



# Submittal Record

Our Passion is Building®

Rodgers Builders, Inc.  
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Architect:

Project:

Rodgers Project #:

## Form of Submittal

## Submittal No.

- Product Data
- Shop Drawings
- Mix Designs
- MSDS Sheets
- Physical Samples
- Manufacturer's Certification
- Test Reports
- Installation Instructions
- Letter of Affidavit / Compliance
- Welding Certificates
- Sample Warranty
- Other (Specify) - \_\_\_\_\_

**MODEL #'S PAGE 4**  
**AHU-1,2,3 PAGE 18**  
**AHU-4,5,6 PAGE 19**  
**AHU-7,8,9 PAGE 20**  
**AHU-10 PAGE 22**

Item: \_\_\_\_\_

Drawing Number: \_\_\_\_\_

Spec. Section & Package No.: \_\_\_\_\_

Manufacturer: \_\_\_\_\_

Brand: \_\_\_\_\_

Submitted By: \_\_\_\_\_

Review Due Date: \_\_\_\_\_

- NO EXCEPTIONS TAKEN
- EXCEPTIONS INDICATED
- REVISE AND RESUBMIT
- REJECTED; RESUBMIT

REVIEWED ONLY FOR CONFORMANCE WITH DESIGN CONCEPT OF THE PROJECT AND COMPLIANCE WITH INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR DIMENSIONS TO BE VERIFIED AND CORRELATED AT THE SITE; FOR QUANTITY VERIFICATION; FOR INFORMATION THAT PERTAINS SOLELY TO THE FABRICATION PROCESSES OR THE MEANS, METHODS, TECHNIQUES OR SEQUENCES AND PROCEDURES OF CONSTRUCTION; AND FOR COORDINATION OF THE WORK OF ALL TRADES.

YATES-CHREITZBERG-HUGHES ARCHITECTS  
7035 NORTHWINDS DR., NW  
CONCORD, NORTH CAROLINA 28027

BY: JRS                      DATE: 02/11/2025  
PER OPTIMA

## Rodgers Stamp

**Rodgers Builders, Inc.**

- \_\_\_\_\_ No Exception Taken                      \_\_\_\_\_ Make Corrections Noted
- \_\_\_\_\_ Rejected    \_\_\_\_\_ Revise and Resubmit
- \_\_\_\_\_ Submit Specified Item                      \_\_\_\_\_ Reviewed

Corrections and comments are only for general conformance with the design concepts of the project and general compliance with the information given in the contract documents. Action shown is subject to the requirements of the plans and specifications. This review does not relieve the subcontractor/vendor from compliance with requirements of the drawings and specifications. Subcontractor /vendor is responsible for dimensions which shall be confirmed and correlated at the job site, fabrication process, and techniques of construction: coordination of their work with that of all other trades and the satisfactory performance of their work.

By \_\_\_\_\_ Date \_\_\_\_\_  
No. \_\_\_\_\_

## A/E Stamp

### OPTIMA ENGINEERING, P.A. SHOP DRAWING REVIEW

**REVIEW IS FOR GENERAL COMPLIANCE WITH THE INTENT OF THE CONTRACT DOCUMENTS. MECHANICAL CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR CORRECTNESS, DIMENSIONS, DETAILS, QUANTITIES AND ALL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT, INCLUDING ELECTRICAL CHANGES, MAINTENANCE ACCESS, CLEARANCES, BUILDING ALTERATIONS, PIPING, REPLACEMENT OF OTHER SYSTEM COMPONENTS, ETC.**

NO EXCEPTION TAKEN	
APPROVED AS NOTED	<b>X</b>
REVISE AND RESUBMIT	
REJECTED	

Reviewed By: Kelsey Sheehan                      Date: 02/07/2025



# Submittal

**Prepared For:**  
Superior Mechanical  
Attn: Ben Wyke

**Date:** January 28, 2025

**Engineer:**  
Optima Engineering  
Steve Daley, P.E.

**Job Name:**  
CCS Coltrane Webb Beverly Hills Replacement ES

**Opportunity ID:** 7927867

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Trane U.S. Inc. is pleased to provide the following submittal for your review and approval.

## Product Summary

### Qty Product

10 - Performance Climate Changer Indoor Air Handlers (CSAA)

## Notes:

1. This submittal is based on specifications and mechanical drawings sealed 10-21-2024.
2. The mechanical contractor shall verify / confirm all piping locations, clearance requirements and access door locations and note any discrepancies / changes on the returned submittal.
3. All fan motors are compatible with VFDs and shall be provided with shaft grounding rings. All unit controls (space and unit sensors, unit controller, damper actuators, etc...) shall be provided and installed by others, including VFDs.
4. All electrical requirements shall be coordinated / confirmed with the electrical contractor prior to ordering equipment.
5. The following items are not included by Trane unless otherwise noted:
  - Chilled or hot water valves*
  - Equipment startup*
  - Controls or control wiring*
  - Electrical disconnects*
  - Mounting pads*
  - Seismic restraints*

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Jeff Auten  
Trane U.S. Inc.  
4501 South Tryon Street  
Charlotte, NC 28217  
Office Phone: (704) 525-9600

The attached information describes the equipment we propose to furnish for this project and is submitted for your approval.  
**Submittal acceptance and return is a critical step, so please ensure submittals are returned with approval to release to production within 14 days of submittal date.**

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**Tag Data - Performance Climate Changer (CSAA) (Qty: 10)**

Item	Tag(s)	Qty	Description	Model Number
A1	AHU-1	1	Performance Climate Changer (CSAA)	CSAA025UA
A2	AHU-2	1	Performance Climate Changer (CSAA)	CSAA025UA
A3	AHU-3	1	Performance Climate Changer (CSAA)	CSAA035UA
A4	AHU-4	1	Performance Climate Changer (CSAA)	CSAA030UA
A5	AHU-5	1	Performance Climate Changer (CSAA)	CSAA010UA
A6	AHU-6	1	Performance Climate Changer (CSAA)	CSAA021UA
A7	AHU-7	1	Performance Climate Changer (CSAA)	CSAA021UA
A8	AHU-8	1	Performance Climate Changer (CSAA)	CSAA008UA
A9	AHU-9	1	Performance Climate Changer (CSAA)	CSAA014UA
A10	AHU-10	1	Performance Climate Changer (CSAA)	CSAA008UA

**Product Data - Performance Climate Changer (CSAA)**

Item: A1 Qty: 1 Tag(s): AHU-1

**Unit level options**

- Indoor unit, size 25
- 6in. integral base frame
- UL listed unit
- Multiple composite handles/latches
- 234.581" total unit length
- Field provided controls (by others)

**Controls and VFD/starter**

- No unit controller
- Supply fan external junction box, field provided NEMA
- Return fan external junction box, field provided NEMA

**Warranty**

- 5-year parts and labor warranty – entire unit

**Air mixing section (Pos #1)**

- Reduced length mixing box w/o filters
- Door- right side
- Front full face opening
- Top rectangular opening

**Fan section (Pos #2)**

- Return fan section
- Door- right side, outward swing
- 24.5in. **direct drive plenum fan**, 80% width, H press
- 1 fan
- Right side drive
- NEMA premium compliant ODP
- Voltage 460/3
- 7.5 HP
- 1800 RPM
- Inverter balance with shaft grounding
- Top damper - opposed blade
- External junction box

**Air mixing section (Pos #3)**

- Mixing box w/filters
- Door- right side
- Back damper - parallel blade
- Front full face opening
- Top damper - parallel blade
- 2in. filter frame

**Plated media, MERV 8 (Field Installed)**

**Coil section (Pos #4)**

- Medium horizontal coil
- Right side - coil supply
- 5W hot water heating coil, 1 row
- 80 coil fins per foot
- Aluminum fins

Prima flo E (energy efficient)  
 .020" copper tubes, 5/8in. diameter  
 Galvanized steel coil casing  
 Coil connections - standard

**Access section (Pos #5)**

Extended medium access section  
 Door- right side

**Coil section (Pos #6)**

Small horizontal coil  
 Stainless steel drain pan  
 Right side - drain & coil connections  
 Type "UW" chilled water cooling coil, 4 rows  
 161 coil fins per foot  
 Aluminum fins  
 Delta flo H (Hi efficient)  
 .016" copper tubes, 1/2in. diameter  
 Galvanized steel coil casing  
 Coil connections - standard

**Access section (Pos #7)**

Extended medium access section  
 Door- right side

**Fan section (Pos #8)**

Supply fan section  
 Door- right side, outward swing  
 27in. [direct drive plenum fan](#) full width, H press  
 1 fan  
 Right side drive  
 NEMA premium compliant ODP  
 Voltage 460/3  
 10 HP  
 1200 RPM  
 Inverter balance with shaft grounding  
 Top rectangular discharge  
 External junction box

**Item: A2 Qty: 1 Tag(s): AHU-2****Unit level options**

Indoor unit, size 25  
 6in. integral base frame  
 UL listed unit  
 Multiple composite handles/latches  
 245.926" total unit length  
 Field provided controls (by others)

**Controls and VFD/starter**

No unit controller  
 Supply fan external junction box, field provided NEMA  
 Return fan external junction box, field provided NEMA

**Warranty**

5-year parts and labor warranty – entire unit

**Air mixing section (Pos #1)**

Reduced length mixing box w/o filters  
 Door- right side  
 Front full face opening  
 Top rectangular opening

**Fan section (Pos #2)**

Return fan section  
 Door- right side, outward swing  
 27in. [direct drive plenum fan](#) full width, H press  
 1 fan  
 Right side drive  
 NEMA premium compliant ODP

Voltage 460/3  
 7.5 HP  
 1200 RPM  
 Inverter balance with shaft grounding  
 Top damper - opposed blade  
 External junction box

**Air mixing section (Pos #3)**

Mixing box w/filters  
 Door- right side  
 Back damper - parallel blade  
 Front full face opening  
 Top damper - parallel blade  
 2in. filter frame

Pleated media, MERV 8 (Field Installed)

**Coil section (Pos #4)**

Medium horizontal coil  
 Right side - coil supply  
 5W hot water heating coil, 1 row  
 80 coil fins per foot  
 Aluminum fins  
 Prima flo E (energy efficient)  
 .020" copper tubes, 5/8in. diameter  
 Galvanized steel coil casing  
 Coil connections - standard

**Access section (Pos #5)**

Extended medium access section  
 Door- right side

**Coil section (Pos #6)**

Medium horizontal coil  
 Stainless steel drain pan  
 Right side - drain & coil connections  
 Type "UW" chilled water cooling coil, 6 rows  
 94 coil fins per foot  
 Aluminum fins  
 Delta flo H (Hi efficient)  
 .016" copper tubes, 1/2in. diameter  
 Galvanized steel coil casing  
 Coil connections - standard

**Access section (Pos #7)**

Extended medium access section  
 Door- right side

**Fan section (Pos #8)**

Supply fan section  
 Door- right side, outward swing  
 27in. direct drive plenum fan 80% width, H press  
 1 fan  
 Right side drive  
 NEMA premium compliant ODP  
 Voltage 460/3  
 15 HP  
 1800 RPM  
 Inverter balance with shaft grounding  
 Top rectangular discharge  
 External junction box

**Item: A3 Qty: 1 Tag(s): AHU-3**

**Unit level options**

Indoor unit, size 35  
 6in. integral base frame  
 UL listed unit  
 Single metal handle - ganged latches

240.598" total unit length  
 Field provided controls (by others)

**Controls and VFD/starter**

No unit controller  
 Supply fan external junction box, field provided NEMA  
 Return fan external junction box, field provided NEMA

**Warranty**

5-year parts & labor warranty – entire unit

**Air mixing section (Pos #1)**

Reduced length mixing box w/o filters  
 Door- right side  
 Front full face opening  
 Top rectangular opening

**Fan section (Pos #2)**

Return fan section  
 Door- right side, outward swing  
 24.5in. direct drive plenum fan, full width, H press  
 2 fan array  
 Right side drive  
 NEMA premium compliant ODP  
 Voltage 460/3  
 5 HP (each fan)  
 1200 RPM  
 Inverter balance with shaft grounding  
 Top damper - opposed blade  
 External junction box

**Air mixing section (Pos #3)**

Mixing box w/filters  
 Door- right side  
 Back damper - parallel blade  
 Front full face opening  
 Top damper - parallel blade  
 2in. filter frame

Pleated media, MERV 8 (Field Installed)

**Coil section (Pos #4)**

Small horizontal coil  
 Door- right side  
 Right side - coil supply  
 5W hot water heating coil, 1 row  
 80 coil fins per foot  
 Aluminum fins  
 Prima flo E (energy efficient)  
 .020" copper tubes, 5/8in. diameter  
 Galvanized steel coil casing  
 Coil connections - standard

**Coil section (Pos #5)**

Small horizontal coil  
 Door- right side  
 Stainless steel drain pan  
 Right side - drain & coil connections  
 Type "UU" chilled water cooling coil, 4 rows  
 149 coil fins per foot  
 Aluminum fins  
 Delta flo H (Hi efficient)  
 .016" copper tubes, 1/2in. diameter  
 Galvanized steel coil casing  
 Turbulators  
 Coil connections – standard

**Fan section (Pos #6)**

Supply fan section  
 Door- right side, outward swing  
 22.25in. **direct drive plenum fan**, 80% width, H press  
 2 fan array  
 Right side drive  
 NEMA premium compliant ODP  
 Voltage 460/3  
 10 HP (each fan)  
 1800 RPM  
 Inverter balance with shaft grounding  
 Top rectangular discharge  
 External junction box

**Item: A4 Qty: 1 Tag(s): AHU-4****Unit level options**

Indoor unit, size 30  
 6in. integral base frame  
 UL listed unit  
 Multiple composite handles/latches  
 249.027" total unit length  
 Field provided controls (by others)

**Controls and VFD/starter**

No unit controller  
 Supply fan external junction box, field provided NEMA  
 Return fan external junction box, field provided NEMA

**Warranty**

5-year parts and labor warranty – entire unit

**Air mixing section (Pos #1)**

Reduced length mixing box w/o filters  
 Door- right side  
 Front full face opening  
 Top rectangular opening

**Fan section (Pos #2)**

Return fan section  
 Door- right side, outward swing  
 30in. **direct drive plenum fan**, full width, M press  
 1 fan  
 Right side drive  
 NEMA premium compliant ODP  
 Voltage 460/3  
 7.5 HP  
 1200 RPM  
 Inverter balance with shaft grounding  
 Top damper - opposed blade  
 External junction box

**Air mixing section (Pos #3)**

Mixing box w/filters  
 Door- right side  
 Back damper - parallel blade  
 Front full face opening  
 Top damper - parallel blade  
 2in. filter frame

**Pleated media, MERV 8 (Field Installed)**

**Coil section (Pos #4)**

Medium horizontal coil  
 Right side - coil supply  
 5W hot water heating coil, 1 row  
 80 coil fins per foot  
 Aluminum fins  
 Prima flo E (energy efficient)

.020" copper tubes, 5/8in. diameter  
Galvanized steel coil casing  
Coil connections - standard

**Access section (Pos #5)**

Extended medium access section  
Door- right side

**Coil section (Pos #6)**

Small horizontal coil  
Stainless steel drain pan  
Right side - drain & coil connections  
Type "3U" chilled water cooling coil, 4 rows  
136 coil fins per foot  
Aluminum fins  
Omega flo H (Hi efficient)  
.012" copper tubes, 3/8in. diameter  
Galvanized steel coil casing  
Turbulators  
Coil connections - standard

**Access section (Pos #7)**

Extended medium access section  
Door- right side

**Fan section (Pos #8)**

Supply fan section  
Door- right side, outward swing  
27in. [direct drive plenum fan](#), full width, H press  
1 fan  
Right side drive  
NEMA premium compliant ODP  
Voltage 460/3  
15 HP  
1800 RPM  
Inverter balance with shaft grounding  
Top rectangular discharge  
External junction box

**Item: A5 Qty: 1 Tag(s): AHU-5****Unit level options**

Indoor unit, size 10  
6in. integral base frame  
UL listed unit  
Multiple composite handles/latches  
199.566" total unit length  
Field provided controls (by others)

**Controls and VFD/starter**

No unit controller  
Supply fan external junction box, field provided NEMA  
Return fan external junction box, field provided NEMA

**Warranty**

5-year parts and labor warranty – entire unit

**Air mixing section (Pos #1)**

Reduced length mixing box w/o filters  
Door- left side  
Front full face opening  
Bottom rectangular opening

**Fan section (Pos #2)**

Return fan section  
Door- left side, outward swing  
18.25in. [direct drive plenum fan](#), 80% width, M press  
1 fan  
Left side drive  
NEMA premium compliant ODP

Voltage 460/3  
 2 HP  
 1800 RPM  
 Inverter balance with shaft grounding  
 Top damper - opposed blade  
 External junction box

**Air mixing section (Pos #3)**

Mixing box w/filters  
 Door- left side  
 Back damper - parallel blade  
 Front full face opening  
 Top damper - parallel blade  
 2in. filter frame

Pleated media, MERV 8 (Field Installed)

**Coil section (Pos #4)**

Medium horizontal coil  
 Left side - coil supply  
 5W hot water heating coil, 1 row  
 80 coil fins per foot  
 Aluminum fins  
 Prima flo H (Hi efficient)  
 .020" copper tubes, 5/8in. diameter  
 Galvanized steel coil casing  
 Coil connections - standard

**Access section (Pos #5)**

Extended medium access section  
 Door- left side

**Coil section (Pos #6)**

Small horizontal coil  
 Stainless steel drain pan  
 Left side - drain & coil connections  
 Type "UW" chilled water cooling coil, 4 rows  
 133 coil fins per foot  
 Aluminum fins  
 Delta flo H (Hi efficient)  
 .016" copper tubes, 1/2in. diameter  
 Galvanized steel coil casing  
 Turbulators  
 Coil connections - standard

**Access section (Pos #7)**

Extended medium access section  
 Door- left side

**Fan section (Pos #8)**

Supply fan section  
 Door- left side, outward swing  
 18.25in. **direct drive plenum fan**, full width, M press  
 1 fan  
 Left side drive  
 NEMA premium compliant ODP  
 Voltage 460/3  
 3 HP  
 1800 RPM  
 Inverter balance with shaft grounding  
 Bottom rectangular discharge  
 External junction box

**Item: A6 Qty: 1 Tag(s): AHU-6**

**Unit level options**

Indoor unit, size 21  
 6in. integral base frame  
 UL listed unit

Multiple composite handles/latches  
 213.846" total unit length  
 Field provided controls (by others)

**Controls and VFD/starter**

No unit controller  
 Supply fan external junction box, field provided NEMA  
 Return fan external junction box, field provided NEMA

**Warranty**

5-year parts and labor warranty – entire unit

**Air mixing section (Pos #1)**

Reduced length mixing box w/o filters  
 Door- right side  
 Front full face opening  
 Bottom rectangular opening

**Fan section (Pos #2)**

Return fan section  
 Door- right side, outward swing  
 22.25in. **direct drive plenum fan**, 80% width, H press  
 1 fan  
 Right side drive  
 NEMA premium compliant ODP  
 Voltage 460/3  
 7.5 HP  
 1800 RPM  
 Inverter balance with shaft grounding  
 Top damper - opposed blade  
 External junction box

**Air mixing section (Pos #3)**

Mixing box w/filters  
 Door- right side  
 Back damper - parallel blade  
 Front full face opening  
 Top damper - parallel blade  
 2in. filter frame

**Pleated media, MERV 8 (Field Installed)**

**Coil section (Pos #4)**

Medium horizontal coil  
 Stainless steel drain pan  
 Right side - drain & coil connections  
 Type "UW" chilled water cooling coil, 4 rows  
 165 coil fins per foot  
 Aluminum fins  
 Delta flo H (Hi efficient)  
 .016" copper tubes, 1/2in. diameter  
 Galvanized steel coil casing  
 Coil connections - standard

**Access section (Pos #5)**

Extended medium access section  
 Door- right side

**Coil section (Pos #6)**

Medium horizontal coil  
 Right side - coil supply  
 Modified coil height w/ vert blkoff  
 5W hot water heating coil, 1 row  
 91 coil fins per foot  
 Aluminum fins  
 Prima flo E (energy efficient)  
 .020" copper tubes, 5/8in. diameter  
 Galvanized steel coil casing  
 Coil connections - standard

**Access section (Pos #7)**

Extended medium access section

Door- right side

**Fan section (Pos #8)**

Supply fan section

Door- right side, outward swing

22.25in. **direct drive plenum fan**, full width, H press

1 fan

Right side drive

NEMA premium compliant ODP

Voltage 460/3

7.5 HP

1800 RPM

Inverter balance with shaft grounding

Top rectangular discharge

External junction box

**Item: A7 Qty: 1 Tag(s): AHU-7****Unit level options**

Indoor unit, size 21

6in. integral base frame

UL listed unit

Multiple composite handles/latches

213.846" total unit length

Field provided controls (by others)

**Controls and VFD/starter**

No unit controller

Supply fan external junction box, field provided NEMA

Return fan external junction box, field provided NEMA

**Warranty**

5-year parts and labor warranty – entire unit

**Air mixing section (Pos #1)**

Reduced length mixing box w/o filters

Door- right side

Front full face opening

Top rectangular opening

**Fan section (Pos #2)**

Return fan section

Door- right side, outward swing

22.25in. **direct drive plenum fan**, 80% width, H press

1 fan

Plenum fan

Right side drive

NEMA premium compliant ODP

Voltage 460/3

7.5 HP

1800 RPM

Inverter balance with shaft grounding

Top damper - opposed blade

External junction box

**Air mixing section (Pos #3)**

Air mixing section

Mixing box w/filters

Door- right side

Back damper - parallel blade

Front full face opening

Top damper - parallel blade

2in. filter frame

**Pleated media, MERV 8 (Field Installed)**

**Coil section (Pos #4)**

Medium horizontal coil  
 Stainless steel drain pan  
 Right side - drain & coil connections  
 Type "UW" chilled water cooling coil, 6 rows  
 84 coil fins per foot  
 Aluminum fins  
 Delta flo H (Hi efficient)  
 .016" copper tubes, 1/2in. diameter  
 Galvanized steel coil casing  
 Coil connections - standard

**Access section (Pos #5)**

Extended medium access section  
 Door- right side

**Coil section (Pos #6)**

Medium horizontal coil  
 Right side - coil supply  
 Modified coil height w/ vert blkoff  
 5W hot water heating coil, 1 row  
 91 coil fins per foot  
 Aluminum fins  
 Prima flo E (energy efficient)  
 .020" copper tubes, 5/8in. diameter  
 Galvanized steel coil casing  
 Coil connections - standard

**Access section (Pos #7)**

Extended medium access section  
 Door- right side

**Fan section (Pos #8)**

Supply fan section  
 Door- right side, outward swing  
 22.25in. **direct drive plenum fan**, full width, H press  
 1 fan  
 Right side drive  
 NEMA premium compliant ODP  
 Voltage 460/3  
 7.5 HP  
 1800 RPM  
 Inverter balance with shaft grounding  
 Top rectangular discharge  
 External junction box

**Item: A8 Qty: 1 Tag(s): AHU-8**

**Unit level options**

Indoor unit, size 8  
 6in. integral base frame  
 UL listed unit  
 Multiple composite handles/latches  
 199.566" total unit length  
 Field provided controls (by others)

**Controls and VFD/starter**

No unit controller  
 Supply fan external junction box, field provided NEMA  
 Return fan external junction box, field provided NEMA

**Warranty**

5-year parts and labor warranty – entire unit

**Air mixing section (Pos #1)**

Reduced length mixing box w/o filters  
 Door- right side  
 Front full face opening  
 Bottom rectangular opening

**Fan section (Pos #2)**

Return fan section  
Door- right side, outward swing  
18.25in. **direct drive plenum fan**, 80% width, M press  
1 fan  
Right side drive  
NEMA premium compliant ODP  
Voltage 460/3  
2 HP  
1800 RPM  
Inverter balance with shaft grounding  
Top damper - opposed blade  
External junction box

**Air mixing section (Pos #3)**

Mixing box w/filters  
Door- right side  
Back damper - parallel blade  
Front full face opening  
Top damper - parallel blade  
2in. filter frame  
**Plated media, MERV 8 (Field Installed)**

**Coil section (Pos #4)**

Medium horizontal coil  
Right side - coil supply  
5W hot water heating coil, 1 row  
80 coil fins per foot  
Aluminum fins  
Prima flo H (Hi efficient)  
.020" copper tubes, 5/8in. diameter  
Galvanized steel coil casing  
Turbulators  
Coil connections - standard

**Access section (Pos #5)**

Extended medium access section  
Door- right side

**Coil section (Pos #6)**

Small horizontal coil  
Stainless steel drain pan  
Right side - drain & coil connections  
Type "UP" chilled water cooling coil, 4 rows  
162 coil fins per foot  
Aluminum fins  
Delta flo H (Hi efficient)  
.016" copper tubes, 1/2in. diameter  
Galvanized steel coil casing  
Coil connections - standard

**Access section (Pos #7)**

Extended medium access section  
Door- right side

**Fan section (Pos #8)**

Supply fan section  
Door- right side, outward swing  
18.25in. **direct drive plenum fan**, 80% width, M press  
1 fan  
Right side drive  
NEMA premium compliant ODP  
Voltage 460/3  
5 HP, 1800 RPM  
Inverter balance with shaft grounding  
Bottom rectangular discharge  
External junction box

**Item: A9 Qty: 1 Tag(s): AHU-9****Unit level options**

Indoor unit, size 14  
 6in. integral base frame  
 UL listed unit  
 Multiple composite handles/latches  
 210.37" total unit length  
 Field provided controls (by others)

**Controls and VFD/starter**

No unit controller  
 Supply fan external junction box, field provided NEMA  
 Return fan external junction box, field provided NEMA

**Warranty**

5-year parts warranty – entire unit

**Air mixing section (Pos #1)**

Reduced length mixing box w/o filters  
 Door- left side  
 Front full face opening  
 Top rectangular opening

**Fan section (Pos #2)**

Return fan section  
 Door- left side, outward swing  
 20in. **direct drive plenum fan**, full width, M press  
 1 fan  
 Left side drive  
 NEMA premium compliant ODP  
 Voltage 460/3  
 5 HP  
 1800 RPM  
 Inverter balance with shaft grounding  
 Top damper - opposed blade  
 External junction box

**Air mixing section (Pos #3)**

Mixing box w/filters  
 Door- left side  
 Back damper - parallel blade  
 Front full face opening  
 Top damper - parallel blade  
 2in. filter frame

**Pleated media, MERV 8 (Field Installed)**

**Coil section (Pos #4)**

Medium horizontal coil  
 Left side - coil supply  
 5W hot water heating coil, 1 row  
 80 coil fins per foot  
 Aluminum fins  
 Prima flo E (energy efficient)  
 .020" copper tubes, 5/8in. diameter  
 Galvanized steel coil casing  
 Coil connections - standard

**Access section (Pos #5)**

Extended medium access section  
 Door- left side

**Coil section (Pos #6)**

Small horizontal coil  
 Stainless steel drain pan  
 Left side - drain & coil connections  
 Type "UW" chilled water cooling coil, 4 rows  
 143 coil fins per foot  
 Aluminum fins  
 Delta flo H (Hi efficient)

.016" copper tubes, 1/2in. diameter  
 Galvanized steel coil casing  
 Turbulators  
 Coil connections - standard

**Access section (Pos #7)**

Extended medium access section  
 Door- left side

**Fan section (Pos #8)**

Supply fan section  
 Door- left side, outward swing  
 22.25in. **direct drive plenum fan**, 80% width, H press  
 1 fan  
 Left side drive  
 NEMA premium compliant ODP  
 Voltage 460/3  
 7.5 HP  
 1800 RPM  
 Inverter balance with shaft grounding  
 Top rectangular discharge  
 External junction box

**Item: A10 Qty: 1 Tag(s): AHU-10**

**Unit level options**

Indoor unit, size 8  
 6in. integral base frame  
 UL listed unit  
 Multiple composite handles/latches  
 196.864" total unit length  
 Field provided controls (by others)

**Controls and VFD/starter**

No unit controller  
 Supply fan external junction box, field provided NEMA  
 Return fan external junction box, field provided NEMA

**Warranty**

5-year parts warranty – entire unit

**Air mixing section (Pos #1)**

Reduced length mixing box w/o filters  
 Door- left side  
 Front full face opening  
 Top rectangular opening

**Fan section (Pos #2)**

Return fan section  
 Door- left side, outward swing  
 16.5in. **direct drive plenum fan**, full width, M press  
 1 fan  
 Left side drive  
 NEMA premium compliant ODP  
 Voltage 460/3  
 2 HP  
 1800 RPM  
 Inverter balance with shaft grounding

**COORDINATE WITH ELECTRICAL**

Top damper - opposed blade  
 External junction box

**Air mixing section (Pos #3)**

Mixing box w/filters  
 Door- left side  
 Back damper - parallel blade  
 Front full face opening  
 Top damper - parallel blade  
 2in. filter frame

**Pleated media, MERV 8 (Field Installed)**

**Coil section (Pos #4)**

Medium horizontal coil  
Left side - coil supply  
Type "TT" pot water heating coil, 1 row  
80 coil fins per foot  
Aluminum fins  
Prima flo E (energy efficient)  
.020" copper tubes, 5/8in. diameter  
Galvanized steel coil casing  
Coil connections - standard

**Access section (Pos #5)**

Extended medium access section  
Door- left side

**Coil section (Pos #6)**

Small horizontal coil  
Stainless steel drain pan  
Left side – drain & coil connections  
Type "UP" chilled water cooling coil, 4 rows  
148 coil fins per foot  
Aluminum fins  
Delta flo H (Hi efficient)  
.016" copper tubes, 1/2in. diameter  
Galvanized steel coil casing  
Coil connections - standard

**Access section (Pos #7)**

Extended medium access section  
Door- left side

**Fan section (Pos #8)**

Supply fan section  
Door- left side, outward swing  
16.5in. [direct drive plenum fan](#), full width, M press  
1 fan  
Left side drive  
NEMA premium compliant ODP  
Voltage 460/3  
5 HP  
1800 RPM  
Inverter balance with shaft grounding  
Top rectangular discharge  
External junction box

**Performance Data - Performance Climate Changer (CSAA)**

Tags	AHU-1		AHU-2		AHU-3	
<b>Unit Level Options</b>						
Length (in)	234.581		245.926		240.598	
Width (in)	80.000		80.000		100.000	
Height (in)	65.000		65.000		70.750	
Rigging weight (lb)	4582.7		4878.9		6373.1	
Installed weight (lb)	4715.7		5052.0		6547.9	
Actual airflow (cfm)	11100		12900		17000	
Shipping split 1 weight (lb)	1462.1		1811.9		2354.6	
Shipping split 2 weight (lb)	1488.5		1607.0		1440.5	
Shipping split 3 weight (lb)	1765.1		1633.1		2752.7	
<b>Fan Section - Position</b>						
	SA #2	RA #8	SA #2	RA #8	SA #2	RA #6
Fan airflow (cfm)	11100	11100	12900	12900	17000	17000
Overall ESP (in H2O)	0.500	2.000	0.500	2.000	0.500	2.000
Total static pressure (in H2O)	1.403	3.526	1.720	3.876	1.225	3.647
Fan pressure drop (in H2O)	1.403	2.211	1.720	2.285	1.225	2.211
Speed (rpm)	1766	1451	1341	1792	1248	2153
Total brake horsepower (hp)	6.132	8.414	5.921	11.937	6.386	16.990
Unit static efficiency (%)	40.04	73.34	59.07	66.03	51.43	57.53
Motor hertz (Hz)	60.00	74.00	68.00	61.00	64.00	73.00
Discharge 1 top - airflow (cfm)	11100	11100	12900	12900	17000	17000
Discharge 1 front - face velocity (ft/min)	382	-	444	-	420	-
Discharge 1 top - face velocity (ft/min)	1674	1300	1946	1510	1518	1299
Discharge 1 front - pressure drop (in H2O)	0.023	-	0.031	-	0.027	-
Discharge 1 top - pressure drop (in H2O)	0.262	0.211	0.354	0.285	0.215	0.211
Discharge 1 front - area (sq ft)	8.54	-	8.54	-	13.56	-
Discharge 1 top - area (sq ft)	6.63	8.54	6.63	8.54	11.20	13.09
<b>Access Section - Position</b>						
	#5	#7	#5	#7		
Section length (in)	19.000	19.000	19.000	19.000		
Section weight (lb)	161.0	173.6	161.0	173.6		
<b>Coil Section - Position</b>						
	#4	#6	#4	#6	#4	#5
Coil performance airflow (cfm)	11100	11100	12900	12900	17000	17000
Coil face area (sq ft)	24.08	24.97	24.08	24.97	32.63	34.94
Coil face velocity (ft/min)	461	444	536	517	521	487
Coil section pressure drop (in H2O)	0.058	0.510	0.076	0.684	0.073	0.549
Coil rigging weight (lb)	99.1	294.6	99.1	340.4	124.7	396.9
Coil installed weight (lb)	132.7	394.0	132.7	479.9	167.3	529.1
Top or single coil dry weight (lb)	99.1	294.6	99.1	340.4	124.7	396.9
Leaving dry bulb (F)	84.80	56.00	83.39	56.00	84.64	56.00
Leaving wet bulb (F)	-	55.61	-	55.33	-	55.44
Entering dry bulb (F)	65.00	80.00	65.00	80.00	65.00	80.00
Entering wet bulb (F)	-	67.00	-	67.00	-	67.00
Fluid type	Water	Water	Water	Water	Water	Water
Entering fluid temperature (F)	180.00	44.00	180.00	44.00	180.00	44.00
Leaving fluid temperature (F)	140.00	56.00	140.00	56.00	140.00	56.00
Standard fluid flow rate (gpm)	11.91	65.58	12.86	77.88	18.10	101.77
Fluid pressure drop (ft fluid)	0.30	3.90	0.35	7.07	0.69	5.35
Fluid velocity (ft/s)	0.77	2.74	0.84	3.26	1.11	1.94
Fluid volume (gal)	4.03	11.89	4.03	16.69	5.12	15.81
Sensible capacity (MBh)	-	293.66	-	341.28	-	449.75
Total capacity (MBh)	238.29	394.87	257.28	468.94	362.10	612.75
<b>Air Mixing Section - Position</b>						
	#1	#3	#1	#3	#1	#3
Opening 1 back - airflow (cfm)	-	11100	-	12900	-	17000
Opening 1 front - airflow (cfm)	11100	11100	12900	12900	17000	17000
Opening 1 top - airflow (cfm)	11100	11100	12900	12900	17000	17000
Opening 1 back - area (sq ft)	-	10.36	-	10.36	-	14.32

Tags	AHU-1		AHU-2		AHU-3	
Opening 1 front - area (sq ft)	29.03	29.03	29.03	29.03	40.50	40.50
Opening 1 top - area (sq ft)	6.55	10.36	6.55	10.36	9.07	14.32
Opening 1 back - face velocity (ft/min)	-	1071	-	1245	-	1187
Opening 1 top - face velocity (ft/min)	1696	1071	1971	1245	1874	1187
Opening 1 back - pressure drop (in H2O)	-	0.201	-	0.271	-	0.252
Opening 1 top - pressure drop (in H2O)	0.000	0.096	0.000	0.130	0.000	0.115
Back inlet type	-	Ducted	-	Ducted	-	Ducted
Top inlet type	Ducted	Ducted	Ducted	Ducted	Ducted	Ducted
Filter condition	-	Mid-life	-	Mid-life	-	Mid-life
Filter airflow (cfm)	-	11100	-	12900	-	17000
Filter area (sq ft)	-	50.00	-	50.00	-	63.33
Filter face velocity (ft/min)	-	222	-	258	-	268
Filter pressure drop (in H2O)	-	0.547	-	0.559	-	0.563

Tags	AHU-4		AHU-5		AHU-6	
<b>Unit Level Options</b>						
Length (in)	249.027		199.566		213.846	
Width (in)	93.500		61.500		80.000	
Height (in)	65.000		41.250		56.250	
Rigging weight (lb)	5215.7		2394.5		3730.4	
Installed weight (lb)	5341.4		2448.9		3835.6	
Actual airflow (cfm)	14900		4200		9000	
Shipping split 1 weight (lb)	2015.4		824.7		1343.2	
Shipping split 2 weight (lb)	1606.5		835.3		1281.3	
Shipping split 3 weight (lb)	1719.4		788.9		1211.1	
<b>Fan Section - Position</b>						
	SA #2	RA #8	SA #2	RA #8	SA #2	RA #8
Fan airflow (cfm)	14900	14900	4200	4200	9000	9000
Overall ESP (in H2O)	0.500	2.000	0.500	0.750	0.500	0.750
Total static pressure (in H2O)	1.618	3.765	0.735	2.218	1.094	2.312
Fan pressure drop (in H2O)	1.618	2.266	0.735	0.951	1.094	0.950
Speed (rpm)	1147	1702	1715	1790	1935	1791
Total brake horsepower (hp)	6.245	12.997	1.482	2.406	5.529	6.288
Unit static efficiency (%)	60.86	68.05	32.84	61.03	28.07	52.17
Motor hertz (Hz)	58.00	58.00	58.00	61.00	66.00	61.00
Discharge 1 top - airflow (cfm)	14900	14900	4200	-	9000	9000
Discharge 1 bottom - airflow (cfm)	-	-	-	4200	-	-
Discharge 1 front - face velocity (ft/min)	436	-	337	-	369	-
Discharge 1 top - face velocity (ft/min)	1877	1460	870	-	1357	1264
Discharge 1 bottom - face velocity (ft/min)	-	-	-	1268	-	-
Discharge 1 front - pressure drop (in H2O)	0.030	-	0.018	-	0.021	-
Discharge 1 top - pressure drop (in H2O)	0.329	0.266	0.071	-	0.172	0.200
Discharge 1 bottom - pressure drop (in H2O)	-	-	-	0.201	-	-
Discharge 1 front - area (sq ft)	10.21	-	3.33	-	7.12	-
Discharge 1 top - area (sq ft)	7.94	10.21	4.83	-	6.63	7.12
Discharge 1 bottom - area (sq ft)	-	-	-	3.31	-	-
<b>Access Section - Position</b>						
	#5	#7	#5	#7	#5	#7
Section length (in)	19.000	19.000	19.000	19.000	19.000	19.000
Section weight (lb)	176.0	190.8	121.0	130.7	154.0	166.6
<b>Coil Section - Position</b>						
	#4	#6	#4	#6	#4	#6
Coil performance airflow (cfm)	14900	14900	4200	4200	9000	9000
Coil face area (sq ft)	28.69	29.61	9.19	9.98	20.81	15.58
Coil face velocity (ft/min)	519	503	457	421	432	578
Coil section pressure drop (in H2O)	0.072	0.601	0.061	0.405	0.499	0.097

Tags	AHU-4		AHU-5		AHU-6	
Coil rigging weight (lb)	112.8	300.9	49.7	126.8	252.4	73.9
Coil installed weight (lb)	151.0	388.4	64.6	166.3	335.3	96.2
Top or single coil dry weight (lb)	112.8	300.9	49.7	126.8	252.4	73.9
Leaving dry bulb (F)	84.40	56.00	83.52	56.00	56.00	78.32
Leaving wet bulb (F)	-	55.11	-	55.34	55.66	-
Entering dry bulb (F)	65.00	80.00	65.00	80.00	80.00	56.00
Entering wet bulb (F)	-	67.00	-	67.00	67.00	-
Fluid type	Water	Water	Water	Water	Water	Water
Entering fluid temperature (F)	180.00	44.00	180.00	44.00	44.00	180.00
Leaving fluid temperature (F)	140.00	56.00	140.00	56.00	56.00	140.00
Standard fluid flow rate (gpm)	15.67	91.49	4.22	25.34	52.97	10.89
Fluid pressure drop (ft fluid)	0.54	9.21	0.07	3.83	3.95	0.38
Fluid velocity (ft/s)	1.02	2.69	0.52	1.98	2.67	1.09
Fluid volume (gal)	4.59	10.46	1.80	4.72	9.90	2.68
Sensible capacity (MBh)	-	394.19	-	111.11	238.10	-
Total capacity (MBh)	313.45	550.87	84.35	152.57	318.93	217.84
<b>Air Mixing Section - Position</b>	<b>#1</b>	<b>#3</b>	<b>#1</b>	<b>#3</b>	<b>#1</b>	<b>#3</b>
Opening 1 back - airflow (cfm)	-	14900	-	4200	-	9000
Opening 1 front - airflow (cfm)	14900	14900	4200	4200	9000	9000
Opening 1 top - airflow (cfm)	14900	14900	-	4200	-	9000
Opening 1 bottom - airflow (cfm)	-	-	4200	-	9000	-
Opening 1 back - area (sq ft)	-	12.04	-	4.16	-	8.64
Opening 1 front - area (sq ft)	34.18	34.18	12.48	12.48	24.41	24.41
Opening 1 top - area (sq ft)	7.80	12.04	-	4.16	-	8.64
Opening 1 bottom - area (sq ft)	-	-	2.69	-	5.46	-
Opening 1 back - face velocity (ft/min)	-	1238	-	1010	-	1042
Opening 1 top - face velocity (ft/min)	1909	1238	-	1010	-	1042
Opening 1 bottom - face velocity (ft/min)	-	-	1562	-	1648	-
Opening 1 back - pressure drop (in H2O)	-	0.265	-	0.226	-	0.202
Opening 1 top - pressure drop (in H2O)	0.000	0.121	-	0.199	-	0.118
Opening 1 bottom - pressure drop (in H2O)	-	-	0.000	-	0.000	-
Back inlet type	-	Ducted	-	Ducted	-	Ducted
Top inlet type	Ducted	Ducted	-	Ducted	-	Ducted
Bottom inlet type	-	-	Ducted	-	Ducted	-
Filter condition	-	Mid-life	-	Mid-life	-	Mid-life
Filter airflow (cfm)	-	14900	-	4200	-	9000
Filter area (sq ft)	-	56.67	-	13.89	-	33.33
Filter face velocity (ft/min)	-	263	-	302	-	270
Filter pressure drop (in H2O)	-	0.561	-	0.575	-	0.563
Total mixing section pressure drop (in H2O)	0.000	0.825	0.000	0.801	0.000	0.766

Tags	AHU-7		AHU-8		AHU-9	
<b>Unit Level Options</b>						
Length (in)	213.846		199.566		210.370	
Width (in)	80.000		50.500		72.000	
Height (in)	56.250		41.250		45.000	
Rigging weight (lb)	3758.2		2175.3		2901.8	
Installed weight (lb)	3896.5		2218.9		2972.3	
Actual airflow (cfm)	8700		4000		6900	
Shipping split 1 weight (lb)	1343.2		753.5		1002.5	
Shipping split 2 weight (lb)	1342.2		736.2		998.0	
Shipping split 3 weight (lb)	1211.1		729.2		971.8	

Tags	AHU-7		AHU-8		AHU-9	
Fan Section - Position	SA #2	RA #8	SA #2	RA #8	SA #2	RA #8
Fan airflow (cfm)	8700	8700	4000	4000	6900	6900
Overall ESP (in H2O)	0.500	0.750	0.500	2.000	0.500	2.000
Total static pressure (in H2O)	1.055	2.245	0.859	3.892	0.954	3.792
Fan pressure drop (in H2O)	1.055	0.937	0.859	2.264	0.954	2.250
Speed (rpm)	1875	1743	1678	2261	1717	1938
Total brake horsepower (hp)	5.046	5.818	1.427	3.896	2.957	6.636
Unit static efficiency (%)	28.67	52.94	37.95	62.99	35.09	62.16
Motor hertz (Hz)	64.00	59.00	57.00	77.00	58.00	66.00
Discharge 1 top - airflow (cfm)	8700	8700	4000	-	6900	6900
Discharge 1 bottom - airflow (cfm)	-	-	-	4000	-	-
Discharge 1 front - face velocity (ft/min)	356	-	396	-	417	-
Discharge 1 top - face velocity (ft/min)	1312	1222	1061	-	1179	1413
Discharge 1 bottom - face velocity (ft/min)	-	-	-	1455	-	-
Discharge 1 front - pressure drop (in H2O)	0.020	-	0.025	-	0.027	-
Discharge 1 top - pressure drop (in H2O)	0.161	0.187	0.105	-	0.130	0.250
Discharge 1 bottom - pressure drop (in H2O)	-	-	-	0.264	-	-
Discharge 1 front - area (sq ft)	7.12	-	2.67	-	4.88	-
Discharge 1 top - area (sq ft)	6.63	7.12	3.77	-	5.85	4.88
Discharge 1 bottom - area (sq ft)	-	-	-	2.75	-	-
Access Section - Position	#5	#7	#5	#7	#5	#7
Section length (in)	19.000	19.000	19.000	19.000	19.000	19.000
Section weight (lb)	154.0	166.6	109.0	117.0	135.0	146.4
Coil Section - Position	#4	#6	#4	#6	#4	#6
Coil performance airflow (cfm)	8700	8700	4000	4000	6900	6900
Coil face area (sq ft)	20.81	15.58	7.31	7.99	12.50	13.65
Coil face velocity (ft/min)	418	558	547	501	552	505
Coil section pressure drop (in H2O)	0.468	0.092	0.083	0.620	0.081	0.568
Coil rigging weight (lb)	280.2	73.9	43.5	108.5	61.3	166.6
Coil installed weight (lb)	396.2	96.2	56.5	139.1	80.0	218.4
Top or single coil dry weight (lb)	280.2	73.9	43.5	108.5	61.3	166.6
Leaving dry bulb (F)	56.00	78.69	84.68	56.00	82.47	56.00
Leaving wet bulb (F)	55.30	-	-	55.55	-	55.35
Entering dry bulb (F)	80.00	56.00	65.00	80.00	65.00	80.00
Entering wet bulb (F)	67.00	-	-	67.00	-	67.00
Fluid type	Water	Water	Water	Water	Water	Water
Entering fluid temperature (F)	44.00	180.00	180.00	44.00	180.00	44.00
Leaving fluid temperature (F)	56.00	140.00	140.00	56.00	140.00	56.00
Standard fluid flow rate (gpm)	52.68	10.70	4.27	23.74	6.53	41.61
Fluid pressure drop (ft fluid)	5.12	0.37	0.45	7.00	0.16	8.29
Fluid velocity (ft/s)	2.66	1.08	0.52	3.70	0.72	2.86
Fluid volume (gal)	13.88	2.68	1.57	3.66	2.25	6.19
Sensible capacity (MBh)	230.16	-	-	105.82	-	182.54
Total capacity (MBh)	317.20	214.11	85.35	142.96	130.73	250.55
Air Mixing Section - Position	#1	#3	#1	#3	#1	#3
Opening 1 back - airflow (cfm)	-	8700	-	4000	-	6900
Opening 1 front - airflow (cfm)	8700	8700	4000	4000	6900	6900
Opening 1 top - airflow (cfm)	8700	8700	-	4000	6900	6900
Opening 1 bottom - airflow (cfm)	-	-	4000	-	-	-
Opening 1 back - area (sq ft)	-	8.64	-	3.33	-	5.66
Opening 1 front - area (sq ft)	24.41	24.41	10.09	10.09	16.53	16.53
Opening 1 top - area (sq ft)	5.46	8.64	-	3.33	3.68	5.66
Opening 1 bottom - area (sq ft)	-	-	2.16	-	-	-
Opening 1 back - face velocity (ft/min)	-	1007	-	1201	-	1219
Opening 1 top - face velocity (ft/min)	1593	1007	-	1201	1877	1219
Opening 1 bottom - face velocity (ft/min)	-	-	1854	-	-	-

Tags	AHU-7		AHU-8		AHU-9	
Opening 1 back - pressure drop (in H2O)	-	0.189	-	0.330	-	0.290
Opening 1 top - pressure drop (in H2O)	0.000	0.110	-	0.309	0.000	0.192
Opening 1 bottom - pressure drop (in H2O)	-	-	0.000	-	-	-
Back inlet type	-	Ducted	-	Ducted	-	Ducted
Top inlet type	Ducted	Ducted	-	Ducted	Ducted	Ducted
Bottom inlet type	-	-	Ducted	-	-	-
Filter condition	-	Mid-life	-	Mid-life	-	Mid-life
Filter airflow (cfm)	-	8700	-	4000	-	6900
Filter area (sq ft)	-	33.33	-	11.11	-	18.06
Filter face velocity (ft/min)	-	261	-	360	-	382
Filter total pressure drop (in H2O)	-	0.560	-	0.595	-	0.604
Total mixing section pressure drop (in H2O)	0.000	0.749	0.000	0.925	0.000	0.893

Tags	AHU-10	
<b>Unit Level Options</b>		
Length (in)	196.864	
Width (in)	50.500	
Height (in)	41.250	
Rigging weight (lb)	2132.5	
Installed weight (lb)	2170.3	
Actual airflow (cfm)	3500	
Shipping split 1 weight (lb)	738.0	
Shipping split 2 weight (lb)	718.5	
Shipping split 3 weight (lb)	713.8	
<b>Fan Section - Position</b>	<b>SA #2</b>	<b>RA #8</b>
Fan airflow (cfm)	3500	3500
Overall ESP (in H2O)	0.500	2.000
Total static pressure (in H2O)	0.775	3.583
Fan pressure drop (in H2O)	0.775	2.215
Speed (rpm)	1844	2392
Total brake horsepower (hp)	1.285	3.268
Unit static efficiency (%)	33.26	60.50
Motor hertz (Hz)	63.00	81.00
Discharge 1 top - airflow (cfm)	3500	3500
Discharge 1 front - face velocity (ft/min)	347	-
Discharge 1 top - face velocity (ft/min)	928	1313
Discharge 1 front - pressure drop (in H2O)	0.019	-
Discharge 1 top - pressure drop (in H2O)	0.081	0.215
Discharge 1 front - area (sq ft)	2.67	-
Discharge 1 top - area (sq ft)	3.77	2.67
<b>Access Section - Position</b>	<b>#5</b>	<b>#7</b>
Section length (in)	19.000	19.000
Section weight (lb)	109.0	117.0
<b>Coil Section - Position</b>	<b>#4</b>	<b>#6</b>
Coil performance airflow (cfm)	3500	3500
Coil face area (sq ft)	6.50	7.99
Coil face velocity (ft/min)	538	438
Coil section pressure drop (in H2O)	0.077	0.459
Coil rigging weight (lb)	34.8	105.3
Coil installed weight (lb)	42.0	135.9
Top or single coil dry weight (lb)	34.8	105.3
Leaving dry bulb (F)	85.84	56.00
Leaving wet bulb (F)	-	55.50
Entering dry bulb (F)	65.00	80.00

Tags	AHU-10	
Entering wet bulb (F)	-	67.00
Fluid type	Water	Water
Entering fluid temperature (F)	180.00	44.00
Leaving fluid temperature (F)	140.00	56.00
Standard fluid flow rate (gpm)	3.95	20.86
Fluid pressure drop (ft fluid)	2.05	5.55
Fluid velocity (ft/s)	2.18	3.25
Fluid volume (gal)	0.86	3.66
Sensible capacity (MBh)	-	92.59
Total capacity (MBh)	79.11	125.61
<b>Air Mixing Section - Position</b>	<b>#1</b>	<b>#3</b>
Opening 1 back - airflow (cfm)	-	3500
Opening 1 front - airflow (cfm)	3500	3500
Opening 1 top - airflow (cfm)	3500	3500
Opening 1 back - area (sq ft)	-	3.33
Opening 1 front - area (sq ft)	10.09	10.09
Opening 1 top - area (sq ft)	2.16	3.33
Opening 1 back - face velocity (ft/min)	-	1051
Opening 1 top - face velocity (ft/min)	1623	1051
Opening 1 back - pressure drop (in H2O)	-	0.253
Opening 1 top - pressure drop (in H2O)	0.000	0.237
Back inlet type	-	Ducted
Top inlet type	Ducted	Ducted
Filter condition	-	Mid-life
Filter airflow (cfm)	-	3500
Filter area (sq ft)	-	11.11
Filter face velocity (ft/min)	-	315
Filter total pressure drop (in H2O)	-	0.579
Total mixing section pressure drop (in H2O)	0.000	0.832

**Mechanical Specifications - Performance Climate Changer (CSAA)****Item: A1 - A10 Qty: 10 Tag(s): AHU-1, AHU-2, AHU-3, AHU-4, AHU-5, AHU-6, AHU-7, AHU-8, AHU-9, AHU-10****GENERAL**

Per ASHRAE 62.1 recommendation, indoor air handling units will be wrapped to protect unit from in-transit rain and debris.

Installing contractor is responsible for long term storage in accordance with the Installation, Operation, and Maintenance manual (CLCH-SVX07\*-EN). Unit shall be UL and C-UL Listed.

Supply fans within the scope of AHRI Standard 430 are "Certified by the AHRI Central Station Air-Handling Unit (AHU) Certification Program, based on AHRI Standard 430/431. AHRI certified units are subject to rigorous and continuous testing, have performance ratings independently measured and are third-party verified. Certified units may be found in the AHRI Directory at [www.ahridirectory.org](http://www.ahridirectory.org)".

Unit sound performance data shall be reported as sound power. Trane, in providing this program and data, does not certify or warrant NC levels. These levels are affected by factors specific to each application and/or installation and therefore unable to be predicted or certified by Trane. Refer to product data for specific fan footnote references.

Refer to product data for AHRI certification status. For coils within the scope of AHRI Standard 410 cooling coil performance is certified in accordance with the AHRI Forced-Circulation Air-Cooling and Air-Heating Coils Certification Program which is based on AHRI Standard 410 within the Range of Standard Rating Conditions listed in Table 1 of the Standard. Certified units may be found in the AHRI Directory at [www.ahridirectory.org](http://www.ahridirectory.org). Heating performance for heat pump or condenser mode is not certified.

**Unit Construction**

All unit panels shall be 2" solid, double-wall construction to facilitate cleaning of unit interior. Unit panels shall be provided with a mid-span, no-through-metal, internal thermal break. Casing thermal performance shall be such that under 55°F supply air temperature and design conditions on the exterior of the unit of 81°F dry bulb and 73°F wet bulb, condensation shall not form on the casing exterior. Casing construction will comply with NFPA 90A.

All exterior and interior indoor AHU panels will be made of galvanized steel.

**Unit Paint**

Unit to ship unpainted from factory. If required, unit to be painted by 3rd party finisher, or by painting contractor at job site.

**Casing Deflection**

The casing shall not exceed 0.0042 inch deflection per inch of panel span at 1.00 times design static pressure. Maximum design static shall not exceed +8 inches w.g. in all positive pressure sections and -8 inches w.g. in all negative pressure sections.

**Floor Construction**

The unit floor shall be of sufficient strength to support a 300.0 lb load during maintenance activities and shall deflect no more than 0.0042 inch per inch of panel span.

**Unit Base**

Manufacturer to provide a full perimeter integral base frame for either ceiling suspension of units or to support and raise all sections of the unit for proper trapping. Indoor unit base frame will either be bolted construction or welded construction. All outdoor unit base frames shall be welded construction. For indoor units, refer to schedule for base height and construction type. Contractor will be responsible for providing a housekeeping pad when unit base frame is not of sufficient height to properly trap unit. Unit base frames not constructed of galvanized steel shall be chemically cleaned and coated with both a rust-inhibiting primer and finished coat of rust-inhibiting enamel. Unit base height to be included in total height required for proper trap height.

**Insulation**

Panel insulation shall provide a minimum thermal resistance (R) value of 13 ft<sup>2</sup>-h-°F/Btu throughout the entire unit. Insulation shall completely fill the panel cavities in all directions so that no voids exist and settling of insulation is prevented.

**Drain Pan**

In sections provided with a drain pan, the drain pan shall be designed in accordance with ASHRAE 62.1. To address indoor air quality (IAQ) the drain pan shall be sloped in two planes promoting positive drainage to eliminate stagnant water conditions. Drain pan shall be insulated, and of double wall construction. The outlet shall be the lowest point on the pan, and shall be of sufficient diameter to preclude drain pan overflow under normally expected operating conditions. All drain pans connections shall have a threaded connection, extending a minimum of 2-1/2" beyond the unit base, and shall be made from the same material as the drain pan. Drain pan located under a cooling coil shall be of sufficient size to collect all condensate produced from the coil.

*Refer to Product Data for specific information on which sections are supplied with a drain pan, the drain pan material and connection location.*

**Access Door Construction**

Access doors shall be 2" double wall construction. Interior and exterior door panels shall be of the same construction as the interior and exterior wall panels respectively. All doors shall be provided with a thermal break construction of door panel and door frame. Gasketing shall be provided around the full perimeter of the doors to prevent air leakage. Surface mounted handles shall be provided to allow quick access to the interior of the functional section and to prevent through cabinet penetrations that could likely weaken the casing leakage and thermal performance. Handle hardware shall be designed to prevent unintended closure. Outswing doors shall have easily removable hinges and handles that can be relocated to change the door swing if needed. Door hinges shall be made of galvanized steel.

All doors shall be a minimum of 60" high when sufficient height is available or the maximum height allowed by the unit height.

Door handles shall be provided for each latching point of the door necessary to maintain the specified air leakage integrity of the unit.

*Refer to Product Data for specific information on which sections are supplied with an access door, the door location, a single handle and a window.*

**Lifting Instructions**

The air handling units must be rigged, lifted, and installed in strict accordance with the Installation, Operation, and Maintenance manual (CLCH-SVX07G-EN). The units are also to be installed in strict accordance with the specifications. Units may be shipped fully assembled or disassembled to the minimum functional section size in accordance with shipping and job site requirements.

Indoor units shall be shipped on an integral base frame (variable from the standard 2.5" to 8" height) for the purpose of mounting units to a housekeeping pad and providing additional height to properly trap condensate from the unit. The integral base frame may be used for ceiling suspension, external isolation, or as a housekeeping pad. Indoor sizes 3 to 30 will also be shipped with a shipping skid designed for forklift transport. Refer to the unit As-Built or Product Data section of the submittal for the base frame height of each unit.

All units will be shipped with an integral base frame designed with the necessary number of lift points for safe installation. All lifting lugs are to be utilized during lift. The lift points will be designed to accept standard rigging devices and be removable after installation.

**MIXING SECTION**

A mixing section shall be provided to support the damper assembly for outdoor, return, and/or exhaust air.

**Dampers**

Dampers shall modulate the volume of outdoor, return, or exhaust air. The dampers shall be of double-skin airfoil design with metal, compressible jamb seals and flexible blade-edge seals on all blades. The blades shall rotate on stainless-steel sleeve bearings. The dampers shall be rated for a maximum leakage rate of 3 cfm/ft<sup>2</sup> at 1 in. w.g. complying with ASHRAE 90.1 maximum damper leakage. All leakage testing and pressure ratings shall be based on AMCA Standard 500-D. Dampers may be arranged in a parallel or opposed-blade configuration.

**Filters**

Mixing sections shall be provided with a filter rack as indicated in the Product Data and As-Built sections of the submittal.

2-inch pleated media filters made with 100% synthetic fibers that are continuously laminated to a supported steel-wire grid with water repellent adhesive shall be provided. Filters shall be capable of operating up to 625 fpm face velocity without loss of filter efficiency and holding capacity. The filters shall have a MERV 8 rating when tested in accordance with the ANSI/ASHRAE Standard 52.2.

**COIL SECTION WITH FACTORY INSTALLED COIL**

The coil section shall be provided complete with coil and coil holding frame. The coils shall be installed such that headers and return bends are enclosed by unit casings. If two or more cooling coils are stacked in the unit, an intermediate drain pan shall be installed between each coil and be of the same material as the primary drain pan. Like the primary drain pan, the intermediate drain pan shall be designed being of sufficient size to collect all condensation produced from the coil and sloped to promote positive drainage to eliminate stagnant water conditions. The intermediate pan shall begin at the leading face of the water-producing device and be of sufficient length extending downstream to prevent condensate from passing through the air stream of the lower coil. Intermediate drain pan shall include downspouts to direct condensate to the primary drain pan. The outlet shall be located at the lowest point of the pan and shall be sufficient diameter to preclude drain pan overflow under any normally expected operating condition.

**Coil with Inspection**

The coil section complete with a double-wall, shall include a removable door downstream of the coil for inspection, cleaning, and maintenance. Interior and exterior door panels shall be of the same construction as the interior and exterior wall panels, respectively. All doors shall be provided with a thermal break construction of door panel and door frame. Casing penetrations supplied for hydronic drain and vents. Piping contractor shall provide extended piping.

No casing penetrations supplied for hydronic drain and vents. If required, piping contractor will need to drill drain and vent penetrations using factory located features provided in coil panel.

**Water Coils**

The coils shall have aluminum fins and seamless copper tubes. Copper fins may be applied to coils with 5/8-inch tubes. Fins shall have collars drawn, belled, and firmly bonded to tubes by mechanical expansion of the tubes. The coil casing may be galvanized or stainless steel. Refer to the Product Data section of the submittal for the coil casing material. The coils shall be proof-tested to 300 psig and leak-tested under water to 200 psig. Refer to the Product Data section of the submittals for AHRI certification status.

Coil connections are constructed of cast iron with female connections, steel block with female connections or steel pipe with male connections. Type P or TT coil connections do not extend out of unit casing. All other water coil types have connections that extend out beyond unit casing. Headers on downstream coil bank of staggered coil sections do not extend beyond the unit casing and must be completed by the on-site piping contractor.

Tubes are 1/2" OD, 0.016" or 5/8" OD, 0.020" or 3/8" OD, 0.012" thick copper.

**ACCESS/INSPECTION / TURNING SECTION**

A section shall be provided to allow additional access/inspection of unit components and space for field-installed components as needed. An access door shall be provided for easy access. All access sections shall be complete with a double-wall, removable door downstream for inspection, cleaning, and maintenance. Interior and exterior door panels shall be of the same construction as the interior and exterior wall panels, respectively. All doors shall be provided with a thermal break construction of door panel and door frame.

**DIRECT-DRIVE PLENUM FAN SECTION**

The fan type shall be provided as required for stable operation and optimum energy efficiency. The fan shall be a single-width, single-inlet, multiblade-type direct-drive plenum fan. Motor bearing life of the direct-drive plenum fan shall be not less than L-10 250,000 hrs. *Refer to the Product Data section for fan quantity and number of blades selected within each unit.* Central Station Air Handling Unit Supply Fans are "Certified by the AHRI Central Station Air-Handling Unit (AHU) Certification Program, based on AHRI Standard 430/431. AHRI certified units are subject to rigorous and continuous testing, have performance ratings independently measured and are third-party verified. Certified units may be found in the AHRI Directory at [www.ahridirectory.org](http://www.ahridirectory.org)" Central Station Air Handling Unit Supply Fans shall be tested and rated in accordance with AHRI Standard 260 for sound performance.

Fans that are selected with inverter balancing shall first be dynamically balanced at design RPM. The fans then will be checked in the factory from 25% to 100% of design RPM to insure they are operating within vibration tolerance specifications, and that there are no resonant frequency issues throughout this operating range. Inverter balancing that requires lockout frequencies inputted into a variable frequency drive to in order to bypass resonant frequencies shall not be acceptable. If supplied in this manner by the unit manufacturer, the contractor will be responsible for rebalancing in the field after unit installation. Fans selected with inverter balancing shall have a maintenance free grounding assembly installed on the fan motor to discharge both static and induced shaft currents to ground.

On units supplied with plenum or motorized impeller fans, door guard(s) shall be supplied on the access door(s) to the fan and those downstream access door(s) where unintended access to the plenum or motorized impeller fan could

occur. Door guard is intended to deter unauthorized entry and incidental contact with rotating components. *Refer to the Product Data section for fans with access door guard(s).*

### **Motor Frame**

The motor shall be mounted integral to the isolated fan assembly and furnished by the unit manufacturer. The motor is mounted inside the unit casing on an adjustable base to permit adjustment of drive belt tension (not applicable for direct drive plenum fans). The motor shall meet or exceed all NEMA Standards Publication MG 1 requirements and comply with NEMA Premium efficiency levels when applicable except for fractional horsepower motors which are not covered by the NEMA classification. The motor shall be T-frame, squirrel cage with size, type, and electrical characteristics as shown on the equipment schedule. *Refer to the Product Data section for selected fan motors within each unit.*

### **Two-Inch Spring Isolators**

Direct-drive fan and motor assemblies shall be internally isolated from the unit casing with 2-inch deflection spring isolators. The isolation system shall be designed to resist loads produced by external forces, such as earthquakes, and conform to the current IBC seismic requirements.

### **Indoor Units with an External Motor Junction Box**

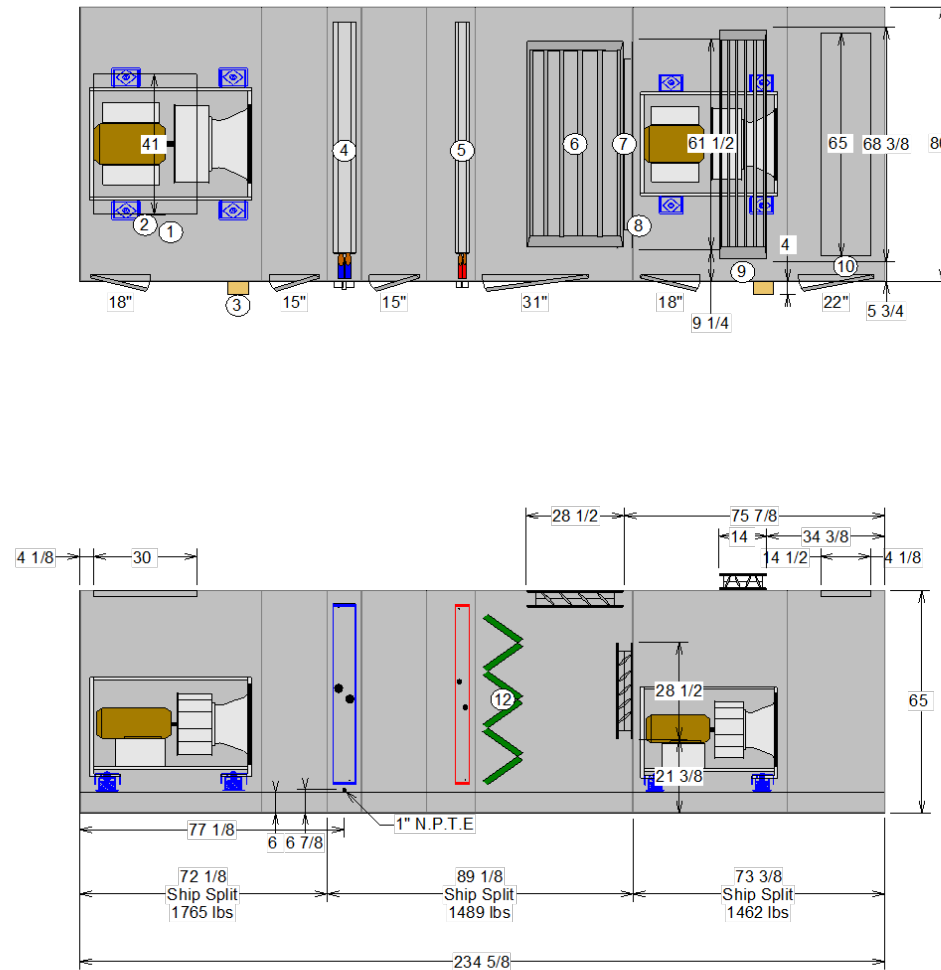
The fan section shall have motor leads extended to a factory-installed NEMA external junction box to facilitate field supplied VFD wiring and to maintain air leakage integrity of the casing. For units with a full-load amp rating less than or equal to 110 amps, the enclosure shall be a NEMA 1 enclosure. For units with a full-load amp rating greater than 110 amps, the enclosure shall be a NEMA 4 enclosure. *Refer to the Product Data section for fans with an external motor junction box.*

### **Dampers**

Dampers within the fan section shall modulate the volume of exhaust air. The dampers shall be of double-skin airfoil design with metal, compressible jamb seals and flexible blade-edge seals on all blades. The blades shall rotate on stainless-steel sleeve bearings. The dampers shall be rated for a maximum leakage rate of 3 cfm/ft<sup>2</sup> at 1 in. w.g. complying with ASHRAE 90.1 maximum damper leakage. All leakage testing and pressure ratings shall be based on AMCA Standard 500-D.

**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A1 Qty: 1 Tag(s): AHU-1



- 1 Plenum fan - 27in. dd plenum, full width, H press Supply fan 10 hp 460/3
  - 2 Opening top 41 x 30
  - 3 External junction box RH (2)
  - 4 Cooling coil - 4 Rows Coil type 1/2" Urm Optimized, General (UW)
  - 5 Heating coil - 1 Rows Coil type 5/8" Shipping Coil, General (5W)
  - 6 Damper top-parallel blade 61.5 x 28.5
  - 7 Damper back-parallel blade 28.5 x 61.5
  - 8 Plenum fan - 24.5in. dd plenum, 80% width, H press Return fan 7.5 hp 460/3
  - 9 Damper top 68.375 x 14
  - 10 Opening top 65 x 14.5
  - 11 1" N.P.T.E
  - 12 Angled filters -
- Doors  
 18 width x 55 height  
 15 width x 55 height  
 31 width x 55 height  
 22 width x 55 height

For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length shown.

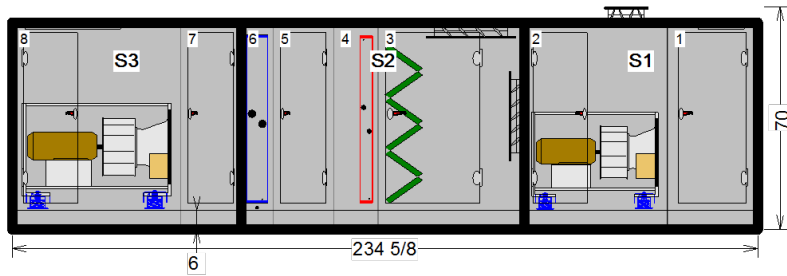
**OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE**

Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 11100. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-1
Paint:		Rigging/Installed Weight: 4582.7 lb / 4715.7 lb



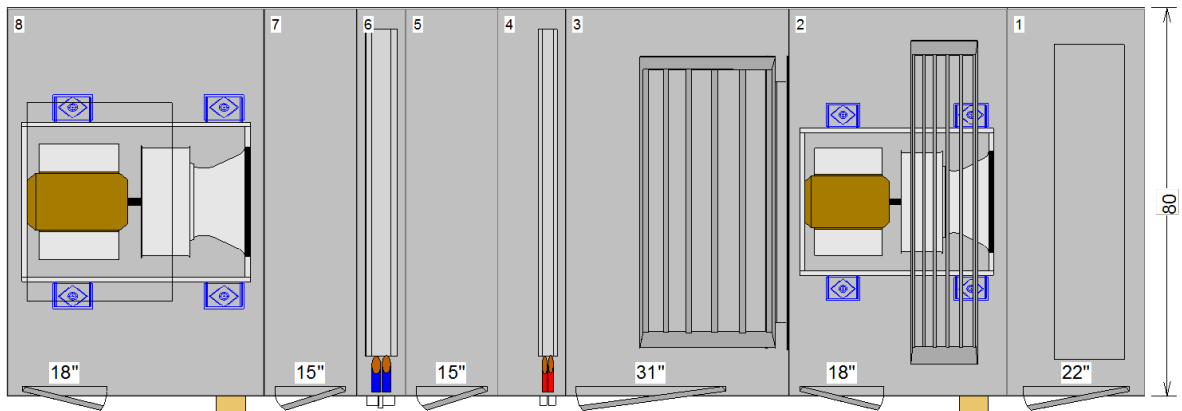
**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A1 Qty: 1 Tag(s): AHU-1**

Shipping splits are indicated by thick black lines



For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length sh

Pos #	Module	Length	Weight
1	Air mixing section	28 3/8	328.61
2	Fan section	45	1133.51
3	Air mixing section	46 1/8	592.78
4	Coil section	14	246.69
5	Access section	19	161.00
6	Coil section	10	488.06
7	Access section	19 1/8	173.64
8	Fan section	53	1591.42
		Installed Unit Weight 4715.72 lbs	



Basic Overall Plan View: Top - Measurements in inches

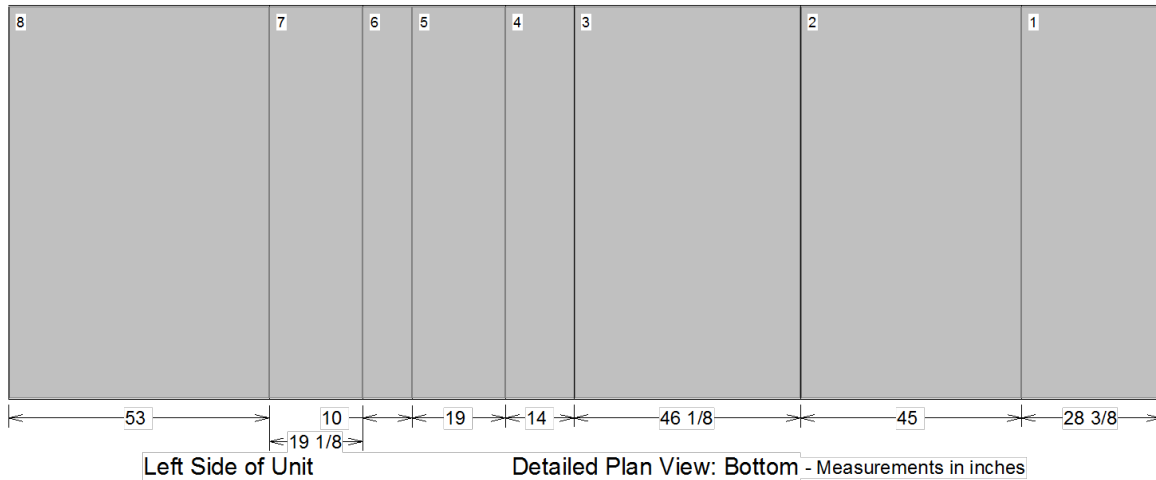
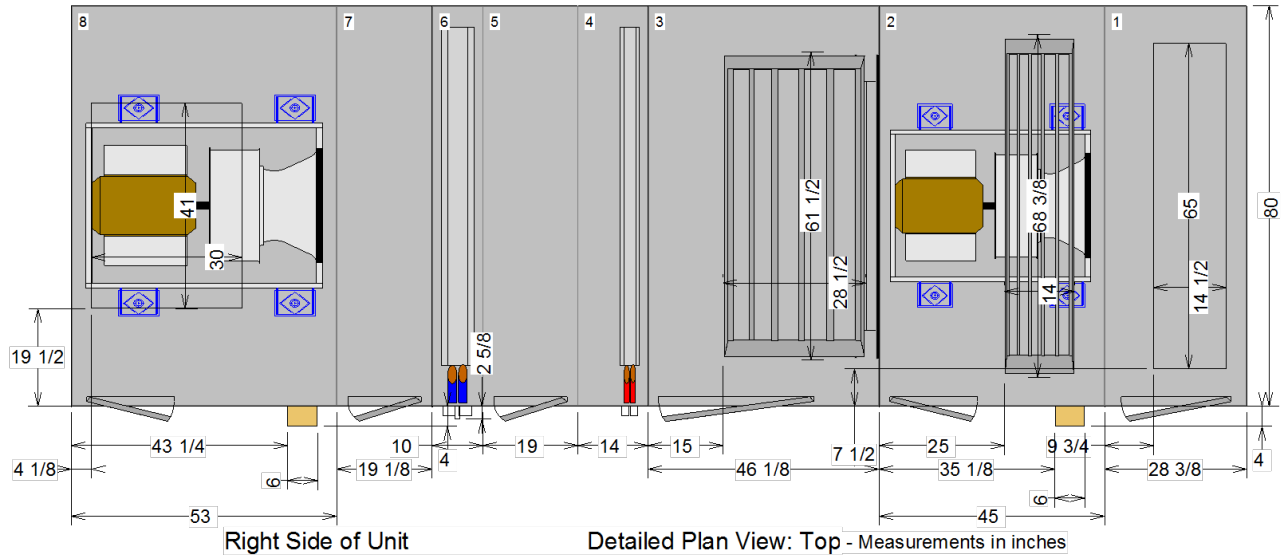
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Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 11100. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-1
Paint:		Rigging/Installed Weight: 4582.7 lb / 4715.7 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A1 Qty: 1 Tag(s): AHU-1



**\*\*Placement of electrical conduit may vary by a tolerance of 8" in any direction.**

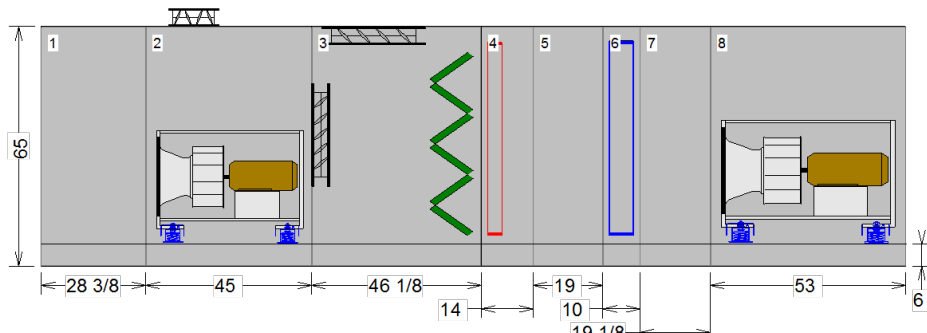
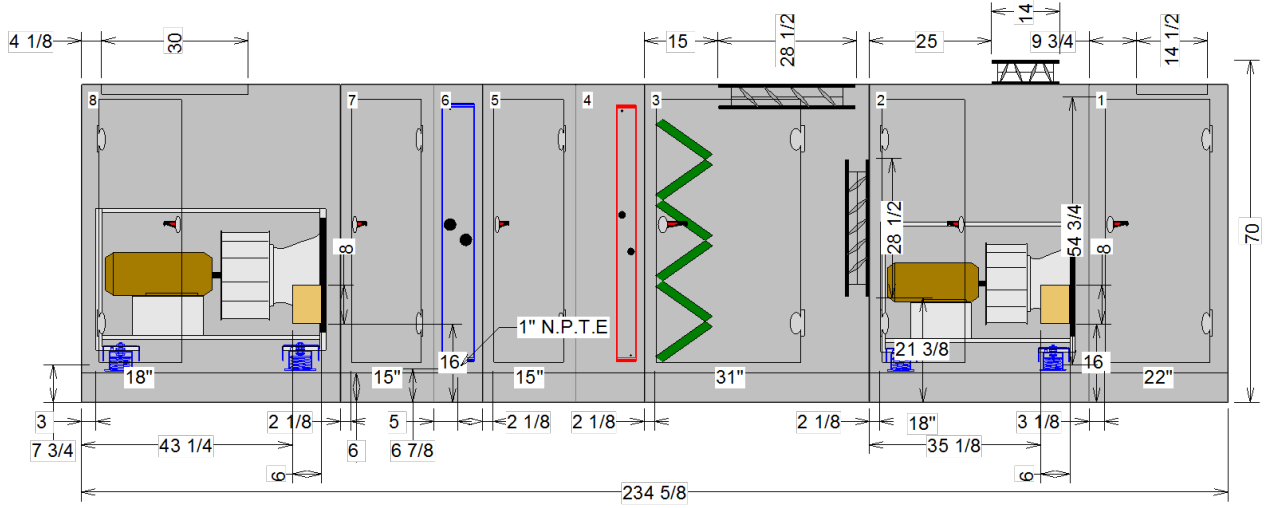
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Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 11100. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-1
Paint:		Rigging/Installed Weight: 4582.7 lb / 4715.7 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A1 Qty: 1 Tag(s): AHU-1



Detailed Elevation View: Left - Measurements in inches

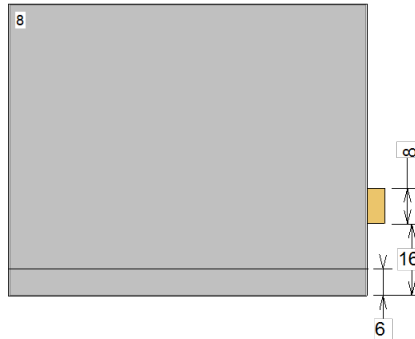
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Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 11100. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-1
Paint:		Rigging/Installed Weight: 4582.7 lb / 4715.7 lb

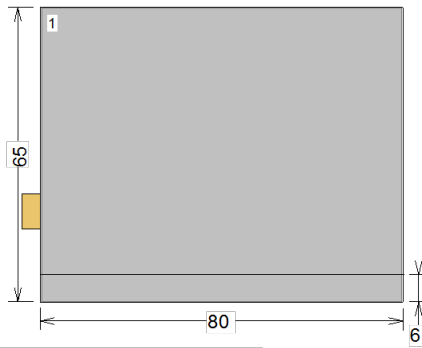


**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A1 Qty: 1 Tag(s): AHU-1



Detailed Elevation View: Front - Measurements in inches



Detailed Elevation View: Back - Measurements in inches

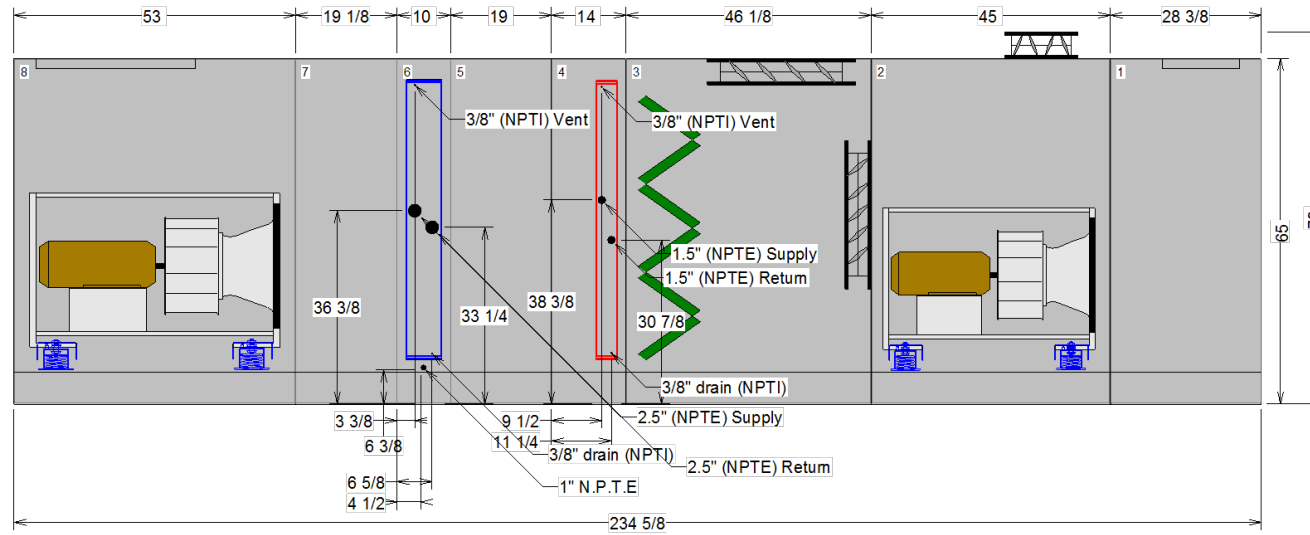
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Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 11100. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-1
Paint:		Rigging/Installed Weight: 4582.7 lb / 4715.7 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A1 Qty: 1 Tag(s): AHU-1



**NPTI : National Pipe Thread Internal Connection  
 NPTE : National Pipe Thread External Connection**

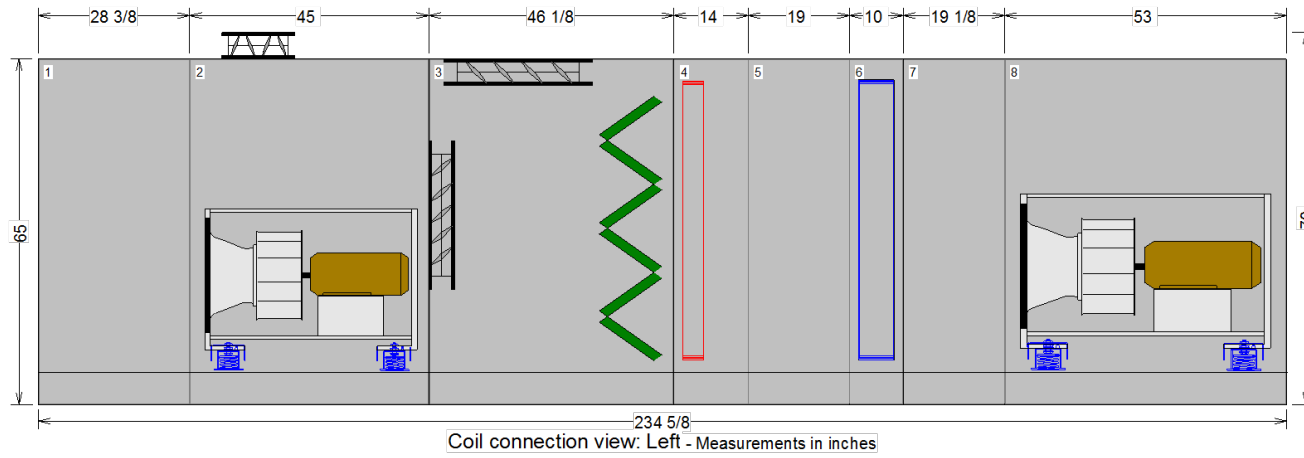
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Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 11100. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-1
Paint:		Rigging/Installed Weight: 4582.7 lb / 4715.7 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A1 Qty: 1 Tag(s): AHU-1



**NPTI : National Pipe Thread Internal Connection**  
**NPTE : National Pipe Thread External Connection**

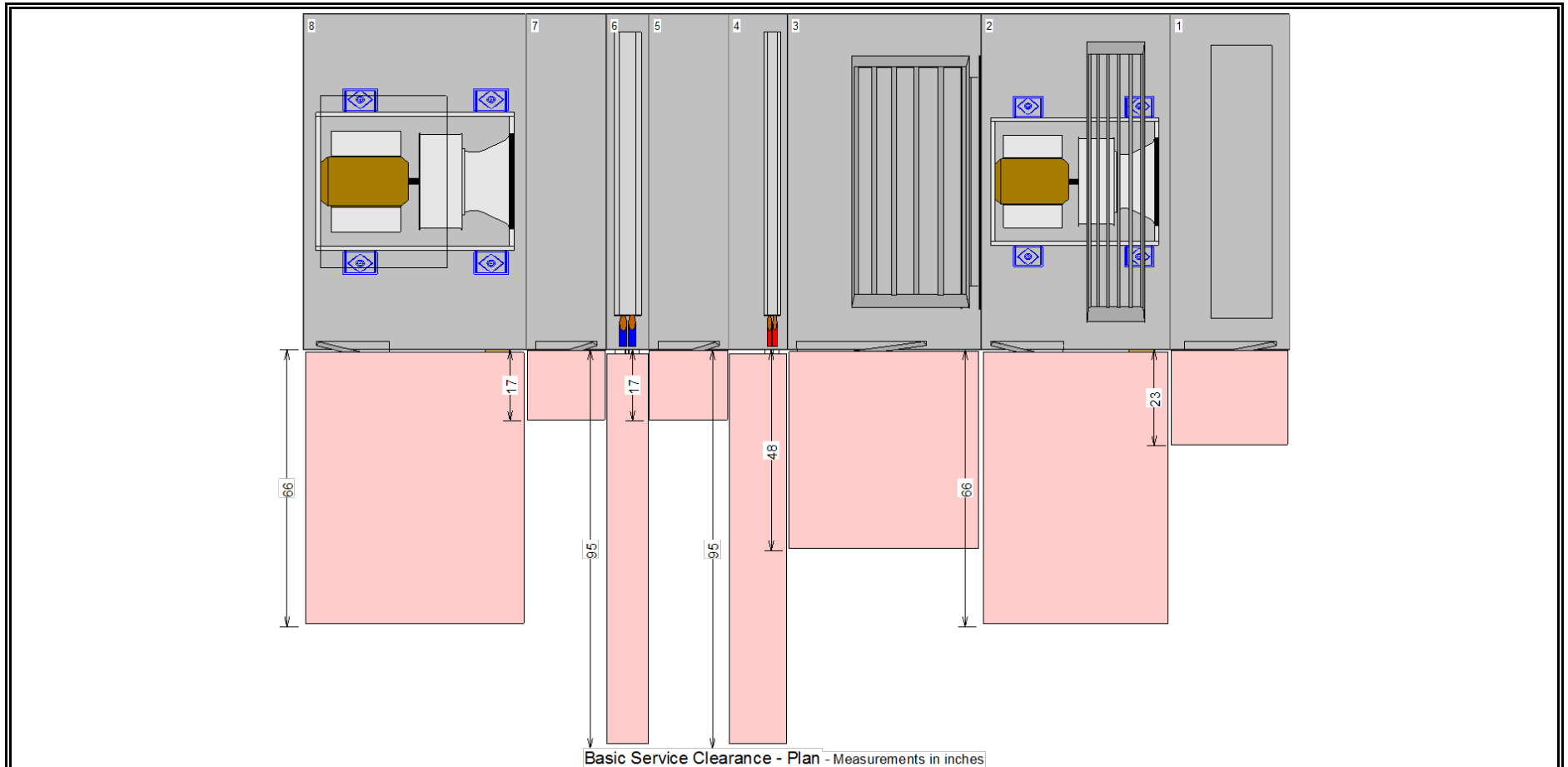
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Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 11100. cfm	Proposal Number:
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Paint:		Rigging/Installed Weight: 4582.7 lb / 4715.7 lb




**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A1 Qty: 1 Tag(s): AHU-1

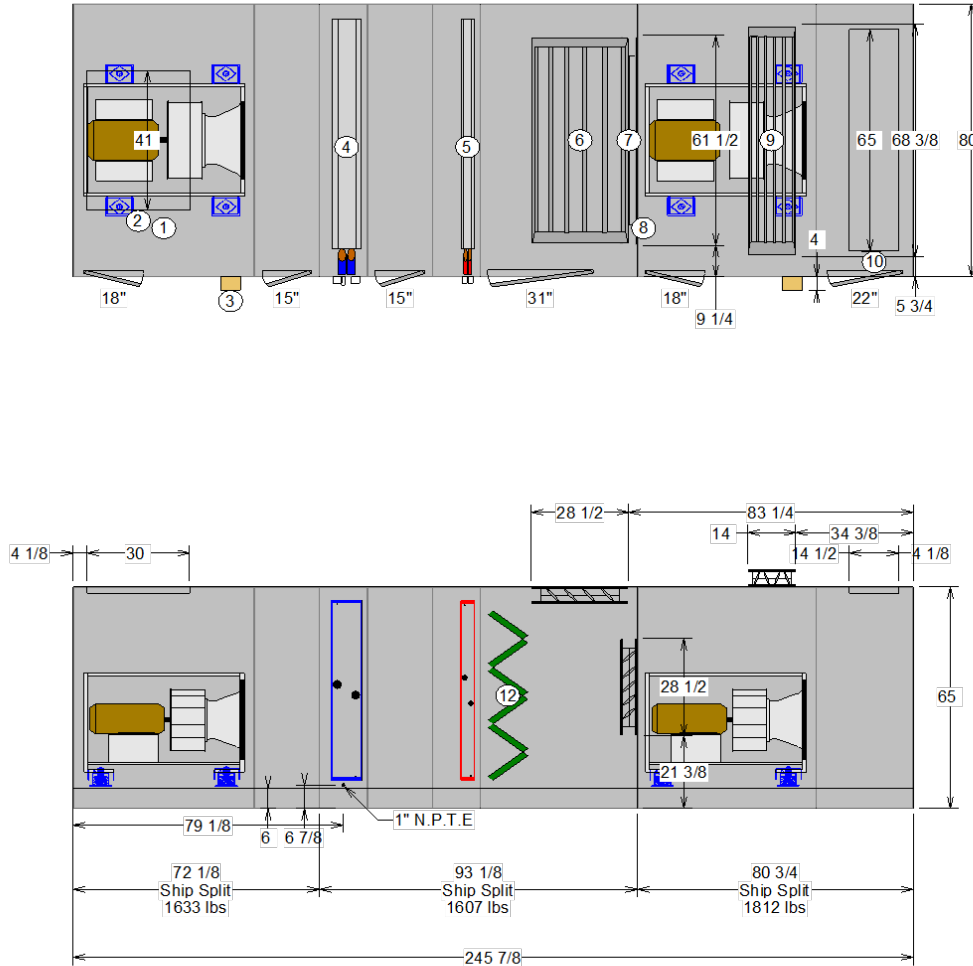


*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 11100. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-1	
Paint:		Rigging/Installed Weight: 4582.7 lb / 4715.7 lb	

**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A2 Qty: 1 Tag(s): AHU-2



- 1 Plenum fan - 27in. dd plenum, 80% width, H press Supply fan 15 hp 460/3
  - 2 Opening top 41 x 30
  - 3 External junction box RH (2)
  - 4 Cooling coil - 6 Rows Coil type 1/2" Unit Optimized, General (UW)
  - 5 Heating coil - 1 Rows Coil type 5/8" Shipping Coil, General (5W)
  - 6 Damper top-parallel blade 61.5 x 28.5
  - 7 Damper back-parallel blade 28.5 x 61.5
  - 8 Plenum fan - 27in. dd plenum, full width, H press Return fan 7.5 hp 460/3
  - 9 Damper top 68.375 x 14
  - 10 Opening top 65 x 14.5
  - 11 1" N.P.T.E
  - 12 Angled filters -
- Doors  
 18 width x 55 height  
 15 width x 55 height  
 31 width x 55 height  
 22 width x 55 height

For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length shown.

**OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE**

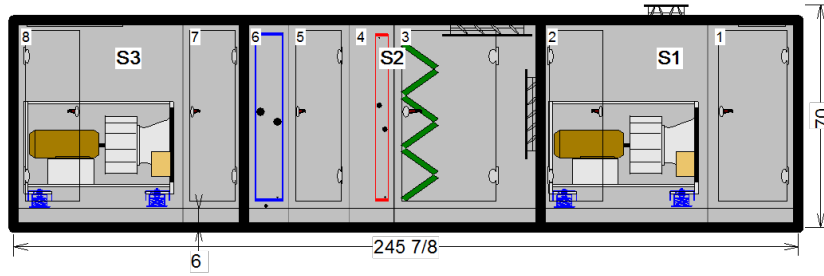
Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 12900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-2
Paint:		Rigging/Installed Weight: 4878.9 lb / 5052.0 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

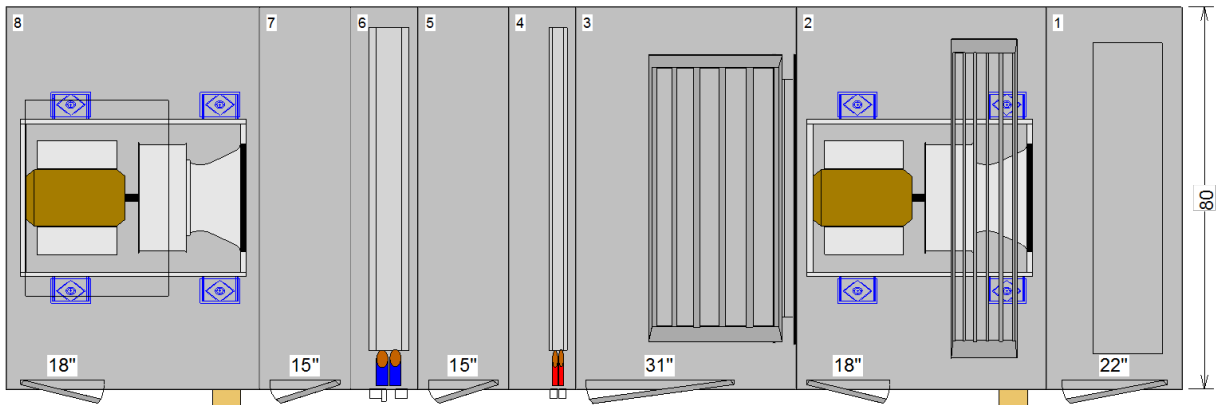
Item: A2 Qty: 1 Tag(s): AHU-2

Shipping splits are indicated by thick black lines



For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length sh

Pos #	Module	Length	Weight
1	Air mixing section	28 3/8	328.61
2	Fan section	52 3/8	1483.32
3	Air mixing section	46 1/8	592.78
4	Coil section	14	246.69
5	Access section	19	161.00
6	Coil section	14 1/8	606.53
7	Access section	19 1/8	173.64
8	Fan section	53	1459.42
		Installed Unit Weight 5052.00 lbs	



Basic Overall Plan View: Top - Measurements in inches

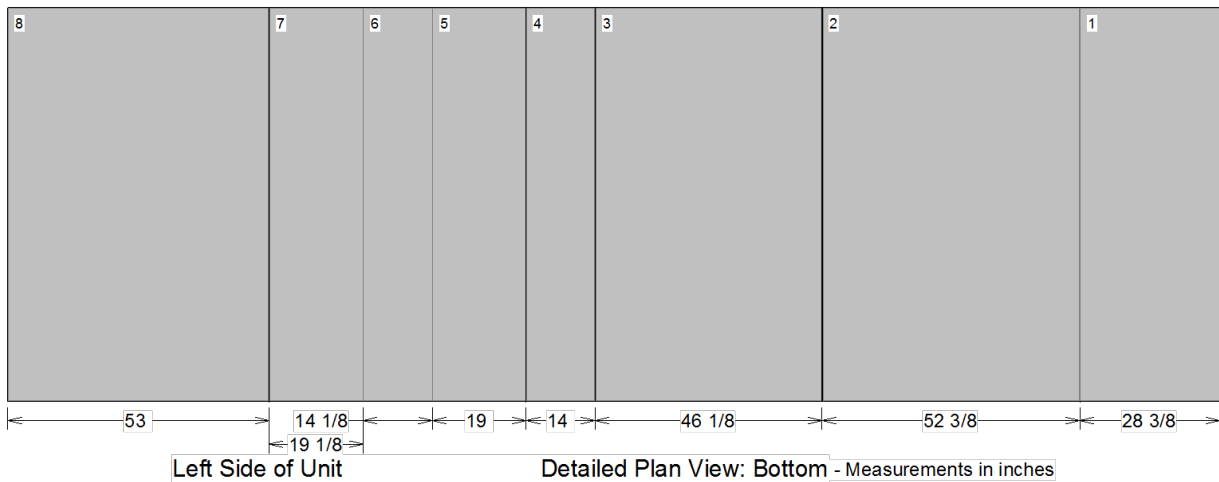
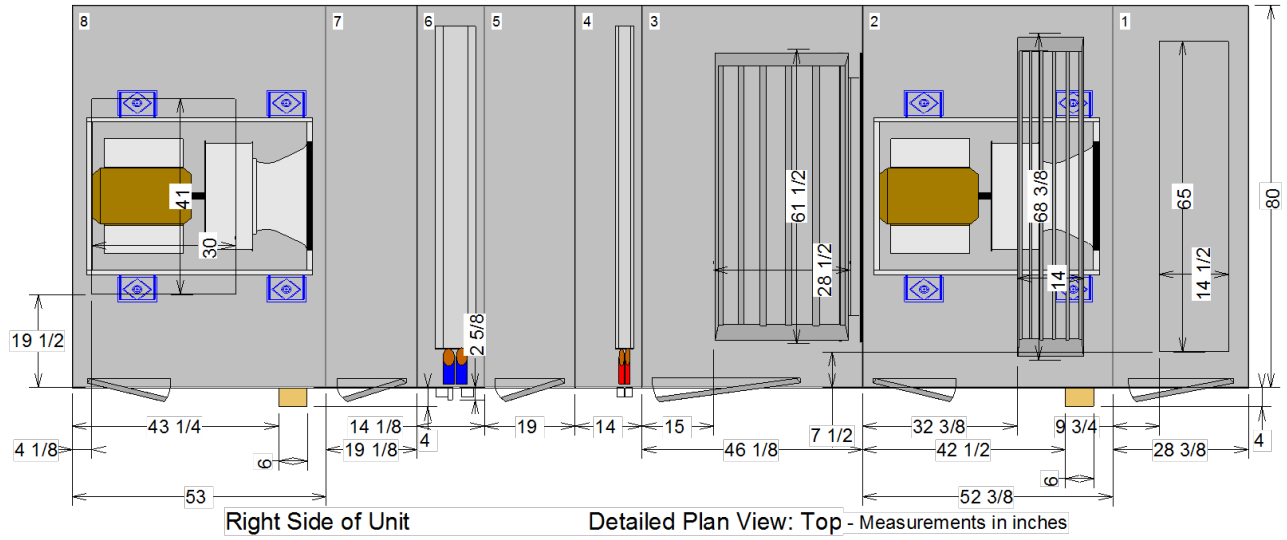
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 12900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-2
Paint:		Rigging/Installed Weight: 4878.9 lb / 5052.0 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A2 Qty: 1 Tag(s): AHU-2



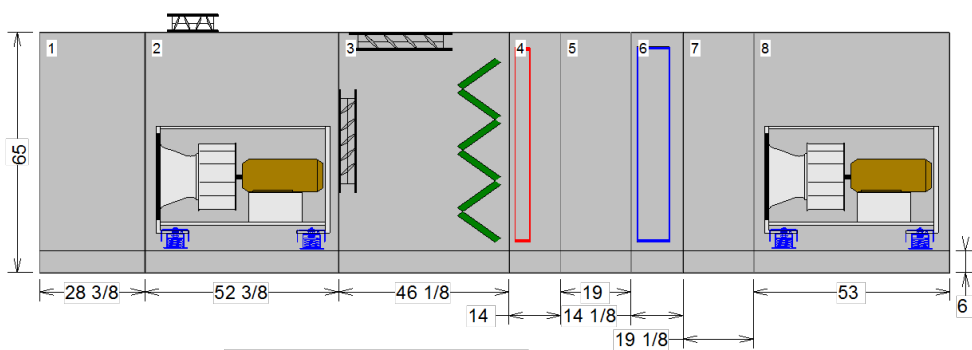
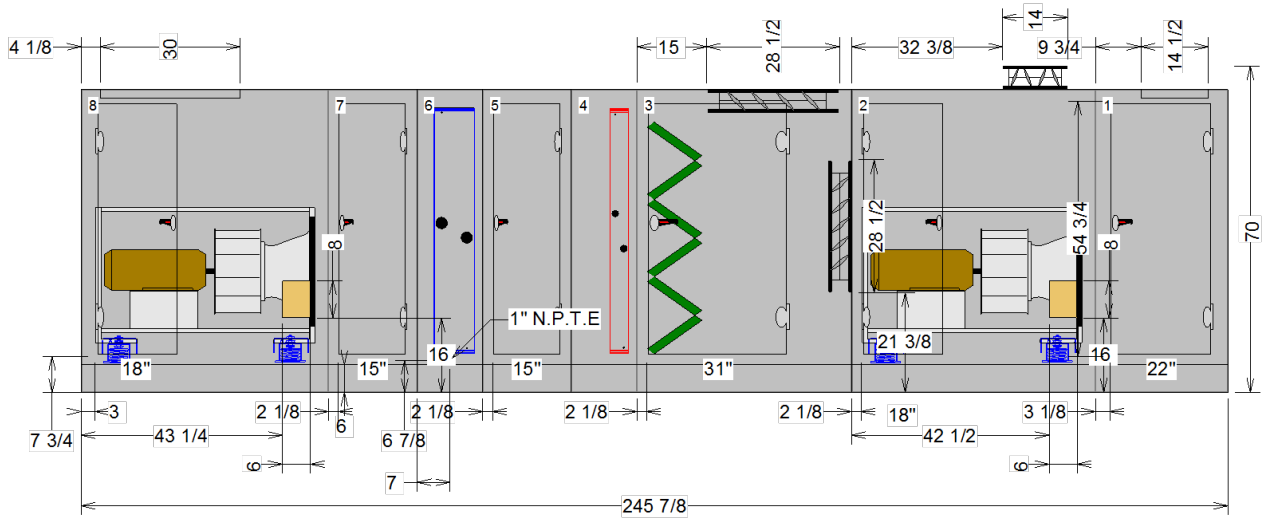
**\*\*Placement of electrical conduit may vary by a tolerance of 8" in any direction.**

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 12900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-2
Paint:		Rigging/Installed Weight: 4878.9 lb / 5052.0 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A2 Qty: 1 Tag(s): AHU-2**



Detailed Elevation View: Left - Measurements in inches

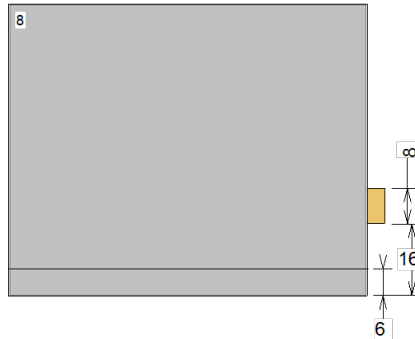
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 12900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-2
Paint:		Rigging/Installed Weight: 4878.9 lb / 5052.0 lb

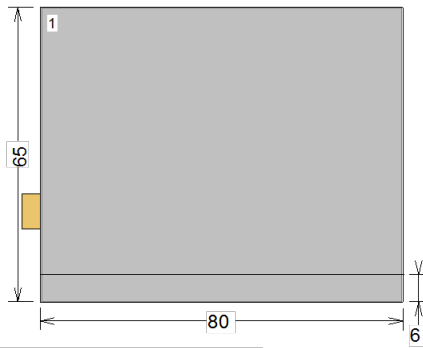


**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A2 Qty: 1 Tag(s): AHU-2



Detailed Elevation View: Front - Measurements in inches



Detailed Elevation View: Back - Measurements in inches

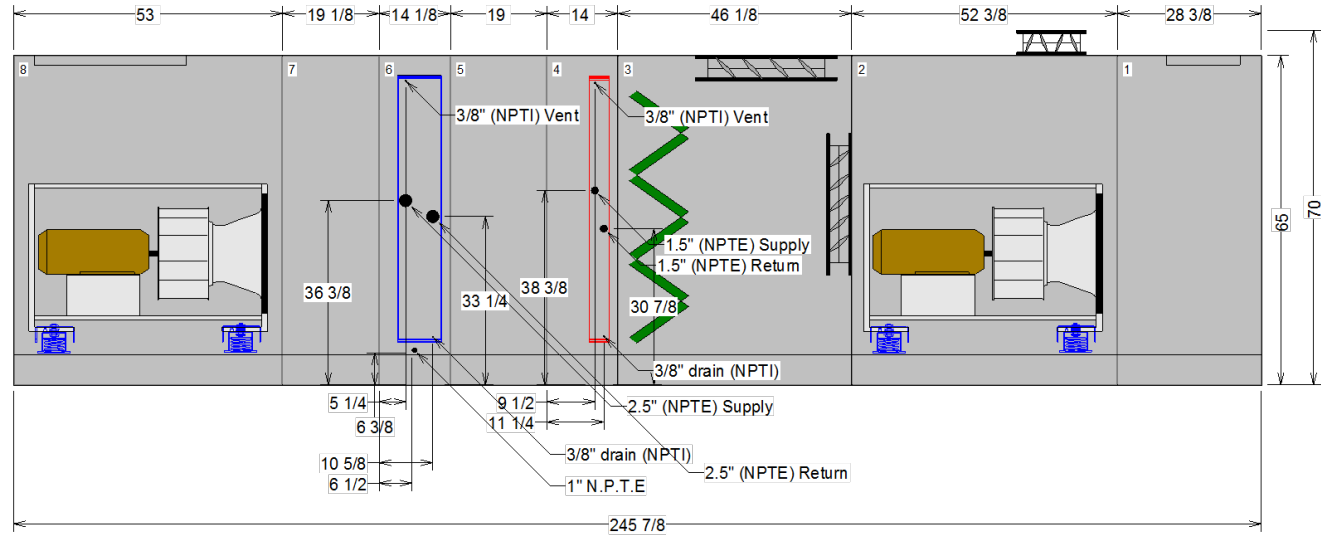
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 12900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-2
Paint:		Rigging/Installed Weight: 4878.9 lb / 5052.0 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A2 Qty: 1 Tag(s): AHU-2



**NPTI : National Pipe Thread Internal Connection  
 NPTE : National Pipe Thread External Connection**

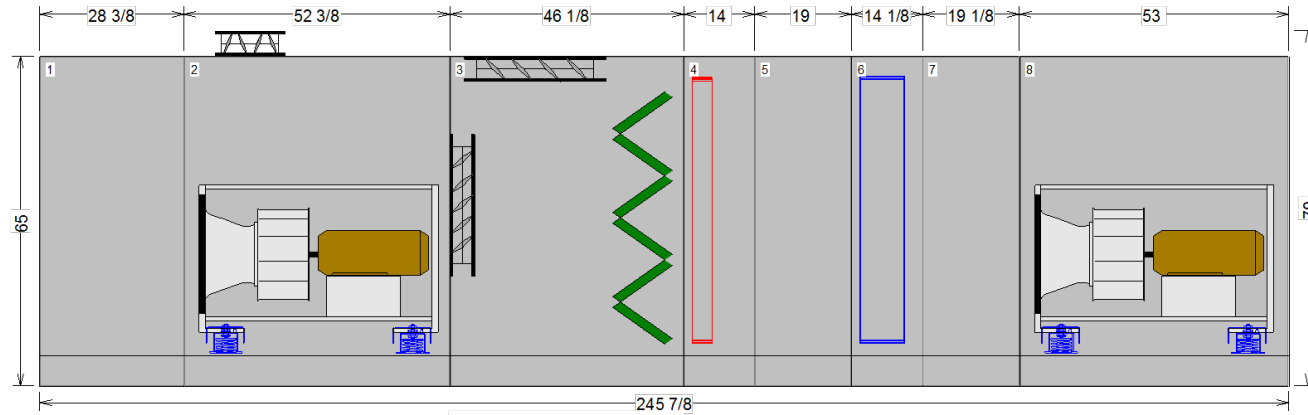
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 12900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-2
Paint:		Rigging/Installed Weight: 4878.9 lb / 5052.0 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A2 Qty: 1 Tag(s): AHU-2



Coil connection view: Left - Measurements in inches

**NPTI : National Pipe Thread Internal Connection  
 NPTE : National Pipe Thread External Connection**

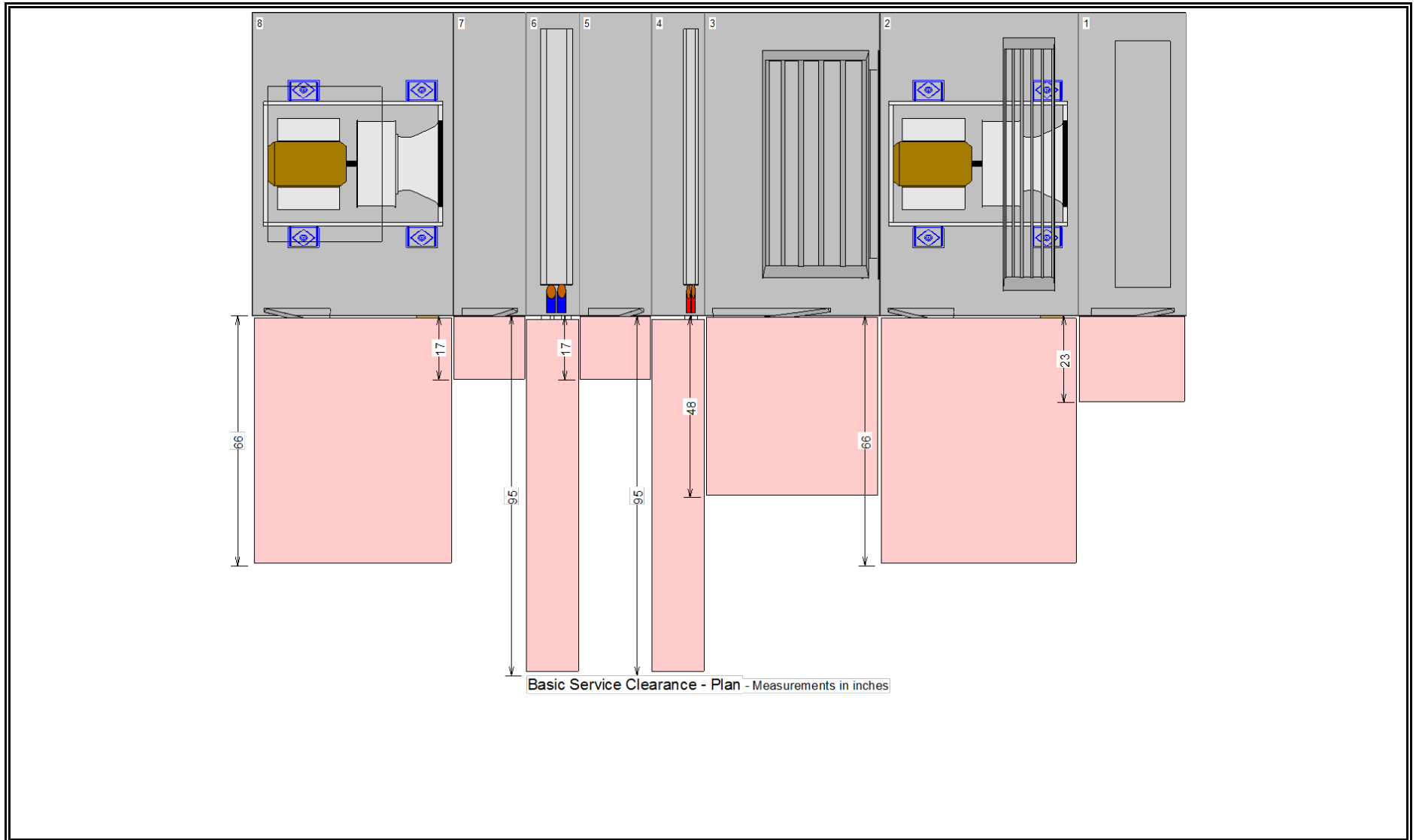
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 12900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-2
Paint:		Rigging/Installed Weight: 4878.9 lb / 5052.0 lb




**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A2 Qty: 1 Tag(s): AHU-2

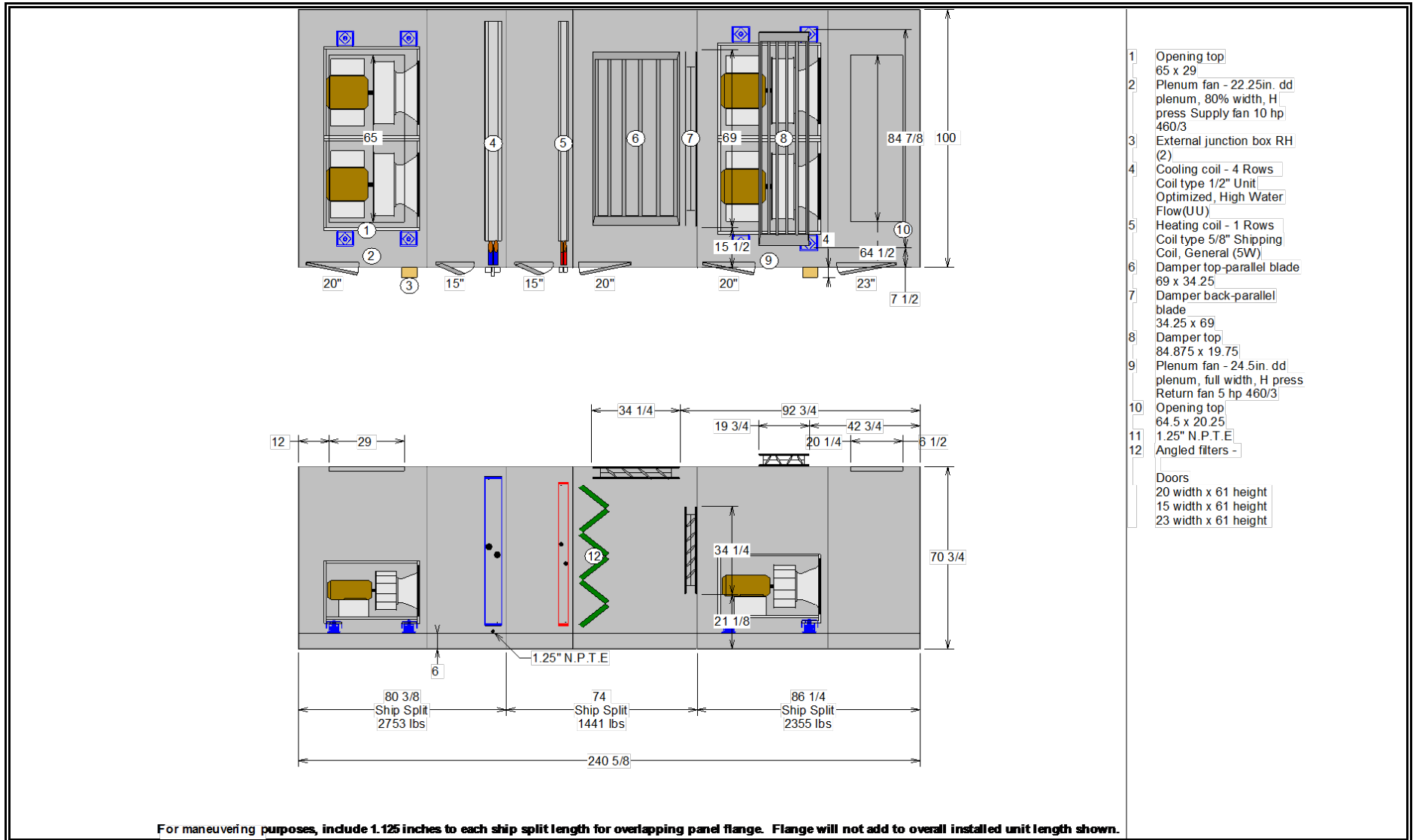


*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 25	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 12900. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-2	
Paint:		Rigging/Installed Weight: 4878.9 lb / 5052.0 lb	

**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A3 Qty: 1 Tag(s): AHU-3

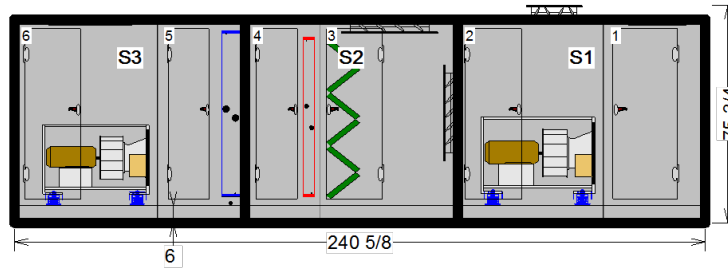


Unit size: 35	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 17000. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-3	
Paint:		Rigging/Installed Weight: 6373.1 lb / 6547.9 lb	

**Dimensional Drawings - Performance Climate Changer (CSAA)**

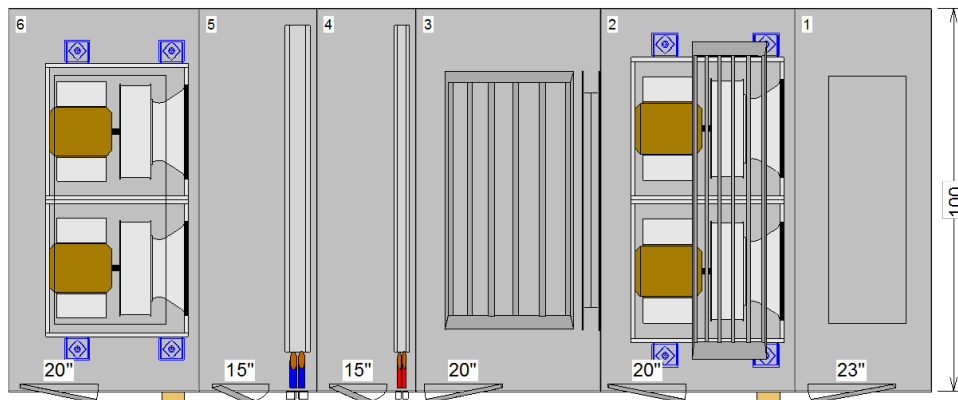
Item: A3 Qty: 1 Tag(s): AHU-3

Shipping splits are indicated by thick black lines



For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length sh

Pos #	Module	Length	Weight
1	Air mixing section	35 1/2	566.02
2	Fan section	50 3/4	1788.61
3	Air mixing section	48 1/8	887.97
4	Coil section	25 7/8	552.57
5	Coil section	30 5/8	980.59
6	Fan section	49 3/4	1772.15
		Installed Unit Weight 6547.90 lbs	



Basic Overall Plan View: Top - Measurements in inches

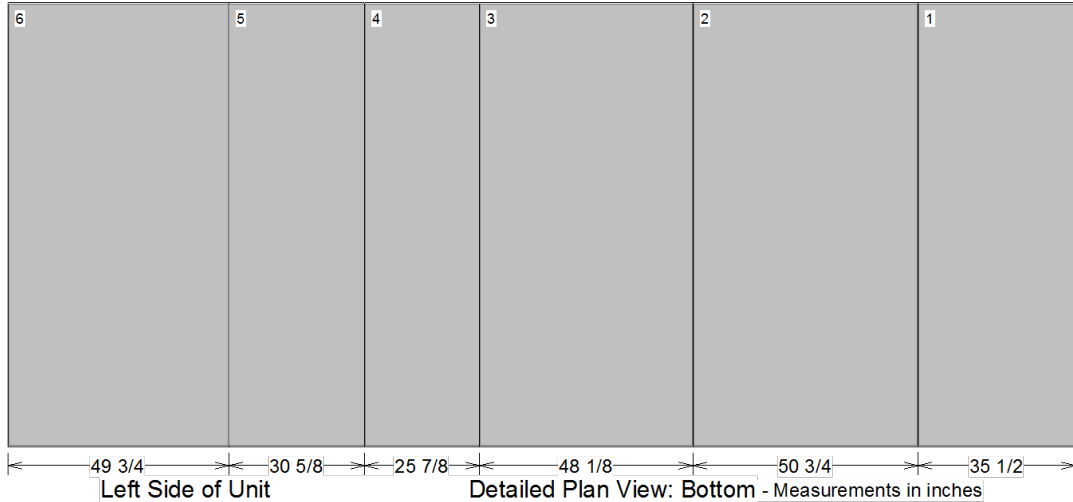
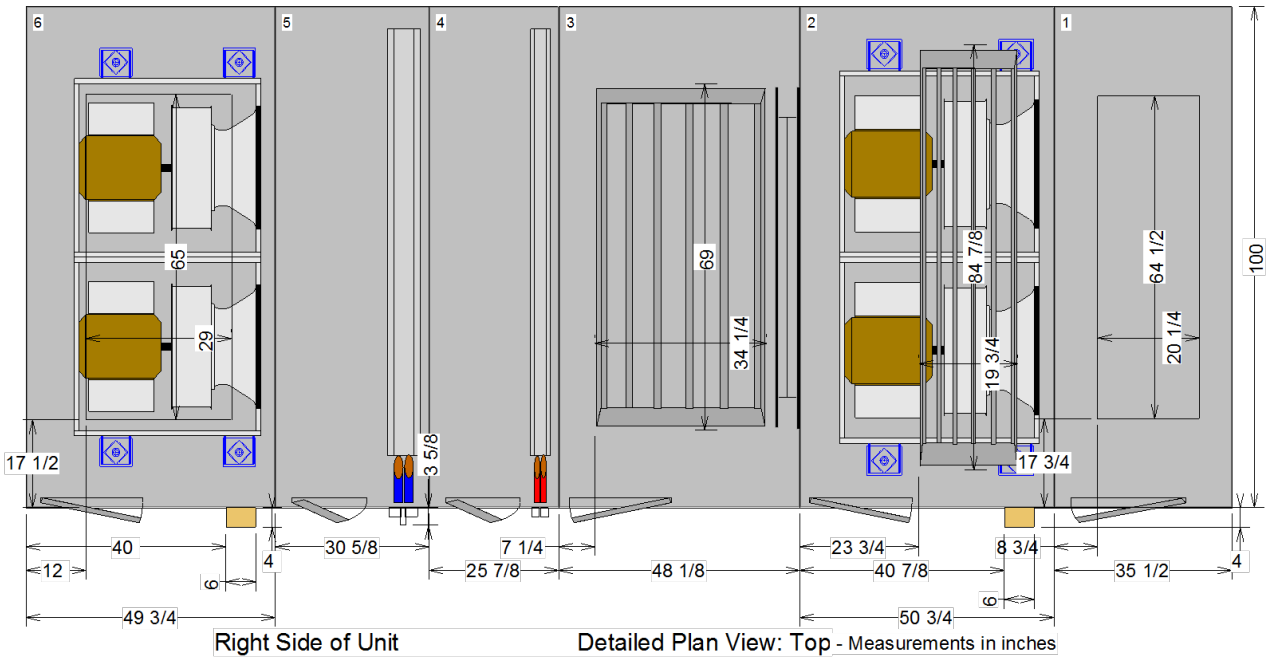
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 35	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 17000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-3
Paint:		Rigging/Installed Weight: 6373.1 lb / 6547.9 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A3 Qty: 1 Tag(s): AHU-3



**\*\*Placement of electrical conduit may vary by a tolerance of 8" in any direction.**

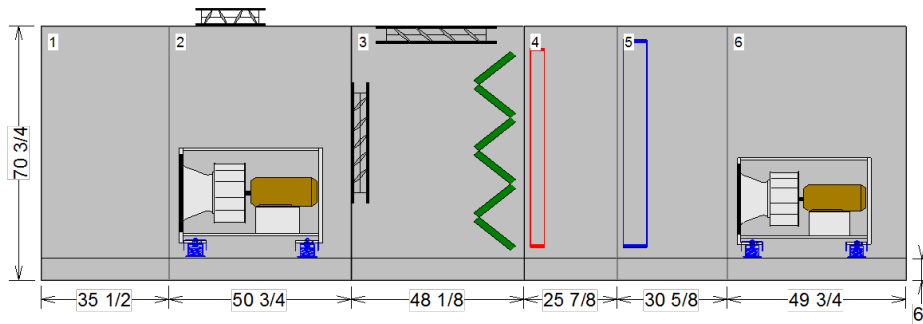
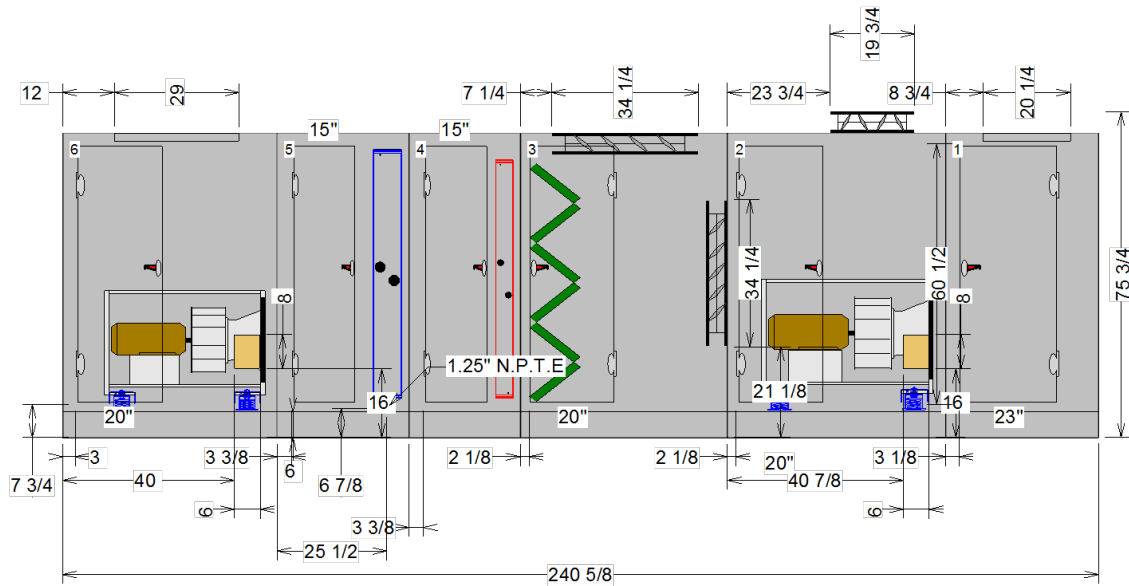
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 35	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 17000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-3
Paint:		Rigging/Installed Weight: 6373.1 lb / 6547.9 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A3 Qty: 1 Tag(s): AHU-3



Detailed Elevation View: Left - Measurements in inches

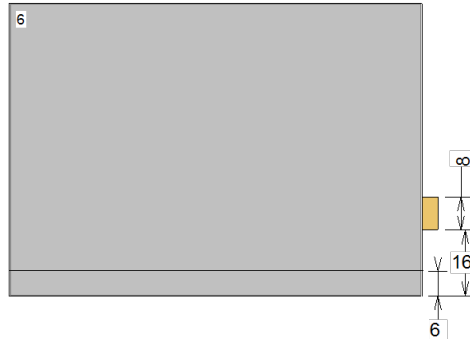
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 35	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 17000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-3
Paint:		Rigging/Installed Weight: 6373.1 lb / 6547.9 lb

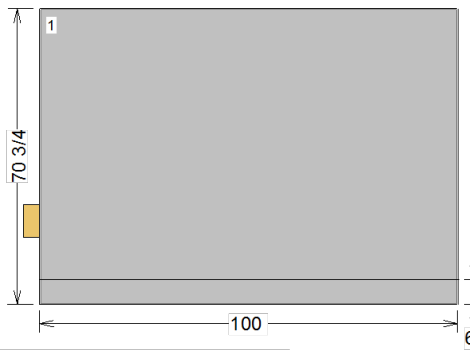


**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A3 Qty: 1 Tag(s): AHU-3



Detailed Elevation View: Front - Measurements in inches



Detailed Elevation View: Back - Measurements in inches

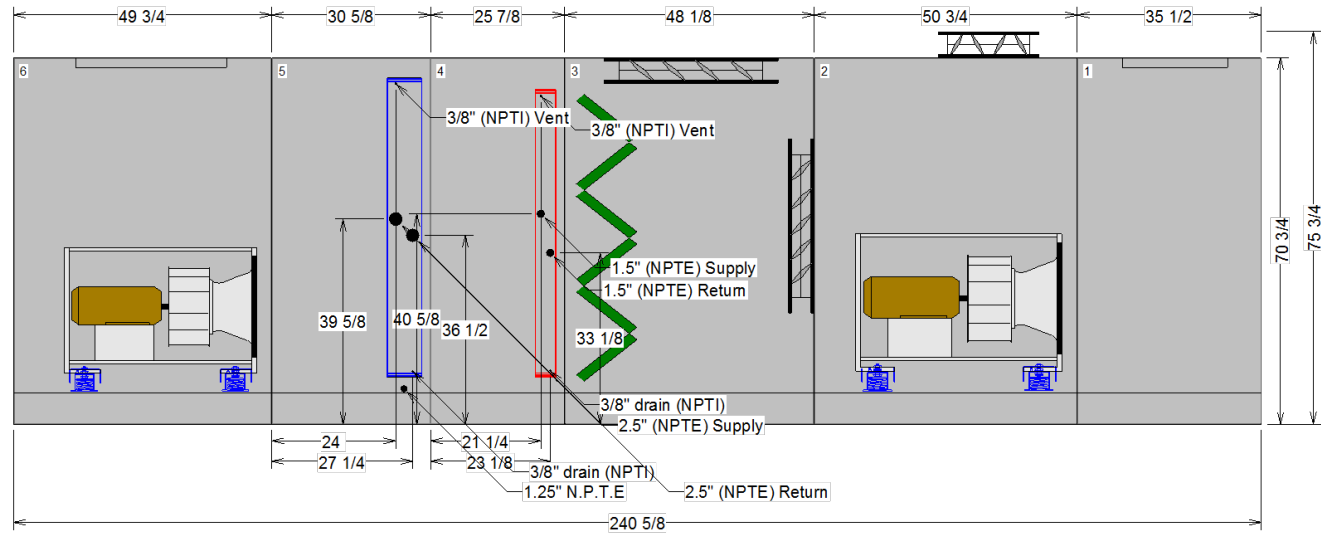
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 35	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 17000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-3
Paint:		Rigging/Installed Weight: 6373.1 lb / 6547.9 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A3 Qty: 1 Tag(s): AHU-3



**NPTI : National Pipe Thread Internal Connection  
 NPTE : National Pipe Thread External Connection**

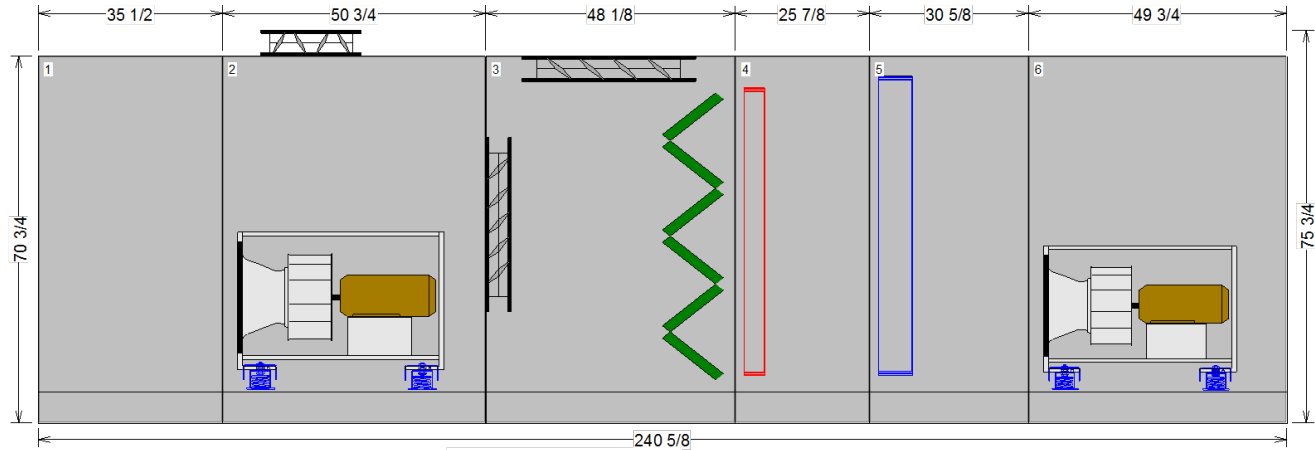
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 35	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 17000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-3
Paint:		Rigging/Installed Weight: 6373.1 lb / 6547.9 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**


Item: A3 Qty: 1 Tag(s): AHU-3



Coil connection view: Left - Measurements in inches

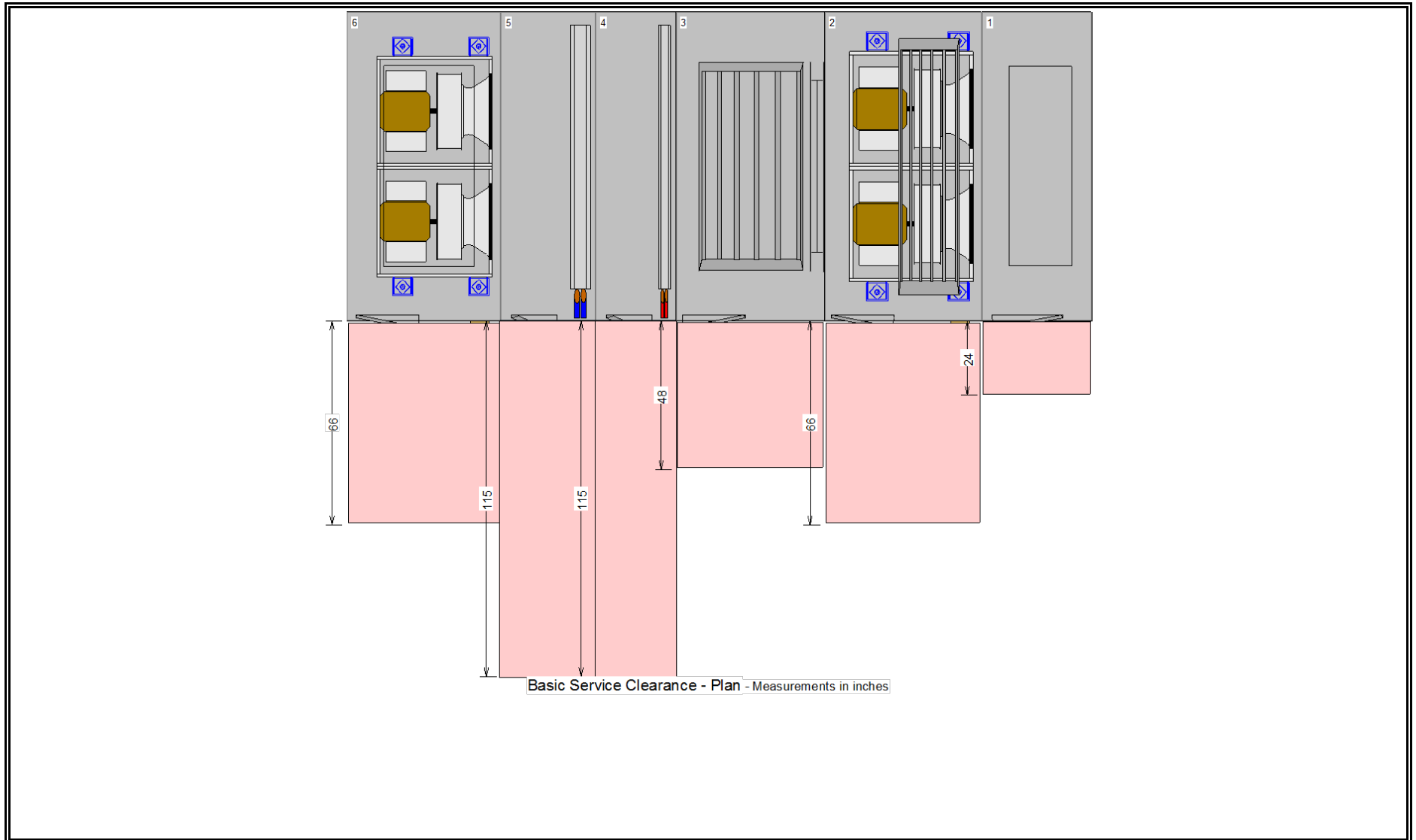
**NPTI : National Pipe Thread Internal Connection**  
**NPTE : National Pipe Thread External Connection**

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*


Unit size: 35	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 17000. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-3	
Paint:		Rigging/Installed Weight: 6373.1 lb / 6547.9 lb	

**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A3 Qty: 1 Tag(s): AHU-3

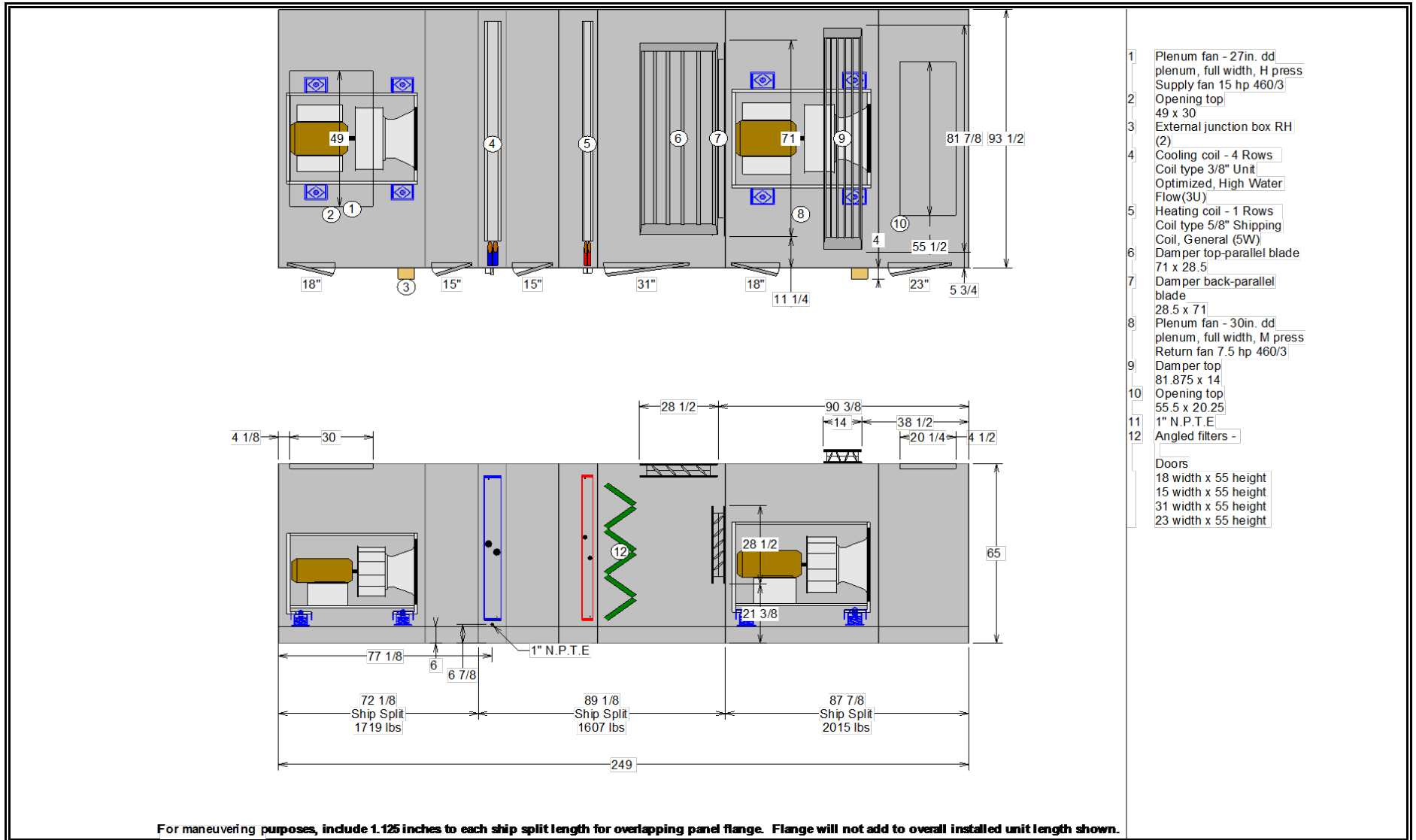


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Unit size: 35	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 17000. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-3	
Paint:		Rigging/Installed Weight: 6373.1 lb / 6547.9 lb	

**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A4 Qty: 1 Tag(s): AHU-4



For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length shown.

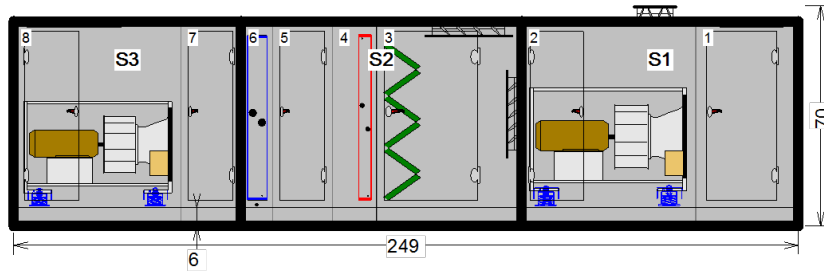
**OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE**

Unit size: 30	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 14900. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-4	
Paint:		Rigging/Installed Weight: 5215.7 lb / 5341.4 lb	

**Dimensional Drawings - Performance Climate Changer (CSAA)**

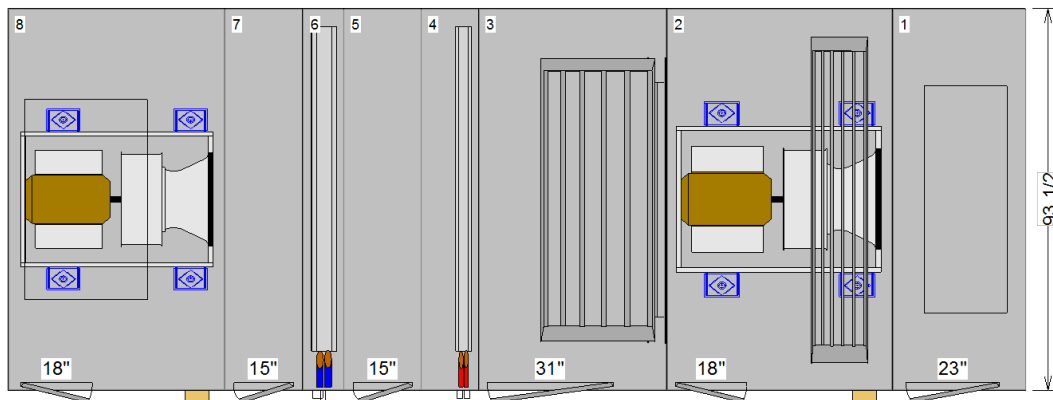
Item: A4 Qty: 1 Tag(s): AHU-4

Shipping splits are indicated by thick black lines



For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length sh

Pos #	Module	Length	Weight
1	Air mixing section	32 1/2	394.04
2	Fan section	55 3/8	1621.40
3	Air mixing section	46 1/8	663.31
4	Coil section	14	275.28
5	Access section	19	176.00
6	Coil section	10 1/8	491.94
7	Access section	19 1/8	190.78
8	Fan section	53	1528.60
		Installed Unit Weight 5341.36 lbs	



Basic Overall Plan View: Top - Measurements in inches

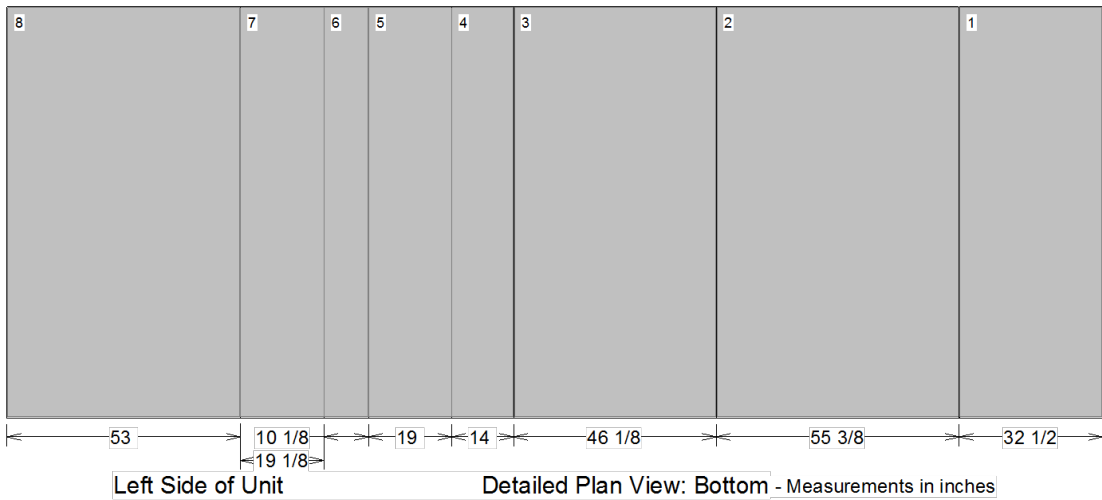
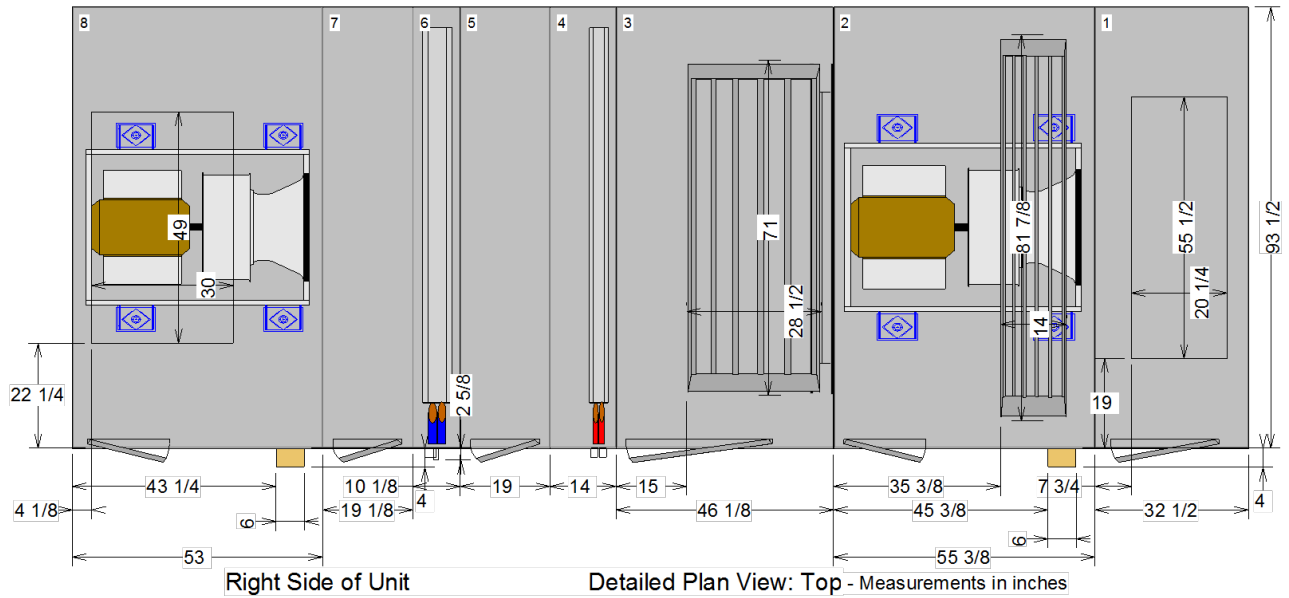
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 30	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 14900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-4
Paint:		Rigging/Installed Weight: 5215.7 lb / 5341.4 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A4 Qty: 1 Tag(s): AHU-4



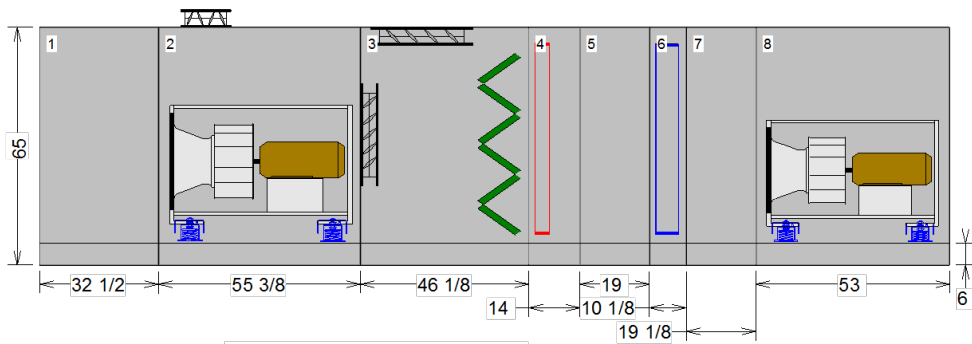
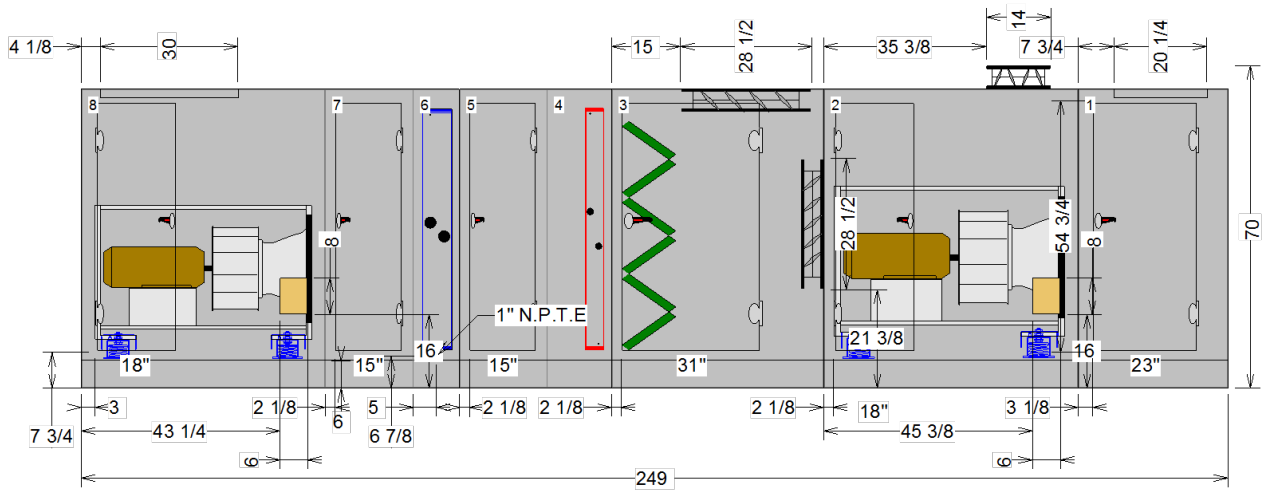
**\*\*Placement of electrical conduit may vary by a tolerance of 8" in any direction.**

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Unit size: 30	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 14900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-4
Paint:		Rigging/Installed Weight: 5215.7 lb / 5341.4 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A4 Qty: 1 Tag(s): AHU-4**



Detailed Elevation View: Left - Measurements in inches

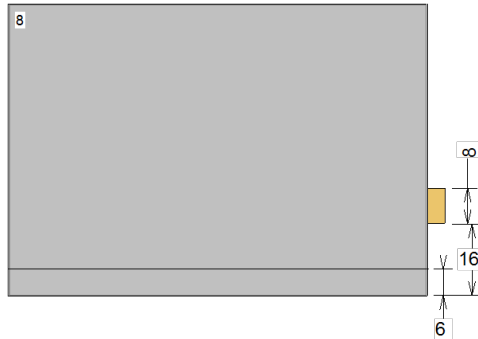
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Unit size: 30	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 14900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-4
Paint:		Rigging/Installed Weight: 5215.7 lb / 5341.4 lb

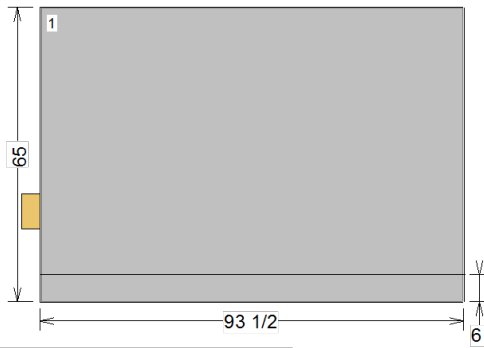


**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A4 Qty: 1 Tag(s): AHU-4



Detailed Elevation View: Front - Measurements in inches



Detailed Elevation View: Back - Measurements in inches

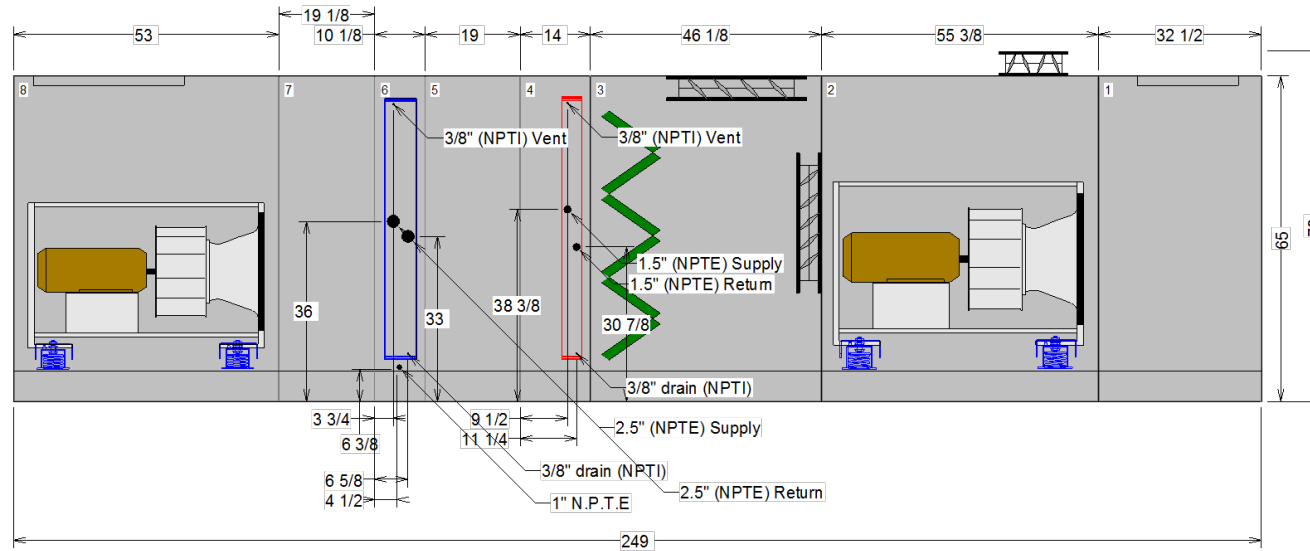
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 30	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 14900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-4
Paint:		Rigging/Installed Weight: 5215.7 lb / 5341.4 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A4 Qty: 1 Tag(s): AHU-4



**NPTI : National Pipe Thread Internal Connection  
NPTE : National Pipe Thread External Connection**

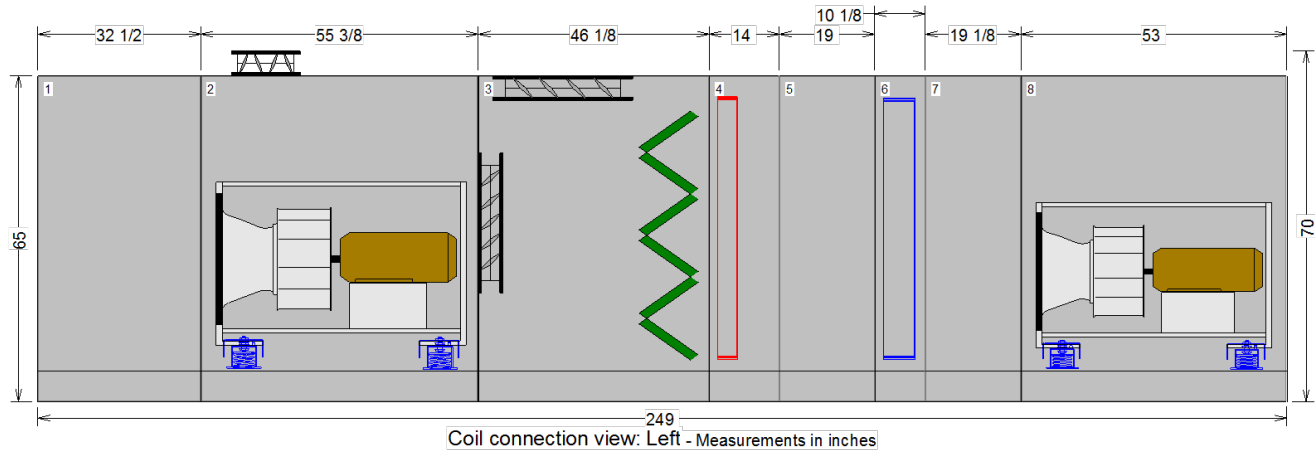
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 30	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 14900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-4
Paint:		Rigging/Installed Weight: 5215.7 lb / 5341.4 lb




**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A4 Qty: 1 Tag(s): AHU-4



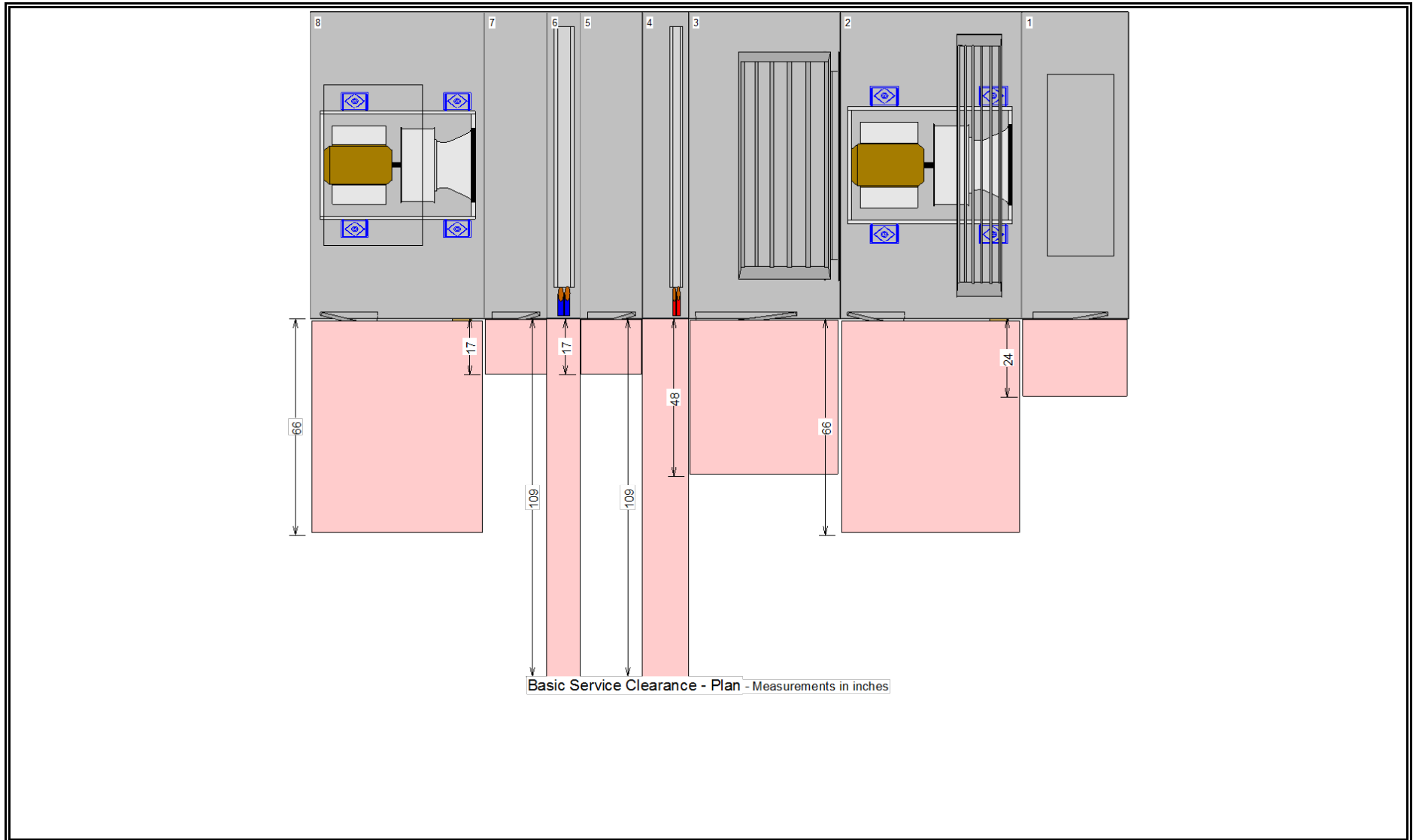
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*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*


Unit size: 30	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 14900. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-4	
Paint:		Rigging/Installed Weight: 5215.7 lb / 5341.4 lb	

**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A4 Qty: 1 Tag(s): AHU-4

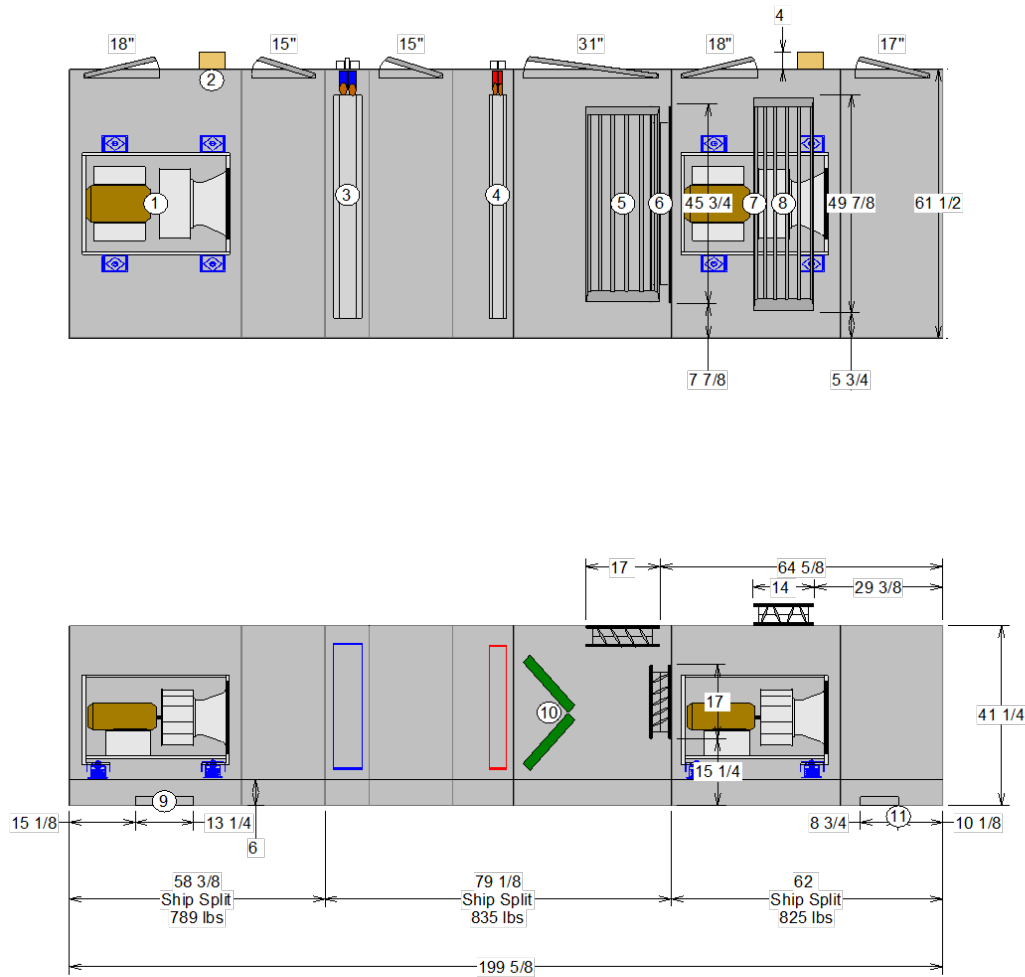


*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 30	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 14900. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-4	
Paint:		Rigging/Installed Weight: 5215.7 lb / 5341.4 lb	

**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A5 Qty: 1 Tag(s): AHU-5



- 1 Plenum fan - 18.25in. dd plenum, full width, M press Supply fan 3 hp 460/3
  - 2 External junction box LH (2)
  - 3 Cooling coil - 4 Rows Coil type 1/2" Unit Optimized, General (UW)
  - 4 Heating coil - 1 Rows Coil type 5/8" Shipping Coil, General (5W)
  - 5 Damper top-parallel blade 45.75 x 17
  - 6 Damper back-parallel blade 17 x 45.75
  - 7 Plenum fan - 18.25in. dd plenum, 80% width, M press Return fan 2 hp 460/3
  - 8 Damper top 49.875 x 14
  - 9 Opening bottom 36 x 13.25
  - 10 Angled filters -
  - 11 Opening bottom 44.25 x 8.75
- Doors
- 18 width x 31 height
  - 15 width x 31 height
  - 31 width x 31 height
  - 17 width x 31 height

For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length shown.

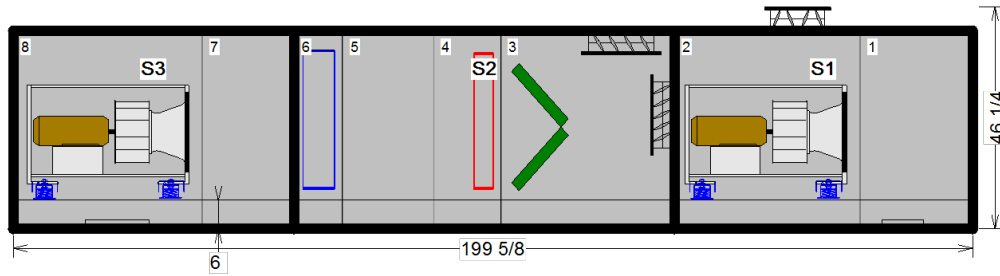
**OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE**

Unit size: 10	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 4200. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-5
Paint:		Rigging/Installed Weight: 2394.5 lb / 2448.9 lb



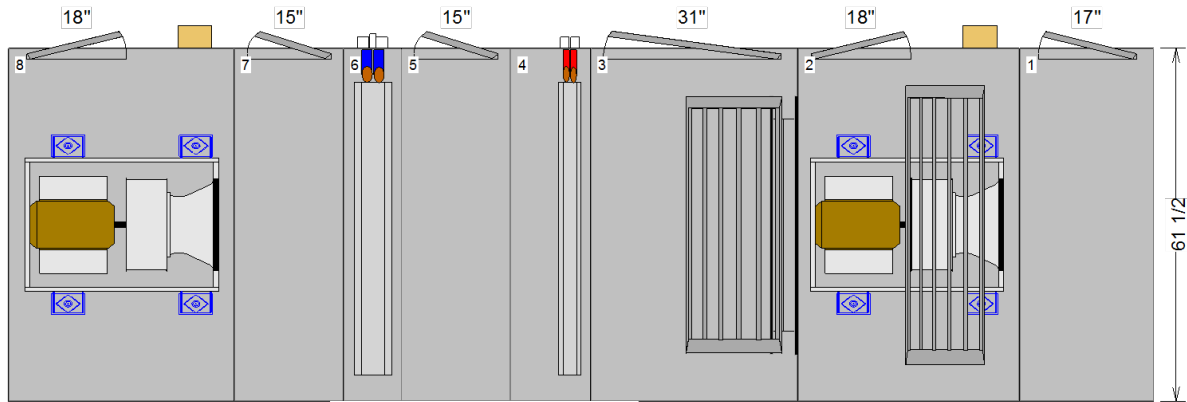
**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A5 Qty: 1 Tag(s): AHU-5**

Shipping splits are indicated by thick black lines



For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length sh

Pos #	Module	Length	Weight
1	Air mixing section	23 3/8	196.11
2	Fan section	38 5/8	628.59
3	Air mixing section	36 1/8	327.09
4	Coil section	14	150.13
5	Access section	19	121.00
6	Coil section	10 1/8	237.11
7	Access section	19	130.72
8	Fan section	39 3/8	658.17
		Installed Unit Weight 2448.93 lbs	



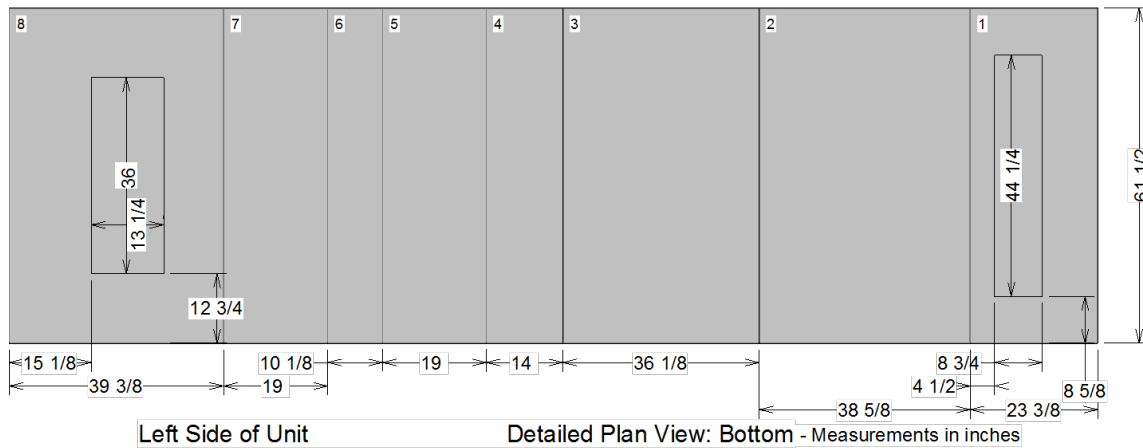
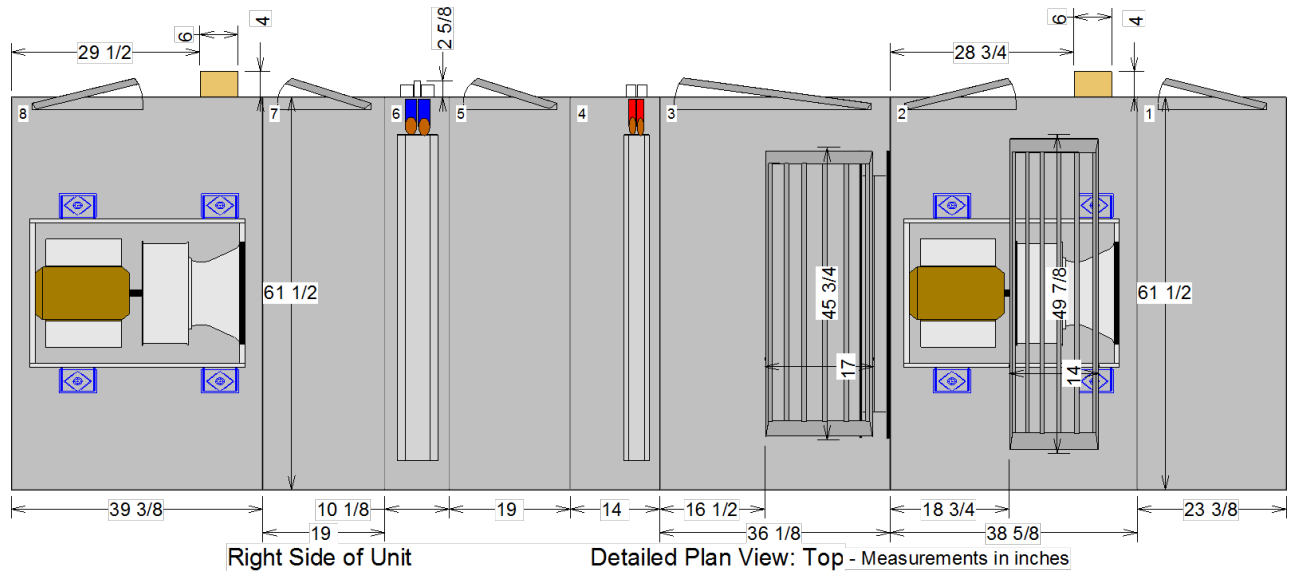
Basic Overall Plan View: Top - Measurements in inches

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 10	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 4200. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-5
Paint:		Rigging/Installed Weight: 2394.5 lb / 2448.9 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A5 Qty: 1 Tag(s): AHU-5**



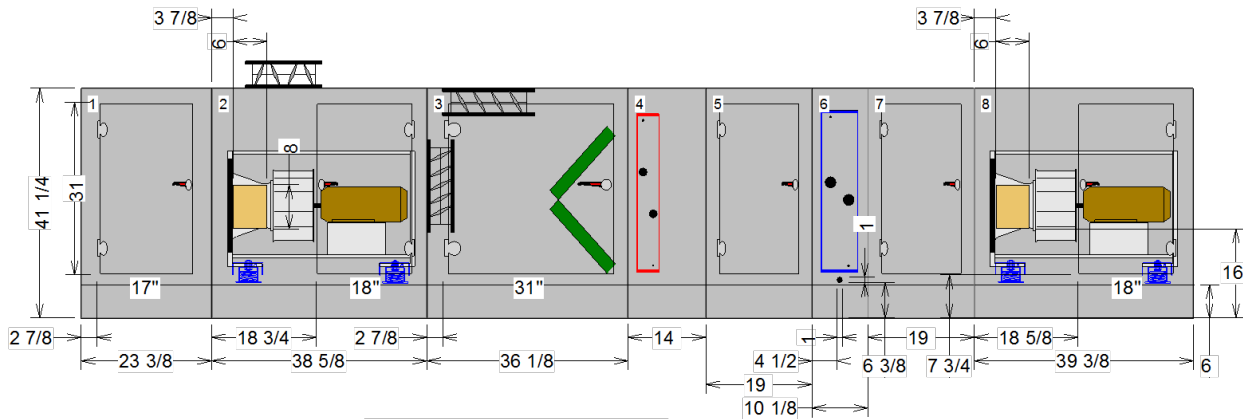
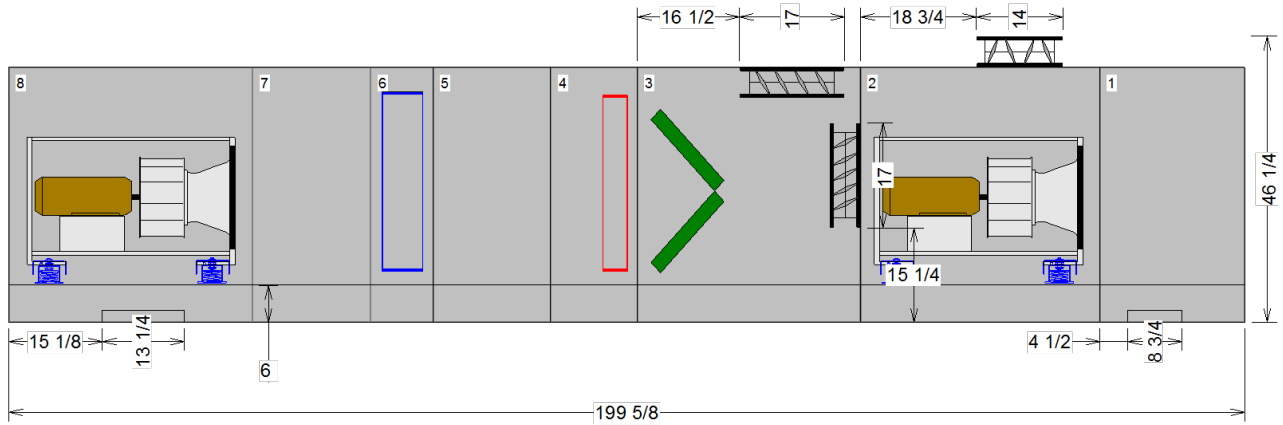
**\*\*Placement of electrical conduit may vary by a tolerance of 8" in any direction.**

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 10	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 4200. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-5
Paint:		Rigging/Installed Weight: 2394.5 lb / 2448.9 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A5 Qty: 1 Tag(s): AHU-5**



Detailed Elevation View: Left - Measurements in inches

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 10	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 4200. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-5
Paint:		Rigging/Installed Weight: 2394.5 lb / 2448.9 lb

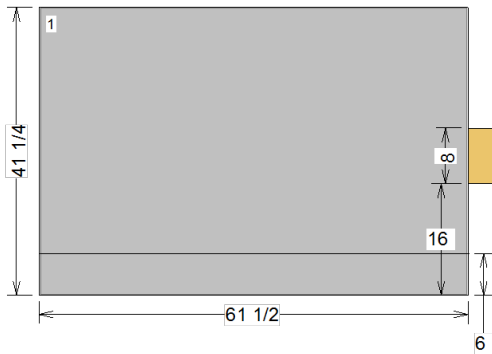


**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A5 Qty: 1 Tag(s): AHU-5



Detailed Elevation View: Front - Measurements in inches



Detailed Elevation View: Back - Measurements in inches

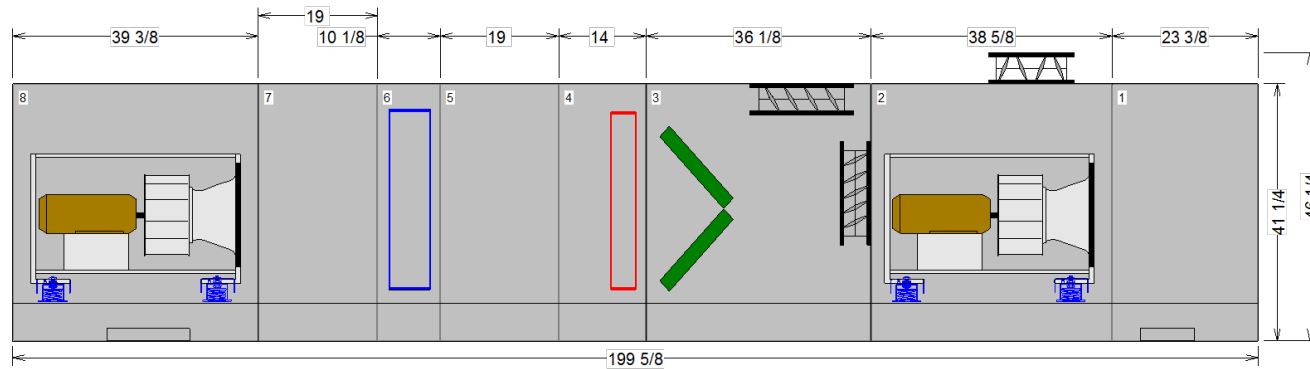
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 10	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 4200. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-5
Paint:		Rigging/Installed Weight: 2394.5 lb / 2448.9 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A5 Qty: 1 Tag(s): AHU-5



**NPTI : National Pipe Thread Internal Connection  
 NPTE : National Pipe Thread External Connection**

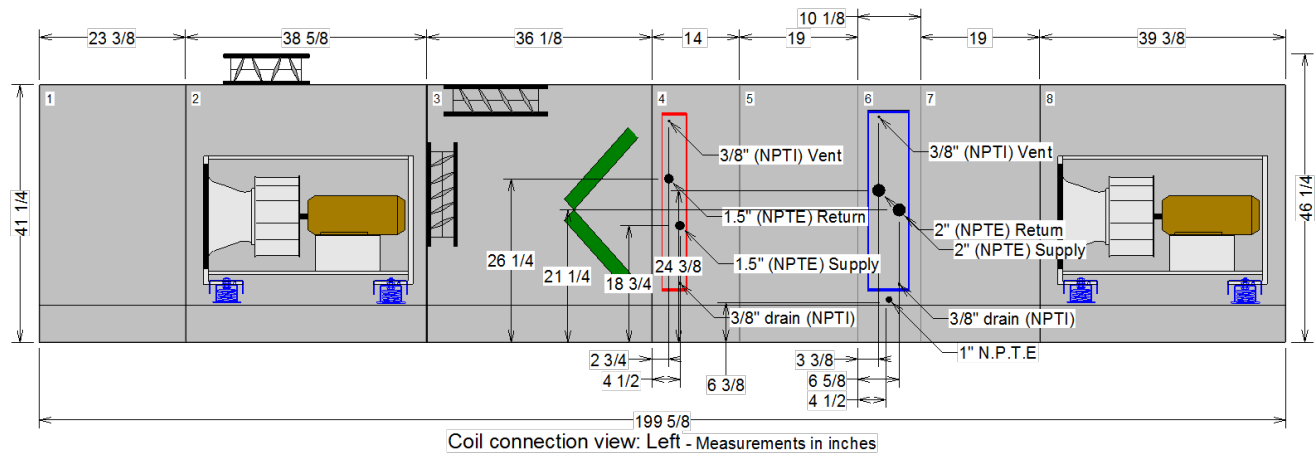
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 10	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 4200. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-5
Paint:		Rigging/Installed Weight: 2394.5 lb / 2448.9 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A5 Qty: 1 Tag(s): AHU-5



**NPTI : National Pipe Thread Internal Connection**  
**NPTE : National Pipe Thread External Connection**

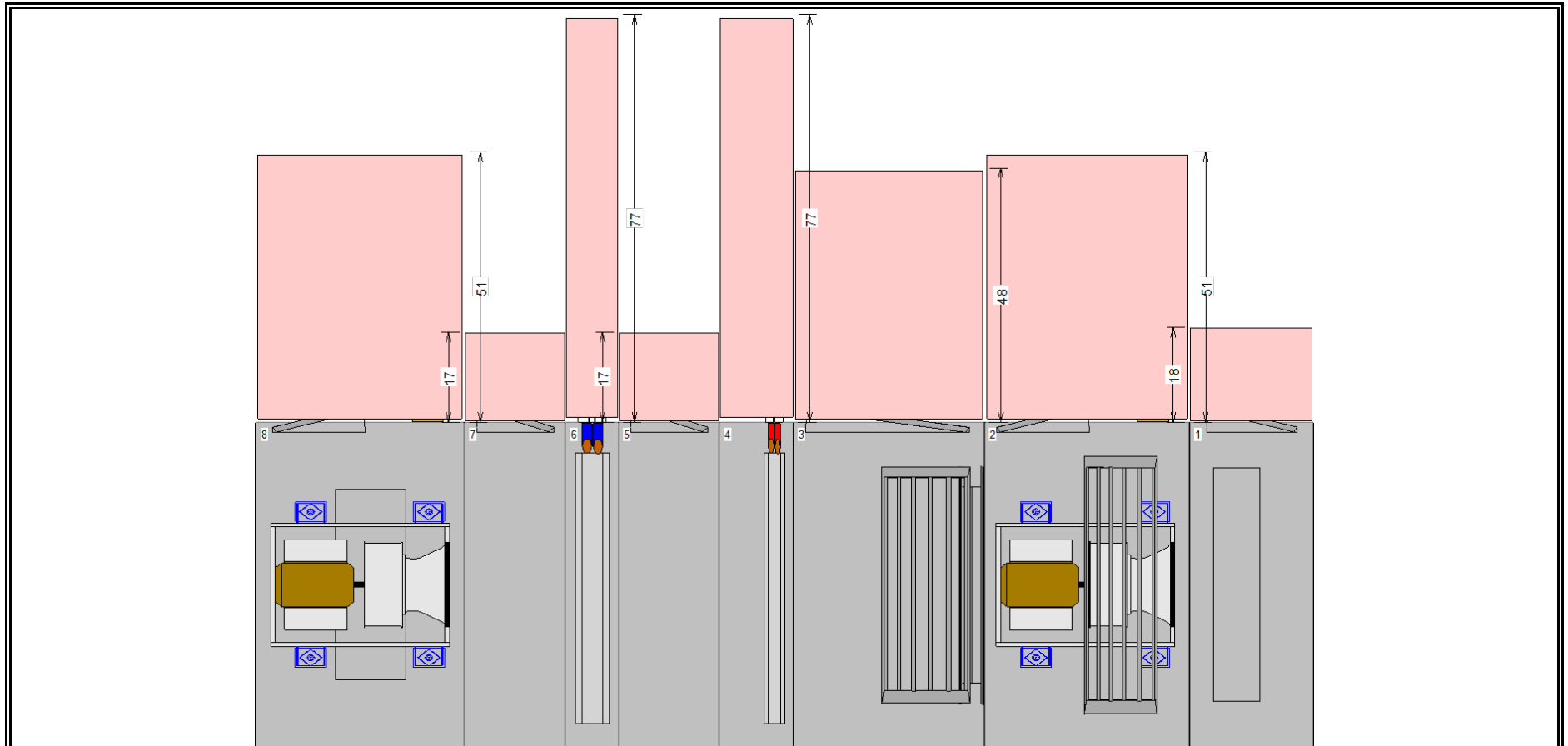
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 10	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 4200. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-5
Paint:		Rigging/Installed Weight: 2394.5 lb / 2448.9 lb




**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A5 Qty: 1 Tag(s): AHU-5



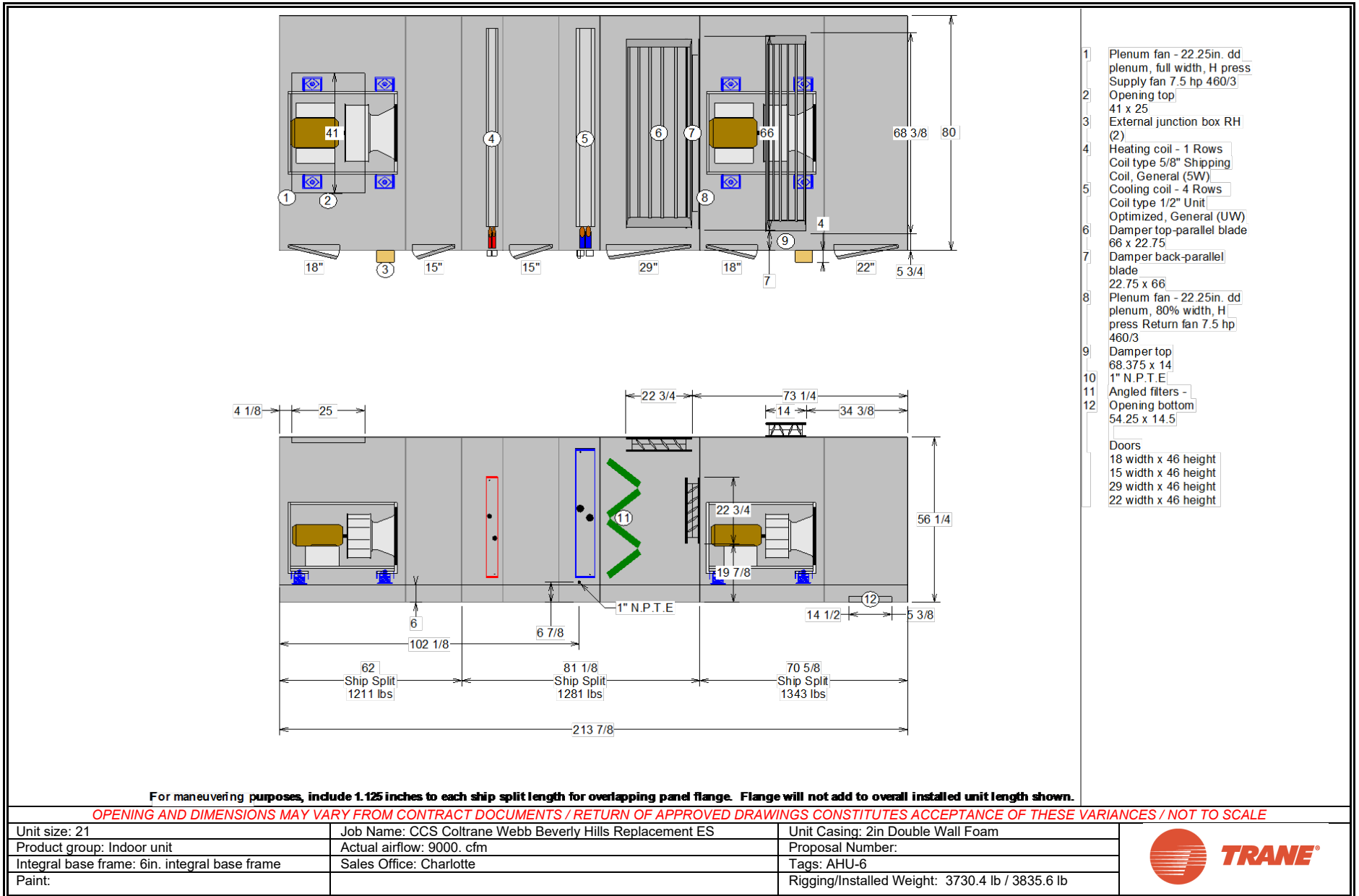
Basic Service Clearance - Plan - Measurements in inches

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 10	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 4200. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-5	
Paint:		Rigging/Installed Weight: 2394.5 lb / 2448.9 lb	

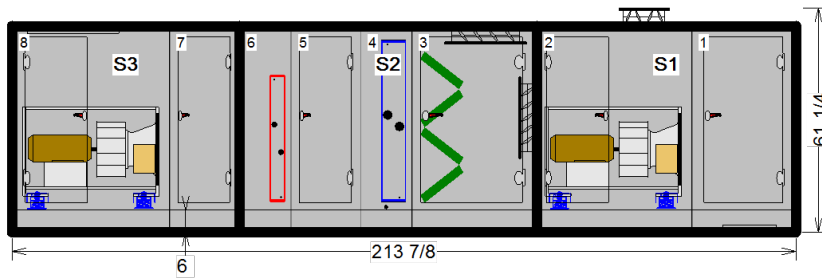
**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A6 Qty: 1 Tag(s): AHU-6



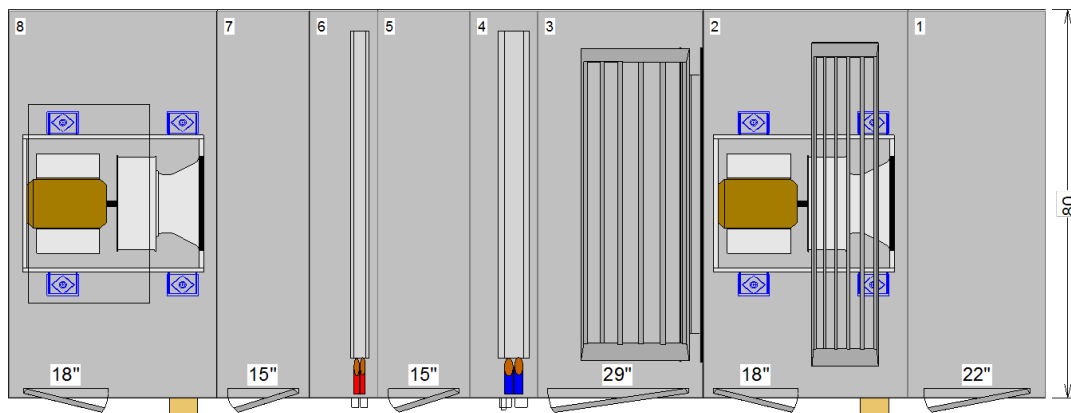
**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A6 Qty: 1 Tag(s): AHU-6**

Shipping splits are indicated by thick black lines



For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length sh

Pos #	Module	Length	Weight
1	Air mixing section	28 3/8	304.61
2	Fan section	42 1/4	1038.62
3	Air mixing section	34 1/8	465.78
4	Coil section	14	444.00
5	Access section	19	154.00
6	Coil section	14 1/8	217.54
7	Access section	19 1/8	166.64
8	Fan section	43	1044.44
		Installed Unit Weight 3835.64 lbs	



Basic Overall Plan View: Top - Measurements in inches

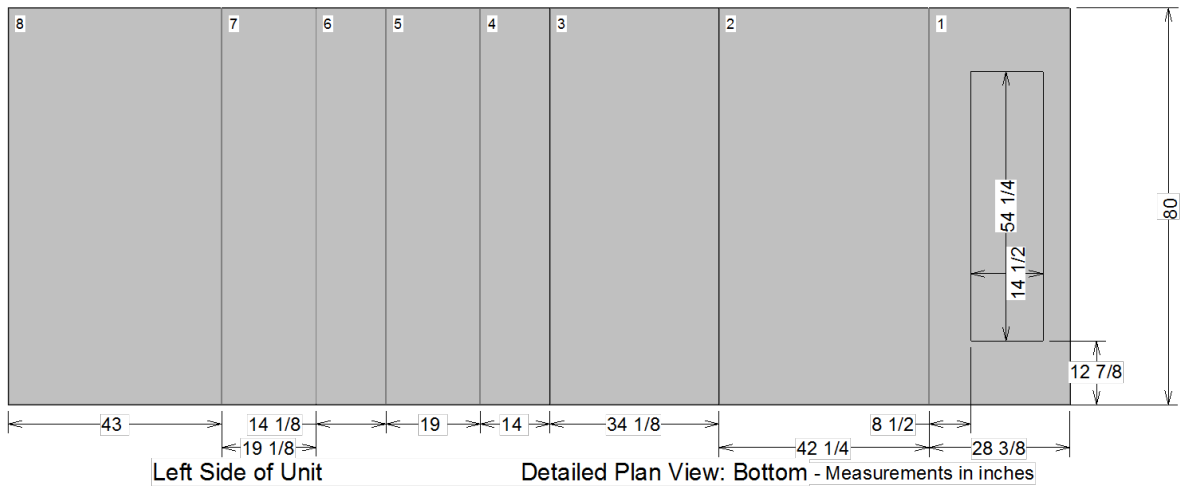
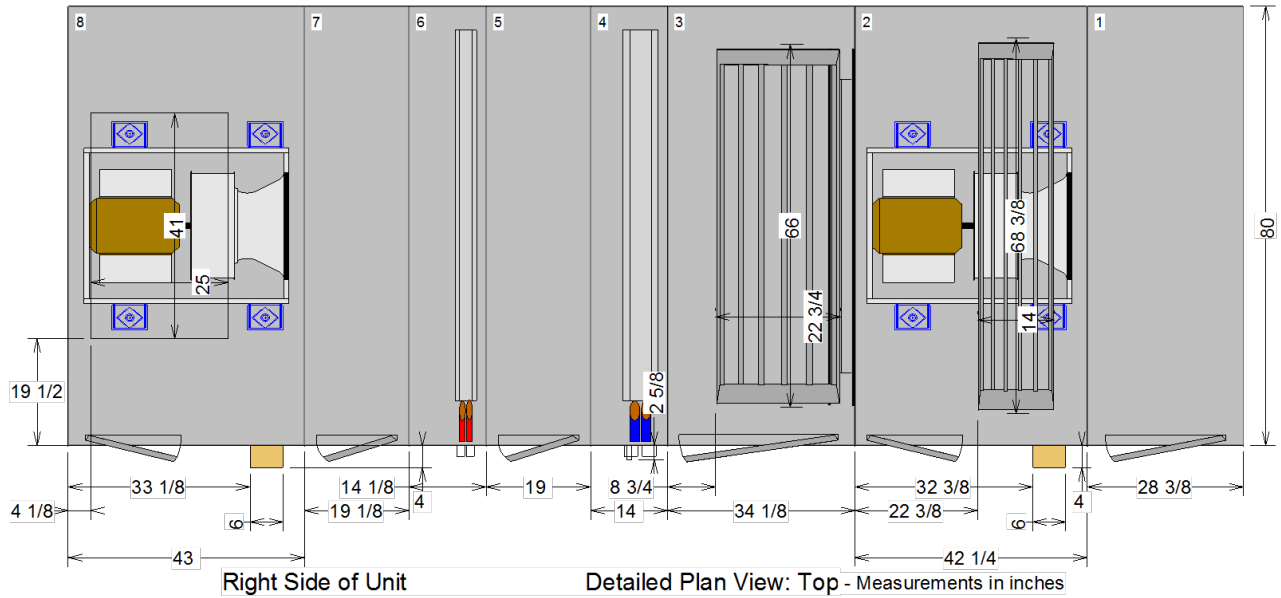
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 21	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 9000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-6
Paint:		Rigging/Installed Weight: 3730.4 lb / 3835.6 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A6 Qty: 1 Tag(s): AHU-6



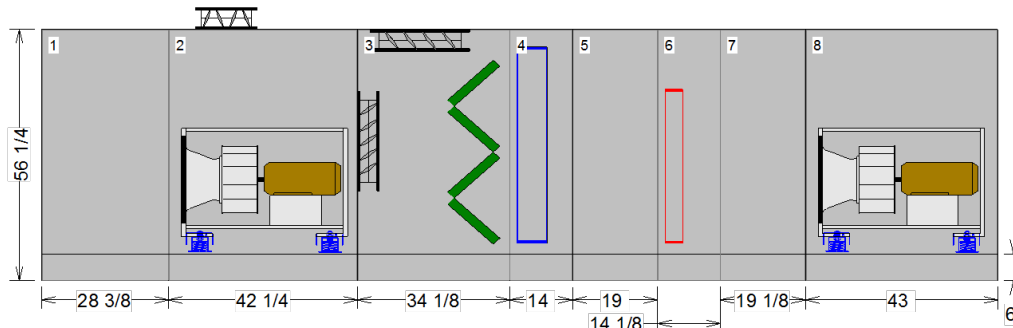
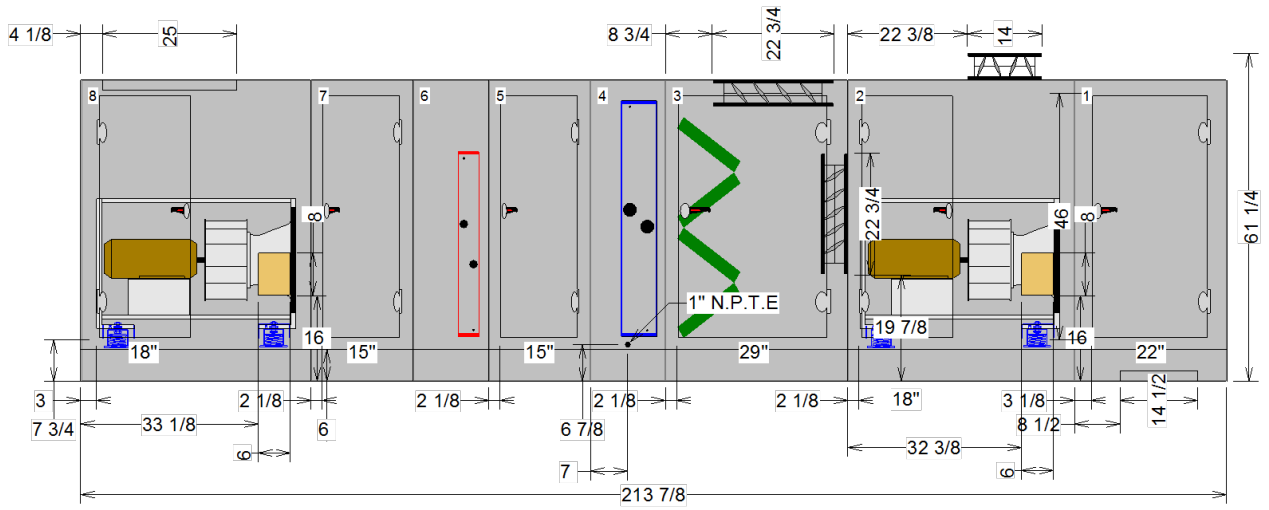
**\*\*Placement of electrical conduit may vary by a tolerance of 8" in any direction.**

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Unit size: 21	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 9000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-6
Paint:		Rigging/Installed Weight: 3730.4 lb / 3835.6 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A6 Qty: 1 Tag(s): AHU-6**



Detailed Elevation View: Left - Measurements in inches

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 21	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 9000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-6
Paint:		Rigging/Installed Weight: 3730.4 lb / 3835.6 lb

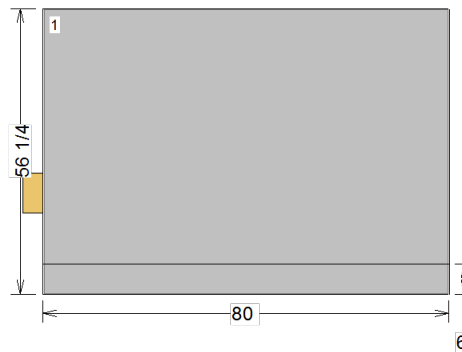


**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A6 Qty: 1 Tag(s): AHU-6



Detailed Elevation View: Front - Measurements in inches



Detailed Elevation View: Back - Measurements in inches

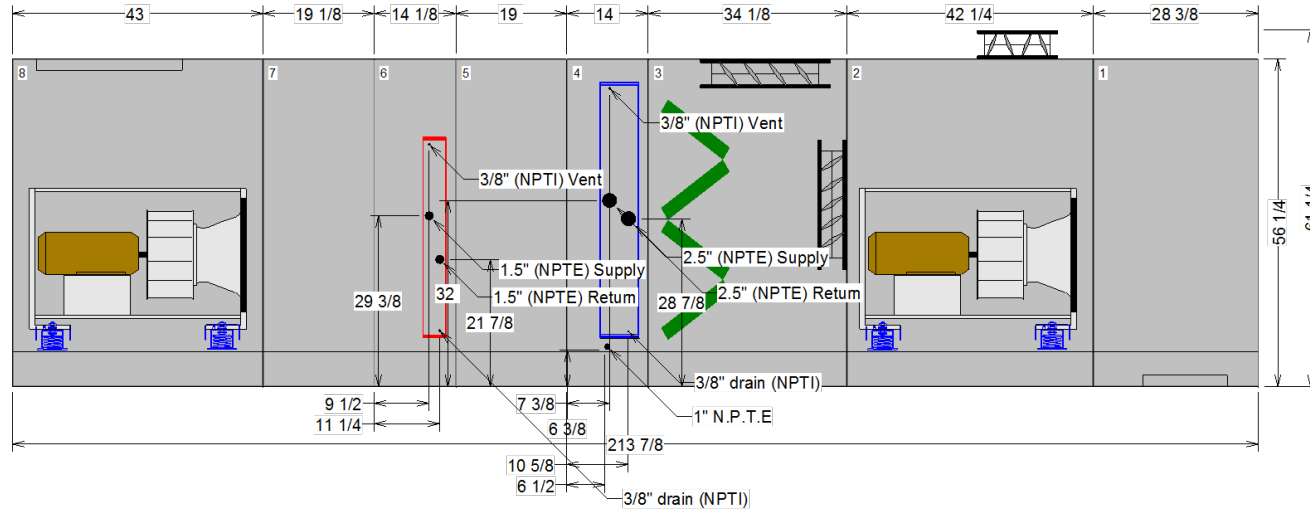
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 21	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 9000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-6
Paint:		Rigging/Installed Weight: 3730.4 lb / 3835.6 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A6 Qty: 1 Tag(s): AHU-6



**NPTI : National Pipe Thread Internal Connection  
 NPTE : National Pipe Thread External Connection**

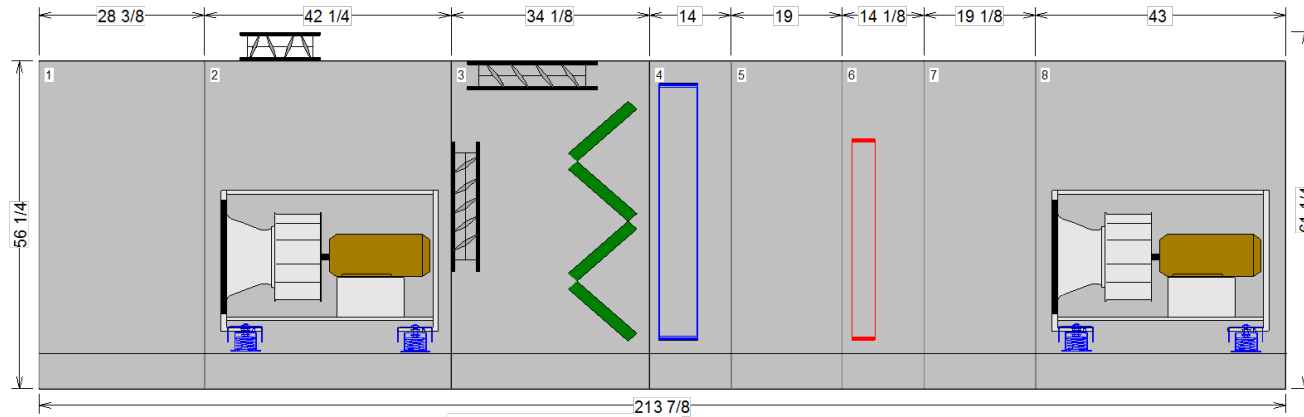
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 21	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 9000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-6
Paint:		Rigging/Installed Weight: 3730.4 lb / 3835.6 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A6 Qty: 1 Tag(s): AHU-6



Coil connection view: Left - Measurements in inches

**NPTI : National Pipe Thread Internal Connection**  
**NPTE : National Pipe Thread External Connection**

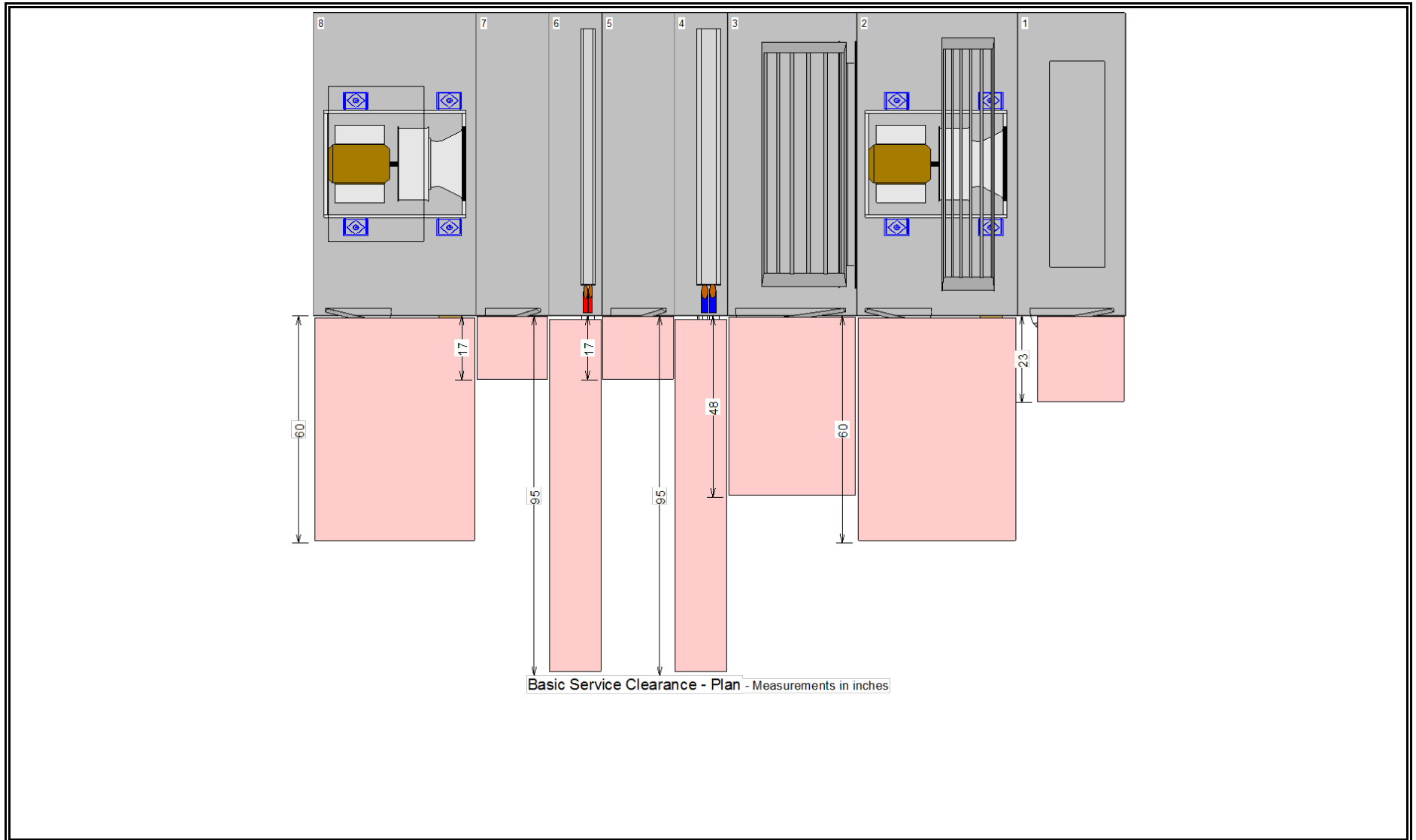
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 21	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 9000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-6
Paint:		Rigging/Installed Weight: 3730.4 lb / 3835.6 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A6 Qty: 1 Tag(s): AHU-6

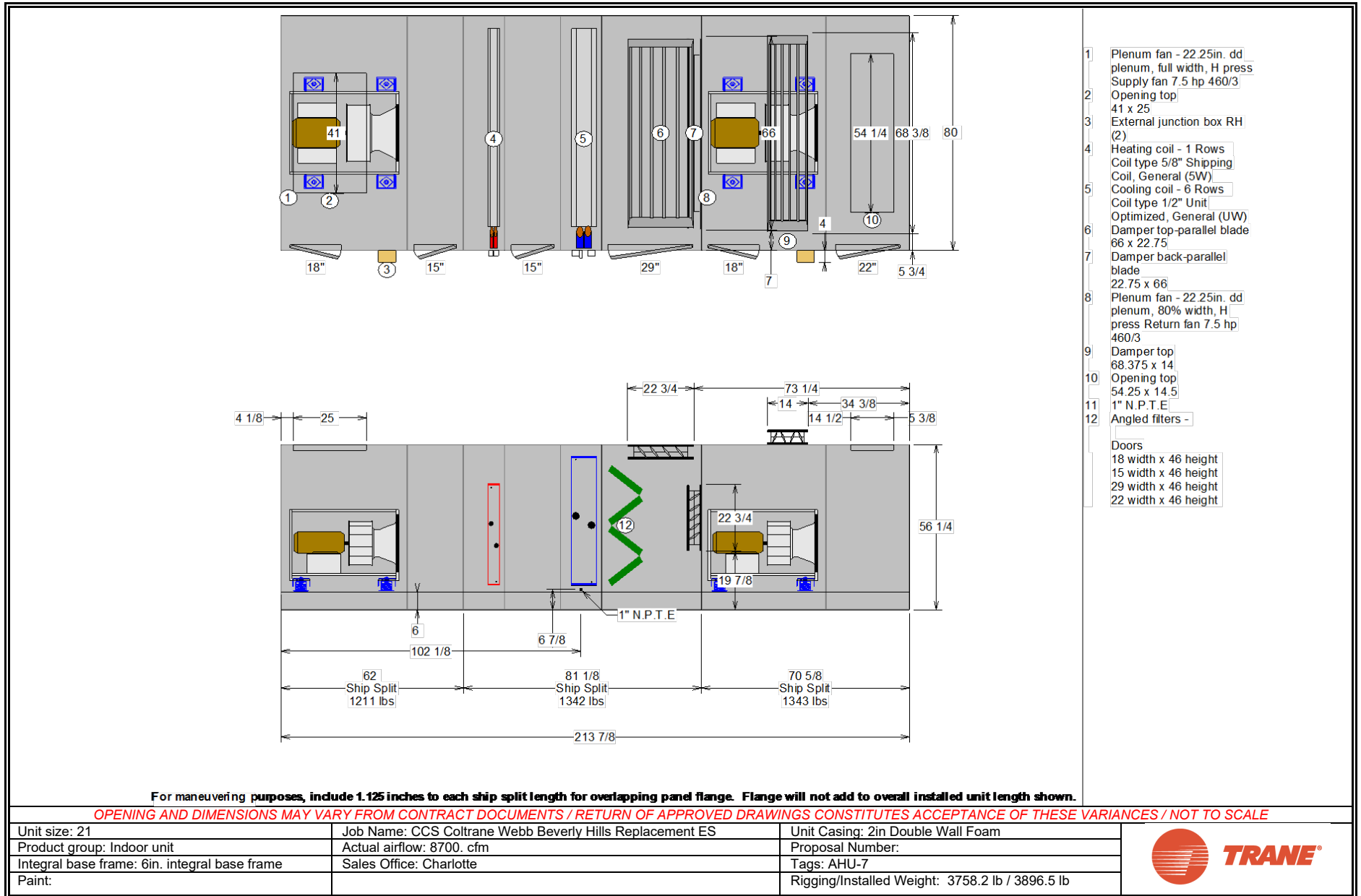


<b>OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE</b>		
Unit size: 21	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 9000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-6
Paint:		Rigging/Installed Weight: 3730.4 lb / 3835.6 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

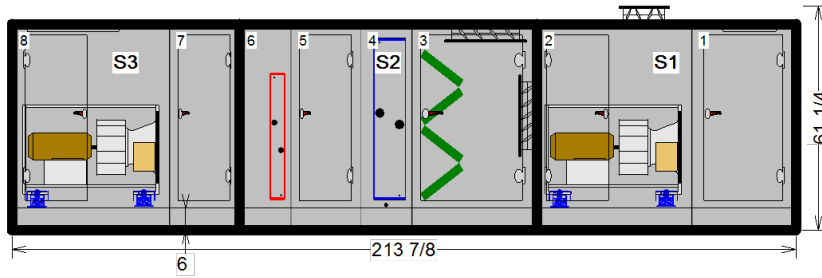
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**Dimensional Drawings - Performance Climate Changer (CSAA)**

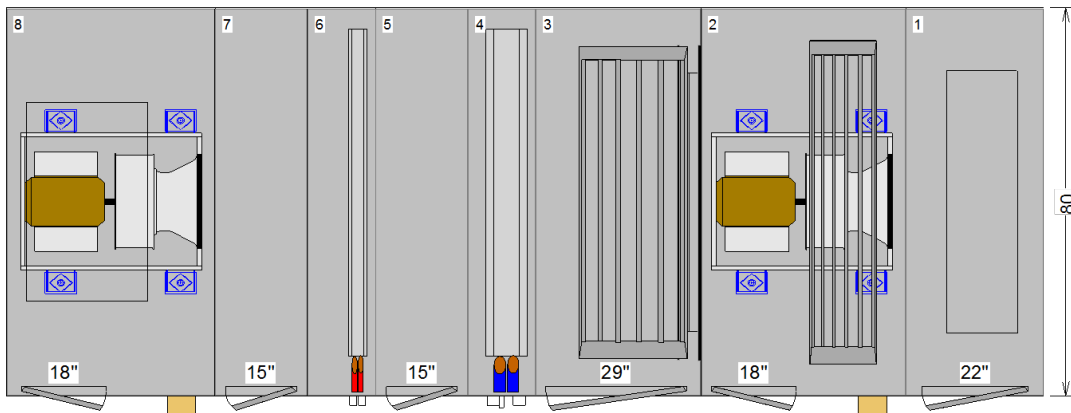
Item: A7 Qty: 1 Tag(s): AHU-7

Shipping splits are indicated by thick black lines



For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length sh

Pos #	Module	Length	Weight
1	Air mixing section	28 3/8	304.61
2	Fan section	42 1/4	1038.62
3	Air mixing section	34 1/8	465.78
4	Coil section	14	504.90
5	Access section	19	154.00
6	Coil section	14 1/8	217.54
7	Access section	19 1/8	166.64
8	Fan section	43	1044.44
			Installed Unit Weight 3896.54 lbs



Basic Overall Plan View: Top - Measurements in inches

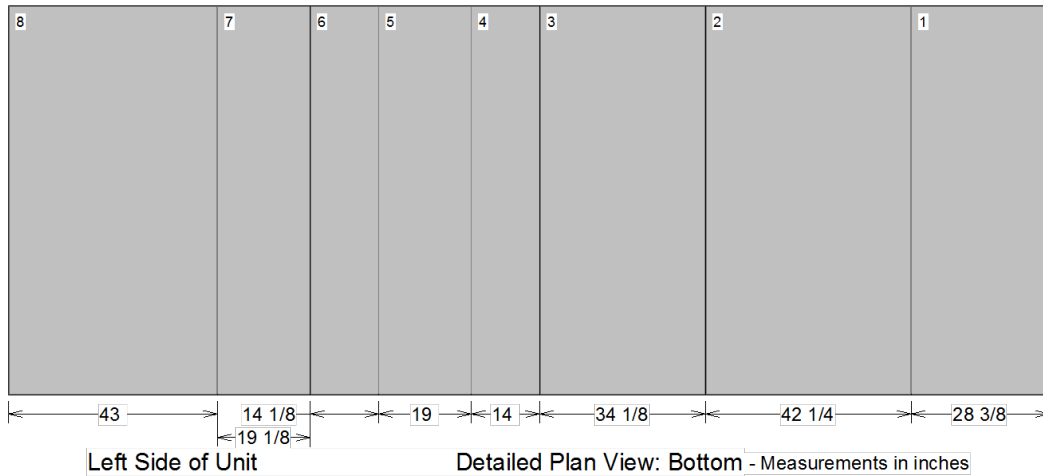
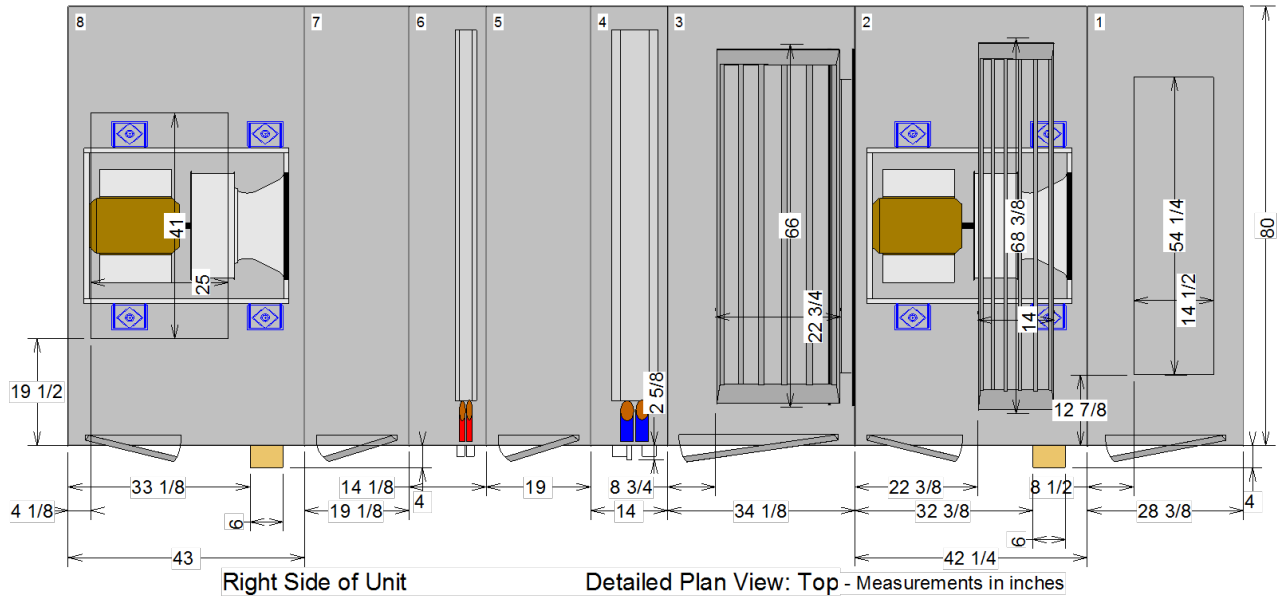
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 21	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 8700. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-7
Paint:		Rigging/Installed Weight: 3758.2 lb / 3896.5 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A7 Qty: 1 Tag(s): AHU-7



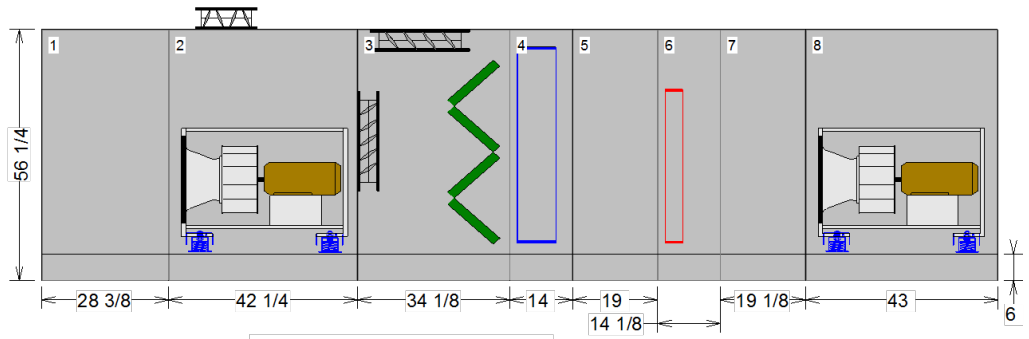
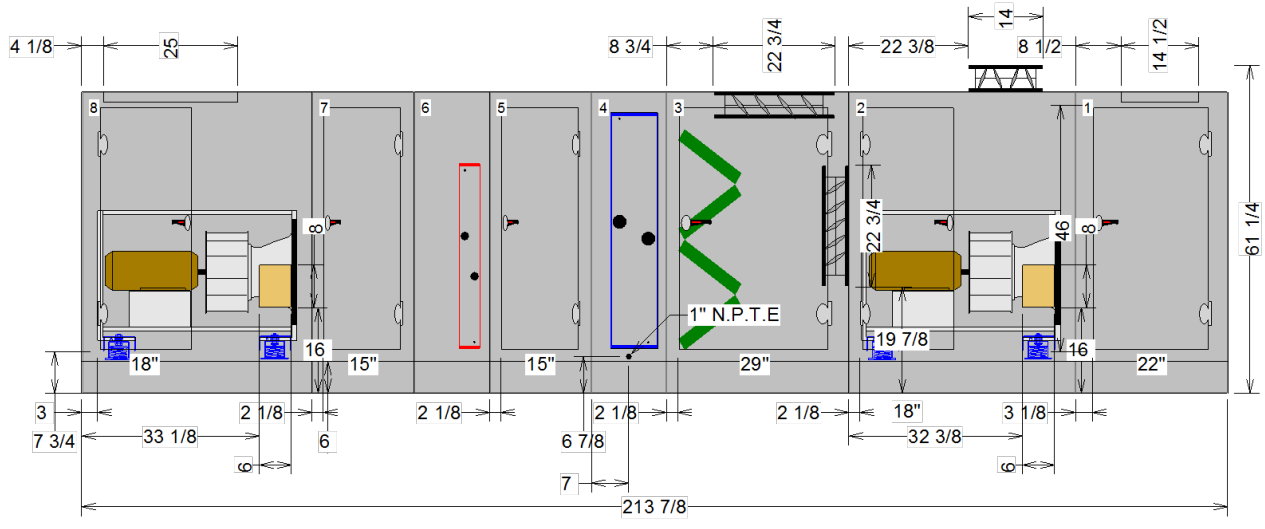
**\*\*Placement of electrical conduit may vary by a tolerance of 8" in any direction.**

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Unit size: 21	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 8700. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-7
Paint:		Rigging/Installed Weight: 3758.2 lb / 3896.5 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A7 Qty: 1 Tag(s): AHU-7**



Detailed Elevation View: Left - Measurements in inches

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 21	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 8700. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-7
Paint:		Rigging/Installed Weight: 3758.2 lb / 3896.5 lb

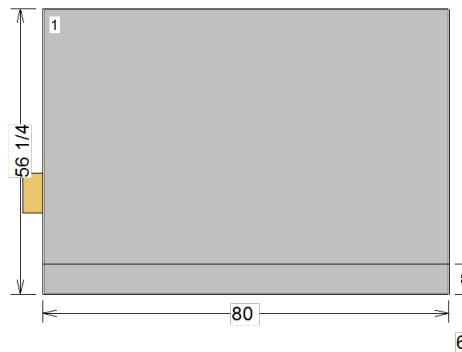


**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A7 Qty: 1 Tag(s): AHU-7



Detailed Elevation View: Front - Measurements in inches



Detailed Elevation View: Back - Measurements in inches

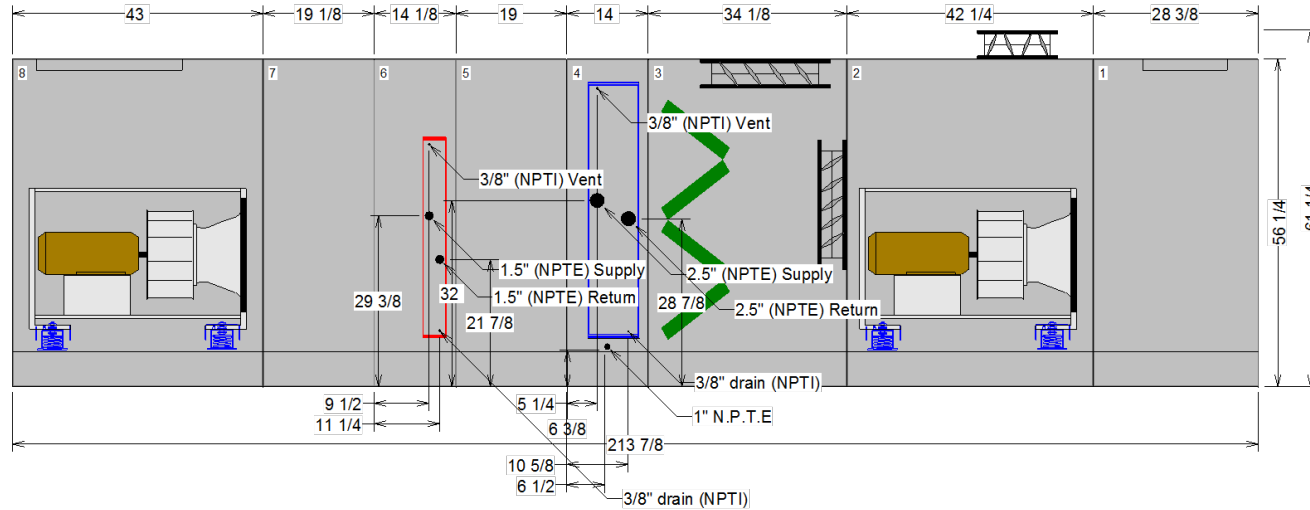
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 21	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 8700. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-7
Paint:		Rigging/Installed Weight: 3758.2 lb / 3896.5 lb




**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A7 Qty: 1 Tag(s): AHU-7



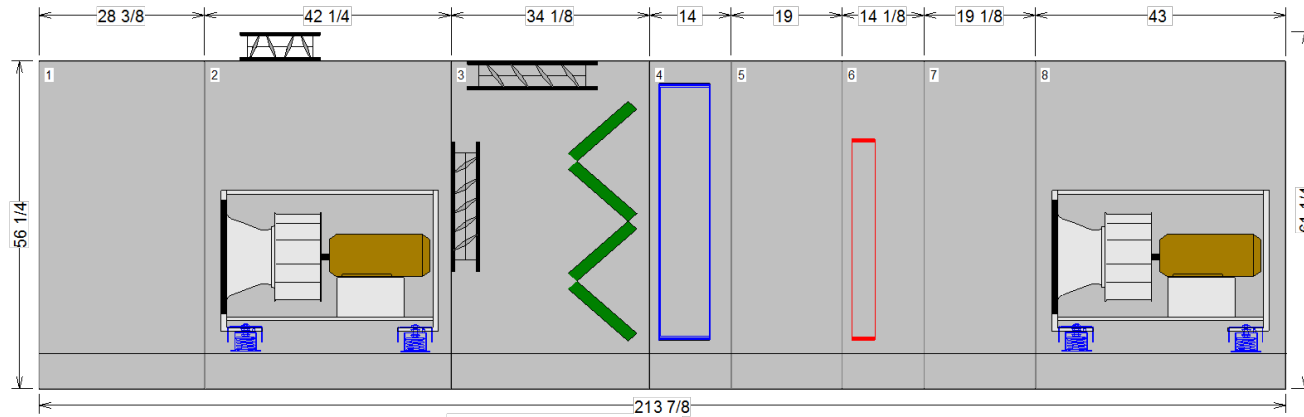
**NPTI : National Pipe Thread Internal Connection  
 NPTE : National Pipe Thread External Connection**

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Unit size: 21	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 8700. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-7	
Paint:		Rigging/Installed Weight: 3758.2 lb / 3896.5 lb	

**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A7 Qty: 1 Tag(s): AHU-7



Coil connection view: Left - Measurements in inches

**NPTI : National Pipe Thread Internal Connection  
 NPTE : National Pipe Thread External Connection**

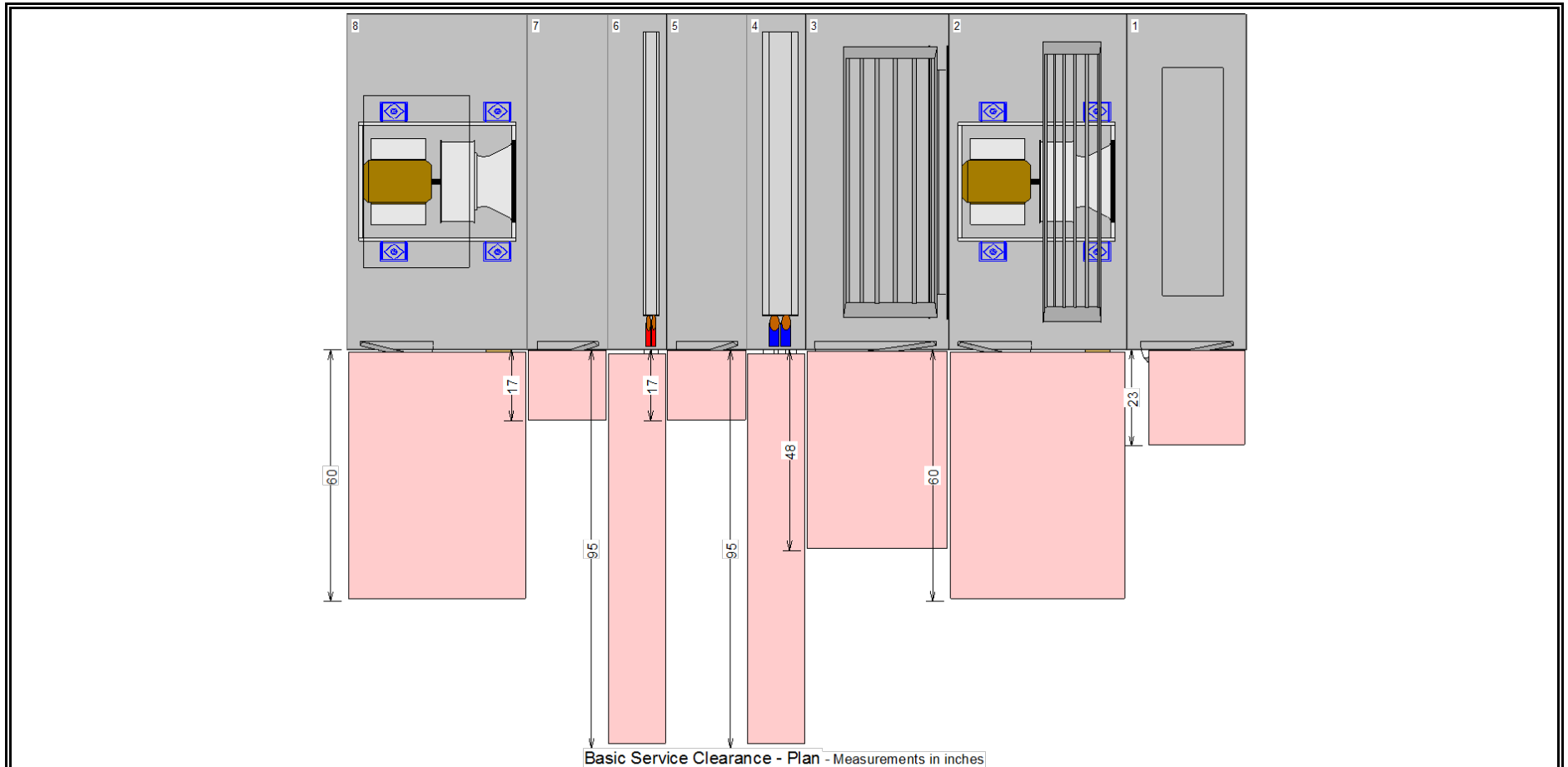
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 21	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 8700. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-7
Paint:		Rigging/Installed Weight: 3758.2 lb / 3896.5 lb




**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A7 Qty: 1 Tag(s): AHU-7

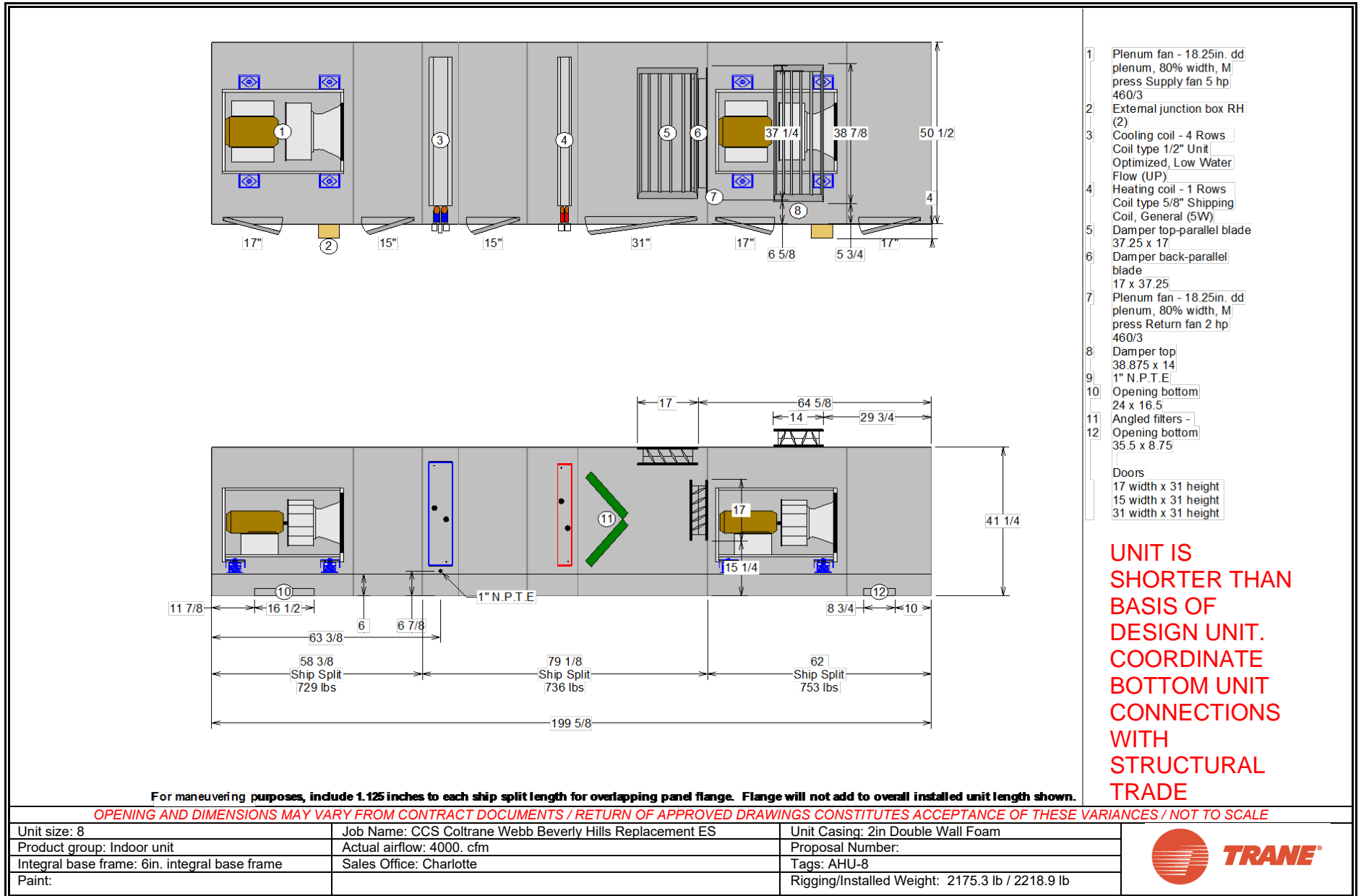


*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 21	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 8700. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-7	
Paint:		Rigging/Installed Weight: 3758.2 lb / 3896.5 lb	

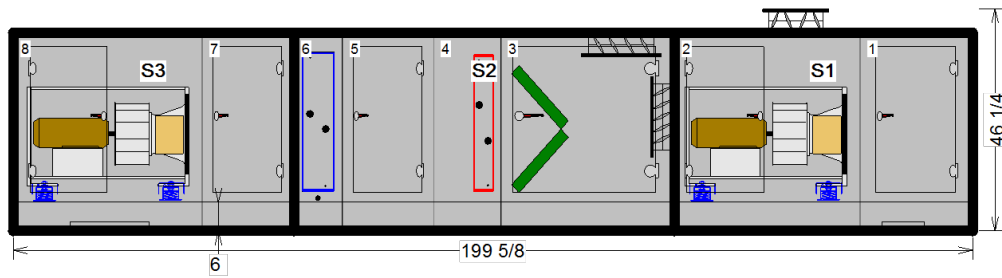
**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A8 Qty: 1 Tag(s): AHU-8



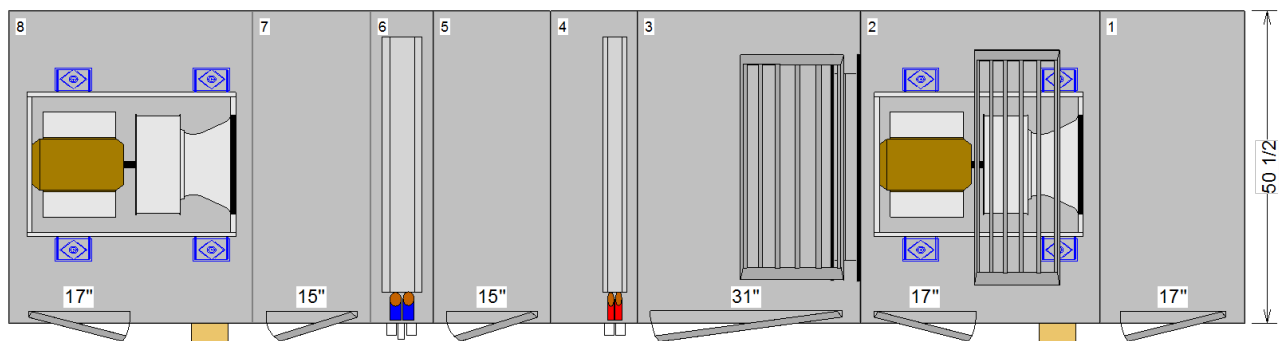
**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A8 Qty: 1 Tag(s): AHU-8**

Shipping splits are indicated by thick black lines



For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length sh

Pos #	Module	Length	Weight
1	Air mixing section	23 3/8	173.37
2	Fan section	38 5/8	580.11
3	Air mixing section	36 1/8	291.36
4	Coil section	14	133.65
5	Access section	19	109.00
6	Coil section	10 1/8	202.18
7	Access section	19	116.98
8	Fan section	39 3/8	612.25
		Installed Unit Weight 2218.90 lbs	



Basic Overall Plan View: Top - Measurements in inches

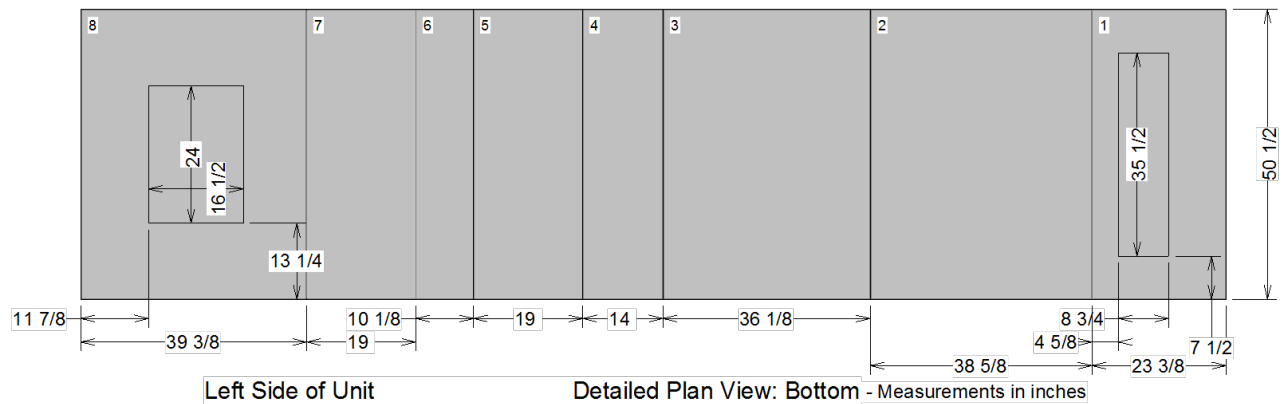
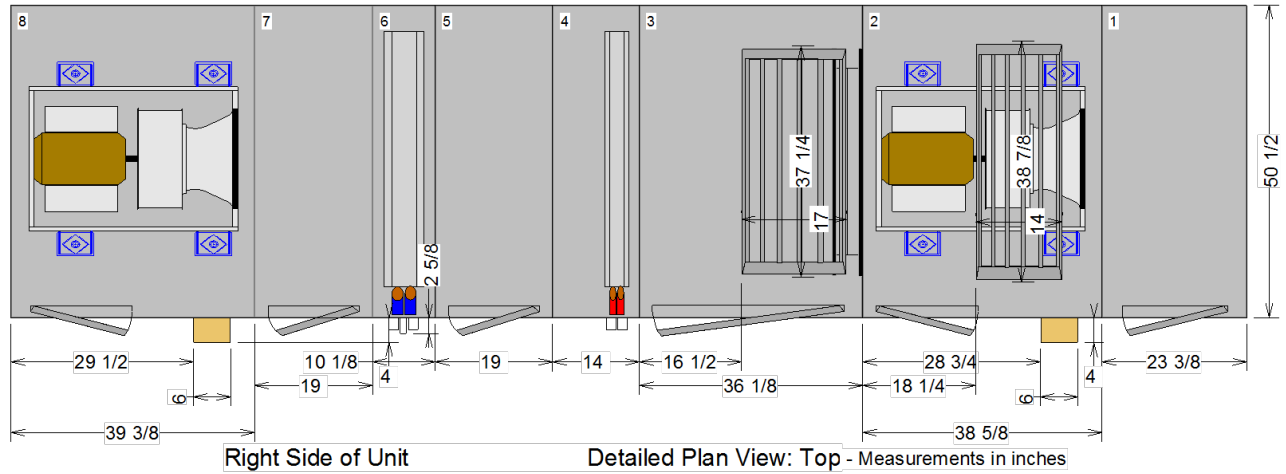
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 8	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 4000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-8
Paint:		Rigging/Installed Weight: 2175.3 lb / 2218.9 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A8 Qty: 1 Tag(s): AHU-8



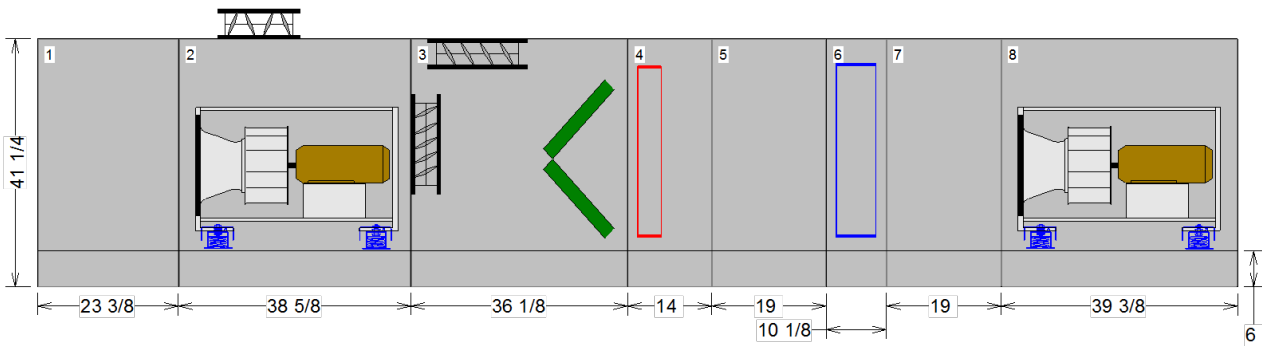
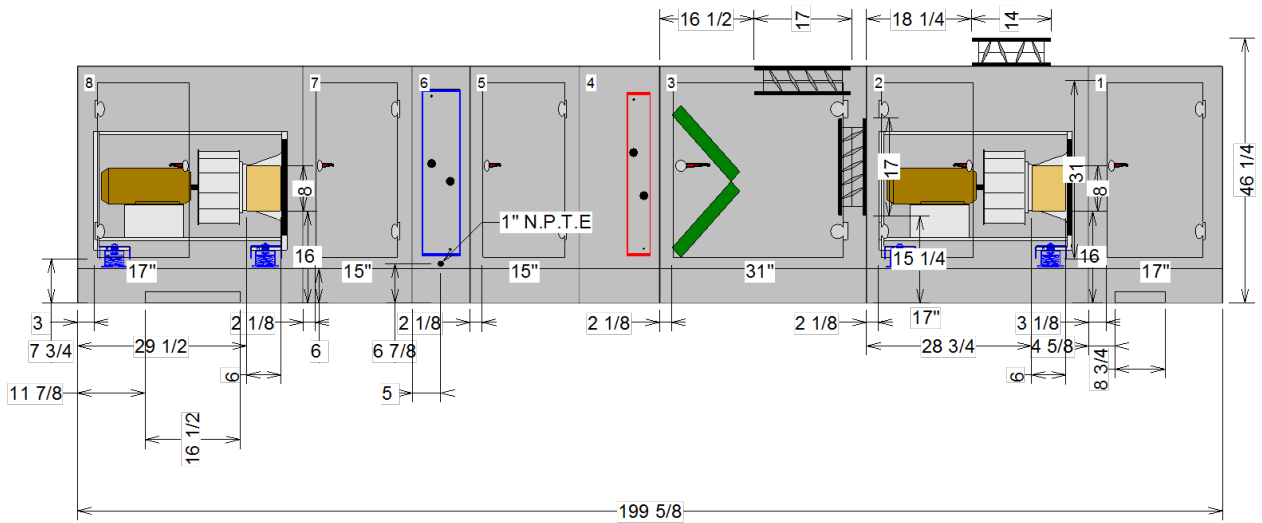
**\*\*Placement of electrical conduit may vary by a tolerance of 8" in any direction.**

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 8	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 4000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-8
Paint:		Rigging/Installed Weight: 2175.3 lb / 2218.9 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A8 Qty: 1 Tag(s): AHU-8**



Detailed Elevation View: Left - Measurements in inches

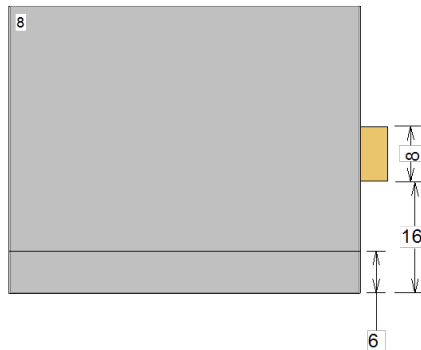
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 8	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 4000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-8
Paint:		Rigging/Installed Weight: 2175.3 lb / 2218.9 lb

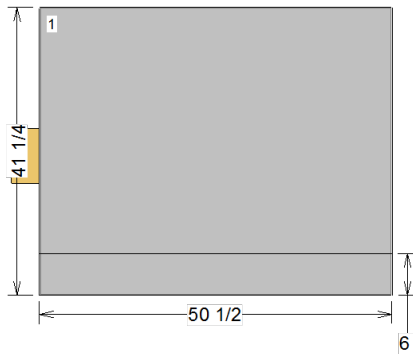


**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A8 Qty: 1 Tag(s): AHU-8



Detailed Elevation View: Front - Measurements in inches



Detailed Elevation View: Back - Measurements in inches

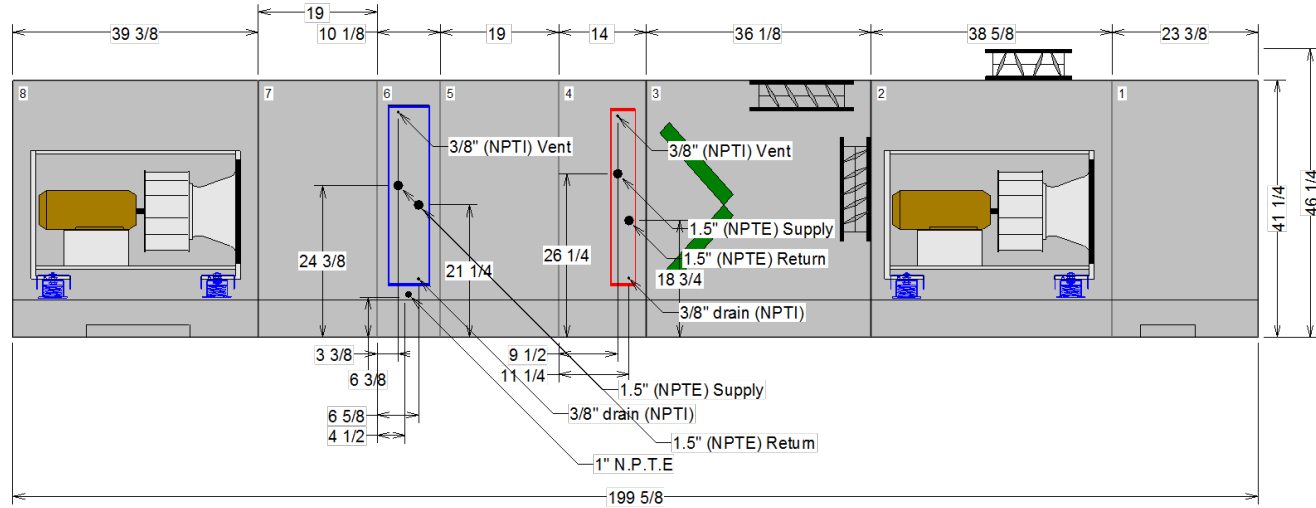
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 8	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 4000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-8
Paint:		Rigging/Installed Weight: 2175.3 lb / 2218.9 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A8 Qty: 1 Tag(s): AHU-8



**NPTI : National Pipe Thread Internal Connection  
 NPTE : National Pipe Thread External Connection**

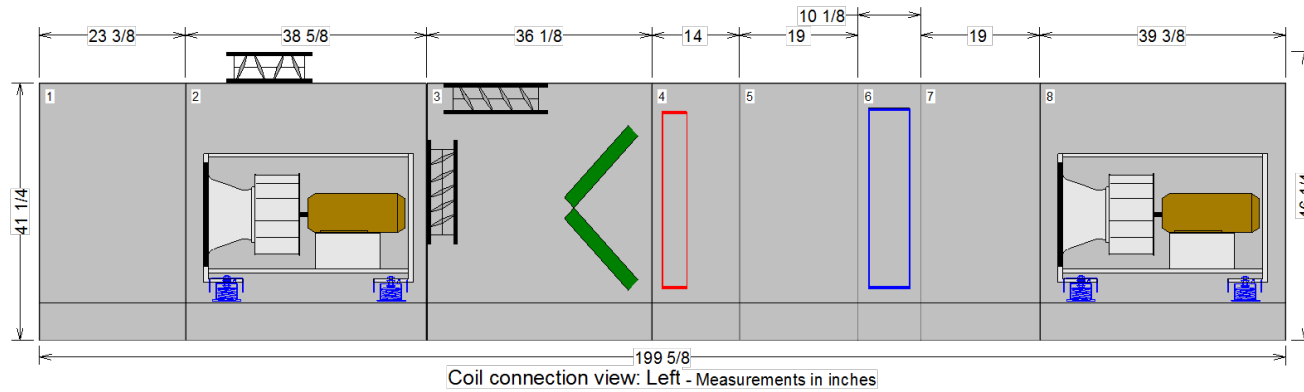
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Unit size: 8	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 4000. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-8
Paint:		Rigging/Installed Weight: 2175.3 lb / 2218.9 lb




**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A8 Qty: 1 Tag(s): AHU-8



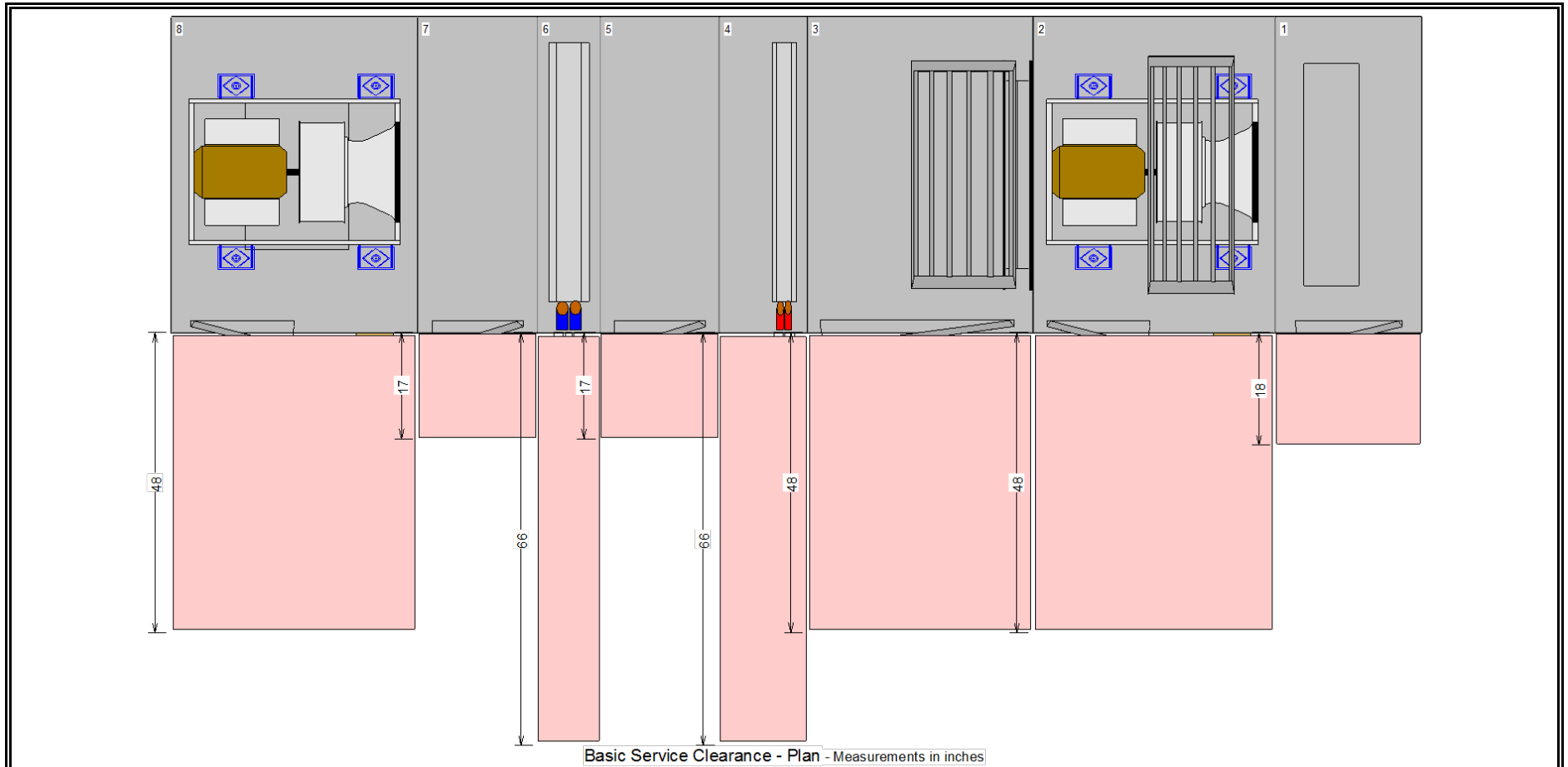
**NPTI : National Pipe Thread Internal Connection  
 NPTE : National Pipe Thread External Connection**

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Unit size: 8	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 4000. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-8	
Paint:		Rigging/Installed Weight: 2175.3 lb / 2218.9 lb	

**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A8 Qty: 1 Tag(s): AHU-8

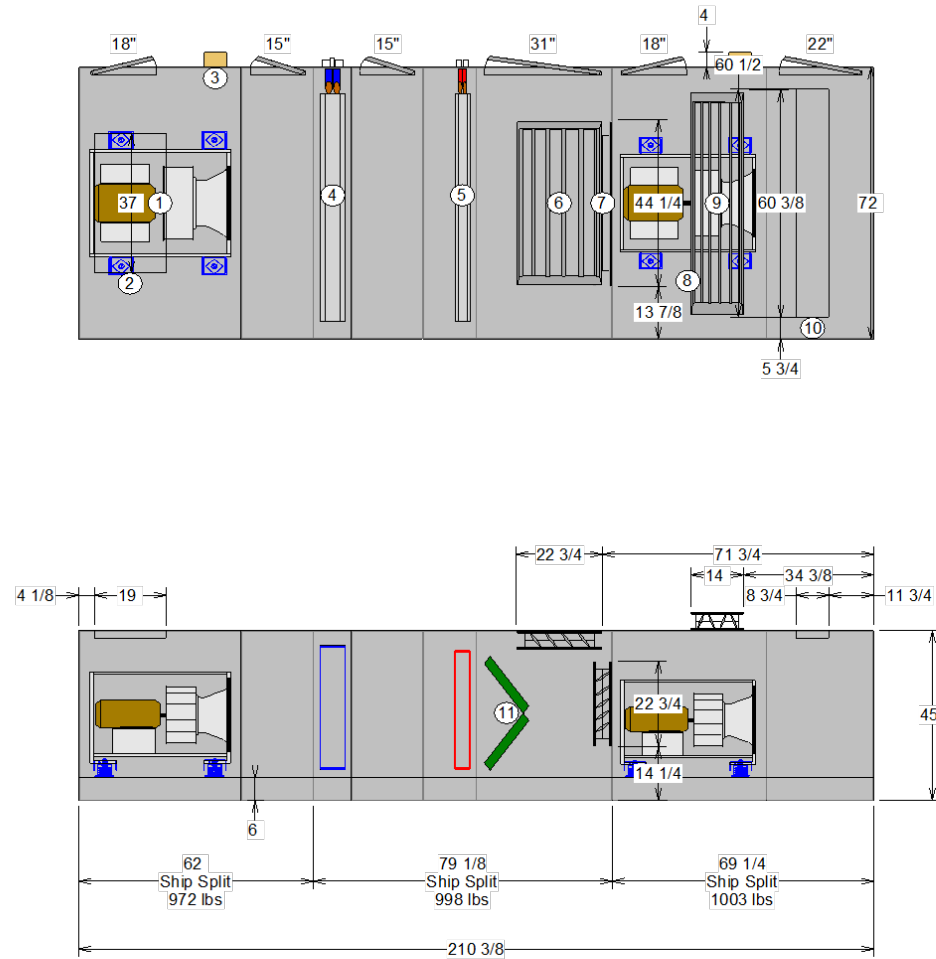


*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 8	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 4000. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-8	
Paint:		Rigging/Installed Weight: 2175.3 lb / 2218.9 lb	

**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A9 Qty: 1 Tag(s): AHU-9



- 1 Plenum fan - 22.25in. dd plenum, 80% width, H press Supply fan 7.5 hp 460/3
- 2 Opening top 37 x 19
- 3 External junction box LH (2)
- 4 Cooling coil - 4 Rows  
Coil type 1/2" Unit Optimized, General (UW)
- 5 Heating coil - 1 Rows  
Coil type 5/8" Shipping Coil, General (5W)
- 6 Damper top-parallel blade 44.25 x 22.75
- 7 Damper back-parallel blade 22.75 x 44.25
- 8 Plenum fan - 20in. dd plenum, full width, M press Return fan 5 hp 460/3
- 9 Damper top 60.375 x 14
- 10 Opening top 60.5 x 8.75
- 11 Angled filters -  
Doors  
18 width x 35 height  
15 width x 35 height  
31 width x 35 height  
22 width x 35 height

For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length shown.

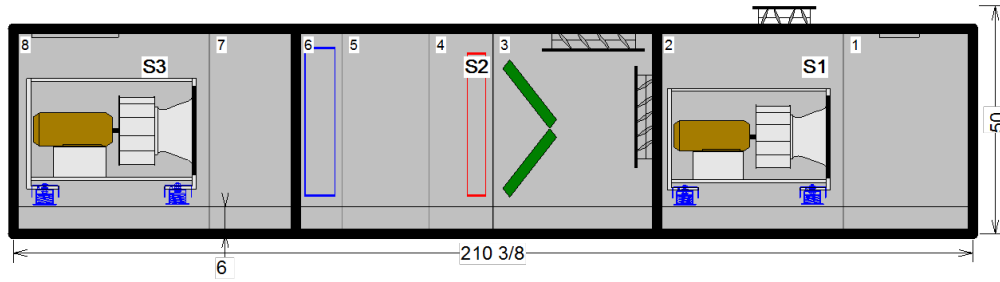
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 14	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 6900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-9
Paint:		Rigging/Installed Weight: 2901.8 lb / 2972.3 lb



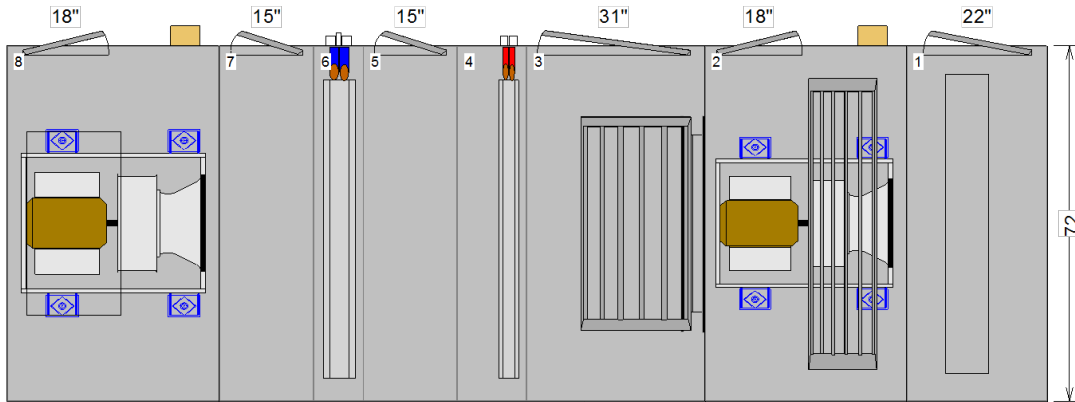
**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A9 Qty: 1 Tag(s): AHU-9**

Shipping splits are indicated by thick black lines



For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length sh

Pos #	Module	Length	Weight
1	Air mixing section	28 3/8	253.34
2	Fan section	40 7/8	749.20
3	Air mixing section	36 1/8	388.95
4	Coil section	14	175.80
5	Access section	19	135.00
6	Coil section	10 1/8	298.20
7	Access section	19 1/8	146.38
8	Fan section	43	825.43
		Installed Unit Weight 2972.30 lbs	



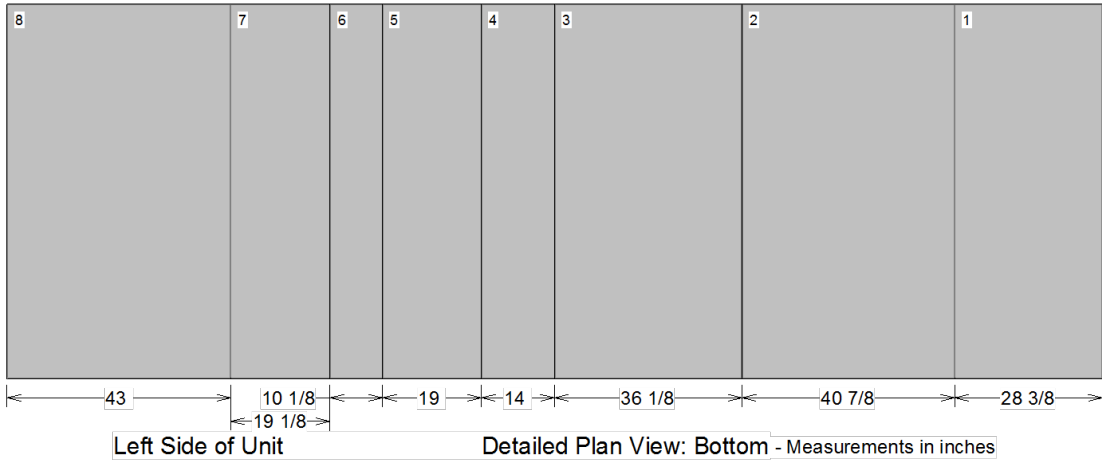
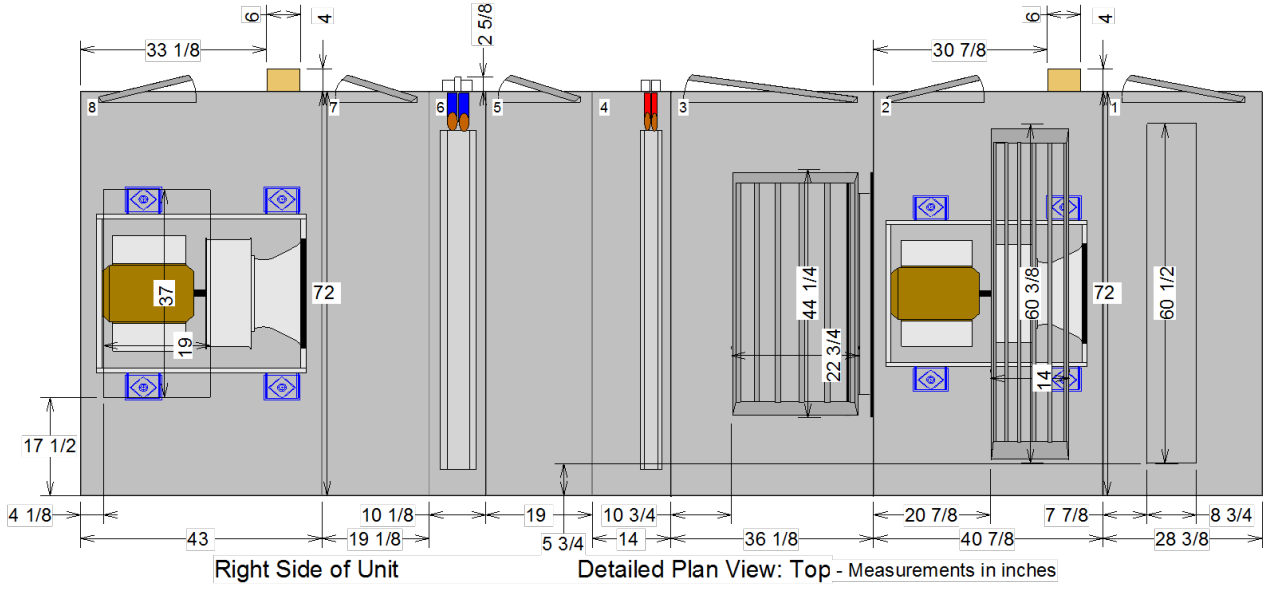
Basic Overall Plan View: Top - Measurements in inches

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 14	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 6900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-9
Paint:		Rigging/Installed Weight: 2901.8 lb / 2972.3 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A9 Qty: 1 Tag(s): AHU-9**



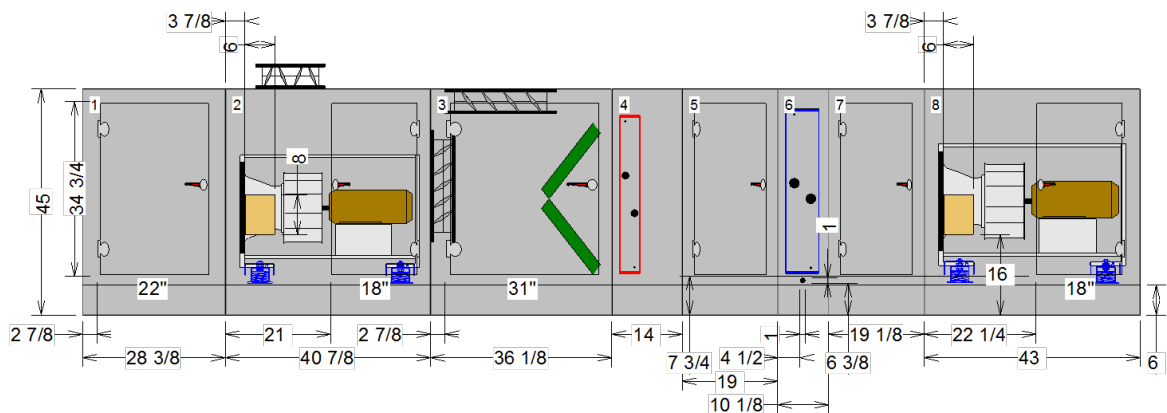
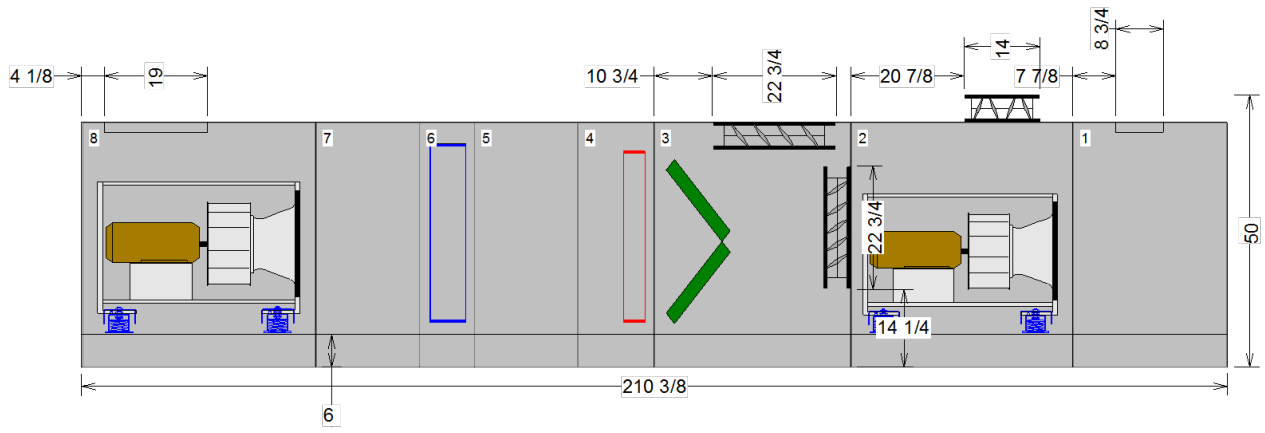
**\*\*Placement of electrical conduit may vary by a tolerance of 8" in any direction.**

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 14	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 6900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-9
Paint:		Rigging/Installed Weight: 2901.8 lb / 2972.3 lb




**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A9 Qty: 1 Tag(s): AHU-9**



Detailed Elevation View: Left - Measurements in inches

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

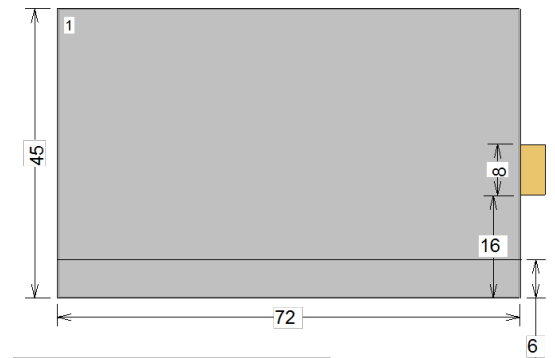
Unit size: 14	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 6900. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-9	
Paint:		Rigging/Installed Weight: 2901.8 lb / 2972.3 lb	

**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A9 Qty: 1 Tag(s): AHU-9



Detailed Elevation View: Front - Measurements in inches



Detailed Elevation View: Back - Measurements in inches

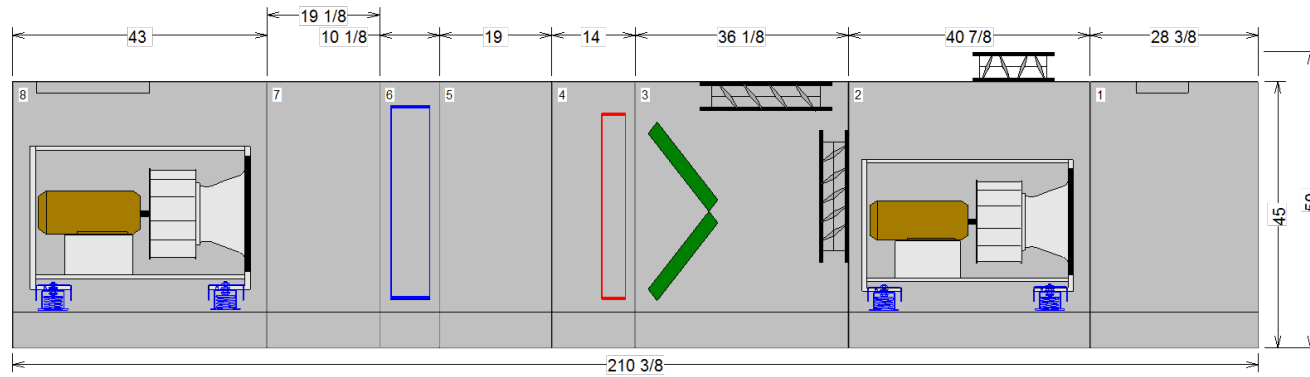
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 14	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 6900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-9
Paint:		Rigging/Installed Weight: 2901.8 lb / 2972.3 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A9 Qty: 1 Tag(s): AHU-9



**NPTI : National Pipe Thread Internal Connection  
 NPTE : National Pipe Thread External Connection**

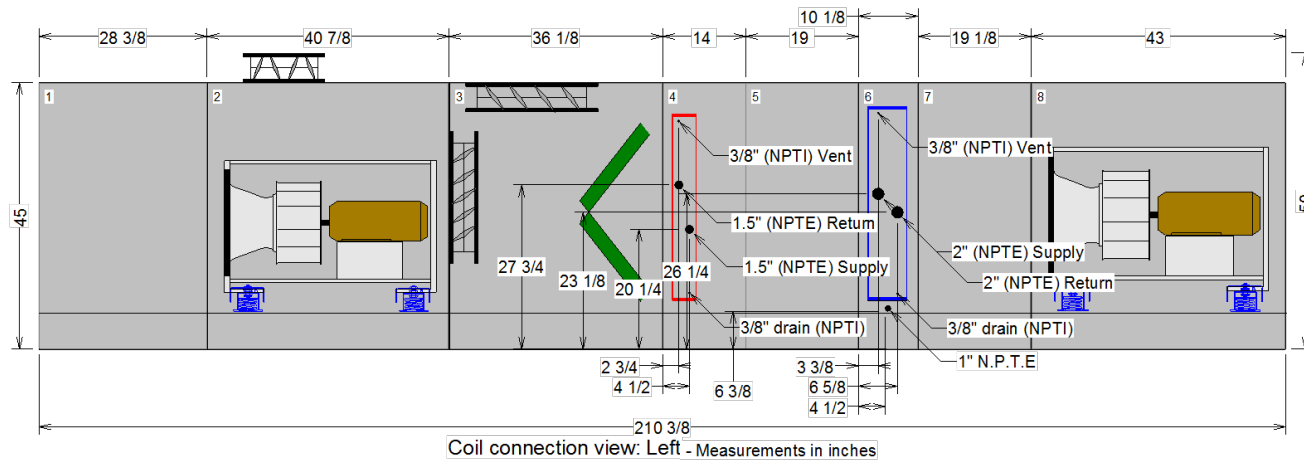
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 14	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 6900. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-9
Paint:		Rigging/Installed Weight: 2901.8 lb / 2972.3 lb




**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A9 Qty: 1 Tag(s): AHU-9



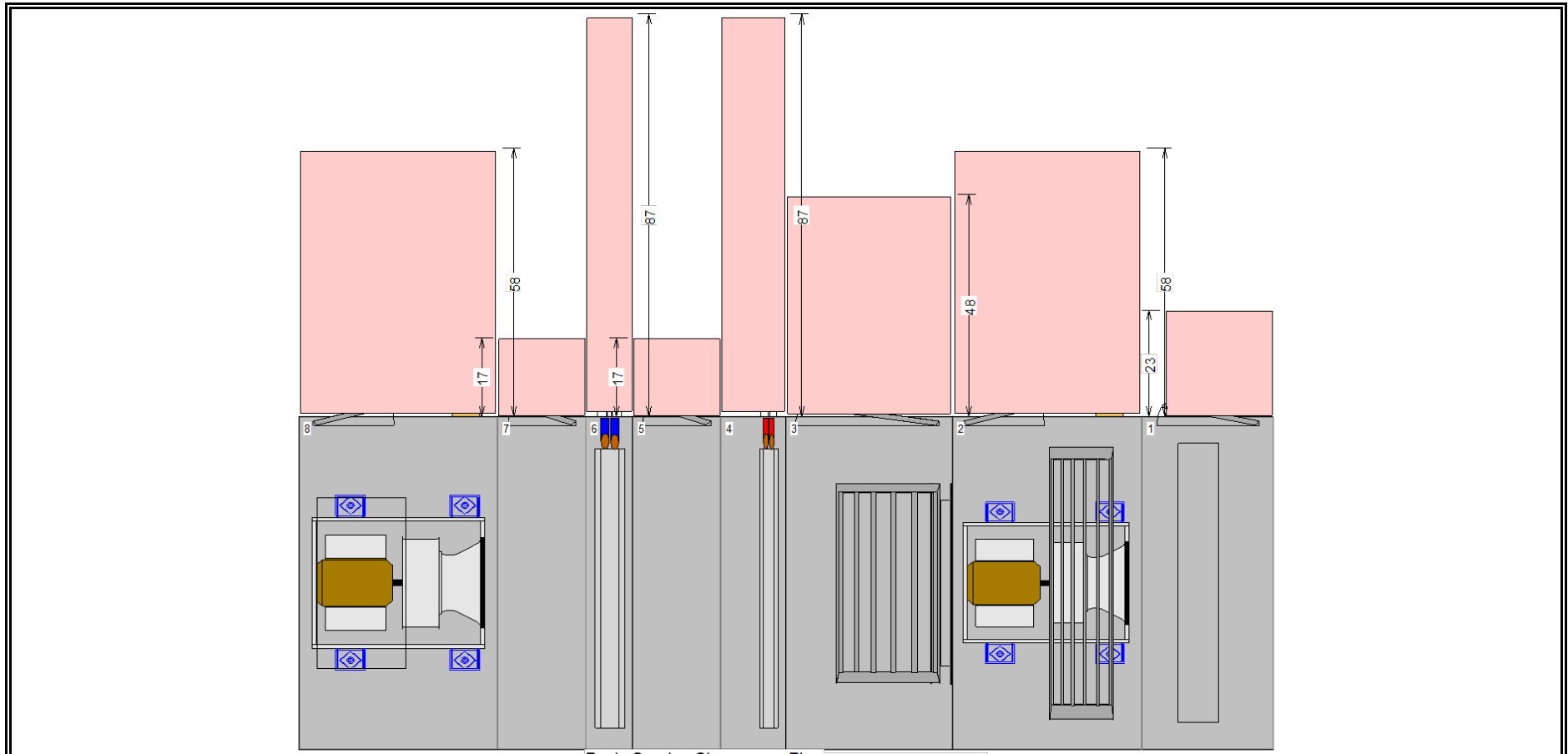
**NPTI : National Pipe Thread Internal Connection  
 NPTE : National Pipe Thread External Connection**

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 14	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 6900. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-9	
Paint:		Rigging/Installed Weight: 2901.8 lb / 2972.3 lb	


**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A9 Qty: 1 Tag(s): AHU-9



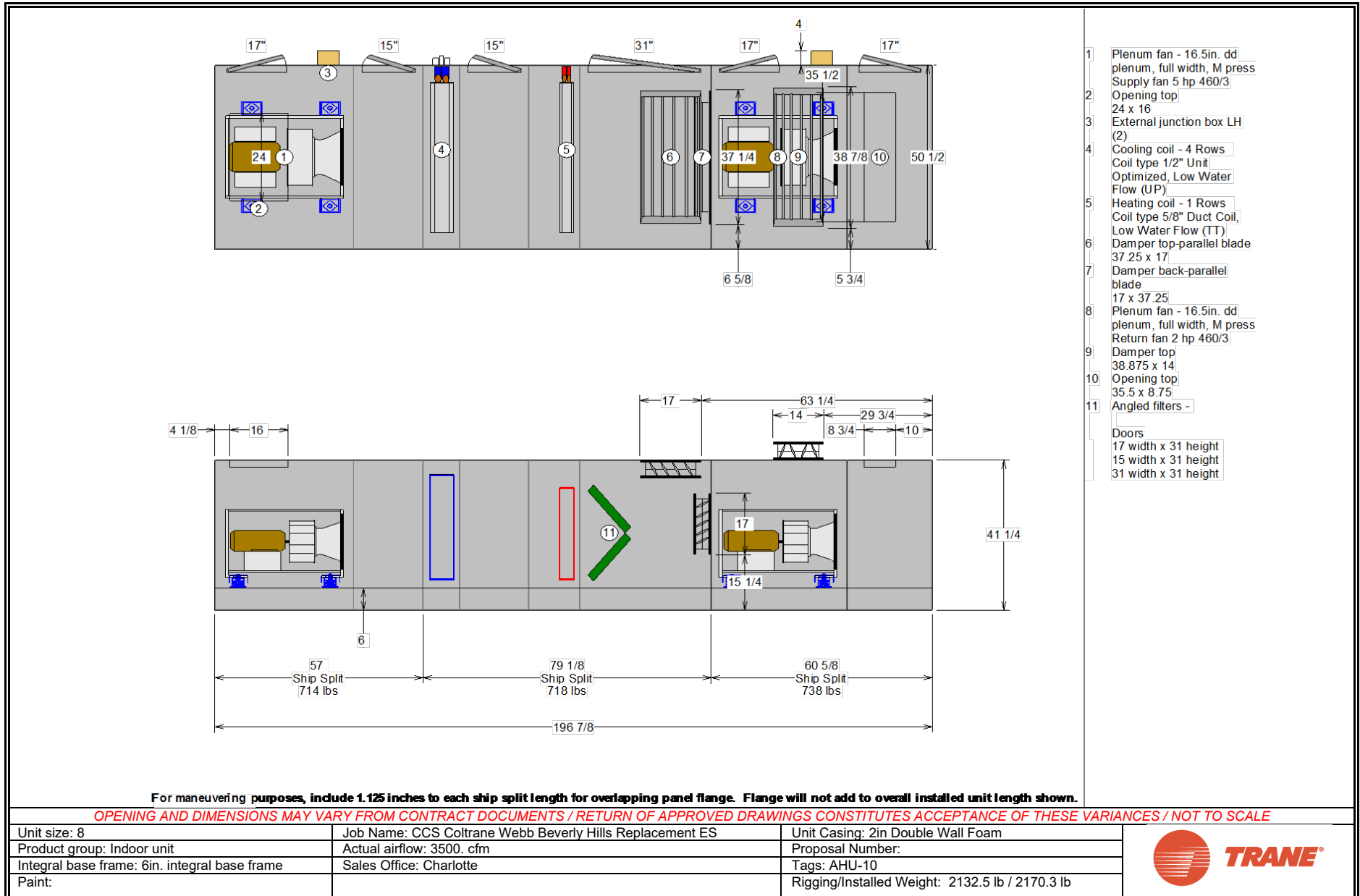
Basic Service Clearance - Plan - Measurements in inches

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 14	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 6900. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-9	
Paint:		Rigging/Installed Weight: 2901.8 lb / 2972.3 lb	

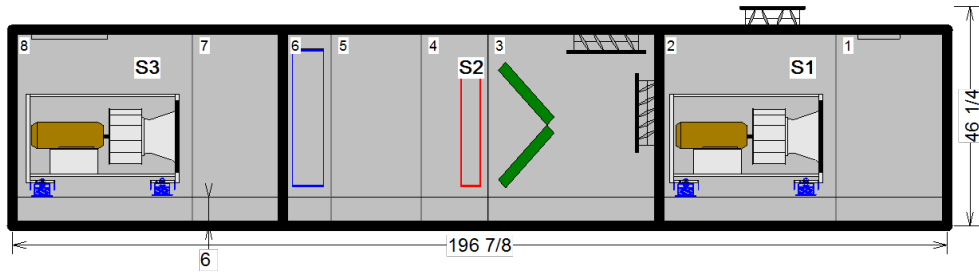
**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A10 Qty: 1 Tag(s): AHU-10



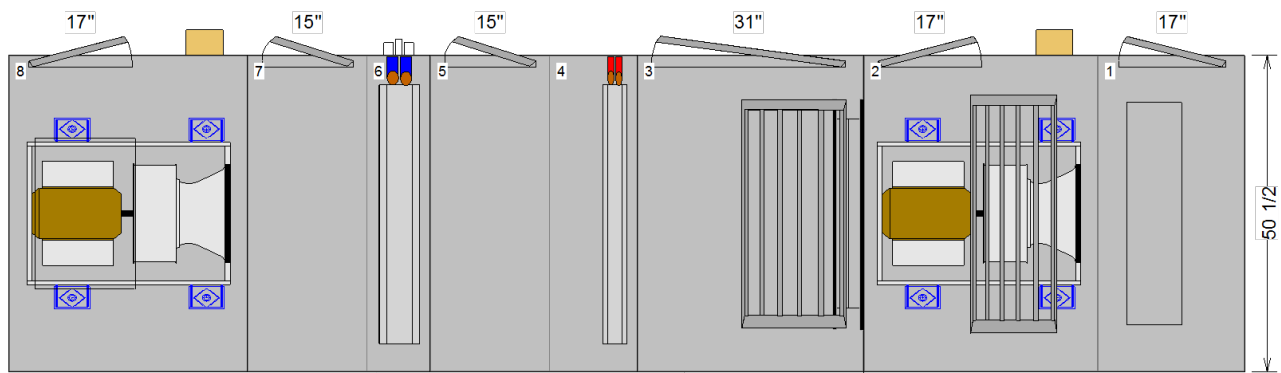
**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A10 Qty: 1 Tag(s): AHU-10**

Shipping splits are indicated by thick black lines



For maneuvering purposes, include 1.125 inches to each ship split length for overlapping panel flange. Flange will not add to overall installed unit length sh

Pos #	Module	Length	Weight
1	Air mixing section	23 3/8	173.37
2	Fan section	37 1/4	564.67
3	Air mixing section	36 1/8	291.36
4	Coil section	14	119.15
5	Access section	19	109.00
6	Coil section	10	198.98
7	Access section	19 1/8	116.98
8	Fan section	38	596.80
		Installed Unit Weight 2170.31 lbs	



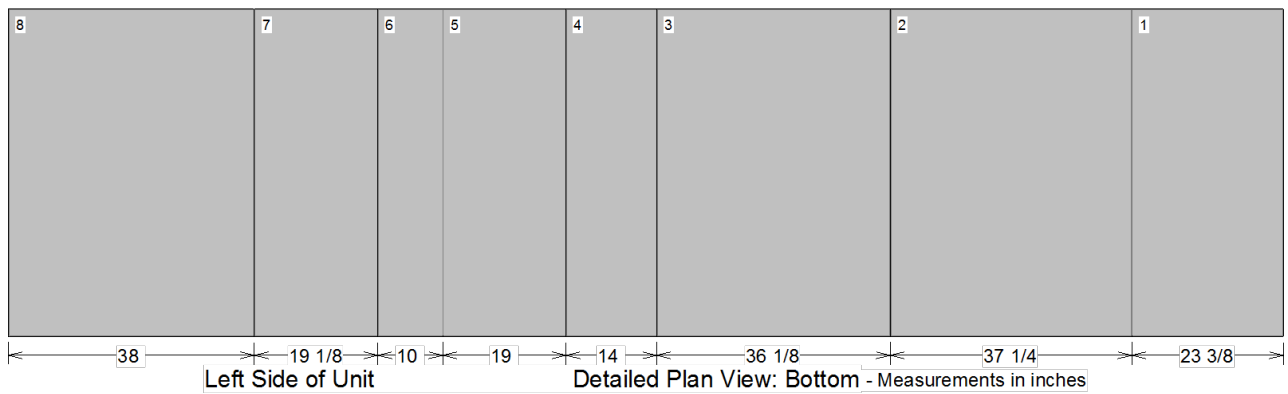
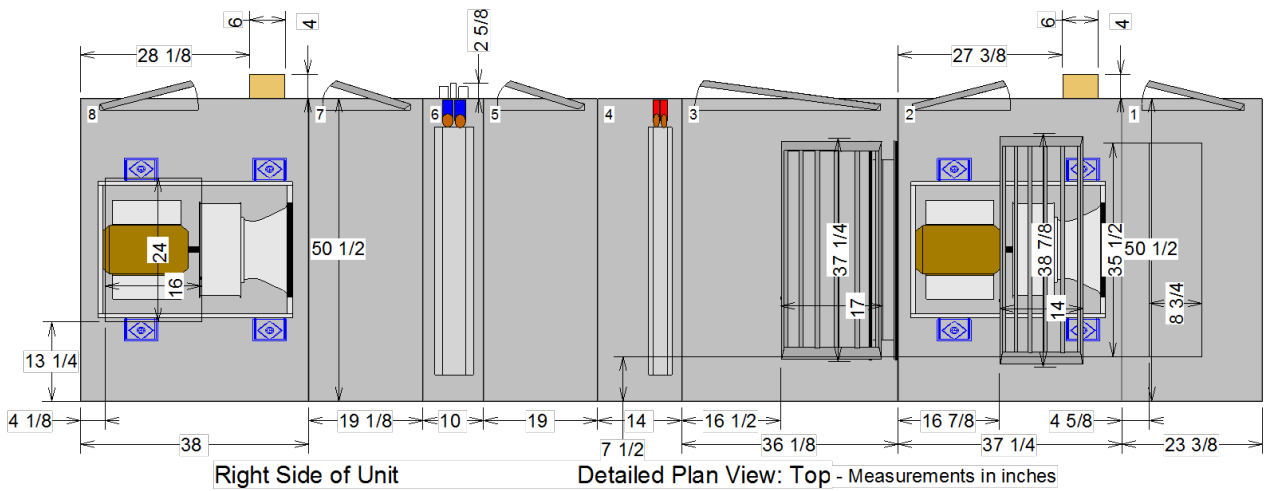
Basic Overall Plan View: Top - Measurements in inches

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 8	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 3500. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-10
Paint:		Rigging/Installed Weight: 2132.5 lb / 2170.3 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A10 Qty: 1 Tag(s): AHU-10**



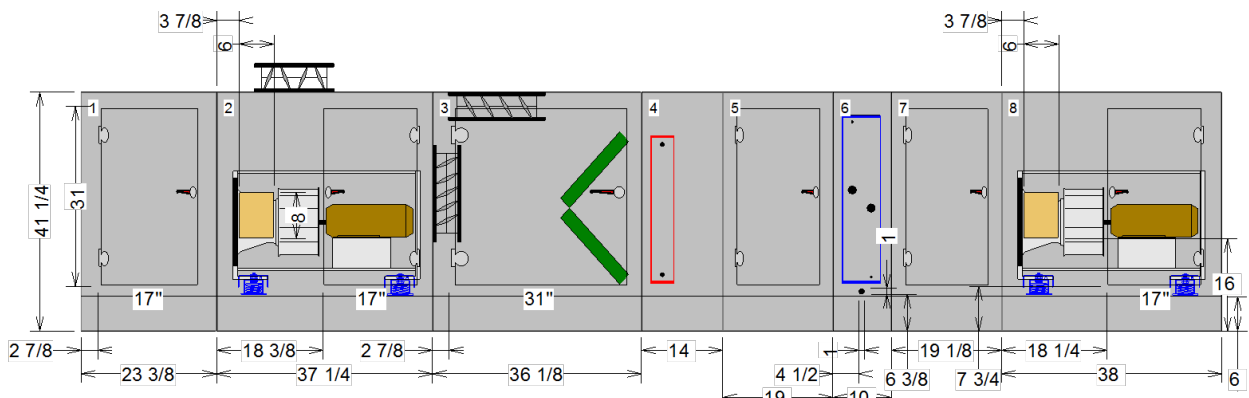
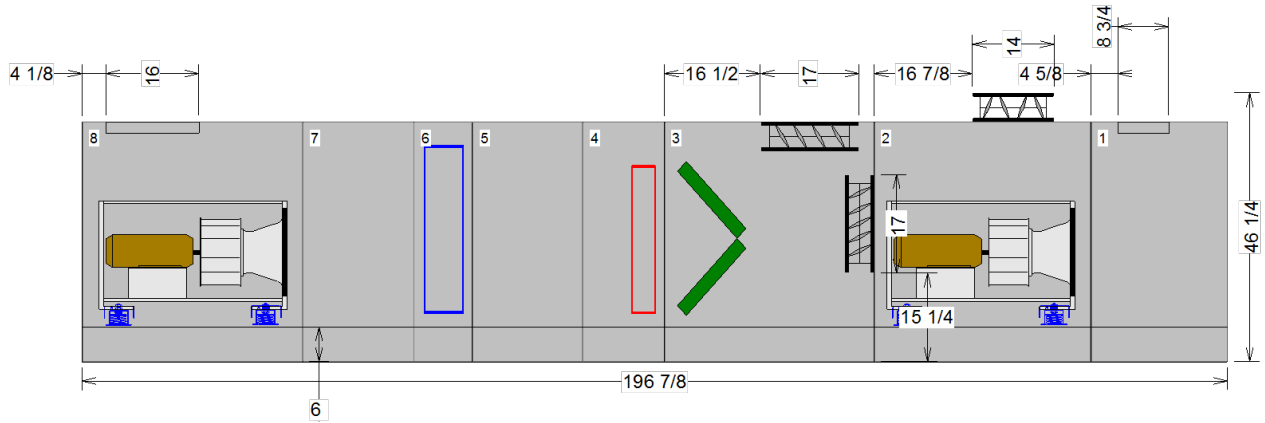
**\*\*Placement of electrical conduit may vary by a tolerance of 8" in any direction.**

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Unit size: 8	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 3500. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-10
Paint:		Rigging/Installed Weight: 2132.5 lb / 2170.3 lb




**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A10 Qty: 1 Tag(s): AHU-10**

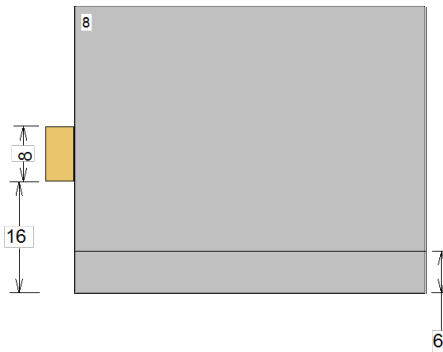


Detailed Elevation View: Left - Measurements in inches

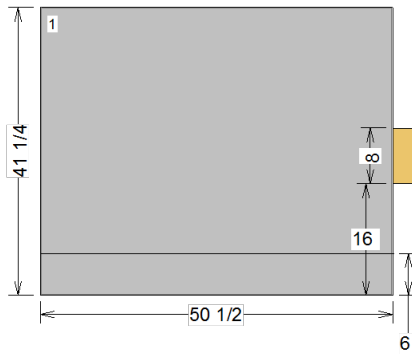
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 8	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 3500. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-10	
Paint:		Rigging/Installed Weight: 2132.5 lb / 2170.3 lb	

**Dimensional Drawings - Performance Climate Changer (CSAA)**  
**Item: A10 Qty: 1 Tag(s): AHU-10**



Detailed Elevation View: Front - Measurements in inches



Detailed Elevation View: Back - Measurements in inches

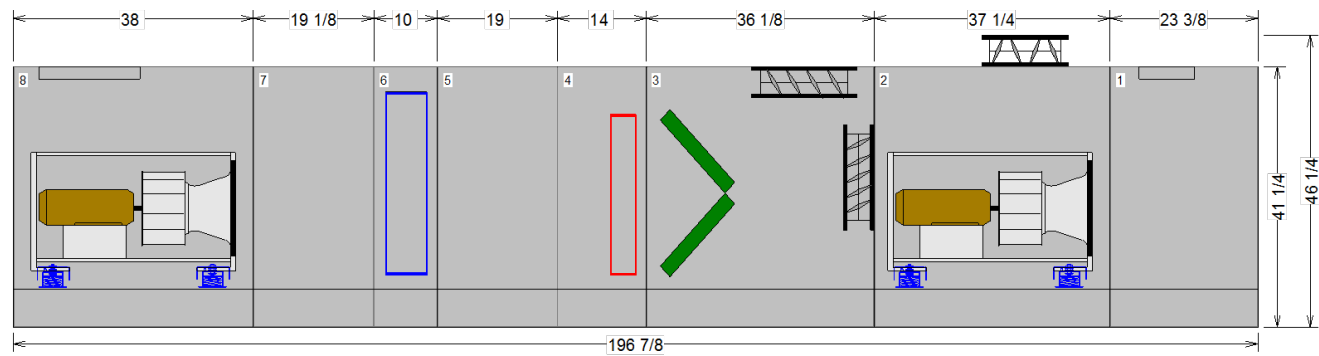
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 8	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 3500. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-10
Paint:		Rigging/Installed Weight: 2132.5 lb / 2170.3 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A10 Qty: 1 Tag(s): AHU-10



**NPTI : National Pipe Thread Internal Connection  
 NPTE : National Pipe Thread External Connection**

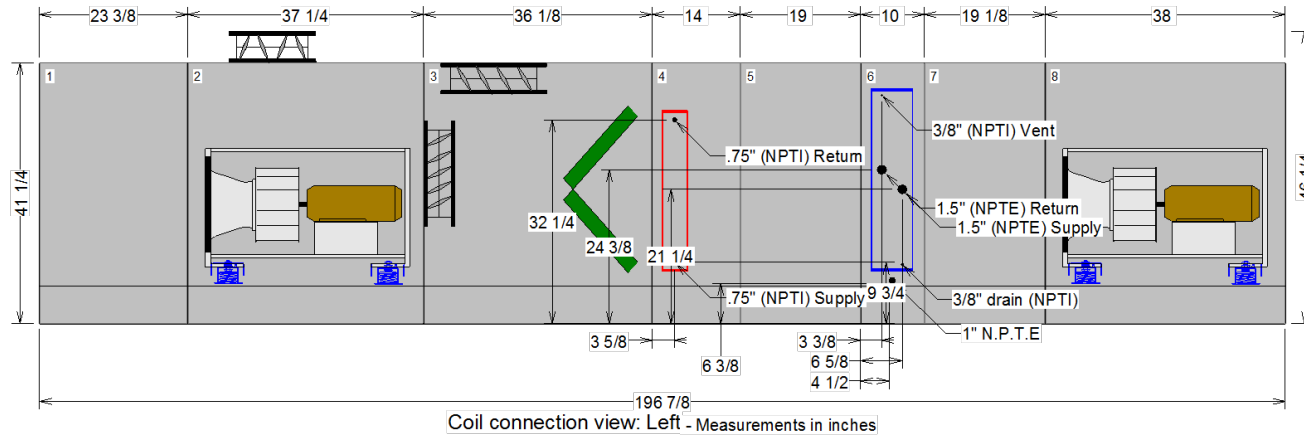
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 8	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 3500. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-10
Paint:		Rigging/Installed Weight: 2132.5 lb / 2170.3 lb



**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A10 Qty: 1 Tag(s): AHU-10



**NPTI : National Pipe Thread Internal Connection  
 NPTE : National Pipe Thread External Connection**

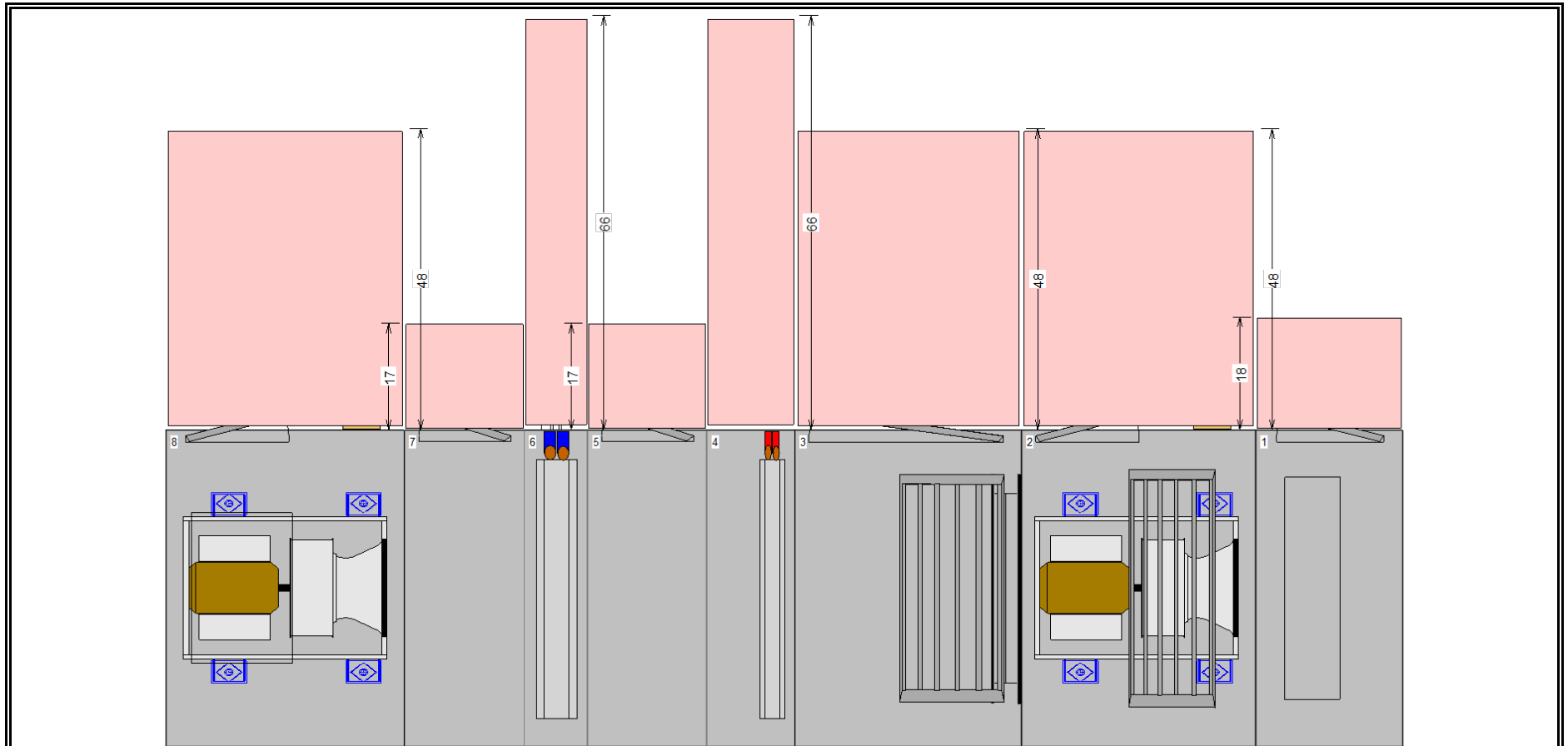
*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 8	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam
Product group: Indoor unit	Actual airflow: 3500. cfm	Proposal Number:
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-10
Paint:		Rigging/Installed Weight: 2132.5 lb / 2170.3 lb




**Dimensional Drawings - Performance Climate Changer (CSAA)**

Item: A10 Qty: 1 Tag(s): AHU-10



Basic Service Clearance - Plan - Measurements in inches

*OPENING AND DIMENSIONS MAY VARY FROM CONTRACT DOCUMENTS / RETURN OF APPROVED DRAWINGS CONSTITUTES ACCEPTANCE OF THESE VARIANCES / NOT TO SCALE*

Unit size: 8	Job Name: CCS Coltrane Webb Beverly Hills Replacement ES	Unit Casing: 2in Double Wall Foam	
Product group: Indoor unit	Actual airflow: 3500. cfm	Proposal Number:	
Integral base frame: 6in. integral base frame	Sales Office: Charlotte	Tags: AHU-10	
Paint:		Rigging/Installed Weight: 2132.5 lb / 2170.3 lb	

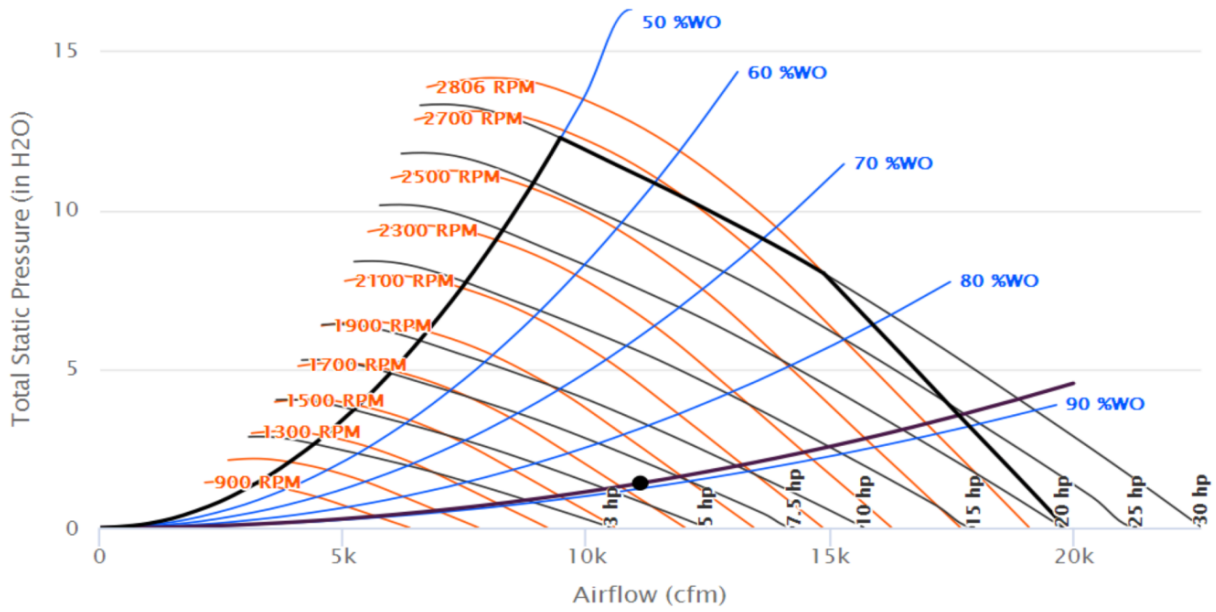
**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A1 Qty: 1 Tag(s): AHU-1**

**Fan Details**

<b>Unit Size</b>	24UR	<b>Operating Brake Power</b>	6.132 hp
<b>Motor Frequency</b>	60.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	11,100 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	1.403 in H2O	<b>Efficiency</b>	40.04 %
<b>Operating RPM</b>	1,766 rpm		

**AHU-1 - Return - Single Fan**

Size 25 DDP 24.5 inch AF H Press 80% Width 9 blades



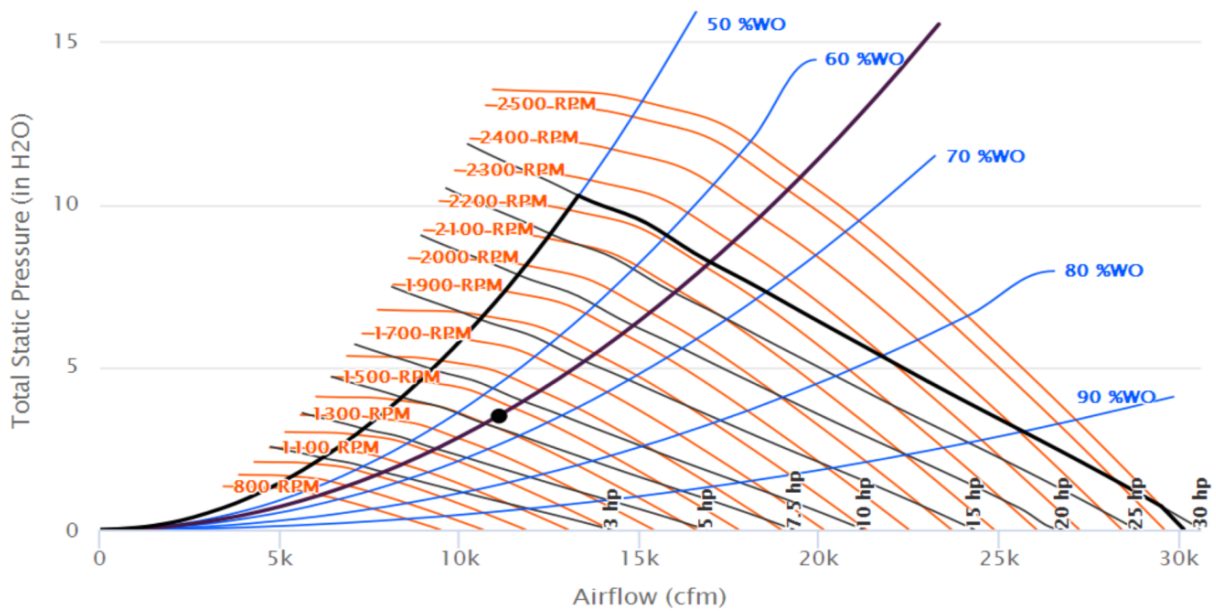
**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A1 Qty: 1 Tag(s): AHU-1**

**Fan Details**

<b>Unit Size</b>	27UF	<b>Operating Brake Power</b>	8.414 hp
<b>Motor Frequency</b>	74.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	11,100 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	3.526 in H2O	<b>Efficiency</b>	73.34 %
<b>Operating RPM</b>	1,451 rpm		

**AHU-1 - Supply - Single Fan**

Size 25 DDP 27 inch AF H Press 100% Width 9 blades



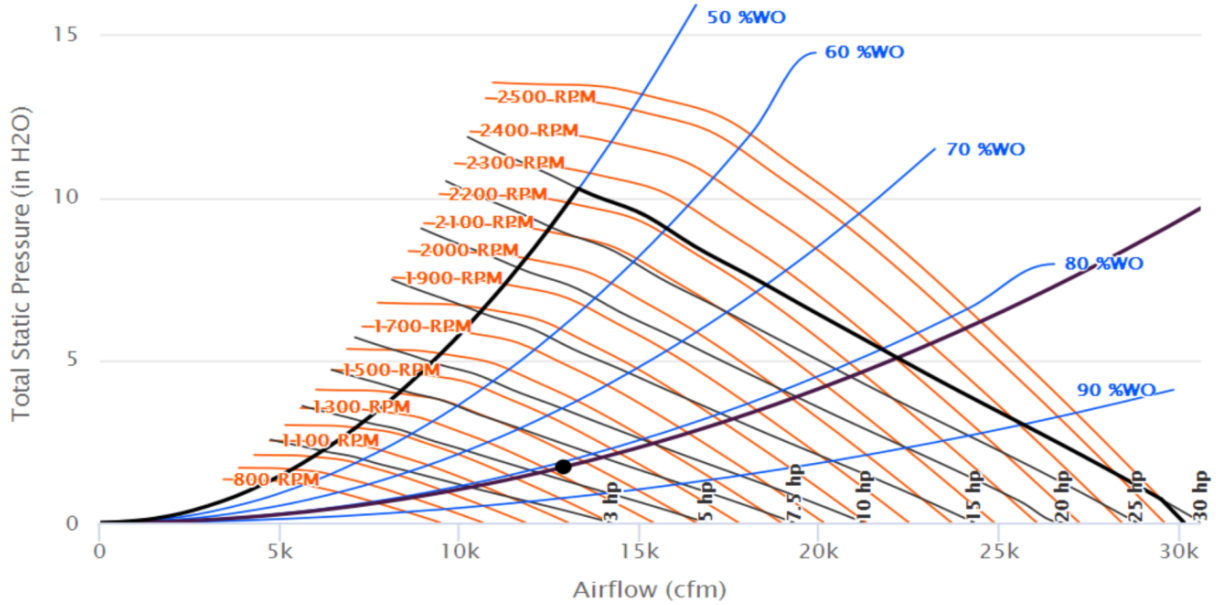
**Fan Curve - Performance Climate Changer (CSAA)**  
 Item: A2 Qty: 1 Tag(s): AHU-2

**Fan Details**

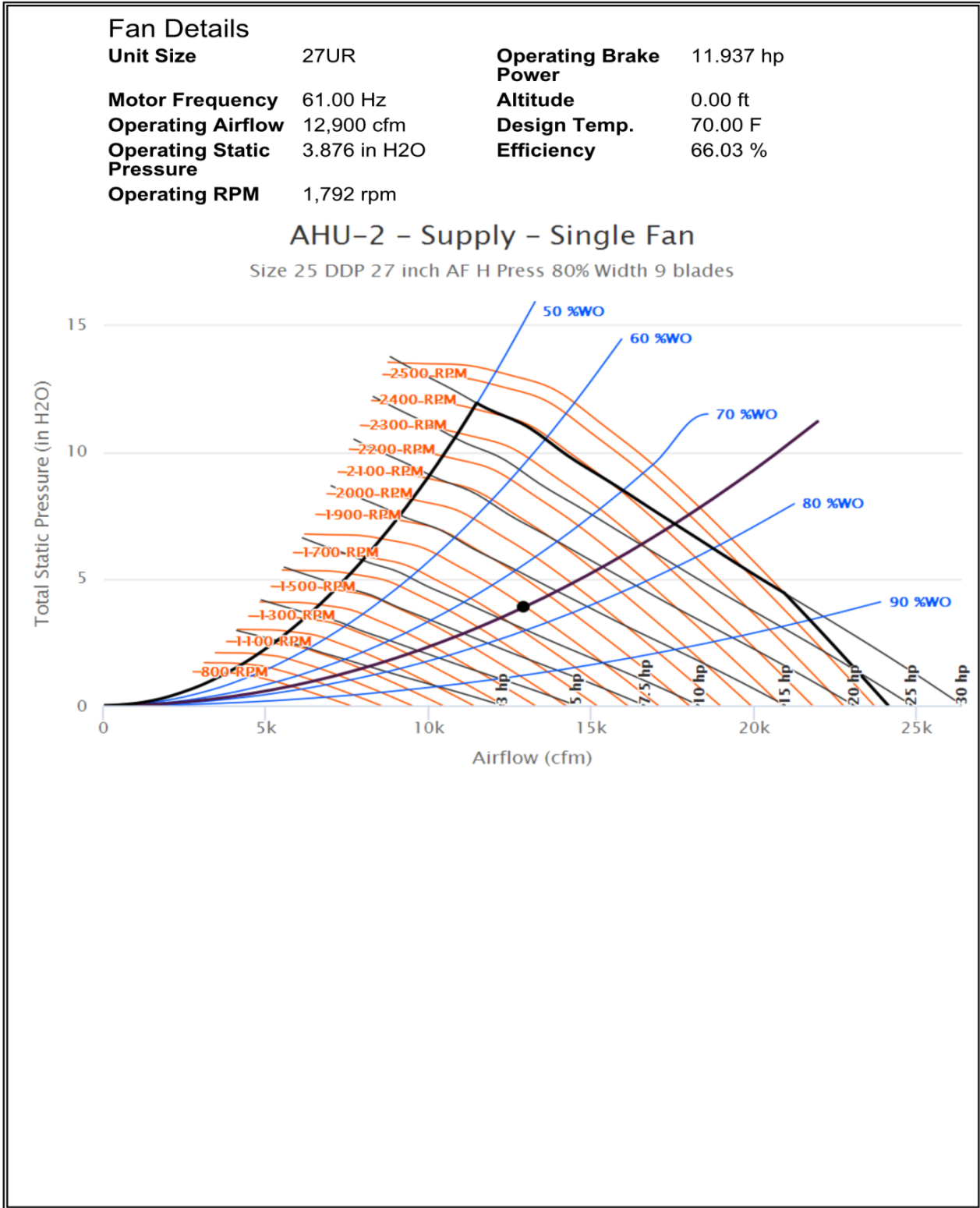
<b>Unit Size</b>	27UF	<b>Operating Brake Power</b>	5.921 hp
<b>Motor Frequency</b>	68.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	12,900 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	1.720 in H2O	<b>Efficiency</b>	59.07 %
<b>Operating RPM</b>	1,341 rpm		

**AHU-2 - Return - Single Fan**

Size 25 DDP 27 inch AF H Press 100% Width 9 blades



**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A2 Qty: 1 Tag(s): AHU-2**



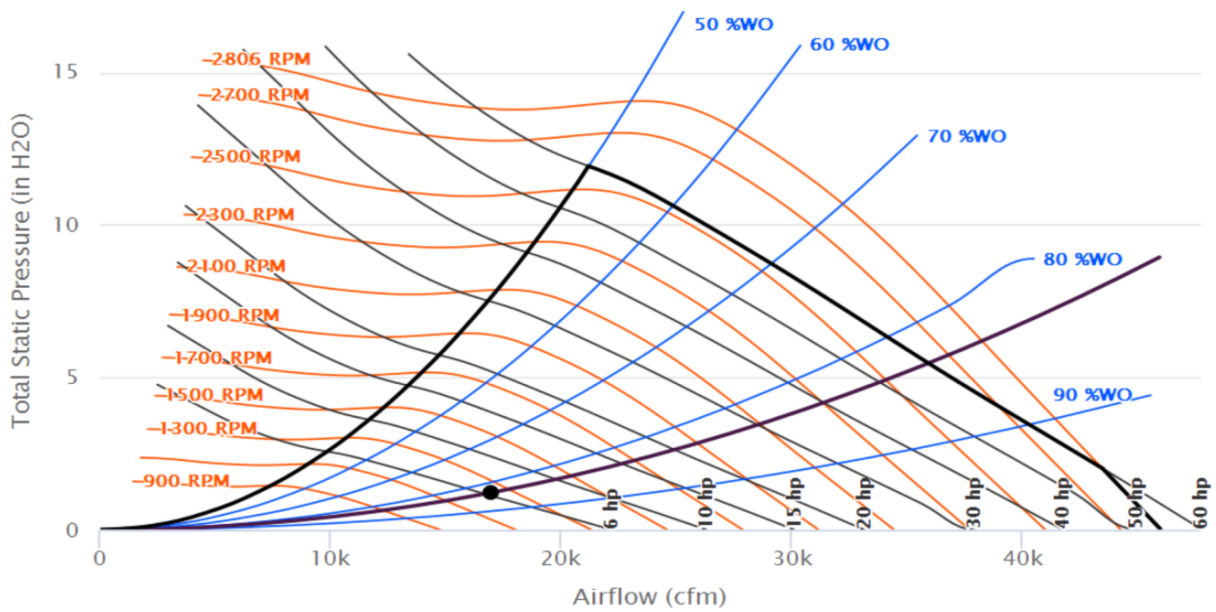
**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A3 Qty: 1 Tag(s): AHU-3**

**Fan Details**

<b>Unit Size</b>	24UF	<b>Operating Brake Power</b>	6.386 hp
<b>Motor Frequency</b>	64.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	17,000 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	1.225 in H2O	<b>Efficiency</b>	51.43 %
<b>Operating RPM</b>	1,248 rpm		

**AHU-3 - Return**

Size 35 DDP 24.5 inch AF H Press 2x1 array 100% Width 12 blades



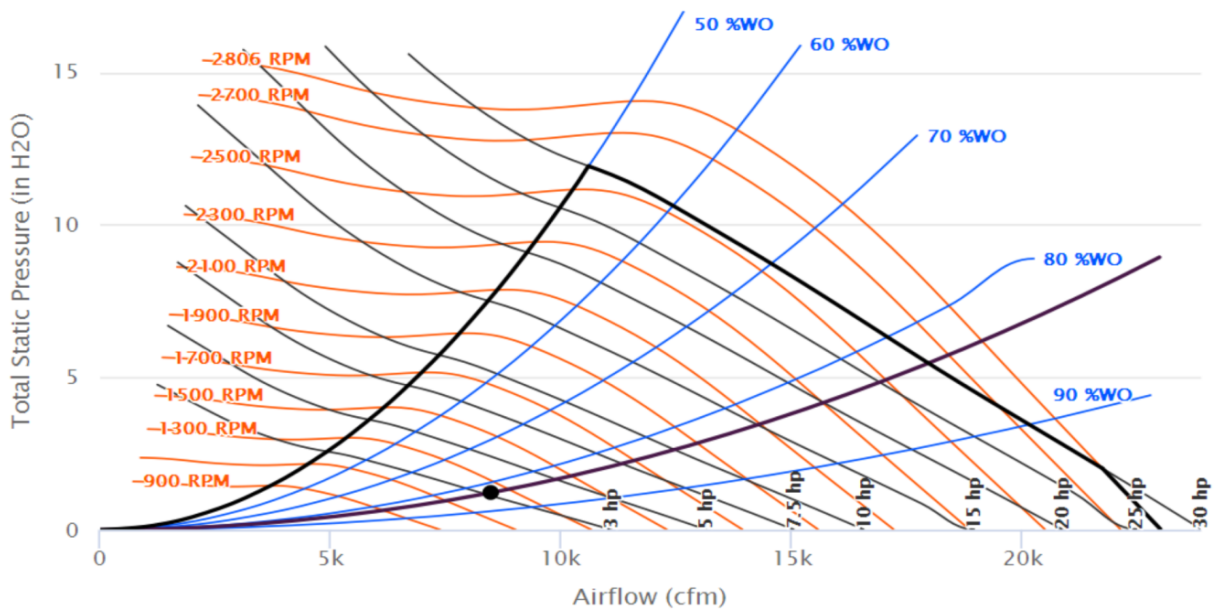
**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A3 Qty: 1 Tag(s): AHU-3**

**Fan Details**

<b>Unit Size</b>	24UF	<b>Operating Brake Power</b>	3.193 hp
<b>Motor Frequency</b>	64.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	8,500 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	1.225 in H2O	<b>Efficiency</b>	51.43 %
<b>Operating RPM</b>	1,248 rpm		

**AHU-3 - Return - Single Fan**

Size 35 DDP 24.5 inch AF H Press 2x1 array 100% Width 12 blades



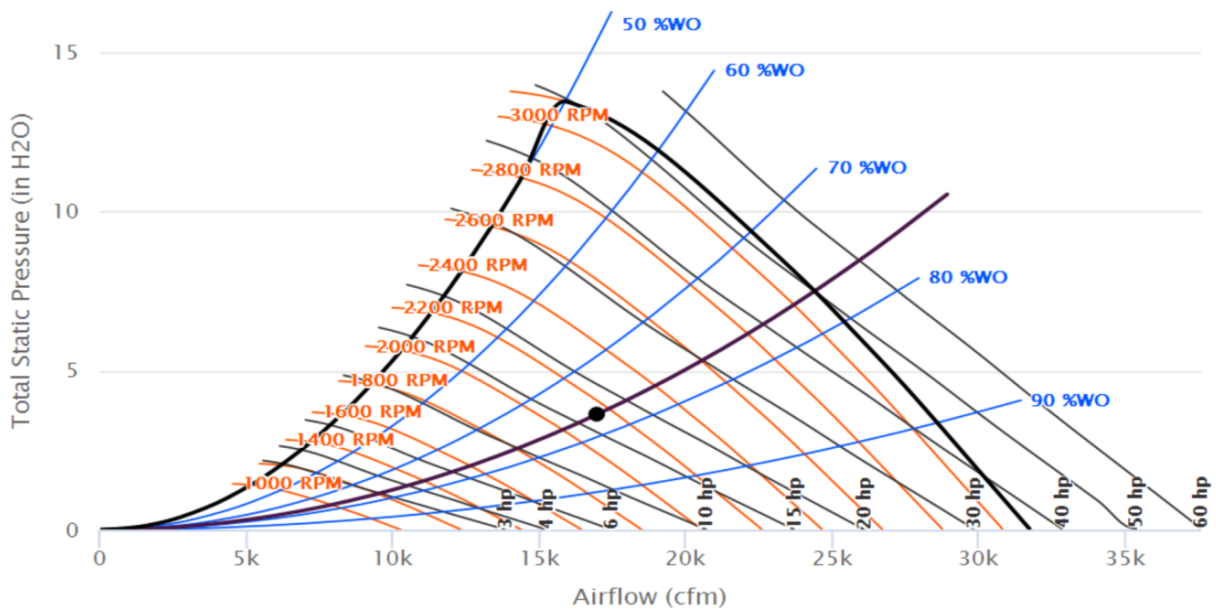
**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A3 Qty: 1 Tag(s): AHU-3**

**Fan Details**

<b>Unit Size</b>	22UR	<b>Operating Brake Power</b>	16.990 hp
<b>Motor Frequency</b>	73.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	17,000 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	3.647 in H2O	<b>Efficiency</b>	57.53 %
<b>Operating RPM</b>	2,153 rpm		

**AHU-3 - Supply**

Size 35 DDP 22.25 inch AF H Press 2x1 array 80% Width 9 blades



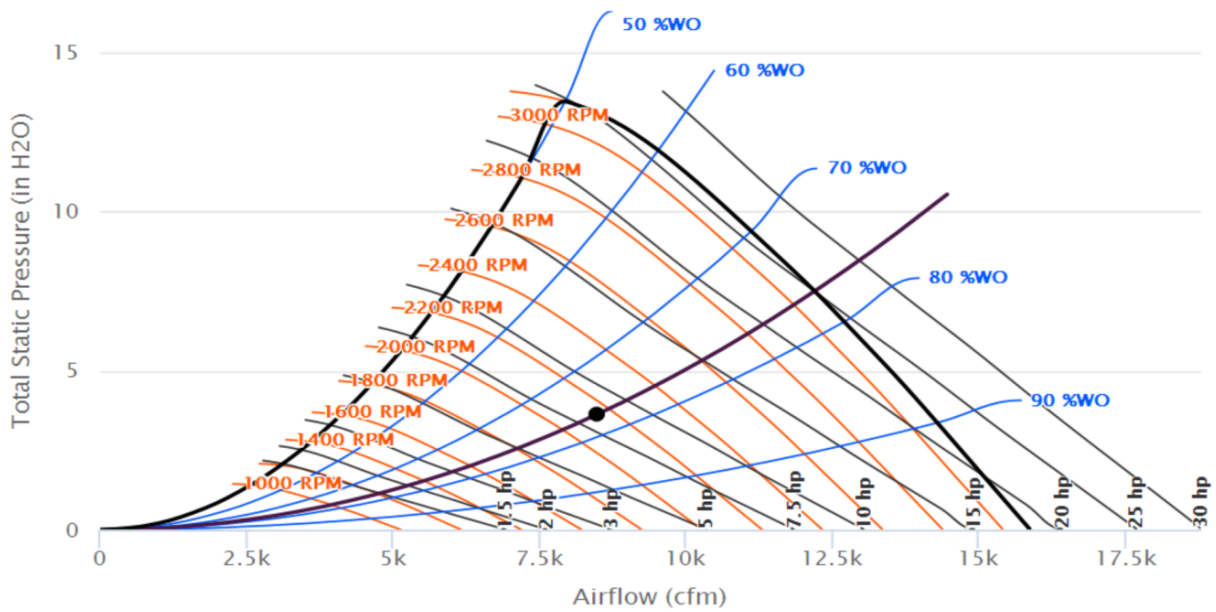
**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A3 Qty: 1 Tag(s): AHU-3**

**Fan Details**

<b>Unit Size</b>	22UR	<b>Operating Brake Power</b>	8.495 hp
<b>Motor Frequency</b>	73.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	8,500 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	3.647 in H2O	<b>Efficiency</b>	57.53 %
<b>Operating RPM</b>	2,153 rpm		

**AHU-3 - Supply - Single Fan**

Size 35 DDP 22.25 inch AF H Press 2x1 array 80% Width 9 blades



**Fan Curve - Performance Climate Changer (CSAA)**  
 Item: A4 Qty: 1 Tag(s): AHU-4

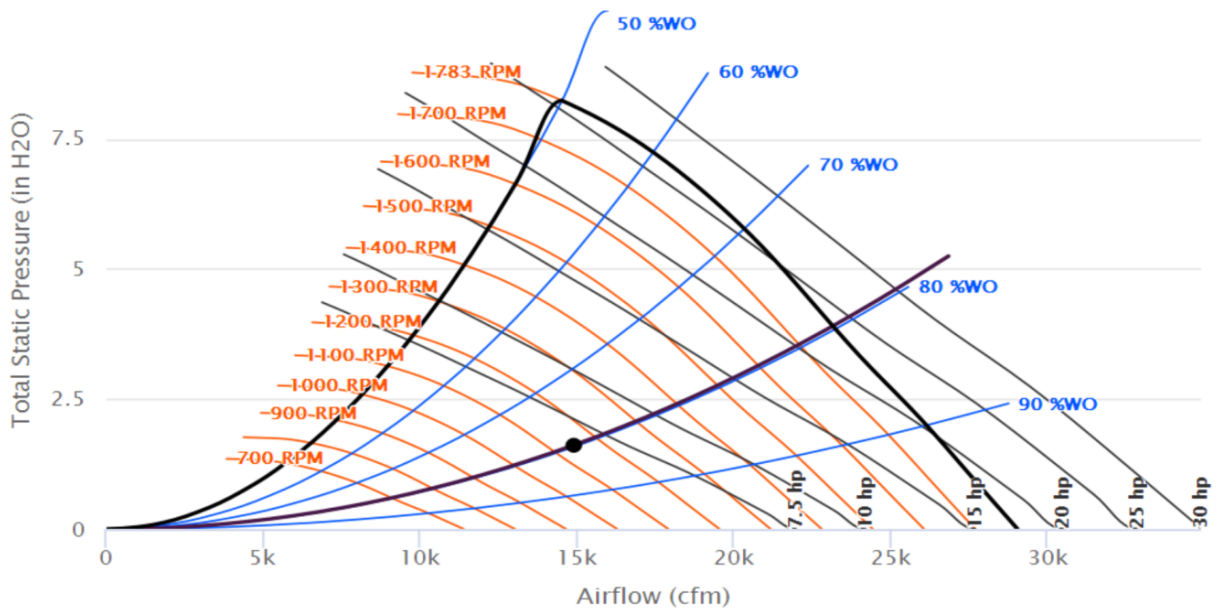
**Fan Details**

<b>Unit Size</b>	30TF	<b>Operating Brake Power</b>	6.245 hp
<b>Motor Frequency</b>	58.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	14,900 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	1.618 in H2O	<b>Efficiency</b>	60.86 %
<b>Operating RPM</b>	1,147 rpm		

Design VFD frequency is less than line frequency. Ensure the air delivery system can handle being pressurized to the 60 hz operating point on the fan curve.

**AHU-4 - Return - Single Fan**

Size 30 DDP 30 inch AF M Press 100% Width 9 blades



**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A4 Qty: 1 Tag(s): AHU-4**

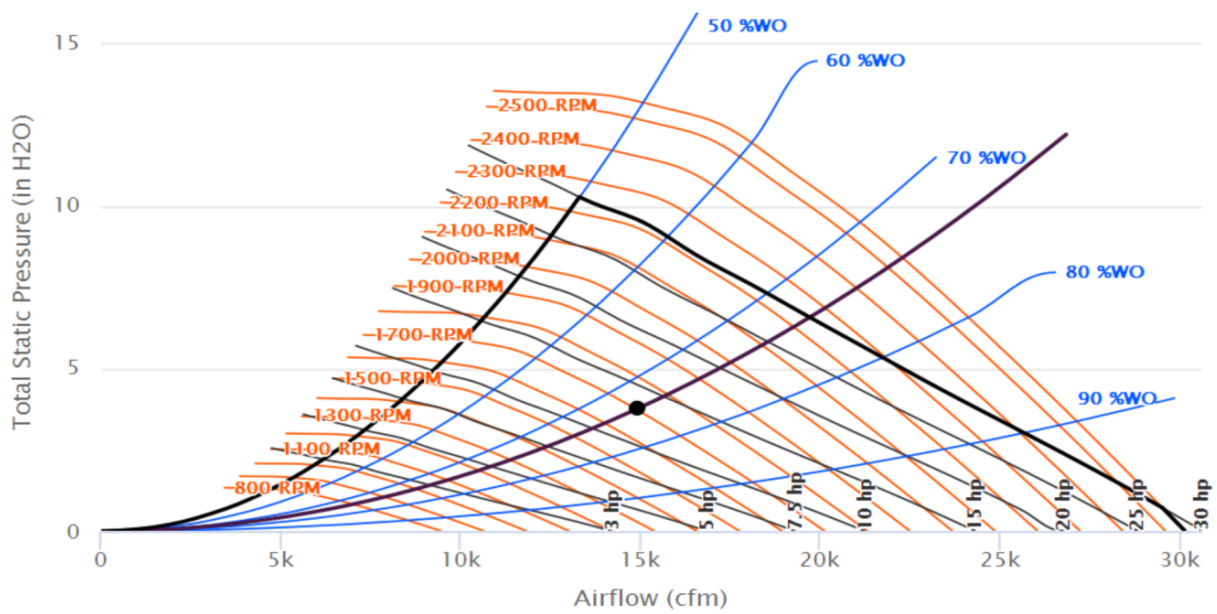
**Fan Details**

<b>Unit Size</b>	27UF	<b>Operating Brake Power</b>	12.997 hp
<b>Motor Frequency</b>	58.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	14,900 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	3.765 in H2O	<b>Efficiency</b>	68.05 %
<b>Operating RPM</b>	1,702 rpm		

Design VFD frequency is less than line frequency. Ensure the air delivery system can handle being pressurized to the 60 hz operating point on the fan curve.

**AHU-4 - Supply - Single Fan**

Size 30 DDP 27 inch AF H Press 100% Width 9 blades



**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A5 Qty: 1 Tag(s): AHU-5**

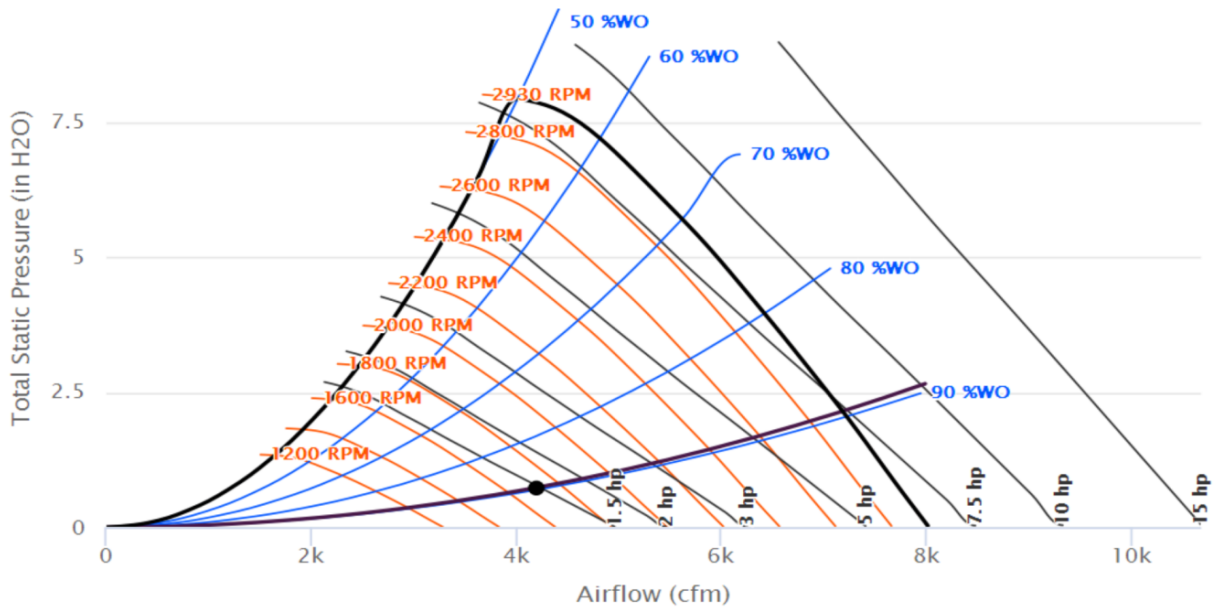
**Fan Details**

<b>Unit Size</b>	18TR	<b>Operating Brake Power</b>	1.482 hp
<b>Motor Frequency</b>	58.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	4,200 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	0.735 in H2O	<b>Efficiency</b>	32.84 %
<b>Operating RPM</b>	1,715 rpm		

Design VFD frequency is less than line frequency. Ensure the air delivery system can handle being pressurized to the 60 hz operating point on the fan curve.

**AHU-5 – Return – Single Fan**

Size 10 DDP 18.25 inch AF M Press 80% Width 9 blades



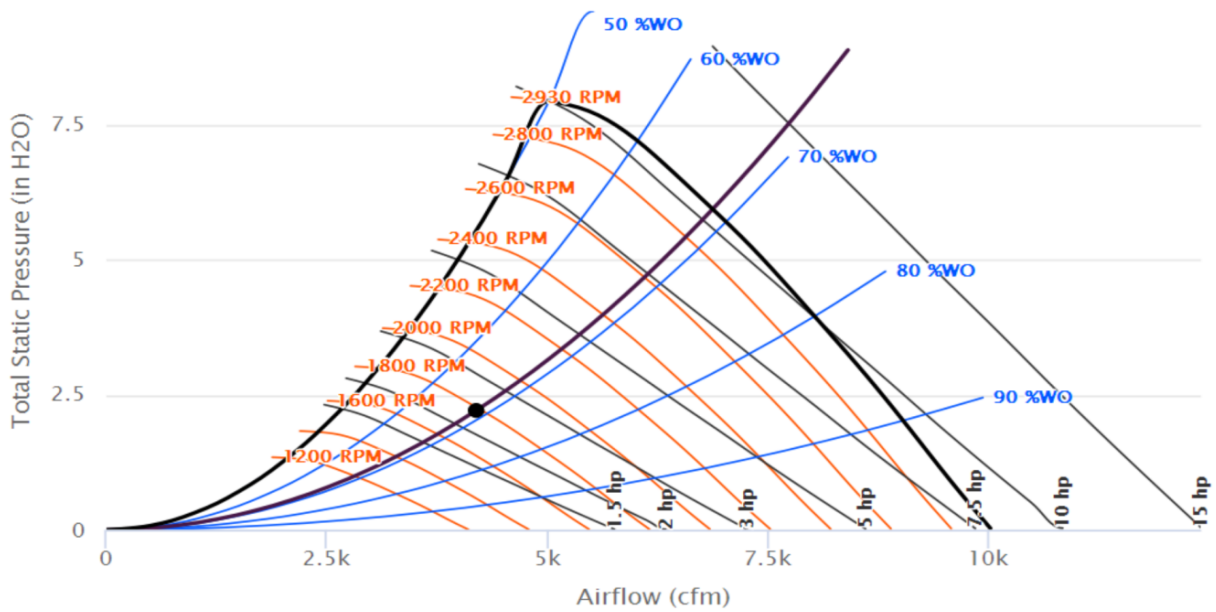
**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A5 Qty: 1 Tag(s): AHU-5**

**Fan Details**

<b>Unit Size</b>	18TF	<b>Operating Brake Power</b>	2.406 hp
<b>Motor Frequency</b>	61.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	4,200 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	2.218 in H2O	<b>Efficiency</b>	61.03 %
<b>Operating RPM</b>	1,790 rpm		

**AHU-5 - Supply - Single Fan**

Size 10 DDP 18.25 inch AF M Press 100% Width 9 blades



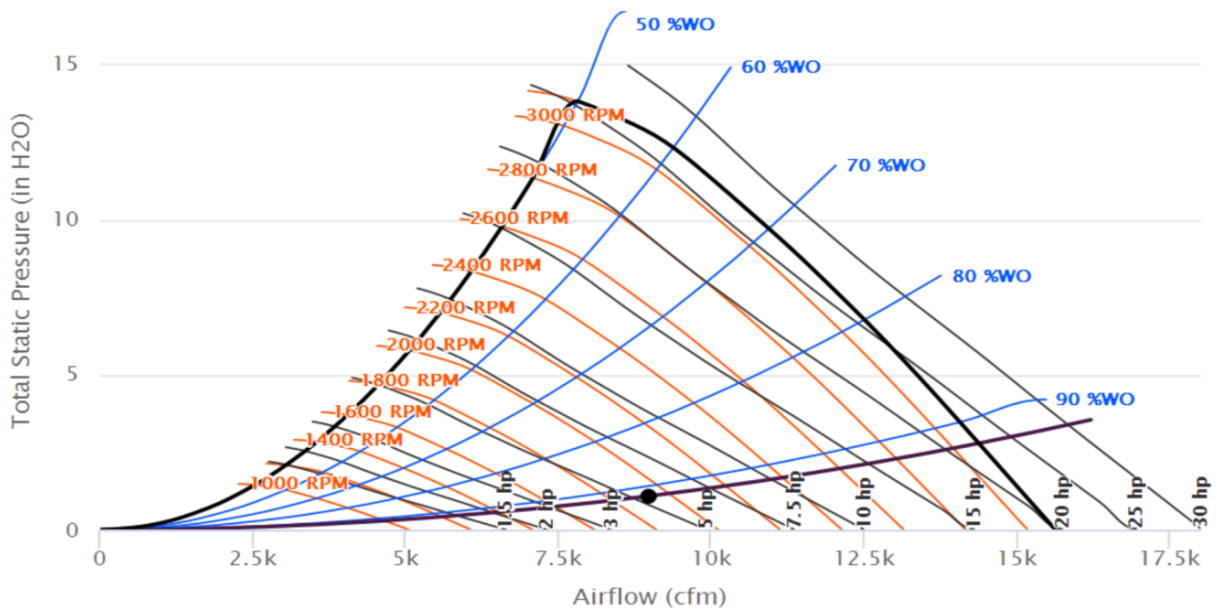
**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A6 Qty: 1 Tag(s): AHU-6**

**Fan Details**

<b>Unit Size</b>	22UR	<b>Operating Brake Power</b>	5.529 hp
<b>Motor Frequency</b>	66.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	9,000 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	1.094 in H2O	<b>Efficiency</b>	28.07 %
<b>Operating RPM</b>	1,935 rpm		

**AHU-6 - Return - Single Fan**

Size 21 DDP 22.25 inch AF H Press 80% Width 9 blades



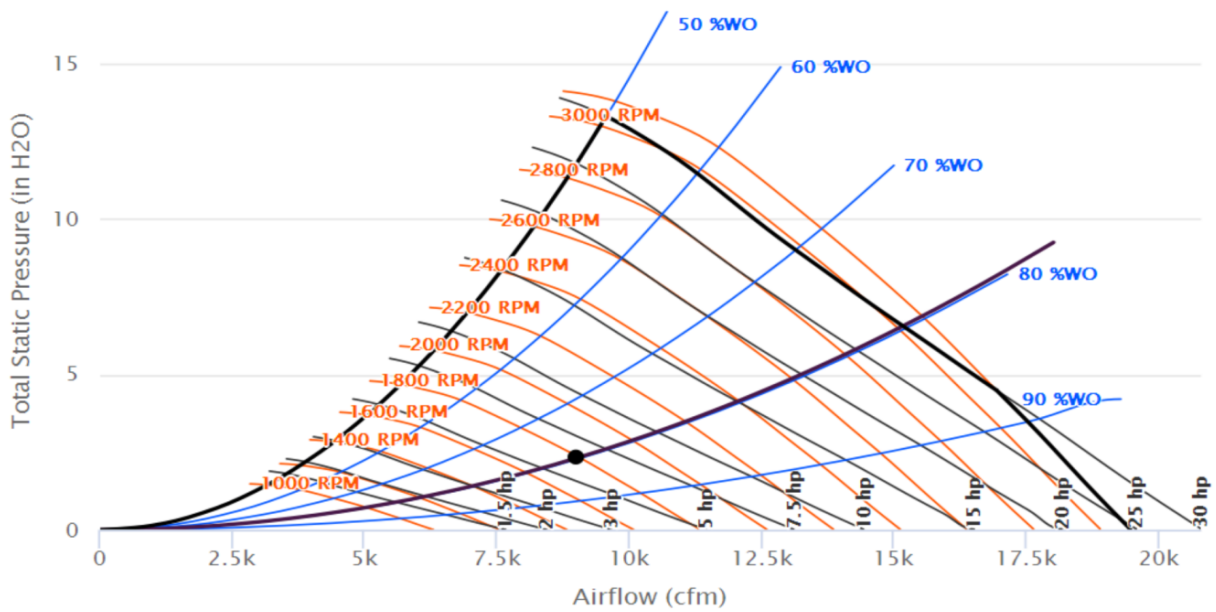
**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A6 Qty: 1 Tag(s): AHU-6**

**Fan Details**

<b>Unit Size</b>	22UF	<b>Operating Brake Power</b>	6.288 hp
<b>Motor Frequency</b>	61.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	9,000 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	2.312 in H2O	<b>Efficiency</b>	52.17 %
<b>Operating RPM</b>	1,791 rpm		

**AHU-6 - Supply - Single Fan**

Size 21 DDP 22.25 inch AF H Press 100% Width 9 blades



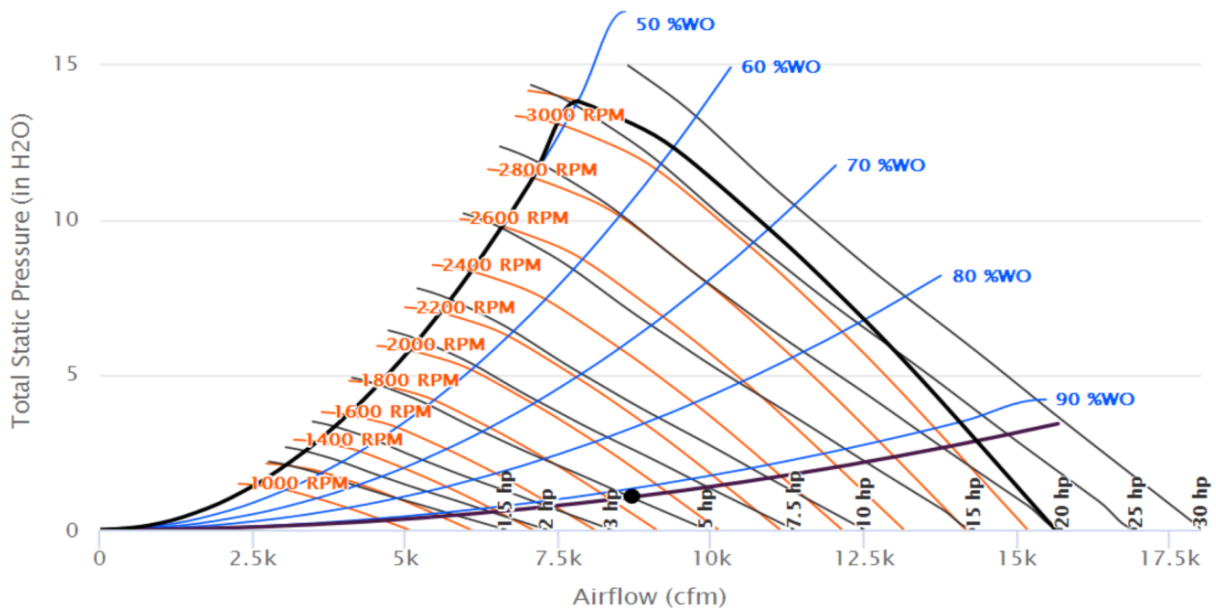
**Fan Curve - Performance Climate Changer (CSAA)**  
 Item: A7 Qty: 1 Tag(s): AHU-7

**Fan Details**

<b>Unit Size</b>	22UR	<b>Operating Brake Power</b>	5.046 hp
<b>Motor Frequency</b>	64.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	8,700 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	1.055 in H2O	<b>Efficiency</b>	28.67 %
<b>Operating RPM</b>	1,875 rpm		

**AHU-7 - Return - Single Fan**

Size 21 DDP 22.25 inch AF H Press 80% Width 9 blades



**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A7 Qty: 1 Tag(s): AHU-7**

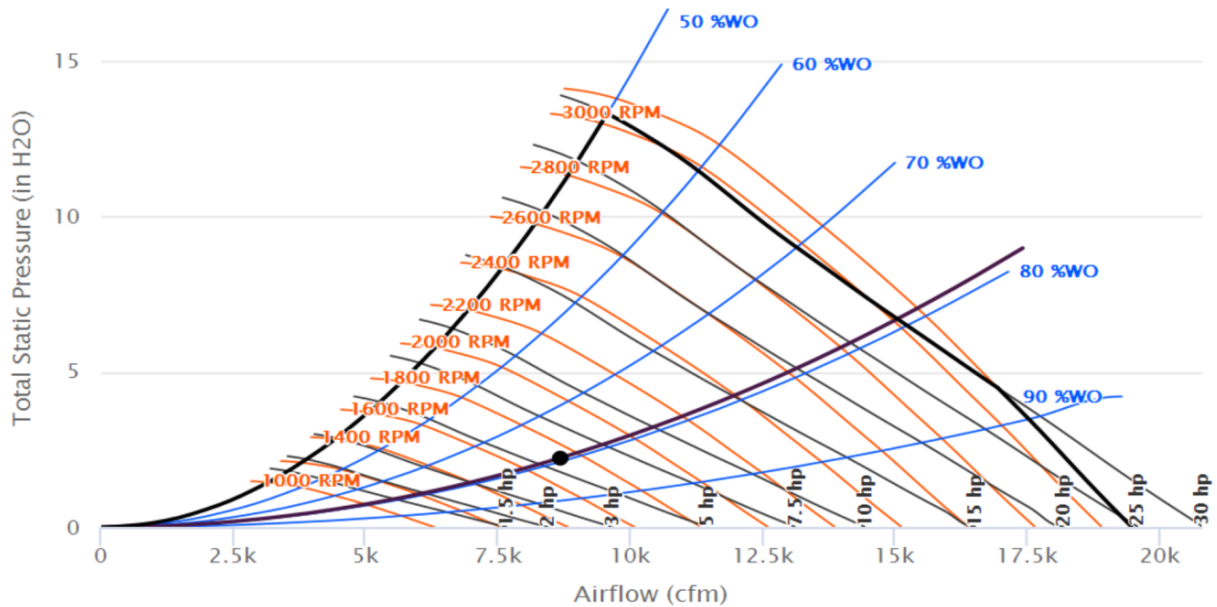
**Fan Details**

<b>Unit Size</b>	22UF	<b>Operating Brake Power</b>	5.818 hp
<b>Motor Frequency</b>	59.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	8,700 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	2.245 in H2O	<b>Efficiency</b>	52.94 %
<b>Operating RPM</b>	1,743 rpm		

Design VFD frequency is less than line frequency. Ensure the air delivery system can handle being pressurized to the 60 hz operating point on the fan curve.

**AHU-7 - Supply - Single Fan**

Size 21 DDP 22.25 inch AF H Press 100% Width 9 blades



**Fan Curve - Performance Climate Changer (CSAA)**  
 Item: A8 Qty: 1 Tag(s): AHU-8

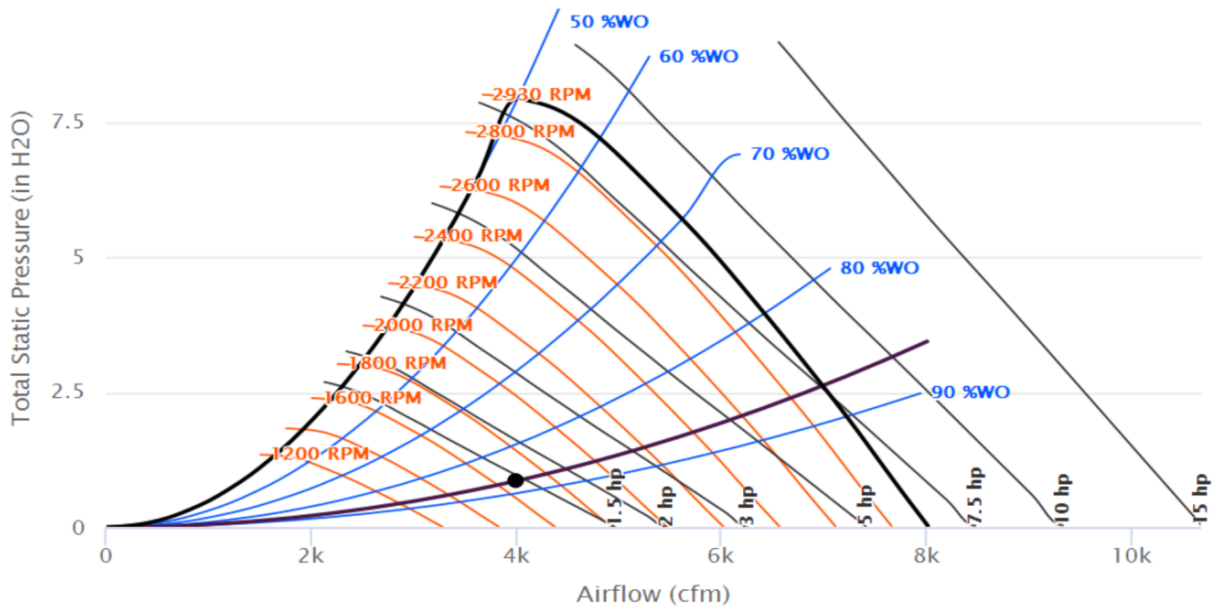
**Fan Details**

<b>Unit Size</b>	18TR	<b>Operating Brake Power</b>	1.427 hp
<b>Motor Frequency</b>	57.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	4,000 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	0.859 in H2O	<b>Efficiency</b>	37.95 %
<b>Operating RPM</b>	1,678 rpm		

Design VFD frequency is less than line frequency. Ensure the air delivery system can handle being pressurized to the 60 hz operating point on the fan curve.

**AHU-8 - Return - Single Fan**

Size 8 DDP 18.25 inch AF M Press 80% Width 9 blades



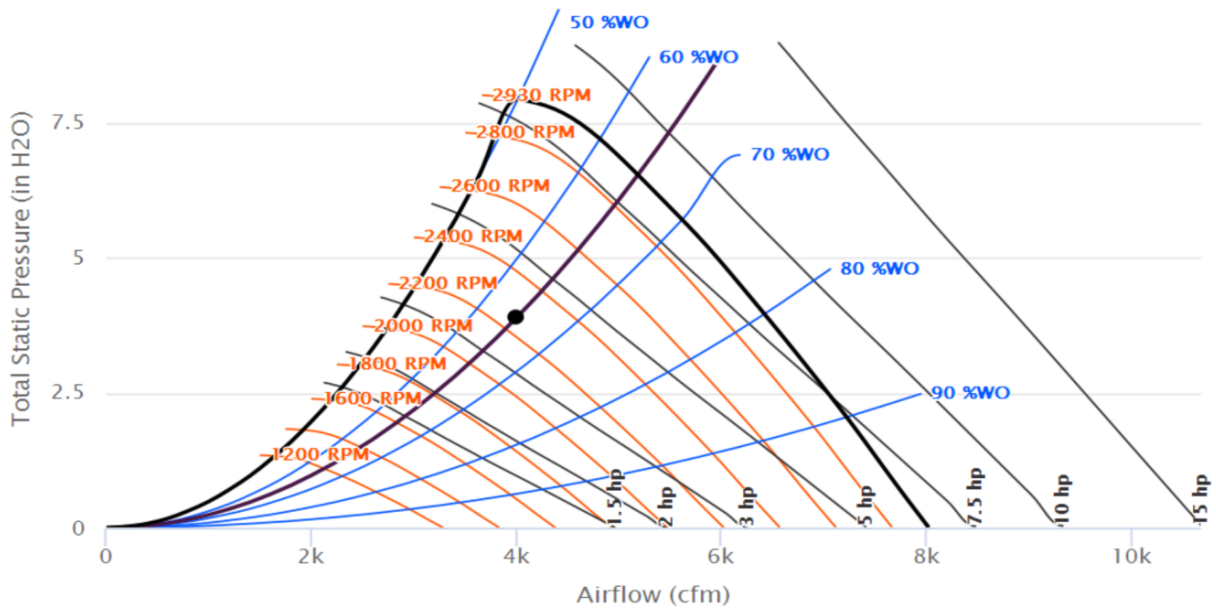
**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A8 Qty: 1 Tag(s): AHU-8**

**Fan Details**

<b>Unit Size</b>	18TR	<b>Operating Brake Power</b>	3.896 hp
<b>Motor Frequency</b>	77.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	4,000 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	3.892 in H2O	<b>Efficiency</b>	62.99 %
<b>Operating RPM</b>	2,261 rpm		

**AHU-8 - Supply - Single Fan**

Size 8 DDP 18.25 inch AF M Press 80% Width 9 blades



**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A9 Qty: 1 Tag(s): AHU-9**

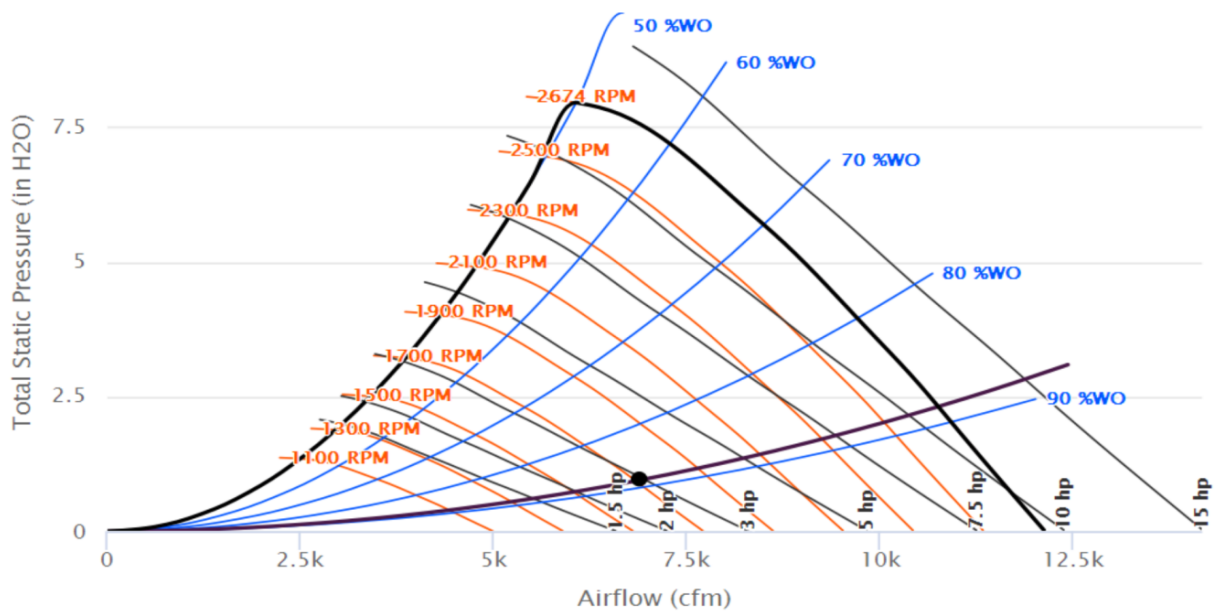
**Fan Details**

<b>Unit Size</b>	20TF	<b>Operating Brake Power</b>	2.957 hp
<b>Motor Frequency</b>	58.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	6,900 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	0.954 in H2O	<b>Efficiency</b>	35.09 %
<b>Operating RPM</b>	1,717 rpm		

Design VFD frequency is less than line frequency. Ensure the air delivery system can handle being pressurized to the 60 hz operating point on the fan curve.

**AHU-9 - Return - Single Fan**

Size 14 DDP 20 inch AF M Press 100% Width 9 blades



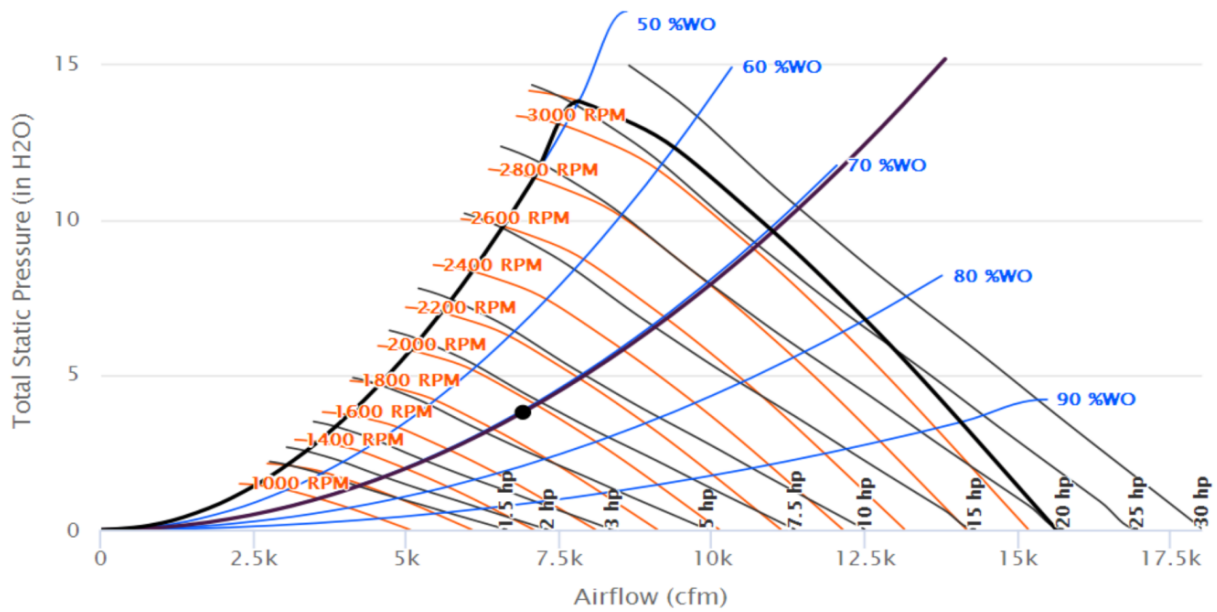
**Fan Curve - Performance Climate Changer (CSAA)**  
 Item: A9 Qty: 1 Tag(s): AHU-9

**Fan Details**

<b>Unit Size</b>	22UR	<b>Operating Brake Power</b>	6.636 hp
<b>Motor Frequency</b>	66.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	6,900 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	3.792 in H2O	<b>Efficiency</b>	62.16 %
<b>Operating RPM</b>	1,938 rpm		

**AHU-9 - Supply - Single Fan**

Size 14 DDP 22.25 inch AF H Press 80% Width 9 blades



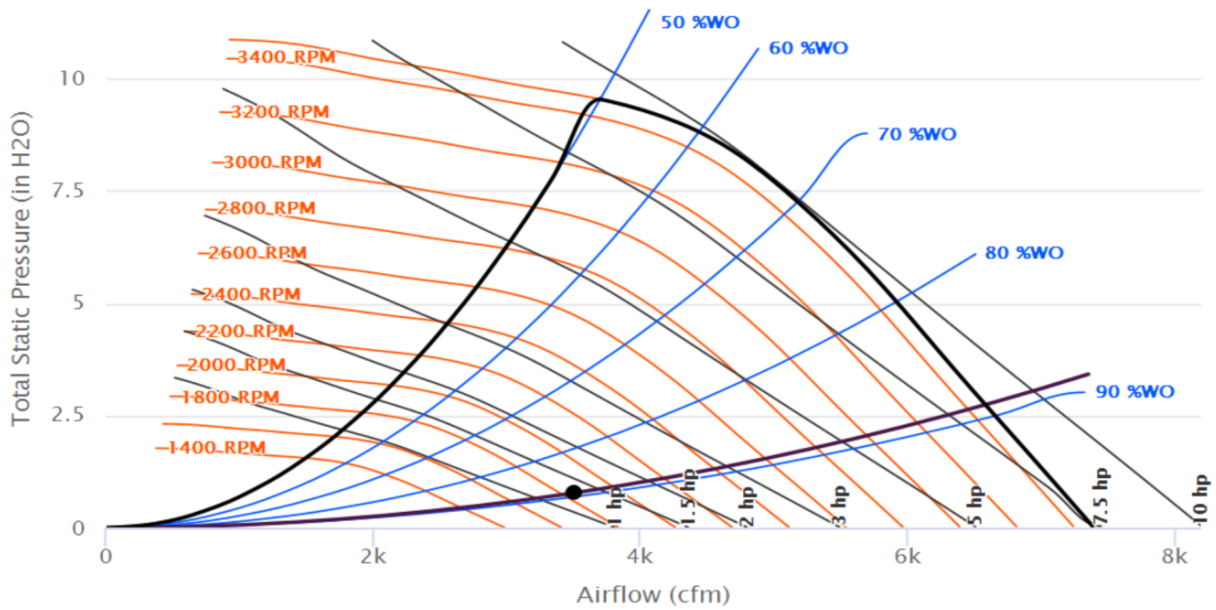
**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A10 Qty: 1 Tag(s): AHU-10**

**Fan Details**

<b>Unit Size</b>	16TF	<b>Operating Brake Power</b>	1.285 hp
<b>Motor Frequency</b>	63.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	3,500 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	0.775 in H2O	<b>Efficiency</b>	33.26 %
<b>Operating RPM</b>	1,844 rpm		

**AHU-10 - Return - Single Fan**

Size 8 DDP 16.5 inch AF M Press 100% Width 9 blades



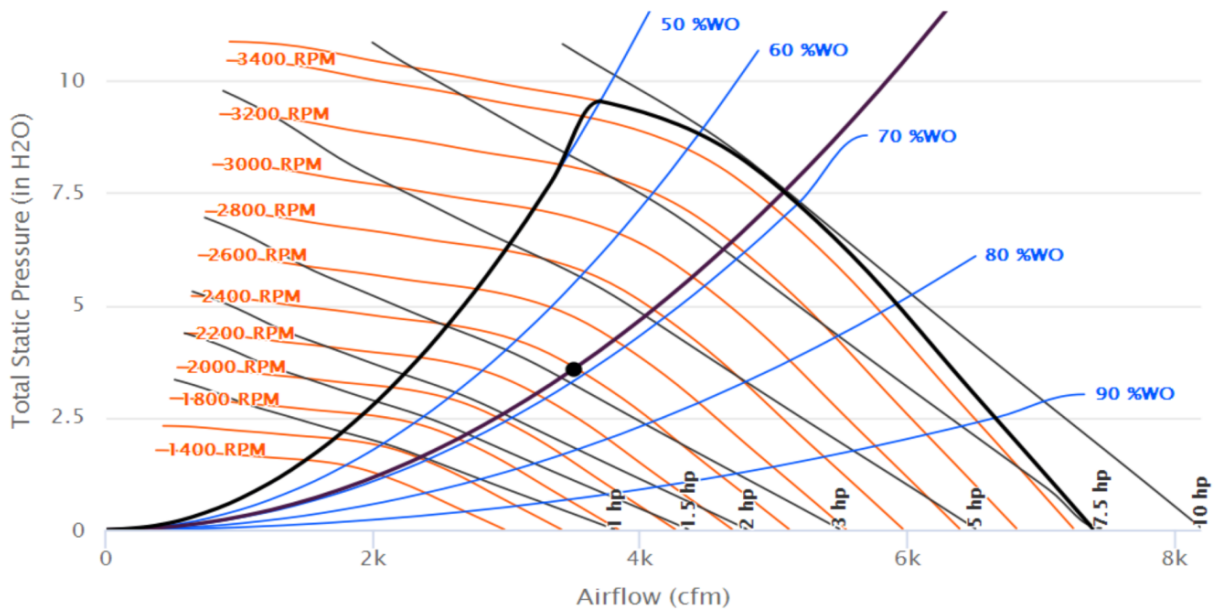
**Fan Curve - Performance Climate Changer (CSAA)**  
**Item: A10 Qty: 1 Tag(s): AHU-10**

**Fan Details**

<b>Unit Size</b>	16TF	<b>Operating Brake Power</b>	3.268 hp
<b>Motor Frequency</b>	81.00 Hz	<b>Altitude</b>	0.00 ft
<b>Operating Airflow</b>	3,500 cfm	<b>Design Temp.</b>	70.00 F
<b>Operating Static Pressure</b>	3.583 in H2O	<b>Efficiency</b>	60.50 %
<b>Operating RPM</b>	2,392 rpm		

**AHU-10 - Supply - Single Fan**

Size 8 DDP 16.5 inch AF M Press 100% Width 9 blades



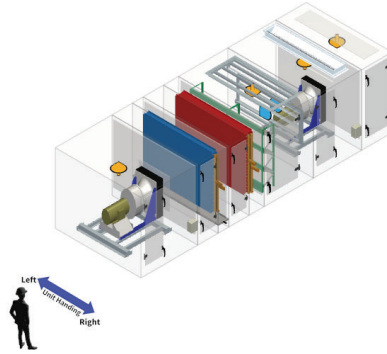
# Trane Performance Climate Changer Acoustics\_AHU-1

## Unit Overview - AHU-1

Application	Unit Size	External Dimensions			Weight		
		Height	Width	Length	Installed	Rigging	
Indoor unit	CSAA025	65.0 in	80.0 in	234.581 in	4716 lb	4583 lb	
Quantity of Shipping Sections		Largest Ship Split			Heaviest Ship Split	Elevation	
3 piece(s)		Height	Width	Length	1765 lb	0.00 ft	
		65.0 in	80.0 in	89.0 in			
Supply Fan				Return/Exhaust Fan			
Airflow	11100. cfm	Total Static Pressure	3.526 in H2O	Airflow	11100. cfm	Total Static Pressure	1.403 in H2O

## Construction Features

Panel	2in. foam injected R-13 with thermal break
Panel Material	All unit inner panels - galvanized
Integral Base Frame	6in. integral base frame
Short Circuit Current Rating	65 kA
Agency Approval	UL listed unit



## Unit Acoustics

Sound Path	63 (Hz)	125	250	500	1K	2K	4K	8K
Supply top:	77 dB	80. dB	85 dB	83 dB	82 dB	84 dB	84 dB	73 dB
Return:	75 dB	77 dB	90. dB	79 dB	75 dB	79 dB	81 dB	69 dB
Outdoor:	80. dB	82 dB	91 dB	83 dB	83 dB	85 dB	87 dB	75 dB
Exhaust:	79 dB	82 dB	92 dB	84 dB	84 dB	85 dB	88 dB	75 dB
Casing:	81 dB	81 dB	86 dB	80. dB	80. dB	64 dB	56 dB	57 dB

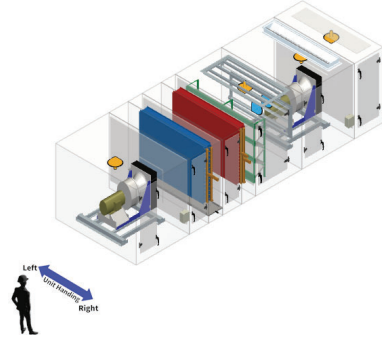
# Trane Performance Climate Changer Acoustics\_AHU-2

## Unit Overview - AHU-2

Application		Unit Size		External Dimensions			Weight	
Indoor unit		CSAA025		Height	Width	Length	Installed	Rigging
				65.0 in	80.0 in	245.926 in	5052 lb	4879 lb
Quantity of Shipping Sections		Largest Ship Split			Heaviest Ship Split	Elevation		
3 piece(s)		Height	Width	Length	1812 lb	0.00 ft		
		65.0 in			80.0 in			93.0 in
Supply Fan				Return/Exhaust Fan				
Airflow	12900. cfm	Total Static Pressure	3.876 in H2O		Airflow	12900. cfm	Total Static Pressure	1.720 in H2O

## Construction Features

<b>Panel</b>	2in. foam injected R-13 with thermal break
<b>Panel Material</b>	All unit inner panels - galvanized
<b>Integral Base Frame</b>	6in. integral base frame
<b>Short Circuit Current Rating</b>	65 kA
<b>Agency Approval</b>	UL listed unit



## Unit Electrical

Circuit	Voltage/Phase/Frequency	FLA	MCA	Max Fuse Size
Circuit number 1 Supply fan motor(s)	460/3/60	18.10 A	-	-
Circuit number 2 Return/booster fan motor(s)	460/3/60	11.40 A	-	-

Note: No factory motor interface provided. MCA and MOP to be determined by the Electrical Contractor.

## Unit Acoustics

Sound Path	63 (Hz)	125	250	500	1K	2K	4K	8K
<b>Supply top:</b>	78 dB	83 dB	94 dB	87 dB	87 dB	90. dB	93 dB	79 dB
<b>Return:</b>	75 dB	76 dB	88 dB	74 dB	76 dB	82 dB	81 dB	68 dB
<b>Outdoor:</b>	78 dB	79 dB	86 dB	81 dB	83 dB	87 dB	85 dB	73 dB
<b>Exhaust:</b>	79 dB	80. dB	86 dB	82 dB	83 dB	88 dB	85 dB	74 dB
<b>Casing:</b>	82 dB	83 dB	86 dB	81 dB	82 dB	68 dB	62 dB	57 dB

## Unit Controls

<b>Controller Type</b>	No controller
------------------------	---------------

## Warranty

<b>Warranty section</b>	Extd. warranty
<b>Parts - whole unit</b>	2nd-5th year additional
<b>Labor - 1st year</b>	1st year labor warranty
<b>Labor - beyond 1st year</b>	2nd thru 5th year

## Air mixing section - Position: 1

Openings							
Face	Path	Type	Airflow	Face Velocity	Area	Pressure Drop	Hood
Top	Return	Sizeable rectangular opening	12900. cfm	1971 ft/min	6.55 sq ft	0.000 in H2O	N/A
Section Options							
<b>Door Location</b>		Right					

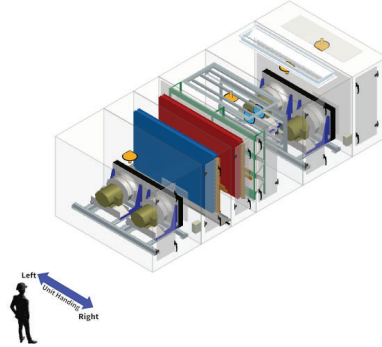
# Trane Performance Climate Changer Acoustics\_AHU-3

## Unit Overview - AHU-3

Application	Unit Size	External Dimensions			Weight		
		Height	Width	Length	Installed	Rigging	
Indoor unit	CSAA035	70.8 in	100.0 in	240.598 in	6548 lb	6373 lb	
Quantity of Shipping Sections		Largest Ship Split			Heaviest Ship Split	Elevation	
3 piece(s)		Height	Width	Length	2753 lb	0.00 ft	
		70.8 in	100.0 in	86.2 in			
Supply Fan				Return/Exhaust Fan			
Airflow	17000. cfm	Total Static Pressure	3.647 in H2O	Airflow	17000. cfm	Total Static Pressure	1.225 in H2O

## Construction Features

Panel	2in. foam injected R-13 with thermal break
Panel Material	All unit inner panels - galvanized
Integral Base Frame	6in. integral base frame
Short Circuit Current Rating	65 kA
Agency Approval	UL listed unit



## Unit Acoustics

Sound Path	63 (Hz)	125	250	500	1K	2K	4K	8K
Supply top:	85 dB	86 dB	93 dB	90. dB	91 dB	90. dB	90. dB	80. dB
Return:	82 dB	83 dB	88 dB	79 dB	80. dB	84 dB	82 dB	69 dB
Outdoor:	84 dB	86 dB	90. dB	85 dB	87 dB	90. dB	85 dB	72 dB
Exhaust:	84 dB	86 dB	90. dB	85 dB	87 dB	90. dB	84 dB	71 dB
Casing:	84 dB	86 dB	88 dB	83 dB	86 dB	69 dB	58 dB	48 dB

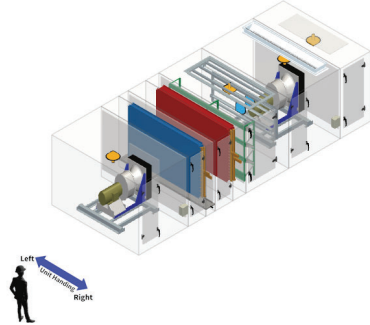
# Trane Performance Climate Changer Acoustics\_AHU-4

## Unit Overview - AHU-4

Application	Unit Size	External Dimensions			Weight		
		Height	Width	Length	Installed	Rigging	
Indoor unit	CSAA030	65.0 in	93.5 in	249.027 in	5341 lb	5216 lb	
Quantity of Shipping Sections		Largest Ship Split			Heaviest Ship Split	Elevation	
3 piece(s)		Height	Width	Length	2015 lb	0.00 ft	
		65.0 in	93.5 in	89.0 in			
Supply Fan				Return/Exhaust Fan			
Airflow	14900. cfm	Total Static Pressure	3.765 in H2O	Airflow	14900. cfm	Total Static Pressure	1.618 in H2O

## Construction Features

Panel	2in. foam injected R-13 with thermal break
Panel Material	All unit inner panels - galvanized
Integral Base Frame	6in. integral base frame
Short Circuit Current Rating	65 kA
Agency Approval	UL listed unit



## Unit Acoustics

Sound Path	63 (Hz)	125	250	500	1K	2K	4K	8K
Supply top:	83 dB	84 dB	90. dB	85 dB	84 dB	91 dB	92 dB	79 dB
Return:	77 dB	80. dB	84 dB	74 dB	76 dB	83 dB	80. dB	68 dB
Outdoor:	79 dB	85 dB	85 dB	79 dB	80. dB	86 dB	82 dB	70. dB
Exhaust:	79 dB	85 dB	85 dB	80. dB	81 dB	86 dB	81 dB	70. dB
Casing:	84 dB	86 dB	84 dB	80. dB	82 dB	65 dB	60. dB	60. dB

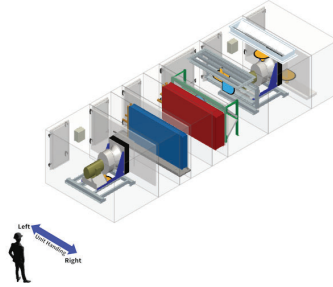
# Trane Performance Climate Changer Acoustics\_AHU-5

## Unit Overview - AHU-5

Application	Unit Size	External Dimensions			Weight		
		Height	Width	Length	Installed	Rigging	
Indoor unit	CSAA010	41.3 in	61.5 in	199.566 in	2449 lb	2395 lb	
Quantity of Shipping Sections		Largest Ship Split			Heaviest Ship Split	Elevation	
3 piece(s)		Height	Width	Length	835 lb	0.00 ft	
		41.3 in	61.5 in	79.0 in			
Supply Fan				Return/Exhaust Fan			
Airflow	4200. cfm	Total Static Pressure	2.218 in H2O	Airflow	4200. cfm	Total Static Pressure	0.735 in H2O

## Construction Features

Panel	2in. foam injected R-13 with thermal break
Panel Material	All unit inner panels - galvanized
Integral Base Frame	6in. integral base frame
Short Circuit Current Rating	65 kA
Agency Approval	UL listed unit



## Unit Acoustics

Sound Path	63 (Hz)	125	250	500	1K	2K	4K	8K
Supply bottom:	77 dB	74 dB	88 dB	76 dB	75 dB	74 dB	68 dB	60. dB
Return:	74 dB	71 dB	79 dB	75 dB	67 dB	71 dB	64 dB	54 dB
Outdoor:	74 dB	73 dB	83 dB	75 dB	71 dB	72 dB	66 dB	56 dB
Exhaust:	74 dB	73 dB	82 dB	75 dB	71 dB	72 dB	66 dB	56 dB
Casing:	75 dB	70. dB	83 dB	73 dB	66 dB	56 dB	50. dB	43 dB

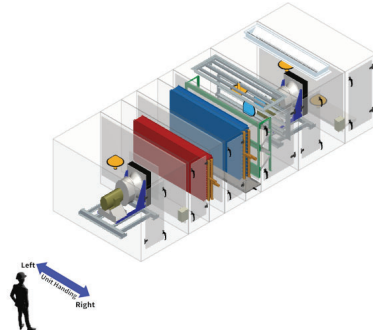
# Trane Performance Climate Changer Acoustics\_AHU-6

## Unit Overview - AHU-6

Application	Unit Size	External Dimensions			Weight		
		Height	Width	Length	Installed	Rigging	
Indoor unit	CSAA021	56.3 in	80.0 in	213.846 in	3836 lb	3730 lb	
Quantity of Shipping Sections	Largest Ship Split	Largest Ship Split			Heaviest Ship Split	Elevation	
		Height	Width	Length			
3 piece(s)		56.3 in	80.0 in	81.0 in	1343 lb	0.00 ft	
Supply Fan			Return/Exhaust Fan				
Airflow	9000. cfm	Total Static Pressure	2.312 in H2O	Airflow	9000. cfm	Total Static Pressure	1.094 in H2O

## Construction Features

Panel	2in. foam injected R-13 with thermal break
Panel Material	All unit inner panels - galvanized
Integral Base Frame	6in. integral base frame
Short Circuit Current Rating	65 kA
Agency Approval	UL listed unit



## Unit Acoustics

Sound Path	63 (Hz)	125	250	500	1K	2K	4K	8K
Supply top:	82 dB	86 dB	91 dB	87 dB	86 dB	84 dB	88 dB	76 dB
Return:	78 dB	78 dB	95 dB	81 dB	77 dB	80. dB	86 dB	71 dB
Outdoor:	82 dB	82 dB	92 dB	85 dB	85 dB	86 dB	91 dB	77 dB
Exhaust:	82 dB	83 dB	93 dB	85 dB	85 dB	86 dB	91 dB	78 dB
Casing:	81 dB	82 dB	91 dB	83 dB	81 dB	62 dB	55 dB	50. dB

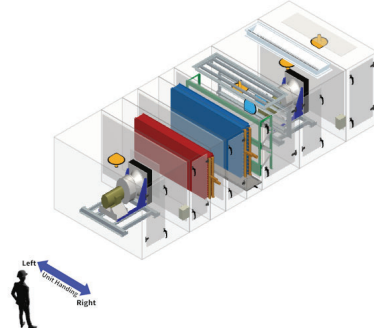
# Trane Performance Climate Changer Acoustics\_AHU-7

## Unit Overview - AHU-7

Application		Unit Size		External Dimensions			Weight	
Indoor unit		CSAA021		Height	Width	Length	Installed	Rigging
				56.3 in	80.0 in	213.846 in	3897 lb	3758 lb
Quantity of Shipping Sections		Largest Ship Split			Heaviest Ship Split	Elevation		
3 piece(s)		Height	Width	Length	1343 lb	0.00 ft		
		56.3 in	80.0 in	81.0 in				
Supply Fan				Return/Exhaust Fan				
Airflow	8700. cfm	Total Static Pressure	2.245 in H2O	Airflow	8700. cfm	Total Static Pressure	1.055 in H2O	

## Construction Features

<b>Panel</b>	2in. foam injected R-13 with thermal break
<b>Panel Material</b>	All unit inner panels - galvanized
<b>Integral Base Frame</b>	6in. integral base frame
<b>Short Circuit Current Rating</b>	65 kA
<b>Agency Approval</b>	UL listed unit



## Unit Acoustics

Sound Path	63 (Hz)	125	250	500	1K	2K	4K	8K
<b>Supply top:</b>	81 dB	86 dB	90. dB	86 dB	85 dB	83 dB	85 dB	75 dB
<b>Return:</b>	77 dB	77 dB	91 dB	80. dB	76 dB	79 dB	84 dB	69 dB
<b>Outdoor:</b>	81 dB	81 dB	89 dB	84 dB	83 dB	85 dB	89 dB	76 dB
<b>Exhaust:</b>	81 dB	82 dB	89 dB	84 dB	84 dB	85 dB	89 dB	77 dB
<b>Casing:</b>	80. dB	81 dB	86 dB	82 dB	80. dB	62 dB	55 dB	49 dB

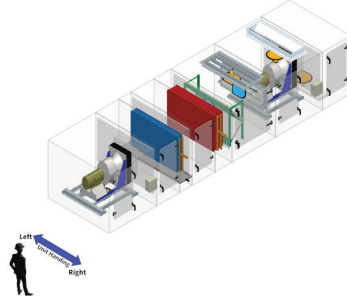
# Trane Performance Climate Changer Acoustics\_AHU-8

## Unit Overview - AHU-8

Application	Unit Size	External Dimensions			Weight		
		Height	Width	Length	Installed	Rigging	
Indoor unit	CSAA008	41.3 in	50.5 in	199.566 in	2219 lb	2175 lb	
Quantity of Shipping Sections		Largest Ship Split			Heaviest Ship Split	Elevation	
3 piece(s)		Height	Width	Length	753 lb	0.00 ft	
		41.3 in	50.5 in	79.0 in			
Supply Fan				Return/Exhaust Fan			
Airflow	4000. cfm	Total Static Pressure	3.892 in H2O	Airflow	4000. cfm	Total Static Pressure	0.859 in H2O

## Construction Features

Panel	2in. foam injected R-13 with thermal break
Panel Material	All unit inner panels - galvanized
Integral Base Frame	6in. integral base frame
Short Circuit Current Rating	65 kA
Agency Approval	UL listed unit



## Unit Acoustics

Sound Path	63 (Hz)	125	250	500	1K	2K	4K	8K
Supply bottom:	80. dB	77 dB	82 dB	77 dB	75 dB	75 dB	69 dB	60. dB
Return:	77 dB	75 dB	81 dB	73 dB	68 dB	71 dB	65 dB	55 dB
Outdoor:	76 dB	76 dB	84 dB	75 dB	72 dB	73 dB	67 dB	57 dB
Exhaust:	77 dB	76 dB	84 dB	75 dB	71 dB	72 dB	67 dB	57 dB
Casing:	81 dB	74 dB	83 dB	73 dB	69 dB	58 dB	52 dB	44 dB

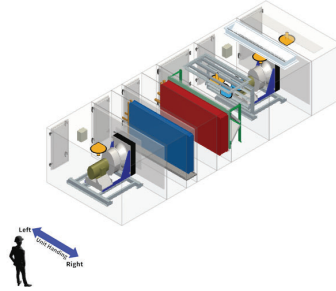
# Trane Performance Climate Changer Acoustics\_AHU-9

## Unit Overview - AHU-9

Application	Unit Size	External Dimensions			Weight		
		Height	Width	Length	Installed	Rigging	
Indoor unit	CSAA014	45.0 in	72.0 in	210.370 in	2972 lb	2902 lb	
Quantity of Shipping Sections		Largest Ship Split			Heaviest Ship Split	Elevation	
3 piece(s)		Height	Width	Length	1003 lb	0.00 ft	
		45.0 in	72.0 in	79.0 in			
Supply Fan				Return/Exhaust Fan			
Airflow	6900. cfm	Total Static Pressure	3.792 in H2O	Airflow	6900. cfm	Total Static Pressure	0.954 in H2O

## Construction Features

Panel	2in. foam injected R-13 with thermal break
Panel Material	All unit inner panels - galvanized
Integral Base Frame	6in. integral base frame
Short Circuit Current Rating	65 kA
Agency Approval	UL listed unit



## Unit Acoustics

Sound Path	63 (Hz)	125	250	500	1K	2K	4K	8K
Supply top:	77 dB	79 dB	92 dB	83 dB	82 dB	79 dB	83 dB	71 dB
Return:	79 dB	76 dB	94 dB	78 dB	72 dB	75 dB	76 dB	63 dB
Outdoor:	83 dB	78 dB	94 dB	80. dB	79 dB	79 dB	77 dB	67 dB
Exhaust:	83 dB	78 dB	94 dB	80. dB	79 dB	78 dB	77 dB	66 dB
Casing:	78 dB	77 dB	89 dB	79 dB	75 dB	62 dB	60. dB	56 dB

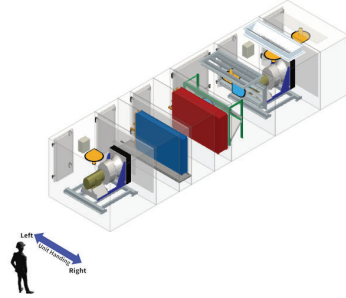
# Trane Performance Climate Changer Acoustics\_AHU-10

## Unit Overview - AHU-10

Application	Unit Size	External Dimensions			Weight		
		Height	Width	Length	Installed	Rigging	
Indoor unit	CSAA008	41.3 in	50.5 in	196.864 in	2170 lb	2133 lb	
Quantity of Shipping Sections		Largest Ship Split			Heaviest Ship Split	Elevation	
3 piece(s)		Height	Width	Length	738 lb	0.00 ft	
		41.3 in	50.5 in	79.0 in			
Supply Fan				Return/Exhaust Fan			
Airflow	3500. cfm	Total Static Pressure	3.583 in H2O	Airflow	3500. cfm	Total Static Pressure	0.775 in H2O

## Construction Features

Panel	2in. foam injected R-13 with thermal break
Panel Material	All unit inner panels - galvanized
Integral Base Frame	6in. integral base frame
Short Circuit Current Rating	65 kA
Agency Approval	UL listed unit



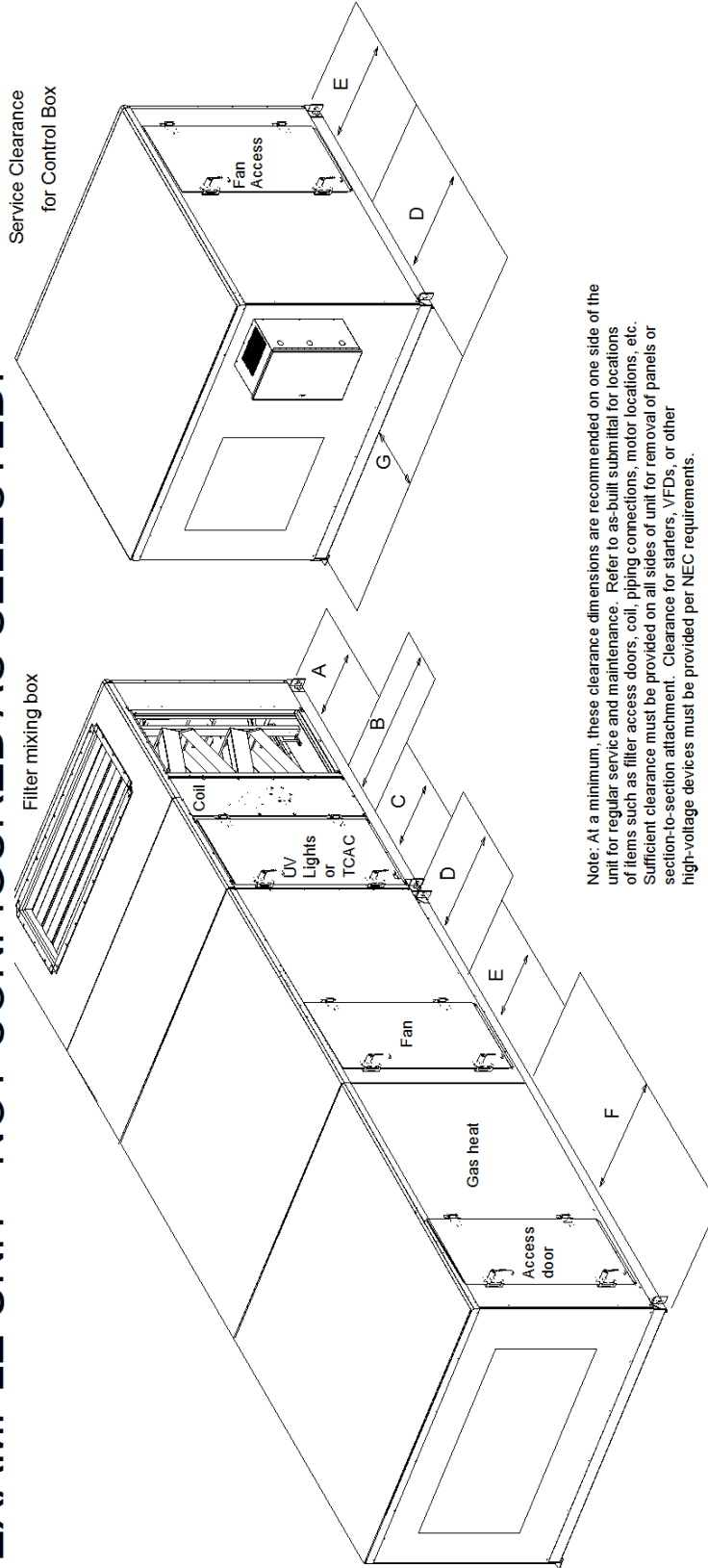
## Unit Acoustics

Sound Path	63 (Hz)	125	250	500	1K	2K	4K	8K
Supply top:	80. dB	76 dB	85 dB	80. dB	79 dB	77 dB	74 dB	66 dB
Return:	76 dB	72 dB	81 dB	77 dB	70. dB	72 dB	67 dB	58 dB
Outdoor:	79 dB	75 dB	87 dB	79 dB	75 dB	75 dB	71 dB	62 dB
Exhaust:	79 dB	74 dB	87 dB	79 dB	75 dB	75 dB	71 dB	62 dB
Casing:	79 dB	72 dB	83 dB	80. dB	70. dB	61 dB	57 dB	51 dB

**Accessory - Performance Climate Changer (CSAA)**

Item: A1 - A10 Qty: 10 Tag(s): AHU-1, AHU-2, AHU-3, AHU-4, AHU-5, AHU-6, AHU-7, AHU-8, AHU-9, AHU-10

**EXAMPLE UNIT - NOT CONFIGURED AS SELECTED.**



Note: At a minimum, these clearance dimensions are recommended on one side of the unit for regular service and maintenance. Refer to as-built submittal for locations of items such as filter access doors, coil, piping connections, motor locations, etc. Sufficient clearance must be provided on all sides of unit for removal of panels or section-to-section attachment. Clearance for starters, VFDs, or other high-voltage devices must be provided per NEC requirements.

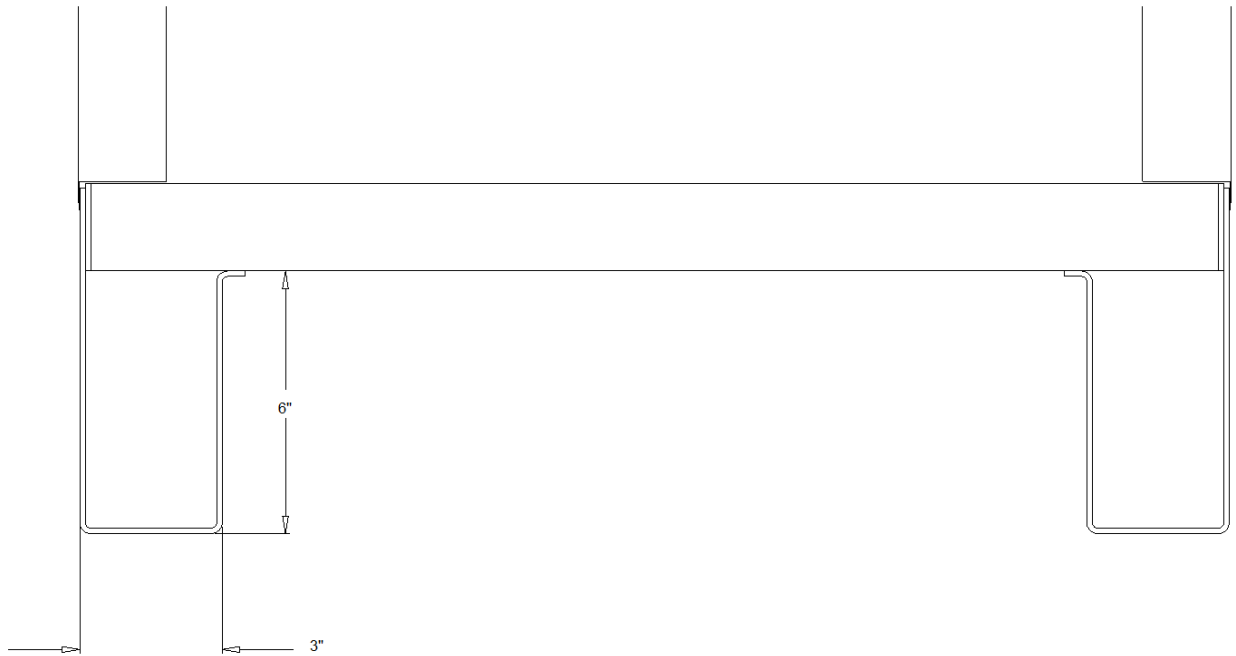
Component	3	4	6	8	10	12	14	17	21	25	30	35	40	50	57	66	80	100	120
A (filter)	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	52	56	58	58
B (coil, humidifier)	48	59	66	87	82	87	87	87	95	95	109	115	128	141	141	156	156	170	197
B (staggered coil)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	67	67	76	80	88	96	96	105	105	113	129
C (UV Lights)	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	52	56	58	58
C (TCAC)	43	59	63	83	75	81	83	83	58	58	83	75	83	83	83	83	83	75	83
D (External Starter, VFD, LV box or Overload box)	61	61	61	61	61	61	61	61	64	64	64	64	64	64	64	64	64	64	64
D (Internal Starter or VFD)	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
E (fan)	48	48	48	48	51	100	58	61	60	66	66	66	70	77	77	93	93	101	101
F (Gas Heat Ext Vestible)	N/A	N/A	89	90	108	100	100	105	115	115	118	136	140	156	156	170	179	180	N/A
F (Gas Heat Int Vestible)	N/A	N/A	56	63	74	79	84	84	92	92	106	112	125	138	138	153	153	167	194

Component	All Sizes
G (Side mount LV box)	36
G (Front mount LV box)	13

**Accessory - Performance Climate Changer (CSAA)**

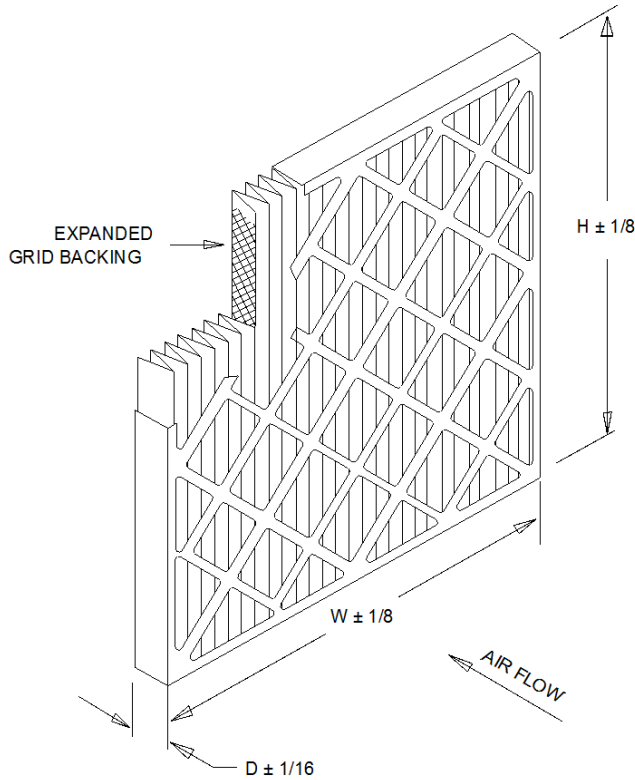
**Item: A1 - A10 Qty: 10 Tag(s): AHU-1, AHU-2, AHU-3, AHU-4, AHU-5, AHU-6, AHU-7, AHU-8, AHU-9, AHU-10**

# Base Detail



**Accessory - Performance Climate Changer (CSAA)**

**Item: A1 - A10 Qty: 10 Tag(s): AHU-1, AHU-2, AHU-3, AHU-4, AHU-5, AHU-6, AHU-7, AHU-8, AHU-9, AHU-10**



**STANDARD CONSTRUCTION**

1. 100 % Synthetic White Un-Dyed Media
2. 10.0 Pleats Per Foot
3. Expanded Metal Pleat Supports
4. Moisture Resistant Beverage Board Frame
5. Double Wall Frame

**NOTES**

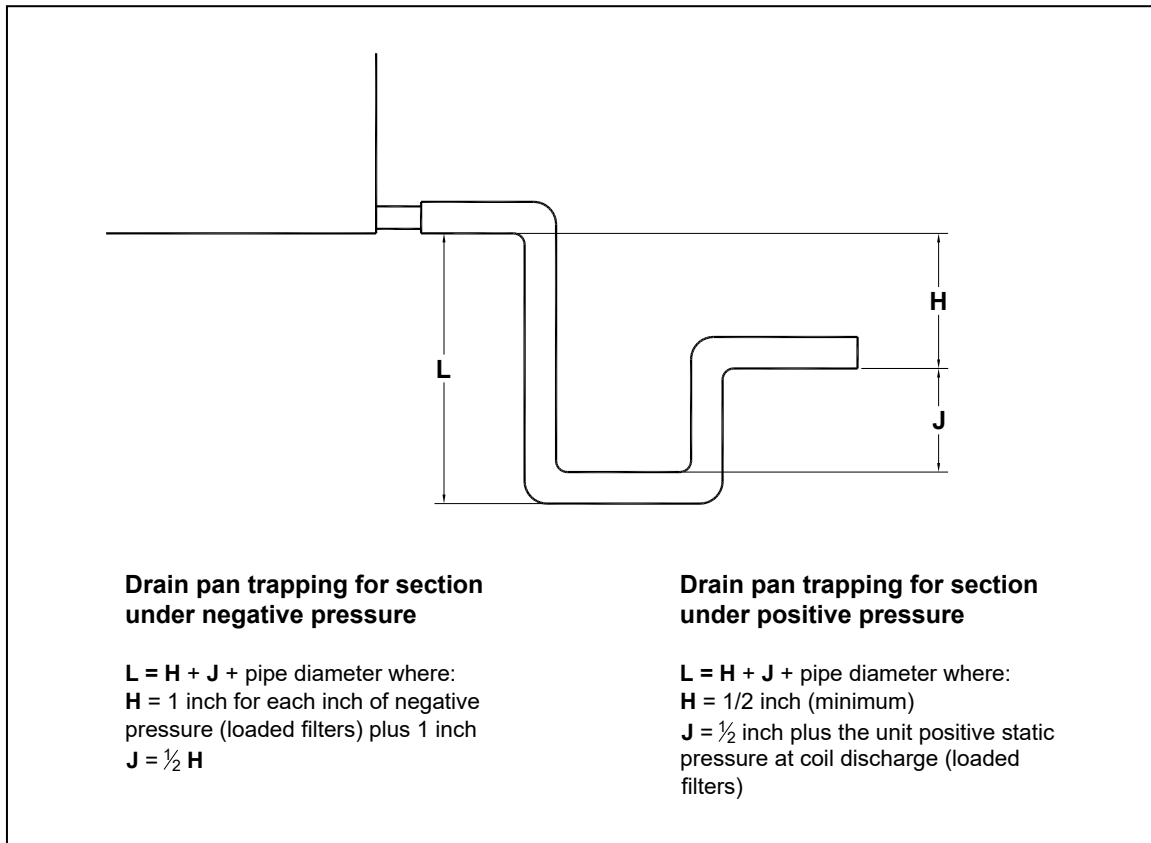
1. MERV 8-A Per ASHRAE 52.2-2007 Appendix J.
2. Final Resistance: 1/0" W.G.
3. Rated Velocity: 500 FPM
4. Class 2 Filter Per U.L. Standard 900
5. Maximum Operating Temperature: 225 DEG. F

MODEL NUMBER	NOMINAL SIZE IN. W X H X D	ACTUAL SIZE IN. W X H X D	RATED AIR FLOW CFM	INITIAL RESISTANCE IN. W.G.	MEDIA AREA SQ. FT.
MX40-STD2-217	10 X 20 X 2	9-1/2 X 19-1/2 X 1-3/4	700	0.29	4.7
MX40-STD2-220	12 X 20 X 2	11-1/2 X 19-1/2 X 1-3/4	840	0.29	5.5
MX40-STD2-210	12 X 24 X 2	11-3/8 X 23-3/8 X 1-3/4	1000	0.29	6.2
MX40-STD2-239	14 X 20 X 2	13-1/2 X 19-1/2 X 1-3/4	980	0.29	5.7
MX40-2TD2-241	14 X 25 X 2	13-1/2 X 24-1/2 X 1-3/4	1220	0.29	7.1
MX40-STD2-245	15 X 20 X 2	14-1/2 X 19-1/2 X 1-3/4	1050	0.29	6.2
MX40-STD2-201	16 X 20 X 2	15-1/2 X 19-1/2 X 1-3/4	1120	0.29	6.7
MX40-STD2-216	16 X 24 X 2	15-3/8 X 23-3/8 X 1-3/4	1340	0.29	8.0
MX40-STD2-202	16 X 24 X 2	15-1/2 X 24-1/2 X 1-3/4	1400	0.29	8.0
MX40-STD2-280	15 X 20 X 2	17-1/2 X 19-1/2 X 1-3/4	1250	0.29	7.8
MX40-STD2-212	18 X 24 X 2	17-3/8 X 23-3/8 X 1-3/4	1500	0.29	9.3
MX40-STD2-285	18 X 25 X 2	17-1/2 X 24-1/2 X 1-3/4	1570	0.29	9.7
MX40-STD2-203	20 X 20 X 2	19-1/2 X 19-1/2 X 1-3/4	1400	0.29	8.3
MX40-STD2-211	20 X 24 X 2	19-3/8 X 23-3/8 X 1-3/4	1670	0.29	9.9
MX40-STD2-204	20 X 25 X 2	19-1/2 X 24-1/2 X 1-3/4	1750	0.29	10.3
MX40-STD2-205	24 X 24 X 2	23-3/8 X 23-3/8 X 1-3/4	2000	0.29	11.7
MX40-STD2-225	25 X 25 X 2	24-1/2 X 24-1/2 X 1-3/4	2170	0.29	13.6

**Accessory - Performance Climate Changer (CSAA)**

**Trap Schedule**

**Item: A1 - A10 Qty: 10 Tag(s): AHU-1, AHU-2, AHU-3, AHU-4, AHU-5, AHU-6, AHU-7, AHU-8, AHU-9, AHU-10**



Unit Tag(s)	Unit Size	Entering Ext. Static Pressure (in H2O)	Discharge Ext. Static Pressure (in H2O)	Drain pan Section Location	Recommended Trap Dimensions <sup>1</sup>			Selected Baserail Height (in) <sup>1</sup>
					H (in)	J (in)	L (in)	
AHU-1 <sup>2</sup>	Unit size 25	1.000	1.000	Coil section [6]	3.769	1.884	6.653	6.000
AHU-2 <sup>2</sup>	Unit size 25	1.000	1.000	Coil section [6]	4.031	2.015	7.046	6.000
AHU-3 <sup>2</sup>	Unit size 35	1.000	1.000	Coil section [5]	3.874	1.937	7.061	6.000
AHU-4 <sup>2</sup>	Unit size 30	1.000	1.000	Coil section [6]	3.938	1.969	6.906	6.000
AHU-5 <sup>2</sup>	Unit size 10	0.375	0.375	Coil section [6]	3.067	1.534	5.601	6.000
AHU-6 <sup>2</sup>	Unit size 21	0.375	0.375	Coil section [4]	3.076	1.538	5.615	6.000
AHU-7 <sup>2</sup>	Unit size 21	0.375	0.375	Coil section [4]	3.032	1.516	5.548	6.000
AHU-8 <sup>2</sup>	Unit size 8	1.000	1.000	Coil section [6]	4.033	2.016	7.049	6.000
AHU-9 <sup>2</sup>	Unit size 14	1.000	1.000	Coil section [6]	3.939	1.969	6.908	6.000
AHU-10 <sup>2</sup>	Unit size 8	1.000	1.000	Coil section [6]	3.789	1.894	6.683	6.000

<sup>1</sup> To ensure proper condensate trapping the field installed housekeeping pad height is the responsibility of the contractor.

<sup>2</sup> The external static pressure used for fan selection was assumed to be divided 50% to entering duct external static pressure and 50% discharge external static pressure.



**Accessory - Performance Climate Changer (CSAA)****Filter Schedule****Item: A1 - A10 Qty: 10 Tag(s): AHU-1, AHU-2, AHU-3, AHU-4, AHU-5, AHU-6, AHU-7, AHU-8, AHU-9, AHU-10**

Unit Tag(s)	Filter Location	Filter Arrangement	Filter Depth	Filter Type	MERV Rating	Filter Quantity	Filter Size
AHU-1, AHU-2	Air mixing section [3]	Angled	2in. filter frame	Pleated media	MERV 8	18	16 x 25
AHU-3	Air mixing section [3]	Angled	2in. filter frame	Pleated media	MERV 8	6 18	16 x 20 16 x 25
AHU-4	Air mixing section [3]	Angled	2in. filter frame	Pleated media	MERV 8	18 6	16 x 20 16 x 25
AHU-5	Air mixing section [3]	Angled	2in. filter frame	Pleated media	MERV 8	4	20 x 25
AHU-6, AHU-7	Air mixing section [3]	Angled	2in. filter frame	Pleated media	MERV 8	12	16 x 25
AHU-8, AHU-10	Air mixing section [3]	Angled	2in. filter frame	Pleated media	MERV 8	4	20 x 20
AHU-9	Air mixing section [3]	Angled	2in. filter frame	Pleated media	MERV 8	4 2	20 x 20 20 x 25

**Field Wiring - Performance Climate Changer (CSAA)**

**MCA MOP Schedule**

**Item: A1 - A10 Qty: 10 Tag(s): AHU-1, AHU-2, AHU-3, AHU-4, AHU-5, AHU-6, AHU-7, AHU-8, AHU-9, AHU-10**

Unit Tag(s)	Circuit	Circuit Description	Voltage/Phase/Hz	MCA (A)	MOP (A)
AHU-1, AHU-2, AHU-4, AHU-5, AHU-6, AHU-7, AHU-8, AHU-9, AHU-10	1	Supply fan motor(s)	460/3/60	-	-
	2	Return/booster fan motor(s)	460/3/60	-	-
AHU-3	1	Supply fan motor (each x 2)	460/3/60	-	-
	2	Return fan motor (each x 2)	460/3/60	-	-

Note: When motor interface is not provided by the factory, MCA and MOP must be determined by the electrical contractor.

**Field Installed Options - Part/Order Number Summary**

This is a report to help you locate field installed options that arrive at the jobsite. This report provides part or order numbers for each field installed option, and references it to a specific product tag. It is NOT intended as a bill of material for the job.

**Product Family - Performance Climate Changer (CSAA)**

Item	Tag(s)	Qty	Description	Model Number
A1	AHU-1	1	Performance Climate Changer (CSAA)	CSAA025UA
A2	AHU-2	1	Performance Climate Changer (CSAA)	CSAA025UA
A3	AHU-3	1	Performance Climate Changer (CSAA)	CSAA035UA
A4	AHU-4	1	Performance Climate Changer (CSAA)	CSAA030UA
A5	AHU-5	1	Performance Climate Changer (CSAA)	CSAA010UA
A6	AHU-6	1	Performance Climate Changer (CSAA)	CSAA021UA
A7	AHU-7	1	Performance Climate Changer (CSAA)	CSAA021UA
A8	AHU-8	1	Performance Climate Changer (CSAA)	CSAA008UA
A9	AHU-9	1	Performance Climate Changer (CSAA)	CSAA014UA
A10	AHU-10	1	Performance Climate Changer (CSAA)	CSAA008UA

Field Installed Option Description	Part/Ordering Number
Pleated media, 2 complete sets for each AHU	