EL PASO COUNTY PLANNING & COMMUNITY DEVELOPMENT
SIGN APPLICATION

SC1940
PLAT 12506
CS CAD-O

DATE: 11/19/2019

Business

Name: Avalanche Signs
Address: 7204 Cole View, Colorado Springs, CO 80915
Zone:
Legal Description: LOT 13 CLAREMONT BUSINESS PARK FIL NO 2

Type of Sign

Illuminated: YES - WALL SIGN
Non-Illuminated:
Valuation: $1,600

Storefront Length &/or Width: North: 50'

Proposed Sign Sq. Ft. North: 27.1 South: 0 East: 0 West: 45
Existing Sign Sq. Ft. North:0 South: 0 East: 0 West: 0
Total Sign Sq. Ft. 27.1

Contractor Information

Name: Avalanche Sign Contracting, LLC

Address: 786 Hathaway Drive Colorado Springs, CO 80915
Phone: 719 471 9898

Type of License: D-5A

Contractor ID# 20294

Vicinity Map

Tax Schedule # 5408102017
Please show major intersections.

Elevation Drawing

Indicate storefront length & placement of

NORTH EAST ELEVATION

Sign Plan

(Please indicate dimensions and sign copy)

For Planning & Community Development Use Only

Approved Date:
Denied Date:
Comments:

Approved
By:Petra Rangel
Date:04/08/2020
El Paso County Planning & Community Development

Resubmittal? Yes _____ No_____

Fee of $262.00 must accompany this Application. Additional signs at time of first Application are $125.00. Make checks payable to El Paso County.

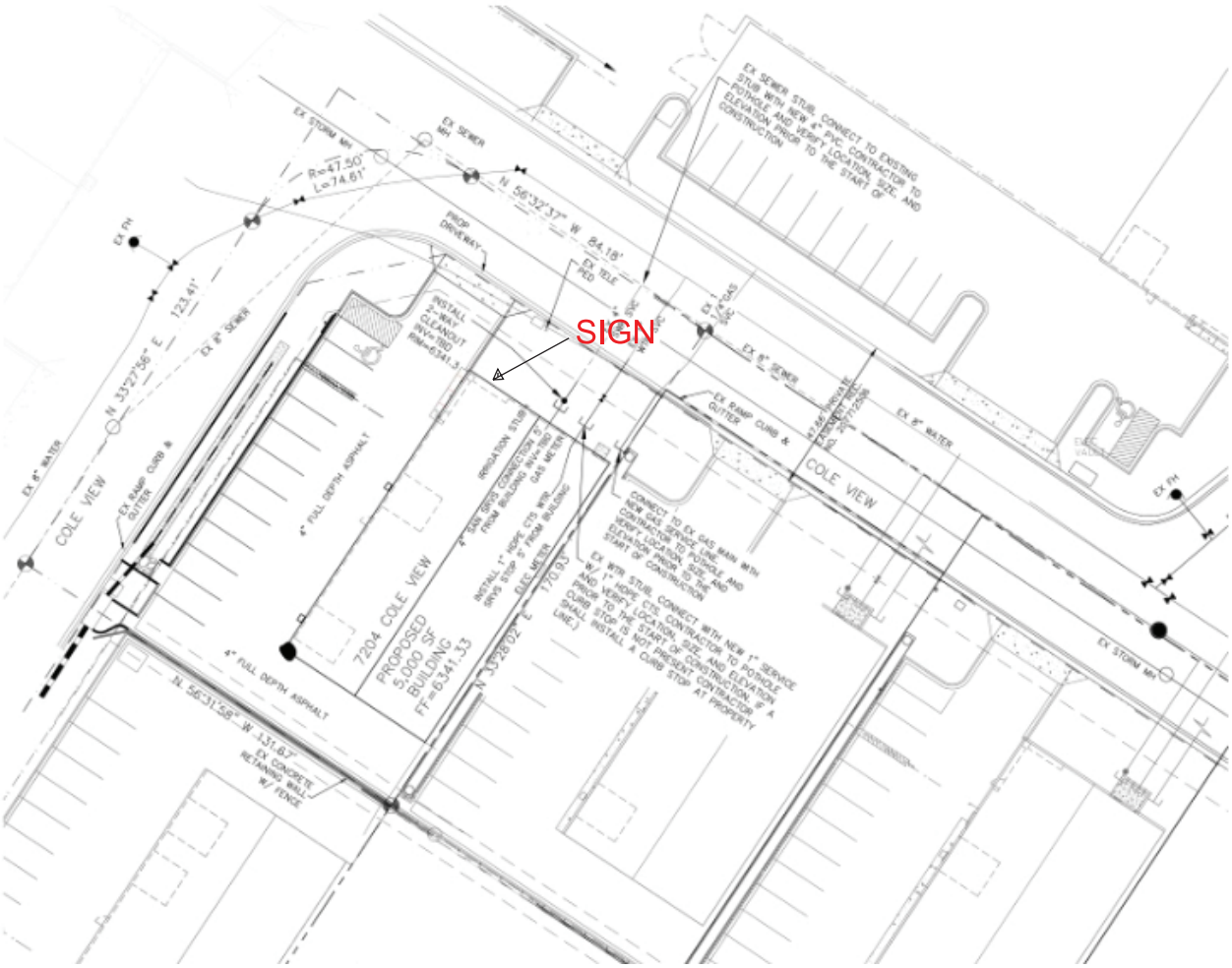

60.00"
64.81”

Vicinity Map

Tax Schedule # 5408102017

Please show major intersections.

NORTH



UL Listed documents enclosed

Wiring Diagram
Wiring Instructions
Power Supply Electrical Req.
Master Compliance Record

Manufactured by:

Artes Metalicos / Gemini Inc.

GEMINI

Tamps, Mexico

Fabricated Channel Letters

UL File No. E319118

(**Total amps** req., per power supply, listed on mfg. label)

All Sign Sections contain UL Listed Labels

Made in Mexico

2019

GEMINI

WIRING INSTRUCTIONS

Fabricated Metal - Lit with UL Certified LEDs - **60 WATT**

Warnings in English & French for Canada

F10-ULAB-A2
Rev. 11/21/19
DGW

Customer Installation/Tips/Troubleshooting Guide

Enclosed are your fabricated lit letters, populated with UL certified LEDs.
Each individual letter/logo has been custom filled with LED modules, designed to provide a consistent Lumen output.

Components Used

All components used in Gemini lit letters are UL approved for LED lighting.
Gemini's UL EFILE #E319118 - UL Certified & CSA approved.

LEDs (letters) to Power Supply Connections

It is recommended that all electrical connections be performed by a licensed electrical contractor.
Each component has been filled with UL approved LEDs, and contains a 3-wire cable.
60 watt power supplies are equipped with two separate channels.
Each power supply can carry a maximum of 5.0 amps, at 12VDC, to the LEDs.

Standard wire connections from letter cable wires to power supply:

Power Supply (to LEDS)	Letters
White (+)	RED coated 18AWG wire (+)
Black (-)	BLACK coated 18AWG wire (-)

Connect 14AWG, Green ground wires to main ground wire, then to PS ground or a proper grounding location.
When Class 2 wiring circuits pass through any wall, NEC code requires use of a conduit, or a UL Certified Class 2 cable.
When these circuits run through concealed spaces, such as a drop ceilings, many codes require use of Plenum rated cable.

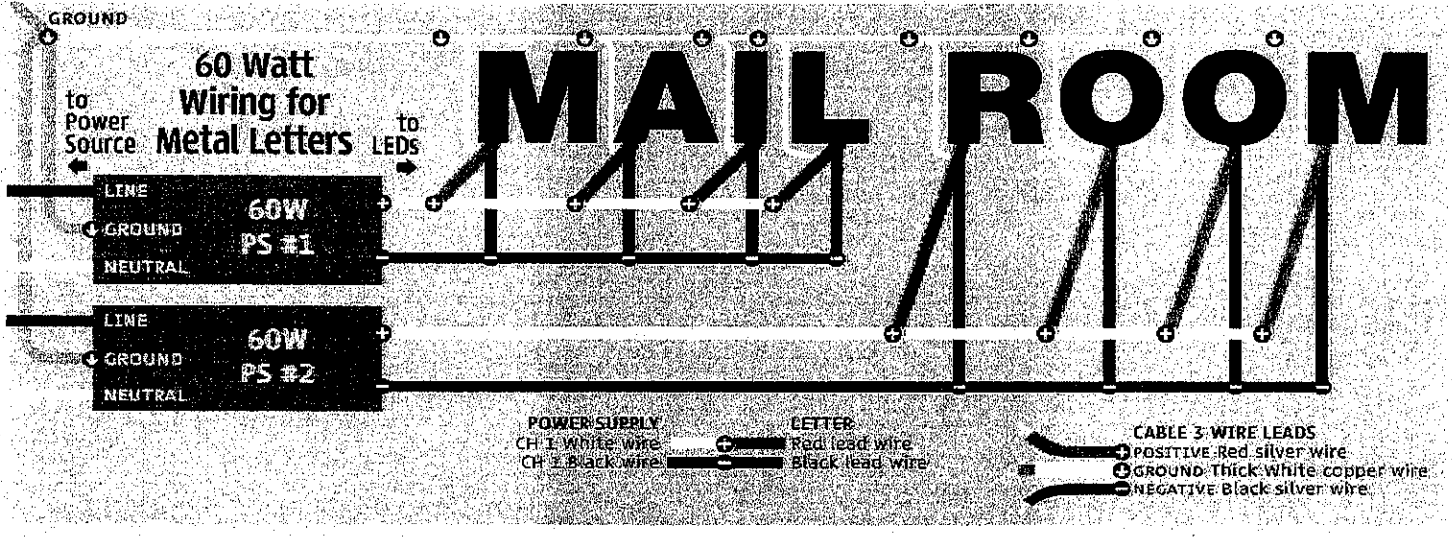
Power Supply (PS) to Power Source Connection

Power Supplies provided are UL approved, Class 2, 12VDC output, wet location rated, max. 277 VAC input.
Do NOT mount power supply directly into letters. Amperage ratings are listed on the power supply labels.
It is recommended that lead cables not exceed 10 feet long, for proper LED performance.
Each 60 watt power supply has 3 wires for input from power source.
Black is the LINE, White is NEUTRAL, and green is the GROUND.
Connect power supply to appropriate sized breaker or power cord, in accordance with National Electric Code (NEC), Article 600, UL 48 and all local electric codes. All field wiring shall be 14 AWG stranded wire.
All orders will be supplied with a wiring diagram that details letter groupings to Power Supply channels.

Power Supply Wiring - Example

"MAIL" are powered by power supply #1.
"ROOM" are powered by power supply #2.

Caution: Plugging LEDs direct into 110VAC will destroy them.
Use ONLY Class 2,12VDC power supplies



Notes:

LED Modules

LED modules have been secured to letter backs with double faced tape. Every other module has been further secured with a plastic support blocks. Should you need to reposition any LED modules, break off the support block with pliers, reposition module and re-tape module. Then secure with silicone on sides and wires.

Backs

All LED lit components are supplied with required weep (drain) holes in the drops of each letter back, per UL requirements. Weep holes are supplied to allow moisture or water to escape, as these units are not sealed.
Some install situations may require installers to further seal lit components, or field install additional weep holes - as needed.

Letter Stand-Off

Halo lit letters are designed to stand-off the mounting surface by using studs and spacers.
Adjusting the spacer length or stand-off from the wall will effect the halo lighting effect.
Typical stand-offs for optimal halo lighting is around 1-1/2" from the mounting surface.

Mounting Surface

When Halo (back) lighting, it is best to install on a non-glossy, lighter colored mounting surfaces.
Dark, Glossy backgrounds will absorb the LED light and will not produce a desirable halo effect.

LED Troubleshooting Guide

Caution: Plugging LEDs direct into 110V will destroy them. Use ONLY Class 2 Power Supplies

Blinking LEDs:

Blinking LEDs: Too many LEDs connected to a given power supply.
Reduce the number of letters or modules attached to your power supply.

LEDs in one or more letters will not light:

LEDs will not light: Too many LED modules are connected to a given power supply.
Reduce the number of letters or modules attached to your power supply.
Check letter connections. Make sure lead cables are properly wired to power supply line.
Make sure all wires are connected per wiring diagram.
Reduce length of lead cables to 10ft. Maximum lengths.
Check AC input connection and/or check circuit breaker.

One LED module is Dark (not lit):

You may have a bad module. Check lighting of letter with face covered to determine impact of one dark LED.
If the face is too dark or visible shadows exist, additional LEDs may have to be added to the letter.

I see light shadows:

Insure that all modules are secured to the Lexan backs.
If a module has come loose, press it back down and secure with additional DF tape and/or silicone.

Some LEDs appear dim:

Ensure that the overall length of the LED system does not exceed the maximum load.
Ensure that the length of supply wire is equal to or below the recommended remote distance.
Ensure that only 50 modules are connected to any one power supply channel.

Electrical Contractor Required

WARNINGS!

It is recommended that all electrical connections be performed by a licensed electrical contractor.
Always follow proper OSHA LOTO (Lockout/Tagout) and NEC practices and procedures.

RISK OF ELECTRIC SHOCK:

Turn power **OFF** before inspection, installation or removal.
• Properly ground any Power Supply enclosures.
• Shut off power at fuse box or circuit breaker before install.
Prepare Electrical Wiring *(Electrical Requirements)*

RISK OF FIRE:

• Use only UL approved supply wires.
Field wiring must be min.14 AWG stranded wire.
• Follow all NEC and Local Electrical Codes.
• Use only UL approved wire for input connection. Minimum size 1.02mm

• The grounding and bonding of the LED Driver shall be done in accordance with NEC Article 600.
Always understand and follow all National Electric Codes (NEC) and local electrical codes.

Entrepreneur en électricité AVERTISSEMENTS obligatoires!

Il est recommandé que toutes les connexions électriques doivent être faites par un maître électricien.
Toujours suivre OSHA LOTO (verrouillage/étiquetage) et NEC pratiques et procédures appropriées.

RISQUE DE CHOC ÉLECTRIQUE : RISQUES D'INCENDIE :

Coupez l'alimentation avant l'inspection, l'installation ou la suppression.
• Utilisez uniquement UL approuvé fils d'alimentation,
• Terre correctement tous les boîtiers alimentation minimum de 18 AWG.
• Coupez l'alimentation de la boîte à fusible ou le disjoncteur avant d'installer.
• Suivez toutes NEC et les codes électriques locaux.
• Utilisez uniquement UL fil pour l'entrée approuvé
Préparer le câblage électrique (Spécifications électriques) de connexion. Taille minimale 1,02 mm
• La mise à la terre et la liaison du conducteur de LED doivent être effectués en conformité avec l'article NEC 600.
Toujours comprendre et suivre toutes les codes NEC (National Electric) et les codes électriques locaux.
Toutes les alimentations doivent être classé endroit humide, classe 2 avec UL lettres.

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Toutes les alimentations doivent être classé endroit humide, classe 2 avec UL lettres.

UL ELECTRICAL RATING WORKSHEET - FLEX LEDS- MX

Rev. 10/10/19
DGW

This worksheet details the module count of UL Listed Sign Sections, and provides a total module, watts, and amperage requirement, by power supply.
When UL Listing a set of sub-assemblies, each component will be labeled with a sign section number.
The supplied wiring diagram will detail the Sign Section Assembly requirements.
A UL label will also be affixed to each power supply, identifying it as a sign section.
A manufacture label will be placed on each power supply, identifying the total amperage draw for the Sign Sections being lit by each power supply.

UL Label#	Sign Section Number	LED Module Count	Component
P 76017331	4 OF 5	0	Power Supply
P 76017332	5 OF 5	46	A

Sample Label

ELECTRIC
SIGN
SECTION

No. HJ X X X X X X
SECTION ___OF_____

Description	LED Count	Watts per LED
0810046-BLUE	46	0.48

	Total Watts	12 volt system	AMPS Total
	22.08	/ 12=	1.84
Total	**22**	**/ 12=**	**1.84**

12VDC Power Supply					
Fabricated Letters	Manufactured for Gemini by Artes Metalicos, Tamps, MX.				
UL Listed-File No.E319118	Mfg.Date _	10/12/2019	Electrica Rating 12 VDC	1.84	amps.

MAXIMUM 2.5 Amps - per 30watt Power Supply - at 12VDC

UL ELECTRICAL RATING WORKSHEET - FAB METAL- MX

Rev.10/10/19
DGW

This worksheet details the module count of UL Listed Sign Sections, and provides a total module, watts, and amperage requirement, by power supply.
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A manufacture label will be placed on each power supply, identifying the total amperage draw for the Sign Sections being lit by each power supply.

UL Label#	Sign Section Number	LED Module Count	Component
P 76017328	1 OF 5	0	Power Supply
P 76017329	2 OF 5	51	LOGO 1
P 76017330	3 OF 5	55	LOGO 2

Sample Label

ELECTRIC
SIGN
SECTION

No. HJ X X X X X X
SECTION ___OF_____

Description	LED Count	Watts per LED
0810046-BLUE	106	0.48

Total Watts	12 volt system	AMPS Total
50.88	/ 12=	4.24
Total 51	**/ 12=**	**4.24**

12VDC Power Supply

Fabricated Letters — Manufactured for Gemini by Artes Metalicos, Tamps, MX.
UL Listed-File No.E319118 — Mfg.Date 10/12/2019 Electrical Rating 12VDC 4.24 amps

MAXIMUM 5 Amps - **per 60watt Power Supply - at 12VDC**

UL - Master Compliance Record (MCR) - Fabr Metal-Halo Lit

F3-ULAB-C1
Rev. 8/13/14

This record is to be maintained for each order.
The products identified below were reviewed for compliance with applicable requirements in the current version of UL48 standard, UL follow-up inspection instructions, SAM, applicable bulletins & items noted.

Custom Name: AVALANCHE SIGN MFG
Order Number: 5227354

UL File #: E319118 - Fabricated Letters
ID: Halo Lit Fabricated Metal
Construction Type: Indoor and Outdoor rated logos/letters
Fabricated Metal Letters
Illumination Source: Lit with low (12volt) LEDs
Construction Review: The Sign (Letters and/or logos) were evaluated using this criteria and found to comply with UL48 requirements:

- **1.** Enclosure/Sign Back: Lexan backs (per order requirements-check one)
  - ✓ a. Clear LEXAN backs
  - b. Light Diffused LEXAN backs
- **2.** Ventilating Openings: not required
- **3.** Sign Face/Panels: n/a
- **4.** ✓ Drain holes (1/4"diam) in Lexan of each body drop
- **5.** ✓ Grounding and bonding: green ground wire affixed to sign body hardware
- **6.** Electrical & thermal spacing: n/a
- **7.** Wire routing and support: n/a
- **8.** General workmanship
  - ✓ a. sign bodies wiped clean of dust/dirt/metal shavings
- **9.** Proper Lead Wires or LED Cable, (per order requirements):
  - a. Lead Wires or
  - ✓ b. LED Cable Leads
- **10.** Electrical/Supply connections:
  - ✓ a. Line drawing made with sub-assembly to power supply requirements
- **11.** ✓ Installation Instructions: Halo lit cast wiring instruction sheet
- **12.** ✓ Correct components: sub-assembly listing

Performance Review: The sign / letters were evaluated using the following critical requirements and found to comply with requirements:

- ✓ a. order tracking log for Lexan sheet used
- ✓ b. weep holes in all Lexan back letter drops.
- ✓ c. test LEDs and pigtail wire connections
- ✓ d. UL label dated and affixed to sign bodies

Review sign-off: All of the above criteria were met satisfactorily in compliance of UL48.
YES ✓ NO _____ n/s _____

For n/a, describe: _____

For any boxes checked as NO, what action was taken?

Were letters re-inspected & re-tested and found to comply with requirements?
YES _____ NO ✓

MTR Signature: _____ Date: 10-10-19

note 1: If results do not comply, product must be re-worked and brought back into compliance or NOT labeled with a UL Mark. If re-worked, product must be re-inspected or re-tested to verify compliance.

note 2: Record details of results if non-conformances are identified, including disposition and rework details. Record corrective actions taken to bring product into compliance.

Fabricated Wiring Diagram | Order # 5227354 | PO # AVALANCHE LOGO HALO

Blue w/Red Stripe: Positive
Blue w/Silver wire: Negative
Center Blue Copper: Ground

☑ **30 W**
White: Positive
Black: Negative
Green: Ground

☐ **60 W**
White: Positive
Black: Negative
Green: Ground

☐ **100 W**
INPUT:
White: Positive
Black: Negative
Green: Ground

OUTPUT 1:
White: Positive
Black: Negative
OUTPUT 2:
Red: Positive
Green: Negative