

## Product Evaluation

DR472 | 1220

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at 800-248-6032.

**Evaluation ID:** DR-472

**Effective Date:** December 1, 2020

**Re-evaluation Date:** December 2024

**Product Name:** DKS Series 1800 Steel Opaque Side Hinged Commercial Doors, Singles and Doubles, Inswing and Outswing, Impact Resistant

**Manufacturer:** Cal-Royal Products, Inc.  
6606 Flotilla St.  
City of Commerce, CA 90040  
(323) 888-6601

### General Description:

System	Description	Label Rating	Drawing Number
1	3'-0" x 8'-0" Single Door, X (7700-V Series Panic Bar w/ Vertical Rods)	Outswing: +70 / -70 psf	TX-4483
2	4'-0" x 8'-0" Single Door; X (7700-V Series Panic Bar w/ Vertical Rods)	Outswing: +50 / -50 psf	TX-4483
3	3'-0" x 7'-0" Single Door; X (Pioneer SL/ CSL Series Latch)	Inswing/Outswing: +55 / -55 psf	TX-4484
4	3'-0" x 7'-0" Single Door; X (Pioneer SL/ CSL Series Latch/ T300 Series Deadbolt)	Inswing/Outswing: +55 / -55 psf	TX-4484
5	3'-0" x 7'-0" Single Door; X (Genesys Series Latch)	Inswing/Outswing: +70 / -70 psf	TX-4484
6	3'-0" x 7'-0" Single Door; X (5500 Series Panic Bar)	Outswing: +55 / -55 psf	TX-4484

**General Description (Continued):**

System	Description	Label Rating	Drawing Number
7	3'-0" x 7'-0" Single Door; X (7700 Series Panic Bar)	Outswing: +70 / -70 psf	TX-4484
8	3'-0" x 7'-0" Single Door; X (86E Mortise Lock/ M Series)	Inswing/Outswing: +80 / -80 psf	TX-4484
9	6'-0" x 7'-0" Double Door; XX (Pioneer SL/ CSL Series Latch/ T300 Series Deadbolt)	Inswing/Outswing: +55 / -55 psf	TX-4485
10	6'-0" x 7'-0" Double Door; XX (7700-V Series Panic Bar w/ Vertical Rods)	Outswing: +70 / -70 psf	TX-4485
11	8'-0" x 8'-0" Double Door; XX (7700-V Series Panic Bar w/ Vertical Rods)	Outswing: +50 / -50 psf	TX-4486

**Product Dimensions:**

System	Max. Overall Size	Operable Panel Size
1	40" x 98"	35-3/4" x 95"
2	52" x 98"	47-3/4" x 95"
3-8	40" x 88"	35-3/4" x 83-1/8"
9-10	76" x 88"	35-3/4" x 83-1/8"
11	100" x 98"	47-3/4" x 95"

**Components and Hardware:**

System	Component	Quantity	Attachment Method
1-11	Hinges	4 (8'0" doors) 3 (7'-0" doors)	Install hardware in accordance with Cal-Royal drawings No. TX-4483, TX-4484, TX-4485, and TX-4486, dated October 1, 2014. Revision 1 dated July 2, 2020. Signed and sealed by Lyndon F. Schmidt, P.E. on July 2, 2020.
1-2, 10-11	7700-V Series Panic Bar w/ Vertical Rods	1 each	
3	Pioneer SL/ CSL Series Latch	1 each	
4, 9	Pioneer SL/ CSL Series Latch/ T300 Series Deadbolt	1 each	
5	Genesys Series Latch	1	
6	5500 Series Panic Bar	1	
7	7700 Series Panic Bar	1	
8	86E Mortise Lock/ M Series	1	

**Product Identification (Manufacturer Label on Door):**

System		
1-2	Manufacturer's name	Cal-Royal Products, Inc.
	Product name	DKS Series 1800 Steel Side Hinged Commercial Door, Outswing, Impact Resistant Door Panel, Singles
	Test standards	ASTM E330-14/E1886-13a/E1996-14a
3-8	Manufacturer's name	Cal-Royal Products, Inc.
	Product name	DKS Series 1800 Steel Side Hinged Commercial Door, Inswing/Outswing, Impact Resistant Door Panel, Singles
	Test standards	ASTM E330-14/E1886-13a/E1996-14a
9-11	Manufacturer's name	Cal-Royal Products, Inc.
	Product name	DKS Series 1800 Steel Side Hinged Commercial Door, Inswing/Outswing, Impact Resistant Door Panel, Doubles
	Test standards	ASTM E330-14/E1886-13a/E1996-14a

**Impact Resistance:**

System	Impact Resistant	Requirement
1-11	Yes	These products satisfy TDI's criteria for protection from windborne debris. Install the assemblies at a height on the structure that does not exceed the design pressure rating for the assemblies.

**Acceptance of Smaller Assemblies:** Door assemblies with dimensions equal to or smaller than those specified is acceptable within the limitations of this report.

**Installation:**

System		
1-11	Type of installation	Install in accordance with Cal-Royal drawings No. TX-4483, TX-4484, TX-4485, and TX-4486, dated October 1, 2014. Revision 1 dated July 2, 2020. Signed and sealed by Lyndon F. Schmidt, P.E. on July 2, 2020.
	Wall framing	
	Fasteners	
	Fastener location/spacing	
	Fastener penetration	

**Note:** Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.