

# SHADOW PANEL SPECIFICATIONS

#### 1. PRODUCT NAME

American Shadow Panel for wall applications.

## 2. MANUFACTURER

# AMERICAN BUILDINGS COMPANY

1150 State Docks Road Eufaula, Alabama 36027 Phone: (334) 687-2032

#### 3. PRODUCT DESCRIPTION

These 16" net width embossed panels have deep-fluted profiles that accent contrasting shadow patterns. Panels are 3" deep and are fastened to the framework from the inside leaving no exposed fasteners.

*Basic Use*: A wall panel system for new or retrofit construction.

*Materials:* Shadow Panels are embossed 24 gage 50,000 psi either G90 zinc-coated (galvanized) or AZ50 aluminumzinc alloy-coated steel. Pre-painted panels have American Buildings Company's SmartKote<sup>®</sup> (PVDF) Finish.

Shadow Panels are fastened to the supporting members from the inside, totally concealing the fasteners. Fasteners are carbon steel, cadmium or zinc plated, No. 12 x 1" self-drilling hex head screws with special 1/2" x 1" rectangular locking nuts. For wall systems requiring blanket insulation a special Fab-Lok® fastener is recommended.

# 4. TECHNICAL DATA

This panel has been tested in accordance with Air Infiltration, ASTM E283 and Water Penetration, ASTM E331. This panel has received a Class A fire rating when tested in accordance with test procedure ASTM E108.

# 5. INSTALLATION

Installation should be performed in accordance with American Buildings Company's manuals and building erection drawings, and should be by a qualified installer using proper tools and equipment. Systems are installed by American Buildings Company Authorized Builders.

## 6. AVAILABILITY

For availability, contact:

# AMERICAN BUILDINGS COMPANY

## 7. WARRANTY

Thirty-five year material warranties are available.

## 8. MAINTENANCE

Only normal routine maintenance is required over the life of the panels.

## 9. TECHNICAL SERVICES

For information, contact:

# AMERICAN BUILDINGS COMPANY

# 10. PRODUCT NOTES

American Buildings Company reserves the right to revise all standard specifications and information. American Buildings Company regularly updates its published "Standard Specifications" on the American Buildings web site, <u>www.americanbuildings.com</u>, which supercede and replace any previously published standard specifications of American Buildings Company.

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PANEL PROFILE

CROSS SECTION

Engineering Properties of American Buildings Company Shadow Panel											
Designated	Steel	Base	Total	Panel Base	Top In			Bottom In			
Gage	Yield	Metal	Thick.	Metal Weight	Compression			Compression			Fb
of	KSI	Thick.	(In.)	(lbs. / ft. <sup>2</sup> )	lx	Sx	Ма	lx	Sx	Ма	KSI
Steel		(In.)			(In. <sup>4</sup> / ft.)	(ln. <sup>3</sup> / ft.)	K-IN.	(In. <sup>4</sup> / ft.)	(In. <sup>3</sup> / ft.)	K-IN.	
24 Ga.	50	0.0225	0.0241	1.46	0.282	0.162	4.86	0.374	0.162	4.86	30

Gage	No.	Load	Maximum Total Uniform Load in PSF							
of	of	Туре	Span Lengths, Ft.							
Panel	Spans		3.00	4.00	5.00	6.00	7.00	8.00	9.00	10.00
24 Ga.	1	POS	137	103	82	69	59	51	40	32
	1	NEG	-278	-202	-130	-90	-66	-51	-40	-32
	2	POS	88	66	53	44	38	33	29	26
	2	NEG	-111	-83	-67	-56	-48	-42	-37	-31
	3	POS	100	75	60	50	43	37	33	30
	5	NEG	-126	-95	-76	-63	-54	-47	-42	-38
	4	POS	96	72	58	48	41	36	32	29
		NEG	-122	-91	-73	-61	-52	-46	-41	-36

1. The panels are checked for bending, shear, combined bending and shear, deflection, web crippling and screw pullout. Deflection is limited to span/60, with the wind load permitted to be taken as 0.7 times the "component & cladding" loads as noted in footnote f of IBC Table 1604.3.

2. Section Properties are calculated in accordance with the 2007 North American Specification for the Design of Cold-Formed Steel Structural Members.

3. Minimum yield strength of 29, 26 and 24 gage steel is 80,000 psi. Minimum yield strength of 22 gage steel is 50,000 psi.

4. Steel panels are either aluminum-zinc alloy or G-90 coated. The base metal thickness is used in determining section properties.

5. Positive load (POS) is applied inward toward the panel supports, and is applied to the outer surface of the full panel cross-section. Negative load (NEG) is in the opposite direction.