

A

STOREFRONT ELEVATION

TMO-29W-1B

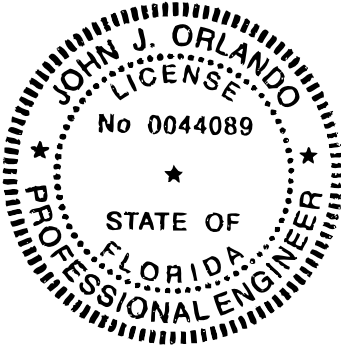
Scale: 1/4"=1'-0"



EXISTING CONDITIONS:



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



John 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 52225S sheet 1 of 3

**SIGNSource**  
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	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"				

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

**TMO-29W-1B**

44.3 Square feet

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  
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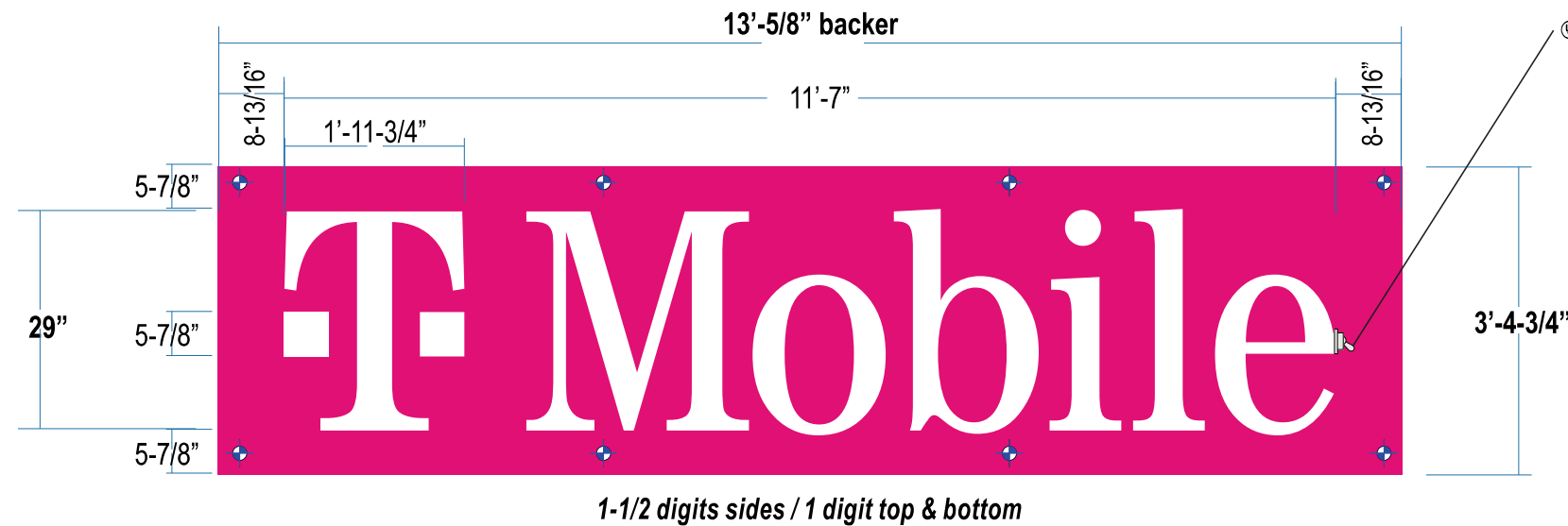
**John Orlando** Digitally signed by John Orlando  
Date: 2022.04.13 15:59:16 -04'00'

Sign Code:

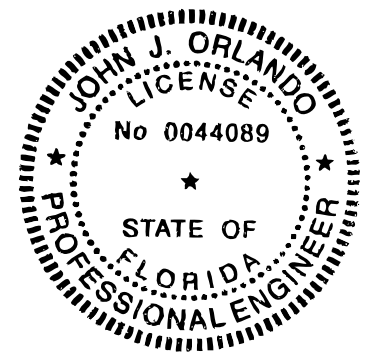
Aggregate for all signage: 1.50 sf per LF of lot frontage

$$30 \times 1.5 = 45 \text{ sq ft}$$

Proposed Sign:

$$3'-4\frac{3}{4}" \times 13'-5\frac{5}{8}" = 44.3 \text{ SF}$$


④ Disconnect switch  
(can be on either side)  
20 AMP dedicated 1  
10V circuit. 12GA wire.  
Time clock or photocell  
for controlling the circuit.



## COLOR PALETTE



**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***

<b>BACKER PANEL:</b>	1" deep fabricated alum. backer cabinet w/ internal angle stringers; .063 alum. skin painted TMO Magenta and White base coat specified (per color palette)
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**INSTALL:** Mount in eight (8) evenly spaced places per Mounting Detail.  
Precise fastener locations  by installers.

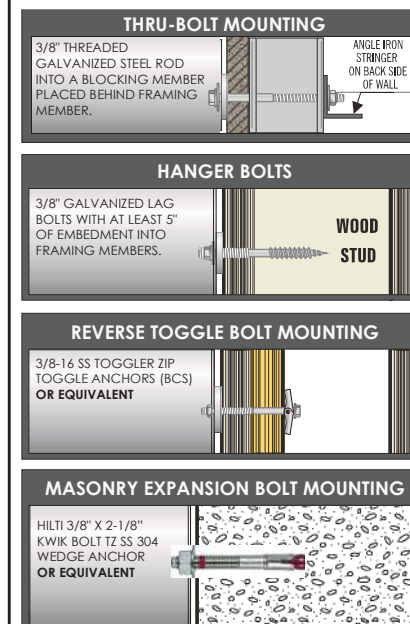
**WALL TYPE:** Signband Wall material is BRICK

**JOB NOTE:** UL label location - one to be visible from ground, others to be placed on top of letters and one on power supply

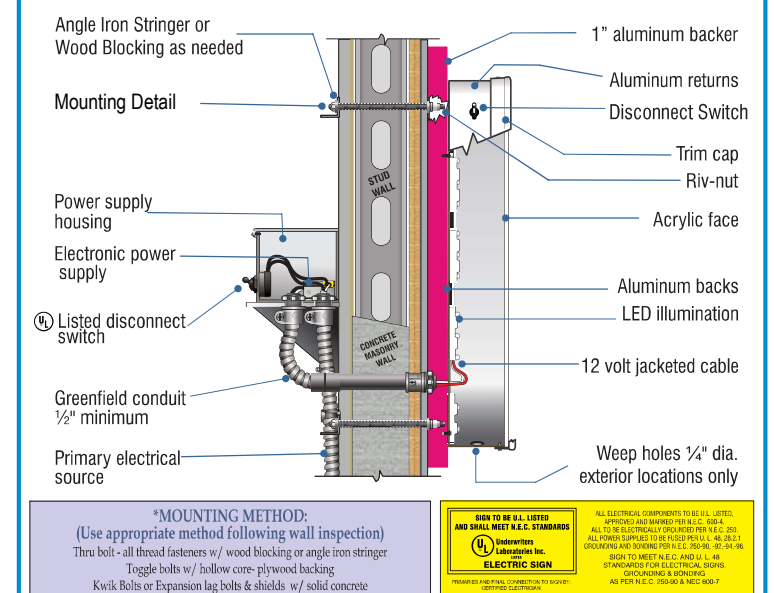
**QUANTITY:** (1) One Channel letters set required for Front elevation.



## MOUNTING DETAIL



### LED CHANNEL on 1" BACKER - FLUSH MOUNTED



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	
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[illegible]

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 Coefficient (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 <sup>2</sup>
- 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](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.

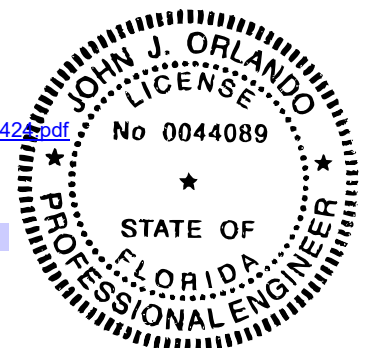
[https://www.hilti.com/medias/sys\\_master/documents/hac/9233455513630/Technical-information-ASSET-DOC-LOC-1543424.pdf](https://www.hilti.com/medias/sys_master/documents/hac/9233455513630/Technical-information-ASSET-DOC-LOC-1543424.pdf)

References:

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

sheet: 3 of 3

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