



Airflow Direction Incorporated
The Patented Baulin-tube[®] Indicator Company

Thank you for your interest in ADI !

Please find attached...

- ✓ **ADI's Model Number Nomenclature for ordering;**
- ✓ **Some items to be aware that affect performance and cost;**
- ✓ **ADI's payment terms;**
- ✓ **a handy table for determining a wall thickness from architectural plans;**
- ✓ **a handy guide on room pressure criteria to obtain a minimum of 0.01" w.c. (inches of water column) pressure to ensure airflow direction into or out of a room;**
- ✓ **ADI's Warranty, and**
- ✓ **an order form for your use in procuring ADI products.**

Please feel free to contact ADI for any general or technical questions you may have...

AIRFLOW DIRECTION INCORPORATED

Baulin-tube[®] Indicator QUICK-REFERENCE SHEET

ADI's Baulin-tube[®] Indicators come in "Visual-Only" and "Visual-*plus*-Alarm" models. Each model is fully described in the ADI catalog. The model number nomenclature described below will help you specify the available options for ADI's Baulin-tube[®] Indicators.



Model ADI-69-V Series Visual-Only

Simple, reliable and no electricity required.

Model ADI-69-V+A Series Visual-*plus*-Alarm

Uses the visual-only Baulin-tube[®] indicator *plus* an alarm function

ADI INDICATOR MODEL NUMBER NOMENCLATURE

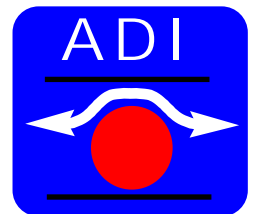


Indicator Type:
V = Visual-Only
V+A = Visual-*plus*-Alarm

Room Type:
N = (V or V+A) Negative Room
P = (V or V+A) Positive Room
N/P* = (V-Only) Manually Switchable/Neg-Pos
CURVE* = (V-Only) Auto Switchable/Neg-Pos, this failsafe mode differs from straight-tube N,P & N/P models.
**see catalog page 11 for choosing between N/P and CURVE models.*

Security Options:
INSEC = Inside Security Plate (roomside)
OUTSEC = Outside Security Cage

Local Annunciator Options (V+A units only):
M&T = With Mute & Test Function
NOM&T = Without Mute & Test Function
NOLOCAL = Without local annunciator.



Patent Notice: ADI products are protected under one or more of the following patents: US [5,291,182] [5,410,298] [5,798,697] [5,661,461] and Canadian Patent 2107396. It is unlawful for any entity to make, use, sell, offer-for-sale or import any similarity of this product without the express written consent of ADI.

Airflow Direction Incorporated
 Tel: (888) 334-4545 <> Fax: (888) 257-3555
www.airflowdirection.com

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IMPORTANT NOTES. PLEASE READ EACH ONE, DO NOT SKIP !

1. IMPORTANT: A MINIMUM ROOM DIFFERENTIAL PRESSURE OF 0.007 TO 0.01 INCHES OF WATER COLUMN IS REQUIRED TO OPERATE THE BAULIN-TUBE® INDICATOR. MOST CODES REQUIRE A MINIMUM ROOM PRESSURE OF 0.01 INCHES OF WATER COLUMN. ADI RECOMMENDS A MINIMUM OF 0.01 TO 0.05 INCHES OF WATER COLUMN.
2. ADI HIGHLY SUGGESTS USING DOOR SEALS. SEE ADI'S TECHNICAL BULLETIN- "ADI & MINIMUM ROOM DIFFERENTIAL PRESSURE."
3. If you are installing the ADI indicator in a concrete poured or block wall, or you would like a more finished look, order the escutcheon plates, (Model ADI-69-Escutcheon) listed below. If the wall is not yet constructed, save installation effort and incorporate the ADI Concrete Block Wall Sleeve Detail.
4. If you are installing the ADI indicator in a door, you need to order the escutcheon plates, (Model ADI-69-Escutcheon) listed below. Request the ADI Door Installation Detail.
5. If you are installing the ADI indicator in glazing (glass), you need to order the escutcheon plates, (Model ADI-69-Escutcheon) listed below. Request the ADI Glazing Installation Detail.
6. See ADI's Technical Bulletin for Fire-Rated Walls.

CONTRACTOR & RESELLER PURCHASER TERMS OF PAYMENT & ORDER FORM

TAXES, INSTALLATION AND FIELD REPRESENTATION

ADI's cost does not include: installation; ADI field representation; or any state or local taxes. Any taxes which ADI may be required to pay or collect upon or with respect to the sale, purchase, delivery, use or consumption of any of the material sold by ADI for the account of the Buyer, shall be added to the purchase price. Please inform ADI if you are required to pay tax so ADI can properly adjust this order.

PAYMENT TERMS AND DELIVERY

ADI accepts Commercial/Bank Letter of Credit, C.O.D., MasterCard or VISA. Shipping is F.O.B. factory. Sale is final, non-refundable & non-returnable.



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WARRANTY

Airflow Direction Incorporated (ADI) warrants the tube, tube-end-caps, end-dome-covers, and backplates, under normal use and service as described in the installation instructions and the operation and maintenance manual, shall be free from defects in workmanship and material during the life of the installation of the units. If one of these components becomes non-conforming to ADI's standards, contact ADI for a Return Merchandise Authorization (RMA) number and return to ADI for a free replacement. For all other components furnished by ADI, ADI warrants the parts for one year after shipment; if the warranty is within that year, contact ADI for a Return Merchandise Authorization (RMA) number and a free replacement.

THE INSTALLER IS RESPONSIBLE TO PROPERLY FOLLOW ADI'S INSTALLATION INSTRUCTIONS FURNISHED BY ADI. DURING NORMAL USE OF ADI'S INDICATORS, AS DESCRIBED IN THE ADI FURNISHED WALL LABEL, ALONG WITH THE ADI FURNISHED OPERATION AND MAINTENANCE INSTRUCTIONS, THE END-USER IS RESPONSIBLE TO OBSERVE THE INDICATOR AND CHECK THE OPERATION OF ADI'S SELF-CHECK FEATURE, AS OFTEN AS NECESSARY TO AVOID A PROBLEM. THEREFORE, TO THE EXTENT PERMITTED BY LAW, THE END-USER OR BUYER'S EXCLUSIVE AND SOLE REMEDY FOR ANY AND ALL CLAIMED LIABILITY, LOSSES, INJURIES, OR DAMAGES CONCERNING THE PURCHASED ADI PRODUCT, SHALL ONLY BE A FREE REPLACEMENT OF THE PURCHASED ADI PRODUCT. ADI SHALL NOT BE LIABLE FOR ANY INCIDENTAL LABOR AND COSTS TO REPLACE THE PRODUCT IN THE FIELD OR FOR ANY SPECIAL, DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES TO ANYONE BY REASON OF THE FACT THAT ADI'S PRODUCT SHALL HAVE BEEN DEFECTIVE.

THIS EXPRESS LIMITED WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER REPRESENTATIONS MADE BY ADI ADVERTISEMENTS, ADI AGENTS AND ALL OTHER WARRANTIES, BOTH EXPRESS AND IMPLIED. ADI DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE.

PATENT INFRINGEMENT NOTICE

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Use this reference table to check your wall thickness and if the walls differ in thickness for a particular ADI indicator model number, please use the "ROOM SCHEDULE SHEET" in the order form.

WALL THICKNESS TABLE FOR ONE LAYER GWB ON BOTH SIDES * BE SURE TO ADD IF MORE THAN ONE LAYER ON EITHER SIDE (INCHES)			
METAL STUD	1/2"GWB	5/8"GWB	3/4"GWB
1-5/8	2-5/8	2-7/8	3-1/8
2	3	3-1/4	3-1/2
2-1/2	3-1/2	3-3/4	4
3	4	4-1/4	4-1/2
3-1/2	4-1/2	4-3/4	5
3-5/8	4-5/8	4-7/8	5-1/8
4	5	5-1/4	5-1/2
5-1/2	6-1/2	6-3/4	7
6	7	7-1/4	7-1/2

WALL THICKNESS TABLE FOR CMU BLOCK WALL (INCHES)	
NOMINAL	ACTUAL
3	2-5/8
4	3-5/8
5	4-5/8
6	5-5/8
8	7-5/8
10	9-5/8
12	11-5/8

Disclaimer: These are for guiding purposes according to common industry practice values. Please measure the actual materials on your application.



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**IMPORTANT NOTE: CHECK YOUR APPLICATION
FOR PROPER ROOM PRESSURE.
THIS SHEET WILL HELP YOU.**

PLEASE NOTE: ADI'S BAULIN-TUBE® REQUIRES A MINIMUM OF 0.007"W.C. DIFFERENTIAL PRESSURE WHEN INSTALLED WITH THE FAILSAFE FEATURE. A MINIMUM ROOM DIFFERENTIAL 0.01"W.C. IS RECOMMENDED AND REQUIRED BY MOST CODES.

This summary sheet is based on a written article concerning research conducted by Airflow Direction Inc. The summary is as follows:

When designing the HVAC system to obtain a desired room pressurization/directional airflow for 200+/- square foot (sf) rooms, we suggest you consider *:

- Rooms should have a minimum of 0.01"w.c. (0.05"w.c. preferred) of negative or positive pressure. Codes and industry regulations and practice may dictate specific limits.
- Rooms should have a differential airflow to obtain the 0.01"w.c. or higher. For 200+/- sf rooms, the best approach is to have the differential capability of 400 cfm and the ability to throttle down the differential to satisfy the 0.01"w.c. or higher. For 0.01"w.c., we have seen 400 cfm of differential airflow for a room that was thought to be well sealed. We have also seen a room requiring only 150 cfm of differential airflow. The range depends on ceiling, wall and window tightness, door seals and the existence of other supply or exhausts in the room.
- Air Balancer specs should be: Positive rooms: (+10%/-0%) for supply, (+0%/-10%) for exhaust. Negative rooms: (+10%/-0%) for exhaust, (+0%/-10%) for supply.
- For negative rooms, the makeup air should be provided via a supply outside the room. For positive rooms, the exfiltration of air should be accommodated by an exhaust outside the room.
- All room penetrations above and below the ceiling and the ductwork should be well-sealed.
- The ceiling should be as tight as possible, preferably sheetrock or concrete deck.
- Specify surface mount or recessed vaportight or non-return-air light fixtures.
- Each entry door to the room should be sealed on its top and sides (including astragal vertical joint seal for leaf or double doors) and include an adjustable bottom seal.
- A sliding entry door is preferred over a swing door. If a swing door is used, it should open out of a negative room or open into a positive room.
- Anterooms should be used whenever possible with 12 air changes per hour (ACH) minimum (codes and industry regulations and practice may dictate higher values) and a neutral pressure where the supply and exhaust airflow quantities are equal.
- An airflow direction indicator should be installed to visually see the dynamics of the room pressurization.

* Note: This summary is for informational purposes only and is not intended to be a substitute for an HVAC design performed and stamped by a state registered, licensed professional engineer, following good engineering practice as well as conformance to any applicable codes and regulations.



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The Installer is responsible to properly follow ADI's installation instructions furnished by ADI. During normal use of ADI's indicators, as described in the ADI-furnished and Installer-installed wall label, along with the ADI furnished operation and maintenance instructions, the End-User is responsible to observe the indicator and check the operation of ADI's SELF-CHECK feature, as often as necessary to avoid a potential unwanted situation with the facility or ADI's product. Therefore, to the extent permitted by law, the End-User or Buyer's exclusive and sole remedy for any and all claimed liability, losses, injuries, or damages concerning the purchased ADI product, shall only be a free replacement of the purchased ADI product. ADI shall not be liable for any incidental labor and costs to replace the product in the field or for any special, direct, indirect, consequential or incidental damages to anyone by reason of the fact that ADI's product shall have been defective.

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Fax: (888) 257-3555 Local: (781) 233-1157

ORDER FORM

Again, Thank You for you interest in ADI[™]

Please Note...

To order, please contact ADI for proper model numbers, quotation of price, terms of sale and warranties.

In order for ADI to process the order, please be sure to fill-out and return all of the following pages, except the last page which may not be applicable.

Also, because ADI's visual and visual-plus-alarm products are patented, ADI offers compensation for any information on infringement of ADI's patents, including those who make, sell, offer for sale or import similar visual and visual-plus-alarm products.

Thank you for choosing ADI[™].



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End User Information, required for warranty purposes:

END USER INFORMATION	
Today's Date:	
Name of Facility:	
Project Name:	
Street Address:	
City/Town:	
State & Zip Code:	
Types of Rooms ADI Units are being Installed into (please check all that apply, enter types if not listed)	<input type="checkbox"/> Healthcare Protective Isolation Room (Positive Pressure) <input type="checkbox"/> Healthcare Infectious Isolation Room (Negative Pressure) <input type="checkbox"/> Healthcare Operating Rooms <input type="checkbox"/> Healthcare Endoscopy or Bronchoscopy Rooms <input type="checkbox"/> Healthcare Laboratory Rooms <input type="checkbox"/> Healthcare Other: _____ <input type="checkbox"/> Laboratory Containment Rooms (BL2,BL2+,BL3,BL4) <input type="checkbox"/> Laboratory Research Rooms <input type="checkbox"/> Laboratory Other: _____ <input type="checkbox"/> Pharmaceutical Clean Rooms <input type="checkbox"/> Pharmaceutical Research Rooms <input type="checkbox"/> Pharmaceutical Other: _____ <input type="checkbox"/> Animal Resource Holding Rooms <input type="checkbox"/> Animal Resource Procedure Rooms <input type="checkbox"/> Animal Resource Clean Corridor/Supply Rooms <input type="checkbox"/> Animal Resource Cagewash Rooms <input type="checkbox"/> Animal Resource Other: _____ <input type="checkbox"/> Correctional Facility/Room Types: _____ <input type="checkbox"/> Other: _____ _____



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Billing & Shipping Information:

Today's Date:		
	BILL TO:	SHIP TO:
Person*		
Dept		
Company*		
Street*		
City*		
State*		
Zip Code*		
Telephone*	()	* ()
Fax *	()	()
Your Purchasing Agent's Email Address*:		
Terms of Sale & Notices Have Been Read By (sign name):		
Requested Delivery Date:		
Payment Method:		
For Credit Card order, please indicate below or call ADI to give information:		
Card Type (circle one): VISA MasterCard		
Name on Card:		
Number on Card:		
Expiration Date:		
Your Reference Purchase Order Number to ADI:		
Reference Tag for Shipping Label:		

* Required for Billing and Shipping.



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Note: When ordering different wall thickness indicators, leave Wall Thickness column blank and use attached "Room Schedule Sheet"

Note: After inches enter a "B" for block concrete, "D" for door, "G" for glass & order escutcheons

ORDER FORM

QTY	ADI Item #	Description	Wall Thickness (inch)	Cost Each	Cost Sub-Totals
VISUAL- ONLY INDICATORS					
	ADI-69-V-N	Visual Only-Negative Indicator			
	ADI-69-V-P	Visual Only-Positive Indicator			
	ADI-69-V-N/P	Visual Only-with Neg/Pos Supplies*			
	ADI-69-V-CURVE	Visual Only-Neg/Pos Curved Indicator**			
	ADI-69-Escutcheon (each)	6" Adaptor (For B&D-2 req'd, for G-4 req'd)			
VISUAL- ONLY INDICATORS WITH INSIDE SECURITY PLATE					
	ADI-69-V-N-INSEC	Visual Only-Neg w/inside plate			
	ADI-69-V-P-INSEC	Visual Only-Pos w/inside plate			
	ADI-69-V-N/P-INSEC	Visual Only-N/P (manual) w/inside plate			
	ADI-69-V-CURVE	Visual Only-CURVE w/inside plate			
VISUAL plus ALARM INDICATORS					
	ADI-69-V+A-N-NOLOCAL	Visual plus Alarm -Negative Indicator without Local Annunciator. For FMS or Remotes			
	ADI-69-V+A-P-NOLOCAL	Visual plus Alarm -Positive Indicator without Local Annunciator. For FMS or Remotes			
	ADI-69-V+A-N-NOM&T	Visual plus Alarm -Negative Indicator with Basic Local Annunciator (no Mute & Test)			
	ADI-69-V+A-P-NOM&T	Visual plus Alarm -Positive Indicator with Basic Local Annunciator (no Mute & Test)			
	ADI-69-V+A-N-M&T	Visual plus Alarm -Negative Indicator with Mute & Test Local Annunciator			
	ADI-69-V+A-P-M&T	Visual plus Alarm -Positive Indicator with Mute & Test Local Annunciator			
VISUAL plus ALARM INDICATORS W/ INSIDE SECURITY PLATE					
	ADI-69-V+A-N-NOM&T-INSEC	Visual plus Alarm-Neg With Basic Local (no Mute & Test) & inside security plate			
	ADI-69-V+A-P-NOM&T-INSEC	Visual plus Alarm-Pos With Basic Local (no Mute & Test) & inside security plate			
	ADI-69-V+A-N-M&T-INSEC	Visual plus Alarm-Neg With Mute & Test & inside security plate			
	ADI-69-V+A-P-M&T-INSEC	Visual plus Alarm-Pos With Mute & Test & inside security plate			
Freight Delivery Time (circle choice): Next-Day 2-Day Ground → Freight Cost					\$
SUB-TOTAL COST					\$

* Manually changeable between negative and positive modes.

Prices subject to change without notice

** Senses negative or positive mode without manual intervention.

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See ADI's catalog for a discussion table between the N/P and CURVE models.



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OPTIONAL ORDER FORM for OTHER ADI PRODUCTS.

DO NOT RETURN TO ADI IF YOU ARE NOT ORDERING ANY OF THESE ITEMS...

QTY	ADI Item #	Description	Cost Each	Cost Sub-Totals
	REMOTE ANNUNCIATORS			
	NOM&T	1 zone local annunciator without mute & test function		
	M&T	1 zone local annunciator with mute & test function		
	REMOTE-10-ZONE	2 to 10 zone remote annunciator		
	REMOTE-30-ZONE	11 to 30 zone remote annunciator		
	OUTSIDE SECURITY (Inside room security plate is under each indicator price in the ADI Indicator Order Form)			
	OUTSEC	Steel Outside Security Cover for Corridor or Anteroom		
	Freight Delivery Time (circle choice): Next-Day 2-Day Ground		→ Freight Cost	\$
	SUB-TOTAL COST			

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