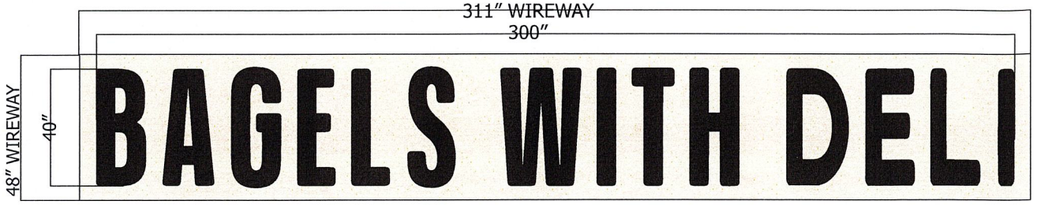
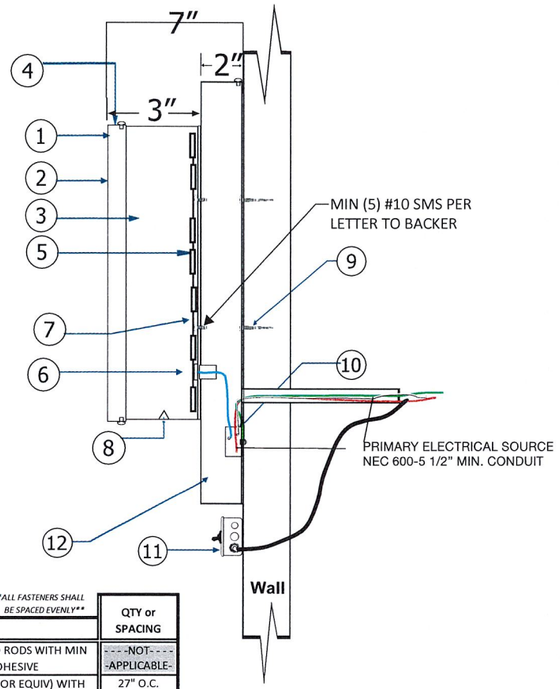
REVERSE CHANNEL LETTERS ON A WIREWAY
EXISTING LETTER HEIGHT - 21.5" (21.5" x 315"=47sqft)--1 BAY
PROPOSED LETTER HEIGHT-40" (40" x 300"=83.3sqft)--2 BAYS
WALL COLOR: SW 7632-MODERN GRAY
WALL: STUCCO/WIRELATH/90LB PAPER/PLYWOOD



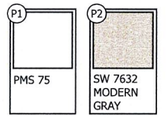


Production Notes

1. .155 MODIFIED WHITE ACRYLIC FACES
2. BLACK VINYL ON FACES
3. ALUMINUM RETURNS & BACKS FINISH TO BE BLACK. INSIDE PAINTED WHITE
4. 1" JEWELITE TRIM CAP-BLACK
5. ILLUMINATION: PRINCIPAL PL-QM3-TW200-P M-QMTX0-71-TRUE WHITE (71K) or APPROVED EQUIVALENT
6. FLEX CONDUIT
7. LED STRIPS TO BE MOUNTED TO RETURNS OR BACKS OF CHANNEL LETTERS WITH VHB TAPE AND SILICONE
8. 1/4" WEEP HOLES AS REQUIRED (EXTERIOR ONLY)
9. MOUNTING HARDWARE (DETERMINED BY WALL CONSTR.)
10. (120V) LED POWER SUPPLY
11. (120V/20AMP) WEATHERPROOF J-BOX W/DISCONNECT ON WALL, ASTRONOMICAL TIME CLOCK OR PHOTOCELL
12. WIREWAY-PAINTED SW 7632-MODERN GRAY

Paint Notes:

All Painted Surfaces to have Akzo Nobel Satin Paint (UNLESS SPECIFIED)
P1) RETURNS-INSIDE PAINTED WHITE
P2) WIREWAY PAINTED-SW 7632-MODERN GRAY



WALL COLOR: SW 7632-MODERN GRAY
WALL: STUCCO/WIRELATH /90LB PAPER/PLYWOOD

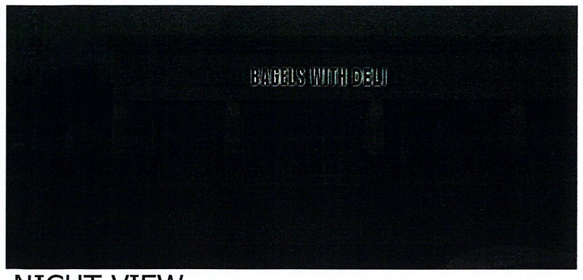
EXISTING

PROPOSED

THIS IS CENTERED BETWEEN BAYS

ANCHOR SCHEDULE ***ALL FASTENERS SHALL BE SPACED EVENLY***

WALL MATERIAL	ANCHOR TYPE	QTY or SPACING
CONCRETE (3ksi) or HOLLOW MASONRY	3/8" THREADED RODS WITH MIN 2" EMBED IN ADHESIVE	- - - -NOT- - - - -APPLICABLE-
	3/8" TAPCONS (OR EQUIV) WITH 2.5" EMBED	27" O.C. TOP+BOT
	3/8" EXPANSION ANCHORS WITH 3.5" EMBED	34" O.C. TOP+BOT
1/2" PLYWOOD (NO ACCESS BEHIND)	3/8" TOGGLE BOLTS	21" O.C. TOP+BOT
	1/4" WOOD SCREWS, FULL EMBED	- - - -NOT- - - - -APPLICABLE-
METAL STUDS OR METAL PANELS	#14 METAL SCREWS TO MIN 18ga STEEL OR 0.090" ALUM	18" O.C. TOP+BOT
HOLLOW WALL (BLOCKING BEHIND)	3/8" THRUBOLTS OR LAGS TO SOLID BLOCKING BEHIND	34" O.C. TOP+BOT



NIGHT VIEW

Electrical Notes:

ALL COMPONENTS SHALL BE U.L. APPROVED
BALLASTS SHALL HAVE INDEPENDANT U.L. APPROVAL (FUSED WHERE REQUIRED)
ALL INSTALLATIONS SHALL BE IN COMPLIANCE WITH N.E.C. AND STATE, COUNTY, OR LOCAL CODES. ALL SIGNS SHALL BE BONDED TO BUILDING EQUIPMENT BONDING CONDUCTOR PER N.E.C. 250.

PRIMARY WIRE SIZE: #12 THWN

DISCONNECT SWITCH: AT BASE OF SIGN, 20 AMP 2 POLE, ASTRONOMICAL TIME CLOCK OR PHOTOCELL PHOTOCELL PAIRS WITH EMS SYSTEMS CONTROLS ALL SIGNAGE AND MEETS CRITERIA C-405

MAXIMUM LOAD: 16 AMPS 120 VOLTS PER CIRCUIT SIZE 20 AMPS PER N.E.C. 600-6A

POWER SUPPLY: 120v-277 MULTI VOLT 60W 12v DC

ILLUMINATION: PRINCIPAL PL-QM3-TW200-P M-QMTX0-71-TRUE WHITE (71K) or APPROVED EQUIVALENT

CONDUIT: MINIMUM 1/2

TOTAL SIGN LOAD: 2.4 AMPS 120VOLTS

TOTAL SIGN CIRCUITS: 1

KEMP Signs & Service, Inc.
ES0000229
1740 HILL AVENUE
WEST PALM BEACH, FL
33407
561-840-6382
FAX: 561-840-6385

CUSTOMER:

BAGELS WITH DELI
1732 S. FEDERAL HWY.
DELRAY BEACH, FL 33483

GRAPHIC DESIGNER: Pammi Reeves
SALES PERSON: Maria Damiani
DATE: 05.30.2025

ALL ELECTRICAL TO BE U.L. LISTED COMPONENTS AND SHALL MEET ALL N.E.C. STANDARDS

PRIMARY ELECTRICAL LEADS, POWER TO SIGN BY OTHERS

DESIGN SHALL COMPLY WITH THE 8th EDITION OF THE FBC 2023 (AND OTHER CODES)
SIGN COMPLIES WITH 8th EDITION OF THE FBC & HVHZ

CHRISTIAN LANGLEY LICENSE No. 67382 STATE OF FLORIDA PROFESSIONAL ENGINEER
NOV 07 2025
Easy Seals
Christian Langley, PE #67382
Florida Cert of Auth #31124
1200 N Federal Hwy, #200
Boca Raton, FL 33432
1-888-371-3113

TORNADO LOADS: Design for Tornado Loads is NOT Required

WIND LOADS (ASCE 7-22) • V=170 mph • Risk Category 2 Struct. • Sign Height = 30 ft max Wall components & cladding: • Exposure 'C' • ASD Load Coeff = 0.6 • Kzt=1.0, Kd=0.85, G=0.85 • Zone 4: ± **40.7 psf** • Zone 5: ± **51.8 psf**

General Notes: • Design is in accordance with the requirements of the **Fla Bldg Code 8th Ed (2023)** for use within & outside the High Velocity Hurricane Zone (HVHZ). • This engineering certifies only the structural integrity of those systems, components, and/or other construction explicitly specified herein. • 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. • Structural design meets requirements of ACI 318-19, AISC 360-16, ADM1-20, & NDS-18, as applicable. • Steel components shall be coated, painted, or otherwise protected against corrosion per FBC Sec 2203.2/2222.6. • Alum components in contact with steel or embedded in concrete shall be painted or protected as prescribed in ADM1-20(1a), or plastic/neoprene spacers provided. • All exposed fasteners shall be S.S. or have a protective coating for corrosion protection. • All welding shall comply with AWS requirements. • Steel welds: E70xx electrodes. • Aluminum welds: 4043 filler alloy. • Alum extrusions: 6063-T6 or stronger, U.N.O.

Easy Seals
easyseals.com

DESIGN CALCULATIONS

FOR

BAGELS WITH DELI
FRONT LETTERS ON BACKER

1732 S Federal Hwy – Delray Beach

GENERAL NOTES:

1. Design is in accordance with the Florida Building Code 8th Edition (2023) for use within and outside the High Velocity Hurricane Zone (HVHZ).
2. Wind loads have been calculated per the requirements of ASCE 7-22 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 2020 Aluminum Design Manual. 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 & apellate fees resulting from deviation from this design.

Index:

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

CHRISTIAN LANGLEY LICENSE No. 67382 STATE OF FLORIDA PROFESSIONAL ENGINEER

Jun 05 2025

Christian Langley PE # 67382
Easy Seals Cert Auth # 31124

ASCE 7-22 Design Wind Loads

WALL-MOUNTED SIGNS

Building Specs

V =	170 mph	*Basic wind speed (Vult)*	ASD Load Combo Coeff:	0.6	
Exposure	C		Risk Category:	II	***←Tornado load eval not req'd***
Ae =	N/A	*Effective plan area (sqft)*			
VT =	N/A	*Tornado speed (Vult)*			
VT/V =	N/A				

Calculations

α =	9.8	*3-sec gust speed power law exponent*	Kd = 0.85	*Directionality factor*
z_g =	2460'	*Nominal ht. of atmos. boundary layer*	Kzt = 1.0	*Topographic factor*
Gcpi =	0	*Internal pressure coeff*	Ke = 1.0	*Ground elevation factor*
			A = 10 sq ft	*Tributary area*

170 mph - Exp "C"

WALL-MOUNTED SIGNS

SIGN HEIGHT	ASD WIND PRESSURES CENTER (Zone 4)	CORNER (Zone 5)	Kh = Kz	q_z	GCp (4)	GCp (5)
15 ft	**35.3 psf**	**45.0 psf**	0.85	37.8	-1.10	-1.40
20 ft	**37.5 psf**	**47.7 psf**	0.90	40.1	-1.10	-1.40
25 ft	**39.2 psf**	**49.9 psf**	0.94	41.9	-1.10	-1.40
30 ft	**40.7 psf**	**51.8 psf**	0.98	43.5	-1.10	-1.40
35 ft	**42.0 psf**	**53.4 psf**	1.01	44.9	-1.10	-1.40
40 ft	**43.2 psf**	**54.9 psf**	1.04	46.2	-1.10	-1.40
45 ft	**44.2 psf**	**56.3 psf**	1.07	47.3	-1.10	-1.40
50 ft	**45.2 psf**	**57.5 psf**	1.09	48.3	-1.10	-1.40
55 ft	**46.1 psf**	**58.6 psf**	1.11	49.3	-1.10	-1.40
60 ft	**46.9 psf**	**59.7 psf**	1.13	50.1	-1.10	-1.40
70 ft	**39.6 psf**	**79.2 psf**	1.17	51.7	-0.90	-1.80
80 ft	**40.7 psf**	**81.3 psf**	1.20	53.2	-0.90	-1.80
90 ft	**41.7 psf**	**83.3 psf**	[illegible]	54.5	[illegible]	[illegible]
100 ft	**42.6 psf**	**85.1 psf**	1.25	55.6	-0.90	-1.80
110 ft	**43.4 psf**	**86.8 psf**	1.28	56.7	-0.90	-1.80
120 ft	**44.2 psf**	**88.4 psf**	1.30	57.8	-0.90	-1.80
130 ft	**44.9 psf**	**89.8 psf**	1.32	58.7	-0.90	-1.80
140 ft	**45.6 psf**	**91.2 psf**	1.34	59.6	-0.90	-1.80
150 ft	**46.2 psf**	**92.5 psf**	1.36	60.4	-0.90	-1.80
175 ft	**47.7 psf**	**95.4 psf**	1.40	62.4	-0.90	-1.80
200 ft	**49.0 psf**	**98.1 psf**	1.44	64.1	-0.90	-1.80
250 ft	**51.3 psf**	**102.6 psf**		67.1		

Wall Sign Anchor Design

Structure Dimensions & Loading

Design wind pressure: **P = 51.8 psf**

Sign type: Backer/Wireway
Sign size: h = 48.0 inches (height)

Wall material: Masonry (ASTM C90, 1,500 psi min)
Anchor type/size: 3/8" Expansion Anchor
Ref: Powers Power-Bolt, catalog
Min Embedment: 1.5"
Min edge dist: 12"

Anchor tensile capacity: **Tcap = 295.0 lb** (per anchor)

Check Anchors for Pullout

Total Reaction: Rt = 207 lb/ft ... = P*h (along raceway)
Anchor spacing req'd s = 34.2 in O.C. ... = (2*cap)/Rt

Pairs of anchors at 34 inches on center (max)
2.8 feet on center
OK, typical anchor option shown. Limit to anchors at 34" O.C. max along top+bottom
Ref anchor schedule for other anchor options.