



Historic District Commission MEETING AGENDA

Monday, January 27, 2025 - 6:00 PM
Council Chambers, Easton Town Office
14 S Harrison Street

Call to Order

- 1) Approval of the Agenda for January 27, 2025.

Old Business

New Business

- 1) **Application Number:** 2025 - 1374 / HD 25 - 01
Applicant: Quinnworks Inc.
Location: 516 & 518 August Street
Tax Map 0104 Grid 0000, Parcel 1045
Zoning District: CB
Request: Replacement of the existing steps and landings.

Discussion Item

Approval of Minutes

- 1) Approval of the Draft Decision Summary from the January 13, 2025 meeting.

Administrative Approval

- 1) **Application Number:** 2025 - 1380 / HD 25 - 04
Applicant: Marasun LLC
Location: 317 August Street
Tax Map 0103, Grid 00EA, Parcel 1076
Zoning District: R-7A
Request: In kind asphalt shingle roof replacement.
- 2) **Application Number** 2025-1384
Location 46 Pennsylvania Avenue
Applicant Trevor Newcomb on behalf of the Town of Easton

Request

HVAC Installation

Consent Docket

- 1) **Application Number:** 2025 - 1375 / HD 25 - 02
 Applicant: Ronald Newnam
 Location: 134 N. Washington Street (Goodwill Industries of the Chesapeake)
 Tax Map 0103, Grid 00EA, Parcel 0616

 Zoning District: CB
 Request: Emergency approval for a flat membrane roof replacement and HVAC unit replacement (*as per the Historic District Commission Chairperson*).

Adjournment



TOWN OF EASTON
PLANNING & ZONING
14 S Harrison Street, Easton MD 21601

Historic District Commission Staff Report

Meeting Date: 1/27/2025

Staff Contact: Nicholas Johnson AICP, Town Planner, njohnson@eastonmd.gov

Property Address: 516 August Street

Applicant: Quinworks Inc. on behalf of Rick Parker

Application Number: 2025-1374

Code Enforcement Case: Yes ☐ No ☒

Project Description:

The applicant is proposing to demolish and re-construct existing steps and landings located on the rear façade of this structure. The new stairs and landings will be constructed entirely of pressure treated lumber and will need to meet current building codes. This is considered a contributing structure to the Easton Historic District.

Historic District Guidelines:

Guideline 6. Comply with Health and Safety Codes

- a. Compliance with health and safety codes and handicapped access requirements must be carried out with minimum impact on the historic character of buildings.
- b. When permitted by law, fire escapes or fire towers shall be placed at the rear of buildings as a secondary means of egress.
- c. Provide barrier-free access that promotes independence for the disabled to the highest degree practicable, while preserving significant historic features.
- d. Construction of ramps, lifts, fire escapes, and similar accessibility features should be constructed in an area that is hidden from public view, such as on a rear or side elevation, when possible.

Guideline 54. Fire Escapes and Exterior Stairs

- a. Locate fire escapes and exterior stairs in the rear or on side elevations that are not visible, or minimally visible, from public rights-of-way.
- b. Fire escapes and exterior stairs should not damage architectural features. Avoid placing these units where architecture features would need to be removed to accommodate them.



TOWN OF EASTON
PLANNING & ZONING
14 S Harrison Street, Easton MD 21601

Draft Motions:

1. I move that the Historic District Commission **approve** the application as submitted

OR

2. I move that the Historic District Commission deny the application based on the following findings

OR

3. I move an alternate motion.



TOWN OF EASTON
PLANNING & ZONING
14 S Harrison Street, Easton MD 21601

Appendix A: 2012 Easton Historic District Survey Sheet

EASTON HISTORIC DISTRICT SURVEY

PROPERTY #:

Picture:



TAX ID		ADDRESS		OWNER NAME			
2101021532		516 AUGUST ST		WATER'S EDGE MANAGEMENT, LLC			
YEAR BUILT		PHYSICAL CONDITION					
1890		GOOD					
ARCHITECTURAL STYLE				ADDITION(S)			
2ND EMPIRE				NONE APPARENT			
NHL DISTRICT	NR DISTRICT	NR LISTED	MEETS NR CRITERIA	1980 NR RATING	MD INVENTORY	CONTRIBUTING	NC CODE
				B		Y	
NOTES							
UNUSUAL EXAMPLE OF 1 1/2 STORY 2ND EMPIRE DWELLING. RETAINS BASIC FENESTRATION PATTERN + FORM BUT HAS INAPPROPRIATELY SCALED PORCH AND MODERN SIDING. ORIGINAL FRONT PAIRED DOORS. HISTORIC OUTBUILDING-BARN?							

RECEIVED

JAN 09 2025

HD 25 - 01



TOWN OF EASTON
PLANNING AND ZONING
14 SOUTH HARRISON STREET, EASTON, MD 21601

TOWN OF EASTON

Application #: 2025 - 1374
Date Received: 01/09/2025
Fee Paid: \$75.00
HDC Meeting Date: 01/27/2025
Date Property Posted: 01/20/2025

HISTORIC DISTRICT COMMISSION HEARING APPLICATION

APPLICATION TYPE (PLEASE CIRCLE)

ROOFING

DEMOLITION

SIGNAGE

FENCING

OTHER

NEW CONSTRUCTION/ADDITION

EXTERIOR ALTERATIONS

FOR TREE REMOVAL(S) - PLEASE USE THE TREE REMOVAL APPLICATION

*Rebuild
Steps + Landings*

PROPERTY INFORMATION

ADDRESS

516 + 518 August ST EASTON Md. 21601

☐ Contributing

☐ Non-Contributing

YEAR BUILT:

NATIONAL REGISTAR #

PROPERTY INFORMATION

OWNER NAME

Richard C PARKER Jr. (Waters Edge Management LLC)

TELEPHONE NO.

609-306-0878

EMAIL

rickp0605@gmail.com

Applicant or Agent

NAME

Charles J Quinn

Quinnworks INC

TELEPHONE NO.

410-490-6119

EMAIL

mujquinn@quinnworksinc.com

Description of Proposal (include additional sheets, as necessary)

<i>Demo Existing Steps and Landings on the Rear of</i>
<i>the Building and Replace in Same Footprint</i>
<i>With All pressure Treated Lumber. New Steps and</i>
<i>Landings Will Be Built stronger and to current codes.</i>

Specific Requirements

- The payment of fees is due at the time of application submittal.
As of December 27, 2022, the fees are as follows:
Commercial - \$200 Residential - \$75 Signs - \$75 Staff Approval \$25
- Provide 2 hard copies plus 1 digital copy of the application and all supplemental information.
- Disclose any easements or deed restrictions pertaining to the property and any improvements including the details of said easements or restrictions.
- Disclose any tax credits and or grants being considered for the project.

The Historic District Commission (HDC) reserves the right to request reasonable additional information or design drawings that further clarify proposals. In cases where professional design services are warranted, the HDC may require the applicant to retain a licensed design consultant. If the applicant or their designee is not present for the scheduled meeting the Commission may elect to refrain from discussing and voting on the scheduled agenda item. Any modifications during review shall warrant an updated application.

I hereby certify that I have reviewed the Easton Historic District Guidelines as published

Signature of Applicant or Agent

Date

Printed Name of Applicant or Agent

<i>Charles J Quinn</i>
<i>1-9-25</i>
<i>Charles J Quinn</i>

Revised 4.4.2022



NARRATIVE

1-9-2025

Quinnworks INC
518 Brownsville Rd
Centreville Md 21617

(Charles J Quinn)

410-490-6119

MHIC # 30344
MHBR # 3738

The Above Has been contracted to Demo
the existing Steps and Landings (2 Sets)
on the rear of

516 + 518 ~~St~~ August ST
EASTON Md 21601

Then Build New Steps and Landings in the
Same footprint as the old (2 Sets)
The New Construction will be built Stronger
And to current codes. All materials to be
Pressure Treated Lumber

All Demo Materials And materials From new
Construction will be cleaned up and Disposed
of at a Legal disposal Location

Charles J Quinn
Quinnworks Inc

1-9-2025

* MATERIALS LIST

Quinnworks inc
518 Brownsville Rd
Centreville md 21617
MHIC #30344
MHBK #3738

Charles J Quinn

516 + 518 August St
Easton md 21617

Demo + Rebuild 2 sets
of Steps + Landings at
The Rear of the building.

EXISTING materials to be Demanded

4x4 Post
2x8 Joist
2x12 Stair stringers
5/4x6 Decking
2x10 Stair treads
4x4 Rail Post
2x4 Rail Cap
2x4 Center Rail

NEW CONSTRUCTION Materials

4x6 Post
2x8 Joist Double Band
2x12 Stringers
5/4x6 Decking
5/4x6 x2 Stair Treads
4x4 Rail post
2x4 Rail Top + Bottom
2x2 Pickets
5/4x6 Rail Cap

Charles J Quinn
Quinnworks inc.

1-9-2025

ESTIMATE #535
12/09/24 11:53 AM

84 LUMBER CO.

PAGE 1

NAME: QUINNWORKS INC
CODE: 0492093100-000-000
ADDRESS: 518 BROWNSVILLE ROAD
CENTREVILLE, MD 21617
PHONE: (410) 490-6119 FAX:
PROJECT:

STORE: 0931 - WYE MILLS
ADDRESS: 125 OWENS ROAD
PHONE: (410) 364-9084
ASSOCIATE: MATT CZYZEWSKI
EST DATE: 12/09/24 START: / /

< THIS IS NOT A RECEIPT >

#535

CUSTOMER COPY

	P.O.S. #	QTY	DESCRIPTION
			** DELIVERED
1.	3416400	30	80# HANDICRETE
2.	6219500	1	PALLETS-CONCRETE
3.	6210000	5	4X8X16 SOLID BLOCK
4.	6061606	2	6X6X16 SYP TREATED #2
5.	4061206	6	4X6X12 SYP TREATED #2
6.	2121065	3	2X12X10 #2 TREATED GRD CTN
7.	2121665	3	2X12X16 #2 TREATED GRD CTN
8.	5460807	12	5/4X6X8 SYP PREM TRTD
9.	5461607	26	5/4X6X16 SYP PREM TRTD
10.	1081206	11	1X8X12 SYP TREATED #2
11.	4040806	6	4X4X8 SYP TREATED #2
12.	4041206	1	4X4X12 SYP TREATED #2
13.	2040870	7	2X4X8 #2 PRIME TRT SYP
14.	2041070	2	2X4X10 #2 PRIME TRT SYP

ESTIMATE #535

12/09/24 11:53 AM

84 LUMBER CO.

PAGE 2

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PHONE: (410) 490-6119 FAX:
PROJECT:

STORE: 0931 - WYE MILLS
ADDRESS: 125 OWENS ROAD
PHONE: (410) 364-9084
ASSOCIATE: MATT CZYZEWSKI
EST DATE: 12/09/24 START: / /

< THIS IS NOT A RECEIPT >

#535

CUSTOMER COPY

	P.O.S.#	QTY	DESCRIPTION
15.	2041270	8	2X4X12 #2 PRIME TRT SYP
16. L	7530500	200	2X2X42 BEVL 2 END PT
17.	2101065	3	2X10X10 #2 TREATED GRD CNT
18.	2081065	6	2X8X10 #2 TREATED GRD CNT
19. L	7500400	4	4X8 TUF-TEX LATTICE

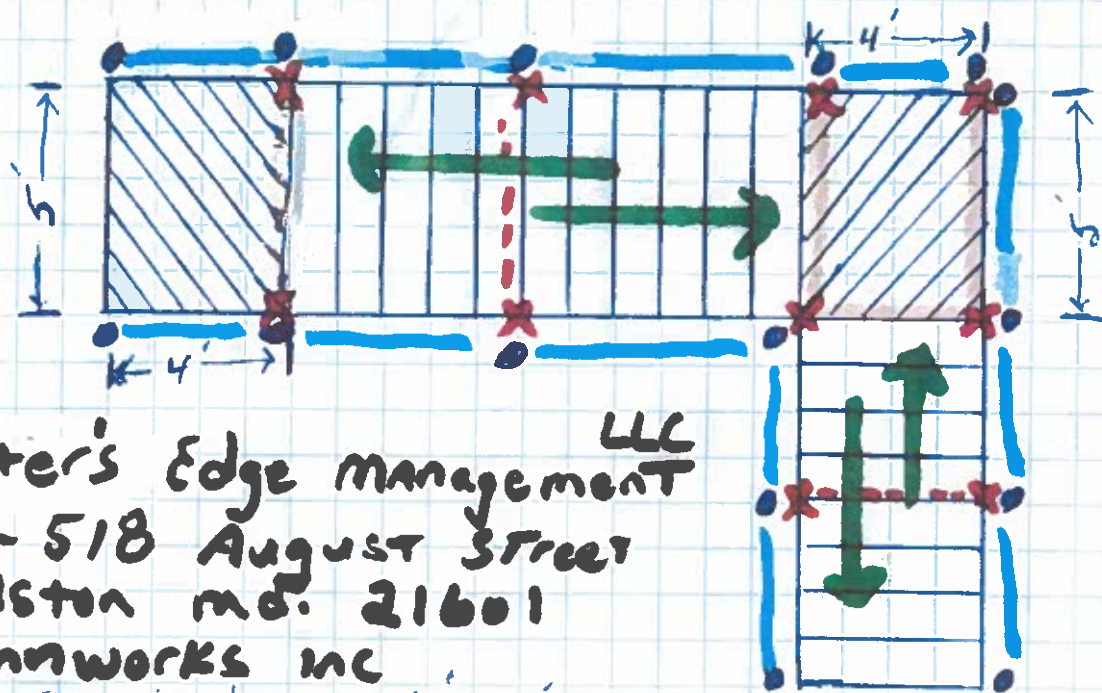
SUB

84 LUMBER CO. ESTIMATE AND PRICING POLICY

1. REGULAR UNIT PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE ANYTIME AFTER 7 DAYS FOLLOWING DATE OF ESTIMATE.
2. SALE PRICES ARE IN EFFECT ONLY UNTIL THE END OF THE ADVERTISED SALE PERIOD.
3. CUSTOMER DEPOSIT OF FULL AMOUNT OF ESTIMATED TOTAL PRICE WILL RENDER UNIT PRICES FIRM FOR 30 DAYS FROM DATE OF DEPOSIT.
4. 84 LUMBER CO. ASSUMES NO RESPONSIBILITY FOR ACCURACY OF TAKE OFFS FROM DRAWINGS OR BLUEPRINTS OR THAT THE PRODUCTS LISTED WILL BE SUFFICIENT TO COMPLETE CUSTOMER'S INTENDED PROJECT. CUSTOMERS SHOULD HAVE QUALIFIED ENGINEER OR ARCHITECT REVIEW ALL QUANTITIES.
5. THIS ESTIMATE DOES NOT CONSTITUTE A CONTRACT OF SALE OR GUARANTEE AVAILABILITY OF ANY PRODUCT LISTED.
6. ALL PRICES QUOTED BASED ON TOTAL PACKAGE PRICE AND SUBJECT TO CHANGE IF TOTAL PACKAGE NOT PURCHASED OR CONTENTS OF PACKAGE CHANGE.

For this project, call Maggie's Mgmt LLC dba 84 Insurance for a quote on Builders Risk Insurance at 877-866-1384 Opt. 1 Ext. 2165 or visit 84insurance.com.

Maggies Management, LLC is a licensed insurance producer and is a separate entity from 84 Lumber Co. 84 Lumber Co. is not licensed to and does not sell insurance.



- x = Location of 4"x6" post set on footer to code
- = Double 2"x8" Band Boards
- ... = Double 2"x6" Support Beam Notched And Bolted To 4"x6" post To Support Step Run
- 4"x4" Post + 2"x2" Balusters To code
- Railing

Water's Edge Management LLC
516 - 518 August Street
Easton md. 21601
Quinnworks inc

Top Landing 4' x 5'
Attached To The House
2"x8" 1/2" Lags 12" OC
With 2"x8" Joist Hangers
2"x8" Joist and 2x8 Band
2"x8" Joist Hangers 16" OC
5/4"x6" Decking

4"x4" Rail Post
2"x2" Picket Balusters
5/4"x6" Top Rail

518 Brownsville Rd
Centreville md 21617

Both sets of stairs
2"x12" stringers
And 5/4"x6" Treads
To code

Mid level Landing
Same Specs as
upper landing

Post 4"x6"

Footer 24"x24"x24"
With 8" of concrete

Front of upper landing
+ 3 sides of the mid
level landing will
have Double Bands
Attached To The
4"x6" post and
Bolted or Lagged

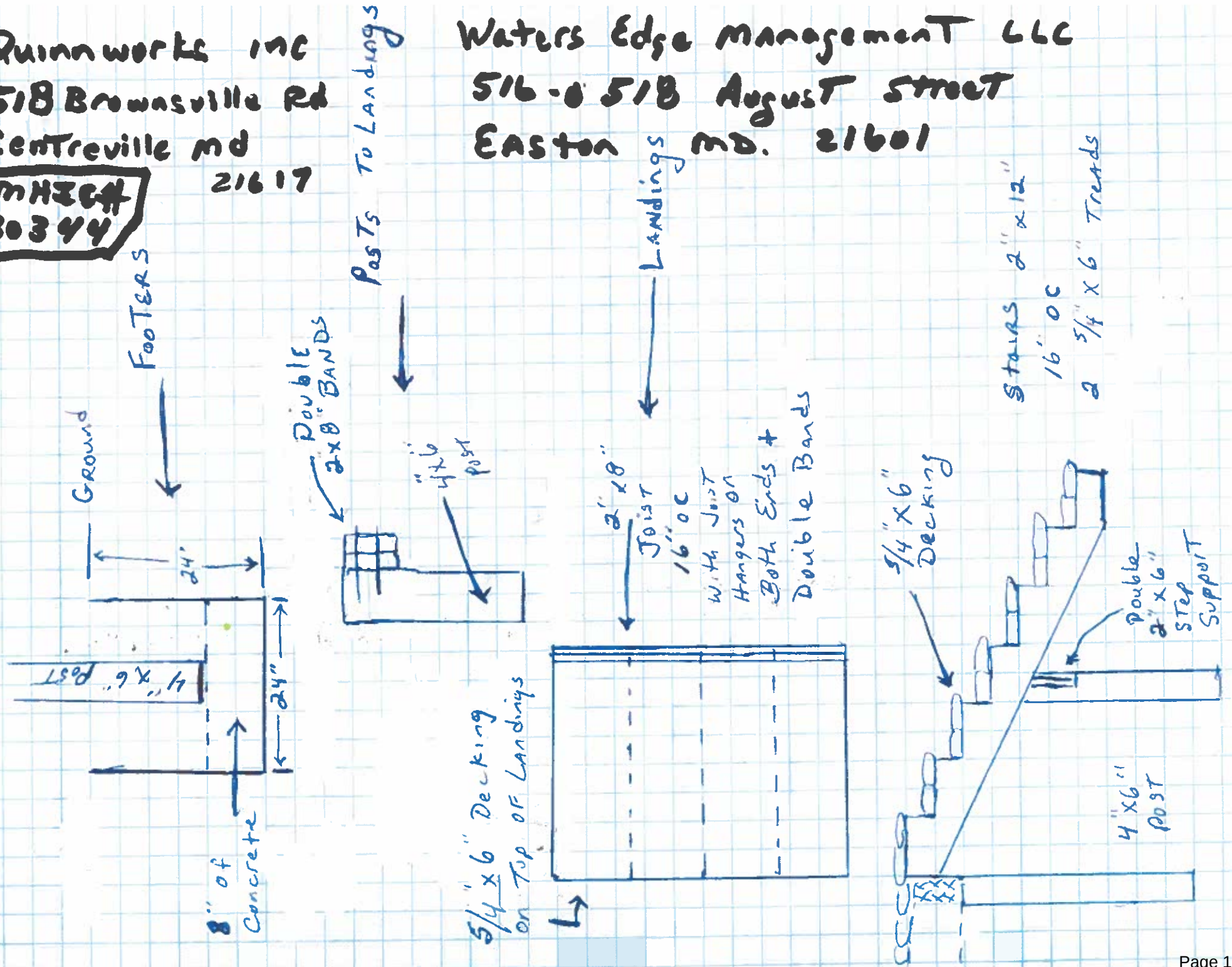
1/4" = 1' SCALE

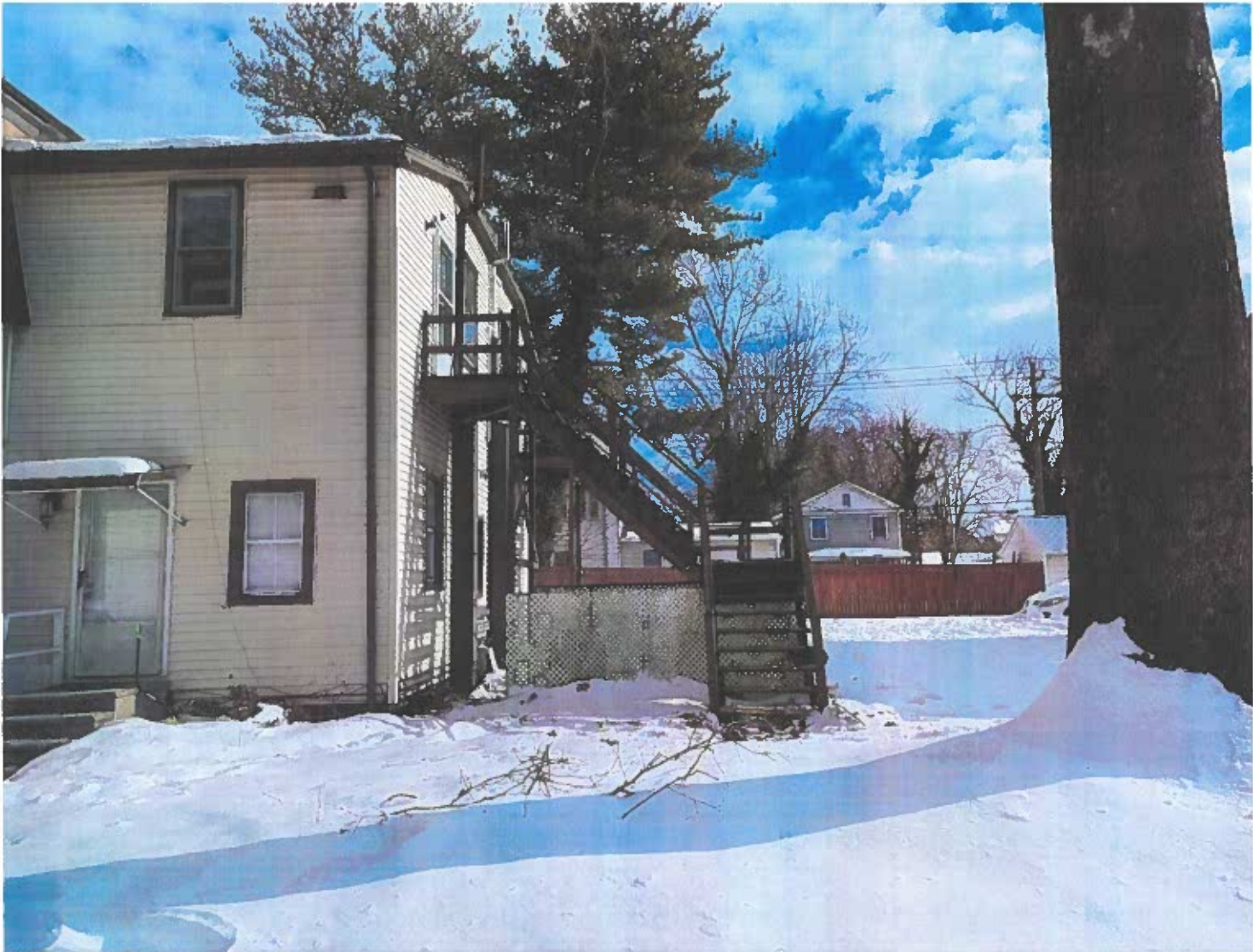
MUR # 30344

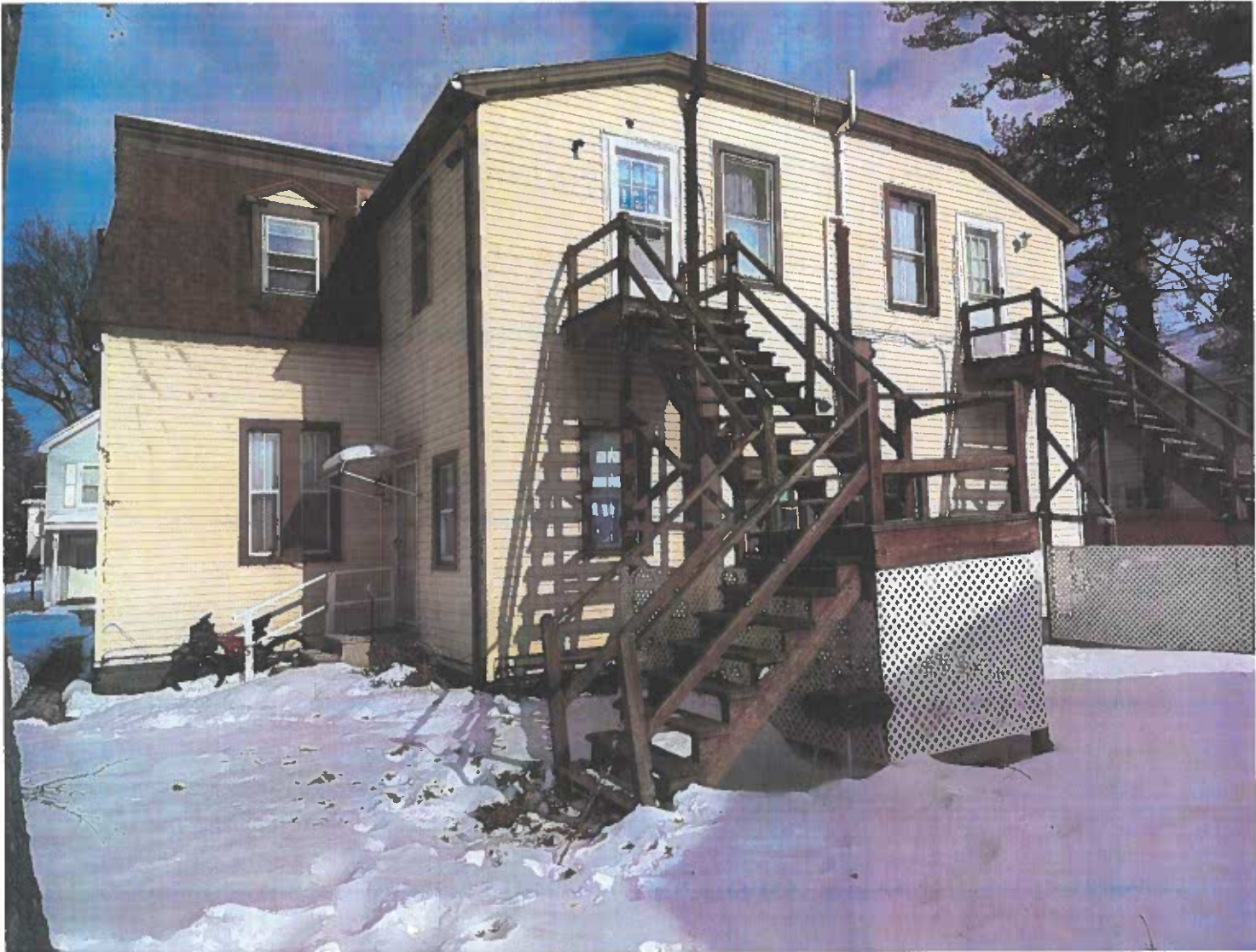
Quinnworks inc
518 Brownsville Rd
Centreville md
21617

MHC#
30344

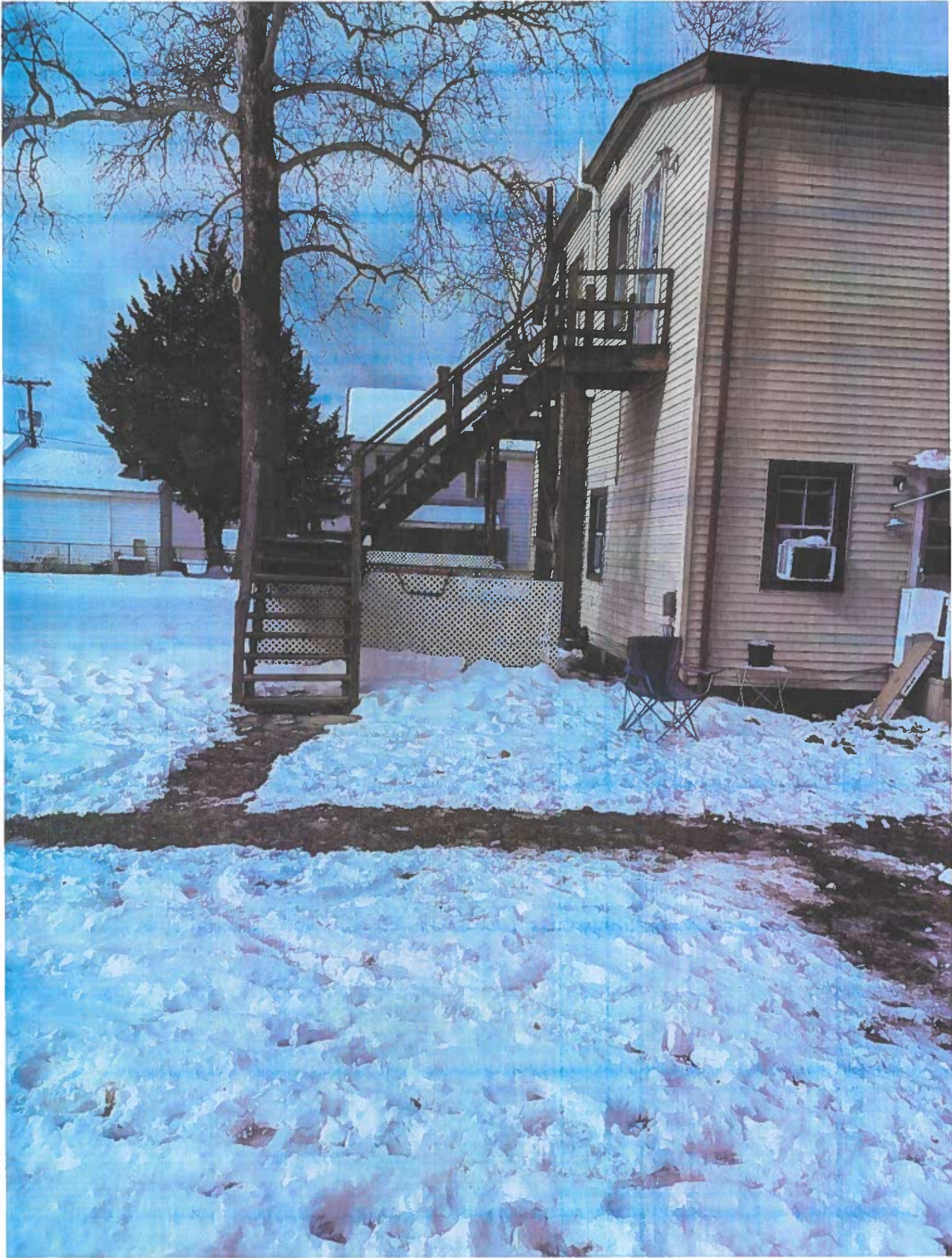
Waters Edge Management LLC
516-0 518 August Street
Easton md. 21601













**Town of Easton Historic District Commission
Draft Decision Summary**

Monday, January 13, 2025 at 6:00 p.m.

Town Hall Chamber 2

14 S. Harrison Street, Easton, Maryland

Archived video of the meeting is available at:

[Town of Easton Agenda and Minutes](https://www.eastonmd.gov)
 [\(eastonmd.gov\)](https://www.eastonmd.gov)

Attendance:

Commission Members:

Ernest Demby, Chairperson
Maria Brophy, Vice Chairperson
Kevin Bateman
Emily Carey
Dudley Greer
Michael Stuart

Staff:

Miguel Salinas, Planning and Zoning Director
Nicholas Johnson AICP, Town Planner (Current)
Samantha Smith, Administrative Specialist
Tom Diem, Building Code Official
Sharon Van Emburgh, *Esq.* Town Attorney

1. Call to Order — Chairperson Demby called the meeting to order at 6:00 pm.

2. Agenda Summary Review —

Vice Chairperson Brophy moved to approve the January 13, 2025 Agenda Summary. Commissioner Bateman seconded the motion.

<u>Vote</u>	<u>5 - 0 - 1</u>
FOR:	5 - Demby, Brophy, Bateman, Greer, Stuart
AGAINST:	0
ABSTAIN:	0
ABSENT:	1 - Carey

3. Old Business — None

4. New Business —

a. File No.: 2024 - 1367 / HD 24 - 146
Applicant: Jennifer Read Van West
Location: 23 N. Hanson Street, Easton, MD 21601

Tax Map 0103, Grid 00EA, Parcel 1149
Zoning: CB

Request: The Applicant is proposing an in kind replacement of 181 linear feet of wooden picket fencing. The replacement fencing will be four (4) feet high, gothic picket fencing constructed of pressure treated wood. This structure in which the fence is associated is a contributing structure to the Historic District.

Historic District Guideline references:

- i. *Guideline 14. Perimeter Walls and Fences*

Staff Presentation:

Nicholas Johnson AICP, Town Planner - Current

Applicant Presentation:

Jennifer Read Van West

Public Comment — None

Public Comment Written — None

Commissioner Stuart moved to approve the application as submitted. Commissioner Greer seconded the motion.

Vote 6 - 0

FOR: 6 - Demby, Brophy, Bateman, Carey, Greer, Stuart

AGAINST: 0

ABSTAIN: 0

ABSENT: 0

b. File No.: 2024 - 1352 / HD 24 - 138

Applicant: Yingling Renovations, LLC

Location: 516 August Street, Easton, MD 21601

Tax Map 0104, Grid 0000, Parcel 1045

Zoning: CB

Request: The Applicant is requesting to replace the flat portion of the roof with an EPDM roofing system and the sloped portions of the roof with asphalt shingles. The replacement of the capping above the windows is not a part of the scope of work. This is a contributing structure to the Historic District.

Historic District Guideline references:

- i. *Second Empire Style (1860 - 1900)*
- ii. *Guideline 68. Maintain Historic Roof Shape*
- iii. *Guideline 69. Perform Regular Roof Maintenance*
- iv. *Guideline 70. Roof Material*

Staff Presentation:
Nicholas Johnson AICP, Town Planner - Current

Applicant Presentation:
Chad Yingling, Yingling Renovations, LLC

Public Comment — None
Public Comment Written — None

Commissioner Greer moved to approve the application as submitted. Commissioner Bateman seconded the motion.

<u>Vote</u>	<u>6 - 0</u>
FOR:	6 - Demby, Brophy, Bateman, Carey, Greer, Stuart
AGAINST:	0
ABSTAIN:	0
ABSENT:	0

- c. **File No.:** 2024 - 1368 / HD 24 - 147
Applicant: Jay Corvan Architect, LLC
Location: 5 South Street, Easton, MD 21601
Tax Map 0104, Grid 00EA, Parcel 1512
Zoning: CB

Request: The applicant is proposing to install two (2) emergency egress stairs from the second floor in order to comply with applicable building codes. These stairs are located on the rear of the structure and provide a path for emergency egress from the third-floor window to the ground. This structure is considered a contributing structure to the Easton Historic District.

Historic District Guideline references:
i. *Guideline 6. Comply with Health and Safety Codes*
ii. *Guideline 54. Fire Escapes and Exterior Stairs*

Staff Presentation:
Nicholas Johnson AICP, Town Planner - Current
Tom Diem, Building Code Official

Applicant Presentation:
Jay Corvan AIA

Public Comment — None
Public Comment Written — None

Vice Chairperson Brophy moved to approve the application with the condition that the stairs shall be painted to match the siding of the structure. Commissioner Carey seconded the motion.

Vote	6 - 0
FOR:	6 - Demby, Brophy, Bateman, Carey, Greer, Stuart
AGAINST:	0
ABSTAIN:	0
ABSENT:	0

d. **File No.:** 2024 - 1358 / HD 24 - 142
Applicant: Chesapeake Community Development LLC
Location: 521 August Street, Easton, MD 21601
Tax Map 0103, Grid 00EA, Parcel 1039
Zoning: CB

Request: The Applicant is seeking approval for the construction of a two-story mansion apartment on the corner of Park Street, August Street, and Powells Alley, and the removal of five (5) healthy trees within the Historic District. The proposed structure is approximately 3,330 square feet, with a height of 26 feet. A Certificate of Appropriateness for the exact scope of work lapsed on July 22, 2024 as no building permit was obtained within six (6) months of issuance.

Background: At their January 22, 2024 meeting, application 2024 - 007 / HD 24 - 05 was approved by the Historic District Commission via a 5-0 vote subject to the following conditions:

1. All trash and recycling receptacles shall be screened on three sides; and
2. Minor revisions to the proposed site and structure that are consistent with the Historic District Guidelines may be administratively approved by staff after consultation with the Chair of the Commission.

At their May 16, 2024 meeting, the Town of Easton Planning Commission granted Sketch Site Plan approval (application 2024 - 1178) via a 4-0 vote for the development of the two-story mansion apartment with associated site improvements.

Historic District Guideline references:

- i. *Guideline 94. Style*
- ii. *Guideline 95. Siting*
- iii. *Guideline 96. Orientation, Alignment, and Setback*
- iv. *Guideline 97. Form, Massing, Height, and Scale*
- v. *Guideline 103. Materials*
- vi. *Guideline 105. Exterior color*
- vii. *Guideline 106. Details and Ornamentation*
- viii. *Guideline 107. Placement*

- ix. *Guideline 109. Energy and Sustainability*
x. *Guideline 110. Exterior Lighting*
xi. *Guideline 112. Proportion*
xii. *Guideline 115. Roof Form*
xiii. *Guideline 116. Roof Material*
xiv. *Guideline 117. Gutters and Downspouts*
xv. *Guideline 121. General Guidelines for Utilities for New Construction*
xvi. *Guideline 122. Trash and Refuse Containers*
xvii. *Guideline 123. Mechanical Equipment*
xviii. *Guideline 126. Arrangement*
xix. *Guideline 127. Window Type*

Staff Presentation:

Nicholas Johnson AICP, Town Planner - Current
Sharon Van Emburgh, Esq. Town Attorney

Applicant Presentation:

Ross Benincasa, Chesapeake Community Development
Virginia Richardson, RAUCH Inc.

Public Comment — None

Public Comment Written — None

Commissioner Stuart moved to approve the application subject to the following conditions:

- 1. All trash and recycling receptacles shall be screened on three sides.**
- 2. Minor revisions to the proposed site and structure that are consistent with the Historic District Guidelines may be administratively approved by staff after consultation with the Chair of the Commission.**

Vice Chairperson Brophy seconded the motion.

<u>Vote</u>	<u>4 - 0 - 2</u>
FOR:	4 - Demby, Brophy, Greer, Stuart
AGAINST:	0
ABSTAIN:	2 - Bateman, Carey
ABSENT:	0

e. File No.: 2024 - 1360 / HD 24 - 143
Applicant: Marasun LLC
Location: 308 Needwood Avenue, Easton, MD 21601
Tax Map 0105, Grid 00EA, Parcel 2221
Zoning: R-7A

Request: The Applicant is requesting to replace the existing rear flat roof with a new walkable flat roofing material, and to replace the existing wooden railing with a new PVC railing. This is a contributing structure to the Historic District.

Background: Due to the presence of an active leak, an emergency approval (application 2024 - 1360 / HD 24 - 143) was granted by the Chairperson of the Commission for an in kind asphalt roof replacement. A building permit was subsequently issued on December 18, 2024.

- Historic District Guideline references:
- i. *Guideline 65. Make Sensitive Replacements (Porches)*
 - ii. *Guideline 68. Maintain Historic Roof Shape*
 - iii. *Guideline 69. Perform Regular Roof Maintenance*
 - iv. *Guideline 70. Roof Material*
 - v. *Appendix B - Porch and Deck Materials: Vinyl*

Staff Presentation:
Nicholas Johnson AICP, Town Planner - Current
Tom Diem, Building Code Official

Applicant Presentation:
John Mara, Marsun LLC

Public Comment — None
Public Comment Written — None

**Vice Chairperson Brophy moved to approve the application as submitted.
Commissioner Stuart seconded the motion.**

Vote	6 - 0
FOR:	6 - Demby, Brophy, Bateman, Carey, Greer, Stuart
AGAINST:	0
ABSTAIN:	0
ABSENT:	0

- f. **File No.:** 2024 - 1365 / HD 24 -144
Applicant: Pamela Gardner AIA, LLC
Location: 30 N. Harrison Street, Easton, MD 21601
Tax Map 0103, Grid 00EA, Parcel 1145
Zoning: CB

Request: The Applicant is proposing to install two (2) 57.6 square foot wall signs and a freestanding monument sign. The Applicant is also proposing to install a four (4) foot tall decorative aluminum fence with brick pillars along the

northern and southern property lines surrounding the rear parking lot. This is a non contributing structure to the Historic District.

Background: On July 22, 2024, the Commission granted a Certificate of Appropriateness (application 2024 - 1248 / HD 24 - 84) for various exterior alterations including: the removal of the ATM infill, awning and landing from the western façade of the structure, the removal and relocation of an existing window from the southern façade to replace the ATM infill on the western façade, and the installation of a new metal door and ramp on the southern façade in place of the removed window. The application was approved by the Historic District Commission via a 4-0 vote subject to the following conditions:

1. The new window installed on the west façade shall be the existing window from the southern façade or a new window that matches in type, size, proportion, design, style and material.
2. The Applicant shall return to the Commission for any approvals regarding signage, lighting and modifications to the parking lot.

Historic District Guideline references:

- i. *Guideline 14. Perimeter Walls and Fences*
- ii. *Guideline 25. General Guidelines for Signage*
- iii. *Guideline 35. Wall Signs*
- iv. *Guideline 48. HVAC*

Staff Presentation:

Nicholas Johnson AICP, Town Planner - Current
Tom Diem, Building Code Official

Applicant Presentation:

Pam Gardner AIA

Public Comment — None

Public Comment Written — None

The Applicant amended their application to include the installation of an HVAC system at the rear southeast corner of the structure.

Vice Chairperson Brophy moved to approve the amended application subject to the following conditions:

1. **The mini split system shall be screened by vegetation or fencing.**

2. The illumination of the freestanding sign shall meet the Town's standards for external illumination.

Commissioner Bateman seconded the motion.

Vote	6 - 0
FOR:	6 - Demby, Brophy, Bateman, Carey, Greer, Stuart
AGAINST:	0
ABSTAIN:	0
ABSENT:	0

- g. **File No.:** 2024 - 1366 / HD 24 - 145
Applicant: TLL LLC
Location: 122 N. Harrison Street, Easton, MD 21601
Tax Map 0103, Grid 00EA, Parcel 0645
Zoning: CB

Request: The Applicant is requesting to remove the existing wooden windows, and to install Anderson 100 Series composite windows. The proposed windows have a combination of one over one and two-over-two grill patterns This is a contributing structure to the Historic District.

Historic District Guideline references:

- i. *Guideline 1. Preserve Significant Historic Features*
- ii. *Guideline 2. Repair Rather than Replace*
- iii. *Guideline 3. Make Sensitive Replacements*
- iv. *Guideline 89. Maintain Historic Windows*
- v. *Guideline 90. Make Sensitive Replacements*
- vi. *Appendix B: Common Substitute Materials*

Staff Presentation:

Nicholas Johnson AICP, Town Planner - Current

Applicant Presentation:

Laurence Claggett

Public Comment — None

Public Comment Written — None

Commissioner Bateman moved to approve the application subject to the following conditions:

1. The first floor, front facing windows shall be wood with simulated divided light matching the pattern of the existing windows.

- 371 2. All other windows may be Anderson 100 Series composite windows with
372 simulated divided light, and a two-over-two grill pattern.
373

374 Commissioner Stuart seconded the motion.
375

376

Vote	6 - 0
FOR:	6 - Demby, Brophy, Bateman, Carey, Greer, Stuart
AGAINST:	0
ABSTAIN:	0
ABSENT:	0

381

- 382 h. File No.: 2024 - 1351 / HD 24 - 137
383 Applicant: Sandra C. Flores
384 Location: 309 Brookletts Avenue, Easton, MD 21601
385 Tax Map 0104, Grid 00EA, Parcel 1882
386 Zoning: R-7A
387

388 **Request:** The Applicant is requesting to replace twelve (12) vinyl windows
389 that were installed without a Certificate of Appropriateness with aluminum clad
390 wood windows. The Applicant is also requesting to install a pre-fabricated shed in
391 the rear yard. This is a contributing structure to the Historic District, and the
392 historic survey notes that most of the windows on this structure were likely
393 original.
394

395 **Background:** On March 11, 2024, the Commission granted a Certificate of
396 Appropriateness (application 2024 - 1140) for the replacement of the three (3)
397 first floor windows facing Brookletts Avenue with wood windows, and the
398 remaining windows to be replaced with composite windows. The approval was
399 conditioned upon the window trim being replaced in kind. The building permit
400 application (24-19173) for this scope of work was rescinded by the contractor via
401 a letter received on April 25, 2024. The Certificate of Appropriateness
402 subsequently lapsed on September 11, 2024.
403

404 **Outstanding Issue:** This application is part of an active Code Enforcement case
405 (#24-0194) regarding vinyl windows that were installed without a building permit
406 or Certificate of Appropriateness. In late 2023, the Planning and Zoning
407 Department and Code Enforcement Department received an anonymous
408 complaint that vinyl windows were being installed at 309 Brookletts Avenue. The
409 Town records show that no Certificate of Appropriateness or building permit had
410 been issued for window replacement at this property. A comparison of photos
411 taken of this structure in 2013 with current photos clearly shows that 6/6 vinyl
412 windows and new trim were installed on the structure without a Certificate of
413 Appropriateness. On February 5, 2024, Code Enforcement sent a letter to the
414 property owner instructing them to submit an application to replace the
415 inappropriately installed vinyl windows.
416

Historic District Guideline references:

- i. *Guideline 1. Preserve Significant Historic Features*
- ii. *Guideline 3. Make Sensitive Replacements*
- iii. *Guideline 11. Erect New Outbuildings Sensitive*
- iv. *Guideline 90. Make Sensitive Replacements (Windows)*
- v. *Appendix B: Windows (Vinyl-Clad)*

Staff Presentation:

Nicholas Johnson AICP, Town Planner - Current
Tom Diem, Building Code Official

Applicant Presentation:

Ronald Newnam

Public Comment — None

Public Comment Written — None

Commissioner Stuart moved to approve the application subject to the following conditions:

- 1. The three (3) first floor facing windows shall be wood with a two-over-two grill pattern.**
- 2. All other windows may be aluminum-clad wood with a two-over-two grill pattern.**

Commissioner Bateman seconded the motion.

<u>Vote</u>	<u>6 - 0</u>
FOR:	6 - Demby, Brophy, Bateman, Carey, Greer, Stuart
AGAINST:	0
ABSTAIN:	0
ABSENT:	0

5. Annual Election for Chairperson and Vice Chairperson

- a. Chairperson: Kevin Bateman nominated Kevin Bateman for Chairperson. Ernest Demby nominated Ernest Demby for Chairperson.
Ernest Demby was elected Chairperson by a 4 to 2 count.
- b. Vice Chairperson: Dudley Greer nominated Maria Brophy for Vice Chairperson. Kevin Bateman seconded the nomination. Maria Brophy accepted the nomination.
Maria Brophy was elected Vice Chairperson by a 6 to 0 count.

463 **6. Discussion Item —**
464

- 465 **a.** Enforcement of Demolition by Neglect — As an expansion to the ongoing
466 discussion on historic preservation, staff provided an educational overview of the
467 provisions for Demolition by Neglect. The Town of Easton Zoning Ordinance
468 defines Demolition by Neglect (*Section 28-114*) as: “ any willful neglect in the
469 maintenance and repair of an individually designated landmark, site, or
470 structure...that does not result from an owner’s financial inability to maintain and
471 repair such landmark, site, or structure.” The procedures for the review of
472 demolition applications within the historic district can also be found in *Chapter*
473 *6.6* of the Town of Easton Historic District Design Guidelines.

474
475 The Commission discussed willful violations of property maintenance, and the
476 appropriate circumstance to enforce Demolition by Neglect versus an Order to
477 Restore. An Order to Restore is defined as: “an order to require the property
478 owner to restore the property to the condition that existed prior to intervention”
479 (*Section 28-601.G*). The Commission acknowledged financial hardship as an
480 important consideration in enforcing any corrective action for property
481 maintenance violations, and favored strengthening the current design guidelines
482 with reference to the Property Maintenance Codes in Chapter 11 of the Town
483 Code.
484

485
486 **7. Decision Summary Review —**
487

488 **Vice Chairperson Brophy moved to approve the December 23, 2024 Decision**
489 **Summary. Commissioner Bateman seconded the motion.**

490
491 Vote 4 - 0 - 2
492 FOR: 4 - Demby, Brophy, Bateman, Carey
493 AGAINST: 0
494 ABSTAIN: 2 - Greer, Stuart
495 ABSENT: 0
496

497
498 **8. Administrative Approval — None**
499

500
501 **9. Consent Docket — None**
502

503
504 **10. Adjournment —** Vice Chairperson Brophy moved to adjourn. Commissioner Carey
505 seconded the motion. The meeting was adjourned at 7:40 p.m.



RECEIVED

JAN 22 2025

HD 25 -04

TOWN OF EASTON
PLANNING AND ZONING TOWN OF EASTON
14 SOUTH HARRISON STREET, EASTON, MD 21601

Application #:	2025-1380
Date Received:	01/22/2025
Fee Paid:	\$25.00
HDC Meeting Date:	01/27/2025
Date Property Posted:	-

HISTORIC DISTRICT COMMISSION HEARING APPLICATION

APPLICATION TYPE
(PLEASE CIRCLE)

ROOFING

DEMOLITION

SIGNAGE

FENCING

OTHER

NEW CONSTRUCTION/ADDITION

EXTERIOR ALTERATIONS

FOR TREE REMOVAL(S) - PLEASE USE THE TREE REMOVAL APPLICATION

PROPERTY INFORMATION

ADDRESS

317 AUGUST ST EASTON MD 21601-3640

☐ Contributing☐ Non-Contributing

YEAR BUILT:

1900

NATIONAL REGISTAR #

PROPERTY INFORMATION

OWNER NAME

THOMPSON NORVAL E SR

TELEPHONE NO.

4102007544

EMAIL

bethlibart@yahoo.com

Applicant or Agent

NAME

MARASUN

TELEPHONE NO.

4437463597

EMAIL

PRODUCTION@MARASUN.COM

Description of Proposal (include additional sheets, as necessary)

PARTIAL ROOF REPLACEMENT

ASPHALT SHINGLE ROOF INSTALLATION IN KIND,

We are replacing asphalt shingles for asphalt shingles and are looking for administrative approval

Specific Requirements

- The payment of fees is due at the time of application submittal.

As of December 27, 2022, the fees are as follows:

Commercial - \$200

Residential - \$75

Signs - \$75

Staff Approval \$25

- Provide 2 hard copies plus 1 digital copy of the application and all supplemental information.
- Disclose any easements or deed restrictions pertaining to the property and any improvements including the details of said easements or restrictions.
- Disclose any tax credits and or grants being considered for the project.

The Historic District Commission (HDC) reserves the right to request reasonable additional information or design drawings that further clarify proposals. In cases where professional design services are warranted, HDC may require the applicant to retain a licensed design consultant.

If the applicant or their designee is not present for the scheduled meeting the Commission may elect to refrain from discussing and voting on the scheduled agenda item.

Any modifications during review shall warrant an updated application.

I hereby certify that I have reviewed the Easton Historic District Guidelines as published

Signature of Applicant or Agent

John A Marrah

Date

01/21/25

Printed Name of Applicant or Agent

John A Marrah

Revised 4.4.2022



Historic District Commission Application Checklist

Revised December 2022

Please complete the section that applies to your application. If a checklist item is not included or is non-applicable, please provide information supporting its omission for the Commission's consideration.

Requirements:

The payment of fees is due at the time of application submittal. As of December, 2022, the fees are as follows:

Commercial - \$200, Residential - \$75, Signs - \$75, Staff Approval - \$25.

The application submitted shall include 2 copies plus 1 digital.

All Applications to Include:

- ☐ A narrative fully explaining the request
- ☐ Photographs of all existing conditions and that will be affected by the proposed project
- ☐ Description of all existing materials and a listing of all materials to be used for proposed project.
- ☐ Manufacturer cut-sheets and material specifications related to all proposed work.
- ☐ Any available and applicable historical photographs, sketches or other documentary evidence illustrating previous conditions and configurations of the building(s)

New Construction / Addition

- ☐ Dimensioned elevations drawn to an appropriate scale illustrating all sides of the proposed structure. Drawings shall include notations outlining roof pitches, trim details and the type of windows and doors to be used for the project
- ☐ Site plan drawn to an appropriate scale and including setbacks and neighboring structures. Site Plan should illustrate the footprint(s) of all proposed EXISTING AND PROPOSED construction.
- ☐ Construction schedule
- ☐ For new construction only, the Commission will require a three-dimensional rendering, superimposed photo, silhouette or model of the proposed structure, other structure(s) located on the subject property and neighboring structures when necessary to understand the visual impact of the new construction and its compliance with the Guidelines.

Renovations

- ☐ Elevations or photographs of the existing conditions
- ☐ Elevation of the proposed changes
- ☐ Cut sheet for all proposed materials – Be sure to include all of the following that apply and any other additional materials:
 - Windows
 - Doors
 - Trim, fascia, soffit, etc
 - Decking/ porch flooring materials
 - Roofing Materials, gutters

Windows

Restoration of existing windows is the Commission's first choice. However, the Commission recognizes it may not always be practical to replace windows. For contributing buildings the front façade and any other façade facing a primary right of way are required to be wood windows. Aluminum, or fiberglass clad wood windows may be approved by the Commission on side or rear façades of contributing buildings. For non-contributing buildings clad wood windows will be considered on all elevations. Note: National Register Buildings are held to the highest of standards.

- ☐ Photograph or scaled elevation of all elevations of the building with each window that is to be replaced clearly labeled.
- ☐ Manufacturers cut sheet for each window to be replaced. Clearly labeled where it will be installed on the building.
- ☐ Materials for the windows must be clearly identified on the cut sheet
- ☐ Please note if existing trim/shutters are to remain or if new are to be installed, please include list of all new materials and cut sheets.

Roofing

Note: National Register Buildings are held to the highest of standards.

- ☐ Photographs or scaled elevations showing the existing roofing material to be replaced.
- ☐ Manufacturers cut sheet for each type of roofing to be replaced. Clearly labeled where it will be installed on the building.
- ☐ Please note if existing trim, fascia, soffit, or gutters are to remain or if new are to be installed, please include list of all new materials and cut sheets.

Signs

- ☐ Dimensioned scale drawings of the sign. Identify all materials to be used, color(s), lettering (including size and font style) and wording
- ☐ Photograph depicting the proposed location for the signage
- ☐ Lighting detail
- ☐ Construction and or mounting details

Landscaping & Trees

- ☐ Landscape plan where existing and proposed landscape features to be installed/planted, removed and/or relocated are identified including the location and species of existing and new trees

Fence

- ☐ Application must include:
 - A Site plan :
 - Drawn to scale
 - Show and label the location of new and any existing fence. (this can be completed on two separate site plans for clarity)
 - Include location of neighboring structures
 - Identify height of proposed fence, location of gates and other openings
 - If the height or style of fence changes based on location, this must be clearly identified.
 - Proposed fence style and material
 - Include photograph, manufacturer cut-sheet of the fence, or detailed sketch of proposed fence.
 - other relevant construction and or material detail

Demolition

The Historic District Commission (HDC) reserves the right to request a professional inspection of the structure(s). Said request may include evaluation by a historic preservation specialist.

- ☐ Elevations and photographic documentation of all elevations of the structure(s) to be demolished including footprint dimensions, height dimensions and a site plan illustrating location of the structure(s) to be demolished
- ☐ Structural Analysis by Structural Engineer or Licensed Architect
- ☐ For Economic Hardship please provide documentation. Reference Guideline 13.9
- ☐ Attach replacement plan

Other

- ☐ Attach all documentation supporting request

The Historic District Commission (HDC) reserves the right to request reasonable additional information or design drawings that further clarify proposals. In cases where professional design services are warranted, the HDC may require the applicant to retain a licensed design consultant.

If the applicant or their designee is not present for the scheduled HDC meeting, the Commission may elect to refrain from discussing and voting on the scheduled agenda item.

This checklist shall be submitted along with the completed Historic District Commission Application and all additional supporting information.



BETH THOMPSON ROOFING PROPOSAL

JAN 03, 2025

Project #31359539757

MARASUN
roofing | siding | windows | gutters | solar



BETH THOMPSON

bethlibart@yahoo.com

4102007544

317 August Street
Easton, MD
21601



We can help you with

Roofing, Siding, Windows, Gutters, & Solar
913 S. Talbot Street St. Michaels, MD 21663

hello@marasunllc.com
(410) 226-6212

INTRODUCTION

Hi Beth,

Thank you for allowing Marasun the opportunity to provide this quote on the repairs to your home. Please find your estimate below along with upgrade options for potential improvements to your project, if applicable.

The following estimate is for:

- Remove and disposal of all old materials on the first story roofing system. We will strip your roof down to the plywood decking--all of it will be replaced. We will use our Catch-All System and our Equipter Roof Buggy to keep your house safe and your yard clean. We will use magnets to search for any stray nails that hit the ground.
- Supply and install new materials: We will install the shingle or metal roofing system as shown in your proposal.
- Clean up of entire work area: We will clean during and after the installation to maintain a clean worksite and we pay special attention to any nails.
- You will have direct contact with our Production Manager for all scheduling and deliveries.
- Marasun is Licensed by the state of Maryland Home Improvement Commission and our License Number is 120560 . In Delaware our License number is DE-2022-000005015. We carry full Workers Comp and Liability Insurance at the \$1,000,000, 2,000,000, 1,000,000 level. We would be happy to share our insurance and license information with you if you would like.
- We QA your installation all throughout the job and do a final QA after the installation is complete to make sure that your job meets all of our expectations. Our Goal is a 5 star experience for you and a Google 5 star rating for Marasun.
- We provide a Workmanship Warranty as defined in your proposal.

If you have any questions, please give me a call. We always want to provide the best value to our clients. If we are outside your budget, please let me know and we will do our best to work within that.

Kind regards,

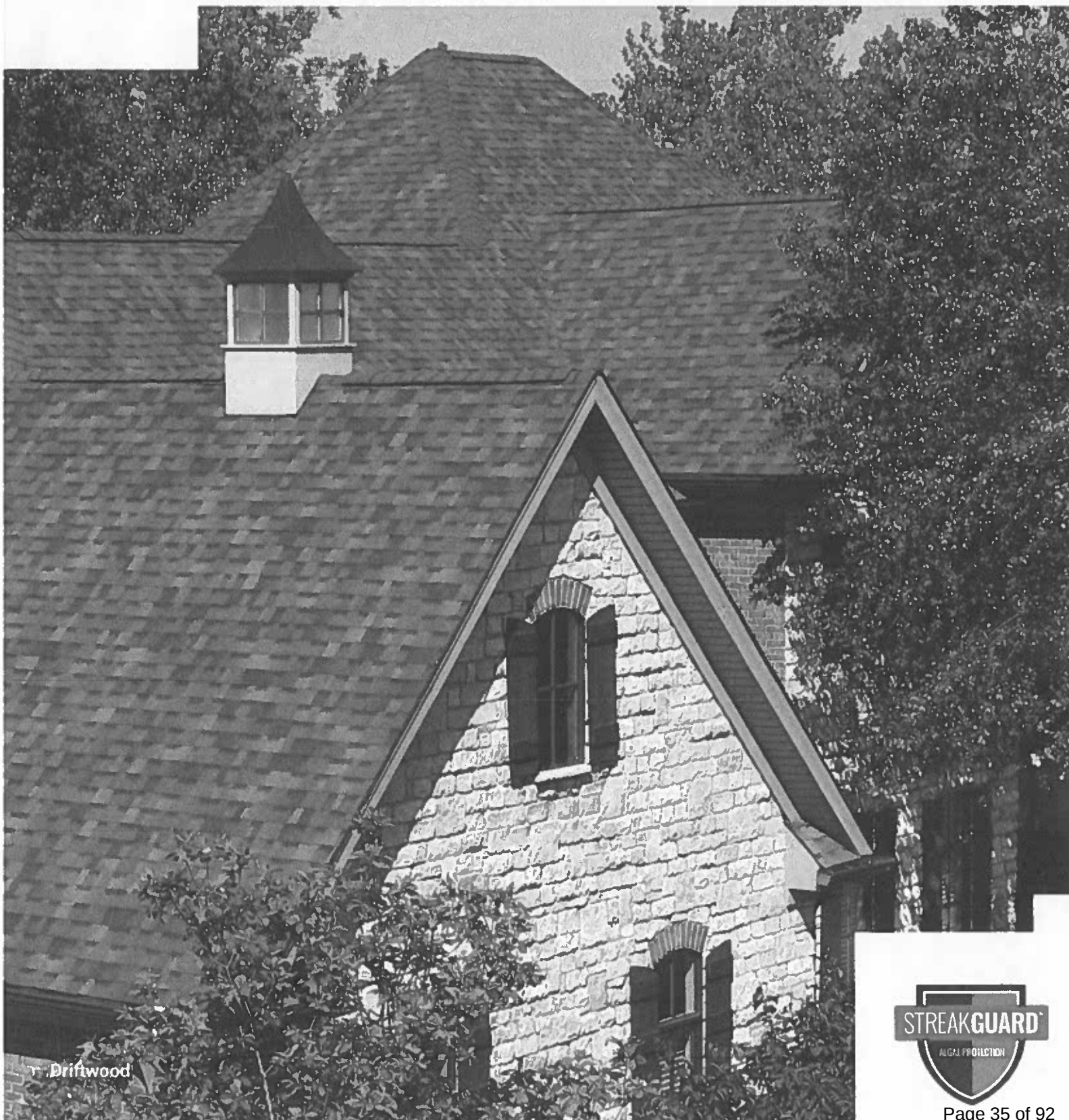
Mike Brock
Marasun
Design@marasunllc.com
410.226.6212



TruDefinition®
DURATION®

Shingles with Patented SureNail® Technology

Tejas con tecnología patentada SureNail®



Driftwood



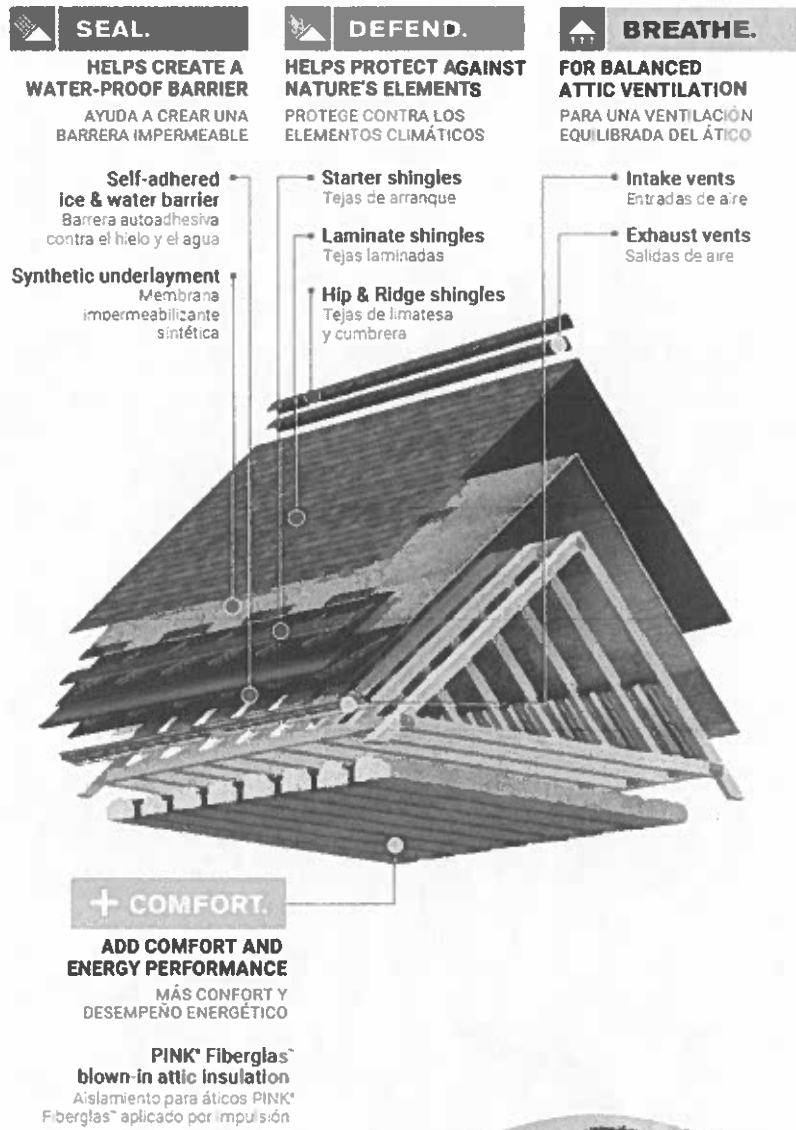


TOTAL PROTECTION SIMPLIFIED™

It takes more than just shingles to protect a home. It takes an integrated system of components and layers designed to perform in three critical areas. The Owens Corning® Total Protection Roofing System® gives you the assurance that all of your Owens Corning® roofing components are working together to help increase the performance of your roof.

PROTECCIÓN TOTAL SIMPLIFICADA™

Se necesita más que simplemente tejas para proteger su vivienda. Se necesita un sistema integral de componentes y capas diseñadas para desempeñarse en tres áreas críticas. El Total Protection Roofing System® de Owens Corning® le garantiza que todos sus componentes para cubiertas de Owens Corning® funcionan en conjunto para mejorar el desempeño de su techo.



REGISTER YOUR WARRANTY

Registering your Owens Corning® warranty ensures it's easily referenced should you ever need to access it. The process is easy—just have your installation date, shingle type, shingle color and number of squares ready. Then go online to www.owenscorning.com/roofingstandardwarranty or call 1-800-ROOFING (1-800-766-3464) to finish the process.



SCAN TO REGISTER YOUR WARRANTY

Escanee para registrar su garantía

REGISTRE SU GARANTÍA

Al registrar su garantía de Owens Corning® la podrá consultar rápidamente si fuera necesario acceder a ella. El proceso es simple: tenga a mano la fecha de instalación, el tipo y color de tejas y la cantidad de cuadrados. Luego, visite www.owenscorning.com/roofingstandardwarranty o llame al 1-800-ROOFING (1-800-766-3464) para completar el proceso.



DEEP DIMENSION OUTSTANDING PERFORMANCE

Duration® Shingles offer:

- The high-performance of SureNail® Technology
- A TruDefinition® Color Platform
- A Limited Lifetime Warranty* for as long as you own your home
- The protection of a 130-MPH* wind warranty
- StreakGuard™ Protection with a 25-year Algae Resistance Limited Warranty^{3/5}

UNA NUEVA DIMENSIÓN DESEMPEÑO SOBRESALIENTE

Las tejas Duration® ofrecen:

- El gran desempeño de la tecnología SureNail®
- La gama de colores TruDefinition®
- Una garantía limitada de por vida* mientras sea propietario de la vivienda
- La protección de una garantía contra vientos de hasta 210 km/h (130 mph)*
- Protección StreakGuard™ con una garantía limitada de 25 años de resistencia a las algas ^{3/5}



Don't let black streaks lower the value or curb appeal of your home.

Owens Corning blends specialized copper-lined granules, developed by 3M, a leading producer of roofing granules, into our colorful shingles. This helps resist blue-green algae growth.*

No deje que las manchas de algas afecten al valor o aspecto de su vivienda.

En sus coloridas tejas, Owens Corning añade gránulos especiales con recubrimiento de cobre, desarrollados por 3M, un productor líder de gránulos para techos. Esto ayuda a prevenir la proliferación de algas azul-verdosas.*

THE FINISHING TOUCH

OWENS CORNING® HIP & RIDGE SHINGLES

Owens Corning® Hip & Ridge Shingles are uniquely color matched to TruDefinition® Duration® Shingles. The multiple color blends are only available from Owens Corning® Roofing and offer a finished look for the roof.

EL TOQUE FINAL

TEJAS DE LIMATESA Y CUMBRERA DE OWENS CORNING®

Las tejas de limatesa y cumbrera de Owens Corning® se ofrecen en una exclusiva gama de colores para combinar con las tejas Duration® TruDefinition®. Esta gran variedad de combinaciones de colores es una exclusividad de Owens Corning® Roofing para lograr techos con un acabado único.



TruDefinition®

DURATION®

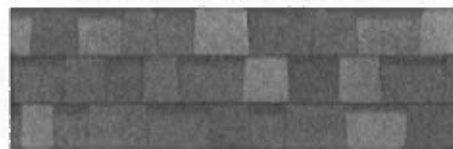
Shingles with Patented SureNail® Technology | Tejas con tecnología patentada SureNail®



Brownwood



Chateau Green



Colonial Slate



Desert Rose



Driftwood



Estate Gray



Harbor Blue



Midnight Plum



Onyx Black



Peppercorn



Sand Castle



Sierra Gray



Slatestone Gray



Teak



Terra Cotta



Williamsburg Gray

COLOR DISCLAIMER

As color experts, we know getting the shingle color right is a big part of any roofing purchase. Due to printing color variations, in addition to viewing shingle literature, we suggest you request an actual shingle sample to see how it will appear on your home and with your home's exterior elements in various natural lighting conditions. Lastly, we recommend you verify your color choice by seeing it installed on an actual home; your roofing contractor or supplier can provide a sample and may be able to direct you to a local installation.

DESCARGO DE RESPONSABILIDAD SOBRE LOS COLORES

En tanto que especialistas en color, sabemos que obtener el color de teja perfecto es una parte importante en toda compra de techos. Debido a las variaciones en los colores impresos, además de mirar folletos de tejas, le sugerimos que solicite una muestra de la teja para ver como se verá en su hogar y con los elementos externos de la vivienda bajo distintas condiciones de luz natural. Finalmente, le recomendamos que para verificar su elección de colores, vea cómo lucen las tejas ya instaladas en una vivienda; su contratista de techos o su proveedor le pueden dar una muestra e incluso indicarle dónde ver un techo ya instalado.

THERE'S A LINE BETWEEN A GOOD SHINGLE AND A GREAT SHINGLE®

It's the nailing line on your shingles. The difference between a good shingle and a great shingle is having Patented SureNail® Technology, only from Owens Corning.

HAY UNA GRAN DIFERENCIA ENTRE UNA BUENA TEJA Y UNA TEJA EXCELENTE™

Es la línea de clavado en su tejas. La diferencia entre una buena teja y una teja excelente es la tecnología patentada SureNail®, una exclusividad de Owens Corning.

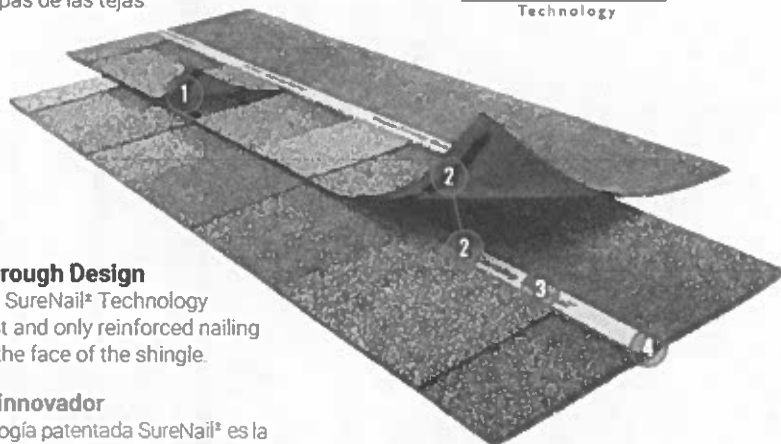
1

Excellent Adhesive Power

Helps keep the shingle layers laminated.

Excelente poder adhesivo

Ayuda a conservar el laminado de las capas de las tejas



2

Breakthrough Design

Patented SureNail® Technology is the first and only reinforced nailing zone on the face of the shingle.

Diseño innovador

La tecnología patentada SureNail® es la primera y la única que provee un área de clavado reforzada en la cara de la teja.

"No Guess" Wide Nailing Zone

This tough, engineered woven-fabric strip is embedded in the shingle to create an easy-to-see, strong, durable fastener zone.

Área de clavado ancha, sin cálculos "a ojo"

Esta banda resistente de tela mecánica tejida está incrustada en la teja para proveer un área de sujeción resistente, duradera y fácil de detectar.

3

Outstanding Grip

The SureNail® strip enhances the already amazing grip of our proprietary Tru-Bond® sealant for exceptional wind resistance of a 130-MPH wind warranty.

Agarre excepcional

La banda SureNail® mejora el excelente agarre de nuestro sellador patentado Tru-Bond® con una garantía de resistencia al viento excepcional de 210 km/h (130 mph).

4

Triple Layer Protection**

A unique "triple layer" of reinforcement occurs when the fabric overlays the two shingle layers, providing increased protection against "nail pull" from the wind.

Triple Layer Protection**

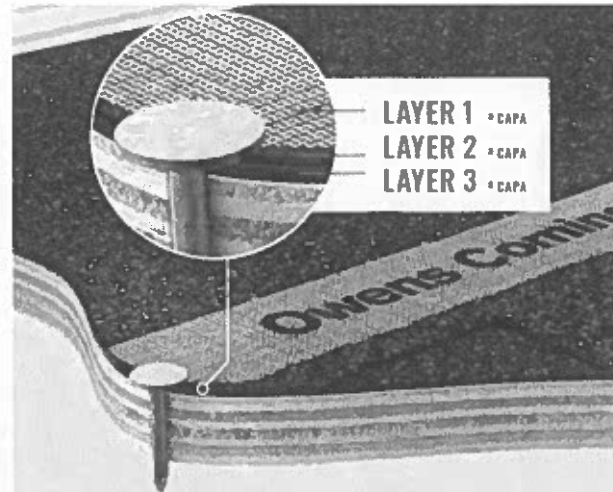
Cuando la tela cubre las dos capas de la teja, se forma una "triple capa" de refuerzo excepcional que ofrece una mayor protección ante el "arranque de clavos" debido al viento.

Double the Common Bond

SureNail® features up to a 200% wider bond between the shingle layers in the nailing zone over standard shingles.

Duplica la adherencia común

En comparación con las tejas comunes, SureNail® ofrece un área de unión hasta un 200 % más ancha entre las capas de la teja en el área de clavado.



THE PROOF IS IN THE PERFORMANCE

LA PRUEBA ESTÁ EN EL DESEMPEÑO



Up to
2.5X
BETTER
NAIL PULL-THROUGH RESISTANCE

Hasta
2.5
VECES MEJOR
RESISTENCIA A LA TRACCIÓN DE LOS CLAVOS



Up to
9X
BETTER
NAIL BLOW-THROUGH RESISTANCE

Hasta
9
VECES MEJOR
RESISTENCIA AL DESPRENDIMIENTO DE LOS CLAVOS



Up to
2X
BETTER
DELAMINATION RESISTANCE

Hasta
2
VECES MEJOR
RESISTENCIA A LA DELAMINACIÓN

Product Attributes

Warranty Length*

Limited Lifetime*
(for as long as you own your home)

Wind Resistance Limited Warranty*

130-MPH

Algae Resistance Limited Warranty**

25 Years

TRU PROtection® Non-Prorated Limited Warranty* Period

10 Years



TruDefinition® Duration® Shingles Product Specifications

Size	13¼" x 39¾"
Application Exposure	5%*
Shingles per Bundle	Not less than 20
Average Shingle Count per 3 Bundles	64
Average Coverage per 3 Bundles	98.4 sq. ft.

Applicable Standards and Codes

ASTM D3462

ASTM D228

ASTM D3018 (Type 1)

ICC-ES AC438*

ASTM D3161 (Class F Wind Resistance)

ASTM D7158 (Class H Wind Resistance)

ASTM E108/UL 790 (Class A Fire Resistance)

PRI ER 1378E01

Florida Product Approval

Miami-Dade County Product Approval†

Características del producto

Período de garantía*

Garantía limitada de por vida:
(mientras sea propietario de la vivienda)

Garantía limitada de resistencia al viento*

210 km/h (130 mph)

Garantía limitada de resistencia a las algas**

25 años

Período no prorrateado de garantía limitada TRU PROtection®

10 años



Especificaciones de las tejas Duration® TruDefinition®

Tamaño	33.65 x 100 cm (13¼ x 39¾ pulg)
Exposición de aplicación	14.3 cm (5% pulg)
Tejas por paquete	20 como mínimo
Cantidad promedio de tejas por 3 paquetes	64
Cobertura promedio por 3 paquetes	9.14 m² (98.4 pies²)

Normas y códigos pertinentes

ASTM D3462

ASTM D228

ASTM D3018 (Tipo 1)

ICC-ES AC438*

ASTM D3161 (Resistencia al viento, Clase F)

ASTM D7158 (Resistencia al viento Clase H)

ASTM E108/UL 790 (Resistencia al fuego Clase A)

PRI ER 1378E01

Aprobación del producto en el estado de Florida

Producto aprobado por el condado de Miami-Dade†

* See actual warranty for complete details, limitations and requirements.

† 40-Year Limited Warranty on commercial projects.

• Owens Corning testing against competing products with wide, single-layer nailing zones when following manufacturers' installation instructions and nailing in the middle of the allowable nailing zone.

** Tru-Bond® is a proprietary premium weathering-grade asphalt sealant that is blended by Owens Corning Roofing® and Asphalt, LLC.

• The amount of Triple Layer Protection® may vary on shingle-to-shingle basis.

• International Code Council Evaluation Services Acceptance Criteria for Alternative Asphalt Shingles

• Excludes non-Owens Corning® roofing products such as flashing, fasteners, pipe boots and wood decking.

1 See Color Disclaimer information on page 2 for additional details.

2 Applies to all areas that recognize Miami-Dade Notice of Acceptance (NOA).

3 Shingles are algae resistant to control the growth of algae and discoloration.

4 This coverage is effective 1/1/2023; installation must include use of an Owens Corning® Hip & Ridge product. See actual warranty for details.

For Patent information, please visit owenscorning.com/patents.

SureNail® Technology is not a guarantee of performance in all weather conditions.

• Owens Corning® Black Sable shingle includes a patented design.

* Consulte la garantía para obtener una lista completa de detalles, limitaciones y requisitos.

† Garantía limitada de 40 años para proyectos comerciales.

• Ensayos comparativos de Owens Corning con productos de la competencia con zonas de clavado ancho de una sola capa cuando se siguen las instrucciones de instalación del fabricante y se clava en el medio de la zona de clavado permitida.

** Tru-Bond® es un sellador asfáltico patentado de calidad premium formulado por Owens Corning Roofing® and Asphalt, LLC.

• La cantidad de Triple Layer Protection® puede variar entre una teja y otra.

• Criterios de aceptación de los servicios de evaluación del Consejo Internacional de Códigos para tejas asfálticas alternativas.

• Se excluyen productos para techos no fabricados por Owens Corning®, como tapajuntas, sujetadores, bases de tubos y estructuras de soporte de madera.

• Para obtener más información, consulte el Descargo de responsabilidad sobre los colores, en la página 2.

2 Aplicable a todas las zonas que reconocen el Aviso de aceptación (NOA, Notice of Acceptance) del condado de Miami Dade.

3 Las tejas son resistentes a las algas para controlar su desarrollo y la decoloración.

4 Esta cobertura entra en vigor el 1 de enero de 2023; la instalación debe incluir el uso de un producto para limatesa y cumbre de Owens Corning®.

Para información sobre la patente, visite www.owenscorning.com/patents.

La tecnología SureNail® no es una garantía de desempeño en todos los tipos de condiciones climáticas.

• Las tejas Black Sable de Owens Corning® incluyen un diseño patentado.



OWENS CORNING ROOFING AND ASPHALT, LLC
ONE OWENS CORNING PARKWAY
TOLEDO, OHIO, USA 43659

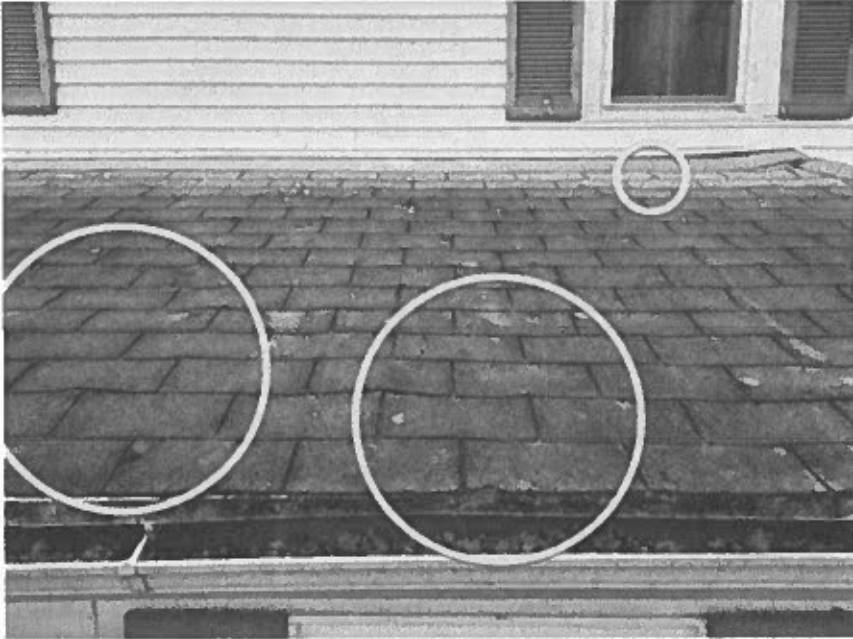
1-800-GET-PINK® | 1-800-438-7465
www.owenscorning.com

Pub. No. 10024201. Printed in U.S.A. September 2022.
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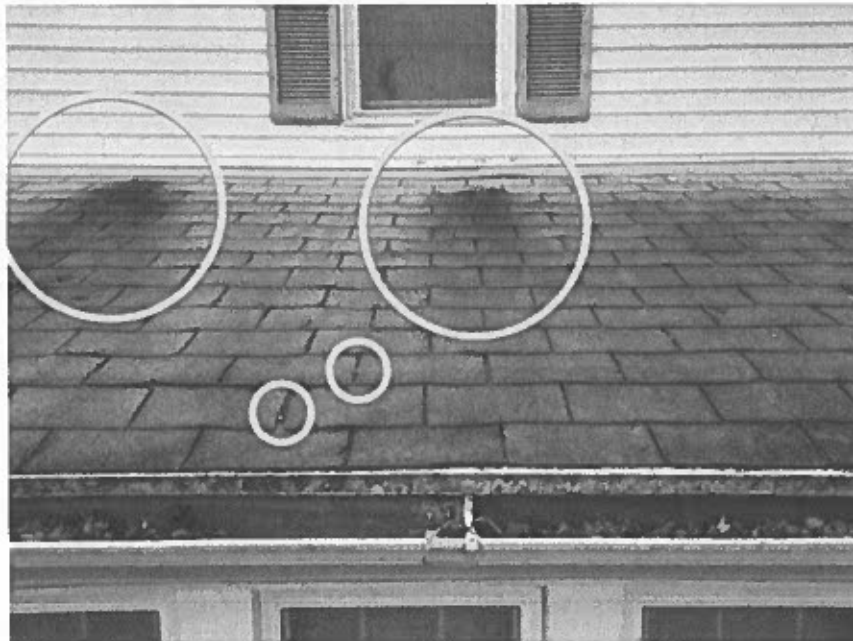
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Pub. N.º 10024201. Impreso en EE.UU. Septiembre de 2022.
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INSPECTION



Some of the existing shingles are very brittle and have started to cup and curl



There is black algae and lichen growing on some portions of the roof

PROPOSED SOLUTION



We are proposing to remove your existing shingles on the 1-st story roofing system and replace all of the plywood decking

In the case of an asphalt shingle roof installation, we will install Ice and Watershield, an adhesive backed Rolled Asphalt product at the eaves, valleys, all areas with flashing and all penetrations.

We will then install drip edge on the rakes and eaves of the house.

We will then cover the rest of the roof with Synthetic Underlayment. At this point, the roof is dried in.

We will then install Starter Shingles on eaves of the roof to improve the wind resistance of your new roof.

We will then install the Shingle System.

We will replace all Pipe Boots.

After the shingles are installed, we will install Hip and Ridge Shingles.

ARCHITECTURAL ASPHALT SHINGLES

Description	Qty
OWENS CORNING TRUDEFINITION DURATION	
OWENS CORNING TRUDEFINITION DURATION SHINGLES:	16
Duration® series shingles are unrivaled by any other architectural shingles because they feature our patented surenail® technology	
OWENS CORNING PROEDGE HIP AND RIDGE:	2
ProEdge® Hip & Ridge shingles provide a clean and consistent look.	
OWENS CORNING STARTER STRIP:	1
Starter strip shingles provide increased wind resistance to the overall shingle system.	
OWENS CORNING RHINOROOF GRANULATED ICE AND WATERSHIELD 1.95 SQ	2
Protects a roof from the damaging effects of water intrusion due to wind-driven rain and ice dams because fully adhered roofing underlayment sticks aggressively to the deck surface and forms a watertight seal around fasteners used to install shingles and other roof materials.	
OWENS CORNING RHINOROOF U20 SYNTHETIC UNDERLAYMENT	.5
10 sq 42" X 286' Long	
A lightweight, synthetic polymer-based underlayment that outperforms felt and outclasses other synthetics. designed for use on roof decks as a water-resistant layer beneath asphalt roofing shingles.	
ROOFING ACCESSORIES - FASTENERS, SEALANTS AND PAINT	
MARASUN COMPOUND: 1" STINGER RING SHANK ELECTRO-GALVANIZED NAILS:	.33
Cap nails for underlayment installation. This is a warranty requirement for most shingle manufacturers.	
MARASUN COMPOUND: 1 1/4" COIL NAILS:	.5
Electro galvanized nails used to fasten down the roofing system	
TRIM & FLASHING MATERIALS	
DRIP EDGE - TRI ODE 2":	10
Metal flashing that protects the eaves of your home and prevents rain from going behind the gutters and/or fascia potentially causing damage.	
MARASUN COMPOUND: ALUMINUM STEP FLASHING	1
Bundle of 50. Covers 20LF	
BERGER BUILDING PRODUCTS .019" X 24" X 50' PAINTED ALUMINUM TRIM COIL:	1
DIMENSIONAL LUMBER	

1/2" CDX PLYWOOD SHEET:

18

Covers the material cost of Exterior Grade CDX Plywood 4'x8' Sheet. material is used for property protection and rotted decking if necessary

SIMPSON STRONG TIE PLYWOOD CLIPS 1/2" (BOX OF 250):

1

DECKING NAILS 2 1/2":

1

used to fasten down the material that is to be installed. These come in various lengths and are used in various applications. 5lb box

ASPHALT ROOF REPLACEMENT LABOR**ASPHALT ROOF REPLACEMENT 3/12 - 8/12:**

6

Tearing off a single layer of roofing materials and installing all-new asphalt roofing components.

ASPHALT EXTRA LAYER REMOVAL:

5

Covers the additional cost of labor for the removal of an extra asphalt layer.

CEDAR LAYER REMOVAL:

5

Covers the additional cost of labor for an cedar layer.

FLASHING INSTALLATION LABOR

53

This is for replacing the existing step and apron flashing with new flashing installed un

DIMENSIONAL LUMBER LABOR**PLYWOOD DECKING INSTALL:**

17

Covers the cost of time and labor to install plywood and use plywood as property protection.

ROOFING SERVICES**WASTE DISPOSAL FEE:**

24

Dump fees for waste disposal.

CATCH-ALL SYSTEM:

1

To protect the home from roofing debris and property damage during roof replacement.

EQUIPTER TRASH MANAGEMENT (DAY):

1

Increases production speed and safety and helps our customers receive roofing services faster and more efficiently. self-propelled, raisable trailer takes the hassle out of debris management

PERMIT APPLICATION FEE

1

OWENS CORNING WARRANTIES

AUTHORIZATION PAGE

- | | |
|--|-------------|
| ☒ Architectural Asphalt Shingles | \$6,215.49 |
| ☐ Standing Seam Metal Proposal | \$11,500.67 |
| ☐ Roof Cleaning | \$507.10 |

Project: 31359539757
Name: Beth Thompson
Address: 317 August Street, Easton, MD

Options



10 Year Low Monthly
Payment Financing at
9.99%

Description	Qty	Unit price	Line total	Est. Payment
☒ REINSTALL DOWNSPOUT /REPAIR	1	\$83.33	\$83.33	\$1.10/mo

Quote	\$6,215.49
Options	\$83.33
Final Price	\$6,298.82

Customer Comments / Notes

My Product Selections

Standing Seam Roof Color

Asphalt Shingle Color

not sure



TOWN OF EASTON
PLANNING AND ZONING
14 SOUTH HARRISON STREET, EASTON, MD 21601

Application #:
Date Received:
Fee Paid:
HDC Meeting Date:
Date Property Posted:

HISTORIC DISTRICT COMMISSION HEARING APPLICATION

APPLICATION TYPE (PLEASE CIRCLE)

ROOFING DEMOLITION SIGNAGE FENCING OTHER
NEW CONSTRUCTION/ADDITION EXTERIOR ALTERATIONS
FOR TREE REMOVAL(S) - PLEASE USE THE TREE REMOVAL APPLICATION

PROPERTY INFORMATION

ADDRESS: 46 Pennsylvania Avenue, Easton, MD 21601
☒ Contributing ☐ Non-Contributing YEAR BUILT: NATIONAL REGISTAR #

PROPERTY INFORMATION

OWNER NAME: The Town of Easton
TELEPHONE NO.: 410-822-2525 EMAIL: tnewcomb@eastonmd.gov

Applicant or Agent

NAME: Trevor Newcomb
TELEPHONE NO.: 410-924-3276 EMAIL: tnewcomb@eastonmd.gov

Description of Proposal (include additional sheets, as necessary)

Relocation of an exterior condensing unit for the purpose of an emergency repair to the existing
HVAC system. The location is to be from the existing within a fenced yard area to a location next to
the building along the southern facade.

Specific Requirements

- The payment of fees is due at the time of application submittal.
As of December 27, 2022, the fees are as follows:
Commercial - \$200 Residential - \$75 Signs - \$75 Staff Approval \$25
- Provide 2 hard copies plus 1 digital copy of the application and all supplemental information.
- Disclose any easements or deed restrictions pertaining to the property and any improvements including the details of said easements or restrictions.
- Disclose any tax credits and or grants being considered for the project.

The Historic District Commission (HDC) reserves the right to request reasonable additional information or design drawings that further clarify proposals. In cases where professional design services are warranted, the HDC may require the applicant to retain a licensed design consultant. If the applicant or their designee is not present for the scheduled meeting the Commission may elect to refrain from discussing and voting on the scheduled agenda item. Any modifications during review shall warrant an updated application.

I hereby certify that I have reviewed the Easton Historic District Guidelines as published

Signature of Applicant or Agent

Date

Printed Name of Applicant or Agent

01-27-2025	
Trevor Newcomb	

Revised 4.4.2022



Town of Easton
Planning and Zoning
14 S. Harrison Street Easton, MD 21601
410-822-1943
HISTORIC DISTRICT COMMISSION

ADMINISTRATIVE CERTIFICATE OF APPROPRIATENESS

Approval Date: January 27, 2025
Application Number: HD-25-1384
Location: 46 Pennsylvania Avenue
Applicant: Trevor Newcomb on behalf of the Town of Eaton
Request: HVAC Installation

The applicant, Trevor Newcomb, requested approval for improvements at 46 Pennsylvania Avenue. The request is to install a new HVAC system located at the southern façade of the structure. Given that the request complies with §28-601.E.4.d of the Town of Easton Zoning Ordinance, the Easton Historic District Design Guidelines, and has been approved by the Maryland Historic Trust; **the application is approved subject to the following conditions:**

- 1. Any exterior line sets shall be painted to match the structure**
- 2. Screening for the unit shall be approved by the Maryland Historic Trust prior to installation**
- 3. The unit shall be screened from view so they are not visible from the street and;**
- 4. The unit shall be mounted in a way that does not damage historic material.**

Historic District Guideline references: 48

If the scope of work changes and or the materials and methods used are contrary to that understood by the application and any supplemental information provided, the work shall not continue until such time that the Commission is notified and said differences are considered and approved by the Commission.

“A Certificate of Appropriateness shall lapse upon the expiration of the corresponding Building Permit. For applications that require a building permit but for which none is issued, this Certificate of Appropriateness shall lapse six (6) months after issuance. In the event a building permit is not required, the Certificate of Appropriateness shall lapse six (6) months from its issuance if substantial work is not underway. For good cause shown, this period may be extended by the Commission”.

Prior to start of work please contact the Building Inspection Department at 410 822 2525 to ensure all required building permits have been obtained. Also, please reach out to the Building Inspection department to ensure your project complies with the Town of Easton’s building codes.

Representative, Historic District Commission

Date



Nicholas Johnson <njohnson@eastonmd.gov>

2025-01-24 Town of Easton - Emergency Railroad Station HVAC Replacement Approval Request

Trevor Newcomb <tnewcomb@eastonmd.gov>

Fri, Jan 24, 2025 at 12:41 PM

To: mht.easements@maryland.gov

Cc: Town Manager <townmanager@eastonmd.gov>, Megan Cook <mcook@eastonmd.gov>, Nicholas Johnson <njohnson@eastonmd.gov>

Good Afternoon,

As the Town of Easton's Railroad Station, located at 46 Pennsylvania Avenue, is subject to a Maryland Historical Preservation Easement, I am writing to request approval for the replacement of its existing HVAC system.

The existing location of the condensing unit is within an enclosed area to the south of the building. This location required the original installer to trench-in the refrigerant lines, something that is disallowed these days.

As an alternative, we are hoping to have the condensing unit installed along the southern facade and adjacent to a non-used sliding "barn door". Locating the equipment here would not adversely effect the building nor the brick pad upon which it would sit.

Please note that the HVAC system is currently non-functioning and the building is habited by town employees. The replacement proposed would be a direct replacement of both the condensing unit as well as the interior air handler. No modification to the building are necessary to accommodate this work.

Please find the attached information and please let me know if any additional information is necessary for your determination.

Thank you for your consideration.

EXISTING CONDENSING UNIT LOCATION



PROPOSED CONDENSING UNIT LOCATION - SOUTHERN ELEVATION



Trevor Newcomb

Director – Facilities & Buildings
Town of Easton | EastonMD.gov

14 S. Harrison Street St. | Easton, MD 21601
Office: 410-822-2525
tnewcomb@eastonMD.gov

3 attachments



2025-01-25 PROPOSAL 9,485 Tom's 1400-30-46 - Railroad (1).pdf
155K



Handler -ACiQ FJMA4X Spec Sheet.pdf
778K



Condensor - ACiQ R4H5S Spec Sheet.pdf
3388K



Nicholas Johnson <njohnson@eastonmd.gov>

2025-01-24 Town of Easton - Emergency Railroad Station HVAC Replacement Approval Request

MHT Easements -MDP- <mht.easements@maryland.gov>

Fri, Jan 24, 2025 at 3:35 PM

To: Trevor Newcomb <tnewcomb@eastonmd.gov>

Cc: Town Manager <townmanager@eastonmd.gov>, Megan Cook <mcook@eastonmd.gov>, Nicholas Johnson <njohnson@eastonmd.gov>

Good afternoon Trevor,

Thank you for submitting the information regarding the replacement of the HVAC unit at the Easton Railroad Station in Talbot County.

I have reviewed the materials provided in your submission, and based on the scope of work and specifications, I grant staff approval for the replacement of the HVAC unit on the south side of the building in the location you indicated. It is our understanding that the unit will likely be screened at some point in the future. When you are ready to do so, please be sure to submit the screening information to MHT for review and approval prior to undertaking that screening project.

This work is consistent with the Secretary of the Interior's *Standards for the Treatment of Historic Properties*, specifically *General Rehabilitation Standards 5, 6, 8, 9, and 10*.

This approval is valid for a period of six months from the date of this email. Should you need additional time to complete the project, make any changes to the scope of work as approved, or have any questions regarding this email, please contact MHT Easement Staff via email at mht.easements@maryland.gov.

Sincerely,
Carolyn



Easement Program

Maryland Historical Trust / Maryland Department of Planning
100 Community Place
Crownsville, MD 21032
V 410.697.9545
E mht.easements@maryland.gov
W mht.maryland.gov

MD TWO FIFTY: Maryland's Story is America's Story

*Please note that hard copy submissions to the easement program are no longer required unless specifically requested by staff.

[Quoted text hidden]

Tom's General Services

Tom's General Services

314 N. Aurora Street Suite F
Easton, Maryland 21601

314 N. Aurora Street, Suite F

Easton, Maryland 21601

Office: 410-822-7401

Email: info@tomsgeneralservices.com

QUOTE

Quote Date: 01/21/2025

Quote Number: 763

Town of Easton*

P.O. Box 520
Easton, Maryland 21601

Site Information - Main Address

46 Pennsylvania Ave.
Easton 21601

Item	Qty	Unit Price	Amount
Quote	1.00	9,485.16	9,485.16
Sub Total:			\$9,485.16
Tax:			\$0.00
Total:			\$9,485.16

Description: Labor and materials to replace existing heat pump system.

Notes: R4H5S36AKAAA 1 ea.

ARCOAIRE HEAT PUMP 3.0T 15 SEER

HPKIT5H 1 ea.

H/P SYSTEM HORIZ INSTALL KIT

Kit PAP32X32 1 ea.

EL3232-2 PLASTIC PAD 2" ELITE

Kit N63126 1 ea.

NRP 1/2" 10GA HVAC 6FT WHIP 12-6-10

Kit DPU222R 1 ea.

60AMP NON-FUSED DISCONNECT 7711

Kit TH6220U2000 1 ea.

H/W STAT PROG 2H/2C 7-DAY 5-2 OR 5-1-1

Kit 61250-1/2 1 ea.

LINE SET 50' 3/8 X 3/4 X 1/2 WALL

Kit EZT210 1 ea.

EZ TRAP 3/4" COND TRAP W FLOAT SWITCH

Kit AM34PVC 1 ea.

PVC 3/4" MALE ADAPTER SCHEDULE 40

Kit E34PVC 6 ea.

PVC 3/4" 90 DEGREE ELL SCHEDULE 40

Kit 34PVC40 20 FT.

PVC 3/4" SCHEDULE 40 PIPE

Kit NPR4102 1 ea.

NOVENT TAMPER RESISTANT CAP PINK R410A 1/4" 2PK

Kit AGG30X60 1 ea.

AG 30X62X4.5 GOLIATH AUX DRAIN PAN W/O SWITCH

Kit AG4100-G18 1 ea.

A/G FLOAT SWITCH AG4200E GOLIATH AUX DRAIN PAN

Kit 4008S 4 ea.

DIVERSITECH HPR-6-2PG 6" PUMP RISER

FJMA4X36L0BB 1 ea.

ARCOAIRE AHU 3.0T R410A TXV

EHC15BKB 1 ea.

ARCOAIRE 15KW HEATER 208/230 CKT BRKR

01-22-25
PLEASE PROCEED


R4H5S

Single-Stage Split-System Heat Pump with R-410A Refrigerant 1-1/2 To 5 Tons

Product Data



This unit has been designed utilizing non-ozone depleting R-410A refrigerant. Heat pumps with R-410A refrigerant provide a collection of features unmatched by any other family of equipment.

NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory (www.ahridirectory.org) for the most up-to-date ratings information.

Industry leading Features / Benefits

Efficiency

- 14.3 - 15.2 SEER2 / 11.0 - 12.5 EER2 / 7.5 - 8.1 HSPF2 (depending on unit size and indoor combination installed)
- Indoor air quality accessories available

Sound

- Sound levels as low as 69 dBA with accessory sound blanket

Comfort

- System supports programmable or standard thermostat controls

Reliability

- Non-ozone depleting R-410A refrigerant
- Scroll compressor
- Internal pressure relief valve
- Internal thermal overload
- Loss of charge switch
- Filter drier
- Balanced refrigeration system for maximum reliability

Durability

Protection Package:

- Solid, durable sheet metal construction
- Dense wire coil guard

Applications

- Long-line - up to 250 feet (76.20 m) total equivalent length, up to 200 feet (60.96 m) condenser above evaporator, or up to 80 ft. (24.38 m) evaporator above condenser (See Longline Guide for more information.)
- Low ambient cooling (down to 0°F/-17.8°C) with approved low ambient accessory kits

MODEL NUMBER NOMENCLATURE

	4	H	5	S	18	A	K	A	A	A
Brand R= Entry	Refrigerant 4 = R-410A	Type H = HP	SEER2 5= 14.3 SEER2	OD Design Type S= Single Stage	Nominal Capacity 18 = 1-1/2 Tons 24 = 2 Tons 30 = 2-1/2 Tons 36 = 3 Tons 42 = 3-1/2 Tons 48 = 4 Tons 60 = 5 Tons	Feature A = Standard	Voltage K = 208-230-1 or 208/230-1	Special Feature A = Standard	Region A = Standard HP	Major Series A = Initial



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.



Quality
ISO 9001
SAI GLOBAL



This product has been designed and tested to meet the most stringent standards for energy efficiency when installed with appropriate components. However, improper installation, changes and/or use in flow or other conditions may reduce energy efficiency. Read the instructions and specifications carefully. Follow the instructions and specifications for proper installation and use. Failure to follow proper installation and use may reduce energy efficiency and shorten equipment life.

Tested AHRI Combination Ratings

NOTE: Ratings contained in this document are subject to change at any time.

For AHRI ratings certificates, please refer to the AHRI directory www.ahridirectory.org. Additional ratings and system combinations can be accessed via the Ratings Database here: [ACiQTM](#)

CATALOG ORDERING NUMBERS

Size	Model Number
18	R4H5S18AKAAA
24	R4H5S24AKAAA
30	R4H5S30AKAAA
36	R4H5S36AKAAA
42	R4H5S42AKAAA
48	R4H5S48AKAAA
60	R4H5S60AKAAA

Standard Features

Feature	18	24	30	36	42	48	60
R-410A Refrigerant	X	X	X	X	X	X	X
Scroll Compressor	X	X	X	X	X	X	X
Field Installed Filter Drier	X	X	X	X	X	X	X
Front Seating Service Valves	X	X	X	X	X	X	X
Internal Pressure Relief Valve	X	X	X	X	X	X	X
Internal Thermal Overload	X	X	X	X	X	X	X
Long Line capability	X	X	X	X	X	X	X
Low Ambient capability with Kit	X	X	X	X	X	X	X
Suction Line Accumulator	X	X	X	X	X	X	X
Loss of Charge Switch	X	X	X	X	X	X	X

X = Standard

Physical Data

Unit Size	18	24	30	36	42	48	60
Compressor Type	Scroll						
Refrigerant	R-410A						
Control	TXV (R-410A Hard Shutoff)						
Charge (lb)	5.9	6.3	9.0	9.0	9.9	10.8	13.7
Outdoor Htg. Piston #	42	46	52	57	61	65	76
Cond Fan	Forward Swept or Propeller Type, Direct Drive						
Air Discharge	Vertical						
Air Qty (CFM)	2346	2652	2652	3550	3716	3716	4779
Motor HP	1/12	1/10	1/10	1/4	1/4	1/4	1/4
Motor RPM	800	825	825	825	1110	1110	825
Cond Coil							
Face Area (Sq ft)	15.0	17.2	15.0	15.0	17.2	19.3	25.1
Fins per In.	20	20	20	20	20	20	20
Rows	1	1	2	2	2	2	2
Circuits	6	6	7	7	10	12	12
Valve Connect (In. ID)							
Vapor	5/8	5/8	3/4	3/4	7/8	7/8	7/8
Liquid	3/8"						
Refrigerant Tubes* (In. OD)							
Rated Vapor† (0-80 Ft Tube Length)	5/8	5/8	3/4	3/4	7/8	7/8	1 1/8
Rated Liquid Line‡ (0-80 Ft Tube Length)	3/8"						

*. For 15 ft. lineset

†. Units are rated with 25 ft (7.6 m) of lineset length. See Vapor Line Sizing and Cooling Capacity Loss table when using other sizes and lengths of lineset.

‡. See Liquid Line Sizing For Cooling Only Systems with R-410A Refrigerant tables.

Note: See unit Installation Instruction for proper installation.

Vapor Line Sizing and Cooling Capacity Loss

Acceptable vapor line diameters provide adequate oil return to the compressor while avoiding excessive capacity loss. The suction line diameters shown in the chart below are acceptable for HP systems with R-410A refrigerant:

Vapor Line Sizing and Cooling Capacity Losses - R-410A Refrigerant 1- Stage Heat Pump Applications

Unit Nominal Size (Btuh)	Acceptable Vapor Line Diameters (In. OD)	Cooling Capacity Loss (%) Total Equivalent Line Length (ft)										
		Standard Application				Long Line Application Requires Accessories						
		25 (7.62)	50 (15.2)	80 (24.4)	80+ (24.4+)	100 (30.48)	125 (38.10)	150 (45.72)	175 (53.34)	200 (60.96)	225 (68.58)	250 (76.20)
18,000	1/2	1	2	3	3	4	6	7	8	9	10	12
	5/8	0	0	1	1	1	1	2	2	3	3	3
24,000	5/8	0	1	1	1	2	3	3	4	4	5	6
	3/4	0	0	0	0	0	1	1	1	1	1	2
30,000	5/8	1	2	3	3	3	4	5	6	7	8	9
	3/4	0	0	1	1	1	1	2	2	2	3	3
	7/8	0	0	0	0	0	1	1	1	1	1	1
36,000	5/8	1	2	4	4	5	6	7	9	10	11	13
	3/4	0	0	1	1	1	2	2	3	3	4	4
	7/8	0	0	0	0	0	1	1	1	1	2	2
42,000	3/4	0	1	2	2	2	3	4	4	5	6	6
	7/8	0	0	1	1	1	1	2	2	2	3	3
48,000	3/4	0	1	2	2	3	4	5	5	6	7	8
	7/8	0	0	1	1	1	2	2	2	3	3	4
60,000	3/4	1	2	4	4	5	6	7	9	10	11	12
	7/8	0	1	2	2	2	3	4	4	5	5	6
	1 1/8	0	0	0	0	1	1	1	1	1	1	2
Standard Length = 80 ft. (24.4 m) or less total equivalent length												
Applications in this area are long line. Accessories are required as shown recommended on Long Line Application Guidelines												
Applications in this area may have height restrictions that limit allowable total equivalent length, when outdoor unit is below indoor unit See Long Line Application Guidelines												

Refrigerant Piping Length Limitations

Maximum Line Lengths:

The maximum allowable total equivalent length for heat pumps varies depending on the vertical separation. See the tables below for allowable lengths depending on whether the outdoor unit is on the same level, above or below the indoor unit.

Maximum Line Lengths for Heat Pump Applications

	MAXIMUM ACTUAL LENGTH* ft (m)	MAXIMUM EQUIVALENT LENGTH{ ft (m)	MAXIMUM VERTICAL SEPARATION ft (m)
Units on equal level	200 (61)	250 (76.2)	N/A
Outdoor unit ABOVE indoor unit	200 (61)	250 (76.2)	200 (61)
Outdoor unit BELOW indoor unit	See Table 'Maximum Total Equivalent Length: Outdoor Unit BELOW Indoor Unit'		

*, * Maximum actual length not to exceed 200 ft (61 m)

Maximum Total Equivalent Length* { - Outdoor Unit BELOW Indoor Unit

Size	Liquid Line Diameter w/ TXV	HP with R-410A Refrigerant - Maximum Total Equivalent Length Vertical Separation ft (m) Outdoor unit BELOW indoor unit;						
		0-20 (0 - 6.1)	21-30 (6.4 - 9.1)	31-40 (9.4 - 12.2)	41-50 (12.5 - 15.2)	51-60 (15.5 - 18.3)	61-70 (18.6 - 21.3)	71-80 (21.6 - 24.4)
18,000	3/8	250*	250*	250*	250*	250*	250*	250*
24,000	3/8	250*	250*	250*	250*	250*	250*	250*
30,000	3/8	250*	250*	250*	250*	250*	250*	250*
36,000	3/8	250*	250*	250*	250*	250*	250*	250*
42,000	3/8	250*	250*	250*	250*	250*	250*	150
48,000	3/8	250*	250*	250*	250*	230	160	—
60,000	3/8	250*	225*	190	150	110	—	—

*, Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.

— = outside acceptable range

Long Line Applications

An application is considered Long Line when the refrigerant level in the system requires the use of accessories to maintain acceptable refrigerant management for systems reliability. Defining a system as long line depends on the liquid line diameter, actual length of the tubing, and vertical separation between the indoor and outdoor units.

For Heat Pump systems, the chart below shows when an application is considered Long Line. Beyond these lengths, long line accessories are required:

**HP with R-410A Refrigerant Long Line Description ft (m)
Beyond these lengths, long line accessories are required**

Liquid Line Size	Units On Same Level	Outdoor Below Indoor	Outdoor Above Indoor
3/8	80 (24.4)	20 (6.1) vertical or 80 (24.4) total	80 (24.4)

Note: See Long Line Guideline for details

Accessories

ICP KIT NUMBER	KIT NAME	18	24	30	36	42	48	60
NASA00601CH	Crankcase Heater	X	X	X	X			
NASA00501CH	Crankcase Heater					X	X	S
NASA001TD	Time Delay Relay	X	X	X	X	X	X	X
NASA00101IK	Isolation Relay	X	X	X	X	X	X	X
NASA001LS	Solenoid Valve Kit	X	X	X	X	X	X	X
NASA00106SS	Snow Stand	X	X	X	X	X	X	X
NASA001AC	Cycle Protector	X	X	X	X	X	X	X
NASA00201FS	Evaporator Freeze Stat	X	X	X	X	X	X	X
NASA405PS	High Pressure Switch Kit	X	X	X	X	X	X	X
NASA012SC	Hard Start	X	X	X	X	X	X	X
NASA401LA	Low Ambient Cooling Pressure Switch	X	X	X	X	X	X	X
NAEA40501TX	TXV Kit	X	X	X				
NAEA40601TX	TXV Kit				X	X		
NAEA40701TX	TXV Kit						X	X
NAEB40501TX	TXV Kit	X	X	X				
NAEB40601TX	TXV Kit				X	X		
NAEB40701TX	TXV Kit						X	X
NASA00201SJ	Sound Blanket	X	X	X	X			
NASA00101SJ	Sound Blanket					X	X	X
NASA00201SF	Support Feet	X	X	X	X	X	X	X

X = Accessory

S = Standard

Accessory Usage Guideline

Accessory	REQUIRED FOR LOW-AMBIENT COOLING APPLICATIONS (Below 55°F / 12.8°C)	REQUIRED FOR LONG LINE APPLICATIONS*	REQUIRED FOR SEA COAST APPLICATIONS (Within 2 miles / 3.22 km)
Accumulator	Standard	Standard	Standard
Ball Bearing Fan Motor	Standard	Standard	Standard
Compressor Start Assist Capacitor and Relay	Yes	Yes	No
Crankcase Heater	Yes†	Yes	No
Evaporator Freeze Thermostat	Yes	No	No
Hard Shutoff TXV	Yes	Yes	No
Isolation Relay	Yes	No	No
Liquid Line Solenoid Valve	No	See Long-Line Application Guideline	No
Low Ambient Switch	Yes	No	No
Support Feet	Recommended	No	Recommended

*. For tubing line sets between 80 and 200 ft. (24.38 and 60.96 m) and/or 20 ft. (6.09 m) vertical differential, refer to Residential Split-System Longline Application Guideline.

†. Standard on 3 phase units only

Accessory Description and Usage (Listed Alphabetically)

1. Ball-Bearing Fan Motor

A fan motor with ball bearings which permits speed reduction while maintaining bearing lubrication.

2. Compressor Start Assist - Capacitor and Relay

Start capacitor and relay gives a "hard" boost to compressor motor at each start up.

Usage Guideline:

Required for single-phase scroll compressors in the following applications:

Long line

Low ambient cooling

Suggested for all compressors in areas with a history of low voltage problems.

3. Crankcase Heater

An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes the chance of liquid slugging.

Usage Guideline:

Required in low ambient cooling applications.

Required in long line applications.

Suggested in all commercial applications.

4. Cycle Protector

The cycle protector is designed to prevent compressor short cycling. This control provides an approximate 5-minute delay after power to the compressor has been interrupted for any reason, including power outage, protector control trip, thermostat jiggling, or normal cycling.

5. Evaporator Freeze Thermostat

An SPST temperature-actuated switch that stops unit operation when evaporator reaches freeze-up conditions.

Usage Guideline:

Required when low ambient kit has been added.

6. Low-Ambient Pressure Switch Kit

A long life pressure switch which is mounted to outdoor unit service valve. It is designed to cycle the outdoor fan motor in order to maintain head pressure within normal operating limits (approximately 100 psig to 225 psig). The control will maintain working head pressure at low-ambient temperatures down to 0°F (-18°C) when properly installed and also using wind baffles. Instructions provided in accessory kit.

Usage Guideline:

A Low-Ambient Pressure Switch must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

7. Outdoor Air Temperature Sensor

This device enables the thermostat to display the outdoor temperature. This device is also required to enable special thermostat features such as auxiliary heat lock out.

Usage Guideline:

Suggested for use with compatible thermostats.

8. Sound Hood

Wraparound sound reducing cover for the compressor. Reduces the sound level of the compressor.

Usage Guideline:

Suggested when unit is installed closer than 15 ft (4.57 m) to quiet areas, bedrooms, etc.

Suggested when unit is installed between two houses less than 10 ft (3 m) apart.

Accessory Description and Usage (Listed Alphabetically) Continued

9. Support Feet

Four or five stick-on plastic feet that raise the unit 4 in. (101.6 mm) above the mounting pad. This allows sand, dirt, and other debris to be flushed from the unit base, minimizing corrosion.

Usage Guideline:

Suggested in the following applications:

- Coastal installations.
- Windy areas or where debris is normally circulating.
- Rooftop installations.
- For improved sound ratings.

10. Thermostatic Expansion Valve (TXV)

A modulating flow-control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator.

Kit includes valve, adapter tubes, and external equalizer tube. Hard shut off types are available.

Usage Guideline:

- Required to achieve AHRI ratings in certain equipment combinations. Refer to combination ratings.
- Hard shut off TXV or LLS required in air conditioner long line applications.
- Required for use on all zoning systems.

11. Time-Delay Relay

An SPST delay relay which briefly continues operation of indoor blower motor to provide additional cooling after the compressor cycles off.

NOTE: Most indoor unit controls include this feature. For those that do not, use the guideline below.

Usage Guideline:

For improved efficiency ratings for certain combinations of indoor and outdoor units. Refer to AHRI Directory of Certified Product Performance (AHRI Directory).

When a Time-Delay Relay (TDR) is called for in the AHRI Directory, use a 30 second TDR for MicroChannel Indoor units and use a 90 second TDR for Round Tube Plate Fin Indoor units.

12. Winter Start Control

This control is designed to alleviate nuisance opening of the low-pressure switch by bypassing it for the first 3 minutes of operation.

Electrical Data

UNIT SIZE	V/PH	OPER VOLTS*		COMPR		FAN	MCA	MAX FUSE† or CKT BRK AMPS
		MAX	MIN	LRA	RLA	FLA		
18	208-230-1	253	197	45.7	10.3	0.50	13.4	20
24				59.5	11.1	0.60	14.5	25
30				67.9	14.1	0.60	18.2	30
36				83.1	15.3	1.20	20.3	30
42				110.0	18.6	1.40	24.7	40
48				120.0	25.0	1.52	32.8	50
60				150.0	25.6	1.20	33.2	50

*. Permissible limits of the voltage range at which the unit will operate satisfactorily

†. Time-Delay fuse.

FLA—Full Load Amps

LRA—Locked Rotor Amps

MCA—Minimum Circuit Amps

RLA—Rated Load Amps

NOTE: Control circuit is 24-V on all units and requires external power source. Copper wire must be used from service disconnect to unit.

All motors/compressors contain internal overload protection.

Complies with requirements of ASHRAE Standards 90.1

Short Circuit Current Rating (SCCR): 5kA rms

Sound Power Level Without Sound Hood

UNIT SIZE	STANDARD RATING (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dB, without tone adjustment)						
		125	250	500	1000	2000	4000	8000
18	71	70.2	66.4	65.1	67.4	62.8	58.2	52.5
24	76	66.3	68.4	69.4	67.7	64.4	61.4	55.9
30	76	70.1	71.3	70.8	69.6	64.0	60.6	54.9
36	76	74.0	72.5	71.7	70.5	66.1	61.7	55.6
42	76	72.1	72.6	70.0	67.6	62.9	60.5	56.0
48	76	75.5	72.4	71.4	68.3	63.1	60.5	55.5
60	76	65.2	67.0	67.4	70.0	62.6	59.7	55.5

NOTE: Tested in compliance with AHRI 270 but not listed with AHRI.

Sound Power Level With Sound Hood

UNIT SIZE	STANDARD RATING (dBA)	TYPICAL OCTAVE BAND SPECTRUM (dB, without tone adjustment)						
		125	250	500	1000	2000	4000	8000
18	69	70.6	66.2	64.8	65.7	61.2	57.5	51.3
24	74	66.7	68.1	68.7	66.5	63.1	60.0	53.1
30	74	71.4	70.5	70.5	68.3	63.4	60.3	53.5
36	74	74.7	72.7	71.8	68.6	64.3	59.0	51.6
42	74	72.8	73.7	70.3	67.3	62.6	59.8	53.4
48	74	76.3	71.9	71.0	68.1	62.9	60.0	53.9
60	73	65.4	67.5	67.5	68.8	61.5	58.5	52.9

NOTE: Tested in compliance with AHRI 270 but not listed with AHRI.

Charging Subcooling (TXV-Type Expansion Device)

UNIT SIZE-VOLTAGE	REQUIRED SUBCOOLING °F (°C)
18	7 (3.9)
24	7 (3.9)
30	12 (6.7)
36	12 (6.7)
42	10 (5.6)
48	13 (7.2)
60	10 (5.6)

HP Only Replacement with Piston Indoors

This heat pump may only be installed with piston metered indoor units as replacement components in a piston system.

When installing a non-rated heat pump with a piston indoor unit, the correct piston must be installed, which should be listed in the indoor unit Installation Instructions or Product Data.

Replacement pistons can be ordered from Replacement Components (RC).

Dimensions

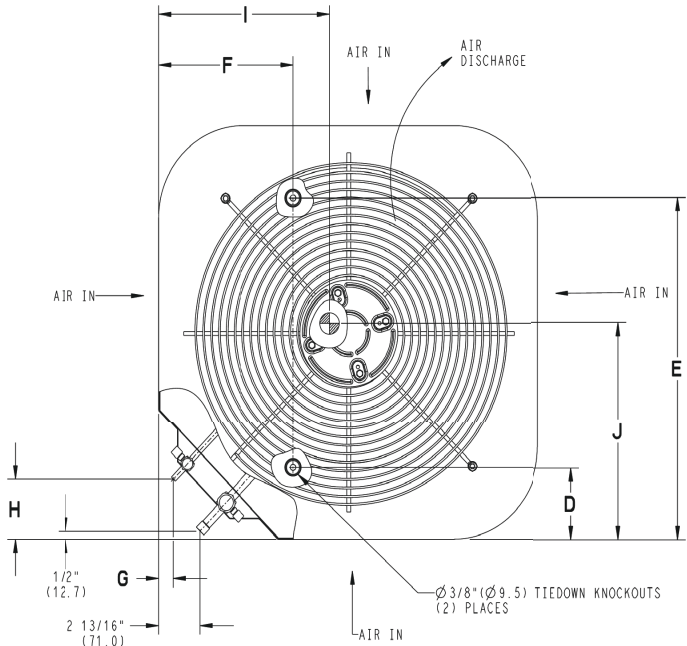
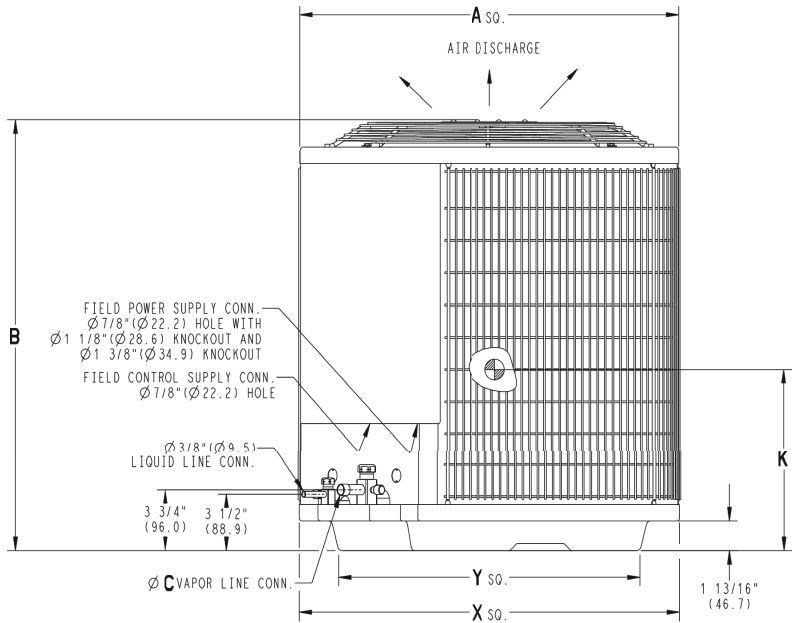
Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

UNIT	SERIES	ELECTRICAL CHARACTERISTICS					A		B		C		D		E		F		G		H		I		J		K		OPERATING WEIGHT		SHIPPING WEIGHT		SHIPPING LENGTH / WIDTH (Sq.)		SHIPPING HEIGHT	
							INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	Lbs	Kgs	Lbs	Kgs	INCH	MM	INCH	MM
R4H5S18**AAA	A	Y	N	N	N		31 3/16	792.5	28 1/4	718.0	5/8	15.9	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	14 3/4	374.7	16 1/4	412.8	13 1/2	342.9	135	61.1	152	69.1	32 3/16	817.9	29 7/8	758.5
R4H5S24**AAA	A	Y	N	N	N		31 3/16	792.5	31 11/16	804.3	5/8	15.9	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	13 3/4	349.3	14	355.6	14 1/2	368.3	153	69.6	173	78.4	32 3/16	817.9	33 1/4	844.9
R4H5S30**AAA	A	Y	N	N	N		31 3/16	792.5	28 1/4	718.0	3/4	19.1	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	15 3/4	400.1	15 1/2	393.7	12 1/4	311.2	171	77.6	202	91.4	32 3/16	817.9	29 7/8	758.5
R4H5S36**AAA	A	Y	N	N	N		31 3/16	792.5	28 1/4	718.0	3/4	19.1	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	14	355.6	14 1/2	368.3	12 1/2	317.5	173	78.4	190	86.4	32 3/16	817.9	29 7/8	758.5
R4H5S42**AAA	A	Y	N	N	N		31 3/16	792.5	31 11/16	804.3	7/8	22.2	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	15 1/4	387.4	14 1/2	368.3	13 3/4	349.3	216	98.0	235	106.8	32 3/16	817.9	33 1/4	844.9
R4H5S48**AAA	A	Y	N	N	N		31 3/16	792.5	35 1/16	890.7	7/8	22.2	6 9/16	166.1	24 11/16	626.3	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	15 1/4	387.4	15	381.0	14 3/4	374.7	222	100.7	242	109.6	32 3/16	817.9	36 11/16	931.3
R4H5S60**AAA	A	Y	N	N	N		35	889.0	38 7/8	987.8	7/8	22.2	6 9/16	166.1	28 7/16	722.8	9 1/8	231.3	1 1/8	28.2	3 13/16	97.4	16 1/2	419.1	17 1/2	444.5	19	482.6	253	114.8	275	124.6	36	914.9	40 9/16	1030.4

205-230-1-60	Y=YES N=NO
209-230-3-60	
460-3-60	
575-3-60	

NOTES:

1. CENTER OF GRAVITY

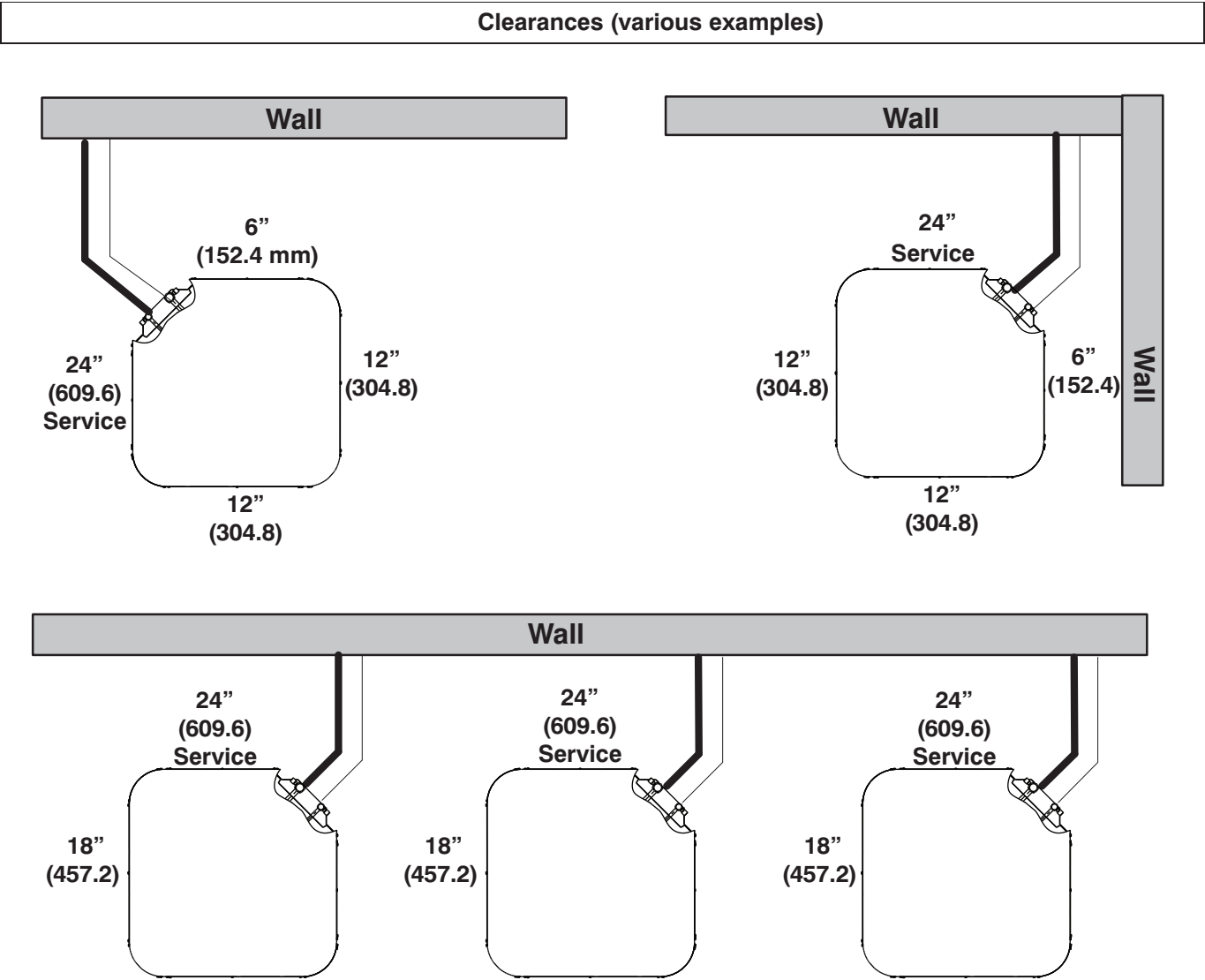


UNIT SIZE	"X"		"Y"	
	MINIMUM GROUND MOUNTING PAD APPLICATION DIMENSIONS		MINIMUM ROOF-TOP MOUNTING PAD APPLICATION DIMENSIONS	
-	23 1/8	587.3	17 7/8	454.6
-	25 3/4	654.0	20 7/16	518.5
18,24,30,36,42,48	31 3/16	792.5	22 15/16	583.2
60	35	889.0	26 3/4	679.7

NOTE: ALL DIMENSIONS IN INCH (MM)

U.S. ECCN: Not Subject to Regulation (N.S.R.)

Clearances

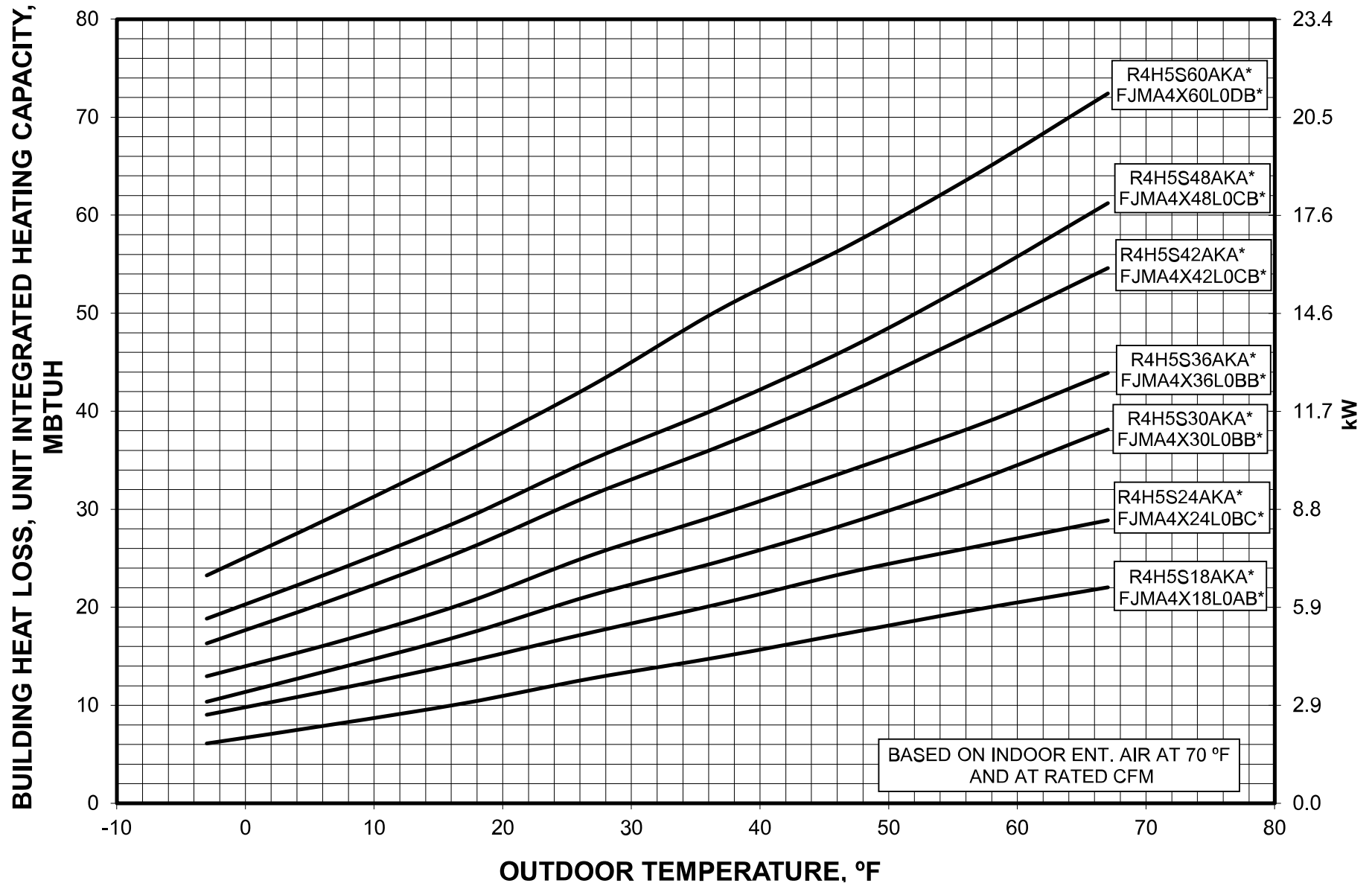


Note: Numbers in () = mm
Allow 48" above unit

IMPORTANT: When installing multiple units in an alcove, roof well, or partially enclosed area, ensure there is adequate ventilation to prevent re-circulation of discharge air.

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Balance Point Worksheet



DETAILED COOLING CAPACITIES[#]

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)																	
		75.0 (23.9)			85.0 (29.4)			95.0 (35.0)			105.0 (40.6)			115.0 (46.1)			125.0 (51.7)		
		Capacity MBtuh	Total Sys.		Capacity MBtuh	Total Sys.		Capacity MBtuh	Total Sys.		Capacity MBtuh	Total Sys.		Capacity MBtuh	Total Sys.		Capacity MBtuh	Total Sys.	
CFM	EWB	Total	Sens†	KW**	Total	Sens†	KW**	Total	Sens†	KW**	Total	Sens†	KW**	Total	Sens†	KW**	Total	Sens†	KW**
NR4H5S18AKAAA Outdoor Section With FJMA4X18L0AB* Indoor Section																			
525	72.0 (22.2)	20.65	10.58	1.15	19.67	10.21	1.30	18.65	9.83	1.47	17.57	9.44	1.65	16.37	9.00	1.87	15.06	8.54	2.11
	67.0 (19.4)	18.74	13.02	1.17	17.84	12.65	1.31	16.91	12.27	1.48	15.92	11.87	1.66	14.84	11.44	1.88	13.64	10.96	2.12
	63.0 (17.2)††	17.37	12.52	1.18	16.52	12.15	1.32	15.66	11.77	1.48	14.74	11.37	1.67	13.74	10.93	1.88	12.63	10.45	2.12
	62.0 (16.7)	17.07	15.40	1.18	16.26	15.01	1.32	15.44	14.60	1.49	14.58	14.14	1.67	13.76	13.32	1.88	12.79	12.79	2.12
	57.0 (13.9)	16.50	16.50	1.18	15.86	15.86	1.32	15.19	15.19	1.49	14.47	14.47	1.67	13.67	13.67	1.88	12.77	12.77	2.12
600	72.0 (22.2)	21.04	11.10	1.17	20.03	10.73	1.32	18.96	10.35	1.48	17.83	9.94	1.67	16.59	9.50	1.89	15.23	9.03	2.13
	67.0 (19.4)	19.10	13.87	1.18	18.17	13.49	1.33	17.20	13.10	1.50	16.17	12.69	1.68	15.05	12.24	1.90	13.81	11.75	2.14
	63.0 (17.2)††	17.71	13.31	1.19	16.84	12.93	1.34	15.94	12.54	1.50	14.99	12.13	1.69	13.95	11.68	1.90	12.80	11.18	2.14
	62.0 (16.7)	17.47	16.50	1.19	16.65	16.06	1.34	15.88	15.44	1.50	15.04	15.04	1.69	14.18	14.18	1.90	13.22	13.22	2.14
	57.0 (13.9)	17.19	17.19	1.20	16.50	16.50	1.34	15.79	15.79	1.50	15.02	15.02	1.69	14.16	14.16	1.90	13.20	13.20	2.14
675	72.0 (22.2)	21.34	11.60	1.19	20.29	11.22	1.34	19.19	10.84	1.50	18.02	10.43	1.69	16.74	9.98	1.91	15.35	9.50	2.15
	67.0 (19.4)	19.38	14.68	1.20	18.41	14.29	1.35	17.42	13.89	1.51	16.35	13.47	1.70	15.20	13.00	1.92	13.95	12.48	2.16
	63.0 (17.2)††	17.98	14.06	1.21	17.06	13.66	1.36	16.16	13.27	1.52	15.17	12.84	1.71	14.10	12.38	1.92	12.93	11.85	2.16
	62.0 (16.7)	18.01	16.88	1.21	17.22	16.30	1.36	16.30	16.30	1.52	15.48	15.48	1.71	14.58	14.58	1.92	13.56	13.56	2.16
	57.0 (13.9)	17.76	17.76	1.21	17.03	17.03	1.36	16.28	16.28	1.52	15.46	15.46	1.71	14.56	14.56	1.92	13.55	13.55	2.16
R4H5S24AKAAA Outdoor Section With FJMA4X24L0BC* Indoor Section																			
700	72.0 (22.2)	28.31	14.39	1.54	27.03	13.91	1.72	25.65	13.40	1.93	24.16	12.86	2.16	22.53	12.28	2.43	20.76	11.66	2.74
	67.0 (19.4)	25.74	17.76	1.55	24.54	17.27	1.74	23.27	16.75	1.95	21.90	16.19	2.19	20.41	15.60	2.46	18.77	14.95	2.77
	63.0 (17.2)††	23.88	17.09	1.56	22.77	16.59	1.75	21.58	16.07	1.96	20.29	15.51	2.20	18.89	14.91	2.48	17.36	14.25	2.79
	62.0 (16.7)	23.47	21.02	1.56	22.40	20.51	1.75	21.26	19.94	1.96	20.04	19.31	2.20	18.80	18.80	2.48	17.57	17.57	2.79
	57.0 (13.9)	22.69	22.69	1.57	21.83	21.83	1.75	20.91	20.91	1.96	19.89	19.89	2.20	18.78	18.78	2.48	17.54	17.54	2.79
780	72.0 (22.2)	28.73	14.96	1.56	27.41	14.48	1.74	25.98	13.96	1.95	24.45	13.41	2.18	22.77	12.82	2.45	20.96	12.19	2.75
	67.0 (19.4)	26.13	18.68	1.57	24.89	18.18	1.76	23.60	17.66	1.97	22.18	17.09	2.20	20.63	16.47	2.48	18.98	15.82	2.79
	63.0 (17.2)††	24.27	17.95	1.58	23.11	17.44	1.77	21.88	16.91	1.98	20.56	16.34	2.22	19.12	15.72	2.50	17.55	15.05	2.81
	62.0 (16.7)	23.91	22.23	1.58	22.82	21.67	1.77	21.67	21.67	1.98	20.65	19.77	2.22	19.35	19.35	2.49	18.05	18.05	2.80
	57.0 (13.9)	23.45	23.45	1.59	22.54	22.54	1.77	21.57	21.57	1.98	20.50	20.50	2.22	19.33	19.33	2.49	18.03	18.03	2.80
900	72.0 (22.2)	29.21	15.76	1.59	27.84	15.27	1.77	26.36	14.75	1.98	24.76	14.20	2.21	23.03	13.60	2.48	21.16	12.96	2.78
	67.0 (19.4)	26.57	19.99	1.60	25.30	19.49	1.79	23.96	18.95	2.00	22.50	18.36	2.23	20.90	17.72	2.50	19.21	17.03	2.81
	63.0 (17.2)††	24.75	19.19	1.61	23.51	18.65	1.80	22.24	18.11	2.01	20.86	17.51	2.25	19.38	16.87	2.53	17.78	16.16	2.84
	62.0 (16.7)	24.74	23.06	1.61	23.45	23.45	1.80	22.77	20.71	2.01	21.27	21.27	2.25	20.02	20.02	2.52	18.65	18.65	2.82
	57.0 (13.9)	24.39	24.39	1.62	23.42	23.42	1.80	22.38	22.38	2.01	21.24	21.24	2.25	20.00	20.00	2.52	18.63	18.63	2.82
R4H5S30AKAAA Outdoor Section With FJMA4X30L0BB* Indoor Section																			
875	72.0 (22.2)	33.73	17.56	1.88	32.26	17.00	2.08	30.69	16.41	2.32	29.01	15.78	2.59	27.19	15.11	2.89	25.19	14.39	3.24
	67.0 (19.4)	30.54	21.64	1.87	29.19	21.08	2.08	27.76	20.48	2.31	26.23	19.85	2.58	24.56	19.18	2.88	22.74	18.43	3.23
	63.0 (17.2)††	28.25	20.78	1.87	26.96	20.19	2.08	25.66	19.61	2.31	24.23	18.98	2.57	22.69	18.30	2.88	20.98	17.55	3.22
	62.0 (16.7)	27.76	25.61	1.87	26.55	25.01	2.08	25.30	24.37	2.31	23.96	23.64	2.57	22.77	22.23	2.88	21.24	21.24	3.22
	57.0 (13.9)	26.90	26.90	1.87	25.95	25.95	2.08	24.92	24.92	2.31	23.81	23.81	2.57	22.58	22.58	2.88	21.21	21.21	3.22
1055	72.0 (22.2)	34.62	18.81	1.93	33.05	18.23	2.14	31.39	17.63	2.37	29.62	16.98	2.64	27.70	16.29	2.95	25.60	15.55	3.29
	67.0 (19.4)	31.35	23.69	1.93	29.91	23.07	2.13	28.40	22.47	2.37	26.81	21.82	2.63	25.06	21.10	2.94	23.16	20.32	3.28
	63.0 (17.2)††	29.00	22.65	1.93	27.67	22.06	2.13	26.27	21.44	2.36	24.77	20.79	2.63	23.06	20.18	2.93	21.39	19.27	3.27
	62.0 (16.7)	28.70	28.17	1.93	27.79	26.62	2.13	26.32	26.32	2.36	25.10	25.10	2.63	23.75	23.75	2.93	22.25	22.25	3.28
	57.0 (13.9)	28.47	28.47	1.93	27.41	27.41	2.13	26.29	26.29	2.36	25.06	25.06	2.63	23.72	23.72	2.93	22.22	22.22	3.28
1125	72.0 (22.2)	34.88	19.27	1.95	33.28	18.68	2.16	31.59	18.07	2.39	29.79	17.42	2.66	27.84	16.73	2.97	25.71	15.98	3.31
	67.0 (19.4)	31.58	24.42	1.95	30.13	23.81	2.15	28.60	23.18	2.39	26.97	22.55	2.65	25.21	21.79	2.96	23.29	21.01	3.30
	63.0 (17.2)††	29.23	23.34	1.95	27.88	22.75	2.15	26.45	22.12	2.38	24.93	21.47	2.65	23.29	20.72	2.95	21.51	19.90	3.30
	62.0 (16.7)	29.35	28.17	1.95	28.20	27.21	2.15	26.76	26.76	2.38	25.50	25.50	2.65	24.11	24.11	2.95	22.57	22.57	3.30
	57.0 (13.9)	28.98	28.98	1.95	27.89	27.89	2.15	26.73	26.73	2.38	25.47	25.47	2.65	24.08	24.08	2.95	22.55	22.55	3.30

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DETAILED COOLING CAPACITIES# (Continued)

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)																	
		75.0 (23.9)			85.0 (29.4)			95.0 (35.0)			105.0 (40.6)			115.0 (46.1)			125.0 (51.7)		
CFM	EWB	Capacity MBtuh		Total Sys. KW**	Capacity MBtuh		Total Sys. KW**	Capacity MBtuh		Total Sys. KW**	Capacity MBtuh		Total Sys. KW**	Capacity MBtuh		Total Sys. KW**	Capacity MBtuh		Total Sys. KW**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
R4H5S36AKAAA Outdoor Section With FJMA4X36L0BB* Indoor Section																			
1060	72.0 (22.2)	41.65	21.37	2.29	39.73	20.65	2.56	37.70	19.88	2.81	35.53	19.08	3.10	33.22	18.24	3.46	30.74	17.34	3.94
	67.0 (19.4)	37.84	26.35	2.33	36.07	25.61	2.59	34.20	24.83	2.85	32.20	24.01	3.14	30.07	23.15	3.49	27.78	22.23	3.97
	63.0 (17.2)††	35.05	25.33	2.34	33.41	24.59	2.61	31.65	23.80	2.87	29.77	22.97	3.15	27.75	22.05	3.50	25.63	21.17	3.96
	62.0 (16.7)	34.43	31.15	2.34	32.85	30.37	2.61	31.16	29.52	2.87	29.40	28.59	3.15	27.78	26.91	3.50	25.87	25.87	3.96
	57.0 (13.9)	33.21	33.21	2.34	31.95	31.95	2.61	30.59	30.59	2.87	29.12	29.12	3.15	27.54	27.54	3.50	25.83	25.83	3.96
1200	72.0 (22.2)	42.35	22.32	2.33	40.36	21.58	2.59	38.26	20.80	2.84	36.01	19.99	3.13	33.63	19.14	3.50	31.06	18.23	3.98
	67.0 (19.4)	38.52	27.88	2.36	36.73	27.17	2.63	34.73	26.33	2.89	32.65	25.53	3.17	30.46	24.62	3.53	28.11	23.67	4.01
	63.0 (17.2)††	35.69	26.76	2.38	33.97	25.98	2.65	32.15	25.22	2.91	30.21	24.37	3.19	28.15	23.46	3.54	25.95	22.50	4.01
	62.0 (16.7)	35.17	33.16	2.38	33.55	32.30	2.65	31.96	31.04	2.91	30.19	30.19	3.19	28.50	28.50	3.54	26.68	26.68	4.01
	57.0 (13.9)	34.46	34.46	2.38	33.13	33.13	2.65	31.69	31.69	2.91	30.14	30.14	3.19	28.46	28.46	3.54	26.65	26.65	4.01
1350	72.0 (22.2)	42.92	23.27	2.36	40.87	22.52	2.62	38.70	21.74	2.88	36.39	20.92	3.17	33.94	20.05	3.54	31.31	19.13	4.02
	67.0 (19.4)	39.04	29.46	2.41	37.15	28.70	2.67	35.15	27.89	2.93	33.03	27.01	3.22	30.77	26.12	3.58	28.38	25.12	4.05
	63.0 (17.2)††	36.22	28.22	2.42	34.43	27.45	2.69	32.38	26.55	2.95	30.58	25.76	3.23	28.47	24.83	3.59	26.23	23.82	4.06
	62.0 (16.7)	35.86	35.05	2.42	34.24	34.24	2.69	32.73	32.73	2.95	31.07	31.07	3.23	29.31	29.31	3.59	27.40	27.40	4.06
	57.0 (13.9)	35.60	35.60	2.43	34.18	34.18	2.69	32.67	32.67	2.95	31.03	31.03	3.23	29.28	29.28	3.59	27.37	27.37	4.06
R4H5S42AKAAA Outdoor Section With FJMA4X42L0CB* Indoor Section																			
1240	72.0 (22.2)	48.60	25.34	2.78	46.33	24.47	3.05	43.92	23.55	3.35	41.35	22.59	3.69	38.56	21.56	4.08	35.57	20.47	4.51
	67.0 (19.4)	44.20	31.29	2.76	42.16	30.41	3.03	40.00	29.52	3.33	37.66	28.55	3.68	35.14	27.51	4.06	32.42	26.39	4.50
	63.0 (17.2)††	41.02	30.12	2.75	39.13	29.25	3.02	37.13	28.33	3.32	34.97	27.38	3.66	32.64	26.34	4.05	30.10	25.20	4.49
	62.0 (16.7)	40.34	37.05	2.75	38.51	36.14	3.02	36.60	35.16	3.32	34.57	34.05	3.66	32.61	32.17	4.05	30.38	30.38	4.49
	57.0 (13.9)	38.95	38.95	2.74	37.50	37.50	3.01	35.95	35.95	3.32	34.26	34.26	3.66	32.39	32.39	4.05	30.33	30.33	4.49
1400	72.0 (22.2)	49.37	26.42	2.83	47.01	25.53	3.10	44.51	24.60	3.40	41.83	23.62	3.74	38.96	22.57	4.13	35.87	21.47	4.56
	67.0 (19.4)	44.94	33.07	2.81	42.80	32.18	3.08	40.60	31.27	3.38	38.15	30.26	3.73	35.54	29.19	4.11	32.74	28.03	4.55
	63.0 (17.2)††	41.72	31.77	2.80	39.75	30.88	3.07	37.67	29.95	3.37	35.43	28.96	3.71	33.03	27.90	4.10	30.43	26.73	4.54
	62.0 (16.7)	41.00	39.25	2.80	39.28	38.36	3.07	37.60	36.44	3.37	35.39	35.39	3.71	33.41	33.41	4.10	31.22	31.22	4.54
	57.0 (13.9)	40.36	40.36	2.80	38.81	38.81	3.07	37.15	37.15	3.37	35.34	35.34	3.71	33.37	33.37	4.10	31.19	31.19	4.54
1575	72.0 (22.2)	50.01	27.54	2.88	47.56	26.63	3.15	44.97	25.69	3.46	42.22	24.69	3.80	39.26	23.63	4.18	36.09	22.51	4.61
	67.0 (19.4)	45.54	34.92	2.87	43.33	34.01	3.14	41.02	33.06	3.44	38.53	32.03	3.78	35.87	30.93	4.17	33.00	29.72	4.60
	63.0 (17.2)††	42.31	33.47	2.85	40.28	32.57	3.12	38.12	31.59	3.43	35.82	30.60	3.77	33.37	29.48	4.16	30.70	28.27	4.59
	62.0 (16.7)	41.94	41.55	2.85	40.30	39.64	3.12	38.33	38.33	3.43	36.38	36.38	3.77	34.28	34.28	4.16	31.98	31.98	4.60
	57.0 (13.9)	41.64	41.64	2.85	39.99	39.99	3.12	38.25	38.25	3.43	36.34	36.34	3.77	34.24	34.24	4.16	31.94	31.94	4.60
R4H5S48AKAAA Outdoor Section With FJMA4X48L0CB* Indoor Section																			
1390	72.0 (22.2)	55.87	29.05	3.15	53.35	28.08	3.48	50.68	27.07	3.86	47.80	25.99	4.28	44.69	24.83	4.76	41.32	23.59	5.29
	67.0 (19.4)	50.74	35.74	3.13	48.44	34.76	3.46	46.00	33.74	3.83	43.37	32.65	4.26	40.53	31.47	4.73	37.44	30.21	5.26
	63.0 (17.2)††	47.01	34.36	3.12	44.90	33.40	3.44	42.63	32.38	3.82	40.19	31.29	4.24	37.55	30.11	4.71	34.66	28.84	5.24
	62.0 (16.7)	46.17	42.21	3.11	44.12	41.22	3.44	41.95	40.14	3.81	39.64	38.93	4.24	37.50	36.67	4.71	34.86	34.86	5.24
	57.0 (13.9)	44.48	44.48	3.11	42.87	42.87	3.44	41.13	41.13	3.81	39.23	39.23	4.23	37.13	37.13	4.71	34.81	34.81	5.24
1600	72.0 (22.2)	56.99	30.56	3.21	54.35	29.56	3.55	51.56	28.52	3.92	48.55	27.43	4.35	45.33	26.24	4.83	41.84	24.99	5.36
	67.0 (19.4)	51.78	38.17	3.19	49.37	37.17	3.52	46.82	36.12	3.90	44.08	35.00	4.32	41.13	33.79	4.80	37.95	32.49	5.33
	63.0 (17.2)††	48.01	36.63	3.18	45.82	35.65	3.51	43.42	34.59	3.88	40.88	33.47	4.30	38.13	32.24	4.78	35.16	30.94	5.31
	62.0 (16.7)	47.29	45.42	3.18	45.22	44.28	3.51	43.24	42.39	3.88	40.84	40.84	4.30	38.59	38.59	4.78	36.10	36.10	5.31
	57.0 (13.9)	46.44	46.44	3.18	44.70	44.70	3.50	42.83	42.83	3.88	40.79	40.79	4.30	38.54	38.54	4.78	36.06	36.06	5.31
1800	72.0 (22.2)	57.79	31.89	3.27	55.06	30.89	3.61	52.17	29.83	3.98	49.08	28.72	4.41	45.76	27.53	4.89	42.17	26.26	5.42
	67.0 (19.4)	52.53	40.36	3.25	50.03	39.35	3.58	47.40	38.28	3.96	44.59	37.12	4.38	41.55	35.87	4.86	38.31	34.52	5.39
	63.0 (17.2)††	48.72	38.67	3.24	46.43	37.63	3.57	43.99	36.58	3.94	41.37	35.40	4.36	38.58	34.17	4.84	35.52	32.79	5.37
	62.0 (16.7)	48.29	48.07	3.24	46.68	45.27	3.57	44.21	44.21	3.94	42.05	42.05	4.37	39.67	39.67	4.85	37.07	37.07	5.38
	57.0 (13.9)	47.99	47.99	3.24	46.14	46.14	3.57	44.16	44.16	3.94	42.00	42.00	4.37	39.63	39.63	4.85	37.02	37.02	5.38

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DETAILED COOLING CAPACITIES# (Continued)

EVAPORATOR AIR		CONDENSER ENTERING AIR TEMPERATURES °F (°C)																	
		75.0 (23.9)			85.0 (29.4)			95.0 (35.0)			105.0 (40.6)			115.0 (46.1)			125.0 (51.7)		
CFM	EWB	Capacity MBtuh	Total Sys.	KW**	Capacity MBtuh	Total Sys.	KW**	Capacity MBtuh	Total Sys.	KW**	Capacity MBtuh	Total Sys.	KW**	Capacity MBtuh	Total Sys.	KW**	Capacity MBtuh	Total Sys.	KW**
		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡		Total	Sens‡	
R4H5S60AKAAA Outdoor Section With FJMA4X60L0DB* Indoor Section																			
1735	72.0 (22.2)	69.21	35.68	3.92	66.03	34.48	4.31	62.63	33.22	4.77	58.98	31.87	5.29	55.00	30.43	5.89	50.73	28.90	6.55
	67.0 (19.4)	62.99	44.15	3.91	60.07	42.92	4.30	57.00	41.66	4.75	53.67	40.30	5.27	50.05	38.84	5.86	46.13	37.27	6.53
	63.0 (17.2)††	58.43	42.45	3.90	55.76	41.25	4.28	52.91	40.00	4.73	49.85	38.64	5.25	46.50	37.19	5.84	42.85	35.62	6.51
	62.0 (16.7)	57.37	52.31	3.90	54.80	51.06	4.28	52.09	49.70	4.73	49.36	47.68	5.25	46.28	46.28	5.84	43.28	43.28	6.51
	57.0 (13.9)	55.54	55.54	3.89	53.50	53.50	4.27	51.30	51.30	4.73	48.88	48.88	5.25	46.20	46.20	5.84	43.22	43.22	6.51
2000	72.0 (22.2)	70.52	37.55	4.00	67.19	36.32	4.40	63.64	35.03	4.85	59.83	33.66	5.38	55.71	32.20	5.98	51.29	30.64	6.64
	67.0 (19.4)	64.19	47.18	3.99	61.17	45.94	4.38	57.94	44.65	4.84	54.48	43.24	5.36	50.73	41.74	5.95	46.68	40.11	6.62
	63.0 (17.2)††	59.61	45.29	3.98	56.81	44.07	4.37	53.84	42.78	4.82	50.65	41.37	5.34	47.16	39.87	5.93	43.39	38.24	6.59
	62.0 (16.7)	58.76	56.28	3.98	56.13	54.83	4.37	53.44	53.44	4.82	50.82	50.82	5.34	47.92	47.92	5.94	44.75	44.75	6.60
	57.0 (13.9)	57.95	57.95	3.98	55.74	55.74	4.37	53.36	53.36	4.82	50.75	50.75	5.34	47.87	47.87	5.94	44.69	44.69	6.60
2250	72.0 (22.2)	71.43	39.21	4.08	67.99	37.97	4.47	64.32	36.66	4.93	60.40	35.27	5.46	56.16	33.79	6.06	51.64	32.22	6.72
	67.0 (19.4)	65.05	49.92	4.07	61.91	48.66	4.46	58.63	47.34	4.92	55.03	45.88	5.44	51.19	44.33	6.03	47.06	42.63	6.70
	63.0 (17.2)††	60.45	47.82	4.06	57.55	46.58	4.45	54.50	45.24	4.90	51.19	43.81	5.42	47.62	42.24	6.01	43.78	40.51	6.68
	62.0 (16.7)	59.93	59.93	4.06	57.98	55.94	4.45	55.01	55.01	4.90	52.24	52.24	5.43	49.20	49.20	6.02	45.85	45.85	6.69
	57.0 (13.9)	59.82	59.82	4.06	57.47	57.47	4.45	54.95	54.95	4.90	52.18	52.18	5.43	49.15	49.15	6.02	45.80	45.80	6.69

#Detailed cooling capacities are based on indoor and outdoor unit at the same elevation per AHRI standard 210/240-2008. If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.

‡Sensible capacities shown are based on 80°F (27°C) entering air at the indoor coil. For sensible capacities at other than 80°F (27°C), deduct 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree below 80°F (27°C), or add 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air per degree above 80°F (27°C).

**Total System. kw is total of indoor and outdoor unit kilowatts.

††At TVA rating indoor condition (75°F edb/63°F ewb). All other indoor air temperatures are at 80°F edb.

NOTE: When the required data falls between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.

EWB — Entering Wet Bulb1

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HEAT PUMP HEATING PERFORMANCE

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)																							
		-3.0 (-19.4)		7.0 (-13.9)		17.0 (-8.3)		27.0 (-2.8)		37.0 (2.8)		47.0 (8.3)		57.0 (13.9)		67.0 (19.4)									
EDB	CFM	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†			
		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*							
R4H5S18AKAAA Outdoor Section With FJMA4X18L0AB* Indoor Section																									
65.0 (18.3)	525	6.31	5.80	1.06	8.24	7.57	1.12	10.33	9.42	1.18	12.82	11.39	1.25	14.99	13.64	1.32	17.43	17.43	1.39	19.89	19.89	1.46	22.25	22.25	1.53
	600	6.44	5.92	1.07	8.39	7.71	1.13	10.49	9.57	1.18	12.98	11.53	1.24	15.17	13.81	1.30	17.65	17.65	1.37	20.05	20.05	1.42	22.35	22.35	1.49
	675	6.56	6.03	1.09	8.52	7.83	1.14	10.64	9.70	1.19	13.11	11.65	1.24	15.33	13.95	1.29	17.84	17.84	1.35	20.16	20.16	1.40	22.39	22.39	1.46
70.0 (21.1)	525	5.98	5.50	1.11	7.94	7.30	1.17	10.04	9.15	1.24	12.60	11.19	1.31	14.79	13.46	1.38	17.18	17.18	1.46	19.51	19.51	1.53	21.99	21.99	1.61
	600	6.10	5.61	1.12	8.08	7.42	1.18	10.20	9.30	1.24	12.76	11.33	1.30	14.96	13.61	1.36	17.40	17.40	1.43	19.80	19.80	1.50	22.01	22.01	1.57
	675	6.21	5.71	1.13	8.21	7.54	1.18	10.34	9.43	1.24	12.90	11.46	1.30	15.11	13.75	1.35	17.59	17.59	1.42	19.93	19.93	1.47	22.16	22.16	1.53
75.0 (23.9)	525	5.66	5.21	1.15	7.64	7.02	1.22	9.76	8.90	1.29	12.12	10.77	1.36	14.59	13.28	1.45	16.93	16.93	1.53	19.52	19.52	1.61	21.74	21.74	1.69
	600	5.77	5.31	1.16	7.78	7.15	1.23	9.91	9.04	1.29	12.36	10.98	1.36	14.75	13.42	1.43	17.15	17.15	1.50	19.69	19.69	1.57	21.85	21.85	1.64
	675	5.88	5.41	1.18	7.90	7.26	1.24	10.05	9.16	1.29	12.68	11.26	1.36	14.90	13.56	1.42	17.33	17.33	1.49	19.79	19.79	1.55	21.89	21.89	1.61
R4H5S24AKAAA Outdoor Section With FJMA4X24L0BC* Indoor Section																									
65.0 (18.3)	700	9.25	8.51	1.46	11.80	10.84	1.51	14.65	13.36	1.57	17.55	15.59	1.64	20.48	18.64	1.70	23.72	23.72	1.76	26.48	26.48	1.81	29.22	29.22	1.87
	780	9.37	8.62	1.47	11.95	10.98	1.51	15.04	13.71	1.58	17.71	15.73	1.62	20.68	18.82	1.68	23.86	23.86	1.73	26.51	26.51	1.78	29.14	29.14	1.83
	900	9.54	8.77	1.49	12.15	11.16	1.52	15.24	13.90	1.58	17.92	15.92	1.62	20.93	19.05	1.67	23.93	23.93	1.71	26.50	26.50	1.75	28.95	28.95	1.79
70.0 (21.1)	700	8.92	8.20	1.52	11.47	10.54	1.58	14.22	12.97	1.64	17.33	15.39	1.72	20.20	18.38	1.78	23.45	23.45	1.85	26.22	26.22	1.90	28.63	28.63	1.96
	780	9.04	8.31	1.54	11.62	10.68	1.58	14.40	13.13	1.64	17.48	15.53	1.71	20.40	18.56	1.76	23.60	23.60	1.82	26.26	26.26	1.87	28.88	28.88	1.92
	900	9.21	8.47	1.55	11.81	10.85	1.59	14.66	13.37	1.64	17.69	15.71	1.70	20.65	18.79	1.75	23.86	23.86	1.79	26.27	26.27	1.83	28.80	28.80	1.87
75.0 (23.9)	700	8.57	7.88	1.59	11.12	10.22	1.65	13.86	12.64	1.71	17.09	15.18	1.81	19.92	18.13	1.87	23.12	23.12	1.95	25.95	25.95	2.00	28.41	28.41	2.05
	780	8.69	7.99	1.60	11.27	10.36	1.65	14.03	12.79	1.71	17.25	15.32	1.79	20.11	18.30	1.85	23.32	23.32	1.92	26.00	26.00	1.96	28.60	28.60	2.01
	900	8.86	8.15	1.62	11.47	10.54	1.67	14.26	13.00	1.72	17.45	15.50	1.78	20.36	18.53	1.84	23.49	23.49	1.88	26.03	26.03	1.93	28.48	28.48	1.97
R4H5S30AKAAA Outdoor Section With FJMA4X30L0BB* Indoor Section																									
65.0 (18.3)	875	10.57	9.72	1.64	13.85	12.73	1.72	17.28	15.76	1.79	21.23	18.86	1.89	24.67	22.45	1.96	28.51	28.51	2.04	32.89	32.89	2.15	38.06	38.06	2.28
	1055	10.85	9.98	1.67	14.18	13.03	1.74	17.66	16.10	1.81	21.56	19.15	1.88	25.07	22.81	1.94	29.01	29.01	2.01	33.55	33.55	2.11	38.62	38.62	2.20
	1125	10.95	10.07	1.68	14.29	13.13	1.75	17.79	16.22	1.81	21.68	19.26	1.89	25.21	22.94	1.94	29.17	29.17	2.01	33.76	33.76	2.10	38.73	38.73	2.19
70.0 (21.1)	875	10.08	9.27	1.70	13.39	12.30	1.79	16.83	15.35	1.87	20.92	18.58	1.97	24.34	22.15	2.05	28.12	28.12	2.14	32.38	32.38	2.25	37.46	37.46	2.39
	1055	10.37	9.54	1.73	13.72	12.61	1.81	17.20	15.68	1.88	21.26	18.89	1.97	24.73	22.50	2.03	28.60	28.60	2.11	33.02	33.02	2.20	38.12	38.12	2.30
	1125	10.47	9.63	1.75	13.83	12.71	1.82	17.33	15.80	1.89	21.39	19.00	1.97	24.86	22.62	2.03	28.76	28.76	2.10	33.23	33.23	2.20	38.25	38.25	2.29
75.0 (23.9)	875	9.59	8.82	1.76	12.92	11.87	1.86	16.38	14.94	1.95	20.21	17.95	2.04	24.00	21.84	2.14	27.72	27.72	2.24	31.88	31.88	2.35	36.84	36.84	2.51
	1055	9.87	9.08	1.80	13.24	12.17	1.88	16.75	15.27	1.96	20.93	18.59	2.05	24.39	22.20	2.12	28.20	28.20	2.20	32.50	32.50	2.30	37.59	37.59	2.41
	1125	9.96	9.16	1.81	13.35	12.27	1.89	16.87	15.38	1.97	21.05	18.70	2.06	24.52	22.31	2.12	28.36	28.36	2.20	32.70	32.70	2.30	37.75	37.75	2.39
R4H5S36AKAAA Outdoor Section With FJMA4X36L0BB* Indoor Section																									
65.0 (18.3)	1060	13.57	12.48	2.18	17.01	15.63	2.19	21.01	19.16	2.26	25.84	22.95	2.39	30.04	27.34	2.49	34.58	34.58	2.60	39.39	39.39	2.69	44.72	44.72	2.78
	1200	13.82	12.71	2.20	17.30	15.90	2.20	21.35	19.47	2.27	26.14	23.22	2.38	30.41	27.67	2.48	35.06	35.06	2.58	39.98	39.98	2.67	45.47	45.47	2.74
	1350	14.06	12.93	2.23	17.57	16.14	2.22	21.65	19.74	2.28	26.43	23.48	2.39	30.76	27.99	2.48	35.49	35.49	2.57	40.51	40.51	2.65	46.11	46.11	2.71
70.0 (21.1)	1060	12.97	11.93	2.28	16.42	15.09	2.29	20.40	18.60	2.35	25.37	22.54	2.48	29.53	26.87	2.59	34.00	34.00	2.69	38.63	38.63	2.79	43.93	43.93	2.89
	1200	13.24	12.18	2.31	16.72	15.36	2.31	20.74	18.91	2.37	25.71	22.84	2.48	29.91	27.22	2.58	34.47	34.47	2.68	39.26	39.26	2.76	44.65	44.65	2.85
	1350	13.47	12.39	2.34	16.99	15.61	2.33	21.06	19.20	2.39	26.01	23.10	2.49	30.27	27.55	2.58	34.90	34.90	2.67	39.81	39.81	2.75	45.29	45.29	2.82
75.0 (23.9)	1060	12.31	11.32	2.36	15.76	14.48	2.37	19.74	18.00	2.44	24.24	21.53	2.55	29.02	26.41	2.68	33.42	33.42	2.79	37.92	37.92	2.90	43.17	43.17	3.01
	1200	12.56	11.55	2.39	16.05	14.75	2.39	20.08	18.31	2.45	24.77	22.00	2.56	29.40	26.75	2.67	33.88	33.88	2.78	38.68	38.68	2.88	43.86	43.86	2.96
	1350	12.81	11.78	2.43	16.34	15.01	2.42	20.40	18.60	2.47	25.51	22.66	2.59	29.74	27.06	2.68	34.30	34.30	2.77	39.06	39.06	2.86	44.47	44.47	2.93
R4H5S42AKAAA Outdoor Section With FJMA4X42L0CB* Indoor Section																									
65.0 (18.3)	1240	16.99	15.63	2.54	21.52	19.77	2.66	26.48	24.15	2.78	31.94	28.37	2.92	36.98	33.65	3.05	42.60	42.60	3.19	48.96	48.96	3.38	55.33	55.33	3.53
	1400	17.30	15.91	2.57	21.85	20.08	2.68	26.93	24.56	2.79	32.29	28.68	2.92	37.43	34.06	3.03	43.09	43.09	3.16	49.58	49.58	3.32	55.68	55.68	3.47
	1575	17.60	16.19	2.61	22.18	20.38	2.70	27.39	24.98	2.81	32.63	28.99	2.92	37.82	34.42	3.03	43.57	43.57	3.15	50.05	50.05	3.29	56.08	56.08	3.43
70.0 (21.1)	1240	16.32	15.01	2.64	20.86	19.17	2.76	25.80	23.53	2.89	31.50	27.98	3.05	36.49	33.21	3.17	42.00	42.00	3.33	48.21	48.21	3.52	54.61	54.61	3.68
	1400	16.61	15.28	2.67	21.21	19.49	2.78	26.19	23.88	2.90	31.84	28.28	3.04	36.90	33.58	3.16	42.66	42.66	3.30	48.84	48.84	3.46	55.06	55.06	3.61
	1575	16.91	15.55	2.70	21.53	19.78	2.80	26.56	24.22	2.91	32.19	28.59	3.05	37.29	33.93	3.15	42.96	42.96	3.28	49.37	49.37	3.42	55.39	55.39	3.57
75.0 (23.9)	1240	15.58	14.33	2.73	20.17	18.53	2.86	25.12	22.91	3.00	31.06	27.59	3.18	35.99	32.75	3.31	41.41	41.41	3.47	47.45	47.45	3.67	53.91	53.91	3.83
	1400	15.88	14.60	2.76	20.52	18.85	2.88	25.50	23.25	3.01	31.40	27.89	3.17	36.38	33.11	3.29	41.89	41.89	3.43	48.08	48.08	3.61	54.36	54.36	3.76
	1575	16.17	14.87	2.80	20.84	19.15	2.91	25.86	23.58	3.02	31.74	28.19	3.17	36.63	33.33	3.28	42.35	42.35	3.42	48.64	48.64	3.57	54.67	54	

HEAT PUMP HEATING PERFORMANCE (Continued)

INDOOR AIR		OUTDOOR COIL ENTERING AIR TEMPERATURES °F (°C)																							
		-3.0 (-19.4)			7.0 (-13.9)			17.0 (-8.3)			27.0 (-2.8)			37.0 (2.8)			47.0 (8.3)			57.0 (13.9)			67.0 (19.4)		
		Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†	Capacity MBtuh		Total Sys. KW†
Total	Integ*	Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*		Total	Integ*	
R4H5S48AKAAA Outdoor Section With FJMA4X48L0CB* Indoor Section																									
65.0 (18.3)	1390	19.57	18.00	2.85	24.39	22.41	2.96	29.74	27.12	3.07	35.56	31.59	3.20	41.01	37.32	3.31	47.17	47.17	3.45	54.37	54.37	3.63	62.01	62.01	3.78
	1600	19.94	18.34	2.88	24.80	22.79	2.97	30.31	27.64	3.08	35.98	31.96	3.19	41.51	37.78	3.29	47.81	47.81	3.41	55.19	55.19	3.56	62.47	62.47	3.68
	1800	20.25	18.62	2.91	25.15	23.11	3.00	31.02	28.29	3.11	36.32	32.26	3.20	41.92	38.15	3.28	48.32	48.32	3.39	55.75	55.75	3.51	62.68	62.68	3.63
70.0 (21.1)	1390	18.83	17.32	2.96	23.72	21.79	3.08	29.00	26.44	3.19	35.11	31.19	3.35	40.48	36.84	3.46	46.50	46.50	3.61	53.55	53.55	3.79	61.23	61.23	3.95
	1600	19.20	17.66	2.99	24.11	22.15	3.10	29.46	26.86	3.20	35.51	31.54	3.34	40.96	37.27	3.44	47.13	47.13	3.56	54.36	54.36	3.73	61.68	61.68	3.85
	1800	19.51	17.94	3.03	24.45	22.47	3.12	29.87	27.24	3.22	35.87	31.86	3.34	41.37	37.65	3.43	47.63	47.63	3.54	54.97	54.97	3.67	61.95	61.95	3.79
75.0 (23.9)	1390	18.07	16.62	3.08	23.00	21.13	3.20	28.29	25.80	3.33	34.68	30.81	3.50	39.98	36.38	3.62	45.84	45.84	3.77	52.73	52.73	3.96	60.36	60.36	4.12
	1600	18.43	16.95	3.11	23.40	21.50	3.22	28.75	26.22	3.34	35.07	31.15	3.49	40.45	36.81	3.59	46.45	46.45	3.72	53.53	53.53	3.89	60.89	60.89	4.02
	1800	18.74	17.23	3.14	23.74	21.81	3.25	29.13	26.56	3.35	35.43	31.47	3.49	40.85	37.17	3.58	46.95	46.95	3.70	54.15	54.15	3.84	61.18	61.18	3.96
R4H5S60AKAA Outdoor Section With FJMA4X60L0DB* Indoor Section																									
65.0 (18.3)	1735	24.41	22.45	3.46	30.46	27.99	3.55	36.84	33.59	3.66	43.94	39.03	3.80	51.13	46.53	3.97	57.77	57.77	4.12	65.36	65.36	4.31	73.43	73.43	4.46
	2000	24.94	22.94	3.51	31.05	28.53	3.59	37.49	34.18	3.68	45.49	40.41	3.84	51.78	47.12	3.95	58.57	58.57	4.09	66.39	66.39	4.25	74.12	74.12	4.37
	2250	25.38	23.34	3.57	31.53	28.97	3.63	38.04	34.69	3.72	45.99	40.85	3.86	52.40	47.69	3.96	59.21	59.21	4.08	67.22	67.22	4.22	74.60	74.60	4.32
70.0 (21.1)	1735	23.25	21.38	3.59	29.39	27.00	3.68	35.80	32.64	3.80	42.69	37.92	3.95	50.48	45.94	4.14	57.00	57.00	4.31	64.36	64.36	4.50	72.44	72.44	4.66
	2000	23.77	21.86	3.64	29.96	27.53	3.72	36.45	33.24	3.83	43.52	38.66	3.96	51.26	46.65	4.13	57.74	57.74	4.26	65.36	65.36	4.44	73.17	73.17	4.56
	2250	24.21	22.27	3.70	30.44	27.97	3.77	36.98	33.72	3.86	44.15	39.22	3.98	51.61	46.97	4.13	58.36	58.36	4.25	66.17	66.17	4.40	73.65	73.65	4.51
75.0 (23.9)	1735	22.05	20.28	3.72	28.28	25.98	3.82	34.75	31.69	3.95	41.62	36.97	4.11	49.79	45.31	4.33	56.23	56.23	4.50	63.37	63.37	4.70	71.41	71.41	4.87
	2000	22.56	20.75	3.77	28.85	26.51	3.86	35.38	32.26	3.98	42.37	37.64	4.11	50.41	45.87	4.31	56.98	56.98	4.45	64.35	64.35	4.63	72.18	72.18	4.76
	2250	22.99	21.14	3.83	29.32	26.94	3.91	35.92	32.75	4.01	42.96	38.16	4.13	50.91	46.33	4.31	57.48	57.48	4.44	65.12	65.12	4.60	72.65	72.65	4.70

NOTE: When the required data falls between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.
* The Btuh heating capacity values shown are net integrated values from which the defrost effect has been subtracted. The Btuh heating from supplement heaters should be added to those values to obtain total Sys. capacity.
† The kW values include the compressor, outdoor fan motor, and indoor blower motor. The kW from supplement heaters should be added to these values to obtain total Sys. kilowatts.
EDB — Entering Dry Bulb2

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

Guide Specifications

General

Air-Cooled, Split-System Heat Pump

R4H5S

1-1/2 to 5 nominal tons

System Description

Outdoor-mounted, air-cooled, split-system heat pump unit suitable for ground or rooftop installation. Unit consists of a hermetic compressor, an air-cooled coil, propeller-type condenser fan, and a control box. Unit will discharge supply air upward as shown on contract drawings. Unit will be used in a refrigeration circuit to match up to a packaged fan coil or coil unit.

Quality Assurance

- Unit will be rated in accordance with the latest edition of AHRI Standard 210/240.
- Unit will be certified for capacity and efficiency, and listed in the latest AHRI directory.
- Unit construction will comply with latest edition of ANSI/ASHRAE and with NEC.
- Unit will be constructed in accordance with UL standards and will carry the UL label of approval. Unit will have C-UL approval.
- Unit cabinet will be capable of withstanding Federal Test Method Standard No. 141 (Method 6061) 500-hr salt spray test.
- Air-cooled condenser coils are pressure tested and the outdoor unit is leak tested.
- Unit constructed in ISO9001 approved facility.

Delivery, Storage, and Handling

Unit will be shipped as single package only and is stored and handled per unit manufacturer's recommendations.

Warranty (for inclusion by specifying engineer)

U.S. and Canada only.

PRODUCTS

Equipment

Factory assembled, single piece, air-cooled heat pump unit. Contained within the unit enclosure is all factory wiring, piping, controls, compressor, refrigerant charge R-410A, and special features required prior to field start-up.

Unit Cabinet

Available with dense grille only.

Fans

Condenser fan will be direct-drive propeller type, discharging air upward.

Condenser fan motors will be totally enclosed, 1-phase type with class B insulation and permanently lubricated bearings.

Shafts will be corrosion resistant.

Fan blades will be statically and dynamically balanced.

Condenser fan openings will be equipped with steel wire safety guards.

Compressor

Compressor will be hermetically sealed.

Compressor will be mounted on rubber vibration isolators.

Condenser Coil

Condenser coil will be air cooled.

Coil will be constructed of aluminum fins mechanically bonded to copper or aluminum tubes which are then cleaned, dehydrated, and sealed.

Refrigeration Components

Refrigeration circuit components will include liquid-line shutoff valve with sweat connections, vapor-line shutoff valve with sweat connections, system charge of R-410A refrigerant, POE compressor oil, accumulator, and reversing valve.

Operating Characteristics

The capacity of the unit will meet or exceed _____ Btuh at a suction temperature of _____ °F/°C. The power consumption at full load will not exceed _____ kW.

Combination of the unit and the evaporator or fan coil unit will have a total net cooling capacity of _____ Btuh or greater at conditions of _____ CFM entering air temperature at the evaporator at _____ °F wet bulb and _____ °F/°C dry bulb, and air entering the unit at _____ °F/°C.

The system will have a SEER of _____ Btuh/watt or greater at DOE conditions.

Electrical Requirements

Nominal unit electrical characteristics will be _____ v, single phase, 60 hz. The unit will be capable of satisfactory operation within voltage limits of _____ v to _____ v.

Unit electrical power will be single point connection.

Control circuit will be 24v.

Special Features

Refer to section of this literature identifying accessories and descriptions for specific features and available enhancements.

System Design Summary

1. Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01-in. wc.
2. Minimum outdoor operating air temperature without low-ambient operation accessory is 55°F (12.8°C).
3. Maximum outdoor operating air temperature for cooling mode is 125°F (51.7°C).
4. Minimum outdoor operating air temperature for heating mode is –10°F (–23.3°C).
5. Maximum outdoor operating air temperature for heating mode is 66°F (18.9°C).
6. For reliable operation, unit should be level in all horizontal planes.
7. For interconnecting refrigerant tube lengths greater than 80 ft (23.4 m) and/or elevation differences between indoor and outdoor units greater than 20 ft (6.1 m), consult Residential Piping and Longline Guideline and Service Manual available from equipment distributor.
8. If any refrigerant tubing is buried, provide a 6 in. (152.4 mm) vertical rise to the valve connections at the unit. Refrigerant tubing lengths up to 36 in. (914.4 mm) may be buried without further consideration. Do not bury refrigerant lines longer than 36 in. (914.4 mm).
9. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
10. Do not apply capillary tube indoor coils to these units.
11. Factory-supplied filter drier must be installed

Product Data



A200369

AIR HANDLER TECHNOLOGY AT ITS FINEST

The FJM fan coil has the proven technology of ICP fan coil units with R-410A refrigerant as well as vertical and horizontal applications. The design features contoured condensate pans with rugged drain connections, ensuring that little water is left in the unit at the end of the cooling duty cycle. The lack of standing condensate and corrosion free pans improves IAQ and product life, features homeowners appreciate.

Standard features include grooved tubing and louvered fins. Coil circuiting has also been updated to make the most of all ICP heat pumps and air conditioners. Units come with solid state fan controls, 1-inch (25mm) thick insulation with R-value of 4.2, multi-speed motors, and fully-wettable coils. Units can accommodate factory- and/or field-installed heaters from 3 to 30 kW.

Assembled at the factory compliant with low leak requirements of less than 2% cabinet leakage rate at 0.5 inches W.C. and 1.4% cabinet leakage rate at 0.5 inches W.C. when tested in accordance with ASHRAE 193 standard.

The FJM fan coil design is loaded with popular features. These fan coils utilize the latest in electronic commutation motor (ECM) technology through the use of high efficiency, multi-tap ECM motors allowing reliable air delivery with increased static pressure. It comes in a pre-painted (taupe metallic) galvanized steel casing and a factory-supplied power plug for ease of installation. The unit is shipped with a R-410A refrigerant TXV (sizes 18–60).

STANDARD FEATURES

- Multi-tap ECM (electronic commutating motor) motors – all sizes
- Integrated motor controls, with 90-sec off TDR function, have replaced integrated circuit board.
- Five available speed tags to meet a wide range of applications
- Large, grooved tube, louvered fin coils
- Efficient, quiet, time-tested blower housings and diffusers
- Sturdy, drainable condensate pans
- Cabinet construction features innovations designed to prevent cabinet sweating.
- Tested for condensate disposal in much tougher conditions than Air Conditioning and Refrigeration Institute requirements.
- Super-thick R-4.2 insulation with vapor barrier
- Pre-painted galvanized steel cabinet (taupe metallic)
- Design meets stringent regulations for cabinet air leakage of less than 2% when tested at 0.5 inches W.C., and cabinet air leakage less than 1.4% at 0.5 inches W.C. when tested in accordance with ASHRAE 193 standard.
- Installation-flexible, multipoise units
- Horizontal hanging provisions on cabinet
- No tools required to access filter.
- Newly improved filter rack area filter door insulation added for improved air seal.
- Factory-installed heater packages available on select models (5 through 15 kW).
- 3 through 30 kW accessory heaters - field installed
- Factory-supplied power plug
- Easy plug-in provisions for heater installation.
- Entry options for high and low voltage wiring hook-up.
- Leak-preventing sweat connections
- Thermostatic expansion valve, TXV, on all coils
- Designed for manufactured housing applications.

MODEL NUMBER NOMENCLATURE

	1	2	3	4	5	6	7	8	9	10	11	12	
	F	J	M	A	4	X	1	8	L	0	B	B	
Product F = Fan Coil													Series Code
Type J = ECM 5-speed													Cabinet Width A = 14" B = 17" C = 21" D = 24"
Position M = Multipoise													
Series A													Coil Type L = Aluminum
Refrigerant 4 = R410A													
Metering Device X = TXV													
													Capacity 18 = 18,000 24 = 24,000 30 = 30,000 36 = 36,000 42 = 42,000 48 = 48,000 60 = 60,000



Use of the AHRI Certified TM Mark indicates a manufacturer's participation in the program. For verification of certification for individual products, go to www.ahridirectory.org.



ISO 9001
QMI-SAI Global

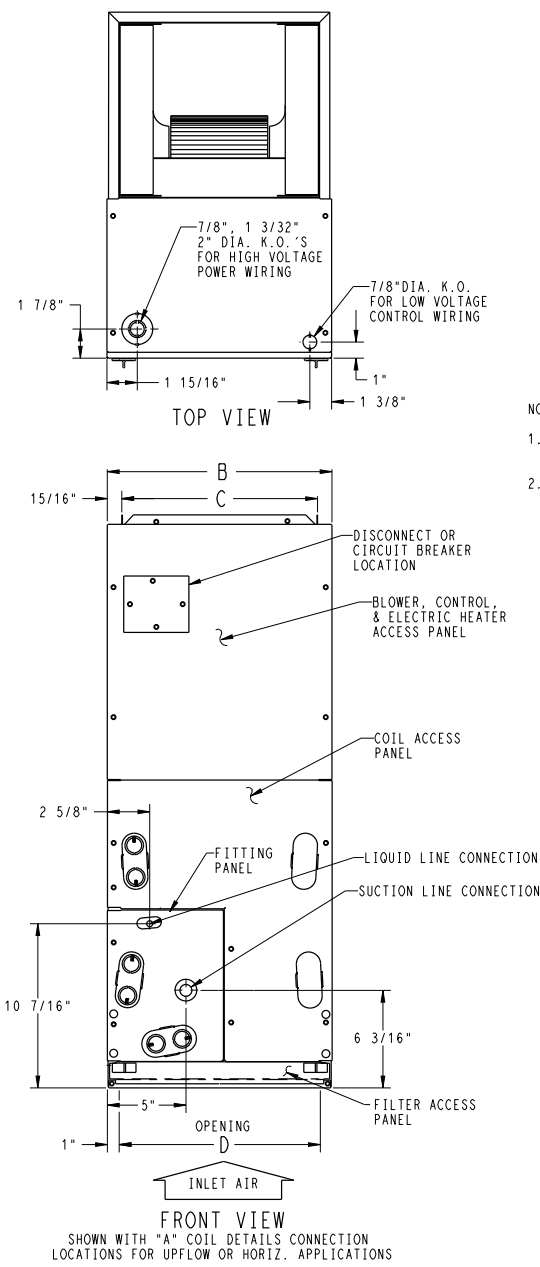


A200437

DIMENSIONS

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

3



UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A	B	C	D	E	F	G		J	COIL CONFIGURATION		SHIPPING WT (LBS)
															SLOPE	"A"	
FJMA4X18	01	X	O			42 11/16"	14 5/16"	12 7/16"	12 5/16"	10 7/16"	18 1/8"	18 5/8"		12"	X	-	-
FJMA4X24	01	X	O			49 5/8"	17 5/8"	15 3/4"	15 5/8"	15 3/8"	23 1/8"	23 5/8"		17"	X	-	-
FJMA4X30	01	X	O			49 5/8"	17 5/8"	15 3/4"	15 5/8"	15 7/8"	23 1/8"	23 1/2"		-	-	X	-
FJMA4X36	01	X	O			49 5/8"	17 5/8"	15 3/4"	15 5/8"	15 7/8"	23 1/8"	23 1/2"		-	-	X	-
FJMA4X42	01	X	*			49 5/8"	21 1/8"	19 1/4"	19 1/8"	15 11/16"	23 7/16"	23 1/8"		-	-	X	-
FJMA4X48	01	X	*			53 7/16"	21 1/8"	19 1/4"	19 1/8"	19 1/2"	27 1/4"	26 15/16"		-	-	X	-
FJMA4X60	01	X	*			59 3/16"	24 11/16"	22 3/4"	22 11/16"	25 1/4"	32 15/16"	32 5/8"		-	-	X	-

208/230-1-60

208/230-3-60

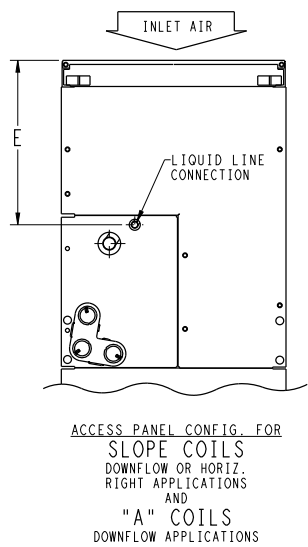
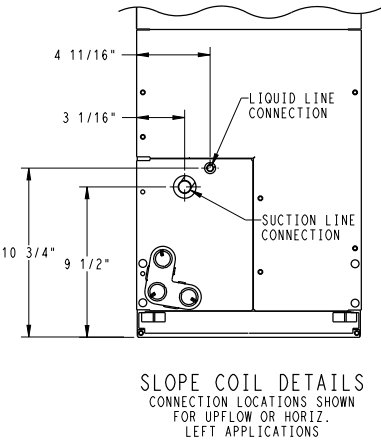
X=YES
O=NO
*=YES, DUE TO AVAILABLE FIELD INSTALLED HEATERS.

- NOTE:
- SERIES DESIGNATION IS THE 13TH & 14TH POSITION OF UNIT PRODUCT NUMBER
 - ALL DIMENSIONS ARE IN "INCHES" UNLESS NOTED.

UNIT CONNECTION SIZES

SUCTION: 18 THRU 24 - 5/8" I.D. SWEAT
30 & 36 - 3/4" I.D. SWEAT
42 THRU 60 - 7/8" I.D. SWEAT

LIQUID: 3/8" I.D. SWEAT
CONDENSATE: 3/4" FPT



NOTE: ALLOW 21" FROM FRONT FOR SERVICE

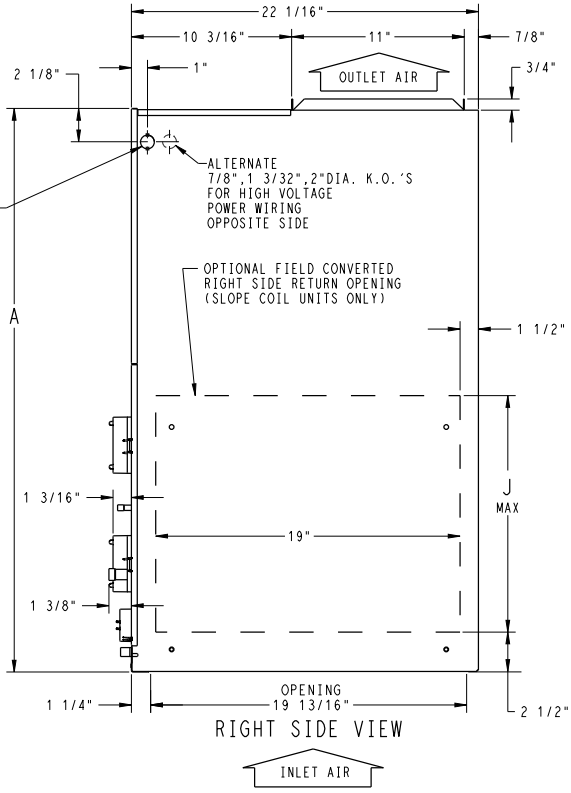


Fig. 1 – FJM - English (sheet 1)

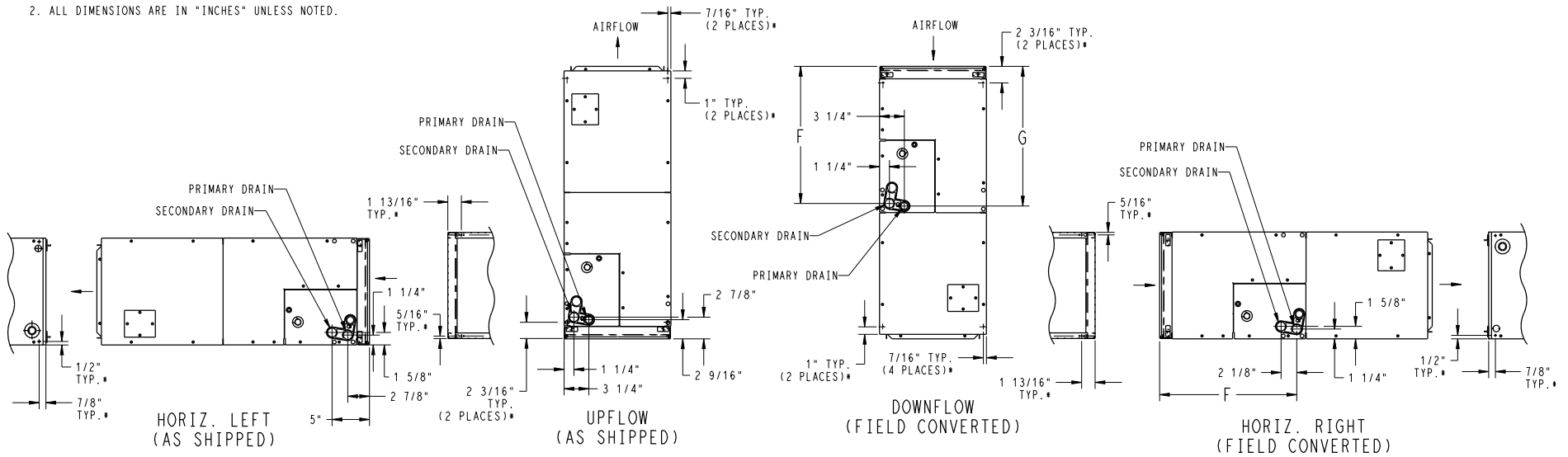
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DIMENSIONS (cont.)

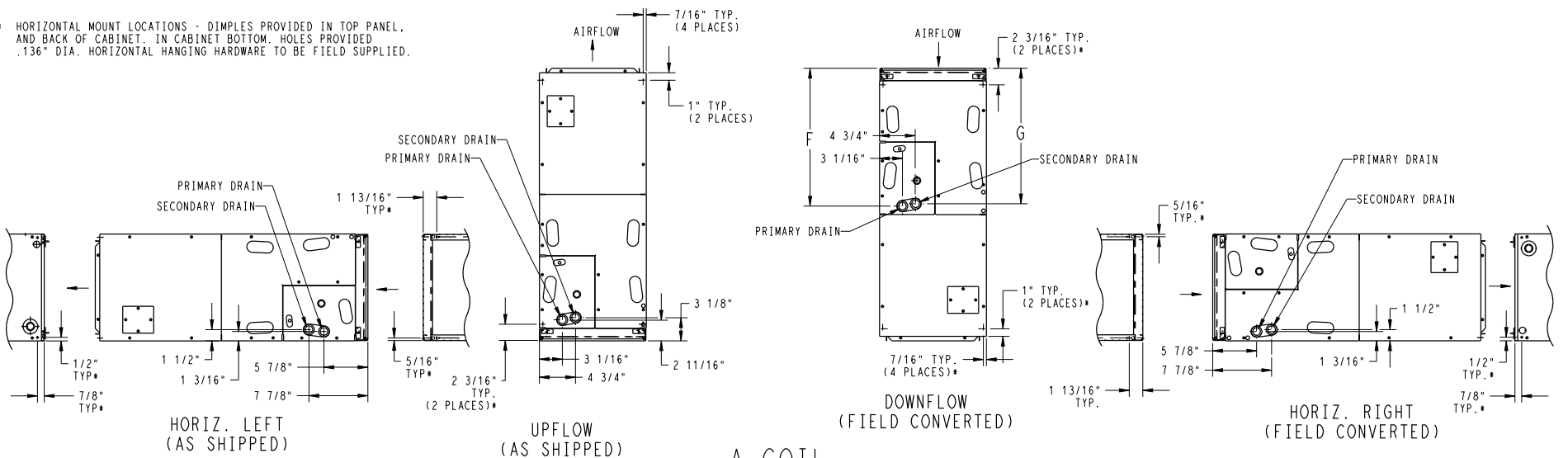
NOTES:

- CONDENSATE PAN DRAIN CAPS NOT SHOWN FOR CLARITY.
- ALL DIMENSIONS ARE IN "INCHES" UNLESS NOTED.

SLOPE COIL



* HORIZONTAL MOUNT LOCATIONS - DIMPLES PROVIDED IN TOP PANEL, AND BACK OF CABINET. IN CABINET BOTTOM, HOLES PROVIDED .136" DIA. HORIZONTAL HANGING HARDWARE TO BE FIELD SUPPLIED.



A-COIL

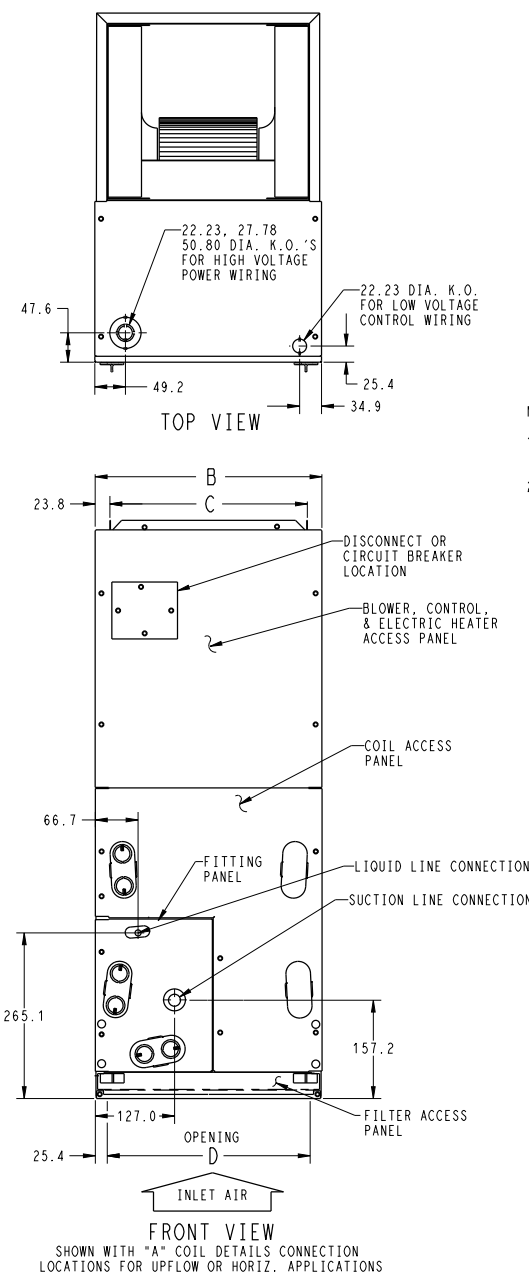
Fig. 2 – FJM- English (sheet 2)

A221152

DIMENSIONS (cont.)

Manufacturer reserves the right to change, at any time, specifications and designs without notice and without obligations.

5



UNIT	SERIES	ELECTRICAL CHARACTERISTICS				A	B	C	D	E	F	G		J	COIL CONFIGURATION		SHIPPING WT (Kgs)
															SLOPE	"A"	
FJMA4X18	01	X	O			1084.3	363.6	315.9	312.8	265.1	460.4	473.1		304.8	X	-	-
FJMA4X24	01	X	O			1260.5	447.7	400.0	396.9	390.5	587.4	600.1		431.8	X	-	-
FJMA4X30	01	X	O			1260.5	447.7	400.0	396.9	403.2	587.4	596.9		-	-	X	-
FJMA4X36	01	X	O			1260.5	447.7	400.0	396.9	403.2	587.4	596.9		-	-	X	-
FJMA4X42	01	X	*			1260.5	536.6	489.0	485.8	398.5	595.3	587.4		-	-	X	-
FJMA4X48	01	X	*			1357.3	536.6	489.0	485.8	495.3	692.2	684.2		-	-	X	-
FJMA4X60	01	X	*			1503.4	627.1	577.8	576.3	641.4	836.6	828.7		-	-	X	-

208/230-1-60
208/230-3-60

X=YES
O=NO
*=YES, DUE TO AVAILABLE FIELD INSTALLED HEATERS.

- NOTE:
- 1. SERIES DESIGNATION IS THE 13TH & 14TH POSITION OF UNIT PRODUCT NUMBER
 - 2. ALL DIMENSIONS ARE IN "MM" UNLESS NOTED.

NOTE: ALLOW 533.4 FROM FRONT FOR SERVICE

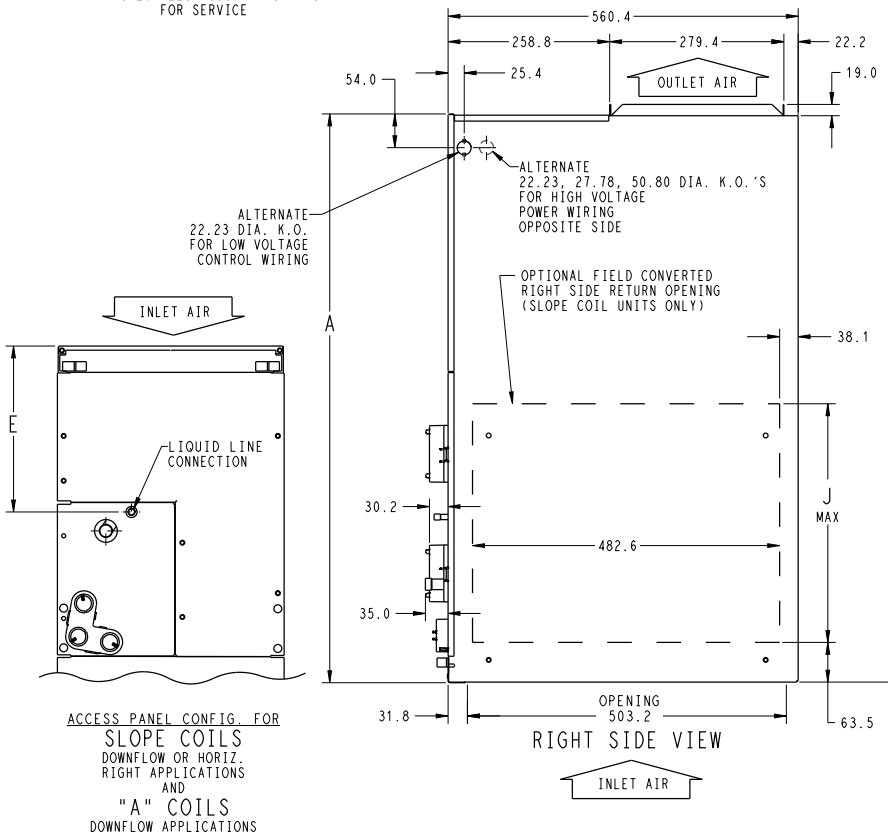
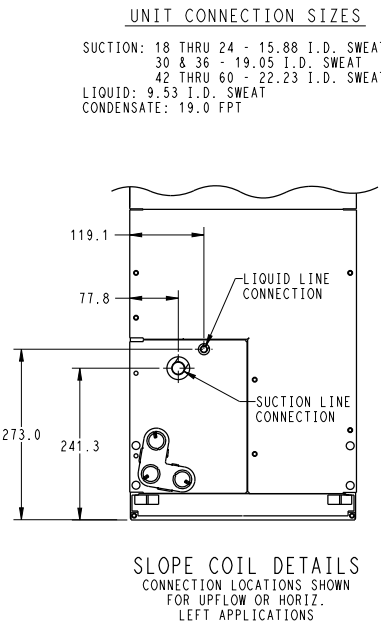


Fig. 3 – FJM - Metric (sheet 1)

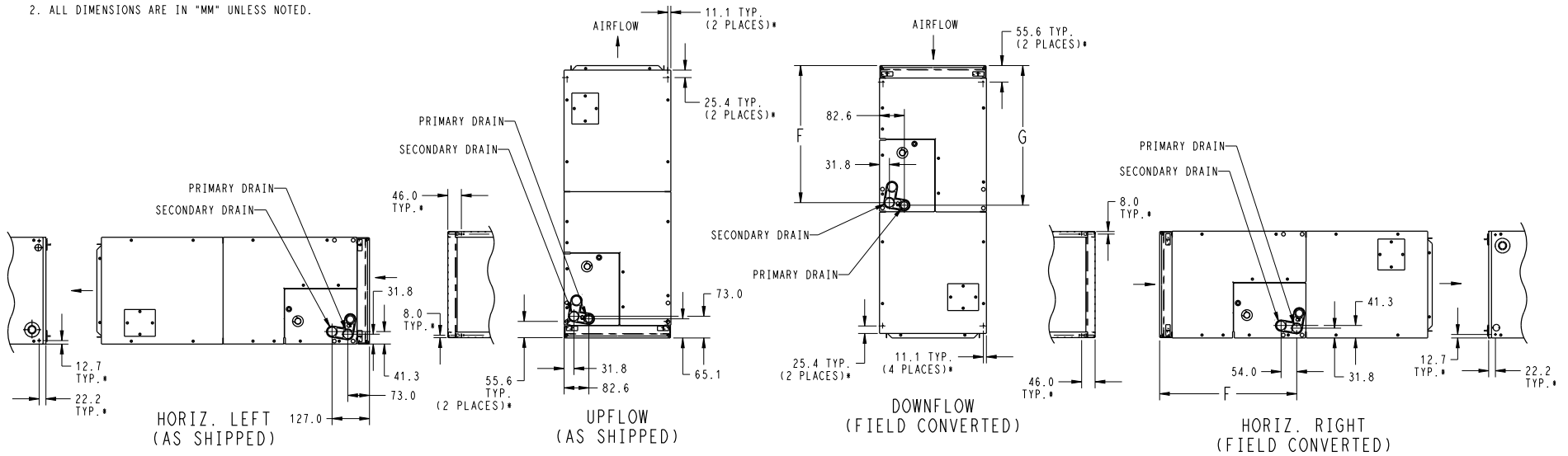
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DIMENSIONS (cont.)

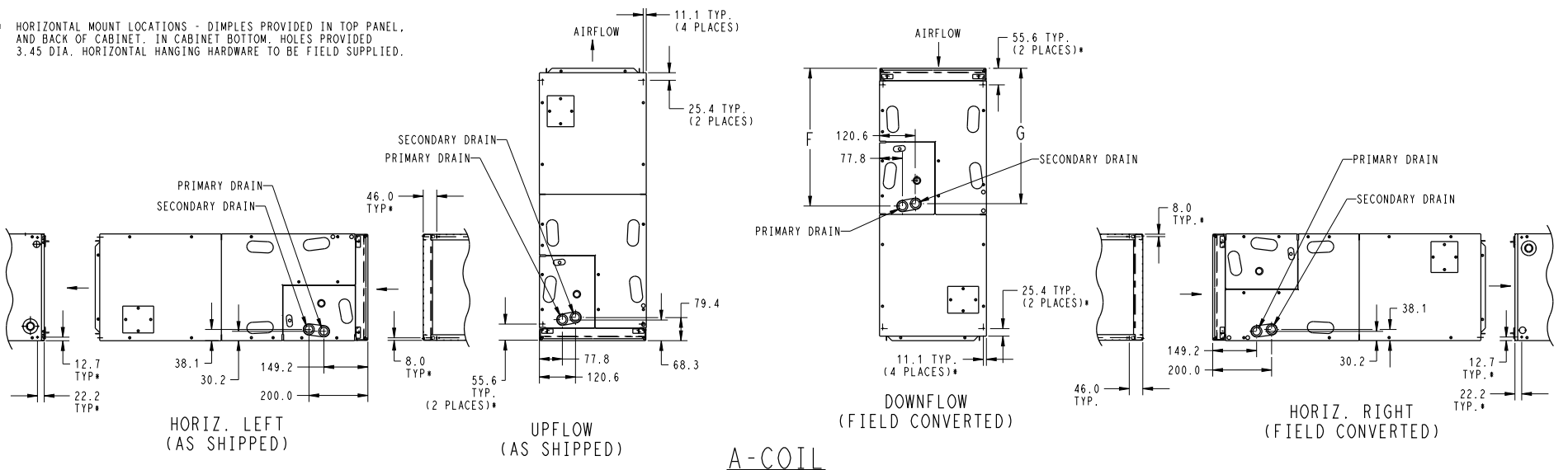
NOTES:

- CONDENSATE PAN DRAIN CAPS NOT SHOWN FOR CLARITY.
- ALL DIMENSIONS ARE IN "MM" UNLESS NOTED.

SLOPE COIL



- * HORIZONTAL MOUNT LOCATIONS - DIMPLES PROVIDED IN TOP PANEL, AND BACK OF CABINET. IN CABINET BOTTOM, HOLES PROVIDED 3.45 DIA. HORIZONTAL HANGING HARDWARE TO BE FIELD SUPPLIED.



A-COIL

Fig. 4 – FJM - Metric (sheet 2)

A221154

Table 1 – PHYSICAL DATA

UNIT SIZE	NOMINAL COOLING CAPACITY (Btuh)	DIMENSIONS – IN (mm)			SHIPPING WEIGHT LB (KG)
		Height	Width	Depth	
18	18,000	42-11/16 in. (1084mm)	14-5/16 in. (364mm)	22-1/16 in. (560mm)	120 (54.4)
24	24,000	49-5/8 in. (1260mm)	17-5/8 in. (448mm)	22-1/16 in. (560mm)	131 (59.4)
30	30,000	49-5/8 in. (1260mm)	17-5/8 in. (448mm)	22-1/16 in. (560mm)	148 (67.1)
36	36,000	49-5/8 in. (1260mm)	17-5/8 in. (448mm)	22-1/16 in. (560mm)	148 (67.1)
42	42,000	49-5/8 in. (1260mm)	21-1/8 in. (537mm)	22-1/16 in. (560mm)	166 (75.3)
48	48,000	53-7/16 in. (1357mm)	21-1/8 in. (537mm)	22-1/16 in. (560mm)	182 (82.5)
48	48,000	53-7/16 in. (1357mm)	21-1/8 in. (537mm)	22-1/16 in. (560mm)	182.5 (82.8)
60	60,000	59-3/16 in. (1503mm)	24-11/16 in. (627mm)	22-1/16 in. (560mm)	210 (95.2)
60	60,000	59-3/16 in. (1503mm)	24-11/16 in. (627mm)	22-1/16 in. (560mm)	210.5 (95.5)

Table 2 – SPECIFICATIONS

SIZE	18	24	30	36	42	48	60
EVAPORATOR COIL							
Face Area, ft ² (m ²)	2.23 (0.21)	2.97 (0.28)	3.96 (0.37)		4.45 (0.41)	5.93 (0.55)	7.42 (0.69)
Configuration	Slope		A				
Refrigerant Sweat Liquid Line Connection, in (mm)	3/8 (9.5) ID						
Refrigerant Sweat Suction Line Connection, in (mm)	5/8 (15.9) ID		3/4 (19.1) ID		7/8 (22.2) ID		
Metering Device R-410AR-410A	TXV						
FILTER SIZE (W x L), in (mm)	13 x 20 (330.2 x 508)	16 x 20 (406.4 x 508)			20 x 20 (508 x 508)		23 x 20 (584.2 x 508.0)
BLOWER ASSEMBLY							
Motor Type (ECM)	Multi-tap ECM						
Motor HP	1/3	1/3	1/2	1/2	1/2	3/4	3/4
CFM	525	700	875	1050	1225	1400	1750
CABINET CONFIGURATIONS							
	Singular (1-piece)				Singular (1-piece) or Modular (2-piece)		

PERFORMANCE DATA

Table 3 – Airflow Performance (CFM) Wet

Ton (Size)	Blower Speed	External Static (in. wc)									
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
1-1/2 (18)	Tap 5	754	737	717	694	668	641	605	572	528	481
	Tap 4	695	678	655	628	600	573	551	520	479	421
	Tap 3	695	678	655	628	600	573	551	520	479	421
	Tap 2	643	620	591	557	534	506	477	439	408	378
	Tap 1	487	448	428	394	358	325	281	NA	NA	NA
2 (24)	Tap 5	1021	1003	964	925	876	838	797	761	726	689
	Tap 4	936	907	873	805	779	732	696	661	626	591
	Tap 3	936	907	873	805	779	732	696	661	626	591
	Tap 2	846	831	792	739	702	651	609	548	536	491
	Tap 1	746	697	629	567	521	477	446	389	364	326
2-1/2 (30)	Tap 5	1247	1215	1188	1154	1122	1083	1053	1017	971	915
	Tap 4	1133	1114	1082	1044	1009	968	924	873	835	785
	Tap 3	1133	1114	1082	1044	1009	968	924	873	835	785
	Tap 2	1040	997	961	929	883	828	782	725	708	667
	Tap 1	896	862	805	740	689	648	597	NA	NA	NA
3 (36)	Tap 5	1433	1404	1363	1328	1282	1251	1201	1145	1095	1021
	Tap 4	1304	1277	1256	1230	1207	1168	1122	1080	1073	983
	Tap 3	1304	1277	1256	1230	1207	1168	1122	1080	1073	983
	Tap 2	1183	1148	1124	1094	1051	1005	955	901	846	783
	Tap 1	1020	995	958	921	881	840	791	735	693	649
3-1/2 (42)	Tap 5	1571	1551	1508	1473	1439	1407	1372	1317	1253	1189
	Tap 4	1517	1493	1458	1425	1392	1358	1328	1295	1253	1193
	Tap 3	1517	1493	1458	1425	1392	1358	1328	1295	1253	1193
	Tap 2	1369	1339	1299	1263	1226	1188	1155	1112	1068	1012
	Tap 1	1260	1231	1172	1143	1077	1041	995	949	896	867
4 (48)	Tap 5	1896	1853	1821	1795	1760	1737	1702	1670	1665	1619
	Tap 4	1711	1673	1643	1607	1570	1549	1509	1490	1446	1411
	Tap 3	1711	1673	1643	1607	1570	1549	1509	1490	1446	1411
	Tap 2	1547	1504	1466	1416	1388	1369	1324	1290	1239	1200
	Tap 1	1397	1347	1312	1269	1232	1172	1135	1086	1038	989
5 (60)	Tap 5	2109	2067	2043	1996	1967	1928	1899	1848	1812	1766
	Tap 4	2109	2067	2043	1996	1967	1928	1899	1848	1812	1766
	Tap 3	2109	2067	2043	1996	1967	1928	1899	1848	1812	1766
	Tap 2	1901	1868	1825	1785	1737	1710	1662	1620	1584	1521
	Tap 1	1583	1557	1499	1451	1392	1358	1313	1259	1194	1138

NOTES:

1. Airflow based upon dry coil at 230V with factory-approved filter and electric heater (2 element heater sizes 018 through 036, 3 element heater sizes 042 through 060).
2. To avoid potential for condensate blowing out of drain pan prior to making drain trap:
Return static pressure must be less than 0.40 in. wc. Horizontal applications of 042 - 060 sizes must have supply static greater than 0.20 in. wc.
Airflow above 400 cfm/ton on 048-060 size could result in condensate blowing off coil or splashing out of drain pan.
3. At higher pextstats (above 0.6 in/wc), water blowoff is more likely to occur depending on the user's setup.

PERFORMANCE DATA (cont.)**Table 4 – Airflow Performance (CFM) Dry**

Ton (Size)	Blower Speed	External Static (in. wc)									
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
1-1/2 (18)	Tap 5	762	741	721	698	672	656	635	577	547	509
	Tap 4	695	679	655	628	600	580	559	534	505	452
	Tap 3	695	679	655	628	600	580	559	534	505	452
	Tap 2	634	615	585	547	522	506	475	444	407	371
	Tap 1	498	470	434	390	356	300	272	NA	NA	NA
2 (24)	Tap 5	1046	1013	978	958	925	877	830	752	722	687
	Tap 4	992	950	916	869	812	763	705	660	611	585
	Tap 3	992	950	916	869	812	763	705	660	611	585
	Tap 2	900	862	814	769	709	644	594	548	507	451
	Tap 1	762	723	651	599	531	471	428	385	345	319
2-1/2 (30)	Tap 5	1277	1244	1226	1193	1169	1122	1094	1058	1014	969
	Tap 4	1179	1142	1114	1070	1039	998	937	915	867	825
	Tap 3	1179	1142	1114	1070	1039	998	937	915	867	825
	Tap 2	1066	1030	997	960	916	863	795	746	703	674
	Tap 1	923	878	832	784	723	658	616	563	NA	NA
3 (36)	Tap 5	1489	1463	1428	1388	1345	1305	1262	1213	1160	1093
	Tap 4	1357	1337	1310	1283	1249	1212	1165	1114	1064	1014
	Tap 3	1357	1337	1310	1283	1249	1212	1165	1114	1064	1014
	Tap 2	1211	1190	1162	1132	1100	1066	1016	959	905	838
	Tap 1	1059	1038	1004	967	925	887	843	791	747	681
3-1/2 (42)	Tap 5	1647	1620	1583	1548	1505	1464	1424	1379	1319	1250
	Tap 4	1569	1539	1506	1476	1442	1404	1370	1336	1299	1219
	Tap 3	1569	1539	1506	1476	1442	1404	1370	1336	1299	1219
	Tap 2	1393	1355	1329	1288	1248	1223	1180	1138	1091	1037
	Tap 1	1265	1234	1195	1154	1111	1062	1022	964	914	865
4 (48)	Tap 5	1956	1917	1887	1855	1831	1798	1763	1743	1707	1683
	Tap 4	1773	1743	1704	1667	1634	1612	1571	1536	1500	1464
	Tap 3	1773	1743	1704	1667	1634	1612	1571	1536	1500	1464
	Tap 2	1566	1524	1483	1451	1414	1376	1340	1303	1266	1217
	Tap 1	1413	1373	1328	1283	1246	1204	1168	1120	1075	1012
5 (60)	Tap 5	2148	2123	2084	2048	2002	1974	1939	1891	1893	1812
	Tap 4	2148	2123	2084	2048	2002	1974	1939	1891	1893	1812
	Tap 3	2148	2123	2084	2048	2002	1974	1939	1891	1893	1812
	Tap 2	1955	1913	1868	1833	1796	1757	1711	1654	1632	1570
	Tap 1	1646	1590	1527	1496	1442	1373	1315	1294	1221	1164

NOTES:

1. Airflow based upon dry coil at 230V with factory-approved filter and electric heater (2 element heater sizes 018 through 036, 3 element heater sizes 042 through 060).
2. To avoid potential for condensate blowing out of drain pan prior to making drain trap:
Return static pressure must be less than 0.40 in. wc. Horizontal applications of 042 - 060 sizes must have supply static greater than 0.20 in. wc.
Airflow above 400 cfm/ton on 048-060 size could result in condensate blowing off coil or splashing out of drain pan.
3. At higher pextstats (above 0.6 in/wc), water blowoff is more likely to occur depending on the user's setup.

Table 5 – Gross Cooling Capacities

Unit Size	INDOOR COIL AIR		SATURATED TEMPERATURE LEAVING EVAPORATOR (°F / °C)														
			35/2			40/4			45/7			50/10			55/13		
	CFM	EWB	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF
18	525	72/22	42.80	20.80	0.00	38.40	18.70	0.00	33.50	16.50	0.01	27.90	14.10	0.02	21.70	11.70	0.02
		67/19	34.90	21.40	0.03	30.40	19.20	0.03	25.30	16.80	0.03	19.80	14.50	0.03	13.90	12.10	0.04
		62/17	27.70	21.90	0.03	23.20	19.60	0.03	18.50	17.30	0.04	14.90	14.90	0.13	12.20	12.20	0.28
	600	72/22	46.90	22.80	0.00	42.10	20.50	0.00	36.70	18.10	0.02	30.60	15.60	0.03	23.80	13.00	0.03
		67/19	38.30	23.70	0.04	33.40	21.20	0.04	27.80	18.70	0.04	21.60	16.10	0.04	15.20	13.40	0.05
		62/17	30.40	24.30	0.04	25.40	21.80	0.04	20.30	19.30	0.06	16.50	16.50	0.15	13.60	13.60	0.30
	675	72/22	50.60	24.60	0.00	45.40	22.20	0.02	39.60	19.70	0.03	33.00	17.00	0.04	25.60	14.10	0.04
		67/19	41.40	25.70	0.05	36.10	23.10	0.05	30.10	20.40	0.05	23.40	17.60	0.05	16.50	14.80	0.06
		62/17	32.90	26.60	0.05	27.50	23.90	0.05	22.10	21.10	0.07	18.10	18.10	0.17	14.90	14.90	0.32
24	700	72/22	54.40	26.40	0.00	49.20	24.00	0.00	43.30	21.40	0.01	36.40	18.50	0.02	28.60	15.50	0.03
		67/19	44.80	27.70	0.03	39.30	25.00	0.03	33.00	22.10	0.03	26.00	19.10	0.03	18.50	16.10	0.04
		62/17	35.80	28.60	0.03	30.20	25.80	0.03	24.30	22.90	0.04	19.70	19.70	0.13	16.30	16.30	0.28
	800	72/22	59.10	28.70	0.00	53.50	26.20	0.01	47.00	23.40	0.02	39.70	20.30	0.03	31.20	31.20	0.04
		67/19	48.70	30.40	0.04	42.90	27.60	0.04	36.10	24.50	0.04	28.30	21.20	0.04	20.20	17.90	0.05
		62/17	39.10	31.60	0.04	33.00	28.60	0.05	26.60	25.40	0.06	21.90	21.90	0.16	18.10	18.10	0.30
	900	72/22	63.20	30.80	0.00	57.20	28.20	0.02	50.40	25.20	0.04	42.60	22.00	0.04	33.50	18.60	0.05
		67/19	52.30	32.80	0.05	46.10	29.90	0.05	38.90	26.70	0.05	30.50	23.20	0.05	21.80	19.60	0.06
		62/17	42.10	34.50	0.05	35.60	31.30	0.06	28.80	27.90	0.07	24.00	24.00	0.18	19.80	19.80	0.32
30	875	72/22	71.60	34.70	0.00	64.40	31.30	0.00	56.30	27.70	0.00	47.20	23.80	0.02	36.80	19.70	0.02
		67/19	58.70	36.00	0.02	51.30	32.30	0.03	42.90	28.40	0.03	33.60	24.40	0.03	23.70	20.30	0.04
		62/17	46.70	36.80	0.03	39.20	33.00	0.03	31.20	29.10	0.04	25.00	25.00	0.12	20.60	20.60	0.27
	1000	72/22	78.30	38.00	0.00	70.50	34.40	0.00	61.60	30.50	0.02	51.70	26.30	0.03	40.30	21.90	0.03
		67/19	64.30	39.70	0.03	56.30	35.80	0.03	47.10	31.50	0.04	36.80	27.10	0.04	26.00	22.70	0.05
		62/17	51.40	40.90	0.04	43.10	36.70	0.04	34.40	32.40	0.05	27.90	27.90	0.14	23.00	23.00	0.29
	1125	72/22	84.30	41.00	0.00	75.90	37.20	0.00	66.80	33.20	0.02	55.80	28.60	0.04	43.60	23.80	0.04
		67/19	69.40	43.10	0.04	60.80	38.90	0.04	51.00	34.50	0.05	39.80	29.70	0.05	28.10	24.90	0.06
		62/17	55.60	44.80	0.05	46.70	40.30	0.05	37.30	35.60	0.06	30.60	30.60	0.16	25.20	25.20	0.31
36	1050	72/22	64.89	33.39	0.00	58.38	30.18	0.00	51.08	26.68	0.02	42.84	22.99	0.03	33.40	19.04	0.03
		67/19	53.14	34.96	0.04	46.48	31.47	0.04	38.88	27.72	0.04	30.22	23.74	0.04	21.13	19.74	0.05
		62/17	42.35	36.18	0.04	35.45	32.44	0.04	28.12	28.54	0.05	22.73	22.73	0.15	18.64	18.64	0.29
	1200	72/22	70.55	36.42	0.00	63.54	32.99	0.02	55.62	29.26	0.03	46.67	25.30	0.04	36.48	21.08	0.05
		67/19	57.90	38.43	0.05	50.70	34.71	0.05	42.55	30.74	0.05	33.13	26.44	0.05	23.14	22.04	0.06
		62/17	46.31	40.09	0.05	38.86	36.09	0.05	31.02	31.87	0.07	25.31	25.31	0.17	20.78	20.78	0.31
	1350	72/22	75.52	39.17	0.00	68.14	35.55	0.03	59.70	31.64	0.04	50.12	27.45	0.05	39.26	23.00	0.06
		67/19	62.18	41.63	0.06	54.49	37.72	0.06	45.77	33.52	0.06	35.75	28.98	0.06	25.00	24.22	0.08
		62/17	49.84	43.73	0.06	42.00	39.53	0.07	33.71	35.01	0.09	27.74	27.74	0.20	22.79	22.79	0.33

Table 5 – Gross Cooling Capacities

Unit Size	INDOOR COIL AIR		SATURATED TEMPERATURE LEAVING EVAPORATOR (°F / °C)														
			35/2			40/4			45/7			50/10			55/13		
	CFM	EWB	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF	TC	SHC	BF
42	1225	72/22	79.15	40.41	0.00	70.85	36.31	0.00	61.59	31.90	0.02	51.15	27.24	0.03	39.41	22.38	0.04
		67/19	64.55	42.04	0.04	56.05	37.58	0.04	46.51	32.90	0.04	35.85	28.04	0.04	24.90	23.25	0.05
		62/17	51.09	43.18	0.04	42.46	38.53	0.05	33.59	33.84	0.06	27.05	27.05	0.15	22.11	22.11	0.30
	1400	72/22	86.34	44.20	0.00	77.30	39.79	0.01	67.22	35.05	0.03	55.91	30.07	0.04	43.10	24.80	0.05
		67/19	70.55	46.30	0.05	61.37	41.55	0.05	50.95	36.50	0.05	39.20	31.18	0.06	27.27	25.94	0.07
		62/17	56.04	47.92	0.06	46.63	42.89	0.06	36.98	37.71	0.08	30.12	30.12	0.18	24.63	24.62	0.32
	1575	72/22	92.81	47.68	0.00	83.15	42.98	0.03	72.31	37.96	0.05	60.17	32.67	0.06	46.45	27.07	0.06
		67/19	76.00	50.25	0.06	66.13	45.22	0.06	55.01	39.88	0.07	42.37	34.20	0.07	29.47	28.50	0.08
		62/17	60.57	52.40	0.07	50.47	47.01	0.07	40.22	41.43	0.09	33.01	33.01	0.20	26.99	26.99	0.34
48	1400	72/22	83.95	44.30	0.00	75.71	40.05	0.00	66.36	35.45	0.01	55.84	30.58	0.02	43.82	25.38	0.03
		67/19	68.80	46.22	0.03	60.32	41.61	0.03	50.67	36.70	0.03	39.64	31.45	0.03	27.80	26.12	0.04
		62/17	54.96	47.71	0.03	46.12	42.77	0.03	36.69	37.67	0.04	29.32	29.32	0.13	24.10	24.10	0.28
	1600	72/22	91.53	48.40	0.00	82.59	43.90	0.00	72.47	38.97	0.02	61.02	33.73	0.03	48.01	28.16	0.04
		67/19	75.19	50.91	0.04	65.98	45.99	0.04	55.57	40.75	0.04	43.57	35.09	0.04	30.49	29.21	0.05
		62/17	60.21	52.94	0.04	50.73	47.68	0.04	40.48	42.10	0.06	32.72	32.72	0.15	26.92	26.92	0.30
	1800	72/22	98.31	52.15	0.00	88.79	47.39	0.02	77.99	42.21	0.03	65.70	36.65	0.04	51.81	30.76	0.05
		67/19	80.94	55.25	0.05	71.10	50.06	0.05	59.93	44.50	0.05	47.14	38.52	0.05	32.96	32.14	0.06
		62/17	64.96	57.83	0.05	54.92	52.30	0.05	44.06	46.35	0.07	35.97	35.97	0.17	29.59	29.59	0.31
60	1600	72/22	118.17	60.42	0.00	106.56	54.57	0.00	93.41	48.24	0.02	78.64	41.59	0.02	62.13	34.63	0.03
		67/19	96.74	62.87	0.03	84.83	56.56	0.03	71.43	49.91	0.03	56.41	42.93	0.03	39.37	35.48	0.04
		62/17	77.24	64.78	0.03	65.10	58.16	0.03	51.83	51.23	0.04	41.00	41.00	0.12	33.67	33.67	0.27
	1750	72/22	129.14	66.15	0.00	116.46	59.92	0.00	102.18	53.13	0.02	86.08	45.94	0.03	68.00	38.39	0.03
		67/19	105.94	69.36	0.04	92.95	62.59	0.04	78.33	55.41	0.04	61.93	47.86	0.04	43.49	39.82	0.05
		62/17	84.76	71.94	0.04	71.53	64.80	0.04	57.37	57.38	0.05	45.94	45.94	0.14	37.65	37.65	0.29
	2000	72/22	139.03	71.41	0.00	125.46	64.82	0.01	110.15	57.64	0.03	92.83	49.99	0.04	73.33	41.92	0.04
		67/19	114.27	75.38	0.05	100.34	68.21	0.05	84.61	60.58	0.05	66.92	52.51	0.05	47.25	43.94	0.06
		62/17	91.59	78.67	0.05	77.41	71.08	0.05	62.32	63.11	0.07	50.60	50.60	0.16	41.54	41.54	0.31

CFM - Cubic Ft per Minute

EWB - Entering Wet Bulb °F (°C)

LWB - Leaving Wet Bulb °F (°C)

TC - Gross Cooling Capacity 1000 Btuh

SHC - Gross Sensible Capacity 1000 Btuh

BF - Bypass Factor

MBH - 1000 Btuh

NOTES:

- Contact manufacturer for cooling capacities at conditions other than shown in table.
- Formulas:
 Leaving db = entering db - sensible heat cap.

$$1.09 \times \text{CFM}$$
 Leaving wb = wb corresponding to enthalpy of air leaving coil (h_{lwb})

$$h_{lwb} = h_{ewb} - \frac{\text{total capacity (Btuh)}}{4.5 \times \text{CFM}}$$
 where h_{ewb} = enthalpy of air entering coil. Direct interpolation is permissible. Do not extrapolate.
- SHC is based on 80°F (27°C) db temperature of air entering coil. Below 80°F (27°C) db, subtract (Correction Factor x CFM) from SHC. Above 80°F (27°C) db, add (Correction Factor x CFM) to SHC.
- Bypass Factor = 0 indicates no psychometric solution. Use bypass factor of next lower EWB for approximation.

SHC CORRECTION FACTOR

BYPASS FACTOR	ENTERING AIR DRY-BULB TEMPERATURE (°F)					
	79	78	77	76	75	Under 75
	81	82	83	84	85	Over 85
	ENTERING AIR DRY-BULB TEMPERATURE (°C)					
	26	25	25	24	24	Under 75
	27	28	28	29	29	Over 85
Correction Factor						
0.10	.098	1.96	2.94	3.92	4.91	Use formula shown below
0.20	0.87	1.74	2.62	3.49	4.36	
0.30	0.76	1.53	2.29	3.05	3.82	

Interpolation is permissible.

Correction Factor = $1.09 \times (1 - \text{BF}) \times (\text{db} - 80)$

PERFORMANCE DATA (cont.)

Table 6 – Electric Heater Static Pressure Drop (in wc)

SIZES 18 - 36			SIZES 42 - 60		
HEATER ELEMENTS	kW	EXTERNAL STATIC PRESSURE CORRECTION	HEATER ELEMENTS	kW	EXTERNAL STATIC PRESSURE CORRECTION
0	0	+02	0	0	+04
1	3, 5	+01	1	3, 5	+03
2	8, 10	0	2	8, 10	+02
3	9, 15	–02	3	9, 15	0
4	20	–04	4	20	–02
			6	18, 24, 30	–10

The airflow performance data was developed using fan coils with 10-kW electric heaters (2 elements) in the 018 through 036 size units and 15-kW heaters (3 elements) in the 042 through 061 size units. For fan coils with heaters of a different number of elements, the external available static at a given CFM from the curve may be corrected by adding or subtracting available external static pressure as indicated above.

Table 7 – Minimum CFM and Motor Speed Selection

SIZE	HEATER kW									
	3	5	8	9	10	15	18	20	24	30
18	525	525	525	—	600	—	—	—	—	—
24	700	700	700	—	700	775	—	—	—	—
30	—	875	875	—	875	875	—	1060	—	—
36	—	1050	970	970	970	920	—	1040	—	—
42	—	—	1225	1225	1225	1225	1225	1225	—	—
48	—	—	1400	1400	1400	1400	1400	1400	1400	1400
60	—	—	1750	1750	1750	1750	1750	1750	1750	1750

Speed Tap 4 (white wire) is used for electric heat only. White wire must remain on tap 4.

Table 8 – Estimated Sound Power Level (dBA)*

SIZE	CONDITIONS		OCTAVE BAND CENTER FREQUENCY						
	CFM	Ext Static Pressure	63	125	250	500	1000	2000	4000
18	525	0.50	70.8	66.8	62.8	59.8	57.8	55.8	51.8
24	700	0.50	72.0	68.0	64.0	61.0	59.0	57.0	53.0
30	875	0.50	73.0	69.0	65.0	62.0	60.0	58.0	54.0
36	1050	0.50	73.8	69.8	65.8	62.8	60.8	58.8	54.8
42	1225	0.50	74.4	70.4	66.4	63.4	61.4	59.4	55.4
48	1400	0.50	75.0	71.0	67.0	64.0	62.0	60.0	56.0
60	1750	0.50	76.0	72.0	68.0	65.0	63.0	61.0	57.0

* Estimated sound power levels have been derived using the method described in the 1987 ASHRAE HVAC Systems & Applications Handbook, Chapter 52, p. 52.7.

PERFORMANCE DATA (cont.)

Table 9 – EH Heater Table

HEATER PART NO.	kW @ 240V	VOLTS/PH	STAGES (kW OPERATING)	INTERNAL CIRCUIT PROTECTION	FAN COIL SIZE USED WITH	HEATING CAP.* @ 230V
EHC05CKN	5	230/1	5	None	18	15,700
EHC07CKN	8	230/1	8	None	18	25,100
EHC10CKN	10	230/1	10	None	18	31,400
EHC05BKN	5	230/1	5	None	24–60	15,700
EHC07BKN	8	230/1	8	None	24–60	25,100
EHC10BKN	10	230/1	10	None	24–60	31,400
EHC20BKF	20	230/1	5, 20	Fuse†	30–60	62,800
EHC05CKB	5	230/1	5	Circuit Breaker	18	15,700
EHC07CKB	8	230/1	8	Circuit Breaker	18	25,100
EHC10CKB	10	230/1	10	Circuit Breaker	18	31,400
EHC05BKB	5	230/1	5	Circuit Breaker	24–60	15,700
EHC07BKB	8	230/1	8	Circuit Breaker	24–60	25,100
EHC10BKB	10	230/1	10	Circuit Breaker	24–60	31,400
EHC20BKB	20	230/1	5, 20	Circuit Breaker	30–60	62,800
EHC09BKCEN	9	230/1‡	3, 9	None	36–60	28,200
EHC15BKF	15	230/1	5, 15	Fuse†	24–60	47,100
EHC15BKB	15	230/1	5, 15	Circuit Breaker	24–60	47,100
3 Phase Only						
EHC15BHN	15	230/3	5, 15	None	36–60	47,100
EHC18BHN	18	230/3	6, 12, 18	None	42–60	56,500
3 Phase, Factory Shipped (field convertible to single phase)						
EHC25BHCF	24	230/3	8, 16, 24	Fuse	48, 60	78,300
EHC30BHCF	30	230/3	10, 20, 30	Fuse	48, 60	94,100

*. Does not include heat from blower motor.

†. Single point wiring kit required for these heaters.

‡. Field convertible to 3 phase.

Table 10 – Electrical Data for Units without Electric Heat

MODEL SIZE	MTR HP	MTR FLA	VOLTS/PH/HZ	SINGLE CIRCUIT		BRANCH CIRCUIT MIN WIRE SIZE* AWG
				MCA	MAXIMUM OVERCURRENT PROTECTION	
18	1/3	2.9	208/230/1/60	3.6	15	14
24	1/3	2.9	208/230/1/60	3.6	15	14
30	1/2	4.2	208/230/1/60	5.3	15	14
36	1/2	4.2	208/230/1/60	5.3	15	14
42	1/2	4.2	208/230/1/60	5.3	15	14
48	3/4	6.1	208/230/1/60	7.6	15	14
60	3/4	6.1	208/230/1/60	7.6	15	14

* Use copper wire only. Use 75°C only in this application. When using non-metallic (NM) sheathed cable, wire size required should be based on that of 60°C conductors, instead of wire sizes shown in table above per NEC Article 336-26.

NOTE: If branch circuit wire length exceeds 100 ft (30 m), consult NEC 215-2 to determine maximum wire length. Use 2% voltage drop.

FLA - Full Load Amps

SCCR (Short Circuit Current Rating) = 5kA rms, symmetrical, 230V

PERFORMANCE DATA (cont.)

HEATER ELECTRICAL DATA

Table 11 – Electric Heater Internal Protection

HEATER kW	PHASE	FUSE QTY/SIZE	CKT BKR* QTY/SIZE
5	1	—	1/60
8	1	—	1/60
9	1/3	—	—
10	1	—	1/60
15	1	2/30–2/60	2/60
15	3	—	—
18	3	—	—
20	1	4/60	2/60
24	1/3	6/60	—
30	1/3	6/60	—

* All circuit breakers are 2 pole.

When using units with 20-, 24-, and 30-kW electric heaters, maintain a 1-in. (25mm) clearance from combustible materials to discharge plenum and ductwork and maintain a distance of 36-in (914mm) from the unit. Use an accessory downflow base to maintain proper clearance on downflow installations. Use flexible connectors between ductwork and unit to prevent transmission of vibration. When electric heater is installed, use heat resistant material for flexible connector between ductwork and unit at discharge connection. Ductwork passing through unconditioned space must be insulated and covered with vapor barrier.

Table 12 – Electric Heater Electrical Data

FC Size	HEATER PART NO.	kW		P H A S E	Internal Circuit Protection	HEATER AMPS 208/230V*			MIN AMPACITY 208/230V†			BRANCH CIRCUIT								
												Min Wire Size (AWG) 208/230V†			Min Gnd Wire Size 208/230V†			Max Fuse/Ckt Bkr Amps 208/230V		
		240V	208V			Single Circuit	Dual Circuit		Single Circuit	Dual Circuit		Single Circuit	Dual Circuit		Single Circuit	Dual Circuit		Single Circuit	Dual Circuit	
							L1,L2	L3,L4		L1,L2	L3,L4		L1,L2	L3,L4		L1,L2	L3,L4		L1,L2	L3,L4
24-42	EHC05BKN	5	3.8	1	None	17.8/19.7	—	—	27.5/29.9	—	—	10/10	—	—	10/10	—	—	30/30	—	—
24-42	EHC05BKB	5	3.8	1	Ckt Bkr	17.8/19.7	—	—	27.5/29.9	—	—	10/10	—	—	10/10	—	—	30/30	—	—
48-60	EHC05BKN	5	3.8	1	None	17.8/19.7	—	—	29.9/32.3	—	—	10/8	—	—	10/10	—	—	30/35	—	—
48-60	EHC05BKB	5	3.8	1	Ckt Bkr	17.8/19.7	—	—	29.9/32.3	—	—	10/8	—	—	10/10	—	—	30/35	—	—
18	EHC05CKN	5	3.8	1	None	17.8/19.7	—	—	25.9/28.3	—	—	10/10	—	—	10/10	—	—	30/30	—	—
18	EHC05CKB	5	3.8	1	Ckt Bkr	17.8/19.7	—	—	25.9/28.3	—	—	10/10	—	—	10/10	—	—	30/30	—	—
24-60	EHC07BKN	8	6.0	1	None	28.5/31.5	—	—	43.3/47.0	—	—	8/8	—	—	10/10	—	—	45/50	—	—
24-60	EHC07BKB	8	6.0	1	Ckt Bkr	28.5/31.5	—	—	43.3/47.0	—	—	8/8	—	—	10/10	—	—	45/50	—	—
18	EHC07CKN	8	6.0	1	None	28.5/31.5	—	—	39.3/43.0	—	—	8/8	—	—	10/10	—	—	40/45	—	—
18	EHC07CKB	8	6.0	1	Ckt Bkr	28.5/31.5	—	—	39.3/43.0	—	—	8/8	—	—	10/10	—	—	40/45	—	—
24-60	EHC10BKN	10	7.5	1	None	35.6/39.4	—	—	52.1/56.9	—	—	6/6	—	—	10/10	—	—	60/60	—	—
24-60	EHC10BKB	10	7.5	1	Ckt Bkr	35.6/39.4	—	—	52.1/56.9	—	—	6/6	—	—	10/10	—	—	60/60	—	—
18	EHC10CKN	10	7.5	1	None	35.6/39.4	—	—	48.1/52.9	—	—	8/6	—	—	10/10	—	—	50/60	—	—
18	EHC10CKB	10	7.5	1	Ckt Bkr	35.6/39.4	—	—	48.1/52.9	—	—	8/6	—	—	10/10	—	—	50/60	—	—
30-60	EHC09BKCN‡	9	6.8	1	None	32.2/35.6	—	—	47.9/52.1	—	—	8/6	—	—	10/10	—	—	50/60	—	—
30-60	EHC09BKCN	9	6.8	3	None	18.6/20.6	—	—	30.9/33.4	—	—	8/8	—	—	10/10	—	—	40/40	—	—
24-60	EHC15BKF**	15	11.3	1	Fuse	53.4/59.1	35.6/39.4	17.8/19.7	74.4/81.5	52.1/56.9	22.3/24.6	4/4	6/6	10/10	8/8	10/10	10/10	80/90	60/60	25/25
24-60	EHC15BKB	15	11.3	1	Ckt Bkr	53.4/59.1	35.6/39.4	17.8/19.7	74.4/81.5	52.1/56.9	22.3/24.6	4/4	6/6	10/10	8/8	10/10	10/10	80/90	60/60	25/25
36-60	EHC15BHN	15	11.3	3	Fuse	30.8/34.1	—	—	46.1/50.3	—	—	8/6	—	—	10/10	—	—	50/60	—	—
42-60	EHC18BHN	18	13.5	3	None	37.2/41.2	—	—	54.1/59.1	—	—	6/6	—	—	10/10	—	—	60/70	—	—
30-60	EHC20BKF**	20	15.0	1	Fuse	71.2/78.8	35.6/39.4	35.6/39.4	96.6/106.1	52.1/56.9	44.5/49.3	3/2	6/6	8/8	8/6	10/10	10/10	100/110	60/60	45/50
30-60	EHC20BKB	20	15.0	1	Ckt Bkr	71.2/78.8	35.6/39.4	35.6/39.4	96.6/106.1	52.1/56.9	44.5/49.3	3/2	6/6	8/8	8/6	10/10	10/10	100/110	60/60	45/50
48-60	EHC25BHCF††	24	18.0	3	Fuse	49.3/54.6	—	—	69.3/75.9	—	—	4/4	—	—	8/8	—	—	80/80	—	—
48-60		24	18.0	1	Fuse	85.5/94.5	—	—	114.5/125.8	—	—	2/1	—	—	6/6	—	—	125/150	—	—
48-60	EHC30BHCF††	30	22.5	3	Fuse	61.7/68.2	—	—	84.8/92.9	—	—	4/3	—	—	8/8	—	—	90/100	—	—
48-60		30	22.5	1	Fuse	106.8/118.1	—	—	141.1/155.3	—	—	0/00	—	—	6/6	—	—	150/175	—	—

*. For 240V, multiply 230V heater amps by 1.04. Wire sizing and over-current protection may need adjustment per local code requirements.

†. Copper wire must be used. If other than uncoated (non-plated), 75°C ambient, copper wire (solid wire for smaller, and stranded wire for larger than 10 AWG) is used, consult applicable tables of the National Electric Code (ANSI/NFPA 70).

‡. Field convertible to 3 phase.

**. Single circuit application of F15 and F20 heaters requires single-point wiring kit accessory.

††. Field convertible to 1 phase, single or multiple supply circuit.

Table 13 – Field Multipoint Wiring or 24- and 30-kW Single Phase

FC Size	HEATER PART NO.	kW		PHASE	HEATER AMPS 208/230V			MIN AMPACITY 208/230V†			MIN WIRE SIZE (AWG) 208/230V†			MIN GND WIRE SIZE 208/230V	MAX FUSE/CKT BKR AMPS 208/230V		
		240V	208V		L1,L2	L3,L4	L5,L6	L1,L2	L3,L4	L5,L6	L1,L2	L3,L4	L5,L6		L1,L2	L3,L4	L5,L6
48-60	EHC25BHCF‡	24	18.0	1	28.5/31.5	28.5/31.5	28.5/31.5	43.3/47.0	35.6/39.4	35.6/39.4	8/8	8/8	8/8	10/10	50/50	40/40	40/40
48-60	EHC30BHCF‡A	30	22.5	1	35.6/39.4	35.6/39.4	35.6/39.4	52.1/56.9	44.5/49.3	44.5/49.3	6/6	8/8	8/8	10/10	60/60	45/50	45/50

*. Includes blower motor amps of largest fan coil used with heater.

†. Copper wire must be used. If other than uncoated (non-plated), 75°C ambient, copper wire (solid wire for 10 AWG and smaller, stranded wire for larger than 10 AWG) is used, consult applicable tables of the NEC (ANSI/NFPA 70).

‡. Field convertible to 1 phase, single or multiple supply circuit.

Table 14 – Accessories

ITEM		ACCESSORY PART NO.*	FAN COIL SIZE USED WITH
1.	Disconnect Kit	EBAC01DSC3	All single phase 3kW - 10kW heaters
2.	Downflow Base Kit	EBAC01NCB	18
		EBAC02NCB	24, 30, 36
		EBAC03NCB	42, 48
		EBAC04NCB	60
3.	Downflow Conversion Kit †	EBAC01DFS	Slope Coil Units—18, 24
		EBAC02DFA	A-Coil Units—30, 36, 42, 48, 60
4.	Downflow/Horizontal Conversion Gasket Kit	EBAC01GSK	All
5.	Horizontal Water Management Kit (25 pack) ‡	NAMA00125HC	A-Coil Units—30, 36, 42, 48, 60
6.	Single-Point Wiring Kit	EBAC01SPK	Only with 15- and 20-kW Fused Heaters
7.	Filter	Available at retail big-box hardware stores. See Table 2 for sizes.	
8.	Fan Coil Filter Cabinet (Fan Coil Filter Media)	AHIC0014A (FAIC0014A02)	18
		AHIC0017A (FAIC0017A2)	24, 30, 36
		AHIC0021A (FAIC0021A2)	42, 48
		AHIC0024A (FAIC0024A2)	60
9.	PVC Condensate Trap Kit (50 pack)	EBAC01CTK	All
10.	TXV Kit, R-410A, Aluminum Coils Only	NAEB20101TX	18L, 24L, 30L, 36L, 42L
		NAEB20201TX	48L
		NAEB20301TX	60L
		NAEB20401TX	60L
11.	Door Gasket Kit **	1191140	All
12.	Accessory Quick Connect Kit	NAMA00110QC	All

* Factory authorized and listed, field-installed.

** This kit is for replacement of factory installed gaskets if they are damaged or removed from the fan coil.

† KFAHD0101SLP must also be purchased for down flow applications.

‡ KFAHD0101SLP must also be purchased for down flow or horizontal applications.

Accessory Kits Description – Suggested and Required Use

1. Disconnect Kit

The kit is used to disconnect electrical power to the fan coil so service or maintenance may be performed safely.

SUGGESTED USE: Units for 3- through 10-kW electric resistance heaters and cooling controls.

2. Downflow Base Kit

This kit is designed to provide a 1-in. (25mm) minimum clearance between unit discharge plenum, ductwork, and combustible materials. It also provides a gap-free seal with the floor.

REQUIRED USE: This kit must be used whenever fan coils are used in downflow applications.

3. Downflow Conversion Kit

Fan coils are shipped from the factory for upflow or horizontal-left applications. Downflow conversion kits provide proper condensate water drainage and support for the coil when used in downflow applications. Separate kits are available for slope coils and A-coils.

REQUIRED USE: This kit must be used whenever fan coils are used in downflow applications.

4. Downflow/Horizontal Conversion Gasket Kit

This kit provides the proper gasketing of units when applied in either a downflow or horizontal application.

REQUIRED USE: Fan coils in either downflow or horizontal applications.

5. Horizontal Applications - Water Management Kit

This kit provides proper installation of fan coils under conditions of high static pressure and high relative humidity.

SUGGESTED USE: All fan coils.

6. Single Point Wiring Kit

The single point wiring kit acts as a jumper between L1 and L3 lugs, and between the L2 and L4 lugs. This allows the installer to run two heavy-gauge, high-voltage wires into the fan coil rather than 4 light-gauge, high-voltage wires.

SUGGESTED USE: Fan coils with 15- and 20-kW fused heaters only.

7. Filter Kit (12 pack)

The kit consists of 12 fan coil framed filters. These filters collect large dust particles from the return air entering the fan coil and prevents them from collecting on the coil. This process helps to keep the coil clean, which increases heat transfer and, in turn, the efficiency of the system.

SUGGESTED USE: To replace filters in fan coils.

REQUIRED USE: All units unless a filter grille is used.

8. Fan Coil Filter Cabinet

This cabinet is mounted to the fan coil on the return air end and designed to slip over the outer fan coil casing. The cabinets are insulated using the same insulation as production fan coils. They are designed for the removal of particulates from indoor air using FILXXFNC00(14, 17, 21, 24) media filter cartridges. These fan coil media filter cartridge kits are designed for the removal of particles from indoor air. The cartridge is installed in the return air duct next to the air handler or further upstream.

SUGGESTED USE: All fan coils.

9. PVC Condensate Drain Trap Kit

This kit consists of 50 PVC condensate traps. Each trap is pre-formed and ready for field installation. This deep trap helps the system make and hold proper condensate flow even during blower initiation.

SUGGESTED USE: All fan coils.

10. TXV Kit

These kits are designed to add TXVs to piston fan coils or convert R-410A fan coils to R-22 TXVs.

11. Door Gasket Kit

This kit consists of specific adhesive-backed foam strips which are applied to the unit door and frame, limiting air leakage.

12. Accessory Quick Connect Kit

This kit enables the installer to easily connect a 230V IAQ accessory (air purifier, electronic air cleaner, UV light, etc.) kit to a fan coil unit, eliminating the need to run a separate power supply to the accessory. Use of this kit may eliminate the requirement for a licensed electrician to complete the job (check local codes).

25.00



TOWN OF EASTON
PLANNING AND ZONING
14 SOUTH HARRISON STREET, EASTON, MD 21601

RECEIVED

JAN 14 2025

HD 25 - 02

Application #:	2025 - 1375
Date Received:	01/14/2025
Fee Paid:	\$25.00
HDC Meeting Date:	01/27/2025
Date Property Posted:	-

HISTORIC DISTRICT COMMISSION HEARING APPLICATION

APPLICATION TYPE (PLEASE CIRCLE)

ROOFING

DEMOLITION

SIGNAGE

FENCING

OTHER

NEW CONSTRUCTION/ADDITION

EXTERIOR ALTERATIONS

HVAC

FOR TREE REMOVAL(S) - PLEASE USE THE TREE REMOVAL APPLICATION

PROPERTY INFORMATION

ADDRESS

134 N Washington St Easton MD

☐

Contributing

☐

Non-Contributing

YEAR BUILT:

NATIONAL REGISTAR #

PROPERTY INFORMATION

OWNER NAME

134 Associates

TELEPHONE NO.

4104438615

EMAIL

Newman.Ron@134md.com

Applicant or Agent

NAME

Ronnie Newman

TELEPHONE NO.

4104438615

EMAIL

same

Description of Proposal (include additional sheets, as necessary)

Repair Boiler room roof new plywood & Duralast
Also replacing HVAC units
as they went bad 2-12 Ton units
Boiler Room is 12' x 12'

Specific Requirements

- The payment of fees is due at the time of application submittal.
As of December 27, 2022, the fees are as follows:
Commercial - \$200 Residential - \$75 Signs - \$75 Staff Approval \$25
- Provide 2 hard copies plus 1 digital copy of the application and all supplemental information.
- Disclose any easements or deed restrictions pertaining to the property and any improvements including the details of said easements or restrictions.
- Disclose any tax credits and or grants being considered for the project.

The Historic District Commission (HDC) reserves the right to request reasonable additional information or design drawings that further clarify proposals. In cases where professional design services are warranted, the HDC may require the applicant to retain a licensed design consultant. If the applicant or their designee is not present for the scheduled meeting the Commission may elect to refrain from discussing and voting on the scheduled agenda item. Any modifications during review shall warrant an updated application.

I hereby certify that I have reviewed the Easton Historic District Guidelines as published

Signature of Applicant or Agent

Date

Printed Name of Applicant or Agent

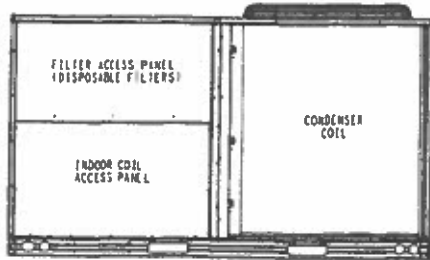
1-13-25
Ronnie Newman

Revised 4.4.2022

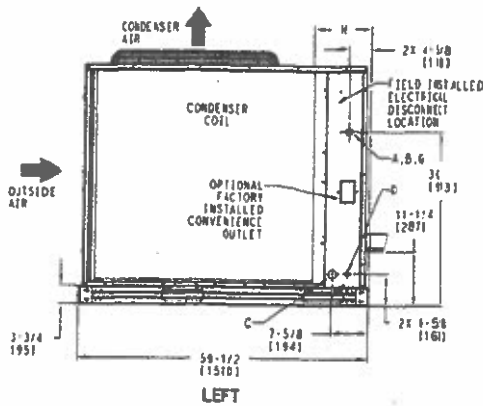
NOTES:

1. DIMENSIONS ARE IN INCHES. DIMENSIONS IN $\square$ ARE IN MILLIMETERS.
2. CENTER OF GRAVITY
3. DIRECTION OF AIR FLOW
4. ALL VIEW DRAWN USING 3RD ANGLE

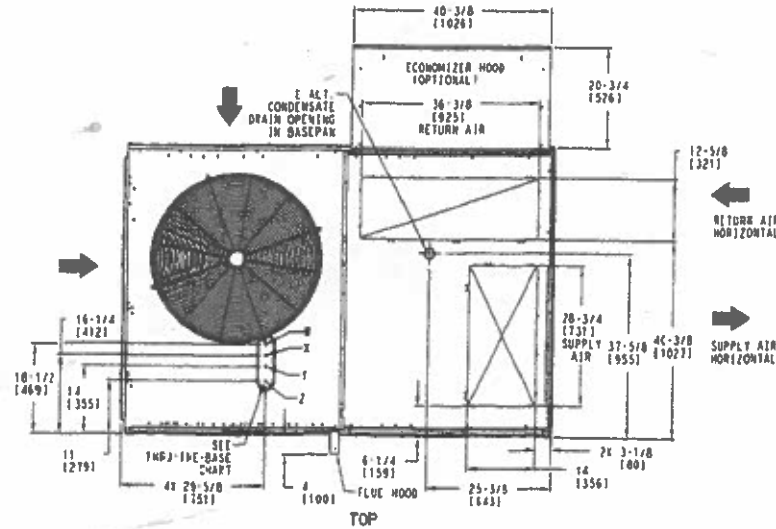
UNIT	OUTDOOR COIL TYPE	N
RGV-150	RTPI	15 7/8 (403)
RTPI - ROUND TUBE, PLATE FIN (COPPER/ALUMINUM)		



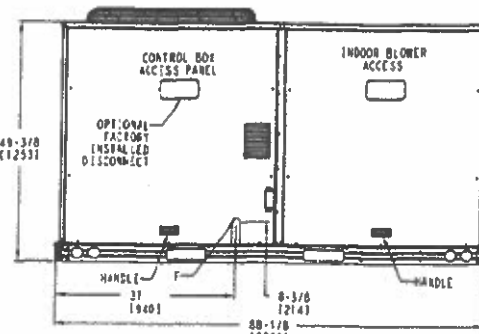
BACK



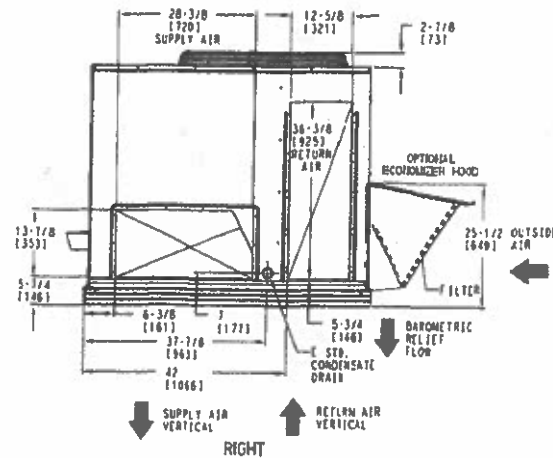
LEFT



TOP



FRONT



RIGHT

CONNECTION SIZES	
A	1 3/8" (35) DIA. FIELD POWER SUPPLY HOLE
B	2 1/2" (64) DIA. POWER SUPPLY KNOCKOUT
C	1 3/4" (51) DIA. GAUGE ACCESS PLUG
D	7/8" (22) DIA. FIELD CONTROL WIRING HOLE
E	3/4" - 1/4" NPT CONDENSATE DRAIN
F	3/4" - 1/4" NPT GAS CONNECTION
G	2" (51) DIA. POWER SUPPLY KNOCK-OUT

THRU-THE-BASE CHART THESE HOLES REQUIRED FOR USE (R61MPH002A01, 004A01)			
THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)	
1/2"	ACC.	7/8" (22.2)	
1/2"	24V	7/8" (22.2)	
1/4"	POWER	1 3/4" (44.4)	
1/4"	GAS	1 5/8" (41.3)	
FOR 'THRU-THE-BASE' FACTORY OPTION, FITTINGS FOR ONLY 1, 2, & 3 ARE PROVIDED			
(100) PROVIDES 3/4" FPT THRU CURB FLANGE & FITTING.			

ETC CLASSIFICATION	SHEET	DATE	SUPERCESSES	RGV-150 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	48TH006409	REV
U.S. ECCN:NSR	1 OF 3	06/01/21				

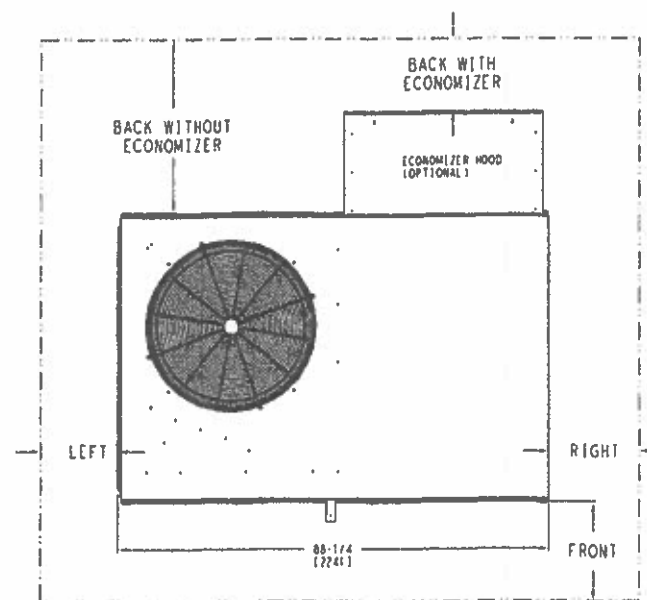
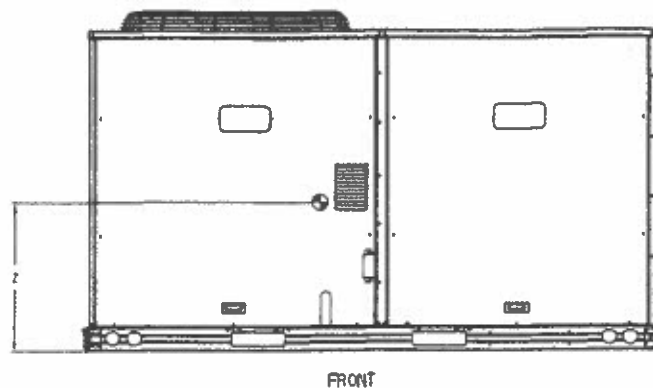
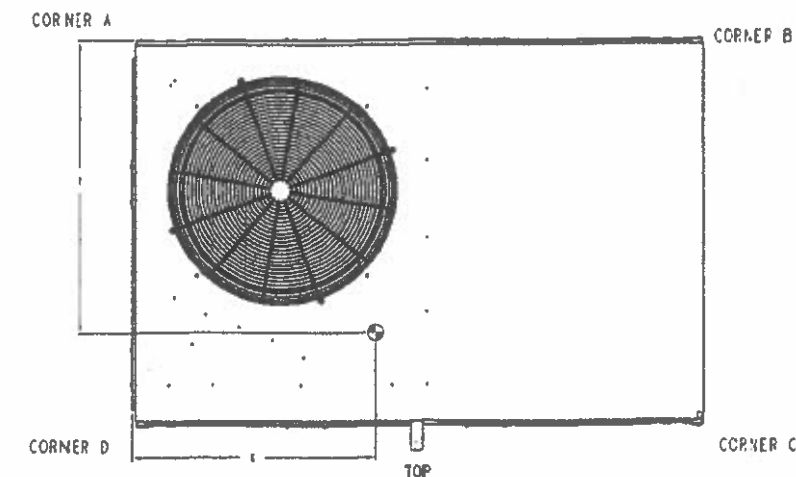


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UNIT	OUTDOOR COIL TYPE	STD. UNIT WEIGHT**		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.			
		LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z	
RGV-150	RTF	1041	472	243	110	195	88	249	122	355	152	39 1/4	199 1/2	34 1/2	187 1/2

** STANDARD UNIT HEIGHT IS WITH LOW GAS HEAT AND WITHOUT PACKAGING. FOR OTHER OPTIONS AND ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.



NOTE:

1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

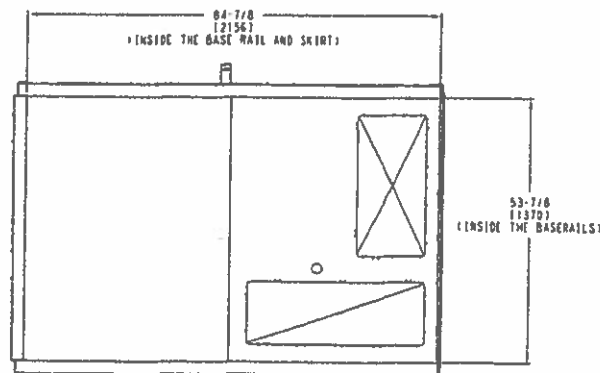
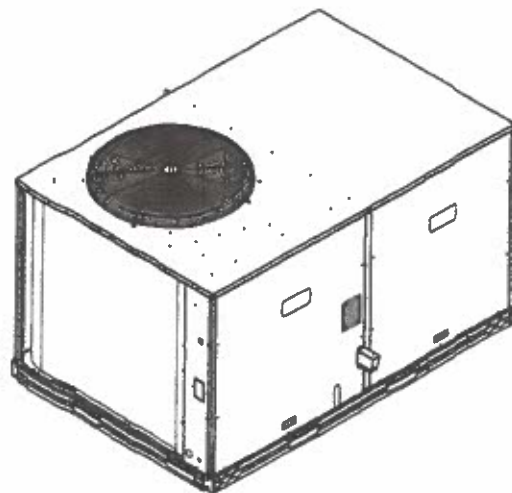
SURFACE	SERVICE WITH		OPERATING CLEARANCE
	CONDUCTIVE BARRIER	NONCONDUCTIVE BARRIER	
FRONT	48 (1219mm)	36 (914mm)	18 (457mm)
LEFT	48 (1219mm)	42 (1067mm)	18 (457mm)
BACK W/O ECON	48 (1219mm)	42 (1067mm)	18 (457mm)
BACK W/ECON	36 (914mm)	36 (914mm)	18 (457mm)
RIGHT	36 (914mm)	36 (914mm)	18 (457mm)
TOP	72 (1829mm)	72 (1829mm)	72 (1829mm)

ITC CLASSIFICATION U.S. ECCM: NSR	SHEET 2 OF 3	DATE 06/01/21	SUPERCEDES	RGV-150 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	481M006409	REV
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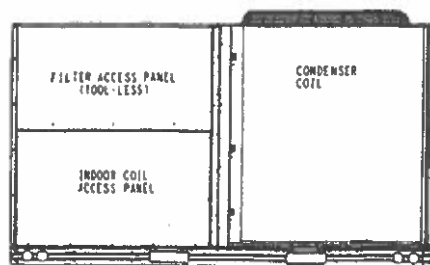
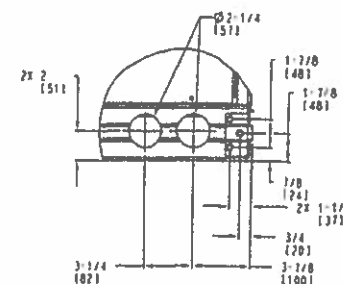
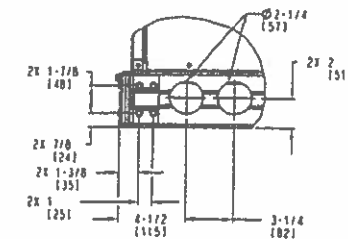


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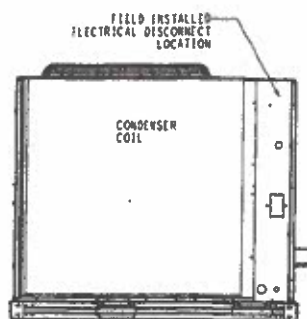
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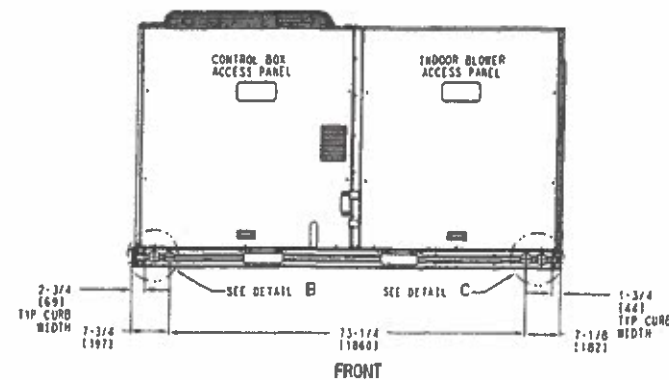
INSIDE BASERAIL DIMENSIONS
 BOTTOM



BACK



LEFT



ITC CLASSIFICATION U.S. ECCN: NSR	SHEET 3 OF 3	DATE 06/01/21	SUPERCEDES -	RGV-150 SINGLE ZONE ELECTRICAL COOLING WITH GAS HEAT	401M006409	REV -
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TOWN & COUNTRY
Siding & Shingles, Inc.
410-240-6888
CLUMP, N.J.

E-T-N

