Broken Arrow Public Schools
Independent School District NO. 3
701 S Main Street
Broken Arrow, OK 74012
Phone (918) 259-5700

Request for Bid
HVAC UNIT REPLACEMENTS
LEISURE PARK ELEMENTARY
#B12-52

Time and Date to be Returned:  2:00PM on July 17, 2012

Mail Information To:  Mark Bilby
Director of Purchasing
Broken Arrow Public Schools
701 S Main Street
Broken Arrow, OK 74012
1.1 General District Information
Broken Arrow Public Schools referred to as BAPS below is a dynamic leader in public education. The sixth largest district in Oklahoma, it serves approximately 17,000 students and covers 115-square miles in the southeast portions of Tulsa County and the western portions of Wagoner County.

1.2 Purpose/Scope of Bid
The purpose of this bid is to replace existing HVAC units at Leisure Park Elementary School located at 4300 S Juniper Place, Broken Arrow, OK

1.3 Proposal Due Date
The due date of this Bid is July 17, 2012 at 2:00 Pm., CST. An original and one copy shall be provided.

1.4 Instructions to Vendors
Advice: The department responsible for this Bid is the Purchasing Department located at 701 S Main, Broken Arrow Oklahoma, 74012. The BAPS contact will be Mark Bilby, Director of Purchasing, telephone number (918) 259-5705; fax (918) 251-0065.

Questions can be sent electronically to mabilby@baschools.org. All questions and answers will be published and provided to all vendors as soon as possible.

Submission: the submission of a response shall be prima facie evidence that the vendor has full knowledge of the scope, nature, quality of work to be performed, the detailed requirements of the project, and the conditions under which the work is to be performed.

Any alternates should be accompanied by a copy of the manufacturer’s specifications. Any differences must be noted on a separate sheet.

The contractor has the responsibility if required to obtain and pay for all relative permits and licenses and to meet all City of Broken Arrow requirements. The contractor also agrees to comply with all city, county, state and federal laws applicable to the Project.

Bid Security in the form of a cashier’s check, certified check, or surety bond in the amount of five percent (5%) of the bid shall accompany the sealed proposal of each bidder. Checks or Surety bonds will be returned to unsuccessful bidders.

Before beginning the project the contractor agrees to furnish Owner with the following at Contractor’s expense: a performance bond in an amount equal to the Contract Sum; a warranty bond in an amount equal to the Contract Sum for a period of one year from the date of completion of the Work; and the statutory bond required by Oklahoma law in connection with contracts for the making of public improvements (tit. 61, (1991) O.S. § 1).

The surety providing the above bonds shall be listed in the most recent edition of U.S. TREASURY CIRCULAR 570 and be fully authorized to do business in Oklahoma.

Faxed bids ARE NOT acceptable. All bids must be submitted by the date and time of public opening (see above). Bids must be submitted on the forms provided in a sealed envelope clearly marked (typed or blocking lettering only) with the vendor's name, return address, the opening date and time. An original and one copy of the Bid shall be provided.

Bids must be addressed to: Broken Arrow Public Schools, Mark Bilby, Director of Purchasing 701 S Main Broken Arrow, OK 74012.

Bids not submitted in the format as instructed by this packet may not be accepted. Addendums to this bid, once filed, may be submitted in a sealed envelope only, and properly identified, prior to the opening hour.
Bids will be publicly opened and read aloud at the above mentioned office following closing time stated above. Bids received more than ninety six (96) hours, excluding Saturdays, Sundays, and holidays, before the time set for opening bids, as well as bids received after the time set for opening bids, will not be considered and will be returned unopened.

The district reserves the right to waive any informality, or to reject any or all bids.

Receipt of Bid / Late Bid: Sealed Bids shall be received at the place and the time indicated in this packet. It is the sole responsibility of the vendors to ensure timely delivery of the bid. BAPS will not be responsible for failure of service on the part of the U.S. Postal Service, courier companies, or any other form of delivery service chosen by the vendor.

Bids received after the date and time specified shall be considered LATE, and shall not be considered for award.

Accuracy of Proposals / Withdrawal of Proposals prior to Bid Opening: Bids will represent a true and correct statement and shall contain no cause for claim of omission or error. Bids may be withdrawn in writing or by facsimile (provided that the facsimile is signed and dated by vendor's authorized representative) at any time prior to the opening hour. However, no proposal may be withdrawn for a period of thirty (30) days subsequent to the opening of the Bid.

Addenda: The only method by which any requirement of this solicitation may be modified is by writing.

If an addendum to the proposal document is required, BAPS will mail the addendum within a reasonable time prior to the due date. BAPS is not responsible if a vendor does not receive the proposal revision in time to include the information with the proposal submission. Proposals may not be considered if they do not include acknowledgement of a formal addendum. Addendums will be mailed to all vendors of record and such addendum shall be acknowledged by signing and including in your proposal submission.

Bid Due Date: The proposal must be received on or before 2:00 Pm., Central Standard Time, on July 17, 2012, at the Purchasing Department, 701 S Main, Broken Arrow OK, 74012.

Insurance: The vendor performing services for BAPS shall:

1. Maintain worker's compensation insurance as required by Oklahoma statutes, for all employees engaged in the work.

2. Maintain commercial liability, bodily injury and property damage insurance against any claim(s), which might occur in carrying out the services, referenced in this Bid. Minimum coverage will be ONE MILLION DOLLARS ($1,000,000) liability for bodily injury and property damage including product liability and completed operations.

3. Provide motor vehicle insurance for all owned, non-owned and hired vehicles that are used in carrying out the services described in this bid. Minimum coverage shall be ONE MILLION DOLLARS ($1,000,000) per occurrence combined single limit for automobile liability and property damage.

Taxes: BAPS is exempt from all federal excise, state and local taxes unless otherwise stated in this document. In the event taxes are imposed on the services purchased, BAPS will not be responsible for payment of the taxes. The vendor shall absorb the taxes entirely. Upon request, BAPS's Tax Exemption Certificate will be furnished.

Indemnification: The vendor shall protect, indemnify and hold BAPS harmless against any liability claims and costs of whatsoever kind and nature for injury to or death of any person or persons and for loss or damage to any property occurring in connection with or in any incident to or arising out of occupancy, use, service, operations or performance of
work in connection with the contract, resulting in whole or in part from the negligent acts or omissions of the vendor.

**Disclosure:** Vendor shall note any and all relationships that might be a conflict of interest and include such information with the bid.

### 1.5 General Terms and Conditions

**Applicability:** These general terms and conditions will be observed in preparing the proposal to be submitted.

**Purchase:** Purchases will be put into effect by means of purchase orders or suitable contract documents executed by the Director of Purchasing.

**Governing Law and Venue:** This contract shall be construed in and governed under and by the laws of the State of Oklahoma.

**Costs:** All costs directly or indirectly related to preparation of a response or oral presentation, if any, required to supplement and/or clarify a proposal shall be the sole responsibility of the vendor.

**Award:** The bid will be awarded by the Board of Education (BOE) at the BOE regularly scheduled meeting. The awarding of a contract to the lowest responsible bidder or bidders shall be made within thirty (30) days after the opening of bids.

**Retention of Documentation:** All proposal materials and supporting documentation that is submitted in response to this proposal becomes the permanent property of BAPS.

### 1.6 Format for Response

To achieve a uniform review process and obtain the maximum degree of comparability, it is required that the proposal be organized in the format specified.

An original and one copy of the bid will be required. The original copy should be so noted and signed

**1. Bid Proposal Page (Enclosed)**

Show the Bid subject, the name of the vendor's firm, address, telephone number, name of contact person, and date.

### 1.7 Vendor Profile

**Reference:** Please include three references with the bid.

### 1.8 Mandatory Pre-Bid

A mandatory Pre-Bid to inspect and view the areas in which the work will be performed will take place July 10, 2012 at 10:00Am. The location of the pre-bid will be at Leisure Park Elementary located at 4300 S Juniper Place, Broken Arrow Ok. If you have any questions on the location please call David McNutt at 918-259-4530. Bidders must attend the pre-bid in order to be considered.
SPECIFICATIONS AND SCOPE:

- Please see enclosed Specifications and Scope
ACKNOWLEDGEMENTS:
A. Bidder has received and fully examined INSTRUCTIONS
B. We agree to hold this Proposal open for thirty (30) days after bid opening date.
C. Successful bidder(s) agree to comply with all Affidavit provisions.
D. Bid pricing shall be written in numbers and in words. If there is a discrepancy in pricing, the bid written in words will govern.

BASE BID:
Replacement of Unit LP-#01 (See enclosed for Specifications): $_______________________

Bid Price in Writing: _____________________________________________________________

Replacement of Unit LP-#03 (See enclosed for Specifications): $_______________________

Bid Price in Writing: _____________________________________________________________

Replacement of Unit LP-#16 (See enclosed for Specifications): $_______________________

Bid Price in Writing: _____________________________________________________________

Replacement of Unit LP-#18 (See enclosed for Specifications): $_______________________

Bid Price in Writing: _____________________________________________________________

Replacement of Unit LP-#19 (See enclosed for Specifications): $_______________________

Bid Price in Writing: _____________________________________________________________
Replacement of Unit LP-#21 (See enclosed for Specifications): $_______________________

Bid Price in Writing: _________________________________________________________

Replacement of Unit LP-#22 (See enclosed for Specifications): $_______________________

Bid Price in Writing: _________________________________________________________

Replacement of Unit LP-#24 (See enclosed for Specifications): $_______________________

Bid Price in Writing: _________________________________________________________

ALTERNATE BID:

Replacement of all units as a package (See enclosed for Specifications): $_______________________

Bid Price in Writing: _________________________________________________________
STATE OF OKLAHOMA
) ss
COUNTY OF ________________
)

I, ___________________, of lawful age, being first duly sworn, on oath says, that (s)he is the agent authorized by the Bidder to submit the attached bid. Affiant further states that the nature of any partnership, joint venture or other business relationship presently in effect or which existed within one year prior to the date of this statement with the Architect, Engineer or other party to the project is as follows:

____________________________________________________________

____________________________________________________________

____________________________________________________________

Affiant further states that the names of all persons having any such business relationships and the positions they hold with their respective companies or firms are as follows:

____________________________________________________________

____________________________________________________________

____________________________________________________________

(If none of the business relationships hereinabove mentioned exist, affiant should so state.)

___________________________
BIDDER

Subscribed and sworn to before me this _____day of___________, 20____.

___________________________
NOTARY PUBLIC

My Commission Expires:

___________________________

(SEAL)
STATEMENT OF NON-COLLUSION

STATE OF __________________________) SS
COUNTY OF __________________________)

(Name)______________________________________________________________, of lawful age, being first duly
sworn, on oath says: (s)he is the duly authorized
agent of (Firm) ______________________________________________________________, the bidder submitting
the competitive bid which is attached to this statement, for the purpose of certifying the facts pertaining to the existence
of collusion among bidders and between bidders and Broken Arrow Public School officials or employees, as well as
facts pertaining to the giving or offering of things of value to school district personnel in return for special consideration
in the letting of any contract pursuant to the bid to which this statement is attached: (S)he is fully aware of the facts and
circumstances surrounding the making of the bid to which this statement is attached and has been personally and
directly involved in the proceedings leading to the submission of such bid: and neither the bidder nor anyone subject to
the bidder’s direction or control has been a party: (a) to any collusion among bidders in restraint of freedom of
competition by agreement to bid at a fixed price or to refrain from bidding: (b) to any collusion with any school district
official or employee as to quantity, quality or price in the prospective contract, or as to any other terms of such
prospective contract, nor; (c) in any discussions between bidders and any school district official concerning exchange
of money or other thing of value for special consideration in the letting of a contract.

Affiant Signature ___________________________________________

Print Name _______________________________________________

Title _____________________________________________________

Company Name ___________________________________________

Subscribed & sworn before me this ______________day of _____________
My Commission expires:

________________________________________________________

NOTARY PUBLIC ___________________________________________

(SEAL)
SERVICE PROVIDER AFFIDAVIT

STATE OF OKLAHOMA )
COUNTY OF _______ )
ss:

The undersigned, under the penalties of perjury, certifies to the Broken Arrow School District ("District") as follows:

1. The undersigned:
   ____ has a contract with the District; OR
   ____ is the duly authorized representative of a business
   ("entity") having a contract with the District, to perform work on District premises on a full-time or part-time basis, which work would not otherwise be performed by District employees.

2. The undersigned hereby certifies that the undersigned will not allow any employee of the undersigned or of the entity, or of any subcontractor, to perform work on District premises on a full-time or part-time basis that would otherwise be performed by District employees if such employee is or has been convicted in this state, the United States or another state of any felony offense unless ten (10) years has elapsed since the date of the criminal conviction or the employee has received a pardon for the offense.

3. No employee of the undersigned, or the entity, who performs any work on District property is currently registered or required to register under the Oklahoma Sex Offenders Registration Act or the Mary Rippy Violent Offenders Registration Act.

4. The undersigned, or the entity:
   ____ has
   ____ has not

conducted a felony record search of employees who would be assigned to work on a part-time or full-time basis on District property.
5. This Affidavit is intended to comply with OKLA. STAT. tit. 70, § 6-101.48.

EXECUTED AND DELIVERED this _______ day of __________________ , ________

__________________________________________

AFFIANT SIGNATURE

__________________________________________
(Print Name and Title)

Representing:

__________________________________________
(Name of Entity)

Subscribed and sworn to before me this ______ day of __________________ , ________

My Commission expires: __________________________

__________________________________________

Notary Public

[SEAL]

Notary Commission Number: __________________________
Scope of work

Purpose
HVAC: Replace current rooftop units.

Location
Leisure Park Elementary School, 4300 S. Juniper Place, Broken Arrow

Replacement Materials
Eight (8) high efficiency Lennox Energence 17 SEER Units

Project Requirements
Disconnect and removal of existing equipment, furnishing and setting of new equipment, controls work, electrical work, and refrigerant systems work, and proper disposal of removed equipment in accordance with all local, state, and federal laws, statutes, and guidelines.

Project Constraints
Installation of HVAC systems must follow all of the requirements in the BAPS HVAC Requirements document (attachment 1).
Optional accessories such as freeze stats, thermostats, fan cycle switches, etc. that are not already built into equipment must be quoted separately.

Related expenses
Contractor shall supply all necessary labor and materials.
Requirements for HVAC Systems  (attachment 1)

Requirements for ALL units:

- Hail guards
- Condensate overflow protection (including Package units)
- Lennox Energence 17 Seer Equipment for rooftop units
- New Disconnect
- New Thermostat (except for units with Energy Management Systems)

Requirements for All Package Units

- Economizer
- Unit Number (permanent and neat)
- Condensate lines must be ran to roof drain on non-gravel roofs.
- Copper P-Traps and drainlines are required.

Requirements for Slit Systems

- Float switch on Evaporator overflow drain
- Furnace and Condenser numbered (permanent and neat)
- Aux. drainpan under furnace when possible
- Sight glass
- External filter rack
- New flue is desired when possible

Lennox Energence Prodigy Control Boards must be set up during installation

- 10% Minimum Damper position
- Economizer controlled by enthalpy
- Economizer set on “D” setting
- 55 deg. Mixed air temperature
- Unit number entered
## Broken Arrow Public Schools
### HVAC Unit Inventory

**School:** LEISURE PARK  
**Unit Type:** A/C-HEAT UNIT

**Unit #:** LP-#01  
**Purchased Date:** 1/1/1982

**Building:** PHASE 1

**Room Name:** ATTENDANCE OFFICE

**Location of Unit:**

**Location of Thermostat:**

**Unit Controls The Following Rooms:**

**Brand:** CARRIER  
**Filter Size #1:**  
**Filter Size #2:**

**Model #:** 48HD008500  
**Filter Qty #1:** 0  
**Filter Qty #2:**

**Serial #:** 4582G 55715  
**BTU Rating:**  
**Belt Size:**

### FILTER CHANGE DATES

<table>
<thead>
<tr>
<th>Phase</th>
<th>Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>Unit Type</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>LEISURE PARK</td>
<td>A/C-HEAT UNIT</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Location of Thermostat**

**Unit Controls The Following Rooms**

<table>
<thead>
<tr>
<th>Brand</th>
<th>Filter Size #1</th>
<th>Filter Size #2</th>
<th>Model #</th>
<th>Filter Qty #1</th>
<th>Filter Qty #2</th>
<th>Serial #</th>
<th>BTU Rating</th>
<th>Belt Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARRIER</td>
<td></td>
<td></td>
<td>48HD006</td>
<td>0</td>
<td></td>
<td>4182G 51432</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Phase** | Voltage

**FILTER CHANGE DATES**

<table>
<thead>
<tr>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Maintenance Department
## Broken Arrow Public Schools
### HVAC Unit Inventory

<table>
<thead>
<tr>
<th>School</th>
<th>LEISURE PARK</th>
<th>Unit Type</th>
<th>A/C-HEAT UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit #</td>
<td>LP-#16</td>
<td>Purchased Date</td>
<td>1/1/1984</td>
</tr>
<tr>
<td>Building</td>
<td>PHASE 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room Name</td>
<td>BOYS RESTROOM - NORTH</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location of Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location of Thermostat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit Controls The Following Rooms</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Brand</th>
<th>CARRIER</th>
<th>Filter Size #1</th>
<th>Filter Size #2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model #</td>
<td>48H0005500</td>
<td>Filter Qty #1</td>
<td>0</td>
</tr>
<tr>
<td>Serial #</td>
<td>2384G 10134</td>
<td>BLTU Rating</td>
<td>Belt Size</td>
</tr>
<tr>
<td>Phase</td>
<td></td>
<td>Voltage</td>
<td></td>
</tr>
</tbody>
</table>

### FILTER CHANGE DATES

<table>
<thead>
<tr>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Maintenance Department
**Broken Arrow Public Schools**
**HVAC Unit Inventory**

- **School**: LEISURE PARK
- **Unit Type**: A/C-HEAT UNIT
- **Unit #**: LP-#18
- **Purchased Date**: 1/1/1984
- **Building**: PHASE 2
- **Room Name**: ROOM - 112
- **Location of Unit**:
- **Location of Thermostat**:
- **Unit Controls The Following Rooms**:
- **Brand**: CARRIER
- **Model #**: 48HD006500
- **Serial #**: 1784G 03158
- **Filter Size #1**: [ ]
- **Filter Size #2**: [ ]
- **Filter Qty #1**: 0
- **Filter Qty #2**: [ ]
- **BTU Rating**: [ ]
- **Belt Size**: [ ]
- **Phase**: [ ]
- **Voltage**: [ ]

**FILTER CHANGE DATES**

[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]
[ ] [ ] [ ] [ ] [ ] [ ]

*Maintenance Department*
Broken Arrow Public Schools
HVAC Unit Inventory

School: LEISURE PARK  Unit Type: A/C-HEAT UNIT

Unit #: LP-#19  Purchased Date: 1/1/1984

Building: PHASE 2

Room Name: ROOM - 113

Location of Unit

Location of Thermostat

Unit Controls The Following Rooms

Brand: CARRIER  Filter Size #1  Filter Size #2

Model #: 48LD004500  Filter Qty #1: 0  Filter Qty #2

Serial #: 0384G 91246  BTU Rating:  

Phase  Voltage

FILTER CHANGE DATES

<table>
<thead>
<tr>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Maintenance Department
**Broken Arrow Public Schools**  
**HVAC Unit Inventory**

<table>
<thead>
<tr>
<th>School</th>
<th>LEISURE PARK</th>
<th>Unit Type</th>
<th>A/C-HEAT UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit #</td>
<td>LP-#21</td>
<td>Purchased Date</td>
<td>1/1/1984</td>
</tr>
<tr>
<td>Building</td>
<td>PHASE 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Room Name</td>
<td>ROOM - 116</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location of Unit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location of Thermostat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit Controls The Following Rooms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brand</td>
<td>CARRIER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model #</td>
<td>48LD004500</td>
<td>Filter Qty #1</td>
<td>0</td>
</tr>
<tr>
<td>Serial #</td>
<td>0384G 91250</td>
<td>BTU Rating</td>
<td></td>
</tr>
<tr>
<td>Phase</td>
<td></td>
<td>Voltage</td>
<td></td>
</tr>
</tbody>
</table>

**FILTER CHANGE DATES**

<table>
<thead>
<tr>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Maintenance Department
School: LEISURE PARK  Unit Type: A/C-HEAT UNIT  
Unit #: LP-#22  Purchased Date: 1/1/1984

Location of Unit:  
Location of Thermostat:  
Unit Controls The Following Rooms:  

Brand: CARRIER  Filter Size #1  Filter Size #2:  
Model #: 48HD008510  Filter Qty #1: 0  Filter Qty #2:  
Serial #: 0784G 96062  BTU Rating  Belt Size  
Phase:  Voltage:  

FILTER CHANGE DATES:

Maintenance Department
# Broken Arrow Public Schools
## HVAC Unit Inventory

<table>
<thead>
<tr>
<th>School</th>
<th>LEISURE PARK</th>
<th>Unit Type</th>
<th>A/C-HEAT UNIT</th>
<th>Horizontal Heat</th>
<th>Package Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit #</td>
<td>LP-#24</td>
<td>Purchased Date</td>
<td>1/1/1984</td>
<td>Split System</td>
<td>Air Handler</td>
</tr>
<tr>
<td>Building</td>
<td>PHASE 2</td>
<td>Room Name</td>
<td>ROOM - 120</td>
<td>Hanging Heater</td>
<td>Window Unit</td>
</tr>
<tr>
<td>Location of Unit</td>
<td></td>
<td>Location of Thermostat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit Controls The Following Rooms</td>
<td></td>
<td>Brand</td>
<td>CARRIER</td>
<td>Filter Size #1</td>
<td>Filter Size #2</td>
</tr>
<tr>
<td>Model #</td>
<td>48HD008510</td>
<td>Filter Qty #1</td>
<td>0</td>
<td>Filter Qty #2</td>
<td></td>
</tr>
<tr>
<td>Serial #</td>
<td>0784G 96058</td>
<td>BTU Rating</td>
<td></td>
<td></td>
<td>Belt Size</td>
</tr>
</tbody>
</table>

**FILTER CHANGE DATES**

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phase</td>
<td>Voltage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Maintenance Department
Energence™
Saving Energy with Intelligence
Commercial Packaged Rooftop Units
3- to 50-Ton LC/LG Models

Up to 17.0 SEER,
Up to 12.8 EER
and 13.6 IEER

Lennox
Innovation never felt so good.™
SAVING ENERGY WITH INTELLIGENCE™
Designed to intelligently achieve the lowest total cost of ownership

The Energence® rooftop unit product line represents Lennox’ ongoing commitment to innovative light commercial rooftop units. Delivering the industry’s lowest total cost of ownership, the Energence unit’s ultra-efficient design helps reduce energy costs while being extremely cost-effective to service and maintain. Built on the Lennox legacy of advanced technology, Energence rooftop units set the standard for premium rooftop units.

Optimum energy efficiency
The most energy-efficient light commercial rooftop unit* in its class and the first to break the 17.0 SEER barrier, Lennox’ Energence rooftop unit line achieves efficiency ratings up to 30% higher than U.S. Department of Energy minimum standards. The Energence line delivers exceptional peak load and overall energy usage reductions for commercial buildings. The line offers the most models that surpass the Consortium for Energy Efficiency’s (CEE) Tier 2 EER levels for rebates (the highest currently available).

Available features minimize blower power during free-cooling mode and the optional blower belt auto tensioner can maintain proper tension of the blower belt, increasing system reliability. The system can also self-monitor and verify performance of the unit in real time, providing confirmation that the unit is operating efficiently.

The higher the SEER, the lower the energy cost.
Compare the annual energy costs for a system with 17 SEER with the annual energy costs for a system with 13 SEER and notice how fast the savings add up. As you can see, the higher the SEER, the lower the energy bill. From Sacramento to Miami, energy savings can range from 19% to 27% a year. Over the lifetime of the system, you can save thousands of dollars with a 17 SEER system versus a 13 SEER system.†

<table>
<thead>
<tr>
<th>Location</th>
<th>Lifetime Cost Savings ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miami, FL</td>
<td>3,500</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>3,000</td>
</tr>
<tr>
<td>Sacramento, CA</td>
<td>2,500</td>
</tr>
<tr>
<td>Kansas City, MO</td>
<td>2,000</td>
</tr>
<tr>
<td>New York, NY</td>
<td>1,500</td>
</tr>
<tr>
<td>Chicago, IL</td>
<td>1,000</td>
</tr>
</tbody>
</table>

*Commercial gas/electric or electric/electric single-packaged rooftop units, 3- to 5-ton units. Claim pertains to 17.0 SEER rating for LGH601H4 unit. Established through review of competitive literature available to the general public in November 2010.
**Commercial gas/electric single-packaged rooftop units, 3- to 20-ton unit range, based on Consortium of Energy Efficiency’s Tier 2 EER rebate level. Established through review of competitive literature available to the general public in November 2010.
†Calculations based on Lennox® Total Cost of Ownership™ calculator, comparing 5-ton 17 SEER (12.7 EER) unit to a 5-ton 13 SEER (11 EER) unit at a retail facility (under 25,000 square feet) and a 10:00 a.m. to 10:00 p.m. operating schedule. Lifetime energy cost savings are calculated by multiplying annual energy costs by 15 years. Actual savings may vary depending on system settings, equipment maintenance, local weather, construction, installation of equipment, duct system, hours of operation, local fuel taxes and other factors. This information is intended as an example for comparison purposes only.
FAST AND ACCURATE SETUP WHILE MINIMIZING SERVICE TIME

Standard on every Energence® rooftop unit, the Prodigy® control system* makes setup, troubleshooting and servicing easier than ever. Each unit tracks the runtime of every major component and records the date and time when service or maintenance is performed. The system intelligently operates the rooftop unit to help ensure reliability, maximum efficiency and comfort.

Through a patent-pending USB service port, the unit generates service reports that can be downloaded to a USB flash drive. Reports help provide service verification with encrypted time/date stamp, unit serial number, alarm code log and critical runtime information.

A self-test mode can test the operation of individual components or operating modes. Each critical component's test will activate only that component and return either a status message or a sensor reading to ensure proper operations. By reducing maintenance and service time, the self-test function may help contractors get to more job sites per day, increasing productivity.

Verification when and where you need it

The Prodigy® control service report:
• Validates effectiveness of service and maintenance work
• Makes service versus replacement decisions based on component runtime
• Speeds up maintenance and service jobs by quickly identifying problem areas
• Alarm and status log provides quick view of past issues
• Trends service and unit operation over time with time/date-stamped reports
• Verifies service technicians are on the roof and at the unit on time
• Helps assure correct unit operation after maintenance with sensor readings

*Prodigy® system is comprised of the Prodigy unit controller and the SmartWire® system.
COMFORTABLE. INNOVATIVE. EARTH FRIENDLY.

Improving a building's indoor air quality creates a better indoor environment, and a better indoor environment helps protect a company's productivity and profitability. Lennox' patented Humiditrol® dehumidification system removes moisture based on humidity requirements rather than temperature, making it easy and efficient to create a better indoor environment.

Already the most efficient hot-gas reheat system, an advanced Humiditrol system that is up to 20% more efficient is also available for 3- to 5-ton Energence® units.

The advanced system reduces power consumption in dehumidification mode by:
- Lowering the indoor airflow while increasing latent capacity
- Lowering the outdoor fan speed

Solar HVAC technology goes commercial
Lennox proudly introduces the SunSource® Commercial Energy System—the first and only solar system to integrate directly with HVAC. The SunSource system integrates with Energence units to deliver efficiency ratings up to 34 SEER® and beyond.

Simple, scalable and easy to install, the SunSource system allows building owners to qualify for tax credits, rebates, government subsidies and grants, which can significantly reduce the first cost of the system. By reducing a building's dependence on the energy grid, the SunSource system can also translate into substantial energy savings.
- Can help meet ASHRAE Green Standard 189.1 requirement to be solar-ready and LEED EAc2 On-Site Renewable Energy credit
- Each Energence unit can accommodate 6–21 solar panels
- Microinverter technology allows for simple solar system design and installation with no changes to the building's electrical infrastructure

*Equipment performance estimates are based on the U.S. Department of Energy (DOE) annual performance factor (APF) method for heat pumps (10 CFR part 430). Estimates of annual solar energy production are calculated for a centrally located city in each DOE heating region, using National Renewable Energy Laboratory's (NREL) PVWatts, Version 1. The annual solar energy production is solely an estimate for that region and is based on a fixed-tilt south-facing array free of shading, with a module tilt angle equal to the local latitude of the installation. The annual solar energy production is included in the APF calculation as a reduction of the annual equipment power consumption.

Green design with LEED®
Every Energence rooftop unit is designed to reduce your business' carbon footprint. With an efficiency rating 30% above LEED minimum for EAc1.3, Energence rooftop units are the industry's leading efficiency units. Energence units can also be equipped with factory options that can help qualify for additional LEED credits. Energence rooftop units are the perfect choice for sustainable green building design.

Lennox is a committed member of the U.S. and Canada Green Building Councils.

Environmental impact—carbon emissions
The average vehicle emits 4.8 metric tons of CO₂ each year. With a 20-ton Energence® unit replacing a 9 EER/9.0 IPLV unit, the efficiency would eliminate the generation of over 10 metric tons of CO₂ per year—the equivalent of taking two vehicles off the road.*

*Based on Lennox' Total Cost of Ownership™ calculator, with a 20-ton Energence rooftop unit replacing an existing 20-ton rooftop unit at 8.5 EER and 9.0 IPLV, resulting in carbon emissions savings of 10.3 metric tons based on an operating schedule of 10:00 a.m. to 10:00 p.m., 7 days per week, in Austin, Texas. Assumes an average vehicle generates 4.8 metric tons of carbon dioxide each year.
# Rooftop Unit Performance Specifications

<table>
<thead>
<tr>
<th>Nom Ton.</th>
<th>Model</th>
<th>Cooling Data</th>
<th>Heating Data</th>
<th>Physical Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SEER or IER</td>
<td>Low</td>
<td>Std.</td>
</tr>
<tr>
<td>3</td>
<td>LGH036S4T</td>
<td>11.6</td>
<td>15.0</td>
<td>—</td>
</tr>
<tr>
<td>3</td>
<td>LGH036H4E</td>
<td>12.5</td>
<td>17.0</td>
<td>—</td>
</tr>
<tr>
<td>4</td>
<td>LGH048S4T</td>
<td>12.5</td>
<td>15.0</td>
<td>—</td>
</tr>
<tr>
<td>4</td>
<td>LGH048H4E</td>
<td>12.8</td>
<td>17.0</td>
<td>—</td>
</tr>
<tr>
<td>5</td>
<td>LGH060S4T</td>
<td>12.5</td>
<td>15.5</td>
<td>—</td>
</tr>
<tr>
<td>5</td>
<td>LGH060H4E</td>
<td>12.7</td>
<td>17.0</td>
<td>—</td>
</tr>
<tr>
<td>6</td>
<td>LGH072H4B</td>
<td>12.0</td>
<td>12.5</td>
<td>—</td>
</tr>
<tr>
<td>7.5</td>
<td>LGH092H4B</td>
<td>12.5</td>
<td>13.0</td>
<td>—</td>
</tr>
<tr>
<td>8.5</td>
<td>LGH102H4B</td>
<td>12.2</td>
<td>13.0</td>
<td>—</td>
</tr>
<tr>
<td>10</td>
<td>LGH120H4B</td>
<td>12.0</td>
<td>13.0</td>
<td>—</td>
</tr>
<tr>
<td>12.5</td>
<td>LGH150S4B</td>
<td>10.8</td>
<td>11.0</td>
<td>—</td>
</tr>
<tr>
<td>13</td>
<td>LGH156H4B</td>
<td>12.0</td>
<td>13.6</td>
<td>169</td>
</tr>
<tr>
<td>15</td>
<td>LGH180H4B</td>
<td>12.0</td>
<td>13.5</td>
<td>169</td>
</tr>
<tr>
<td>17.5</td>
<td>LGH210H4B</td>
<td>12.0</td>
<td>13.0</td>
<td>169</td>
</tr>
<tr>
<td>20</td>
<td>LGH240H4B</td>
<td>12.0</td>
<td>13.2</td>
<td>—</td>
</tr>
<tr>
<td>25</td>
<td>LGH300S4B</td>
<td>10.5</td>
<td>10.9</td>
<td>—</td>
</tr>
<tr>
<td>35</td>
<td>LGH420H4V</td>
<td>10.8</td>
<td>12.5</td>
<td>—</td>
</tr>
<tr>
<td>40</td>
<td>LGH480H4V</td>
<td>10.8</td>
<td>13.0</td>
<td>—</td>
</tr>
<tr>
<td>45</td>
<td>LGH540S4V</td>
<td>10.0</td>
<td>11.7</td>
<td>—</td>
</tr>
<tr>
<td>50</td>
<td>LGH600S4V</td>
<td>9.8</td>
<td>11.0</td>
<td>—</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nom Ton.</th>
<th>Model</th>
<th>Cooling Data</th>
<th>Heating Data</th>
<th>Physical Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>KW Rangew</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>LCH036S4T</td>
<td>11.6</td>
<td>15.0</td>
<td>7.5</td>
</tr>
<tr>
<td>3</td>
<td>LCH036H4E</td>
<td>12.5</td>
<td>17.0</td>
<td>7.5</td>
</tr>
<tr>
<td>4</td>
<td>LCH048S4T</td>
<td>12.5</td>
<td>15.0</td>
<td>7.5</td>
</tr>
<tr>
<td>4</td>
<td>LCH048H4E</td>
<td>12.8</td>
<td>17.0</td>
<td>7.5</td>
</tr>
<tr>
<td>5</td>
<td>LCH060S4T</td>
<td>12.5</td>
<td>15.5</td>
<td>7.5</td>
</tr>
<tr>
<td>5</td>
<td>LCH060H4E</td>
<td>12.7</td>
<td>17.0</td>
<td>7.5</td>
</tr>
<tr>
<td>6</td>
<td>LCH072H4B</td>
<td>12.0</td>
<td>12.5</td>
<td>7.5</td>
</tr>
<tr>
<td>7.5</td>
<td>LCH092H4B</td>
<td>12.7</td>
<td>13.2</td>
<td>7.5</td>
</tr>
<tr>
<td>8.5</td>
<td>LCH102H4B</td>
<td>12.4</td>
<td>13.2</td>
<td>7.5</td>
</tr>
<tr>
<td>10</td>
<td>LCH120H4B</td>
<td>12.2</td>
<td>13.2</td>
<td>15</td>
</tr>
<tr>
<td>12.5</td>
<td>LCH150S4B</td>
<td>11.0</td>
<td>11.2</td>
<td>15</td>
</tr>
<tr>
<td>13</td>
<td>LCH156H4B</td>
<td>12.0</td>
<td>13.6</td>
<td>15</td>
</tr>
<tr>
<td>15</td>
<td>LCH180H4B</td>
<td>12.0</td>
<td>13.5</td>
<td>15</td>
</tr>
<tr>
<td>17.5</td>
<td>LCH210H4B</td>
<td>12.0</td>
<td>13.0</td>
<td>15</td>
</tr>
<tr>
<td>20</td>
<td>LCH240H4B</td>
<td>12.0</td>
<td>13.2</td>
<td>15</td>
</tr>
<tr>
<td>25</td>
<td>LCH300S4B</td>
<td>10.5</td>
<td>10.9</td>
<td>15</td>
</tr>
<tr>
<td>35</td>
<td>LCH420H4V</td>
<td>10.8</td>
<td>12.5</td>
<td>—</td>
</tr>
<tr>
<td>40</td>
<td>LCH480H4V</td>
<td>10.8</td>
<td>13.0</td>
<td>—</td>
</tr>
<tr>
<td>45</td>
<td>LCH540S4V</td>
<td>10.0</td>
<td>11.7</td>
<td>—</td>
</tr>
<tr>
<td>50</td>
<td>LCH600S4V</td>
<td>10.0</td>
<td>11.0</td>
<td>—</td>
</tr>
</tbody>
</table>

Note: Due to Lennox’ ongoing commitment to quality, all specifications, ratings and dimensions are subject to change.
Quality components built for performance

1. **Hinged Access Panels**—Provide quick access to components and protect panels and roof from damage during servicing.

2. **Isolated Compressor Compartment**—Allows performance check during normal compressor operation without disrupting airflow.

3. **Corrosion-Resistant, Removable, Double-Sloped Drain Pan**—Provides application flexibility, durability and improved serviceability.

4. **Thermostatic Expansion Valves**—Provide peak cooling performance across the entire application range.

5. **Scroll Compressor**—Standard on all units for reliable, long-term operation.

6. **Humiditrol® Dehumidification System**—Patented system allows for independent control of temperature and humidity, providing enhanced comfort control.

7. **MERV 13 Filters**—Available as factory or field option, provide an enhanced level of indoor air quality, and can help the building qualify for additional LEED® credits.

8. **Foil-Faced Insulation**—On all internal surfaces that contact airflow, helps minimize airborne fibers and improve IAQ.

9. **Prodigy® Control System**—Standard on every Energence® rooftop unit; the Prodigy control system is the heart of the Lennox® controls offering.

**Blower Belt Auto Tensioner**—Factory option ensures blower is delivering the proper airflow for comfort, while maximizing efficiency and belt life (not shown).

Options and accessories to maximize your savings

**Factory-Installed Options**
- HACR circuit breakers
- Direct-drive blower motor
- Belt-drive blower motor
- Drive kits
- Corrosion protection
- Novar® LSM
- Phase monitor
- Humiditrol® dehumidification system
- Gas heat input
- Stainless steel heat exchanger

**Factory- or Field-Installed Options**
- Condensate drain trap
- Blower proving switch
- BACnet® module
- LonTalk® module
- Dirty filter switch
- Fresh air tempering
- Smoke detector (return and/or supply)
- Disconnect switch
- GFI service outlets
- Economizer
- Outdoor air dampers
- High-efficiency air filters
- UVC light kit
- Barometric relief dampers
- Low-temperature vestibule heater

**Field-Installed Options**
- Coil guards
- Hall guards
- i.Connection® Network
- Horizontal economizer control kit
- Humidity sensor kit
- CO₂ sensor
- LPG/propane conversion kit
1 **Push-Buttons**—Provide easy navigation during setup and diagnostics and allow intuitive setup steps without DIP switches.

2 **Scrolling Display**—Improves communication with clearly displayed text instead of codes. High contrast ratio improves readability in varied environments.

3 **USB Port (Patent Pending)**

4 **Integrated Controls and Terminal Boards**—Improve reliability and flexibility with fewer add-on boards.

5 **Guided Menu Setup**—Reduces complexity of start-up and commissioning and helps to ensure the system is set up properly per design specifications.

6 **Time Clock with Runtime Information for System Components, including:**
   - Compressors
   - Blower
   - Condensing fans
   - Free cooling
   - Heating
   - Power exhaust
   - Dehumidification mode
   - Date/time-stamped alarm codes

7 **BACnet® and LonTalk® Open Protocols Integration**—Assures easy integration with other devices using either open protocol. The Prodigy® unit controller is both a BTL-listed device and a LonMark-certified device.

8 **SmartWire™ System (Patent Pending)**—The SmartWire™ system is designed to simplify field sensor and thermostat installation. Through advanced connectors that are keyed and color-coded, the SmartWire system helps prevent miswiring and ensure the unit and components are installed properly. The wire-coloring scheme is standardized across all models, and each connection is intuitively labeled to make troubleshooting and servicing quick and easy.

**SmartWire™ System**

**Languages**—Available in English, Spanish and French.

For a complete list of features, options and accessories, contact your Lennox representative or visit www.lennoxcommercial.com to download technical documents.
**SOLUTIONS FOR CUSTOMIZED COMFORT**

Don't just choose a Lennox® product...choose a Lennox Commercial Comfort System. These complete packages of HVAC solutions provide tools to create a healthy and comfortable environment.

<table>
<thead>
<tr>
<th>Packaged Units</th>
<th>Heating</th>
<th>Indoor Air Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Strategos® Rooftop Units</td>
<td>• T-Class Unit Heaters</td>
<td>• Humiditrol® Dehumidification System</td>
</tr>
<tr>
<td>• Emergence® Rooftop Units</td>
<td>• Unit Heaters</td>
<td>• Demand Control Ventilation</td>
</tr>
<tr>
<td>• Landmark® Rooftop Units</td>
<td>• Duct Furnaces</td>
<td>• Energy Recovery Ventilators/Systems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Split Systems</th>
<th>Commercial Controls</th>
<th>Air Filters</th>
</tr>
</thead>
<tbody>
<tr>
<td>• S-Class™ Air Conditioners/ Heat Pumps</td>
<td>• Prodigy® Control System</td>
<td>• UVC Lamps</td>
</tr>
<tr>
<td>• T-Class™ Air Conditioners/ Heat Pumps</td>
<td>• I. Connection® Network</td>
<td></td>
</tr>
<tr>
<td>• Air Handlers</td>
<td>• Systems Integration Solutions</td>
<td></td>
</tr>
<tr>
<td>• Indoor Coils</td>
<td>• Commercial Thermostats</td>
<td></td>
</tr>
</tbody>
</table>

**LENNOX**

*Innovation never felt so good.*™

© Lennox Industries Inc. 2010

Visit us at www.lennox.com, or contact us at 1-800-9-LENNOX.

For a complete list of the registered and common law trademarks owned by Lennox Industries Inc., please visit www.lennox.com.