



Village of Biscayne Park

Commission Agenda Report

Village Commission Meeting Date: April 5, 2016

Subject: Recreation Center
Lighting

Prepared By: Commission Bob
Anderson

Sponsored By: Commission

Background

At the March Commission meeting the commission was given a written update regarding installation of lighting at the Recreation Center Entrance. I would like the commission to discuss the details and proposal at the April meeting. This will also give any member of the public who wants to speak about this the opportunity to do so.

Fiscal / Budget Impact

To Be Determined

Recommendation

Commission to discuss.

Attachments

Written information that was given at the the March meeting.



Village of Biscayne Park Commission Agenda Report

Village Commission Meeting Date: March 1, 2016

Subject: Update regarding the installation of lighting at the Recreation Center entrance.

Prepared By: Heidi Siegel, Village Manager

Sponsored By: Staff

Background

At the July 7, 2015 Village Commission meeting, the Biscayne Park Foundation made a presentation regarding installation of bollard lighting at the Recreation Center entrance. The Village Commission agreed to the project and the donation from the Foundation for \$4,000 to partially fund the project. Subsequent to this meeting, the Village Commission added \$2,000 to the Fiscal Year 2015/2016 budget for a \$2,000 match for the project.

LED bollard lighting has been determined to be the best choice to illuminate the space without disturbing neighboring residents and taking into account the Village is a bird sanctuary. Because of the shade in this area, it is recommended the Village install electric lights rather than solar. Six bollard lights will be affixed to a concrete pad and all wiring will be underground in conduit.

Due to the cost of the entrance project, Commission approval is not required for the materials and services that would be rendered to complete the project. Based on the bids received the cost to install six bollard lights at the entrance to the Recreation Center is \$4,000.00. This project will be funded by the \$2,000.00 set aside in the current Village budget and \$2,000.00 provided by the Biscayne Park Foundation.

Additionally, at the November 10, 2015 Commission meeting there was consensus for staff to research the cost of lighting improvements for the entire perimeter of the Recreation Center park. Based on a solar lighting application, the cost for just the product is between \$48,000 - \$59,000. The estimate does

March 1, 2016

Commission Agenda Report

Update regarding the installation of lighting at the Recreation Center entrance

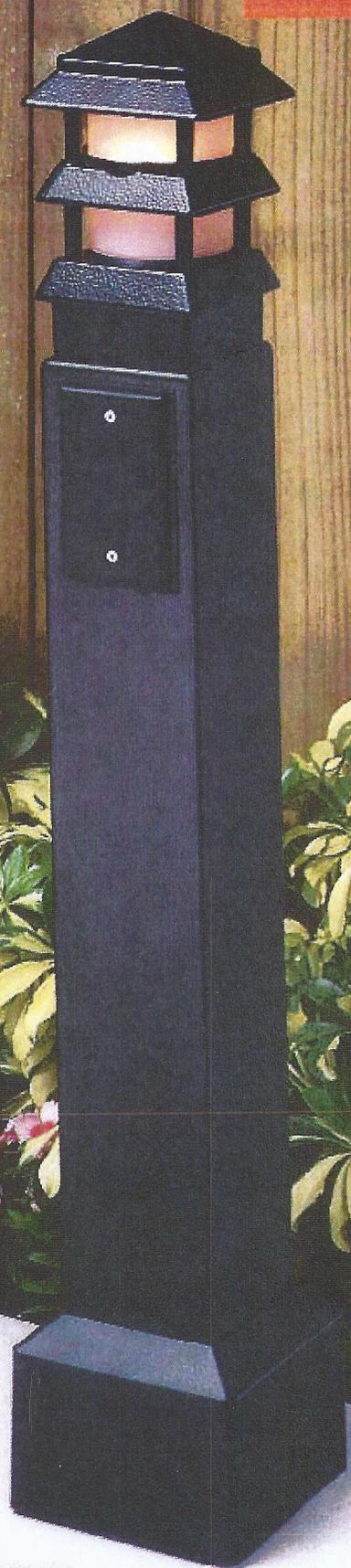
not include installation. To gather the installation estimate, electrical plans and survey work of the park would need to be provided. Lighting for the perimeter of the park is not in this year's budget, but this estimate should give us a guideline to budget for FY2016/17. Staff recommends that in regards to long-term expenses, it is most cost efficient to utilize solar powered bollards for the perimeter of the park.

Attachments

- Proposed Bollard Lighting for Entrance
- Estimate for Park Perimeter

Arlington's new Gard-N-Post™ Bollard Kit

Square light. Square post.



GPBK35B
(also available in Bronze GPBK35BR)

Arlington's **Gard-N-Post™ Bollard Kit** is the low cost answer to installing an attractive bollard outdoors.

It's perfect for wood decks, concrete walkways, and boat docks. And because the square pagoda light fixture matches the shape of the post, it looks great too.

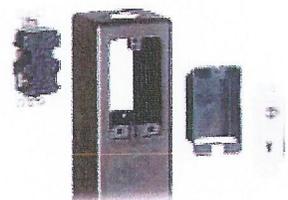
Back-to-back openings in the post, and a low voltage separator give you the option of installing power in one side, low voltage in the other – or 110V devices in both!

Available in black or bronze, the colorant runs throughout the post so there's no chipping or loss of color.

The kit includes a metal support post, 35" non-metallic Gard-N-Post, pagoda light fixture, low voltage separator, blank device plates – everything you need to install the bollard, *except the anchor bolts and caulking.*

UL/CSA Listed. UL Listed enclosure.

Like the pagoda light fixture?
It's also sold separately (GPP60B or GPP60BR), and fits other Arlington Gard-N-Posts; the 19.5" GP19 and the 26" GP26.



Arlington

Fax 570.562.0646 • www.aifittings.com
800.233.4717

Patented. Other patents pending



FL, Biscayne Park

Burke Recreation Center- Solar Pathway Lighting

C/O Troy Nelson

The Burke Recreation Center would benefit for security and illumination that would be powered by solar. Due to some shading and area trees we would look to specify remote power assembly poles to mount in the clear sunny areas facing due south—Verification of clear exposure will need to be completed. I would suggest using our largest power assembly SEPA550-QM to operate 5 Solar Viper fixtures each on an individual 17' MH pole Aluminum anchor base. The power assembly will mount and 12 VDC wiring will run from the power assembly to each fixture. The 1840 linear feet of pathways can be evenly illuminated with 4 total complete systems which each has 1 power array and 5 light poles. The quantities are determined based on .20 FC min lighting uniformity along the pathway based on the assumed length. The systems will operate a 20 Watt LED fixture for 7 hours after dusk and then switch to half intensity until dawn. The solar package will provide over 5 days of battery reserve and the life cycle is between 7 and 9 years. The warranty and general specifications information is attached. Additional site information will need to be determined before final specifications and drawings can be completed.

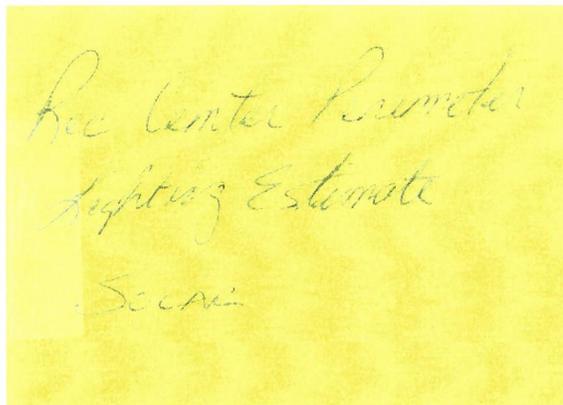
For pricing, budget number for product alone-- no installation is approx. \$48,000-\$59,000. Additional changes may occur in the system design based on shading areas, mounting location options, and exact pathway measurements.

All of the SEPCO systems use poles that are designed to meet the local wind zone requirements we can include foundation details and designs along with structural calculations and signed and sealed documents if notified. Our manufacturing facility is in Stuart, Florida and all of the final product will ship from our facility.

If you have any questions please feel free to contact us- we look forward to providing product that will offer security lighting and sustainability for this recreation area.

Sincerely,

Stephanie Holloran

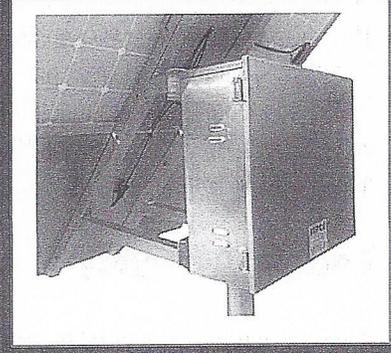
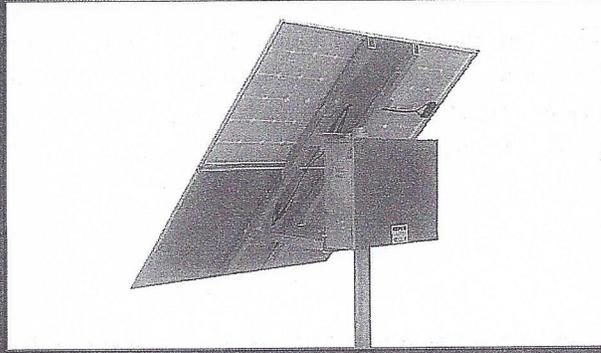
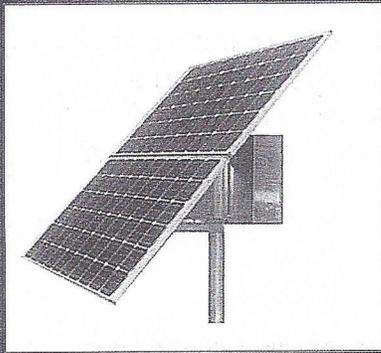


Solar Electric Power Company

1521 SE Palm Court, Stuart, FL 34994 | ph: 772-220-6615 | fax: 772-220-8616 | www.sepco-solarlighting.com



SEPA550-QM Solar Electric Power Assembly



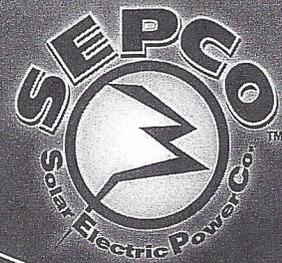
Features & Benefits:

- The SEPA550 solar electric power assembly features two solar modules ranging between 255-300 Watts each integrated together on our double support power bracket. Optional full sheet metal protection for the back side of the panels.
- The 448 Amp hour battery assembly, consisting of four 112 amp hour batteries, is contained within a vented aluminum battery box and includes a wiring harness and control electronics. Optional keyed locks.
- There are 14 different controllers to choose from for different types of applications such as dusk to dawn, dusk activated timer, split timing, and motion activation.
- The systems are built for easy installation with quick connect terminals and can be mounted to a wall, roof, or pole.
- Every system is available to produce DC or AC power depending on the needs of the load.
- Meets AASHTO wind force ratings.
- Powder coating and custom design available.
- 5 year maintenance free system, warranty up to 25 years (see warranty).



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Standard

Commercial Warranty

SEPA Solar Electric Power Assemblies and Lighting Systems

Warranty

Solar Panels (>72 Watts).....	25 Years
Solar Panels (<52 Watts).....	10 Years
SEPCO™ ALC/MPPT Controller.....	5 Years
Sealed "GEL" Battery (Full Replacement).....	2 Years
Sealed "GEL" Battery*(Pro-Rated).....	5 Years
SEPCO™ Light Fixtures.....	5 Years
Mounts and Hardware.....	25 Years
SEPCO™ D.C. Inverter Ballasts.....	5 Years
SEPCO™ LED Lamps.....	10 Years
SEPCO™ D.C. to A.C. Inverters.....	2 Years
SEPCO™ D.C. to D.C. Converters.....	2 Years
All Other Lamps.....	6 Months

Life Expectancy

Solar Panels	30 Years+
SEPCO™ ALC/MPPT Controller.....	15 Years
Sealed "GEL" Battery.....	5-7 Years
SEPCO™ Light Fixtures.....	15 Years
Mounts and Hardware.....	30 Years
SEPCO™ D.C. Inverter Ballasts.....	15 Years
SEPCO™ LED Lamps.....	20 Years
SEPCO™ D.C. to A.C. Inverters.....	15 Years
SEPCO™ D.C. to D.C. Converters.....	15 Years
All Other Lamps.....	5 Years +

Limited Warranty

SEPCO™ warrants its systems to be free of defects in material and workmanship for the period of time as shown above from the date of purchase by the original purchaser. SEPCO™ will repair or replace any system or system part returned prepaid to us within the qualifications above so long as there is no evidence that the part has been misused, abused, damaged by lightning, exposed to operation beyond that implied by the system specifications or altered in any manner without the express written consent of SEPCO™. SEPCO™ disclaims any warranties expressed or implied, including warranties of merchantability and/or fitness for a particular purpose. In no event shall SEPCO™ be held liable for incidental or consequential damages. Warranty claimants must first obtain a return authorization number (RAN) before returning any part to the SEPCO™ factory. Warranty repairs will be handled during normal working hours and returned prepaid by surface transportation. SEPCO™ has the right to substitute components within the system to perform as specified.

- The battery is covered under full replacement from the date it ships from the factory for two years
- The Additional Pro-Rated Warranty States that the day after the 24th month that the system has been shipped from the factory the customer will only be responsible for 50% of the then current Spare Parts Price Total. After the 36th month the customer will only be responsible for 65% of the then current cost. From the 48th month to the 60th month the customer will only be responsible for 85% of the then current cost.

Rev 9/23/14

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SolarViper

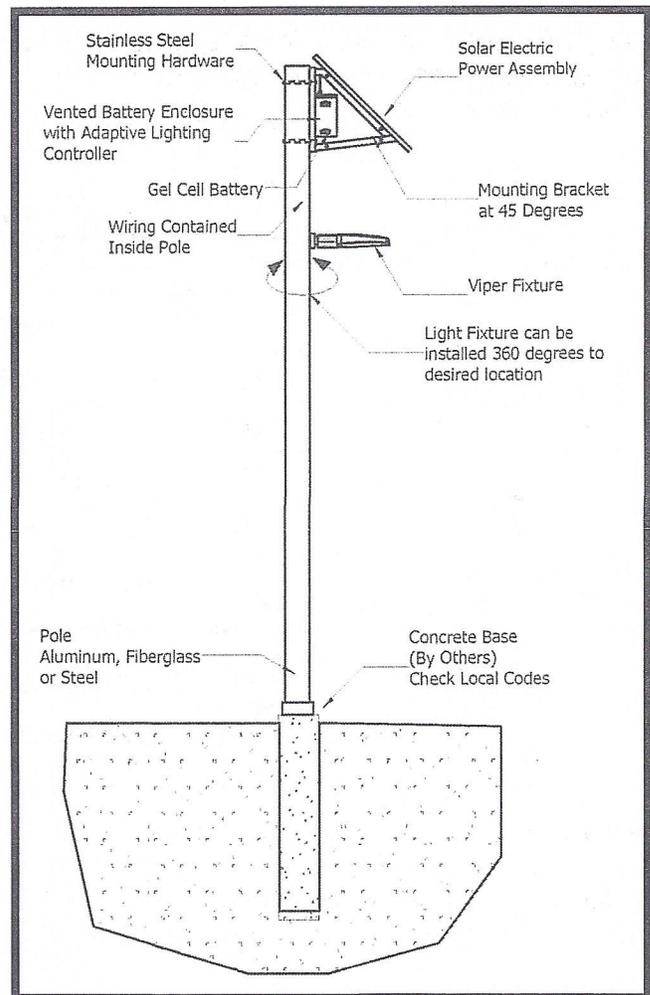
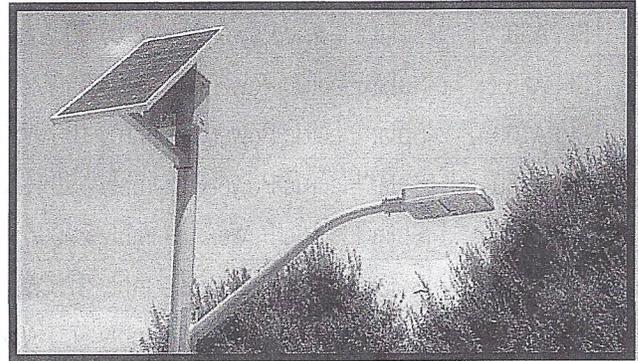
Overview

The SolarViper high powered LED solar lighting system comes complete with solar power assembly, fixture, bracket and all mounting hardware to attach to a pole. SEPCO can also provide a pole to meet wind load specifications.

The SolarViper solar power assembly ranges from 30 Watts to 550 Watts with the size of the battery assembly allowing for a minimum of five days autonomy. The solar power assembly is sized according to installation location and takes into concern local conditions.

The Viper fixture is a contemporary Cobrahead style fixture and comes complete with LEDs and driver used to operate the fixture from the solar charged batteries. The SolarViper ranges from 15 to 90 Watts and comes with Type II, III, IV and V Distribution patterns. There are dimming and finish options available.

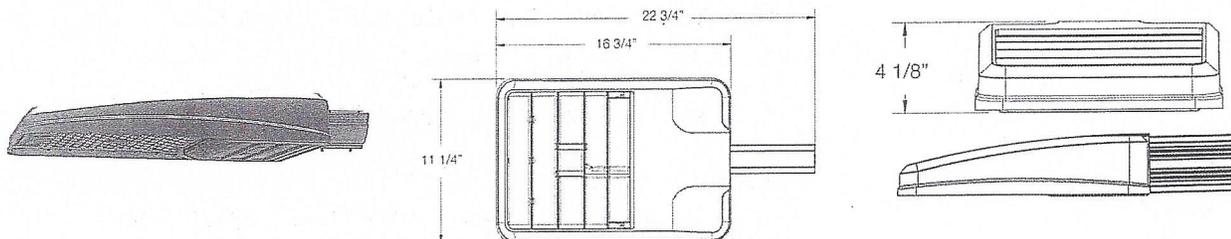
The SolarViper bracket can either be a long elliptical arm SP – Side of Pole Bracket ranging from 4' to 8' or a short arm ST – Side of Pole Tenon Bracket ranging from 5" to 24". The brackets mount directly to any round or square pole.





SolarViper

Fixture



OVERVIEW: The light fixture assembly is a Cobrahead style fixture and comes complete with LEDs and driver used to operate the fixture from the solar charged batteries. The light fixture can be mounted anywhere on the pole or wall below the solar, or can be mounted separately on another pole or wall, even in the shade.

APPLICATIONS: Roadways, Parking Lots, Area, Perimeters

HOUSING: Die Cast Aluminum

FINISH: Black, Bronze, Green, Gray, White, Metallic Bronze, Metallic Titanium

OPTICAL ASSEMBLY: Each LED has an individual optical lens

LAMPING: 15 – 90 Watt LED Type II, III, IV, V Distribution

DIMENSIONS: 16.25" Long x 11.25" Wide x 4.125" High

SHIPPING WEIGHT: 15 lbs

Watts	Color	Optics	Finish
_____	_____	_____	_____

Control Options

Each system comes complete with a controller to run the light for the required operation profile needed for each project.

Notes:

Controller Options

ALC / MPPT NOTES

- 1 - DTD (Dusk to Dawn)
- 2 - DAT (Dusk Activated for ___ Hours)
- 3 - DIM (Dimming Operation)
- 4 - DATDIM (Dusk Activated, Dim for Remainder of Night)
- 5 - DATDIMFI (DAT, DIM, Full Intensity ___ Before Dawn)
- 6 - DTDDIMMAIDFI (DTD, DIM, Full Intensity MAID Activated)
- 7 - DATDIMMAIDFI (DAT, DIM, Full Intensity MAID Activated)
- 8 - AOC (Always On Controller)
- 9 - CUS (Custom Configuration, see description)

- MAID – Motion Activated InfraRed Detector
- OCS – Occupancy Sensor
- RAS – Remote Actuated Switch
- RTC – Real Time Clock
- RRTC – Remote Real Time Clock
- SLT – Spring Loaded Timer

VPR - Viper

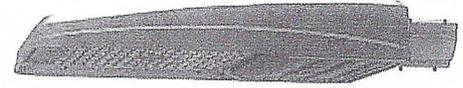


FIXTURE CODE: VPR

PROJECT: _____

CUSTOMER: _____

NOTES: _____



FEATURES & BENEFITS:

- The Viper fixture uses solid state / light emitting diode (LED) light source
- 12 VDC electronic dimming drivers
- Die cast aluminum housing
- Multiple light distributions available

SPECIFICATIONS:

OVERVIEW: The light fixture assembly is a Cobrahead style fixture and comes complete with LEDs and driver used to operate the fixture from the solar charged batteries. The light fixture can be mounted anywhere on the pole or wall below the solar, or can be mounted separately on another pole or wall, even in the shade.

APPLICATIONS: Roadways, Parking Lots, Area, Perimeters

HOUSING: Die Cast Aluminum

FINISH: Black, Bronze, Green, Gray, White, Metallic Bronze, Metallic Titanium

OPTICAL ASSEMBLY: Each LED has an individual optical lens

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DIMENSIONS: 16.25" Long x 11.25" Wide x 4.125" High

SHIPPING WEIGHT: 15 lbs



Note: SEPCO™ reserves the right to modify the above details to reflect changes in the cost of materials and/or production and/or design without prior notice.

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35" Gard-N-Post™ Bollard Kit

GARD-N-POST with pagoda-style light fixture included. Post is UV rated plastic for long outdoor life. Two non-chipping colors.



GPBK35B/R

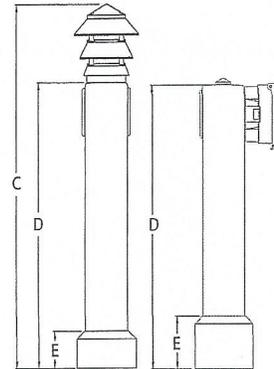
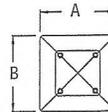
CATALOG NUMBER	UPC/DCI/NAED MFG #018997	DESCRIPTION	UNIT PKG	STD PKG	DIM A	DIM B	DIM C	DIM D	DIM E
GPBK35B	77040	Black	1	1	6.070	6.070	35.000	27.000	3.500
GPBK35BR	77041	Bronze	1	1	6.070	6.070	35.000	27.000	3.500

Add suffix "GC" to Catalog # when ordering in Canada, for example GPBK35BGC.

PATENTED. ADDITIONAL PATENTS PENDING.



CSA listed with grounding lug.



GPBK35B/R

GPBK28B

FEATURES AND BENEFITS

- Molded-in color is permanent – unlike painted posts where lawn equipment chips the color off
- Openings on both sides of the post for back-to-back power
- Low voltage separator provided for Power use on one side and Low Voltage on the other (phone, security, & cable TV)
- Perfect for wood decks, boat docks, and concrete walkways
- Makes a very low cost bollard
- Kit includes everything needed for installation, except anchor bolts, caulking, and bulb.
- Includes Arlington's Large Louvered Pagoda Light Fixture
- (2) combination KOs for a UL Listed enclosure

Kit comes with...

GARD-N-POST & metal stabilizer, boot, (pagoda light fixture & decorative spacer or IN-AND-OUT™ cover), (2) blank device plates with gaskets & screws, low voltage separator, and removable KO plate with screws.

Recommended anchors (not included)...

Concrete: (4) 3/8" x 2-1/2 Tapcons®

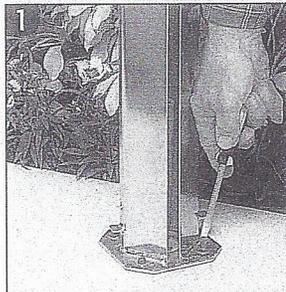
Cast-in-Place Concrete:

(4) 3/8" anchor bolts

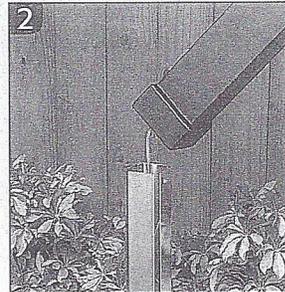
Wood Deck: (4) 3/8" bolts with nuts and washers

Tapcons® is a registered trademark of ITW Buildex.

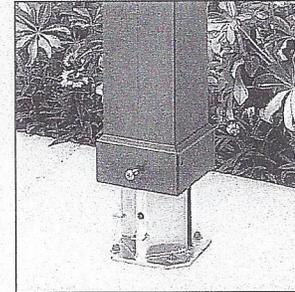
Installation Instructions



1 Metal support post attaches easily to surface.



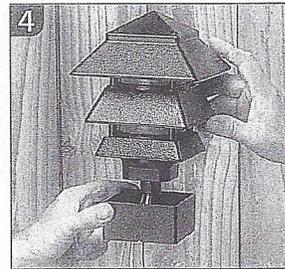
2 The non-metallic GARD-N-POST slides over the support post.



3 Both posts are held firmly in place with the supplied screws.



4 Place decorative curb over GARD-N-POST. Slide it down to cover the installation.



5 Press fit spacer to base of lamp.



6 Install pagoda light to post with locknut inside the top of the post. Wire fixture.