

GENERAL NOTES:

1. TKJ ENGINEERING, LLC. HAS NO CONTROL OF THE MANUFACTURING, PERFORMANCE, OR INSTALLATION OF THIS PRODUCT. THESE GENERIC PLANS WERE ENGINEERED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES AND TEST DATA PROVIDED BY THE MANUFACTURER.
2. THE ADVANCED SCREEN SYSTEM SHOWN ON THIS PRODUCT EVALUATION DOCUMENT HAS BEEN DESIGNED IN ACCORDANCE WITH THE 7TH EDITION (2020) FLORIDA BUILDING CODE (FBC). THIS ADVANCED SCREEN SYSTEM SHALL NOT BE INSTALLED IN HIGH VELOCITY HURRICANE ZONES (MIAMI–DADE COUNTY/BROWARD COUNTY). THE ADVANCED SCREEN ZIPPER SYSTEM INSTALLED IN WIND ZONE 4 (SEE FBC SECTION 1609.1.2.2), OR ESSENTIAL FACILITIES SHALL MEET THE MINIMUM SEPARATION TO GLASS. THE ADVANCED SCREEN ROPE SYSTEM INSTALLED IN ANY WIND ZONE SHALL MEET THE MINIMUM SEPARATION TO GLASS. DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1609 OF THE ABOVE REFERENCED CODE, IN ACCORDANCE WITH ASCE 7–16, AND FOR A BASIC WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE THE ADVANCED SCREEN SYSTEM WILL BE INSTALLED. THE ADVANCED SCREEN SYSTEM ADEQUACY FOR IMPACT, DEFLECTION, AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1609.1.2 OF THE ABOVE REFERENCED CODE AND AS PER ASTM E330, E1886, & E1996 AT FENESTRATION TESTING LABORATORY, INC. PER THEIR REPORTS (SEE LIST OF REPORTS).
3. LIMITATIONS OF USE:

A. THIS PRODUCT SHALL NOT BE USED IN HIGH VELOCITY HURRICANE ZONES (SEE FBC SECTION 202).

B. FOR DETERMINING INTERNAL PRESSURE IN THESE REFERENCED CODES, THE ZIPPER SYSTEM IS CLASSIFIED AS NON–POROUS, HAVING A POROSITY OF LESS THEN 10% AND THE ROPE SYSTEM IS CLASSIFIED AS POROUS, HAVING A POROSITY OF GREATER THAN 10% FOR THE CONDITIONS SHOWN IN THIS PRODUCT EVALUATION DOCUMENTS. SCREEN PANELS MUST COMPLETELY COVER AN OPENING IN ALL DIRECTIONS. GLASS SEPARATION IS NOT REQUIRED EXCEPT FOR THE FOLLOWING CONDITIONS.

• ESSENTIAL FACILITIES AS DEFINED IN ASCE 7–16

• WHERE THE SPECIFYING AUTHORITY HAS SPECIFIED OPTIONAL ADDITIONAL PASS/FAIL CRITERIA IN ACCORDANCE WITH ASTM E1996 FOR WIND ZONE 4 AS DEFINED IN ASTM E1996 WITH MODIFICATION BY THE FBC SECTION 1609.1.2.2 (FBC: LOCATIONS WITH ULTIMATE WIND SPEED GREATER THAN 170 MPH).

• THE ADVANCED SCREEN ZIPPER SYSTEM INSTALLED IN WIND ZONE 4 OR ESSENTIAL FACILITIES AND ADVANCED SCREEN SYSTEM ROPE SYSTEM IN ANY WIND ZONE SHALL MEET THE MINIMUM SEPARATION TO GLASS TABLES ON SHEET 3.

C. INSTALLATION WITH INTERMEDIATE, END, AND CORNER MULLIONS REQUIRE A FLORIDA PRODUCT APPROVAL FOR USE WITH THIS TYPE OF SHUTTER SYSTEM.

D. INSTALLATIONS SHALL NOT EXCEED THE MAXIMUM ALLOWABLE STRESS DESIGN (ASD) DESIGN RATINGS AND SIZE LIMITS PROVIDED IN THIS PRODUCT EVALUATION. ULTIMATE DESIGN WIND LOADS DETERMINED BY THE FLORIDA BUILDING CODE AND ASCE 7–16 SHALL BE REDUCED TO ASD BY MULTIPLYING BY 0.6 (SEE FBC SECTION 1609.1.2.4)

E. IMPACT LEVEL D; 9–1/4 LB LARGE MISSILE IMPACT.

F. ANCHORING OR LOADING CONDITIONS OTHER THAN THOSE SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL

G. THIS PRODUCT CAN BE USED AS A WINDBORNE DEBRIS SHUTTER PRODUCT.

H. INCREASE IN ALLOWABLE STRESS (1.33) HAS NOT BEEN INCORPORATED INTO THE DESIGN OF THIS PRODUCT.

4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE EXISTING STRUCTURE IS ADEQUATE TO SUPPORT THE MINIMUM LOADS SHOWN ON THE TABLES ON SHEET 2. EXISTING STRUCTURES NOT ABLE TO SUPPORT THESE LOADS SHALL BE EVALUATED AS A SITE SPECIFIC PROJECT. SEE NOTE 4 OF PRODUCT EVALUATION NOTES.
5. ALL ALUMINUM EXTRUSION SHALL BE 6063–T6 ALLOY (UNLESS OTHERWISE NOTED OR CAN BE REPLACED WITH 6061–T6).
6. WIND ABATEMENT MANUFACTURE’S LABELS SHALL BE IN ACCORDANCE WITH SECTION 1709.9 OF THE FLORIDA BUILDING CODE.
7. FOR DETERMINING INTERNAL PRESSURE IN THE ABOVE REFERENCED CODES, THIS PRODUCT IS CLASSIFIED AS NON–POROUS, HAVING A POROSITY OF LESS THEN 10%, FOR THE CONDITIONS SHOWN IN THIS PRODUCT EVALUATION DOCUMENT. SCREEN PANELS MUST COMPLETELY COVER AN OPENING IN ALL DIRECTIONS.
8. THE ROLL–UP SCREEN SHALL BE STORED IN THE UP POSITION OR SHALL BE STORED IN A DESIGNATED AND ACCESSIBLE AREA, DURING NORMAL WEATHER CONDITIONS.

PRODUCT EVALUATION NOTES:

1. THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) 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 P.E.D.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SELECTION, PURCHASE, AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT BASED ON THIS PRODUCT EVALUATION PROVIDED AND SHALL NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT.
3. THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.
4. 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 P.E.D. THE ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER, SHALL SUBMIT SITE SPECIFIC DRAWINGS FOR REVIEW.

ANCHOR & FASTENING NOTES:

1. ALL FASTENERS SHALL BE CORROSION RESISTANT COATED CARBON STEEL AS PER DIN 50018 OR STAINLESS STEEL 304 OR 316 SERIES WITH 50 KSI YIELD POINT AND 90 KSI ULTIMATE TENSILE STRENGTH.
2. NO EMBEDMENT INTO NON–STRUCTURAL COMPONENTS SUCH AS, STUCCO, TILE, SIDING, ETC. SHALL BE CONSIDERED AS PART OF THE EMBEDMENT.
3. THE ANCHOR SPACING AND DESIGN PRESSURES ARE VALID FOR EDGE DISTANCES AND MINIMUM EMBEDMENT ON SHEET 2. FOR EDGE DISTANCES LESS THAN SPECIFIED, THE SCREEN DESIGN PRESSURE SHALL BE REDUCED BY THE EDGE DISTANCE REDUCTION FACTORS SHOWN ON SHEET 2. THE EDGE DISTANCE SHALL NOT BE LESS THAN 1 1/2” IN CONCRETE OR CMU, 3/4” IN WOOD, OR MINIMUM SPECIFIED BY THE MANUFACTURER. THE MINIMUM EDGE DISTANCE FOR THE 1/4–14 DRIL–FLEX SCREW IS 1/2”.

ZIPPER SCREEN FABRIC SPECIFICATION:

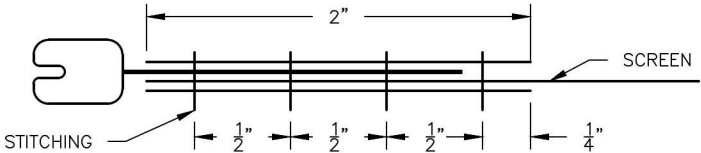
FIBER CONTENT: 100% POLYPROPYLENE  
FINISH: CALENDARED  
WEIGHT (ASTM D3776): 9.7 –OZ/SQUARE YARD  
THICKNESS (ASTM D5199): 21.0 MIL  
SELVAGE: HEAT CUT OR WOVEN  
TENSILE STRENGTH (GRAB METHOD, ASTM D4632): WARP – 500 lbs., WEFT – 550 lbs.  
BURST STRENGTH (ASTM D3786): 750 PSI  
TEAR STRENGTH (ASTM D4533): WARP – 200 lbs., WEFT – 250 lbs.  
ABRASION RESISTANCE (ASTM D4886): 95% STRENGTH RETAINED  
PUNCTURE STRENGTH (ASTM D4833): 200 lbs.  
AIR FLOW: 175 CFM  
UV RETENTION (ASTM D–G154): 70%  
OPEN AREA (COE–02215) 5%

ROPE SCREEN FABRIC SPECIFICATION:

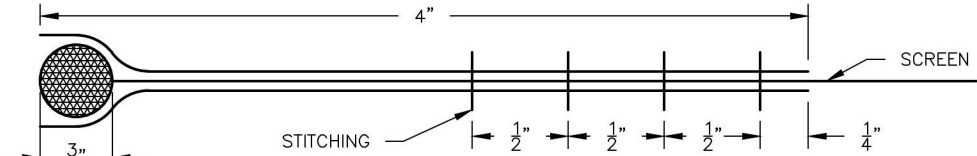
FIBER CONTENT: 100% POLYPROPYLENE  
WEAVE: 3/3 BASKETWEAVE  
YARN SIZE (ASTM D1907): WARP – 925, FILL – 925 DENIER MONOFILL PP  
WEIGHT (ASTM D3776): 10.0 –OZ/SQUARE YARD  
THICKNESS (ASTM D5199): 24.0 MIL  
SELVAGE: HEAT CUT OR WOVEN  
TENSILE STRENGTH (ASTM D4632): WARP – 500 lbs., WEFT – 450 lbs.  
BURST STRENGTH (ASTM D3786): 985 PSI  
AIR FLOW: 300 CFM  
SHADE: 88%

EDGES:

ZIPPER SCREEN: 2” THERMO–SEALED POLYPROPYLENE REINFORCED EDGES  
ROPE SCREEN: 4” THERMO–SEALED POLYPROPYLENE REINFORCED EDGES



STITCHING - DETAIL  
ZIPPER SCREEN RAIL EDGES - SCALE: 1:1



STITCHING - DETAIL  
ROPE SCREEN RAIL EDGES - SCALE: 1:1

LIST OF REPORTS:

FENESTRATION TESTING LABORATORY, INC.

LABORATORY No. 7001  
DATE: 2/5/2013  
PROJECT No. 12–4031  
FILE No. 12–374  
TEST PROTOCOL: ASTM E330–02, E1886–05, & E1996–05  
MAXIMUM WIDTH TESTED: 294”  
DESIGN PRESSURE TESTED: 60 PSF  
STRUCTURAL LOAD TESTED: 90 PSF  
MINIMUM WIDTH TESTED: 55.5”  
DESIGN PRESSURE TESTED: 140 PSF  
STRUCTURAL LOAD TESTED: 210 PSF

ARCHITECTURAL TESTING

REPORT No. 97368.01–401–44  
DATE: 5/05/2010  
TEST PROTOCOL: ASTM E330–02, E1886–05, & E1996–05  
MAXIMUM WIDTH TESTED: 296.5”  
DESIGN PRESSURE TESTED: 75 PSF  
STRUCTURAL LOAD TESTED: 112.5 PSF

REPORT No. A0255.01–401–36  
DATE: 5/07/2010  
TEST PROTOCOL: ASTM E330–02  
MAXIMUM WIDTH TESTED: 168”  
DESIGN PRESSURE TESTED: 75 PSF  
MINIMUM WIDTH TESTED: 36”  
DESIGN PRESSURE TESTED: 75 PSF

REVISIONS

DATE

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ADVANCED HURRICANE TECHNOLOGY

6063 JAMES LANE, NAPLES, FL 34109

PHONE: 239.280.0020; FAX: 239.280.0023

WWW.AHT-USA.NET

ADVANCED SCREEN

ROLL-UP SYSTEM

TKJ Engineering, LLC.

14355 AUTUMN CREEK DRIVE, RIVERVIEW, FL 33569

TEL: 813-404-7649; EM: TKJENGINEERING@VERIZON.NET

CERTIFICATE OF AUTHORIZATION NUMBER: 28592

DATE: 10/5/20

DRAWN BY: TKJ

SCALE: N.T.S.

PROJ. #: 20–0803

THIS IS TO CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THESE PLANS & SPECIFICATIONS ARE IN COMPLIANCE WITH THE BUILDING CODE REQUIREMENTS

DATE OF REVIEW: 10/5/20

PROFESSOR

FLORIDA

165824

TREVOR JOHNSON

LICENSE

No 65624

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OF

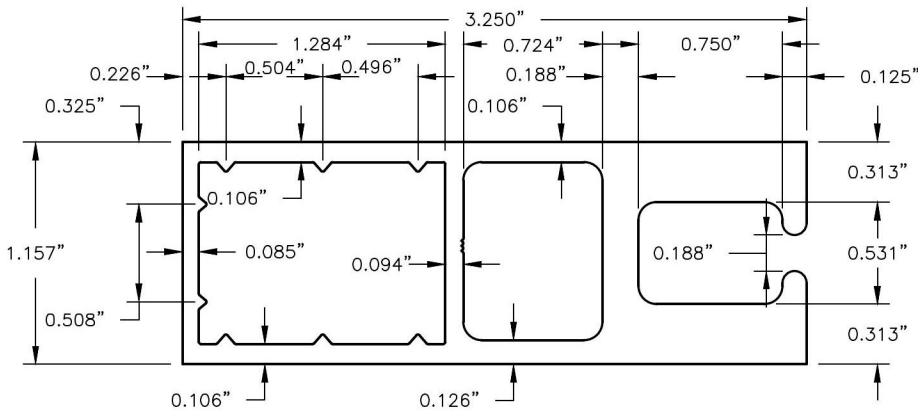
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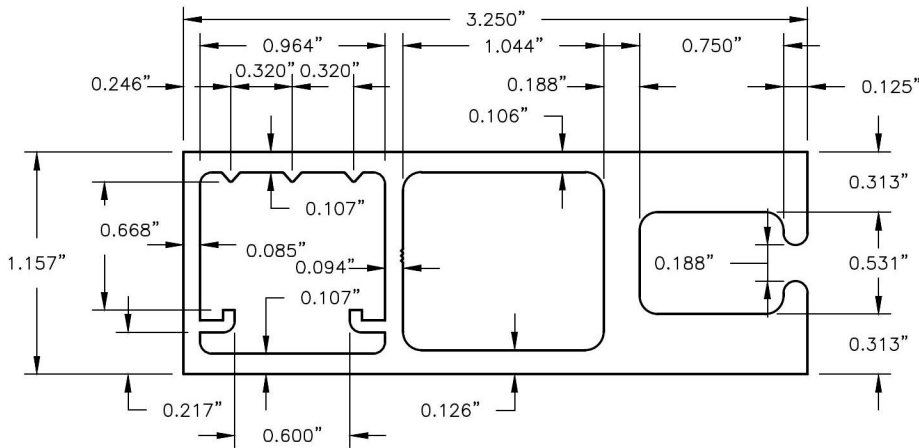




| ZIPPER SCREEN MINIMUM SEPARATION TO GLAZING (INCHES) REQUIRED<br>FOR INSTALLATION IN WND ZONE 4 AND ESSENTIAL FACILITIES |                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|--|----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| SCREEN<br>SPAN   | PRESSURE (PSF) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|  | 140            | 135  | 130  | 125  | 120  | 115  | 110  | 105  | 100  | 95   | 90   | 85   | 80   | 75   | 70   | 65   | 60   | 55   | 50   | 45   | 40   | 35   | 30   |  |
| 36"  | 7.0            | 6.9  | 6.8  | 6.8  | 6.7  | 6.6  | 6.5  | 6.4  | 6.3  | 6.3  | 6.2  | 6.1  | 6.0  | 5.9  | 5.8  | 5.7  | 5.5  | 5.4  | 5.3  | 5.2  | 5.0  | 4.9  | 4.7  |  |
| 42"  | 7.8            | 7.8  | 7.7  | 7.6  | 7.5  | 7.4  | 7.3  | 7.2  | 7.1  | 7.0  | 6.9  | 6.8  | 6.7  | 6.6  | 6.4  | 6.3  | 6.2  | 6.0  | 5.9  | 5.7  | 5.6  | 5.4  | 5.2  |  |
| 48"  | 8.7            | 8.6  | 8.5  | 8.4  | 8.3  | 8.2  | 8.1  | 8.0  | 7.8  | 7.7  | 7.6  | 7.5  | 7.4  | 7.2  | 7.1  | 6.9  | 6.8  | 6.6  | 6.5  | 6.3  | 6.1  | 5.9  | 5.7  |  |
| 54"  | 9.5            | 9.4  | 9.3  | 9.2  | 9.1  | 8.9  | 8.8  | 8.7  | 8.6  | 8.4  | 8.3  | 8.2  | 8.0  | 7.9  | 7.7  | 7.6  | 7.4  | 7.2  | 7.0  | 6.9  | 6.6  | 6.4  | 6.2  |  |
| 60"  | 10.3           | 10.2 | 10.1 | 9.9  | 9.8  | 9.7  | 9.6  | 9.4  | 9.3  | 9.1  | 9.0  | 8.8  | 8.7  | 8.5  | 8.4  | 8.2  | 8.0  | 7.8  | 7.6  | 7.4  | 7.2  | 6.9  | 6.7  |  |
| 66"  | 11.1           | 11.0 | 10.8 | 10.7 | 10.6 | 10.4 | 10.3 | 10.1 | 10.0 | 9.8  | 9.7  | 9.5  | 9.3  | 9.2  | 9.0  | 8.8  | 8.6  | 8.4  | 8.2  | 7.9  | 7.7  | 7.4  | 7.1  |  |
| 72"  | 11.9           | 11.7 | 11.6 | 11.4 | 11.3 | 11.2 | 11.0 | 10.8 | 10.7 | 10.5 | 10.3 | 10.1 | 10.0 | 9.8  | 9.6  | 9.4  | 9.2  | 8.9  | 8.7  | 8.4  | 8.2  | 7.9  | 7.6  |  |
| 78"  | 12.6           | 12.5 | 12.3 | 12.2 | 12.0 | 11.8 | 11.7 | 11.5 | 11.3 | 11.2 | 11.0 | 10.8 | 10.6 | 10.4 | 10.2 | 9.9  | 9.7  | 9.5  | 9.2  | 8.9  | 8.7  | 8.3  | 8.0  |  |
| 84"  | 13.4           | 13.2 | 13.0 | 12.9 | 12.7 | 12.5 | 12.4 | 12.2 | 12.0 | 11.8 | 11.6 | 11.4 | 11.2 | 11.0 | 10.7 | 10.5 | 10.3 | 10.0 | 9.7  | 9.4  | 9.1  | 8.8  | 8.4  |  |
| 90"  | 14.1           | 13.9 | 13.8 | 13.6 | 13.4 | 13.2 | 13.0 | 12.8 | 12.6 | 12.4 | 12.2 | 12.0 | 11.8 | 11.6 | 11.3 | 11.1 | 10.8 | 10.5 | 10.2 | 9.9  | 9.6  | 9.3  | 8.9  |  |
| 96"  | 14.8           | 14.6 | 14.5 | 14.3 | 14.1 | 13.9 | 13.7 | 13.5 | 13.3 | 13.1 | 12.8 | 12.6 | 12.4 | 12.1 | 11.9 | 11.6 | 11.3 | 11.0 | 10.8 | 10.4 | 10.1 | 9.7  | 9.3  |  |
| 102"   | 15.5           | 15.3 | 15.1 | 14.9 | 14.7 | 14.5 | 14.3 | 14.1 | 13.9 | 13.7 | 13.4 | 13.2 | 13.0 | 12.7 | 12.4 | 12.2 | 11.9 | 11.6 | 11.2 | 10.9 | 10.5 | 10.1 | 9.7  |  |
| 108"   | 16.2           | 16.0 | 15.8 | 15.6 | 15.4 | 15.2 | 15.0 | 14.7 | 14.5 | 14.3 | 14.0 | 13.8 | 13.5 | 13.3 | 13.0 | 12.7 | 12.4 | 12.1 | 11.7 | 11.4 | 11.0 | 10.6 | 10.1 |  |
| 114"   | 16.9           | 16.7 | 16.5 | 16.3 | 16.0 | 15.8 | 15.6 | 15.4 | 15.1 | 14.9 | 14.6 | 14.3 | 14.1 | 13.8 | 13.5 | 13.2 | 12.9 | 12.5 | 12.2 | 11.8 | 11.4 | 11.0 | 10.5 |  |
| 120"   | 17.5           | 17.3 | 17.1 | 16.9 | 16.7 | 16.4 | 16.2 | 16.0 | 15.7 | 15.5 | 15.2 | 14.9 | 14.6 | 14.3 | 14.0 | 13.7 | 13.4 | 13.0 | 12.7 | 12.3 | 11.9 | 11.4 | 10.9 |  |
| 126"   | 18.2           | 18.0 | 17.8 | 17.5 | 17.3 | 17.1 | 16.8 | 16.5 | 16.3 | 16.0 | 15.7 | 15.5 | 15.2 | 14.9 | 14.5 | 14.2 | 13.9 | 13.5 | 13.1 | 12.7 | 12.3 | 11.8 | 11.3 |  |
| 132"   | 18.8           | 18.6 | 18.4 | 18.1 | 17.9 | 17.7 | 17.4 | 17.1 | 16.9 | 16.6 | 16.3 | 16.0 | 15.7 | 15.4 | 15.1 | 14.7 | 14.3 | 14.0 | 13.6 | 13.2 | 12.7 | 12.2 | 11.7 |  |
| 138"   | 19.5           | 19.3 | 19.0 | 18.8 | 18.5 | 18.2 | 18.0 | 17.7 | 17.4 | 17.1 | 16.8 | 16.5 | 16.2 | 15.9 | 15.5 | 15.2 | 14.8 | 14.4 | 14.0 | 13.6 | 13.1 | 12.6 | 12.0 |  |
| 144"   | 20.1           | 19.9 | 19.6 | 19.3 | 19.1 | 18.8 | 18.6 | 18.3 | 18.0 | 17.7 | 17.4 | 17.1 | 16.8 | 16.4 | 16.0 | 15.7 | 15.3 | 14.9 | 14.5 | 14.0 | 13.5 | 13.0 | 12.4 |  |
| 150"   | 20.7           | 20.5 | 20.2 | 20.0 | 19.7 | 19.4 | 19.1 | 18.8 | 18.5 | 18.2 | 17.9 | 17.6 | 17.3 | 16.9 | 16.5 | 16.1 | 15.8 | 15.3 | 14.9 | 14.4 | 13.9 | 13.4 | 12.8 |  |
| 156"   | 21.3           | 21.1 | 20.8 | 20.5 | 20.2 | 20.0 | 19.7 | 19.4 | 19.1 | 18.8 | 18.4 | 18.1 | 17.7 | 17.4 | 17.0 | 16.6 | 16.2 | 15.8 | 15.3 | 14.8 | 14.3 | 13.8 | 13.2 |  |
| 162"   | 21.9           | 21.7 | 21.4 | 21.1 | 20.8 | 20.5 | 20.2 | 19.9 | 19.6 | 19.3 | 18.9 | 18.6 | 18.2 | 17.9 | 17.5 | 17.1 | 16.7 | 16.2 | 15.7 | 15.3 | 14.7 | 14.1 | 13.5 |  |
| 168"   | 22.5           | 22.2 | 22.0 | 21.7 | 21.4 | 21.1 | 20.8 | 20.5 | 20.1 | 19.8 | 19.5 | 19.1 | 18.7 | 18.4 | 18.0 | 17.5 | 17.1 | 16.6 | 16.2 | 15.6 | 15.1 | 14.5 | 13.9 |  |
| 174"   | -              | 22.8 | 22.5 | 22.2 | 21.9 | 21.6 | 21.3 | 21.0 | 20.7 | 20.3 | 20.0 | 19.6 | 19.2 | 18.8 | 18.4 | 18.0 | 17.5 | 17.1 | 16.6 | 16.0 | 15.5 | 14.9 | 14.2 |  |
| 180"   | -              | -    | 23.1 | 22.8 | 22.5 | 22.2 | 21.8 | 21.5 | 21.2 | 20.8 | 20.5 | 20.1 | 19.7 | 19.3 | 18.9 | 18.4 | 18.0 | 17.5 | 17.0 | 16.4 | 15.9 | 15.2 | 14.6 |  |
| 186"   | -              | -    | -    | 23.3 | 23.0 | 22.7 | 22.4 | 22.0 | 21.7 | 21.3 | 21.0 | 20.5 | 20.2 | 19.7 | 19.3 | 18.9 | 18.4 | 17.9 | 17.4 | 16.8 | 16.2 | 15.6 | 14.9 |  |
| 192"   | -              | -    | -    | -    | 23.5 | 23.2 | 22.9 | 22.5 | 22.2 | 21.8 | 21.4 | 21.0 | 20.6 | 20.2 | 19.8 | 19.3 | 18.8 | 18.3 | 17.8 | 17.2 | 16.6 | 15.9 | 15.2 |  |
| 198"   | -              | -    | -    | -    | -    | -    | 23.4 | 23.1 | 22.7 | 22.3 | 21.9 | 21.5 | 21.1 | 20.6 | 20.2 | 19.7 | 19.3 | 18.7 | 18.2 | 17.6 | 17.0 | 16.3 | 15.5 |  |
| 204"   | -              | -    | -    | -    | -    | -    | -    | 23.5 | 23.2 | 22.8 | 22.4 | 22.0 | 21.5 | 21.1 | 20.6 | 20.2 | 19.7 | 19.1 | 18.6 | 17.9 | 17.3 | 16.6 | 15.9 |  |
| 210"   | -              | -    | -    | -    | -    | -    | -    | 23.7 | 23.2 | 22.8 | 22.4 | 22.0 | 21.5 | 21.1 | 20.6 | 20.1 | 19.5 | 19.0 | 18.3 | 17.7 | 17.0 | 16.2 |      |  |
| 216"   | -              | -    | -    | -    | -    | -    | -    | 24.1 | 23.7 | 23.3 | 22.9 | 22.4 | 22.0 | 21.5 | 21.0 | 20.4 | 19.9 | 19.3 | 18.7 | 18.0 | 17.3 | 16.5 |      |  |
| 222"   | -              | -    | -    | -    | -    | -    | -    | -    | 24.2 | 23.8 | 23.3 | 22.9 | 22.4 | 21.9 | 21.4 | 20.9 | 20.3 | 19.7 | 19.1 | 18.4 | 17.7 | 16.8 |      |  |
| 228"   | -              | -    | -    | -    | -    | -    | -    | -    | -    | 24.2 | 23.8 | 23.3 | 22.8 | 22.3 | 21.8 | 21.2 | 20.6 | 20.1 | 19.4 | 18.7 | 18.0 | 17.1 |      |  |
| 234"   | -              | -    | -    | -    | -    | -    | -    | -    | -    | -    | 24.2 | 23.7 | 23.2 | 22.7 | 22.2 | 21.6 | 21.0 | 20.4 | 19.7 | 19.0 | 18.3 | 17.5 |      |  |
| 240"   | -              | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 24.1 | 23.6 | 23.1 | 22.6 | 22.0 | 21.4 | 20.8 | 20.1 | 19.4 | 18.6 | 17.7 |      |  |
| 246"   | -              | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 24.5 | 24.0 | 23.5 | 22.9 | 22.4 | 21.8 | 21.1 | 20.4 | 19.7 | 18.9 | 18.1 |      |  |
| 252"   | -              | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 24.5 | 23.9 | 23.4 | 22.7 | 22.1 | 21.5 | 20.8 | 20.1 | 19.2 | 18.3 |      |  |
| 258"   | -              | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 24.9 | 24.3 | 23.7 | 23.1 | 22.5 | 21.8 | 21.1 | 20.4 | 19.6 | 18.7 |      |  |
| 264"   | -              | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 24.7 | 24.1 | 23.5 | 22.9 | 22.2 | 21.5 | 20.7 | 19.8 | 19.0 |      |  |
| 270"   | -              | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 25.1 | 24.5 | 23.9 | 23.2 | 22.5 | 21.8 | 21.0 | 20.2 | 19.2 |  |
| 276"   | -              | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 24.9 | 24.2 | 23.6 | 22.8 | 22.1 | 21.3 | 20.4 | 19.5 |  |
| 282"   | -              | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 25.2 | 24.6 | 23.9 | 23.2 | 22.5 | 21.7 | 20.8 | 19.8 |  |
| 288"   | -              | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | 24.9 | 24.2 | 23.5 | 22.8 | 21.9 | 21.1 | 20.1 |  |



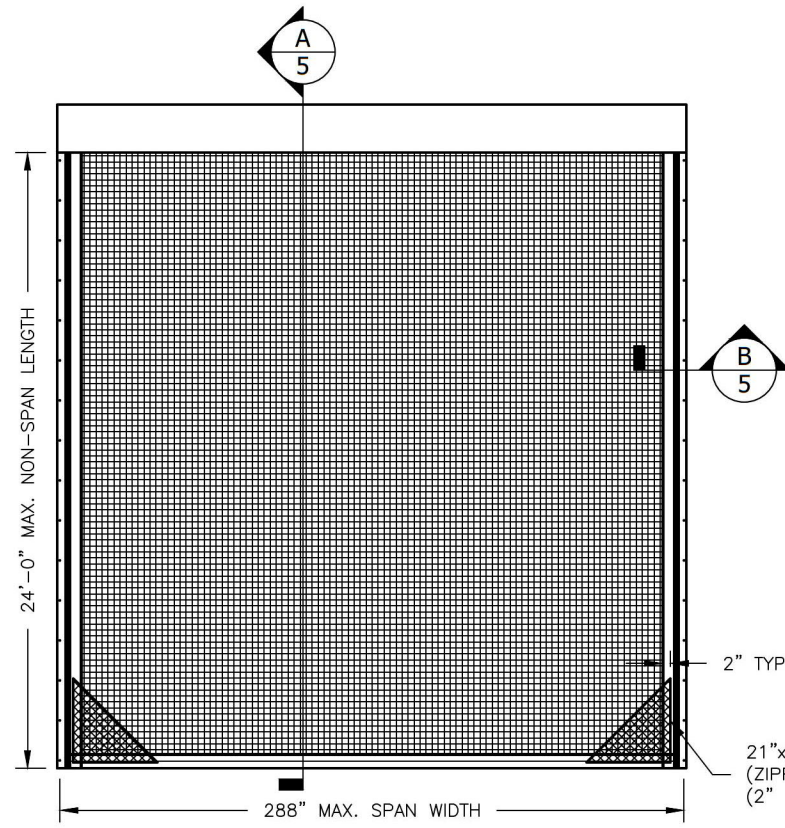
3 1/4" ZIPPER SIDE RAIL TRACK  
6063-T6 ALUMINUM - SCALE: 1:1



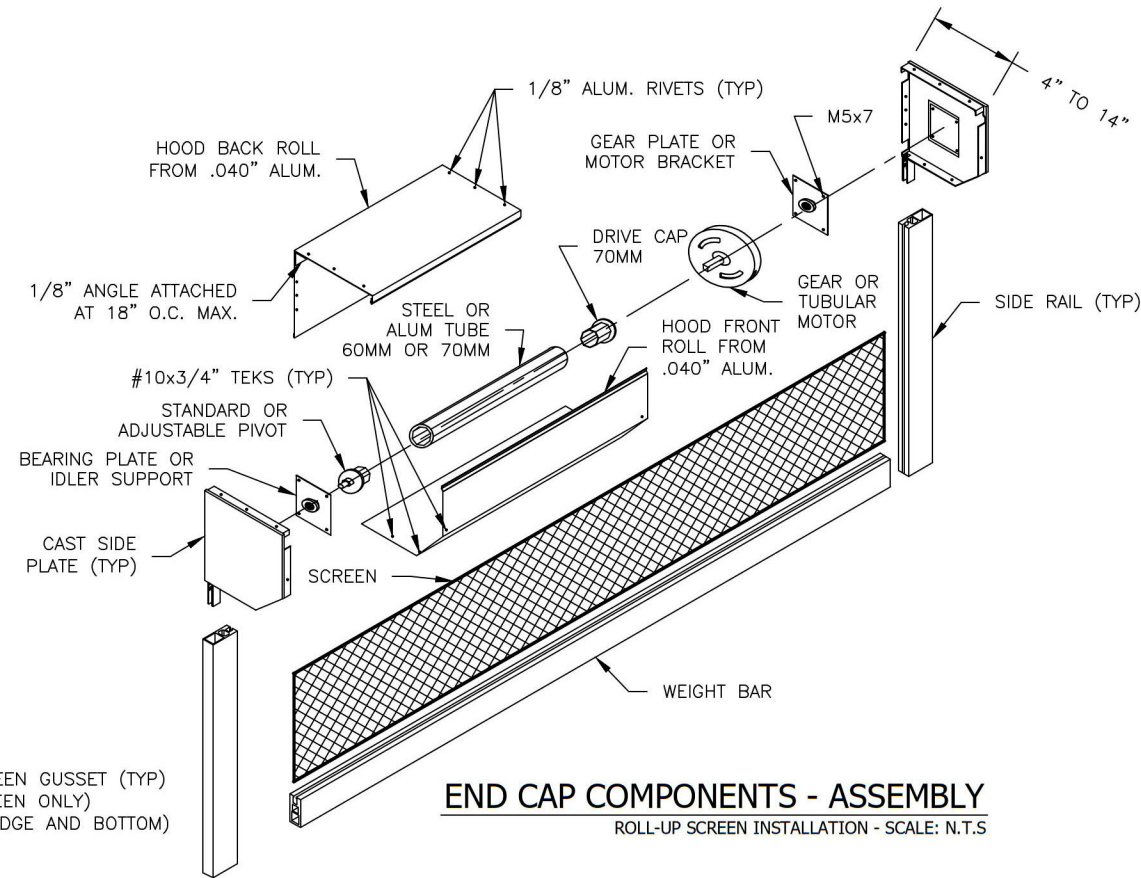
3 1/4" ROPE SIDE RAIL TRACK  
6063-T6 ALUMINUM - SCALE: 1:1

| ROPE SCREEN MINIMUM SEPARATION TO GLAZING (INCHES)<br>REQUIRED FOR INSTALLATION IN ALL WIND ZONE |                |      |      |      |      |      |      |      |      |      |
|--|----------------|------|------|------|------|------|------|------|------|------|
| SCREEN<br>SPAN   | PRESSURE (PSF) |      |      |      |      |      |      |      |      |      |
|  | 75             | 70   | 65   | 60   | 55   | 50   | 45   | 40   | 35   | 30   |
| 36"  | 9.0            | 8.8  | 8.6  | 8.4  | 8.2  | 8.0  | 7.7  | 7.5  | 7.2  | 7.0  |
| 42"  | 10.1           | 9.9  | 9.7  | 9.5  | 9.2  | 9.0  | 8.7  | 8.4  | 8.1  | 7.8  |
| 48"  | 11.3           | 11.0 | 10.8 | 10.5 | 10.3 | 10.0 | 9.7  | 9.3  | 9.0  | 8.6  |
| 54"  | 12.4           | 12.1 | 11.9 | 11.6 | 11.3 | 10.9 | 10.6 | 10.2 | 9.9  | 9.4  |
| 60"  | 13.5           | 13.3 | 12.9 | 12.6 | 12.3 | 11.9 | 11.5 | 11.1 | 10.7 | 10.2 |
| 66"  | 14.7           | 14.3 | 14.0 | 13.7 | 13.3 | 12.9 | 12.5 | 12.0 | 11.6 | 11.1 |
| 72"  | 15.8           | 15.4 | 15.0 | 14.7 | 14.3 | 13.8 | 13.4 | 12.9 | 12.4 | 11.8 |
| 78"  | 16.9           | 16.5 | 16.1 | 15.7 | 15.2 | 14.8 | 14.3 | 13.8 | 13.3 | 12.6 |
| 84"  | 18.0           | 17.6 | 17.1 | 16.7 | 16.2 | 15.7 | 15.2 | 14.7 | 14.1 | 13.4 |
| 90"  | 19.1           | 18.6 | 18.2 | 17.7 | 17.2 | 16.7 | 16.1 | 15.6 | 14.9 | 14.2 |
| 96"  | 20.2           | 19.7 | 19.2 | 18.7 | 18.2 | 17.6 | 17.0 | 16.4 | 15.7 | 15.0 |
| 102"   | 21.3           | 20.8 | 20.3 | 19.7 | 19.2 | 18.6 | 17.9 | 17.3 | 16.6 | 15.8 |
| 108"   | 22.3           | 21.8 | 21.3 | 20.7 | 20.1 | 19.5 | 18.8 | 18.1 | 17.4 | 16.6 |
| 114"   | 23.4           | 22.9 | 22.3 | 21.7 | 21.1 | 20.4 | 19.7 | 19.0 | 18.2 | 17.3 |
| 120"   | 24.5           | 23.9 | 23.3 | 22.7 | 22.0 | 21.4 | 20.6 | 19.9 | 19.0 | 18.1 |
| 126"   | 25.6           | 25.0 | 24.3 | 23.7 | 23.0 | 22.3 | 21.5 | 20.7 | 19.8 | 18.9 |
| 132"   | 26.6           | 26.0 | 25.4 | 24.7 | 24.0 | 23.2 | 22.4 | 21.6 | 20.7 | 19.7 |
| 138"   | 27.7           | 27.1 | 26.4 | 25.7 | 24.9 | 24.1 | 23.3 | 22.4 | 21.5 | 20.5 |
| 144"   | 28.8           | 28.1 | 27.4 | 26.7 | 25.9 | 25.1 | 24.2 | 23.3 | 22.3 | 21.2 |
| 150"   | 29.9           | 29.2 | 28.4 | 27.7 | 26.8 | 26.0 | 25.1 | 24.1 | 23.1 | 22.0 |
| 156"   | 31.0           | 30.2 | 29.5 | 28.7 | 27.8 | 26.9 | 26.0 | 25.0 | 23.9 | 22.8 |
| 162"   | 32.1           | 31.3 | 30.5 | 29.7 | 28.8 | 27.9 | 26.9 | 25.9 | 24.8 | 23.5 |
| 168"   | 33.1           | 32.3 | 31.5 | 30.7 | 29.8 | 28.8 | 27.8 | 26.7 | 25.6 | 24.3 |
| 174"   | 34.2           | 33.4 | 32.6 | 31.7 | 30.7 | 29.8 | 28.7 | 27.6 | 26.4 | 25.1 |
| 180"   | 35.3           | 34.5 | 33.6 | 32.7 | 31.7 | 30.7 | 29.6 | 28.5 | 27.3 | 25.9 |
| 186"   | 36.4           | 35.5 | 34.6 | 33.7 | 32.7 | 31.7 | 30.6 | 29.4 | 28.1 | 26.7 |
| 192"   | 37.5           | 36.6 | 35.7 | 34.7 | 33.7 | 32.6 | 31.5 | 30.2 | 28.9 | 27.5 |
| 198"   | 38.7           | 37.7 | 36.7 | 35.7 | 34.7 | 33.6 | 32.4 | 31.1 | 29.8 | 28.3 |
| 204"   | 39.8           | 38.8 | 37.8 | 36.8 | 35.7 | 34.5 | 33.3 | 32.0 | 30.6 | 29.1 |
| 210"   | 40.9           | 39.9 | 38.9 | 37.8 | 36.7 | 35.5 | 34.3 | 32.9 | 31.5 | 29.9 |
| 216"   | 42.0           | 41.0 | 40.0 | 38.9 | 37.7 | 36.5 | 35.2 | 33.8 | 32.3 | 30.7 |
| 222"   | 43.2           | 42.1 | 41.0 | 39.9 | 38.7 | 37.5 | 36.1 | 34.7 | 33.2 | 31.5 |
| 228"   | 44.3           | 43.2 | 42.1 | 41.0 | 39.7 | 38.5 | 37.1 | 35.6 | 34.1 | 32.3 |
| 234"   | 45.5           | 44.4 | 43.2 | 42.0 | 40.8 | 39.4 | 38.0 | 36.6 | 35.0 | 33.2 |
| 240"   | 46.7           | 45.5 | 44.3 | 43.1 | 41.8 | 40.4 | 39.0 | 37.5 | 35.8 | 34.0 |
| 246"   | 47.8           | 46.7 | 45.5 | 44.2 | 42.9 | 41.5 | 40.0 | 38.4 | 36.7 | 34.8 |
| 252"   | 49.0           | 47.9 | 46.6 | 45.3 | 44.0 | 42.5 | 41.0 | 39.4 | 37.6 | 35.7 |
| 258"   | 50.2           | 49.0 | 47.7 | 46.4 | 45.0 | 43.5 | 42.0 | 40.3 | 38.5 | 36.6 |
| 264"   | 51.5           | 50.2 | 48.9 | 47.6 | 46.1 | 44.6 | 43.0 | 41.3 | 39.5 | 37.5 |
| 270"   | 52.7           | 51.4 | 50.1 | 48.7 | 47.2 | 45.7 | 44.0 | 42.3 | 40.4 | 38.4 |
| 276"   | 54.0           | 52.7 | 51.3 | 49.8 | 48.3 | 46.7 | 45.1 | 43.3 | 41.4 | 39.2 |
| 282"   | 55.3           | 53.9 | 52.5 | 51.0 | 49.5 | 47.8 | 46.1 | 44.3 | 42.3 | 40.2 |
| 288"   | 56.5           | 55.2 | 53.7 | 52.2 | 50.6 | 49.0 | 47.2 | 45.3 | 43.3 | 41.1 |

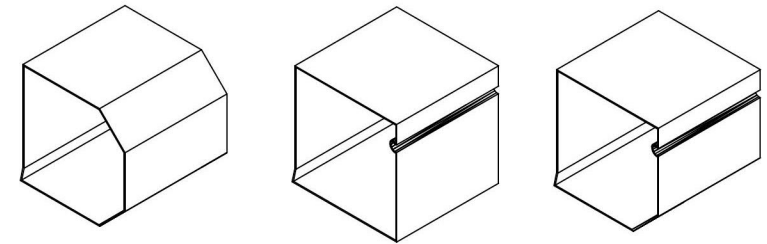




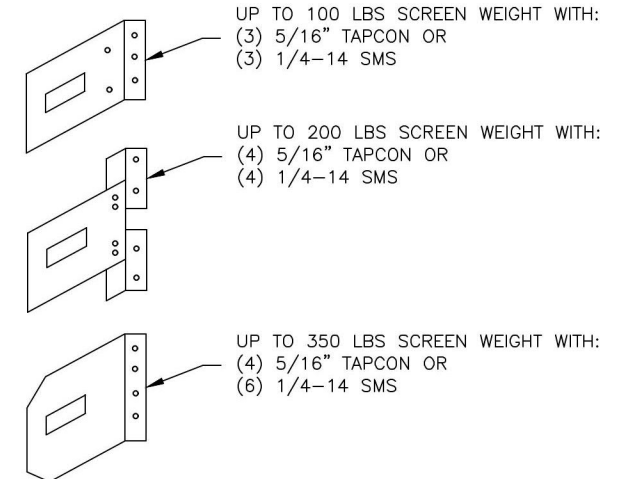
**ROLL-UP SCREEN SINGLE UNIT - ELEVATION**  
TYPICAL SINGLE SPAN INSTALLATION - N.T.S.



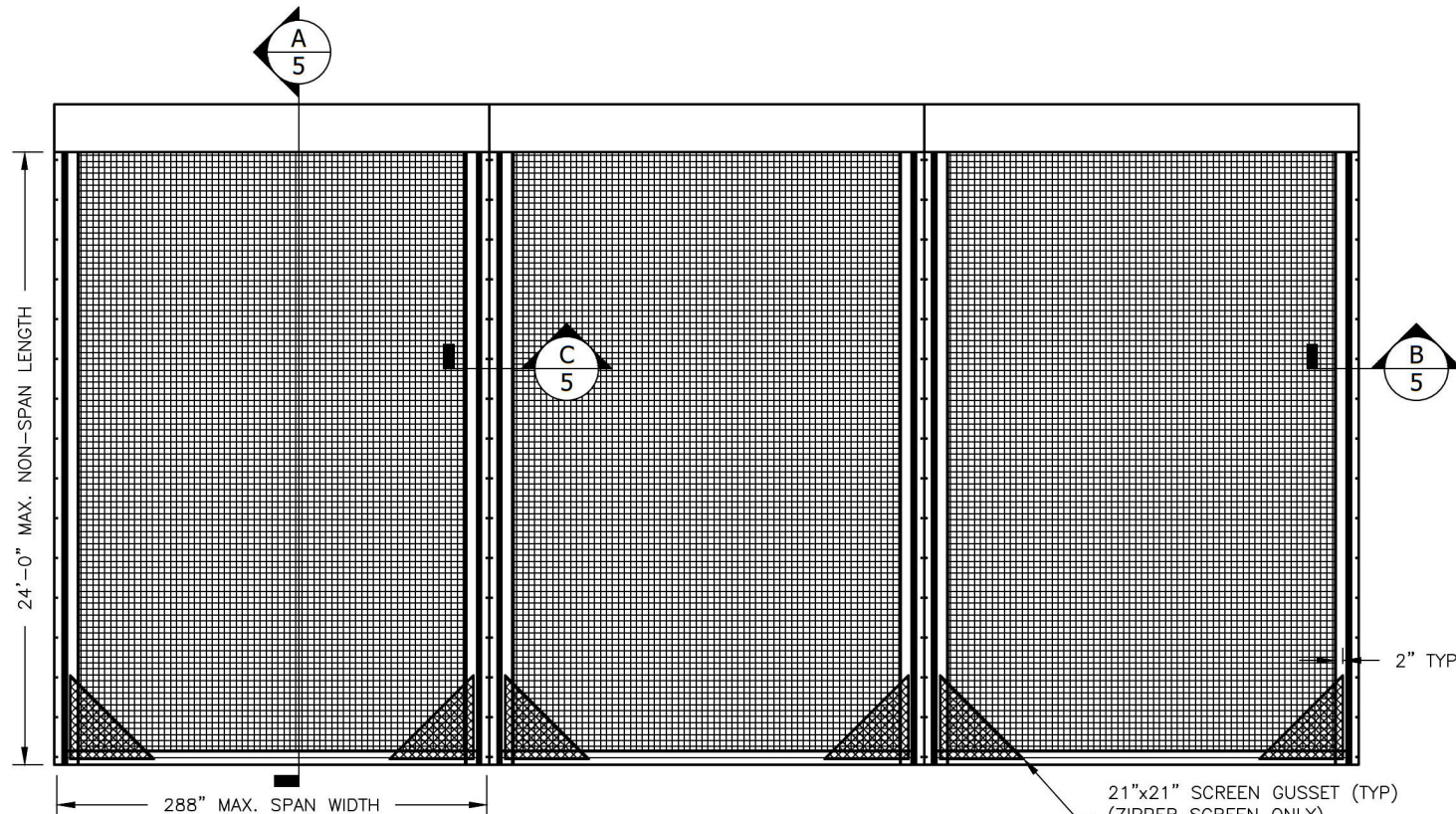
**END CAP COMPONENTS - ASSEMBLY**  
ROLL-UP SCREEN INSTALLATION - SCALE: N.T.S



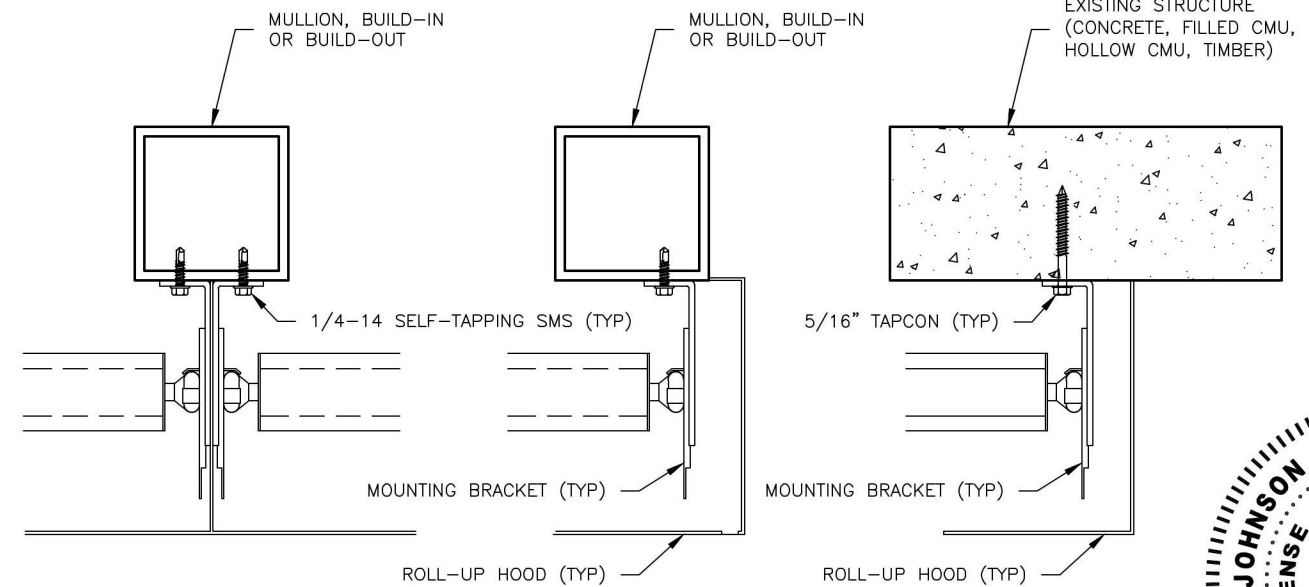
**ALUMINUM BOX COVER**  
ROLL-UP SCREEN INSTALLATION - SCALE: N.T.S



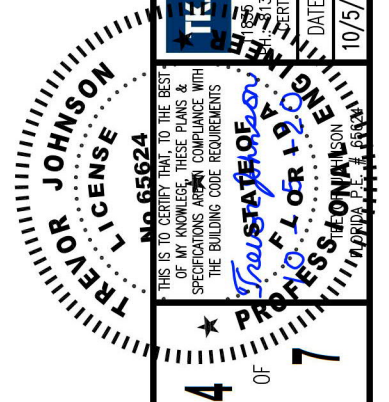
**MOUNTING BRACKET**  
ROLL-UP SCREEN - SCALE: N.T.S



**ROLL-UP SCREEN MULTIPLE UNIT - ELEVATION**  
APPROVED INTERMEDIATE MULLION REQUIRED FOR INSTALLATION - N.T.S.



**MOUNTING BRACKET - DETAILS**  
ROLL-UP SCREEN INSTALLATION - SCALE: N.T.S



**ADVANCED SCREEN  
ROLL-UP SYSTEM**

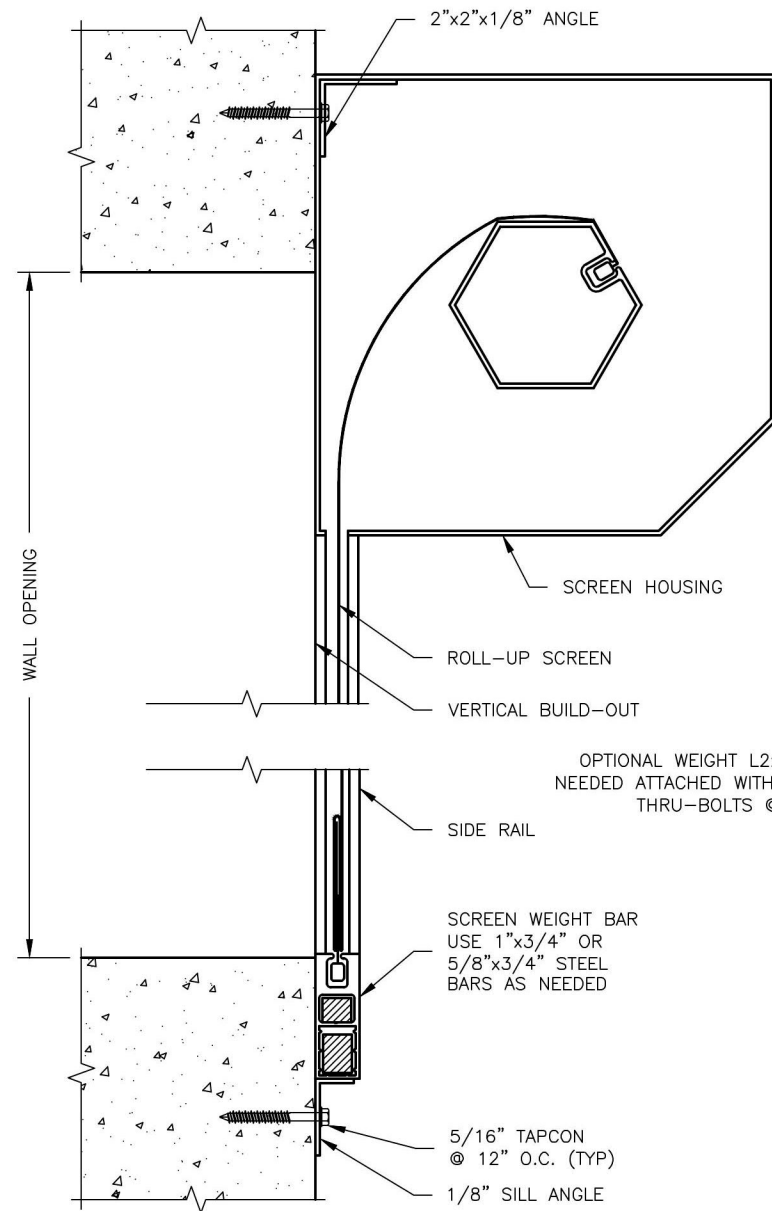
**TEJ Engineering, LLC.**

1855 AUTUMN CREEK DRIVE, RIVERVIEW, FL 33569  
TEL: 813.404.7649; EM: TKENGINEERING@VERIZON.NET  
F.L.C. CERTIFICATE OF AUTHORIZATION NUMBER: 28582

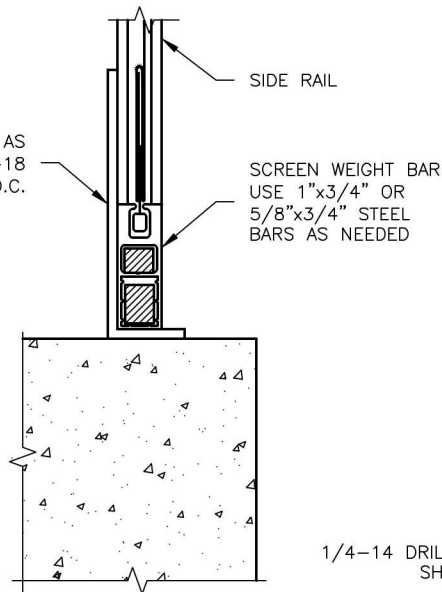
**ADVANCED HURRICANE TECHNOLOGY**  
6063 JAMES LANE, NAPLES, FL 34109  
PHONE: 239.260.0020; FAX: 239.260.0023  
WWW.AHT-USA.NET

| # | DATE | REVISIONS |
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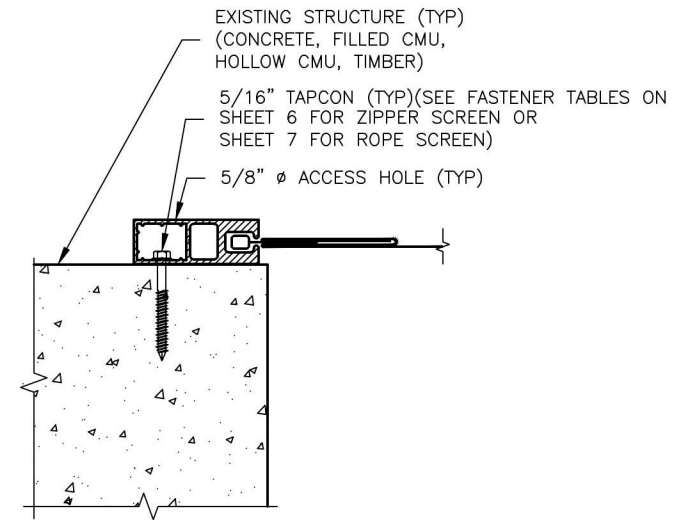




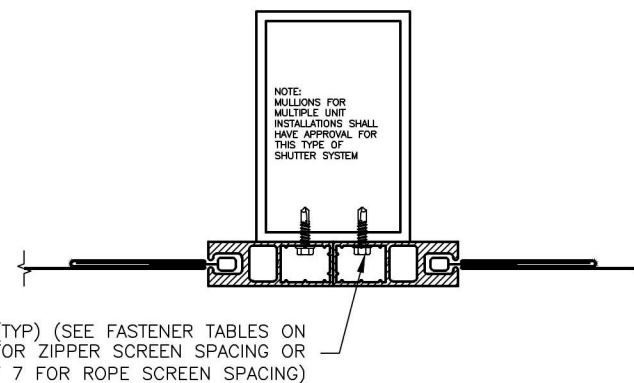
**A1** **TYPICAL DIRECT MOUNT**  
ROLL-UP SCREEN AT WALL - SCALE: N.T.S.



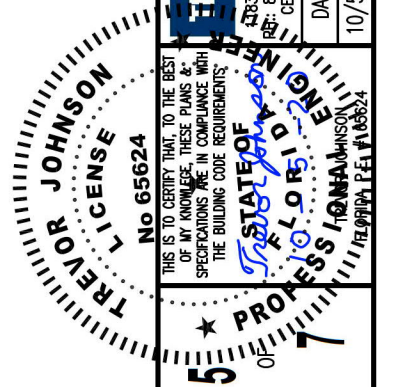
**A2** **TYPICAL DIRECT MOUNT**  
ROLL-UP SCREEN AT FLOOR - SCALE: N.T.S.



**B** **DIRECT MOUNT - SECTION**  
ROLL-UP SCREEN AT WALL - SCALE: N.T.S.



**C** **MULLION MOUNT - SECTION**  
ROLL-UP SCREEN AT MULLIONS - SCALE: N.T.S.



**TKJ Engineering, LLC.**  
43835 AUTUMN CREEK DRIVE, RIVERVIEW, FL 33569  
TEL: 813.404.7649; FAX: 813.404.7649  
WWW.TKJENGINEERING.COM  
CERTIFICATE OF AUTHORIZATION NUMBER: 28592

|         |           |        |          |
|---------|-----------|--------|----------|
| DATE:   | DRAWN BY: | SCALE: | PROJ. #: |
| 10/5/20 | TKJ       | N.T.S. | 20-0803  |

## ADVANCED SCREEN ROLL-UP SYSTEM

**AHT**  
ADVANCED HURRICANE TECHNOLOGY  
6063 JAMES LANE, NAPLES, FL 34109  
PHONE: 239.260.0020; FAX: 239.260.0023  
WWW.AHT-USA.NET

| # | DATE | REVISIONS |
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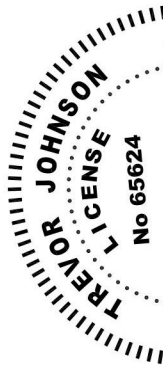


| ZIPPER SCREEN DIRECT MOUNT   |                                     |                                     |                             |                        |
|--|-------------------------------------|-------------------------------------|-----------------------------|------------------------|
| MAXIMUM DESIGN PRESSURE OF A SIDE RAIL SCREEN<br>FOR ANY LENGTH ATTACHED WITH<br>5/16" ELCO ULTRACON HFH @ 6" O.C. |                                     |                                     |                             |                        |
| SCREEN<br>SPANS<br>UP TO   | CONC. &<br>FILLED CMU<br>(3500 PSI) | CONC. &<br>FILLED CMU<br>(2500 PSI) | HOLLOW<br>CMU<br>(1800 PSI) | TIMBER<br>(S.G. = .55) |
|  | PRESSURE<br>(PSF)                   | PRESSURE<br>(PSF)                   | PRESSURE<br>(PSF)           | PRESSURE<br>(PSF)      |
| 36"  | 140                                 | 140                                 | 128                         | 140                    |
| 42"  | 140                                 | 140                                 | 107                         | 140                    |
| 48"  | 140                                 | 140                                 | 90                          | 140                    |
| 54"  | 140                                 | 140                                 | 79                          | 140                    |
| 60"  | 140                                 | 140                                 | 71                          | 126                    |
| 66"  | 140                                 | 140                                 | 62                          | 114                    |
| 72"  | 140                                 | 140                                 | 57                          | 101                    |
| 78"  | 140                                 | 133                                 | 51                          | 92                     |
| 84"  | 140                                 | 120                                 | 47                          | 84                     |
| 90"  | 135                                 | 113                                 | 44                          | 78                     |
| 96"  | 127                                 | 104                                 | 42                          | 72                     |
| 102"   | 117                                 | 96                                  | 37                          | 67                     |
| 108"   | 109                                 | 90                                  | 36                          | 62                     |
| 114"   | 103                                 | 85                                  | 33                          | 57                     |
| 120"   | 97                                  | 79                                  | 32                          | 54                     |
| 126"   | 91                                  | 75                                  | 29                          | 52                     |
| 132"   | 86                                  | 72                                  | 28                          | 47                     |
| 138"   | 83                                  | 68                                  | 27                          | 46                     |
| 144"   | 80                                  | 64                                  | 25                          | 42                     |
| 150"   | 74                                  | 63                                  | 24                          | 42                     |
| 156"   | 71                                  | 58                                  | 24                          | 38                     |
| 162"   | 69                                  | 57                                  | 22                          | 38                     |
| 168"   | 65                                  | 53                                  | 20                          | 35                     |
| 174"   | 64                                  | 53                                  | 20                          | 33                     |
| 180"   | 59                                  | 49                                  | 20                          | 33                     |
| 186"   | 59                                  | 48                                  | 19                          | 31                     |
| 192"   | 55                                  | 46                                  | 18                          | 29                     |
| 198"   | 54                                  | 43                                  | 17                          | 29                     |
| 204"   | 52                                  | 43                                  | 17                          | 28                     |
| 210"   | 49                                  | 41                                  | 17                          | 26                     |
| 216"   | 49                                  | 39                                  | 16                          | 25                     |
| 222"   | 47                                  | 39                                  | 15                          | 25                     |
| 228"   | 44                                  | 38                                  | 14                          | 25                     |
| 234"   | 44                                  | 36                                  | 13                          | 23                     |
| 240"   | 43                                  | 34                                  | 13                          | 22                     |
| 246"   | 41                                  | 34                                  | 13                          | 21                     |
| 252"   | 39                                  | 33                                  | 13                          | 21                     |
| 258"   | 39                                  | 32                                  | 13                          | 21                     |
| 264"   | 38                                  | 30                                  | 13                          | 20                     |
| 270"   | 37                                  | 30                                  | 12                          | 19                     |
| 276"   | 35                                  | 30                                  | 11                          | 18                     |
| 282"   | 35                                  | 29                                  | 11                          | 17                     |
| 288"   | 35                                  | 28                                  | 10                          | 17                     |

| ZIPPER SCREEN DIRECT MOUNT   |                                     |                                     |                             |                        |
|--|-------------------------------------|-------------------------------------|-----------------------------|------------------------|
| MAXIMUM DESIGN PRESSURE OF A SIDE RAIL SCREEN<br>FOR ANY LENGTH ATTACHED WITH<br>5/16" ELCO ULTRACON HFH @ 4" O.C. |                                     |                                     |                             |                        |
| SCREEN<br>SPANS<br>UP TO   | CONC. &<br>FILLED CMU<br>(3500 PSI) | CONC. &<br>FILLED CMU<br>(2500 PSI) | HOLLOW<br>CMU<br>(1800 PSI) | TIMBER<br>(S.G. = .55) |
|  | PRESSURE<br>(PSF)                   | PRESSURE<br>(PSF)                   | PRESSURE<br>(PSF)           | PRESSURE<br>(PSF)      |
| 36"  | 140                                 | 140                                 | 140                         | 140                    |
| 42"  | 140                                 | 140                                 | 140                         | 140                    |
| 48"  | 140                                 | 140                                 | 140                         | 140                    |
| 54"  | 140                                 | 140                                 | 126                         | 140                    |
| 60"  | 140                                 | 140                                 | 112                         | 140                    |
| 66"  | 140                                 | 140                                 | 101                         | 140                    |
| 72"  | 140                                 | 140                                 | 90                          | 140                    |
| 78"  | 140                                 | 140                                 | 84                          | 140                    |
| 84"  | 140                                 | 140                                 | 76                          | 135                    |
| 90"  | 140                                 | 140                                 | 70                          | 126                    |
| 96"  | 140                                 | 140                                 | 65                          | 115                    |
| 102"   | 140                                 | 140                                 | 61                          | 109                    |
| 108"   | 140                                 | 140                                 | 57                          | 101                    |
| 114"   | 140                                 | 135                                 | 52                          | 94                     |
| 120"   | 140                                 | 129                                 | 51                          | 88                     |
| 126"   | 140                                 | 121                                 | 47                          | 83                     |
| 132"   | 137                                 | 115                                 | 45                          | 79                     |
| 138"   | 130                                 | 109                                 | 42                          | 74                     |
| 144"   | 124                                 | 104                                 | 41                          | 70                     |
| 150"   | 118                                 | 98                                  | 38                          | 67                     |
| 156"   | 113                                 | 93                                  | 37                          | 63                     |
| 162"   | 109                                 | 90                                  | 35                          | 61                     |
| 168"   | 106                                 | 87                                  | 33                          | 58                     |
| 174"   | 100                                 | 81                                  | 33                          | 55                     |
| 180"   | 96                                  | 80                                  | 31                          | 53                     |
| 186"   | 94                                  | 76                                  | 29                          | 51                     |
| 192"   | 88                                  | 74                                  | 29                          | 48                     |
| 198"   | 86                                  | 70                                  | 28                          | 48                     |
| 204"   | 83                                  | 69                                  | 27                          | 45                     |
| 210"   | 80                                  | 65                                  | 25                          | 43                     |
| 216"   | 77                                  | 65                                  | 25                          | 43                     |
| 222"   | 75                                  | 61                                  | 25                          | 40                     |
| 228"   | 72                                  | 60                                  | 24                          | 39                     |
| 234"   | 71                                  | 58                                  | 22                          | 39                     |
| 240"   | 68                                  | 55                                  | 21                          | 37                     |
| 246"   | 66                                  | 55                                  | 21                          | 35                     |
| 252"   | 65                                  | 53                                  | 21                          | 34                     |
| 258"   | 61                                  | 50                                  | 21                          | 34                     |
| 264"   | 61                                  | 50                                  | 20                          | 33                     |
| 270"   | 60                                  | 49                                  | 19                          | 31                     |
| 276"   | 57                                  | 47                                  | 18                          | 30                     |
| 282"   | 56                                  | 45                                  | 17                          | 30                     |
| 288"   | 56                                  | 45                                  | 17                          | 30                     |

| ZIPPER SCREEN DIRECT MOUNT   |                         |                         |                         |                         |
|--|-------------------------|-------------------------|-------------------------|-------------------------|
| MAXIMUM DESIGN PRESSURE OF A SIDE RAIL SCREEN<br>FOR ANY LENGTH ATTACHED WITH<br>1/4"-14 ELCO DRIL-FLEX HWH TO ALUMINUM OR STEEL |                         |                         |                         |                         |
| SCREEN<br>SPANS<br>UP TO   | @ 6" O.C.<br>1/8" AL/ST | @ 6" O.C.<br>1/4" AL/ST | @ 4" O.C.<br>1/8" AL/ST | @ 4" O.C.<br>1/4" AL/ST |
|  | PRESSURE<br>(PSF)       | PRESSURE<br>(PSF)       | PRESSURE<br>(PSF)       | PRESSURE<br>(PSF)       |
| 36"  | 140                     | 140                     | 140                     | 140                     |
| 42"  | 140                     | 140                     | 140                     | 140                     |
| 48"  | 120                     | 140                     | 140                     | 140                     |
| 54"  | 108                     | 140                     | 140                     | 140                     |
| 60"  | 96                      | 140                     | 140                     | 140                     |
| 66"  | 85                      | 140                     | 133                     | 140                     |
| 72"  | 78                      | 140                     | 120                     | 140                     |
| 78"  | 73                      | 140                     | 111                     | 140                     |
| 84"  | 67                      | 140                     | 102                     | 140                     |
| 90"  | 62                      | 128                     | 96                      | 140                     |
| 96"  | 57                      | 121                     | 89                      | 140                     |
| 102"   | 52                      | 111                     | 84                      | 140                     |
| 108"   | 50                      | 103                     | 79                      | 140                     |
| 114"   | 47                      | 97                      | 73                      | 140                     |
| 120"   | 44                      | 91                      | 68                      | 140                     |
| 126"   | 42                      | 86                      | 65                      | 137                     |
| 132"   | 40                      | 82                      | 62                      | 130                     |
| 138"   | 37                      | 79                      | 58                      | 124                     |
| 144"   | 37                      | 74                      | 57                      | 117                     |
| 150"   | 34                      | 70                      | 53                      | 111                     |
| 156"   | 33                      | 69                      | 52                      | 107                     |
| 162"   | 32                      | 63                      | 49                      | 104                     |
| 168"   | 30                      | 62                      | 47                      | 100                     |
| 174"   | 29                      | 58                      | 46                      | 94                      |
| 180"   | 29                      | 58                      | 43                      | 91                      |
| 186"   | 27                      | 54                      | 43                      | 88                      |
| 192"   | 25                      | 53                      | 41                      | 84                      |
| 198"   | 24                      | 50                      | 38                      | 82                      |
| 204"   | 25                      | 48                      | 38                      | 77                      |
| 210"   | 24                      | 48                      | 37                      | 77                      |
| 216"   | 23                      | 45                      | 35                      | 72                      |
| 222"   | 21                      | 44                      | 34                      | 71                      |
| 228"   | 21                      | 44                      | 34                      | 68                      |
| 234"   | 21                      | 41                      | 33                      | 66                      |
| 240"   | 21                      | 39                      | 31                      | 65                      |
| 246"   | 20                      | 39                      | 30                      | 62                      |
| 252"   | 19                      | 38                      | 30                      | 61                      |
| 258"   | 18                      | 36                      | 30                      | 60                      |
| 264"   | 17                      | 35                      | 29                      | 57                      |
| 270"   | 17                      | 35                      | 27                      | 56                      |
| 276"   | 17                      | 35                      | 26                      | 55                      |
| 282"   | 17                      | 33                      | 25                      | 53                      |
| 288"   | 17                      | 32                      | 26                      | 51                      |

| ZIPPER SCREEN DIRECT MOUNT  |                         |                         |                         |                         |
|---|-------------------------|-------------------------|-------------------------|-------------------------|
| MAXIMUM DESIGN PRESSURE OF A SIDE RAIL SCREEN<br>FOR ANY LENGTH ATTACHED WITH<br>5/16"-24 ELCO DRIL-FLEX HWH TO ALUMINUM OR STEEL |                         |                         |                         |                         |
| SCREEN<br>SPANS<br>UP TO  | @ 6" O.C.<br>1/8" AL/ST | @ 6" O.C.<br>1/4" AL/ST | @ 4" O.C.<br>1/8" AL/ST | @ 4" O.C.<br>1/4" AL/ST |
|   | PRESSURE<br>(PSF)       | PRESSURE<br>(PSF)       | PRESSURE<br>(PSF)       | PRESSURE<br>(PSF)       |
| 36"   | 140                     | 140                     | 140                     | 140                     |
| 42"   | 140                     | 140                     | 140                     | 140                     |
| 48"   | 124                     | 140                     | 140                     | 140                     |
| 54"   | 108                     | 140                     | 140                     | 140                     |
| 60"   | 96                      | 140                     | 140                     | 140                     |
| 66"   | 87                      | 140                     | 135                     | 140                     |
| 72"   | 78                      | 140                     | 123                     | 140                     |
| 78"   | 73                      | 140                     | 114                     | 140                     |
| 84"   | 67                      | 140                     | 103                     | 140                     |
| 90"   | 62                      | 140                     | 96                      | 140                     |
| 96"   | 57                      | 134                     | 90                      | 140                     |
| 102"  | 53                      | 126                     | 84                      | 140                     |
| 108"  | 51                      | 117                     | 79                      | 140                     |
| 114"  | 47                      | 109                     | 73                      | 140                     |
| 120"  | 45                      | 103                     | 69                      | 140                     |
| 126"  | 42                      | 97                      | 67                      | 140                     |
| 132"  | 40                      | 92                      | 62                      | 140                     |
| 138"  | 37                      | 88                      | 59                      | 140                     |
| 144"  | 37                      | 85                      | 57                      | 133                     |
| 150"  | 34                      | 80                      | 53                      | 127                     |
| 156"  | 33                      | 76                      | 52                      | 122                     |
| 162"  | 32                      | 74                      | 49                      | 117                     |
| 168"  | 30                      | 69                      | 47                      | 112                     |
| 174"  | 29                      | 68                      | 46                      | 106                     |
| 180"  | 29                      | 64                      | 43                      | 103                     |
| 186"  | 27                      | 63                      | 43                      | 100                     |
| 192"  | 25                      | 59                      | 41                      | 95                      |
| 198"  | 24                      | 59                      | 38                      | 92                      |
| 204"  | 25                      | 55                      | 38                      | 89                      |
| 210"  | 24                      | 54                      | 37                      | 86                      |
| 216"  | 23                      | 53                      | 35                      | 83                      |
| 222"  | 21                      | 50                      | 34                      | 81                      |
| 228"  | 21                      | 49                      | 34                      | 78                      |
| 234"  | 21                      | 48                      | 33                      | 76                      |
| 240"  | 21                      | 45                      | 31                      | 72                      |
| 246"  | 20                      | 44                      | 30                      | 72                      |
| 252"  | 19                      | 44                      | 30                      | 69                      |
| 258"  | 18                      | 42                      | 30                      | 67                      |
| 264"  | 17                      | 40                      | 29                      | 67                      |
| 270"  | 17                      | 40                      | 27                      | 63                      |
| 276"  | 17                      | 40                      | 26                      | 62                      |
| 282"  | 17                      | 38                      | 25                      | 62                      |
| 288"  | 17                      | 36                      | 26                      | 59                      |



6

OF

7

THIS IS TO CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE, THESE PLANS & SPECIFICATIONS ARE IN COMPLIANCE WITH THE BUILDING CODE REQUIREMENTS.

For 2024

10/5/20

DATE:

DRAWN BY:

SCALE:

PROJ. #:

10/5/20

TKJ

N.T.S.

20-0803

TK Engineering, LLC.

13335 AUTUMN CREEK DRIVE, RIVERVIEW, FL 33569  
PH: 813.404.7649; EM: TKENGINEERING@VERIZON.NET  
CERTIFICATE OF AUTHORIZATION NUMBER: 28582

ADVANCED SCREEN  
ROLL-UP SYSTEM



| # | DATE | REVISIONS |
|---|------|-----------|
|   |      |           |
|   |      |           |
|   |      |           |
|   |      |           |
|   |      |           |



| ROPE SCREEN DIRECT MOUNT   |   |   |   |                                       |
|--|---|---|---|---------------------------------------|
| MAXIMUM DESIGN PRESSURE OF A SIDE RAIL SCREEN<br>FOR ANY LENGTH ATTACHED WITH<br>5/16" ELCO ULTRACON HFH @ 6" O.C. |   |   |   |                                       |
| SCREEN SPANS UP TO   | CONC. & FILLED CMU (3500 PSI)<br>PRESSURE (PSF) | CONC. & FILLED CMU (2500 PSI)<br>PRESSURE (PSF) | HOLLOW CMU (1800 PSI)<br>PRESSURE (PSF) | TIMBER (S.G. = .55)<br>PRESSURE (PSF) |
| 90"  | 75  | 75  | 49                                      | 75                                    |
| 96"  | 75  | 75  | 46                                      | 75                                    |
| 102"   | 75  | 75  | 43                                      | 75                                    |
| 108"   | 75  | 75  | 41                                      | 74                                    |
| 114"   | 75  | 75  | 38                                      | 70                                    |
| 120"   | 75  | 75  | 36                                      | 66                                    |
| 126"   | 75  | 75  | 35                                      | 62                                    |
| 132"   | 75  | 75  | 32                                      | 59                                    |
| 138"   | 75  | 75  | 31                                      | 56                                    |
| 144"   | 75  | 75  | 29                                      | 53                                    |
| 150"   | 75  | 72  | 29                                      | 51                                    |
| 156"   | 75  | 68  | 27                                      | 48                                    |
| 162"   | 75  | 66  | 26                                      | 47                                    |
| 168"   | 75  | 64  | 25                                      | 45                                    |
| 174"   | 74  | 61  | 24                                      | 43                                    |
| 180"   | 72  | 60  | 23                                      | 41                                    |
| 186"   | 68  | 57  | 22                                      | 40                                    |
| 192"   | 67  | 55  | 22                                      | 38                                    |
| 198"   | 64  | 53  | 21                                      | 37                                    |
| 204"   | 63  | 51  | 20                                      | 36                                    |
| 210"   | 61  | 50  | 20                                      | 35                                    |
| 216"   | 59  | 49  | 19                                      | 34                                    |
| 222"   | 58  | 47  | 19                                      | 33                                    |
| 228"   | 56  | 46  | 18                                      | 32                                    |
| 234"   | 54  | 45  | 18                                      | 32                                    |
| 240"   | 52  | 44  | 18                                      | 31                                    |
| 246"   | 52  | 42  | 17                                      | 30                                    |
| 252"   | 51  | 41  | 17                                      | 29                                    |
| 258"   | 49  | 40  | 16                                      | 28                                    |
| 264"   | 48  | 39  | 16                                      | 27                                    |
| 270"   | 47  | 39  | 15                                      | 27                                    |
| 276"   | 46  | 38  | 15                                      | 26                                    |
| 282"   | 45  | 37  | 15                                      | 26                                    |
| 288"   | 44  | 36  | 14                                      | 25                                    |

| ROPE SCREEN DIRECT MOUNT   |   |   |   |                                       |
|--|---|---|---|---------------------------------------|
| MAXIMUM DESIGN PRESSURE OF A SIDE RAIL SCREEN<br>FOR ANY LENGTH ATTACHED WITH<br>5/16" ELCO ULTRACON HFH @ 4" O.C. |   |   |   |                                       |
| SCREEN SPANS UP TO   | CONC. & FILLED CMU (3500 PSI)<br>PRESSURE (PSF) | CONC. & FILLED CMU (2500 PSI)<br>PRESSURE (PSF) | HOLLOW CMU (1800 PSI)<br>PRESSURE (PSF) | TIMBER (S.G. = .55)<br>PRESSURE (PSF) |
| 90"  | 75  | 75  | 75                                      | 75                                    |
| 96"  | 75  | 75  | 73                                      | 75                                    |
| 102"   | 75  | 75  | 68                                      | 75                                    |
| 108"   | 75  | 75  | 63                                      | 75                                    |
| 114"   | 75  | 75  | 60                                      | 75                                    |
| 120"   | 75  | 75  | 57                                      | 75                                    |
| 126"   | 75  | 75  | 54                                      | 75                                    |
| 132"   | 75  | 75  | 51                                      | 75                                    |
| 138"   | 75  | 75  | 48                                      | 75                                    |
| 144"   | 75  | 75  | 47                                      | 75                                    |
| 150"   | 75  | 75  | 44                                      | 75                                    |
| 156"   | 75  | 75  | 43                                      | 75                                    |
| 162"   | 75  | 75  | 41                                      | 75                                    |
| 168"   | 75  | 75  | 40                                      | 72                                    |
| 174"   | 75  | 75  | 38                                      | 69                                    |
| 180"   | 75  | 75  | 37                                      | 67                                    |
| 186"   | 75  | 75  | 36                                      | 64                                    |
| 192"   | 75  | 75  | 34                                      | 62                                    |
| 198"   | 75  | 75  | 33                                      | 60                                    |
| 204"   | 75  | 75  | 32                                      | 58                                    |
| 210"   | 75  | 75  | 31                                      | 57                                    |
| 216"   | 75  | 75  | 30                                      | 54                                    |
| 222"   | 75  | 74  | 29                                      | 53                                    |
| 228"   | 75  | 72  | 28                                      | 52                                    |
| 234"   | 75  | 71  | 28                                      | 50                                    |
| 240"   | 75  | 69  | 27                                      | 49                                    |
| 246"   | 75  | 67  | 27                                      | 47                                    |
| 252"   | 75  | 65  | 26                                      | 47                                    |
| 258"   | 75  | 64  | 25                                      | 46                                    |
| 264"   | 75  | 63  | 25                                      | 45                                    |
| 270"   | 74  | 61  | 24                                      | 44                                    |
| 276"   | 72  | 60  | 23                                      | 42                                    |
| 282"   | 71  | 59  | 23                                      | 42                                    |
| 288"   | 69  | 57  | 22                                      | 41                                    |

| ROPE SCREEN DIRECT MOUNT   |   |   |   |   |
|--|---|---|---|---|
| MAXIMUM DESIGN PRESSURE OF A SIDE RAIL SCREEN<br>FOR ANY LENGTH ATTACHED WITH<br>1/4"-14 ELCO DRIL-FLEX HWH TO ALUMINUM OR STEEL |   |   |   |   |
| SCREEN SPANS UP TO   | @ 6" O.C.<br>1/8" AL/ST<br>PRESSURE (PSF) | @ 6" O.C.<br>1/4" AL/ST<br>PRESSURE (PSF) | @ 4" O.C.<br>1/8" AL/ST<br>PRESSURE (PSF) | @ 4" O.C.<br>1/4" AL/ST<br>PRESSURE (PSF) |
| 90"  | 65  | 75  | 75  | 75  |
| 96"  | 61  | 75  | 75  | 75  |
| 102"   | 58  | 75  | 75  | 75  |
| 108"   | 54  | 75  | 75  | 75  |
| 114"   | 51  | 75  | 75  | 75  |
| 120"   | 48  | 75  | 75  | 75  |
| 126"   | 46  | 75  | 71  | 75  |
| 132"   | 44  | 75  | 67  | 75  |
| 138"   | 42  | 75  | 65  | 75  |
| 144"   | 40  | 75  | 63  | 75  |
| 150"   | 38  | 75  | 59  | 75  |
| 156"   | 37  | 75  | 57  | 75  |
| 162"   | 36  | 75  | 55  | 75  |
| 168"   | 34  | 73  | 53  | 75  |
| 174"   | 33  | 71  | 51  | 75  |
| 180"   | 32  | 67  | 49  | 75  |
| 186"   | 30  | 66  | 47  | 75  |
| 192"   | 29  | 63  | 46  | 75  |
| 198"   | 29  | 61  | 44  | 75  |
| 204"   | 28  | 59  | 43  | 75  |
| 210"   | 27  | 57  | 42  | 75  |
| 216"   | 26  | 56  | 41  | 75  |
| 222"   | 25  | 54  | 39  | 75  |
| 228"   | 25  | 52  | 38  | 75  |
| 234"   | 24  | 51  | 37  | 75  |
| 240"   | 24  | 50  | 37  | 75  |
| 246"   | 23  | 49  | 36  | 75  |
| 252"   | 22  | 47  | 35  | 75  |
| 258"   | 22  | 46  | 34  | 73  |
| 264"   | 21  | 45  | 33  | 71  |
| 270"   | 21  | 44  | 32  | 70  |
| 276"   | 20  | 43  | 32  | 68  |
| 282"   | 20  | 42  | 31  | 67  |
| 288"   | 19  | 41  | 30  | 66  |

| ROPE SCREEN DIRECT MOUNT  |   |   |   |   |
|---|---|---|---|---|
| MAXIMUM DESIGN PRESSURE OF A SIDE RAIL SCREEN<br>FOR ANY LENGTH ATTACHED WITH<br>5/16"-24 ELCO DRIL-FLEX HWH TO ALUMINUM OR STEEL |   |   |   |   |
| SCREEN SPANS UP TO  | @ 6" O.C.<br>1/8" AL/ST<br>PRESSURE (PSF) | @ 6" O.C.<br>1/4" AL/ST<br>PRESSURE (PSF) | @ 4" O.C.<br>1/8" AL/ST<br>PRESSURE (PSF) | @ 4" O.C.<br>1/4" AL/ST<br>PRESSURE (PSF) |
| 90"   | 67  | 75  | 75  | 75  |
| 96"   | 62  | 75  | 75  | 75  |
| 102"  | 58  | 75  | 75  | 75  |
| 108"  | 55  | 75  | 75  | 75  |
| 114"  | 52  | 75  | 75  | 75  |
| 120"  | 50  | 75  | 75  | 75  |
| 126"  | 47  | 75  | 73  | 75  |
| 132"  | 44  | 75  | 69  | 75  |
| 138"  | 43  | 75  | 66  | 75  |
| 144"  | 40  | 75  | 63  | 75  |
| 150"  | 39  | 75  | 60  | 75  |
| 156"  | 37  | 75  | 58  | 75  |
| 162"  | 36  | 75  | 55  | 75  |
| 168"  | 34  | 75  | 54  | 75  |
| 174"  | 33  | 75  | 51  | 75  |
| 180"  | 32  | 75  | 50  | 75  |
| 186"  | 31  | 73  | 48  | 75  |
| 192"  | 30  | 70  | 46  | 75  |
| 198"  | 29  | 69  | 45  | 75  |
| 204"  | 29  | 66  | 44  | 75  |
| 210"  | 27  | 64  | 42  | 75  |
| 216"  | 26  | 63  | 41  | 75  |
| 222"  | 25  | 61  | 40  | 75  |
| 228"  | 25  | 59  | 39  | 75  |
| 234"  | 24  | 58  | 38  | 75  |
| 240"  | 24  | 56  | 37  | 75  |
| 246"  | 24  | 55  | 36  | 75  |
| 252"  | 23  | 53  | 35  | 75  |
| 258"  | 22  | 52  | 35  | 75  |
| 264"  | 22  | 51  | 34  | 75  |
| 270"  | 21  | 50  | 33  | 75  |
| 276"  | 21  | 49  | 32  | 75  |
| 282"  | 20  | 48  | 32  | 75  |
| 288"  | 20  | 47  | 31  | 73  |

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OF

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THIS IS TO CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE THESE PLANS & SPECIFICATIONS ARE IN COMPLIANCE WITH THE BUILDING CODE REQUIREMENTS OF THE STATE OF FLORIDA

TREVO R JOHNSON

LICENSE

No 65624

PROFESSIONAL ENGINEER

FLORIDA REG. # 106624

TKJ

DATE: 10/5/20

DRAWN BY:

SCALE:

PROJ. #:

N.T.S.

20-0803

TKJ Engineering, LLC.

14835 AUTUMN CREEK DRIVE, RIVERVIEW, FL 33569

PH: 813-404-7649; EM: TKENGINEERING@VERIZON.NET

CERTIFICATE OF AUTHORIZATION NUMBER: 28582

ADVANCED SCREEN  
ROLL-UP SYSTEM

AHT

ADVANCED HURRICANE TECHNOLOGY

6063 JANES LANE, NAPLES, FL 34109

PHONE: 239.260.0020; FAX: 239.260.0023

WWW.AHT-USA.NET

| # | DATE | REVISIONS |
|---|------|-----------|
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