







Rectangular, Round & Flat Oval

Curtain Types: A, B, CR & CO

For Use in Static & Dynamic Systems UL 555 Classified - 3 Hour Rating







Fire

e Dampers	
	Page
Introduction	3
Static Fire Dampers	
Static Fire Damper (Type A)	4
Static Fire Damper (Type B)	5
Static Fire Damper (Type CR)	6
Static Fire Damper (Type CO)	7
Dynamic Fire Dampers	
Dynamic Fire Damper (Type A)	8
Dynamic Fire Damper (Type B)	9
Dynamic Fire Damper (Type CR)	10
Dynamic Fire Damper (Type CO)	11
Fire Damper Installation Instructions	
Fire Dampers Installation Instructions	1216
Certificate & Approval	
UL Certificate of Compliance	18-19
QCDD Approval	2021



DUCT VENTILATION AIR CONDITIONING Co. (W.L.L.)

Static & Dynamic Fire Dampers

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

DVAC Fire Dampers have been investigated by UL Laboratories in Chicago-USA on February 2013 in accordance with UL 555 Standard for Fire Dampers.





UNDERWRITERS LABORATORIES UL 555 STANDARD

UL 555 - FIRE DAMPERS

Fire Dampers are intended for use where air ducts penetrate

or terminate at openings in walls or partitions, in air transfer openings in partitions, and where air ducts extend through floors as specified in the Standard for Installation of Air Conditioning and Ventilating Systems, NFPA 90A. In a Fire Emergency the Fire Damper is designed to close and prevent the spread of fire from one side of the wall or partition to the other.

Fire Dampers are evaluated for use as either:

a) Fire Dampers for Static Systems -

For HVAC systems that are automatically shut down in the event of a fire.

b) Fire Dampers for Dynamic Systems -

For HVAC systems that are operational in the event of a fire.

c) Combination Fire and Smoke Dampers -

For locations in HVAC systems where a Fire Damper and a Smoke Damper are required at a single location.

The UL 555 Standard for Fire Dampers includes Significant Test Criteria.

Operational Reliability

To ensure operation through 250 cycles for dampers for use without actuators, or 20,000 cycles for dampers with actuators and Cycle Testing following Salt Spray Exposure.

• Fire Endurance

For either 1.5 or 3 hrs to determine the hourly classification of the damper assembly.

Hose Stream Test

To verify the damper assembly and associated installation components remain intact during explosive fire conditions.

Salt-Spray Exposure

To simulate the dust and other debris that accumulates on a fire damper mounted in a duct or opening within a building and to investigate the performance of the Fire Damper while subjected to such accumulations.

Dynamic Closure

To verify the damper assembly will close against heated Air Flow velocity of at least 2000 fpm and 4 inches of water. (Not required for Dampers Classified for Static "fans off" Systems).

		Type of Damper		
Test	Section or Standard	Static Fire Damper	Dynamic Fire Damper	Combination Fire and Smoke Damper
1. Fire Endurance & Hose Stream	10	X	X	X
2. Operational Reliability	11	X	X	X
3. Salt-Spray Exposure	12	X	X	X
4. Spring Closing Force	13	X	-	-
5. Dynamic Closure	14	-	X	X
6. Operation	UL555S	-	-	X
7. Leakage	UL555S	-	-	X

x: Test applicable

^{-:} Test not applicable



Static Fire Dampers - Type A

Rectangular

Codes: CRFD-A-S & CRFD-A-S-S

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

CURTAIN RECTANGULAR FIRE DAMPER (TYPE A)

- . FOR USE IN STATIC SYSTEMS
- . 3 HOUR RATING
- . UL 555 CLASSIFIED



Description:

The Rectangular Curtain Type Fire Damper provides an efficient solution to separate areas of Fire in Ventilation Systems. The Curtain Type Fire Damper will stop the spread of fire through ducts, walls or floors.

Damper Size (Vertical):

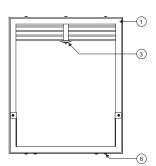
- Min. size: WxH 100x100mm - Max. size: WxH 900x900mm

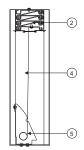
Damper Size (Horizontal):

- Min. size: WxH 100x100mm - Max. size: WxH 900x900mm

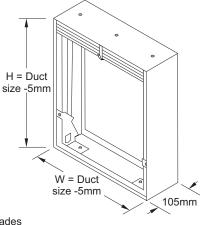
Features: - Casing: 20 Gauge (1.0mm) Galvanized Steel

Blades: 22 Gauge (0.8mm) Galvanized Steel
 Spring: 301 Stainless Steel Closure Spring
 Fusible Link: 165°F (74°C) is Standard





- 1 Casing
- 2 Interlocking Curtain Blades
- 3 UL Listed Fusible Link
- 4 Closure Spring
- (5) Catch Plate
- (6) Steel Rivet



Ordering example:

Fire Damper Sleeve:

DVAC Integral Fire Dampers Sleeve ensure proper damper mounting in sleeve and can be delivered to job site for immediate installation.

Note: Sleeves can be field fabricated.

H W L

Type 'A': Blades and Frame in the airstream Min. size: WxH 100x100mm

Max. size: WxH 900x900mm

Installation:



Static Fire Dampers - Type B

Rectangular

Codes: CRFD-B-S & CRFD-B-S-S

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

CURTAIN RECTANGULAR FIRE DAMPER (TYPE B)

- . FOR USE IN STATIC SYSTEMS
- . 3 HOUR RATING
- . UL 555 CLASSIFIED



Description:

The Rectangular Curtain Type Fire Damper provides an efficient solution to separate areas of Fire in Ventilation Systems. The Curtain Type Fire Damper will stop the spread of fire through ducts, walls or floors.

Damper Size (Vertical):

- Min. size: WxH 100x100mm - Max. size: WxH 900x800mm

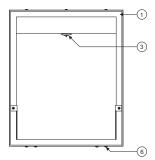
Damper Size (Horizontal):

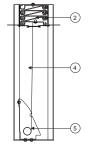
- Min. size: WxH 100x100mm - Max. size: WxH 900x800mm

Features: - Casing: 20 Gauge (1.0mm) Galvanized Steel

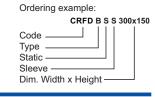
- Blades: 22 Gauge (0.8mm) Galvanized Steel - Spring: 301 Stainless Steel Closure Spring - Fusible Link: 165°F (74°C) is Standard

1
Damper Height (H) Dim. (A)
100 thru 400mm 50mm A
410 thru 650mm 75mm
660 thru 800mm 100mm
H = Du size -5n





- (2) Interlocking Curtain Blades
- ③ UL Listed Fusible Link
- 4 Closure Spring
- (5) Catch Plate
- 6 Steel Rivet



Fire Damper Sleeve:

DVAC Integral Fire Dampers Sleeve ensure proper damper mounting in sleeve and can be delivered to job site for immediate installation.

Note: Sleeves can be field fabricated.

Please refer to Fire Damper installation instructions (Page 12---16).

Type 'B': Blades partially out of airstream Min. size: WxH 100x150mm

Max. size: WxH 900x900mm



Static Fire Dampers - Type CR

Round

Codes: CRFD-CR-S & CRFD-CR-S-S

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

CURTAIN ROUND FIRE DAMPER (TYPE CR)

- . FOR USE IN STATIC SYSTEMS . 3 HOUR RATING
- . UL 555 CLASSIFIED



Description:

The Round Curtain Type Fire Damper provides an efficient solution to separate areas of Fire in Ventilation Systems. The Curtain Type Fire Damper will stop the spread of fire through ducts, walls or floors.

Damper Size (Vertical):

Min. size: WxH 150mm Diameter
Max. size: WxH 750mm Diameter

Damper Size (Horizontal):

- Min. size: WxH 150mm Diameter - Max. size: WxH 750mm Diameter

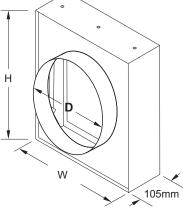
Features: - Casing: 20 Gauge (1.0mm) Galvanized Steel

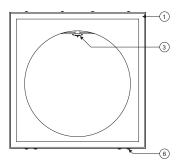
Blades: 22 Gauge (0.8mm) Galvanized SteelSpring: 301 Stainless Steel Closure Spring

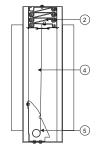
- Fusible Link: 165°F (74°C) is Standard

Diameter (D)	Height (H)	Width (W)
150 thru 400mm	+75mm	+50mm
410 thru 550mm	+125mm	+50mm
560 thru 750mm	+150mm	+50mm

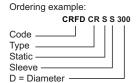
Diameter (D)	Collar
150 thru 400mm	22 Gauge
410 thru 750mm	20 Gauge







- 1 Casing
- 2 Interlocking Curtain Blades
- ③ UL Listed Fusible Link
- 4 Closure Spring
- (5) Catch Plate
- (6) Steel Rivet



Fire Damper Sleeve:

DVAC Integral Fire Dampers Sleeve ensure proper damper mounting in sleeve and can be delivered to job site for immediate installation.

Note: Sleeves can be field fabricated.

H W L

Type 'CR': Blades partially in airstream
Min. size: WxH 250x250mm
Max. Size: WxH 900x900mm

Installation



Static Fire Dampers - Type CO

Flat Oval

Codes: CFOFD-CO-S & CFOFD-CO-S-S

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

CURTAIN FLAT OVAL FIRE DAMPER (TYPE CO)

. FOR USE IN STATIC SYSTEMS . 3 HOUR RATING

. UL 555 CLASSIFIED



Description:

The Flat Oval Curtain Type Fire Damper provides an efficient solution to separate areas of Fire in Ventilation Systems. The Curtain Type Fire Damper will stop the spread of fire through ducts, walls or floors.

Damper Size (Vertical):

- Min. size: WxH 150mm Minor or Major Axis - Max. size: WxH 750mm Minor or Major Axis

Damper Size (Horizontal):

Min. size: WxH 150mm Minor or Major Axis
Max. size: WxH 750mm Minor or Major Axis

Features: - Casing: 20 Gauge (1.0mm) Galvanized Steel

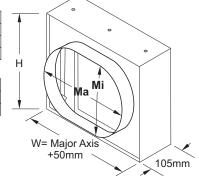
- Blades: 22 Gauge (0.8mm) Galvanized Steel

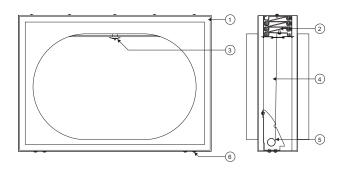
- Spring: 301 Stainless Steel Closure Spring

- Fusible Link: 165°F (74°C) is Standard

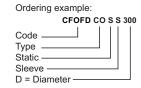
Minor Axis (Mi)	Height (H)
150 thru 400mm	+75mm
410 thru 550mm	+125mm
560 thru 750mm	+150mm

Diameter (D)	Collar Thickness
150 thru 400mm	22 Gauge (0.8mm)
410 thru 750mm	20 Gauge (1.0mm)





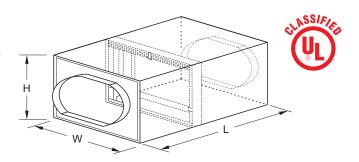
- 1 Casing
- 2 Interlocking Curtain Blades
- 3 UL Listed Fusible Link
- 4 Closure Spring
- (5) Catch Plate
- 6 Steel Rivet



Fire Damper Sleeve:

DVAC Integral Fire Dampers Sleeve ensure proper damper mounting in sleeve and can be delivered to job site for immediate installation.

Note: Sleeves can be field fabricated.



Installation

Please refer to Fire Damper installation instructions (Page 12---16).

Type 'CO': Blades partially in airstream
Min. size: WxH 350x250mm
Max. size: WxH 900x800mm



Dynamic Fire Dampers - Type A

Rectangular

Codes: CRFD-A-D & CRFD-A-D-S

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

CURTAIN RECTANGULAR FIRE DAMPER (TYPE A)

- . FOR USE IN DYNAMIC SYSTEMS
- . 3 HOUR RATING
- . UL 555 CLASSIFIED



Description:

The Rectangular Curtain Type Fire Damper provides an efficient solution to separate areas of Fire in Ventilation Systems. The Curtain Type Fire Damper will stop the spread of fire through ducts, walls or floors.

There is a wide choice of sizes available for Low, Medium and High Velocity applications.

Ratings: - Pressure: Up to 4"w.g. (Up to 1000 Pa)

- Velocity: Up to 2000 fpm (Up to 10.16 m/s)

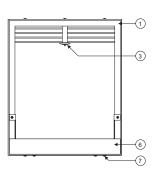
Damper Size (Vertical):

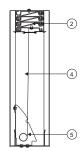
- Min. size: WxH 100x150mm - Max. size: WxH 900x900mm

Features: - Casing: 20 Gauge (1.0mm) Galvanized Steel

- Blades: 22 Gauge (0.8mm) Galvanized Steel - Spring: 301 Stainless Steel Closure Spring

- Fusible Link: 165°F (74°C) is Standard







2 Interlocking Curtain Blades

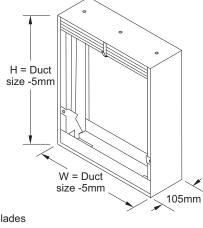
3 UL Listed Fusible Link

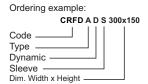
4 Closure Spring

(5) Catch Plate

6 50mm, 18 Gauge (1.2mm) GI Flat

7 Steel Rivet





Fire Damper Sleeve:

DVAC Integral Fire Dampers Sleeve ensure proper damper mounting in sleeve and can be delivered to job site for immediate installation.

Note: Sleeves can be field fabricated.

H W L

Type 'A': Blades and frame in the airstream Min. size: WxH 100x150mm Max Size: WxH 900x900mm

Installation



Dynamic Fire Dampers - Type B

Rectangular

Codes: CRFD-B-D & CRFD-B-D-S

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

CURTAIN RECTANGULAR FIRE DAMPER (TYPE B)

- . FOR USE IN DYNAMIC SYSTEMS
- . 3 HOUR RATING
- . UL 555 CLASSIFIED



Description:

The Rectangular Curtain Type Fire Damper provides an efficient solution to separate areas of Fire in Ventilation Systems. The Curtain Type Fire Damper will stop the spread of fire through ducts, walls or floors.

There is a wide choice of sizes available for Low, Medium and High Velocity applications.

Ratings: - Pressure: Up to 4"w.g. (Up to 1000 Pa)

- Velocity: Up to 2000 fpm (Up to 10.16 m/s)

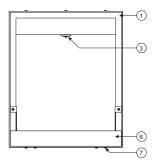
Damper Size (Vertical):

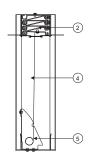
- Min. size: WxH 100x100mm - Max. size: WxH 900x800mm

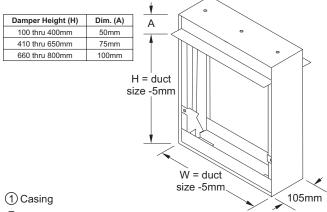
Features: - Casing: 20 Gauge (1.0mm) Galvanized Steel

- Blades: 22 Gauge (0.8mm) Galvanized Steel - Spring: 301 Stainless Steel Closure Spring

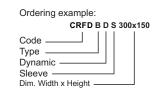
- Fusible Link: 165°F (74°C) is Standard







- (2) Interlocking Curtain Blades
- 3 UL Listed Fusible Link
- 4 Closure Spring
- (5) Catch Plate
- 6 50mm, 18 Gauge (1.2mm) GI Flat
- (7) Steel Rivet



Fire Damper Sleeve:

DVAC Integral Fire Dampers Sleeve ensure proper damper mounting in sleeve and can be delivered to job site for immediate installation.

Note: Sleeves can be field fabricated.

Type 'B': Blades partially in airstream Min. size: WxH 100x150mm Max. size: WxH 900x900mm



Dynamic Fire Dampers - Type CR

Round

Codes: CRFD-CR-D & CRFD-CR-D-S

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

CURTAIN ROUND FIRE DAMPER (TYPE CR)

- . FOR USE IN DYNAMIC SYSTEMS
- . 3 HOUR RATING
- . UL 555 CLASSIFIED



Description:

The Round Curtain Type Fire Damper provides an efficient solution to separate areas of Fire in Ventilation Systems. The Curtain Type Fire Damper will stop the spread of fire through ducts, walls or floors.

There is a wide choice of sizes available for Low, Medium and High Velocity applications.

Ratings: - Pressure: Up to 4"w.g. (Up to 1000Pa)

- Velocity: Up to 2000 fpm (Up to 10.16m/s)

Damper Size (Vertical):

- Min. size: 150mm Diameter - Max. size: 750mm Diameter

Features: - Casing: 20 Gauge (1.0mm) Galvanized Steel

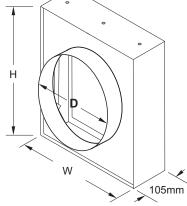
- Blades: 22 Gauge (0.8mm) Galvanized Steel

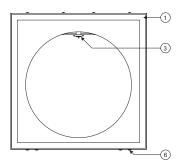
- Spring: 301 Stainless Steel Closure Spring

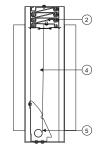
- Fusible Link: 165°F (74°C) is Standard

Diameter (D)	Height (H)	Width (W)
150 thru 400mm	+75mm	+50mm
410 thru 550mm	+125mm	+50mm
560 thru 750mm	+150mm	+50mm

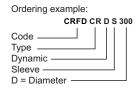
Diameter (D)	Collar Thickness
150 thru 400mm	22 Gauge (0.8mm)
410 thru 750mm	20 Gauge (1.0mm)







- 1 Casing
- 2 Interlocking Curtain Blades
- ③ UL Listed Fusible Link
- 4 Closure Spring
- (5) Catch Plate
- 6 Steel Rivet



Fire Damper Sleeve:

DVAC Integral Fire Dampers Sleeve ensure proper damper mounting in sleeve and can be delivered to job site for immediate installation.

Note: Sleeves can be field fabricated.

H W L

Type 'CR': Blades partially in airstream
Min. size: WxH 250x250mm
Max. Size: WxH 900x900mm

Installation



Dynamic Fire Dampers - Type CO

Flat Oval

Codes: CFOFD-CO-D & CFOFD-CO-D-S

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

CURTAIN FLAT OVAL FIRE DAMPER (TYPE CO)

- . FOR USE IN DYNAMIC SYSTEMS
- . 3 HOUR RATING
- . UL 555 CLASSIFIED



Description:

The Flat Oval Curtain Type Fire Damper provides an efficient solution to separate areas of Fire in Ventilation Systems. The Curtain Type Fire Damper will stop the spread of fire through ducts, walls or floors.

There is a wide choice of sizes available for Low, Medium and High Velocity applications.

Ratings: - Pressure: Up to 4"w.g. (Up to 1000 Pa)

- Velocity: Up to 2000 fpm (Up to 10.16 m/s)

Damper Size (Vertical):

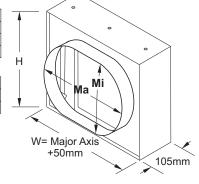
- Min. size: 150mm Minor or Major Axis
- Max. size: 750mm Minor or Major Axis

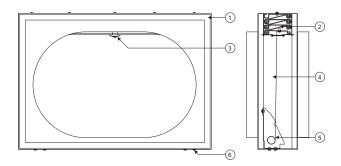
Features: - Casing: 20 Gauge (1.0mm) Galvanized Steel

- Blades: 22 Gauge (0.8mm) Galvanized Steel
- Spring: 301 Stainless Steel Closure Spring
- Fusible Link: 165°F (74°C) is Standard

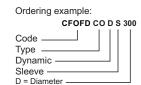
Minor Axis (Mi)	Height (H)
150 thru 400mm	+75mm
410 thru 550mm	+125mm
560 thru 750mm	+150mm

Diameter (D)	Collar Thickness
150 thru 400mm	22 Gauge (0.8mm)
410 thru 750mm	20 Gauge (1.0mm)





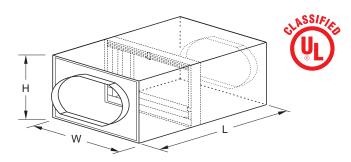
- (1) Casing
- 2 Interlocking Curtain Blades
- ③ UL Listed Fusible Link
- 4 Closure Spring
- (5) Catch Plate
- 6 Steel Rivet



Fire Damper Sleeve:

DVAC Integral Fire Dampers Sleeve ensure proper damper mounting in sleeve and can be delivered to job site for immediate installation.

Note: Sleeves can be field fabricated.



Installation

Please refer to Fire Damper installation instructions (Page 12---16).

Type 'CO': Blades partially in airstream
Min. size: WxH 350x250mm
Max. size: WxH 900x800mm



Fire Dampers - Type A & B

Installation Instructions - Rectangular

Codes: CRFD & CRFD-S

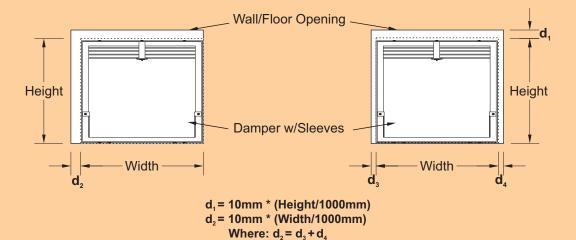
Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

INSTALLATION INSTRUCTIONS

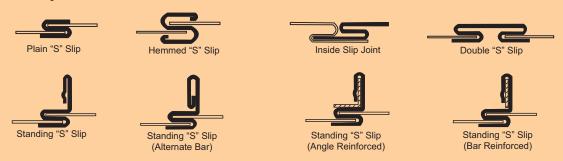
Section 1: - Wall/Floor Opening and Clearance Required

The Opening in wall or floor shall be larger than the Fire Damper Sleeve, due to the expansion during periods of intense heat.

- Minimum clearance required is 10mm per linear meter for Damper Width & Height.
- Sleeve may rest on bottom of the opening.



<u>Section 2:</u> - Duct sleeve connections listed in UL 555, Sixth Edition, *Standard for Fire Dampers* a) <u>Breakaway Joints</u>



The breakaway connections shown in fig. above can be applied with maximum 2 # 10 sheet metal screws on each side and on the bottom located in the center of the slip pocket and penetrating both sides of the slip pocket.

Transverse joints illustrated can be applied as top and bottom joints with Drive Slip - side joints in duct heights up to 500mm.





Fire Dampers - Type A & B

Installation Instructions - Rectangular

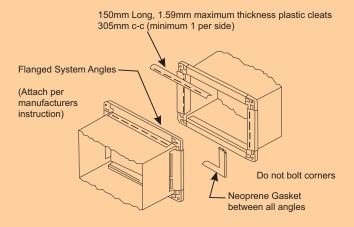
Codes: CRFD & CRFD-S

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

INSTALLATION INSTRUCTIONS

b) Slip-on Flange System:

UL tested Slip-on Flange System are approved as breakaway connection when installed, as shown below:



Section 3: - Sleeve Thickness & Length

All Fire Dampers must be installed in a sleeve of the required gauge and length. It could be factory Installed or field fabricated.

- Sleeve shall extend a maximum of 150mm from the wall or floor opening from each side.
- Sleeve may extend with a maximum length of 400mm from wall or floor (if a factory installed access door is required).

Type of Connection	Duct Dimension	Sleeve Thickness
Rigid or Breakaway	All Duct sizes	2.0mm
Digid or Proglement	Max. width 900mm	1 Emm
Rigid of Breakaway	Rigid or Breakaway Up to 4.0 m ²	1.5mm
	Up to 300mm	0.55mm
Breakaway Only	301 to 750mm	0.7mm
	751 to 1350mm	0.85mm
	1351 to 2100mm	1.0mm
	2101mm and Up	1.2mm

N.B.: Any Duct connection other than breakaway is considered rigid.



Fire Dampers - Type A & B

Installation Instructions - Rectangular

Codes: CRFD & CRFD-S

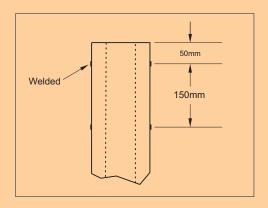
Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

INSTALLATION INSTRUCTIONS

Section 4: - Damper-Sleeve Attachment

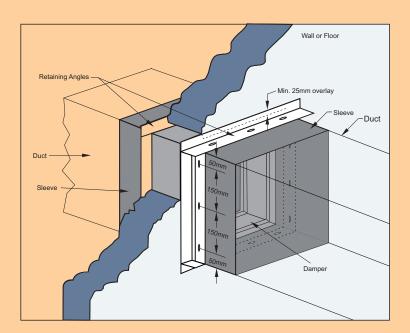
All four sides of the damper frame must be attached to the sleeve with one row of attachments on each side of the blade channel. Attachment must be spaced a maximum of 150mm on centers and a max of 50mm from corners and minimum of 4 attachments per side with a total of 16.

Secure damper to sleeve with 12mm long welds.



Section 5: - Securing the Fire Damper Sleeve to the Opening

- Centerline of the Fire Damper blade should be positioned within the confines of the wall or floor opening.
- Fire Damper and Sleeve assembly must be installed in opening using retaining angles on each side of the wall or floor.
- Retaining Angles thickness should be 1.5mm minimum
- Retaining Angles should be secured to the damper sleeve **ONLY**.
- Retaining Angles should cover the gap
 +25mm overlap with the wall
- Retaining Angles should be attached to 4 (four) sides of the damper sleeve using 6mm bolts & nuts methods with a maximum spacing of 50mm from corners and 150mm on center.





Fire Dampers - Type A, B, CR & CO

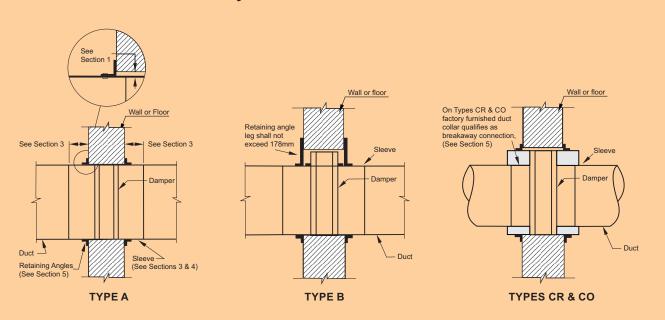
Installation Instructions - Rectangular, Round & Flat Oval

Codes: CRFD & CRFD-S

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

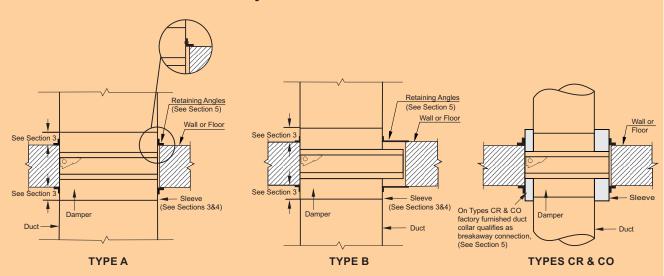
INSTALLATION INSTRUCTIONS

VERTICAL mount without factory mounted sleeve



Note: When Dampers are installed vertically, the blade stack must be on the top.

HORIZONTAL mount without factory mounted sleeve



Note: When Dampers are installed horizontally, the ramp must be positioned up, as shown in above drawings.



TYPE A

Fire Dampers - Type A, B, CR & CO

Installation Instructions - Rectangular, Round & Flat Oval

TYPES CR & CO

Codes: CRFD & CRFD-S

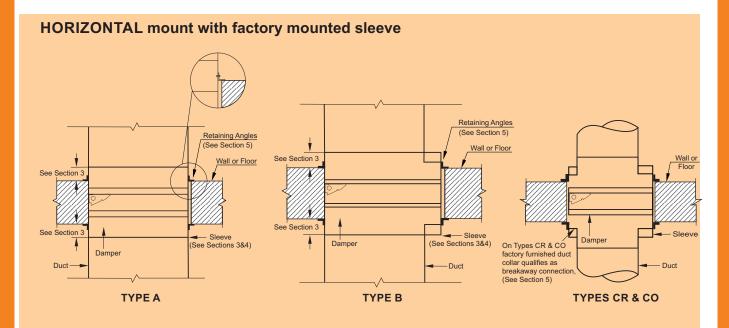
Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

INSTALLATION INSTRUCTIONS

VERTICAL mount with factory mounted sleeve See Section 5 Max. 150mm Max. 150mm See Section 3 Damper Damper

TYPE B

Note: When Dampers are installed vertically, the blade stack must be on the top.



Note: When Dampers are installed horizontally, the ramp must be positioned up, as shown in above drawings.









Rectangular, Round & Flat Oval

Curtain Types: A, B, CR & CO

For Use in Static & Dynamic Systems UL 555 Classified - 3 Hour Rating





UL Certificate of Compliance Dec. 2013 - Chicago - USA

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

CERTIFICATE OF COMPLIANCE

 Certificate Number
 20131204-R26828

 Report Reference
 R26828-20131129

 Issue Date
 2013-DECEMBER-04

Issued to: DUCT VENTILATION AIR CONDITIONING CO W L L

SMALL INDUSTRIES ZONE-PINK AREA

ZONE 81 STREET 13 BLDG.57

DOHA 55619 QATAR

This is to certify that DAMPERS FOR FIRE BARRIER AND SMOKE representative samples of APPLICATIONS

"See Addendum Page"

Have been investigated by UL in accordance with the

Standard)s(indicated on this Certificate.

Standard)s(for Safety: UL 555 - Standard for Fire Dampers

Additional Information: See the UL Online Certifications Directory at

www.ul.com/database for additional information

Only those products bearing the UL Classification Mark should be considered as being covered by UL's Classification and Follow-Up Service.

The UL Classification Mark includes :UL in a circle: with the word" CLASSIFIED ') as shown(; a control number)may be alphanumeric(assigned by UL; a statement to indicate the extent of UL's evaluation of the product; and the product category name)product identity(as indicated in the appropriate UL Directory.

Look for the UL Classification Mark on the product.

William R .Carney ,Director ,North American Certification Programs

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC)UL(or any authorized licensee of UL .For questions ,please contact a local UL Customer Service Representative at www.ul.com/contactus

(U)



UL Certificate of Compliance Dec. 2013 - Chicago - USA

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

CERTIFICATE OF COMPLIANCE

 Certificate Number
 20131204-R26828

 Report Reference
 R26828-20131129

 Issue Date
 2013-DECEMBER-04

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Models:

Fire damper ,Models CRFD-Type A ,CRFD-Type B ,CRFD-Type CR and CFOFD-Type CO curtain type ,for vertical mounting intended for use in static and dynamic applications .

Fire damper ,Models CRFD-Type A ,CRFD-Type B ,CRFD-Type CR and CFOFD-Type CO curtain type ,for horizontal mounting intended for use in static applications.

William R. Carney ,Director ,North American Certification Program
UL LLC

information and documentation involving UL Mark services are provided on behalf of UL LLC)UL(or any authorize

(U)



Fire Dampers QCDD Approval

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

تاريخ الطباعة : 31-12-2018

وقت الطباعة : ص 8:33

104438

رقم الرخصة التجارية:

رقم الطلب: PAC18015927



وزارة الداخليسة الادارة العامه للدفاع المدني

إدارة الوقاية

ادة عدم ممانعة

نوع الشهادة اعتماد منتج

بيانات المنشأة

شركه دفاك داكت للتهويه والتكييف الاسم التجارى:

> 31177 رقم السجل التجاري

> > رقم قيد المنشأة: 12-1845-00

البريد الإلكتروني:

Ventilation systems التصنيف:

Dampers إسم المنتج :

تفاصيل الشهادة

تم مراجعة الطلب المقدم واتضح بأنه لا مانع من اعتماد المنتج /المنتجات الموضحه في التقرير الفني المرفق بناء على اعتماده من قبل الهيئه المختبرية الموضحه في التقرر الفني المرفق.

- 1. يجب على الشركه الالتزام والعمل بما جاء في اشتراطات قسم أنظمة السلامه التي تم الاطلاع والموافقة عليها من خلال الموقع
 - 2. يجب ان يقوم بتركيب هذا المنتج من قبل مهندسين وفنيين معتمدين من الإدارة العامة للدفاع المدنى.
 - 3. يجب أن يحمل المنتج العلامة التجارية للهيئه المختبرية المعتمدة والموضحه في التقرير الفني المرفق

31/12/2018 كاريخ الإنتهاء إلى 31/12/2018 كاريخ الإنتهاء إلى المائة الله المائة المائة المائة الله المائة 30/12/2020

تاريخ الاعتماد :

Page 1 of 2



QCDD Approval

Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

DATE: 2018-12-31 PERMIT PAC18015927	و التاريخ : رقم الطلب :	وزارة الداخلية الإدارة العامة للدفاع المدن إدارة الوقاية
TECHNICAL REPORT		تقرير الفني
PRODUCT:	Dampers	لمنتج:
PRODUCT APPLICATION:	Ventilation systems	صنيف المعدة :
APPLICANT / P.O .Box	شركه دفاك داكت للتهويه والتكييف	نقدم الطلب :
MANUFACTURER / LOCATION :	DUCT VENTILATION AIR CONDITIONING CO W L L / QATAR	لشركة المصنعة / بلد الصنع:
	الوصف	الموديل
Fire Dampers for Use in Station	System, 3 Hr Class, V/H Damper Mounting Position, Sizes: Single Section-36 x 36in.	CRFD-Type A
Fire Dampers for Use in Station	Single Section-36 x 36in. Single Section-36 x 36in.	CRFD-Type B
Fire Dampers for Use in Stati	c System, 3 Hr Class, V/H Damper Mounting Position, Size:	CFOFD-Type CO
Fire Dampers for Use in Stati	29.5in. Round Damper Dia. c System, 3 Hr Class, V/H Damper Mounting Position, Size:	CRFD-Type CR
	29.5in. Round Damper Dia. c System, Dampers rated 2000 fpm/4.0 in. WC, 3 hr Class, V-	CRFD-Type A
Fire Damper for Use in Dynami	Position, Single Section Damper Size: 36in x 36in. c System, Dampers rated 2000 fpm/4.0 in. WC, 3 hr Class, V-	CRFD-Type B
Fire Damper for Use in Dynami	Position, Single Section Damper Size: 36in x 36in. c System, Dampers rated 2000 fpm/4.0 in. WC, 3 hr Class, V-	CRFD-Type CR
Fire Damper for Use in Dynami	tion, Round Damper Diameter: Min-5.9in., Max-29.5in. c System, Dampers rated 2000 fpm/4.0 in. WC, 3 hr Class, V-tion, Round Damper Diameter: Min-5.9in., Max-29.5in.	CFOFD-Type CO
3RD PARTY CERTIFICATE / APPROVAL :	- EMME.R26828 - Underwriters Laboratories (UL)	نهادة المختبرات المساندة (من هيئات معتمدة) :
RECOMMENDATIONS The basic standard used to	o investigate fire dampers for use in dynamic systems and	fire dampers for use in
	c systems in this category is ANSI/UL 555, "Fire Dampers	

Page 2 of 2



Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

Remarks:
<u> </u>



Tel: +974 44 500 118 - 44 500 119 - Fax: +974 44 500 117 - Doha, State Of Qatar

Remarks:
<u> </u>











