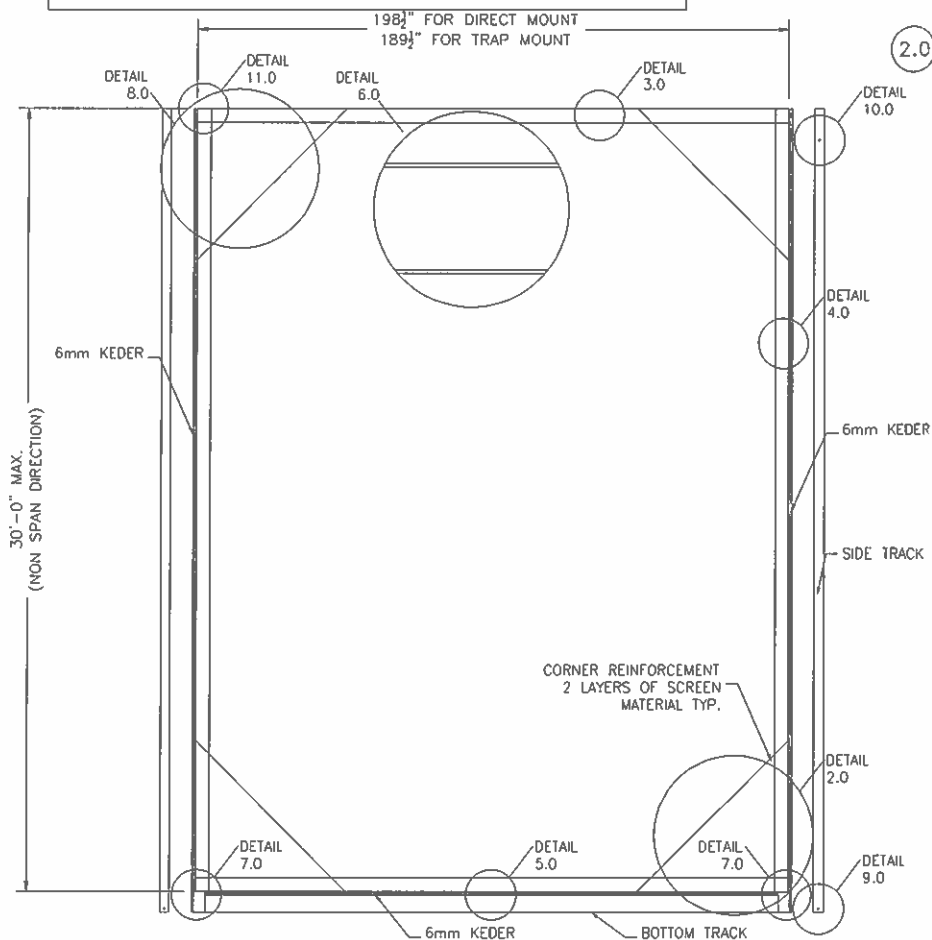


FORCE 12 700 SERIES ROLLING SHUTTERS

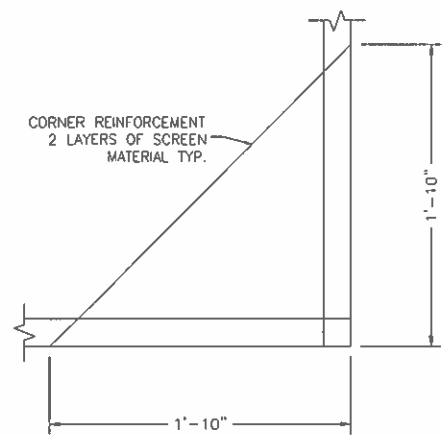
MAXIMUM ALLOWABLE PRESSURES	
DESIGN PRESSURE RATING	IMPACT RATING
CONCRETE ±60.0 PSF	LARGE AND SMALL MISSILE IMPACT
FILLED CONCRETE BLOCK ±60.0 PSF	LARGE AND SMALL MISSILE IMPACT

- SPAN NOTES:**
- ALLOWABLE PRESSURES SHALL NOT BE EXCEEDED.
 - PANEL WIDTHS WIDER THAN THE MAXIMUM NOTED ON THE DRAWING ARE NOT ACCEPTABLE.
 - PANEL WIDTHS LESS THAN 12" ARE NOT ACCEPTABLE.
 - ANCHOR SPACING AND HARDWARE SPACING NOT TO EXCEED VALUES OUTLINED IN ANCHOR SCHEDULE SHEET 3.

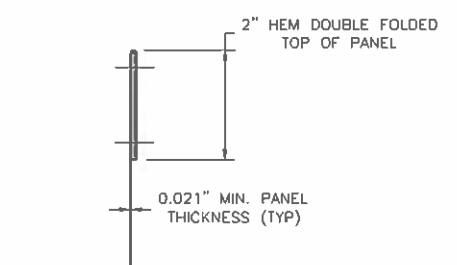


1.0 STORM PANEL TYPICAL CONSTRUCTION
SCALE: NTS=1'-0"

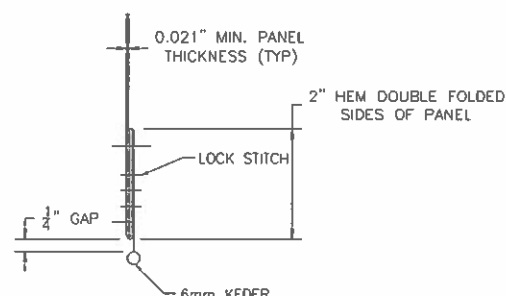
6.0 REINFORCEMENT PATCH (OPTIONAL)
SCALE: NTS=1'-0"



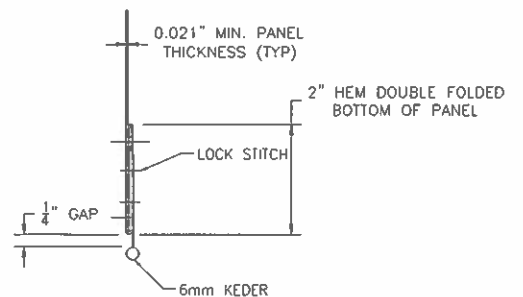
2.0 BOTTOM CORNER REINFORCEMENT
SCALE: NTS=1'-0"



3.0 PANEL PROFILE AT TOP
SCALE: NTS=1'-0"



4.0 PANEL PROFILE AT SIDES
SCALE: NTS=1'-0"



5.0 PANEL PROFILE AT BOTTOM
SCALE: NTS=1'-0"

FABRIC SPECIFICATIONS:

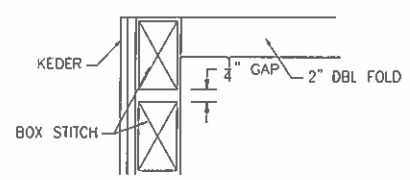
FIBER CONTENT: 100% POLYPROPYLENE
CONSTRUCTION: 3/4 BASKETWEAVE
WARP - 60 ENDS PER INCH
FILL - 50 ENDS PER INCH
CALENDERED

FINISH: 7.6 OZ / SQUARE YARD
SELVAGE: HEAT CUT OR WOVEN
TENSILE STRENGTH: WARP - 540 LBS.
(GRAB METHOD, ASTM D-4632): FILL - 425 LBS.
BURST STRENGTH (ASTM D-3786): 825 PSI
TEAR STRENGTH: WARP - 200 LBS.
(ASTM D-4533): FILL - 170 LBS.
ABRASION RESISTANCE (ASTM D-4886): 95% STRENGTH RETAINED
PUNCTURE STRENGTH (ASTM D-4833): 190 LBS.
AIR FLOW: 230 CFM

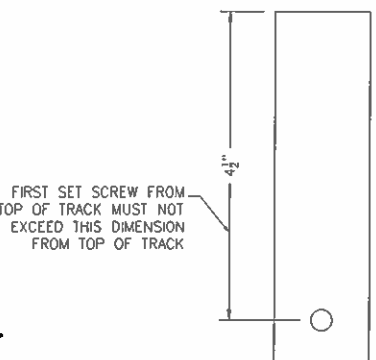
LIMITATIONS AND CONDITIONS OF USE:

- THIS STORM PANEL HAS BEEN TESTED AND EVALUATED AS A LARGE AND SMALL MISSILE IMPACT SYSTEM IN ACCORDANCE WITH THE 2009 INTERNATIONAL BUILDING CODE (IBC) AND THE 2009 INTERNATIONAL RESIDENTIAL CODE (IRC) FOR USE WHERE THE BASIC WIND SPEED IS LESS THAN 140 MPH PER ASCE 7-10.
- THIS PRODUCT MEETS ASCE 7-10 REQUIREMENTS.
- POSITIVE AND NEGATIVE DESIGN PRESSURES TO BE USED WITH THESE DRAWINGS SHALL BE DETERMINED BY OTHERS FOR SPECIFIC JOBS IN ACCORDANCE WITH THE GOVERNING CODE. WHEN CALCULATING LOAD COMBINATIONS PER ASCE 7-10, USE OF DIRECTIONALITY FACTOR $K_d=0.85$ IS ALLOWED.
- NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT.
- THE DOOR SYSTEM 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 SITE SPECIFIC DOCUMENTS TO BE USED IN CONJUNCTION WITH THIS DOCUMENT.
- PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND NEW SUPERIMPOSED LOADS.
- PANELS SHOULD BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER PANEL AS FOLLOWS:

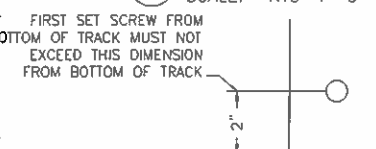
FORCE 12 - SERIES 700 - ROLLING SHUTTERS
HENDEE ENTERPRISES INC.
DESIGN PRESSURE RATING: _____
THIS PRODUCT IS DESIGNED IN COMPLIANCE WITH:
ASTM E 1886-05 (LARGE MISSILE/CYCLIC LOAD)
ASTM E 1996-09 (LARGE MISSILE/CYCLIC LOAD)
ASTM E 330-02 (UNIFORM STATIC LOAD PRESSURE)
IMPACT RESISTANT: LARGE AND SMALL MISSILE IMPACT
- STORM PANELS HAVE BEEN DESIGNED AND TESTED TO THE MAXIMUM SPAN AND LOADS SHOWN ON THESE DRAWINGS. REFERENCE HURRICANE TEST LABORATORY, LLC (HTL), RIMERA BEACH, FL, TEST REPORTS.
- ALL BOLTS & WASHERS SHALL BE ZINC COATED, GALVANIZED OR STAINLESS STEEL WITH A MINIMUM TENSILE STRENGTH OF 60 KSI.
- THIS PRODUCT IS ONLY TO BE DEPLOYED AS TEMPORARY PROTECTION AND IS NOT TO BE LEFT IN PLACE FOR EXTENDED PERIODS OF TIME.



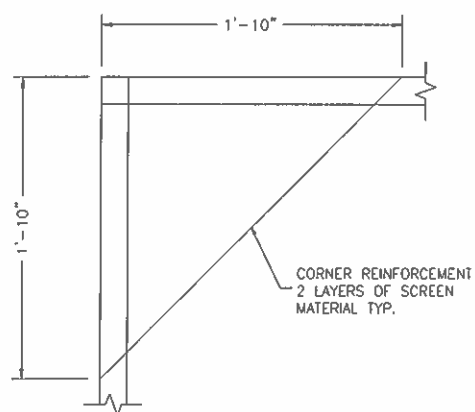
11.0 TOP CORNER DETAIL
SCALE: NTS=1'-0"



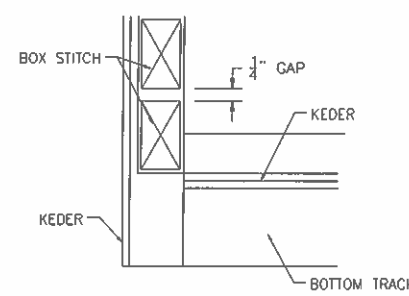
10.0 SIDE TRACK AT TOP
SCALE: NTS=1'-0"



9.0 SIDE TRACK AT BOTTOM
SCALE: NTS=1'-0"



8.0 TOP CORNER REINFORCEMENT
SCALE: NTS=1'-0"



7.0 BOTTOM CORNER DETAIL
SCALE: NTS=1'-0"

Hendee Enterprises, Inc.
The Innovative Solutions Company
P.O. Box 1588, Houston, TX 77106-1588, 8369 South East Dr., Houston, TX 77064
(713) 798-2322, Fax (713) 798-0094, (800) 231-7275 (ext 1), (800) 335-3641 (toll free)
chuck@hendee.com

CONSULTANTS:
James R. Bailey, P.E.
Texas PE # 74911
Platinum Risk Consulting LLC
4931 Chappell Hill Dr.
Missouri City, Texas 77459
281-403-2625
Texas Firm # 11044

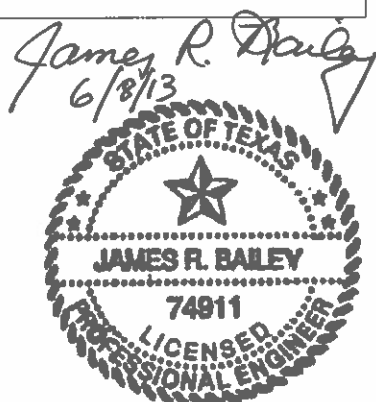
CLIENT: HENDEE ENTERPRISES
LOCATION: HOUSTON, TX
TITLE: FORCE 12 - 700 SERIES - ROLLING DOORS
DATE: 10/31/12
REVISION: 0

BY: JRB
DATE: 10/31/12
SCALE: 0

THIS DOCUMENT, CONTRACT CONDITIONS, AND TAKE OFFER INFORMATION IS THE PROPERTY OF HENDEE ENTERPRISES, INC. AND IS LOANED TO THE USER FOR THE PROJECT SPECIFICALLY IDENTIFIED HEREIN. IT IS NOT TO BE REPRODUCED, COPIED, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF HENDEE ENTERPRISES, INC. ANY UNAUTHORIZED USE OF THIS DOCUMENT IS PROHIBITED.

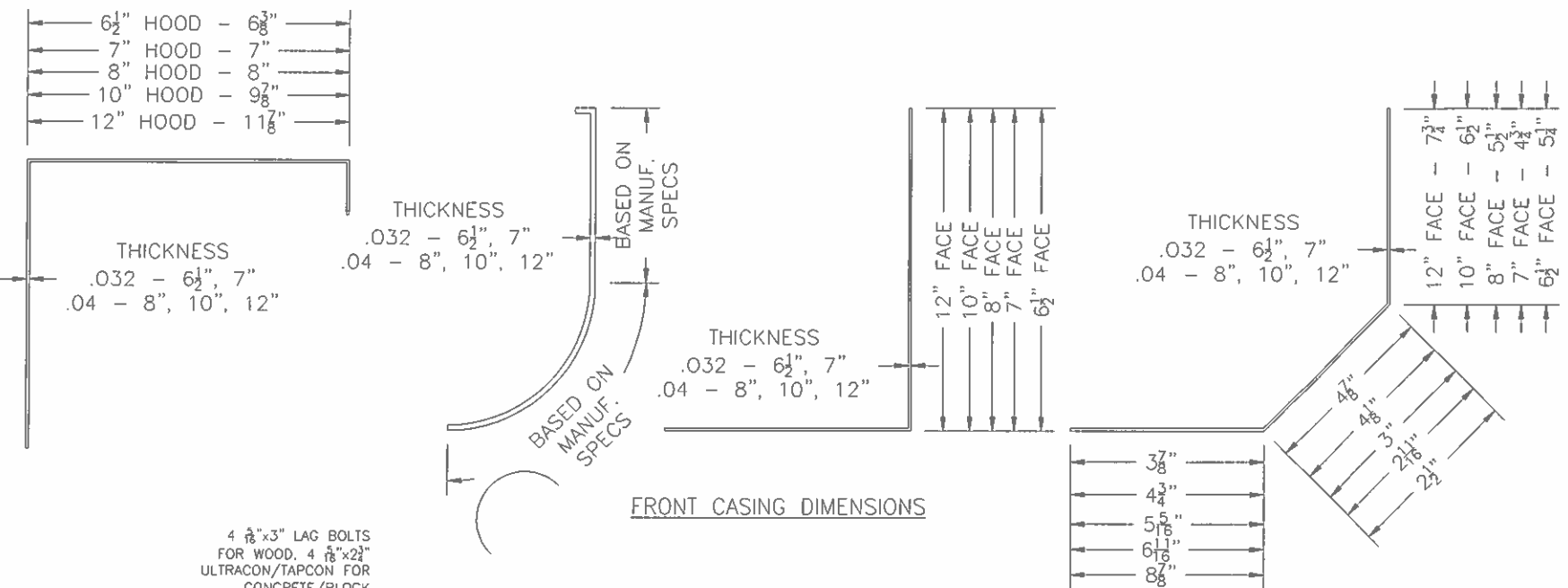
CHECKED BY:
DRAWN BY: MG/AD
FILE NAME: 700 SERIES
JOB NUMBER: -
DOCUMENT DATE: 11/16/08

SHEET:
1 OF 3

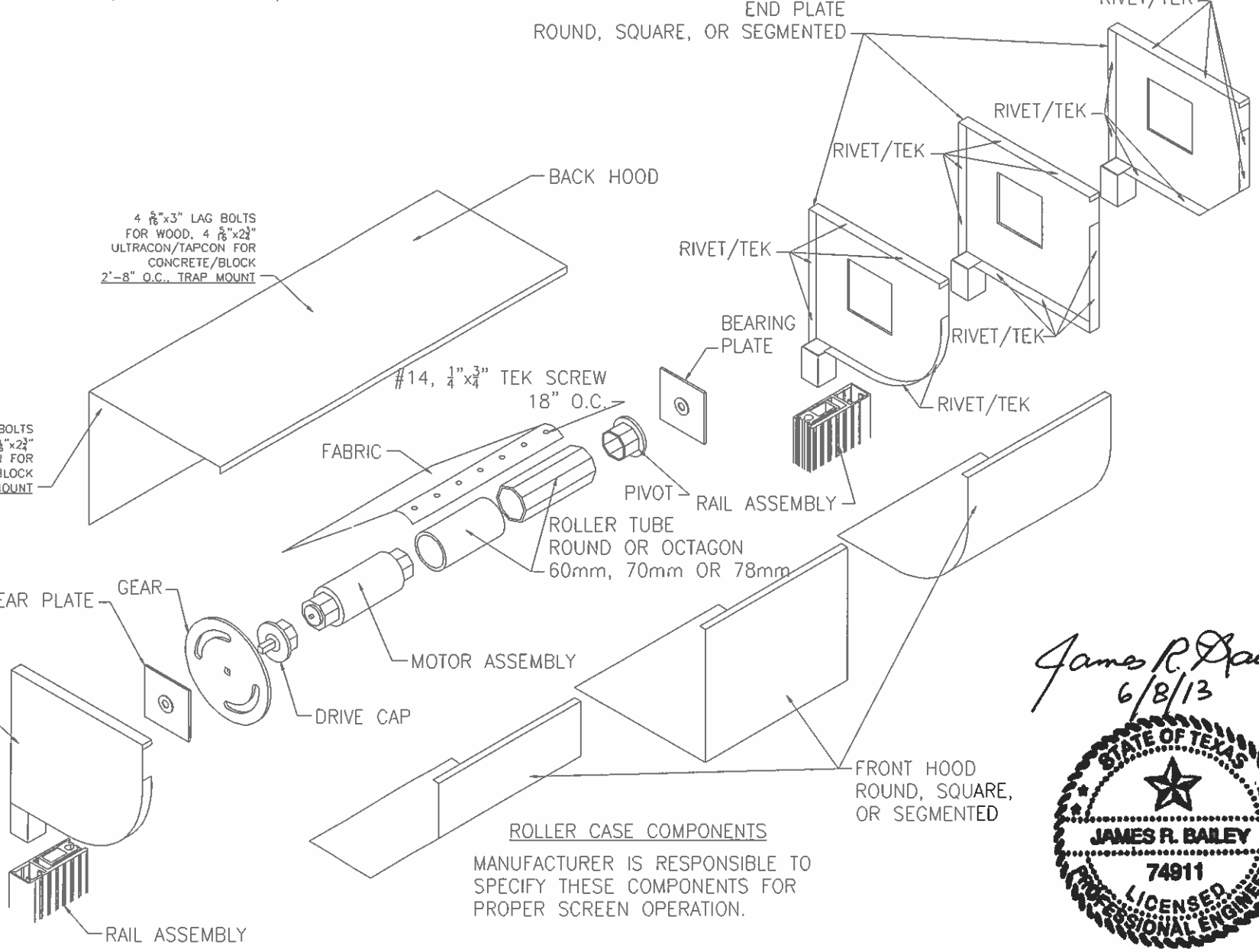
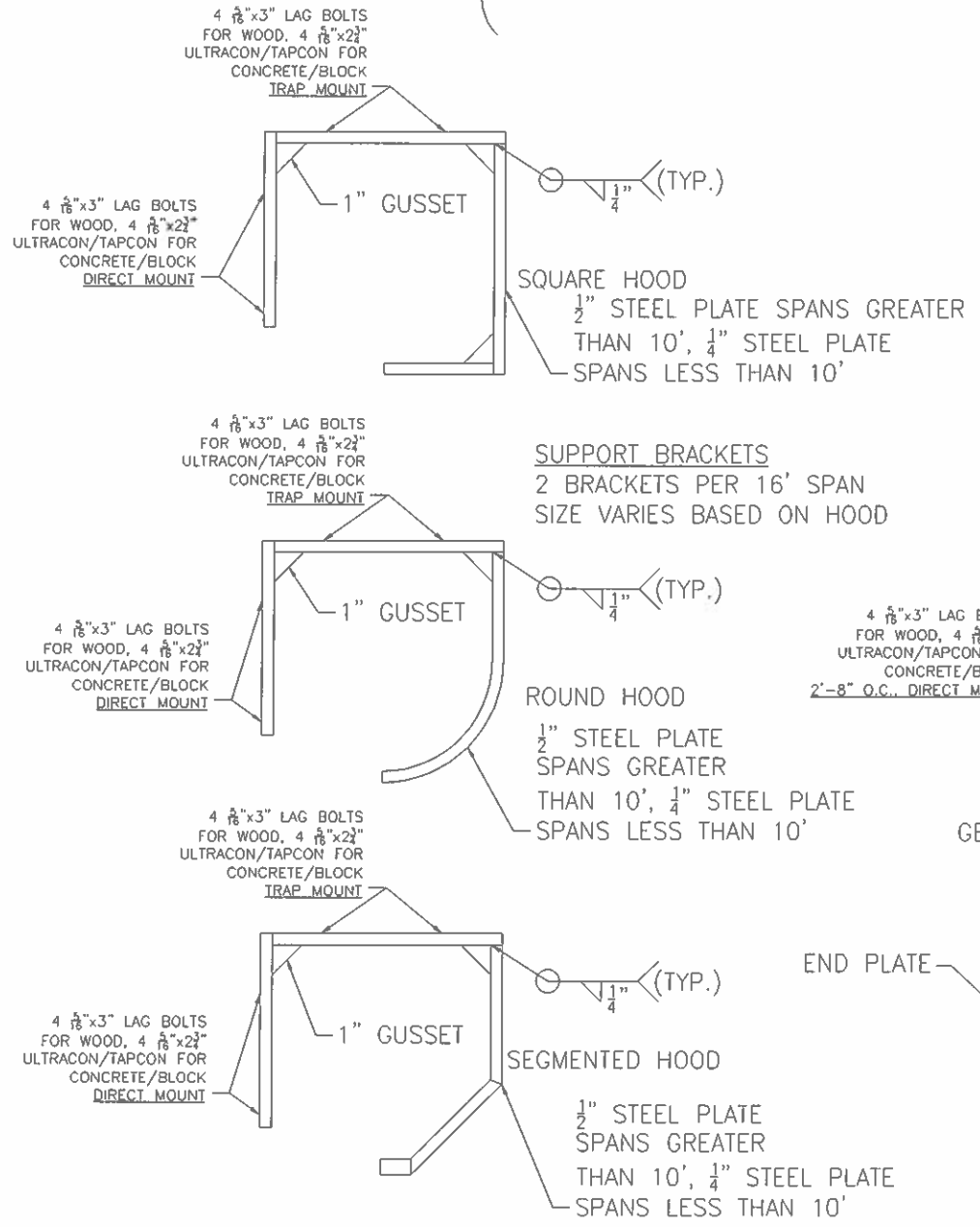


A:FORCE 12 20013 TEXAS DEPARTMENT OF INSURANCE\F12-SERIES-700-ROLLING SHUTTERS.dwg 6/4/2013 8:25:55 AM, DWG TO PDF.plt

FORCE 1X ONLY TEXAS DEPARTMENT OF INSURANCE FILE NUMBER 700-ROLLING SCREENS SERIES 700-ROLLING SHUTTERS 4/29/2013 4:06:28 PM DWG 10 10063



BILL OF MATERIAL (SHIPPING LIST)		
ITEM	DESCRIPTION	DESCRIPTION
1	BACK HOOD	STEEL OR ALUM.
2	FRONT HOOD	STEEL OR ALUM.
3	END PLATE	CAST ALUM.
4	GEAR PLATE	STEEL
5	GEAR	STEEL
6	DRIVE CAP	PVC W/ STEEL OR CAST ALUM.
7	MOTOR ASSEMBLY	-
8	ROLLER TUBE	STEEL OR ALUM.
9	PIVOT	PVC W/ STEEL OR CAST ALUM.
10	BEARING PLATE	STEEL
11	SUPPORT BRACKET	STEEL
12	RIVETS	ALUM.
13	TEK SCREWS	GALVANIZED, STAINLESS, OR ZINC PLATED STEEL
14	LAG BOLTS	GALVANIZED, STAINLESS, OR ZINC PLATED STEEL
15	ULTRACON/TAPCON	GALV., ZINC PLATED, OR COATED STEEL
16	RAIL ASSEMBLY	ALUM. 6063
17	BOTTOM TRACK	ALUM. 6063



**ALL RIVETS TO BE 1/4" OR #6 OR #8 TEK SCREWS

Hendee Enterprises, Inc.
The Innovative Solutions Company
P.O. Box 4288, Houston, TX 77210-4288 South Park Dr., Houston, TX 77054
(713) 798-2322, Fax (713) 798-0984, (800) 231-2775 (toll), (800) 371-3641 (texas)
ehendee.com

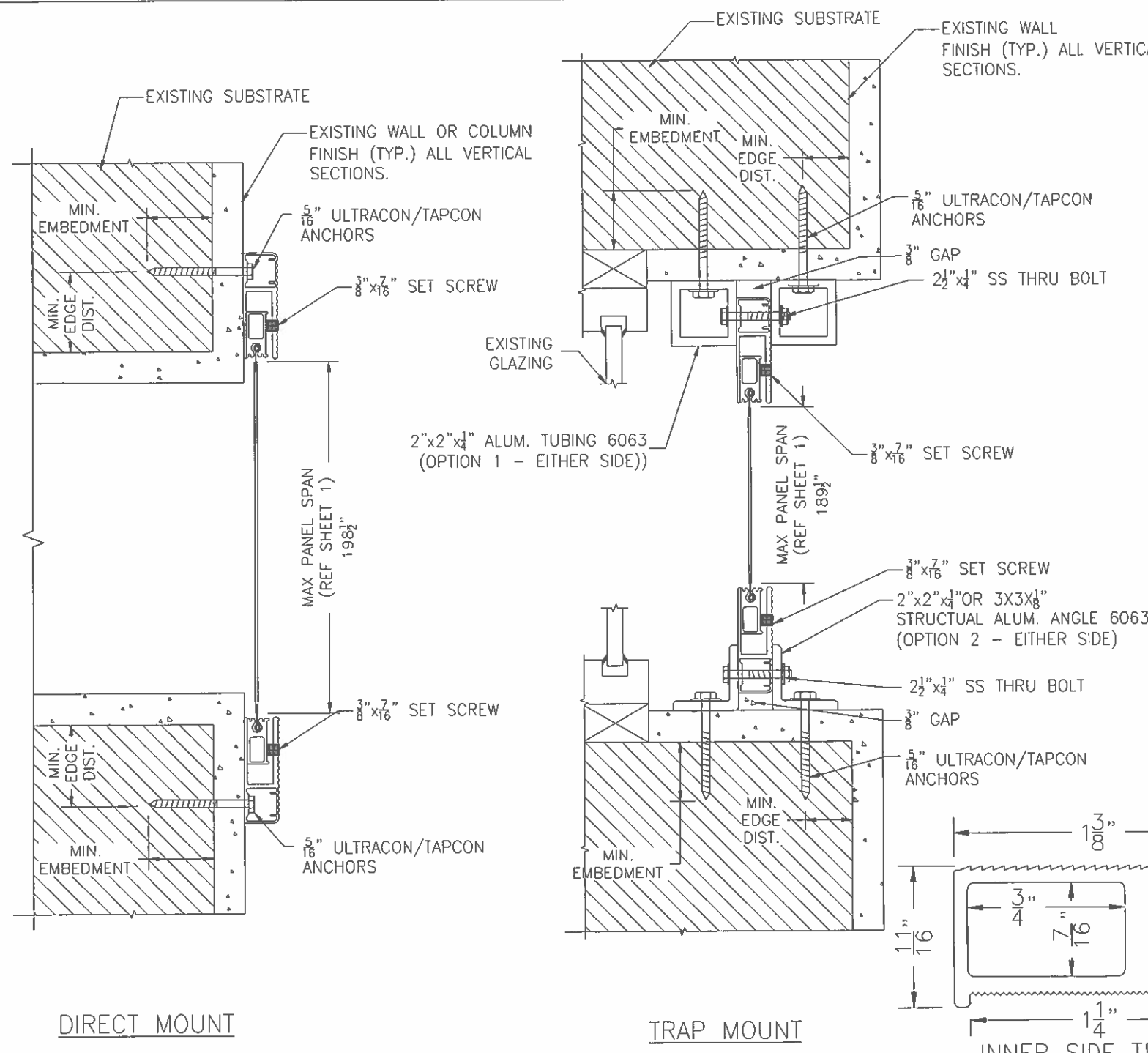
CONSULTANTS:
James R. Bailey, P.E.
Texas Reg # 74911
Feldman Risk Consulting LLC
4951 Chappell Hill Dr.
Millenriet City, Texas 77459
281-483-2825
Texas Reg # 11044

CLIENT: HENDEE ENTERPRISES
LOCATION: HOUSTON, TX
TITLE: FORCE 12 - 700 SERIES - ROLLING DOORS
DATE: 10/31/12
REVISION: 0

STATE OF TEXAS
JAMES R. BAILEY
74911
LICENSED PROFESSIONAL ENGINEER

10/31/12
11/18/08
2 OF 3

INFORCE 12/2003 TEXAS DEPARTMENT OF INSURANCE F12-SERIES-700-ROLLING SCREEN F12-SERIES-700-ROLLING SHUTTERS.dwg, 6/4/2013 8:20:09 AM, DWG TO PDF.pc3



CONCRETE (3500 psi)

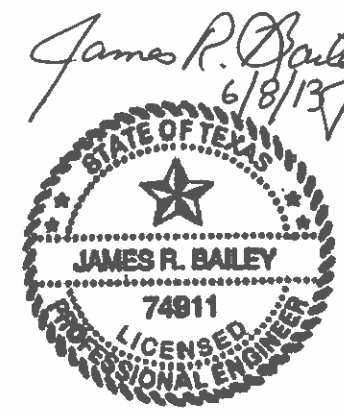
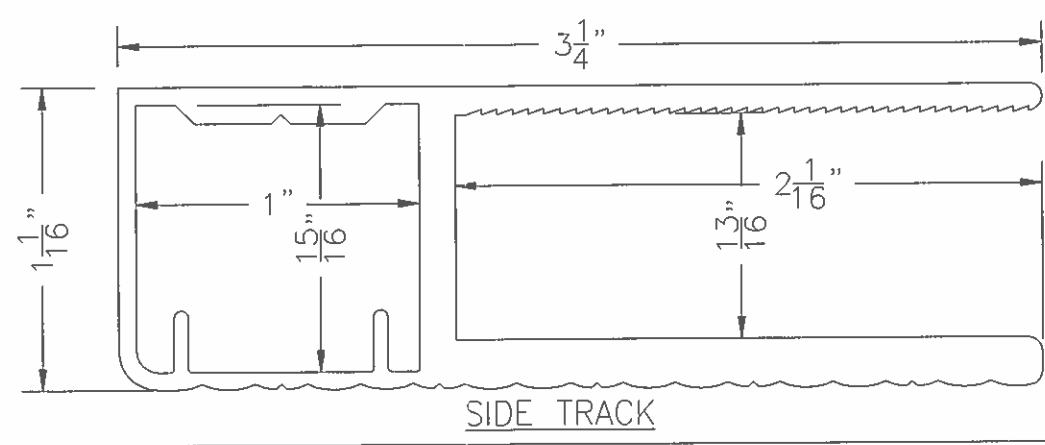
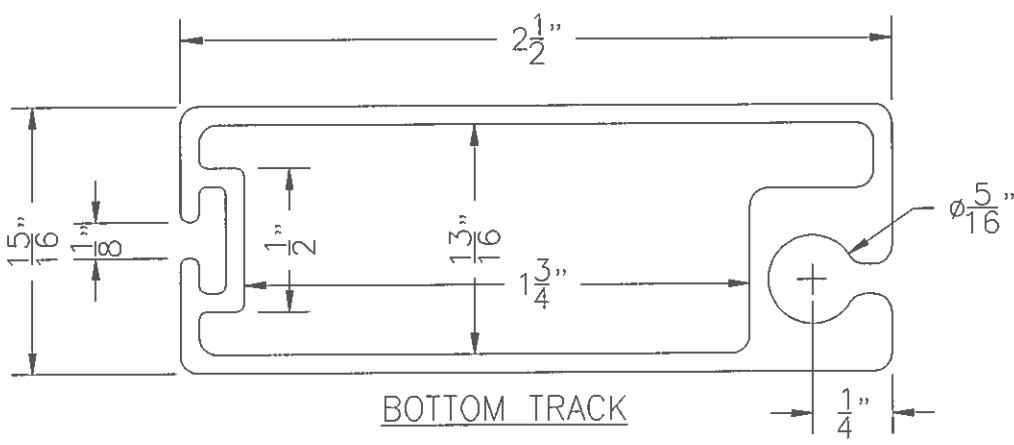
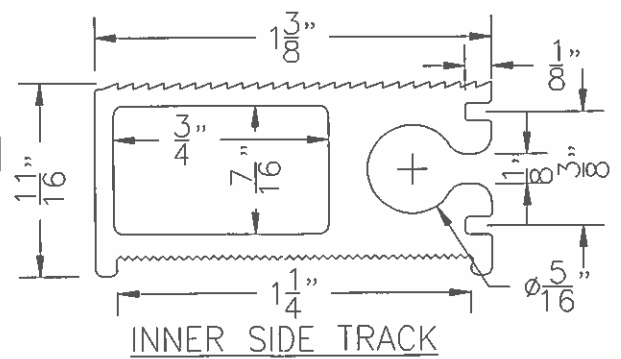
	UNIFORM LOAD (psf)	ULTRACON/TAPCON ANCHOR SPACING (5/8" x 2 1/2")	MINIMUM EDGE DISTANCE	MINIMUM EMBEDMENT	3/8" x 7/16" SET SCREW SPACING (O.C.)
DIRECT MOUNT PANEL SPANS UP TO 198 1/2"	27	12"	3 1/4"	2 1/4"	6"
	35	11"	3 1/4"	2 1/4"	6"
	45	10"	3 1/4"	2 1/4"	6"
	53	9"	3 1/4"	2 1/4"	6"
	60	6"	3 1/4"	2 1/4"	6"
TRAP MOUNT PANEL SPANS UP TO 189 1/2"	27	12"	2 1/4"	3"	6"
	35	11"	2 1/4"	3"	6"
	45	10"	2 1/4"	3"	6"
	55	9"	2 1/4"	3"	6"
	60	6"	2 1/4"	3"	6"

FILLED CONCRETE BLOCK (1800 psi)

	UNIFORM LOAD (psf)	ULTRACON/TAPCON ANCHOR SPACING (5/8" x 2 1/2")	MINIMUM EDGE DISTANCE	MINIMUM EMBEDMENT	3/8" x 7/16" SET SCREW SPACING (O.C.)	2 1/2" x 1/4" SS THRU BOLT SPACING (O.C.)
DIRECT MOUNT PANEL SPANS UP TO 198 1/2"	27	12"	3 1/4"	2 1/4"	6"	6"
	35	10"	3 1/4"	2 1/4"	6"	6"
	45	8"	3 1/4"	2 1/4"	6"	6"
	53	7"	3 1/4"	2 1/4"	6"	6"
	60	6"	3 1/4"	2 1/4"	6"	6"
TRAP MOUNT PANEL SPANS UP TO 189 1/2"	27	12"	2 1/4"	3"	6"	6"
	35	11"	2 1/4"	3"	6"	6"
	45	10"	2 1/4"	3"	6"	6"
	55	9"	2 1/4"	3"	6"	6"
	60	6"	2 1/4"	3"	6"	6"

BILL OF MATERIAL (SHIPPING LIST)

ITEM	DESCRIPTION	DESCRIPTION
1	BOTTOM TRACK	ALUM. 6063
2	INNER SIDE TRACK	ALUM. 6063
3	SIDE TRACK	ALUM. 6063
4	2"x2"x1/4" TUBING	ALUM. 6063
5	1/4" THRU BOLT	STAINLESS STEEL
6	SET SCREW	STAINLESS STEEL, ZINC PLATED, OR PAINTED
7	ULTRACON/TAPCON	GALV., ZINC PLATED, OR COATED STEEL



Consultants:
 James R. Bailey, P.E.
 Texas PE # 74911
 Platinum Risk Consulting LLC
 4931 Chappell Hill Dr.
 Missouri City, Texas 77489
 281-403-2825
 Texas Firm # 11044

Client: HENDEE ENTERPRISES
Location: HOUSTON, TX
Title: FORCE 12 - 700 SERIES - ROLLING DOORS
Date: 10/31/12
Revision: 0

Checked By: MG/AD
Drawn By: MG/AD
File Name: 700 SERIES
Job Number:
Document Date: 11/18/08
Sheet: 3 OF 3

BY: REV. DATE DESCRIPTION
 1 0 10/31/12 TEXAS DEPARTMENT OF INSURANCE SUBMITTAL

CONTRACTOR'S REPRESENTATIVE SHALL SIGN AND STAMP IN THE PRESENCE OF THE ENGINEER AT THE TIME OF THE REVIEW AND SIGNATURE OF THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED TO THE ENGINEER.