



STERNER™

INFRANOR™



INFRANOR™

SERIES 872/876

Area & Airport Apron Precision Floodlighting



INFRANOR™ SERIES 872/876

The Infranor Series 872/876 luminaire combines the benefits of extruded aluminum construction with precision engineered optics. Its unique asymmetrical forward throw optics provides highly uniform light levels in both the horizontal and vertical planes, while incorporating integral louvers to provide excellent glare control and unsurpassed house side and edge of beam cutoff. Thus making the 872/876 the ideal choice for area applications where product life and strict photometric criteria are a priority.

SERIES 872 / 876 FEATURES & BENEFITS

EXTRUDED ALUMINUM HOUSING

is mitre-cut from a single piece of 6063-T6 alloy, to ensure rigidity and durability. Also allows for an optional anodized finish that is extremely resistant to flaking, fading, and corrosive environments.

DUAL INTEGRAL LOUVER SYSTEM

provides superior glare control by directly shielding the lamp's arc tube from visual viewing angles. Optional Airport Louver ('AV') includes a third louver for additional glare and spill light control for control towers and approaching aircraft.

EXTRUDED ALUMINUM BALLAST BOX

is finned for additional heat dissipation and attached separate from the housing to increase lamp and electrical component life. Made from 6063-T6 alloy to allow for an optional anodized finish that is extremely resistant to flaking, fading, and corrosive environments.

EXTRUDED ALUMINUM BALLAST TRAY

is used as a heat sink for electrical components. Tray incorporates fins for additional heat dissipation to help increase electrical component life.

5/16" THICK STEEL YOKE

allows for quick and easy installation with optional mounting hardware.

EXTRUDED REFLECTOR FORMER

ensures repeatable optical performance and durability from handling and thermodynamic characteristics. Available in an asymmetric forward throw distribution ('4L').

872 CAST REMOTE BALLAST BOX can be installed in an easy to access maintenance friendly location.

PATENTED LAMP STABILIZER prevents lamp sag from gravity and vibration, in turn maximizing optical performance and lamp life.

LAMP	BULB TYPE	LOUVER	IES CLASSIFICATION	MAX CANDLEPOWER	OPTIMUM AIMING ANGLE
400MH	ED/BT37	STANDARD	TYPE-IV	26,475	63
1000MH	ED/BT37	STANDARD AIRPORT	TYPE-IV	93,454 85,500	62
400HPS	E18	STANDARD AIRPORT	TYPE-IV	75,600 66,100	61
1000HPS	E25	STANDARD AIRPORT	TYPE-IV	183,700 179,700	60



Note: Visit our website at www.sternerlighting.com for additional photometric information not listed. Contact our experienced Application Engineering department for design assistance when applying this product.

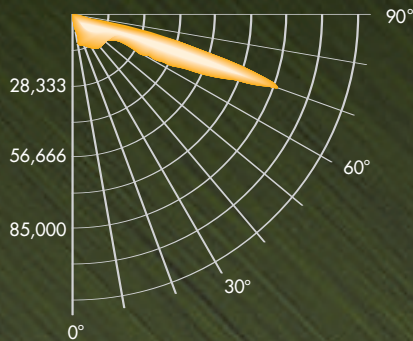
UNIQUE ASYMETRIC BEAM IDEAL FOR AIRPORT APRON LIGHTING

The asymmetric distribution offered in the Infranor Series 872/876 when coupled with optional Airport Louver ('AV'), will photometrically perform to meet the specific design criteria required for airport apron lighting. Uniformity and cutoff restrictions in both the horizontal and vertical plane, house side spill light control, and direct-view shielding of the lamp's arc tube are easily met. For added details, please refer to our Airport Airside Design Guide or contact Sterner's experienced Application Engineering department for design assistance.

PHOTOMETRIC DETAILS

(1000MH with airport louver 'AV' shown below)

Vertical Plane Candela Distribution (max candela trace)



	Lumens	% of Lamp
Downward Street Side	52,221	50.0%
Downward House Side	101	0.1%
Downward Total	52,321	50.1%
Upward Street Side	495	0.5%
Upward House Side	0	0.0%
Upward Total	495	0.5%
Total Flux	52,817	50.5%

1000MH Pre-aimed For Maximum Performance at 62° (+/- 5° adjustment)



Control illumination levels by combining multiple fixtures.
Control spread of distribution by adjusting pole height.



Demonstrates edge of beam cutoff, horizontal & vertical uniform illumination.



Demonstrates house side spill light control.

872 / 876

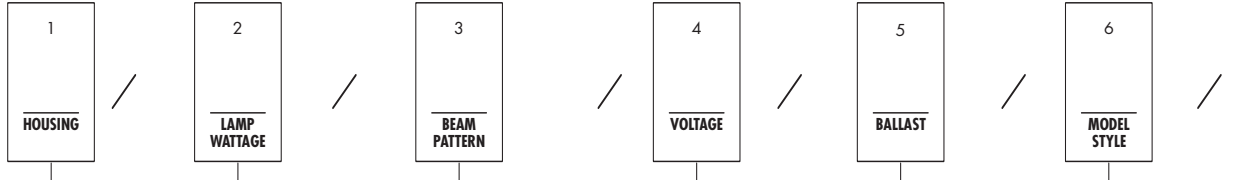
ORDER EXAMPLE

1 2 3 4 5 6
876 / 1000MH / 4L / 277 / C / YK /

ORDERING SEQUENCE

Item Sequence:

ORDER NUMBER:



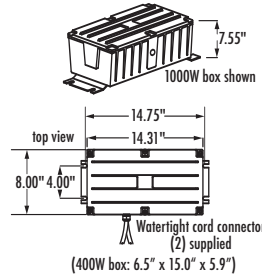
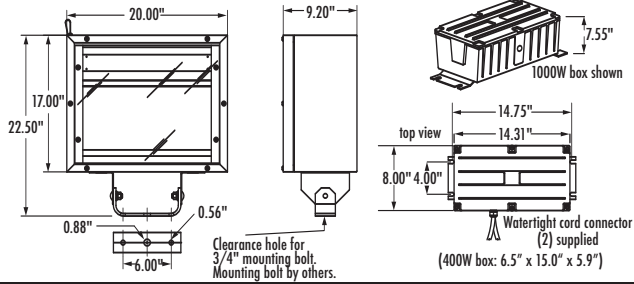
872 (remote) 876 (attached)	400MH (ED/BT37) 1000MH (ED/BT37) 750PMH (pulse ED/BT37) 1000PMH (pulse ED/BT37) 400HPS (E18) 1000HPS (E25)	4L¹ Asymmetric Forward Throw	120 208 240 277 347 480	C Core & Coil	YK Yoke
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NOTES: 1) Fixture designed to be aimed for optimal performance. See table on previous page for details.
 2) First digit denotes fixture qty. per assembly.
 3) In-line brackets and 'PD' Base Pad require use of 'SF' Slip Fitter option per fixture.
 4) 'TS' Top Shield finish is black unless otherwise specified.
 5) 'SG' Stone Guard not available for use with 'TS' Top Shield option.
 6) 'PRL' Photocell Receptacle Luminaire not available with '872' remote version.
 7) Extruded parts (housing, doorframe, & ballast box) are anodized. Fabricated yoke parts and mounting options are powder finish.

DIMENSIONS & DETAILS

872

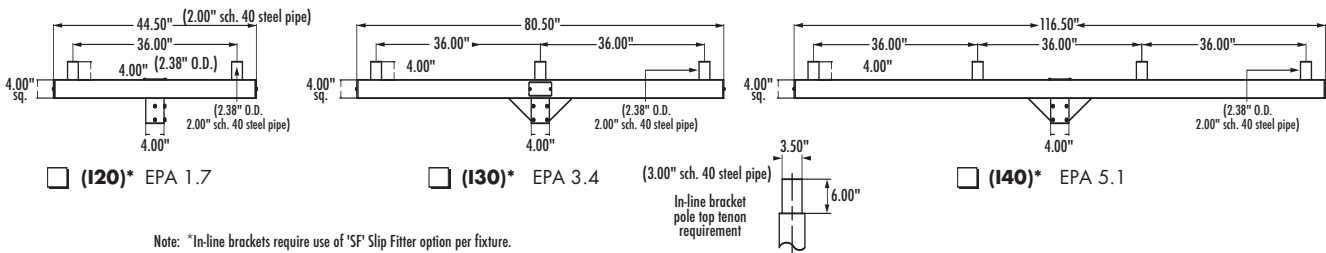
REMOTE BOX WEIGHT: 50 LBS.
 FIXTURE WEIGHT: 42 LBS.
 EPA: 2.8 (fixture only)



QUANTITY / MOUNTING DETAILS (Note: First digit denotes fixture qty. per assembly)

(110) Single fixture

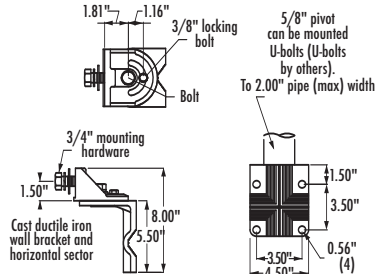
IN-LINE BRACKETS



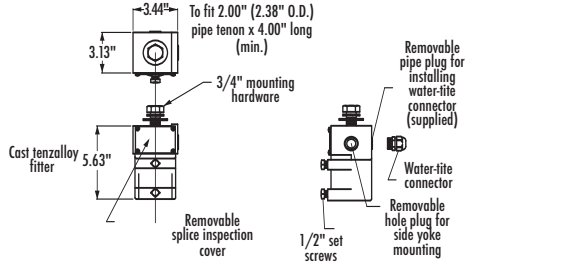
Note: *In-line brackets require use of 'SF' Slip Fitter option per fixture.

GENERAL MOUNTING DETAILS

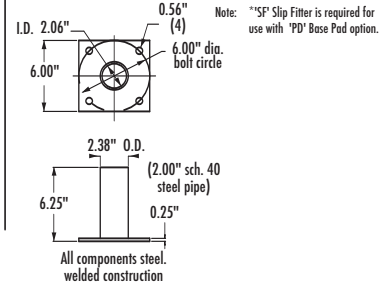
(WB) Wall Bracket (1/2" anchors by others)



(SF)* Slip Fitter Note: **SF Slip Fitter is required for use with in-line brackets and 'PD' Base Pad options.



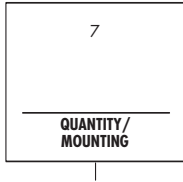
(PD) Base Pad (1/2" anchors by others)



Infranor Area Lighting



7 / 8 / 9 / 10
I30 SF / **AV** / **N** / **BZ**



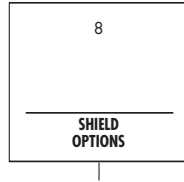
110² Single Fixture

In-Line Bracket **Cluster Bracket**

I20^{2,3} 2-Way **C28**² 2 @ 180°
I30^{2,3} 3-Way **C29**² 2 @ 90°
I40^{2,3} 4-Way **C39**² 3 @ 90°
C49² 4 @ 90°

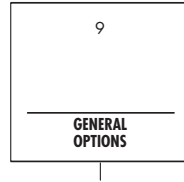
General Mounting

PD³ Base Pad
SF³ Slip Fitter
WB Wall Bracket



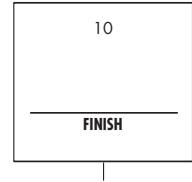
AV Airport Louver
TS⁴ Top Shield
SG⁵ Stone Guard

N Not Required



FL Fuse Luminaire
SC Safety Cable
PRL⁶ Photocell Receptacle Luminaire

N Not Required



Powder

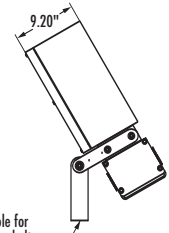
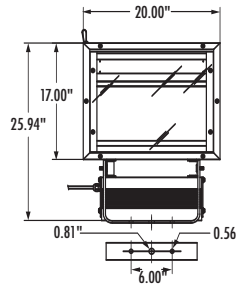
BK Black
BZ Dark Bronze
WH White
AL Natural Aluminum

Anodized

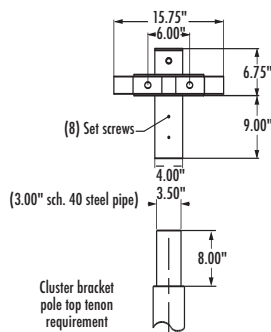
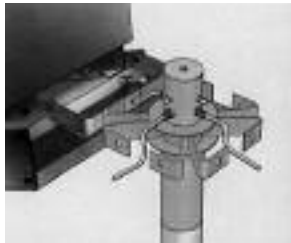
LBZ⁷ Light Bronze
MBZ⁷ Medium Bronze
DBZ⁷ Dark Bronze
ABK⁷ Black
AAL⁷ Natural Aluminum
NS Non-Standard Finish
(consult factory)

876

FIXTURE WEIGHT: 90 LBS.
 EPA: 3.60



CLUSTER BRACKETS



(C28)



(C29)



(C39)



(C49)

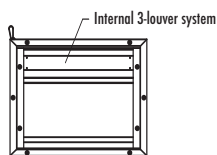
EPA CHART (fixture & mounting combined)

FIXTURE	MOUNTING							
	110	120	130	140	C28	C29	C39	C49
872	2.8	7.3	11.8	16.3	5.6	4.1	6.9	8.2
876	3.6	8.9	14.2	19.5	7.2	5.6	9.2	11.2

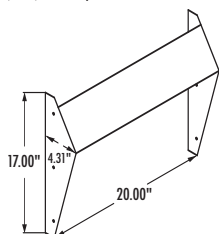
(In-line & cluster mounts recommended for use with steel poles)

SHIELD OPTIONS (TS' Top Shield finish is black unless otherwise specified.)

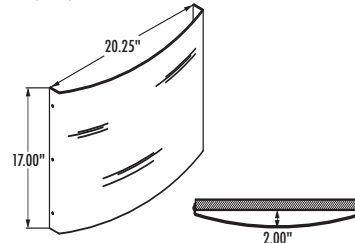
(AV) Airport Louver



(TS)* Top Shield



(SG)* Stone Guard



(N) Not Required

Note: *SG Stone Guard not available for use with TS Top Shield option.



Denver International Airport

HOUSING

The luminaire housing shall be mitre-formed construction from a single piece of 6063-T6 aluminum extrusion, with only a single seam located at the bottom of the housing. The rear canopy shall be of aluminum sheet that is crimped into a specially designed upper lip of the sidewall extrusion. This lip shall be lined with an Isocryl gasket prior to the crimping process to form a fully sealed canopy without the use of silicone or welds.

LENS & DOORFRAME

The luminaire lens shall be clear tempered glass, 0.188" thick, thermal and impact resistant. Lens shall be set into a mitre formed extruded aluminum doorframe which is secured by (6) self-retained stainless steel fasteners. Lens and doorframe are gasketed by an extruded silicone gasket for a watertight seal. Door shall hinge and be self-retained via (1) stainless steel cable.

YOKE

The luminaire yoke shall be formed from rigid steel bar 0.310" thick and 2.50" wide. Yoke is designed for use with various mounting accessories and to be aimed at an optimum design angle (determined by wattage +/- 5 degrees).

REFLECTOR

The luminaire reflector module shall be of a high purity anodized specular aluminum to provide an asymmetrical distribution. Reflector shall be backed by an aluminum extrusion for stability and repeatability of distribution. The specular reflector sheet shall be held in contour to the extrusions by stainless steel extension springs. Reflector shall include Sterner's patented lamp stabilizer to prevent lamp sag and to maximize lamp life and overall efficiency.

INTERNAL LOUVERS

Standard reflector shall incorporate (2) internal louvers fastened to both ends to provide for optimum shielding and glare control of the bare lamp. Optional Airport Louver 'AV' shall incorporate a third louver to provide additional glare and spill light control required to meet the stringent airport design criteria. Each louver shall be flat black and/or lined with specular aluminum to provide the appropriate asymmetric distribution.

ELECTRICAL MODULE

Luminaire shall be cULus listed for use in wet locations and manufactured from UL recognized electrical components. Electrical assembly is easily accessible through the ballast box. Each high power factor ballast is capable of starting temperatures down to -20° F (-28.9° C) and shall be CWA. The socket shall be a mogul-based porcelain socket with a 4KV rating (5KV for 1000HPS). Fixture shall be equipped with a watertight connector and 3' of 16/3 STO-W cord.

LAMP

Luminaire shall accept the following lamps:

400MH	ED/BT37	750PMH	pulse ED/BT37	400HPS	E18
1000MH	ED/BT37	1000PMH	pulse ED/BT37	1000HPS	E25

872 REMOTE MOUNTED BALLAST BOX

Ballast shall be housed in a cast aluminum housing with heat dissipating fins and supplied with (2) watertight connectors. Ballast box shall have a cast aluminum cover and is secured with (6) plated steel fasteners. 400MH and 1000MH ballasts shall be capable of mounting at a distance of 200' (based on 10-gauge wire and 1% voltage drop), 750PMH and 1000PMH at a distance of 50' (includes long range starter). 400HPS ballast shall be capable of mounting at a distance of 50' and 1000HPS at 75' (includes long range starter). The cast aluminum alloy shall contain less than 2/10 of 1% copper for resistance to corrosion including marine applications.

876 ATTACHED BALLAST BOX

Ballast shall be housed in an extruded aluminum housing with heat dissipating fins. Ballast box shall have aluminum endplates, gasketed by an E.P.D.M. gasket and secured by (4) stainless steel fasteners. Electrical components shall be mounted to an extruded ballast tray that slides out for ease in servicing. Extruded box is to be attached separate from the luminaire housing to reduce heat and wear, maximizing electrical component/lamp life.

FINISH

Finished parts are washed in a multistage phosphate processing system and finished with a standard polyester urethane powder coat paint. Optional anodized finishes are available and shall use an electrolytic process to oxidize and colorize the aluminum for a finish that is extremely resistant flaking, fading, and corrosive environments (some fabricated and mounting hardware will be powder finish). Standard powder colors are dark bronze, black, white, and natural aluminum. Standard anodized colors are bronze (light, medium, and dark), black, and natural aluminum. Contact factory for non-standard colors.



STERNER™

INFRANOR™



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