

SPECIFICATION SHEET Model FMBC Channel Frame, FNBC Flanged Frame Galvanized Acoustical Louver

(Optional Aluminum Construction)

CARNES COMPANY 448 S. Main St., P. O. Box 930040, Verona, WI 53593-0040 Phone: (608)845-6411 Fax: (608)845-6504 www.carnes.com Top (Head) **Standard Specifications** 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 Perforated Metal Screen: 3/4" x .051" flattened aluminum Screen mounted in a removable frame Minimum Size: 12"w x 12"h Maximum Size: 48"w x 120"h Larger sizes are made in sections with vertical mullions **Options (at additional cost)** - Extended Sill Typ. Blade - Filter Racks (no screen) - Security Bars - Hinged Sub Frame - Welded Construction - Aluminum Construction - Stainless Steel Construction - Selection of finishes; prime coat, kynar, baked enamel, clear and color anodize Bottom (Sill) Piece Varies CERTIFIED RATINGS WATER 8" SOUND AIR 1-1/2' Flange Detail Typ. Jamb *Width and height dimensions are approximately 1/4" under listed size. Size Tag Qty. Frame Variations Width Height

 Location

 Arch./Engr.
 Location

 Representative
 Date

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 17175, pg 1

ACOUSTICAL DATA

Sound Transmission Class (STC)

This is numerical two-digit figure rating derived from a standardized performance test made in accourdance 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=Trans	mission Loss	NR=F	ree Field No	ise 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.



Water Penetration







Standard air - .075 lbs. per cu. ft. Ratings do not include the effects of screen

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./sg.ft. of water penetration.



The Carnes Company certifies that the model FMBC/FNBC louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to sound and air performance ratings and water penetration ratings.

Free Area in Square Feet

HEIGHT	WIDTH IN INCHES									
INCHES	12	18	24	30	36	42	48			
12	0.29	0.44	0.59	0.73	0.88	1.02	1.17			
18	0.44	0.66	0.88	1.10	1.32	1.54	1.76			
24	0.59	0.88	1.17	1.46	1.76	2.05	2.34			
30	0.73	1.10	1.46	1.83	2.19	2.56	2.93			
42	1.02	1.54	2.05	2.56	3.07	3.58	4.10			
48	1.17	1.76	2.34	2.93	3.51	4.10	4.46			
54	1.32	1.97	2.63	3.29	3.95	4.61	5.27			
60	1.46	2.19	2.93	3.66	4.39	5.12	5.85			
66	1.61	2.41	3.22	4.02	4.83	5.63	6.44			
72	1.76	2.63	3.51	4.39	5.27	6.14	7.02			
78	1.90	2.85	3.80	4.75	5.70	6.65	7.61			
84	2.05	3.07	4.10	5.12	6.14	7.17	8.19			
90	2.19	3.29	4.39	5.48	6.58	7.68	8.78			
96	2.34	3.51	4.68	5.85	7.02	8.19	9.36			
102	2.49	3.73	4.97	6.22	7.46	8.70	9.95			
108	2.63	3.95	5.27	6.58	7.90	9.21	10.5			
114	2.78	4.17	5.56	6.95	8.34	9.73	11.1			
120	2.93	4.39	5.85	7.31	8.78	10.2	11.7			