APPLICATION

Vertical installation of fire and combination fire and smoke dampers in a fire resistant ventilation duct, can be accomplished when installed as shown.

NOTES

1. The damper sleeve must slip inside the fire resistant duct spool. Damper sleeve assembly will be 1/4” min., 1/2” max., smaller than duct spool size.

2. Damper to be supplied with factory mounted sleeve. Sleeve gage shall be minimum of 16 (1.6) gage for dampers up to 36”w x 24”h (914 x 610) and 14 (2) gage for dampers exceeding 36”w x 24”h (914 x 610).

3. Mounting Angles:
   1 1/2” x 1 1/2” x 1/4” (38 x 38 x 6) to 24” (610)
   2” x 2” x 1/4” (51 x 51 x 6) over 24” (610) up to 32” (813)
   2 1/2” x 2 1/2” x 1/4” (64 x 64 x 6) over 32” (813) up to 40” (1016)
   3” x 3” x 1/4” (76 x 76 x 6) above 40” (1016)

4. Mounting Angle Fasteners:
   #10 (4) bolts or screws
   3/16” (4) steel rivets
   1/2” (13) long welds

5. Mounting Angle Fasteners Spacing:
   Mounting angles to damper sleeve, space fasteners on 6” (152) on center.
   Mounting angle to spool flange, space fasteners on 12” (305) on center.
   Minimum 2 fasteners per side.

6. Hanger Rods:
   3/8” (10) threaded rod anchored to the floor above and attached to the mounting angles through hole in the angles and secured with hex nut and washer (Items #5 and 6). Anchor to masonry per assembly No. V-5.

7. Duct to Damper Sleeve Connection:
   See the fire damper or the combination fire/smoke damper basic installation instruction for breakaway, flanged or non-breakaway connections.

INSTALLATION SUPPLEMENTS

Refer to the appropriate Ruskin installation instruction supplements for additional information or special requirements:

- Optional Sealant of Dampers in Fire Rated Wall or Floor Openings
- Extension of Fire and Combination Fire and Smoke Damper Sleeves
- Drivemate No. 14880 Breakaway Connection
- Flanged System Breakaway connections
- TS150 FireStat for “Reopenable” Combination Fire and Smoke Dampers
- SP100 Switch Package
- EFL Electric Resettable “Fuse” Link
- EFL/SP100 Electric Resettable “Fuse” Link
- PFL Pneumatic Fuse Link
- DSDF Flow Rated Duct Smoke Detector
- DSDN No-Flow Rated Duct Smoke Detector

Dimensions shown in parentheses ( ) indicate millimeters.
<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1.</td>
<td>Fire Resistant Ventilation Duct (UL Category Control No. HNLJ. Assembly No. V-5).</td>
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<tr>
<td>2.</td>
<td>Fire Damper or Combination Fire/Smoke Damper</td>
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<tr>
<td>3.</td>
<td>Hanger Rods in Accordance with Assembly No. V-5.</td>
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<tr>
<td>4.</td>
<td>Mounting Angles (See Note #3)</td>
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<td>5.</td>
<td>3/8&quot; (10) Hex Nuts</td>
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<tr>
<td>6.</td>
<td>3/8&quot; (10) Flat Washer</td>
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<tr>
<td>7.</td>
<td>Mounting Angle Fasteners (See Note #4)</td>
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![Diagram](image-url)