



SUBMITTAL DATA

For

Fire Dampers

Project Z

London ON

SUBMISSION DATE

1/7/2022

REP


Optimal DeltaT Inc.

ENGINEER

Technicair

CONTRACTOR

James Mechanical

 OPTIMAL DELTAT	Project	Project Z
	Location	London ON
	Date	1/7/2022
	Submitted By	Optimal DeltaT Inc.
SUMMARY	Engineer	Technicair
	Contractor	Project Z

<i>Fire Dampers</i>							
QTY	Tag	Size	V/H	Dynamic/Static	Material	Part Number	Manufacturer
3	FD	8x6	Vertical	Dynamic	Steel	D120	Nailor
1	FD	8x8	Horizontal	Dynamic	Stainless Steel	D120SS	Nailor



DYNAMIC CURTAIN TYPE FIRE DAMPER

1 1/2 HR. LABEL • VERT. OR HORIZ.
FOR USE IN DYNAMIC OR STATIC SYSTEMS
MODEL: D0120 (TYPE B)



QUALIFICATIONS:

- **UL 555 & CAN/ULC-S112 CLASSIFIED DYNAMIC FIRE DAMPER.**
1 1/2 hr. label (File # R9492).
- **Meets all the requirements of UL and NFPA 80, 90A and 101 for fire dampers in dynamic HVAC systems, as well as IBC and NBC (Canada) Building Code requirements.**
- **City of New York Board of Standards and Appeals. Cal. No. 460-88-SA.**
- **California State Fire Marshal: Fire Damper Listing No. 3225-0935:0113.**
- **Maximum velocity: 4000 fpm @ 4" w.g. (20 m/s @ 1 kPa).**

Model D0120 curtain fire damper is UL approved for use where local building codes require the protection of HVAC ductwork penetrations in walls, partitions or floors that have a fire resistance rating of up to 2 hours. The D0120 is classified for use in dynamic "fans on" systems where the HVAC system remains operative in the event of a fire. Damper closure under airflow is assured. Type B fire dampers place the curtain blade pack out of the airstream for higher free area and reduced pressure drop.

STANDARD CONSTRUCTION:

- Frame:** 4 1/4" (108) wide, 22 ga. (0.85) roll-formed G60 galvanized steel.
- Blades:** Curtain type interlocking blades, 22 ga. (0.85) roll-formed G60 galvanized steel.
- Enclosure:** 22 ga. (0.85) galvanized steel.
- Fusible Link:** 165°F (74°C) standard. UL Listed. 212°F (100°C) available.
- Blade Closure:** Stainless steel closure springs and galvanized steel locking ramps.

Sizes (Duct W x H):

Velocity/ Pressure Rating	Single Section				Multiple Section	
	Minimum		Maximum		Maximum	
	Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal
24	6" x 4" (152 x 102)	6" x 4" (152 x 102)	36" x 32" (914 x 813)	24" x 21" (610 x 533)	① 72" x 21" or 36" x 45" (1829 x 533 or 914 x 1143)	—
34, 44	6" x 4" (152 x 102)	—	24" x 21" (610 x 533)	—	—	—

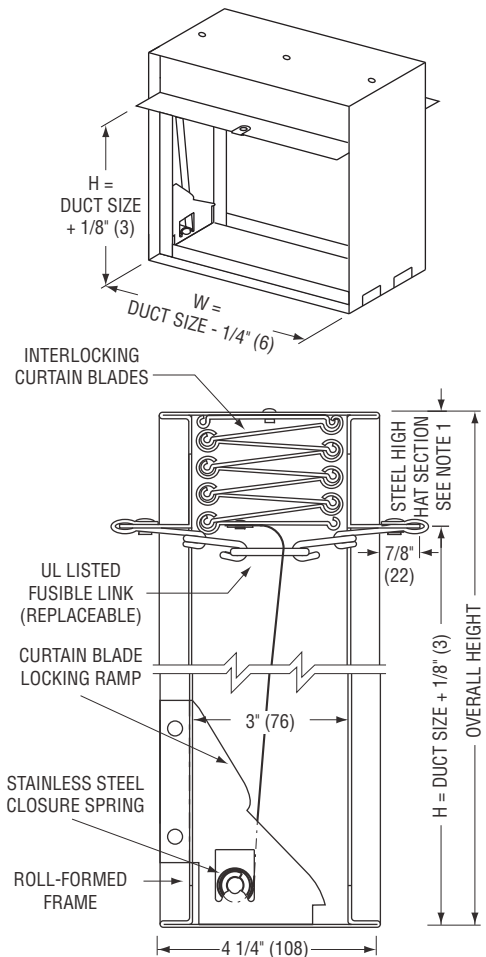
① Individual sections of multiple section assembly not to exceed 24" (610) in width, up to 48" (1219) wide. Assemblies larger than 48" (1219) in width will be made up of individual sections not to exceed 18" (457) wide.

OPTIONS:

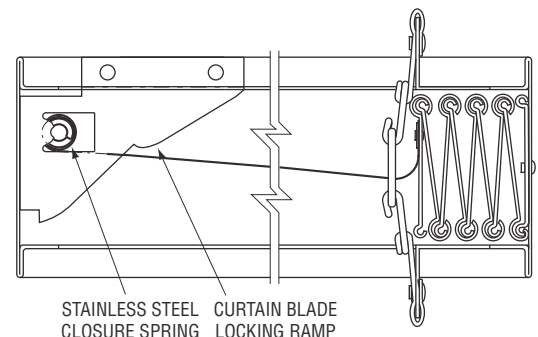
- ☐ Non-standard temperature fusible link. Specify _____.
- ☐ Factory Sleeve. Available in 10 (3.5) through 22 ga. (0.85) galvanized steel and in lengths required for application.
Specify: _____ length. _____ ga.
- ☐ **PT Pull Tab Release.** Permits simple reset of horizontal damper when access door is located below damper. (See dwg. ACC-PTR for details).

DYNAMIC VELOCITY/PRESSURE RATING:

- ☐ **24** 2000 fpm @ 4" w.g. (Standard)
- ☐ **34** 3000 fpm @ 4" w.g. } (Optional)
- ☐ **44** 4000 fpm @ 4" w.g. }



VERTICAL MOUNT



HORIZONTAL MOUNT

NOTES:

1. See sizing chart for relationship of duct size and damper size. Refer to drawing D0100-MSSC.

For installation instructions, see IOM-FDINST.
Dimensions are in inches (mm).

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

DATE

B SERIES

SUPERSEDES

DRAWING NO.

3 - 28 - 18

FD

4 - 28 - 14

D0100-2



**STAINLESS STEEL DYNAMIC CURTAIN TYPE
FIRE DAMPER**
1 1/2 HR. LABEL • VERTICAL
FOR USE IN DYNAMIC OR STATIC SYSTEMS
MODEL: D0120SS (TYPE B)



QUALIFICATIONS:

- **UL 555 & CAN/ULC-S112 CLASSIFIED DYNAMIC FIRE DAMPER.**
1 1/2 hr. label (File # R9492).
- **Meets all the requirements of UL and NFPA 80, 90A and 101 for fire dampers in dynamic HVAC systems, as well as IBC and NBC (Canada) Building Code requirements.**
- **City of New York Board of Standards and Appeals. Cal. No. 460-88-SA.**
- **California State Fire Marshal: Fire Damper Listing No. 3225-0935:0113.**
- **Maximum velocity: 2000 fpm @ 4" w.g. (10 m/s @ 1 kPa).**

Model D0120SS stainless steel curtain fire damper is UL approved for use where local building codes require the protection of HVAC ductwork penetrations in walls or partitions that have a fire resistance rating of up to 2 hours. The D0120SS is classified for use in dynamic "fans on" systems where the HVAC system remains operative in the event of a fire. Damper closure under airflow is assured. Type B fire dampers place the curtain blade pack out of the airstream for higher free area and reduced pressure drop.

STANDARD CONSTRUCTION:

- Frame:** 4 7/8" (124) wide, 22 ga. (0.79) roll-formed Type 304 stainless steel.
- Blades:** Curtain type interlocking blades, 22 ga. (0.79) roll-formed Type 304 stainless steel.
- Enclosure:** 22 ga. (0.79) stainless steel.
- Fusible Link:** 165°F (74°C) standard. UL Listed.
212°F (100°C) available.
- Blade Closure:** Stainless steel closure springs and stainless steel locking ramps.

Sizes (Duct W x H):

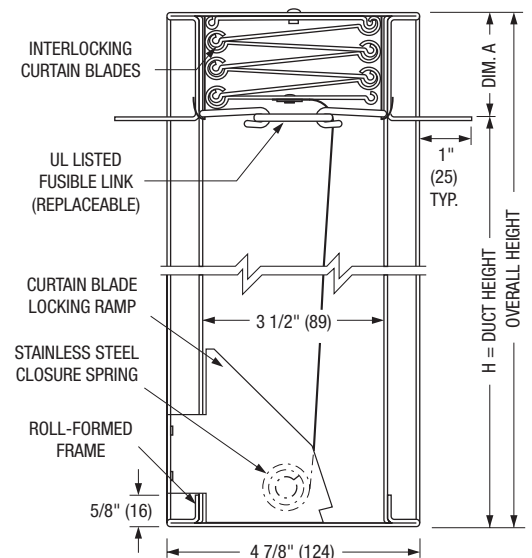
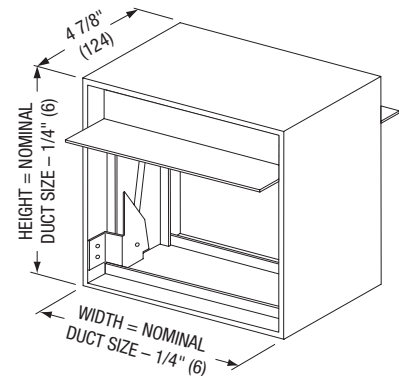
Velocity/ Pressure Rating	Single Section	
	Minimum	Maximum
	Vertical	Vertical
24	4" x 4" (102 x 102)	24" x 21" (610 x 533)

OPTIONS:

- ☐ 316 Type 316 stainless steel frame and blades.
- ☐ Non-standard temperature fusible link. Specify _____.
- ☐ Factory Sleeve. Available in 10 (3.5) through 18 ga. (1.27) stainless steel and in lengths required for application.
Specify: _____ length. _____ ga.

DYNAMIC VELOCITY/PRESSURE RATING:

- ☐ **24** 2000 fpm @ 4" w.g. (Standard)



MODEL D0120SS – VERTICAL MOUNT

Duct Height H	Dim. A
4" thru 15" (102 thru 381)	2" (51)
16" thru 24" (406 thru 610)	3" (76)

SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

For installation instructions, see IOM-FDINST.
Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
10 - 9 - 20	FD	10 - 22 - 18	D0100SS-2