

**WAKE COUNTY  
PUBLIC SCHOOL SYSTEM**

1551 Rock Quarry Road Bldg. F  
Raleigh, NC 27610

Request For Quote No. **251-23-237**

**DATE DUE: OCTOBER 27, 2022 2:00 pm**

Refer ALL Inquiries via Email to: Jim Jaeger

BID NAME:

**ROOF TOP UNIT REPLACEMENT –  
PURCHASE ONLY**

E-Mail: [jjjaeger@wcpss.net](mailto:jjjaeger@wcpss.net)

Using Agency Name: WAKE COUNTY PUBLIC SCHOOL SYSTEM

**NOTICE TO BIDDERS**

**SEALED** RFQ's, subject to the conditions made a part hereof, will be received via delivery until: **2:00 p.m. OCTOBER 27, 2022**

**EXECUTION**

In compliance with this Invitation for Quote, and subject to all the conditions herein, the undersigned offers and agrees to furnish and deliver any or all items upon which prices are quoted, at the prices set opposite each item within the time specified herein. By executing this quote, I certify that this quote is submitted competitively and without collusion (G.S. 143-54), that none of our officers, directors, or owners of an unincorporated business entity has been convicted of any violations of Chapter 78A of the General Statutes, the Securities Act of 1933, or the Securities Exchange Act of 1934 (G.S. 143-59.2), and that we are not an ineligible vendor as set forth in G.S. 143-59.1. False certification is a Class I felony.

**Failure to execute/sign quote prior to submittal shall render quote invalid. Late quotes are not acceptable.**

BIDDER:		FEDERAL ID OR SOCIAL SECURITY NO.	
STREET ADDRESS:		P.O. BOX:	ZIP:
CITY & STATE & ZIP:		TELEPHONE NUMBER:	TOLL FREE TEL. NO (800)
PRINCIPAL PLACE OF BUSINESS ADDRESS IF DIFFERENT FROM ABOVE			
TYPE OR PRINT NAME & TITLE OF PERSON SIGNING:		FAX NUMBER:	
AUTHORIZED SIGNATURE:	DATE:	E-MAIL:	

Offer valid for 45 days from date of quote receipt unless otherwise stated here: \_\_\_\_ days Prompt Payment Discount:  
\_\_\_\_ % \_\_\_\_ days

**PURPOSE AND BACKGROUND**

The Wake County Public School System (WCPSS) is the nation's sixteenth largest school district and the largest in the state of North Carolina. With 112 elementary schools, 38 middle schools, 28 high schools and 5 special schools, we serve over 160,000 students.

## WCPSS Purchasing Department Ethics Policy and Standards of Conduct

All purchasing department employee conducting business transactions on the behalf of the Wake County Public School System hold positions of public trust which dictates that their actions be governed by the highest standards of personal and business conduct. Each employee must exhibit the highest standards of honesty, integrity, and fairness when engaging in any activity concerning the school system, particularly in relationships with vendors, suppliers, the public and other employees.

Employees shall perform their jobs in a competent and ethical manner without violating the public trust or applicable law, policies, and regulations.

Conflict of Interest:

The following acts are deemed by state law and/or the Board of Education to be in conflict with the interests of the Wake County Public School System.

1. An employee shall not, for personal financial gain, solicit or sell or have any pecuniary (financial) interest in the supplying of any goods, wares, merchandise materials, supplies, services, or equipment to the Wake County Public School System. Approved extended employment shall not be a violation of this.
2. An employee shall not, for personal financial gain, solicit or sell or have any pecuniary (financial) interest in the sale of any goods, wares, merchandise, materials, supplies, equipment, or services to students or employees of this school system at school, on school premises, or any Wake County Public School System facility.
3. An employee shall not act as an agent for any manufacturer, merchant, dealer, publisher, or author seeking to sell any goods, wares, merchandise, materials, supplies, services, or equipment to the Wake County Public School System.
4. An employee shall not receive or accept any gift, reward, gratuity, or other compensation from any manufacturer, merchant, dealer, publisher, or author for influencing or recommending to the school system or any school that it use a seller's goods, wares, merchandise, materials, supplies, services, or equipment.

An employee shall not use for personal financial gain, any school facilities, supplies, equipment, or student labor (student labor during regular school hours), in the manufacture, creation, or repair of any goods, wares, or merchandise for sale, or for the providing of services to the general public. However, this provision shall not prohibit the renting of school facilities to school employees in accordance with Community Schools' policies and regulations. 6. Except as allowed by state law (N.C.G.S. §§14-234, 143-58.1), no employee shall use the powers, policies, and procedures of the State's Division of Purchase and Contract or the school system's Purchasing Division to purchase or procure any property or service for private use or benefit.

Nepotism:

No employee shall approve any contract with or purchase any goods or services from any immediate family member without disclosure to and approval of the Chief Business Officer. In addition, no employee shall recommend the employment of or directly supervise or evaluate any immediate family member without disclosure to and approval of the Assistant Superintendent of Human Resources. Immediate family includes employee's spouse, parents, children, stepchildren, brothers, sisters, mother-in-law, father-in-law, sons-in-law, daughters-in-law, brothers-in-law, and sisters-in-law. In addition, for the purpose of this regulation, anyone living in the same household with the employee is considered a member of the immediate family.

Gifts to Employees:

School system employees shall not accept any gifts except token gifts of insubstantial value. School system employees shall not accept any gift, reward, gratuity, or other compensation from any manufacturer, merchant, dealer, publisher, or author for the purpose of influencing or recommending to the school system or any school the use of a seller's goods, wares, merchandise, materials, supplies, services, or equipment. Refer to Policy: 3243/4243

**IMPORTANT NOTE:** All proposals shall be physically delivered to the office address listed above. Sealed proposals, subject to the conditions made a part hereof, will be received at the address indicated in the table in this Section, for furnishing and delivering the commodity or service as described herein.

- a) Submit **ONE (1) SIGNED, ORIGINAL EXECUTED PROPOSAL** response, **ONE (1) PHOTOCOPY OF YOUR PROPOSAL** and **ONE (1) Electronic Copy (if possible-Flash/Thumb drive or Disc)**, simultaneously to the address identified in the table above.
- b) **Submit your proposal in a sealed package. Clearly mark each package with: (1) Vendor name; (2) the RFP number; (3) the due date; and (4) Buyer's Name. Address the package(s) for delivery as shown in the table above.**  
**Important Note:** If Vendor is submitting more than one (1) proposal, each proposal shall be submitted in **separate sealed envelopes and clearly marked accordingly for each RFP.**

**For delivery purposes, separate sealed envelopes from a single Vendor may be included in the same outer package. Proposals may be subject to rejection unless submitted with the information above included on the outside of the sealed proposal package.**

**TRANSPORTATION CHARGES:** "FOB Raleigh, North Carolina with all transportation charges prepaid and included in the bid price."

## TERMS AND CONDITIONS

1. **READ, REVIEW AND COMPLY:** It shall be the bidder's responsibility to read this entire document, review all enclosures and attachments, and comply with all requirements specified herein.
2. **NOTICE TO VENDORS:** WCPSS objects to and reserves the right to reject any additional terms and conditions submitted with an Offeror's response. This applies to any language appearing in or attached to the document as part of the Offeror's response. By execution and delivery of this Request for Proposal and response(s), the Offeror agrees that any additional terms and conditions, whether submitted purposely or inadvertently, shall have no force or effect, unless specifically accepted in writing by WCPSS. The Offeror shall identify on a separate document any additional terms and conditions that are submitted with the Offeror's response.
3. **DEFINITIONS:**
  - **BIDDER:** Company, firm, corporation, partnership, individual, etc., submitting a response to an Invitation for Bids.
  - **TERM CONTRACT:** A contract generally intended to cover all normal requirements for a commodity for a specified period of time based on estimated quantities only.
  - **OPEN MARKET CONTRACT:** A contract for the purchase of a commodity not covered by a term contract.
4. **EXECUTION:** Failure to sign under EXECUTION section will render bid invalid.
5. **ORDER OF PRECEDENCE:** In cases of conflict between specific provisions in this bid, the order of precedence shall be (1) special terms and conditions specific to this bid, (2) specifications, and (3) Instructions to Bidders.
6. **TIME FOR CONSIDERATION:** Unless otherwise indicated on the first page of this document, bidder's offer shall be valid for 45 days from the date of bid opening. Preference may be given to bids allowing not less than 45 days for consideration and acceptance.
7. **SPECIFICATIONS:** Any deviation from specifications indicated herein must be clearly pointed out; otherwise, it will be considered that items offered are in strict compliance with these specifications, and bidder will be held responsible therefore. Deviations shall be explained in detail. The bidder shall not construe this paragraph as inviting deviation or implying that any deviation will be acceptable.
8. **INFORMATION AND DESCRIPTIVE LITERATURE:** Bidder is to furnish all information requested in the spaces provided in this document. Further, if required elsewhere in this bid, each bidder must submit with their bid sketches, descriptive literature and/or complete specifications covering the products offered. Reference to literature submitted with a previous bid will not satisfy this provision. Bids which do not comply with these requirements will be subject to rejection.
9. **RECYCLING AND SOURCE REDUCTION:** It is the policy of WCPSS to encourage and promote the purchase of products with recycled content to the extent economically practicable, and to purchase items which are reusable, refillable, repairable, more durable, and less toxic to the extent that the purchase or use is practicable and cost-effective. We also encourage and promote using minimal packaging and the use of recycled/recyclable products in the packaging of commodities purchased. However, no sacrifice in quality of packaging will be acceptable. The company remains responsible for providing packaging that will protect the commodity and contain it for its intended use. Companies are strongly urged to bring to the attention of WCPSS which issued the solicitation document, those products or packaging they offer which have recycled content and that are recyclable.
10. **CLARIFICATIONS/INTERPRETATIONS:** Any and all questions regarding this document must be addressed to the purchaser named on the cover sheet of this document. Do not contact the school or department directly. Any and all revisions to this document shall be made only by written addendum from WCPSS Purchasing Department. The bidder is cautioned that the requirements of this bid can be altered only by written addendum and that verbal communications from whatever source are of no effect.
11. **ACCEPTANCE AND REJECTION:** WCPSS reserves the right to reject any and all bids, to waive any informality in bids and, unless otherwise specified by the bidder, to accept any item in the bid. If either a unit price or extended price is obviously in error and the other is obviously correct, the incorrect price will be disregarded.
12. **REFERENCES:** WCPSS reserves the right to require a list of users of the exact item offered. WCPSS may contact these users to determine acceptability of the bid. Such information may be considered in the evaluation of the bid.
13. **AWARD OF CONTRACT:** As directed by statute, qualified bids will be evaluated and acceptance may be made of the lowest and best bid most advantageous to WCPSS as determined upon consideration of such factors as: prices offered; the quality of the articles offered; the general reputation and performance capabilities of the bidders; the substantial conformity with the specifications and other conditions set forth in the bid; the suitability of the articles for the intended use; the related services needed; the date or dates of delivery and performance; and such other factors deemed by WCPSS to be pertinent or peculiar to the purchase in question. Unless otherwise specified by WCPSS or the bidder, WCPSS reserves the right to accept any item or group of items on a multi-item bid. WCPSS also reserves the right to reject any and all bids. In addition, on TERM CONTRACTS, WCPSS reserves the right to make partial, progressive or multiple awards: where it is advantageous to award separately by items; or where more than one supplier is needed to provide the contemplated requirements as to quantity, quality, delivery, service, geographical areas; other factors deemed by WCPSS to be pertinent or peculiar to the purchase in question.
14. **HISTORICALLY UNDERUTILIZED BUSINESSES:** Pursuant to General Statute 143-48 and Executive Order #150, WCPSS invites and encourages participation in this procurement process by businesses owned by minorities, women, disabled, disabled business enterprises and non-profit work centers for the blind and severely disabled.
15. **CONFIDENTIAL INFORMATION:** As provided by statute and rule, WCPSS will consider keeping trade secrets which the bidder does not wish disclosed confidential. Each page shall be identified in boldface at the top and bottom as "CONFIDENTIAL" by the bidder. Cost information shall not be deemed confidential. In spite of what is labeled as a trade secret, the determination whether it is or not will be determined by North Carolina law.
16. **SAMPLES:** Sample of items, when required, must be furnished as stipulated herein, free of expense, and if not destroyed will, upon request be returned at the bidder's expense. Request for the return of samples must be made within 10 days following date of bid opening. Otherwise the samples will become WCPSS property. Each individual sample must be labeled with the bidder's name, bid number, and item number. A sample on which an award is made, will be retained until the contract is completed, and then returned, if requested, as specified above.

17. **AWARD PROCEDURES:** Contract award notice shall be posted on WCPSS website. Contract award notices are sent only to those actually awarded contracts, and not to every person or firm responding to this solicitation.
18. **RECIPROCAL PREFERENCE:** G.S. 143-59 establishes a reciprocal preference law to discourage other states from applying in-state preferences against North Carolina's resident bidders. The "Principal Place of Business" is defined as the principal place from which the trade or business of the bidder is directed or managed.
19. **DEFAULT AND PERFORMANCE BOND:** In case of default by the contractor, WCPSS may procure the articles or services from other sources and hold the contractor responsible for any excess cost occasioned thereby. WCPSS reserves the right to require performance bond or other acceptable alternative guarantees from successful bidder without expense to WCPSS.
20. **GOVERNMENTAL RESTRICTIONS:** In the event any Governmental restrictions are imposed which necessitate alteration of the material, quality, workmanship or performance of the items offered prior to their delivery, it shall be the responsibility of the contractor to notify in writing WCPSS, indicating the specific regulation which required such alterations. WCPSS reserves the right to accept any such alterations, including any price adjustments occasioned thereby, or to cancel the contract.
21. **TAXES:** Any applicable taxes shall be invoiced as a separate item. G.S. 143-59.1 bars the WCPSS from entering into contracts with vendors if the vendor or its affiliates meet one of the conditions of G. S. 105-164.8(b) and refuse to collect use tax on sales of tangible personal property to purchasers in North Carolina. Conditions under G. S. 105-164.8(b) include: (1) Maintenance of a retail establishment or office, (2) Presence of representatives in the State that solicit sales or transact business on behalf of the vendor and (3) Systematic exploitation of the market by media-assisted, media-facilitated, or media-solicited means. By execution of the bid document the vendor certifies that it and all of its affiliates (if it has affiliates) collect(s) the appropriate taxes.
22. **SITUS:** The place of this contract, its situs and forum, shall be Wake County, North Carolina, where all matters, whether sounding in contract or tort, relating to its validity, construction, interpretation and enforcement shall be determined.
23. **GOVERNING LAWS:** This contract is made under and shall be governed and construed in accordance with the laws of the State of North Carolina.
24. **INSPECTION AT CONTRACTOR'S SITE:** WCPSS reserves the right to inspect, at a reasonable time, the equipment/item, plant or other facilities of a prospective contractor prior to contract award, and during the contract term as necessary for WCPSS determination that such equipment/item, plant or other facilities conform with the specifications/requirements and are adequate and suitable for the proper and effective performance of the contract.
25. **PAYMENT TERMS:** Payment terms are Net not later than 30 days after receipt of correct invoice or acceptance of goods, whichever is later. Payment may be made by procurement card and it shall be accepted by the contractor for payment if the contractor accepts that card (Visa, Mastercard, etc.) from other customers.
26. **CONDITION AND PACKAGING:** Unless otherwise provided by special terms and conditions or specifications, it is understood and agreed that any item offered or shipped has not been sold or used for any purpose and shall be in first class condition. All containers/packaging shall be suitable for handling, storage or shipment.
27. **STANDARDS:** All manufactured items and/or fabricated assemblies subject to operation under pressure, operation by connection to an electric source, or operation involving a connection to a manufactured, natural, or LP gas source shall be constructed and approved in a manner acceptable to the appropriate state inspector which customarily requires the label or re-examination listing or identification marking of the appropriate safety standard organization; such as the American Society of Mechanical Engineers for pressure vessels; the Underwriters Laboratories and/or National Electrical Manufacturers' Association for electrically operated assemblies; or the American Gas Association for gas operated assemblies, where such approvals of listings have been established for the type of device offered and furnished. Further, all items furnished shall meet all requirements of the Occupational Safety and Health Act (OSHA), and state and federal requirements relating to clean air and water pollution.
28. **PATENT:** The contractor shall hold and save WCPSS, its officers, agents and employees, harmless from liability of any kind, including costs and expenses, on account of any confidential information, copyrighted material, patented or unpatented invention, articles, device or appliance manufactured or used in the performance of this contract, including use by WCPSS or disclosure of any information pursuant to the NC Public Records Act.
29. **ASSIGNMENT:** No assignment of the contractor's obligations nor the contractor's right to receive payment hereunder shall be permitted. However, upon written request approved by the purchasing department and solely as a convenience to the contractor, WCPSS may:
  - a. Forward the contractor's payment check directly to any person or entity designated by the contractor, and
  - b. Include any person or entity designated by contractor as a joint payee on the contractor's payment check.In no event shall such approval and action obligate WCPSS to anyone other than the contractor and the contractor shall remain responsible for fulfillment of all contract obligations.
30. **INSURANCE:**
  - a. **Worker's Compensation** including Occupational Disease and Employer's Liability Insurance. Statutory - Amount and coverage as required by State of North Carolina Worker's Compensation laws. Employer's Liability - At least

Part A	Bodily Injury	Statutory Limits
Part B	By Accident	\$500,000 each accident
	By Disease	\$500,000 policy limit
		\$500,000 each employee
  - b. **Public liability and Property Damage Insurance** - The Contractor shall procure insurance coverage for direct operations, contractual liability and completed operations with limits not less than those stated below:

	Occurrence:
General Aggregate	\$2,000,000
Premises Operations	\$1,000,000
Personal & Advertising Injury	\$1,000,000
  - c. **Comprehensive Automobile Liability Insurance**, including coverage for owned, hired and non-owned vehicles: A Combined Single Limit for bodily injury and property damage limit of not less than \$1,000,000; and \$2,000 medical payments.
  - d. Certificates of Insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work. These Certificates shall contain a provision that coverage afforded under the policies will not be canceled until at least thirty (30) days' prior written notice has been given to the Owner, and that the Wake County Board of Education is listed as additional insured on general liability.

The successful bidder agrees to hold harmless and indemnify the Wake County Board of Education (WCBOE) for any liability that may arise from the negligent or illegal acts of the bidder's employees or agents.

31. **GENERAL INDEMNITY:** The provider shall hold and save WCPSS, its officers, agents, and employees, harmless from liability of any kind, including all claims and losses, accruing or resulting to any other person, firm, or corporation furnishing or supplying work, services, materials, or supplies in connection with the performance of this contract, and from any and all claims and losses accruing or resulting to any person, firm, or corporation that may be injured or damaged by the provider in the performance of this contract and that are attributable to the negligence or intentionally tortious acts of the provider. The provider represents and warrants that it shall make no claim of any kind or nature against WCPSS agents who are involved in the delivery or processing of contractor goods to WCPSS. The representation and warranty in the preceding sentence shall survive the termination or expiration of this contract.
32. **CANCELLATION (TERM CONTRACTS ONLY):** All contract obligations shall prevail for at least 180 days after the effective date of the contract. After that period, in addition to the provisions of the paragraph entitled Price Adjustments, for the protection of both parties, this contract may be canceled in whole or in part by either party by giving 30 days prior notice in writing to the other party.
33. **QUANTITIES (TERM CONTRACTS ONLY):** The award of a term contract neither implies nor guarantees any minimum or maximum purchases there under.
34. **PRICE ADJUSTMENTS (TERM CONTRACTS ONLY):** Any price changes, downward or upward, which might be permitted during the contract period must be general, either by reason of market change or on the part of the contractor to other customers.
  - a. **Notification:** Must be given to WCPSS, in writing, concerning any proposed price adjustments. Such notification shall be accompanied by copy of manufacturer's official notice or other acceptable evidence that the change is general in nature.
  - b. **Decreases:** WCPSS shall receive full proportionate benefit immediately at any time during the contract period.
  - c. **Increases:** All prices shall be firm against any increase for 180 days from the effective date of the contract. After this period, a request for increase may be submitted with WCPSS reserving the right to accept or reject the increase or cancel the contract. Such action by WCPSS shall occur not later than 15 days after the receipt by WCPSS of a properly documented request for price increase. Any increases accepted shall become effective not later than 30 days after the expiration of the original 15 days reserved to evaluate the request for increase.
35. **INVOICES:** It is understood and agreed that orders will be shipped at the established contract prices in effect on dates orders are placed. Invoicing at variance with this provision will subject the contract to cancellation. Applicable North Carolina sales tax shall be invoiced as a separate item.
36. **LUNSFORD ACT/CRIMINAL BACKGROUND CHECKS:** The Provider shall conduct at its own expense sexual offender registry checks on each of its employees, agents, ownership personnel, or contractors ("contractual personnel") who will engage in any service on or delivery of goods to school system property or at a school-system sponsored event. The checks shall include (at a minimum) checks of the State Sex Offender and Public Protection Registration Program, the State Sexually Violent Predator Registration Program, and the National Sex Offender Registry ("the Registries"). For the Provider's convenience only, all of the required registry checks may be completed at no cost by accessing the North Carolina Sex Offender Registry website at <http://sexoffender.ncdoj.gov/>. The Provider shall provide certification on Sexual Offender Registry Check Certification Form that the registry checks were conducted on each of its contractual personnel providing services or delivering goods under this Agreement prior to the commencement of such services or the delivery of such goods. The Provider shall conduct a current initial check of the registries (a check done more than 30 days prior to the date of this Agreement shall not satisfy this contractual obligation). In addition, Provider agrees to conduct the registry checks and provide a supplemental certification form before any additional contractual personnel are used to deliver goods or provide services pursuant to this Agreement. Provider further agrees to conduct annual registry checks of all contractual personnel and provide annual certifications at each anniversary date of this Agreement. Provider shall not assign any individual to deliver goods or provide services pursuant to this Agreement if said individual appears on any of the listed registries. Provider agrees that it will maintain all records and documents necessary to demonstrate that it has conducted a thorough check of the registries as to each contractual personnel and agrees to provide such records and documents to the school system upon request. Provider specifically acknowledges that the school system retains the right to audit these records to ensure compliance with this section at any time in the school system's sole discretion. Failure to comply with the terms of this provision shall be grounds for immediate termination of the Agreement. In addition, the school system may conduct additional criminal records checks at Provider's expense. If the school system exercises this right to conduct additional criminal records checks, Provider agrees to provide within seven (7) days of request the full name, date of birth, state of residency for the past ten years, and any additional information requested by the school system for all contractual personnel who may deliver goods or perform services under this Agreement. Provider further agrees that it has an ongoing obligation to provide the school system with the name of any new contractual personnel who may deliver goods or provide services under the Agreement. WCPSS reserves the right to prohibit any contractual personnel of Provider from delivering goods or providing services under this Agreement if WCPSS determines, in its sole discretion, that such contractual personnel may pose a threat to the safety or well-being of students, school personnel or others.
37. **ACCESS TO PERSONS AND RECORDS:** The State Auditor and the WCPSS internal auditors shall have access to persons and records as a result of all contracts or grants entered into by WCPSS in accordance with General Statute 147-64.7 and Session Law 2010-194, Section 21 (i.e., the State Auditors and WCPSS may audit the records of the contractor during the term of the contract to verify accounts and data affecting fees or performance).
38. **COMPLIANCE WITH E-VERIFY:** Provider shall comply with all applicable laws and regulations in providing services under this Contract. In particular, Provider shall not employ any individuals to provide services to the School System who are not authorized by federal law to work in the United States. Provider represents and warrants that it is aware of and in compliance with the Immigration Reform and Control Act and North Carolina law (Article 2 of Chapter 64 of the North Carolina General Statutes) requiring use of the E-Verify system for employers who employ twenty-five (25) or more employees and that it is and will remain in compliance with these laws at all times while providing services pursuant to this Contract. Provider shall also ensure that any of its subcontractors (of any tier) will remain in compliance with these laws at all times while providing subcontracted services in connection with this Contract.
39. **COMPLIANCE WITH AFFORDABLE CARE ACT:** Provider is responsible for providing affordable health care coverage to all of its full-time employees providing services to the School System. The definitions of "affordable coverage" and "full-time employee" are governed by the Affordable Care Act and accompanying IRS and Treasury Department regulations.
40. **IRAN DIVESTMENT ACT:** Provider certifies that as of the date of this Contract, Provider is not listed on the Final Divestment List created by the North Carolina State Treasurer pursuant to N.C. Gen. Stat. § 147-86.58. Provider understands that it is not entitled to any payments whatsoever under this Contract if this certification is false. The individual signing this Contract certifies that he or she is authorized by Provider to make the foregoing statement.

Non-EP T&C

November 2019

Company Name (include dba): \_\_\_\_\_  
Phone number: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Corporate Office Address: \_\_\_\_\_

Wake County Office Address (if different from Corporate): \_\_\_\_\_  
\_\_\_\_\_

Web Address: \_\_\_\_\_

Length of time in business: \_\_\_\_\_ Number of permanent employees: \_\_\_\_\_

DOT #: \_\_\_\_\_ MC License #: \_\_\_\_\_

Insurance Contact: \_\_\_\_\_ Phone: \_\_\_\_\_

The Wake County Public School System reserves the right to reject or disqualify any and all vendors, waive informalities and irregularities in the bid process, and to accept vendors, which are considered to be in the best interest of the School System.

## Wake County Public School System Vendor Information Form

In order to be an active vendor with the Wake County Public School System and to have purchase orders and checks issued to you, a completed, TYPED Vendor Information Form must be submitted to our purchasing department. Please complete the Vendor Information Form and email to [purchasing@wcpss.net](mailto:purchasing@wcpss.net)

### ORDER ADDRESS:

VENDOR NAME: \_\_\_\_\_

STREET/PO BOX: \_\_\_\_\_

CITY, STATE, ZIP CODE: \_\_\_\_\_

### PAY ADDRESS (IF DIFFERENT FROM ORDER ADDRESS):

VENDOR NAME: \_\_\_\_\_

STREET/PO BOX: \_\_\_\_\_

CITY, STATE, ZIP CODE: \_\_\_\_\_

CONTACT PERSON: \_\_\_\_\_

TELEPHONE #: \_\_\_\_\_ ( ) \_\_\_\_\_

FAX #: \_\_\_\_\_ ( ) \_\_\_\_\_

E-MAIL ADDRESS: \_\_\_\_\_

FEDERAL TAX ID #: \_\_\_\_\_ OR

SOCIAL SECURITY #: \_\_\_\_\_

(YOU MUST PROVIDE US A TAXPAYER ID # (EITHER SS# OR FEDERAL ID #) IN ORDER TO RECEIVE PAYMENT)

1. Name(s) of Owner(s) of Company: \_\_\_\_\_
2. Are any owners in #1 related to any employee of Wake County Public School System? Yes \_\_\_\_\_ No \_\_\_\_\_
3. If your answer to #2 above is Yes: Owner Name \_\_\_\_\_

- | WCPSS Employee  | Position/Dept. Employed   | Relationship |
|---|---|--------------|
| 4. Is your company incorporated?  | Yes _____ No _____  |              |
| 5. Invoice payment terms?   | Net 30 _____ 1% 10 Net 30 _____ 2% 10 Net 30 _____ Other _____                              |              |
| 6. Is your company a vendor of any N.C. Department of Administration Division of Purchase and Contract certification? | Yes _____ No _____ Not Sure _____   |              |
| 7. This firm certifies that it is a:  | Woman Owned _____ Minority Owned _____ Disabled Owned _____ Small Business Enterprise _____ |              |

(NOTE: TO QUALIFY FOR W/M/D STATUS, 51% OF THE COMPANY MUST BE OWNED AND CONTROLLED BY A WOMAN, MINORITY, OR DISABLED INDIVIDUAL)

8. Are you a supplier of goods \_\_\_\_\_ or a service provider \_\_\_\_\_
9. Are you a government agency? Yes \_\_\_\_\_ No \_\_\_\_\_
10. Do you receive retirement income from the N.C. Retirement System? Yes \_\_\_\_\_ No \_\_\_\_\_

Please mail /email completed Vendor Information Form to: Wake County Public School System  
ATTENTION: Purchasing Department  
1551 Rock Quarry Rd  
Raleigh, NC 27610-4145  
Email: [purchasing@wcpss.net](mailto:purchasing@wcpss.net)

Revised 10/5/2022

1551 Rock QUARRY ROAD  
RALEIGH, NORTH CAROLINA 27610-4145  
PHONE: 919.694-8726  
EMAIL: PURCHASING@WCPSS.NET

**Minority, Women, Small Business Enterprise Information:**

Pursuant to WCPSS Board of Education policy and NC General Statutes, WCPSS invites and encourages participation in the procurement process by businesses owned by minorities, women, small business enterprise, disabled business enterprises and non-profit work centers for the blind and severely disabled. Parties are asked to complete the following information:

Check all that apply:

- ☐ Minority Owned Business  
☐ Woman Owned Business  
☐ Disabled Owned Business  
☐ Small Business Enterprise

- ☐ Yes, I certify that that my company has been certified by the North Carolina Department of Administration (HUB Office) as a Historically Underutilized Business.  
☐ No, my company has not yet received HUB or MWBE certification but meets the above criteria.  
☐ No, my company is not a minority, woman, disabled owned or small business enterprise.

Vendor Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name: \_\_\_\_\_

Notes to Vendor:

- Questions 2-3 are to satisfy the conflict-of-interest standards of the Wake County Board of Education.
- Question 4 relates to Internal Revenue Service reporting requirements. To be an active vendor you must provide either a federal tax identification number or a social security number.
- Question 5 relates to your payment terms.
- Questions 6-7 are to satisfy North Carolina statutes, which require identification of expenditures with vendors on state contract and with companies owned by minorities, women, disabled persons, and/or small business enterprises.
- Question 8 relates to goods or services. You are a supplier if your company is actually selling a particular item or items.
- Question 9 relates to government agencies.
- Question 10 relates to required reporting to the NC Retirement System.

Any person or entity receiving payment from the Wake County Public School System, regardless of reason, is for our purposes considered to be a vendor.

If you have any questions, please email us. Please send your completed Vendor Information Form to [purchasing@wcpss.net](mailto:purchasing@wcpss.net). Thank you for your prompt attention to this request.



**DELIVER SEALED VIA DELIVERY/COURIER TO:** Jim Jaeger

**Due by:** OCTOBER 27, 2022 2:00 pm

**EMAIL:** [jjaeger@wcpss.net](mailto:jjaeger@wcpss.net)

**QUOTE NO.:** RFQ: 251-23-237

Wake County Public School System

Purchasing Department

1551 Rock Quarry Rd. Bldg. F

Raleigh NC 27610-4145

Please provide a quote for the following items in the template below. This request is a purchase only request and all information should be included below. If allowed and you are quoting a substitute model, you must indicate such on your response and attach all specifications, drawings and information in order for the end user to compare and review. Quotes submitted without the proper documentation will not be considered. Any miscellaneous fees or charges for this quote must be listed below. Bidding vendor must be a Manufacturer's full-service distributor. No RFQ's from third party brokers will be accepted. Any new bidding vendor to WCPSS should include information on being an authorized vendor for the manufacturer.

## **RFP SCHEDULE**

The table below shows the *intended* schedule for this RFP. WCPSS will make every effort to adhere to this schedule.

Event	Responsibility	Date, Time (ET), Location
Issue RFP	WCPSS	By: OCT. 14, 2022 5:00 P.M.
Pre-Bid Meeting	N/A	
Submit Written Questions via Email to: <a href="mailto:jjaeger@wcpss.net">jjaeger@wcpss.net</a>	Vendor	OCT. 21, 2022 by 5:00 p.m. ET
Provide Response Addendum to Questions Emailed back and "RFP Quiet Period" Begins	WCPSS	By: OCT. 25, 2022 by 1:00 p.m. ET
Submit <b><u>SEALED</u></b> Proposals Deadline via Delivery or Courier  <b><u>IMPORTANT NOTE:</u></b> THIS RFP IS REQUIRED TO BE SUBMITTED IN A " <b><u>SEALED</u></b> " PACKAGE	Vendor	OCTOBER 27, 2022 2:00 p.m. ET 1551 Rock Quarry Rd. Bldg. F (Purchasing) Raleigh NC 27610
Public Opening of Proposals	WCPSS Vendor	OCTOBER 27, 2022 2:00 p.m. ET 1551 Rock Quarry Rd. Bldg. F (Purchasing) Raleigh NC 27610

## **PROPOSAL QUESTIONS**

Upon review of the RFP documents, Vendors may have questions to clarify or interpret the RFP in order to submit the best proposal possible. To accommodate the Proposal Questions process, Vendors shall submit any such questions by the above due date. Written questions only shall be emailed to [jjaeger@wcpss.net](mailto:jjaeger@wcpss.net) at date and time specified above. Vendors should enter "RFP #251-23-XX Questions" as the subject for the email. Questions submittals should include a reference to the applicable RFP section and be submitted in a format shown below:

## 251-23-231 PROPOSAL SHEET

Qty.	Description	Unit Price	LINE SUBTOTAL
<b>Four (4)</b>	<ul style="list-style-type: none"> <li>- Provide price for purchase 15 Ton, 14.5 IEER, 460/3/60, 6,000 CFM, 250 MBH input gas pack equivalent to Carrier 48FCEN16A3M6-0A1A0.</li> <li>- Provide insulated adapter curb that is replacing an existing Carrier 50HJQ016G-610QA, Existing CURB OD dimension 78"x71"</li> <li>- Additional accessories shall include Al/Cu coils, 2-stage cooling with hot gas re-heat (humidi-mizer), base electromechanical controls, High Static blower kit @ .75" external Static, low leakage Mixed air damper for economization (will be controlled by BAS), barometric Relief, Non powered convenience outlet, hail guards, 1 year parts warranty, 5 year compressor parts warranty, 10 year HX parts warranty</li> <li>- Equipment must be delivered within 32 weeks of PO being issued</li> </ul>	\$	\$
<u>*IMPORTANT NOTES</u>		<u>IMPORTANT NOTE:</u>	<u>SPECIFICATION SHEET MUST BE INCLUDED WITH YOUR RFQ SUBMISSION</u>
<b>One (1)</b>	<ul style="list-style-type: none"> <li>- Provide price for purchase 12.5 Ton, 15 IEER, 460/360, 5,000 CFM, 225 MBH input gas pack equivalent to Carrier 48FCEN14A3M6-0A1A0.</li> <li>- Provide insulated adapter curb that is replacing an existing Carrier 50HJQ016G-610QA, Existing CURB OD dimension 78"x71"</li> <li>- Additional accessories shall include Al/Cu coils, 2-stage cooling with hot gas re-heat (humidi-mizer), base electromechanical controls, High Static blower kit @ .75" external Static, low leakage Mixed air damper for economization (will be controlled by BAS), Barometric Relief, Non powered convenience outlet, hail guards, 1 year parts warranty, 5 year compressor parts warranty, 10 year HX parts warranty</li> <li>- Equipment must be delivered within 32 weeks of PO being issued</li> </ul>	\$	\$
<u>*IMPORTANT NOTES</u>		<u>IMPORTANT NOTE:</u>	<u>SPECIFICATION SHEET MUST BE INCLUDED WITH YOUR RFQ SUBMISSION</u>
<u>IMPORTANT NOTE*</u>	** MUST QUOTE THE FREIGHT / SHIP CHARGE (IF APPLICABLE) *SPECIFY ANY SPECIAL DELIVERY/UNLOAD NEEDS*	SHIP FEE:	\$
<u>VENDOR NOTE:</u>	<u>IMPORTANT NOTE:</u> ALL BIDDING VENDORS MUST BE "FULL SERVICE DISTRIBUTORS" FOR THE ABOVE REQUESTED PRODUCTS. RFQ'S SUBMITTED FROM BROKERS, 3 <sup>rd</sup> PARTY AGENTS WILL NOT BE ACCEPTED. BIDDING COMPANIES MUST WORK DIRECTLY WITH THE MANUFACTURER. WITH A SUBMITTED RFQ TO WCPSS, DOCUMENTATION OF BEING AN AUTHORIZED MANUFACTURER VENDOR SHOULD BE PROVIDED, IF NOT CURRENTLY DOING BUSINESS WITH WCPSS. THE AWARDED VENDOR WILL BE EXPECTED TO PROVIDE THE ALL COMMODITIES IN A TIMELY MANNER, COORDINATE DELIVERY, HANDLE ANY AND ALL PRODUCT ISSUES RELATED TO ANY WCPSS ORDER RESULTING FROM THIS RFQ AWARD.		
	FOR: EMMS (FAL)	<b>TOTAL:</b>	\$

Note: Please do not include Sales Tax in the above quote. WCPSS is not tax exempt. N.C. Sales Tax will be added automatically on the awarded purchase order.

Please State Availability: (Date of delivery must be included)

Delivery address and details: \*\*\*TO BE COORDINATED WITH WCPSS FACILITIES STAFF\*\*\*

Any Misc. fees or charges must be specified above.

WCPSS reserves the right to amend quantities or cancel bid or an undelivered purchase order due to changes in funds availability

## EQUIPMENT PURCHASE ONLY

Bidding Company Name: \_\_\_\_\_ Date: \_\_\_\_\_

Company Rep (Print): \_\_\_\_\_ Signature: \_\_\_\_\_

## Unit Report For RTU-1,2,3 12.5Ton

Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino

10/13/2022  
08:35AM

### Unit Parameters

Unit Model:.....48FCEN14A3M6-0A1A0  
Unit Size:.....14 (12.5 Tons)  
Volts-Phase-Hertz:.....460-3-60  
Heating Type:.....Gas  
Duct Cfg:.....Vertical Supply / Vertical Return  
Medium Heat  
Single Circuit, Two Stage Cooling with Humidi-MiZer

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

Unit Length:.....7' 4.125"  
Unit Width:.....4' 11.5"  
Unit Height:.....4' 1.375"  
\*\*\* Total Operating Weight:.....1081 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

Gas Line Size:.....3/4  
Condensate Drain Line Size:.....3/4  
Return Air Filter Type:.....Throwaway  
Return Air Filter Quantity:.....4  
Return Air Filter Size:.....20 x 20 x 2

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

### Unit Configuration

High Static (EcoBlue)  
Al/Cu - Al/Cu - Louvered Hail Guards  
Base Electromechanical Controls  
Unpowered Convenience Outlet  
Standard Packaging  
Humidi-MiZer™ Adaptive Dehumidification System

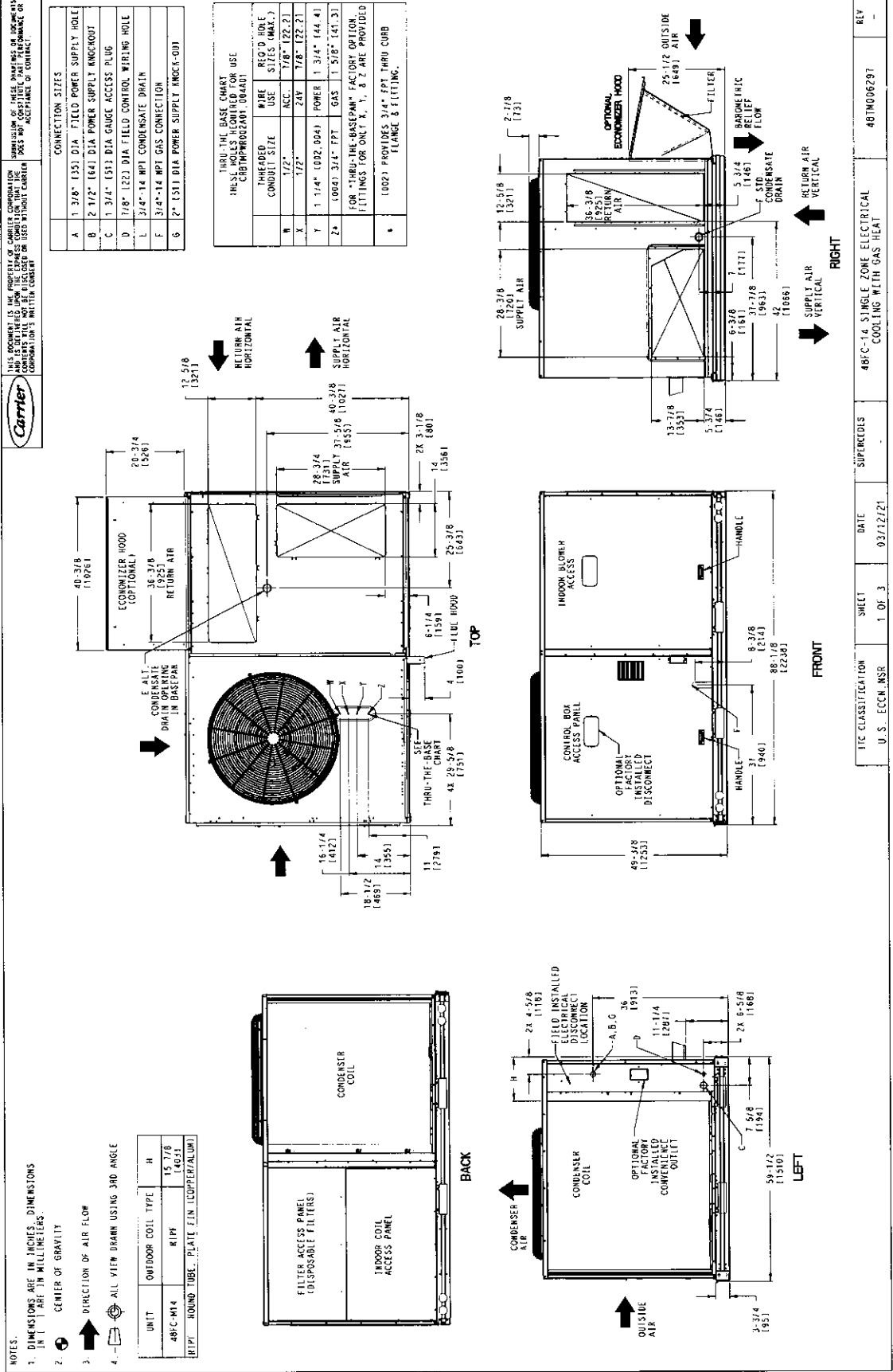
### Warranty Information

1-Year parts(std.)  
5-Year compressor parts(std.)  
10-Year heat exchanger - Aluminized(std.)

# Certified Drawing for RTU-1,2,3 12.5Ton

Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino

10/13/2022  
08:35AM



Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino

Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino

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



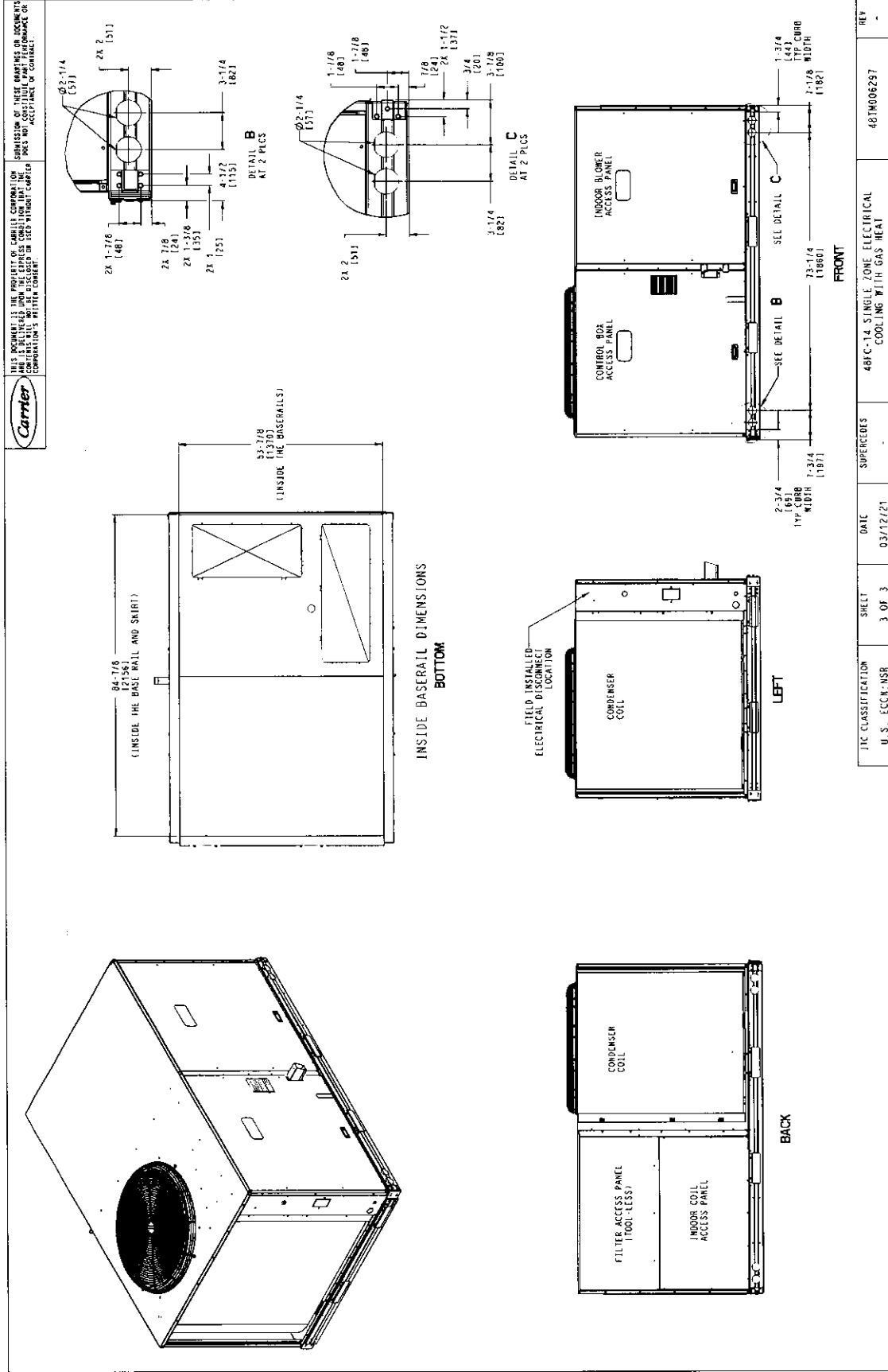
1. FOR ALL MINIMUM CLEARANCES LOCAL CODES OR JURISDICTIONS MAY PREVAIL.

ITC CLASSIFICATION	SHEET	DATE
U.S. FCCN-NSR	2 OF 3	03/12/21

Certified Drawing for RTU-1,2,3 12.5Ton

Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino

10/13/2022  
08:35AM



## Performance Summary For RTU-1,2,3 12.5Ton

Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino

10/13/2022  
08:35AM

### Part Number:48FCEN14A3M6-0A1A0

ARI EER: 10.20  
IEER (Max Cooling at Normal Cooling Design Mode): 15.0

#### Base Unit Dimensions

Unit Length: 88.1 in  
Unit Width: 59.5 in  
Unit Height: 49.4 in

#### Operating Weight

Base Unit Weight: 978 lb  
Medium Heat: 18 lb  
Single Circuit, Two Stage Cooling with Humidi-MiZer: 34 lb  
High Static (EcoBlue): 30 lb  
Al/Cu - Al/Cu - Louvered Hail Guards: 17 lb  
Unpowered Convenience Outlet: 4 lb

Total Operating Weight: 1081 lb

#### Unit

Unit Voltage-Phase-Hertz: 460-3-60  
Air Discharge: Vertical  
Fan Drive Type: Vane Axial  
Actual Airflow: 5000 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: 59.8 F  
Evaporator Leaving Air WB: 57.8 F  
Evaporator Leaving Air Enthalpy: 24.88 BTU/lb  
Gross Cooling Capacity: 147.60 MBH  
Gross Sensible Capacity: 109.00 MBH  
Compressor Power Input: 11.20 kW  
Coil Bypass Factor: 0.120

#### Heating Performance

Heating Airflow: 5000 CFM  
Entering Air Temp: 70.0 F  
Leaving Air Temp: 103.5 F  
Gas Heating Input Capacity: 180.0 / 224.0 MBH  
Gas Heating Output Capacity: 146.0 / 181.0 MBH  
Temperature Rise: 33.5 F

#### Supply Fan

External Static Pressure: 0.75 in wg  
Options / Accessories Static Pressure  
Humidi-MiZer Dehumidification System: 0.28 in wg  
Total Application Static (ESP + Unit Opts/Acc.): 1.03 in wg  
Fan RPM: 1971  
Fan Power: 3.99 BHP  
NOTE: Selected IFM RPM Range: 1308 - 2200

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

#### Electrical Data

Voltage Range: 414 - 506

## Performance Summary For RTU-1,2,3 12.5Ton

Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino

10/13/2022  
08:35AM

Compressor #1 RLA:	10.6
Compressor #1 LRA:	75
Compressor #2 RLA:	8.2
Compressor #2 LRA:	66
Indoor Fan Motor Type:	HIGH
Indoor Fan Motor FLA:	5.6
Combustion Fan Motor FLA (ea):	0.25
Power Supply MCA:	35
Power Supply MOCP (Fuse or HACR):	45
Disconnect Size FLA:	37
Disconnect Size LRA:	156
Electrical Convenience Outlet:	None
Outdoor Fan [Qty / FLA (ea)]:	1 / 7.4

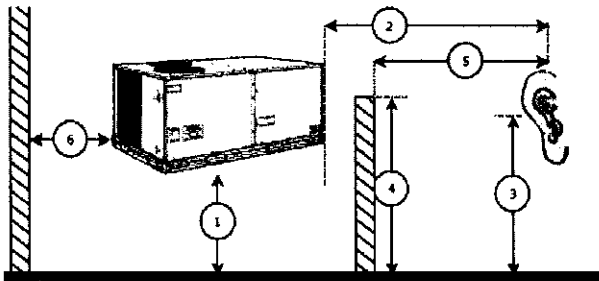
**Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage**

### Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	98.4	94.8	85.6
125 Hz	96.3	89.3	84.7
250 Hz	84.2	74.0	80.5
500 Hz	78.5	70.2	76.0
1000 Hz	75.2	68.4	72.4
2000 Hz	71.8	64.5	68.0
4000 Hz	75.6	65.1	62.8
8000 Hz	77.4	62.5	59.3
A-Weighted	85.2	77.2	79.0

### Advanced Acoustics



#### Advanced Accoustics 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	85.6	84.7	80.5	76.0	72.4	68.0	62.8	59.3	89.2 Lw



## Performance Summary For RTU-1,2,3 12.5Ton

Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino

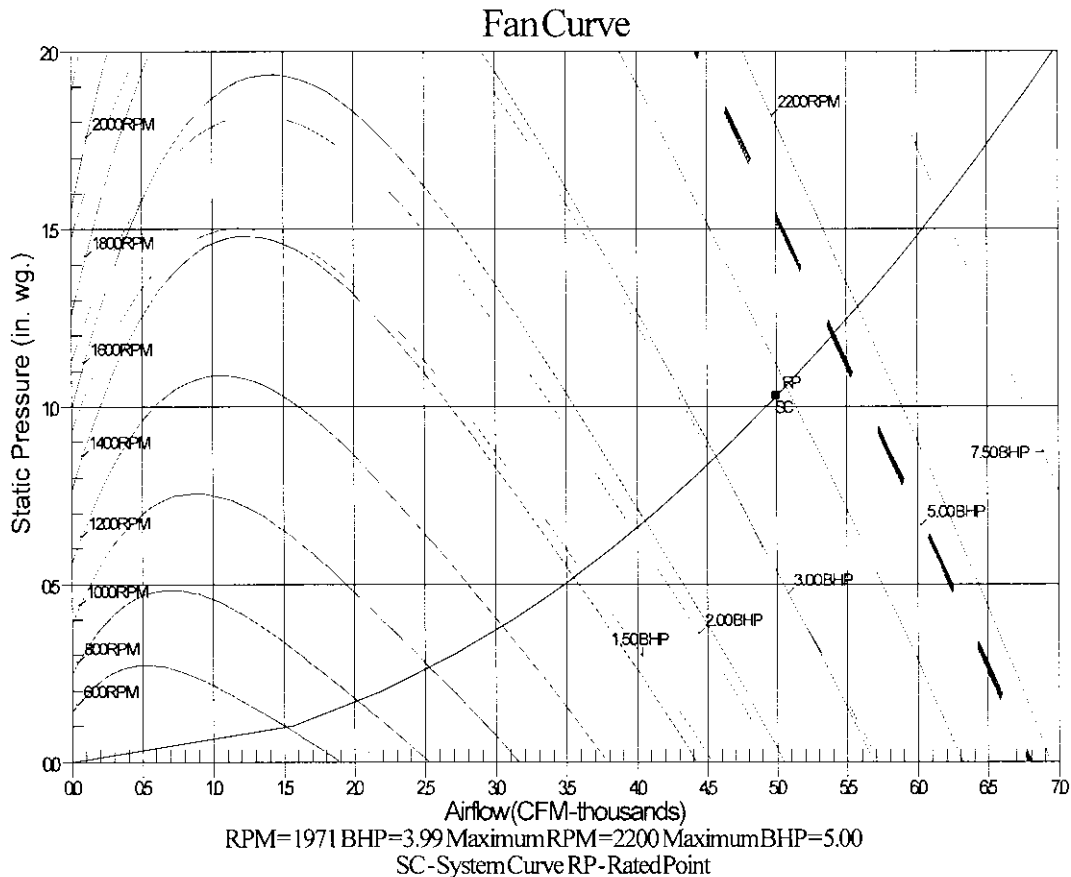
10/13/2022  
08:35AM

B	59.4	68.6	71.9	72.8	72.4	69.2	63.8	58.2	78.5 LwA
C	53.2	52.3	48.1	43.6	40.0	35.6	30.4	26.9	56.8 Lp
D	27.0	36.2	39.5	40.4	40.0	36.8	31.4	25.8	46.1 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.



## Unit Report For RTU-4,5 15Ton

Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino

10/13/2022  
08:35AM

### Unit Parameters

Unit Model:.....48FCEN16A3M6-0A1A0  
Unit Size:.....16 (15 Tons)  
Volts-Phase-Hertz:.....460-3-60  
Heating Type:.....Gas  
Duct Cfg:.....Vertical Supply / Vertical Return  
Medium Heat  
Single Circuit, Two Stage Cooling with Humidi-MiZer

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

Unit Length:.....9' 7.875"  
Unit Width:.....5' 6.375"  
Unit Height:.....4' 9.375"  
\*\*\* Total Operating Weight:.....1446 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

Gas Line Size:.....3/4  
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. This filter is not MERV Rated.

### Unit Configuration

High Static (EcoBlue)  
Al/Cu - Al/Cu - Louvered Hail Guards  
Base Electromechanical Controls  
Unpowered Convenience Outlet  
Standard Packaging  
Humidi-MiZer™ Adaptive Dehumidification System

### Warranty Information

1-Year parts(std.)  
5-Year compressor parts(std.)  
10-Year heat exchanger - Aluminized(std.)

Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino

Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino




Certified Drawing for RTU-4,5 15Ton

10/13/2022  
08:35AM

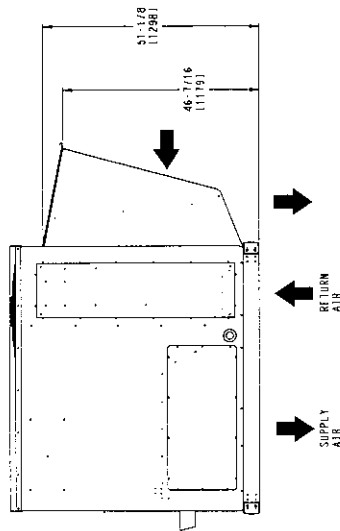
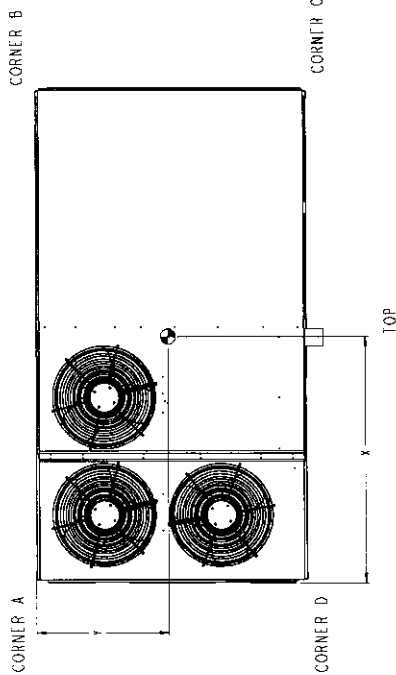
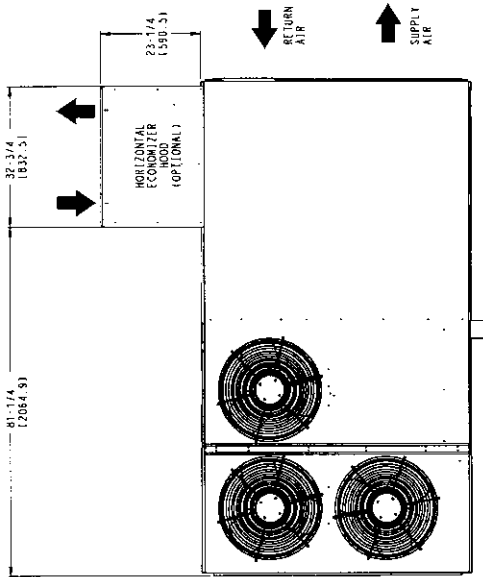
Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino

UNIT	STD UNIT		CORNER		CORNER		CORNER		CORNER		C.G.	
	WEIGHT (LBS)	WEIGHT (KG)	WEIGHT (LBS)	WEIGHT (KG)	WEIGHT (LBS)	WEIGHT (KG)	WEIGHT (LBS)	WEIGHT (KG)	WEIGHT (LBS)	WEIGHT (KG)	X	Y
481C MT6	1480	639	373	169	341	155	332	150	362	164	55.3/8 (11407)	31.1/4 (794)
											21.1/8 (537)	Z

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



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AND IS DELIVERED WITH THE EXPRESS CONDITION THAT THE  
CONTRACTOR WILL NOT REPRODUCE OR DISSEMINATE OR  
ACCEPTANCE OF CONTRACT



HORIZONTAL ECONOMIZER

U.S. CLASSIFICATION	SHEET	DATE	SUPPLEMENT	REV
U.S. ECCN-NSR	2 OF 2	06/10/21	501M002025	

## Performance Summary For RTU-4,5 15Ton

Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino

10/13/2022  
08:35AM

### Part Number: 48FCEN16A3M6-0A1A0

ARI EER: ..... 10.80  
IEER (Max Cooling at Normal Cooling Design Mode): ..... 14.5

#### Base Unit Dimensions

Unit Length: ..... 115.9 in  
Unit Width: ..... 66.4 in  
Unit Height: ..... 57.4 in

#### Operating Weight

Base Unit Weight: ..... 1325 lb  
Medium Heat: ..... 18 lb  
Single Circuit, Two Stage Cooling with Humidi-MiZer: ..... 55 lb  
Al/Cu - Al/Cu - Louvered Hail Guards: ..... 44 lb  
Unpowered Convenience Outlet: ..... 4 lb

Total Operating Weight: ..... 1446 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: ..... 59.2 F  
Evaporator Leaving Air WB: ..... 57.5 F  
Evaporator Leaving Air Enthalpy: ..... 24.72 BTU/lb  
Gross Cooling Capacity: ..... 181.30 MBH  
Gross Sensible Capacity: ..... 134.70 MBH  
Compressor Power Input: ..... 13.50 kW  
Coil Bypass Factor: ..... 0.110

#### Heating Performance

Heating Airflow: ..... 6000 CFM  
Entering Air Temp: ..... 70.0 F  
Leaving Air Temp: ..... 100.1 F  
Gas Heating Input Capacity: ..... 192.0 / 240.0 MBH  
Gas Heating Output Capacity: ..... 156.0 / 195.0 MBH  
Temperature Rise: ..... 30.1 F

#### Supply Fan

External Static Pressure: ..... 0.75 in wg  
Options / Accessories Static Pressure  
Humidi-MiZer Dehumidification System: ..... 0.11 in wg  
Total Application Static (ESP + Unit Opts/Acc.): ..... 0.86 in wg  
Fan RPM: ..... 1770  
Fan Power: ..... 2.76 BHP  
NOTE: ..... Selected IFM RPM Range: 250 - 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: ..... 14.7

## Performance Summary For RTU-4,5 15Ton

Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino

10/13/2022  
08:35AM

Compressor #1 LRA:	130
Compressor #2 RLA:	8.2
Compressor #2 LRA:	66
Indoor Fan Motor Type:	HIGH
Indoor Fan Motor FLA:	5.6
Combustion Fan Motor FLA (ea):	0.25
Power Supply MCA:	35
Power Supply MOCP (Fuse or HACR):	45
Disconnect Size FLA:	36
Disconnect Size LRA:	210
Electrical Convenience Outlet:	None
Outdoor Fan [Qty / FLA (ea)]:	3 / 0.8

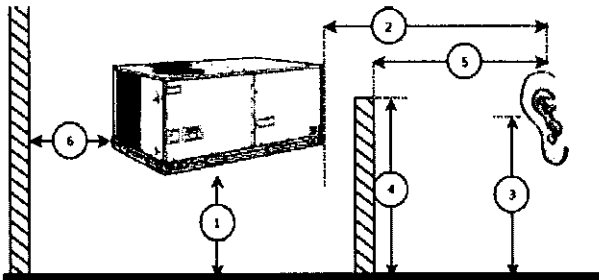
**Control Panel SCCR: 5kA RMS at Rated Symmetrical Voltage**

### Acoustics

Sound Power Levels, db re 10E-12 Watts

	Discharge	Inlet	Outdoor
63 Hz	95.7	92.5	87.0
125 Hz	96.5	86.4	85.2
250 Hz	81.2	65.3	84.6
500 Hz	77.8	66.6	84.9
1000 Hz	72.0	64.8	82.2
2000 Hz	67.3	61.6	78.4
4000 Hz	74.1	62.6	75.3
8000 Hz	72.2	59.5	72.9
A-Weighted	83.7	74.1	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
B	60.8	69.1	76.0	81.7	82.2	79.6	76.3	71.8	87.1 LwA

## Performance Summary For RTU-4,5 15Ton

Project: WCPSS - West Cary MS  
Prepared By: Philip Samartino

10/13/2022  
08:35AM

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.

### FanCurve

