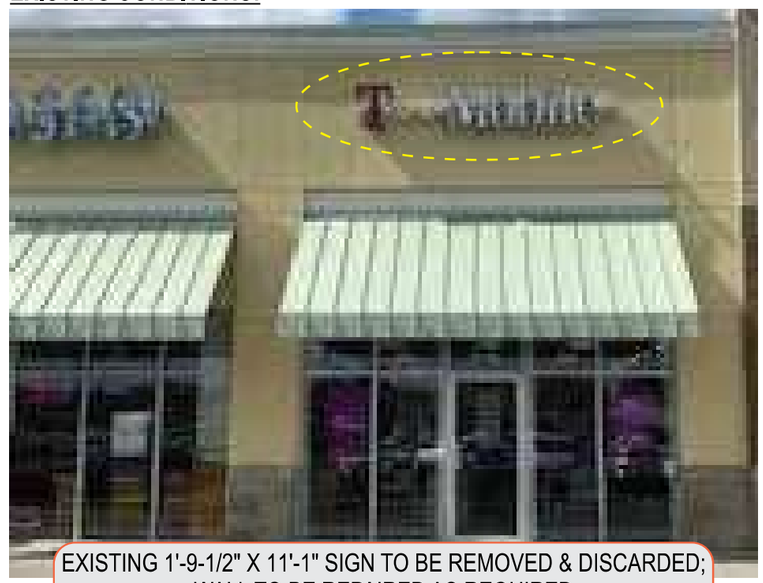
A STOREFRONT ELEVATION

TMO-29W-1B

Scale: 1/4"=1'-0"

EXISTING CONDITIONS:



EXISTING 1'-9-1/2" X 11'-1" SIGN TO BE REMOVED & DISCARDED; WALL TO BE REPAIRED AS REQUIRED

JOHN J. ORLANDO LICENSE No 0044089 STATE OF FLORIDA PROFESSIONAL ENGINEER

John Orlando Digitally signed by John Orlando Date: 2022.04.13 15:58:48 -04'00'

This item has been electronically signed and sealed by John J. Orlando, PE using a Digital Signature and date.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Conforms to the requirements of the 7th Edition (2020) of the Florida Building Code sections 1609 and 3107, V(ult) = 120 mph, Exposure category = C, Risk category = II
John J. Orlando PE LLC - 165 Old Ridge Road - Macon, GA 31211 - 478 731 5394 - jjorlando@cox.net - Florida registration # 0044089 job 5222SS sheet 1 of 3

SIGN Source
YOUR COMPLETE SIGN SOLUTION
2045 Lawson Road Clearwater, FL 33763 • 727-736-3555 • www.signsourcefla.com

CLIENT: T-Mobile

ADDRESS:
313 NW COMMONS LOOP
SUITE 119-C
LAKE CITY, FL 32055

Rev #	Req #	Date/Artist	Description
Original	371064	03/01/22 Z-AP	
Rev 1	371546	03/04/22 Z-SA	Revised Tenant Panel Artwork
Rev 2	373410	03/16/22 Z-RU	Revised Channel letters size from "TMO-24W-1B" to "TMO-29W-1B"

Rev #	Req #	Date/Artist	Description

A FACE LIT CHANNEL LETTERS on BACKER

TMO-29W-1B

Scale: 1/2"=1'-0"

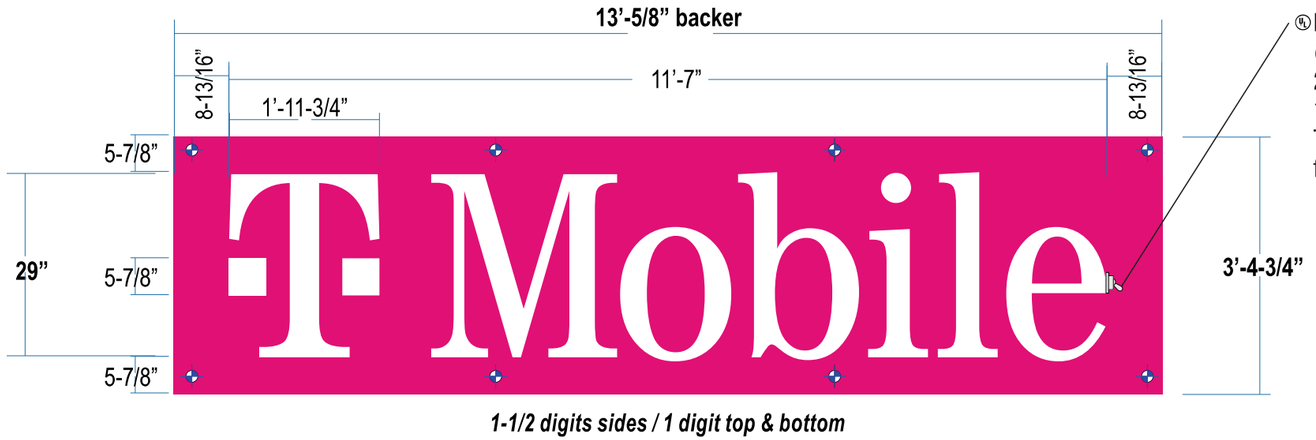
44.3 Square feet

Sign Code:

Aggregate for all signage: 1.50 sf per LF of lot frontage
30 x 1.5 = 45 sq ft

Proposed Sign:

3'-4-3/4" x 13'-5/8" = 44.3 SF



Ⓤ Disconnect switch (can be on either side) 20 AMP dedicated 1 10V circuit.12GA wire. Time clock or photocell for controlling the circuit.

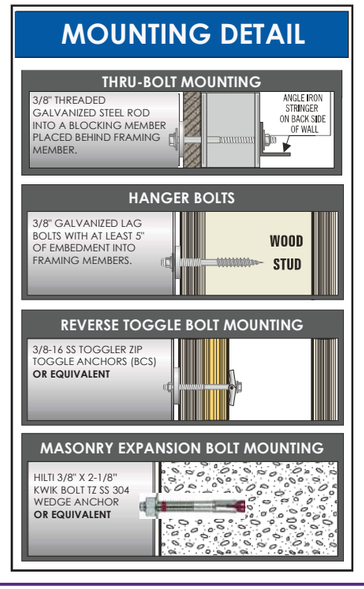
1-1/2 digits sides / 1 digit top & bottom

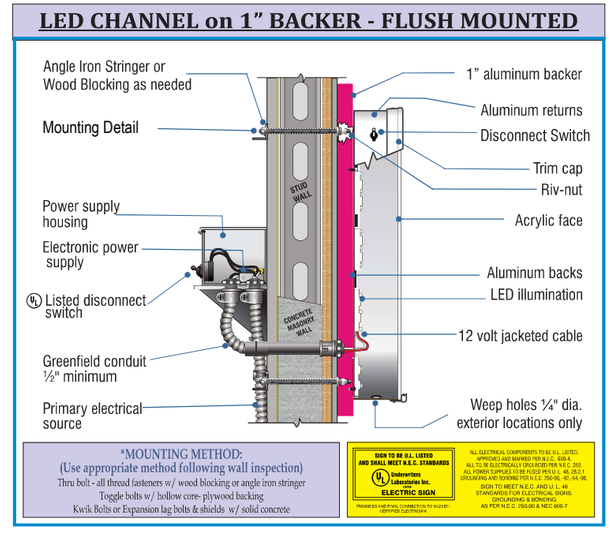
COLOR PALETTE

- Matthews Magenta MP86055 R155445 N Semi-glo V1.0 over MP55898 White Basecoat
- #2447 White Autoglas or Equal

FACES:	3/16" thick #2447 White autoglas or equal
TRIM CAP:	1" White jewelite trimcap
RETURNS:	.040 alum. 3" deep pre-finished White
BACKS:	.063 alum. - pre-finished alum White
LED:	Principal (≥20") SF Mini 6500K; (<20") Qwik Mod 3 6500K White LED's; ***Remote power supplies***
BACKER PANEL:	1" deep fabricated alum. backer cabinet w/ internal angle stringers; .063 alum. skin painted TMO Magenta and White base coat specified (per color palette)
INSTALL:	**Mount in eight (8) evenly spaced places per Mounting Detail. Precise fastener locations ⌖ by installers.**
WALL TYPE:	Signband Wall material is BRICK
JOB NOTE:	UL label location - one to be visible from ground, others to be placed on top of letters and one on power supply
QUANTITY:	(1) One Channel letters set required for Front elevation.

Complies to NEC 2017 — 2017 Edition





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Rev #	Req #	Date/Artist	Description

Job name	T Mobile
Job#	5222SS
Sign company:	Sign Source
Installation location:	313 NW Commons Loop, Suite 119-C, Lake City, FL 32055

Section 3107 and 1609 of Florida Building Code 2020 and Chapter 30 ASCE 7-16 applies.
Application of wind pressures using the alternative all heights method for components and cladding

Type of structure: channel letters on a backer panel

Occupancy Category:	II	
Wind velocity (3 sec gust), FBC 2020, section 1609.3:	120	mph
Wind pressure (qz)	36.9	psf

Net Pressure Coeficient (Cnet) from Figure 30.7-2

Components and cladding not in areas of discontinuity - walls and parapets	-1.09	
Wind Pressure	-40.2	psf

Wind load applied between wall and structure, pulling structure away from wall
Load carried by tension in fasteners connecting structure to wall

- maximum height of structure to be attached	3.40	ft
- maximum width of structure to be attached	13.05	ft
- effective projected area factor	1.00	
- projected area of each component to be attached	44.3	ft^2
- wind load	-1783	lbs
- allowable tension load per fastener to	250	lbs
- even number of fasteners minimum of 2 =	-8	
- number of fasteners practically required due to structure shape	8	
- weight of structure is approximately	177	lbs
- allowable shear load per fastener to	125	lbs
- average shear load per fastener =	22.2	lbs

Mounting surface construction is:	to be determined
Use methods:	1 through 4

Method 1 - 3/8-16 SS Toggler zip toggle anchors (BCS)
- allowable pull out load = 250 lbs
- allowable shear out load = 125 lbs
https://toggler.com/pdfs/SNAPTOGGLE%C2%AE-Heavy-Duty-Toggle-Bolts.pdf
NOTE: . Design assumes that fasteners are installed according to manufacturer's instructions, using correct size drill.

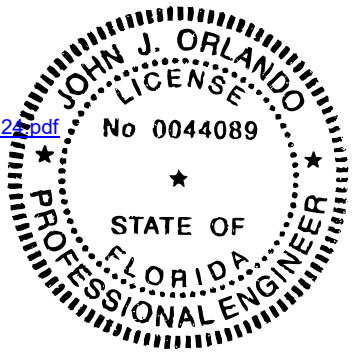
Method 2 - Lag bolts into framing members.
-use 3/8" galvanized lag bolts with at least 5" of embedment into framing members.

- allowable pull out load =	436	pounds
- allowable tension load =	680	pounds

Method 3 - 3/8-16 Gr5 through bolts
http://www.tatoolsonline.com/uploads/266/safety_data_bolt_strengths_identification.pdf
clamp load = 4950 lbs

Method 4 - Hilti 3/8" x 2-1/8" KWIK BOLT TZ2 SS304 WEDGE ANCHOR
- ultimate tension load = 1520 lbs
- allowable tension load = 760 lbs
- ultimate shear load = 1685 lbs
- allowable shear load = 842 lbs
NOTE: . Design assumes that fasteners are installed according to manufacturer's instructions, using correct size drill.
https://www.hilti.com/medias/sys_master/documents/hac/9233455513630/Technical-information-ASSET-DOC-LOC-1543424.pdf

References:
ASCE 7-16
The 7th Edition (2020) of the Florida Building Code



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165 Old Ridge Road
Macon, GA 31211
(478) 731-5394
jjorlando@cox.net

John Orlando Digitally signed by John Orlando
Date: 2022.04.13 15:59:43 -04'00'