



Residential Air Conditioning

Trade Ally Program Standards

Effective: January 1, 2008

**Florida Power & Light Company
Residential Air Conditioning
Program Standards**

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Program Objective

The objective of the Residential Air Conditioning Program is to reduce coincident peak demand and energy usage through: 1) the installation of high efficiency air-cooled or water-cooled air conditioners and heat pumps, 2) the identification and repair of air leaks in the supply and return plenums, 3) the installation of Electronically Commutated Motors (ECM) in the air handlers and 4) the performance of a heat load calculation to properly size the air conditioning system. The purpose of these standards is to instruct FPL Participating Independent Contractors and/or FPL customers in selecting equipment that will qualify for an FPL rebate, and in completing the rebate certificate to redeem the rebate payment. Also, the FPL requirements for qualifying installations are explained.

Customer Eligibility Requirements

- The Residential Air Conditioning Program applies only to residential dwelling units that have been served by FPL for at least one year. If the dwelling is disconnected and reconnected due to hurricane damage, the one-year service requirement is waived.
- All residential customers are eligible for an air conditioning (A/C) rebate if they have an active FPL residential account, install the system in a residential building served by FPL and satisfy the requirements for customer and equipment eligibility and rebate processing.
- All installations of central air conditioning systems must be performed by an FPL Participating Independent Contractor. Governmental entities, including local, state and federal agencies, may at FPL's discretion, install the program measure themselves provided all other program standards are followed.
- Customers who replaced an A/C system and received a rebate shall not be eligible for a rebate for the replacement of that same system for a period of two years. If the dwelling is damaged by a hurricane, this limitation is waived.
- All customers' installation of a qualifying A/C system may be eligible for a contractor incentive for: 1) the supply and return plenums to be sealed, 2) the installation of an ECM in the air handler and, 3) the performance of a heat load calculation, at the time of system installation. These additional incentives to the contractor are subject to qualifying requirements as defined elsewhere within these Standards.

Trade Ally Eligibility

- Each FPL Participating Independent Contractor must enter into a Demand Side Management Program Contract with FPL.
- An FPL Participating Independent Contractor must be a licensed mechanical or air conditioning contractor in the state of Florida. The contractor must comply with all government statutes, codes, ordinances and accepted engineering practices.
- Residential Air Conditioning contractors that wish to receive plenum seal incentive must be certified by FPL and adhere to FPL's standards for duct repairs.
- FPL Participating Independent Contractors shall turn in all rebate certificates within 60 days of completing the customer's installation to FPL for processing.
- Contractor must correct any deficiency in the installation identified by the FPL inspection within 30 working days from date of notification.

Equipment Eligibility

A/C System Equipment Eligibility:

- All installations must be in compliance with all local, state and national codes pertaining to the installation and operation of A/C equipment.
- All systems installed must provide whole house air conditioning or be part of a multi-system.
- Central air conditioning or heat pump systems, 48,000 BTUH compressor capacity or larger, will require hard start kits, approved by the manufacturer, to be installed. The hard start kits can be factory or field installed.
- All central air conditioning systems must be electric driven and either an air-cooled system or a water-cooled system.
- Replacement is defined as the complete replacement of the electric driven cooling system (i.e., condenser, blower, coil, or any supplemental devices), or cooling and heating system in the case of heat pumps.
- If the condenser unit and evaporator coil are replaced, but the non-electric heating air handler is not, FPL will pay the rebate, provided that the condenser unit/evaporator coil combination is currently rated by the Air Conditioning & Refrigeration Institute (ARI).

- Replacement of a major component only is not considered an eligible installation.
- The new system must have enough capacity to provide the cooling requirements of the structure/zone at summer design conditions.
- All systems installed must be new and cannot be refurbished or have been previously installed or used.
- Each central air conditioning or heat pump installation must be an ARI certified combination. For water-cooled systems, per ARI/ISO Standard 13256-1, water source systems (Water loop heat pumps – WLHP) are rated at 86 degrees and ground closed-loop systems (Ground loop heat pumps – GLHP) at 77 degrees. For ground water source systems installed (Ground water heat pumps – GWHP), the GLHP rating will be accepted. If the only rating listed for a system is the WLHP this will be the only accepted rating independent of the installed application. The condensing unit's water temperature must be maintained at its respective equipment rating or better to qualify.
- Installed equipment combinations must be listed in the ARI website (www.aridirectory.org) directory of certified HVAC equipment. The ARI reference number must be entered on the FPL rebate certificate, and a copy of the ARI website page, must accompany the certificate. For electronic submission of Rebate Certificates via the web, contractor must enter on-line the required ARI information. Should the equipment be a new release or a de-listed model, the ARI reference number along with supporting documentation should be submitted for consideration. FPL will verify, using the latest available ARI updates, that the equipment ratings are ARI approved. The rebate certificate will not be processed unless the system ratings have been confirmed by ARI.
- The A/C filters must be accessible, and their location must be shown to the customer.
- The complete system, including any supplemental devices, shall be listed by Underwriters Laboratories (U.L.) or another nationally recognized testing organization in accordance with U. L. standards.
- For installations 6,000 BTUH or greater than the size of the existing system, a heat load calculation supporting the increase in BTUH will be required. The rebate will be paid on the size installed if supported by the heat load calculations.
- If the central A/C system is being installed in a residential dwelling that previously did not have central air conditioning, then a heat load calculation, justifying the size installed, will be required to be submitted with the rebate certificate.

- When the existing central cooling and heating system is connected to the FPL On-Call (Load Management) system, the contractor must disconnect the FPL low voltage wire from the existing thermostat circuit and reinstall this wire in the new thermostat circuit. The contractor must check the proper box on the FPL rebate certificate. If the contractor is unsure how to reconnect the On-Call circuit, the contractor should contact the local FPL Contractor Representative for further instructions. If the contractor is unable to reconnect the On-Call circuit, the contractor shall enter the reason in the space provided on the rebate certificate.
- FPL will pay the proper rebate for an installation in which the air handler/coil and condenser are replaced at different times when the following items are met:
 - the last component was installed on or after the effective date of these standards.
 - both components were replaced within a 12-month period;
 - and the new combination is listed in the current ARI directory of certified equipment at the time of the installation of the last component. The ARI rating in effect at the time of installation of the last component is the one which will apply, and must meet the current FPL SEER/EER requirements.

Specific Requirements - Electric Resistance Heat Strips

- Replacement heat strips' kW should not be greater than the original heat strips' kW, unless the standard size available in the new equipment is greater. However, if replacement heat strips' kW is larger than the kW of the standard size available, then a heat load calculation must be submitted. Oversized heat strips may result in denial of rebate payment.
- Electric resistance heat strips are permitted as supplemental heat for heat pumps only when sized by the balance point method. The thermostat shall have at least two stages, with the first stage operating the heat pump and the remaining stage(s) dedicated to the supplemental heat strips. Oversized heat strips may result in denial of rebate payment.

- Eligible replacements are listed in the following table:

IF THE EXISTING SYSTEM HAS:	YOU CAN REPLACE IT WITH:		
	A HEAT PUMP	STRIP HEATING	NON-ELECTRIC HEATING ^{NOTE 1}
STRIP HEATING	YES	YES	YES
NON-ELECTRIC HEATING	YES	NO <small>SEE NOTE 2 FOR EXCEPTION</small>	YES
HEAT PUMP	YES	NO <small>SEE NOTE 2 FOR EXCEPTION</small>	YES
NO CENTRAL HEAT	YES	NO <small>SEE NOTE 2 FOR EXCEPTION</small>	YES

NOTES: 1) CENTRAL AIR CONDITIONING SYSTEMS WITH NON ELECTRIC HEAT QUALIFY FOR THIS PROGRAM.
 2) STRIP HEATING WILL BE ALLOWED TO REPLACE THESE OTHER FORMS OF HEATING IN ZONES 7, 8 & 9 ONLY. THESE BUILDING CODE ZONES ARE SHOWN IN APPENDIX B OF THIS STANDARD. HEAT LOAD CALCULATIONS WILL BE REQUIRED.

- The installation of the air conditioning system must be in accordance with the manufacturer's recommendations and specifications, including refrigerant line sizes and length. Where refrigerant lines exist it will be permissible to use existing refrigerant lines, if they meet all of the following criteria:
 - Suction line size does not reduce the capacity factor below 0.96.
 - Suction line size is within the manufacturer's printed guidelines.

Optional Contractor Incentives

Plenum Seal Eligibility Requirements:

- All contractors, certified by FPL, who install a qualifying A/C system will be eligible for a contractor incentive for the supply and return plenums to be sealed at the time of system installation.
- Plenum seal is defined as sealing of all air leaks in the supply and return plenums, up to 4 feet from the air handler, or less if the plenum transition is closer (i.e. junction box, trunk line or ceiling/wall). When the air handler closet is the return plenum, all wall, floor and ceiling cracks and penetrations must be sealed.

- All material used in sealing the plenums and air handler must meet the requirements of the current Florida Energy Efficiency Code for Building Construction (Chapter 13 of the Florida Building Code).
- The plenum seal requirements for all repair materials and procedures must adhere to FPL's standards for duct repairs.

Electronically Commutated Motor (ECM) Eligibility Requirements:

- All contractors who install a qualifying A/C system will be eligible for a contractor incentive for the installation of an ECM in the air handler at the time of system installation.
- The ECM must be set to operate to the manufacturer's specifications.
- A copy of the manufacturer's specification sheet identifying the ECM for the air handler installed must be submitted with the rebate certificate.

Heat Load Calculation Eligibility Requirements:

- All contractors who install a qualifying A/C system will be eligible for a contractor incentive for the performance of a heat load calculation for the home or the zone conditioned by the system at the time of system installation.
- Contractors must complete a heat load calculation using an approved software/spreadsheet based on the Air Conditioning Contractors of America (ACCA) Manual J - 8th Edition or latest.
- Inside dry bulb design temperatures must meet FPL levels of 75⁰F for Summer and 70⁰F for Winter.
- Outside design temperatures must follow the geographic design conditions as listed in the corresponding table of the ACCA Manual J residential load calculations guidelines or local code requirements.
- The size of the system installed must meet the State Building Code requirements.
- A copy of the completed heat load calculation must be submitted with the rebate certificate.

Rebate and Incentive Processing

For A/C system installations, the rebate amount will be determined directly from the appropriate rebate schedule as shown in Appendix A.

A/C rebate amount will be deducted from the installed price and the customer will pay only the difference. The rebate amount must be itemized on the customer's invoice.

The following incentives to the contractor will be paid directly to the contractor and not deducted from the cost of the system to the customer:

- The Plenum Seal incentive will be \$30 for each system installed.
- The ECM incentive will be \$25 for each system installed.
- The Heat Load Calculation incentive will be \$100 for each system installed.

Contractors shall complete the Residential Central Air Conditioning Rebate Certificate as follows:

- Complete customer and contractor information sections
 - Enter the total HVAC system cost (before subtracting the FPL rebate amount)
 - Enter the FPL Rebate Amount from the appropriate Rebate Schedule provided in Appendix A
 - Enter the amount due by the customer
 - Have the customer sign and date the rebate certificate in the spaces provided
 - Check "Plenum Sealed" box if a plenum seal is performed and the contractor is certified by FPL for Plenum Seal measure
 - Check "Load Calculation Performed" box if a Heat Load Calculation is performed
 - Check "Electronically Commutated Motor" box if an ECM air handler is installed
- Enter the information requested for the existing system
- Enter the information requested for the new system
- Contractor must leave a completed and signed customer copy of the Residential Central Air Conditioning Rebate Certificate with the customer
- Submit the certificate to FPL for processing
- FPL reserves the right to verify each installation for which a Residential Central Air Conditioning Rebate Certificate has been submitted
- FPL will be the final judge of whether the requirements of the Residential Air Conditioning Program have been met

Reporting Requirements

All program charges such as Payroll & Benefits, Material and Supplies, Outside Services, Advertising, Vehicles, Other, and Incentives Costs shall be reported by both the Energy Conservation Cost Recovery True-Up and Projections, specifically through Schedules CT-2 and C-2 respectively.

Appendix A

Residential Central Air Conditioning Rebate Payment Schedules

**RESIDENTIAL HVAC
CENTRAL STRAIGHT COOL - AIR COOLED
REBATE PER PARTICPANT**

Rebate Dollars								
COOLING CAPACITY BTUH		SEER	SEER	SEER	SEER	SEER	SEER	SEER
FROM	TO	14.0	15.0	16.0	17.0	18.0	19.0	> 20.0
FROM	TO	14.9	15.9	16.9	17.9	18.9	19.9	
	<21000	\$125	\$220	\$305	\$390	\$445	\$500	\$570
21000	26999	\$140	\$265	\$405	\$515	\$585	\$670	\$755
27000	32999	\$165	\$320	\$500	\$640	\$740	\$840	\$950
33000	38999	\$210	\$375	\$585	\$770	\$880	\$1,005	\$1,130
39000	44999	\$265	\$475	\$685	\$895	\$1,035	\$1,175	\$1,330
45000	50999	\$305	\$545	\$780	\$1,020	\$1,175	\$1,340	\$1,510
51000	56999	\$375	\$640	\$895	\$1,145	\$1,330	\$1,510	\$1,705
57000	65000	\$430	\$725	\$1,005	\$1,285	\$1,495	\$1,705	\$1,930
BTUH		EER	EER	EER	EER	EER	EER	EER
FROM	TO	11.0	12.0	13.0	14.0	15.0	16.0	> 17.0
FROM	TO	11.9	12.9	13.9	14.9	15.9	16.9	
	>65000	\$630	\$975	\$1,185	\$1,375	\$1,650	\$1,900	\$2,100

**RESIDENTIAL HVAC
CENTRAL HEAT PUMP - AIR COOLED
REBATE PER PARTICPANT**

Rebate Dollars								
COOLING CAPACITY BTUH		SEER	SEER	SEER	SEER	SEER	SEER	SEER
FROM	TO	14.0	15.0	16.0	17.0	18.0	19.0	> 20.0
FROM	TO	14.9	15.9	16.9	17.9	18.9	19.9	
	<21000	\$125	\$220	\$305	\$390	\$445	\$500	\$570
21000	26999	\$140	\$265	\$405	\$515	\$585	\$670	\$755
27000	32999	\$165	\$320	\$500	\$640	\$740	\$840	\$950
33000	38999	\$210	\$375	\$585	\$770	\$880	\$1,005	\$1,130
39000	44999	\$265	\$475	\$685	\$895	\$1,035	\$1,175	\$1,330
45000	50999	\$305	\$545	\$780	\$1,020	\$1,175	\$1,340	\$1,510
51000	56999	\$375	\$640	\$895	\$1,145	\$1,330	\$1,510	\$1,705
57000	65000	\$430	\$725	\$1,005	\$1,285	\$1,495	\$1,705	\$1,930
BTUH		EER	EER	EER	EER	EER	EER	EER
FROM	TO	11.0	12.0	13.0	14.0	15.0	16.0	> 17.0
FROM	TO	11.9	12.9	13.9	14.9	15.9	16.9	
	>65000	\$630	\$975	\$1,185	\$1,375	\$1,650	\$1,900	\$2,100

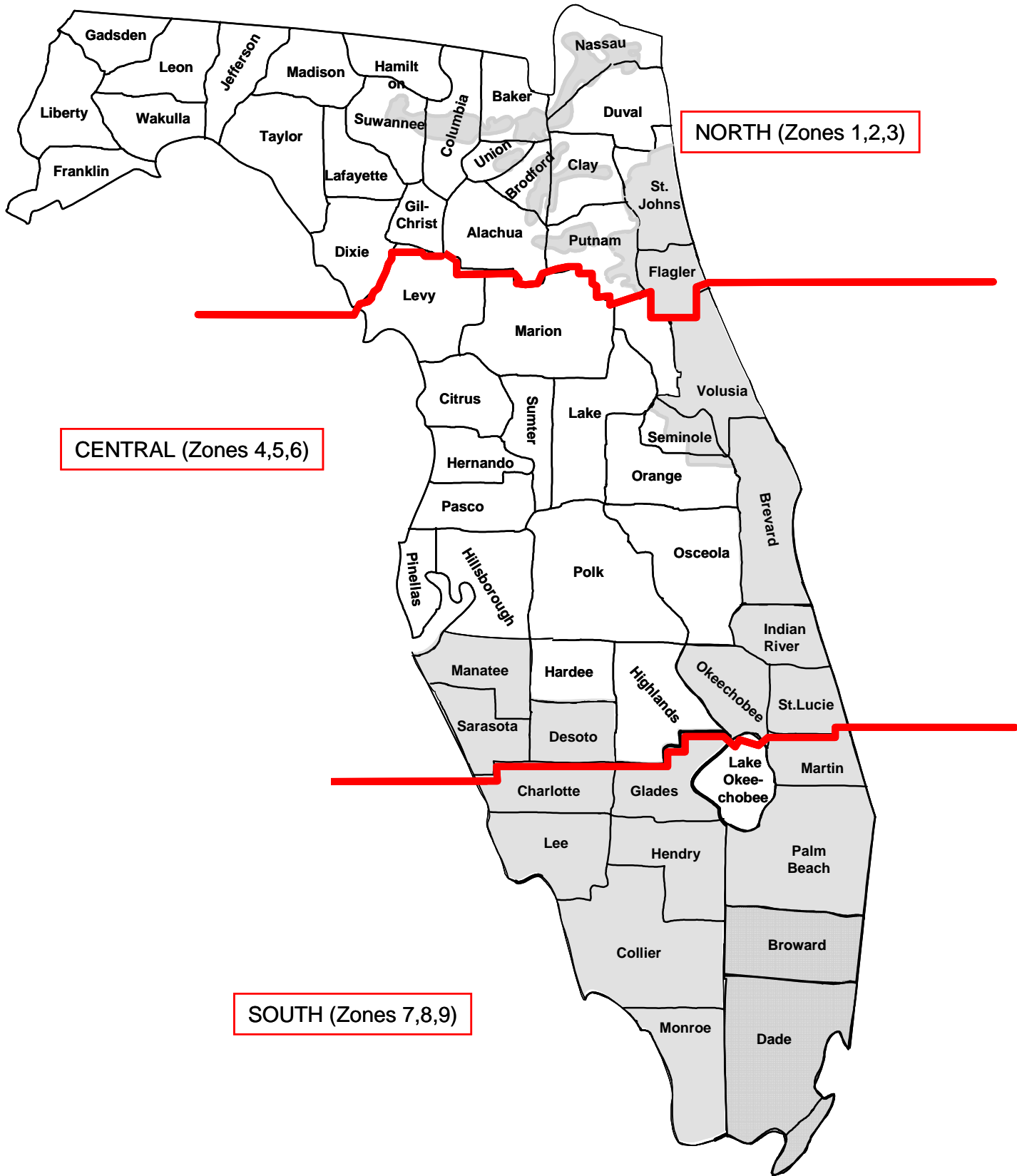
**RESIDENTIAL HVAC
CENTRAL STRAIGHT COOL & HEAT PUMP - WATER COOLED
REBATE PER PARTICPANT**

Rebate Dollars									
COOLING CAPACITY BTUH		EER	EER	EER	EER	EER	EER	EER	EER
FROM	TO	13.0 13.9	14.0 14.9	15.0 15.9	16.0 16.9	17.0 17.9	18.0 18.9	> 19.0	
	< 15000	\$ 50	\$ 85	\$ 115	\$ 140	\$ 160	\$ 180	\$ 200	
15000	20999	\$ 80	\$ 130	\$ 170	\$ 210	\$ 240	\$ 270	\$ 295	
21000	26999	\$ 110	\$ 170	\$ 230	\$ 285	\$ 325	\$ 360	\$ 395	
27000	32999	\$ 135	\$ 215	\$ 280	\$ 355	\$ 400	\$ 450	\$ 495	
33000	38999	\$ 165	\$ 265	\$ 340	\$ 425	\$ 480	\$ 540	\$ 595	
39000	44999	\$ 190	\$ 300	\$ 400	\$ 495	\$ 565	\$ 630	\$ 690	
45000	50999	\$ 215	\$ 350	\$ 460	\$ 565	\$ 640	\$ 720	\$ 790	
51000	56999	\$ 245	\$ 390	\$ 520	\$ 635	\$ 730	\$ 810	\$ 890	
57000	65000	\$ 275	\$ 430	\$ 575	\$ 705	\$ 805	\$ 910	\$ 1,000	
	> 65000	\$ 400	\$ 555	\$ 700	\$ 830	\$ 930	\$ 1,035	\$ 1,125	

Appendix B

Florida Counties by Building Code Zones

FPL Service Territory & Climate Building Zones



Appendix C

Residential Central Air Conditioning Rebate Certificate



FPL Residential Central Air Conditioning REBATE CERTIFICATE

NON-NEGOTIABLE
VOID AFTER 60 DAYS FROM
DATE OF CUSTOMER SIGNATURE

Your selected **FPL Participating Independent Contractor**SM is:

FPL CUSTOMER ACCOUNT NO.			VENDOR NO.		INSTALLATION DATE	
FIRST	MIDDLE	LAST	COMPANY NAME			
INSTALLATION ADDRESS			MAILING ADDRESS			
CITY	STATE FL	ZIP	CITY	STATE FL	ZIP	
TELEPHONE (HOME) ()			TELEPHONE ()		REPRESENTATIVE	
DAY TIME PHONE ()			CONTRACTOR SIGNATURE			DATE

CONGRATULATIONS on your decision to purchase a new high-efficiency _____ **SEER A/C** unit. FPL joins in your efforts to save energy by helping you reduce your cost through the following rebate.

\$ _____ - \$ _____ = \$ _____
TOTAL COST OF A/C SYSTEM **FPL REBATE AMOUNT** AMOUNT DUE BY CUSTOMER TO
(Must be shown on customer's invoice) CONTRACTOR FOR A/C SYSTEM

CUSTOMER SIGNATURE x _____ **DATE** _____
Certificate is not valid unless signed by customer

Optional measures selected and performed by your contractor that promote energy efficiency: If box is checked, the amount shown will be paid by FPL to your contractor to encourage their participation in these optional measures.

- \$30 – PLENUMS* SEALED TO FPL'S SPECIFICATIONS \$75 – LOAD CALCULATIONS* PERFORMED AND SUBMITTED TO FPL \$25 – INSTALLED ELECTRONICALLY COMMUTATED MOTOR (ECM)*
- * Plenums are the part of the A/C Duct System that attach to the air handler. * Load Calculation is a method used for determining the size of the A/C System. * ECM is an electronically controlled motor that maintains the airflow in the A/C System.

EXISTING CENTRAL A/C SYSTEM YES NO A/C SYSTEM COOLING BTUH'S: _____

HEATING TYPE: NONE OIL GAS HEAT PUMP OTHER ELECTRIC RESISTANCE KW: _____

NEW CENTRAL A/C SYSTEM STRAIGHT COOL HEAT PUMP HEAT PUMP/WATER SOURCE

PART OF MULTI SYSTEM: YES NO NUMBER OF A/C SYSTEMS IN HOME _____

BRAND MFG. _____ ARI REFERENCE NO. _____

OUTDOOR/PACKAGE UNIT MODEL NO. _____ COIL MODEL NO. _____

INDOOR MODEL NO. _____ REQUIRED ACCESSORIES (i.e. TXV, LLS, TD) _____

COOLING BTUH'S _____ SEER/EER _____ IF LOAD CALC. SUBMITTED: EQUIP. SENSIBLE BTUH _____ EQUIP. LATENT BTUH _____

HEATING TYPE: NONE OIL GAS HEAT PUMP OTHER ELECTRIC RESISTANCE KW: _____

HEATING BTUH'S _____ COEFFICIENT H.S.P.F. C.O.P. VALUE _____ DUAL COMPRESSOR: YES NO

DOES UNIT HAVE HARD START KIT INSTALLED? YES NO (Required for 48,000 BTUH compressor capacity and larger units)

MFG'S RECOMMENDED REFRIGERANT PIPE SIZE: SUCTION _____ ACTUAL SIZE: SUCTION _____

ON CALL PROGRAM AND EQUIPMENT

DOES CUSTOMER PARTICIPATE IN FPL'S ON CALL PROGRAM? YES NO
IF YES, WAS THE LOW VOLTAGE ON CALL WIRE RECONNECTED? YES NO
IF NO, GIVE REASON _____

MAIL TO: A/C Rebates CSF/GO
P.O. Box 029100
Miami, FL 33102-9100

FPL accepts no responsibility for the quality of the workmanship or installation of any conservation measures it recommends nor for any consequential or incidental damages resulting from defects therein, and does not guarantee such measures, even if free from defects and properly installed.

Form 359 (Non-Stocked) Rev. 07/06

Part 1 (White) **Customer** Part 2 (Canary) **FPL** Part 3 (Pink) **Contractor**

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