



**Young Regulator Co.**

7100 Krick Rd • Walton Hills, OH 44146

P: 440-232-9700 • F: 440-232-8266

[www.youngregulator.com](http://www.youngregulator.com)

Submit 4100BOX – 1-10

**Model 4100BOX**

*Damper In Ceiling Box Fitting*

*Power Open - Spring Closed, No Time Delay*

**Application and Design**

The Young Regulator 4100BOX 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.

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 4100BOX 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	
Box	24 ga. Galvanized Steel
Shell	24 ga. Galvanized Steel
Blade	20 ga. Galvanized Steel
Shaft	1/2" Plated Steel
Bushing	Oil Impregnated Bronze
SIZE INFORMATION	
Inlet	For 8" x 8" Grille
Outlet Diameter	4", 6" and 8"

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 Sec Open 5 Sec Close
Torque	35 in. oz.
Motor Enclosure	Aluminum
OPTIONS	
120V Motor with Time Delay	24V Motors without Time Delay

QUANTITY	GRILLE OPENING	OUTLET DIAMETER	NOTES

<b>PROJECT</b>	<b>LOCATION</b>
<b>CONTRACTOR</b>	<b>DESIGN SPECIFIER</b>



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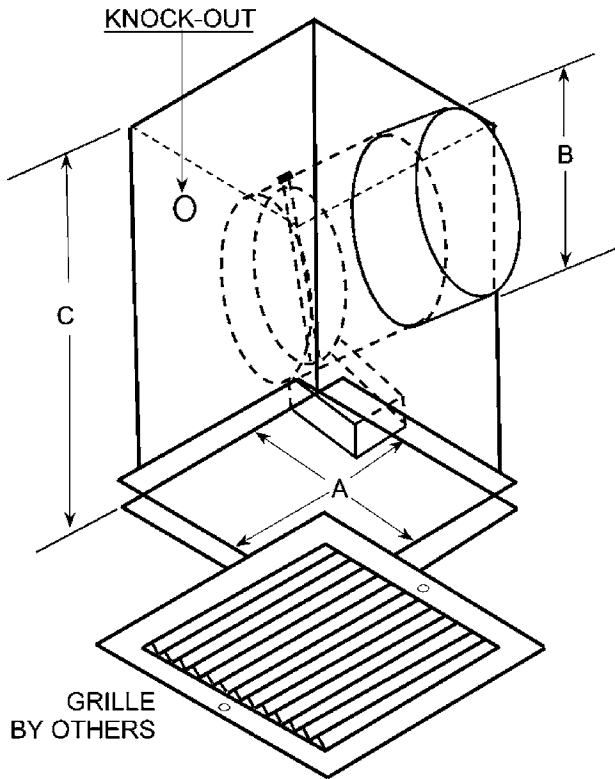
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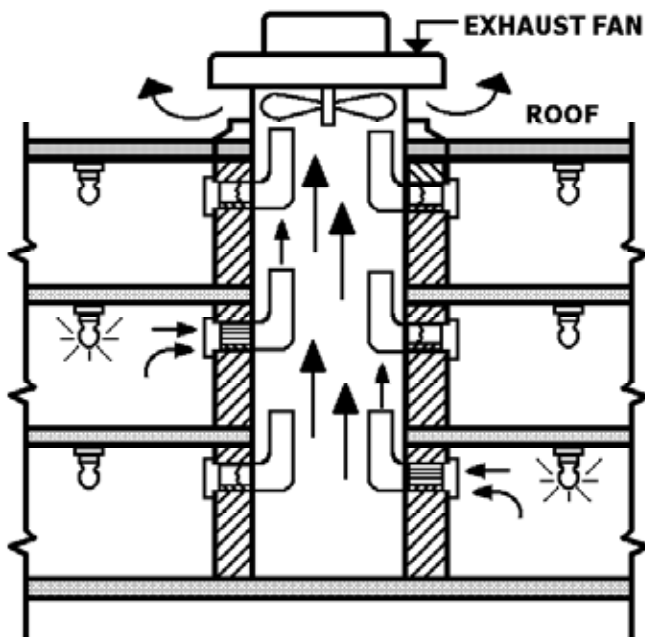
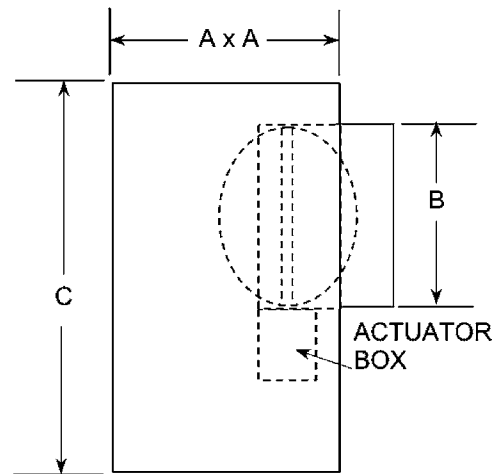
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Inlet	Outlet Dia.	Height
A	B	C
8-1/4"	4"	11"
	6"	11"
	8"	13"



**TYPICAL APPLICATION**

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.

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

Drawings subject to change  
Consult the factory for custom sizes