

Curtain Type Fire Protection Damper

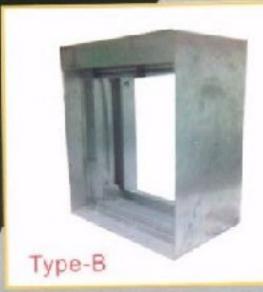
- Maximum up to 4 HRS.F.R.P.
- Complied with B.S.476: Part 20: 1987
- Approved by H.K.F.S.D.
- Easy and simple installation
- Suitable for large opening



Fire Damper

Easy







TFD-100

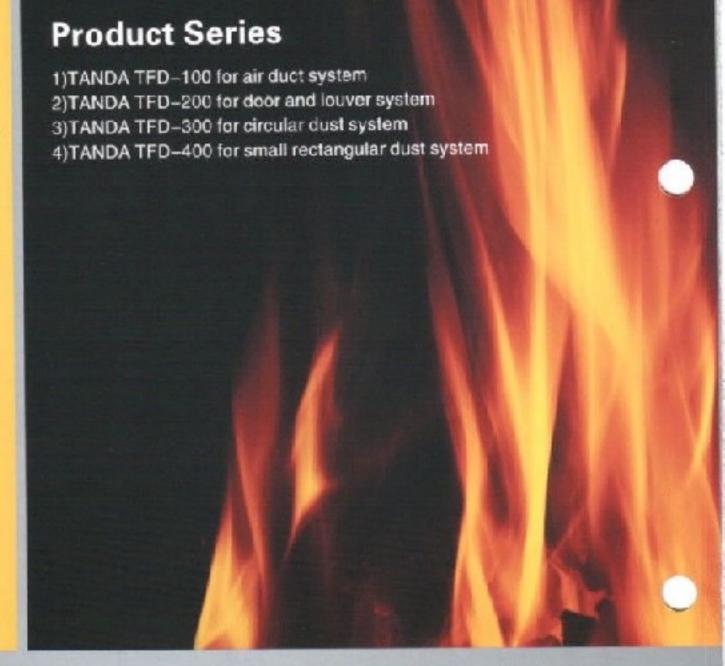
TFD-100

TFD-100

Quality Proved & Flexible Design

TANDA is the first fire damper series using Single Mounting Angle. The interlocking blade and curtain type design have successfully complied with the BS 476:Part 20 and qualified for 4 hours fire resistance.

Our series of fire dampers are suitable for both vertical and horizontal installation. It can be tailor-made in different sizes and shapes and installed at different places such as concrete/partition wall, ceiling, floor, fire rating board/door and louver opening.

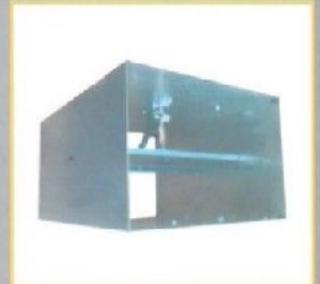


nnovative Designantial Installation





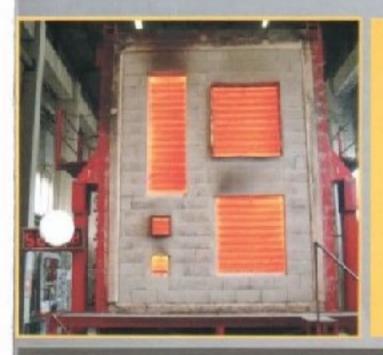




TFD-200

TFD-300

TFD-400



Perfect Installation

The Single Mounting Angle design makes installation at ease. Light weight characteristic also make TANDA fire damper easy to be handled.

Custom-made size makes

TANDA fire damper perfectly fit into your designated area.

Quality Testing

Valid laboratory test report from BRANZ, New Zealand Complied with the BS476;Part20 (up to 4 hours F. R. P. Performance)

Special Features For Your Special Needs

TANDA fire dampers provide a series of choices with unlimited size to fit in different types of building construction.

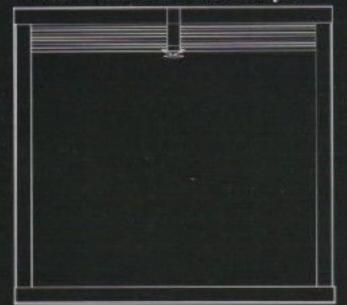
Apart from galvanized fire dampers, stainless steel dampers are also available.

Numerous choice of coloured paint can be coated onto the G. I. surface for matching the original interior.





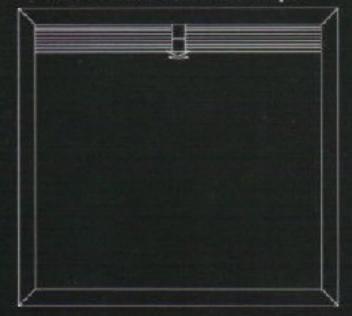
TANDATFD-100 Fire Damper







TANDATFD-200 Fire Damper







Approved Distributor:

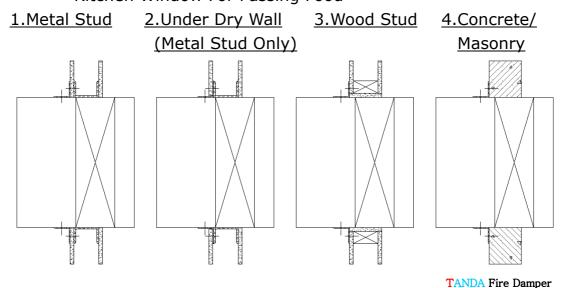
TANDA International Company Limited

Tel : (852) 2156 9796 Fax: (852) 2156 9798

E-mail: sales@tanda.info

Tanda Curtain Type Fire Damper

- Tested to BS 476 part 20 standard,1987
- Up to 4 hours fire rating
- Single side installation method
- Light weight
- Easy to install, save time & money
- Tailor made
- GMS/304/316 different material construction of the frame/blade
- Application
 - Wall (concrete masonry, drywall, brick wall)
 - Floor
 - Fire Rating Partition
 - Louver Opening
 - Fire Door Grilles
 - Kitchen Window For Passing Food



Fire Damper

TFD-100 TYPE A

DAMPER CONSTRUCTION

Integral Frame Sleeve: 1mm Galvanized Mild Steel without

spring / 1.5mm Galvanized Mild Steel

with spring

Blade : 0.6mm Galvanized Mild Steel Roll

Formal curtain blade

Outer Sleeve : 1mm Galvanized Mild steel

Fusible Link : 68 degree C (155 degree F, UL listed)

Spring : Stainless Steel Closure Spring

(Optional for Vertical only)

Minimum Size

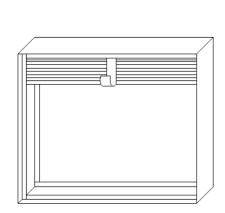
100 x 100mm

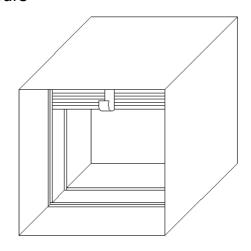
Larger Size

Single Section 1100 x 1200mm Multiple Sections 2660 x 2000mm

Fire Rating

BS 476 part 20 standard, up to 4 hours





Optional Construction

- GMS Frame with GMS/304/316 Stainless Steel Blades or GMS/304/316 Sleeve
- 304/316 Stainless Steel Frames and Blades or GMS/304/316 Sleeve

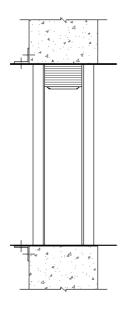
Frame	GI	GI	304	304	GI	316	316
Blade	GI	304	304	304	316	316	316
Sleeve	GI	GI	GI	304	GI	GI	316

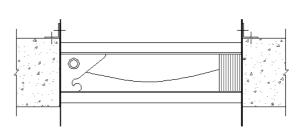
- Mounted with 68 degree C ETL
- Suitable install as vertical or horizontal at concrete masonry, drywall, brick wall, fire rating partition, door grilles, louver opening, kitchen window for passing food

Installation

Vertical Mounting

Horizontal Mounting





Fire Damper

Model: TFD-100 TYPE B

DAMPER CONSTRUCTION

Integral Frame Sleeve: 1mm Galvanized Mild Steel without

spring / 1.5mm Galvanized Mild Steel

with spring

Blade : 0.6mm Galvanized Mild Steel Roll

Formal Curtain Blade

Outer Sleeve : 1mm Galvanized Mild Steel

Fusible Link : 68 degree C (155 degree F, UL listed)

Spring : Stainless Steel Closure Spring

(Optional for Vertical only)

Minimum Size

100 x 100mm

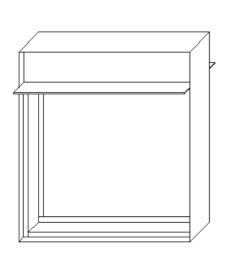
Larger Size

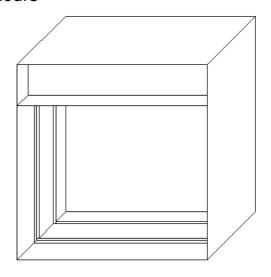
Single Section 1100 x 1200mm Multiple Sections 2660 x 2000mm

Type B	Height of
Damper	U
Height	
100-324	44
325-574	70
575-824	95
825-1100	120

Fire Rating

BS476 part 20 standard, up to 4 hours





TANDA Fire Damper

Optional Construction

- GMS Frame with GMS/304/316 Stainless Steel Blades or GMS/304/316 Sleeve
- 304/316 Stainless Steel Frames and Blades or GMS/304/316 Sleeve

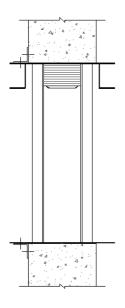
Frame	GI	GI	304	304	GI	316	316
Blade	GI	304	304	304	316	316	316
Sleeve	GI	GI	GI	304	GI	GI	316

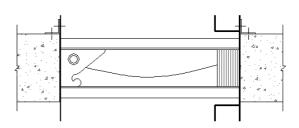
- Mounted with 68 degree C ETL
- Suitable install as vertical or horizontal at concrete masonry, drywall, brick wall, fire rating partition, door grilles, louver opening, kitchen window for food passing

Installation

Vertical Mounting

Horizontal Mounting





Fire Damper

Model: TFD-200

DAMPER CONSTRUCTION

U-Frame : 1 or 1.2mm Galvanized Mild Steel

Blade : 0.6 Galvanized Mild Steel Roll Formal Curtain Blade

Fusible Link: 68 degree C (155 degree F, UL listed)

Spring : Stainless Steel Closure Spring

(Optional for Vertical only)

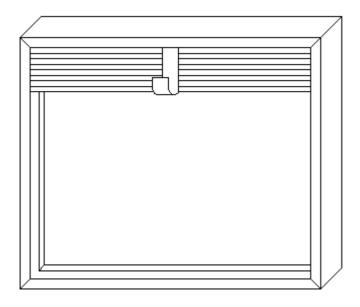
Minimum Size

100 x 100mm Larger Size 1100 x 1200mm

650 x 2000mm

Fire Rating

BS476 part 20 standard, up to 4 hours



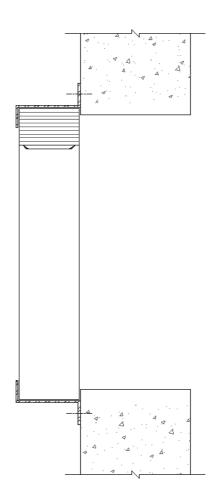
Optional Construction

- GMS Frame with GMS/304/316 Stainless Steel Blades or GMS/304/316 Sleeve
- 304/316 Stainless Steel Frames and Blades or GMS/304/316 Sleeve

Frame	GI	GI	304	GI	316	304	316
Blade	GI	304	304	316	316	316	304

- Mounted with 68 degree C ETL
- Suitable install as vertical or horizontal at concrete masonry, drywall, brick wall, fire rating partition, door grilles, louver opening, kitchen window for food passing

Installation

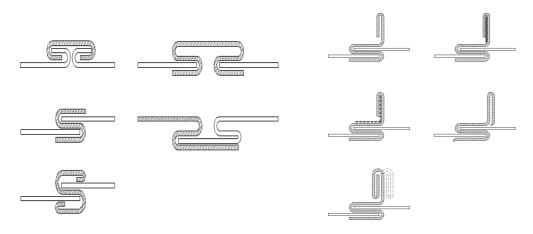


Fire Damper Duct /Sleeve Connections

Break-away Duct/ Sleeve Connections

One of the connections must be use between fire damper sleeve and air duct

"S" Slip Jointing



TANDA SINGLE SIDE ANGLE

TANDA SINGLE SIDE ANGLE is a tested installation method

Angle is fastened directly to the concrete or masonry or brick wall

/ stud through the fire rated board or floor

TFD-100

Vertical mounting

Fasteners for angle to wall

- angle minimum 40 x 40 x 1.5mm fastened to the concrete or masonry wall/ stud through the fire rated board with minimum 25mm overlap
- #10 (M5) minimum anchor bolts/ #10(M5) minimum self-drilling screws/ #10(M5) minimum self-tapping screws
- fasteners shall maximum 50mm from edge, maximum 300mm center to center
- minimum of 2 fasteners on each side

Angle to sleeve

- spot welds or minimum 13mm long tack welds/ #10(M5) minimum self-drilling screws/ #10(M5) minimum bolts and nuts/ #10(M5) minimum steel pop rivets/ #10(M5) minimum self-tapping screws
- fasteners shall maximum 50mm from edge, maximum 300mm center to center
- minimum of 2 fasteners on each side

<u>Horizontal mounting</u>

Fasteners for angle to floor

- angle maximum 40 x 75 x 1.5mm to concrete floor / stud through fire rated board with minimum 25mm overlap
- #10 (M5) minimum anchor bolts/#10(M5) minimum
 self-drilling screws/ #10(M5) minimum self-tapping screws
- fasteners shall maximum 50mm from edge, maximum 150mm center to center
- minimum of 2 fasteners on each side

Angle to sleeve

- spot welds or minimum 13mm long tack welds/ #10(M5) minimum self-drilling screws/ #10(M5) minimum bolts and nuts/ # 10(M5) minimum steel pop rivets/ #10(M5) minimum self-tapping screws
- fasteners shall maximum 50mm from edge, maximum 150mm center to center
- minimum of 2 fasteners on each side

TFD-200

Mounting Method

- Z-Channel minimum (30 x 85 x 30) x 3mm
- #10 (M5) minimum anchor bolts/spot welds or minimum 13mm long tack welds/ #10(M5) minimum self-drilling screws/
 #10(M5) minimum self-tapping screws
- fasteners shall maximum 50mm from edge, maximum 300mm center to center
- minimum of 2 fasteners on each side

Fire Damper & Sleeve

ATTACHING FIRE DAMPERS TO SLEEVES

Fire dampers must be attached to sleeve with all four sides of the damper frame

One of the methods of attachment for single/multiple sections fire damper/ sleeve shown below must be used

- spot welds or minimum 13mm long tack welds
- #10 (M5) minimum self-drilling screws
- #10 (M5) minimum bolts and nuts
- #10 (M5) minimum steel pop rivets
- #10 (M5) minimum self-tapping screws

Vertical mounting

Maximum of 50mm from the ends 300mm on centers Horizontal mounting

Maximum of 50mm from the ends 150mm on centers

- 消 防 處 牌 照 及 審 批 總 區 通 風 系 統 課 香港新界葵涌興盛路 86 號消防處 葵涌辦公大樓 3 字樓



FIRE SERVICES DEPARTMENT LICENSING & CERTIFICATION COMMAND

Ventilation Division

3/F, Fire Services Department Kwai Chung Office Building, No. 86 Hing Shing Road, Kwai Chung

本處檔號 Our Ref.:

FP(LC) 316/13

來函檔號 Your Ref .:

圖文傳真 Fax:

2367 3206

電 話 Tel. No.:

3961 5299

4 June 2020

Tanda International Company Ltd. B1, 4/F, 36 Mok Cheong Street Luen Ming Hing Factory Building Tokwawan, Kowloon Hong Kong (Attn.: Mr. Tatanlex Yim)

Dear Sir,

"TANDA" TFD Series Curtain Type Fire Damper

I refer to your letter of 26.3.2020 requesting our assessment on the captioned products.

We have no in principle objection to the use of "TANDA" TFD series curtain type fire dampers in ventilating systems, subject to compliance with Part XI of the FSD Circulation Letter No. 4/96 and the following details:

Manufacturer

: TANDA International Company Ltd, Hong Kong

Model

- : a) TFD-100
 - b) TFD-100F
 - c) TFD-200

Construction

a) TFD-100 series - curtain type completed with integral sleeve; the frame is made of four pieces of steel sheet joined at the corners by riveted overlaps. This is fitted centrally inside a duct and fastened together by rivets. The curtain comprises interlinked slats with the top one riveted to the frame. The damper can be of full galvanized steel, full stainless steel, galvanized steel frame with stainless steel curtain or stainless steel frame with galvanized steel curtain construction. The stainless steel can be of Grade 304 or 316.

/2...

- b) TFD-100F series curtain type completed with integral sleeve; the frame is made of four pieces of folded galvanised steel which were fixed together with interlocking tabs. This is fitted centrally inside a duct and fastened together by rivets. The curtain comprises interlinked slats with the top one riveted to the frame. The damper can be of full galvanized steel, full stainless steel, galvanized steel frame with stainless steel curtain or stainless steel frame with galvanized steel curtain construction. The stainless steel can be of Grade 304 or 316.
- TFD-200 series curtain type with frame formed from The curtain comprises interlinked slats C-section steel. with the top one riveted to the frame. The damper can be of full galvanized steel, full stainless steel, galvanized steel frame with stainless steel curtain or stainless steel frame with galvanized steel curtain construction. The stainless steel can be of Grade 304 or 316.
- Details of construction shall be as described in the test/ assessment reports.

Maximum Sizes

- TFD-100 series: : a)
 - i) Single section: 1100 mm (W) x 1200 mm (H) maximum
 - ii) Multi-Section (3 x 2 array): 2660 mm (W) x 2000 mm (H) maximum
-
b) TFD-100F series:
 - i) Single section: 1200 mm (W) x 1200 mm (H) / 1,000 mm (W) x 2,000 mm
 - ii) Multi-Section (3 x 2 array): 2600 mm (W) x 2000 mm (H) maximum

Micro Switch

- TFD-200 series: : c)
 - i) Single section: 650 mm (W) x 2000 mm (H) or 1100 mm (W) x 1200 mm (H)
 - ii) Multi-Section (3 x 2 array): 2660 mm (W) x 2000 mm (H) maximum

Fusible Link

Relay & Control Corp., model RCM403 micro switch Model JS155°F by Globe Technologies Corp., UL listed by certificate number: 20130624-R1431 and rated at a temperature not exceeding 69°C

Installation Method: TFD-100/TFD-100F/TFD-200 series: vertical or horizontal mounted.

> Breakaway joints should be provided in accordance with the requirements of UL555 in the ductwork connected to the damper. For there are ductwork connections on both sides of the damper, breakaway joints should be provided on both sides except for the ductwork that are constructed of fire rated materials or installed inside a fire rated shaft/pipe duct.

Test/ Assessment Reports

: By BRANZ:

- a) Test report No. FR5687 of 30.3.2017
- b) Test report No. FR6170 of 11.5.2018
- c) Assessment report No. FAR2577 Issue 2 of 20.4.2015
- d) Assessment report No. FAR2570 Issue 2 of 19.3.2015
- e) Assessment report No. FAR3595 Issue 2 of 19.3.2015f) Assessment report No. FR 3437 Issue 2 of 19.3.2015
- g) Assessment report No. FC11087-001 of 26.11.2019
- h) Assessment report No. FC10271-001 of 12.11.2019
- i) Assessment report No. FR 3400 Issue 2 of 19.3.2015

By RED:

a) Assessment report No. R11E08 Issue 1 of 2.6.2011

Test Standards and Results

: BS 476: Part 20: 1987 Integrity 240 minutes

Quality Assurance Scheme : ISO 9001:2008, Certification No. HK14/00182 of 20.8.2014 issued by SGS, UK Ltd.

Remarks

- : a) A label to indicate the manufacturer, model, standards and fire resistant rating achieved should be fixed to the damper.
 - b) The fusible link shall remain listed in the UL Certification Directory and approved by this Department.
 - c) The micro switch is solely for monitoring purpose and the installation of micro switch and the associated wiring work shall not impede in any way the complete closure/opening of the damper.
 - d) This letter supersedes our previous one of the same series dated 15.4.2016 on the same products.
 - e) Test reports No. R11E08 Issue 1 of 2.6.2011 by RED and FR 3400 Issue 1 of 19.3.2005 by BRANZ are over 10 years. According to FSD Circular letter No. 1/2007, test reports of an accredited laboratory should not be over 10 years. It is to remind that appropriate valid test reports fulfilling the above requirement instead of assessment reports should be submitted to support the next assessment.
 - f) This letter is subject to review by March 2025.

Yours faithfully,

(Stanley CHOW) for Director of Fire Services

SC/HN

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