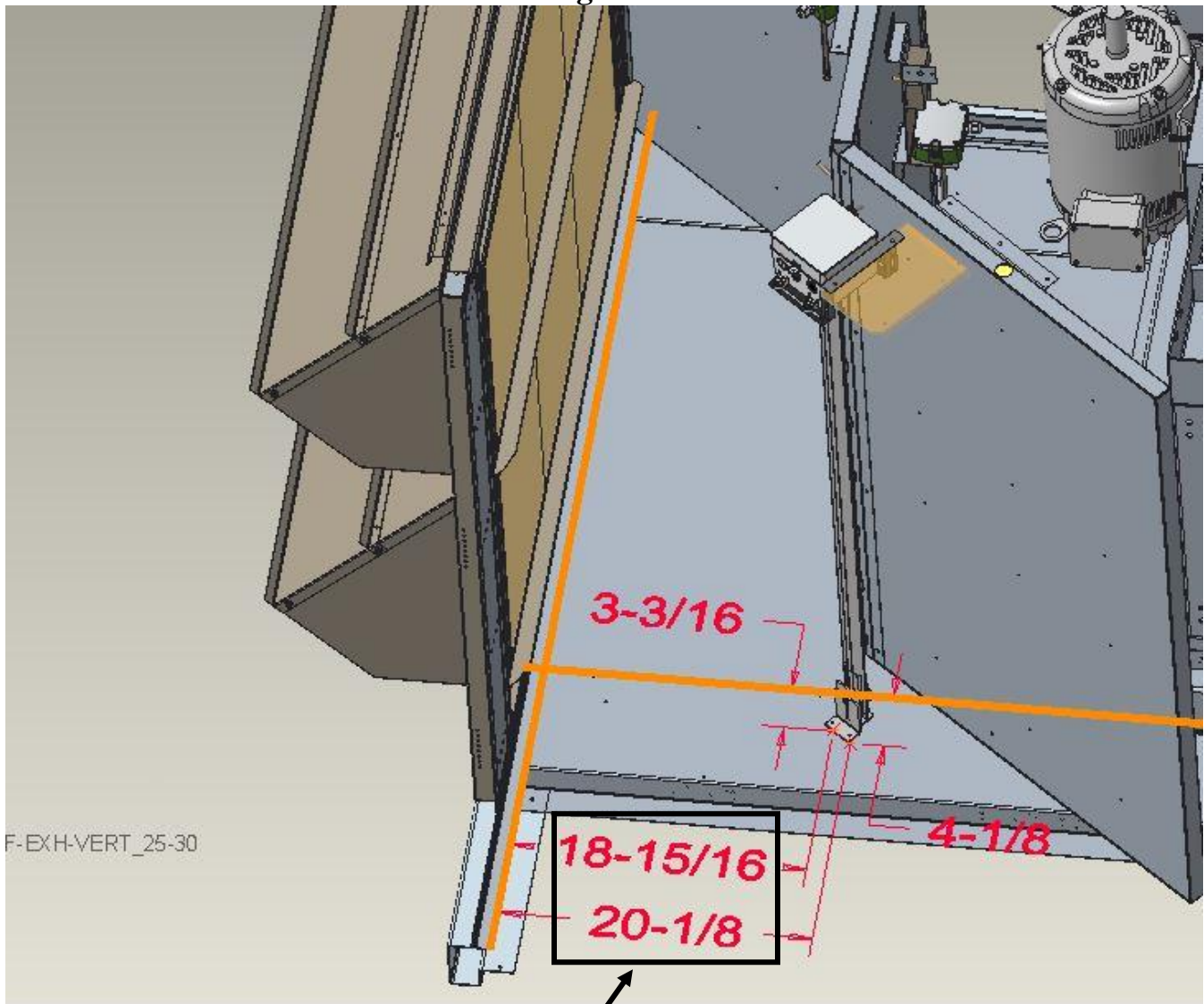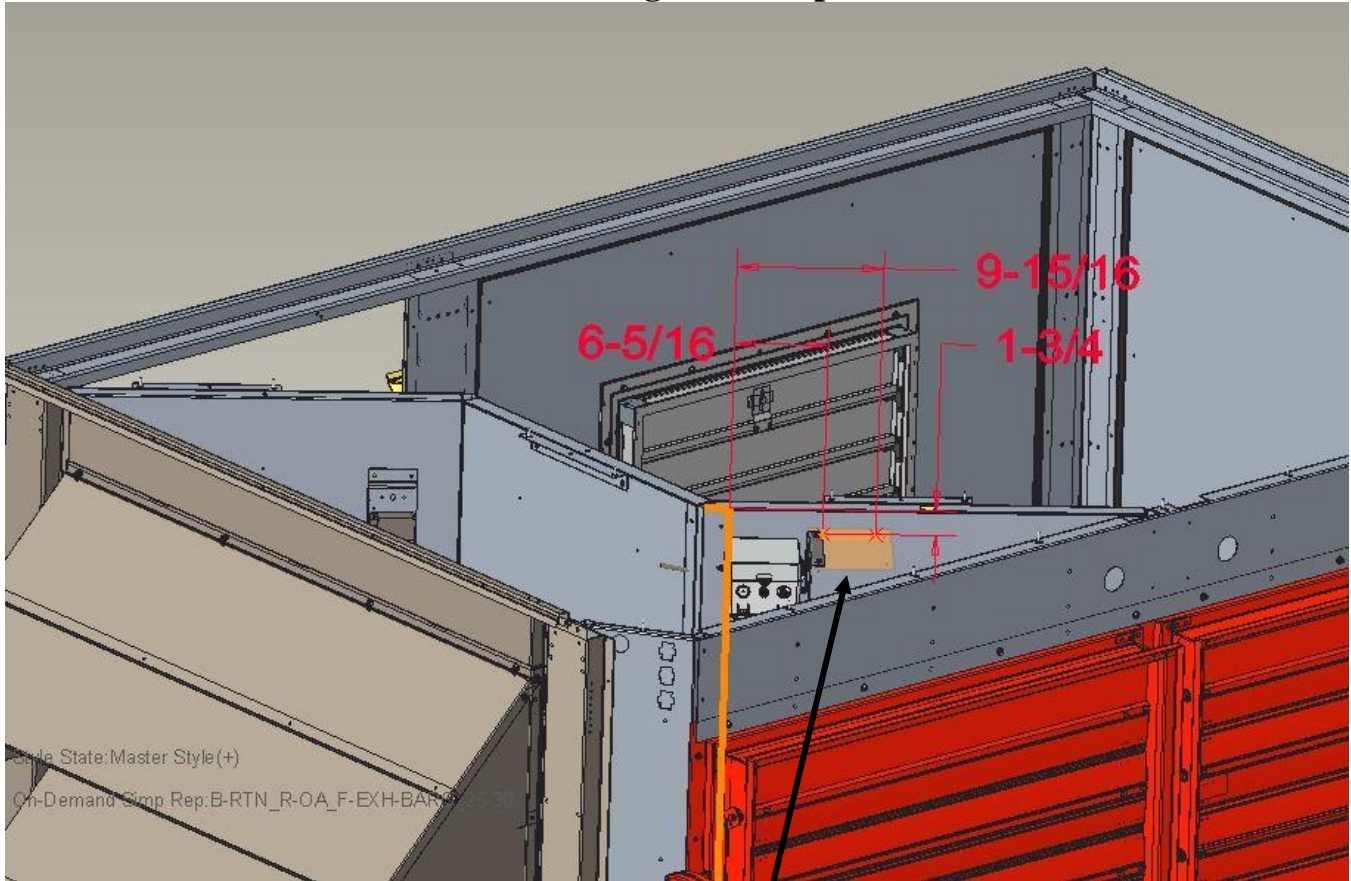
Add 1" to these values if measuring to outside wall

25-30T Left OA Foot
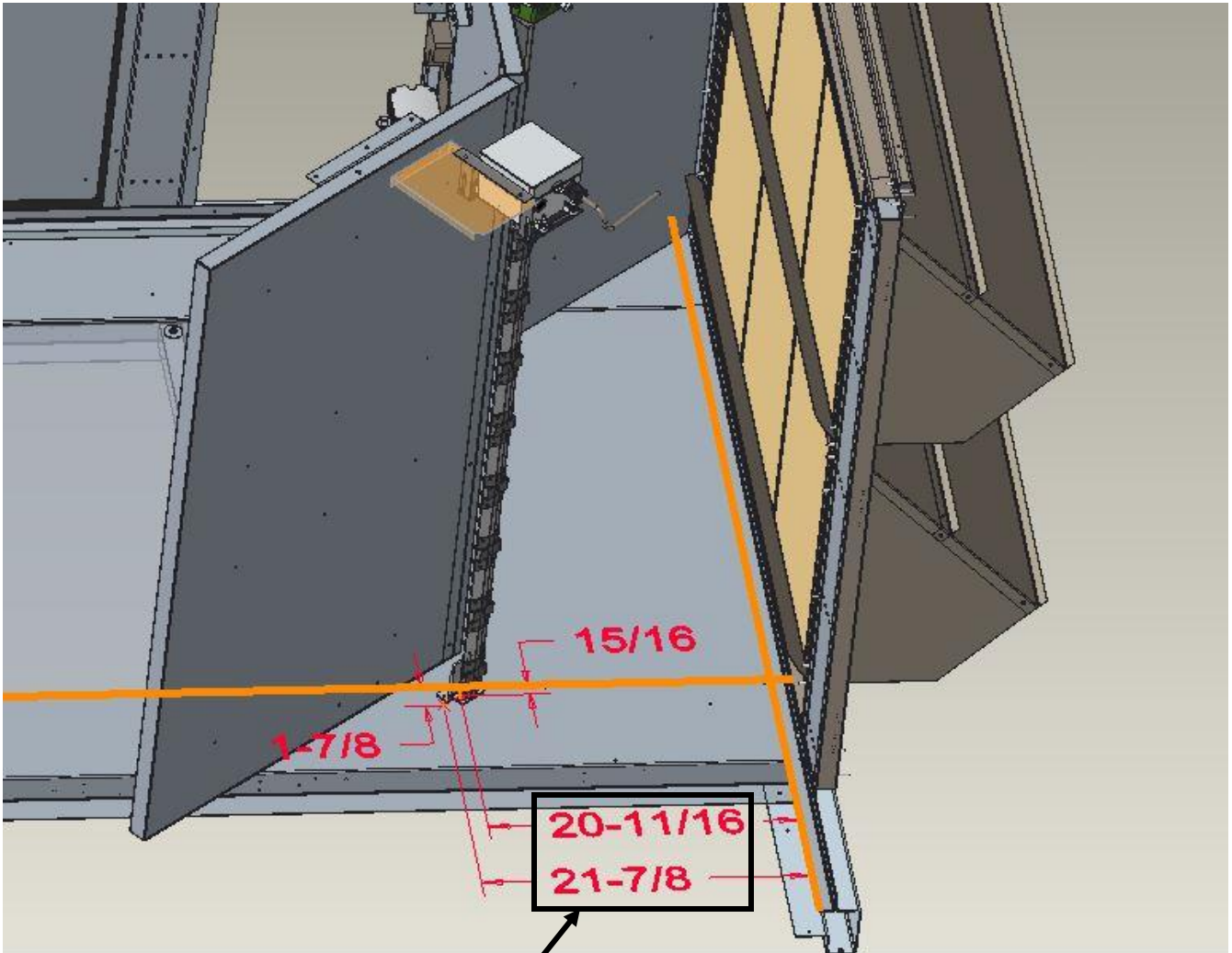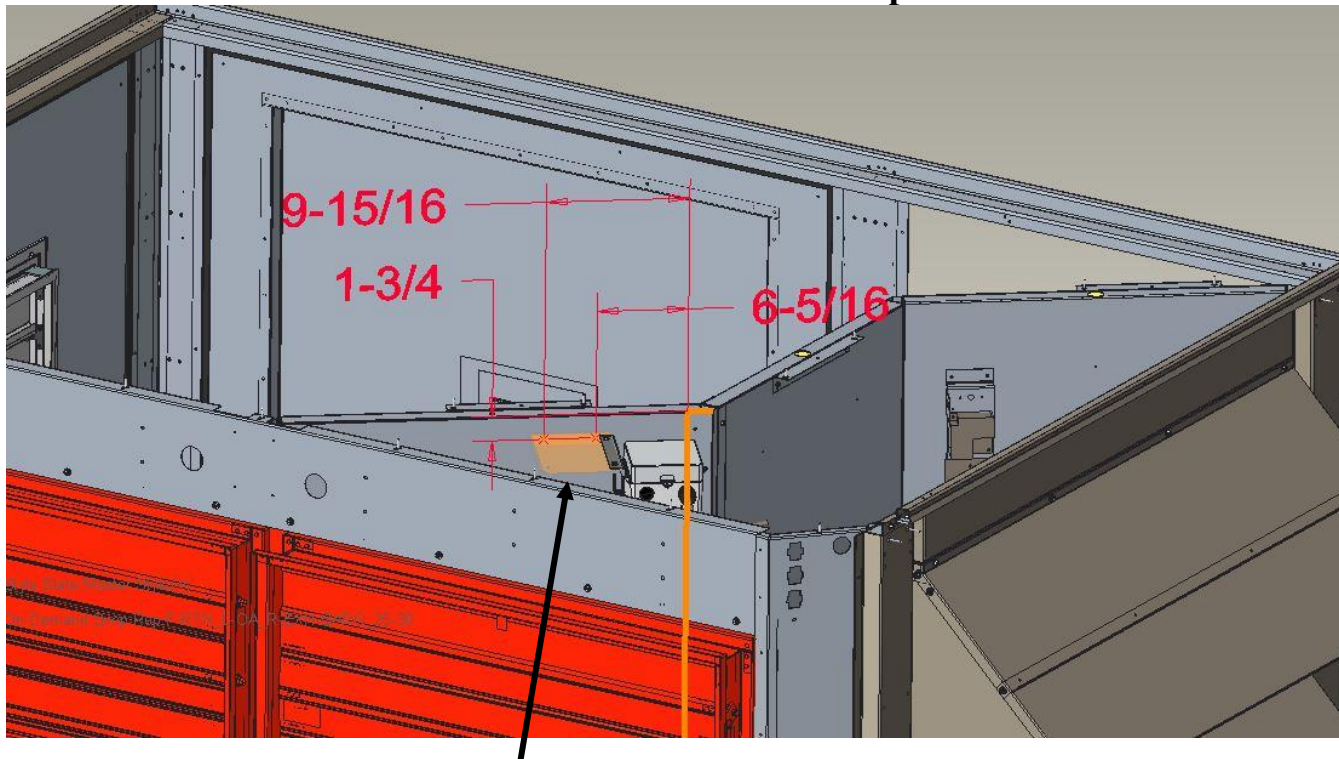

Add 1" to these values if measuring to outside wall

5. Use the below measurements to mark the new location of the wall bracket. **Orange line represents the edge of the angled panel cover.**

25-30T Right OA Top

Note: Orange square in drawing represents the wall bracket

25-30T Left OA Top

Note: Orange square in drawing represents the wall bracket

6. Fasten the wall bracket in the new location.
7. Stand up the array, lining up the foot to the previously marked location and the flange of the controller bracket resting on the top edge of the wall bracket, ensure array is plumb. Mark controller mounting holes on wall bracket.
8. Remove wall bracket and secure bracket to controller at location marked in step 7.
9. Install AFMS in new location and verify plumb.
10. Secure foot with screws.
11. Reassemble OA hood using reverse method used to disassemble.
12. Energize unit.
13. Using unit display navigate to (Details>Econ>Setup) and verify:
    a. LowSpeedFan-MinPos is set to 0%.
    b. HighSpeedFan-MinPos is set to 0%.
    c. MinOA-En is Enabled.
    d. MOAFlow-Sp is set to desired value.
    e. MaxOAFlow is set to 12,000.
14. Perform AFMS programming per steps found in next section of this document.
15. Verify OA flow on AFMS controller reflects similar value on unit display.
    a. Numbers will not match exactly but should be close with unit display lagging behind the AFMS display.

Section 2
25-30T Programming

The AFMS controller is located near the bottom of the control cabinet and attached to the partition wall separating the low voltage from the high voltage. Below is a picture of the controller removed from the partition wall for easier programming.

Menu Navigation

MENU- Opens Operator and Supervisor menus **ESC**- Escape button to back up one step
UP/Down- Navigate through menu/change value **ENTER**- Enter menu/save Parameter

Programming

1. Push MENU button
2. Use UP/DOWN buttons to highlight Operator Menu and push ENTER
3. **DO NOT ENABLE OPERATOR PIN**
4. Push DOWN to Flow Config menu and push ENTER
5. Push ENTER on Duct Shape and verify it is set to **Rectangular**
6. Push ESC to backup
7. Push DOWN to Duct Width push ENTER set to **26.8** inches push ENTER to save
8. Push ESC to backup
9. Push DOWN to Duct Height push ENTER set to **26.8** inches push ENTER to save
10. Push ESC to backup
11. Push DOWN to Duct Area and push ENTER, verify it reads **4.98 or 4.99** (Read Only)
12. Push ESC to backup
13. Push Down to Flow Units and verify it is set to **Imperial**.
14. Push ESC two (2) times to backup to menu selections
15. Push DOWN to Display Config and push ENTER

Follow these same steps to access all the necessary menus and set values according to table below.

IMPORTANT: CHANGE/VERIFY ONLY THE PARAMETERS LISTED IN THE TABLE BELOW

NOTICE: Air Balancer will need to adjust K-factor gain as needed to obtain matching readings with his equipment.

Operator Menu

MENU	PARAMETER	VALUE
Flow Config	Duct Shape	Rectangular
	Duct Width	26.8
	Duct Height	26.8
	Duct Area (Read Only)	4.99
	Flow Units	Imperial
Display Config	Display Units	Imperial
	Display Flow Type	Volume
Output 1 Param		Flow
Flow LPF		0
Output Cal Menu	Output 1 mA Offset	0
	Output 1 mA Low Span	4mA
	Output 1 mA High Span	20mA
	Output 2 mA Offset	0
	Output 2 mA Low Span	4mA
	Output 2 mA High Span	20mA
	Design Range Low	0
	Design Range High	12000
Kfactor Config	K-factor Enable	Yes
	K-factor Gain	1.00
	K-factor Offset	-123

Section 3
40-50T Relocation

1. Remove OA hood to access compartment and sensor array.
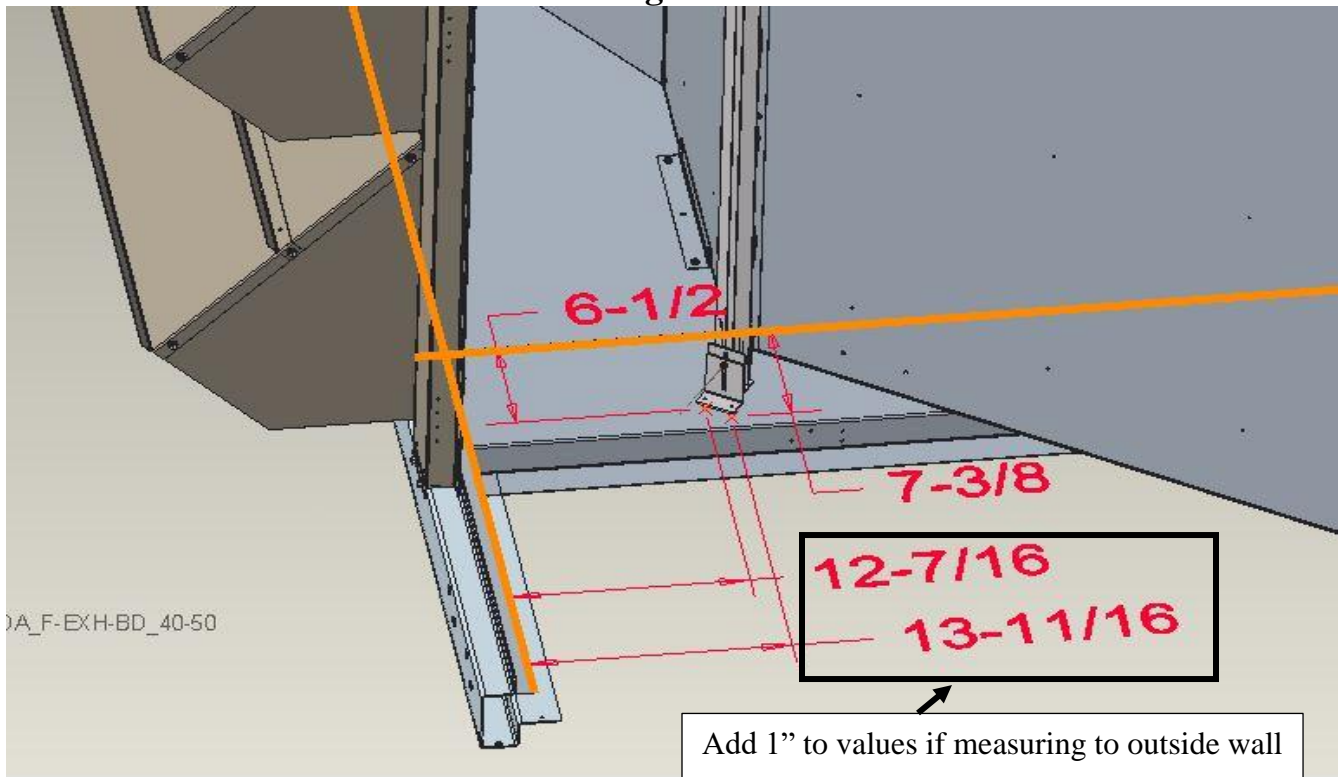2. Locate the AFMS (Air Flow Measurement Station) sensor array in OA hood.

Note: All pictures and drawings represent new sensor array locations.
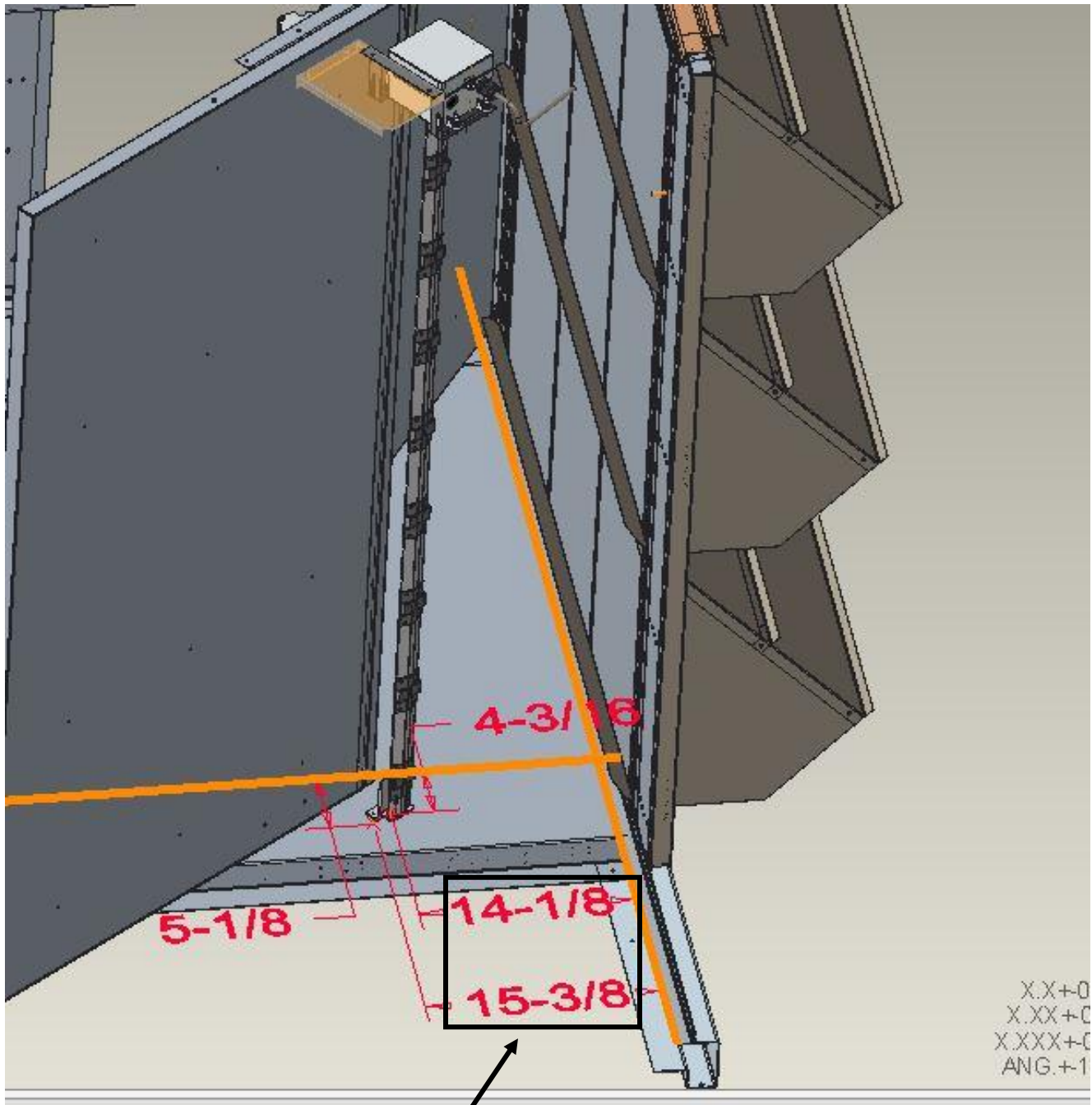

AFMS Sensor Array

3. Remove screws securing sensor array in place and set array to the side.

4. Use below measurements to mark new foot location. **Orange line parallel with OA hood represents edge of angle, add 1" for measurement to wall. Orange line perpendicular to OA hood represents seam in floor.**

40-50T Right OA Foot
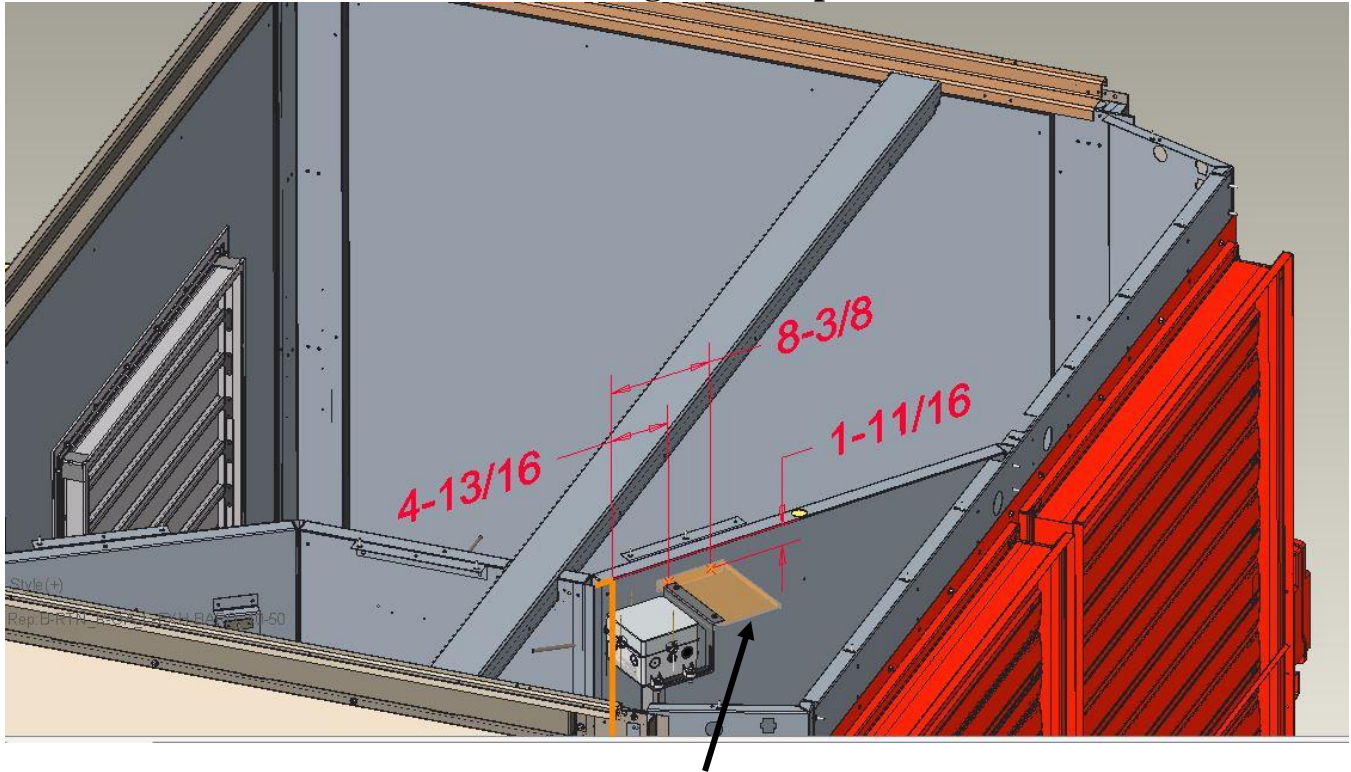

6-1/2

7-3/8

12-7/16

13-11/16

Add 1" to values if measuring to outside wall

DA_F-EXH-BD_40-50

40-50T Left OA Foot

4-3/16

5-1/8

14-1/8

15-3/8

X.X+-0
X.XX+-0
X.XXX+-0
ANG.+-1

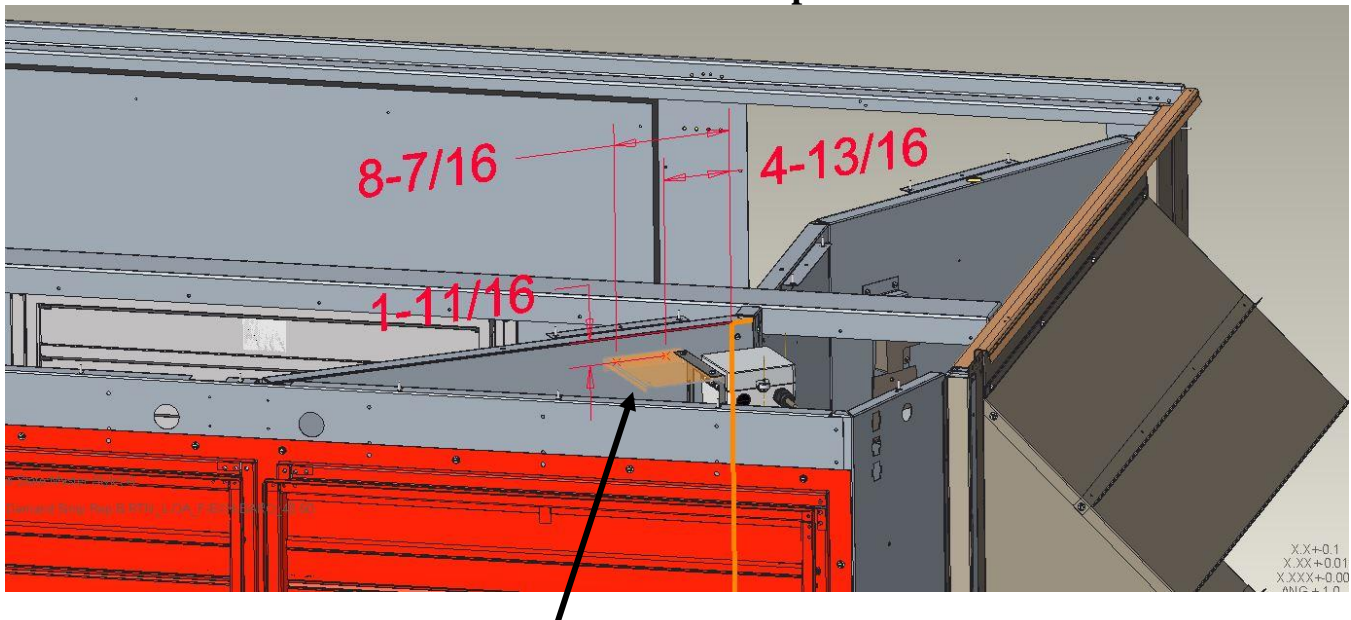Add 1" to values if measuring to outside wall

5. Use the below measurements to mark the new location of the wall bracket. **Orange line represents the edge of the angled panel cover.**

40-50T Right OA Top

Note: Orange square in drawing represents the wall bracket

40-50T Left OA Top

Note: Orange square in drawing represents the wall bracket

6. Fasten the wall bracket in the new location.
7. Stand up the array, lining up the foot to the previously marked location and the flange of the controller bracket resting on the top edge of the wall bracket, ensure array is plumb. Mark controller mounting holes on wall bracket.
8. Remove wall bracket and secure bracket to controller at location marked in step 7.
9. Install AFMS in new location and verify plumb.
10. Secure foot with screws.
11. Reassemble OA hood using reverse method used to disassemble.
12. Energize unit.
13. Using unit display navigate to (Details>Econ>Setup) and verify:
    a. LowSpeedFan-MinPos is set to 0%.
    b. HighSpeedFan-MinPos is set to 0%.
    c. MinOA-En is Enabled.
    d. MOAFlow-Sp is set to desired value.
    e. MaxOAFlow is set to 20,000.
14. Follow AFMS programming steps found in next section of this document.
15. Verify OA flow on AFMS controller reflects similar value on unit display.
    a. Numbers will not match exactly but should be close with unit display lagging behind the AFMS display.

Section 4
40-50T Programming

The AFMS controller is located in the control cabinet near the bottom of the cabinet and attached to the partition wall separating the low voltage from the high voltage. Below is a picture of the controller removed from the partition wall for easier programming.

Menu Navigation

MENU- Opens Operator and Supervisor menus   **ESC**- Escape button to back up one step
UP/Down- Navigate through menu/change value   **ENTER**- Enters menu/saves parameter

Programming

1. Push MENU button
2. Use UP/DOWN buttons to highlight Operator Menu and push ENTER
3. **DO NOT ENABLE OPERATOR PIN**
4. Push DOWN to Flow Config menu and push ENTER
5. Push ENTER on Duct Shape make sure it says **Rectangular**
6. Push ESC to backup
7. Push DOWN to Duct Width push ENTER set to **32.8** inches push ENTER to save
8. Push ESC to backup
9. Push DOWN to Duct Height push ENTER set to **32.8** inches push ENTER to save
10. Push ESC to backup
11. Push DOWN to Duct Area and push ENTER, verify it reads **7.47 or 7.48** (Read Only)
12. Push ESC to backup
13. Push Down to Flow Units and verify it is set to **Imperial**.
14. Push ESC two (2) times to backup to menu selections
15. Push DOWN to Display Config and push ENTER

Follow these same steps to access all the necessary menus and set values according to table below.

IMPORTANT: CHANGE/VERIFY ONLY THE PARAMETERS LISTED IN THE TABLE BELOW

NOTICE: Air Balancer will need to adjust K-factor gain as needed to obtain matching readings with his equipment.

Operator Menu

MENU	PARAMETER	VALUE
Flow Config	Duct Shape	Rectangular
	Duct Width	32.8
	Duct Height	32.8
	Duct Area (Read Only)	7.48
	Flow Units	Imperial
Display Config	Display Units	Imperial
	Display Flow Type	Volume
Output 1 Param		Flow
Flow LPF		0
Output Cal Menu	Output 1 mA Offset	0
	Output 1 mA Low Span	4mA
	Output 1 mA High Span	20mA
	Output 2 mA Offset	0
	Output 2 mA Low Span	4mA
	Output 2 mA High Span	20mA
	Design Range Low	0
	Design Range High	20000
Kfactor Config	K-factor Enable	Yes
	K-factor Gain	1.00
	K-factor Offset	-187