

Dena Zwarich

From: Matt Morris <matt@morriseng.ca>
Sent: Friday, September 4, 2020 2:29 PM
To: gaines@bellnet.ca
Cc: Keith Oster; Annie Griffiths; Dena Zwarich
Subject: FW: Carleton Place Arena - Mechanical Shop Drawings
Attachments: 2 - CP Arena - G&D for Review - Aug 18, 2020.pdf; 3 - CP Arena - Wall Caps for Review - Aug 18, 2020.pdf; 4 - CP Arena - Kitchen Exhaust System for Review - Aug 18, 2020.pdf; 5 - CP Arena - Exhaust Fans for Review - Aug 18, 2020.pdf; 6 - CP Arena - Fire Dampers for Review - Aug 18, 2020.pdf

SUBMITTAL / SHOP DRAWING REVIEW

This submittal/shop drawing review is for general conformance with drawings and specifications only.

Contractor is completely responsible for all dimensions, details, quantities, supply, installation and construction.

This review does not in any way relieve the Contractor of responsibility for compliance with the Contract Documents.

| | |
|------------|--|
| Client: | Larry Gaines Architect |
| Project: | Carleton Place Arena |
| Submittal: | Mechanical |
| Notes: | <p>REGISTERS GRILLES & DIFFUSERS: - <i>Alternate product</i> - <i>No comment</i></p> <p>WALL CAPS: - <i>No comment</i></p> <p>KITCHEN EXHAUST SYSTEM: - <i>No comment</i></p> <p>EXHAUST FANS: - <i>No comment</i></p> <p>FIRE DAMPERS: - <i>No comment</i></p> |

MORRIS ENGINEERING LTD.

68 William Street, Suite 200, Brockville, Ontario
(613)499-2077

SUBMITTAL

Job: Carleton Place Arena

Spec Section No: 15

Submittal No: 6

Revision No: 0

Sent Date: August 18, 2020

Spec Section Title: Mechanical Fire Protection

Submittal Title: Fire Dampers

Contractor:

Climate Works
Rosalyn Grusnick - 613-315-4009

Contractor's Stamp


ClimateWorks
Heating, Cooling & Plumbing
Reviewed
2020-08-18 10:24:38 AM

Architect:

Architect's Stamp

Engineer:

Engineer's Stamp



Project: Carleton Place Arena

Location: 75 Neelin Street

Engineer: Eastern Engineering

Contractor: Climate Works

Date: August 17, 2020

Submitted By: Heather Turcotte, C.E.T. Specification

Section: M001

Product: Alumavent Dynamic Fire Dampers

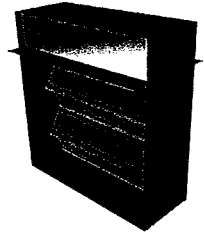
Revision: 0

- UL 555 & CAN/ULC-S112 Classified Dynamic Fire Damper, 1 ½ Hr. Label (File # R25565).
- NFPA 80, 90A & 101 compliant.
- NBC and IBC building codes compliant.

Contractor to confirm sizes and quantities.

5100D SERIES

DYNAMIC 1½ HOUR LABEL FIRE DAMPERS
VERTICAL & HORIZONTAL MOUNT
51BVD & 51BHD • TYPE B



STANDARD CONSTRUCTION

DEPTH: 4 ¼" (108).

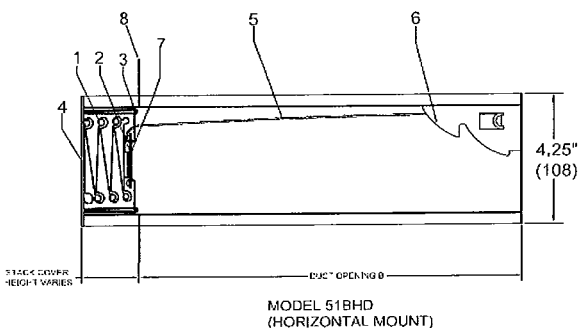
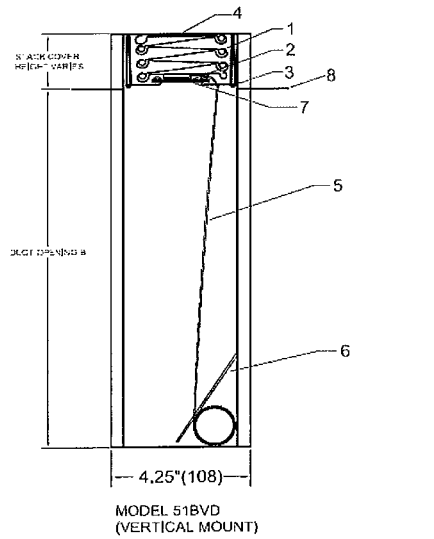
FRAME: Roll formed 20 Ga. galvanized steel with hemmed edge.

BLADE: Roll formed 22 Ga. galvanized steel. Interlocking curtain type blades.

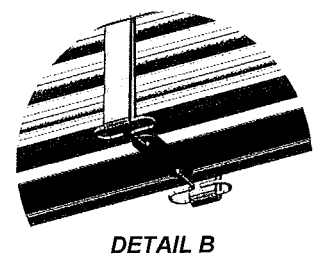
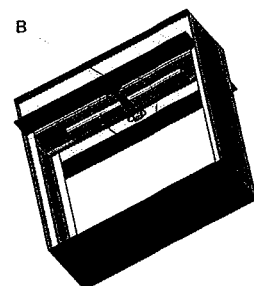
FUSIBLE LINK: 165°F (74 C).

OPTIONAL CONSTRUCTION

- Factory supplied Sleeve — 22, 20, 18 or 16 GA. *Sleeve length required
- 212°F (100 C) Fusible Link [max. size 48" x 44" (1219 x 1118).
- 1 ½" x 1 ½" mounting angles



| FIRE DAMPER COMPONENTS | |
|--------------------------|--------------------------|
| 1. Blade | 5. Constant Force Spring |
| 2. Fusible Link Assembly | 6. Lock Ramp |
| 3. Link Strap | 7. Blade Stiffener |
| 4. Frame | 8. Blade Stack Cover |



DYNAMIC CLOSURE RATINGS:

- 2000 fpm (10.2 m/s) on all sizes, vertical or horizontal mount.
- 5000 fpm (25.4 m/s) vertical mount only, up to 24" x 20" (610 x 508) duct size.
- 4" w.g. (1kPa) maximum pressure on all sizes.

MAINTENANCE RECOMMENDATIONS:

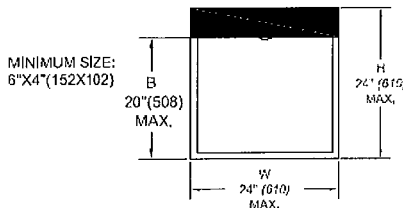
NFPA 80 advises that fire dampers be inspected and tested 1 year after installation, then every 4 years minimum (6 years for hospitals). More frequent inspections may be required due to system use and air conditions, or applicable local codes.

NOTES:

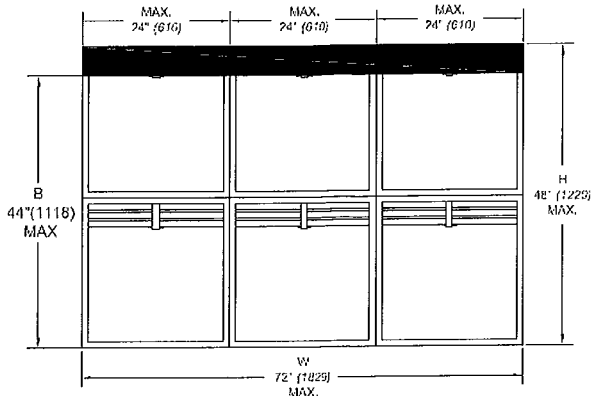
Dampers are furnished approximately ¼" (6) smaller than the given duct dimensions. These dynamic dampers are UL/ULC approved for use in HVAC systems where the fans remain on in the event of fire. 1½ hr. labeled fire dampers are suitable for use in fire separations with a fire resistance rating of 2 hours or less. **Fire dampers must be installed in accordance with manufacturer's instructions. Refer to Alumavent installation instructions for details.**

Dimensions are shown in inches (mm).

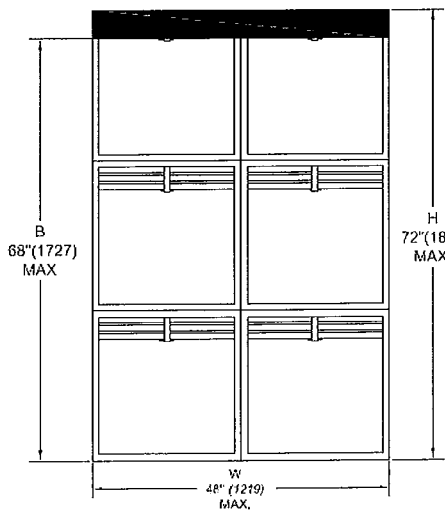
SINGLE SECTION DAMPER
-VERTICAL OR HORIZONTAL MOUNT



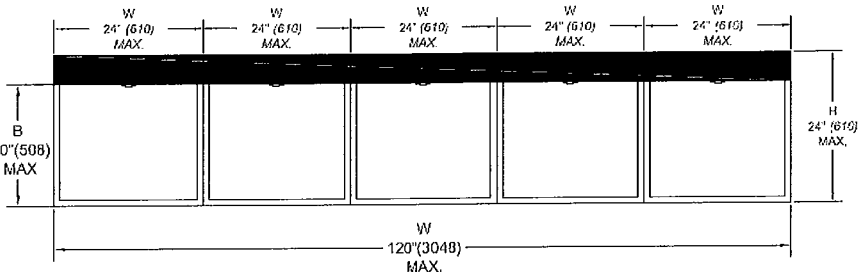
MULTIPLE SECTION DAMPER
-VERTICAL MOUNT ONLY



MULTIPLE SECTION DAMPER
-VERTICAL MOUNT ONLY



MULTIPLE SECTION DAMPER
-VERTICAL MOUNT ONLY



NOTE: SEE TYPE B DYNAMIC SIZING CHART [SC51BD](#) FOR OVERALL DAMPER DIMENSIONS.

| REF. # | QTY. | DUCT WIDTH (W) | DUCT HEIGHT (H) | MOUNT (V/H) | ACCESSORIES |
|--------|------|----------------|-----------------|-------------|-------------|
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*DAMPER WILL BE MANUFACTURED APPROXIMATELY ¼" (6) SMALLER THAN GIVEN DUCT DIMENSIONS.

| | | | |
|----------------------|--|------------------------|--|
| PROJECT NAME: | | ENGINEER: | |
| CONTRACTOR: | | SUBMITTAL DATE: | |

