

Permit Number: BC1703449

Permit Details ()
 Tab Elements ()
 Main Menu ()

^ (.multi-collapse)

Type:  
 Building - Commercial - Awning / Carport / Sign

Status:  
 Issued

Project Name:

Applied Date:  
 03/16/2017

Issue Date:  
 03/30/2017

District:  
 CD-3

Expire Date:  
 06/09/2020

Square Feet:  
 0.00

Valuation:  
 \$2,100.00

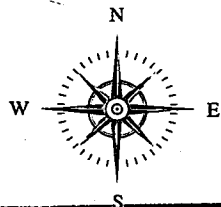
Finalized Date:

Description:  
 ILLUMINATED REVERSE CHANNEL LETTERS SIGN "BHOJWANI TOWERS" (2) WALL SIGNS

# PERMIT DRAWING

## Bhojwani Tower Top View

NOTICE: In addition to the requirements of this permit, there may be additional restrictions or conditions that may be found in the Public Records of the City of Miami Beach. There may be additional permits required from other city departments such as water management's districts, state agencies or federal agencies. The city of Miami Beach assumes no responsibility for accuracy of or results from these plans which are approved subject to compliance with all Federal, State, and Local Laws, Rules, and Regulations.



OFFICIAL  
CITY OF MIAMI BEACH  
APPROVED  
THE

BUILDING: DA 3/3/17  
ZONING: DA 3/3/17  
PLUMBING: DA 3/3/17  
ELECTRICAL: DA 3/3/17  
MECHANICAL: DA 3/3/17  
FIRE PREVENTION: nk  
FLOOD: VF 3/3/17  
PUBLIC WORKS: VF 3/3/17  
STRUCTURAL: VF 3/3/17  
ELEVATOR: VF 3/3/17  
ROOFING: VF 3/3/17



AERIAL VIEW



540 W. 83 Street  
Hialeah, FL 33014  
305-362-3333

www.acusigns.com

Project: Bhojwani Tower Main Sign

Address:  
1651 Washington Ave  
Miami Beach, FL 33139

Account Manager:  
Ralph Moreno

Designer:  
Martin Rodger

Scale: N.T.S. Date: 3/20/2017

This is an original drawing property of ACU SIGNS, and may not be used in whole or in part without written permission. It is not to be shown to anyone outside of your organization, reproduced, copied or exhibited in any fashion. Drawing shall be returned promptly upon or before completion of negotiations or customer agrees to accept a charge levied by the corporation for retention of same. This statement shall become a part of the drawing to which it is attached. Note: The colors depicted here are a graphic representation. Actual colors may vary. See color specifications.



No. Sheet: 1 of 5

### CLIENT APPROVAL

☐ APPROVED AS SHOWN  
☐ APPROVED WITH CHANGES  
☐ DISAPPROVED

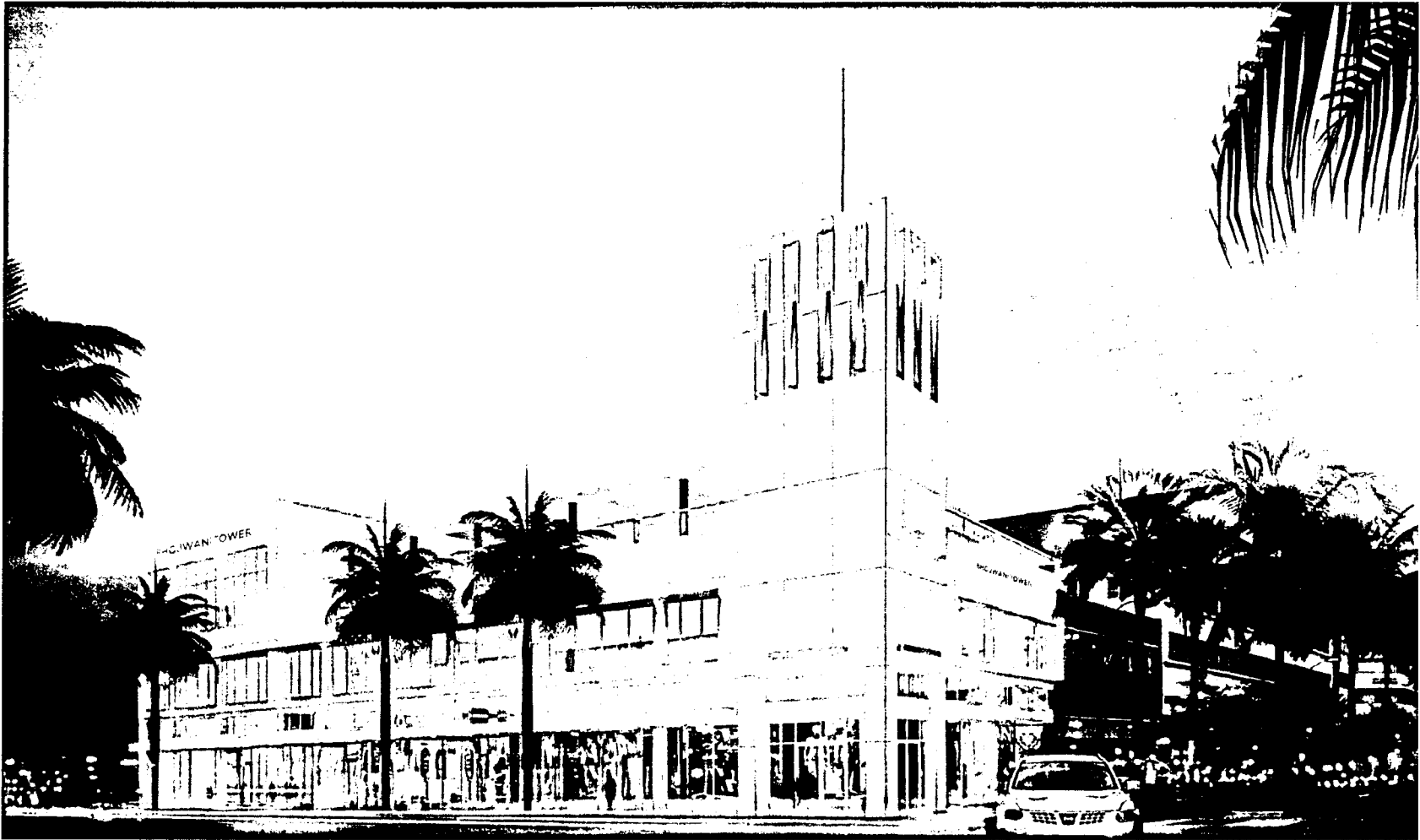
DATE: / /2017

BY: (PLEASE PRINT NAME)

SIGNATURE

PERMIT DRAWING

Bhojwani Tower  
Building View



540 W. 83 Street  
Hialeah, FL 33014  
305-362-3333

www.acusigns.com

Project: Bhojwani Tower Main Sign

Address:  
1651 Washington Ave  
Miami Beach, FL 33139

Account Manager:  
Ralph Moreno

Designer:  
Martin Rodger

Scale:  
N.T.S.

Date:  
3/20/2017

This is an original drawing property of ACU SIGNS, and may not be used in whole or in part without written permission. It is not to be shown to anyone outside of your organization, reproduced, copied or exhibited in any fashion. Drawing shall be returned promptly upon or before completion of negotiations or customer agrees to accept a charge levied by the corporation for retention of same. This statement shall become a part of the drawing to which it is attached. Note: The colors depicted here are a graphic representation. Actual colors may vary. See color specifications.



No.

Sheet:  
2 of 5

CLIENT APPROVAL

- ☐ APPROVED AS SHOWN  
☐ APPROVED WITH CHANGES  
☐ DISAPPROVED

DATE: / /2017

BY: (PLEASE PRINT NAME)

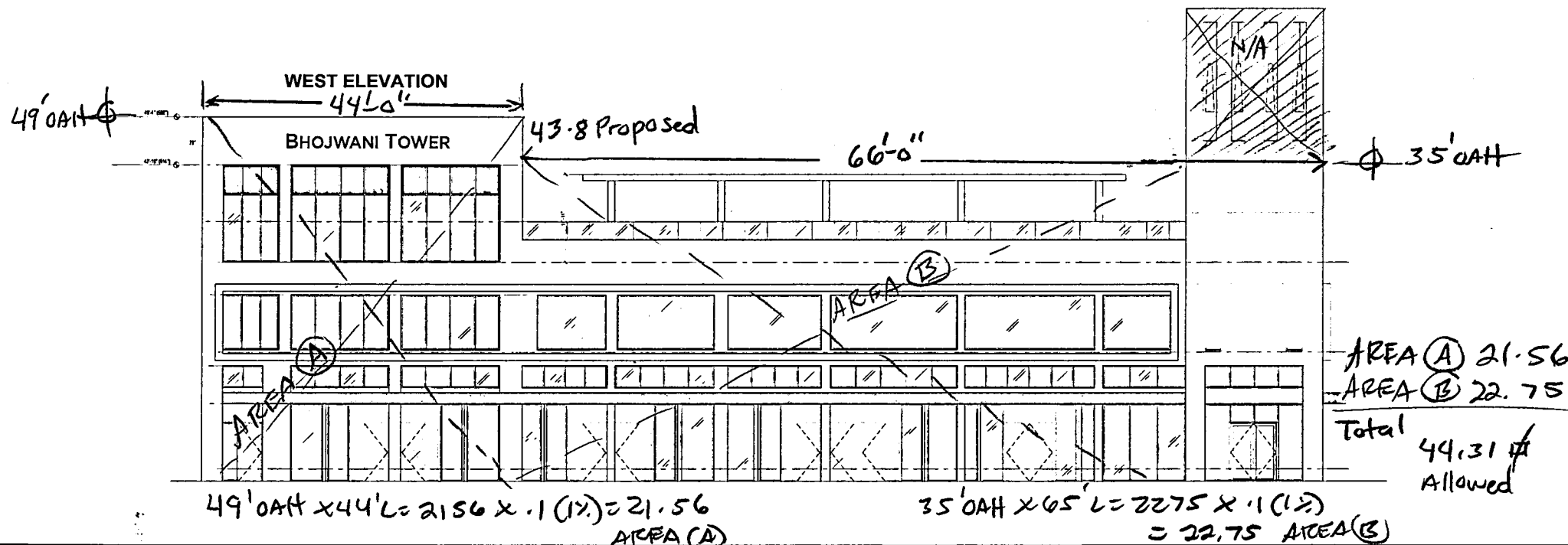
SIGNATURE

General Notes: 1 Design is in accordance with the requirements of the Fla Bldg Code 5th Ed (2014) for use within & outside the High Velocity Hurricane Zone (HVHZ). 2 This engineering certifies only the structural integrity of those systems, components, and/or other construction explicitly specified herein. 3 Electrical notes, details, & specifications are provided by and are the sole responsibility of the electrical contractor. No electrical review has been performed and no certification of such is intended. 4 Aluminum extrusions shall be 6063-T6, unless noted otherwise.

Easy Seals  
Christian Langley  
Florida PE #67392  
Cert of Auth #31124  
1200 N Federal Hwy, #200  
Boca Raton, FL 33432  
1-888-371-3113  
Wall components & details:  
• Zone 4: ± 55.9 psf  
• Zone 5: ± 77.1 psf  
ASCE 7-10 WIND LOADS:  
• Sign Height = 50 ft max  
• Kz=1.0; Kd=0.85; G=0.85  
• V=175 mph • Exposure D  
• Risk Category 2 Structure • ASD Load Coeff = 0.6

# PERMIT DRAWING

## Bhojwani Tower Building Elevations



540 W. 83 Street  
Hialeah, FL 33014  
305-362-3333

www.acusigns.com

Project: Bhojwani Tower Main Sign

Address:  
1651 Washington Ave  
Miami Beach, FL 33139

Account Manager:  
Ralph Moreno

Designer:  
Martin Rodger

Scale:  
N.T.S.

Date:  
8/10/17

This is an original drawing property of ACU SIGNS, and may not be used in whole or in part without written permission. It is not to be shown to anyone outside of your organization, reproduced, copied or exhibited in any fashion. Drawing shall be returned promptly upon or before completion of negotiations or customer agrees to accept a charge levied by the corporation for retention of same. This statement shall become a part of the drawing to which it is attached. Note: The colors depicted here are a graphic representation. Actual colors may vary. See color specifications.



No. Sheet: 3 of 5

### CLIENT APPROVAL

- ☐ APPROVED AS SHOWN
- ☐ APPROVED WITH CHANGES
- ☐ DISAPPROVED

DATE: / / 2017

BY: (PLEASE PRINT NAME)

SIGNATURE

General Notes: 1 Design is in accordance with the requirements of the Fla Bldg Code 5th Ed (2014) for use within & outside the High Velocity Hurricane Zone (HVHZ). 2 This engineering certifies only the structural integrity of those systems, components, and/or other construction explicitly specified herein. 3 Electrical notes, details, & specifications are provided by and are the sole responsibility of the electrical contractor. No electrical review has been performed and no certification of such is intended. 4 Aluminum extrusions shall be 6063-T6, unless noted otherwise.

Easy Seals  
Christian Langley  
Florida PE #67382  
Cert of Auth #31124  
7200 N Federal Hwy #200  
Boca Raton, FL 33432  
1-888-371-3113  
Wall components & cladding  
• Sign Height = 50 ft max  
• Kzt=1.0, Kd=0.85, G=0.85  
• V=175 mph • Exposure "D"  
• Risk Category 2 Structure • ASD Load Coeff = 0.6

PERMIT DRAWING

Bhojwani Tower  
Illuminated Reverse Channels Letters

QUANTITY 2

CITY MAX. ALLOWED SQ FT:  
PROPOSED SQ FT:

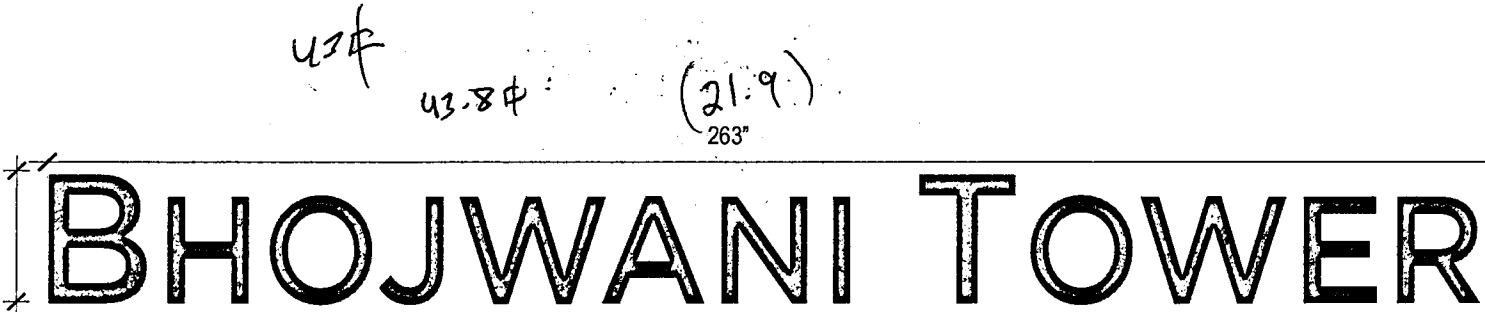
VECTORIZED LOGO: YES. FONT IS GOTHAM MEDIUM.

FABRICATION NOTES:  
ALUMINUM REVERSE CHANNEL LETTERS  
WITH "HOT PINK REFERENCE TMOBILE"  
HALO ILLUMINATION  
RETURN DEEP SIZE: 3"  
STROKE: 3.5"  
MOUNTING: INDIVIDUAL  
SPACER: 1 1/2" STANDOFFS  
ILLUMINATION: "HOT PINK REFERENCE TMOBILE"  
COLOR LED'S.

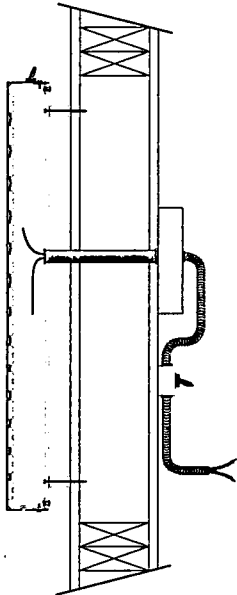
COLOR  
● MP10269 DARK SLATE



NIGHTVIEW



SIDE VIEW



540 W. 83 Street  
Hialeah, FL 33014  
305-362-3333

www.acusigns.com

Project: Bhojwani Tower Main Sign

Address:  
1655 Washington Ave  
Miami Beach, FL 33139

Account Manager:  
Ralph Moreno

Designer:  
Martin Rodger

Scale:  
N.T.S.

Date:  
3/10/17

This is an original drawing property of ACU SIGNS, and may not be used in whole or in part without written permission. It is not to be shown to anyone outside of your organization, reproduced, copied or exhibited in any fashion. Drawing shall be returned promptly upon or before completion of negotiations or customer agrees to accept a charge levied by the corporation for retention of same. This statement shall become a part of the drawing to which it is attached. Note: The colors depicted here are a graphic representation. Actual colors may vary. See color specifications.



No. Sheet: 4 of 5

CLIENT APPROVAL

☐ APPROVED AS SHOWN  
☐ APPROVED WITH CHANGES  
☐ DISAPPROVED

DATE: / /2017

BY: (PLEASE PRINT NAME)

SIGNATURE

# PERMIT DRAWING

## Bhojwani Tower Sign 2 - Illuminated Reverse Channels Letters

QUANTITY 1

CITY MAX. ALLOWED SQ FT: 18.81  
PROPOSED SQ FT: 18.5

VECTORIZED LOGO: YES. FONT IS GOTHAM MEDIUM.

### FABRICATION NOTES:

ALUMINUM REVERSE CHANNEL LETTERS  
WITH "HOT PINK REFERENCE TMOBILE"  
HALO ILLUMINATION  
RETURN DEEP SIZE: 3"  
STROKE: 2"  
MOUNTING: INDIVIDUAL  
SPACER: 1 1/2" STANDOFFS  
ILLUMINATION: "HOT PINK REFERENCE TMOBILE"  
COLOR LED'S.

### COLOR

● MP10269 DARK SLATE

NIGHTVIEW

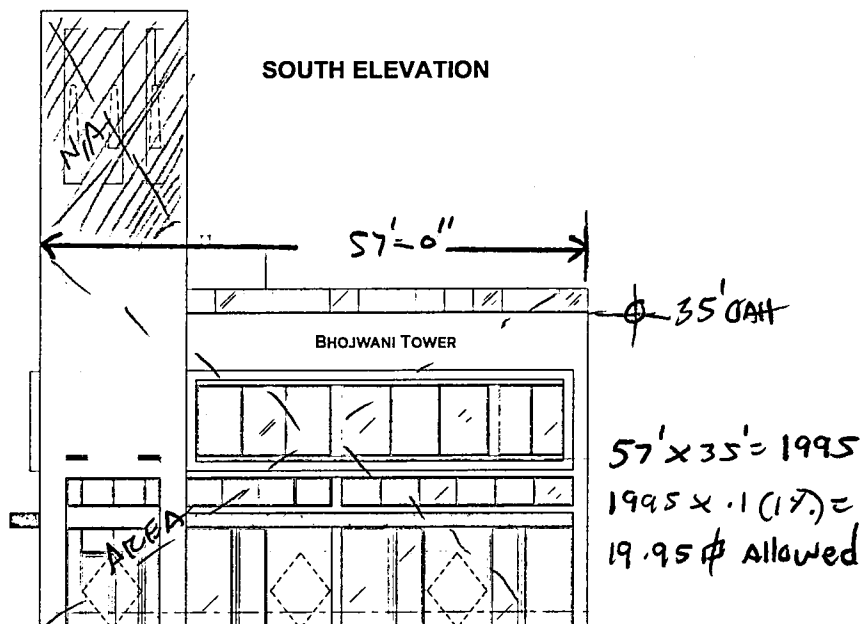
# BHOJWANI TOWER

169" (14')

(1.25) 15 3/4"

# BHOJWANI TOWER

17.5¢ PROPOSED



SIDE VIEW



540 W. 83 Street  
Hialeah, FL 33014  
305-362-3333

www.acusigns.com

Project: Bhojwani Tower Main Sign

Address:  
1651 Washington Ave  
Miami Beach, FL 33139

Account Manager:  
Ralph Moreno

Designer:  
Martin Rodger

Scale:  
N.T.S.

Date:  
3/20/2017

This is an original drawing property of ACU SIGNS, and may not be used in whole or in part without written permission. It is not to be shown to anyone outside of your organization, reproduced, copied, or exhibited in any fashion. Drawings shall be returned promptly upon or before completion of negotiations or customer agreement. This statement shall become a part of the drawing to which it is attached. Note: The colors depicted here are a graphic representation. Actual colors may vary from specifications.



No.

Sheet: 4 of 5

### CLIENT APPROVAL

- ☐ APPROVED AS SHOWN  
☐ APPROVED WITH CHANGES  
☐ DISAPPROVED

DATE: / /2017

BY: (PLEASE PRINT NAME)

SIGNATURE

# PERMIT DRAWING DETAIL

## REVERSE CHANNEL LETTERS LED ILLUMINATED

TOTAL OF (2) POWER SUPPLY REQD.  
TOTAL OF 5.6 AMPS  
Power Requirements: 120V - 20 AMP Circuit

No 12 COPPER WIRE FOR GROUNDING/BONDING  
OF SIGN AS PER NEC 250 TIME DEVICE REQUIRED  
FOR EACH CIRCUIT PER FBC  
IN COMPLIANCE WITH THE 'FLA. ENERGY CODE'

ALL ELECTRICAL COMPONENTS ARE UL LISTED  
SIGN GROUNDED ACCORDING TO NEC 600

INSTALLATION IS IN COMPLIANCE WITH  
FLORIDA BUILDING CODE 2010

### ELECTRICAL INFORMATION

2- C2240 POWER SUPPLY @ 2.8 AMPS EACH

### TOTAL LOAD = 5.6 AMPS

1 - 20 AMP CIRCUIT REQUIRED

1 - 20 AMP DISCONNECT SWITCH

1/2" FLEX CONDUIT WITH 3 THWN WIRES

TO EXISTING PRIMARY LINE BY OTHERS

TIME DEVICE BY OTHERS

SIGN BEARS MANDATORY UL LABELS SIGN

GROUNDING AND BONDING AS PER NEC 250

CIRCUIT # 8

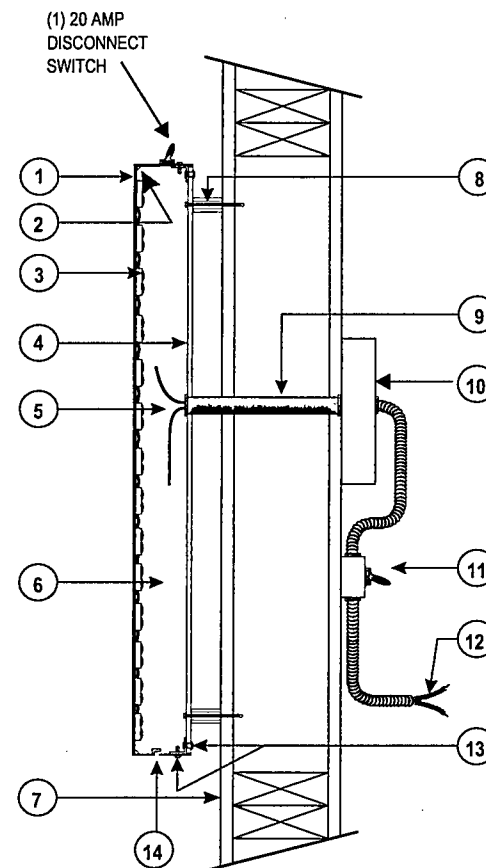
UL THIS PRODUCT IS LISTED BY UNDERWRITERS  
LABORATORY AND BEARS THE LABELS.

### ANCHOR SCHEDULE

WALL MATERIAL	ANCHOR TYPE	QTY or SPACING
CONCRETE (3ksi) or HOLLOW MASONRY	1/4" TREADED RODS WITH MIN 2" EMBED IN ADHESIVE	MIN (3) PER LETTER
	1/4" TAPCONS (OR EQUIV) WITH 1.75" EMBED	MIN (3) PER LETTER
	1/4" EXPANSION ANCHORS WITH 2.5" EMBED	MIN (3) PER LETTER
1/2" PLYWOOD (NO ACCESS BEHIND)	1/4" TOGGLE BOLTS	MIN (3) PER LETTER
	1/4" WOOD SCREWS OR TAPCONS, FULL EMBED	MIN (3) PER LETTER
METAL STUDS OR METAL PANELS	#14 METAL SCREWS TO MIN 18ga STEEL OR 0.090" ALUM	MIN (3) PER LETTER
HOLLOW WALL (BLOCKING BEHIND)	1/4" THRU BOLTS OR LAGS TO SOLID BLOCKING BEHIND	MIN (3) PER LETTER

### DETAILS

- 3" ALUMINUM LETTERS. FACES AND RETURNS PAINTED MP10269 DARK SLATE
- LETTERS .063 ALUM. RETURNS & .090 ALUM. FACES ARE SOLDERED TOGETHER AROUND THE ENTIRE PERIMETER OF LETTER
- LED ILLUMINATION (HOT PINK REFERENCE TMOBILE)
- 3/16" THICK, SATIN ICE LEXAN LETTER BACKS
- LOW VOLTAGE ELECTRICAL WIRE JUMPS
- ALL INTERIOR SURFACES OF LETTERS ARE PAINTED HIGH GLOSS WHITE
- CONCRETE WALL
- LETTERS ATTACHED TO THE WALL BY 1/4" DIAM. FASTENERS
- HALF INCH (1/2") CONDUIT W/ #12 THW PRIMARY WIRE OR 9/16" WALL BUSTERS
- (1) POWER SUPPLY (LOW VOLTAGE)
- (1) 20 AMP DISCONNECT SWITCH
- EXISTING ELECTRICAL WIRING TO PRIMARY ELECTRICAL SOURCE (BY OTHERS)
- CLIPS ARE POP-RIVETED INTO ACRYLIC LETTER BACKS, AND THE BACKS ARE SECURED TO THE LETTER RETURNS WITH SELF TAPPING SCREWS THRU THE LETTER RETURNS
- WEEP HOLES (IF APPLICABLE)



## ELECTRICAL INFO.

### "CODES IN EFFECT" NEC 2011 and FBC 2014 (5TH Edition)

EACH SIGN WILL HAVE ITS OWN DEDICATED CIRCUIT.  
NO OTHER LOADS WILL BE SUPPLIED BY THE SIGN CIRCUIT  
PER NEC 600.5(A). EACH SIGN WILL HAVE A DISCONNECT SWITCH  
IN VIEW. ALL SIGNAGE WILL BE CONTROLLED BY A ASTRONAMICAL  
TIME WITH A MIN 10 HOURS OF BACK-UP PER NEC 600.6 & FBC 13-415.AB.1.4

### OPTIONAL MEANS OF SIGNAGE DISCONNECTION

- DISCONNECT SWITCH on an individual channel letter(all types) or cabinet sign (all types)
- DISCONNECT SWITCH on the wall (any type), eyebrow, hanging slab, canopy mansored roof...
- LOCK-OUT SWITCH at the existing circuit breakers(s) inside of property
- TIME MANAGEMENT SYSTEM as utilized to control all lighting/signs/other appliances as utilized by a store/place of business...

### SIGN MARKINGS:

#### (A) Signs and outline lighting systems.

Signs and outline lighting systems shall be marked with the manufacturer's name, trademark, or other means of identification; and input voltage and current rating.

#### (B) Signs with lampholders for incandescent lamps.

Signs and outline lighting systems with lampholders for incandescent lamps shall be marked to indicate the maximum allowable lamp wattage per lampholder. The markings shall be permanently installed, in letters at least 6 mm (1/4 in.) high, and shall be located where visible during relamping.

#### (C) Section Signs.

Section Signs shall be marked to indicate that field-wiring and installation instructions are required. The electrical connections to same are under a different permit.



540 W. 83 Street  
Hialeah, FL 33014  
305-362-3333

www.acusigns.com

Project: Bhojwani Tower Main Sign

Address:  
1651 Washington Ave  
Miami Beach, FL 33139

Account Manager:  
Ralph Moreno

Designer:  
Martin Rodger

Scale:  
N.T.S.

Date:  
3/10/17

This is an original drawing property of ACU SIGNS, and may not be used in whole or in part without written permission. It is not to be shown to anyone outside of your organization, reproduced, copied or exhibited in any fashion. Drawing shall be returned promptly upon or before completion of negotiations or customer agrees to accept a charge levied by the corporation for retention of signs. This statement shall become a part of the drawing to which it is attached. Note: The colors depicted here are a graphic representation. Actual colors may vary. See color specifications.



No. Sheet: 5 of 5

## CLIENT APPROVAL

☐ APPROVED AS SHOWN  
☐ APPROVED WITH CHANGES  
☐ DISAPPROVED

DATE: / /2017

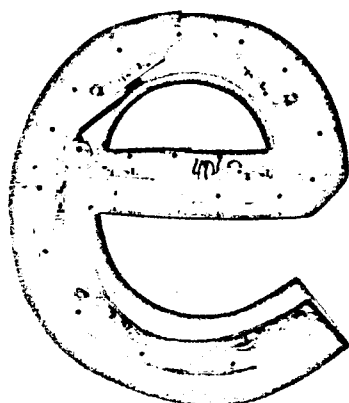
BY: (PLEASE PRINT NAME)

SIGNATURE

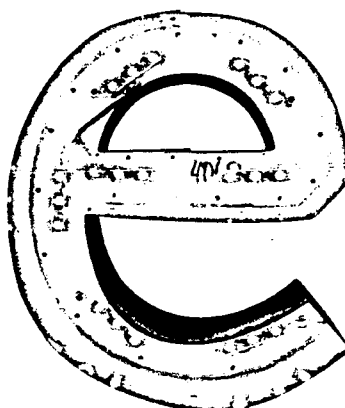
**PURALIGHT™ 12V LED LIGHT MODULES**

**SPECIFICATION SHEET**

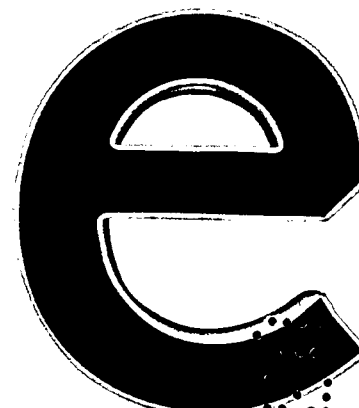
Specified Item #	
Project	
Location	



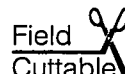
Sign letter utilizing TRIOBRIGHT Modules



Sign letter lit up



Finished sign letter



**[SPECIFICATIONS]**

<b>Input Voltage</b>	12VDC constant voltage	
<b>LED Chip Type</b>	MONOBRIGHT™ DUOBRIGHT™ TRIOBRIGHT™ TRIOBRIGHT™ TILE	Epistar 3528 SMD Chip
	TRIOBRIGHT™ MINI	Epistar 5050 SMD Chip
	TRIOBRIGHT™ RGB	Epistar 5050 RGB Tri-Chip SMD
<b>LED Chip CRI</b>	70+	
<b>Mounting</b>	Includes attached 3M™ Adhesive and mounting holes (mounting holes unavailable on TRIOBRIGHT™ TILE module).	

<b>Connections <sup>1</sup></b>	Solid Color: 20/2 AWG wire each end. RGB: 20/4 AWG wire each end.
<b>Dimmability</b>	Yes
<b>Ambient Temperature <sup>2</sup></b>	-4° ~ 122°F (-20° ~ 50°C)
<b>Operating Temperature <sup>3</sup></b>	-4° ~ 176°F (-20° ~ 80°C)
<b>Environment <sup>4</sup></b>	Outdoor / wet location
<b>Warranty</b>	5 years
<b>Certifications</b>	UL Component Recognized (United States & Canada): E318168

**Note <sup>1</sup>** Ensure wire leads at opposing ends of modules are not crossed when power is applied to the fixture. It is acceptable to modify the length of the leads or cut off the attached leads in the field.

**Note <sup>2</sup>** Do not install product in an environment outside the listed ambient temperature. Ensure adequate airflow and heatsinking is considered when mounting/installing.

**Note <sup>3</sup>** Operating temperature is measured according to the minimum and maximum ambient temperature environment. Exceeding the maximum operating temperature may damage LED chips by reducing the total lamp life, lumen output, and/or adversely impact color consistency.

**Note <sup>4</sup>** Do not install near or around chlorinated/treated water. This product is not rated as submersible. Do not install in direct sunlight.

**Note <sup>5</sup>** LED chips have a luminous flux range with a tolerance of +/- 5%. In other words, lumen output may vary +/- 5%.

**Note <sup>6</sup>** Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.

SS110514-1.2



**PURALIGHT™ 12V LED LIGHT MODULES**
**SPECIFICATION SHEET**
**SPECIFICATIONS**
**MONOBRIGHT™**
**LED Light Module**


Item #	Dimensions	Color Temp	Lumens*	QTY / Strand
DI-12V-MB65	1.18 x 0.53 x 0.31 in	6500K	20 Per Module	50 Modules / Strand

**MONOBRIGHT Specifications**

Input Voltage	Power Consumption / Module	Wire Length Between Modules / Strand Length	Maximum Run*	Beam Angle	LEDs / Module
12V DC	0.28W / 23mA	2.36 in. / ≈15 ft. beginning lead to end lead	50 Modules	120°	1

**DUOBRIGHT™**
**LED Light Module**


Item #	Dimensions	Color Temp	Lumens*	QTY / Strand
DI-12V-DB65	2.4 x 0.55 x 0.28 in	6500K	36 Per Module	20 Modules / Strand

**DUOBRIGHT Specifications**

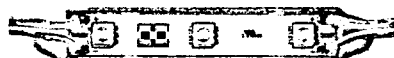
Input Voltage	Power Consumption / Module	Wire Length Between Modules / Strand Length	Maximum Run*	Beam Angle	LED Chips / Module
12V DC	0.48W / 40mA	2.16 in. / ≈7 ft. beginning lead to end lead	30 Modules	120°	2

**TRIOBRIGHT™**
**TILE LED Light Module**


Item #	Dimensions	Color Temp	Lumens*	QTY / Strand
DI-12V-TT65	1.42 x 1.42 x 0.16 in	6500K	50 Per Module	20 Modules / Strand

**TRIOBRIGHT TILE Specifications**

Input Voltage	Power Consumption / Module	Wire Length Between Modules / Strand Length	Maximum Run*	Beam Angle	LED Chips / Module
12V DC	0.72W / 60mA	4.52 in. / ≈10 ft. 3 in. beginning lead to end lead	30 Modules	120°	3

**TRIOBRIGHT™**
**LED Light Module**


Item #	Dimensions	Color Temp	Lumens*	QTY / Strand
DI-12V-TB65	3.6 x 0.55 x 0.28 in	6500K	50 Per Module	20 Modules / Strand

**TRIOBRIGHT Specifications**

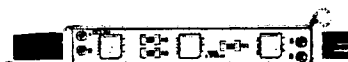
Input Voltage	Power Consumption / Module	Wire Length Between Modules / Strand Length	Maximum Run*	Beam Angle	LED Chips / Module
12V DC	0.72W / 60mA	3.14 in. / ≈10 ft. 2 in. beginning lead to end lead	30 Modules	120°	3

**TRIOBRIGHT™**
**MINI LED Light Module**


Item #	Dimensions	Color Temp	Lumens*	QTY / Strand
DI-12V-TM65	1.97 x 0.4 x 0.12 in	6500K	18 Per Module	20 Modules / Strand

**TRIOBRIGHT MINI Specifications**

Input Voltage	Power Consumption / Module	Wire Length Between Modules / Strand Length	Maximum Run*	Beam Angle	LED Chips / Module
12V DC	0.24W / 20mA	1.96 in. / ≈7 ft. beginning lead to end lead	30 Modules	120°	3

**TRIOBRIGHT™**
**RGB LED Light Module**


Item #	Dimensions	Color Temp	Lumens*	QTY / Strand
DI-12V-TRGB	2.78 x 0.47 x 0.28 in	RGB Color Changing	14 max / Module	25 Modules / Strand

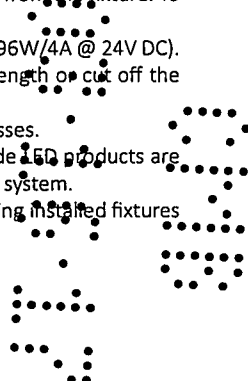
**TRIOBRIGHT RGB Specifications**

Input Voltage	Power Consumption / Module	Wire Length Between Modules / Strand Length	Maximum Run*	Beam Angle	LEDs / MODULE
12V DC	0.72W / 60mA	3.14 in. / ≈13 ft. beginning lead to end lead	30 Modules	120°	3

SS110514-1.2

**SAFETY / WARNINGS / DISCLOSURES**

- Install in accordance with the National Electric Code and local regulations.
- This product is intended to be installed and serviced by a qualified, licensed electrician.
- This product requires a compatible LED driver for proper configuration. Do not connect directly to high voltage 120~277V AC power.
- It is generally recommended to load the driver no more than 80% the labeled rating for maximum performance and longevity. However, see each driver specification sheet for exact minimum and maximum loading values.
- Do not install product in an environment outside the listed ambient temperature. Ensure adequate airflow and heatsinking is considered when mounting/installing.
- Operating temperature is measured according to the minimum and maximum ambient temperature environment. Exceeding the maximum operating temperature may damage LED chips by reducing the total lamp life, lumen output, and/or adversely impact color consistency.
- Do not power modules when tightly coiled. Excess heat may damage the product.
- Ensure adequate airflow and heatsinking is considered when mounting/installing. Exceeding the maximum operating temperature may damage LED chips by reducing the total lamp life, lumen output, and/or adversely impact color consistency.
- Each maximum run requires a dedicated power feed from the driver. Do not extend beyond the recommended maximum run length.
- Ensure applicable wire is installed between driver, fixture, and any controls in-between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.). Inadequate wire installation could overheat wires, and cause fire.
- 'Voltage drop' is a gradual decrease in voltage along a conductor through which current is flowing. When specifying an LED system, ensure to calculate voltage drop appropriately. Voltage drop calculators will suggest the proper gauge wire and distance to install the driver from the fixture. To meet maximum performance, the beginning of the tape light should be receiving no less than 3% of input power rating.
- All fixture accessories including DC connections, etc. have a Class 2 amperage rating unless otherwise noted (60W/5A @ 12V DC; 96W/4A @ 24V DC).
- Ensure wire leads at opposing ends of modules are not crossed when the fixture is turned on. It is acceptable to modify the length or cut off the attached wire leads in the field.
- Actual color may vary from what is pictured on this sheet and other print materials due to the limitations of photographic processes.
- Lighting technology has some amount of gradual light degradation (output and/or color) over the lifespan of the products. Diode LED products are designed to minimize degradation, but some light degradation and color shift is a normal part of the life span of any LED lighting system.
- We reserve the right to modify and improve the design of our fixtures without prior notice. We cannot guarantee to match existing installed fixtures for subsequent orders or replacements in regards to product appearance, CCT, or lumen output.

**WARRANTY****Limited Warranty**

This LED fixture has a five (5) year limited warranty from the date of shipment. This warranty does not include the additional accessories referenced in this specification sheet. Complete warranty details for fixtures and additional accessories are available at [www.DiodeLED.com](http://www.DiodeLED.com) under the 'Tools & Resources' tab. For warranty related questions, please contact customer service.

**Consumer's Acknowledgment**

Diode LED stands behind its products when they are used properly and according to our specifications. By purchasing our products, the purchaser agrees and acknowledges that lighting design, configuration and installation is a complex process, wherein seemingly minor factors or changes in layout and infield adjustments can have a significant impact on an entire system. Choosing the right components is essential. Diode LED is able to work with the original purchaser to make an appropriate product selection to the extent of the limited information that the customer can provide, but it is virtually impossible for Diode LED to design a system that foresees every unknown factor. For this reason, this Warranty does not cover problems caused by improper design, configuration or installation issues. Any statement from a Diode LED employee or agent regarding a customer's bill of goods and/or purchase order is NOT an acknowledgement that the products purchased are designed and configured correctly. The purchaser agrees and acknowledges that it is the customer's responsibility to adhere strictly to all information contained in the Product Specification Sheets.

There is often more than one way to design, configure and layout an LED lighting application properly to achieve the same lighting effect. Diode LED strongly recommends that licensed professionals be used in the design and installation of lighting systems that include Diode LED products. The specifications include important information that a designer and installer should carefully review and strictly follow. Qualified designers and certified and/or licensed installers, with access to the final installation environment, customer goals, and Diode LED product specifications can make the requisite decisions appropriate for a successful finished lighting application.

SS110514-1.2



## DUOBRIGHT™ PURALIGHT™ LED Module Light

The DUOBRIGHT LED Sign Module Light is sold in strands of 20, and is a medium-sized module used in tight spaces. PURALIGHT LED Modules feature a waterproof, durable PVC housing and 3M™ 9888T pressure-sensitive tape backing that adheres strongly to wood, metal, paper and most plastics including polyethylene and polypropylene.

### Recommended Applications

- Interior/Exterior Box Letters
- Light Boxes and Channel Signage
- Cabinets
- Architectural Accenting
- Retail Display and Backlit Acrylic Lighting
- Pathways, Decks and Patios

- **Environment**  
wet or dry location

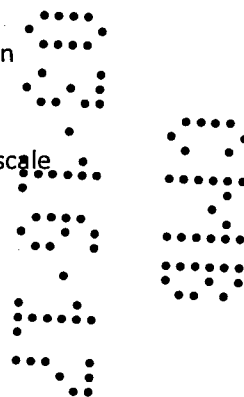
- **Compact**  
perfect for small-scale installations

- **Warranty**  
5-year warranty

**Color (CCT)**



6500K



12V DC	IP67	20	0.48W	70	36
IP Rating	Modules per strand	Watts per module	CRI	Lumens per module	

## DUOBRIGHT™ PURALIGHT™ Module Light

Item #	Modules/strand	Color Temp.	Lumens/module
DI-12V-DB65	20	6500k - cool white	36

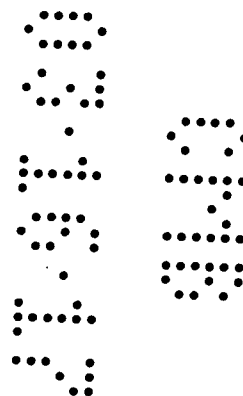
### Compatible Constant Voltage Drivers

Item #	Input	Output	Wattage	Location
DI-0941	100-240V AC	12V	12W	Dry
DI-0904	100-240V AC	12V	20W	Wet/Dry
DI-0939	100-240V AC	12V	25W	Dry
DI-0918	100-240V AC	12V	35W	Wet/Dry
DI-0906	100-240V AC	12V	60W	Wet/Dry
DI-0908	100-277V AC	12V	60W	Wet/Dry
DI-0909	100-240V AC	12V	150W	Dry
DI-0928	100-240V AC	12V	300W	Dry

### Compatible Magnetic Dimmable Drivers

Item #	Input	Output	Wattage	Location
DI-0920	120V AC	12V	20W	Wet/Dry
DI-0922	120V AC	12V	60W	Wet/Dry
DI-0925	120V AC	12V	200W	Wet/Dry
DI-0923	120V AC	12V	100W	Wet/Dry
DI-DM-12V300W-MT	120V AC	12V	Multi-tap 300W	Wet/Dry

Always refer to the website for the most current updates to our technical documents.



Products	Search	Advanced Search	Post Buying Request
----------	--------	-----------------	---------------------

About 164920 results: Switching Power Supply (33328) , AC/DC Adapters (6154) , Other Power Supplies (UPS) (885)

Use 5 minutes and get up to 10 quotes. [Look it!](#)

There are 164920 **led power supply** from at least 6730 **suppliers** on **Alibaba.com**

Related Searches: laptop adaptor , uninterruptible power system , ac/dc adaptors , breakers , inverters & switches [More..](#)

Home > Products > Electrical Equipment & Supplies > Power Supplies > Switching Power Supply (132705)



See larger image: UL 12V 100W LED Power Supply IP67 Waterproof for LED Lighting and Moving Sign Application

[Report Suspicious Activity](#)

[Add to My Favorites](#)

## UL 12V 100W LED Power Supply IP67 Waterproof for LED Lighting and Moving Sign Application

Other products by Input Voltage: 220V

FOB Price: [Get Latest Price](#)

Minimum Order Quantity: 10 Piece/Pieces

Supply Ability: 100000 Piece/Pieces per Week

Payment Terms: T/T,Western Union

<p>Ms. Mon Tseng</p> <p><a href="#">Offline</a></p>	<p><a href="#">Add to Inquiry Cart</a></p>
---	--

[Place Order](#)      [Buyer Protection](#)  
ensure your transaction safety

Language Options

### Verified Supplier

Guangzhou Fangcun Hongmei Neon Equipment Factory

[ Guangdong, China (Mainland) ]

Business type: [Manufacturer](#)

Main Products: [led module](#), [led power supply](#), [led light](#)

No substantiated complaints in last 90 days

[Contact Details](#)      [Similar Products](#)

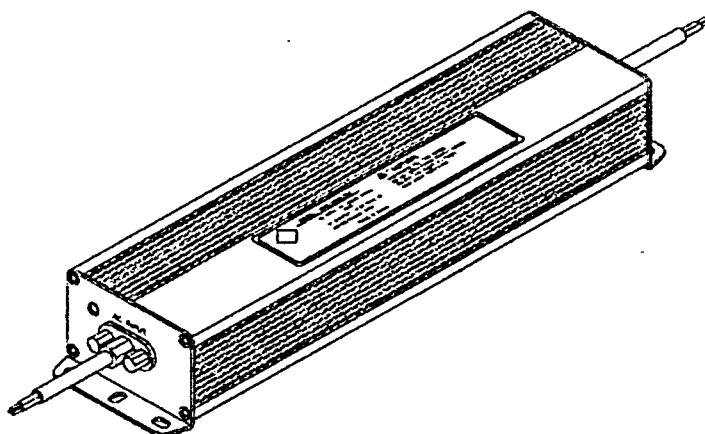
Product Details	Company Profile	Online Showroom: 895 Products	Supplier's Website
-----------------	-----------------	-------------------------------	--------------------

### Quick Details

Place of Origin: Guangdong China (Mainland)	Model Number: HMA-100NU-RX	Output Power: 51 - 100W
Output Type: Single	Input Voltage: 220V	Output Voltage: 12V
Output Frequency: 100W	Output Current: 0-8.33A	

### Specifications

UL100W LED Power Supply,IP67, Constant voltage design,Suitable for LED lighting and moving sign application

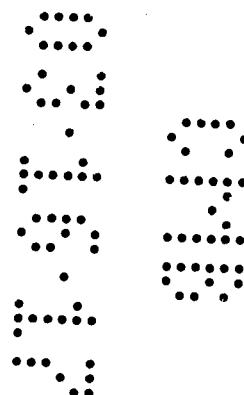


#### Features

- | Constant voltage design
- | Universal AC input / Full range
- | Epoxy encapsulated with IP67 level
- | Withstand 300VAC surge input for 5 seconds
- | Protections: Short circuit / Overload / Over voltage
- | Fully isolated plastic case
- | Cooling by free air convection
- | UL879 Class 2 power unit, pass LPS
- | 100% full load burn-in test
- | Low cost, high reliability
- | Suitable for LED lighting and moving sign applications
- | 2 years warranty

#### SPECIFICATION

		LPS IP67	
OUTPUT	DC VOLTAGE	12V	24V
	RATED CURRENT	12V	24V
		8.33A	4.17A
	CURRENT RANGE	0 ~ 8.33A	0 ~ 4.17A
	RATED POWER	100W	100W
	RIPPLE&NOISE(max.)	120mVp-p	150mVp-p
	note. 2		
	VOLTAGE TOLERANCE	±8.0%	±5.0%
	LINE REGULATION	±1.0%	
	LOAD REGULATION	±8.0%	±2.0%
INPUT	SETUP,, RISE TIME	500ms 20ms/230VAC 500ms20ms/115VAC at full load(for 5~36V);500ms 20ms/230VAC 500ms20ms/115VAC at full load(for 5~36V);	
	note.6		
	HOLD UP TIME(Typ.)	50ms/230VAC 16ms/115VAC at full load	
	VOLTAGE RANGE	120VAC	
	FREQUENCY RANGE	47 ~ 63Hz	
PROTEC-TION	EFFICIENCY (Typ.)	83%	86%
	AC CURRENT	1.2A/115VAC	1A/230VAC
	INRUSH CURRENT(max.)	COLD STAR 30A/115VAC 60A/230VAC	
	LEAKAGE CURRENT	0.25mA /240VAC	
	OVER CURRENT	110 ~ 150% rated output power	
PROTEC-TION	Notes.4	Protection type: Hiccup mode, recovers automatically after fault condition is removed	
	OVER VOLTAGE	13.8~16.2V	27.6~32.4V
		Protection type: Shut down o/p voltage, re-power on to recover.	





**Easy Seals**  
easyseals.com

## DESIGN CALCULATIONS

FOR

### **BHOJWANI TOWER WALL-MOUNTED SIGNS**

1651 Washington Ave – Miami Beach

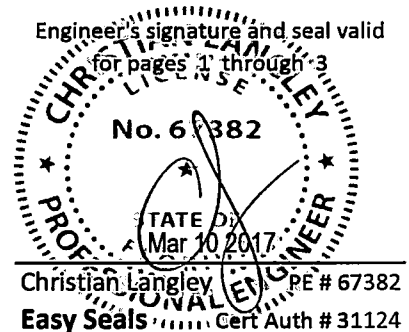
#### **GENERAL NOTES:**

1. Design is in accordance with the Florida Building Code 5th Edition (2014) for use within and outside the High Velocity Hurricane Zone (HVHZ).
2. Wind loads have been calculated per the requirements of ASCE 7-10 as shown herein.
3. These engineering calculations pertain only to the structural integrity of those systems, components, and/or other construction explicitly specified herein and/or in accompanying engineering drawings. The existing host structure (if any) is assumed to be in good condition, capable of supporting the loaded system, subject to building department approval. No warranty, either expressed or implied, is contained herein.
4. System components shall be as noted herein. All references to named components and installation shall conform to manufacturer's or industry specifications as summarized herein.
5. Where site conditions deviate from those noted herein, revisions may be required or a separate site-specific engineering evaluation performed.
6. Aluminum components in contact with steel or embedded in concrete shall be protected as prescribed in the 2010 Aluminum Design Manual, Part 1. Steel components in contact with, but not encased in, concrete shall be coated, painted, or otherwise protected against corrosion.
7. Engineer seal affixed hereto validates structural design as shown only. Use of this specification by contractor, et. Al, indemnifies and saves harmless this engineer for all costs & damages including legal fees & anellate fees resulting from deviation from this design.

#### **Index:**

Pg 1	Cover
Pg 2	Wind Loads
Pg 3	Anchor Design

Engineer's signature and seal valid  
for pages 1 through 3



Christian Langley PE # 67382  
Easy Seals Cert Auth # 31124

# ASCE 7-10 Design Wind Loads

## WALL-MOUNTED SIGNS

### Building Specs

V = 175 mph *Basic wind speed*  
 Exposure D

ASD Load Combo Coeff: 0.6

### Calculations

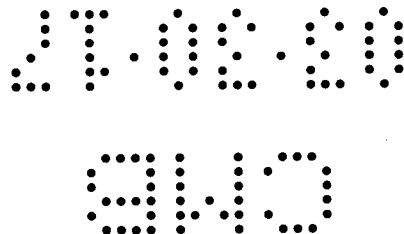
$\alpha = 11.5$  *3-sec gust speed power law exponent*  
 $z_g = 700'$  *Nominal ht. of atmos. boundary layer*  
 $G_{cpi} = 0$  *Internal pressure coeff*

K<sub>d</sub> = 0.85 *Directionality factor*

K<sub>zt</sub> = 1.0 *Topographic factor*

A = 10 sq ft *Tributary area*

<b>175 mph - Exp "D"</b>						
<b>WALL-MOUNTED SIGNS</b>						
SIGN HEIGHT	ASD WIND PRESSURES		K <sub>f</sub> = K <sub>z</sub>	q <sub>z</sub>	G <sub>Cp</sub> (4)	G <sub>Cp</sub> (5)
	CENTER (Zone 4)	CORNER (Zone 5)				
15 ft	45.3 psf	57.7 psf	1.03	68.7	-1.10	-1.40
20 ft	47.6 psf	60.6 psf	1.08	72.2	-1.10	-1.40
25 ft	49.5 psf	63.0 psf	1.13	75.0	-1.10	-1.40
30 ft	51.1 psf	65.1 psf	1.16	77.5	-1.10	-1.40
35 ft	52.5 psf	66.8 psf	1.19	79.6	-1.10	-1.40
40 ft	53.7 psf	68.4 psf	1.22	81.4	-1.10	-1.40
45 ft	54.9 psf	69.8 psf	1.25	83.1	-1.10	-1.40
50 ft	55.9 psf	71.1 psf	1.27	84.6	-1.10	-1.40
55 ft	56.8 psf	72.3 psf	1.29	86.1	-1.10	-1.40
60 ft	57.7 psf	73.4 psf	1.31	87.4	-1.10	-1.40
70 ft	48.5 psf	96.9 psf	1.35	89.7	-0.90	-1.80
80 ft	49.6 psf	99.2 psf	1.38	91.9	-0.90	-1.80
90 ft	50.6 psf	101.3 psf	1.41	93.8	-0.90	-1.80
100 ft	51.6 psf	103.1 psf	1.43	95.5	-0.90	-1.80
110 ft	52.4 psf	104.9 psf	1.46	97.1	-0.90	-1.80
120 ft	53.2 psf	106.5 psf	1.48	98.6	-0.90	-1.80
130 ft	54.0 psf	107.9 psf	1.50	99.9	-0.90	-1.80
140 ft	54.7 psf	109.3 psf	1.52	101.2	-0.90	-1.80
150 ft	55.3 psf	110.7 psf	1.54	102.5	-0.90	-1.80
175 ft	56.8 psf	113.7 psf	1.58	105.3	-0.90	-1.80
200 ft	58.2 psf	116.3 psf	1.62	107.7	-0.90	-1.80
250 ft	60.5 psf	120.9 psf	1.68	112.0	-0.90	-1.80





## Wall Sign Anchor Design

### Structure Dimensions & Loading

Design wind pressure:

**P = 71.1 psf**

Sign type:

Channel Letter

Sign size:

**A = 4.0 sqft (per letter, critical)**

Wall material:

Wood

CDX or equiv, thickness to match Min Embed

Anchor type/size:

#14 SMS

Ref: APA E830E Fastener Loads for Plywood

Min Embedment: 0.5"

Min edge dist: 2"

Min Spacing: 2"

Anchor tensile capacity:

**Tcap = 112.0 lb (per anchor)**

### Check Anchors for Pullout

Total Reaction:

Rt =

284 lb

... = P\*A (per letter)

No. of anchors req'd:

n =

2.5 anchors per letter

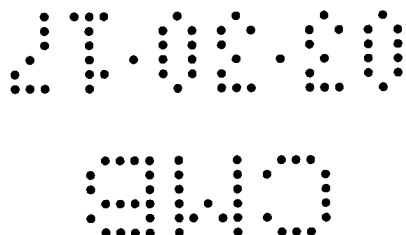
... = Rt/cap

**Total anchors required:**

**3 anchors per letter**

**OK, min (3) per letter.**

**Ref anchor schedule for other anchor options.**



## DESIGN CALCULATIONS

FOR

### BHOJWANI TOWER

#### Sign 2: South Elev Channel Letters

1655 Washington Ave – Miami Beach

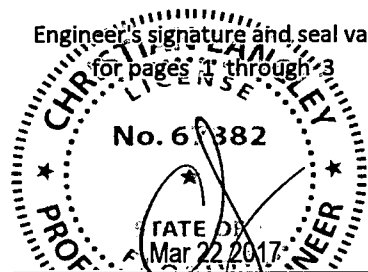
#### GENERAL NOTES:

1. Design is in accordance with the Florida Building Code 5th Edition (2014) for use within and outside the High Velocity Hurricane Zone (HVHZ).
2. Wind loads have been calculated per the requirements of ASCE 7-10 as shown herein.
3. These engineering calculations pertain only to the structural integrity of those systems, components, and/or other construction explicitly specified herein and/or in accompanying engineering drawings. The existing host structure (if any) is assumed to be in good condition, capable of supporting the loaded system, subject to building department approval. No warranty, either expressed or implied, is contained herein.
4. System components shall be as noted herein. All references to named components and installation shall conform to manufacturer's or industry specifications as summarized herein.
5. Where site conditions deviate from those noted herein, revisions may be required or a separate site-specific engineering evaluation performed.
6. Aluminum components in contact with steel or embedded in concrete shall be protected as prescribed in the 2010 Aluminum Design Manual, Part 1. Steel components in contact with, but not encased in, concrete shall be coated, painted, or otherwise protected against corrosion.
7. Engineer seal affixed hereto validates structural design as shown only. Use of this specification by contractor, et. Al, indemnifies and saves harmless this engineer for all costs & damages including legal fees & appellate fees resulting from deviation from this design.

#### Index:

Pg 1	Cover
Pg 2	Wind Loads
Pg 3	Anchor Design

Engineer's signature and seal valid  
for pages 1 through 3



Christian Langley PE # 67382  
Easy Seals Cert Auth # 31124

# ASCE 7-10 Design Wind Loads

## WALL-MOUNTED SIGNS

### Building Specs

V = 175 mph *Basic wind speed*  
 Exposure D

ASD Load Combo Coeff: 0.6

### Calculations

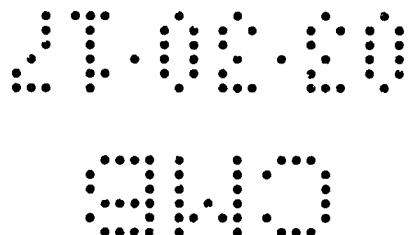
$\alpha = 11.5$  *3-sec gust speed power law exponent*  
 $z_g = 700'$  *Nominal ht. of atmos. boundary layer*  
 $G_{cpi} = 0$  *Internal pressure coeff*

Kd = 0.85 *Directionality factor*

Kzt = 1.0 *Topographic factor*

A = 10 sq ft *Tributary area*

<b>175 mph - Exp "D"</b>						
<b>WALL-MOUNTED SIGNS</b>						
SIGN HEIGHT	ASD WIND PRESSURES CENTER (Zone 4)	CORNER (Zone 5)	$K_z$	$q_z$	$GCP$ (4)	$GCP$ (5)
15 ft	45.3 psf	57.7 psf	1.03	68.7	-1.10	-1.40
20 ft	47.6 psf	60.6 psf	1.08	72.2	-1.10	-1.40
25 ft	49.5 psf	63.0 psf	1.13	75.0	-1.10	-1.40
30 ft	51.1 psf	65.1 psf	1.16	77.5	-1.10	-1.40
35 ft	52.5 psf	66.8 psf	1.19	79.6	-1.10	-1.40
40 ft	53.7 psf	68.4 psf	1.22	81.4	-1.10	-1.40
45 ft	54.9 psf	69.8 psf	1.25	83.1	-1.10	-1.40
50 ft	55.9 psf	71.1 psf	1.27	84.6	-1.10	-1.40
55 ft	56.8 psf	72.3 psf	1.29	86.1	-1.10	-1.40
60 ft	57.7 psf	73.4 psf	1.31	87.4	-1.10	-1.40
70 ft	48.5 psf	96.9 psf	1.35	89.7	-0.90	-1.80
80 ft	49.6 psf	99.2 psf	1.38	91.9	-0.90	-1.80
90 ft	50.6 psf	101.3 psf	1.41	93.8	-0.90	-1.80
100 ft	51.6 psf	103.1 psf	1.43	95.5	-0.90	-1.80
110 ft	52.4 psf	104.9 psf	1.46	97.1	-0.90	-1.80
120 ft	53.2 psf	106.5 psf	1.48	98.6	-0.90	-1.80
130 ft	54.0 psf	107.9 psf	1.50	99.9	-0.90	-1.80
140 ft	54.7 psf	109.3 psf	1.52	101.2	-0.90	-1.80
150 ft	55.3 psf	110.7 psf	1.54	102.5	-0.90	-1.80
175 ft	56.8 psf	113.7 psf	1.58	105.3	-0.90	-1.80
200 ft	58.2 psf	116.3 psf	1.62	107.7	-0.90	-1.80
250 ft	60.5 psf	120.9 psf	1.68	112.0	-0.90	-1.80



## Wall Sign Anchor Design

### Structure Dimensions & Loading

Design wind pressure: **P = 71.1 psf**

Sign type: **Channel Letter**

Sign size: **A = 1.7 sqft (per letter, critical)**

Wall material: **Wood** DX or equiv, thickness to match Min Embed  
 Anchor type/size: **#14 SMS**

Ref: APA E830E Fastener Loads for Plywood

Min Embedment: **0.5"**

Min edge dist: **2"**

Min Spacing: **2"**

Anchor tensile capacity: **Tcap = 112.0 lb (per anchor)**

### Check Anchors for Pullout

Total Reaction **Rt = 122.0 lb**  $Rt = P \times A$  (per letter)  
 No. of anchors req'd: **n = 1.1** anchors per letter  $n = Rt / Tcap$

**Total anchors required: 2 anchors per letter**

**OK, min (3) per letter.**

**Ref anchor schedule for other anchor options.**

27.00.00

040

BC1703449

1651

Washington Ave

03:30:11

04B