

# MIAMI BUS SHELTER SLIM VERSION W/O OPPI PAL-LI SOLAR DISPLAY PANEL

## GENERAL NOTES:

### (I) MIAMI BUS SHELTER SLIM VERSION W/O OPPI PAL-LI SOLAR DISPLAY PANEL

- 1.- MIAMI BUS SHELTER SLIM VERSION SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) HAS BEEN VERIFIED FOR CODE COMPLIANCE USING INFORMATION FROM A CURRENT MIAMI-DADE COUNTY HCA WHICH CORRESPONDS TO A LARGER SHELTER SIZE IN ACCORDANCE WITH THE 2017 (6th EDITION) AND 2020 (7th EDITION) OF THE FLORIDA BUILDING CODE. DESIGN WIND LOADS HAVE BEEN DETERMINED IN ACCORDANCE WITH SECTION 1620 OF THE ABOVE MENTIONED CODE, FOR A BASIC WIND SPEED OF 175 M.P.H. AND IN ACCORDANCE WITH ASCE 7-10 (FBC 2017) & ASCE 7-16 (FBC 2020) STANDARD. TESTING FOR WIND CAPACITY HAS BEEN PERFORMED IN ACCORDANCE OF TAS-202 AND AS PER ASTM E-330 STANDARD, PER PENETRATION TESTING LAB REPORTS # 3887, 3785, 3691, 3601 AND 3625. THIS STRUCTURE SHALL ONLY BE INSTALLED WHERE A.S.D. DESIGN WIND LOADS DO NOT EXCEED THE MAXIMUM VALUES INDICATED BELOW.  
MAXIMUM A.S.D. DESIGN LOADS ARE:  
DEAD LOADS ON STRUCTURAL ROOF: 5.0 P.S.F.  
LIVE LOADS ON STRUCTURAL ROOF: 50 P.S.F.  
MAX. A.S.D. DESIGN PRESSURE RATING FOR WIND:  
- ON STRUCTURAL ROOF: +80, -80 P.S.F. (S.F.=2.00)  
- ON REAR GLASS WALL: +50, -81 P.S.F. (S.F.=1.50)
- 2.- ALL STEEL POSTS AND PLATES TO BE MADE OF AISI 304 SERIES WITH A MINIMUM YIELD STRENGTH OF 42.0 ksi.
- 3.- ALL ALUMINUM EXTRUSIONS SHALL BE MADE OF A MINIMUM ALUMINUM ASSOCIATION ALLOY AND TEMPER CORRESPONDING TO 6063-T8.
4. ALL ALUMINUM EXTRUSIONS IN CONTACT WITH DISSIMILAR MATERIALS SHALL COMPLY WITH SECTION III-6 OF THE 2015 ALUMINUM DESIGN MANUAL.
5. BENCH MATERIAL SHALL BE ASTM A-1011 HOT ROLLED STEEL, W/ A MINIMUM YIELD STRENGTH OF 40.0 ksi, PAINTED AS PER FEDERAL SPECIFICATIONS CORRESPONDING TO RED OXIDE PAINT OR EQUAL. MATERIAL TO BE COATED WITH DENFLEX PX-12412 PVC PLASTISOL COATING, 0.125" THICK, AS MANUFACTURED BY POLYONE, CHICAGO, ILLINOIS W/ 10.4 Lb/Oxide/Density, 2300 psi TENSILE STRENGTH (ASTM D-412), 419 psi TEAR STRENGTH (ASTM D-624). COATING WAS EXPOSED FOR 1000 hrs. IN A QUV ULTRAVIOLET CHAMBER, RESULTING ON SOME LOSS OF GLOSS BUT NO PHYSICAL PROPERTY DEGRADATION. COATING SHALL MAINTAIN A COMFORTABLE TEMPERATURE OF BENCH'S SURFACE UNDER EXTREME WEATHER CONDITIONS (HOT OR COLD). THIS ENGINEER IS NOT RESPONSIBLE FOR THE THERMAL PERFORMANCE OF THIS COATING, WHICH SHALL BE GUARANTEED BY THE COATING MANUFACTURER. MAXIMUM BENCH CAPACITY IS 640 Lbs.
- 6.- ALL MACHINE SCREWS & BOLTS TO BE AISI 304 OR 316 SERIES STAINLESS STEEL. MINIMUM SHEAR STRENGTH SHALL BE 80.0 ksi. MINIMUM TENSILE STRENGTH SHALL BE 90.0 ksi, AS PER ASTM A-276 STANDARD. ALL SHEET METAL SCREWS TO BE STAINLESS STEEL 304 OR 316 AISI SERIES OR CORROSION RESISTANT COATED CARBON STEEL AS PER DIN 50016 WITH 50 ksi YIELD POINT AND 80 ksi TENSILE STRENGTH & SHALL COMPLY W/ FLORIDA BUILDING CODE SECTION 2411.3.3.4.
- 7.- ALL RIVETS TO BE STAINLESS STEEL WITH A MINIMUM OF 550 LB. SHEAR STRENGTH AND 700 LB. MINIMUM TENSILE STRENGTH.
- 8.- ALL WELDING OF STAINLESS STEEL MEMBERS SHALL BE PERFORMED IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY AWS D1.6 REGULATIONS. ELECTRODES SHALL BE MADE OF STAINLESS STEEL WITH A MINIMUM TENSILE STRENGTH OF 80.0 ksi (A.W.S. CLASSIFICATION E-308, E309 OR EQUAL. ALL WELDING OF ALUMINUM MEMBERS TO CONFORM WITH THE AMERICAN WELDING SOCIETY A.W.S. D.1.2 REGULATIONS. USE E-5558 OR 5358 ELECTRODES. USE CERTIFIED WELDERS.
- 9.- STRUCTURAL INSULATED ROOF PANEL IS A 3" THICK 1LB/FT<sup>3</sup> DENSITY EXPANDED POLYSTYRENE AS MANUFACTURED BY DYPLAST PRODUCTS LLC., W/ MIAMI DADE COUNTY PRODUCT APPROVED, WITH 0.035" THICK (STUCCO EMBOSSED) 3003-H154, ALUMINUM SKIN (W/ A MINIMUM YIELD STRENGTH OF 28.00 ksi) TOP AND BOTTOM AND ADHERED TO POLYSTYRENE TO SKIN WITH MOR-AD M-464 URETHANE PREPOLYMER SOLUTION, PRODUCED BY MORTON INTERNATIONAL, INC. CHICAGO, ILLINOIS 60606-1588.
- 10.- GLASS AT REAR WALL OF BUS SHELTER SHALL BE 10mm THICK, TEMPERED AND SHALL COMPLY WITH 16CFR-1201.
- 11.- ANCHORS USED TO CONNECT POST'S BASE PLATES TO CONCRETE FOUNDATION SHALL BE EITHER OF THE FOLLOWING TYPES:  
(a.) 5/8" DIAMETER GALVANIZED STEEL ANCHOR BOLTS, WITH STRAIGHT SHAFT, HEAD AND NUT, TO COMPLY WITH ASTM F1554, GALVANIZED TO ASTM A-153 WITH A MINIMUM YIELD STRENGTH OF 36ksi, AND TO PENETRATE A MINIMUM OF 8" IN TO THE EPOXY TO THE CONCRETE FOUNDATION.  
MINIMUM A.S.D. TENSION LOAD CAPACITY: 6200 LB.  
MINIMUM A.S.D. SHEAR LOAD CAPACITY: 3100 LB.  
ANCHORS SHALL BE INSTALLED STRICTLY FOLLOWING THE SPECIFICATIONS OF THE ANCHOR MANUFACTURER AND THE DETAILS SHOWN ON THIS PRODUCT APPROVAL DOCUMENT.
- 12.- ALL CONCRETE TO DEVELOP A 28 DAY MINIMUM COMPRESSIVE STRENGTH  $f'_c$  OF 3000 psi. ALL REBARS TO BE ASTM A-615 DEFORMED BARS. ALL CONCRETE CONSTRUCTION TO COMPLY WITH ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
- 13.- REQUIRED FRAMING FOR INSTALLATION OF SHELTER WITHIN EXPOSURES C OR D AS DEFINED BY ASCE 7-10 (FBC 2017) & ASCE 7-16 (FBC 2020) STANDARD SHALL BE PROVIDED BASED ON SCHEDULE ON SHEET 4 OF 15 OF THIS DRAWING.

### (II) MIAMI BUS SHELTER SLIM VERSION W/O OPPI PAL-LI SOLAR DISPLAY PANEL

- 1.- ALL MECHANICAL DETAILS AND SPECIFICATIONS, AS APPLICABLE, ARE NOT PART OF THIS DRAWING. THEY SHALL BE PREPARED A FLORIDA REGISTERED ENGINEER OR ARCHITECT AND SHALL BE REVIEWED BY THE CORRESPONDING BUILDING DEPARTMENT IN ORDER TO ISSUE A PERMIT FOR CONSTRUCTION.
- 2.- ALL ZONING DETAILS AND SPECIFICATIONS NEEDED FOR THE LOCATION, USE AND CONSTRUCTION OF BUS SHELTER SLIM VERSION IS NOT PART OF THIS DRAWING AND SHALL BE SUBMITTED SEPARATELY TO THE CORRESPONDING ZONING DEPARTMENT IN ORDER TO ISSUE A PERMIT FOR CONSTRUCTION.
- 3.- MINIMUM SOIL BEARING CAPACITY SHALL BE 2000 P.S.F.
- 4.- SHELTER'S DIMENSIONS HAVE BEEN PROVIDED TO THIS OFFICE BY MIAMI DADE COUNTY TRANSIT DEPARTMENT AND THEY NOT HAVE BEEN ESTABLISHED BY THIS OFFICE.
- 5.- (a.) THIS DRAWING PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT; I.e. WHERE THE SITE CONDITIONS DEVIATE FROM THE DRAWING.  
(b.) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT BASED ON THIS DRAWING PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.  
(c.) THIS DRAWING WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.  
(d.) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE DRAWING. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THIS ENGINEER SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.  
(e.) ORIGINAL P.A.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.
- 6.- FINISH COLOR FOR BUS SHELTER SLIM VERSION IS NOT PART OF THIS DRAWING, BUT SHALL BE DEFINED AS PER AGREEMENT BETWEEN MANUFACTURER AND OWNER OF BUS SHELTER.
7. THIS DRAWING IS A GENERIC STRUCTURAL DRAWING AND DOES NOT CONSTITUTE AT ALL A SHOP DRAWING FOR THE DIRECT MANUFACTURING OF THIS BUS SHELTER.
8. LABELING OF THIS PRODUCT SHALL COMPLY W/ MIAMI DADE COUNTY REGULATIONS.



P.E. SEAL/SIGNATURE/DATE

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No: 20-0922-02  
Expiration Date: 10/22/2025  
By: *[Signature]*  
Miami Dept. of Public Works  
MIAMI DADE COUNTY

**TILECO inc.**  
TILLIT TESTING & ENGINEERING COMPANY  
6345 N.W. 36th St., Ste. 305,  
VIRGINIA GARDENS, FL 33196  
Phone: (904) 971-1150, Fax: (904) 971-1531  
e-mail: tileco@aol.com  
CA-0008719  
WALTER A. TILLIT Jr., P. E.  
FLORIDA Lic. # 44167

MIAMI BUS  
SHELTER  
SLIM VERSION  
W/O OPPI PAL-LI  
SOLAR DISPLAY  
PANEL

GENERAL NOTES

OUTFRONT MEDIA, INC.  
6530 NW 23rd Street  
Doral, FL 33122  
Phone (786) 646-8138

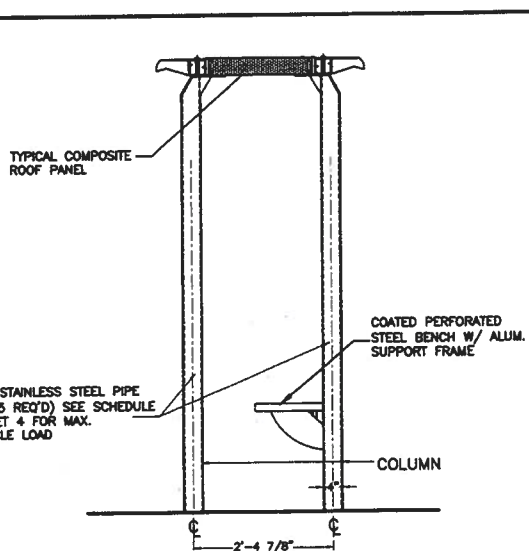
DRAWN BY:  
M.P.

9/3/2020

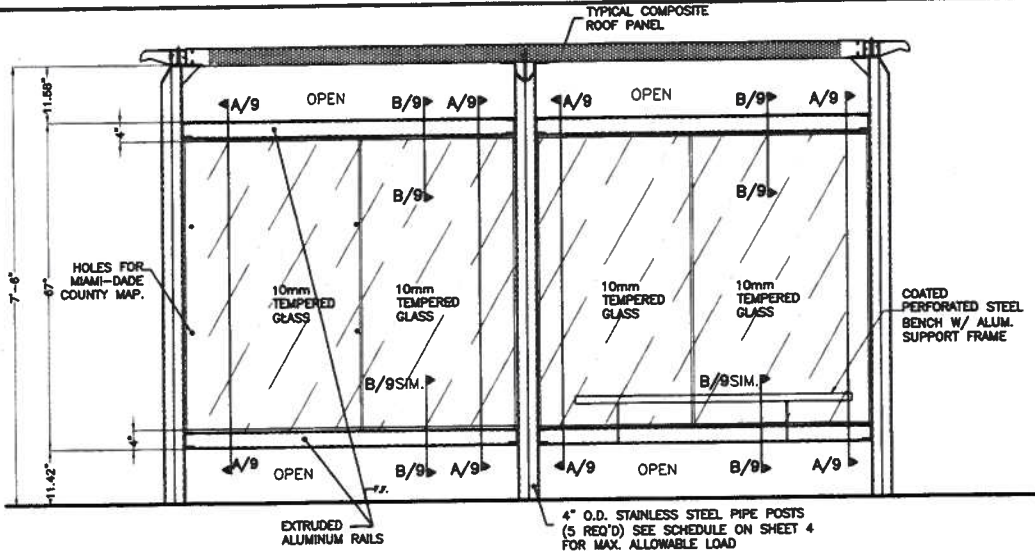
DATE:

20-033  
DRAWING No.

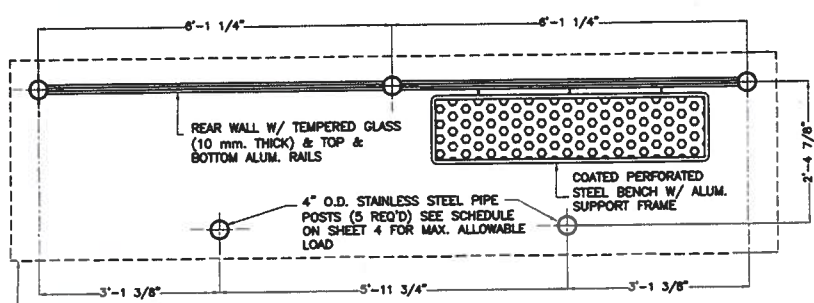
SHEET 1 OF 15



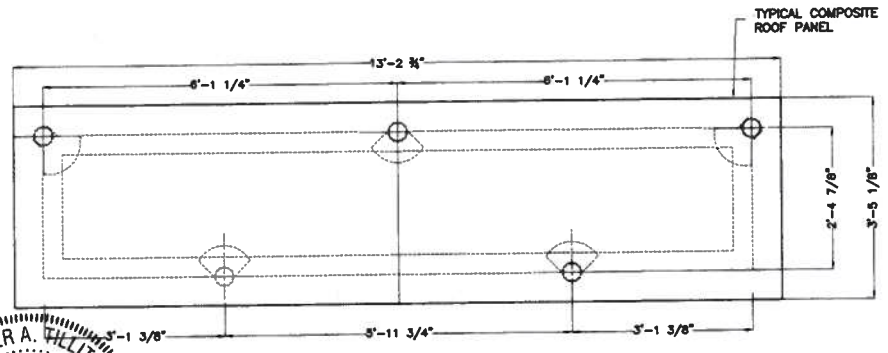
**RIGHT SIDE ELEVATION**  
SCALE: 1/2"=1'-0"



**REAR WALL ELEVATION**  
SCALE: 1/2"=1'-0"



**FLOOR PLAN**  
SCALE: 1/2"=1'-0"



**ROOF PLAN**  
SCALE: 1/2"=1'-0"

PRODUCT REVISED  
to comply with the Florida  
Building Code  
Acceptance No. 20-0924.02  
Expiration Date 8/11/2025  
By: *Walter A. Tillit Jr.*  
Miami Dade County Control



MIAMI DADE COUNTY	P.E. SEAL/SIGNATURE/DATE	<b>TILTECO INC.</b> TILIT TESTING & ENGINEERING COMPANY 8360 N.W. 36th St., Ste. 305, VIRGINIA GARDENS, FL 33196 Phone (305)871-1530, Fax (305)871-1551 e-mail: tiliteco@aol.com CA-0005719	<b>MIAMI BUS SHELTER SLIM VERSION W/O OPPI PAL-LI SOLAR DISPLAY PANEL</b>	OUTFRONT MEDIA INC. 8330 NW 23rd Street Doral, FL 33122 Phone (786) 648-9136	DRAWN BY: M.P.
				1.18/2/2020 042 18-102 Plans & Elevations Revision	9/3/2020 DATE <b>20-033</b> DRAWING No. SHEET 2 OF 15

