

MODEL: IRIS DAMPERS

The IRIS damper uses interlocking steel plates and a calibrated control system to form an adjustable aperture. By measuring differential pressure across the pressure ports, and referring to the matching performance curves, airflow can be precisely determined. Ten sizes are available, from 4" through 32", with capacities from 15 CFM to 20,000 CFM.

MODEL	DIMENSIONS IN INCHES					
	A	C	D	L	OD	WT(lbs)
IRIS-04	1.2	0.6	3.9	4.6	6.5	1.1
IRIS-05	1.2	0.6	4.9	4.6	7.4	1.5
IRIS-06	1.2	0.6	5.9	4.6	9.1	2.0
IRIS-08	1.2	0.6	7.8	4.6	11.2	3.1
IRIS-10	1.6	0.7	9.8	5.3	13.2	4.6
IRIS-12	1.6	0.7	11.8	6.1	16.1	7.7
IRIS-16	2.4	0.8	15.7	7.5	20.7	14.1
IRIS-20	2.0	0.8	19.6	6.7	25.8	21.2
IRIS-25	2.0	0.9	24.7	6.7	32.1	34.4
IRIS-32	3.9	0.9	31.4	10.6	40.0	55.1

HOW TO USE THE IRIS DAMPER

The calibration accuracy of an IRIS damper during disturbance free airflow is +/- 5%.

Once the damper position has been set:

- 1) Measure static pressure in inches wg using BOTH black measuring tubes.
- 2) Refer to the adjustment curve for the corresponding size of the damper.
- 3) Find your measured pressure on the scale on the left side of the adjustment curve. Proceed horizontally across the curve until you meet the damper position line corresponding to your damper position.
- 4) Drop vertically down and read CFM from the bottom scale.
- 5) To increase CFM, open the damper.
To decrease CFM, close the damper.
Measure new static pressure and proceed through steps 2 through 4.

CONSTRUCTION MATERIAL

The IRIS damper is comprised of a casing, damper blades, an adjustment or regulating nut, an airflow adjustment chart, and airflow taps. Blades and casing are manufactured from galvanized steel. The remaining components are made from high strength plastics.

RECOMMENDED INSTALLATION

When an IRIS damper is installed near duct fittings, measurement accuracy may be affected. For optimum operation and airflow control, the chart below indicates the recommended distances between an IRIS damper and duct elbows, tees and transitions. From the chart, to achieve the airflow accuracy, m_2 distance L_{min} defines the minimum distance separating an IRIS damper from the fitting.

	Elbow	Tee	Transition	Transition
L_{min}				
$m_2 = \pm 7\%$	$\geq 1d$	$\geq 4d$	$\geq 2d$	$\geq 2d$
$m_2 = \pm 10\%$	$\geq 1d$	$\geq 2d$	$\geq 2d$	$\geq 2d$

PROJECT		ARCHITECT	
DATE		ENGINEER	
SUBMITTED BY		CONTRACTOR	
SPECIFICATION			
FAN	MODEL NO.	QTY	OPTIONAL EQUIPMENT