



Young Regulator Co.

7100 Krick Rd • Walton Hills, OH 44146

P: 440-232-9700 • F: 440-232-8266

www.youngregulator.com

Submit 3100BOX – 1-10

Model 3100BOX

*Rectangular Opposed Blade Damper
In a Sidewall Fitting, Power Open - Spring Closed,
No Time Delay*

Application and Design

The Young Regulator 3100BOX is an exhaust air automatic damper that opens and closes by operation of a light switch, motion detector, etc; that is located in the room being exhausted. It consists of a rectangular opposed blade damper behind the grill with a round discharge outlet.

Unlike traditional constant volume exhaust systems, the quantity of air being exhausted from the building is dynamic, determined by the number of automatic dampers that are open. The Young Regulator 3100BOX operates only when switched on. When it is not being used, there is minimal air being exhausted from it.

For relief, a bypass loop of outdoor air can be installed. Optionally, a variable speed fan controlled by a pressure sensor can be used.



STANDARD CONSTRUCTION	
Sidewall Fitting	24 ga. Galvanized Steel
Damper	.050 Aluminum Extrusions
SIZE INFORMATION	
Maximum Size	16"W x 12"H
Minimum Size	8"W x 6"H
Ductwork Connection	4", 5", 6" Round or Nominal Duct Opening
ACTUATOR	
Special windings and heavy-duty steel gearing provide for long life and easy spring return operation. Cross pin on motor shaft provides positive direct drive to damper without a coupling or setscrews and allows for quick and easy motor change.	

Volts	120V
Watts	6
VA	10
Timing	15 Seconds Open 5 Seconds Close
Torque	35 in. oz
Motor Enclosure	Aluminum
OPTIONS	
120V Motor with Time Delay	24V Motors without Time Delay

QUANTITY	WIDE	HIGH	NOTES

PROJECT	LOCATION
CONTRACTOR	DESIGN SPECIFIER



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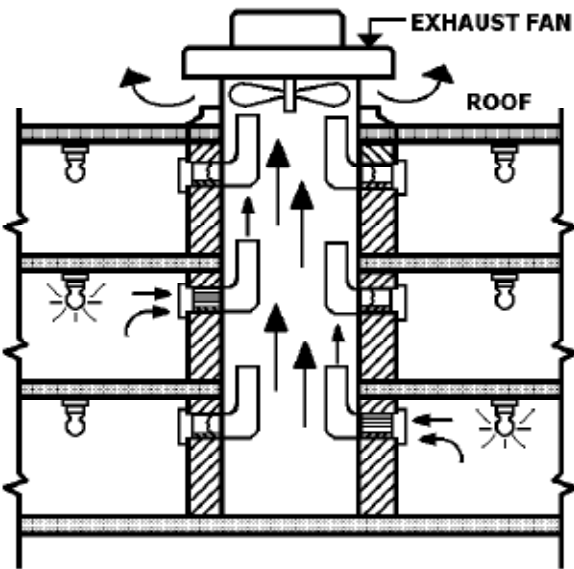
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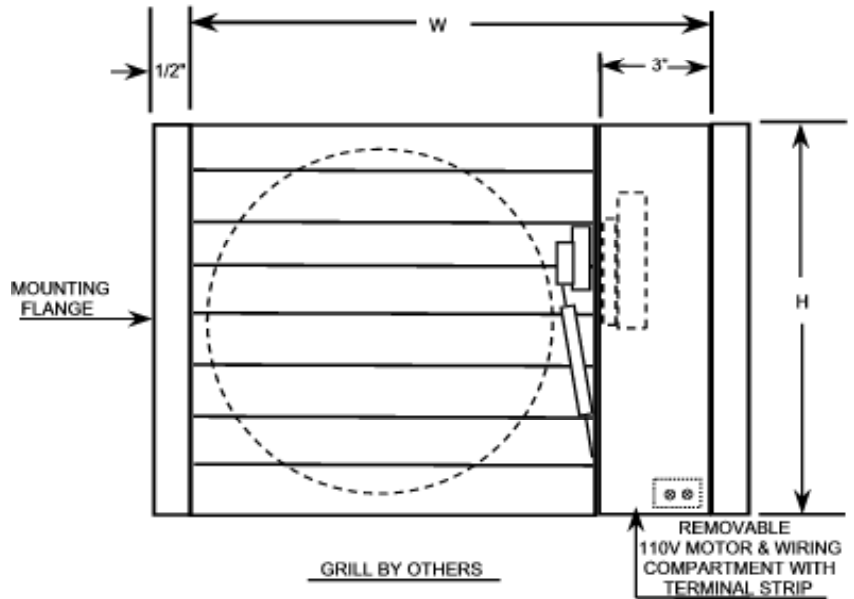
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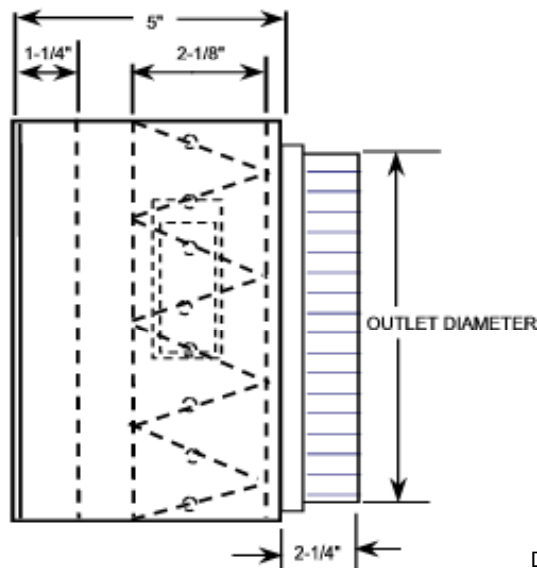
FRONT VIEW



TYPICAL APPLICATION



SIDE VIEW



In occupied rooms, the damper opens to permit the rooftop exhaust fan to exhaust stale air. The damper remains open until the light switch is turned off.

In unoccupied rooms, the damper is closed to prevent the rooftop exhaust fan from exhausting conditioned air. This reduces energy use and saves operating expenses.

The rooftop exhaust fan no longer has to pull air from every room for 24 hours a day, 7 days a week. The fan can be downsized by as much as 20%. This will save on the initial fan cost and reflect significant savings with ongoing operating expenses.

Drawings subject to change
Consult the factory for custom sizes