



ITEM #2: For the ARCHITECTURAL COMMISSION on MONDAY, March 17th @ 7:00 P.M.

REQUEST: Consideration of a request for landscape lighting for property located at 6217 Pine Cone Court within the Highland Pines Subdivision submitted by Apple Landscaping.

Proposed Project:

The request is being made by the property owner to allow landscape lighting at the petitioners' residence. The property is located within the Highland Pines PUD\Subdivision and is situated at the southeast corner of Pine Cone Court and Pine Tree Drive.

Thirty one (31) low voltage (specs attached) lights are proposed to be placed in the landscaping and around a proposed pool on the side of the residence. A proposed this is a LED illumination system. Thirteen (13) path lights will be mounted around the pool deck, patio and walkways to provide safer access around the pool area. These will contain a 3 watt LED light source on a 12' light stem with a Model AL 100 Area light hat. Eight (8) step lights (5 watt output) are also proposed to be installed in stoops leading into the residence and steps to the patio and pool deck area . Ten (10) 4 or 5 watt spot lights (Model BL 100) and approximately 9" tall will be utilized to uplight trees and landscaping around the pool and patio. These lights will be disbursed within the landscaping. A site plan is attached for the review of the AC.

ZONING REGULATIONS:

Lighting within the Residential Districts is identified as "Class 3" lighting and as such must meet "tests" identified below and bolded for this lighting class. As proposed this request is probably best identified as "Landscape Lighting" defined as follows;

"LANDSCAPE LIGHTING: Lighting which is located on the grounds and is primarily designed to illuminate or silhouette vegetation, a lawn or garden. This type of lighting may incidentally illuminate a portion of a building."

5-9-9 EXTERIOR LIGHTING

- (A) Purpose. The village comprehensive plan refers to certain characteristics of the village which are cherished by its residents.

The village of Long Grove is unique. . . Long Grove has managed to retain much of the pristine rural charm,. This has not occurred by coincidence but through thoughtful design.

One of the primary thrusts of the planning efforts of the village has been to achieve a consistent and pleasing quality of life.

Excessive amounts of artificial light intruding upon adjacent properties and visible to the public constitutes light pollution which tends to destroy the natural rural charm the village has strived to perpetuate. Light pollution is aesthetically destructive. It is inconsistent with the rural night and diminishes the economic value of properties which are subjected to light pollution. Our village residents moved here and purchased property here to enjoy the rural charm of the village, not to be subjected to needless and aesthetically harmful light pollution. The purpose of this chapter is to eliminate or reduce as much as possible light pollution.

It is the intent of this section 5-9-9 to provide standards for controlled and moderate forms of illumination systems that promote safety and are consistent with the planning efforts of the village.

(B) Classes of Lighting Areas.

1. Class 1. Class 1 consists of the B1 zoning district.
2. Class 2. Class 2 consists of all other nonresidential zoned areas not included in Class 1. This classification also includes all property utilized for agricultural, educational or religious purposes. This classification does not include public or private roads, but does include driveways to areas that are otherwise within this classification.
3. Class 3. **Class 3 consists of residential areas of the village, including R1, R2, R3 and all residential portions of properties in a planned unit development.**
4. Class 4. Class 4 consists of all public and private roads, excluding driveways.

(C) General Regulations. The regulations and standards set forth in Table 5-14-A below shall regulate and govern the use of, modification of, construction of, installation of, or the erection of any illumination system for the purpose of lighting external areas, including, but not limited to, signs, parking areas, buildings, landscaping, walkways, porches, driveways, and public or private roads. Each illumination system must meet tests 1 through 6, inclusive of Table 5-14-A, before a permit can issue. Table 5-14-A indicates non-permitted uses (NP symbol), permitted uses (P symbol), or uses subject to review and approval of the architectural board (AB symbol).

TABLE 5-14-A LIGHTING SYSTEM TESTS

Each lighting system must be permitted or have received approval in each test group (1-6) before a permit will be issued.

SYMBOLS

P = Permitted NP = Not Permitted AB = Architectural Board Approval Required

TEST 1

<u>Usages Permitted</u>	<u>Class 1</u>	<u>Class 2</u>	<u>Class 3</u>	<u>Class 4</u>
Commercial building lighting	AB	AB	AB	--
Landscape lighting	AB	AB	AB	--
Private sign illumination	NP	AB	NP	--

Roadsign lighting	AB	AB	NP	--
Municipal parking lot	P	--	--	--
Commercial parking lot	AB	AB	--	--
Residential yard/grounds lighting	AB	--	P	--
Driveway lighting	AB	AB	P	--
Holiday lighting	P	P	P	--
Intersection or street lighting	AB	AB	AB	AB
Exterior lighting of dwelling	AB	--	P	--
Security lighting	AB	AB	AB	--

TEST 2

Light Sources Permitted	Class 1	Class 2	Class 3	Class 4
Natural gas	P	P	P	P
Incandescent (white or clear)	P	P	P	P
Halogen	AB	AB	AB	AB
Mercury vapor	NP	P	NP	P
Sodium vapor	NP	NP	NP	NP
Incandescent (multi-colored Christmas or temporary use)	P	P	P	--
Incandescent (malibu type)	NP	NP	P	--
Other	AB	AB	AB	AB

TEST 3

Fixture Styles Permitted	Class 1	Class 2	Class 3	Class 4
Fixtures depicting 19th century styles	P	P	P	P
Other	NP	AB	P	P

TEST 4

Fixture Height	Class 1	Class 2	Class 3	Class 4
Fixture 15 feet or less	P	P	P	P
Fixture higher than 15 feet	AB	AB	NP	P

TEST 5

<u>Brightness</u>	<u>Class 1</u>	<u>Class 2</u>	<u>Class 3</u>	<u>Class 4</u>
Source watts over 200	NP	NP	NP	AB
Source watts under 200	P	P	P	P

TEST 6

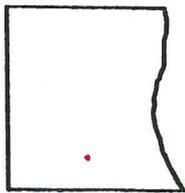
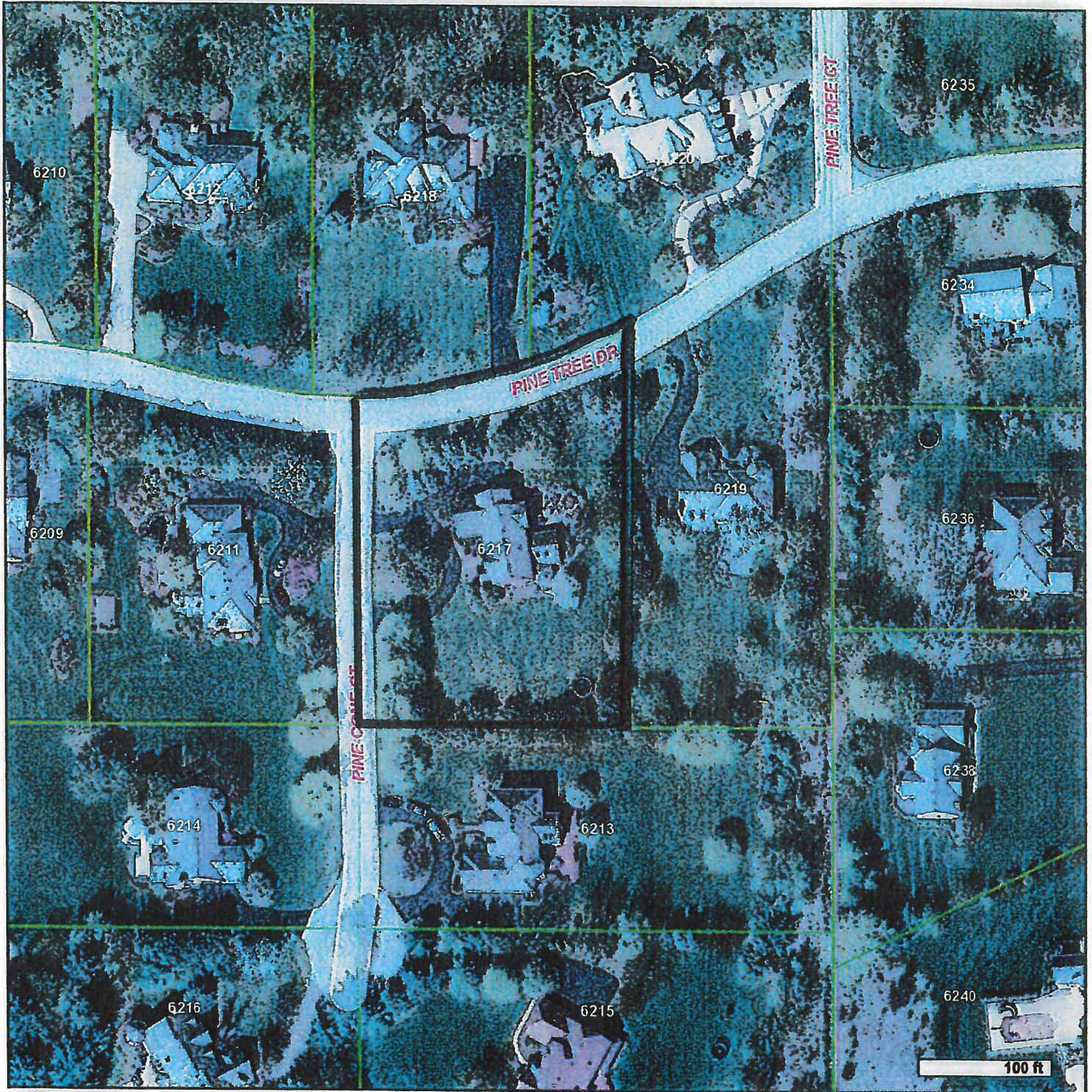
<u>Illumination Of Adjacent Lot</u>	<u>Class 1</u>	<u>Class 2</u>	<u>Class 3</u>	<u>Class 4</u>
External lights which glare into traffic and/or adjacent neighboring properties	NP	NP	NP	--
Reflected light from a dwelling, commercial structure, or sign which is greater than 2 foot-lamberts when measured at the structure. Also applies to structure inadvertently lighted	NP	NP	NP	--
Direct light greater than 2 foot-lamberts from any source reflected off a white surface which is 12 feet from source	NP	NP	NP	

ARCHITECTURAL COMMISSION DECISION:

The AC should review the request for lighting against the "Test Criteria" listed above. A light source LED has been identified and should be approved as an "Other" light source by the AC. Aside from this the other lighting criteria has been met. "Spillage" of light on adjacent properties should not be an issue as lighting will be low to the ground and near the principal structure or disbursed within the landscaping. Fixtures appear "dark sky" compliant based on photo metrics and specs submitted with the fixtures. A landscape barrier exists between the proposed lighting and nearest structure to the east.

Any variations considered to avoid an undue hardship upon the petitioner/owner, should indicate that the illumination system, with the variance, shall not have any adverse effect upon adjacent properties, as well as the illumination system with the variation shall not result in light pollution subject to public view.

Lake County, Illinois



LakeCounty Geographic Information System

Lake County Department
of Information Technology
18 N County St
Waukegan IL 60085
(847) 377-2373

Map Printed on 03/12/2014



-  Lake County Border
-  Streams
-  Tax Parcels
-  Trails

Disclaimer

The selected soil feature layer may not occur anywhere in the current map extent. A Registered Land Surveyor should be consulted to determine the precise location of property boundaries on the ground. This map does not constitute a regulatory determination and is not a base for engineering design. This map is intended to be viewed and printed in color.

LOW-VOLTAGE LANDSCAPE LIGHTING SCHEDULE

*NOTED ON LANDSCAPE PLAN WITH THE FOLLOWING
SYMBOLS:*

 = PATH LIGHT

 = SPOT LIGHT

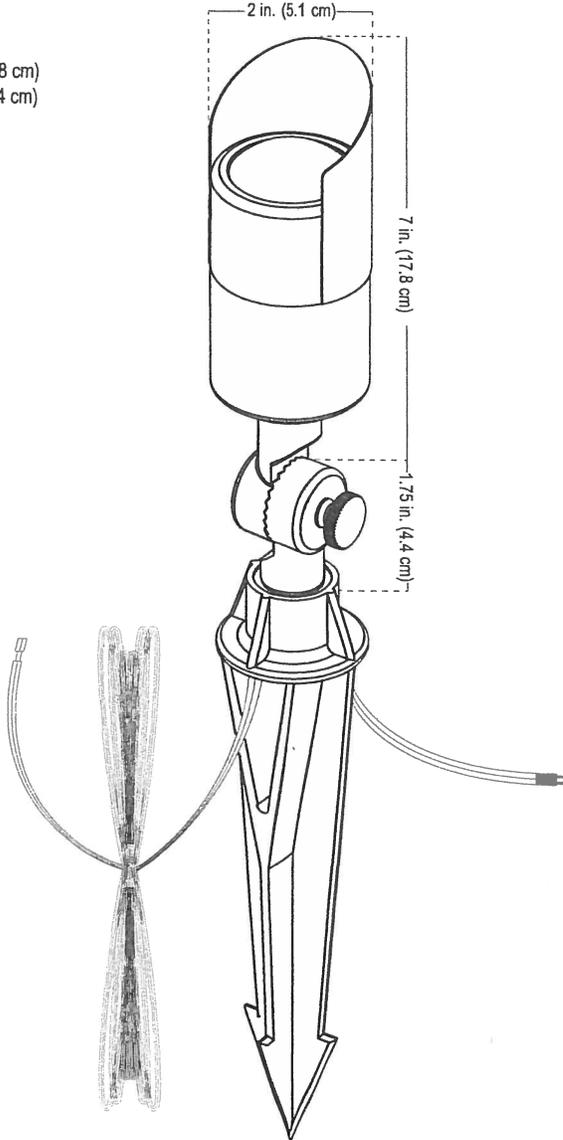
 = STEP LIGHT

ALLIANCE

Specification Sheet

Model: BL100 (MR16 Bullet Light)

Fixture Length: 7 in. (17.8 cm)
 Base Height: 1.75 in. (4.4 cm)
 Width: 2 in. (5.1 cm)



Notes:

SPOT LIGHT

Project:
Type:

Specifications and Features:

- Body:** Solid brass with an aged brass finish
- Knuckle:** Solid brass with dial adjustment for easy adjustments
- Shroud:** Brass with a clear glass convex lens and double o-ring gasket
- Socket:** Spring loaded ceramic bi-pin socket with dual contact and lamp clips
- Wire:** Industry First, double wire lead pre-connected to the fixture, 16 awg (UL listed), brown
 - 25 foot wire lead, pre-stripped for easy wire connection
 - 18 inch wire lead, LED connection ready
- Stake:** Plastic ground stake, attached to the fixture (8.5 in; 21.6 cm length)
- Warranty:** Lifetime warranty on fixture housing
- Certification:** Complies with the requirements of UL-1838 and CAN/CSA-C22.2 No. 250.7. Identified with the ETL and cETL Listed Mark.



Lamp Options

Model #	Base Type	Angle	Wattage	Lumen Output
LMR16-LED-4W-NS	MR16	15°	4w	250lm
LMR16-LED-4W-F	MR16	45°	4w	250lm
LMR16-LED-4W-WF	MR16	60°	4w	250lm
LMR16-LED-5W-NS	MR16	15°	5w	310lm
LMR16-LED-5W-F	MR16	45°	5w	310lm
LMR16-LED-5W-WF	MR16	60°	5w	310lm
LMR16-35-36 (Halogen)	MR16	45°	35w	310lm

LED Ordering Guide: Model-Lamp Wattage-Lamp Angle
 Example: BL100-LED-5W-F

Accessories Available:

Accessories Available:	MR16 Accessories:
Mounting Accessories:	Linear Lens
RISER6 - 6" brass riser, aged brass finish	Frosted Lens
RISER12 - 12" brass riser, aged brass finish	Spread Lens
RISER18 - 18" brass riser, aged brass finish	Blue Lens
RISERADJ - Adjustable plastic riser, aged brass cap	Hex Louver
RMB - Round Mounting Base	
GUTTERMOUNT	

Model IL4.xxx.500

STEP LIGHT



IL4.400.500 Mud Finish Shown

construction

Model IL4.xxx.500 4" width x 1/2" height x 7/8" depth

- Faceplates heavy duty and field replaceable
 - Aluminum .090 thick alloy 5052T
 - Solid Copper or Brass .090 thick
 - Stainless Steel 18g alloy 304
- 6-32 slotted brass or stainless steel screws
- Self leveling insert is Heavy 18 gauge 304 Stainless Steel
- Holes threaded to insert plate

Tested and listed by



UL1838 low voltage lighting systems

electrical

Model IL4.xxx.500

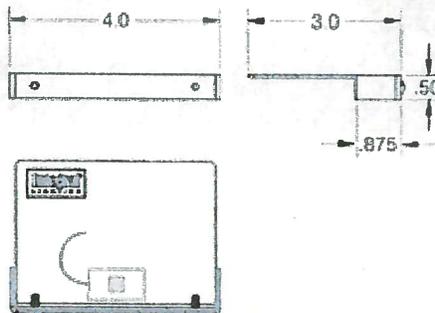
Single array – 16 chips

5 watt output

1.2 watt energy consumption

- LED available in 2700K, 3000K, or 4200K
- LED 70 CRI / 60LM/w
- Multi Circuit Parallel LED structure
- Field replaceable LED module
- Nylon Lens with integrated heat sink
- Circuitry encapsulated for moisture resistance
- 72" long 18/2 leads for connection
- Voltage requirement min 8.0v AC / max 12.5v AC
- Estimated life of 40,000 hours at 11.5v AC input
- Magnetic and electronic transformer compatible

dimensions



Available LED Options
 2700K incandescent look and feel
 3000K our original white
 4200K cool white



MANUFACTURED IN U.S.A.

18 finishes



51 North Elm Street, Wernersville, PA 19565 Phone: 800.861.1364 Fax: 800.388.2898 www.integral-lighting.com

ALLIANCE

Specification Sheet

PATH LIGHT

Project:
Type:

Model: AL100 (Area Light Hat)

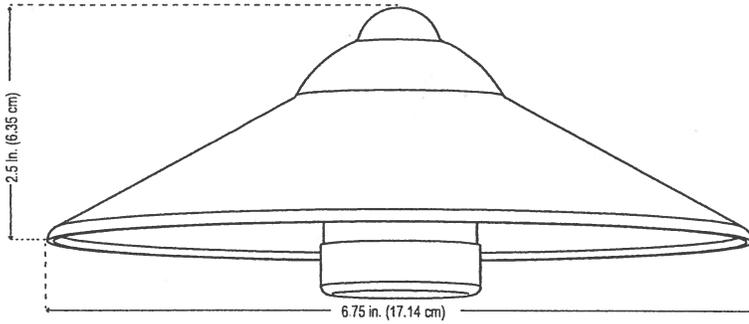
Diameter: 6.75 in. (17.14 cm)
 Height: 2.5 in. (6.35 cm)
 Lens Height: 2 in. (5.08 cm)
 Lens Diameter: 1.5 in. (3.81 cm)

Specifications and Features:

Body: Brass area light hat, aged brass finish

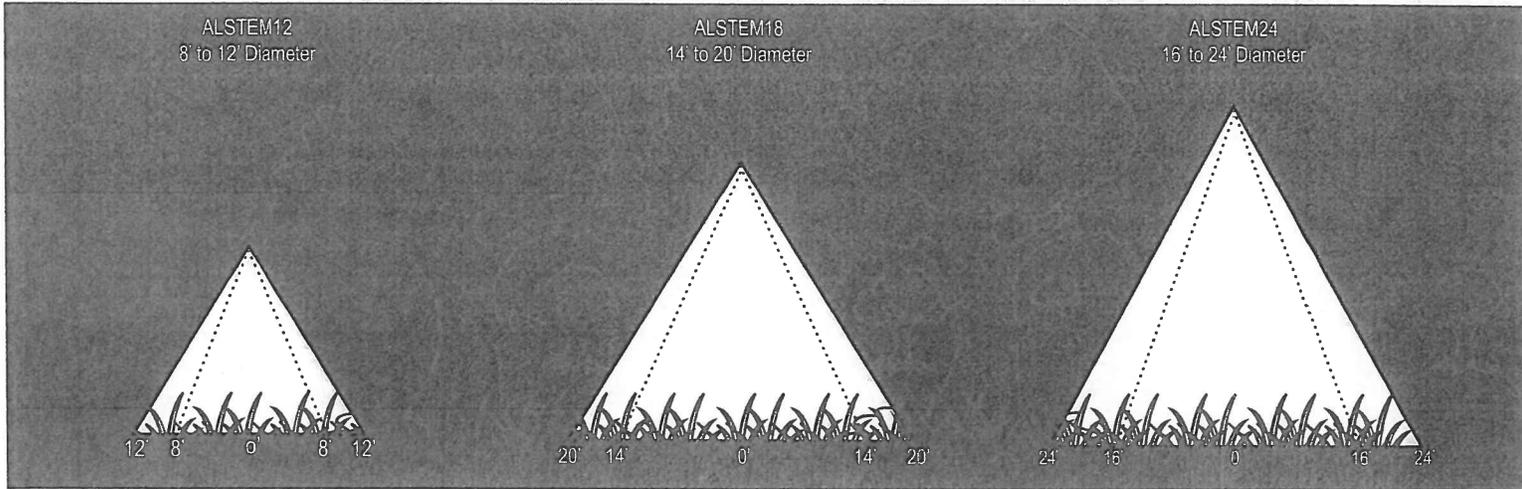
Lens: Polycarbonate frosted lens with rubber gaskets

Warranty: Lifetime warranty



Area Light Stems (Sold Separately):			
Model #:	Height	Lamp Base	Lamp Options
ALSTEM12	12"	Bipin/G4	<ul style="list-style-type: none"> • LBIPIN-LED-3W 3w - 150 lumen LED • LXELOGEN-20W 20w xelogen
ALSTEM18	18"		
ALSTEM24	24"		
ALSTEM60	60"		
ALSTEMADJ	18-29"		

Photometrics:



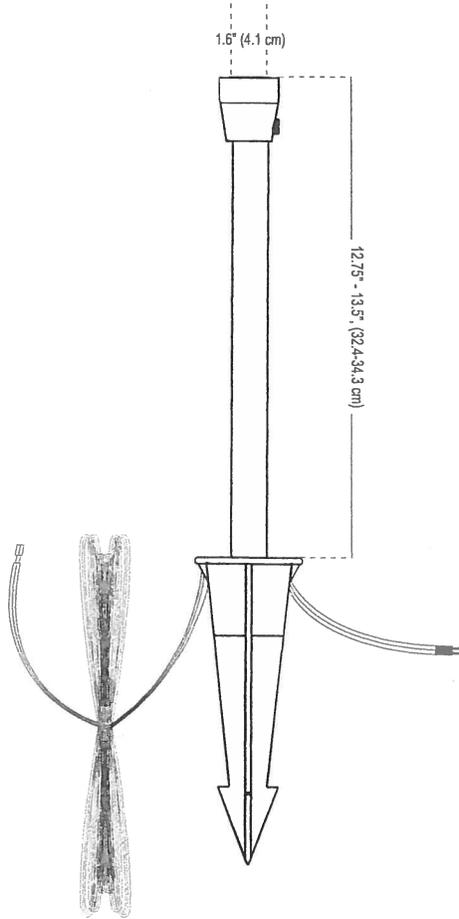
Notes:

ALLIANCE

Specification Sheet

Model: ALSTEM12 (12" Area Light Stem)

Fixture Height: 12.75" - 13.5", (32.4-34.3 cm)
 Stem Diameter: 1.6" (4.1 cm)



Notes:

PATH LIGHT

Project:	PATH LIGHT
Type:	

Specifications and Features:

- Body:** Brass stem, aged brass finish
- Collar:** Brass, adjustable with thumb screw
- Socket:** Spring loaded ceramic bi-pin socket with dual contact
- Wire:** Industry First, double wire lead pre-connected to the fixture, 16 awg (UL listed), brown
 - 25 foot wire lead, pre-stripped for easy wire connection
 - 18 inch wire lead, LED connection ready
- Stake:** Plastic ground stake, attached to the fixture (8.5 in; 21.6 cm length)
- Warranty:** Lifetime warranty on fixture housing
- Certification:** Complies with the requirements of UL-1838 and CAN/CSA-C22.2 No. 250.7. Identified with the ETL and cETL Listed Mark.



Lamp Options

Model #	Base Type	Wattage	Lumen Output
LBIPIN-LED-3W	BIPIN/G4	3w	150lm
LXELOGEN-20 (Halogen)	BIPIN/G4	20w	150lm

LED Ordering Guide: Model-LED

Example: ALSTEM12-LED

Accessories Available:

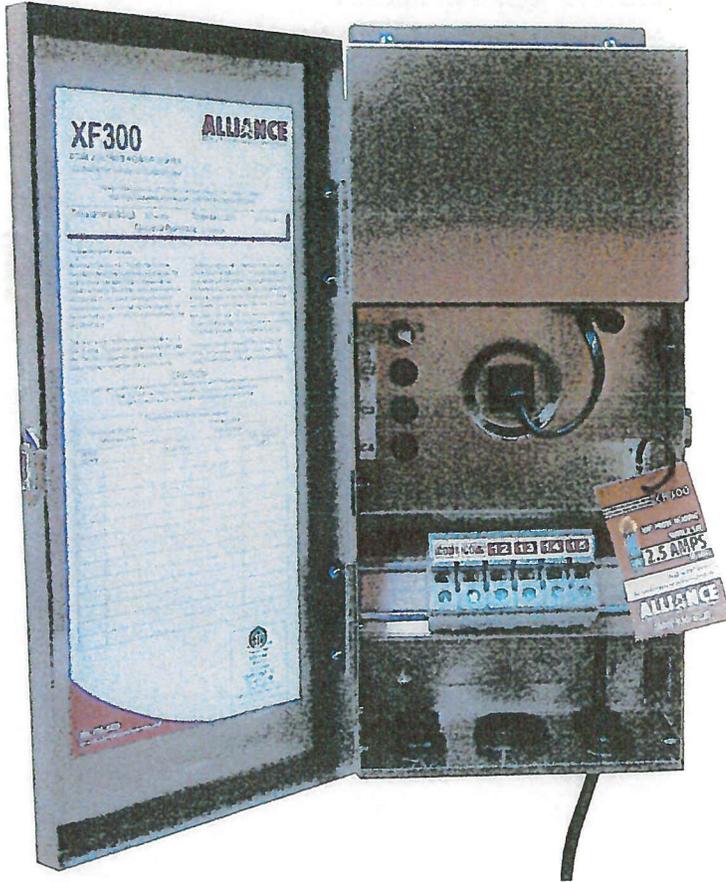
Mounting Accessories:
RMB - Round Mounting Base

ALLIANCE

Specification Sheet

Model: XF300 (300 Watt Transformer)

Description: Low voltage power supply suitable for indoor or outdoor use



Notes:

Project:

Type:

Specifications:

Max Amperage (Load):	2.5 amps
Max Input (Primary Voltage):	120 volts
Secondary Voltage:	12 volts*
Available Voltage Taps:	12,13,14,15
Exterior Construction:	Stainless Steel
Warranty:	Lifetime Warranty
Certification:	UL Listed to U.S. and Canadian safety standards for low voltage landscape lighting (UL 2108)



*You may use any combination of output terminal lugs (12-15 volt). However you may not exceed 300 watts on any single terminal lug.

Features:

- Fully potted, insulated, single core transformer
- Inline surge protection
- Easy on/off, secondary breaker switches on each common tap
- Stainless steel cabinet with removable and lockable latched door
- Multiple voltage taps ranging from 12 to 15 volts
- Two common lug terminals
- Tilted lug bar where the secondary lugs will be easier to access and install. The adjusted lug bar eliminates the blind spots that occur when trying to install low voltage wire to the terminal lug.
- Relay installed to bring the amperage delivered to the timer and photocells down to a lower level thus improving the longevity of life to those accessories and eliminating failures.
- Amp loop that provides contractors with one easy point of reference to check the primary amperage on the transformer
- Snap-In photocell ready receptacles
- Removable bottom panel allowing for easy access to lug terminal, more room for wiring, and the ability to attach conduits through the five knockouts.

Accessories Available:

Transformer Accessories:

TIMER - Mechanical Timer

DGTimer - Digital Timer

PC - Photocell