



**TAS 201, TAS 202, TAS 203 AND ASTM E330
PERFORMANCE TEST REPORT**

Rendered to:

Diamond Door Products

**SERIES/MODEL: Diamond GEM 140 MPH Series
PRODUCT TYPE: Outswing Steel Entry Door**

**Report No.: 56547.01-801-18
Test Date: 03/07/05
Report Date: 05/11/05
Expiration Date: 03/16/15**



TAS 201, TAS 202, TAS 203 AND ASTM E330 PERFORMANCE TEST REPORT

Rendered to:

Diamond Door Products
6525 Cunningham, Building C
Houston, Texas 77041

Report No.: 56547.01-801-18
Test Dates: 03/07/05
Through: 03/16/05
Report Date: 05/11/05
Expiration Date: 03/16/15
Revision 1: 02/11/13
Metro-Dade County Notification No.: ATITX05001

Project Summary: Architectural Testing, Inc. (ATI) was contracted by Diamond Door Products to perform testing per Florida Building Code, Test Protocols for High Velocity Hurricane Zone, Protocols TAS 201-94, TAS 202-94 and TAS 203-94. The samples tested met the performance requirements set forth in each of the protocols for a +44.2/-55.7 psf Design Pressure rating.

Test Procedure: The test specimens were evaluated in accordance with the following Florida Building Code Protocols:

TAS 201-94, *Impact Test Procedures.*

TAS 202-94, *Criteria for Testing Impact and Non Impact Resistant Building Envelope Components Using Uniform Static Air Pressure Loading.*

TAS 203-94, *Criteria for Testing Products Subject to Cyclic Wind Pressure Loading.*

ATM E330, *Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

Drawing Reference: The following drawings have been checked by ATI, and are representative of the samples tested: 140MPH 1, 2, & 3, Deadbolt Strike Jamb, "CW" Series Insulated Doors, Universal Hinge Jamb, Hurricane Mounting Clip, Sill Anchor Hole Locations, Cylinder Lock Box, Hinge Reinforcement, Parker Leversets, Heavy Duty Deadbolt Locks, PD-39980199, Cap Trim, Typical 3070 Door, TH-2.

Test Specimen Description:

Series/Model: Diamond GEM 140 MPH Series

Product Type: Outswing Steel Entry Door

Test Specimen Description: (Continued)

Overall Size: 40-3/4" wide by 86-1/4" high

Leaf Size: 35-7/8" wide by 83-1/4" high by 1-3/4" thick

Finish: White Painted Steel

Steel Thicknesses:

Leaf skin: 0.033"
Hinge: 0.131"
Hinge reinforcement: 0.122"
Leaf top and bottom channel: 0.056"
Door frame: 0.058"
Surface bolt strike plate: 0.117"
Head and jamb flashing: 0.023"
Wall panel: 0.025"
Head to jamb Z-bracket: 0.098"
Head to jamb L-bracket: 0.098"
Sill to jamb bracket: 0.098"
Strike plate reinforcement: 0.120"
2-1/2" x 8" C-channel: 0.058"
C-channel to buck L-bracket: 0.100"
Lock box reinforcement: 0.121"

Weatherstripping:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
1/4" high two finger rubber	1 Row	Aluminum kerf attached to frame jambs and head
1" high one finger rubber	1 Row	Aluminum kerf attached to leaf bottom exterior skin

Frame Construction: Frame head and jamb were steel and measured 8-1/4" wide by 3" deep and had a 1-15/16" x 5/8" rabbet at the interior and exterior. The top corners were coped and butted. Two steel Z-shaped brackets were projection welded to the head. A steel angle bracket was projection welded to each jamb at the top and bottom. The head to jamb joint was secured with two (2) 5/16" x 3/4" bolts and nuts. The bottom bracket at each jamb was secured to the buck with two (2) 3/8" x 4" lag bolts. Strike plate reinforcements were projection welded to the lock jamb. Steel strike plates were secured to the reinforcement with two (2) #10 x 5/8" screws.

Leaf Construction: The door leaf was constructed with a top and bottom skin having folded lock edges. The doors contained a bonded polystyrene core. Flush top and bottom channels were welded to both face sheets. Two lock boxes were projection welded to the lock stile of the door leaf.

Test Specimen Description: (Continued)

Flashing Construction: 3" x 1-1/2" x 1" J-shaped flashing was located at the head. The flashing was secured to the door frame and C-channel with four (4) 1/4" x 1-1/8" self tapping hex head screws located 1" and 4-1/2" from each end. The screw heads were ground flush with the flashing. 3" x 1-1/2" x 1" J-shaped flashing was located at the jambs. The flashing was secured to the door frame and C-channel with six (6) 1/4" x 1-1/8" self tapping hex head screws located 4-1/2", 44-1/2", and 84-1/2" from the top. The screw heads were ground flush with the flashing.

Hardware:

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Grade 2 lever lock	1	38" from the bottom of the leaf
Single cylinder heavy duty dead bolt	1	46" from the bottom of the leaf
Steel strike plate	2	38" and 46" from the bottom of the lock jamb
Three barrel ball bearing hinge	3	8-1/2", 41-1/2", and 74-1/2" from the bottom of the leaf

Drainage: Sloped sill

Reinforcement: Reinforcement was projection welded at the frame jamb strike plates, frame jamb hinge and door leaf hinge.

Installation:

Rough opening: The test unit was installed into a 2-1/2" x 8" metal C-channel rough opening at the head and jambs. The 2-1/2" x 8" C-channel was secured to a buck constructed of a 6x10 lumber at the sill, 4x10 lumber at the head, and 2x10 lumber at the jambs. The 2-1/2" x 8" C-channel was secured to a 1-3/4" by 8" by 5" wide L-shaped bracket at the top and bottom using five (5) 1/4" x 1" self tapping hex head screws. The brackets were secured to the buck at the head with two (2) 5/16" x 3" lag bolts and secured to the sill with two (2) 3/8" x 4" lag bolts. The 2-1/2" x 8" C-channel at the head was secured to the buck with eight (8) #8 x 2" screws at each end.

Door Frame: Each door frame jamb was secured at the interior to the 2-1/2" x 8" C-channel with ten (10) 1/4" x 1-1/8" self tapping hex head screws located 1", 5", 8-1/2", 20", 32", 44", 56", 68", 80", and 90-1/2" from the sill. Each door frame jamb was secured at the exterior to the 2-1/2" x 8" C-channel with ten (10) 1/4" x 1-1/8" self tapping hex head screws with integral neoprene washers located 1", 5", 8-1/2", 20", 32", 44", 56", 68", 80", and 90-1/2" from the sill. The door frame head was secured at the interior to the 2-1/2" x 8" C-channel with four (4) 1/4" x 1-1/8" self tapping hex head screws located 1" and 14" from each jamb. The door frame head was secured at the exterior to the 2-1/2" x 8" C-channel with four (4) 1/4" x 1-1/8" self tapping hex head screws with integral neoprene washers located 1" and 14" from each jamb.

Test Specimen Description: (Continued)

Flashing and threshold: Exterior door frame to 2-1/2" x 8" C-channel exterior fasteners also secured the head flashing, jamb flashing, and exterior wall panels to the C-channel. The exterior steel skin was secured to the wood buck with 1/4" x 1-1/8" self tapping hex head screws with integral neoprene washers located 1" from each corner and on 12" center thereafter. An aluminum threshold was secured to the buck at the sill with three (3) #10 x 1-3/4" screws. An aluminum sill flashing extrusion was secured to the buck at the sill beneath the wall panels.

Test Results: The following results have been recorded:

Protocol TAS 202-94, Static Air Pressure Tests

Test Unit #1

Design Pressure: +50.7/-64.0 psf

Title of Test	Results		
	1	2	3
ASTM E330			
Structural Loads			
50% of Test Pressure (+38.0 psf)			
Maximum Deflection	0.11"	0.11"	0.03"
Permanent Set	0.02"	0.01"	0.00"
ASTM E330			
Design Pressure (+50.7 psf)			
Maximum Deflection	0.12"	0.13"	0.04"
Permanent Set	0.02"	0.01"	0.00"
ASTM E330			
50% of Test Pressure (-48.0 psf)			
Maximum Deflection	0.29"	0.08"	0.28"
Permanent Set	0.07"	0.02"	0.05"
ASTM E330			
Design Pressure (-64.0 psf)			
Maximum Deflection	0.26"	0.38"	0.29"
Permanent Set	0.16"	0.17"	0.14"
ASTM E330			
Test Pressure (+76.0 psf)			
Maximum Deflection	0.27"	0.21"	0.13"
Permanent Set	0.10"	0.03"	0.03"
ASTM E330			
Test Pressure (-96.0 psf)			
Maximum Deflection	1.44"	0.58"	2.71"
Permanent Set	0.45"	0.19"	0.80"
Forced Entry - 300 lb Pull Test		Pass	
300 lb force in opening direction at top, middle and then bottom			

Test Results: (Continued)

Protocol TAS 201-94, *Impact Test Procedures*

Missile Weight: 8.9 lbs
Muzzle Distance from Test Specimen: 17 ft.

Test Unit #1

Impact #1: Missile Velocity: 51.5 fps

Impact Area: Center

Observations: Dented

Results: Pass

Impact #2: Missile Velocity: 50.5 fps

Impact Area: Lock stile bottom corner

Observations: Dented

Results: Pass

Test Unit #2

Impact #1: Missile Velocity: 51.1 fps

Impact Area: Center

Observations: Dented

Results: Pass

Impact #2: Missile Velocity: 51.1 fps

Impact Area: Hinge stile bottom corner

Observations: Dented

Results: Pass

Test Unit #3

Impact #1: Missile Velocity: 50.6 fps

Impact Area: Center near latch

Observations: Dented

Results: Pass

Impact #2: Missile Velocity: 50.0 fps

Impact Area: Lock stile top corner

Observations: Dented

Results: Pass

Test Results: (Continued)

Protocol TAS 203-94, Cyclic Wind Pressure Loading

Test Unit #1

Design Pressure: +44.2/-55.7 psf

POSITIVE PRESSURE

Pressure Range (psf)	Number of Cycles	Average Cycle Time (sec.)	Maximum Deflection at Indicator (inch)		
			#1	#2	#3
0.0 to 27.86	600	1.88	0.12	0.15	0.02
0.0 to 33.43	70	1.88	0.13	0.16	0.02
0.0 to 72.44	1	2.05	0.15	0.18	0.03
			Permanent Set (inch)		
			0.02	0.00	0.00

NEGATIVE PRESSURE

Pressure Range (psf)	Number of Cycles	Average Cycle Time (sec.)	Maximum Deflection at Indicator (inch)		
			#1	#2	#3
0.0 to 31.99	600	1.93	0.32	0.09	0.05
0.0 to 38.39	70	1.74	0.38	0.12	0.09
0.0 to 83.17	1	1.99	0.92	0.42	0.75
			Permanent Set (inch)		
			0.36	0.19	0.36

Result: Pass

Test Results: (Continued)

Protocol TAS 203-94, Cyclic Wind Pressure Loading

Test Unit #2

Design Pressure: +44.2/-55.7 psf

POSITIVE PRESSURE

Pressure Range (psf)	Number of Cycles	Average Cycle Time (sec.)	Maximum Deflection at Indicator (inch)		
			#1	#2	#3
0.0 to 27.86	600	2.03	0.18	0.15	0.02
0.0 to 33.43	70	1.89	0.19	0.16	0.03
0.0 to 72.44	1	1.17	0.22	0.20	0.04
			Permanent Set (inch)		
			0.03	0.03	0.01

NEGATIVE PRESSURE

Pressure Range (psf)	Number of Cycles	Average Cycle Time (sec.)	Maximum Deflection at Indicator (inch)		
			#1	#2	#3
0.0 to 31.99	600	1.77	0.28	0.08	0.12
0.0 to 38.39	70	1.95	0.42	0.15	0.22
0.0 to 83.17	1	1.42	1.02	0.50	0.68
			Permanent Set (inch)		
			0.26	0.10	0.12

Result: Pass

Test Results: (Continued)

Protocol TAS 203-94, Cyclic Wind Pressure Loading

Test Unit #3

Design Pressure: +44.2/-55.7 psf

POSITIVE PRESSURE

Pressure Range (psf)	Number of Cycles	Average Cycle Time (sec.)	Maximum Deflection at Indicator (inch)		
			#1	#2	#3
0.0 to 22.12	600	1.95	0.22	0.17	0.02
0.0 to 26.54	70	2.04	0.22	0.18	0.02
0.0 to 57.51	1	2.00	0.33	0.26	0.08
			Permanent Set (inch)		
			0.05	0.06	0.06

NEGATIVE PRESSURE

Pressure Range (psf)	Number of Cycles	Average Cycle Time (sec.)	Maximum Deflection at Indicator (inch)		
			#1	#2	#3
0.0 to 27.86	600	1.55	0.28	0.08	0.32
0.0 to 33.43	70	1.80	0.30	0.09	0.36
0.0 to 72.44	1	2.00	0.82	0.36	1.02
			Permanent Set (inch)		
			0.01	0.02	0.02

Result: Pass

Note: Refer to ATI Sketch #1 for indicator locations.

Test Equipment:

Cannon: Steel pipe barrel utilizing compressed air to propel the missile

Missile(s): 2 x 4 Southern Pine

Timing Device: Electronic Beam Type

Cycling Mechanism: Computer controlled centrifugal blower with electronic pressure measuring device

Deflection Measuring Device: Linear transducers and 1" dial indicators

Tape and film were used to seal against air leakage during structural testing. In our opinion, the tape and film did not influence the results of the test.

List of Official Observers:

Name	Company
Steve Curry	Diamond Door Company
Joseph A. Reed, P.E.	Architectural Testing, Inc.
Andy Cost	Architectural Testing, Inc.

Representative samples of the test specimen and a copy of this report will be retained by ATI for a period of ten years from the original test date. This report is the exclusive property of the client so named herein and is applicable to the sample tested. Results obtained are tested values and do not constitute an opinion or endorsement by this laboratory. This report may not be reproduced, except in full, without the approval of Architectural Testing, Inc..

For ARCHITECTURAL TESTING, INC.

Andy Cost
Laboratory Manager

John H. Waskow, P.E.
Director – Regional Operations

Ac:hd

Attachments (pages):

Appendix A: Sketch (1)

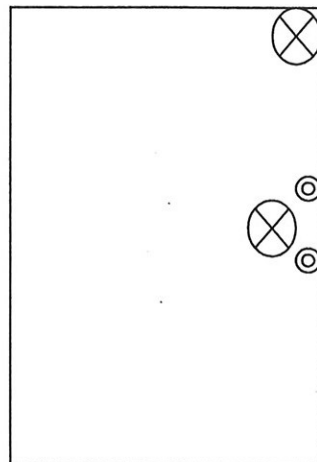
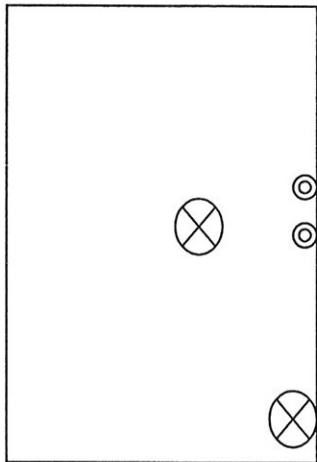
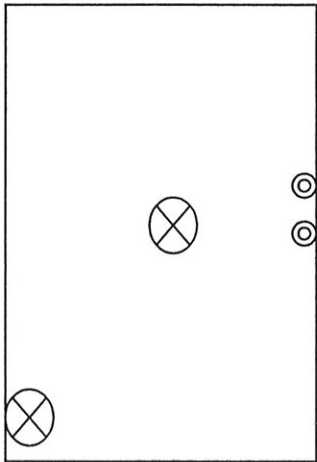
Appendix B: Drawings (16)

Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
0	05/11/05	N/A	Original report issue
1	02/11/13	1, 5, 11	Added ASTM E330 to Test Methods. Changed signature of Joseph Reed to John Waskow

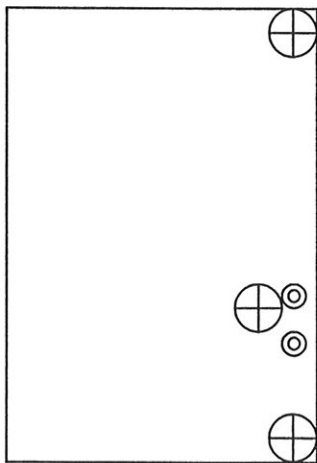
Appendix A

ATI Sketch #1 Impact and Indicator Locations



 **Impact Location**

 **Indicator Location**



Appendix B

Drawings

DIAMOND DOOR PRODUCTS

6825 Cunningham Bldg. C
Houston, TX 77041
Ph. (713)849-5085

"DIAMOND"
STEEL DOOR & FRAME SYSTEM
FOR METAL BUILDINGS
3'-0" x 7'-0" SINGLE DOOR

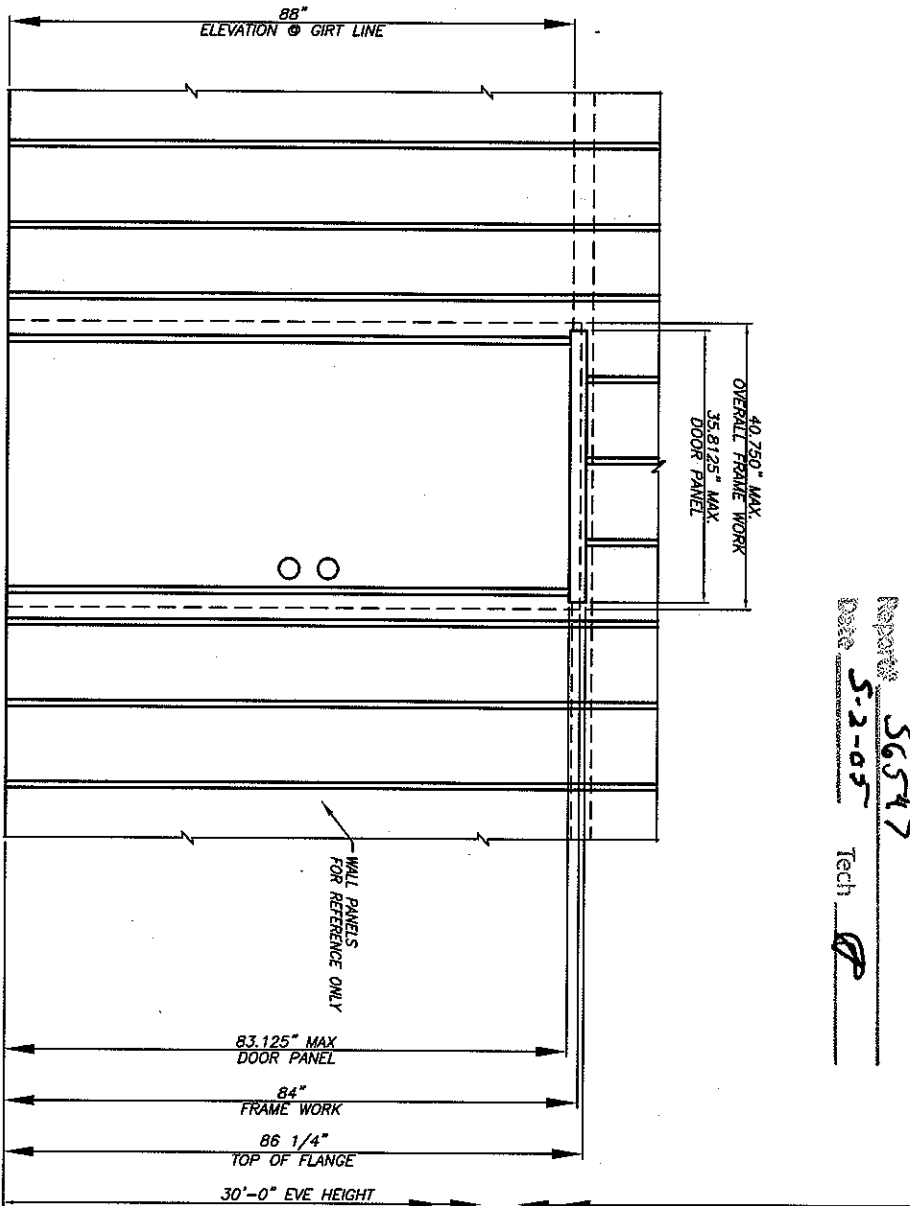


Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# 56547
Date 5-2-05 Tech DP

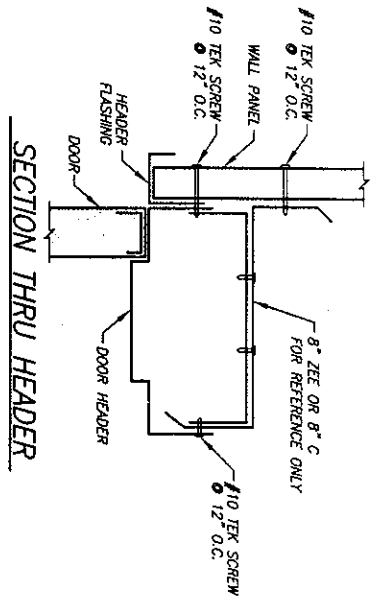
- GENERAL NOTES**
1. THIS PRODUCT IS EVALUATED TO COMPLY WITH THE FLORIDA BUILDING CODE AND TEXAS BOARD OF INSURANCE (FOR USE OUTSIDE OF THE "HVHZ" AREA).
 2. PRODUCT ANCHORS SHALL BE AS LISTED AND SPACED AS SHOWN ON DETAILS. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING.
 3. MAIN WIND FORCE RESISTING SYSTEM (MWFRS) COMPONENT SPACING TO BE DETERMINED BY OTHERS.
 4. ENGINEER OF RECORD SHALL EVALUATE THE SUB-JAMB FOR ADDITIONAL WINDLOADS FROM COMPONENTS AND CLADDING ELEMENTS SUCH AS WALL PANELS.



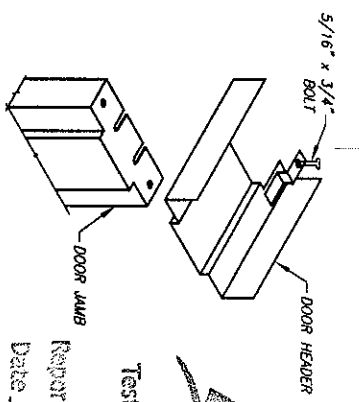
3'-0" x 7'-0" STEEL DOOR & STEEL FRAME SYSTEM
(METAL BUILDING INSTALLATION)

140 mph

DIAMOND DOOR PRODUCTS, LTD.

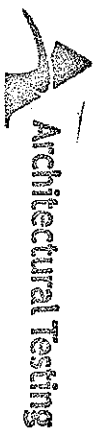


SECTION THRU HEADER



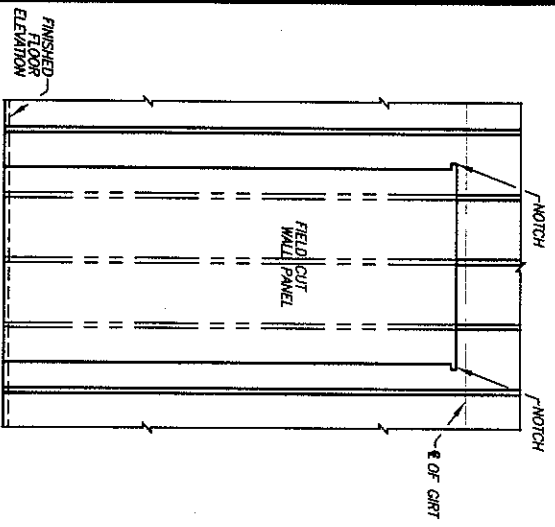
DOOR FRAME ASSEMBLY

Test sample complies with these details.
 Deviations are noted.

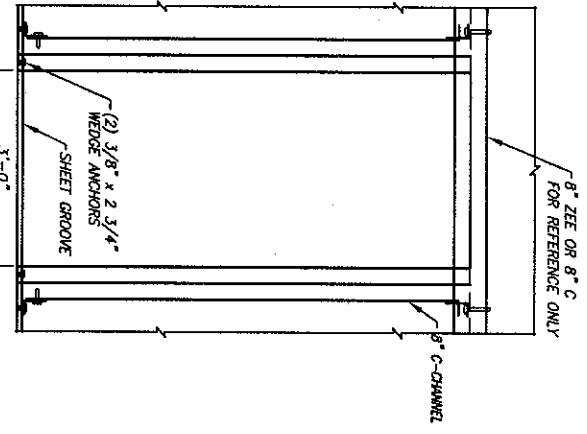


Report # **58547**
 Date **5-2-05**

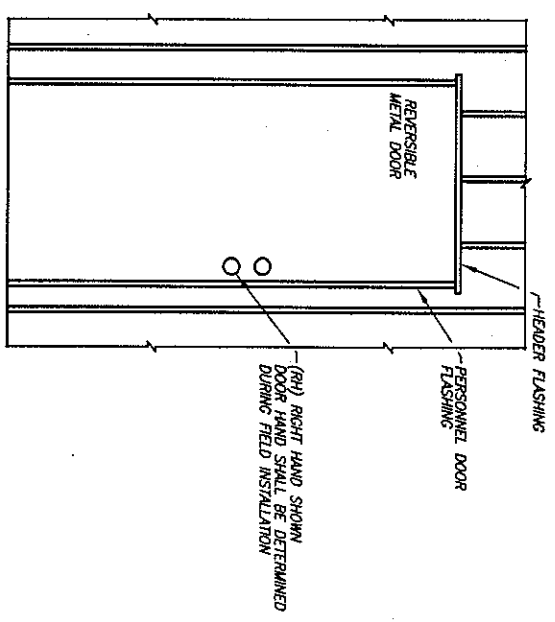
Tech **R**



CUTOUT WALL PANEL ELEVATION



FRAMING ELEVATION



EXTERIOR ELEVATION OF DOOR

PERSONNEL DOOR SPECIFICATION

DOOR PANELS SHALL BE 3'-0" X 7'-0" X 1 3/4" CONSTRUCTED OF 20 GAUGE STEEL SHEET OVER A ONE PIECE POLYSTYRENE CORE. DOOR FRAME SHALL BE FABRICATED FROM 16 GAUGE GALVANNEAL HARDWARE SHALL INCLUDE (3) 4 1/2" X 4 1/2" STANDARD WEIGHT HINGES AND A GRADE 2 TYPE LOCKSET WITH ASA STRIKE W/DEADBOLT. DOOR PANELS AND FRAMES FINISHED SHALL BE MANUFACTURED BY DIAMOND DOOR PRODUCTS, LTD.

GENERAL NOTES

- 1) FIELD LOCATE DOOR, REMOVE AND CUT NECESSARY GIRTS IN BAY,
- 2) ARRANGE JAMBS ACCORDING TO REQUIRED SWING, THEN FASTEN HEADER TO JAMB.
- 3) AFTER ASSEMBLING FRAME, PLACE IN POSITION, SQUARE AND PLUMB, HANG DOOR PANEL.
- 4) FASTEN DOOR FRAME TO GIRTS WITH SCREWS OR TACK WELDING.
- 5) FASTEN BOTTOM OF DOOR JAMBS WITH 3/8" X 2 3/4" WEDGE ANCHORS.
- 6) INSTALL THRESHOLD AND DOOR HARDWARE.
- 7) INSTALL C CHANNEL W/ L CLIPS
- 8) ANCHOR L CLIP TO FLOOR WITH 3/8" X 2 3/4" WEDGE ANCHORS.
- 9) FASTEN UPPER L CLIP TO GIRT USING #10 TEK SCREWS.
- 10) FLASH ACCORDINGLY.

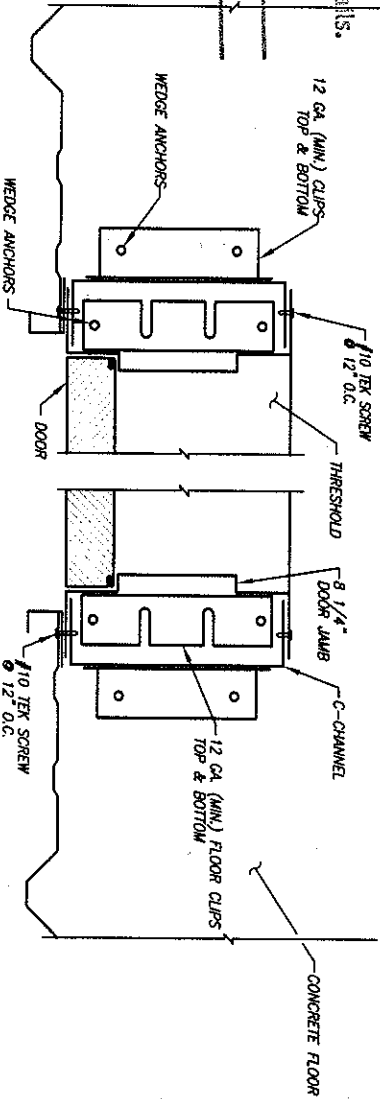
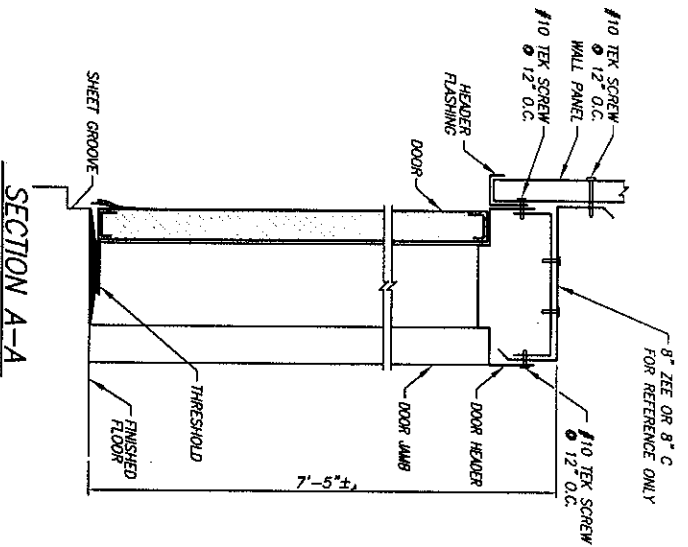
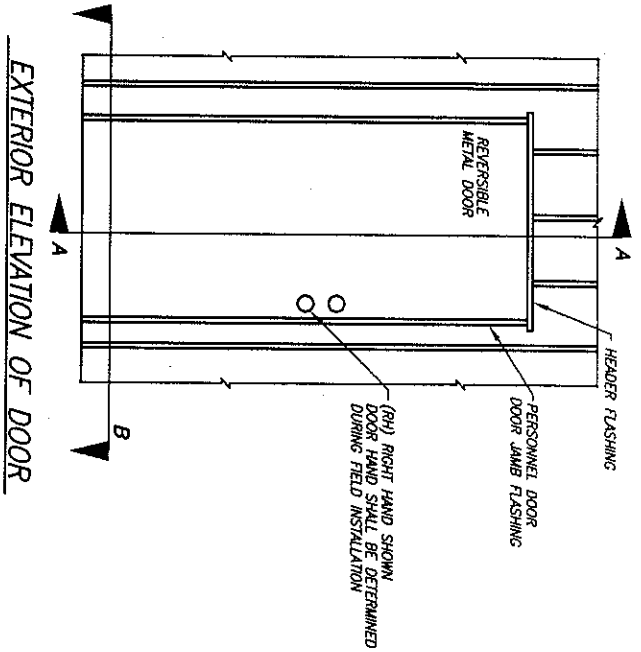
140 mph

DIAMOND DOOR PRODUCTS, LTD.

Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# SB547
Date 5-2-05 Tech Q



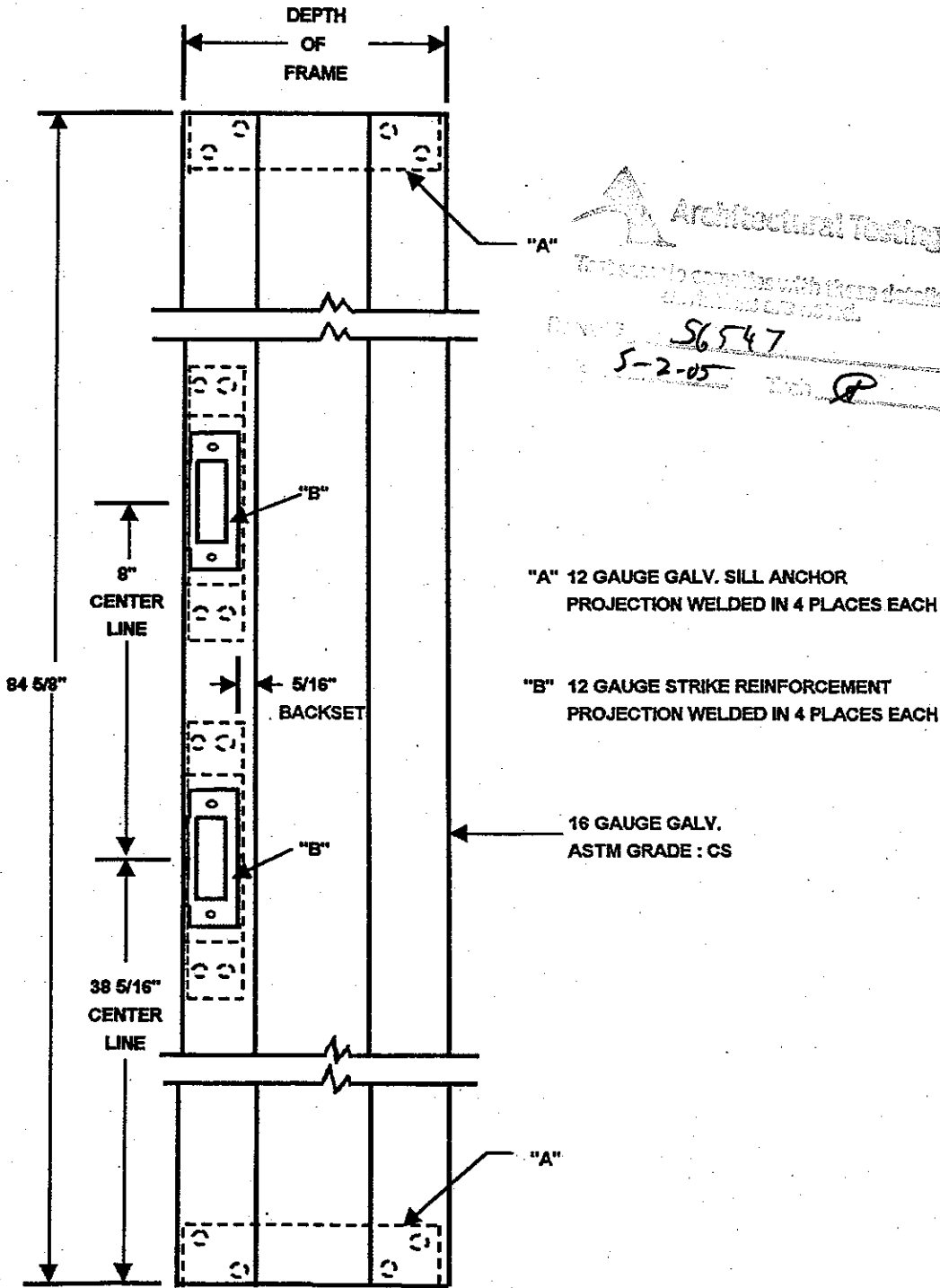
**SECTION B
SECTION THRU JAMB**

140 mph

DIAMOND DOOR PRODUCTS, LTD.

Diamond Door Products, Ltd.

Universal A.S.A. Dead Bolt Strike Jamb



Architectural Testing

Test results comply with these details.

56547

5-2-05

"A" 12 GAUGE GALV. SILL ANCHOR
PROJECTION WELDED IN 4 PLACES EACH

"B" 12 GAUGE STRIKE REINFORCEMENT
PROJECTION WELDED IN 4 PLACES EACH

16 GAUGE GALV.
ASTM GRADE : CS



DIAMOND DOOR PRODUCTS, LTD.

6525 CUNNINGHAM BLDG. C
HOUSTON, TX 77041
Phone: 713-849-5085
Fax: 713-849-5295



"CW" SERIES INSULATED DOORS

SPECIFICATIONS

20 GA. GALVINIZED FACE SHEETS
EMBOSSED OR SMOOTH SURFACES
MILL BONDERIZED **18 GA. SMOOTH SURFACE ONLY**

FLUSH MOUNTED TOP AND BOTTOM
CHANNELS WELDED TO BOTH
FACE SHEETS

POLYSTYRENE CORES BONDED
TO BOTH FACE SHEETS USING A
TWO PART EPOXY

FOLDED FULL FLUSH FACE SHEETS
ALLOWING NO RAW EDGES

LONG LASTING BAKED ON SPRAY
COATED FINISH

AVAILABLE IN WHITE OR BRONZE
EMBOSSED OR GRAY SMOOTH
FINISHES

FULLY CARTONED IN CORUGATED
BOXES AND POLY BAGGED
FOR ADDED PROTECTION

SPECIFICATION COMPLIANCE

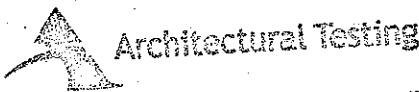
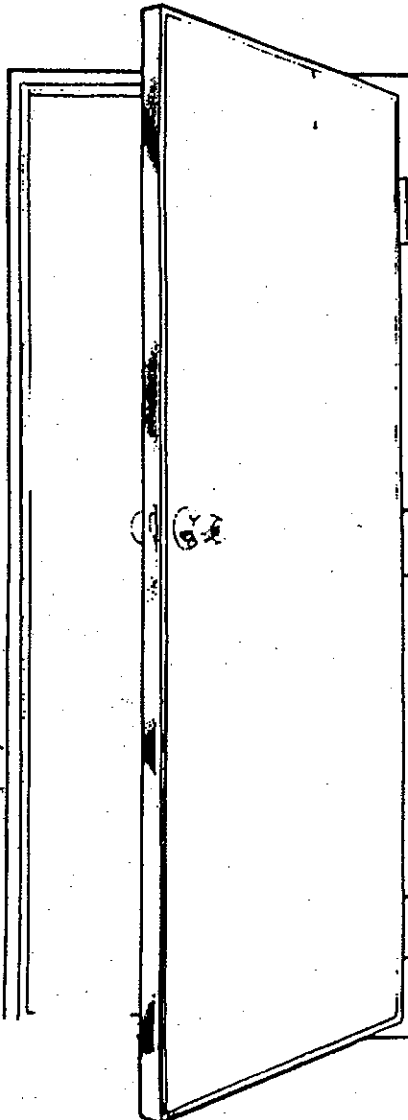
MEETS OR EXCEEDS:
FED SPEC'S HH-1-524C
TYPES I, II, & III
MIL-P-40619A, CLASS II GRADE A
MIL-P-196644C, TYPE II CLASS I
DOD4270,1-M
ASTM-C-578-69, TYPE I & II GRADE II

BUILDING CODES

ICBO UNIFORM BUILDING CODE
SECTION 1717
BOCA-BASIC BUILDING CODE
SECTION 8765
SBCCS- STANDARD BUILDING CODE
SECTION 718
FHA/HUD-USE OF MATERIALS
BULLETIN 71

HIGH POINTS

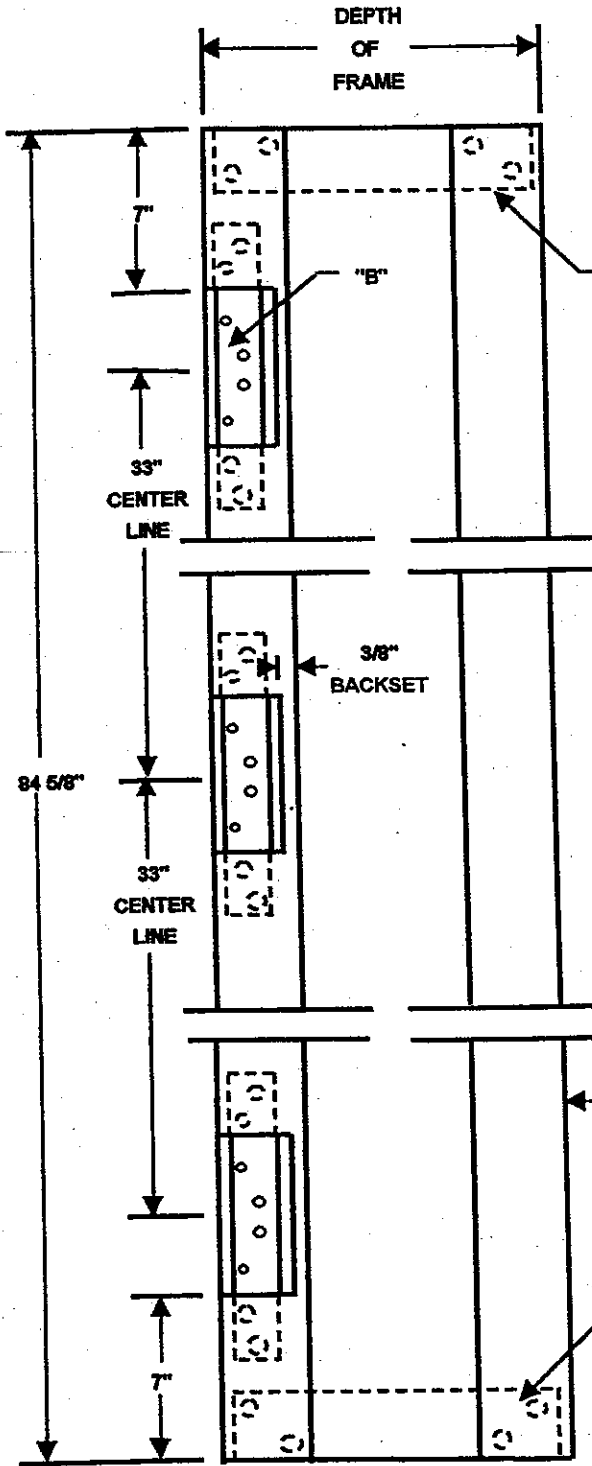
POLYSTYRENE CORE
THERMOPLASTIC POLYMER
SOUND TRANSMISSION 32
"U" FACTOR .16
"R" FACTOR 6.5 OR GREATER



Test sample complies with these details.
Deviations are noted.

Report# 565-47
Date 1-2-05 Tech P

Diamond Door Products, Ltd.
Universal Hinge Jamb



Architectural Testing
 Test sample complies with these details.
 Deviations are noted.
 Report# 56547
 Date 5-2-05 Tech [Signature]

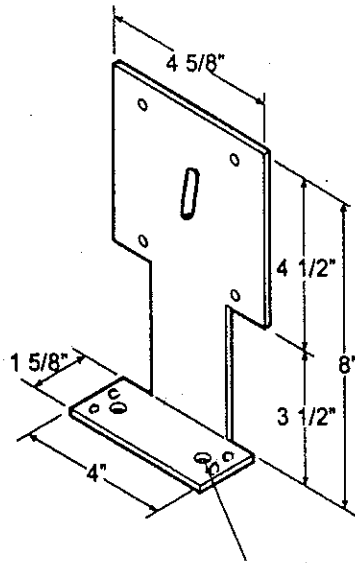
"A" 12 GAUGE GALV. SILL ANCHOR
 PROJECTION WELDED IN 4 PLACES EACH

"B" 10 GAUGE HINGE REINFORCEMENT
 PROJECTION WELDED IN 4 PLACES

16 GAUGE GALV.
 ASTM GRADE : CS

HURRICANE-MOUNTING-CLIP

12GA.-GALVANIZED-STEEL



Architectural Testing

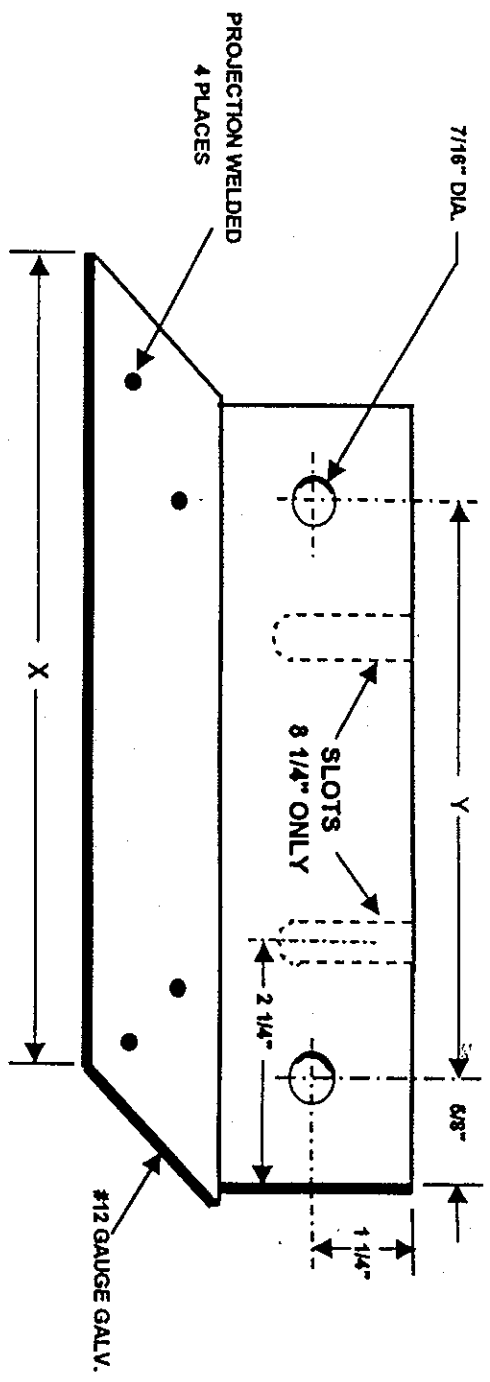
Test sample complies with these details.
Deviations are noted.

Report# S6547

Date 5-2-07

Tech. [Signature]

Diamond Door Products, Ltd.
Sill Anchor Hole Locations



X = LENGHT	Y = CENTER LINE
4.00"	2 3/4"
6.00"	4 3/4"
7.00"	5 3/4"
8.00"	6 3/4"
10.00"	8 3/4"

Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# 565-47
Date 5-2-05 Tech RD

** NOTE ** WHEN LOCATING HOLES FROM OUTSIDE FACE OF FRAME ADD 1/8" TO FIRST HOLE TO ACCOMMODATE FOR MATERIAL THICKNESS AND CLEARANCE OF CLIP.

8/14/03

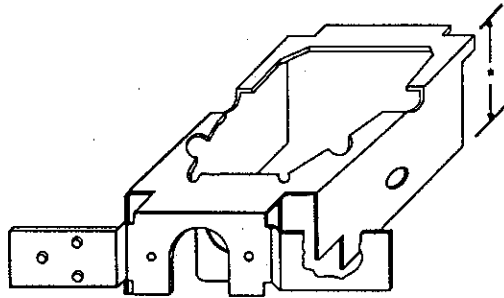
Diamond Sill Anchor

Page DF 09

CYLINDER LOCK BOX

BEVEL, with PROJECTIONS

16GA-C.R.S.



***158 = 1 5/8" LEG HEIGHT**

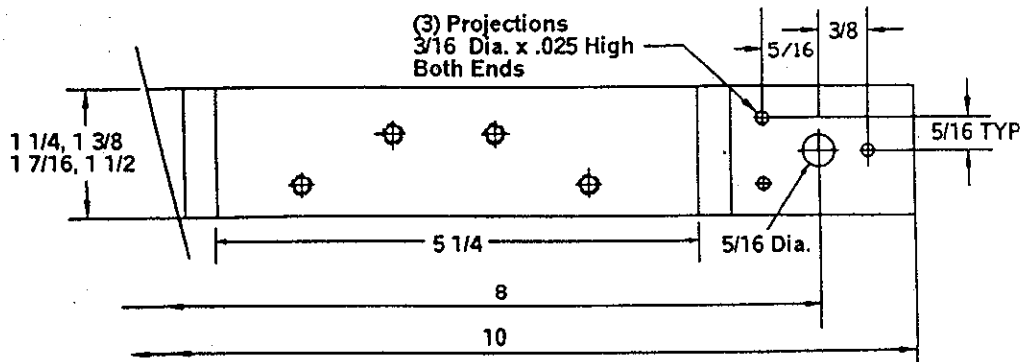
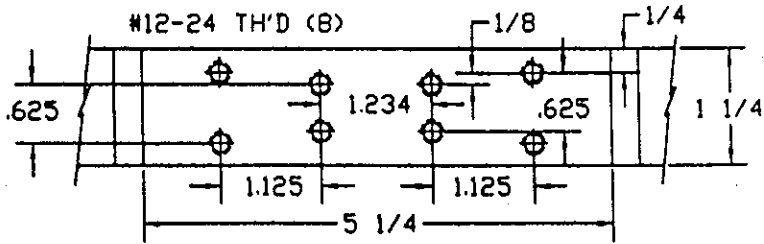


Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# 56547
Date 5-2-05 Tech [Signature]

10GA. HINGE-REINFORCEMENT



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# S6547
Date 5-2-05 Tech Ⓟ

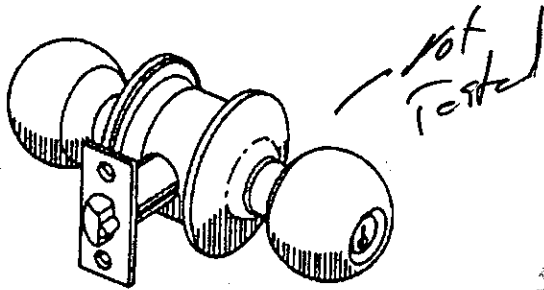


DIAMOND DOOR PRODUCTS, LTD.

GRADE 2 BALL KNOB DIAMOND PT# HLB2

S. Parker UL listed entry locks have three hour fire rated latches, and otherwise have all the features of the heavy duty B9160 series.

Additionally, they meet ANSI-A156-2, Series 4000, Grade 2 specifications. The keyway is SC-1 #1145, or Arrow keyway K. The tumbler is six pin keyed to five pins, and the exit from the inside is panic-resistant. The cylindrical lock housing is cold rolled steel that has been line dichromated for corrosion resistance.



S. Parker UL listed locks have 3 hour fire rated latches & 2 spin-on roses. All with 4 7/8" ANSI Strike.

Architectural Testing

Test done in accordance with three details.

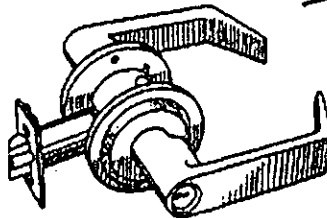
Report # SG597

Date 5-2-05 Tech AR

GRADE 2 LEVER LOCK DIAMOND PT# HLL2 - P

SL7160 Series with Two Step Rose is Ideal for Retrofitting

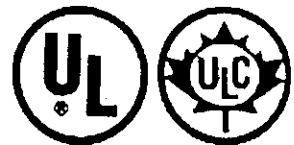
UL listed, ADA approved Grade 2 barrier-free leversets are ready for all ADA and other needs in passage, privacy, storeroom, classroom and dummy functions, in addition to entry models. The customer may provide the lock cylinder and key. Leversets meet ANSI A156.2 Series 4000 Grade standards and more than fulfill ADA requirements. The ANSI Series 4000 standard exceeds 400,000 operating cycles.



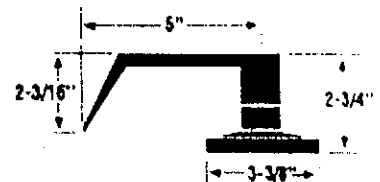
Special keying available (Master & Grand Master)

2 3/8" BS available upon request

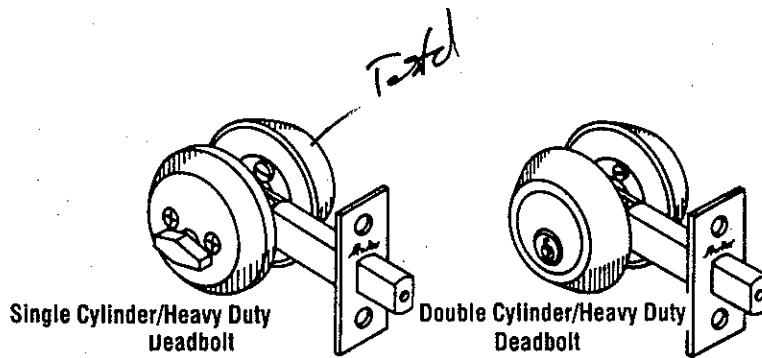
Grade 2 Leverset with Two Step Rose



S. Parker Leversets meet all Grade 2 requirements, and are available in boxed or clamshell package.




HEAVY-DUTY-DEADBOLT-LOCKS



All deadbolts have a solid brass bolt, with a hardened steel core that rotates to make hacksawing almost impossible.

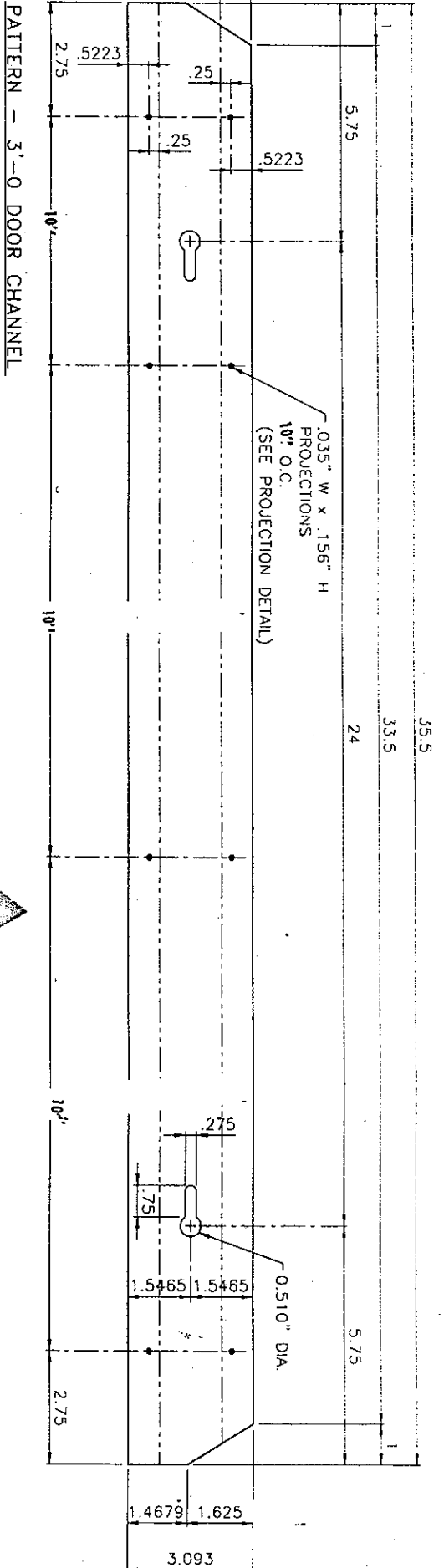
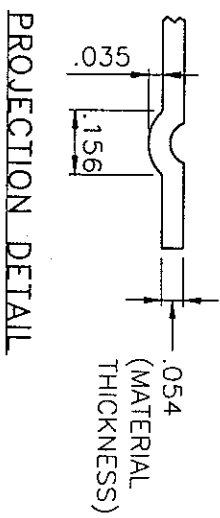
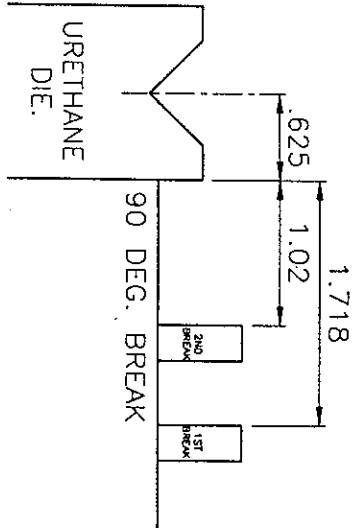
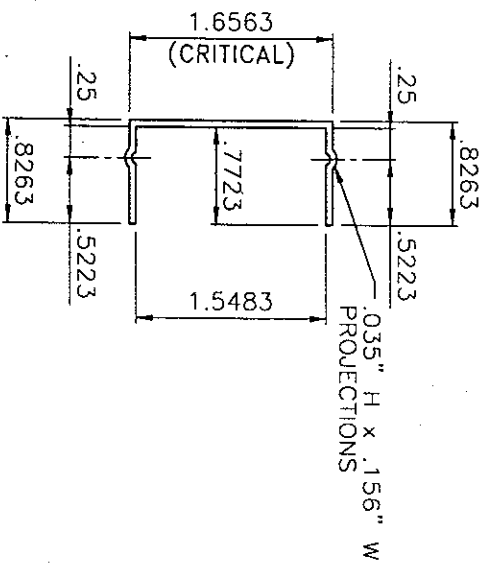
Bolt throws are a full 1".

The single cylinder deadbolt 92160 series has a 2 $\frac{1}{2}$ " backset, and double cylinder uses an 1145 SC-1 keyway. Using a six pin tumbler keyed to five pins, it has a latch face plate that is 1 $\frac{1}{2}$ " x 2 $\frac{1}{2}$ ". It uses Keyblank V, and comes keyed alike if desired.

 Architectural Testing
Test sample complies with these details.
Deviations are noted.
Report# 56547
Date 5-2-07 Tech 9



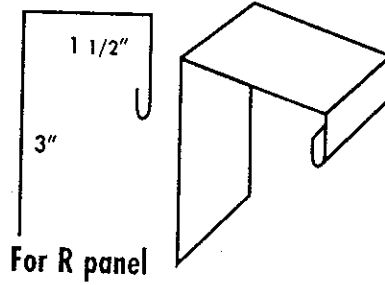
3'-0 DOOR CHANNEL - SECTION



Architectural Testing
 Test sample complies with these details.
 Deviations are noted.
 Report# 56545
 Date 5-2-05
 Tech [Signature]

ITEM NO.	WT.	REVISION DESC			DRAWING DESC			DWG SET - DOOR	REV NO.
MATERIAL 16 GA. (.054) GCN		NEW ISSUE	REV DATE	REV BY	REV APPD	3'-0 DOOR CHANNEL	FILENAME - CHANNEL	0	
BLANK SIZE 3.093 x 35.5	FINISH MILL					DRAWN BY LAS	APPROV BY JMT		
							DRAWING NO. PD-39980199	SHEET 1 OF 1	

CAP TRIM



Sold by Ft.

R Panel

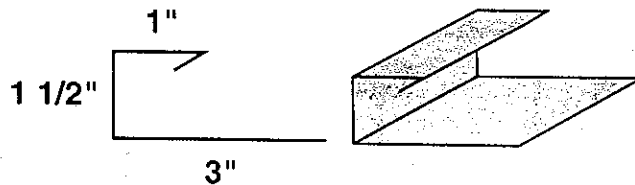


Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# 56547
Date 5-2-05 Tech Ⓟ

DOOR JAMB TRIM FOR USE WITH R & U PANEL



Stocked in 88", 120", 146" lengths

R Panel

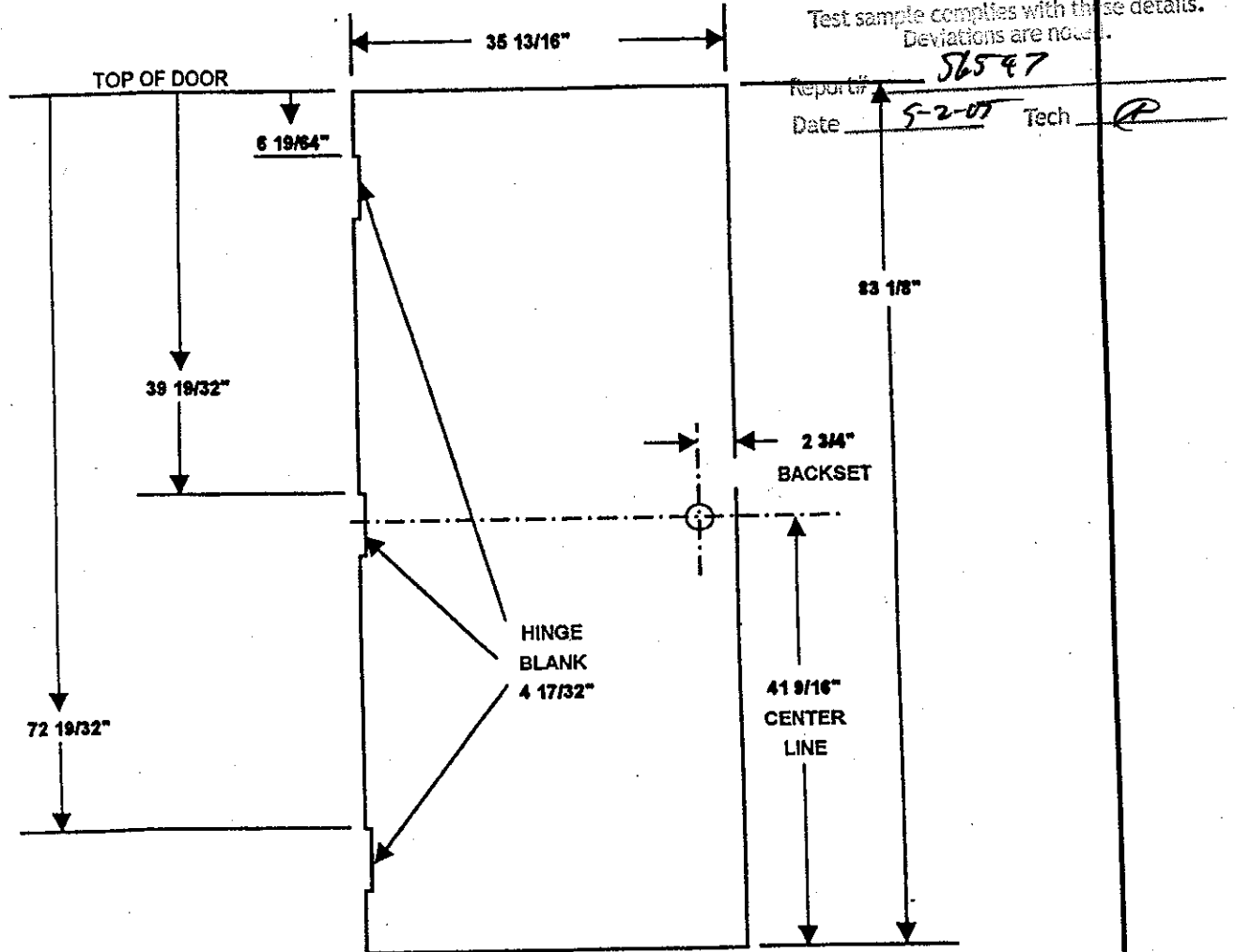
Diamond Door Products, Ltd.

TYPICAL 3070 M DOOR

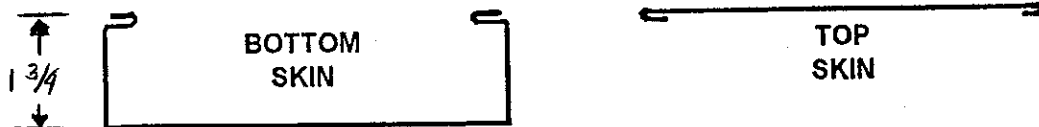


Architectural Testing

Test sample complies with these details.
Deviations are noted.



** NOTE ** BEVELED EDGE DOORS ARE REVERSIBLE BY FLIPPING LEAF END FOR END.



** LOCK EDGE IS BEVELED 1/8" IN 2" TO ASSURE PROPER FIT.

** LOCK EDGE CAN BE SQUARED FOR USE ON 1/2 GLASS DOORS SO HANDING IS NOT NECESSARY.

** ALL VERTICAL EDGES OF DOOR ARE HEMMED TO ELIMATE RAW EDGE METAL

8/15/03

Diamond Reversible Door

FR: 1306 LG @ AF-CO 10: DIMA

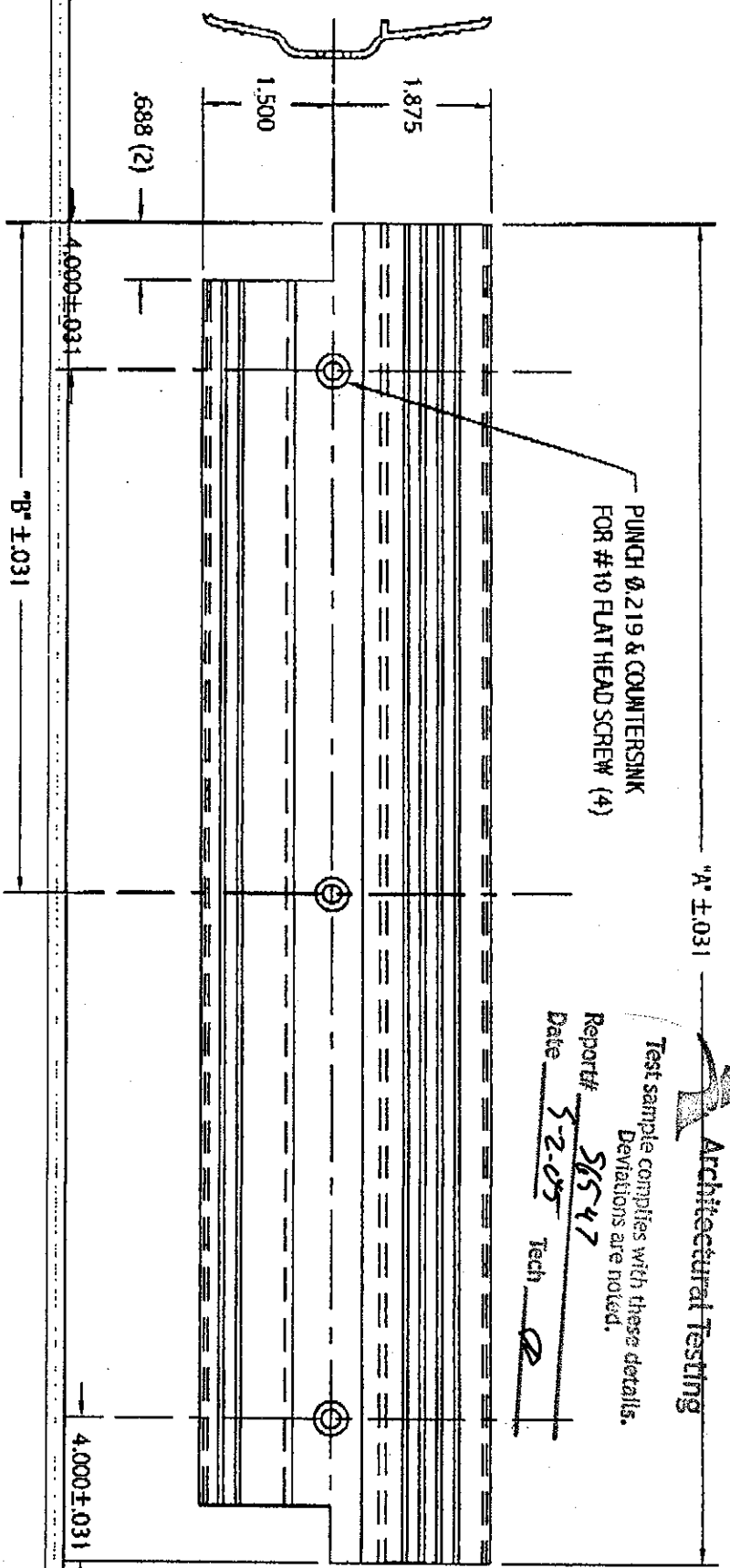
PART NO. TH-2

SF AF- FAB3764

FAB3764REV 081500

PUNCH Ø.219 & COUNTERSINK FOR #10 FLAT HEAD SCREW (4)

Architectural Testing
Test sample complies with these details. Deviations are noted.
Report# 56547
Date 3-2-05 Tech



OPENING	DIM. "A"	DIM. "B"
3'0"	36"	18"
4'0"	48"	24"
6'0"	72"	36"

ALUMINUM ASSOCIATION STANDARD TOLERANCES APPLY UNLESS OTHERWISE NOTED

REV.	DESCRIPTION & DATE	REV.	DESCRIPTION & DATE
080	TYPICAL WALL EXCEPT AS SHOWN	010R	BREAK SHARP CORNERS

CUSTOMER:	TH-2	AFCO ALUMINUM PRODUCTS P.O. BOX 5085 3400 ROY STREET ALEXANDRIA, LA. 71302	
CUST. PART NO:	SILL	TEMPER:	1-5
END USE:		TYPE DIE:	
ALLOY:	6063	NO. OF HOLES:	
DIE SIZE:		BACKER:	
BOLSTER:		FEEDER PLI:	BILLET:
EST. AREA:		EST. PERIMETER:	FACTOR:
EST. WT/LT:		CIRCUMSCRIBED CIR. DIA:	
FINISH:		RATIO:	
DRAWN BY:	DUC LE	DATE:	11/03/00
SCALE:	0.5X		

