

STRUCTURAL NOTES:

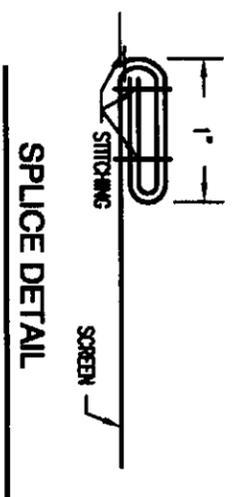
- THIS SYSTEM HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE 2007 INTERNATIONAL BUILDING CODE TEST STANDARDS USED - ASTM E330, ASTM E1886 AND ASTM E1996. THE AGENCY FOR IMPACT, DETECTION AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH THE ABOVE REFERENCED CODE AND AS PER THE FLORIDA BUILDING CODE 2007, DS 201, 202 AND 203 AT FERTIGATION TESTING LABORATORY, INC. FOR THEIR REPORT(S) LISTED HEREIN.
- DESIGN PRESSURE REQUIREMENTS OF A SPECIFIC SITE SHALL BE DETERMINED BY OTHERS IN COMPLIANCE TO THE 2007 INTERNATIONAL BUILDING CODE AS REQUIRED BY THE JURISDICTION WHERE THE SYSTEM WILL BE INSTALLED. WHEN CALCULATING PRESSURES PER ASCE 7, USE OF DIRECTIONALITY FACTOR K_d=0.85 IS ALLOWED.
- NO 35-1/2" INCREASE IN ALLOWABLE STRESS INCREASE HAS BEEN USED IN THE DESIGN OF THIS PRODUCT.
- THIS PRODUCT EVALUATION DOCUMENT (PED) DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. IF SITE CONDITIONS DEVIATE FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE THIS SPECIFIC DOCUMENTS TO BE USED IN CONJUNCTION WITH THIS DOCUMENT.
- THE CONTRACTOR AND / OR PERMIT HOLDER IS TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS SYSTEM, INCLUDING VERIFYING THE AGENCY OF THE EXISTING STRUCTURE TO WITHSTAND THE NEW SUPERIMPOSED LOADS SHOWN BELOW AND THE SOUNDNESS OF THE STRUCTURE WHERE THE SYSTEM IS TO BE ATTACHED TO INSURE PROPER ANCHORAGE.
- SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA LICENSED ENGINEER OR ARCHITECT WHO WILL BECOME THE ENGINEER OF RECORD (EOR) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE PED ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE PED ENGINEER SHALL SUBMIT TO THIS ENGINEER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
- THIS PED SHALL BEAR THE DATE AND ORIGINAL SEAL OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.
- THIS SYSTEM MAY ALSO BE INSTALLED HORIZONTALLY FOLLOWING INSTALLATION DETAILS SHOWN HEREIN.
- THIS WIND ABATEMENT SYSTEM IS INTENDED FOR USE ONLY DURING HURRICANE OR OTHER TROPICAL STORM WEATHERS. SEASONAL OR PERMANENT INSTALLATION OR STORAGE OF THIS WIND ABATEMENT SYSTEM IN AREAS OF PROLONGED EXPOSURE TO DIRECT SUNLIGHT OR OTHER WEATHERING CONDITIONS MAY CAUSE MATERIAL DEGRADATION OR OTHERWISE IMPAIR THEIR AGENCY AS AN IMPACT RESISTANT SYSTEM.
- LIMITATIONS OF USE
THIS WIND ABATEMENT SYSTEM HAS NO MINIMUM SEPARATION FROM GLAZING REQUIREMENT. BREAKING OF GLAZING PROPERLY PROTECTED BY THIS PRODUCT DOES NOT COMPROMISE THE BUILDING ENVELOPE. THE MAXIMUM SIZE SHALL BE 60 PSF MAX. PRESSURE @ 176 INCHES MAXIMUM SPAN. SEE TABLE ON SHEET 1/2.
- RESERVED.
- ALL SCREENS TO BE STAINLESS STEEL 304 OR 316 SERIES OR CORROSION RESISTANT COATED CARBON STEEL WITH A 50 KSI YIELD STRENGTH AND A 90 KSI TENSILE STRENGTH.
- ALL BOLTS TO BE ASTM A307, GALVANIZED OR 304 SERIES STAINLESS STEEL WITH A MINIMUM 36 KSI YIELD STRENGTH.
- ANCHORS TO STRUCTURE (WALL / FLOOR / CEILING / SYSTEM) SHALL BE INSTALLED PER MANUFACTURERS' RECOMMENDATIONS AND AS FOLLOWS:
 - CONCRETE BLOCK MASONRY (ASTM C-90)
TYPICAL ANCHORS (TYP. BUILDER) OR PANELMATE WALE & FEMALE FASTENERS (ELOCO TYPICUM) - 1/4" N. DIA.
I. MINIMUM EMBEDMENT INTO HOLLOW CONCRETE BLOCK MASONRY FOR TYPICAL ANCHORS AND ELOCO PANELMATES IS 1 3/4".
NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED.
II. PANELS, BRICKS OR OTHER PRE-CAST PRODUCTS LOCATED ON THE EXISTING STRUCTURE WALL OR FLOOR SHALL HAVE ANCHORS OF SUFFICIENT LENGTH TO PROPERLY ATTACH TO THE PRIMARY STRUCTURE BEHIND IT.
III. MINIMUM EDGE DISTANCE = 3.0"
 - POURED CONCRETE (f'_c = 3000 PSI MIN.)
TYPICAL ANCHORS (TYP. BUILDER) OR PANELMATE WALE & FEMALE FASTENERS (ELOCO TYPICUM) - 1/4" N. DIA.
I. MINIMUM EMBEDMENT INTO POURED CONCRETE FOR TYPICAL ANCHORS AND ELOCO PANELMATES IS 1 3/4".
NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. SCREENS TO BE 1/4"-20 X 1 3/4" FOR STUCCO, 1 1/8" WITH NO STUCCO.
II. PANELS, BRICKS OR OTHER PRE-CAST PRODUCTS LOCATED ON THE EXISTING STRUCTURE WALL OR FLOOR SHALL HAVE ANCHORS OF SUFFICIENT LENGTH TO PROPERLY ATTACH TO THE PRIMARY STRUCTURE BEHIND IT.
III. MINIMUM EDGE DISTANCE = 3.0"
 - WOOD (Nominal 2x4(min) Southern Pine, Sp-0.55 OR GREATER)
TYPICAL ANCHORS (TYP. BUILDER) OR PANELMATE WALE & FEMALE FASTENERS (ELOCO TYPICUM) - 1/4" N. DIA.
I. MINIMUM EDGE DISTANCE = CENTER OF 2" NOMINAL LUMBER (APPROX. 3/4"). MINIMUM EMBEDMENT = 1-1/2"
II. MINIMUM EDGE DISTANCE = 3.0"
- MAXIMUM DESIGN PRESSURE VERSUS PANEL SPAN SHOWN ON SHEET 2/2
- SCREEN PANEL'S MANUFACTURER LABEL SHALL BE PLACED ON A READILY AND VISIBLE LOCATION ON THE PANEL. ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABEL SHALL READ AS FOLLOWS:
HURRICANE FABRIC.COM LLC
PO BOX 50153, CLAYTON, MO 63105
MADE-IN-USA COUNTY PRODUCT CONTROL APPROVED.
- THIS DOCUMENT IN ITS ENTIRETY WILL BE CONSIDERED INVALID IF IT IS ALTERED BY ANY MEANS.

FASTENER SPACING OF A SINGLE UNIT SCREEN FOR ANY LENGTH ATTACHED WITH 3/8" DROP-IN ANCHOR WITH SIDEWALK BOLT (INCHES)

SCREEN SPAN	FILLED CMU (1900 PSI)					CONCRETE (4000 PSI)					HOLLOW CMU					TIMBER				
	60	50	40	30	20	60	50	40	30	20	60	50	40	30	20	60	50	40	30	20
4'-0"	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
6'-0"	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
8'-0"	14	16	18	18	18	16	18	18	18	18	14	14	17	18	18	14	14	17	18	18
10'-0"	12	14	16	18	18	13	15	18	18	18	12	12	14	17	17	12	12	14	17	17
12'-0"	10	12	14	17	17	12	13	15	18	18	10	10	12	14	15	10	10	12	14	15
14'-0"	9	10	12	14	14	10	11	13	15	16	9	9	10	12	12	9	9	10	12	12
16'-0"	8	9	10	13	13	8	10	11	13	14	8	8	9	10	11	8	8	9	10	11
18'-0"	7	8	9	11	11	8	9	10	12	12	7	7	8	9	10	7	7	8	9	10

FASTENER SPACING OF A SINGLE UNIT SCREEN FOR ANY LENGTH ATTACHED WITH 1/4" ELOCO PANELMATE PRO. WALE & FEMALE (INCHES)

SCREEN SPAN	FILLED CMU (1900 PSI)					CONCRETE (4000 PSI)					HOLLOW CMU					TIMBER				
	60	50	40	30	20	60	50	40	30	20	60	50	40	30	20	60	50	40	30	20
4'-0"	15	18	18	18	17	18	18	18	18	18	15	15	18	18	18	15	15	18	18	18
6'-0"	11	12	15	18	18	14	16	18	18	18	11	11	13	15	15	11	11	13	15	15
8'-0"	7	8	10	12	12	8	9	11	13	13	7	7	9	9	9	7	7	9	9	9
10'-0"	6	7	8	10	10	7	8	9	11	11	6	6	7	7	7	6	6	7	7	7
12'-0"	5	6	7	9	9	6	7	8	9	9	5	5	6	6	6	5	5	6	6	6
14'-0"	4	5	6	7	7	5	6	6	8	8	4	4	5	5	5	4	4	5	5	5
16'-0"	-	5	5	6	6	4	5	6	7	7	-	-	4	4	4	-	-	4	4	4
18'-0"	-	-	5	5	6	4	5	5	6	6	-	-	4	4	4	-	-	4	4	4

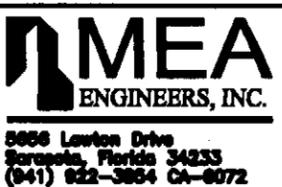


RETENTION CLIP END CONNECTOR:
RHOON ENGINEERING PLASTICS - POLYUMIDE 66
FABRIC SPECIFICATION:
FIBER CONTENT: TEXTILE FABRIC
CONSTRUCTION: 25 X 25 WOVEN
FINISH: RESIN COATED
WEIGHT (ASTM D-3776): 10.8 -02/SQUARE YARD
TENSILE STRENGTH (9988 METHOD, ASTM D -4832): WWP - 879 lbs., WET - 879 lbs.
BURST STRENGTH (ASTM D - 3786): 1,000 PS
AIRBORN RESISTANCE (ASTM D -4886) 85% STRENGTH RETAINED
SEWING:
ONLY SEWING IS AT SPLICE
EDGES:
NO SEWING AT EDGES

John H. Thompson Jr., PE
TX License # 106180
DATE: 2/22/12

TEXAS DEPARTMENT OF INSURANCE

TX REG. # F-13337
WWW.MEAENGINEERS.COM

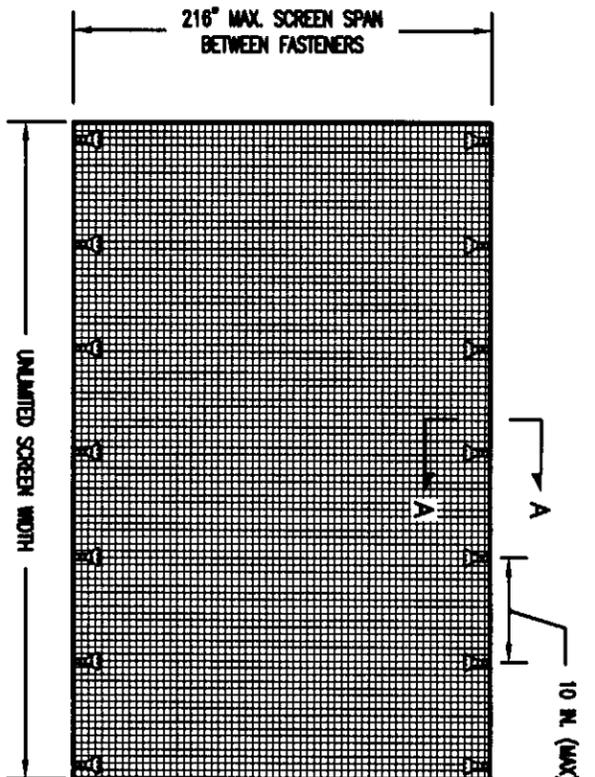


HURRICANE FABRIC.COM LLC
PO BOX 50153
CLAYTON, MO 63105
PHONE: (238)888-0088
WWW.HURRICANEFABRIC.COM

ASTRO GUARD
Wind Abatement System

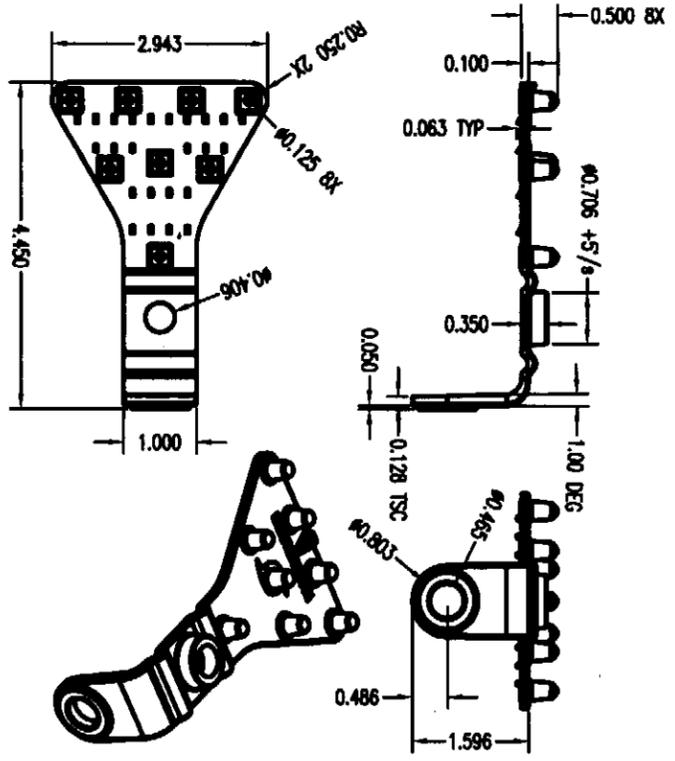
REV.	DESCRIPTION
1	02/22/12-Clarify Note 9

Project Name: JK
Description: NTS
Date: 09/15/11
1/2

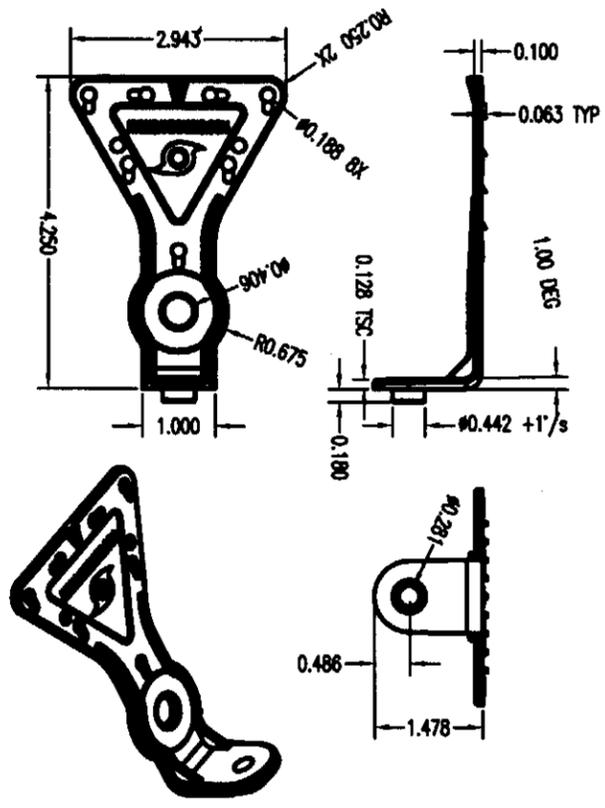


TYPICAL TWO-SIDED INSTALLATION
VERTICAL OR HORIZONTAL INSTALLATION - N.T.S.

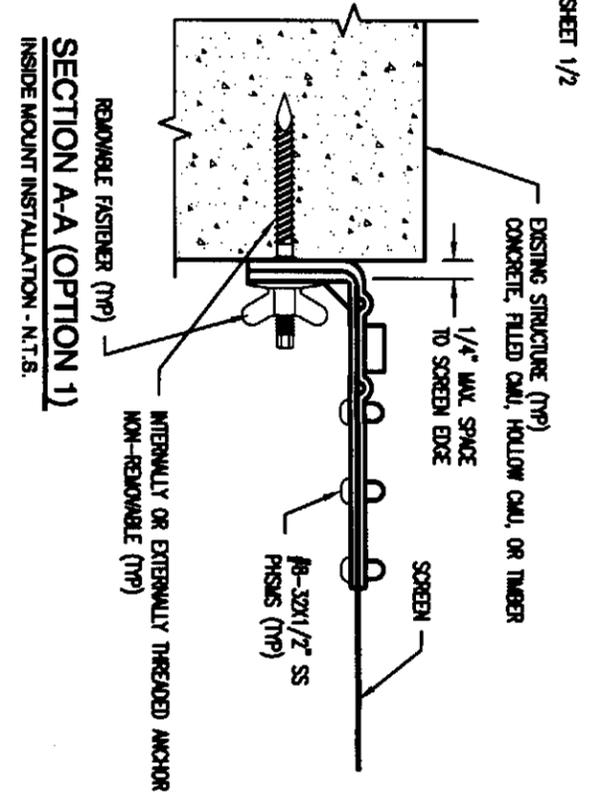
NOTE:
PANELS CAN BE ATTACHED ON THREE OR FOUR SIDES.
FOR FOUR SIDE ATTACHMENT THE SPAN IS IN THE SHORT
DIMENSION BETWEEN FASTENERS



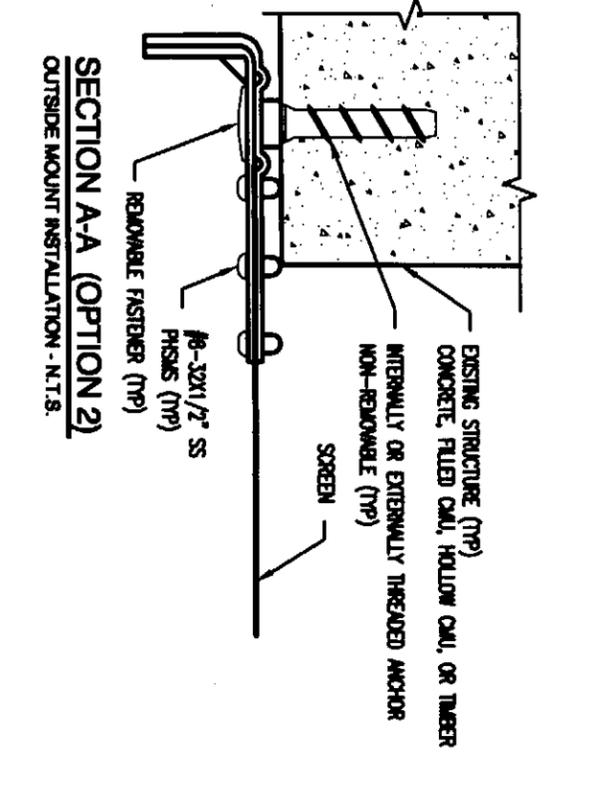
BOTTOM MOUNTING CLIP DETAILS
INSIDE OR OUTSIDE MOUNT INSTALLATION - N.T.S.
AVERAGE THICKNESS = 0.100 IN.
MATERIAL SPECIFICATION = POLYAMIDE 66



TOP MOUNTING CLIP DETAILS
INSIDE OR OUTSIDE MOUNT INSTALLATION - N.T.S.
AVERAGE THICKNESS = 0.100 IN.
MATERIAL SPECIFICATION = POLYAMIDE 66



SECTION A-A (OPTION 1)
INSIDE MOUNT INSTALLATION - N.T.S.



SECTION A-A (OPTION 2)
OUTSIDE MOUNT INSTALLATION - N.T.S.

LOADS ON EXISTING STRUCTURE FROM SCREEN SYSTEM
TX = PARALLEL LOADS (PLF)

SPAN (INCHES)	PRESSURE (PSF)					
	60	55	50	45	40	35
216	1134	1070	1004	936	866	792
192	1020	962	903	842	778	712
168	905	854	801	747	690	631
144	744	702	659	614	568	519
120	651	615	577	538	497	455
96	553	521	489	456	422	386
72	353	333	312	291	269	246
48	254	240	225	210	194	178

LOADS ON EXISTING STRUCTURE FROM SCREEN SYSTEM
TY = PERPENDICULAR LOADS (PLF)

SPAN (INCHES)	PRESSURE (PSF)					
	60	55	50	45	40	35
216	540	495	450	405	360	315
192	480	440	400	360	320	280
168	420	385	350	315	280	245
144	360	330	300	270	240	210
120	300	275	250	225	200	175
96	240	220	200	180	160	140
72	180	165	150	135	120	105
48	120	110	100	90	80	70

EVALUATION BASED ON:
PENETRATION TESTING LABORATORY, INC
LAB NO.: 6418 DATED 12/7/2010
ASTM E186 - UNIFORM STATIC LOADS
ASTM E186 & ASTM E188 - LARGE MASSIVE IMPACT RESISTANCE &
CYCLE LOADING PERFORMANCE



LIST OF REPORTS

[Signature]
TX REG. # F-13337
DATE: 08/22/12

TEXAS DEPARTMENT OF INSURANCE

TX REG. # F-13337
WWW.MEAGNENGINEERS.COM

Description: **ASTRO GUARD**
Wind Abatement System

Project Name: **HURRICANE FABRIC.COM LLC**
PO BOX 80153
CLAYTON, MO 63105
PHONE: (238)888-0088
WWW.HURRICANEFABRIC.COM

Project No: JK
Revision: NTS
Date: 09/15/11

2/2

REV. DESCRIPTION

1 XX/XX/XX-RESERVED

MEAGN ENGINEERS, INC.
5888 Lorton Drive
Gainesville, Florida 34233
(941) 922-3864 CA-8072