

**MODEL XAC-4**

**8" Deep Acoustical Louver**

Sound ratings shall comply with the following standards: "Recommended Practice for Laboratory measurements for airborne sound transmission loss of building partitions." ASTM designation E90-99 and "standard classification for determination of sound transmission class", ASTM designation E413-73. Louver shall be United Enertech **Model XAC-4**

**STANDARD CONSTRUCTION:**

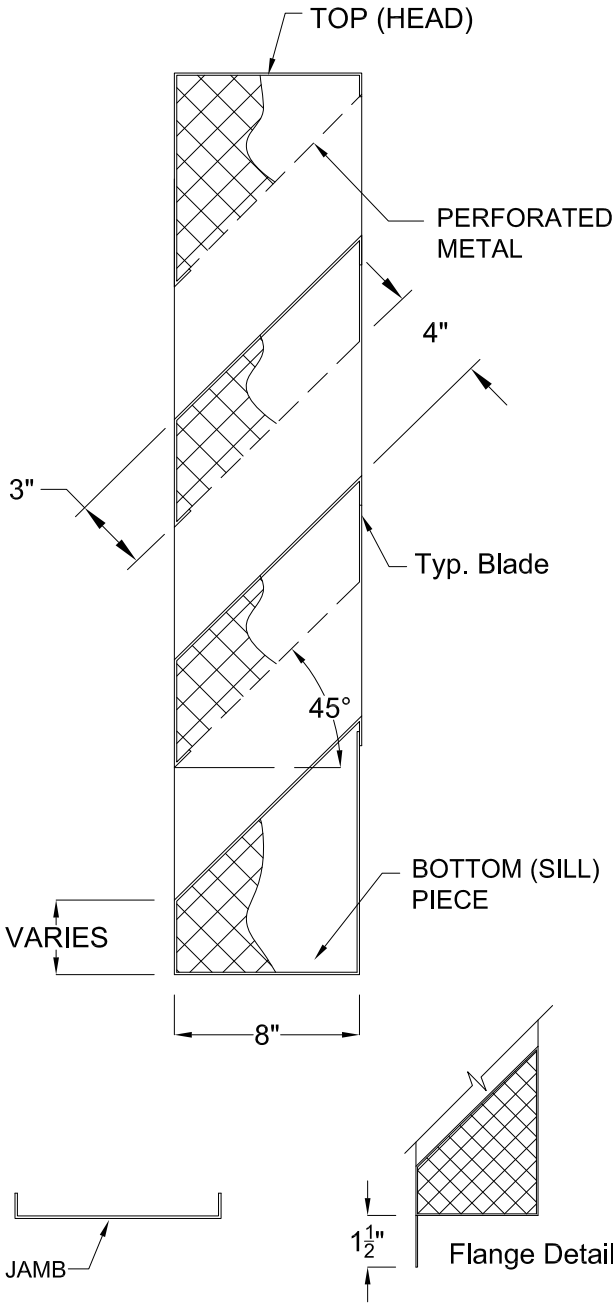
- Frame:** 18 ga. galvanized
- Blade (air side):** 18 ga. galvanized
- Blade (noise side):** 20 ga. galvanized perforated
- Absorbent fill:** Advanced Microfibers composed of Polyester and Polyolefin
- Screen:** 3/4" x .051" flattened aluminum  
Screen mounted in a removable frame
- Minimum Louver Size:** 12"w x 12"h
- Maximum Louver Size:** 48"w x 120"h  
Larger sizes are made in sections with vertical mullions

**OPTIONS:**

- Flanged Frame (1.50" std.)
- Custom Flange (1", 2" , or 3")
- Extended Sill
- Insect Screen (Other Screens Available, See Screen Page)
- Filter Racks (no screen)
- Security Bars
- Hinged Sub Frame
- Welded Construction
- Blank-off, Steel, non-insulated, no screen, non-removeable
- Blank-off, Steel, non-insulated, with bird screen or insect screen
- Blank-off, Steel, insulated double wall, with bird screen, removable
- Blank-off, Steel, insulated double wall, no screen, non-removeable
- Aluminum Construction
- 304 Stainless Steel Const.
- 316 Stainless Steel Const.

**AVAILABLE FINISHES:**

- Powder Polyester TGIC** (2 coats) baked on at 410°F, 2.5 to 3.5 mils Meets AAMA-2603 Standards
- Powder Super durable polyester** (2 coats) baked on at 410°F, 2.5 to 3.5 mils Meets AAMA-2604-05 Standards
- Acrylic baked enamel** (ACRA-BOND® ULTRA) by AkzoNobel baked on at 350°F, 0.8 to 1.2 mils dry Meets AAMA-2603 Standards
- Kynar®** (ALUM\*A\*STAR®) 2 coats by AkzoNobel baked on at 450°F, 1.2 to 1.6 mils dry Meets AAMA-2604-05 Standards
- Kynar 500®** or HYLAR® 5000 70% TRINAR® (2 coats) by AkzoNobel baked on at 450°F, 1.2 to 1.6 mils dry, Meets AAMA-2605-05 Standards
- Kynar 500®** or HYLAR® 5000 (70% Tri-Escent II) (2 coats) by AkzoNobel, a superior finish to other metallic or anodized finishes. A blend of mica, ceramic, and inorganic pigments creates subtle yet dazzling design that goes beyond metallic color without the requirement of a clear coat. 14 standard colors - custom colors available. Baked on at 415°F, 1.4 to 1.8 mils dry, meets AAMA 2605-05.
- Clear Anodize** 204 R-1 Class II (AA-C22A31)(0.4 to 0.7 mil)
- Clear Anodize** 215 R-1 Class I (AA-C22A41)(>0.7 mil)
- Integral Color Anodize** (AA-C22A42)(>0.7 mil)
  - Clear coat available for all above finishes.
  - Hylar® 5000 is a registered trademark of Solvay Solexis, Inc.
  - Kynar® 500 is a registered trademark of Arkema.
  - ALUM\*A\*STAR® 50 and TRINAR® are registered trademarks of AkzoNobel
  - ACRA-BOND® ULTRA is a registered trademark of AkzoNobel



\*Width and Height dimensions are approximately 1/4" under listed size.  
Due to continuing research, United Enertech reserves the right to change specifications without notice.

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<b>MODEL XAC-4 (8" Deep Acoustical Louver)</b>			
DRAWN BY: MHM	DATE: July 2006	REV. DATE: June 2010	REV. NO.: 8
APPROVED BY: BGT		DWG. NO.: <b>A-37</b>	

# XAC-4

## ACOUSTICAL DATA

### Sound Transmission Class (STC)

This is a numerical two-digit figure rating derived from a standardized performance test made in accordance with ASTM E90-90 (Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions) and ASTM E413-87 (Standard Classification for Determination of Sound Transmission Class). The number is used in evaluating the effectiveness of an assembly in isolating or reducing airborne sound transmission. Acoustic performance ratings have been determined by an AMCA Laboratory.

### Outdoor Indoor Transmission Class (OITC)

ASTM E1332 and ASTM E966 procedures are used to determine the OITC rating of building facades relative to ground or air transportation noise.

Full Octave Band Specimen Sound Transmission Loss						
Hz	125	250	500	1000	2000	4000
TL	6	4	7	12	14	10
NR	12	10	13	18	20	16

TL = Transmission Loss    NR = Free Field Noise Reduction    NR = TL + 6 dB

## PERFORMANCE DATA

AMCA Standard 500-L provides a reasonable basis for testing and rating louvers. Testing to AMCA Standard 500-L is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louver system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq.ft. of water penetration.

Beginning point of WATER PENETRATION  
is

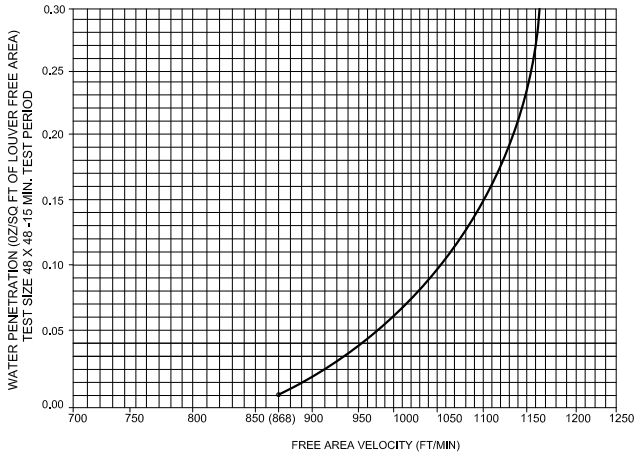
**868 fpm**

free area velocity at .01 oz. of water penetration

### FREE AREA CHART (SQUARE FEET)

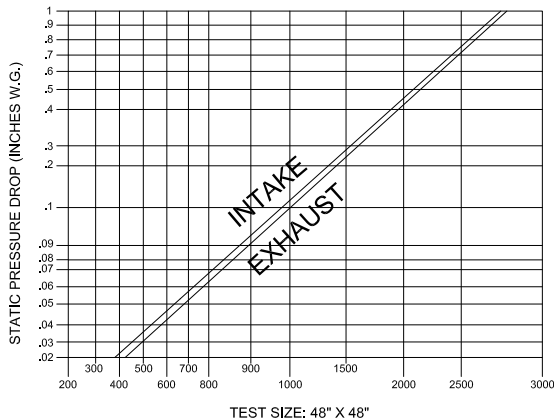
### WATER PENETRATION

Standard Air-.075 lb/ft<sup>3</sup>



Louver Height Inches	Louver Width In Inches						Louver Height Inches	
	12	18	24	30	36	42		48
12	0.29	0.44	0.59	0.73	0.88	1.02	1.17	12
18	0.44	0.66	0.88	1.1	1.32	1.54	1.76	18
24	0.59	0.88	1.17	1.46	1.76	2.05	2.34	24
30	0.73	1.1	1.46	1.83	2.19	2.56	2.93	30
42	1.02	1.54	2.05	2.56	3.07	3.58	4.1	42
48	1.17	1.76	2.34	2.93	3.51	4.1	4.46	48
54	1.32	1.97	2.63	3.29	3.95	4.61	5.27	54
60	1.46	2.19	2.93	3.66	4.39	5.12	5.85	60
66	1.61	2.41	3.22	4.02	4.83	5.63	6.44	66
72	1.76	2.63	3.51	4.39	5.27	6.14	7.02	72
78	1.9	2.85	3.8	4.75	5.7	6.65	7.61	78
84	2.05	3.07	4.1	5.12	6.14	7.17	8.19	84
90	2.19	3.29	4.39	5.48	6.58	7.68	8.78	90
96	2.34	3.51	4.68	5.85	7.02	8.19	9.36	96
102	2.49	3.73	4.97	6.22	7.46	8.7	9.95	102
108	2.63	3.95	5.27	6.58	7.9	9.21	10.5	108
114	2.78	4.17	5.56	6.95	8.34	9.73	11.1	114
120	2.93	4.39	5.85	7.31	8.78	10.2	11.7	120

### PRESSURE DROP



Based on STANDARD AIR-.075 lb. per cubic foot.  
Ratings do not include the effects of screen.