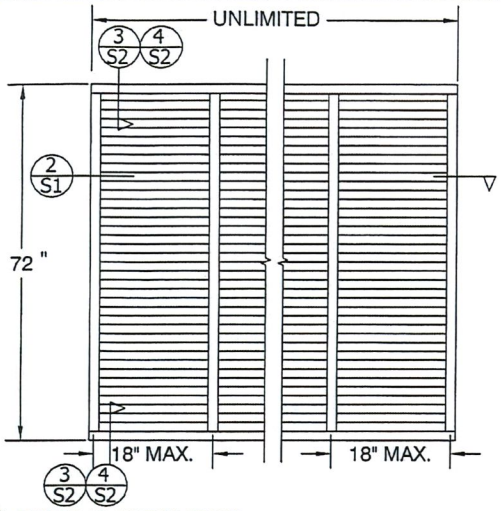
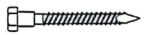
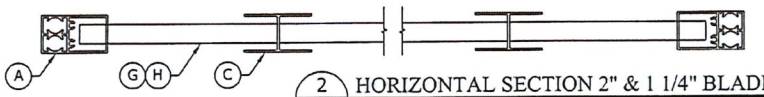


1 / S1 TYPICAL ELEVATION
SCALE: 1/2" = 1'-0"

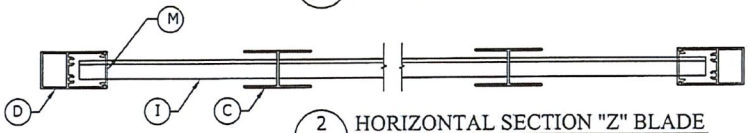
P ROUND TUBE
SCALE: NTS



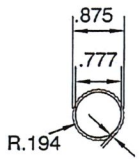
O 1/4" ELCO ULTRACON
SCALE: NTS



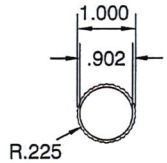
2 / S-1 HORIZONTAL SECTION 2" & 1 1/4" BLADE
SCALE: 1:2



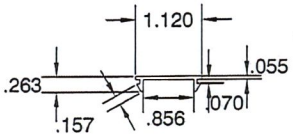
2 / S-1 HORIZONTAL SECTION "Z" BLADE
SCALE: 1:2



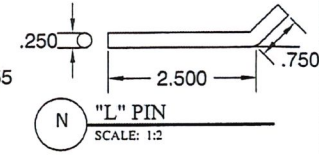
K 7/8" SERRATED TUBE
SCALE: 1:2



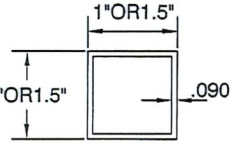
L 1" SERRATED TUBE
SCALE: 1:2



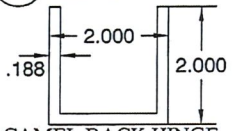
M "Z" BLADE SNAP CAP
SCALE: 1:2



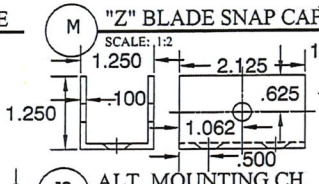
N "L" PIN
SCALE: 1:2



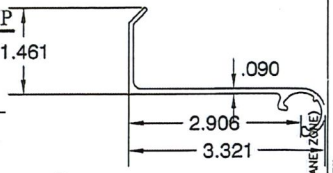
Q SQUARE TUBE
SCALE: NTS



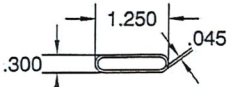
J2 CAMEL BACK HINGE
SCALE: 1:2



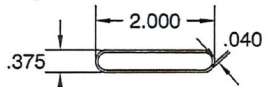
J3 ALT. MOUNTING CH.
SCALE: 1:2



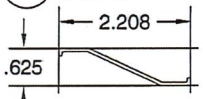
F2 FEMALE HINGE
SCALE: 1:2



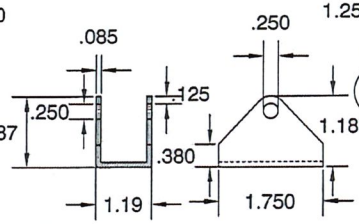
G 1 1/4 " DECORATIVE BLADE
SCALE: 1:2



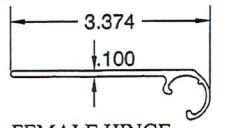
H 2 " DECORATIVE BLADE
SCALE: 1:2



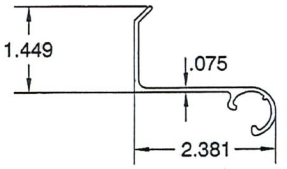
I LOUVER "Z" BLADE
SCALE: 1:2



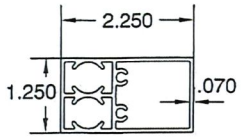
J1 CAMEL BACK HINGE
SCALE: 1:2



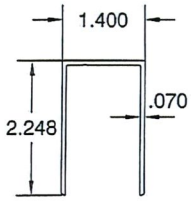
F3 FEMALE HINGE
SCALE: 1:2



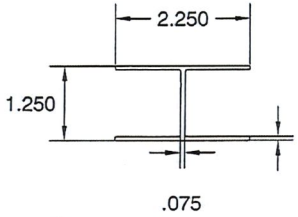
F1 FEMALE HINGE
SCALE: 1:2



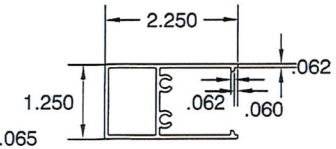
A "OVAL BLADE SIDE RAIL
SCALE: 1:2



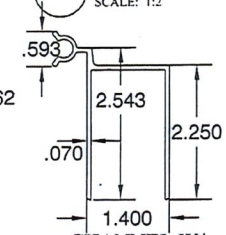
B TOP / BOTTOM RAIL
SCALE: 1:2



C CENTER MULLION
SCALE: 1:2



D "Z" BLADE SIDE RAIL
SCALE: 1:2



E CHANNEL W/ MALE HINGE
SCALE: 1:2

THIS IS NOT A MASTER DRAWING.
VALID ONLY FOR ONE TIME PERMIT

John H. Hampmann Jr., PE
FL License #: 47516
DATE: 10/29/15

2014 FBC (HIGH VELOCITY & NON-HIGH VELOCITY HURRICANE ZONE)

CA #6752
WWW.MEAENGINEERS.COM

MEA ENGINEERS, INC.
2352 Appaloosa Circle
Sarasota, Florida 34240
(941) 922-3854

REV.	DESCRIPTION
1	XX/XX/XX - RESERVED.

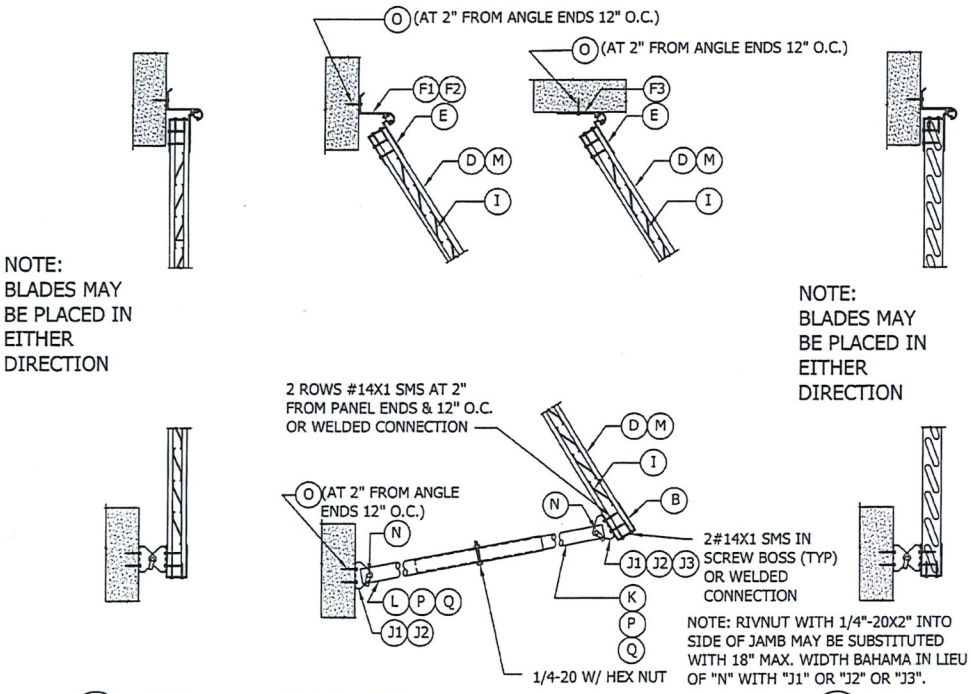
Project Name: EASTERN METAL SUPPLY
3600 23RD AVENUE SOUTH
LAKE WORTH, FL 33461

Description: DECORATIVE BAHAMA SHUTTER

Drawn: JK
Project #: 15-0901A
Scale: NTS
Date: 9/1/15
Sheet No.: S-1

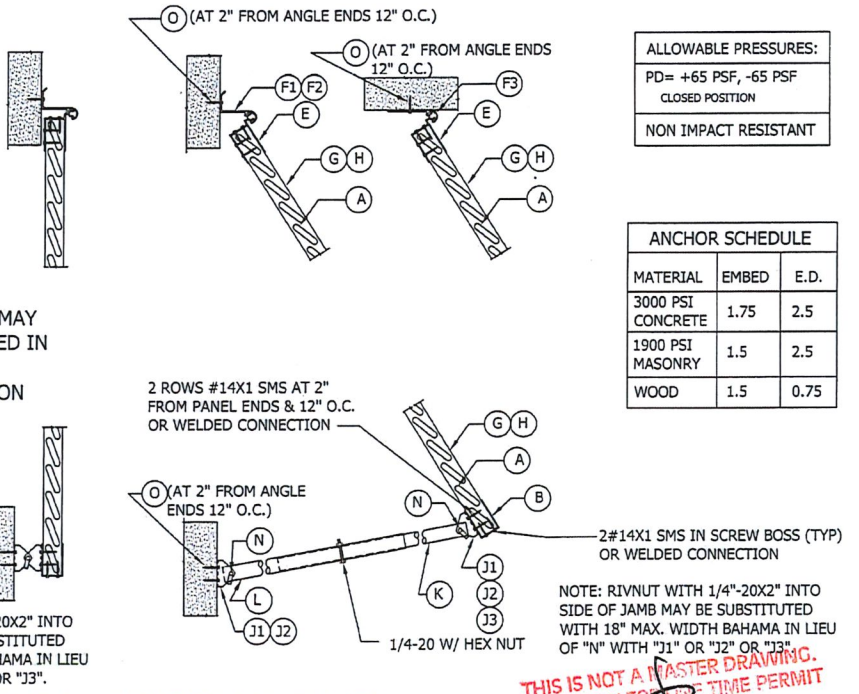
GENERAL NOTES

1. DESIGN IS IN ACCORDANCE WITH THE REQUIREMENTS OF THE FIFTH EDITION (2014) FLORIDA BUILDING CODE FOR USE WITHIN THE NON-HIGH VELOCITY HURRICANE ZONE (HVHZ). ITS USE IS LIMITED TO THE ALLOWABLE DESIGN PRESSURE NOTED IN THIS DOCUMENT AND IS NOT TO BE USED AS AN APPROVED HURRICANE PROTECTION DEVICE.
2. DESIGN PRESSURES FOR USE WITH THIS ENGINEERING SHALL BE AS NOTED:
   DESIGN PRESSURES: +65 PSF / -65 PSF
3. WARNING LABEL: THIS SHADE BAHAMA MUST BE PROVIDED WITH A WARNING LABEL, PERMANENTLY PLACED, STATING THE FOLLOWING: THIS PRODUCT IS NOT DESIGNED TO PROVIDE IMPACT RESISTANCE. IT IS NOT AN APPROVED HURRICANE PROTECTION DEVICE. IT SHOULD BE REMOVED DURING PERIODS OF HURRICANE WARNING.
3A. FASTENERS: ELCO ULTRACON 1/4" TO BE ATTACHED TO CONCRETE, MASONRY OR WOOD. FOR EDGE DISTANCES AND EMBEDMENT LENGTHS REFER TO ANCHOR SCEDULE.
4. THIS DESIGN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. IF SITE CONDITIONS DEVIATE FROM THE CONDITIONS DETAILED HEREIN, A SITE SPECIFIC DESIGN PREPARED BY THIS PROFESSIONAL ENGINEER OF RECORD SHALL BE REQUIRED.
5. THE CONTRACTOR OR PERMIT HOLDER IS RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION OF THIS SYSTEM, INCLUDING VERIFYING THE ADEQUACY OF THE EXISTING STRUCTURE WHERE THE SYSTEM IS TO BE ATTACHED TO INSURE PROPER ANCHORAGE.
6. THIS DOCUMENT SHALL BEAR THE DATE AND ORIGINAL EMBOSSED SEAL OF THE PROFESSIONAL ENGINEER OF RECORD WHO PREPARED IT.
7. ENGINEER SEAL AFFIXED HERETO VALIDATES THE STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et. al. INDEMNIFIES & SAVES HARMLESS THIS ENGINEER FOR ALL COSTS & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM DEVIATIONS FROM THIS PLAN.
8. ANY MODIFICATIONS OR ADDITIONS TO THIS DOCUMENT WILL INVALIDATE ENGINEER'S CERTIFICATION. EXCEPT AS PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
9. ALL ALUMINUM SHALL BE 6063-T6 ALLOY & TEMPER.
10. FASTENERS SHALL BE WEATHER RESISTANT AND INSTALLED PER MANUFACTURERS SPECIFICATIONS.



3 / S2 VERTICAL SECTION "Z" BLADE
SCALE: 1:2

NOTE:
1. FIXED TUBES (P) AND (Q) ARE INSTALLED ONTO (J2)
2. ADJUSTABLE TUBES (K) (L) USE (J1)
3. MAX. TUBE SPACING = 18 "O.C.
4. MAX. TUBE LENGTH = 20 "O.C.



4 / S2 VERTICAL SECTION 2" & 1 1/4" BLADE
SCALE: 1:2

NOTE:
1. FIXED TUBES (P) AND (Q) ARE INSTALLED ONTO (J2)
2. ADJUSTABLE TUBES (K) (L) USE (J1)
3. MAX. TUBE SPACING = 18 "O.C.
4. MAX. TUBE LENGTH = 20 "O.C.

ALLOWABLE PRESSURES:
PD= +65 PSF, -65 PSF CLOSED POSITION
NON IMPACT RESISTANT

ANCHOR SCHEDULE		
MATERIAL	EMBED	E.D.
3000 PSI CONCRETE	1.75	2.5
1900 PSI MASONRY	1.5	2.5
WOOD	1.5	0.75

THIS IS NOT A MASTER DRAWING.
VALID ONLY FOR ONE TIME PERMIT

John H. Kampmann Jr., PE
FL License #: 47516
DATE: 10/28/15

2014 FBC (HIGH VELOCITY & NON-HIGH VELOCITY HURRICANE ZONE)

CA #6752
WWW.MEAENGINEERS.COM
MEA ENGINEERS, INC.
2352 Appaloosa Circle
Sarasota, Florida 34240
(941) 922-3854

REV.	DESCRIPTION
1	XX/XX/XX - RESERVED.

Project Name: EASTERN METAL SUPPLY
3600 23RD AVENUE SOUTH
LAKE WORTH, FL 33461

Description: DECORATIVE BAHAMA SHUTTER

Drawn: JK
Project #: 15-0901A
Scale: NTS
Date: 9/1/15
Sheet No.: S-2