

Attn: Jason Piper
Phone:
Email:
Company: Minooka Community High School
District #111
Address: 201 S Wabena Ave, Minooka, IL
60447

Date: Oct 6, 2026
Re: FY26-27 MCHS111 Central Campus HVAC
Bid
File Number: 3550
Property: Central Campus
Address: 301 S Wabena Ave, Minooka, IL
60447

Re: FY26-27 MCHS111 Central Campus HVAC Bid

Depue Mechanical is pleased to submit our proposal to provide the following proposal for the above referenced work.

Including:

- Perform Lockout/Tagout (LOTO) on power servicing both the Carrier and AAON units.
- Recover all refrigerant from both units and store it in provided refrigerant recovery cylinders.
- Disconnect gas piping, electrical power, and control voltage from both units.
- Prepare both packaged rooftop units for crane removal.
- Rope off and secure the designated crane work area.
- Provide crane services to remove the existing equipment and lift the new units into place.
- Remove and properly dispose of the existing equipment through an approved recycling process.
- Provide and install one (1) new 70-ton AAON rooftop unit.
- Provide and install one (1) new 15-ton Carrier rooftop unit & curb adapter
- Provide and install new disconnect for new Carrier rooftop unit.
- Provide and install new condensate drains for both rooftop units.
- Modify electrical connections as necessary to accommodate the new equipment.
- Modify gas piping as necessary to connect to the new AAON unit.
- Provide necessary sheet metal modifications, including a curb adapter if required for the new AAON unit.
- Provide a subcontractor to integrate both new units into the existing Building Automation System (BAS).
- Start up both the new Carrier and AAON units and verify proper operation.

Lead time of equipment is 22 weeks

Total Proposal as Outlined Above..... \$406,178.03

Qualifications & Exclusions:

1. All work to be completed during normal working hours (Mon-Fri; 7am – 3:30pm).
2. Permits, bonding, and fees unless otherwise stated are excluded.
3. Any work not mentioned above is not included and will be quoted additionally.
4. Sales Tax is NOT included. If work is tax exempt – Owner is to furnish appropriate documentation to support evidence that project/owner is "Tax Exempt"
5. 60% of the total bid amount must be paid before work begins.
6. Permits are not included in this bid and will need to be obtained by Minooka Community High School.
7. Any electrical modifications required below the roof, including upgrades or corrections to line-voltage wiring, must be completed by a certified electrician and are not included in this bid.
8. Newly installed equipment will include a one-year equipment warranty and a one-year labor warranty provided by DePue Mechanical, provided that the equipment receives proper maintenance within the first year after installation.

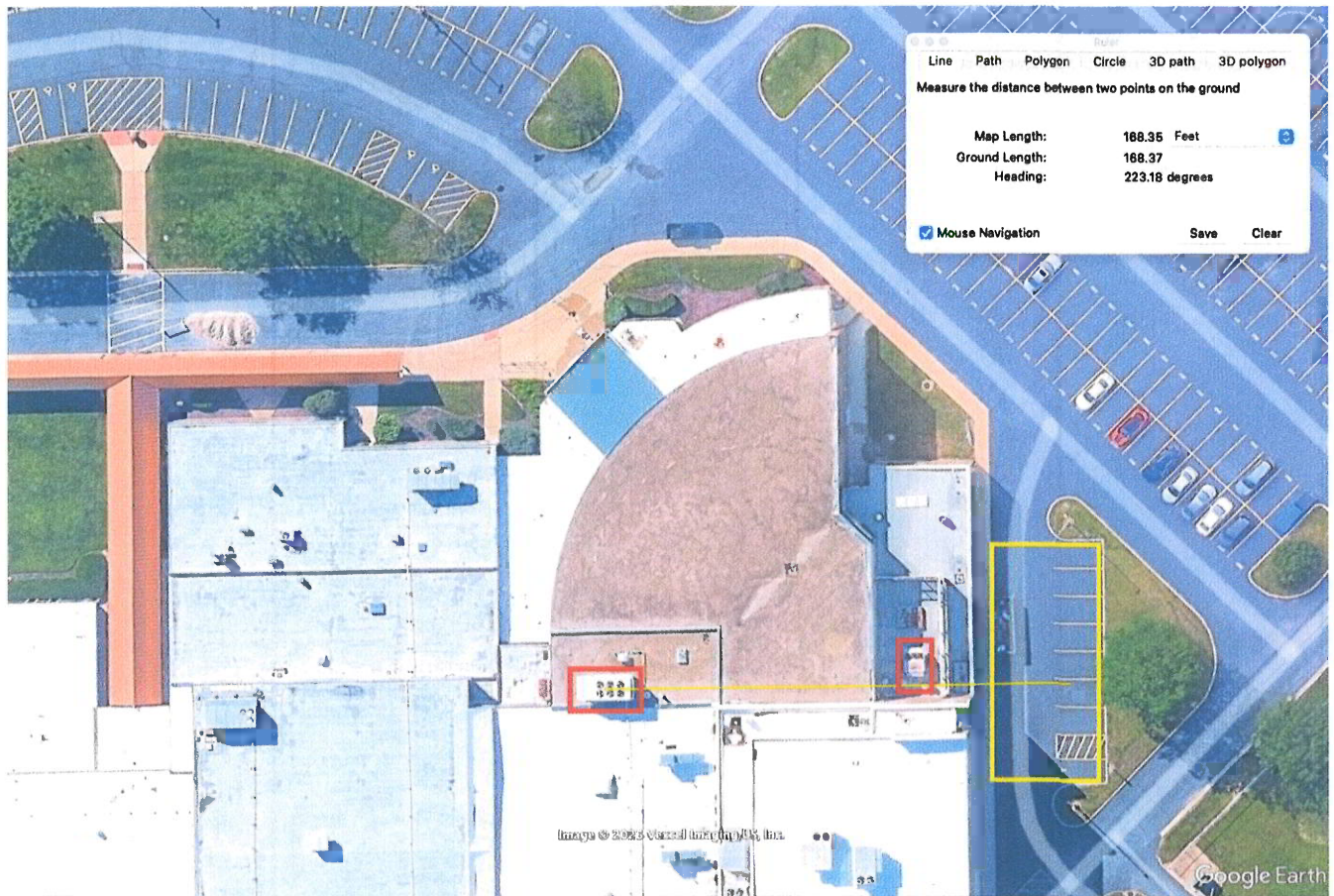
Thank you for allowing us to bid the above and if you have any questions please contact Tom Skowronski at 847-890-8592 or Alex Sanchez at 630-818-6534.

Respectfully submitted,
Alex Sanchez
Depue Mechanical

ACCEPTANCE OF PROPOSAL

This proposal represents the entire agreement between the parties. There are no representations, promises or other understandings unless expressly included herein.

CRANE SCHEDULE



Assurances and Certifications

STATEMENT OF CERTIFICATION

By submission of this bid or proposal, the bidder certifies that:

1. This bid or proposal has been independently arrived at without collusion with any other bidder or with any competitor.
2. This bid or proposal has not been knowingly disclosed and will not be knowingly disclosed, prior to the opening of bids or proposals for this project, to any other bidder, competitor or potential competitor.
3. No attempt has been made or will be made to induce any other person, partnership or corporation to submit or not to submit a bid or proposal.
4. Bidder has not been convicted of price fixing nor pleaded “no contest” to such charges within the last five (5) years.
5. Bidder is not a subsidiary of a company that has been convicted of price fixing nor pleaded “no contest” to such charges within the last five (5) years.
6. As part of its bid, the supplier/bidder does hereby certify that said supplier/bidder is not barred from bidding on the contract as a result of violation of either Section 33E-3 or 33E-4 of Article 33E of Chapter 38 of the Illinois Revised Statutes
7. As part of its bid, the supplier/bidder does hereby certify pursuant to section 3 of the *Illinois Drug-Free Workplace Act (Ill.Rev.Stat. ch 127. para. 132.313)* that [he, she, it] shall provide a drug-free workplace for all employees engaged in the performance or work under the contract by complying with the requirements of the *Illinois Drug-Free Workplace Act* and, further certifies, that [he, she, it] is not ineligible for award of this contract by reason of debarment for a violation of the *Illinois Drug-Free Workplace Act*.
8. As part of its bid, the supplier/bidder does hereby certify pursuant to 775 ILCS 5/2-105 that [he, she, it] has written sexual harassment policies that include at least the minimum information as required by law; that a copy of the policies shall be provided to the Department of Human Rights upon request; and that [he, she, it] is not ineligible for award of this contract by reason of debarment for a violation of the *Illinois Human Rights Act*.
9. As part of its bid, the supplier/bidder does hereby certify pursuant to 775 ILCS 5/2-104 that [he, she, it] complies with the procedures and requirement of the Illinois Department of Human Rights regulations concerning equal employment opportunities and affirmative action, shall provide such information with respect to its employees and applicants for employment and assistance as the Department may reasonably request, and that [he, she, it] is not ineligible for award of this contract by reason of debarment for a violation of the *Illinois Human Rights Act*.

10. Bidder hereby represents, warrants, and certifies that no officer or director thereof has any knowledge that any employee thereof has been convicted of committing or attempting to commit any of the following: "Criminal Code of 1961,; 720 ILCS, Sections 5/11-6 (Indecent solicitation of a child), 5/11-9 (Public indecency), 5/11-14 (Prostitution), 5/11-15 (Soliciting for a prostitute), 5/11-15.1 (Soliciting for a juvenile prostitute), 5/11-19 (Pimping), 5/11-19.1 (Juvenile Pimping), 5/11-19.2 (Exploitation of a child), 5/11-20 (Obscenity), 5/11-20.1 (sexual assault), 5/12-14 (Aggravated criminal sexual assault), 5/12-15 (Criminal sexual abuse), and 5/12-16 (Aggravated criminal sexual abuse, and or those offenses defined in the Cannabis Control Act," 720 ILCS, 550/I et. Seq. (except the "Illinois Controlled Substances Act," 720 ILCS 570/100 et. Seq. and/or any offense committed or attempted in any other state or against the laws of the United States, which if committed or attempted in this State, would have been punishable as one or more of the foregoing offenses.
11. Bidder further agrees that it shall not employ any person who have or may have direct, daily contact with the pupils of any school in the district, and for whom a criminal background investigation has not been conducted pursuant hereto, and further represents and agrees that all applicants for any such employment shall furnish with their applications the attached written "Authorization for Criminal Background Information" form authorizing the Board of Education to request a criminal background investigation of said applicant pursuant to Section 5/10-21.9 of the School Code of Illinois and to receive criminal history record information pursuant thereto to determine if the applicant has been convicted of committing or attempting to commit any of the criminal or drug offenses enumerated above.
12. Bidder further agrees to submit with said authorization payment for any costs and expenses associated with the criminal background investigation Bidder further represents, warrants, and certifies that no applicant for employment with respect to whom the criminal investigation reveals any conviction for committing and/or attempting to commit any of the above enumerated offenses, shall be employed thereby in any position that involves or may involve contact with the students of the school district. This certification is executed on the date hereinafter indicated by the designated bidder by its duly authorized officer.
13. Bidder represents and warrants that it shall comply with the terms and conditions of this Request for Proposal. In addition the bidder agrees that the terms and conditions contained herein take precedence over any conflicting terms in other documents of the parties.

By: *Alex Sanchez*
Authorized Agent Signature

Alex Sanchez
Printed Name

10/13/2026
Date

SUBSCRIBED and SWORN TO before

this 13 day of October, 2026

[Signature]
NOTARY PUBLIC



This page must be returned signed and notarized for the bid to be considered.

BID SUBMITTAL CHECKOFF SHEET

Please Return completed with Bid

1. The bid should include any and all warranties and extended warranties.

Included ☒ Yes ☐ No

2. The bid should include all specification sheets for the equipment and any and all preventative maintenance for the equipment and available maintenance plans.

Included ☒ Yes ☐ No

3. The bids shall include references from 3 school districts of similar size and scope of project, preferably Illinois school districts.

Included ☐ Yes ☒ No

4. The bid shall include an ACORD Certificate of Liability Form indicating the types and amounts of liability insurance maintained by the bidder.

Included ☒ Yes ☐ No

5. The bid shall include the Assurances and Certifications form contained herein signed and completed.

Included ☒ Yes ☐ No

6. The bid shall include a detailed specification substantially equivalent to that contained herein. Any exceptions shall be documented.

Included ☒ Yes ☐ No

7. The bid shall include drawings of the new layout of the room(s) with recommended design graphics
The district is open to receiving proposals that present various options/ at various cost levels.

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

8. The bid shall ☐ include separate line items for the cost of the material shipping, and the installation.

Included ☒ Yes ☐ No

Located in Appendix (or Tab) #: _____

9. The bid shall include lead time for ordering and shipping. Additionally, the bid shall contain an affirmative statement whether the contractor can deliver and install said equipment prior to March 26, 2027 if awarded said bid at the October board meeting and P.O. issued by October 22, 2026.

Included ☒ Yes ☐ No

Located in Appendix (or Tab) #: Page 1 of submittal

10. The bid should include any and all warranties and extended warranties

Included ☒ Yes ☐ No

Located in Appendix (or Tab) #: _____

11. The bid should include all specification sheets for the flooring and any and all preventative maintenance for the flooring and available maintenance plans.

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

12. The bids shall include references from 3 school districts of similar size and scope of project, preferably Illinois school districts.

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

13. The bid shall include an ACORD Certificate of Liability Form indicate the types and amounts of liability insurance maintained and substantially similar to the sample Accord form contained herein

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

14. The bid shall include the Certification form contained herein signed and completed.

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

15. A copy of the Illinois Secretary of State's Department of Business Services online records evidencing that the contractor has a current corporate annual report on file. If the contractor is an individual, sole proprietor, or partnership, this subsection shall not apply;

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

16. Documents evidencing current registration with the Illinois Department of Revenue if the contractor has employees (e.g. document with account number, Illinois Business Tax number).

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

17. Documents evidencing current registration with the Illinois Department of Employment Security if the contractor has employees (e.g. document with UI account number).

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

18. Disclosure of any federal, state or local tax liens or tax delinquencies against the contractor or any officers of the contractor in the last five (5) years.

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

19. A statement that all employees are (i) covered under a current workers' compensation insurance policy and (ii) properly classified under such policy. If the contractor is insured with a carrier, the evidence of workers' compensation insurance shall be a copy of the "Information Page" of the contractor's workers' compensation policy and any continuation of that Information Page which include the name and address of the insured, as well as the class codes the compensation premium is based on and the total estimated remuneration per class code.

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

20. A statement of compliance with all provisions of the Illinois Prevailing Wage Act (820 ILCS 130/1 et seq.) and all rules and regulations therein, for the past five (5) years. Such statement shall also provide that the contractor has reviewed the Prevailing Wage Act or federal Davis-Bacon and Related Acts, has reviewed and agrees to pay the applicable prevailing wage rates attached to the bid specifications, and will strictly comply with the Prevailing Wage Act or federal Davis-Bacon and Related Acts and related requirements. A contractor who has been found by the Illinois Department of Labor to be in violation of the Prevailing

Wage Act twice within a three (3) year period shall be deemed not to be a Responsible Contractor for two (2) years from the date of the latest finding.

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

21. A copy of the written program for the prevention of substance abuse to be filed with a public body pursuant to the Substance Abuse Prevention on Public Works Projects Act (820 ILCS 265/1 et seq.).

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

21. A statement that individuals who will perform work on the district project on behalf of the contractor are properly classified as either (i) an employee or (ii) an independent contractor under all applicable state and federal laws and local ordinances.

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

22. Documents evidencing any professional or trade license required by law or local ordinance for any trade or specialty area in which the contractor is seeking a contract award. Additionally, the contractor must disclose any suspension or revocation of such license held by the company, or of any director, officer or manager of the company.

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

23. Evidence of participation in apprenticeship training programs applicable to the work to be performed on the project, which are approved by and registered with the United States Department of Labor's Office of Apprenticeship, or its successor organization; and evidence that any applicable apprenticeship program has graduated at least five (5) apprentices in each of the past five (5) years for each of the construction crafts the contractor will perform on the project. Evidence of graduation rates are not required for apprenticeable crafts dedicated exclusively to the transportation of material and equipment to and from the district project.

The required evidence includes but is not limited to a copy of all applicable apprenticeship standards and Apprenticeship Agreement(s) for any apprentice(s) who will perform work on the district project; and documentation from each applicable apprenticeship program certifying that it has graduated at least five (5) apprentices in each of the past five (5) years for each construction craft the contractor will perform on the project. Additional evidence of

participation and graduation requirements may be requested by the Minooka Community High School District #111 at its discretion.

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

24. Contractor shall certify that all employees expected to perform work on the project have completed a 10-hour or greater OSHA safety program. Only workers that have satisfactorily completed a 10-hour or greater OSHA safety program will be allowed to participate on the project. The contractor must have copies of employee OSHA cards on file, and Minooka Community High School District #111 may request the contractor provide copies of employees OSHA cards; failure to produce an employee's OSHA card may result in a determination that the contractor is not a responsible contractor.

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

25. Disclosure of the name and address of each subcontractor from whom the contractor has accepted a bid and/or intends to hire on any part of the project. Further, each such subcontractor shall be required to adhere to the requirements set forth herein as though it were bidding directly to Minooka Community High School District #111. Each contractor shall submit all subcontractor information and supporting documentation to Minooka Community High School District #111 prior to the subcontractor commencing work on the project. It shall be the responsibility of the Contractor to ensure its subcontractors comply with all of the requirements of this Code, including the timely and complete submittals of all required documentation, and the full compliance with all obligations set forth in this Ordinance and the project specifications. Failure of a successful Contractor to submit the required subcontractor information or documentation may constitute a contractual default and/or breach by the contractor and may disqualify a Contractor from performing work on future projects.

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

26. Contractor must provide evidence of relevant experience on similar size and scope projects in the past (5) years that indicate the necessary capacity to perform the project and must provide adequate reference(s) verifying the quality of work performed;

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

27. Statements as to past performance, which shall give an accurate and complete record of all public works projects completed in the past three (3) years by the contractor. Such

statements shall include the name of the public body and the project, original contract price, final contract price, the names of all subcontractors used, if applicable, and a statement as to compliance with completion deadlines.

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

28. Any determinations by a court or governmental agency for violations of federal, state, or local laws, including but not limited to serious, willful or repeated violations of the Occupational Safety and Health Act (OSHA), violations of contracting or antitrust laws, tax or licensing laws, environmental laws, or the Federal Davis-Bacon and Related Acts.

Included ☐ Yes ☒ No

Located in Appendix (or Tab) #: _____

29. Any material changes to the contractor's status, at any time, must be reported in writing within fourteen (14) calendar days of its occurrence. Failure to comply with this requirement is grounds for the contractor to be deemed a non-responsible contractor.

Acknowledged & Agreed ☒ Yes ☐ No

30. It is the sole responsibility of the contractor to comply with all submission requirements at the time it submits its bid to Minooka Community High School District #111. Contractor submissions deemed inadequate or incomplete may result in a determination that the contractor is not a responsible contractor.

Acknowledged & Agreed ☒ Yes ☐ No

31. The submission requirements also apply to all subcontractors, except that the successful contractor shall submit all subcontractor submissions to Minooka Community High School District #111 prior to the subcontractor commencing work on the project. Failure of a subcontractor to submit the required information shall not disqualify the successful contractor from performing work on the project and shall not constitute a contractual default and/or breach by the successful contractor.

Acknowledged & Agreed ☒ Yes ☐ No

However, Minooka Community High School District #111 may withhold all payments otherwise due for work performed by a subcontractor, until the subcontractor submits the required information and Minooka Community High School District #111 approves such information. Further, where Minooka Community High School District #111 deems necessary, Minooka Community High School District #111 may also require that the successful contractor remove the subcontractor from the project and replace it with a responsive and responsible subcontractor.

Acknowledged & Agreed ☒ Yes ☐ No

BID SUBMITTAL CHECKOFF SHEET (must be returned with bid)

Company Name: DePue Mechanical

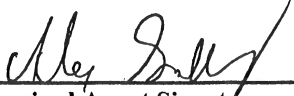
By: *Alex Sanchez*
Authorized Agent Signature

Alex Sanchez
Printed Name

10/13/2026
Date

CONTRACTOR QUESTIONNAIRE (must be returned with Bid)

Company Name: DePue Mechanical

By: 
Authorized Agent Signature

Alex Sanchez
Printed Name

10/13/2026
Date

- Pursuant to 105 ILCS 5/10-20.40 all school districts in the State of Illinois are required to annually report the number and value of contracts awarded to “minority owned businesses, female owned businesses, and businesses owned by persons with disabilities, as defined in the Business Enterprise for Minorities, Females and Persons with Disabilities Act, and locally owned businesses” for contracts over \$25,000. In order to comply with this requirement, we request contractors to complete the following questionnaire and return with their bid responses.
- For purposes of this questionnaire, “Locally Owned” means that the registered address or principal place of business of the company is located within the boundaries of the school district. For a corporation, LLC, LP, LLP, or LLLP, the registered address is the address for business on file with the Illinois Secretary of State. For all other business entities, the principal place of business is where the books and records of the business are kept and/or the management of the business works.

Is Your Company a Locally Owned Business YES _____ NO X as it relates to this School District?

- Guidance issued by the Illinois State Board of Education suggests that we inquire whether your company is certified as a minority, female, or disabled person owned business by a certifying agency (e.g., Chicago Transit Authority – Cook County – Illinois Department of Transportation – Metropolitan Transit Authority Metropolitan Water Reclamation District – U.S. Small Business Administration – State of Illinois) or that it would be eligible for certification if an application were made. The Guidance includes the definitions set forth below. Definition of Ownership: “Minority owned business, female owned business, and business owned by a person with a disability” means a business concern which is at least 51% owned by one or more minority persons, females, or persons with a disability; or in the case of a corporation, at least 51% of the stock in which is owned by one or more minority persons, females, or persons with a disability; and the management and daily business operations of which are controlled by one or more of the minority females, or persons with a disability who own it. (30 ILCS 575/2)
- “Minority person” shall mean a person who is a citizen or lawful permanent resident of the United States and who is: (a) African American – a person having origins in any of the black racial groups in Africa; or (b) Hispanic - a person of Spanish or Portuguese culture with origins in Mexico, South or Central America, or the Caribbean Islands, regardless of race; or (c) Asian American - a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent or the Pacific Islands); or (d) Native American or

Alaskan Native – a person having origins in any of the original peoples of North America.
(30 ILCS 575/2)

- “Female” shall mean a person who is a citizen or lawful permanent resident of the United States and who is of the female gender. (30 ILCS575/2)
- “Person with a disability” means a person who is a citizen or lawful resident of the United States and is a person qualifying as being disabled, where “Disabled” means a severe physical or mental disability that: (a) results from: amputation, arthritis, autism, blindness, burn injury, cancer, cerebral palsy, cystic fibrosis, deafness, head injury, heart disease, hemiplegia, hemophilia, respiratory or pulmonary dysfunction, mental retardation, mental illness, multiple sclerosis, muscular dystrophy, musculoskeletal disorders, neurological disorders, including stroke and epilepsy, paraplegia, quadriplegia and other spinal cord conditions, sickle cell anemia, specific learning disabilities, or end stage renal failure disease; and (b) substantially limits one or more of the person's major life activities. Another disability or combination of disabilities may also be considered as a severe disability for the purposes of item (a) if it is determined by an evaluation of rehabilitation potential to cause a comparable degree of substantial functional limitation similar to the specific list of disabilities listed in this definition. (30 ILCS 575/2).

Is Your Company a Minority Owned Business? YES _____NO X

Is Your Company a Female Owned Business? YES _____NO X

Is Your Company a Business Owned By Persons with Disabilities? YES _____NO X

Exhibit A. Sample Contract

CONTRACT AGREEMENT

This Contract Agreement ("Agreement") is made and entered into as of October, 13th, 2026 (the "Effective Date"), by and between ****Minooka Community High School District No. 111****, an Illinois public school district ("District" or "Owner"), and DePue Mechanical ("Contractor").

ARTICLE 1 – PROJECT AND CONTRACT DOCUMENTS

1.01 Project. The District contracts with Contractor for the Central Campus Auditorium HVAC Project at Minooka Community High School District No. 111 Central Campus, Minooka, Illinois which includes removing and installing HVAC unit replacement (the "Project").

1.02 Contract Documents. The following documents are made part of this agreement and hereby incorporated by reference. The Invitation to Bid / Request for Proposal, Contractor's Bid and all appendices, Specifications, Drawings, Notice of Award, Bonds, Insurance, this Agreement, and any written addenda or modifications agreed and signed between the parties.

1.03 Order of Precedence. In the event of conflict, the District's Invitation to Bid / Request for Proposal shall control.

ARTICLE 2 – SCOPE OF WORK

2.01 Scope. Contractor shall furnish all labor, materials, equipment, tools, supervision, transportation, insurance, and services necessary to complete the Project.

ARTICLE 3 – CONTRACT TIME

3.01 Time of Essence. Time is of the essence.

3.02 Substantial Completion. The Project must start no sooner than March 26, 2027 and the Contractor shall achieve substantial completion no later than April 5, 2027, unless extended in writing by the District.

ARTICLE 4 – CONTRACT PRICE AND PAYMENT

4.01 Contract Sum. The total not-to-exceed Contract Price is \$ \$406,178.

4.02 Payment. Payment shall be made in accordance with the Illinois Local Government Prompt Payment Act (300 ILCS 540/).

ARTICLE 5 – PREVAILING WAGE AND COMPLIANCE

5.01 Prevailing Wage. Contractor shall comply with the Illinois Prevailing Wage Act (820 ILCS 130/1 et seq.).

5.02 Laws. Contractor shall comply with all applicable federal, state, and local laws and regulations.

ARTICLE 6 – BONDS AND INSURANCE

6.01 Bonds. Contractor shall furnish Performance and Labor & Material Payment Bonds in the full amount of the Contract Price and in compliance with the Illinois Public Construction Bond Act (30 ILCS 550/).

6.02 Insurance. Contractor shall maintain all insurance required by the Bid Documents and name the District as Additional Insured.

ARTICLE 7 – SAFETY AND INDEMNIFICATION

7.01 Safety. Contractor shall comply with OSHA and provide a safe work environment.

7.02 Indemnification. To the fullest extent permitted by law, the contractor shall be responsible for any and all injuries or damages to property due to the activities of the contractor, its subcontractors, suppliers, agents and employees arising out of or resulting from performance of the contract, or any activity in connection therewith. The contractor shall indemnify and hold harmless the District, including the Board of Education, its employees, officers and agents from any and all claims, lawsuits, actions, costs and fees, including

reasonable attorney's fees and expenses of every nature and description, arising from, growing out of, or connected with the work, or on account of or in consequence of any neglect in safeguarding the work, or on account of or in consequent of using unacceptable materials in construction of the work of because of any act, omission, neglect, or misconduct of contractor, its officers, employees, agents, subcontractors, or anyone directly or indirectly employed by them and/or anyone for whose acts they may be liable for because of any claims or amount of recovered by reason of any infringement of patent, trademark, or copyright, or by reason of the violation of any law, ordinance, order, or decree.

ARTICLE 8 – LIQUIDATED DAMAGES

8.01 Liquidated Damages. Time is of the essence in the delivery and installation of the equipment in this bid. The successful contractor must warrant that it will deliver and install substantially all of said equipment by August 1, 2026, provided the bid is awarded at the March School Board meeting. The parties further agree that should the successful contractor fail in completion by August 11, 2026 that the district's damages would be difficult to calculate and that liquidated damages are appropriate, not as a penalty, but to compensate the district for the contractor's breach. After a grace period of 7 days, delays, with the exception of Force Majeure or delays not imputable to the contractor, the rate of liquidated damages charged to the contractor shall be \$1,000 dollars a day. Such Liquidated Damages, however, shall not exceed 5% of the total value of the Goods involved in the late delivery

ARTICLE 9 – TERMINATION

9.01 Termination for Cause. The school district may terminate the Contract if the Contractor: 1) repeatedly refuses or fails to supply enough properly skilled workers or proper materials; 2) fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors; 3) repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or 4) otherwise is guilty of material breach of a provision of the Contract Documents. The school district shall provide the contractor with written notice of material breach, if after 10 days the contractor has not cured the breach the district may terminate the contract.

ARTICLE 10 – GOVERNING LAW AND VENUE

10.01 Governing Law and Forum. This Request for proposal and any subsequent agreement stemming therefrom shall be governed by and construed and enforced in accordance with the laws of the State of Illinois applicable to contracts made and to be performed in such state without giving effect to its principles of conflicts of laws. The parties agree that any action or proceeding arising out of or in connection with this Request for proposal and any subsequent agreement therefrom shall be brought only in any Grundy County Illinois or the Northern District of Illinois. Parties consent to submit to the exclusive jurisdiction of the Illinois Courts for purposes of any action or proceeding arising out of or in connection with this Request for proposal and any subsequent agreement therefrom and waive, and agree not to plead or make, any claim that the Illinois Courts lacks venue or that any such action or proceeding brought in the Illinois Court has been brought in an improper or inconvenient forum.

ARTICLE 11 – BOARD APPROVAL AND ENTIRE AGREEMENT

11.01 Board Approval. This Agreement is subject to approval by the Board of Education of Minooka Community High School District No. 111.

11.02 Entire Agreement. This Agreement constitutes the entire agreement between the parties and may be modified only in writing executed by the District.

Company Name: Depue Mechanical Contact Person/email: ~~@Sanchez101~~
Alex. Sanchez@depuemechanical.com

**Minooka Community High School District 111
201 S. Wabena St.
Minooka, IL 60447**

**INVITATION TO BID ON THE
MINOOKA COMMUNITY HIGH SCHOOL DISTRICT 111
CENTRAL CAMPUS AUDITORIUM HVAC BID**

DEADLINE FOR RETURN IS TUESDAY, OCTOBER 13, 2026 AT NOON

BIDS ARE TO BE SUBMITTED TO:

**Minooka Community High School District 111
Attn: Dr. Kathleen Wilkey, Assistant Superintendent of Business
201 S. Wabena St., Minooka IL 60447**

1. OPENING OF BIDS

Bids must be clearly marked “CENTRAL CAMPUS AUDITORIUM HVAC BID”. Bids must be filed with Dr. Kathleen Wilkey, Assistant Superintendent of Business & General Counsel at 201 S. Wabena St., Minooka IL 60447 no later than noon Tuesday, October 13, 2026 at which time they will be opened and publicly acknowledged.

Bidders are invited to attend. Bids will be studied and reviewed and it is anticipated that a recommendation will be made to the Board of Education for award of Bid on Wednesday, October 21, 2026. The Board of Education reserves the right to waive any informalities, irregularities, or defects in any proposal should it be in the best interest of the school district to do so.

2. PREPARATION OF PROPOSAL

Proposal must be submitted on the prescribed Bid Form at the end of this document. All bids must be submitted in a sealed envelope bearing on the outside of the envelope the name of the bidder and the address and must be marked “CENTRAL CAMPUS AUDITORIUM HVAC BID” No Bid forwarded by mail or messenger will be accepted unless received before the scheduled time for opening bids. Proposals will be publicly opened immediately after the deadline. The method of transmittal of the proposal is at the seller’s risk of untimely receipt by the Board. The District will not be responsible for delays in delivery by UPS, FedEx, Airborne or any other carrier the vendor chooses. Faxed copies are not acceptable. Late bids will be returned unopened to the sender.

3. METHODS OF AWARD

The Board of Education reserves the right to reject any and all bids or to accept a bid in whole or in divisible part if deemed to be in the best interest of the School District. The Board of Education reserves the right to choose alternates it deems to be in the best interest of the School District. The Board of Education shall have the right and authority to award orders to the bidder or bidders best meeting all specifications and conditions based upon the sole judgment of the Board. Bids may be accepted in whole or in part, i.e. depending on the cost the district may decide not to do one or more or aspects of the bid.

In making its determination the following qualifications in addition to price will be considered by the Board:

- a. The ability, capacity and skill of the Bidder to perform the service required.
- b. Whether the Bidder can perform the contract or provide the service promptly, or within the time specified, without delay or interference
- c. The character, integrity, reputation, judgment, experience and efficiency of the Bidder.
- d. The quality of performance of previous contracts or services.
- e. The previous and existing compliance by the Bidder with laws and ordinances relating to the contract or service
- f. The sufficiency of the financial resources and ability of the Bidder to perform the contract or provide the service
- g. The quality, availability and adaptability of the supplies, or services, to the particular use required
- h. Past history and performance that the Bidder may have with the District.
- i. Such other information as may be secured having a bearing on the decision to make the award
- j. Warranties & serviceability.
- k. In determining a bidder's responsiveness, the Board shall consider material deviations from the advertised specifications which materially affect price, quantity or limit the bidder's liability.

Proposers and other interested parties are cordially invited to be present at the public proposal opening to be held at the time the sealed proposals are due. Proposals will be publicly opened and results announced.

4. BINDING OFFER, DURATION AND WITHDRAWAL OF BIDS

Responses constitute a complete and binding offer for a period of 60 days from submission. The terms of this Request for proposal shall prevail over any contradicting terms in any subsequent agreement therefrom.

The district, at its sole discretion, has the right to accept all, some or none of the bidder's proposal unless the bidder indicates in its proposal that its offer is contingent on the acceptance of all or certain parts of its proposal.

By submitting a proposal, bidder agrees that it is fully capable and willing to provide the equipment herein and represents and warrants that it will be bound by its responses to this RFP and the terms contained herein and any modifications to such response as agreed upon in writing.

A written request for the withdrawal of the bid or any part thereof may be granted if the request is received by the district prior to the specified time of bid opening. No bids may be withdrawn after they have been opened.

5. CERTIFICATES & ASSURANCES

All bidders shall submit all Certificates and Assurances herein contained and as required by law.

6. INVOICES

The successful Bidder shall submit three copies of invoices. Payment to the bidder shall be made within 30 days after receipt of invoice and approval by the Board of Education. Payments are approved by the Board of Education at its monthly Board meeting (typically the third Wednesday of each month) provided a valid invoice is received at least two weeks prior to the Board meeting and said service has been provided and accepted by the Board of Education.

7. LATE BIDS

Formal bids, amendments thereto, or requests for withdrawal of bids received by the District after the time specified for bid opening will not be considered.

8. COMPLETENESS

All information required by the Invitation to Bid must be supplied to constitute a proper bid.

9. AUTHORITY TO ACT AS AGENT

Upon request, the bidder will provide proof to the District that the signatory on the proposal form has the authority to bind the bidder to the price(s) quoted.

10. DEVIATIONS

In the event that the Bidder intends to deviate from the specifications, all such deviations must be listed and attached to the bid. The absence of a submitted deviations will assure the District that no deviations from specifications exist.

11. QUESTIONS REGARDING SPECIFICATIONS

Should a bidder find discrepancies or omissions in the specifications or instructions, or should he/she be in doubt as to their true meaning, he/she should notify the Assistant Superintendent who will, in turn, clarify such specifications and notify other bidders of any material change or clarification. The Board of Education shall not be held responsible for oral instruction to bidders. **No questions will be accepted 24 hours prior to the bid opening.**

12. SUBLETTING CONTRACT

It is mutually understood and agreed that the Bidder shall not assign, transfer, convey, sublet, or otherwise dispose of his/her contract or right, title or interest therein, or power to execute such contract, to any other person, firm or corporation, without the previous written consent of the District, but in no case shall such consent relieve the Bidder from his/her obligation, or change the terms of the Contract.

Furthermore, the bidder shall not allow a subcontractor to commence work on any portion of the project without evidence that the subcontractor has insurance coverage equal to coverages required of the bidder by the district.

13. NON-DISCRIMINATION

No bidder who is the recipient of the District's funds, or proposes to perform any work or furnish any goods under this agreement shall discriminate against any worker, employee or applicant or any member of the public because of religion, race, sex, color, or national origin, nor otherwise commit any unfair employment practice. Bidder further agrees that this article will be incorporated by the bidder into all contracts entered into with suppliers of materials or services, bidders and subcontractors and all labor organizations furnishing skilled, unskilled, and craft union skilled labor, or who may perform any such labor or services in connection with this contract.

14. SEXUAL HARASSMENT POLICY

Every party to a public contract and every eligible bidder must have a written sexual harassment policy that shall include, at a minimum, the following information: (i) the illegality of sexual harassment; (ii) the definition of sexual harassment under state law; (iii) a description of sexual harassment, utilizing examples; (iv) the recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Human Rights Commission; (v) directions on how to contact the Department and Commission; and (vi) protection against retaliation as provided by Section 6-101 of the Human Rights Act.

15. INDEMNITY

Bidder shall indemnify, keep and save harmless the District, its agents, officials and employees, against all injuries, death, loss, damages, claims, patent claims, suits, liabilities, judgments, cost and expenses, which may in any way accrue against the District in consequence of the granting of this contract or which in any way result therefrom, whether or not it shall be alleged or determined that the act was caused through negligence or omission of the Bidder or his employees, and the bidder shall, at his/her own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefrom or incurred in connection therewith, and if any judgment shall be rendered against the District in any such action, the bidder shall, at his/her own expense, satisfy and discharge the same. Bidder expressly understands and agrees that any performance bond or insurance protection required by this contract, or otherwise provided by bidder, shall in no way limit the responsibility to indemnify, keep or save harmless and defend the District as herein provided.

16. COLLUSIVE BIDDING

The bidder certifies that his/her bid is made without any previous understanding, agreement or connection with any person, firm, or corporation making bid for the same project, and is in all respects fair, without outside control, collusion, fraud, or otherwise illegal action.

17. IDENTICAL BIDDING - EXECUTIVE ORDER NO. 10946

All identical bids submitted to the District as a result of advertised procurement for materials, supplies, equipment or services exceeding \$2,500.00 in total amount shall, at the discretion of the District, be reported to the Attorney General of the United States in accordance with Form DJ-1510 and the Presidential Order dated April 24, 1961 for possible violation and enforcement of antitrust laws.

18. BIDDER NOT AN AGENT

The bidder shall not be held or deemed in any way to be an agent, employee, or official of the District, but rather an independent contractor furnishing services to the District.

19. RESPONSIBILITY FOR MATERIALS SHIPPED

The bidder shall be responsible for the equipment, materials and supplies covered by this contract until they are delivered to the district, but the bidder shall bear all risk on rejected materials and supplies after notice of rejection. Rejected materials or supplies must be promptly removed by and at the expense of the bidder after notification of rejection.

20. INSTALLATION WINDOW

All work under this proposal is scheduled to be performed during Spring Break to minimize disruption to school operations. Work will commence on Friday, March 26, 2027, at 4:00 PM and will be completed by Friday, April 2, 2027. The site will be fully cleared and prepared for normal facility operations well in advance of school resuming on Monday, April 5, 2027. Pricing assumes continuous, uninterrupted access to

all designated work areas throughout this execution window.

21. INSPECTIONS

If applicable, for supplies and materials purchases - inspection and acceptance will be made after delivery. Final inspection shall be conclusive except as regards latent defects, fraud, or such gross mistakes as amount to fraud. Final inspection and acceptance or rejection of the materials or equipment will be made as promptly as practicable, but failure to inspect or accept or reject materials or equipment shall not impose liability on the District for such materials or equipment as are not in accordance with the specifications. All delivered materials shall be accepted subject to inspection and physical count.

22. ZONING

Bidders or vendors should be aware that the District is required by state law to follow and adhere to all local municipal zoning codes.

23. PREVAILING WAGE

The awarded Bidder is required to pay all applicable wage rates as required and stipulated by Federal, State and Local laws.

24. WARRANTIES

The Contractor warrants that all Work shall be free from defects in materials and workmanship for a minimum period of one (1) year from the date of Substantial Completion. If, within this period, the Owner provides the Contractor with written notice of any defective Work, the Contractor shall, at its sole cost and expense, promptly correct, repair, or replace such defective Work to conform to the Contract Documents, including any damage to other work or property caused by such defects.

25. INSURANCE

All insurance coverage shall be provided by Illinois insurance companies policyholder ratings no lower than "A" and financial ratings not lower than "V" in the Best's Insurance Guide's latest edition in effect as of the date of the contract. The insurance carrier must give the School District thirty (30) day notice of cancellation. Minooka Community High School District No. 111 must be named as additional insured. Certificate of Liability Insurance is to be provided to the district if proposal is accepted. General Liability coverage and Automobile Liability coverage in amounts not less than \$1,000,000 per incident, and workers compensation insurance as required by statute, be stated as minimum requirements for the contractor and all subcontractors. In the "Description of Operations locations/Vehicles/Special Items" section of the Certificate it must state: "Minooka Community High School District 111 and its Board of Education is additional insured per the Additional Insured Endorsement".

26. SAFETY

The bidder during shipping/receiving shall provide all barricades, security, and signage necessary to control vehicle and pedestrian traffic.

27. CONTROLLING LAW & FORUM

This Request for proposal and any subsequent agreement stemming therefrom shall be governed by and construed and enforced in accordance with the laws of the State of Illinois applicable to contracts made and to be performed in such state without giving effect to its principles of conflicts of laws. The parties agree that any action or proceeding arising out of or in connection with this Request for proposal and any subsequent

agreement therefrom shall be brought only in any Grundy County Illinois or the Northern District of Illinois. Parties consent to submit to the exclusive jurisdiction of the Illinois Courts for purposes of any action or proceeding arising out of or in connection with this Request for proposal and any subsequent agreement therefrom and waive, and agree not to plead or make, any claim that the Illinois Courts lacks venue or that any such action or proceeding brought in the Illinois Court has been brought in an improper or inconvenient forum.

28. GENERAL

OSHA -All work shall be conducted in accordance with the Occupational Safety and Health Administration (OSHA) requirements and Grundy County regulations. The bidder shall be fully responsible for coordination of his work and the work of his employees, subcontractors, and suppliers, and to assure compliance with schedules. The Occupational Safety & Health Administration (OSHA) Hazardous Communication Standard (29 CFR 1910.1200) states that contractors/suppliers must be informed of the hazardous chemicals their employees may be exposed to while performing their work and any appropriate protective measures. In order to comply with this requirement, the district has developed a list of all the hazardous chemicals known to be present in our facility. A Material Safety Data Sheet (MSDS/SDS) is also on file for each of these chemicals and/or hazardous substances. This information is available to you and to your employees upon request.

In order to insure this and other duties of the bidder, certain indemnifications and insure is required by the contract. Additionally, the bidder guarantees to the owner a safe work place shall be provided for all employees of the bidder, subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable of the applicable standards of the Occupational Safety and Health Act and any work place safety act of the State of Illinois. Bidder agrees to require this work place safety guarantee of all subcontractors and expressly require the district and Board of Education to be third party beneficiaries of each guarantee.

Safety Sheets -In order to protect the safety and health of our own employees as well as the employees of contractors/suppliers, contractor/suppliers must maintain and provide, upon request, an MSDS/SDS on any hazardous chemical(s) or material(s) which they bring to the facility. Failure to maintain an MSDS/SDS and provide this information in a timely manner will result in the removal of the contractor/supplier from the premises.

Installation -The bidder shall at all times conduct the work in such manner as to insure the least obstruction to vehicular and pedestrian traffic. The convenience of the general public and employees shall be provided for in an adequate and satisfactory manner.

Unforeseen Circumstances - Any unforeseen site conditions that are encountered in the field that warrant a modification in the plans and/or design shall be brought to the attention of the district's authorized representative.

Indemnification - To the fullest extent permitted by law, the bidder shall be responsible for any and all injuries or damages to property due to the activities of the bidder, its subcontractors, suppliers, agents and employees arising out of or resulting from performance of the contract, or any activity in connection therewith. The bidder shall indemnify and hold harmless the District, including the Board of Education, its employees, officers and agents from any and all claims, lawsuits, actions, costs and fees, including reasonable attorney's fees and expenses of every nature and description, arising from, growing out of, or connected with the work, or on account of or in consequence of any neglect in safeguarding the work, or on account of or in consequent of using unacceptable materials in construction of the work of because of any act, omission, neglect, or misconduct of bidder, its officers, employees, agents, subcontractors, or anyone directly or indirectly employed by them and/or anyone for whose acts they may be liable for because of any claims or

amount recovered by reason of any infringement of patent, trademark, or copyright, or by reason of the violation of any law, ordinance, order, or decree.

Standards -The bidder shall be responsible for meeting any requirement for any machine, device or part thereof, which is regulated by or becomes regulated by Federal or t State of Illinois authorities having jurisdiction and shall conform to those standards.

Supervision & Inspection - Nothing in this contract between the district and the bidder or anyone else is intended or shall be construed, unless otherwise expressly stated, to reduce the responsibility of the bidder, subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, from full and complete supervision and achievement of work place safety. Any inspection of the work conducted by an authorized representative of the district, employee, or officer whether notice of the results thereof is provided to anyone or not provided to anyone, shall neither establish any duty on their parts nor create any expectation of duty to anyone, including but not limited to third parties, regarding workplace safety.

SPECIFICATIONS

The contractor must schedule a mandatory walkthrough appointment with the District's Building and grounds director prior to submitting the bid:

Building and Grounds Director, Jason Piper, 815-521-2310,
jpiper@mchs.net

Location: Minooka Community High School District #111, Central Campus, 301 S. Wabena Ave, Minooka, IL 60477, Rooftop, accessible by stairs.

1. SCOPE OF WORK

The Contractor shall furnish all labor, materials, equipment, transportation, rigging, permitting, and disposal required to disconnect, remove, and replace two (2) existing rooftop units (RTUs) at the project location.

Unit Breakdown:

- **Unit 1 (RT-1): AAON Rooftop Unit**
 - **Model:** RN-070-3-0-BA04-3D9
 - **Serial Number:** 200906-BNGY05931
 - **Electrical:** 460V / 3-Phase / 60 Hz | MCA: 211A | MOCP: 225A
 - **Heating/Cooling:** Natural Gas Heat (810 MBH Input / 648 MBH Output) | R-410A Refrigerant
- **Unit 2 (Carrier Rooftop Unit):**
 - **Model:** 50HJ-017---691AB
 - **Serial Number:** 1602F47990
 - **Electrical:** 460V / 3-Phase / 60 Hz | MCA: 59A | MOCP: 60A | Electric Heat (32 kW / 39 FLA)
 - **Refrigerant:** R-22 System

2. DEMOLITION & DISPOSAL

1. Safely recover and recycle all refrigerants (R-410A from RT-1, R-22 from Carrier unit) in strict accordance with EPA Section 608 regulations.
2. Disconnect and lock out/tag out (LOTO) all high-voltage electrical, gas supply lines, low-voltage control wiring, and condensate drainage.
3. Remove existing units via crane/rigging in compliance with local safety regulations and OSHA standards.
4. Haul away and legally dispose of/recycle old equipment, sheet metal, and debris off-site.

3. EQUIPMENT SPECIFICATIONS & PERFORMANCE EQUIVALENTS

Contractor shall provide new packaged rooftop units matching or exceeding the capacity and performance of the existing units:

Feature / Unit	RTU 1 (AAON Replacement)	RTU 2 (Carrier Replacement)
Cooling Capacity	~70-Ton Equivalent	~15-Ton Equivalent
Heating Method	Natural Gas (Min. 810 MBH Input / 648 MBH Output)	Electric Resistance Heat (~32 kW)
Electrical Supply	460V / 3-Phase / 60 Hz	460V / 3-Phase / 60 Hz
Refrigerant	R-410A or EPA-Compliant Low-GWP Alternative	R-410A or EPA-Compliant Low-GWP Alternative
Features	Variable airflow, high-efficiency economizer, power exhaust	Integrated economizer, factory-installed electric heater kit

4. INSTALLATION REQUIREMENTS

1. Curbs & Adapters:

- Verify existing curb dimensions and duct openings.
- Provide custom, fully welded 14-gauge galvanized transition roof curb adapters for both units to ensure a watertight seal and proper duct alignment.

2. Electrical:

- Reconnect existing 460V/3PH power supply to new equipment.
- Verify wire sizing and circuit breaker ratings match new unit Minimum Circuit Ampacity (MCA) and Maximum Overcurrent Protection (MOCP).
- Install new non-fused disconnect switches adjacent to each unit.

3. Gas Piping (RT-1):

- Reconnect natural gas line with a dedicated drip leg, shutoff valve, and flexible connection. Test gas lines for leaks before firing.

4. Controls & Thermostats:

- Reconnect existing building automation system (BAS) or install compatible modern

programmable digital thermostats for both units.

5. Condensate Drain Lines:

- Install UV-resistant PVC condensate drain piping with P-traps, properly supported and routed to nearest drain/gutter.

5. TESTING, ADJUSTING, AND BALANCING (TAB) & COMMISSIONING

1. Perform complete startup procedures per manufacturer specifications.
2. Check and record operating voltages, phase balance, amp draw, refrigerant pressures, and gas pressure settings.
3. Provide a complete **Commissioning & Startup Report** upon completion.

6. SUBMITTAL REQUIREMENTS

Bidders must include the following with their proposal:

- Proposed replacement unit manufacturer cutsheets/specifications.
- Detailed curb adapter shop drawings.
- Estimated project timeline and crane lifting plan.
- Comprehensive breakdown of parts, labor, permit fees, and warranty details.
- Proof of insurance and state/local licensing.

7. CLEAN UP

Contractor shall:

- Remove all replaced materials from the site.
- Dispose of refrigerant, oil, and components in accordance with applicable regulations.
- Leave the work area clean and operational.

8. WARRANTY

Contractor shall provide:

- Minimum one (1) year labor warranty.
- Manufacturer compressor warranty.
- Warranty on leak repairs and replacement components.

Warranty shall begin upon Owner acceptance.

Pictures of current unit models:

AAON, Inc.
TULSA, OKLAHOMA

ANSI Z41.15-2003 (3.13.15.14) ANSI Z41.15-2003 (3.13.15.14) CENTRAL FURNACE
MODEL NO. RN-070-3-0-BA04-300 PART NO. 67730
SERIAL NUMBER 200806-WGY05931

ELECTRICAL RATINGS
RATED VOLTS 480 VAC 60 HZ
MINIMUM CIRCUIT AMPLACITY 211 AMP
MAXIMUM CIRCUIT BREAKER (RACK TYPE) 225 AMP

CONFORMS TO UL STANDARD 1995
CERTIFIED TO CAN/CSA STD 222 NO. 236

3 PHASE

MOTOR	QTY	HP	VAC	PH	RPM	FLA	RLA	LRA	DRIVE
Compressor	4		480	3	3600		28.9	175	D
Condenser	0	75	480	1	1075	2.3			D
Evaporator	2	20	480	3	1760	27			D
Compressor Air	3	25	480	1	3200	0.7			D
Power Bls	2	10	480	3	1760	14			D
Add Mtr	2	10	480	1	1075	0.8			D

REQUIRED FOR GAS NAT TEMPERATURE RISE RATION 10-40 TEMPERATURE RISE 25
MANIFOLD PRESS 3.6 "wc MAX INLET PRESS 10.8 "wc MIN INLET PRESS 6.0 "wc

DESIGN MAXIMUM OUTLET TEMPERATURE 200 °F
MAXIMUM INLET SETTING 280 °F

MINIMUM AMBIENT TEMPERATURE IN WHICH GAS HEAT UNIT MAY OPERATE (COA) -40 °F

CLEARANCES
FLOOR - UNIT MUST BE INSTALLED ON MINIMUM 1" RISE (THIS VALUE MAY VARY ON CERTAIN TYPES OF FLOOR)
(CANADA & USA) OR CLASS A, B, OR C ROOF COVERING MATERIAL (USA ONLY).
TOP - NO OBSTRUCTION
FRONT 48 LEFT SIDE 48 RIGHT SIDE 76 BACK 48

FACTORY CHARGE
FACTORY CHARGE REFRIGERANT (1) 484 lb (2) 484 lb (3) 484 lb (4) 484 lb
(CANADA & USA) OR CLASS A, B, OR C ROOF COVERING MATERIAL (USA ONLY).
TOP - NO OBSTRUCTION
FRONT 48 LEFT SIDE 48 RIGHT SIDE 76 BACK 48

CAUTION USE TIME DELAY TYPE FUSE
FOR NON-RESIDENTIAL USE ONLY. NOT SUITABLE FOR USE WITH CONVENTIONAL VENTING SYSTEM.
FORCED AIR FURNACE WITH OR WITHOUT COILING UNIT. CAPACITY IN
FOR OUTDOOR INSTALLATION ONLY. CERTIFIED FOR INSTALLATION DOWNSTREAM FROM
REPERCUSSION SYSTEM.

IN THE ABSENCE OF LOCAL CODES, FOLLOW THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AND LOCAL CODES.
CANADA & USA) OR CLASS A, B, OR C ROOF COVERING MATERIAL (USA ONLY).
TOP - NO OBSTRUCTION
FRONT 48 LEFT SIDE 48 RIGHT SIDE 76 BACK 48

FOR YOUR SAFETY, DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS
AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

NOTICE
This product has been safety tested by ETL Testing Laboratories, Inc. The test procedure is in strict conformance with prevailing and applicable ANSI/UL standards as listed above.
Further information regarding the test procedure and compliance to existing industry standards may be obtained directly from ETL Testing Laboratories, Inc.
ETL Testing Laboratories, Inc.
Industrial Park Cortland, NY 13045
Telephone: (607) 753-6711 510-2520792
*(ANSI) American National Standards Institute
*(UL) Underwriters Laboratories, Inc.

Carrier
A United Technologies Company

MODEL 50HJ-017-691AB
SERIAL 1602F47990

Compressor	Qty	Volts AC	PH	Hz	FLA	RLA	Refrigerant/System	lbs	kg	R-12	Test Pressure Gage
1	1	480	3	60	18.4	30	19.5	6.8	22		Hi 410 PSI (2827 kPa)
1	1	480	3	60	10.0	17	13.5	6.8	22		Lo 150 PSI (1034 kPa)

Fan Motors	Qty	Volts AC	PH	Hz	FLA	HP	KW
Outside	3	480	3	60	9.8	0.5	0.37
Inside	1	480	3	60	7.9	0.5	0.37
Blower	1	480	3	60	39		32

Power	Volts AC	PH	Hz	Max Volts	Min Volts	MCA	MOCP
480	3	60	508	414	59		60

Min Circuit Amps
Max Overcurrent Protective Device Amps
For the first 24 in (610 mm)
For the first 24 in (610 mm)
Test
0.4 in
0.15 in
Charge

Suitable for Outdoor Use ONLY
Made in U.S.A. 99N4505293-T

Accessory Heater / Power Exhaust	Qty	Check	Volts	PH	Hz	FLA	Min Ckt Amps	Max Overcurrent Protective Device Amps
CRHEATER137A00			240	3	60	39	50	60
CRHEATER138A00			240	3	60	56	75	90
CRHEATER139A00			240	3	60	96	101	125
PWR EXH - NO HEAT			240	3	60	2.3	43	50
PWR EXH - CRHEATER137A00			240	3	60	2.3	52	70
PWR EXH - CRHEATER138A00			240	3	60	2.3		

BID SUBMITTAL FORM

(must be returned with accompanying certifications and check off sheets)

Base Bid

Provide a lump sum for all work described in Section 1.1:

Base Bid Total: \$ \$406,178.00

A. Billing Structure:

Contractor to specify how the owner will be billed for work performed:

☒ **Fixed Fee:** \$ \$406,178 (Flat rate for investigation and minor repairs)

☐ **Time & Materials:** \$ _____/hr Labor Rate + % Markup on Materials.

B. Scope Limitations:

Define what constitutes a "Major Repair" requiring a change order (e.g., coil replacement):

Unit Pricing (For Change Orders)

Item	Unit of Measure	Unit Price
R-410A Refrigerant	Per Pound (lb)	\$30
Standard Labor Rate	Per Hour (hr)	\$165
Emergency/After-Hours Rate	Per Hour (hr)	\$ 220

4. CONTRACTOR ACKNOWLEDGEMENT

Company Name: DePue Mechanical

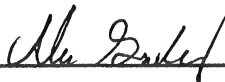
Signature:  Date: 10/13/2026

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Prepared By: Teresa Kaufmann

10/05/2026
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15T ELEC ELEC 460V

**Tag Cover Sheet
Unit Report
Certified Drawing
Performance Report**

Unit Report For 15T ELEC ELEC 460V

Project: MINOOKA HS
Prepared By: Teresa Kaufmann

10/05/2026
04:25PM

Unit Parameters

Unit Model: 50FE-M16A3A6-0A0A0
Unit Size: 16 (15 Tons)
Volts-Phase-Hertz: 460-3-60
Heating Type: Electric
Refrigerant: R-454B
Duct Cfg: Vertical Supply / Vertical Return
DX Options: Two Stage Cooling, Single Circuit

Dimensions (ft. in.) & Weight (lb.) ***

Unit Length: 9' 7.875"
Unit Width: 5' 3.375"
Unit Height: 4' 10.75"
Total Operating Weight: 1471 lb

*** Weights and Dimensions are approximate. Weight does not include unit packaging. Approximate dimensions are provided primarily for shipping purposes. For exact dimensions and weights, refer to appropriate product data catalog.

Lines and Filters

Condensate Drain Line Size: 3/4
Return Air Filter Type: Throwaway
Return Air Filter Quantity: 6
Return Air Filter Size: 18 x 24 x 2

Selection includes construction throwaway filter into the base fan curve.

Unit Configuration

High Static - EcoBlue Vane Axial Fan
Al/Cu - Al/Cu
Standard Electromechanical Controls
Standard Packaging
No
UL60335-2-40 approved R-454B Dissipation board and leak sensor included as standard

Warranty Information

5-Year compressor parts (STD.)
5-Year electric heater (STD.)
1-Year parts (STD.)

No optional warranties were selected.

NOTE: Please see Warranty Catalog 500-089 for explanation of policies and ordering methods.

Ordering Information

Part Number	Description	Quantity
50FE-M16A3A6-0A0A0	Rooftop Unit	1
	Base Unit	
	High Static - EcoBlue Vane Axial Fan	
	None	
Field Installed Accessories		
CRHEATER422A00	Electric Heater	1
CRSINGLE047A00	Single Point Kit	1
CRECOMZR111A00	CH 5 Vertical ULL Econ w/ POL224	1

Certified Drawing for 15T ELEC ELEC 460V

Project: MINOOKA HS
Prepared By: Teresa Kaufmann

10/05/2026
04:25PM

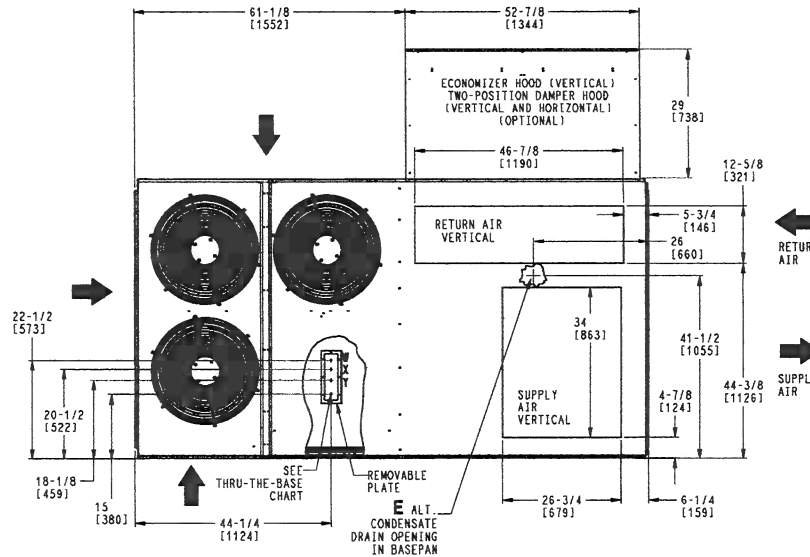
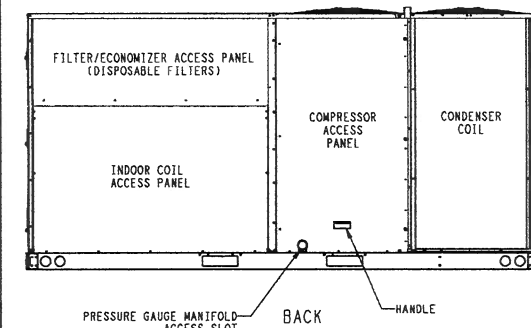
NOTES:

1. DIMENSIONS ARE IN INCHES. DIMENSIONS IN [] ARE IN MILLIMETERS.
2.  CENTER OF GRAVITY
3.  DIRECTION OF AIR FLOW



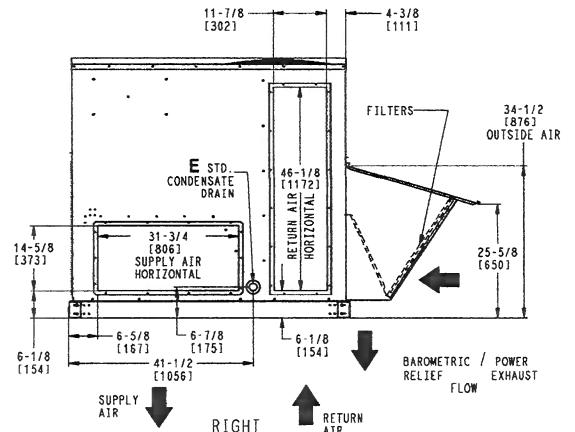
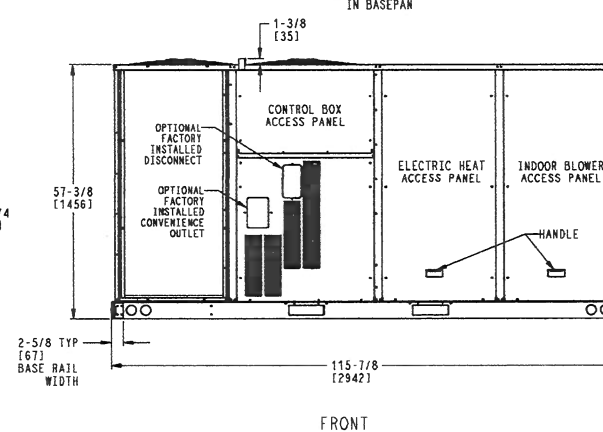
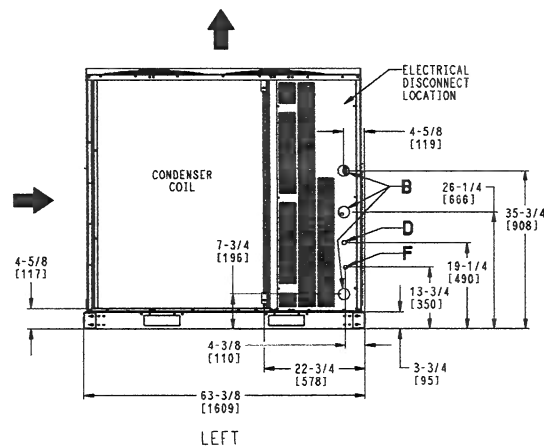
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CONNECTION SIZES	
B	2 1/2" [64] DIA POWER SUPPLY HOLE
D	7/8" [22] DIA FIELD CONTROL WIRING HOLE
E	3/4"-14 NPT CONDENSATE DRAIN
F	7/8" [22] DIA FIELD CONVENIENCE OUTLET HOLE

THRU-THE-BASE CHART THESE HOLES REQUIRED FOR USE CRBTMPWR05A00, 006A00, 007A00				
ACCESSORY NO.	THREADED CONDUIT SIZE	WIRE USE	REQ'D HOLE SIZES (MAX.)	
005	W 1/2"	ACC.	7/8"	[22.2]
	X 1/2"	24V	7/8"	[22.2]
	Y 1 1/4"	POWER	1 1/2"	[38.1]
006	W 1/2"	ACC.	7/8"	[22.2]
	X 1/2"	24V	7/8"	[22.2]
	Y 1 1/2"	POWER	2"	[50.8]
007	W 1/2"	ACC.	7/8"	[22.2]
	X 1/2"	24V	7/8"	[22.2]
	Y 2"	POWER	2 1/2"	[63.5]
FOR "THRU-THE-BASEPAN" FACTORY OPTION, FITTINGS FOR X & Y ARE PROVIDED AS SPECIFIED ON "006".				



ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50FE 16 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	50TM003165	REV
U.S. ECCN: NSR	1 OF 2	8/10/23	-			-

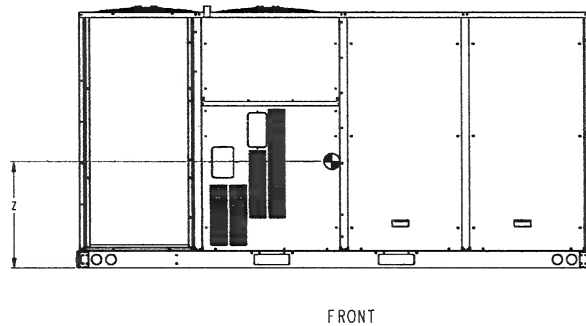
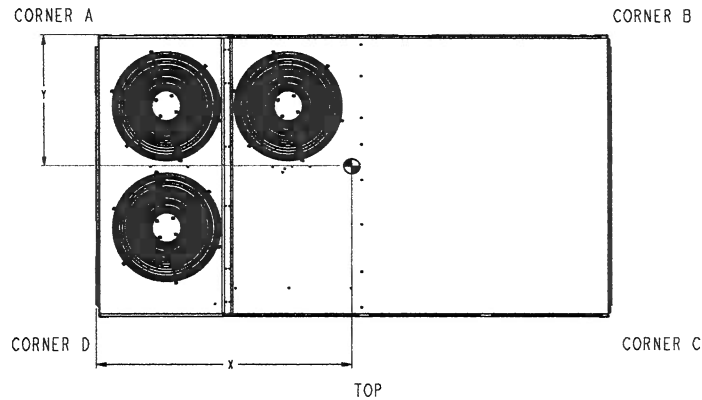
Certified Drawing for 15T ELEC ELEC 460V

Project: MINOOKA HS
Prepared By: Teresa Kaufmann

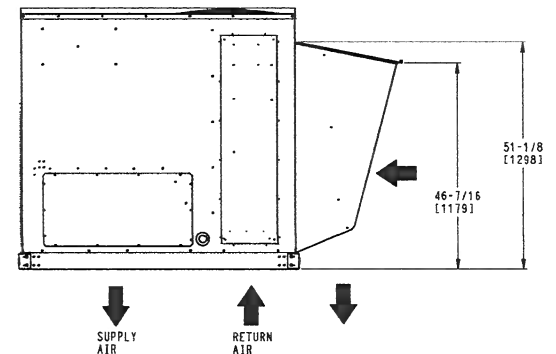
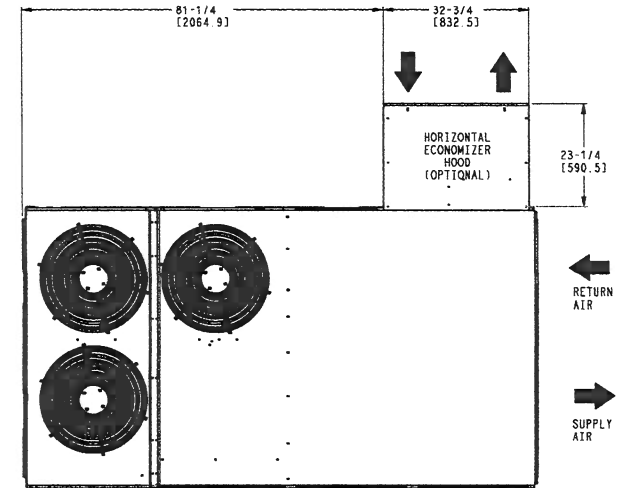
10/05/2026
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UNIT	STD UNIT WEIGHT		CORNER WEIGHT (A)		CORNER WEIGHT (B)		CORNER WEIGHT (C)		CORNER WEIGHT (D)		C.G.		
	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	X	Y	Z
50FE-M16	1325	601	370	168	312	142	294	133	349	158	53 [1345]	30 3/4 [781]	22 [559]

STANDARD UNIT WEIGHT IS WITHOUT ELECTRIC HEAT & WITHOUT PACKAGING.
FOR OPTIONS & ACCESSORIES, REFER TO THE PRODUCT DATA CATALOG.



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HORIZONTAL ECONOMIZER

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	50FE 16 SINGLE ZONE ELECTRICAL COOLING WITH ELECTRIC HEAT	50TM003165	REV
U.S. ECCN: NSR	2 OF 2	8/10/23	-			-

Performance Summary For 15T ELEC ELEC 460V

Project: MINOOKA HS
Prepared By: Teresa Kaufmann

10/05/2026
04:25PM

Part Number:50FE-M16A3A6-0A0A0

Refrigerant: R-454B
ARI EER: 11.00
IEER: 14.7

Base Unit Dimensions

Unit Length: 115.9 in
Unit Width: 63.4 in
Unit Height: 58.8 in

Operating Weight

Base Unit Weight: 1325 lb

Accessories

Single Point Kit: 12 lb
CH 5 Vertical ULL Econ w/ POL224: 134 lb

Total Operating Weight: 1471 lb

Unit

Unit Voltage-Phase-Hertz: 460-3-60
Air Discharge: Vertical
Fan Drive Type: Vane Axial
Actual Airflow: 6000 CFM
Site Altitude: 0 ft

Cooling Performance

Condenser Entering Air DB: 95.0 F
Evaporator Entering Air DB: 80.0 F
Evaporator Entering Air WB: 67.0 F
Entering Air Enthalpy: 31.44 BTU/lb
Evaporator Leaving Air DB: 59.5 F
Evaporator Leaving Air WB: 57.3 F
Evaporator Leaving Air Enthalpy: 24.58 BTU/lb
Gross Cooling Capacity: 185.08 MBH
Gross Sensible Capacity: 133.09 MBH
Compressor Power Input: 13.55 kW
Coil Bypass Factor: 0.128

Heating Performance

Heating Airflow: 6000 CFM
Entering Air Temp: 70.0 F
Leaving Air Temp: 86.0 F
Electric Heating Capacity: 30.30 kW

Supply Fan

External Static Pressure: 0.50 in wg
Options / Accessories Static Pressure
Electric Heaters: 0.04 in wg
Application External Static (ESP + Unit Opts/Acc.): 0.54 in wg
Fan RPM: 1606
Fan Power: 2.00 BHP
NOTE: Selected IFM RPM Range: 1120 - 2200

Selection includes construction throwaway filter into the base fan curve. This filter is not MERV Rated.

Electrical Data

Voltage Range: 414 - 506
Compressor #1 RLA: 13.4
Compressor #1 LRA: 123
Compressor #2 RLA: 9.1

Performance Summary For 15T ELEC ELEC 460V

Project: MINOOKA HS
Prepared By: Teresa Kaufmann

10/05/2026
04:25PM

Compressor #2 LRA:	75
Actual Electric Heater kW:	30.3
Electric Heater FLA:	39.7
Indoor Fan Motor Type:	HIGH
Indoor Fan Motor FLA (Total):	5.6
Power Supply MCA:	57
Power Supply MOCP (Fuse or HACR):	60
Disconnect Size FLA:	52
Disconnect Size LRA:	212
Electrical Convenience Outlet:	None
Outdoor Fan [Qty / FLA (ea)]:	3 / 0.8
Electric Heater Part Number:	422A
Electric Heater Number of Stages:	2

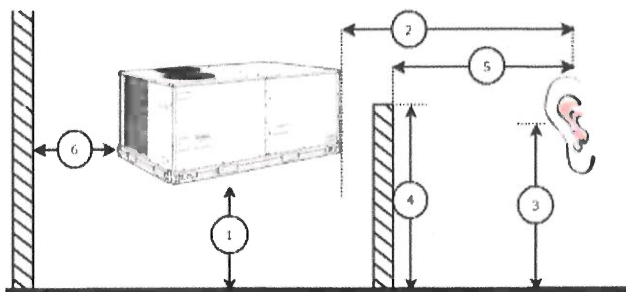
Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage

Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	81.7	78.3	87.0
125 Hz	80.8	74.9	85.2
250 Hz	78.4	70.9	84.6
500 Hz	77.0	68.6	84.9
1000 Hz	78.2	69.3	82.2
2000 Hz	73.0	61.5	78.4
4000 Hz	67.5	52.9	75.3
8000 Hz	60.0	48.0	72.9
A-Weighted	81.4	72.2	87.0

Advanced Acoustics



Advanced Acoustics Parameters

1. Unit height above ground:	30.0	ft
2. Horizontal distance from unit to receiver:	50.0	ft
3. Receiver height above ground:	5.7	ft
4. Height of obstruction:	0.0	ft
5. Horizontal distance from obstruction to receiver:	0.0	ft
6. Horizontal distance from unit to obstruction:	0.0	ft

Detailed Acoustics Information

Octave Band Center Freq. Hz	63	125	250	500	1k	2k	4k	8k	Overall
A	87.0	85.2	84.6	84.9	82.2	78.4	75.3	72.9	92.4 Lw

Performance Summary For 15T ELEC ELEC 460V

Project: MINOOKA HS
Prepared By: Teresa Kaufmann

10/05/2026
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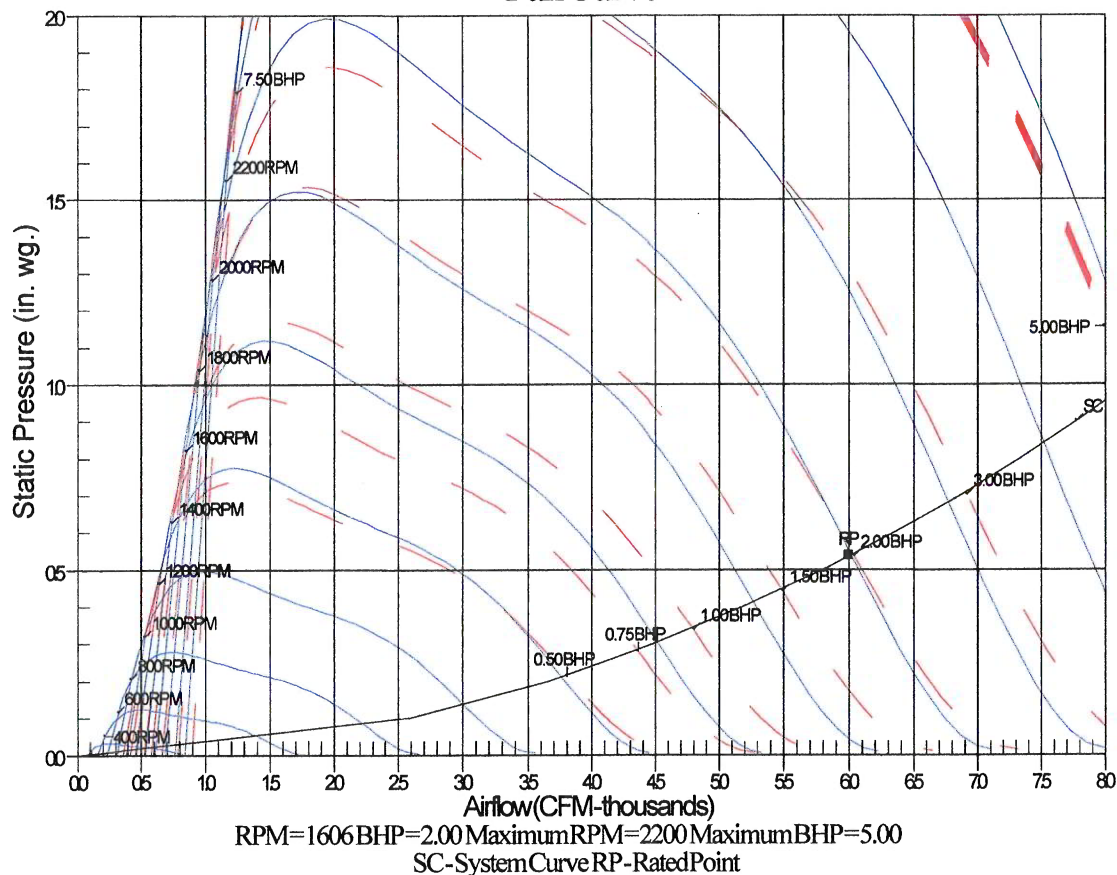
B	60.8	69.1	76.0	81.7	82.2	79.6	76.3	71.8	87.1	LwA
C	54.6	52.8	52.2	52.5	49.8	46.0	42.9	40.5	60.0	Lp
D	28.4	36.7	43.6	49.3	49.8	47.2	43.9	39.4	54.7	LpA

Legend

- A Sound Power Levels at Unit's Acoustic Center, Lw
- B A-Weighted Sound Power Levels at Unit's Acoustic Center, LwA
- C Sound Pressure Levels at Specific Distance from Unit, Lp
- D A-Weighted Sound Pressure Levels at Specific Distance from Unit, LpA

Calculation methods used in this program are patterned after the ASHRAE Guide; other ASHRAE Publications and the AHRI Acoustical Standards. While a very significant effort has been made to insure the technical accuracy of this program, it is assumed that the user is knowledgeable in the art of system sound estimation and is aware of the tolerances involved in real world acoustical estimation. This program makes certain assumptions as to the dominant sound sources and sound paths which may not always be appropriate to the real system being estimated. Because of this, no assurances can be offered that this software will always generate an accurate sound prediction from user supplied input data. If in doubt about the estimation of expected sound levels in a space, an Acoustical Engineer or a person with sound prediction expertise should be consulted.

Fan Curve





Crystal Distribution, Inc.
17560 Tyler Street NW
Elk River, MN 55330
Phone: 763.391.7790
Toll Free: 1.888.234.7001
CDI Terms of Service:

CDI QUOTE #3419152

Date: 10/05/2026

Customer: Teresa Kaufmann (TEMPERATURE EQUIPMENT CORP.)

Job Tag: MINOOKA HS

Purchase Order #



Line	Quantity	CDI Part #	Tag
A	1	1-4010-4008	
Description			
Curb Adapter <i>Old Model:</i> 50HJ017 <i>New Model:</i> 50FE-M16 Top Brace; Insulated Condenser Panel (where required); Fully Insulated (1" Duct Liner R Value 3.85)			

LEAD TIMES:

Item	Standard Build
A1 1-4010-4008	

NOTE: Expediting options available - enter ship to state to view and make your selection.

This quote is valid for 14 days due to volatility in fuel and material costs. Pricing after this period is subject to review.

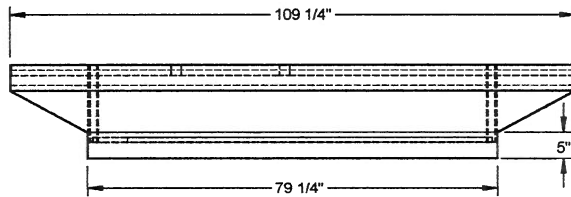
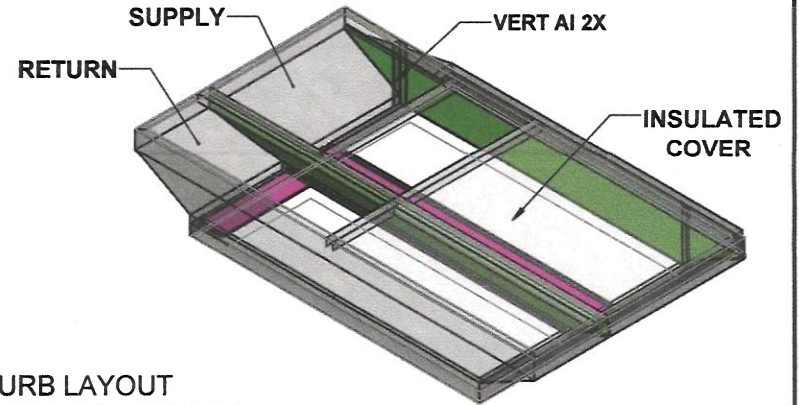
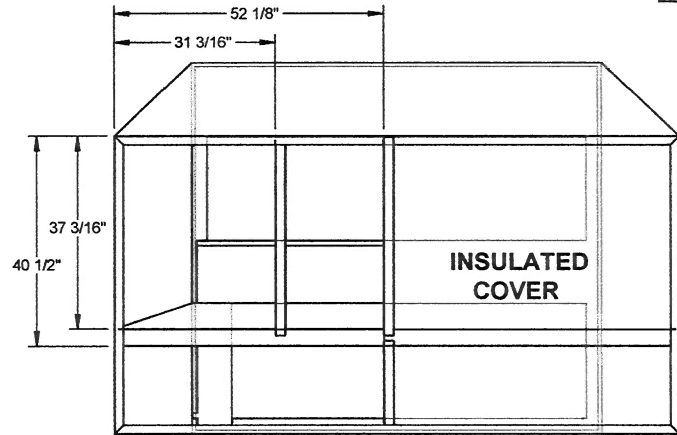
*Thank you for choosing CDI,
Chelsea McClain*

OPTIONS:
MATERIAL: 18ga. GALV STEEL
INSULATED PANELS (WHERE REQUIRED)
1" 1-1/2LB DUCT INSULATION (R VALUE 3.85)
GASKET PROVIDED WITH CURB
1 1/2" ADDED TO EXISTING CURB O.D.

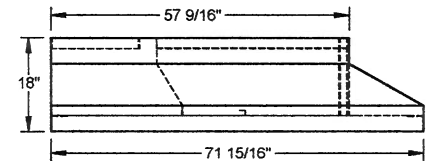
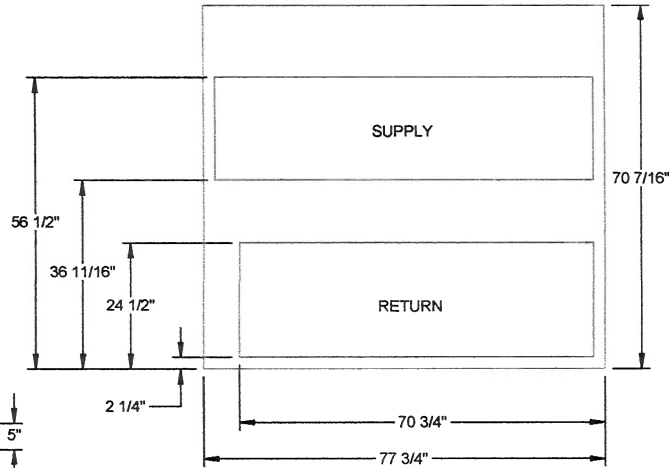
DIMENSIONED AND TOLERANCED PER ANSI Y14.5M-1992

Attn: _____
 Tag: _____
 Approval: _____

REVISIONS				
REV.	ECO#	DESCRIPTION	DATE	APPROVED
1		INITIAL DRAWING	1/25/2018	HMH
2		UPDATE TO NEW 3X3 DESIGN	2/11/2019	HMH



EXISTING CURB LAYOUT



CURB SHOWN IS CDI STANDARD CONFIGURATION CDI RESERVES THE RIGHT TO CHANGE LAYOUT WITHOUT NOTIFICATION. IF CURB IS NEEDED IN A DIFFERENT CONFIGURATION CDI MUST BE NOTIFIED PRIOR TO PLACING AN ORDER.

OPERATIONAL HEIGHT OF CDI ADAPTER IS 3" LESS THAN OVERALL CURB HEIGHT SHOWN.

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		DRAWN: hhom		2/7/2019		
		CHECKED:				
		DIMENSIONS ARE AS FOLLOWS: 1.00 in (25.40 mm)				
3RD ANGLE PROJECTION 		Contact us @ www.cdicurbs.com OR 1-888-234-7001		APPROXIMATE CURB WEIGHT (LBS.)	ECO #	REV: 1
				144.00		
				SCALE: 1:24	SHEET: 1 OF 11	



Unit Rating

2425 S Yukon Ave • Tulsa, OK 74107 • 918-583-2266 • www.aaon.com
ECat v368.0

RNA-070-D-B-3-HAB0B-CA3B0:00-AAHAM-QAJ-00000-BBNBL-ZC-
CB0B-00-00-A-AV0-EB-DA0A-00-000-B00A00-J000AF-000000B

RTU Tag RTU #1

Job Information

Job Name	Minooka HS RTU Replacement - Scenario 1
Job Number	Job 74
Elevation	660 ft
Refrigerant	R-454B
Design System Charge (oz)	343 / 343 / 343 / 343

Unit Information

Approx. Weight (Op./Ship)	9032 / 9032 lbs (±5%)
Base Dimensions (LxWxH)	209.5 x 100.0 x 102.0 in
Coil Filter FV / Qty	453.9 fpm / 24
Min. Room Area/Height/Airflow**	322.0 ft² / 7.0 ft / 581 SCFM
Exhaust Airflow / ESP	20000 SCFM / 0.75 in. w.g.
Outside Air Prefilter FV / Qty	457.9 fpm / 6
Ambient Temperature	95.0 / 75.0 °F DB/WB
Supply Airflow / ESP	21785 SCFM / 2.00 in. w.g.
Return Airflow / ESP	20000 SCFM / 0.75 in. w.g.
Return Temperature	75.0 / 62.0 °F DB/WB
Outside Airflow	7500 SCFM

Static Pressure

External	2.00 in. w.g.
Cooling Coil	0.80 in. w.g.
Filters (Clean)	0.69 in. w.g.
Dirt Allowance	0.35 in. w.g.

Economizer	0.14 in. w.g.
Heater	0.43 in. w.g.
Cabinet	0.11 in. w.g.
Energy Recovery	0.96 in. w.g.
Total	5.48 in. w.g.

Cooling Section

	Gross	Net
Equivalent Total Capacity	936.0 MBH	852.6 MBH
Total Capacity	731.8 MBH	648.3 MBH
Sensible Capacity	574.0 MBH	490.6 MBH
Latent Capacity	157.7 MBH	
Energy Recovery Total Capacity	204.3 MBH	
Mixed Air Temp	77.6 / 64.1 °F DB/WB	
Ent Air Temp	77.6 / 64.1 °F DB/WB	
Lvg Air Temp (Coil)	52.5 / 52.2 °F DB/WB	
Lvg Air Temp (Unit)	56.0 / 53.7 °F DB/WB	

Supply Air Fan	2 x 300 @ 15.26 BHP Ea.
SA Fan RPM / Width	1512 RPM / 6.04 in
SA Fan FEI	1.01
Exhaust Air Fan	2 x RM270-RN @ 7.13 BHP Ea.
EA Fan RPM / Width	1319 RPM / 6.13 in
EA Fan FEI	0.95

Evaporator Coil	45.0 ft² / 6 Rows / 14 FPI
Evaporator Face Velocity	484.1 fpm
Energy Recovery	2 x ERC-5245

Rating Information

Cooling EER	9.8 BTU/h-W
Cooling IEER	13.3 BTU/h-W
Outside the scope of AHRI Standard 340/360 (I-P). Rated using procedure described in AHRI 340/360 (I-P).	
Application EER @ Op. Conditions	8.9 BTU/h-W

Heating Section

Preheat Type	Std (No Preheat)
Auxiliary Heating Type	Nat. Gas Heat
Heating Airflow	21785 SCFM
Total Capacity	729.0 MBH
Entering Air Temp	63.0 / 55.2 °F DB/WB
Leaving Air Temp	94.3 / 66.2 °F DB/WB
Consumption	900.0 MBH
Total Turndown Ratio	1.4:1



Unit Rating

2425 S Yukon Ave • Tulsa, OK 74107 • 918-583-2266 • www.aaon.com
ECat v368.0

Electrical Data

Power Point 1

VAC/Ph/Hz	460 / 3 / 60	FLA	194	MOP	225
SCCR	10 KAIC	MCA	201		

	Qty	Power	VAC	Phase	RPM	FLA	RLA
Compressor 1	2		460	3	4700		26.0
Compressor 2	2		460	3	3500		24.0
Condenser Fan	6	0.75 hp	460	3	1080	1.8	
Supply Fan	2	20 hp	460	3	1760	27.0	
Exhaust Fan	2	10 hp	460	3	1760	14.0	
Combustion	3	0.25 hp	460	1	3200	0.9	
Energy Recovery	2	0.17 hp	460	1	1075	0.6	

Cabinet Sound Power Levels*

Octave Bands	63	125	250	500	1000	2000	4000	8000
Discharge LW (dB)	99	98	99	102	100	96	92	86
Return LW (dB)	94	93	92	91	92	89	85	81

*Sound data is generated by a propriety acoustics model validated through unit testing in accordance with AHRI 260, utilizing tested fan sound data in accordance with AMCA 300.

Notices

- ** The minimum floor area is based on the Lower Flammability Limit (LFL) and calculated in accordance with UL60335-2-40 4th ed. (operating or storage). For UL60335-2-40 3rd ed. double the airflow and minimum floor area listed.
The minimum airflow (Qmin) is the minimum allowable airflow for any operating condition.

Filters

Mixed Air (Main)

Type / Efficiency Rating	Cartridge / MERV 13
Size (Qty)	12x24x4 in (24)

Mixed Air (Pre)

Type / Efficiency Rating	Cartridge / MERV 8
Size (Qty)	12x24x2 in (24)

Energy Recovery Outside Air

Type / Efficiency Rating	Cartridge / MERV 8
Size (Qty)	18x24x2 in (8)

Energy Recovery Exhaust Air

Type / Efficiency Rating	Cartridge / MERV 8
Size (Qty)	16x20x2 in (8)

Outside Air

Type	Metal Mesh
Size (Qty)	16x25x1 in (6)



Energy Recovery Rating

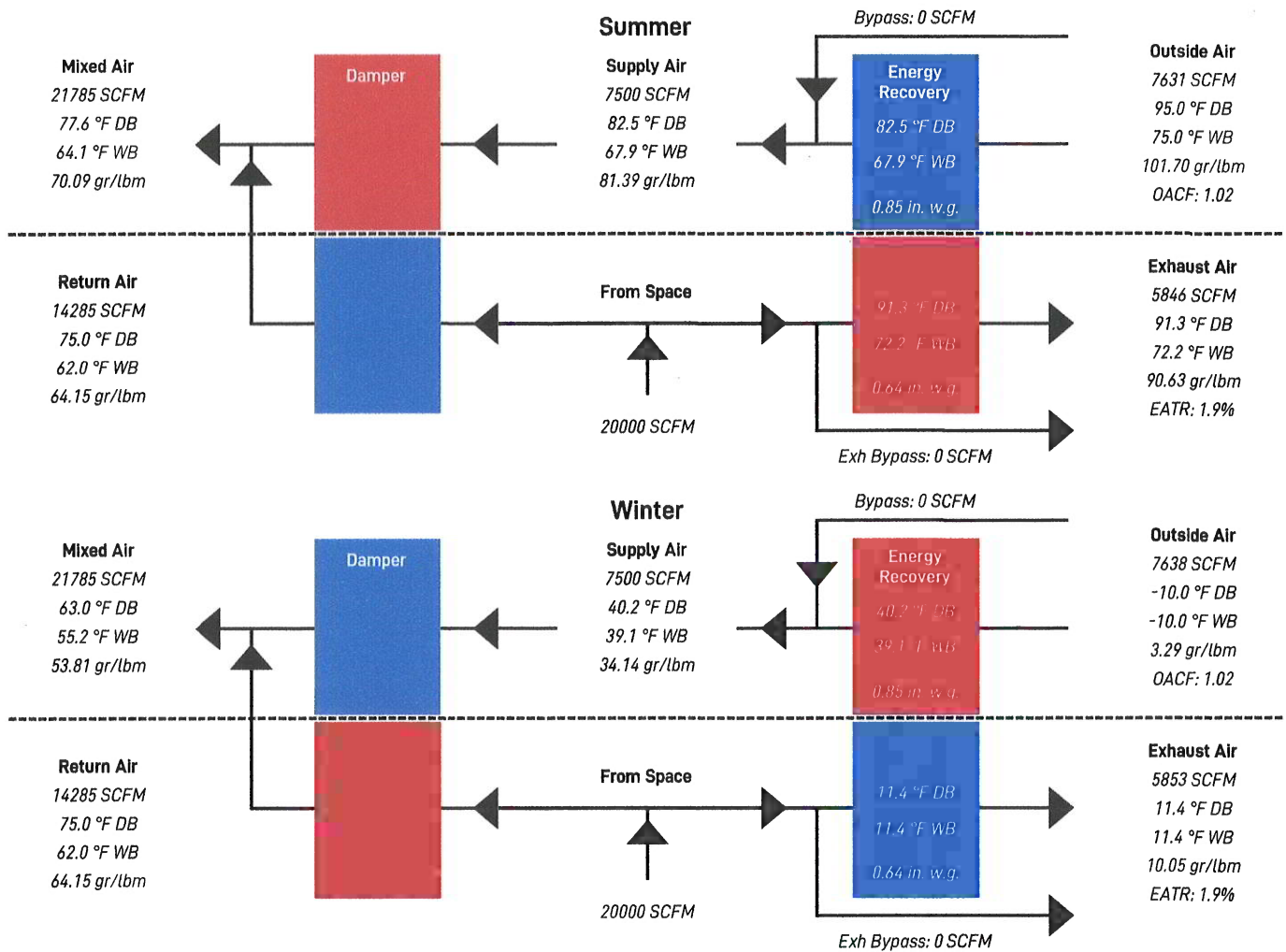
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CB0B-00-00-A-AV0-EB-DA0A-00-000-B00A00-J000AF-000000B

RTU Tag RTU #1

Job Name	Minooka HS RTU Replacement - Scenario 1	Energy Recovery Type	Total
Job Number	Job 74	Model (Type) x Qty	ERC-5245 (wheel) x 2
Elevation	660 ft	Mfr. Software Version	2.4.1
Net Supply Airflow Sum/Win	7359 SCFM / 7359 SCFM	Purge Angle	0°

Application Rating is outside the scope of the AHRI ERV Certification Program but is rated in accordance with AHRI Standard 1060.



Frost Warning - Conditions for frost forming on the energy recovery exists. Outside air preheat is required to prevent frost formation. Optionally, the return air humidity ratio could be lowered to prevent frost formation. See AAON literature titled 'AAON AIRE ENERGY RECOVERY' for details.

Performance

	Summer	Winter		Summer	Winter		Summer	Winter
Total Capacity	204.3 MBH	579.6 MBH	Total Effectiveness	74.9%	78.3%	Enthalpy Recovery Ratio	58.0%	56.2%
Sensible Capacity	98.1 MBH	416.0 MBH	Sensible Effectiveness	82.0%	82.0%	Sensible Energy Recovery Ratio	61.8%	58.3%
Latent Capacity	106.2 MBH	163.6 MBH	Latent Effectiveness	69.7%	70.0%			

**Minimum Circulation Airflow and Room Area
RN Series D-box**

Charge of Largest Circuit [oz]	Minimum Circulation Airflow (Q_{min})†* [CFM]	Minimum Room Area, ft ²			
		6 ft Ceiling/Release Height	7.2 ft Ceiling/Release Height	10 ft Ceiling/Release Height	12 ft Ceiling/Release Height
247	418*	283	231	170	138
263	445*	301	246	181	147
279	472*	320	261	192	155
295	499*	338	276	203	164
311	526*	356	291	214	173
327	553*	375	306	225	182
343	580*	393	321	236	191
359	607*	411	336	247	200
375	634*	430	351	258	209
391	661*	448	366	269	218
407	688*	466	381	280	227
423	715*	485	396	291	236
439	742*	503	411	302	245

† The minimum circulation airflow (Q_{min}) is the minimum airflow required to dilute refrigerant in the event of a leak

* Minimum heating airflow is 2391 CFM to maintain the required air velocity of 1 m/s across heating element(s)

Douglas Ruggiano, P.E., P.A.

10059 SW 156th Avenue

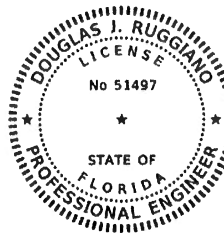
Miami, FL. 33196

786-210-0881

Reference: **Product Wind Certification Statement**
Rooftop Mounted Mechanical Equipment
AAON A/C Unitary Large Package Unit
Air-Cooled w/ Heat Wheel (26 to 70 Tons)
Model No.: **RN-D-0-RA#-A-#-0-00-A**

Based on the manufacturer's cut sheets for the referenced rooftop equipment, I have performed a rational analysis to determine compliance with wind load criteria set forth by the 2023 Florida Building Code (8th Edition) - Mechanical Section 301.15, Florida Building Code - Building Chapter 16 and ASCE 7-22. Analysis results demonstrate that the equipment is adequate for the allowable design wind pressure and mounting heights specified in TABLE 1 below.

TABLE 1						
Design Wind Speed	Max Mounting Height above Natural Grade (ft)		Kz	Allowable Design Wind Pressure (psf)		Equipment Fastening to 16 Ga Roof Curb By Others
	Exposure C	Exposure D		Lateral	Uplift	
120	500	500	2.59	92.8	73.3	Fasten equipment base rail to 16 gage roof curb with ¼"-14 Self Tapping Screws at a spacing not to exceed 7.0" o.c. along the entire perimeter. End fasteners shall not be more than 4" from curb corners. Fasteners shall go thru both the outer and inner wall of the base rail and be of sufficient length to penetrate the curb wall with a minimum ½" projection.
130	500	500	2.21			
140	500	500	1.91			
150	350	225	1.66			
160	200	110	1.46			
170	118	55	1.29			
175	85	40	1.22			
180	65	28	1.15			
186	48	20	1.08			
195	30	At Grade	0.98			
200	24	At Grade	0.93			



Digitally signed
by Douglas J
Ruggiano
Date:
2025.06.10
00:41:43 -04'00'

This item has been electronically signed and sealed by Douglas J. Ruggiano, PE on the signature date using a SHA authentication code.

Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

Douglas J. Ruggiano, P.E.
Florida License No. 51497

Douglas Ruggiano, P.E., P.A.

10059 SW 156th Avenue

Miami, FL. 33196

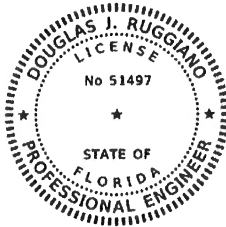
786-210-0881

Reference: **Equipment Roof Live Load Rating Certification Statement**
Rooftop Mounted Mechanical Equipment
AAON A/C Unitary Large Package Unit (26 to 70 Tons)
Model No.: **RN-D* Cabinets**

Based on the manufacturers cut sheets for the referenced rooftop equipment, I have performed a rational analysis to determine the equipment roof live load rating capacity for compliance with minimum requirements per UL 60335 and UL 1995.

Analysis results demonstrate that the roof component for the referenced equipment exceeds minimum said requirements with the following maximum concentrated and uniform load rating capacities and panel deflections less than 0.6":

- a. Max static concentrated force of **440 lbs** applied in the vertical direction at the most unfavorable location, distributed over a 6" diameter circular area.
- b. Max uniform load of **80 psf** distributed over the entire roof surface.



Digitally signed
by Douglas J
Ruggiano
Date:
2024.12.04
16:56:11 -05'00'

This item has been electronically signed and sealed by Douglas J. Ruggiano, PE on the signature date using a SHA authentication code.

Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

Douglas J. Ruggiano, P.E.
Florida License No. 51497



30" STAR Plenum

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ECat v368.0

Job Information

Job Name Minooka HS RTU Replacement - Scenario 1
Unit Tag RTU #1
Last Modified Date 9/25/2026
Elevation 660 ft

Operating Conditions

Application Supply
Total Airflow 21785 CFM
Fan Airflow 2 @ 10892 CFM Ea.
Static Pressure 5.61 in. w.g.

Fan Performance

RPM 1512
BHP 15.26 BHP
Fan Energy Index (FEI) 1.01
Efficiency 61.7%
Max Duct SP with Blocked Airway 6.08 in. w.g.

Wheel Specification

Model / Quantity 300 / 2
Type Backward-curved plenum
Blade Quantity 14
Diameter 30.0 in
Max RPM 1800
Inertia 31 WR²

Motor Selection

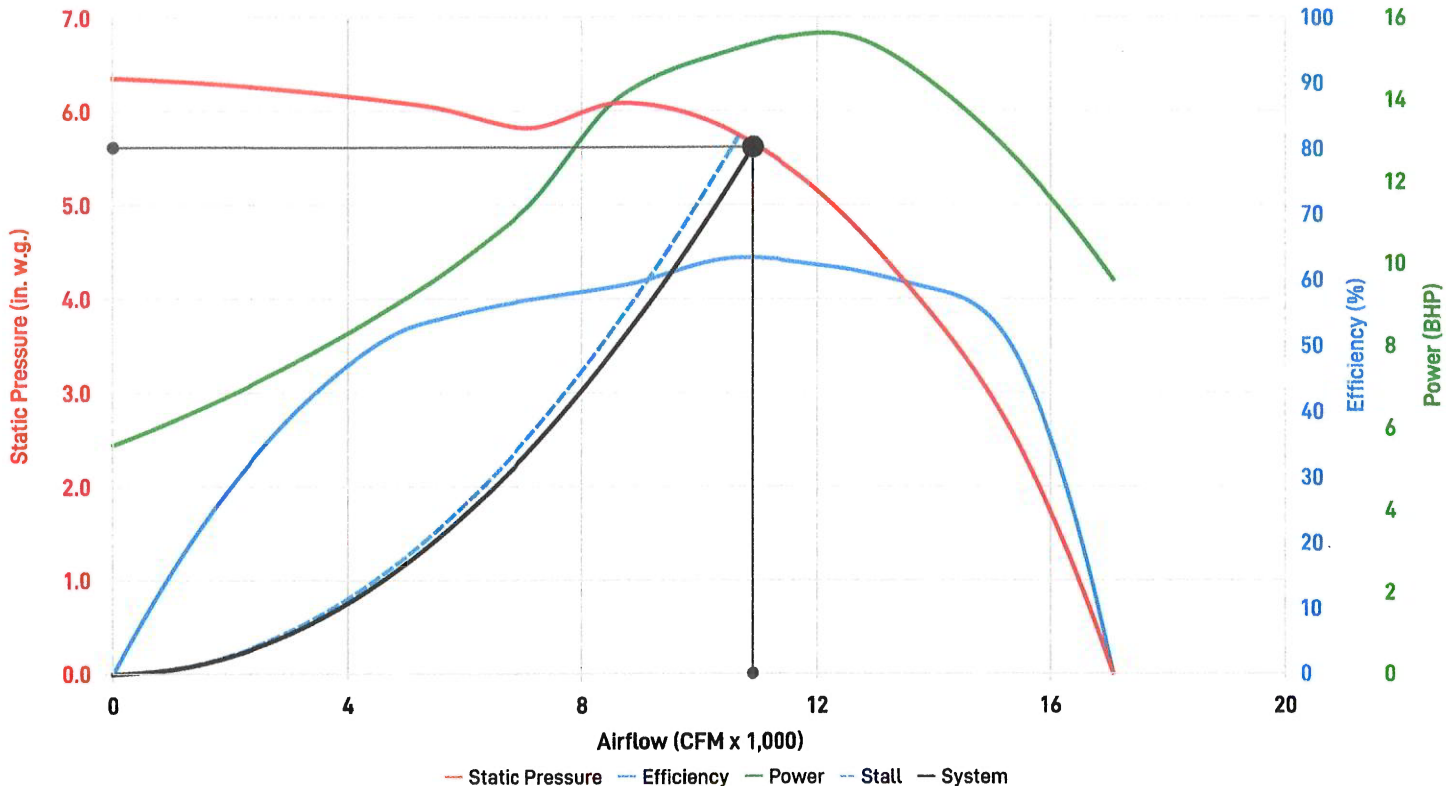
Rated HP / Bypass 20 hp / No
Frame Size 256T
Nominal RPM 1760
VAC/Ph/Hz 460 / 3 / 60
Enclosure Type ODP

Fan Sound Power (Inlet/Outlet)

Octave Band	1	2	3	4	5	6	7	8
	94	94	93	92	92	91	87	83
	98	97	98	101	101	97	94	88

SOUND POWER A-Weighted: 104 dB

Supply Fan Model: 300 x 2 @ 1,512 RPM and 100% Width
Design Conditions: 10,892 CFM @ 5.61 in. w.g. SP





27.4" STAR Plenum

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ECat v368.0

Job Information

Job Name Minooka HS RTU Replacement - Scenario 1
Unit Tag RTU #1
Last Modified Date 9/25/2026
Elevation 660 ft

Operating Conditions

Application Exhaust
Total Airflow 20000 CFM
Fan Airflow 2 @ 10000 CFM Ea.
Static Pressure 2.58 in. w.g.
Relief Damper Pressure Drop 0.89 in. w.g.

Fan Performance

RPM 1319
BHP 7.13 BHP
Fan Energy Index (FEI) 0.95
Efficiency 55.7%
Max Duct SP with Blocked Airway 3.75 in. w.g.

Wheel Specification

Model / Quantity RM270 / 2
Type Backward-curved plenum
Blade Quantity 14
Diameter 27.4 in
Max RPM 1800
Inertia 14 WR²

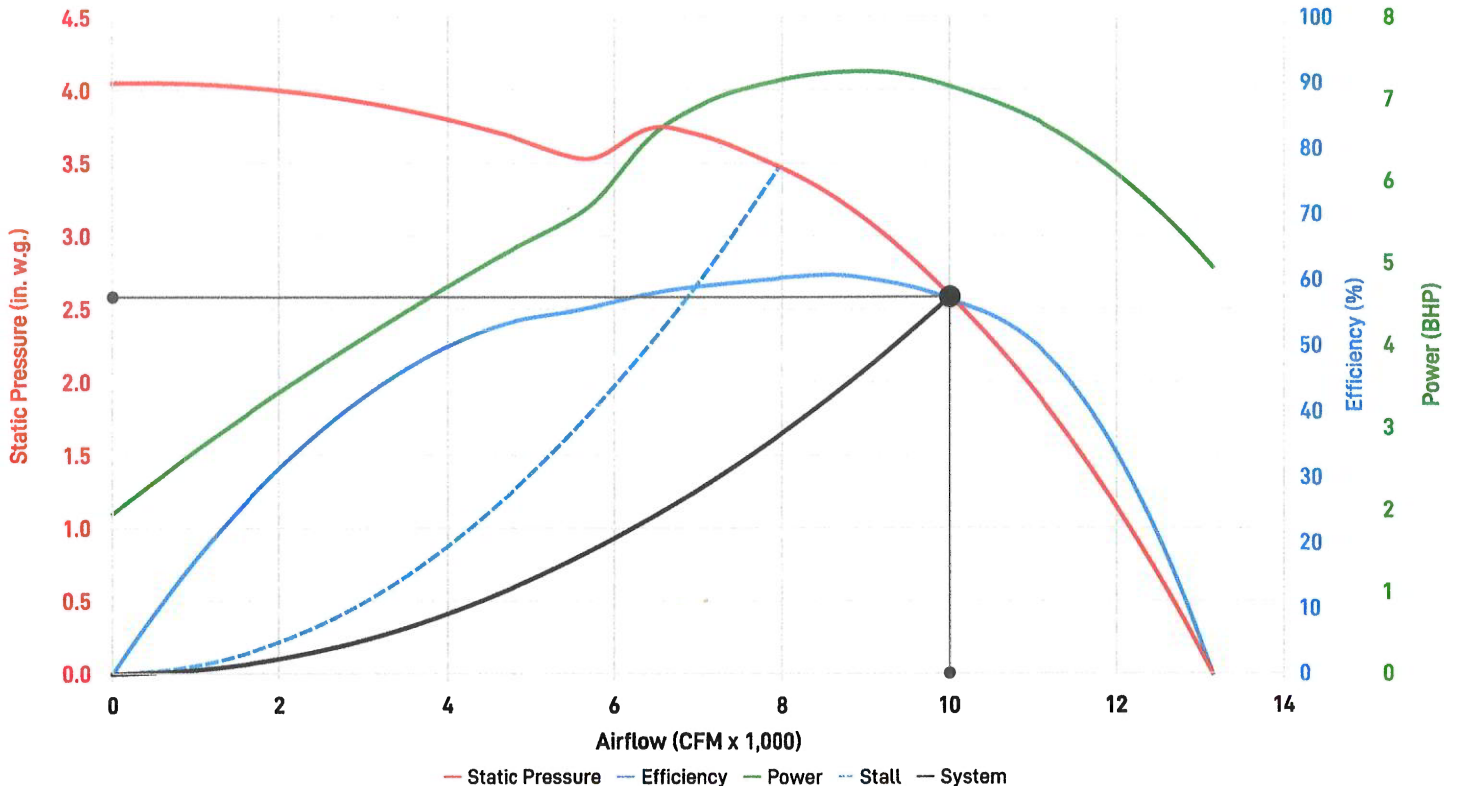
Motor Selection

Rated HP / Bypass 10 hp / No
Frame Size 215T
Nominal RPM 1760
VAC/Ph/Hz 460 / 3 / 60
Enclosure Type ODP

Fan Sound Power (Inlet/Outlet)

Octave Band		(Re 10 ⁻¹² watts)						
1	2	3	4	5	6	7	8	
91	90	89	89	89	87	84	83	
93	92	96	99	96	92	88	84	
SOUND POWER A-Weighted: 99 dB								

Exhaust Fan Model: RM270 x 2 @ 1,319 RPM and 100% Width
Design Conditions: 10,000 CFM @ 2.58 in. w.g. SP





Unit Submittal

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RNA-070-D-B-3-HAB0B-CA3B0:00-AAHAM-QAJ-00000-BBNBL-ZC-
CB0B-00-00-A-AV0-EB-DA0A-00-000-B00A00-J000AF-000000B

RTU Tag RTU #1

Job Name Minooka HS RTU Replacement - Scenario 1
Job Number Job 74

Customer Name
Date 9/25/2026

	Base Option	Description
RN	Generation	RN Series
A	Major Revision	Major Revision A
070	Unit Size	Seventy
D	Series	D Series
B	Minor Revision	Minor Revision B
3	Voltage	460V/3φ/60Hz
H	Compressor Style	R-454B Variable Speed Scroll Compressor
A	Condenser Style	Microchannel Air-Cooled Condenser
B	Indoor Coil Configuration	6 Row Evaporator
0	Cooling Heat Exchanger Construction	Standard
B	Cooling Staging	2 Variable Speed Comp + 2 Two-Step Comp
C	Heat Type	Natural Gas (Vertical Unit Configuration)
A	Heat Construction	Aluminized Heat Exchanger, Gas Piping to the Valve
3	Heat Designation	900 MBH
B	Heat Staging	2 Stage
0	Heat Pump Auxiliary Heating	No Auxiliary Heat

	Feature Option	Description
0	F1	Unit Orientation Standard Access - Hinged Access Doors with Lockable Handles
0	F2	Supply & Return Locations Bottom Supply+Bottom Return
A	F3A	Supply Fan Quantity 2 Fans
A	F3B	Supply Fan Configuration 1 Fan per VFD + Full Width Fan
H	F3C	Supply Fan Size 30" Direct Drive Backward Curved Aluminum
A	F3D	Supply Fan Motor Type High Efficiency Open Motor (1,800 nominal rpm)
M	F3E	Supply Fan Motor Size 20 hp
Q	F4A	Outside Air Section Economizer + Energy Recovery + Bypass Damper
A	F4B	Energy Recovery Type Polymer Energy Recovery Wheel
J	F4C	Energy Recovery Size Low CFM Enthalpy + Exhaust Filters
0	F5A	Return Fan Quantity 0 Return Fans
0	F5B	Return Fan Configuration No Return Fan
0	F5C	Return Fan Size No Return Fan
0	F5D	Return Fan Motor Type No Return Fan
0	F5E	Return Fan Motor Size No Return Fan
B	F6A	Exhaust Fan Quantity 2 Fans
B	F6B	Exhaust Fan Configuration 1 Fan per VFD + Full Width Fan



Unit Submittal

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	Feature Option		Description
N	F6C	Exhaust Fan Size	27" Backward Curved Aluminum
B	F6D	Exhaust Fan Motor Type	High Efficiency Open Motor (1,800 nominal rpm)
L	F6E	Exhaust Fan Motor Size	10 hp
Z	F7	Outside Air Control	FDD Fully Modulating Actuator - Enthalpy Limit + CO2 Override
C	F8	Return and Exhaust Air Options	Standard Barometric Relief EA Dampers
C	F9A	Unit Filter Type	2" Pleated MERV 8 + 4" Pleated MERV 13
B	F9B	Unit Filter Size & Location	High Efficiency Filters in Standard Position
0	F9C	Final Filter Type	No Final Filters
B	F9D	Filter Options	Clogged Filter Switch - Unit + Energy Recovery Filters
0	F10A	Refrigeration Control A	Standard - Adj Comp. Cooling Lock Out Through Unit Controls
0	F10B	Refrigeration Control B	Standard
0	F11A	Refrigeration Options A	None
0	F11B	Refrigeration Options B	Standard Packaged Unit
A	F12	Refrigeration Accessories	Sight Glass
A	F13A	Unit Disconnect Type	Single Point Power - Non-fused Disconnect Power Switch
V	F13B	Disconnect 1 Size	250 Amps
0	F13C	Disconnect 2 Size	Standard - None
E	F14	Safety Options	Remote Safety Shutdown Terminals
B	F15	Electrical Accessories	Phase & Brown Out Protection
D	F16A	Control Sequence	VAV Unit Controller - VAV Cool + CAV Heat
A	F16B	Control Supplier	AAON Controls
0	F16C	Control Supplier Options	None
A	F16D	BMS Connection & Diagnostics	BACnet IP or MSTP
0	F17A	Preheat Configuration	Standard - None
0	F17B	Preheat Sizing	Standard - None
0	F18A	Option Box Location	None
0	F18B	Option Box Size	None
0	F18C	Option Box Accessories	None
B	F19	Outside Air Accessories	Outside Air Hood with Metal Mesh Filters
0	F20	Cabinet Options	Standard - None
0	F21	Accessories	Standard
A	F22	Maintenance Accessories	Factory Wired 115V Convenience Outlet
0	F23	Code Options	Standard - ETL U.S.A. Listing
0	F24	Shipping Splits	Standard
J	F25	Air-Cooled Condenser Accessories	Cond Coil Screen + VFD Cond Fan Head Pressure Control
0	F26	Evap-Cooled Condenser Accessories	Standard
0	F27	Water-Cooled Condenser Accessories	None
0	F28	Energy Recovery Accessories	None
A	F29	VFD Options	Shaft grounding kit on all SA, RA, EA motors
F	F30	Miscellaneous Options	Condensate Overflow Switch + SCCR (10kA)
0	F31	Exterior Cabinet Options	Standard
0	F32	Blank	Standard
0	F33	Blank	Standard



Unit Submittal

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	Feature Option		Description
0	F34	Blank	Standard
0	F35	Warranty	Standard Warranty
0	F36	Cabinet Material	Galvanized Cabinet - Double Wall + R-16 Foam Insulation
B	F37	Specials & Paint	Premium AAON Gray Paint Exterior Paint



Controller Components

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RNA-070-D-B-3-HAB0B-CA3B0:00-AAHAM-QAJ-00000-BBNBL-ZC-
CB0B-00-00-A-AV0-EB-DA0A-00-000-B00A00-J000AF-000000B

RTU Tag RTU #1

Job Name Minooka HS RTU Replacement - Scenario 1
Job Number Job 74

Customer Name
Date 9/25/2026

Part#	Included Parts	Assigned Channel	BACnet Point
ASM07503	VCCX-454 CONTROLLER		BI:47
ASM01643	Space Temp Sensor - Field Installed	VCCX Control Point AI1	AI:12
ASM01643	Space Temp Slide Adjust - Field Installed	VCCX Control Point AI2	AI:8
ASM01692	OSA Temp/Hum Sensor	EBUS2 Communicating Sensor	AI:16,AI:17,AI:18,AI:19
R82890	Supply Temp Sensor - Field Installed	VCCX Control Point AI3	AI:9
ASM01831	Duct Mount CO2 - Field Installed	EBUS4 Communicating Sensor	AI:29
ASM01832	Building Pressure Sensor - Field Installed	VCCX Control Point AI5	AI:23
ASM01840	Return Air Temp/Hum	EBUS6 Communicating Sensor	AI:14,AI:15
ASM01640	Duct Static Pressure Sensor - Field Installed	VCCX Control Point AI8	AI:21
	Supply Fan Control Signal 0-10VDC	VCCX Control Point AO1	AI:22
	Economizer	VCCX Control Point AO2	AI:30
	Building Pressure Control Signal	VCCX Control Point AO4	AI:24
R62330	Proof of Air Flow	VCCX Control Point BI1	BI:6, BI:24
G150620	Clogged Filter Switch (Standard Filters)	VCCX Control Point BI2	BI:25
G150620	Clogged Filter Switch (ERV Wheel O/A Filter)	VCCX Control Point BI2	BI:25
G150620	Clogged Filter Switch (ERV Wheel Exhaust Filter)	VCCX Control Point BI2	BI:25
	A2L Airstream Leak Detect Status	VCCX Control Point BI5	BI:9
	A2L Cabinet Leak Detect Status	VCCX Control Point BI6	BI:10
	Safety Shut Down	VCCX Control Point BI8	BI:26
	Supply Fan	Configured Relay Point	BI:47
	Exhaust Fan	Configured Relay Point	BI:48
	Energy Recovery Wheel	Configured Relay Point	BI:49
	Heat 1	Configured Relay Point	BI:50
	Heat 2	Configured Relay Point	BI:51
	Morning Warm-Up	Configured Relay Point	BI:52
ASM01691	EM1 EXPANSION MODULE		BI:55
	Economizer Position Feedback (Title 24)	EM1 Expansion SIG3	AI:31
ASM07563	A2L MITIGATION BOARD 1		
G137750	Gas Sensor 1	A2L MB1 AI1	
G137750	Gas Sensor 2	A2L MB1 AI2	
	Supply Fan Proof of Flow	A2L MB1 BI1	
	Alarm Output	A2L MB1 Fixed RO3	
ASM07563	A2L MITIGATION BOARD 2		



Controller Components

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Part#	Included Parts	Assigned Channel	BACnet Point
G137750	Gas Sensor 1	A2L MB2 AI1	
G137750	Gas Sensor 2	A2L MB2 AI2	
G137750	Gas Sensor 3	A2L MB2 AI3	
	Alarm Output	A2L MB2 Fixed RO3	
ASM07718	REFRIGERATION MODULE 1		BI:84
V38410	Discharge Pressure Sensor A	RM454-V 1 AI2	AI:50
R32960	Discharge Line Temp Sensor A	RM454-V 1 AI3	AI:66
	Modulating Condenser Signal A	RM454-V 1 AO2	AI:46
	Expansion Valve A1	RM454-V 1 EXV1	AI:62
	Expansion Valve A2	RM454-V 1 EXV2	AI:63
	Compressor Status Input A2	RM454-V 1 BI2	BI:78
	Emergency Shutdown	RM454-V 1 BI4	BI:83
	Compressor Enable A1	RM454-V 1 Fixed RO1	BI:84
	Compressor Enable A2	RM454-V 1 Fixed RO2	BI:85
ASM07718	REFRIGERATION MODULE 2		BI:96
V38391	Suction Pressure Sensor B	RM454-V 2 AI1	AI:73
V38410	Discharge Pressure Sensor B	RM454-V 2 AI2	AI:75
G021010	TXV Coil Temp B	RM454-V 2 AI5	AI:79
	Modulating Condenser Signal B	RM454-V 2 AO2	AI:71
	Compressor Status Input B1	RM454-V 2 BI1	BI:89
	Compressor Status Input B2	RM454-V 2 BI2	BI:90
	Emergency Shutdown	RM454-V 2 BI4	BI:95
	Compressor Enable B1	RM454-V 2 Fixed RO1	BI:96
	Compressor Enable B2	RM454-V 2 Fixed RO2	BI:97
ASM07718	REFRIGERATION MODULE 3		BI:108
V38410	Discharge Pressure Sensor C	RM454-V 3 AI2	AI:100
R32960	Discharge Line Temp Sensor C	RM454-V 3 AI3	AI:116
	Modulating Condenser Signal C	RM454-V 3 AO2	AI:96
	Expansion Valve C1	RM454-V 3 EXV1	AI:112
	Expansion Valve C2	RM454-V 3 EXV2	AI:113
	Compressor Status Input C2	RM454-V 3 BI2	BI:102
	Emergency Shutdown	RM454-V 3 BI4	BI:107
	Compressor Enable C1	RM454-V 3 Fixed RO1	BI:108
	Compressor Enable C2	RM454-V 3 Fixed RO2	BI:109
ASM07718	REFRIGERATION MODULE 4		BI:120
V38391	Suction Pressure Sensor D	RM454-V 4 AI1	AI:123
V38410	Discharge Pressure Sensor D	RM454-V 4 AI2	AI:125
G021010	TXV Coil Temp D	RM454-V 4 AI5	AI:129
	Modulating Condenser Signal D	RM454-V 4 AO2	AI:121
	Compressor Status Input D1	RM454-V 4 BI1	BI:113
	Compressor Status Input D2	RM454-V 4 BI2	BI:114
	Emergency Shutdown	RM454-V 4 BI4	BI:119
	Compressor Enable D1	RM454-V 4 Fixed RO1	BI:120



Controller Components

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Part#	Included Parts	Assigned Channel	BACnet Point
	Compressor Enable D2	RM454-V 4 Fixed R02	BI:121

RN UNITS 40-70 TON

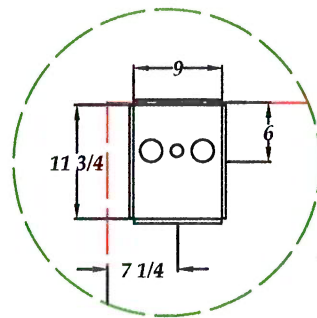
AIR COOLED, ENERGY RECOVERY WHEEL, POWER EXHAUST, RETURN AIR FILTER, RNA-D

AAON®

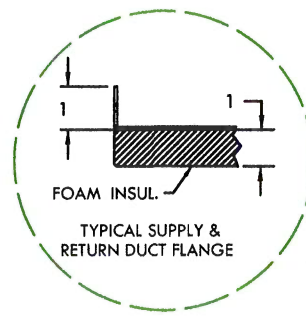
CLEARANCES

LOCATION	UNIT SIZE 40-70 TON
RETURN AIR BACK	48
VENT SIDE FRONT	48
LEFT SIDE	48
RIGHT SIDE	70
TOP	UNOBSTRUCTED

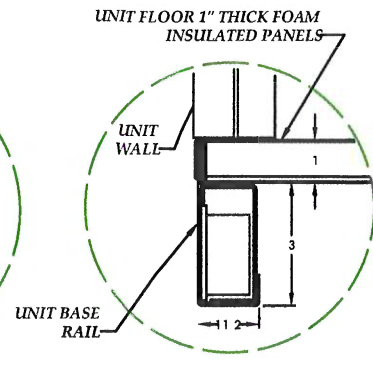
NOTE: RIGHT AND LEFT SIDE UNIT CLEARANCES ARE INTERCHANGEABLE ON UNITS THAT DO NOT HAVE THE HYDRONIC HEATING OPTION. (UNITS WITH HYDRONIC HEAT MUST HAVE 70" RIGHT SIDE ACCESS FOR SERVICE.)



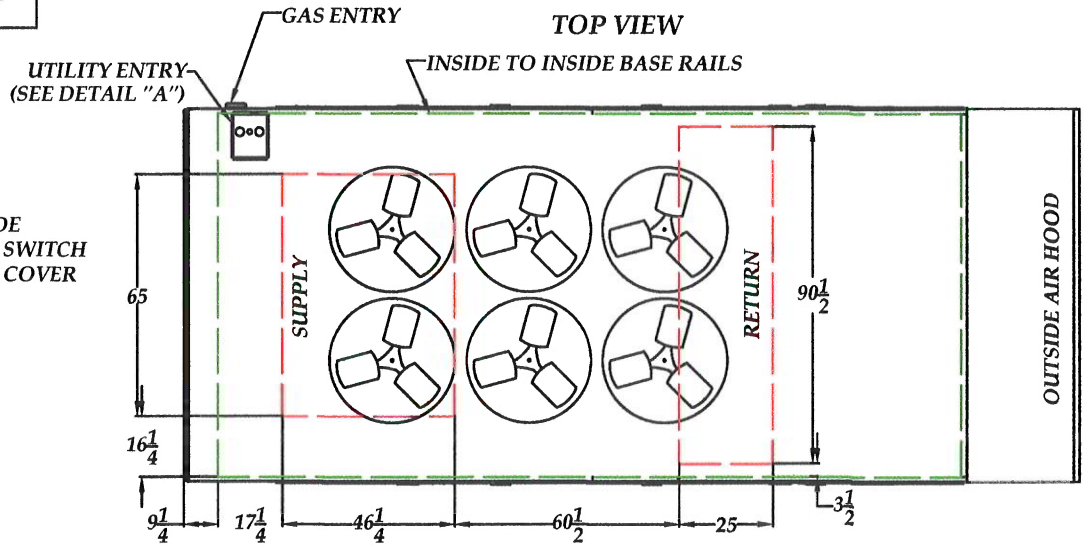
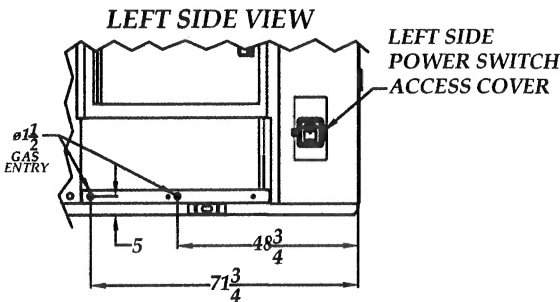
DETAIL A
UTILITY ENTRY



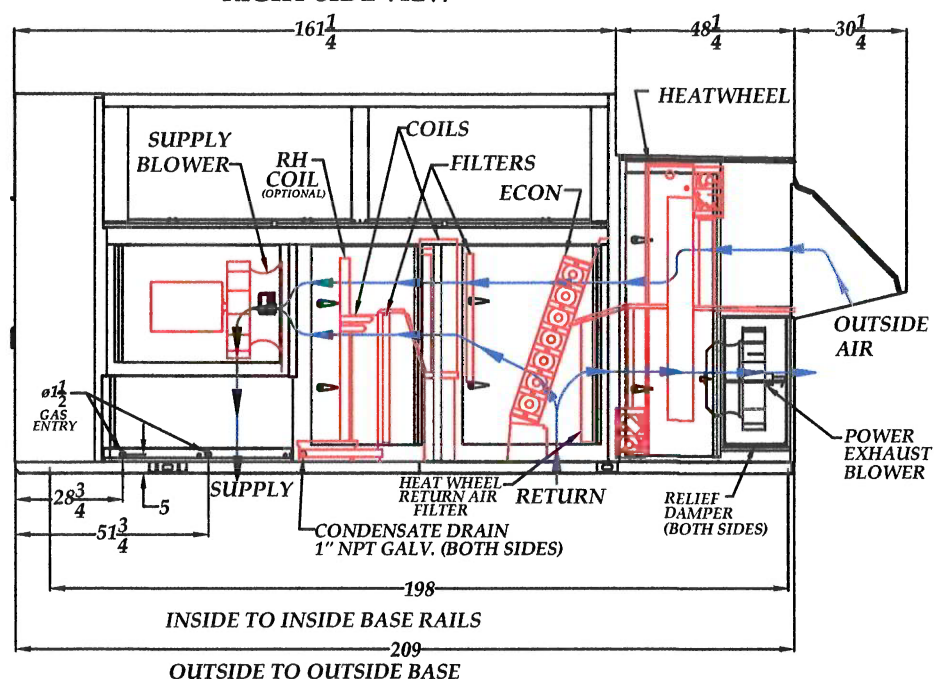
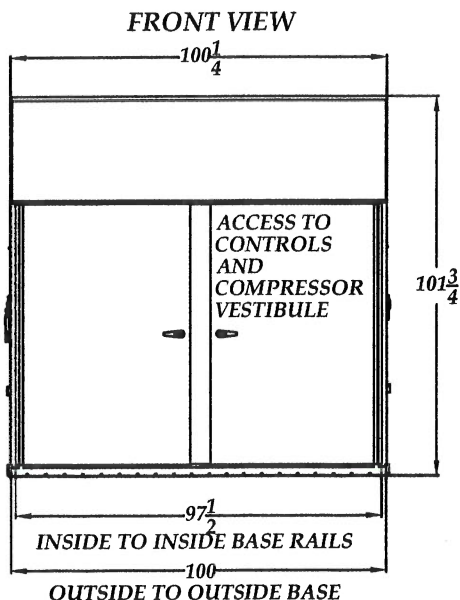
DETAIL B



BASE RAIL
CLEARANCE



RIGHT SIDE VIEW



CAT000550 RNA-D REV:A 06/26/24 JWC
ALL DIMENSIONS ARE IN INCHES

