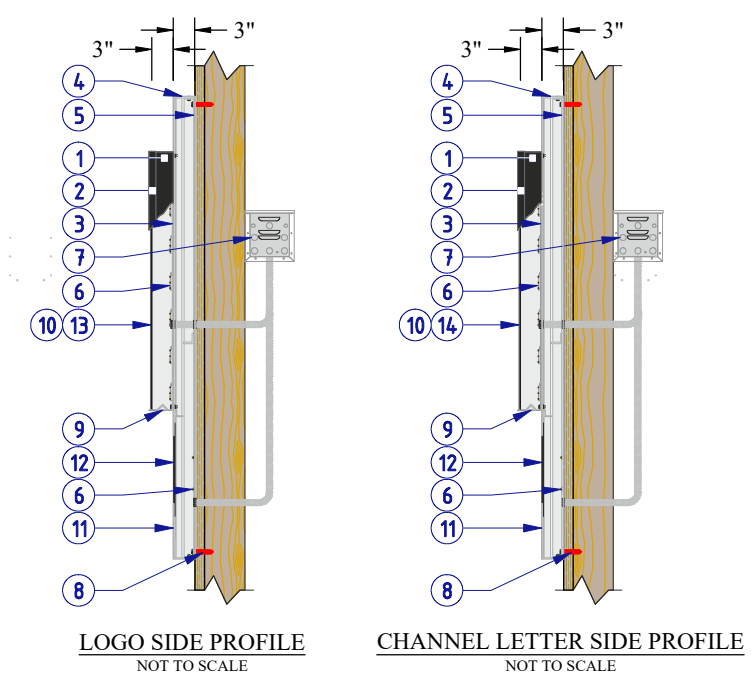


WALL FASTENER SCHEDULE (ALL FASTENERS TO BE NON-CORROSIVE)		
	3/8" Ø GRADE 36 THREADED ROD WITH BLOCKING BEHIND WALL	FOR ALL WALL TYPES
	3/8" Ø GRADE 36 THREADED ROD WITH BEARING PLATES	FOR WOOD, CMU BLOCK OR CONCRETE WALL SYSTEMS
	3/8" Ø THREADED ROD WITH UNISTRUT BLOCKING BEHIND WALL	FOR ALL WALL TYPES
	3/8" Ø HIGH-CAPACITY SNAP TOGGLE	FOR HOLLOW CMU OR WALL SYSTEMS w/ MIN. 1/2" PLYWOOD SUBSTRATE.
	3/8" Ø LIBERTY T-ANCHOR w/ GRADE 36 THREADED ROD	FOR USE WITH HOLLOW CMU WALLS or STUD WALLS WITH 1/2" MIN. THICK PLYWOOD SUBSTRATE
	3/8" Ø GRADE 36 LAG SCREW	FOR WOOD FRAME WALL SYSTEMS. 2-1/2" MIN. EMBEDMENT IN BLOCKING

SPARK STANDARD VIOLET CHANNEL LETTERS ON BACKER SPECIFICATIONS	
NO.	PARTS/DESCRIPTION
1	.040" X 3" PRE-FINISHED BLACK ALUMINUM RETURNS
2	1" BLACK TRIM CAP
3	3MM PRE-FINISHED WHITE ACM BACKS
4	3" X 3" X 3/16" ALUMINUM ANGLE BACKER FRAME
5	.040" ALUMINUM BACK
6	GE 7100K WHITE LED'S AS REQUIRED
7	REMOTE MOUNTED LED POWER SUPPLIES AS REQUIRED
8	NON-CORROSIVE MOUNTING HARDWARE - SEE WALL FASTENER SCHEDULE FOR OPTIONS
9	DRAIN HOLES AS REQUIRED
10	3/16" 2447 WHITE ACRYLIC FACES
11	.080" ROUTED ALUMINUM FACE
12	.177" PLASKOLITE 192301 DAY/NIGHT ACRYLIC FACE BACKER
13	3M 3630-5090 TRANSLUCENT LIME GREEN FILM (1ST SURFACE)
14	3M 3635-9087 DUAL COLOR VIOLET FILM (1ST SURFACE)

- NOTES:
- CHANNEL LETTER INTERIORS TO BE WHITE
 - ELECTRICAL REQUIREMENTS: (1) 20A/120V CIRCUIT
 - U.L. LISTED
 - SIGN AREA: ACTUAL LETTER AREA: 10.84 FT²
 - BOXED AREA: 43.23 FT²
 - BACKER AREA: 64.31 FT²



- GENERAL NOTES:
- All design, detailing, fabricating and construction shall conform to the following codes and specifications:
 - The 2015 Michigan Building Code.
 - The 2015 International Building Code. (ASCE 7-10).
 - American Society of Testing and Materials (ASTM) specifications.
 - Building Code Requirements for Reinforced concrete (ACI 318-(Current Edition)).
 - Code for Welding in Building Construction of the American Welding Society.
 - Specification for the Design, Fabrication and Erection of Structural Steel for Buildings by The American Institute of Steel Construction (AISC) (Current Edition).
 - Aluminum Association Aluminum Design Manual (Current Edition).
 - Site Design Criteria (per ASCE7 Hazard Tool): Risk Category II
 - Seismic Design Category B, Site Soil Class D (Default): S_s = 0.096, S₁ = 0.043, S_{0.5} = 0.102.
 - Wind Speed, V_{ULT} = 115 mph (3 Sec Wind Gusts), Exposure C, Equivalent Wind Load, P_{ULT} = -33.1 PSF or +30.2 PSF C&C, Zone 4 @ <40'-0" above the ground. No additional wind catching surfaces are added to the building structure. The building owners structural engineer shall determine the adequacy of the supporting structure (if necessary).
 - Ground Snow Load = 25 psf.
 - Structural Material Specifications:
 - Threaded rods shall be Galvanized or Zinc plated F-1554 Grade 36, A307 Grade A, A307 Grade B, A307 Grade C, SAE J429 Grade 1 or SAE J429 Grade 2, unless otherwise noted.
 - Anchor Bolts shall be Galvanized F-1554 Grade 36 Rod, unless otherwise noted.
 - Stainless Steel bolts for connections shall be ASTM 316A SS Class 2A, unless otherwise noted.
 - Standard strength bolts for connections shall be Galvanized ASTM A-307, unless otherwise noted.
 - High strength bolts for connections shall be Galvanized ASTM A-325, unless otherwise noted.
 - Aluminum Threaded rods shall be ASTM F-468 Grade 6061, unless otherwise noted.
 - Aluminum shapes shall be extruded from 6061-T6 alloy. Welding filler alloy shall be 5183, 5356, 5556 or approved alternative.
 - Structural Steel and Plates shall be ASTM A-36 (F_y=36 ksi)
 - W-Shape beams shall be ASTM A-992 (F_y=50 ksi) Minimum
 - Structural tubing shall be ASTM A-500, Grade B, (F_y=46 ksi)
 - Structural piping shall be ASTM A-53, Grade B, Type E or S, (F_y=35 ksi), ASTM A572 Grade 42 (F_y=42 ksi) or ASTM A572 Grade 50 (F_y=50 ksi), (see drawing for individual member specifications).
 - All bolted connections to have snug tight condition, & if required be verified with Turn-of-Nut method, unless otherwise noted.
 - Welding electrodes shall comply with AWS D1.2-(Current Edition). (All welding to be done by welder certified for specified weld type.)
 - Engineer is not responsible for the safety on the job site (before, during or after) the installation of this structure. It is the responsibility of the owners, contractors & installers to ensure that the installation & erection are in compliance with OSHA regulations.
 - Contractor shall verify all dimensions and conditions in the field before erection and notify the Engineer of any discrepancies. The scope of this engineer does not include on-site observations, unless specifically contracted.

SIGNS WILL COMPLY TO 2015 MICHIGAN BUILDING CODE

PRIMARY ELECTRICAL POWER TO SIGN TO BE BY OTHERS. ALL POWER TO BE 120 VOLT UNLESS OTHERWISE STATED.

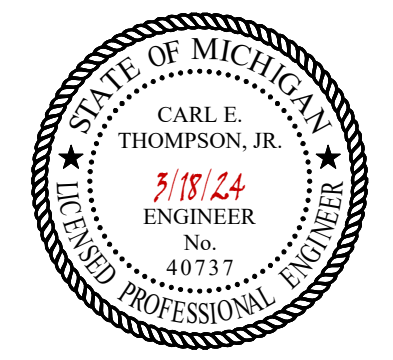
ELECTRICAL TO USE U.L. LISTED COMPONENTS & SHALL MEET ALL N.E.C. STANDARDS

2017 LISTED U.L. US

SIGN MUST BE GROUNDED IN COMPLIANCE WITH ARTICLE 600 OF THE NATIONAL ELECTRIC CODE.

NOTE: Carl E. Thompson, Jr., P.E., is responsible for new wall sign to wall connection design only, all else is shown for informational purposes only & is the responsibility of the sign manufacturer or others. Existing wall is by others, this engineer shall be indemnified & held harmless for the design thereof. This drawing is for permit procurement purposes only. Unauthorized use is strictly prohibited. Any deviations from these plans without prior written consent entirely voids this design. On-site observation are not included in the scope of engineering responsibility. Design is based on items such as existing field data, & site surveys provided by others, neither Carl E. Thompson, Jr., P.E. nor Persona Signs LLC can certify the accuracy of the data provided.

This item has been electronically signed and sealed by Carl E. Thompson, Jr., P.E. using a digital signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



Carl E. Thompson, Jr., P.E.

VIEW	Layout & Details
DESCRIPTION	Spark Wall Sign 5'-5 3/4" x 11'-8 13/16"
INSTALLATION ADDRESS	Spark, 3501 S State St., Ann Arbor, MI 48108
CLIENT P.O.#: 331380	
	Persona Signs, LLC 700 21st Street Southwest (P.O. Box 210) Watertown, SD 57201 1-800-843-9888 www.personasigns.com

CARL E. THOMPSON, JR., P.E.

Mailing Address: P.O. Box 305, Athens, TN 37371
Phone: (423) 405-3303
Email: Carl.E.Thompson.Jr.PE@gmail.com

DRAWN BY:	DATE:	DWG #:	SCALE:	SHEET SIZE:
D.P.Ward	March 18, 2024	24-0194	1/2" = 1'-0"	11"x17"
REVISIONS:	N/A			

SHEET 1 OF 1

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