

COMBINATION FIRE/SMOKE DAMPERS

| MODEL | AMCA RATING | UL HOUR RATING | LEAKAGE CLASS | BLADE TYPE | MATERIAL | MAX VELOCITY (FPM) | | MAX PRESSURE (in.wg) | MAX ASSEMBLY TEMP (°F) |
|---|-------------|----------------|---------------|--------------|----------|--------------------|-------|----------------------|------------------------|
| | | | | | | VERT | HORIZ | | |
| STANDARD | | | | | | | | | |
| FSD-141 | AIR | 1½ | 1 | TRIPLE-V | GALV | 2000 | 2000 | 4 | 350 |
| FSD-142 | AIR | 1½ | 2 | TRIPLE-V | GALV/SS | 2000 | 2000 | 4 | 350 |
| FSD-143 | – | 1½ | 3 | TRIPLE-V | GALV/SS | 2000 | 2000 | 4 | 350 |
| FSD-151 | AIR | 1½ | 1 | AIRFOIL | GALV | 4000 | 4000 | 6** | 350 |
| FSD-152 | – | 1½ | 2 | AIRFOIL | GALV | 4000 | 4000 | 6** | 350 |
| FSD-151-V | – | 1½ | 1 | VERT AIRFOIL | GALV | 2000 | – | 4 | 250 |
| FSD-152-V | – | 1½ | 2 | VERT AIRFOIL | GALV | 4000 | – | 4 | 250 |
| FSD-341 | – | 3 | 1 | TRIPLE-V | GALV | 2000 | 2000 | 4 | 350 |
| FSD-342 | – | 3 | 2 | TRIPLE-V | GALV/SS | 2000 | 2000 | 4 | 350 |
| FSD-343 | – | 3 | 3 | TRIPLE-V | GALV/SS | 2000 | 2000 | 4 | 350 |
| FSD-351 | – | 3 | 1 | AIRFOIL | GALV | 4000 | 4000 | 6** | 350 |
| FSD-352 | – | 3 | 2 | AIRFOIL | GALV | 4000 | 4000 | 6** | 350 |
| ACTUATOR IN THE AIRSTREAM – OUT-OF-PARTITION | | | | | | | | | |
| FSD-141-OP | – | 1½ | 1 | TRIPLE-V | GALV | 2000 | 2000 | 4 | 350 |
| FSD-142-OP | – | 1½ | 2 | TRIPLE-V | GALV | 2000 | 2000 | 4 | 350 |
| FSD-143-OP | – | 1½ | 3 | TRIPLE-V | GALV | 2000 | 2000 | 4 | 350 |
| FSD-151-OP | – | 1½ | 1 | AIRFOIL | GALV | 4000 | 4000 | 6** | 350 |
| FSD-152-OP | – | 1½ | 2 | AIRFOIL | GALV | 4000 | 4000 | 6** | 350 |
| FSD-171-OP | – | 1½ | 1 | TRIPLE-V | GALV | 2000 | 2000 | 4 | 350 |
| FSD-172-OP | – | 1½ | 2 | TRIPLE-V | GALV | 2000 | 2000 | 4 | 350 |
| SIDE PANEL – FRONT/ACCESS | | | | | | | | | |
| FSD-141-SP | – | 1½ | 1 | TRIPLE-V | GALV | 2000 | 2000 | 4 | 350 |
| FSD-142-SP | – | 1½ | 2 | TRIPLE-V | GALV | 2000 | 2000 | 4 | 350 |
| FSD-151-SP | – | 1½ | 1 | AIRFOIL | GALV | 4000 | 4000 | 6** | 350 |
| FSD-152-SP | – | 1½ | 2 | AIRFOIL | GALV | 4000 | 4000 | 6** | 350 |
| TRUE ROUND | | | | | | | | | |
| FSD-125R | – | 1½ | 1 | ROUND | GALV/SS | 3000 | 3000 | 4 | 350 |
| TUNNEL TYPE CORRIDOR CEILING | | | | | | | | | |
| FSD-171 | – | 1½* | 1 | TRIPLE-V | GALV | 2000 | 2000 | 4 | 350 |
| FSD-172 | – | 1½* | 2 | TRIPLE-V | GALV | 2000 | 2000 | 4 | 350 |
| FSD-171-OP | – | 1½* | 1 | TRIPLE-V | GALV | 2000 | 2000 | 4 | 350 |
| FSD-172-OP | – | 1½* | 2 | TRIPLE-V | GALV | 2000 | 2000 | 4 | 350 |

* Tunnel Type Corridor ceiling installation has 1 hr rating | **4 in.wg. below 8" in height

SMOKE DAMPERS

| MODEL | UL555S LEAKAGE CLASS | BLADE TYPE | UL HOUR RATING | | MATERIAL | MAX DYNAMIC CLOSURE VELOCITY (FPM) | | MAX PRESSURE (in.wg) | MAX TEMP (°F) |
|--------------------------------|----------------------|--------------|----------------|------|----------|------------------------------------|--------------|----------------------|---------------|
| | | | CEILING | FIRE | | VERT WALLS | HORIZ FLOORS | | |
| STANDARD | | | | | | | | | |
| SD-141 | 1 | TRIPLE-V | – | – | GALV | 2000 | 2000 | 4 | 350 |
| SD-142 | 2 | TRIPLE-V | – | – | GALV/SS | 2000 | 2000 | 4 | 350 |
| SD-143 | 3 | TRIPLE-V | – | – | GALV/SS | 2000 | 2000 | 4 | 350 |
| SD-151 | 1 | AIRFOIL | – | – | GALV | 4000 | 4000 | 6** | 350 |
| SD-152 | 2 | AIRFOIL | – | – | GALV | 4000 | 4000 | 6** | 350 |
| SD-151-V | 1 | VERT AIRFOIL | – | – | GALV | 2000 | – | 4 | 250 |
| SD-152-V | 2 | VERT AIRFOIL | – | – | GALV | 4000 | – | 4 | 250 |
| TRUE ROUND | | | | | | | | | |
| SD-25R | 1 | ROUND | – | – | GALV/SS | 3000 | 3000 | 4 | 350 |
| CEILING RADIATION/SMOKE | | | | | | | | | |
| CFS-171 | 1 | TRIPLE-V | 3 | 1½ | GALV | – | 2000 | 4 | 350 |
| CFS-172 | 2 | TRIPLE-V | 3 | 1½ | GALV | – | 2000 | 4 | 350 |

**4 in.wg. below 8" in height

CEILING RADIATION DAMPERS

| MODEL | UL HOUR RATING | BLADE TYPE | MATERIAL |
|---------------------------|----------------|---|----------|
| STANDARD | | | |
| CFD-15 | 3 | BUTTERFLY | GALV |
| CFD-15-LP | 3 | LOW PROFILE BUTTERFLY | GALV |
| CFD-15-SB | 3 | SINGLE BLADE BUTTERFLY | GALV |
| CFD-20 | 3 | FOLDED CURTAIN | GALV |
| TRUE ROUND | | | |
| CFD-15R | 3 | ROUND BUTTERFLY | GALV |
| WOOD TRUSS SYSTEMS | | | |
| CFD-521 | 1 | BUTTERFLY | GALV |
| CFD-521-BT | 1 | BUTTERFLY – R-6.3 OR 8.0 INSULATED OUTLET BOX | GALV |
| CFD-521-IP | 1 | BUTTERFLY – R-6.5 OR 8.7 INSULATED DUCT BOARD OUTLET BOX | GALV |
| CFD-521-NP | 1 | BUTTERFLY – FIELD INSTALLED INSULATED DUCT BOARD OUTLET BOX | GALV |

FIRE DAMPERS

| MODEL | STATIC DYNAMIC | UL HOUR RATING | CLASS | BLADE TYPE | MATERIAL | MAX DYNAMIC CLOSURE VELOCITY (FPM) | | MAX PRESSURE (in.wg) |
|--|----------------|----------------|-------|------------------|----------|------------------------------------|--------------|----------------------|
| | | | | | | VERT WALLS | HORIZ FLOORS | |
| STANDARD | | | | | | | | |
| FD-140 | DYNAMIC | 1½ | – | TRIPLE-V | GALV/SS | 4000* | 4000* | 6 |
| FD-150 | DYNAMIC | 1½ | – | AIRFOIL | GALV | 4000* | 4000* | 6*** |
| FD-340 | DYNAMIC | 3 | – | TRIPLE-V | GALV/SS | 4000* | – | 6 |
| FD-350 | DYNAMIC | 3 | – | AIRFOIL | GALV | 4000* | 4000* | 6** |
| CURTAIN STYLE BLADES | | | | | | | | |
| VFD-10-A | STATIC | 1½ | A | CURTAIN | GALV/SS | – | – | – |
| VFD-10-B | STATIC | 1½ | B | CURTAIN | GALV/SS | – | – | – |
| VFD-10-C | STATIC | 1½ | C | CURTAIN | GALV/SS | – | – | – |
| VFD-10D-A | DYNAMIC | 1½ | A | CURTAIN | GALV/SS | 4000 | 4000 | 4 |
| VFD-10D-B | DYNAMIC | 1½ | B | CURTAIN | GALV/SS | 4000 | 4000 | 4 |
| VFD-10D-C | DYNAMIC | 1½ | C | CURTAIN | GALV/SS | 4000 | 4000 | 4 |
| VFD-30-A | STATIC | 3 | A | CURTAIN | GALV/SS | – | – | – |
| VFD-30-B | STATIC | 3 | B | CURTAIN | GALV/SS | – | – | – |
| VFD-30-C | STATIC | 3 | C | CURTAIN | GALV/SS | – | – | – |
| VFD-30D-A | DYNAMIC | 3 | A | CURTAIN | GALV/SS | 4000 | – | 4 |
| VFD-30D-B | DYNAMIC | 3 | B | CURTAIN | GALV/SS | 4000 | – | 4 |
| VFD-30D-C | DYNAMIC | 3 | C | CURTAIN | GALV/SS | 4000 | – | 4 |
| CURTAIN-INTEGRAL MOUNTING ANGLE | | | | | | | | |
| VFD-10-IMA | STATIC | 1½ | A | CURTAIN | GALV | – | – | – |
| VFD-10-IMB | STATIC | 1½ | B | CURTAIN | GALV | – | – | – |
| VFD-10D-IMA | DYNAMIC | 1½ | A | CURTAIN | GALV | 4000 | – | 4 |
| VFD-10D-IMB | DYNAMIC | 1½ | B | CURTAIN | GALV | 4000 | – | 4 |
| OUT-OF-PARTITION | | | | | | | | |
| FD-140-OP | DYNAMIC | 1½ | – | TRIPLE-V | GALV/SS | 4000 | 4000 | 6 |
| FD-150-OP | DYNAMIC | 1½ | – | AIRFOIL | GALV | 4000 | 4000 | 6** |
| VFD-10-OP | STATIC | 1½ | – | CURTAIN | GALV | – | – | – |
| VFD-10D-OP | DYNAMIC | 1½ | – | CURTAIN | GALV | 4000 | 4000 | 4 |
| TRUE ROUND | | | | | | | | |
| FD-125R | DYNAMIC | 1½ | – | ROUND | GALV/SS | 2000 | 2000 | 4 |
| VFD-15R | STATIC | 1½ | – | ROUND | GALV | – | – | – |
| VFD-35R | STATIC | 3 | – | ROUND | GALV | – | – | – |
| THINLINE | | | | | | | | |
| VFD-10-TLA | STATIC | 1½ | A | THINLINE CURTAIN | GALV | – | – | – |
| VFD-10-TLB | STATIC | 1½ | B | THINLINE CURTAIN | GALV | – | – | – |
| VFD-10D-TLA | DYNAMIC | 1½ | A | THINLINE CURTAIN | GALV | 4000* | – | 4 |
| VFD-10D-TLB | DYNAMIC | 1½ | B | THINLINE CURTAIN | GALV | 4000* | – | 4 |

*2000 FPM on multi-section | **4 in.wg. below 8" in height | ***4 in.wg. when sizes exceed 64"×48" or 32"×96"