THERMA-TRU®

118 INDUSTRIAL DR., EDGERTON, OH 43517
TEL. (419)298-1740

SMOOTH STAR, FIBER CLASSIC, CLASSIC CRAFT & CLASSIC CRAFT RUSTIC

DOUBLE "IMPACT" DOOR INSWING / OUTSWING

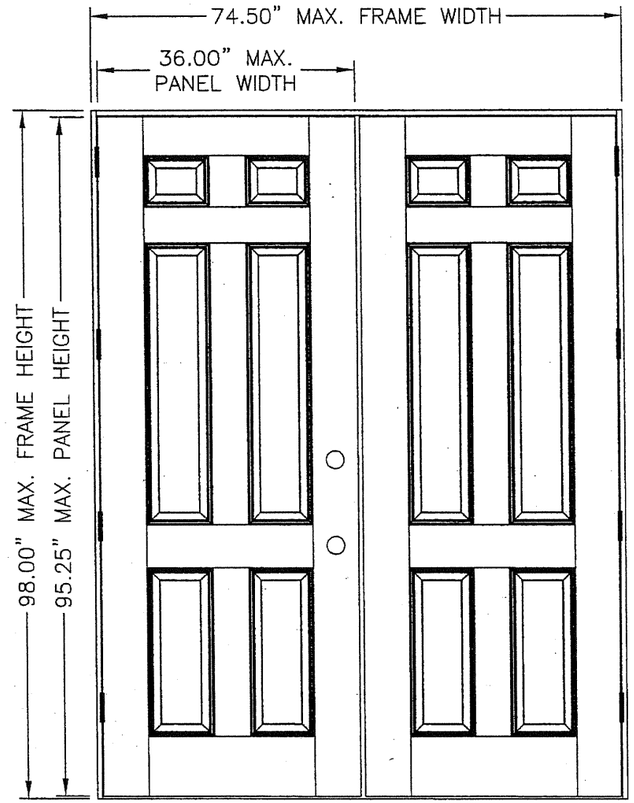
EVALUATED FOR USE IN THE STATE OF TEXAS

THE THERMA-TRU FIBERGLASS DOOR DESCRIBED HEREIN COMPLIES WITH THE INTERNATIONAL RESIDENTIAL CODE (IRC), SECTIONS R301 & R613 AND THE INTERNATIONAL BUILDING CODE (IBC), SECTIONS 1714.5 1405.12, 1609, 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. *When used in wind borne debris regions (SEAWARD and INLAND I ZONES), the Product complies with Sections R301.2.1.2 and 1609.1.4 as an impact resistant product and does not require the use of an approved impact resistant covering. This product does not meet the requirements for enhanced protection of essential facilities as defined in ASTM E1996.*
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.*

SUPPORTING DOCUMENTS & EVIDENCE

1. *Testing per TAS 201-94, TAS 202-94 and TAS 203-94 as performed by Testing Evaluation Laboratories Inc. and reported in test report number TEL 06-1031-3, dated November 9, 2006 and signed by Wendell W. Haney, P.E.*
2. *Anchor analysis for loading conditions prepared, signed and sealed by Wendell W. Haney, P.E..*
3. *Certificate of Participation issued by the National Accreditation and Management Institute, Inc., certifying that Therma-Tru Corporation. is manufacturing products within a Quality Assurance program.*



"SMOOTH STAR", "CLASSIC CRAFT", "CLASSIC CRAFT RUSTIC" & "FIBER CLASSIC"

DOOR TYPE	SWING	OVERALL FRAME DIMENSION	DESIGN PRESSURE	
			POSITIVE	NEGATIVE
CLASSIC CRAFT	OUTSWING	74.50" X 96.50"	+65.0	-65.0
	INSWING	74.50" X 98.00"	+65.0	-65.0
FIBER CLASSIC	OUTSWING	74.50" X 96.50"	+65.0	-65.0
	INSWING	74.50" X 98.00"	+65.0	-65.0
SMOOTH STAR	OUTSWING	74.50" X 96.50"	+65.0	-65.0
	INSWING	74.50" X 98.00"	+65.0	-65.0
RUSTIC	OUTSWING	74.50" X 96.50"	+65.0	-65.0
	INSWING	74.50" X 98.00"	+65.0	-65.0

TABLE OF CONTENTS

SHEET #	DESCRIPTION
1	TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES
2	DOOR PANEL DETAILS (SMOOTH STAR)
3	DOOR PANEL DETAILS (CLASSIC CRAFT)
4	DOOR PANEL DETAILS (CLASSIC CRAFT RUSTIC)
5	DOOR PANEL DETAILS (FIBER CLASSIC)
6	HORIZONTAL CROSS SECTIONS
7	VERTICAL CROSS SECTIONS
8	FRAME ANCHORING
9	ASTRAGAL DETAILS
10	BILL OF MATERIALS & COMPONENTS

Documents Prepared By:
R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL. 33595
Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate Of Authorization No. 9813
Wendell W. Haney P.E. No. 54158

2-16-07

PRODUCT: DOUBLE OPAQUE FIBERGLASS DOOR "IMPACT" INSWING / OUTSWING

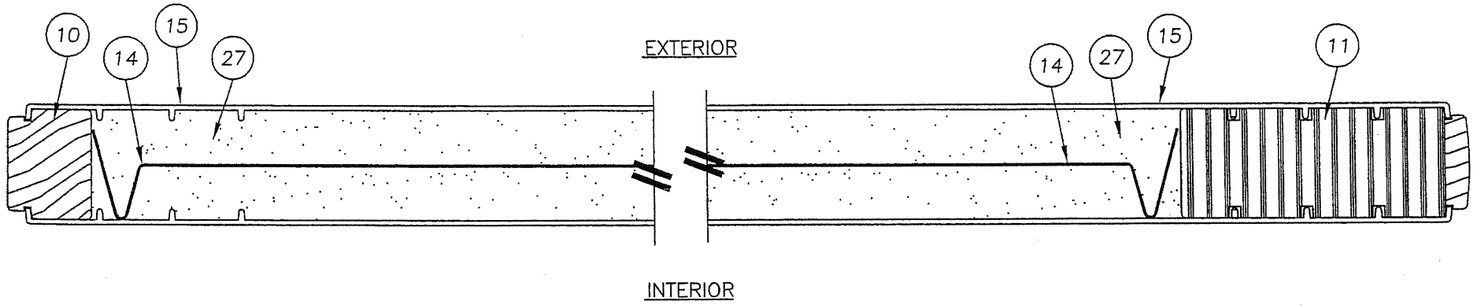
PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

NO.	DATE	BY	REVISIONS

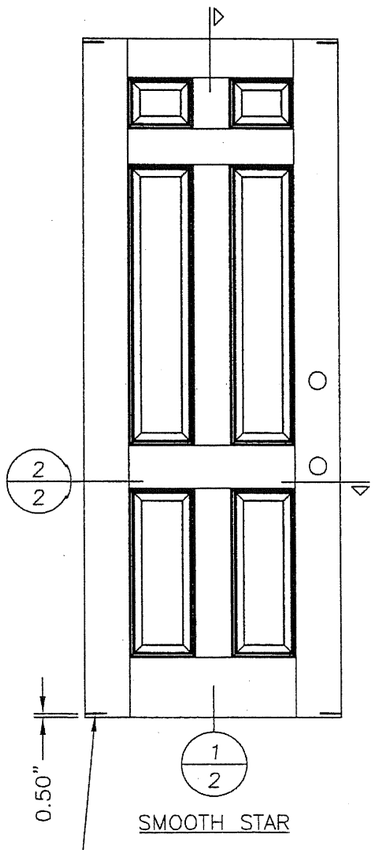
DATE: 12/15/06
SCALE: N.T.S.
DWG. BY: AEM
CHK. BY: WWH
DRAWING NO.: TX-3178
SHEET 1 OF 10

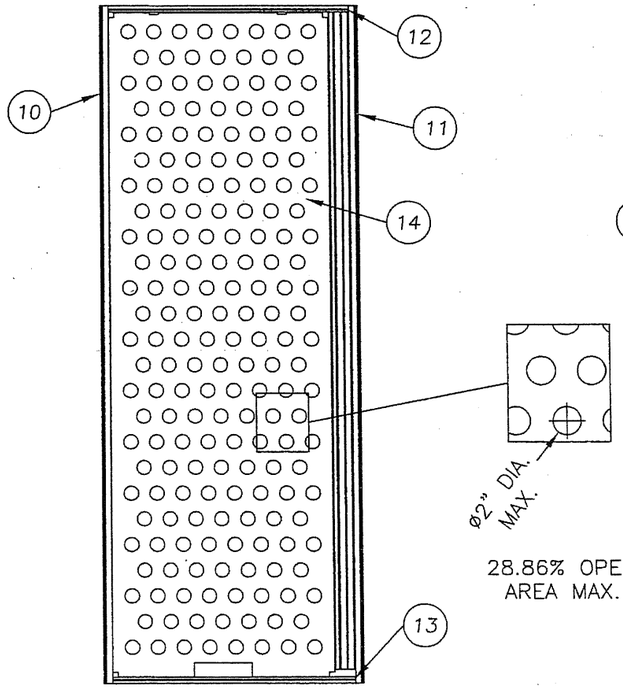
© 2006 R.W. BUILDING CONSULTANTS INC.

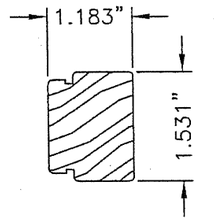
R:\A - Projects\Project Folders\Proj 1101 - 1200\pf1104\80 TX-EVL.dwg, XX1



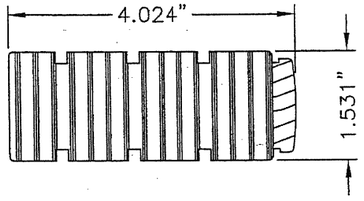
2/2 HORIZONTAL CROSS SECTION
SMOOTH STAR



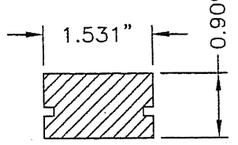




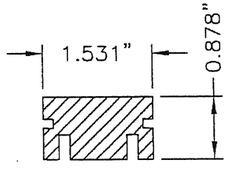
10 HINGE STILE
SMOOTH STAR



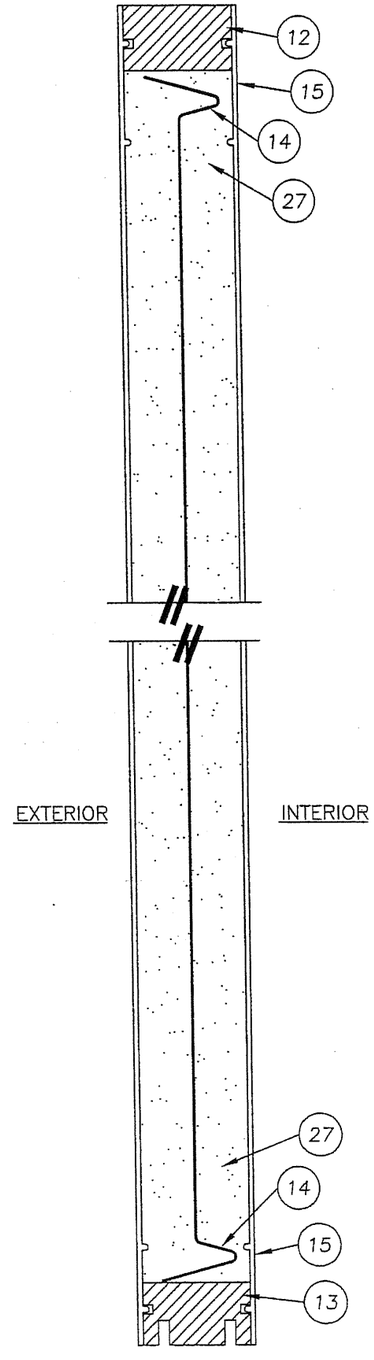
11 LOCK STILE
SMOOTH STAR



12 TOP RAIL
SMOOTH STAR



13 BOTTOM RAIL
SMOOTH STAR



1/2 VERTICAL CROSS SECTION
SMOOTH STAR

Documents Prepared By:
RW BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL. 33595
Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate Of Authorization No. 9813
2-16-07
Wendell W. Haney, P.E. No. 54158

PRODUCT:
DOUBLE OPAQUE
FIBERGLASS DOOR
"IMPACT" INSWING / OUTSWING

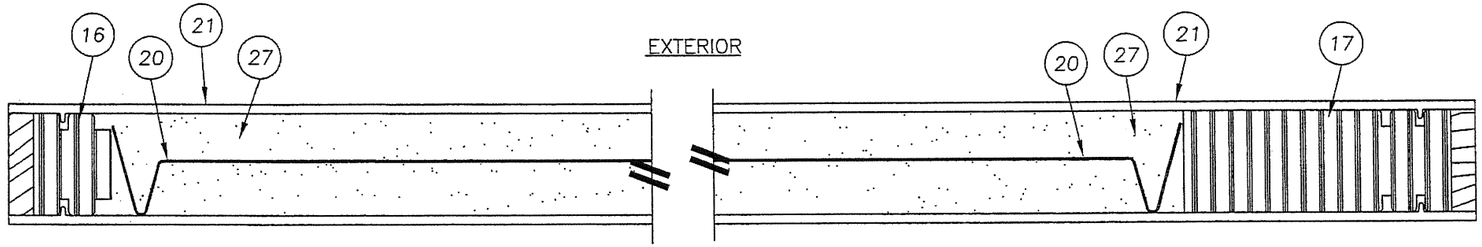
PART OR ASSEMBLY:
DOOR PANEL DETAILS
(SMOOTH STAR)

NO.	DATE	REVISIONS	BY

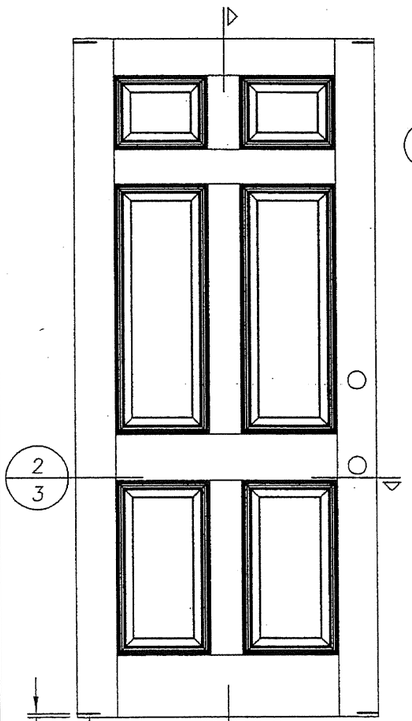
DATE: 12/15/06
SCALE: N.T.S.
DWG. BY: AEM
CHK. BY: WWH
DRAWING NO.: TX-3178
SHEET 2 OF 10

© 2006 R.W. BUILDING CONSULTANTS INC.

R:\A - Projects\Project Folders\Proj 1101 - 1200\pf1104\80 TX-EVL.dwg, XX2

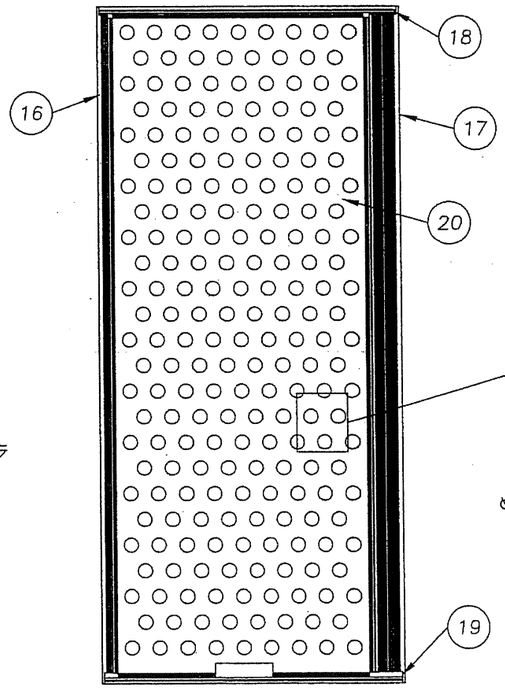


2/3 HORIZONTAL CROSS SECTION
CLASSIC CRAFT

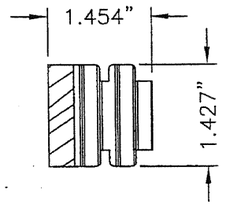


CLASSIC CRAFT

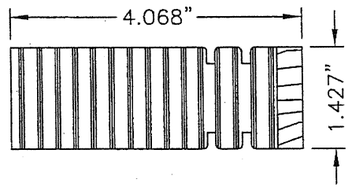
32 TYP. 4 CORNERS OF PANEL



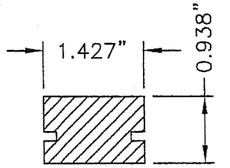
28.86% OPEN AREA MAX.



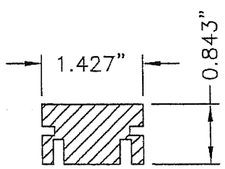
16 HINGE STILE
CLASSIC CRAFT



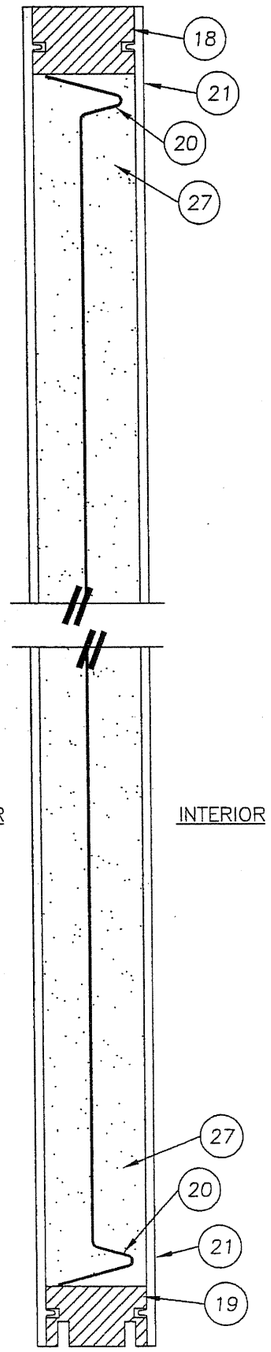
17 LOCK STILE
CLASSIC CRAFT



18 TOP RAIL
CLASSIC CRAFT



19 BOTTOM RAIL
CLASSIC CRAFT



1/3 VERTICAL CROSS SECTION
CLASSIC CRAFT

Documents Prepared By:
R|W BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL. 33595
Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate Of Authorization No. 9813
Wendell W. Hdnes, P.E. No. 54158
2-16-07

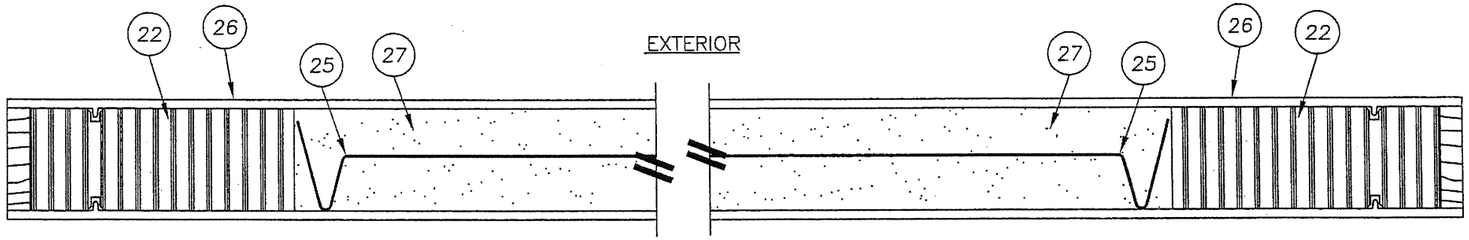
PRODUCT: DOUBLE OPAQUE FIBERGLASS DOOR "IMPACT" INSWING / OUTSWING
PART OR ASSEMBLY: DOOR PANEL DETAILS (CLASSIC CRAFT)

NO.	DATE	BY	REVISIONS

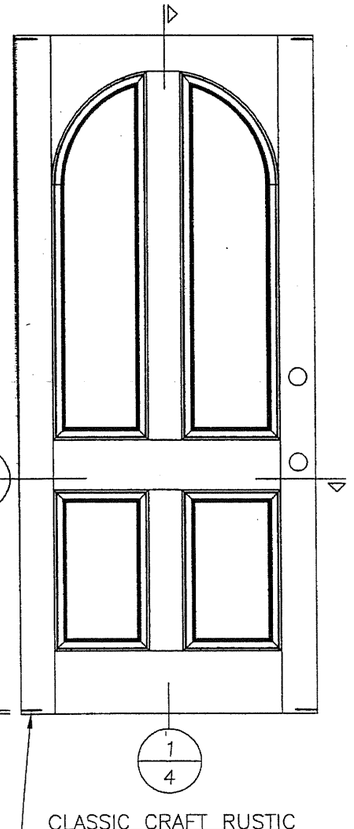
DATE: 12/15/06
SCALE: N.T.S.
DWG. BY: AEM
CHK. BY: WWH
DRAWING NO.: TX-3178
SHEET 3 OF 10

© 2006 R.W. BUILDING CONSULTANTS INC.

R:\A - Projects\Project Folders\Proj 1101 - 1200\pf1104\80 TX-EVL.dwg, XX3

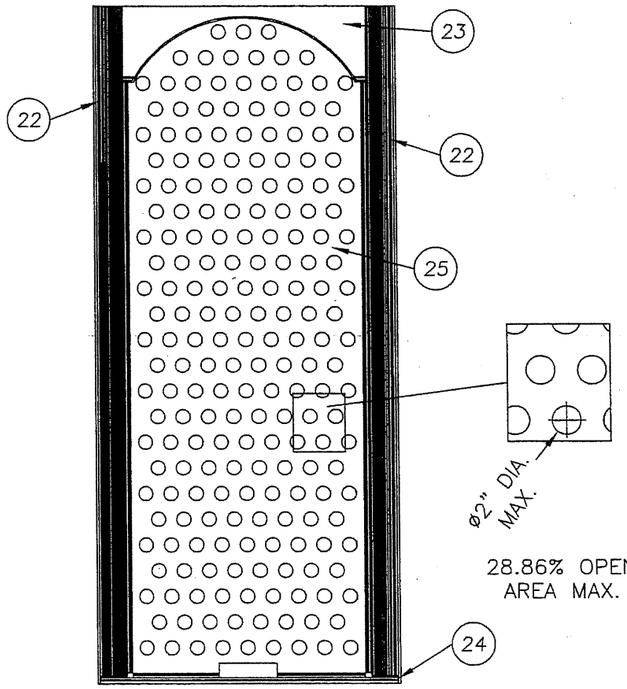


2/4 HORIZONTAL CROSS SECTION
CLASSIC CRAFT RUSTIC

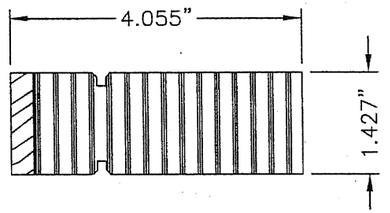


CLASSIC CRAFT RUSTIC

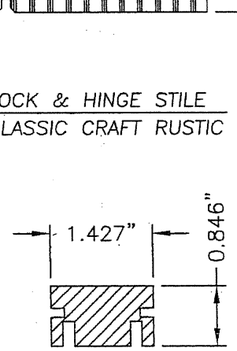
32 TYP. 4 CORNERS OF PANEL



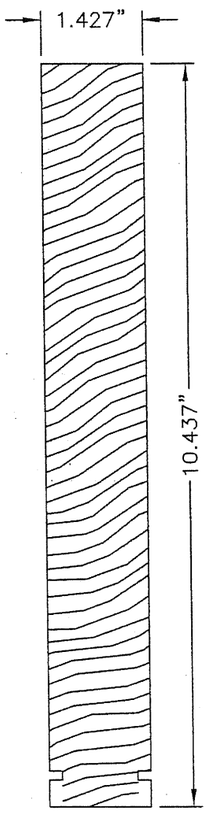
28.86% OPEN AREA MAX.



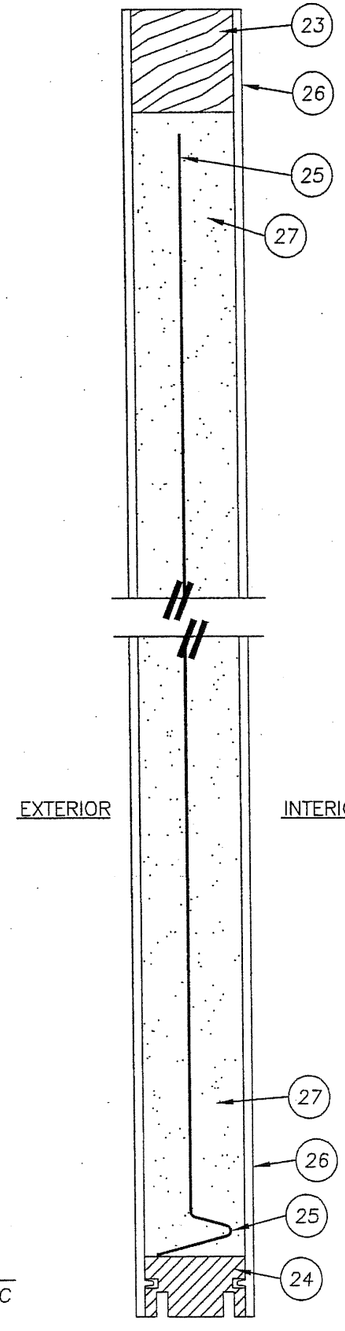
22 LOCK & HINGE STILE
CLASSIC CRAFT RUSTIC



24 BOTTOM RAIL
CLASSIC CRAFT RUSTIC



23 TOP RAIL
CLASSIC CRAFT RUSTIC



1/4 VERTICAL CROSS SECTION
CLASSIC CRAFT RUSTIC

Documents Prepared By:
BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL. 33595
Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate Of Authorization No. 9813
Wendell W. Haney, P.E. No. 54158

PRODUCT: DOUBLE OPAQUE FIBERGLASS DOOR "IMPACT" INSWING / OUTSWING

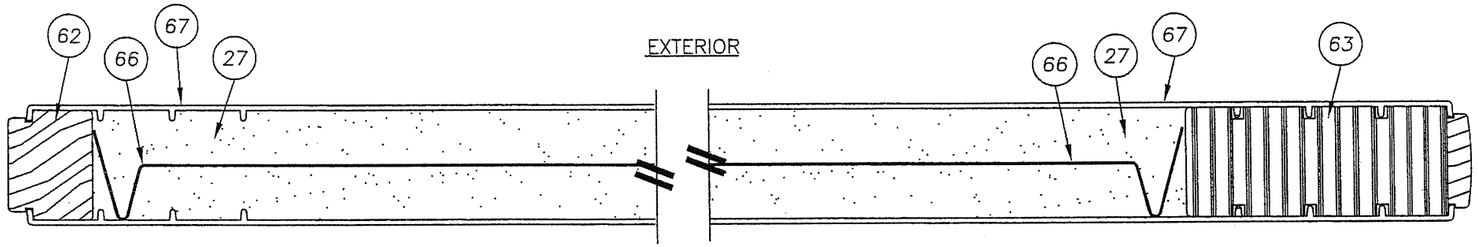
PART OR ASSEMBLY: DOOR PANEL DETAILS (CLASSIC CRAFT RUSTIC)

NO.	DATE	BY	REVISIONS

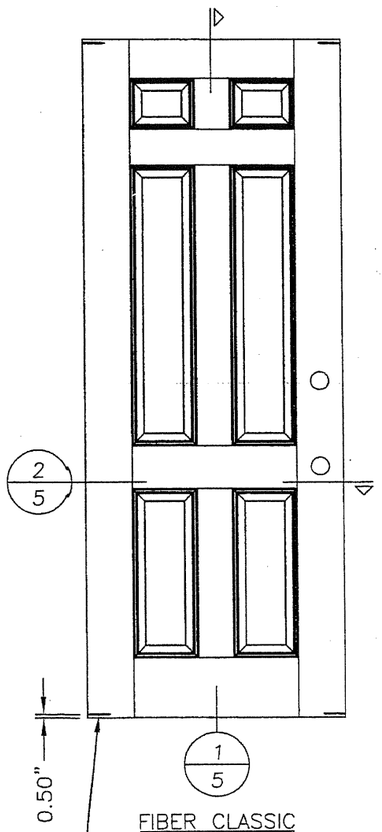
DATE: 12/15/06
SCALE: N.T.S.
DWG. BY: AEM
CHK. BY: WWH
DRAWING NO.: TX-3178
SHEET 4 OF 10

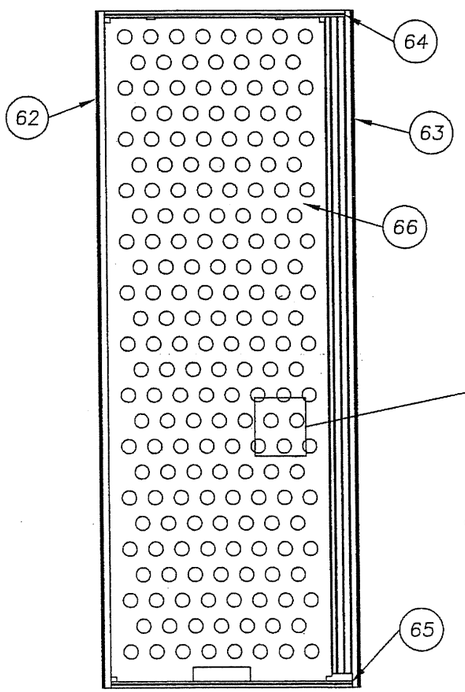
© 2006 R.W. BUILDING CONSULTANTS INC.

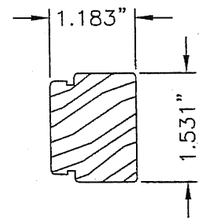
R:\A - Projects\Project Folders\Proj 1101 - 1200\pf1104\80 TX-EVL.dwg, XX4



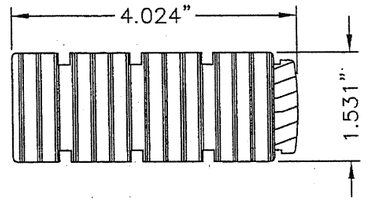
2/5 HORIZONTAL CROSS SECTION
FIBER CLASSIC



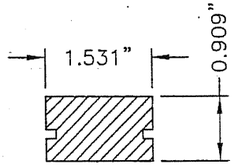




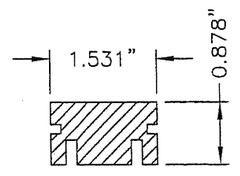
62 HINGE STILE
FIBER CLASSIC



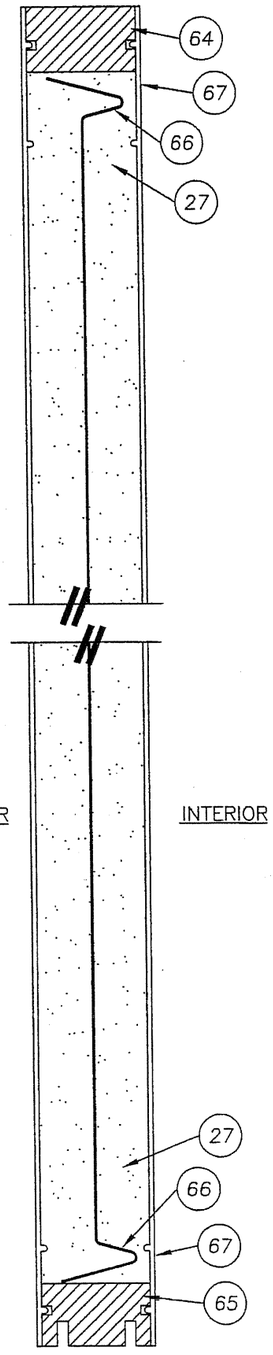
63 LOCK STILE
FIBER CLASSIC



64 TOP RAIL
FIBER CLASSIC



65 BOTTOM RAIL
FIBER CLASSIC



1/5 VERTICAL CROSS SECTION
FIBER CLASSIC

Documents Prepared By:
R W BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL. 33595
Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate Of Authorization No. 9813
Wendell W. Hayes, P.E. No. 54158
2-16-07

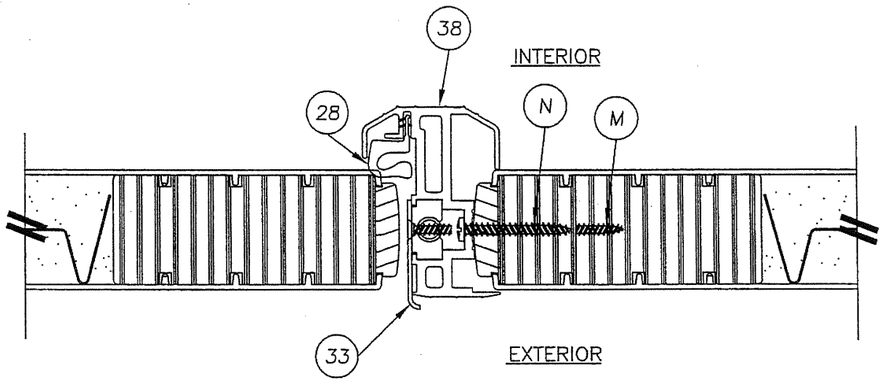
PRODUCT:
DOUBLE OPAQUE
FIBERGLASS DOOR
"IMPACT" INSWING / OUTSWING
PART OR ASSEMBLY:
DOOR PANEL DETAILS
(FIBER CLASSIC)

NO.	DATE	REVISIONS	BY

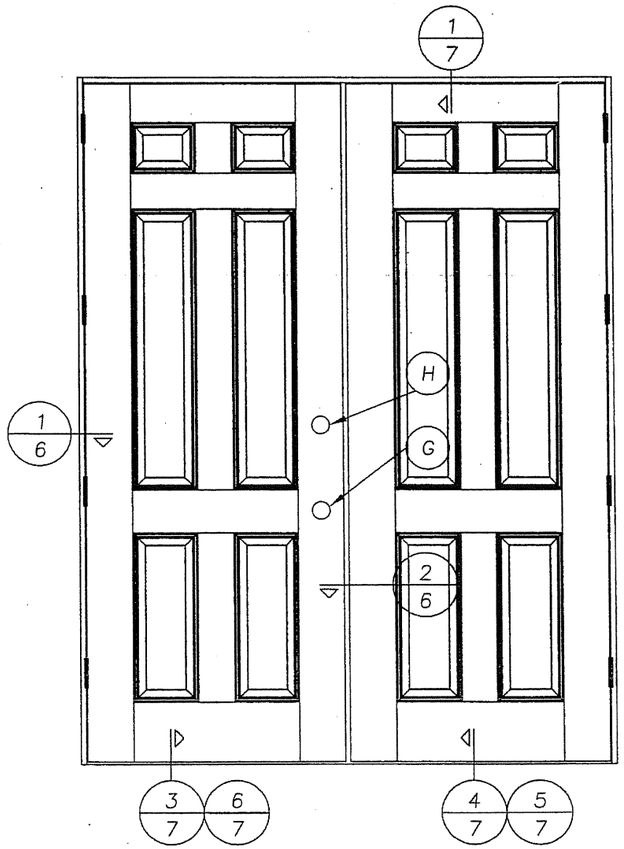
DATE: 12/15/06
SCALE: N.T.S.
DWG. BY: AEM
CHK. BY: WWH
DRAWING NO.:
TX-3178
SHEET 5 OF 10

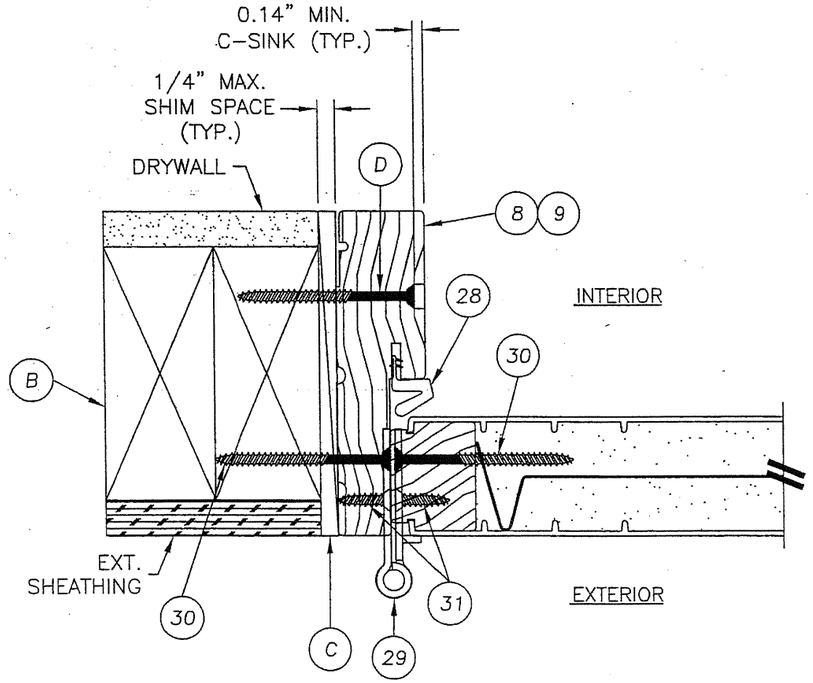
© 2006 R.W. BUILDING CONSULTANTS INC.

R:\A - Projects\Project Folders\Proj 1101 - 1200\pf1104\8'0 TX-EVL.dwg, XX5



2/6 HORIZONTAL CROSS SECTION
@ ASTRAGAL
SMOOTH STAR PANEL SHOWN
SEE DOOR PANEL DETAILS FOR
OPTIONAL PANEL TYPES





1/6 HORIZONTAL CROSS SECTION
@ HINGE
SMOOTH STAR PANEL SHOWN
SEE DOOR PANEL DETAILS FOR
OPTIONAL PANEL TYPES

Documents Prepared By:
R|W BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL. 33595
Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate Of Authorization No. 9813
Wendell W. Harvey, P.E. No. 54158
2-16-07

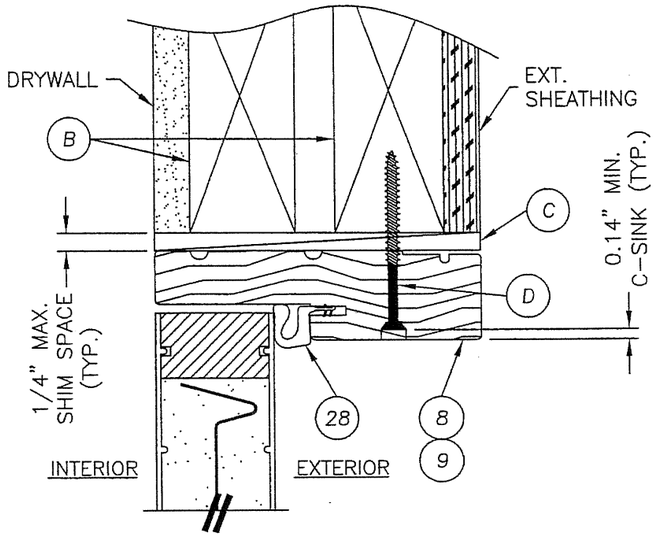
PRODUCT: DOUBLE OPAQUE FIBERGLASS DOOR "IMPACT" INSWING / OUTSWING
PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

NO.	DATE	REVISIONS	BY

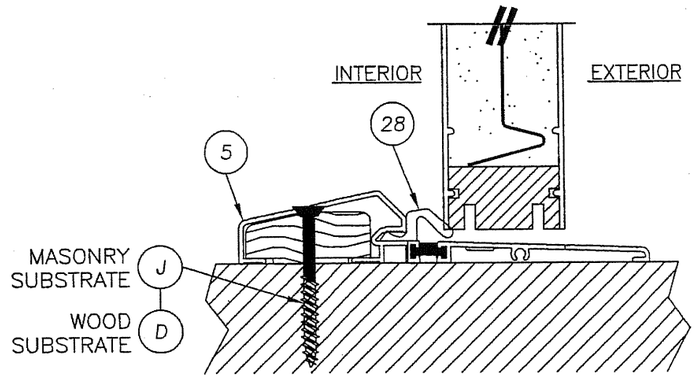
DATE: 12/15/06
SCALE: N.T.S.
DWG. BY: AEM
CHK. BY: WWH
DRAWING NO.: TX-3178
SHEET 6 OF 10

© 2006 R.W. BUILDING CONSULTANTS INC.

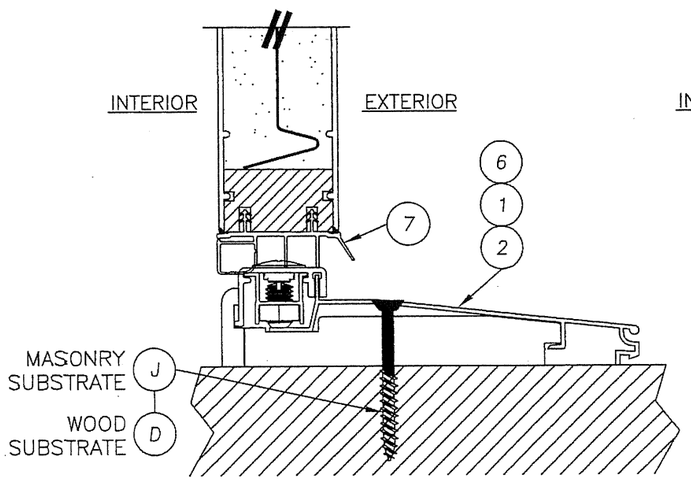
R:\A - Projects\Project Folders\Proj 1101 - 1200\pf1104\80 TX-EVL.dwg, XX6



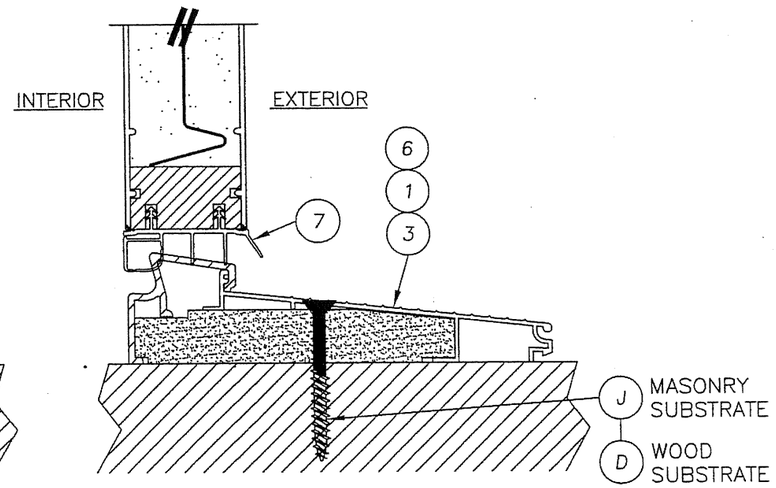
1/7 VERTICAL CROSS SECTION
@ HEAD
SMOOTH STAR PANEL SHOWN
SEE DOOR PANEL DETAILS FOR OPTIONAL PANEL TYPES



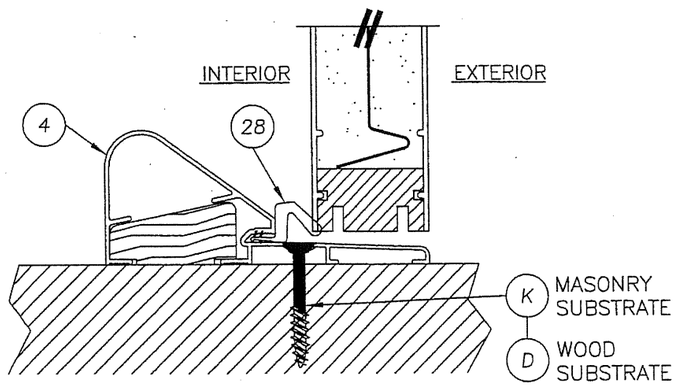
3/7 VERTICAL CROSS SECTION
@ THRESHOLD
SMOOTH STAR PANEL SHOWN
SEE DOOR PANEL DETAILS FOR OPTIONAL PANEL TYPES



4/7 VERTICAL CROSS SECTION
@ THRESHOLD
SMOOTH STAR PANEL SHOWN
SEE DOOR PANEL DETAILS FOR OPTIONAL PANEL TYPES



5/7 VERTICAL CROSS SECTION
@ THRESHOLD
SMOOTH STAR PANEL SHOWN
SEE DOOR PANEL DETAILS FOR OPTIONAL PANEL TYPES



6/7 VERTICAL CROSS SECTION
@ THRESHOLD
SMOOTH STAR PANEL SHOWN
SEE DOOR PANEL DETAILS FOR OPTIONAL PANEL TYPES

Documents Prepared By:
R.W. BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL. 33595
Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate Of Authorization No. 9813
2-16-07
Wendell W. Harley P.E. No. 54158

PRODUCT: DOUBLE OPAQUE FIBERGLASS DOOR "IMPACT" INSWING / OUTSWING

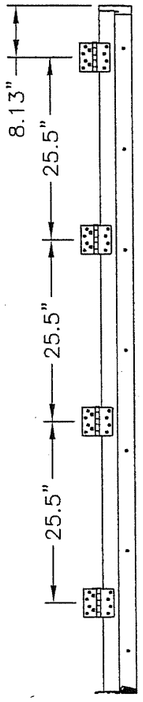
PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO.	DATE	BY	REVISIONS

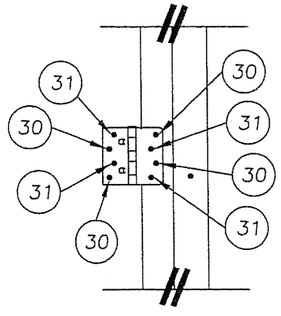
DATE: 12/15/06
SCALE: N.T.S.
DWG. BY: AEM
CHK. BY: WWH
DRAWING NO.: TX-3178
SHEET 7 OF 10

© 2006 R.W. BUILDING CONSULTANTS INC.

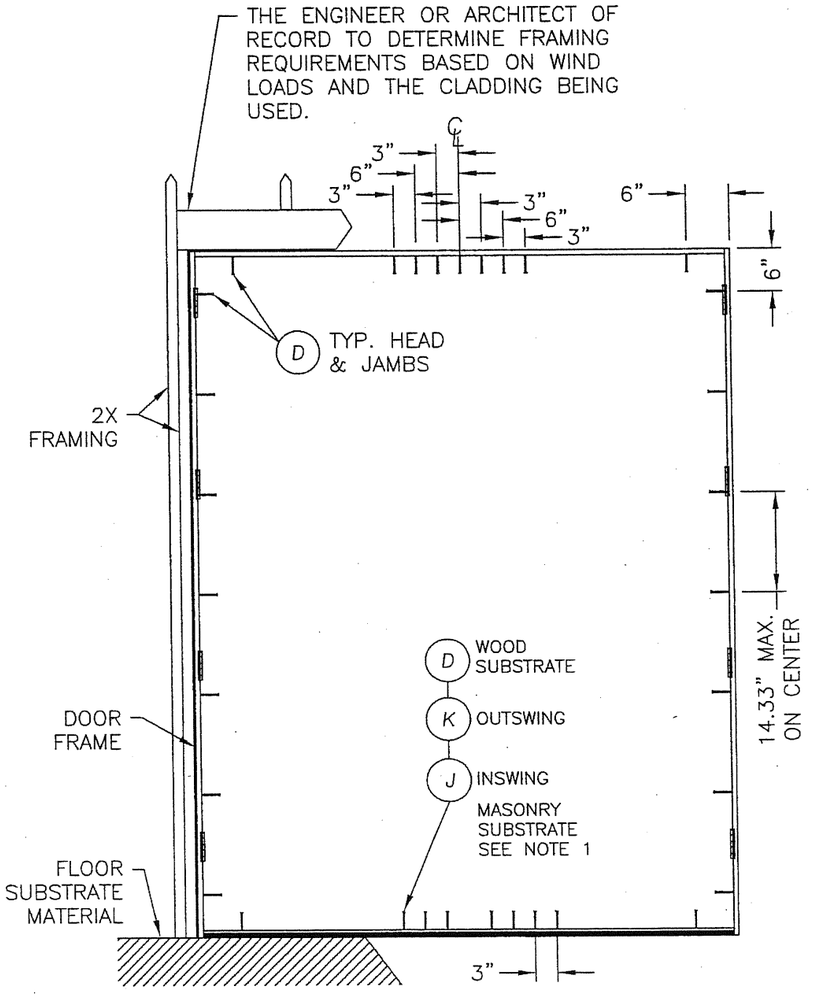
R:\A - Projects\Project Folders\Proj 1101 - 1200\pf1104\8'0 TX-EVL.dwg, XX7



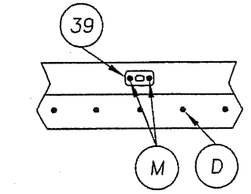
HINGE DETAIL



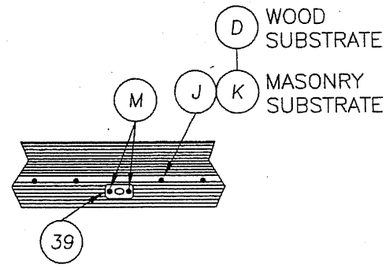
HINGE DETAIL



FRAME ANCHORING



ASTRAGAL STRIKE PLATE @ HEAD



ASTRAGAL STRIKE PLATE @ THRESHOLD

NOTES:

1. *1/4" ITW CONCRETE SCREWS ANCHORING FRAME AND/OR SILL REQUIRE A MINIMUM 2-1/2" CLEARANCE TO MASONRY EDGES AND A MINIMUM 3" CLEARANCE TO ADJACENT CONCRETE SCREWS UNLESS OTHERWISE NOTED BY CONCRETE SCREW MANUFACTURER.*
2. *THE ASTRAGAL BOLT HAS A 3" THROW AT THE TOP AND THE BOTTOM.*

Documents Prepared By:
R W BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL, 33595
Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate Of Authorization No.: 9813
Wendell W. Harvey, P.E. No. 54158

PRODUCT: *DOUBLE OPAQUE FIBERGLASS DOOR "IMPACT" INSWING / OUTSWING*

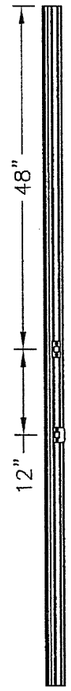
PART OR ASSEMBLY: *FRAME ANCHORING*

NO.	DATE	BY	REVISIONS

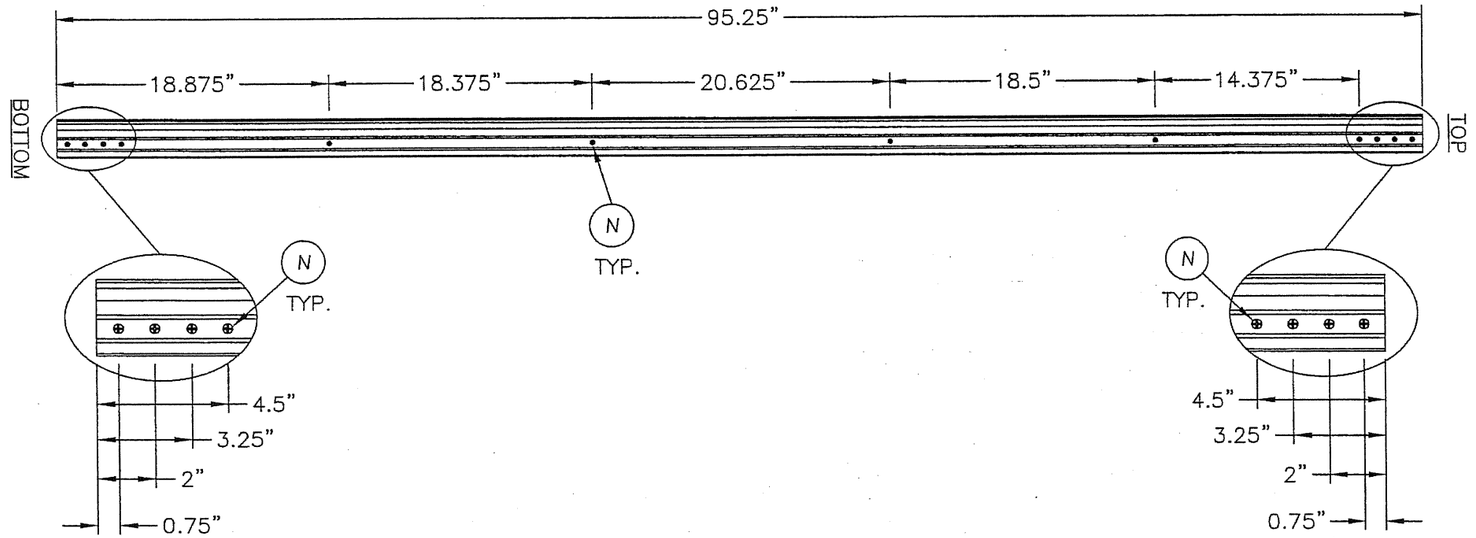
DATE: 12/15/06
SCALE: N.T.S.
DWG. BY: AEM
CHK. BY: WWH
DRAWING NO.: TX-3178
SHEET 8 OF 10

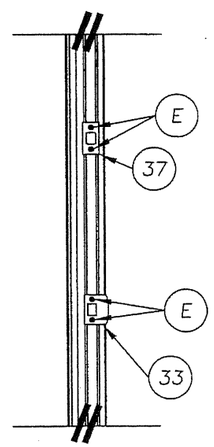
© 2006 R.W. BUILDING CONSULTANTS INC.

R:\A - Projects\Project Folders\Proj 1101 - 1200\pf1104\8'0 TX-EVL.dwg, XX8

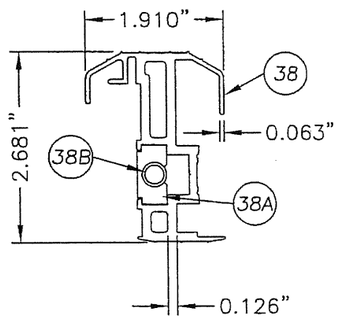


STRIKE PLATE
LOCATION





STRIKE PLATE DETAIL



38 ASTRAGAL DETAIL

Documents Prepared By:
R|W BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL. 33595
Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate Of Authorization No. 9813
Wendell W. Hafley, P.E. No. 54158
2-16-07

PRODUCT:
DOUBLE OPAQUE
FIBERGLASS DOOR
"IMPACT" INSWING / OUTSWING

PART OR ASSEMBLY:
ASTRAGAL DETAILS

NO.	DATE	BY
	REVISIONS	

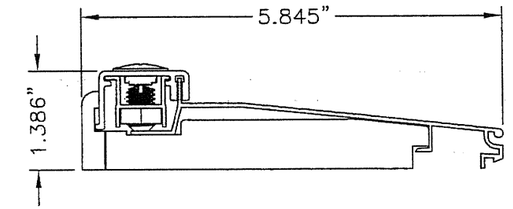
DATE: 12/15/06
SCALE: N.T.S.
DWG. BY: AEM
CHK. BY: WWH
DRAWING NO.:
TX-3178
SHEET 9 OF 10

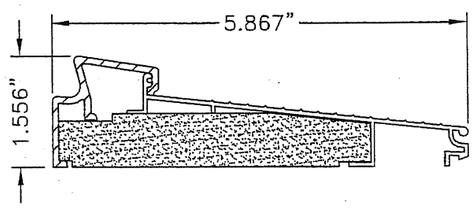
© 2006 R.W. BUILDING CONSULTANTS INC.

R:\A - Projects\Project Folders\Proj 1101 - 1200\pf1104\8'0 TX-EVL.dwg, XX9

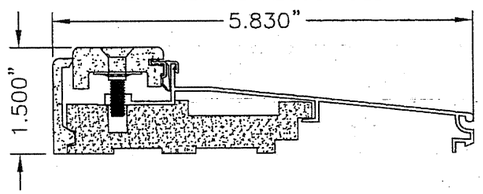
BILL OF MATERIALS		
ITEM	DESCRIPTION	MATERIAL
B	2X FRAMING	WOOD
C	1/4" MAX. SHIM SPACE	WOOD
D	#10 X 2-1/2" PFH WOOD SCREW	STEEL
G	KWIKSET 200 SERIES PASSAGE LOCK	STEEL
H	KWIKSET 600 SERIES DEADBOLT	STEEL
I	1/4" X 3-3/4" ITW TAPCON	STEEL
J	1/4" X 2-1/4" ITW TAPCON	STEEL
K	1/4" X 1-3/4" ITW TAPCON	STEEL
M	#8 X 3" PFH SCREW (STRIKE PLATES @ HEAD & SILL)	STEEL
N	#10 X 1-1/2" PPH SCREW ASTRAGAL TO PANEL	STEEL
1	INSWING ADJUSTABLE THRESHOLD (IS300AJ)	ALUM./WOOD
2	INSWING THRESHOLD (IS300HP5)	–
3	INSWING SELF ADJUST THERMAL BREAK THRESHOLD (ISP30M)	ALUM./COMP.
4	OUTSWING COASTAL THRESHOLD	ALUM./WOOD
5	OUTSWING STANDARD THRESHOLD	ALUM./WOOD
6	INSWING THRESHOLD	–
7	DOOR BOTTOM SWEEP	VINYL
8	JAMB (PINE)	WOOD
9	JAMB (OAK)	WOOD
10	HINGE STILE (SMOOTH STAR)	WOOD
11	LOCK STILE (SMOOTH STAR)	LVL/WOOD
12	TOP RAIL (SMOOTH STAR)	PVC
13	BOTTOM RAIL (SMOOTH STAR)	PVC
14	PANEL REINFORCEMENT 0.023" THK. (SMOOTH STAR)	STEEL
15	DOOR SKIN 0.072" THK. (SMOOTH STAR) Fy = 6,000 PSI MIN.	FIBERGLASS
16	HINGE STILE (CLASSIC CRAFT)	WOOD/LVL
17	LOCK STILE (CLASSIC CRAFT)	WOOD/LVL
18	TOP RAIL (CLASSIC CRAFT)	PVC
19	BOTTOM RAIL (CLASSIC CRAFT)	PVC
20	PANEL REINFORCEMENT 0.023" THK. (CLASSIC CRAFT)	STEEL
21	DOOR SKIN 0.125" THK. (CLASSIC CRAFT) Fy = 6,000 PSI MIN.	FIBERGLASS
22	LOCK & HINGE STILE (CLASSIC CRAFT RUSTIC)	WOOD/LVL
23	TOP RAIL (CLASSIC CRAFT RUSTIC)	WOOD
24	BOTTOM RAIL (CLASSIC CRAFT RUSTIC)	PVC
25	PANEL REINFORCEMENT 0.023" THK. (CLASSIC CRAFT RUSTIC)	STEEL
26	DOOR SKIN 0.125" THK. (CC RUSTIC) Fy = 6,000 PSI MIN.	FIBERGLASS
27	FOAM CORE	POLYURETHANE
28	WEATHERSTRIP	FOAM
29	HINGE	STEEL
30	#10 X 2-1/2" PFH SCREW	STEEL
31	#10 X 3/4" PFH SCREW	STEEL
32	#9 X 3" PFH WOOD SCREW	STEEL
33	LATCH STRIKE PLATE	STEEL
37	DEADBOLT STRIKE PLATE	STEEL

BILL OF MATERIALS		
ITEM	DESCRIPTION	MATERIAL
38	ASTRAGAL	ALUMINUM
38A	ASTRAGAL FLUSH BOLT	STEEL
38B	ASTRAGAL FLUSH BOLT RETAINER	ALUMINUM
39	ASTRAGAL STRIKE PLATE @ HEAD	STEEL
62	HINGE STILE (FIBER CLASSIC)	WOOD
63	LOCK STILE (FIBER CLASSIC)	LVL/WOOD
64	TOP RAIL (FIBER CLASSIC)	PVC
65	BOTTOM RAIL (FIBER CLASSIC)	PVC
66	PANEL REINFORCEMENT 0.023" THK. (FIBER CLASSIC)	STEEL
67	DOOR SKIN 0.072" THK. (FIBER CLASSIC) Fy = 6,000 PSI MIN.	FIBERGLASS

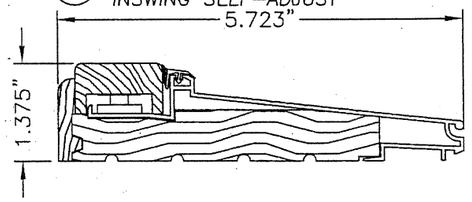




6 THRESHOLD
INSWING
MAX. DP RATING = +/- 50.0 PSF

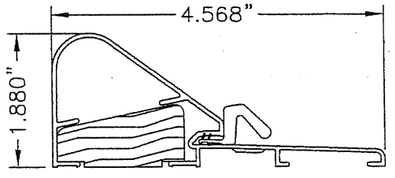


2 THRESHOLD
INSWING ADJUSTABLE

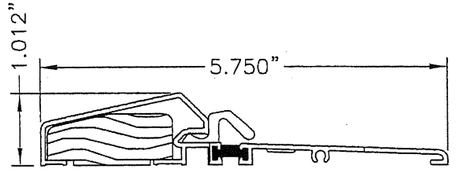


3 THRESHOLD
INSWING SELF-ADJUST

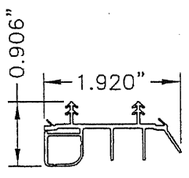
1 THRESHOLD
INSWING ADJUSTABLE



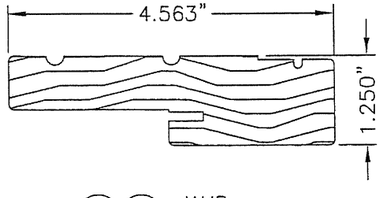
4 THRESHOLD
OUTSWING COASTAL



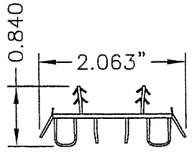
5 THRESHOLD
OUTSWING STANDARD



7 SWEEP



9 8 JAMB



52 SWEEP

Documents Prepared By:
R|W BUILDING CONSULTANTS, INC.
P.O. Box 230 Valrico FL. 33595
Phone No.: 813.659.9197
Florida Board of Professional Engineers
Certificate Of Authorization No. 9813
Wendell W. Hoxey, P.E. No. 54158

PRODUCT:
DOUBLE OPAQUE FIBERGLASS DOOR
"IMPACT" INSWING / OUTSWING

PART OR ASSEMBLY:
BILL OF MATERIALS & COMPONENTS

NO.	DATE	BY	REVISIONS

DATE: 12/15/06
SCALE: N.T.S.
DWG. BY: AEM
CHK. BY: WWH
DRAWING NO.: TX-3178
SHEET 10 OF 10

© 2006 R.W. BUILDING CONSULTANTS INC.

R:\A - Projects\Project Folders\Proj 1101 - 1200\pf1104\80 TX-EVL.dwg, XX10