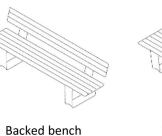
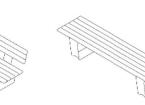
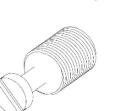
Date: September 28, 2017 www.landscapeforms.com Ph: 800.521.2546





Backless bench

Included components:



Set screw

1/4-20 x 3/4" hex 5/8-11 threaded 4x – surface mount 4x - surface mount

landscapeforms'

3/8-16 x 5-1/8" Threaded rod 4x – embed mount

Picnic table

Tools Required for surface mount or embedded options:

- Safety glasses
- Hammer drill with masonry bits
- Hex key, 1/8" (surface mount) 7/32" (embedded)
- Flat blade screwdriver (surface mount)
- Chemical anchoring adhesive (Hilti HIT RE 500 or equivalent) (embedded)
- (4) Zinc-plated drop-in anchors for 5/8-11 thread size (surface mount), for 7. use with Magni-coated bolts

PROCEDURE FOR INSTALLATION:

- 1. Prepare proper concrete slab as required.
- 2. Freestanding unit ships with glides installed. Unit can be set in place.
- **Note:** DO NOT DRAG unit across concrete or other rough surfaces. This could damage the finish.

For SURFACE MOUNT:

- Turn unit upside down on protective padding. Install surface mount bolts as shown in Figs. 1 or 4. Set unit in position. Trace around anchors to mark hole locations. Verify table hole spacing is 76" on
- center, Fig. 7. Move unit. Drill holes according to anchor manufacturer's recommendations.
- Test fit unit to make sure holes align with anchor bolts.
- Install drop-in anchors (or other anchoring option). Remove surface mount bolts from unit. Install into drop-in anchors.
- Set unit over surface mount anchors.
- 8. Install set screws to secure, see Fig. A.
- For EMBEDDED MOUNT:
- 1. Turn unit upside down on protective padding.
- Remove one screw from each glide pad as shown in Figs. 2 or 5.
- Install threaded rods as shown in Figs. 3 or 6.
- 4. Set unit in position. Trace around rods to mark hole locations. Verify table hole spacing is 76" on center, Fig. 7.
- Move unit. Drill holes according to anchor manufacturer's recommendations, see Fig. B.
- Test fit unit to make sure holes align and embedded rods are not resting on the bottom of the holes. Remove unit and fill holes with anchoring adhesive as recommended by manufacturer.
- 8. Set unit in place. Wipe away excess adhesive before it cures.

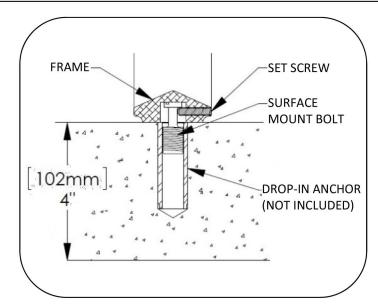


Fig. A – Section view of installed surface mount bolt

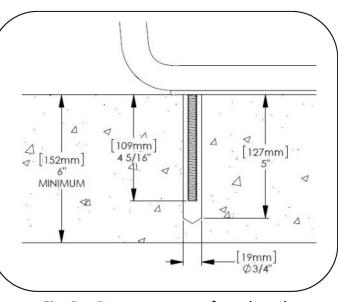


Fig. B – Remove screws from bench glides for embedding

Page 1 of 2

FGP Bike Rack Date: June 10, 2015 www.landscapeforms.com Ph: 800.521.2546 Installation Guide

EMBEDDED

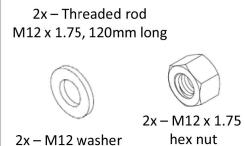


Bike Rack

Included components



Cap screw with thread



Tools Required

1x - Frame 1x - 2pc cover plate

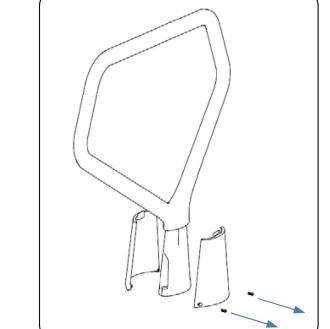
- Unit ships assembled
- 2.5mm hex key
- 19mm wrenches for embedded option

WARNING! Unit must be anchored.

- Hammer drill with masonry bits
- For embedded mount option: chemical anchoring adhesive (Hilti HIT RE 500 or
- For surface mount option: stainless steel anchoring hardware, (2) required per unit (not included). Landscape Forms, Inc. recommends maximum 12mm dia bolt, with a minimum embedded depth of 80mm (see Fig. 4 for bolt clearances).

HANDLE WITH CARE! The finish can be scuffed by contact with tools, concrete,

or other abrasive surfaces. Protect the finish from damage during installation.



FGP BIKE RACK

WALL OR

OBSTRUCTION

Fig. 1 - Recommended spacing, according to Association of

Pedestrian and Bicycle Professionals (APBP), 2nd edition

Fig. 2 – remove cover plates

Page 1 of 2

Date: June 10, 2015

Page 2 of 2

www.landscapeforms.com Ph: 800.521.2546

914mm

914mm

Multiplicity

Backed bench, backless bench, picnic table anchoring

Installation Guide

ASSEMBLE WITH CARE! Pangard II® Polyester Powdercoat is a strong, long-lasting finish. To protect this finish during assembly, place unwrapped powdercoated parts on

packaging foam or other non-marring surface. Do not place or slide powdercoated parts

on concrete or other hard or textured surface – this will damage the finish causing rust to occur. Use touch-up paint on any gouges in the finish caused by assembly tools.

> Date: September 28, 2017 www.landscapeforms.com Ph: 800.521.2546

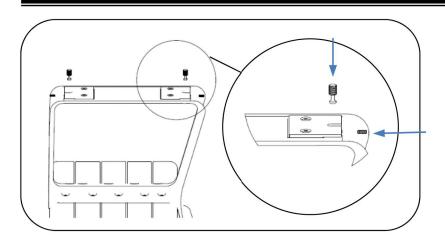


Fig. 1 – install surf mt bolts on bench for marking holes

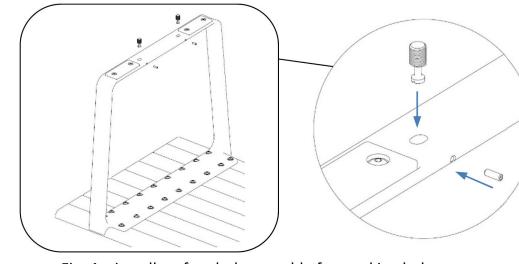
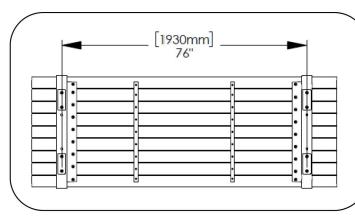
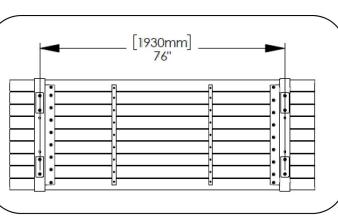
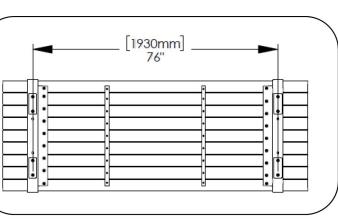
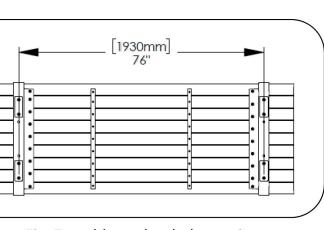


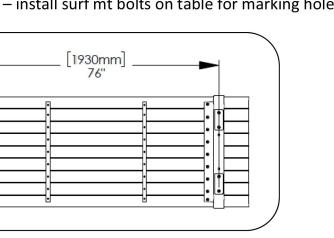
Fig. 4 – install surf mt bolts on table for marking holes











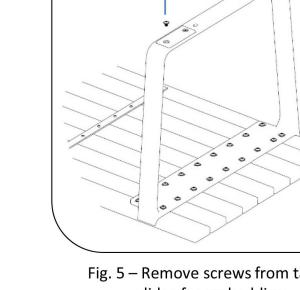


Fig. 5 – Remove screws from table glides for embedding

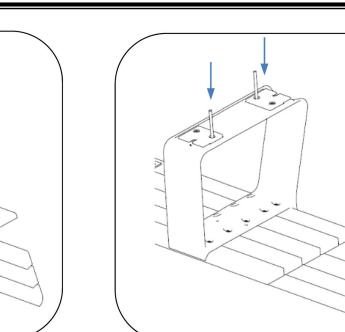


Fig. 2 – Remove screws from bench Fig. 3 – Install threaded rods in glides for embedding bench for embedding

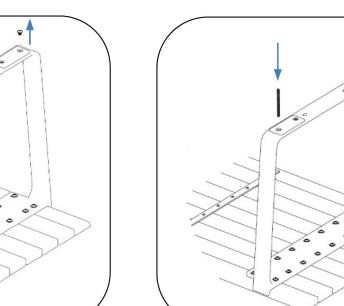


Fig. 6 – Install threaded rods in table for embedding

Fig. 7 – table anchor hole spacing

ASSEMBLE WITH CARE! Pangard II® Polyester Powdercoat is a strong, long-lasting finish. To protect this finish during assembly, place unwrapped powdercoated parts on packaging foam or other non-marring surface. Do not place or slide powdercoated parts on concrete or other hard or textured surface – this will damage the finish causing rust to occur. Use touch-up paint on any gouges in the finish caused by assembly tools.

landscapeforms



landscapeforms

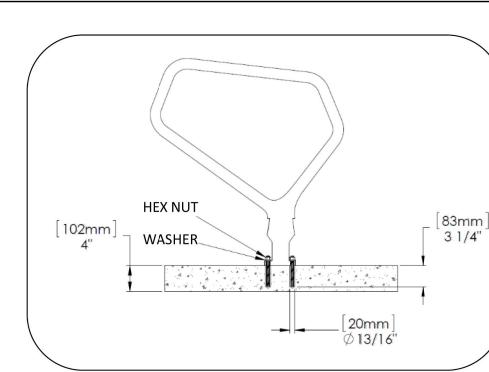


Fig. 3 – Hole size for embedded bike rack

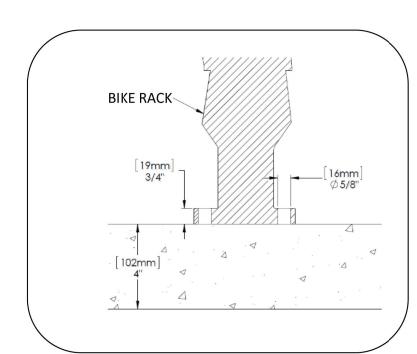


Fig. 4. – Anchor hole clearance for surface mount

INSTALLATION PROCEDURE:

WARNING! Unit must be anchored.

- 1. Remove cover plates. See Fig. 2. Set aside on non-marring surface. Retain the two screws used to secure the cover plates together.
- 2. Set bike rack in position..
- 3. Mark hole locations. See Fig. 1 for recommended spacing.

914mm

4. Move bike rack and drill holes. Clear debris from holes.

FOR EMBEDDED MOUNT:

- 1. Fill holes with adhesive to level recommended by adhesive manufacturer.
- 2. Set threaded rods in place and wipe away excess adhesive.
- 3. Test fit unit over threaded rods to ensure accurate placement. 4. Remove unit and allow adhesive to fully cure per adhesive manufacturer's
- 5. Once adhesive is fully cured, set unit in position over threaded rods.
- 6. Install washer and hex nut as shown in Fig. 3. 7. Reinstall the cover plates.

FOR SURFACE MOUNT:

- 1. Set unit in place and install anchor bolts (not supplied by Landscape Forms) according to anchor manufacturer's instructions. See Fig. 4 for anchor hole clearances.
- 2. Reinstall the cover plates.

Surveyors Planners

> 28 West Adams Road Suite 1200 Detroit, MI 48226 p (313) 962-4442 f (313) 962-5068 www.giffelswebster.com

Landscape Architects

Executive:	MWM
Manager:	AN
Designer:	DD
Quality Control:	TET

Professional Seal:



DATE: ISSUE: 05.31.24 Revised Petition Submittal -

Brush Park Development Company Phase I LLC

630 Woodward Avenue Detroit, MI 48226

Encroachment **Exhibit Details**

Brush Park Encroachments

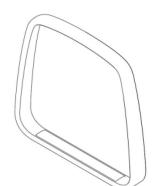
City of Detroit Wayne County MICHIGAN

Date:	05.31.24
Scale:	NTS
Sheet:	Detail 1
Project:	18882-01D

Copyright © 2023 Giffels Webster. No reproduction shall be made without the prior written consent of Giffels Webster.

Page 2 of 2

landscapeforms

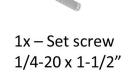


Included components

Bike Rack







Embedded option: 2x – Threaded rod 5/8-11 x 3-1/2" with thread patch

Tools Required

- Unit ships assembled
- 1/8" hex key
- 3/16" hex key
- Hammer drill with masonry bits • For embedded mount option: chemical anchoring adhesive (Hilti HIT RE 500 or
- For surface mount option: stainless steel anchoring hardware, (2) required per unit (not included). Landscape Forms, Inc. recommends maximum 1/2" dia bolt, with a minimum embedded depth of 3" (see Fig. 5. for bolt clearances).

WARNING! Unit must be anchored.

ASSEMBLE WITH CARE! Pangard II® Polyester Powdercoat is a strong, long-lasting finish. To protect this finish during assembly, place unwrapped powdercoated parts on packaging foam or other nonmarring surface. Do not place or slide powdercoated parts on concrete or other hard or textured surface – this will damage the finish causing rust to occur. Use touch-up paint on any gouges in the finish caused by assembly tools.



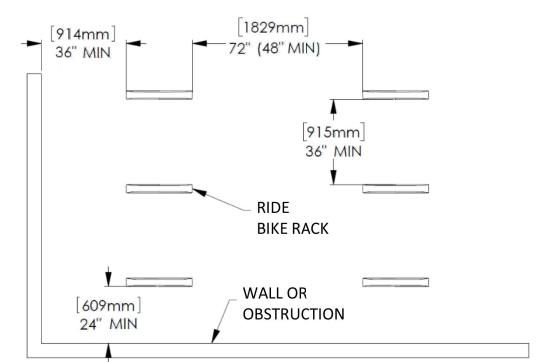


Fig. 1. - Recommended spacing, according to Association of Pedestrian and Bicycle Professionals (APBP)

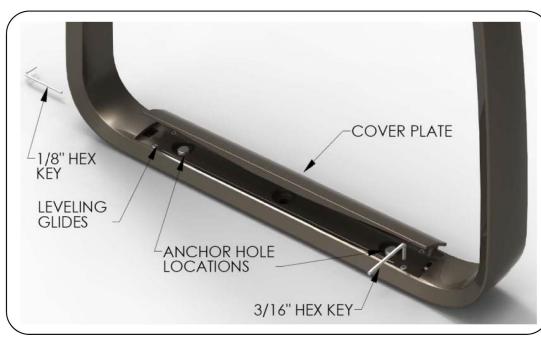


Fig. 2. – Component detail

Page 1 of 2

Date: September 9, 2016

www.landscapeforms.com Ph: 800.521.2546

Bike Rack Installation Guide 2X - Threaded rods Embedded only Embedded Surface mount Included components: • (2) 5/8-11 x 4" threaded rods with Loctite for embedded unit Tools required: Surface mount unit ships fully assembled • Surface mount option: (2) non-corrosive anchor bolts required per unit, maximum size Ø3/8" x 2-1/2" to 3" length Hammer drill with masonry bits • For embedded mount option: chemical anchoring adhesive (Hilti HIT RE 500 or equivalent)

FLO BIKE **RACK** WALL OR OBSTRUCTION 24" MIN Recommended spacing, according to Association of Pedestrian and Bicycle Professionals (APBP)

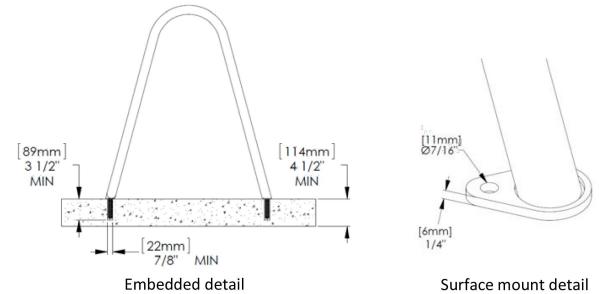
HANDLE WITH CARE! Flo's finish can be scuffed by contact with tools, concrete, or other abrasive surfaces. Protect the finish from damage during installation. Use touchup paint to repair any powder coat finish abrasions.

EMBEDDED INSTALLATION:

- 1. Install thread patch ends of threaded rods into the bike rack legs.
- 2. Set unit in position and mark hole locations.
- 3. Move unit and drill 7/8" diameter (minimum) holes 3-1/2" deep.
- 4. Set unit in position to make sure that Nylon glides make contact with the surface. Threaded rods should not be resting on the bottom of the drilled
- 5. Move unit. Clear holes of debris.
- 6. Fill holes with chemical anchoring adhesive.
- 7. Set unit in position.

8. Wipe away excess adhesive.

- SURFACE MOUNT INSTALLATION:
- Set unit in place and mark holes. 2. Move the unit and drill the holes.
- 3. Install the anchors and bike rack according to the anchor manufacturer's instructions. Be sure that both anchor plates make solid contact with the surface.



landscapeforms

Page 1 of 1

RideTM bike rack Date: September 9, 2016 www.landscapeforms.com Ph: 800.521.2546 Installation Guide

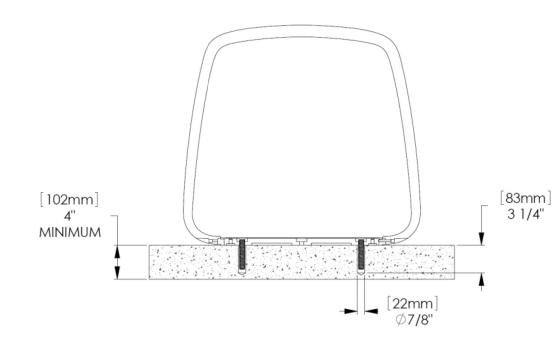


Fig. 3. – Hole size for embedded bike rack

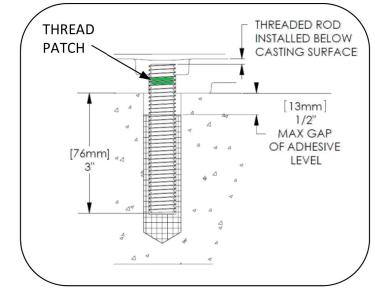


Fig. 4. – Install threaded rod

landscapeforms

INSTALLATION PROCEDURE:

WARNING! Unit must be anchored.

- 1. Set bike rack in position. Using 3/16" hex key, adjust leveling glides until unit is plumb.
- 2. Mark hole locations. See Fig. 1 for recommended spacing.
- 3. Move bike rack and drill holes. Clear debris from holes.

FOR EMBEDDED MOUNT:

- 1. Thread anchor rods with thread patch into bike rack as shown in Fig. 4.
- 2. Fill holes with adhesive to level shown in Fig. 4.
- 3. Set unit in place and wipe away excess adhesive.
- 4. After adhesive has fully cured to manufacturer's recommendation, turn all four leveling glides equally until tight to remove any excess movement of the bike rack.

FOR SURFACE MOUNT:

- 1. Set unit in place and install anchor bolts (not supplied by Landscape Forms) according to anchor manufacturer's instructions.
- 2. Turn all four leveling glides equally until tight to remove any excess movement of the bike rack.

FOR COVER PLATE INSTALLATION:

- 1. Set cover plate in place. End with vertical tab and no thru hole should be installed on the side with access for the set screw. Using 1/8" hex key, install set screw from hardware pack.
- 2. Tighten set screw until cover plate is secure.

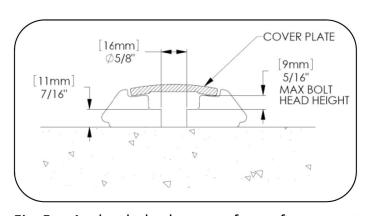


Fig. 5. – Anchor hole clearance for surface mount

Page 2 of 2

Engineers Surveyors Planners

28 West Adams Road Suite 1200 Detroit, MI 48226 p (313) 962-4442

Landscape Architects

f (313) 962-5068 www.giffelswebster.com

Executive:	MWM
Manager:	AN
Designer:	DD
Quality Control:	TET

Professional Seal:



DATE:	ISSUE:
05.31.24	Revised Petition Submittal - Additional Dimensions and Details

Developed For:

Brush Park Development Company Phase I LLC

> 630 Woodward Avenue Detroit, MI 48226

Encroachment **Exhibit** Area 2

Brush Park Encroachments

City of Detroit Wayne County MICHIGAN

Date:	05.31.24
Scale:	NTS
Sheet:	Detail 2

Copyright © 2023 Giffels Webster. No reproduction shall be made without the

prior written consent of Giffels Webster.

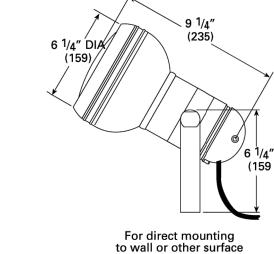
18882-01D



4640 SERIES Yoke Mount White LED Accent Light

CATALOG NUMBER	
NOTES	
TYPE	

L:	9 - 1/4"
	235 mm
W:	6 - 1/4"
	159 mm
H:	6 - 1/4"
	159 mm
Weight	8 lbs



DESCRIPTION

The 4640 yoke mount accent light is uniquely designed with rugged sealed die-cast aluminum construction and an adjustable yoke. A wide range of photometric performances are available with internal and/or external glare control.

ORDERING INFORMATION

IP66

EXAMPLE: 4640 18LED WHT41K MVOLT WFL YM SMSA12 FGS10 CSL10 BL

Model Lamp type ¹		mp type¹ LED Color		Voltage	Distribut	ion	Mou	ınting	Mounting (Options ³
4640	12LED 18LED	RED GRN	Red Green	MVOLT	NSP MFL	Narrow Spot Medium Flood	YM		JBA JBB	Alum. J-Box Bronze J-Box
	IOLLD	BLU	Blue		FL	Flood			ARJB	Architectural J-Box, Alum.
		AMBPC	Phosphor Converted Amber		WFL VWFL ²	Wide Flood Very Wide Flood			SMSA_	12"-48" Stanchion Mount, available in 6" increments.
		WHT30K			HSP	(no optics) Horizontal Spot			PSSA WMC	Pedestal Stanchion Mount Wall Mount Cover
		WHT41K	4100°K Color Temp		HFL	Horizontal Flood			WMSA	Wall Mount with Splice Access
		WHT53K	5300°K Color Temp							

Mounting	Options (Cont'd) ³	Accesso	pries	Cord S	et Length	Finish			
TRA	Tree Mounted J-Box, Alum.	<u>Interna</u>	<u>l</u>	CSL	10'-50' of cord, available	BL	Black	SND	Sand
TRB	Tree Mounted J-Box, Bronze	IHL	Internal Honeycomb Louver		in 5' increments (default	BZ	Bronze	STG	Steel Gray
_TRAS ⁴	Tree Mounted J-Box Alum.	FRF	Frosted Filter		of 10 feet if nothing is	DDB	Dark Bronze	TVG	Terra Verde Greer
	w/mt strap, available with	<u>Extern</u>	<u>al</u>		specified)	DNA	Natural Aluminum	WH	White
	1-4 J-Boxes per strap	GS	Glare Shield	:		GN	Green	CF	Custom
_TRBS ⁴	Tree Mounted J-Box Bronze	FGS	Full Glare Shield (6")			GR	Gray	Z 5	Zinc Undercoat
	w/mt strap, available with	FGS_	Full Glare Shield						(i.e. BLZ)
	1-4 J-Boxes per strap		8′, 10″ or 12″ available						

MOUNTING DETAIL

7/8" Mount Hole

(Reducing washer for

3/8" mounting provided)

1. 12LED = 12 chip board, 14 watts; 18LED = 18 chip board, 19 watts

- 2. FRF filter needed with VWFL.
- 3. See individual mounting specification sheets for conduit/drilling options. 4. For multiple TRAS boxes the number of fixture heads and accessories will be
- equal to the number of boxes ordered.
- 5. Add Zinc undercoat for harsh environments.

(HYDREL)

Yoke Mount Detail

9144 Deering Avenue, Second Floor • Chatsworth, CA 91311 Phone: 866.533.9901 • www.hydrel.com

©2002-2017 Acuity Brands Lighting, Inc. Rev. 03/14/17

4640_YM_LED_WHITE

PERFORMANCE DATA

LUMEN OUTPUT

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

	Distribution	Nema Type	Beam Angle (50%) H x V	Field Angle (10%) H x V	Watts	LPW	Delivere Lumen
	NSP	2 x 2	14.8 x 14.8	27.1 x 27.1	19	53	1,000
	MFL	6 x 6	35.7 x 35.7	109 x 109	19	54	1,000
18LED 3000K 80CRI	FL	5 x 5	75.8 × 56.2	95.7 × 83.4	19	48	900
	WFL	7 x 7	114.2 x 114.2	136.1 x 136.1	19	54	1,000
80CRI	HSP	3 x 3	20.8 × 20.8	38.9 x 38.9	20	57	1,100
	HFL	4 x 3	40.5 x 15.6	60.8 × 30.4	20	48	950
	VWFL	7 x 7	110.2 x 110.2	141 x 141	18	45	800
	NSP	2 x 2	14.8 x 14.8	27.1 x 27.1	19	90	1,700
	MFL	6 x 6	35.7 × 35.7	109 x 109	19	91	1,700
18LED	FL	5 x 5	75.8 × 56.2	95.7 × 83.4	19	79	1,500
4000K	WFL	7 x 7	114.2 x 114.2	136.1 x 136.1	19	90	1,700
70CRI	HSP	3 x 3	20.8 × 20.8	38.9 × 38.9	20	96	1,900
	HFL	4 x 3	40.5 × 15.6	60.8 × 30.4	20	80	1,600
	VWFL	7 x 7	110.2 × 110.2	141 × 141	18	77	1,400
	NSP	2 x 2	14.8 x 14.8	27.1 x 27.1	19	90	1,700
	MFL	6 x 6	35.7 × 35.7	109 x 109	19	91	1,700
18LED	FL	5 x 5	75.8 × 56.2	95.7 x 83.4	19	79	1,500
5000K	WFL	7 x 7	114.2 x 114.2	136.1 x 136.1	19	90	1,700
70CRI	HSP	3 x 3	20.8 × 20.8	38.9 x 38.9	20	96	1,900
	HFL	4 x 3	40.5 × 15.6	60.8 × 30.4	20	80	1,600
	VWFL	7 x 7	110.2 x 110.2	141 x 141	18	77	1,400

30°C 40°C

0°C

10°C

20°C

25°C

Ambient

32°F

50°F

68°F

77°F

104°F

Data references the extrapolated performance projections for the **Fixture** platform in a **25°C ambient**, based on 8400 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from $0-40^{\circ}\text{C}$ (32-104°F).

Lumen Multiplier

1.02

1.01

1.00

1.00

0.99

0.98

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1	0.99	0.98	0.96

			Current (A)					
Light Engines	Drive Current (mA)	System Watts	120	208	240	277	347	480
18 LED	350mA	19	0.16	0.09	0.08	0.07	0.05	0.04

Projected LED Lumen Maintenance

*IP*66

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1	0.99	0.98	0.96

Electrical Load

					Curre	ent (A)		
Light Engines	Drive Current (mA)	System Watts	120	208	240	277	347	480
18 LED	350mA	19	0.16	0.09	0.08	0.07	0.05	0.04

FEATURES & SPECIFICATIONS

LED LIFE: L70/60,000 hours

OPERATING TEMPERATURE: -30°C Through 40°C

MATERIAL: Fixture and Yoke: Die-cast copper-free aluminum alloy A360. All materials are chemfilmed or anodized prior to painting.

LED: White and Monochromatic LEDs, 18LED = 19W, 12LED = 14 watts.

VOLTAGE: MVOLT

LIGHT DISTRIBUTION: See ordering guide.

LENS: Crowned tempered glass.

POWER SUPPLY: 120-277 Intergral Power Supply.

MOUNTING: Yoke Mount with a minimum of 10 ft. 18/3 STW Cord.

Cord length must be specified over 10 feet.

FINISH: Exterior parts are protected by a zinc-infused super durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled

multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climates without cracking or peeling.

FASTENERS: Stainless Steel.

LISTING: IP66, U.L., C.U.L.

WARRANTY: 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms and conditions.aspx

NOTE: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



9144 Deering Avenue, Second Floor • Chatsworth, CA 91311 Phone: 866.533.9901 • www.hydrel.com

©2002-2017 Acuity Brands Lighting, Inc.

Rev. 03/14/17 4640_YM_LED_WHITE

City of Detroit Wayne County MICHIGAN

Developed For:

Brush Park Development

Company Phase I LLC

630 Woodward Avenue

Detroit, MI 48226

Encroachment

Exhibit

Area 3

Brush Park Encroachments

Planners Landscape Architects

28 West Adams Road Suite 1200

Detroit, MI 48226

p (313) 962-4442

f (313) 962-5068

www.giffelswebster.com

Know what's below.

Call before you dig.

Revised Petition Submittal -

MWM

AN

DD

TET

Executive:

Manager:

Quality Control:

Date:	05.31.24
Scale:	NTS
Sheet:	Detail 3
Project:	18882-01D

Copyright © 2023 Giffels Webster. No reproduction shall be made without the prior written consent of Giffels Webster.