

Sumner County Schools
695 E Main Street
Gallatin TN 37066

Foodservice Walk-In Cooler and Walk-In Freezer Bid Specifications

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123 Cherokee Rd
Hendersonville, TN 37075

Bid Specifications for Combination Walk-In Cooler and Freezers

Item 1: WALK-IN COMINATION COOLER/FREEZER/FREEZER
Manufacturer: THERMO-KOOL, or pre-approved alternate
Model #: Q46262-25

Description:

1. Walk-In Combination Cooler and Freezer and Freezer shall be located indoors in a recessed pit.
2. Exterior Dimensions: 21' 11" x 15' 6" x 8' 10" High. Nominal dimensions not accepted.
3. Panel specifications: All panels shall consist of metal pans formed to precise dimensions. Metal finish to be as specified. Insulation shall be "foamed-in-place" urethane to bond permanently to complete inner surfaces of both interior and exterior metal pans to form strong rigid unit. Panels shall not have internal wood or metal support, framing, straps, or other non-insulating members. Each panel shall be 100% urethane foam insulation exclusive of metal pans. Perimeter structure shall be formed of Durathane, high density urethane insulation forming tongues and grooves to assure vapor and airtight joints and to prevent pre-installation damage and deterioration of exposed urethane surfaces. Insulation shall be 4" thick rigid, zero ozone depleting HFC 134a blown Class I urethane foam classified according to UL 723 (ASTM-E-84) as tested by Underwriters Laboratories, Inc. The core material has a flame spread of 25 or less and a smoke density of 250. The urethane foam is foamed-in-place to bond to inner surfaces of metal pans having an average thermal conductivity (K factor) of 0.13 BTU/hr./sq. ft. per degrees /Fahrenheit/inch. As tested in accordance with ASTM C 518-2004, the R factor for coolers at temperatures of 55 F° is greater than 29.0 for 4" thick; for freezers at temperatures of 20 F° the R factor is greater than 32.0 for 4" thick. (R-value of R-25 for Coolers and R-32 for Freezers required to meet 2009 Energy Code). The prefabricated urethane foamed panels shall be supplied with a Class I fire hazard classification according to UL 723 (ASTM-E-84) as tested by Underwriters Laboratories, Inc. Panels shall have a flame spread rating of 25 or less and bear a certifying Underwriters Laboratories, Inc. label. This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions. NSF listed double-bead vinyl gasket shall be applied to the tongue side of all panels, on both interior and exterior. Gaskets shall be impervious to stains, grease, oils, mildew, sunlight, etc.
4. Exterior: Stucco Galvanized
5. Interior: White Stucco Galvanized.
6. Interior Floors: 1/8" Aluminum Treadplate in both freezers and cooler.

7. (3) 34" x 79" Flush Mounted Entrance Door(s) with hardware, Pilot light & switch assembly, vapor proof light & dial thermometer, NSF listed.
8. (3) Door(s) with (2) Hinges per door, hinged right.
9. (3) LED light fixture at door.
10. (3) 14"x14" peep window w/ heated frame and glass.
11. (3) 36" High 1/8" Treadplate kickplates and jamb guards on exterior and interior door and door panel.
12. (3) Vinyl strip curtain.
13. (3) Backup frame heater wire.
14. (3) Pressure relief vent(s).
15. (2) Fan timer switch.
16. (6) 48" LED light fixture(s) w/ bulbs.
17. Ceiling & floor Splice.
18. Enclosure panels.
19. Trim.
20. (3) 12" High condensing unit stands.
21. 36" H Treadplate on exposed exterior. Shipped loose.
22. Refrigeration System: Remote refrigeration shall be located outdoors. Scroll Type condensing unit shall be factory assembled and UL approved. The condenser shall be air-cooled. Refrigerant shall be R-448A. Evaporators shall be a standard low type with air flow parallel to the walk-in ceiling. Evaporators shall be a standard low profile series. (Electronically Commuted Motors required to meet 2009 Energy Code). All evaporator coil components shall be housed in heavy gauge aluminum housing. Units shall have drain pan with drain-pipe connections. All evaporator coils shall be provided with proper sized drain lines, supplied and field installed by contractor. Drains shall be trapped outside of walk-in. Drain shall be heated and insulated to prevent freezing. All plumbing to be in accordance with applicable codes. Evaporators shall be equipped with an automatic electric defrost system including coil heaters, time clock, fan delay control, drain line heaters and liquid line solenoid. All major components provided for field installation of remote refrigeration systems such as tubing, electrical hook-up, drain line and refrigerant charge shall be done by certified and qualified refrigeration, electrical and plumbing contractors. The basic components shall include condensing unit, evaporator coil, control kit (pressure control, thermostat, liquid line drier, sight glass, suction line vibration eliminator, expansion valve, and evaporator coil mounting kit), defrost timer, fan delay control and liquid line solenoid.
23. Cooler Refrigeration System shall have 1 HP, Remote Pre-Assembled Refrigeration System Model RFO130E4SEANT 208-230/60/3 Medium Temperature, base, weather hood, winter controls, Scroll, Air-cooled, R448A (7.2 Compressor RLA) with RL6A094ADASC 115/60/1 coil (1.6 amps) with Dual Speed EC motor. 1 each 12" High Condensing Unit Stand.
24. (2 each) Freezer Refrigeration System shall have 4 HP, Remote Pre-Assembled Refrigeration System Model RFO400L4SEB 208-230/60/3 Low Temperature, base, weather hood, winter controls, Scroll, Air-cooled, R448A, Std. Defrost Kit (11.9 Compressor RLA) with RL6E121DDASC 208-230/60/1 coil (1.5 fan amps, 14.3 heater amps) with Dual Speed EC motor. 2 each 12" High Condensing Unit Stand.
25. Ten year panel warranty.

26. Five year compressor and one year refrigeration parts warranty. One year installation labor warranty.
27. Quality inspection requirements: Walk-ins shall be set up at the manufacturer's facility prior to shipment and a quality control inspection performed on the product. A digital photograph of the walk-ins set up at the manufacturer's facility shall be provided for the food equipment dealer's permanent records.
28. Made in the U.S.A.

Item 1-A: SHELVING FOR WALK IN COOLER, FREEZER, FREEZER
 Manufacturer: WINCO, or pre-approved alternate

- Model #: VEX2454
 - Qty: 48
- Model #: VEX2460
 - Qty: 24
- Model #: VEX72P
 - Qty: 72

1. Shelving units shall be epoxy coated wire shelving.
2. Heavy duty wire construction.
3. Easy to assemble.

The shelving units are to be assembled and placed in the walk-in by the successful bidder. Awarded bidder to verify shelving sizes for walk-in.

Installation Requirements for Successful Bidder:

1. Remove and dispose of existing walk in cooler, freezer, freezer.
2. Deliver and uncrate all walk in panels.
3. Erect and fully assemble walk in panels. Floor panels must be level. Remove all crating from premises.
4. Installer shall not use any wooden products to level walk-in floor panels. Either roof shingles, sand or concrete are approved materials for leveling walk-in floors at time of installation.
5. Remove floor tile located inside and outside of walk in.
6. Existing walk-in in recessed pit. Recessed pit is likely 6". New walk-in must be raised to allow flush door entry.
7. Install enclosure panels and trim.
8. Put condensing units in place. Per Sumner County Schools, unit will be installed on stand provided by manufacturer and installed by successful bidder. Three refrigeration units must be installed and connected.
9. Install 36" H treadplate wainscot on doors and exposed exterior.
10. Make all refrigeration and final electrical connections. Refrigeration systems must be fully started up by successful bidder. Make refrigeration connections from condensing

unit to evaporator coils and make electrical connections to electrical disconnects supplied by Sumner County Schools. Insulate drain line and install heater to drain line for evaporator coil. Drain line must have P-trap.

11. Refrigeration installer responsible to fully seal penetration after refrigeration line installation.
12. Final electrical connections to include condensing unit, evaporator coils, and all electrical components insides freezer (door frame heater wire, lights, drain heater, etc.).
13. Shelving units to be assembled and placed in the walk-ins by successful bidder.
14. Successful bidder to confirm walk-in measurements and shelving quantities & sizing.

Installation Requirements for Sumner County Schools:

1. Responsible for having site totally prepped for installation and utilities available for all final electrical connections for new walk in cooler/freezer/freezer.
2. School is responsible for having properly sized breaker and to run wiring as well as install disconnect so successful bidder can make final connections.
3. Responsible for any mold treatment or reinforcement of concrete if needed.

Millersville Elementary School
1248 Louisville Hwy
Goodlettsville, TN 37072

Bid Specifications for Combination Walk-In Cooler and Freezer

Item 1: WALK-IN COMINATION COOLER/FREEZER
Manufacturer: THERMO-KOOL, or pre-approved alternate
Model #: Q46263-25

Description:

1. Walk-In Combination Cooler and Freezer shall be located indoors in a recessed pit.
2. Exterior Dimensions: 13'2" x 11' 6" x 8'2" High. Nominal dimensions not accepted.
3. Panel specifications: All panels shall consist of metal pans formed to precise dimensions. Metal finish to be as specified. Insulation shall be "foamed-in-place" urethane to bond permanently to complete inner surfaces of both interior and exterior metal pans to form strong rigid unit. Panels shall not have internal wood or metal support, framing, straps, or other non-insulating members. Each panel shall be 100% urethane foam insulation exclusive of metal pans. Perimeter structure shall be formed of Durathane, high density urethane insulation forming tongues and grooves to assure vapor and airtight joints and to prevent pre-installation damage and deterioration of exposed urethane surfaces. Insulation shall be 4" thick rigid, zero ozone depleting HFC 134a blown Class I urethane foam classified according to UL 723 (ASTM-E-84) as tested by Underwriters Laboratories, Inc. The core material has a flame spread of 25 or less and a smoke density of 250. The urethane foam is foamed-in-place to bond to inner surfaces of metal pans having an average thermal conductivity (K factor) of 0.13 BTU/hr./sq. ft. per degrees /Fahrenheit/inch. As tested in accordance with ASTM C 518-2004, the R factor for coolers at temperatures of 55 F° is greater than 29.0 for 4" thick; for freezers at temperatures of 20 F° the R factor is greater than 32.0 for 4" thick. (R-value of R-25 for Coolers and R-32 for Freezers required to meet 2009 Energy Code). The prefabricated urethane foamed panels shall be supplied with a Class I fire hazard classification according to UL 723 (ASTM-E-84) as tested by Underwriters Laboratories, Inc. Panels shall have a flame spread rating of 25 or less and bear a certifying Underwriters Laboratories, Inc. label. This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions. NSF listed double-bead vinyl gasket shall be applied to the tongue side of all panels, on both interior and exterior. Gaskets shall be impervious to stains, grease, oils, mildew, sunlight, etc.
4. Exterior: Stucco Galvanized
5. Interior: White Stucco Galvanized.
6. Interior Floors: 1/8" Aluminum Treadplate in freezer and cooler.
7. (2) 34" x 79" Flush Mounted Entrance Door(s) with hardware, Pilot light & switch assembly, vapor proof light & dial thermometer, NSF listed.

8. (2) Door(s) with (2) Hinges per door, hinged right.
9. (2) LED light fixture at door.
10. (2) 14"x14" peep window w/ heated frame and glass.
11. (2) 36" High 1/8" Treadplate kickplates and jamb guards on exterior and interior door and door panel.
12. (2) Vinyl strip curtain.
13. (2) Backup frame heater wire.
14. (2) Pressure relief vent(s).
15. (1) Fan timer switch.
16. (2) 48" LED light fixture(s) w/ bulbs.
17. Enclosure panels.
18. Trim.
19. 36" H Treadplate on exposed exterior. Shipped loose.
20. Refrigeration System: Remote refrigeration shall be located outdoors. Scroll Type condensing unit shall be factory assembled and UL approved. The condenser shall be air-cooled. Refrigerant shall be R-448A. Evaporators shall be a standard low type with air flow parallel to the walk-in ceiling. Evaporators shall be a standard low profile series. (Electronically Commuted Motors required to meet 2009 Energy Code). All evaporator coil components shall be housed in heavy gauge aluminum housing. Units shall have drain pan with drain-pipe connections. All evaporator coils shall be provided with proper sized drain lines, supplied and field installed by contractor. Drains shall be trapped outside of walk-in. Drain shall be heated and insulated to prevent freezing. All plumbing to be in accordance with applicable codes. Evaporators shall be equipped with an automatic electric defrost system including coil heaters, time clock, fan delay control, drain line heaters and liquid line solenoid. All major components provided for field installation of remote refrigeration systems such as tubing, electrical hook-up, drain line and refrigerant charge shall be done by certified and qualified refrigeration, electrical and plumbing contractors. The basic components shall include condensing unit, evaporator coil, control kit (pressure control, thermostat, liquid line drier, sight glass, suction line vibration eliminator, expansion valve, and evaporator coil mounting kit), defrost timer, fan delay control and liquid line solenoid.
21. Cooler Refrigeration System shall have 3/4 HP, Remote Pre-Assembled Refrigeration System Model RFO080M4SEANT 208-230/60/3 Medium Temperature, base, weather hood, winter controls, Scroll, Air-cooled, R448A (3.4 Compressor RLA) with RL6A066ADASC 115/60/1 coil (.8 amps) with Dual Speed EC motor.
22. Freezer Refrigeration System shall have 3 HP, Remote Pre-Assembled Refrigeration System Model RFO300L4SEA 208-230/60/3 Low Temperature, base, weather hood, winter controls, Scroll, Air-cooled, R448A, Std. Defrost Kit (8.7 Compressor RLA) with RL6E090DDASC 208-230/60/1 coil (1.0 fan amps, 14.3 heater amps) with Dual Speed EC motor
23. Ten year panel warranty.
24. Five year compressor and one year refrigeration parts warranty. One year installation labor warranty.
25. Quality inspection requirements: Walk-ins shall be set up at the manufacturer's facility prior to shipment and a quality control inspection performed on the product. A digital

photograph of the walk-ins set up at the manufacturer's facility shall be provided for the food equipment dealer's permanent records.

26. Made in the U.S.A.

Installation Requirements for Successful Bidder:

1. Remove and dispose of existing walk in cooler and freezer.
2. Deliver and uncrate all walk in panels.
3. Erect and fully assemble walk in panels. Floor panels must be level. Remove all crating from premises.
4. Installer shall not use any wooden products to level walk-in floor panels. Either roof shingles, sand or concrete are approved materials for leveling walk-in floors at time of installation.
5. Remove floor tile located inside and outside of walk in.
6. Existing walk-in in recessed pit. Recessed pit is likely 6". New walk-in must be raised to allow flush door entry.
7. Install enclosure panels and trim.
8. Put condensing units in place.
9. Install 36" H treadplate wainscot on doors and exposed exterior.
10. Make all refrigeration and final electrical connections. Refrigeration systems must be fully started up by successful bidder. Make refrigeration connections from condensing unit to evaporator coils and make electrical connections to electrical disconnects supplied by Sumner County Schools. Insulate drain line and install heater to drain line for evaporator coil. Drain line must have P-trap.
11. Refrigeration installer responsible to fully seal penetration after refrigeration line installation.
12. Final electrical connections to include condensing unit, evaporator coils, and all electrical components insides freezer (door frame heater wire, lights, drain heater, etc.).

Installation Requirements for Sumner County Schools:

1. Responsible for having site totally prepped for installation and utilities available for all final electrical connections for new walk in cooler/freezer.
2. School is responsible for having properly sized breaker and to run wiring as well as install disconnect so successful bidder can make final connections.
3. Responsible for any mold treatment or reinforcement of concrete if needed.

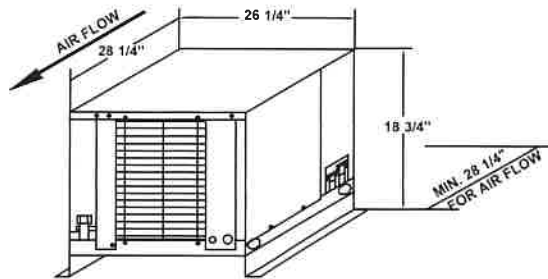
SCROLL

**MEDIUM TEMPERATURE
CONDENSING UNIT**

R-448A

AIR-COOLED

208-230/60/3Ø



SPECIFICATIONS

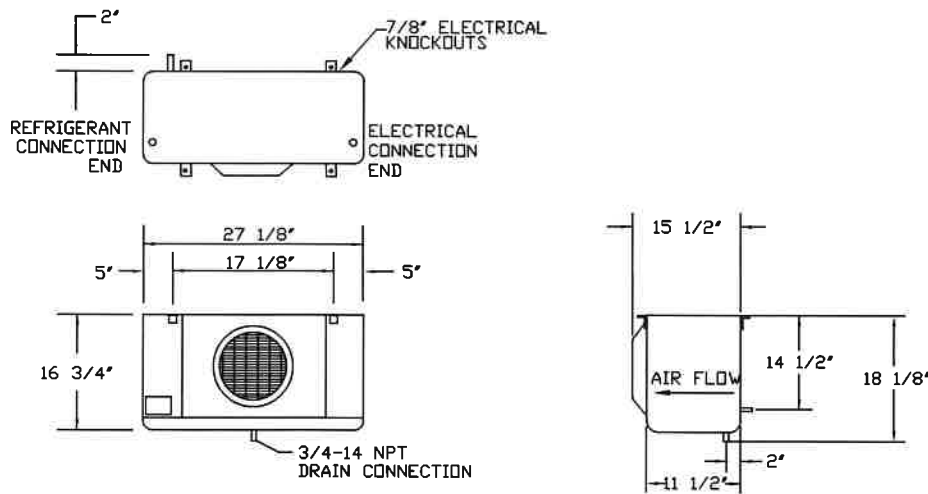
MODEL #	HP	ELECTRICAL DATA			CAPACITY @ 35° WALK-IN TEMP. (90° AMBIENT)	LINE SIZES		APPROX. NET WEIGHT
		COMPRESSOR RLA	MCA	MOPD		LIQUID	SUCTION	
RFO080M4SEA	3/4	3.4	15	15	8,330 BTU	3/8"	5/8"	195 LBS.
RECEIVER CAPACITY @ 90% FULL: 6.1#				HEAT OF REJECTION: 10,829 BTU's				

EVAPORATOR COIL

115/60/1Ø

SPECIFICATIONS

MODEL #	BTU's	No. of FANS	AIR FLOW (CFM)	ELECTRICAL DATA		LINE SIZES			APPROX. NET WEIGHT
				FANS		INLET	SUCTION	DRAIN	
				AMPS	WATTS				
RL6A066ADA	7,800	1	775	0.8	47	3/8" OD	5/8" OD	3/4" NPT	47 LBS.
W/ DUAL SPEED EC MOTOR									



**RFO080M4SEA 208-230/60/3Ø
W/ RL6A066ADA 115/60/1Ø**



Thermo-Kool

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Laurel, Mississippi 39441 • Phone 601/649-4600
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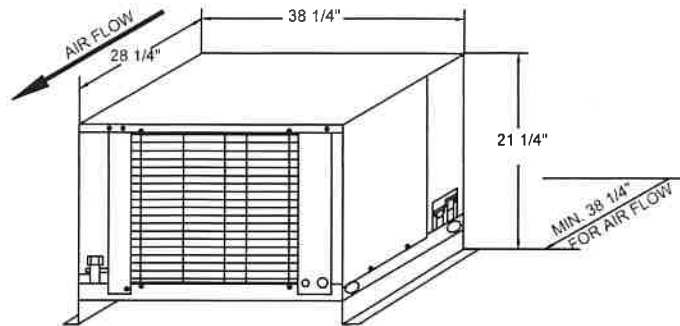
SCROLL

LOW TEMPERATURE CONDENSING UNIT

R-448A

AIR-COOLED

208-230/60/3Ø



SPECIFICATIONS

MODEL #	HP	ELECTRICAL DATA			CAPACITY @ -10° WALK-IN TEMP. (90° AMBIENT)	LINE SIZES		APPROX. NET WT.
		COMP. RLA	MCA	MOPD		LIQUID	SUCTION	
RF0300L4SEA	3	8.7	26	30	9,270 BTU	3/8"	7/8"	245 LBS.

RECEIVER CAPACITY @ 90% FULL: 14.3# HEAT OF REJECTION: 13.905 BTU's

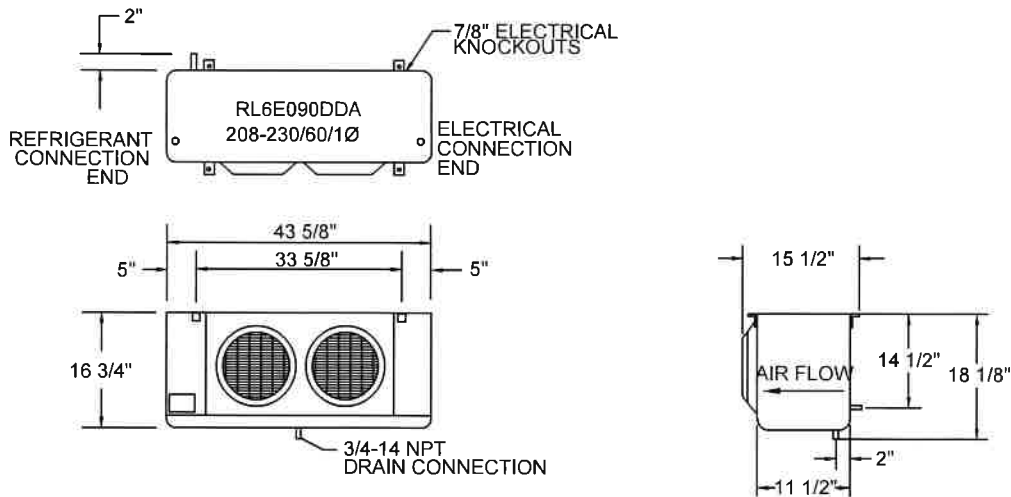
EVAPORATOR COIL

208-230/60/1Ø

SPECIFICATIONS

MODEL #	BTU's	No. of FANS	AIR FLOW (CFM)	ELECTRICAL DATA		LINE SIZES			APPROX. NET WT.
				FAN AMPS	HEATER AMPS	INLET	SUCTION	DRAIN	
RL6E090DDA	10,600	2	1,550	1.0	9.8	3/8" OD	7/8" OD	3/4" NPT	58 LBS.

W/ DUAL SPEED EC MOTOR



RF0300L4SEA 208-230/60/3Ø
W/ RL6E090DDA 208-230/60/1Ø



Thermo-Kool®

Mid-South Industries, Inc. • P.O. Box 989
Laurel, Mississippi 39441 • Phone 601/649-4600
FAX 601/649-0558

White House High School
508 Tyree Springs Road S
White House, TN 37188

Bid Specifications for Equipment

Item 1: WALK-IN FREEZER
Manufacturer: THERMO-KOOL, or pre-approved alternate
Model #: Q45599-25

Description:

1. Walk-In Combination Freezer shall be located indoors on level surface, in recessed pit.
2. Total dimensions shall be 15'3" x 8'9" x 8'4" High. Nominal dimensions not accepted.
3. Insulation: 4" DURATHANE, all-urethane foamed-in-place (Class 1).
4. Exterior: Stucco Galvanized.
5. Interior: White Stucco Galvanized.
6. Interior Floors: 1/8" Aluminum Treadplate in freezer.
7. (1) 36"x79" Flush Mounted Entrance Door(s) with hardware, Pilot light & switch assembly, vapor proof light & dial thermometer. NSF listed.
8. (1) Door(s) with (2) Hinges per door, hinged right.
9. 36" High 1/8" Treadplate kickplates and jamb guards on exterior and interior of door and door panel.
10. (1) LED light fixture at door.
11. (1) 14"x14" peep window w/ heated frame & glass.
12. (1) vinyl strip curtain.
13. (1) Backup frame heater wire.
14. (1) Thermostatically controlled door frame heater(s).
15. (1) Pressure relief vent.
16. (1) M.H Rhodes 74702 Fan timer switch.
17. (3) 48" LED light fixture(s) with bulbs.
18. 36" High 1/8" Treadplate wainscot on door side of walk-in.
19. Enclosure panels.
20. Trim.
21. Freezer Refrigeration system shall have 5 HP, Remote Pre Assembled Refrig. System Model RFO400L4SEB 208-230/60/3 Low Temperature, base, weather hood, winter controls, Scroll, air-cooled, R448A, Std. Defrost Kit (11.9 Compressor RLA) with RL6E105DDASC 208-230/60/1 coil (1.0 fan amps, 9.8 heater amps) with Dual Speed EC motor.
22. Ten year panel warranty.
23. Five year compressor and one year refrigeration parts warranty. One year installation labor warranty.
24. All panels are pre-assembled at the factory prior to shipment for a thorough quality control inspection. A digital photograph is taken of the preassembled walk in and sent to the dealer with all warranty paperwork.

25. Made in the USA.

Item 1.1: WALK IN FREEZER SHELVING
Manufacturer: WINCO, or pre-approved alternate

1. Model # VEX-2436 - Qty: 8 each.
2. Model # VEX-2448 - Qty: 8 each.
3. Model # VEX2454 - Qty: 12 each.
4. Model # VEX72P - Qty: 28 each.
5. Model # ASDR-2060 - Qty: 1 each

The shelving units are to be assembled and placed in the freezer unit by the successful bidder. Dunnage rack to be located under evaporator coils. Awarded bidder to verify shelving sizes for walk-in.

- Shelving units shall be epoxy coated wire shelving.
- Heavy duty wire construction.
- Easy to assemble.
- Dunnage Rack to be of aluminum construction.

Installation Requirements for Successful Bidder:

1. Removal and dispose of existing walk-in combination box.
2. Deliver and uncrate all walk in panels.
3. Erect and fully assemble walk in panels. Floor panels must be level.
4. Install enclosure panels and trim.
5. Install 36" High treadplate wainscot panels on all exposed exterior of walk-in.
6. Put condensing unit in place.
7. Insulate drain line and install heater to drain line from evaporator coil. Drain line must have P-trap.
8. Assemble and place shelving in cooler and freezer. Successful bidder to confirm shelving quantities and sizing.
9. Make all refrigeration and electrical final connections. Refrigeration systems must be fully started up by successful bidder.
10. Final electrical connections to include condensing unit, evaporator coils, and all electrical components inside cooler and freezer (door frame heater wire, lights, drain heater, etc.).

Installation Requirements for Sumner County Schools:

1. Sumner County Maintenance Department to have all properly sized utilizes for final electrical connections prior to installation.
2. Remove sheet rock above existing walk-in to allow for higher walk-in ceilings.
3. Responsible for having site totally prepped for installation and utilities available for all final electrical connections for new walk in cooler.
4. Sumner County Schools is responsible for having properly sized breaker and to run wiring as well as install disconnect so successful bidder can make final connections.