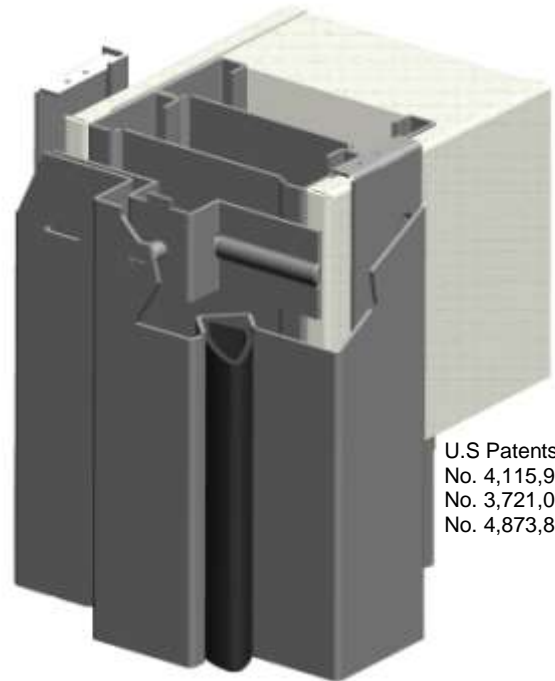


**ENGINEERING DETAILS for STANDARD  
UNI-SEAL SERIES DWF-14, DWF-16 AND DWF-18  
DRYWALL FRAMES FOR 13/4" Doors  
with integral compressible sealing system**

**Specifications**

1. Frames shall be formed with a continuous integral groove in the active rabbet. A closed cell neoprene gasket shall be furnished for field installation in the frame groove after finish painting. Frames shall be manufactured from 14 or 16 gage steel per ASTM A 1008, 568 & 569. OR A60 Galvannealed Per ASTM A924 & A653
2. Frames shall be knocked down for field assembly. Miters shall have a precision hairline joint when assembled.
3. Frames shall be constructed with a double return backbend for maximum bearing directly on the wall.
4. Each jamb shall be provided with a permanently installed GRIP-LOK adjusting anchor. The GRIP-LOK adjusting anchor mechanism shall have no loose retaining rings, washers or clips.
5. All frames shall be provided with snap-in sill anchors pre-drilled for attachment of the base of the jambs to the floor runner.  
  
OPTION: Frames shall be provided with pierced holes at the base of the jambs for screw attachment directly to the floor runner.
6. Heads shall be reinforced for surface applied closers, holders or brackets when required.
7. Dual purpose hinge reinforcements shall be 3/16" thick for 1-3/4" door, comes with galvanneal back-up filler plate for standard weight hinges. Conversion from standard weight to heavy weight hinges is done by removing the filler plate.
8. An angle shall be welded inside the base of each jamb to allow for job site vertical shimming.
9. Heads of pair frames over 4'-0" wide and up to 16 gage shall be prepared with a universal "knock-out" to accept flush bolt on inactive door leaf.  
  
OPTION: Heads of pair frames shall be prepared to receive mortised flush bolt strike as required.
10. Frames shall be prime painted by Pioneer's exclusive "DURA-BOND" process consisting of a wash, phosphate treatment, "flocoat" painting and oven-baking in compliance with ANSI A250.10-2004
11. Frames shall be furnished with UL or WHI Positive and Negative Pressure Label as required. Frames must be installed in accordance with NFPA 80 and per Pioneer's Installation Instruction.
12. Frame construction complies with ANSI A 250.8-2003 ( SDI -100)
13. Hardware preparations and reinforcements comply with ANSI A250.6-2003. Locations are in accordance with ANSI/BHMA A156.115-2006

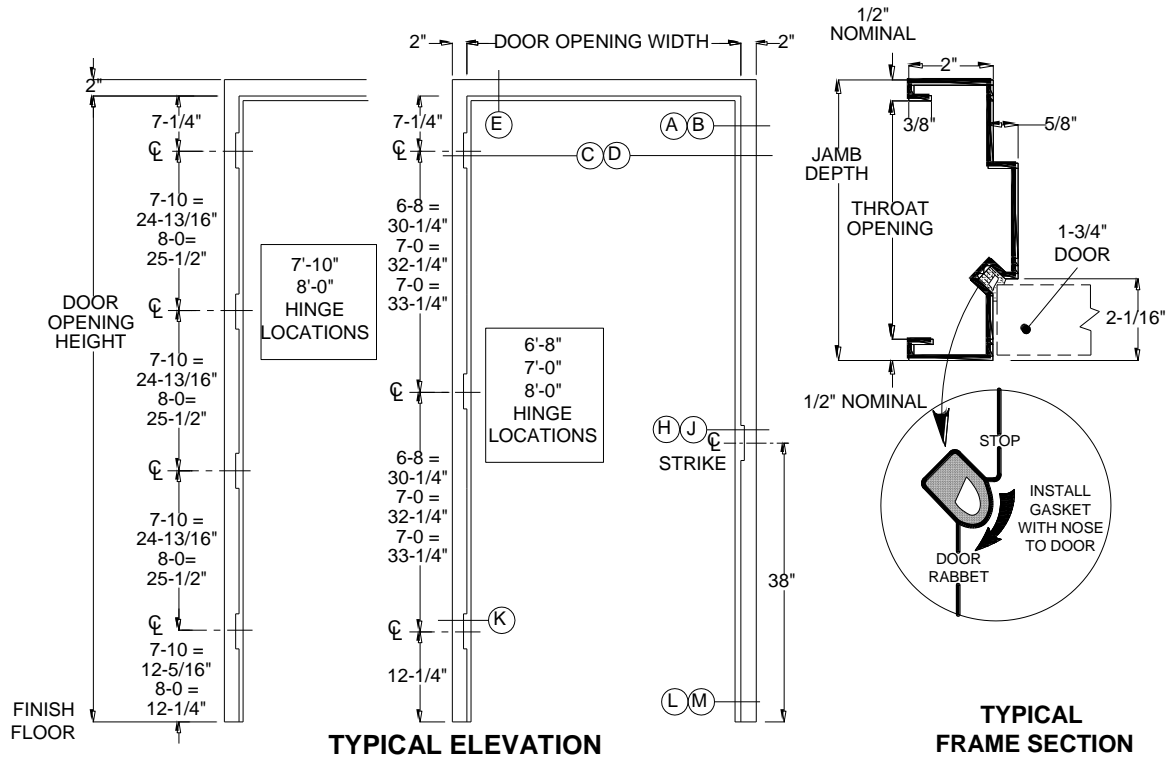


U.S Patents  
No. 4,115,968  
No. 3,721,055  
No. 4,873,804

**TECHNICAL DATA – FRAMES**

**DWF SERIES**

**Standard SERIES DWF-14, DWF-16 and DWF-18 DRYWALL FRAMES FOR 1 3/4" Doors**



STANDARD SIZES*			
DOOR OPENING HEIGHT	DOOR OPENING		JAMB DEPTH
	SINGLE	PAIR	
6'-8" 7'-0" 7'-2" 7'-10" 8'-0"	2'-0"	4'-0"	3-3/8" MIN  4-1/2" MAX.
	2'-4"	4'-8"	
	2'-6"	5'-0"	
	2'-8"	5'-4"	
	2'-10"	5'-8"	
	3'-0"	6'-0"	4-3/4" MIN.  7-3/4" MAX.
	3'-4"	6'-8"	
	3'-6"	7'-0"	
	3'-8"	7'-4"	
	3'-10"	7'-8"	
4'-0"	8'-0"		

**TECHNICAL DATA – FRAMES**

**DWF SERIES**

**HARDWARE PREPARATIONS**

**Standard Hinge Preparation**

1-1/2 pair of 4-1/2" x 4-1/2" standard weight full mortise template hinges for 6'-8" , 7'-0" & 7'-2" height. Two pair for 7'-10" & 8'-0".

**Standard Strike Preparation:**

ASA 4-7/8" furnished as standard. 2-3/4" strike is optional. Extended Lip Strike no less than 1-1/4" lip to center is necessary.

**Fire Rated Label:**

All 14 and 16 Ga. frames available with **Underwriters Laboratories** label unless specifically prohibited by 

**Standard Finish:**

All frames are furnished with a baked "Dura-Bond" prime finish.

**Limitations:**

Slam-action type latching necessary. Not recommended for use with Push & Pull, Unit Lock, Electric Strikes, Roton Hinges, Offset Pivot Hinges or other hinges which may require other than a standard backset or may interfere with proper gasket function.

Consult appropriate hardware templates where stop mounted hardware such as Parallel Arm Closers, Brackets, Holders, Stops, Panic Device Roller Strikes, Vertical Rod Panic Device or other mortise strikes at head or jambs interfere with gasket function. Slight adjustment in mounting may be necessary.

Doors used in Uni-Seal must be square edge.

**MANUFACTURING TOLERANCES - FRAMES**

- Door opening width  
nominal opening ..... + 1/16", -0"
- Door opening height  
nominal opening ..... ± 1/16"
- Jamb depth ..... ± 1/16"
- Throat (between returns)... ± 1/16"

**Hardware cutouts**

- Template dimension ..... +1/64", -0"

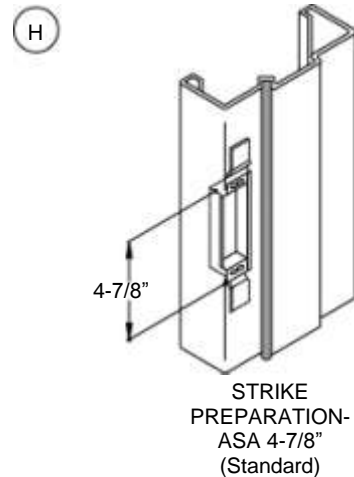
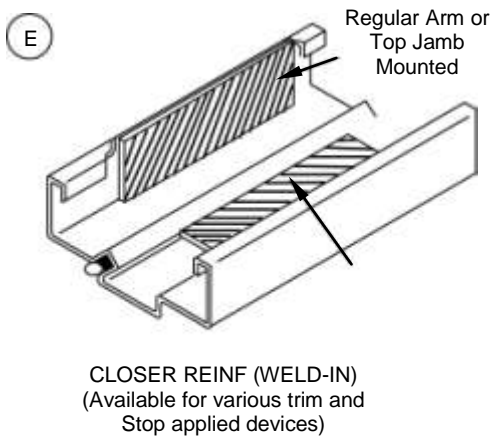
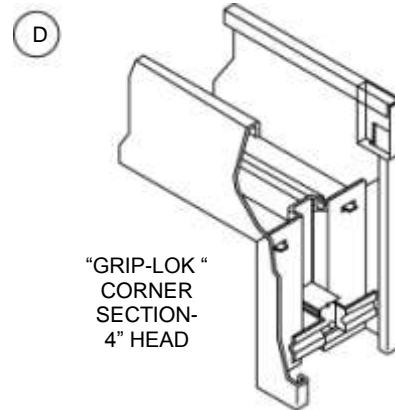
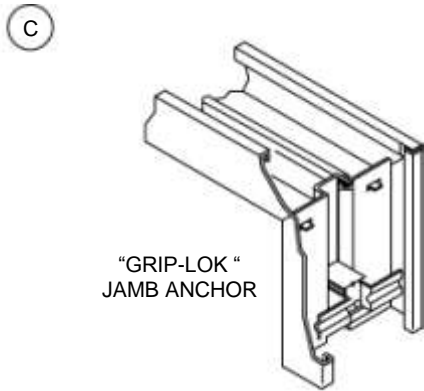
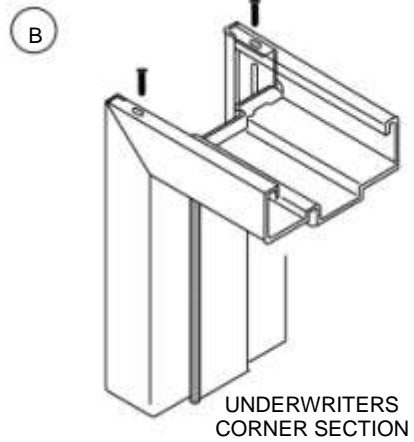
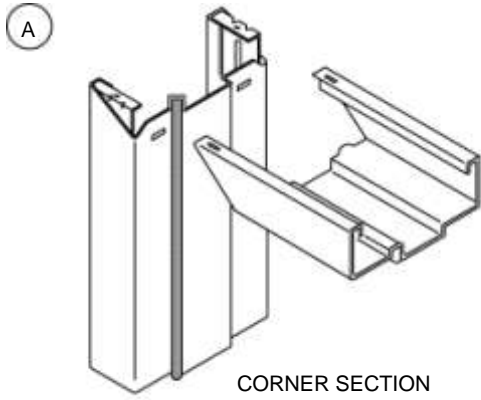
**Hardware Prep location**

- Height ..... ± 1/64"
- Backset..... ± 1/64"
- Depth ..... +1/32", -0"

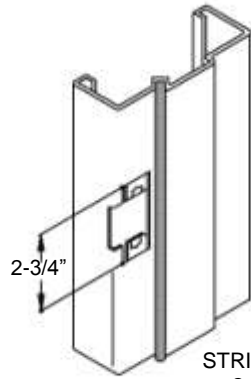
**GASKET PHYSICAL PROPERTIES**

- Polymer.....Neoprene
- Color .....Black
- ASTM Specifications..... SCE-42
- Compression Deflection (P.S.I.) 5.0 to 9.0
- Compression Set (Average) 15% to 25%
- Water Absorption by Weight (Max) ...5%
- Density P.C.F. (Average) ..... 15-35
- Temperature Range —  
-40°F to +150° continuous  
-40°F to +200° intermittent
- Chemical Resistance (Room Temperature)  
Water ..... Good  
Oil ..... Good  
Gasoline .....Fair

**FRAME CONSTRUCTION DETAILS**

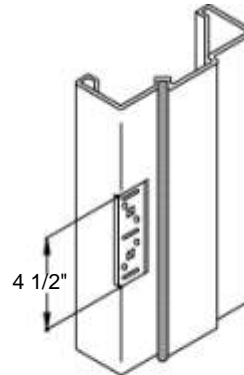


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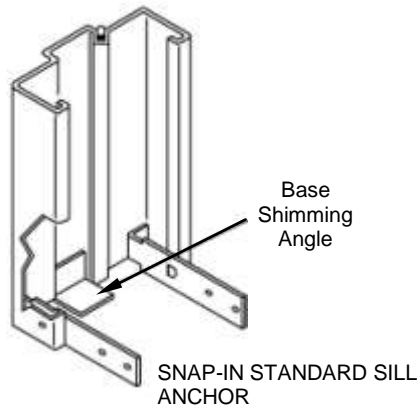
STRIKE PREPARATION-  
2-3/4" (OPTIONAL)

K



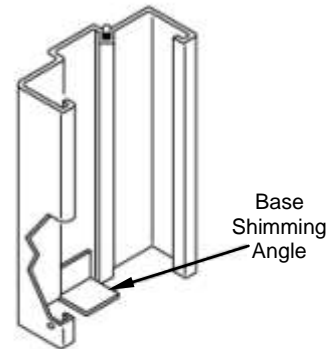
DUAL PURPOSE MORTISE  
HINGE PREPARATION WITH  
BACKUP FILLER PLATE  
(Standard)

L



SNAP-IN STANDARD SILL  
ANCHOR

M



SCREW APPLIED SILL  
ANCHOR  
(Optional)

**NOTE**

In order to provide our customers with the finest products, manufactured in the most up to date manner, Pioneer Industries reserves the right to make design or specific construction changes without notice.

Pioneer Industries will not be responsible for errors incurred by other parties through the use of this data sheet without written confirmation from Pioneer. Other trades should contact Pioneer for exact hardware locations.

### Performance Criteria

#### Air Infiltration: Test Procedure ASTM E 283-73 Performed on an operating door assembly.

WIND PRESSURE		AIR INFILTRATION cfm per ft. of crack length
Miles per hour	Pounds per square foot	
25 <sup>1</sup>	1.56	0.35
30	2.25	0.42
35	3.06	0.64
40	4.00	0.79

<sup>1</sup>Uni-Seal performance exceeds proposed ANSI A 123.6 acceptance criteria of 0.75 cfm ft. at a wind pressure of 25 mph.

#### Water Penetration: Test Procedure ASTM E 331-70(75) Performed on an operating door assembly.

WIND PRESSURE		WATER PENETRATION In ounces after a 15 min. test period
Miles per hour	Pounds per square foot	
34 <sup>2</sup>	2.86	None
39	3.80	None
44	4.84	None
49	5.98	None
54	7.29	None
59	8.69	None
64	10.20	None
69	11.90	1.20

<sup>2</sup>Uni-Seal performance exceeds proposed ANSI A 123.5 acceptance criteria of no water penetration at a wind pressure of 34 mph, with water applied at a minimum rate of 5.0 U.S. gallons per sq. ft., per hour, for a period of 15 minutes

#### Sound Transmission: Test Procedure ASTM E-90-75 Performed on an operating door assembly

STC RATING with Conventional Gaskets	STC RATING with UNI- SEAL
35	35
40	40
42	41
45	44
48	46

Note: Operating acoustical door assemblies employing Uni-Seal, in lieu of conventional surface applied rubber and aluminum extrusions, will maintain up to 95% of its original sound insulating properties.

### Suggested Performance Specifications

1. Test Reports, certified by an independent testing laboratory indicating compliance to these criteria shall be submitted for approval prior to submission of proposal.
2. Air infiltration: The rate of leakage shall not exceed \_\_\_\_\_ cfm per foot of crack length at a static air pressure of \_\_\_\_\_ psf (equivalent to \_\_\_\_\_ mph wind velocity) based on a 3'-0" x 7'-0" operating door assembly.
3. Water Penetration: No water shall pass the interior face of the unit when tested at a static air pressure of \_\_\_\_\_ psf (equivalent to \_\_\_\_\_ mph wind velocity) with water applied at a minimum rate of 5.0 U.S. gallons per sq. ft. per hour, for a time period of 15 minutes based on a 3'-0" x 7'-0" operating door assembly