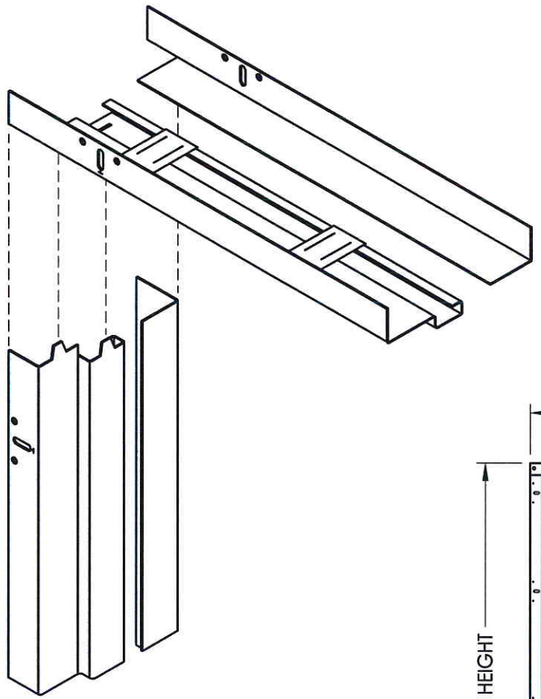
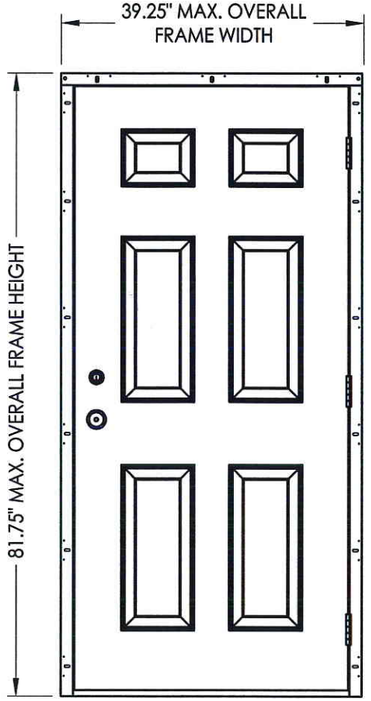
Dunbarton CORPORATION
868 MURRAY ROAD DOTHAN, AL 36303

"REDIFLEX"
TWO-PIECE STEEL FRAME SYSTEM UTILIZING A MASONITE OPAQUE STEEL DOOR PANEL "IMPACT"



REDIFLEX TWO-PIECE



OUTSWING

EVALUATED FOR USE IN THE STATE OF TEXAS

The Door System described herein complies with the 2006 International Residential Code (IRC), Sections R301 & R613 and the 2006 International Building Code (IBC), Sections 1405.12, 1609, 1714.5, 2403 and 2404 (including Texas revisions) subject to the following conditions:

1. Anchors shall be as listed and spaced as shown in the details. Anchor embedment to base material shall be beyond wall dressing or stucco.
2. This system has been tested and evaluated as a large missile impact protective system for installation in the Seaward, Inland I and Inland II areas. This product meets missile level "D" as defined in ASTM E 1996.
3. Allowable design pressure requirements must be equal to or less than the design pressure rating shown in the design pressure chart, sheet 1 of this drawing.
4. Conditions not covered by this drawing are subject to further engineering analysis.

TABLE OF CONTENTS	
SHEET #	**DESCRIPTION**
1	Typical elevation, design pressures & general notes
2	Steel frame cross sections & details
3	Door panel details
4	Horizontal cross sections
5	Vertical cross sections
6	Frame anchoring
7	Bill of materials and components

OVERALL FRAME DIMENSION	DESIGN PRESSURE (PSF)	
	POSITIVE	NEGATIVE
39.50" X 81.75"	+ 65.0	- 65.0

STATE OF TEXAS · LYNDON F. SCHMIDT · 104123 · LICENSED PROFESSIONAL ENGINEER
9.18.13

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P.O. Box 230 Valrico FL. 33595
Phone No.: 813.659.9197
TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME

PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

NO.	DATE	REVISIONS	BY

DATE: 7/9/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4338
SHEET 1 OF 7

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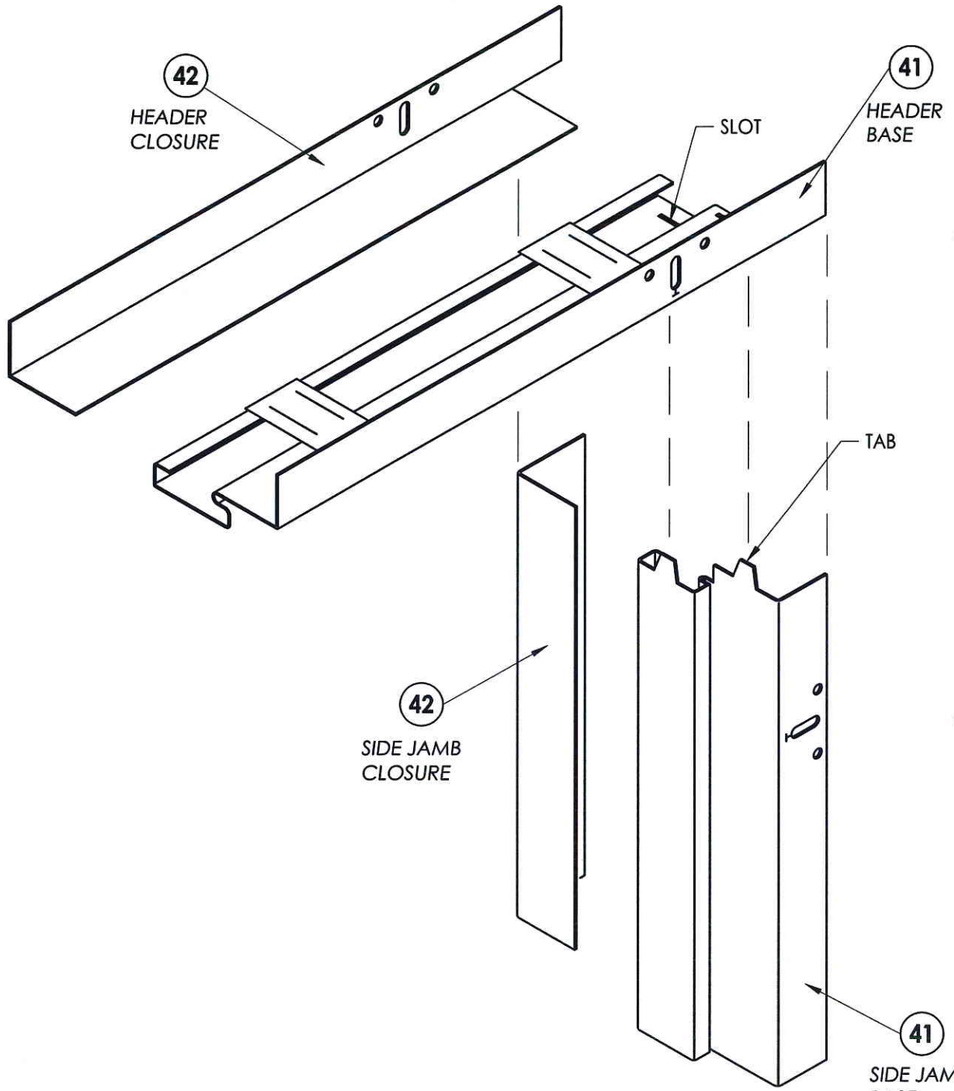
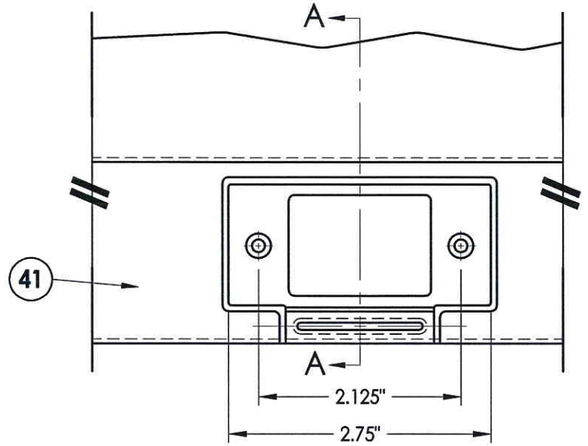
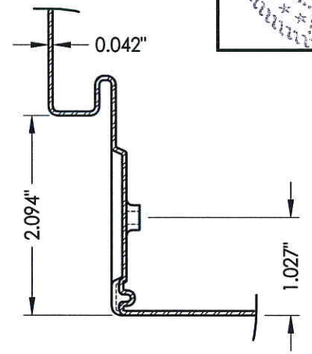
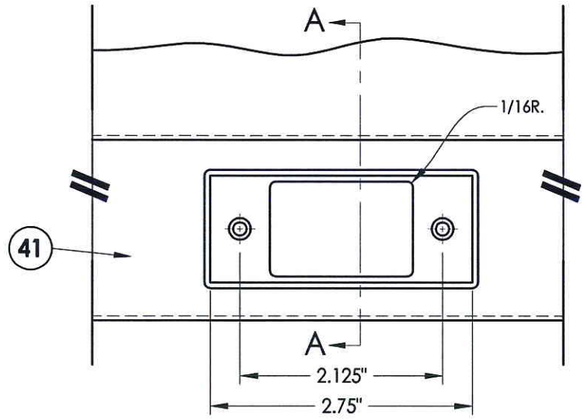




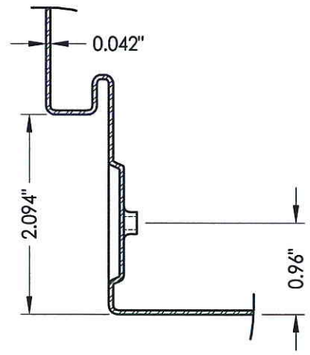
STRIKE AT LATCH



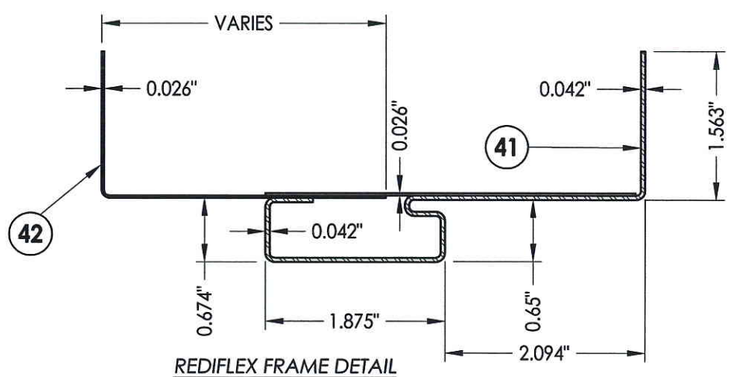
SECTION A-A



STRIKE AT DEADBOLT



SECTION A-A



REDIFLEX FRAME DETAIL

NOTES:

1. HEADER AND SIDE BASE JAMB (41) MINIMUM 18 GA. GALV. STEEL.
2. HEADER AND SIDE CLOSURE JAMB (42) MINIMUM 22 GA. GALV. STEEL.
3. FRAME SHOWN WITHOUT OPTIONAL STEEL TRIM CASING.
4. NON-KERF FRAMES DO NOT MEET AIR AND WATER CRITERIA.

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7-9-13

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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME

PART OR ASSEMBLY: STEEL FRAME CROSS SECTIONS & DETAILS

NO.	DATE	BY	REVISIONS

DATE: 7/9/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4338
SHEET 2 OF 7

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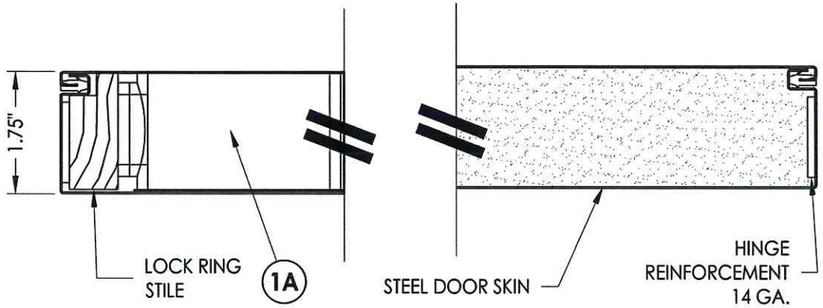
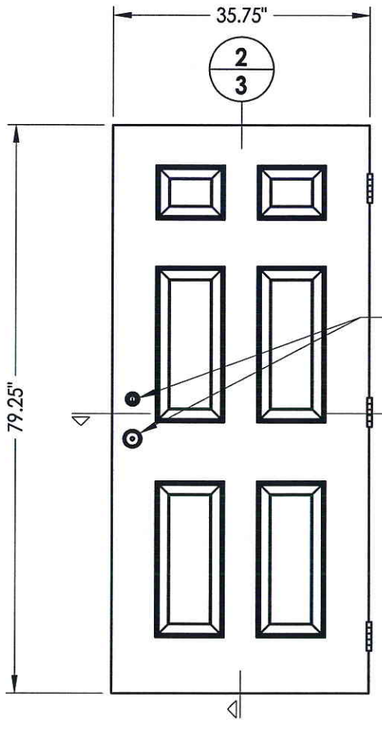
HARDWARE CHART		
MANUFACTURER	MODEL	
KWIKSET	LEVER:	200DL
	DEADBOLT:	Signature Series 980
SCHLAGE	LOCK:	F51
	DEADBOLT:	B60N

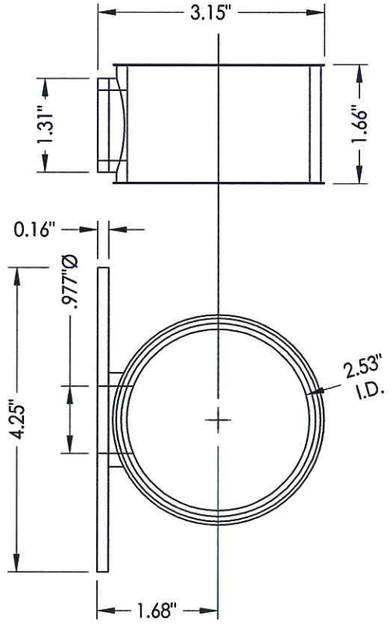


1/3 **HORIZONTAL CROSS SECTION**
Door panel

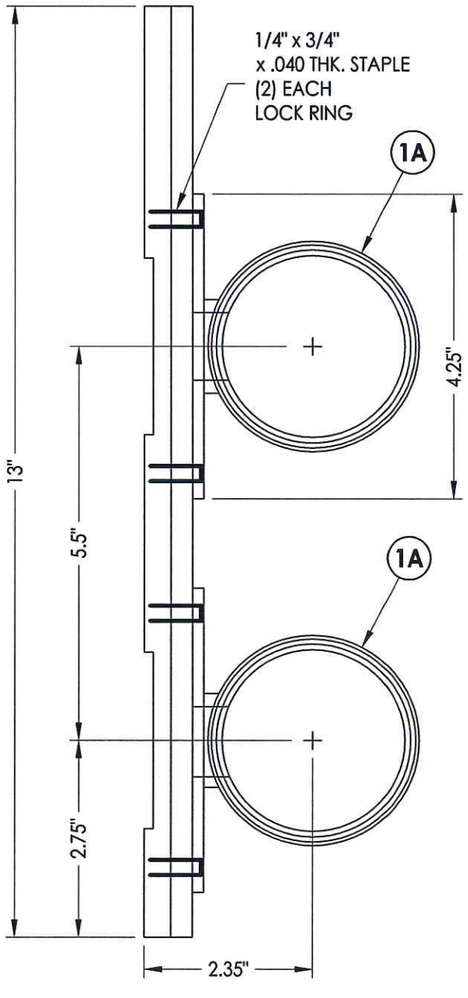


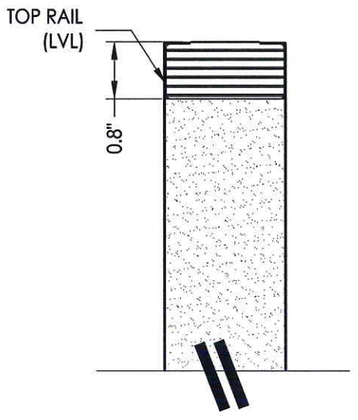
50 **DOOR PANEL**
Masonite

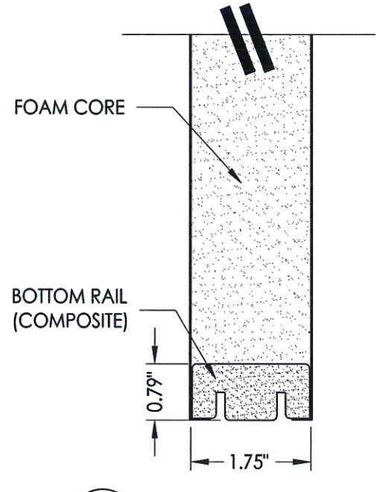
STEEL SKIN: 0.020" MIN. THICK
FOAM CORE: POLYURETHANE (2.0 PCF DENSITY, BASF)



1A **LOCK RING**







2/3 **VERTICAL CROSS SECTION**
Door panel

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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME

PART OR ASSEMBLY: DOOR PANEL DETAILS

NO.	DATE	REVISIONS	BY

DATE: 7/9/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4338
SHEET 3 OF 7

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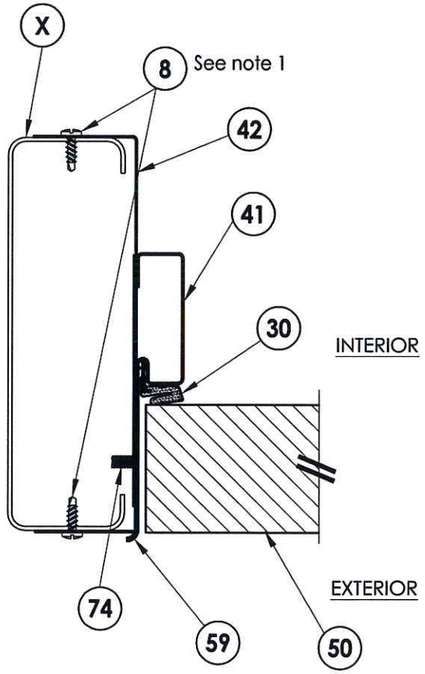
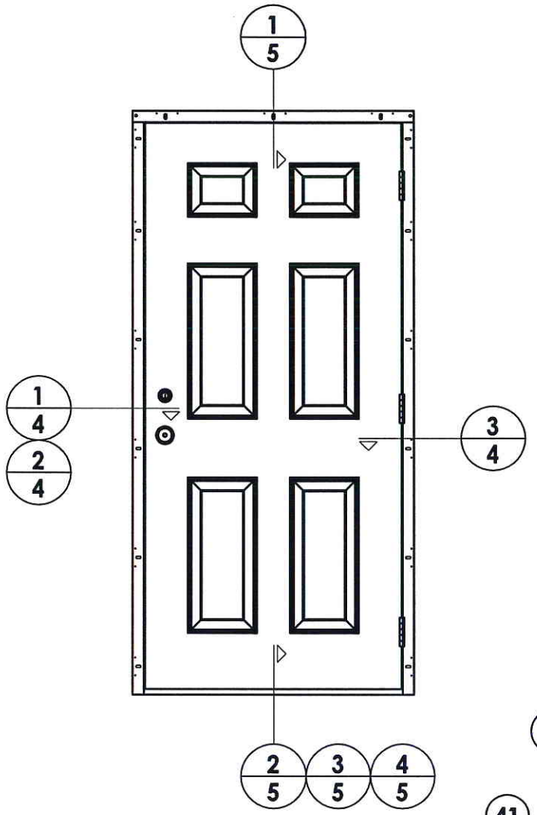
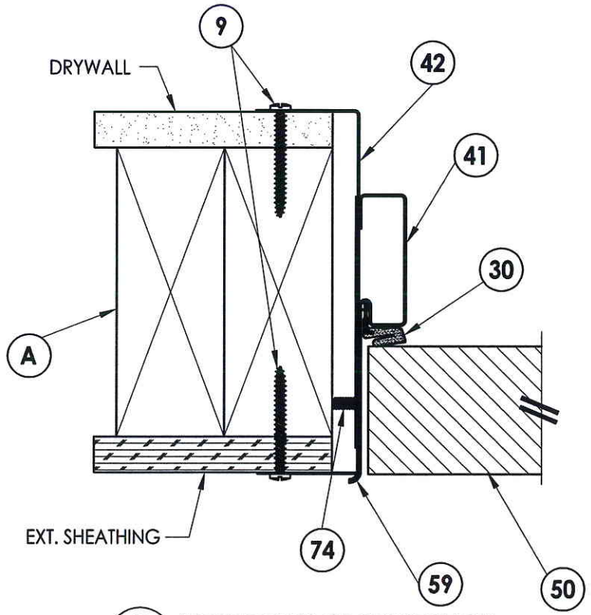


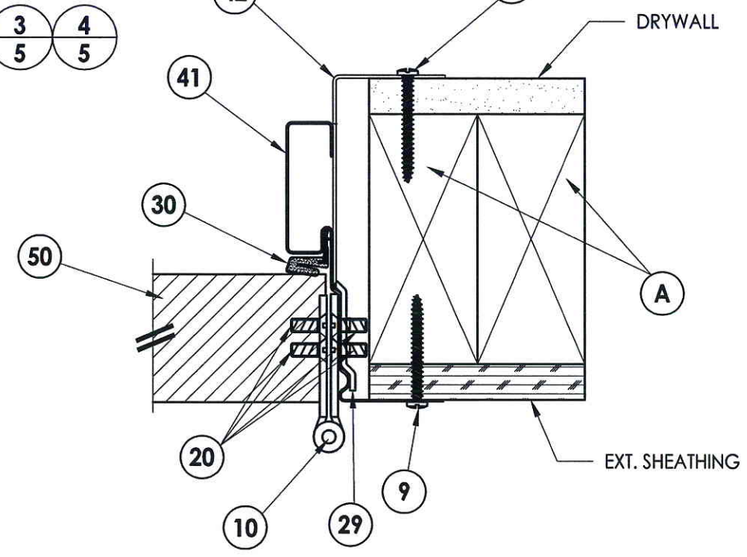
1/4 **HORIZONTAL CROSS SECTION**
Optional steel stud construction



Note:
1. A minimum of three threads must protrude completely though the supporting steel stud.



2/4 **HORIZONTAL CROSS SECTION**



3/4 **HORIZONTAL CROSS SECTION**

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7-9-13

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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: *DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME*

PART OR ASSEMBLY: *HORIZONTAL CROSS SECTIONS*

NO.	DATE	REVISIONS	BY

DATE: 7/9/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4338
SHEET 4 OF 7

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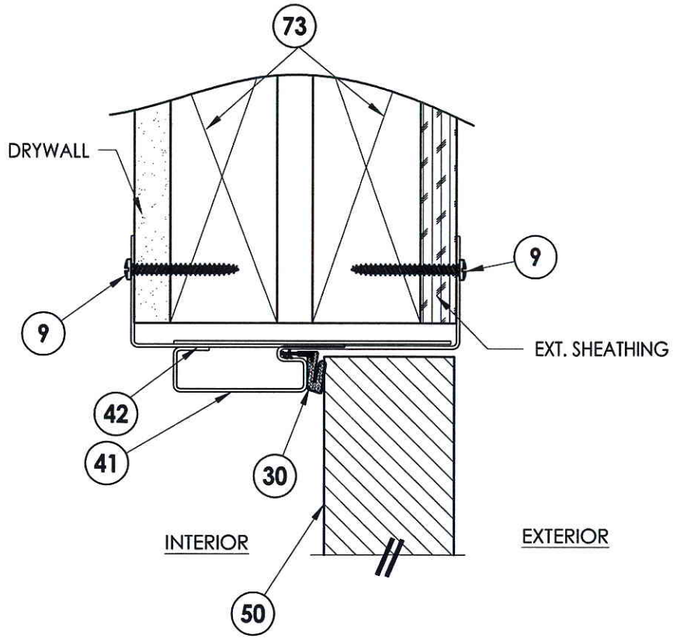
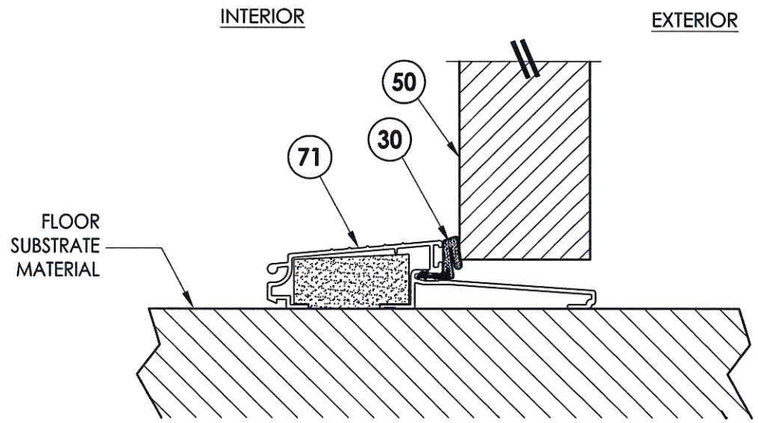
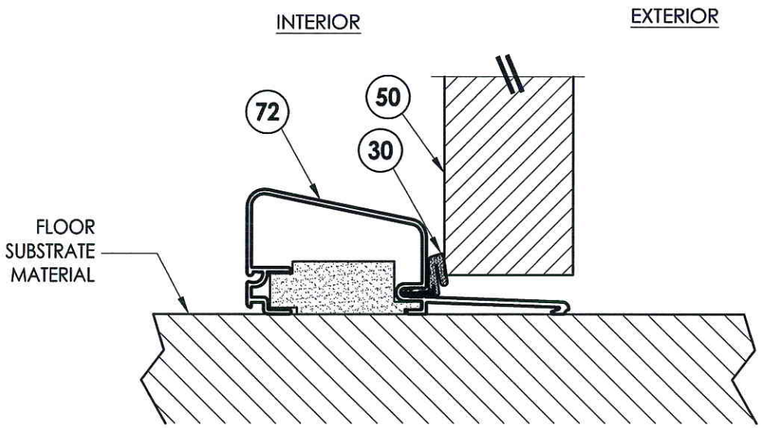


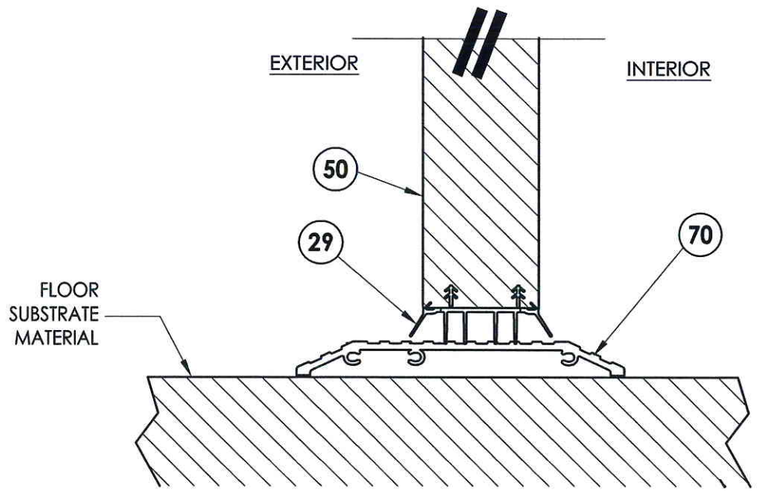
1/5 **VERTICAL CROSS SECTION**



2/5 **VERTICAL CROSS SECTION**
Shown w/ Outswing Threshold



3/5 **VERTICAL CROSS SECTION**
Shown w/ High Dam Threshold



4/5 **VERTICAL CROSS SECTION**
Shown w/ ADA Threshold

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CERTIFICATE OF REGISTRATION # F-11852

STATE OF TEXAS · LYNDON F. SCHMIDT · 104123 · LICENSED PROFESSIONAL ENGINEER

7-12-13

PRODUCT: *DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME*

PART OR ASSEMBLY: *VERTICAL CROSS SECTIONS*

NO.	DATE	BY	REVISIONS

DATE: 7/9/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4338
SHEET 5 OF 7

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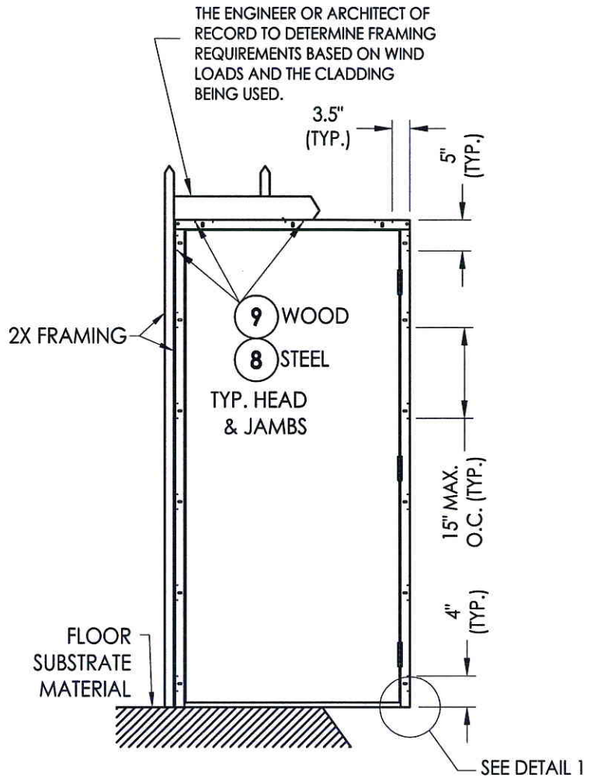
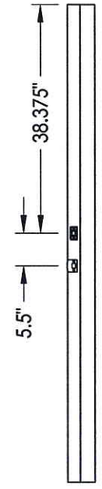
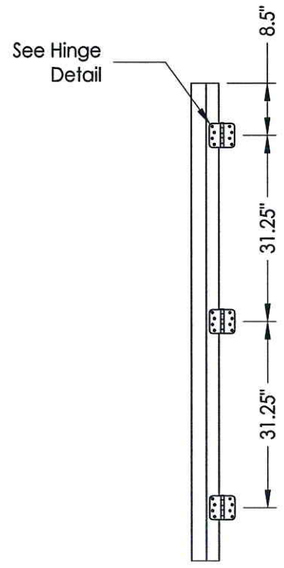


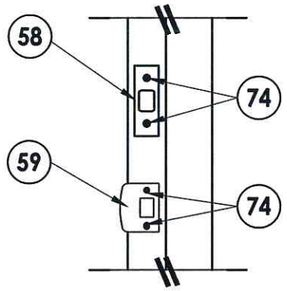
FRAME ANCHORING
Stud construction



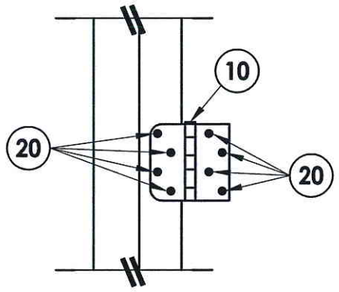
STRIKE JAMB



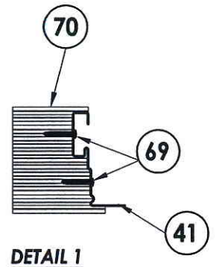
HINGE JAMB



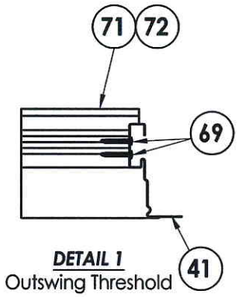
STRIKE PLATE DETAIL



HINGE DETAIL



DETAIL 1
ADA Threshold



DETAIL 1
Outswing Threshold

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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: *DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME*

PART OR ASSEMBLY: *FRAME ANCHORING*

NO.	DATE	REVISIONS	BY

DATE: 7/9/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4338
SHEET 6 OF 7

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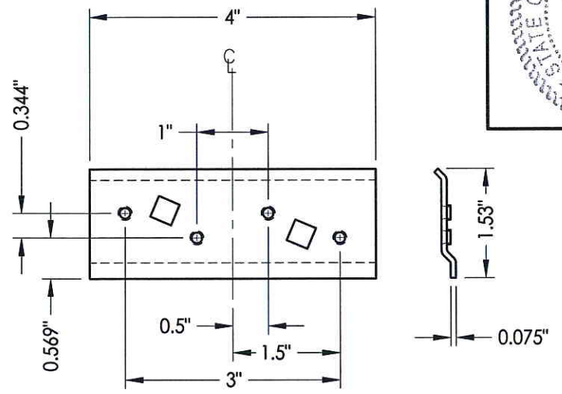
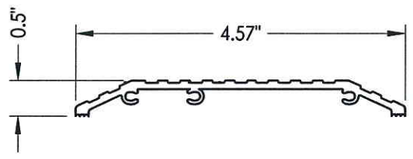
BILL OF MATERIALS

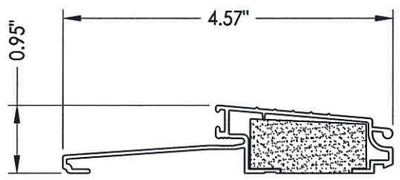
ITEM #	DESCRIPTION	MATERIAL
A	2X FRAMING: SG >= 0.42	WOOD
X	SSMA STUD 550S162-54 (Fy = 33 ksi, Fu = 45 ksi)	STEEL
8	10-16 TEKS SELF-DRILLING SCREW (ITW BUILDEX)	STEEL
9	#6 X 2" PFH WS	STEEL
10	4" X 4" HINGE	STEEL
20	10-24 X 1/2" PFH MS	STEEL
29	JAMB HINGE REIN. 14 GA. 4" x 4" x 1.53" (.075" GALV. STEEL) BY DUNBARTON FR00505	STEEL
30	COMPRESSION WEATHERSTRIPPING QLON QDS 650 BY SCHLEGEL	FOAM
41	REDIFLEX JAMB BASE 18 GA. (.042" MIN. GALV. STEEL) BY DUNBARTON	STEEL
42	REDIFLEX JAMB CLOSURE 22 GA. (.026" MIN. GALV. STEEL) BY DUNBARTON	STEEL
50	STEEL DOOR PANEL - by MASONITE	-
58	STRIKE PLATE - DEADBOLT	STEEL
59	STRIKE PLATE - LATCHBOLT	STEEL
69	#8 X 1-1/4" PWH SMS	STEEL
70	ADA THRESHOLD	ALUM
71	OUTSWING THRESHOLD	ALUM/COMP
72	HIGH DAM OUTSWING THRESHOLD	ALUM/COMP
74	8-32 x 3/8" PFH MS	STEEL



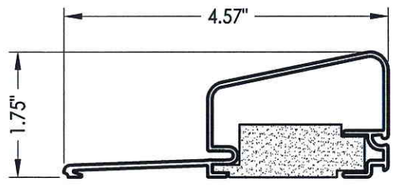
29 **HINGE REINFORCEMENT**



70 **ADA THRESHOLD**



71 **OUTSWING THRESHOLD**
AFCO



72 **HIGH DAM THRESHOLD**
AFCO

Documents Prepared By: Lyndon F. Schmidt, P.E.
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TEXAS BOARD OF PROFESSIONAL ENGINEERS
CERTIFICATE OF REGISTRATION # F-11852

PRODUCT: DUNBARTON REDIFLEX TWO-PIECE STEEL FRAME

PART OR ASSEMBLY: BILL OF MATERIALS & COMPONENTS

NO.	DATE	BY	REVISIONS

DATE: 7/9/13
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: TX-4338
SHEET 7 OF 7

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