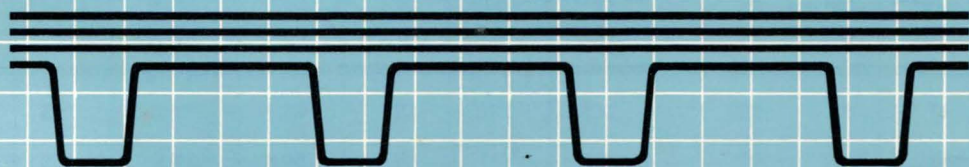
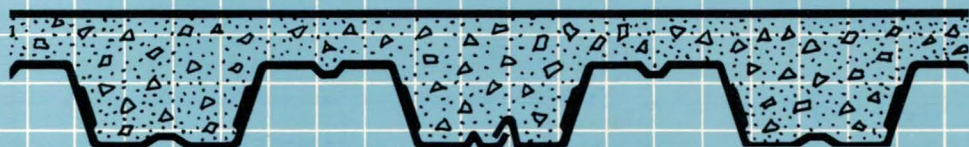


# STEEL DECKS



ROOFS



COMPOSITE



CELLULAR



ACOUSTICAL



CELL  
ACOUSTICAL



HEAVY DUTY  
FORMS



LIGHTWEIGHT  
FORMS

# BOWMAN

DIVISION



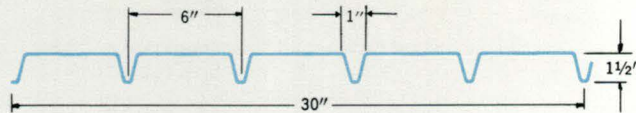
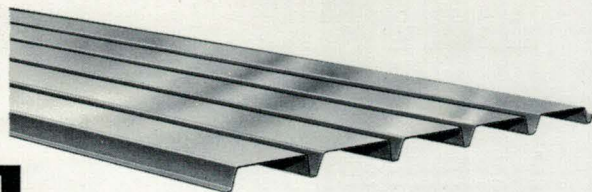
E. G. SMITH CONSTRUCTION PRODUCTS, INC.



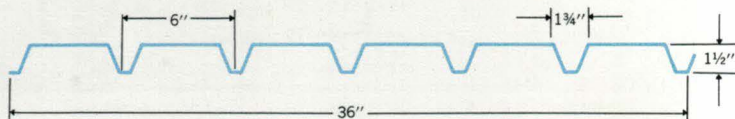
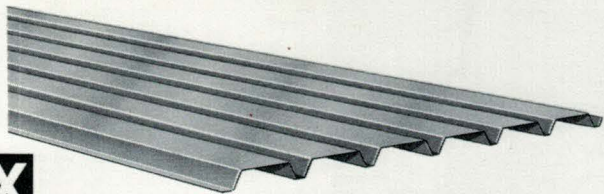
# Roof Deck

(Plain and acoustical)

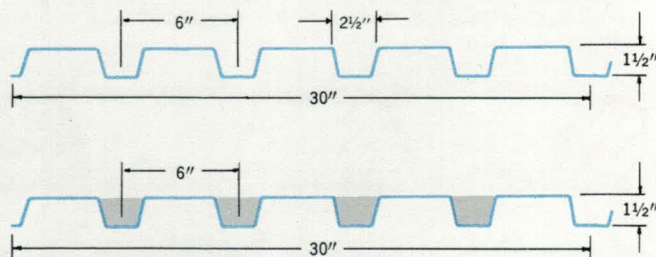
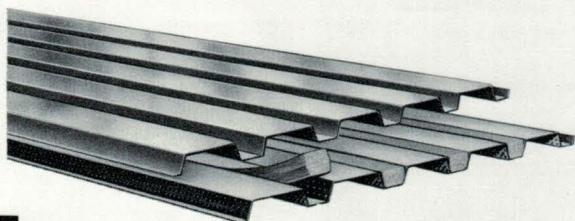
**FM1**



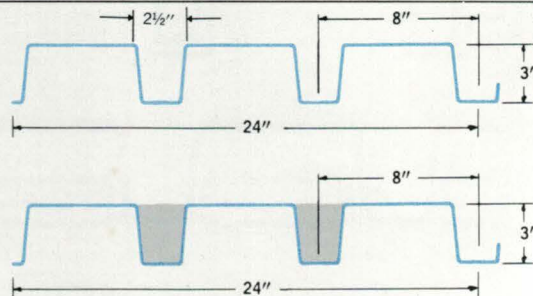
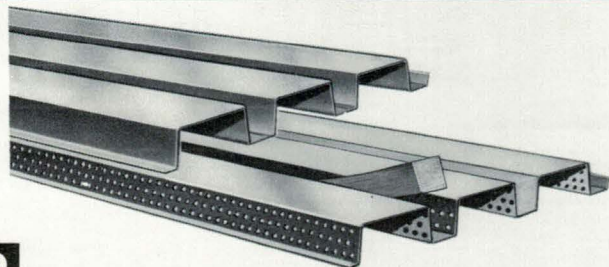
**FMX**



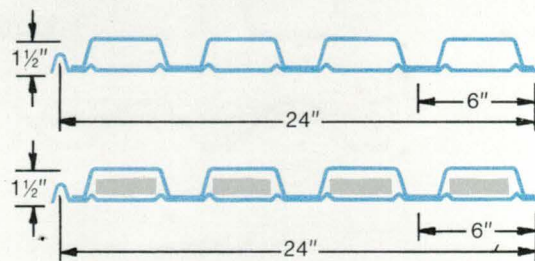
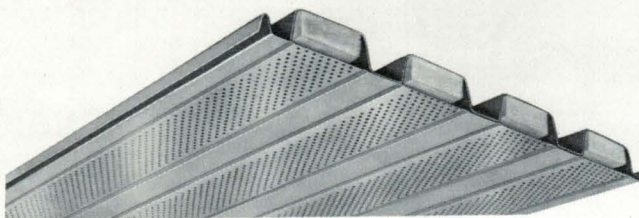
**FM2**



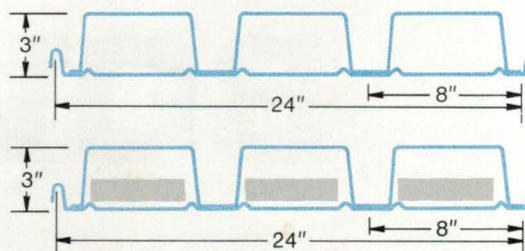
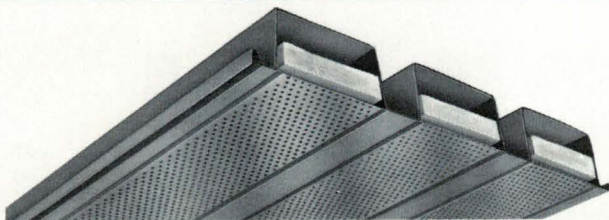
**FM3**



**1 1/2" CELLULAR**



**3" CELLULAR**



Bowman's "FM" Roof Decks are designed to provide the most economical combination of *diaphragm* weldability, load carrying capacity, and insulation materials. All deck panels are furnished with neat fitting *die-set* ends which assure steel-to-steel contact in the bottom of the ribs to permit fully effective welds at end laps...a definite requirement when the deck is utilized as a dia-

*phragm* for wind and/or seismic bracing. The die-set ends also provide flush fitting end laps to avoid breakage of insulation as well as improved adhesion. Available in three coatings...Prime Painted, Hot-Dipped Galvanized, and Galv-Plus.



## Section Properties (per ft. of width)

Gage	Weight (psf.)*		I (in.) <sup>4</sup>	Sp (in.) <sup>3</sup>	Sn (in.) <sup>3</sup>
	Painted	Galv.			
22	1.75	1.79	.112	.105	.115
20	2.10	2.14	.143	.129	.138
18	2.80	2.83	.205	.178	.183
16	3.50	3.54	.264	.227	.229
22	1.67	1.74	.121	.121	.132
20	2.00	2.08	.155	.149	.158
18	2.67	2.74	.223	.204	.210
16	3.33	3.41	.286	.262	.264
22	1.75	1.79	.158	.187	.197
20	2.10	2.14	.203	.243	.251
18	2.80	2.83	.298	.332	.344
16	3.50	3.54	.387	.423	.429
22	2.19	2.23	0.632	.373	.428
20	2.63	2.67	0.810	.484	.538
18	3.50	3.54	1.206	.694	.762
16	4.38	4.42	1.632	.894	.952
20/20	—	3.66	0.359	.295	.436
18/20	—	4.27	0.496	.446	.570
18/18	—	4.76	0.537	.457	.587
16/18	—	5.45	0.685	.628	.724
20/20	—	4.15	1.424	0.593	1.063
18/20	—	4.89	1.959	0.878	1.386
18/18	—	5.38	2.118	0.899	1.432
16/18	—	6.22	2.713	1.232	1.756

### NOTES:

- (1) For acoustical values of "Quiet Deck" see page 5.
- (2) Sound absorbing elements as shown above are inert non-organic mineral fibered material which are furnished by Bowman for installation by others.

## Allowable Uniform Total Loads (PSF)

5.5/Smi

Loads are controlled by either Design stress of 20 ksi, or Live Load deflection of  $L/240 + 10$  PSF dead load, whichever is less.

Gage	(3 or more spans)						
	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"
22	77	63	53	45	39	34	30
20	92	76	64	55	47	41	36
18	123	101	85	73	63	54	48
16	153	127	106	91	78	68	60
22	89	73	61	52	45	39	35
20	106	88	74	63	54	47	41
18	141	117	98	83	72	63	55
16	176	146	122	104	90	78	67
22	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"
	91	78	67	56	48	42	37
	116	99	84	70	59	51	45
	159	136	117	98	82	70	61
	198	169	146	124	104	88	76
22	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
	71	65	59	54	50	46	42
	90	81	74	68	62	57	53
	127	115	105	96	88	81	75
	159	144	131	120	110	102	94
20/20	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"
	71	62	55	48	43	39	36
	94	82	72	63	56	50	46
	101	88	77	68	60	54	49
	127	109	95	83	74	66	59
20/20	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"
	177	161	143	126	112	100	90
	231	210	191	170	151	134	120
	239	216	197	180	162	145	130
	293	265	242	221	203	182	163

(3) Higher section properties and allowable loads are available in FM2 and FM3 decks by providing stiffener ribs—consult.

(4) The section properties and load tables shown above are for non-acoustical roof deck, for corresponding information applicable to acoustical decks contact your nearest Bowman sales office.

\*Weights shown for estimating purposes only.



# Roof Deck

## product information / suggested specifications

### TYPE FM1, FMX, FM2, FM3, 1½" CELLULAR, 3" CELLULAR

**1. SCOPE.** This section shall include all materials, equipment, and labor necessary for the installation of steel roof deck and accessories. Deck supports, field painting, flashings, drains, gutters, downspouts, or other miscellaneous items are not part of this section.

**2. MATERIAL.** Steel deck shall be as manufactured by Bowman Construction Products, Elwin G. Smith Division. Thicknesses and type shall be as indicated on the drawings and shall conform to the following provisions:

- a. The steel shall be ASTM designation A611-72 Grade C cold-rolled structural quality steel sheet (for painted deck) or A446-76 Grade A (for hot-dip galvanized deck and accessories).

**3. DESIGN.**

- a. The minimum section properties shall be  $I = \text{in.}^4$   
 $S_x = \text{in.}^3$   $S_y = \text{in.}^3$

Section properties shall conform to all applicable provisions of the latest edition of the *Specification For The Design Of Cold-Formed Steel Structural Members* as published by the American Iron and Steel Institute.

- b. The deck manufacturer shall submit a fully dimensioned drawing showing the deck geometry and engineering calculations substantiating the section properties. The drawing and calculations shall be thorough, clear and of the type and format as illustrated in Example No. 1, Part III of the *AISI Cold-Formed Steel Design Manual*; and shall be based on a working stress of 20 ksi. Actual measurements of the deck, as manufactured, shall not deviate from the geometry used in the calculations by more than the tolerance listed.

Design Geometry	Allowable Tolerance
Overall depth of deck	$\pm .030"$ (But not less than 1.470" for 1½" deck)
Width of flat elements	$\pm .030"$
Radii of curved elements	$\pm .030"$
Uncoated steel thickness	$-5.0\%$ (t min. $\geq 0.95 \times$ t design)

(Imperfections due to handling and normal construction traffic excluded.)

**4. STRUCTURAL APPLICATION.** Working stress shall not exceed 20 ksi under a total uniform load of  $\text{lbs. per square foot}$ . Deflection due to uniform live load of  $\text{PSF}$  shall not exceed 1/240 of the span. Where possible, deck sheets shall extend over three or more spans. Bending and deflection coefficients for uniform loads and equal spans shall be as follows:

	Moment	Deflection
Simple Span:	$M = WL^2/8$	$.0130WL^4/EI$
Double Span:	$M = WL^2/8$	$.0054WL^4/EI$
Triple Span:	$M = WL^2/10$	$.0068WL^4/EI$

**5. SHOP FINISH.** (Select One)

**\* Prime Painted:** A phosphatized type cleaner shall be used to remove all grease, oil and other foreign matter to prepare the steel surface for further treatment. A stabilized vinyl wash primer shall then be applied to phosphatize the surface and provide a chemically bonded chromated pigmented vinyl coating. After this initial prime coating has been heat-dried, a second light gray flexible, thermosetting, rust inhibiting prime paint shall then be roller applied and cured in a catenary oven at temperatures in excess of 400°F before forming.

**Galvanized.** Deck shall be roll-formed from steel sheet (hot dip galvanized) conforming to ASTM Designation A-446-72, and ASTM A525-73 or Fed. Spec. QQ-S-775d.

**Galv-Plus: Galv + Paint.** The steel shall be galvanized by the hot dip method followed by an organic chromate finish. Then further treated with a clear vinyl epoxy preparation. A light gray thermosetting, rust inhibiting prime paint shall then be roller coated and cured in a catenary oven at temperatures in excess of 400°F before forming.

**6. ACCESSORIES.** Ridge and valley plates, cant strips, sump pans, and other accessories which must be attached directly to the steel deck in order to provide a finished surface for the application of insulation, and roofing shall be supplied where shown on contract drawings.

**7. DRAWINGS.** Placement drawings shall be prepared and submitted for approval. The drawings shall show deck type, finish, gage of steel, the location and length of the sheets, field cutting, the method of fastening and other information as required for a thorough review and installation.

**8. CERTIFICATION.** The deck manufacturer shall certify that all materials will be in full compliance with this specification. The Letter of Certification shall accompany the design computations when submitting placement drawings for approval. When completed, 3 copies of certified mill reports shall be furnished to the Architect.

**9. INSTALLATION.** Deck shall be anchored by welding directly through the bottom of the rib to all structural supports. Average spacing of welds to supports shall not exceed 15" for 1½" deep deck or 8" for 3" deep deck. When spans exceed 5'-0" side laps shall be fastened together at mid span by using welds or screws.

### ACOUSTICAL DECK (QUIET DECK)

#### TYPES FM2, FM3, 1½" CELLULAR, 3" CELLULAR

**1. SCOPE.** (Same as Standard Deck)

**2. MATERIAL.** Acoustical deck shall be Bowman Types FM2, FM3, 1½" and 3" Cellular Quiet Deck as manufactured by Elwin G. Smith Division. Gages shall be indicated on the drawings or shall conform to design provisions described in "3-Design." Deck shall be perforated to provide acoustical absorption as specified in "3-Design." Sound absorbing elements shall consist of an inert, non-organic mineral fibered material which fits in the void spaces between the vertical perforated webs or cells. Elements shall be furnished by the deck manufacturer and shall be installed by the roofing contractor.

**3. DESIGN.** (Same as Standard Deck with the following addition:) The Noise Reduction Coefficient of the deck shall be a minimum of  $\text{_____}$  as determined by an accredited acoustical laboratory.

**4. STRUCTURAL APPLICATION.** (Same as Standard Deck)

**5. SHOP FINISH.** (Same as Standard Deck)

**6. ACCESSORIES.** (Same as Standard Deck)

**7. DRAWINGS.** (Same as Standard Deck)

**8. CERTIFICATION.** (Same as Standard Deck)

**9. INSTALLATION.** (Same as Standard Deck with the following addition:) Sound absorbing elements and sound barriers, furnished by the steel deck manufacturer, shall be installed by the roofing contractor as specified under the "Roofing" section of these specifications. (Insert under Roofing Section).

- Sound absorbing elements shall be furnished by the steel deck manufacturer and installed by the roofing contractor.
- When required, sound barriers shall be furnished by the steel deck manufacturer and installed by the roofing contractor.
- Roof insulation shall be attached using cold adhesives, applied to the top, horizontal deck surface in accordance with the manufacturer's specifications. The adhesive should be confined to top horizontal steel surfaces between rib openings.

## Noise Reduction of "Quiet Deck"

DECK TYPE	TEST NO.	NOISE REDUCTION COEFFICIENT	ROOF INSULATION THICKNESS
FM2	A72-127	.85	1 ½"
	A72-128	.90	1 ⅝"
FM3	A72-129	.90	1 ⅝"
	A72-130	.85	1 ½"
1½" Cellular	A76-253	.70	1 ½"
3" Cellular	A76-248	.90	1 ½"

AUTHORITY: RIVERBANK ACOUSTICAL LABORATORIES



## product information / suggested specifications

### 1. SCOPE

- a. This section shall include all materials, equipment, labor and service necessary for the installation of "Bowman V-Grip" in accordance with this specification and where shown or called for on architectural or structural drawings.
- b. Excluded from this section are the following:
  - (1) Structural steel and/or other miscellaneous bracing or supports for the steel deck.
  - (2) Concrete reinforcing steel and/or temperature steel.
  - (3) Concrete cover (minimum compressive strength  $f'_c = 3000$  psi).
  - (4) Fireproofing of the underside of the steel deck.
  - (5) Holes required by other trades shall be cut and/or drilled by the respective trades.

### 2. MATERIAL

Steel deck shall be as manufactured by Bowman Construction Products, Elwin G. Smith Division. Thicknesses and type shall be as indicated on the drawings and shall conform to the following provisions.

- a. The steel shall be ASTM designation A611-72 Grade C cold-rolled structural quality steel sheet (for painted deck) or A446-76 Grade A (for hot-dip galvanized deck and accessories).

### 3. DESIGN

- a. **Floor Deck**—Steel floor deck shall be proportioned such that all section properties, both positive and negative, conform to the latest edition of the "Specification For The Design of Cold-Formed Steel Structural Members" as published by the American Iron and Steel Institute.

Floor deck shall have adequate embossments to develop mechanical shear bond to provide composite action between the deck and concrete.

- b. **Application as Concrete Form**—Where possible steel floor deck shall extend over three or more spans. Type and gage of steel floor deck shall be proportioned as follows:

- (1) FOR DECKS 1.5" DEEP: Limit maximum fiber stress to not more than 20 ksi when supporting dead load of wet concrete, weight of deck and 20 PSF construction live load.
- (2) FOR DECKS > 2.0" DEEP: The unshored spans indicated are based upon twice the combined weight of wet concrete, deck, and 20 PSF construction load equal to the ultimate capacity of the deck as manufactured from 33 ksi yield steel.
- (3) Limit form deflection due to dead load of wet concrete and deck to not more than;  $L/240$  for 2 and 3 span conditions;  $L/180$  for single span

- c. **Application as Composite Slab**—A sufficient number of physical tests shall have been conducted by an independent testing agency and under the direction of a professional engineer to establish ultimate and service load values for deck-reinforced concrete slabs. Manufacturer's published live loads shall be based on a simple span condition.

Type and gage of steel floor deck shall provide for superimposed live loads as called for on drawings without exceeding:

- (1) Steel deck stress of 20 ksi (0.6 Fy) or a safety factor of 2.0 to ultimate.
- (2) Allowable horizontal shear when based on a safety factor of 2.0 to ultimate.
- (3) Deflection of  $1/360$  of the clear span.

- d. The deck manufacturer shall submit a fully dimensioned drawing showing the deck geometry and engineering calculations substantiating the section properties. The drawing and calculations shall be thorough, clear and of the type and format as illustrated in Example No. 1, Part III of the AISI Cold-Formed Steel Design Manual; and shall be based on a working stress of 20 ksi or a safety factor of 2.0 to ultimate. Actual measurements of the deck, as manufactured and delivered, shall not deviate from the geometry used in the calculations by more than the tolerance listed in Table B. (Insert Table B from Roof Deck Specification, Page 4.)

### 4. SHOP FINISH (Select One)

**Phosphatized/Painted:** Prior to roll forming both surfaces shall be treated with a phosphatized type cleaner which removes all grease, oil and other foreign matter. A stabilized vinyl wash primer shall then be used to phosphatize both surfaces while simultaneously forming a chemically bonded chromated pigmented vinyl coating. A light gray flexible, thermosetting, rust inhibiting prime paint shall then be roller coated on the underside (exposed side) and cured in a catenary oven at temperatures in excess of 400°F.

**Galvanized:** Deck shall be roll-formed from steel sheet (hot-dip galvanized) conforming to ASTM Designation A-446-72 and ASTM-A525-73 or Fed. Spec. QQ-S-775d.

**Galv. + Paint:** The steel shall be galvanized by the hot-dip method followed by an organic chromate finish. Then further treated with a clear vinyl epoxy preparation. A light gray, thermosetting, rust inhibiting prime paint shall then be roller coated on the underside (exposed side) and cured in a catenary oven at temperatures in excess of 400°F before forming.

### 5. ACCESSORIES

- a. Furnish cover plates or proper closure tape as required to close panel ends where panels change direction or abut.
- b. Furnish material for column closures to close openings between floor deck and building columns.

### 6. HOLES FOR OPENINGS

Floor deck around stairs, elevators and other major openings, as shown on the structural drawings, will be engineered by the deck manufacturer to fit these conditions. Holes required for work by other trades, and reinforcing if required, will be provided for by that trade. If unusual openings are required, as a result of an on the job revision to the structure, contact your local Bowman representative for an evaluation of the possible effects the change may have on the floor deck.

7. **DRAWINGS.** Placement drawings shall be prepared and submitted for approval. The drawings shall show deck type, finish, gage of steel, the location and length of the sheets, field cutting, the method of fastening and other information as required for a thorough review and installation.

### 8. CERTIFICATION

The deck manufacturer shall certify that all materials will be in full compliance with this specification. The Letter of Certification shall accompany the design computations when submitting placement drawings for approval. When completed, 3 copies of certified mill reports shall be furnished to the Architect.

### 9. INSTALLATION

V-Grip deck units shall be installed according to the manufacturer's standards. Units shall be placed in accordance with checked layout drawings approved by the architect. All sheets shall be adjusted to final position and be brought to bear on the supporting steel before being permanently fastened. Welds to supports should be  $\frac{5}{8}$ " diameter puddle welds or an elongated weld having an equal perimeter. Each sheet shall be welded to each support at each side of sheet and through interior ribs so that the average spacing of welds along supports does not exceed 12" on centers. Weld metal shall penetrate all layers of steel and have good fusion to the supporting members. When spans exceed 5'-0", side laps are to be fastened at midspan by either welding or mechanical means. On fire-rated floor areas, side laps shall be welded or button-punched at nominal 36"

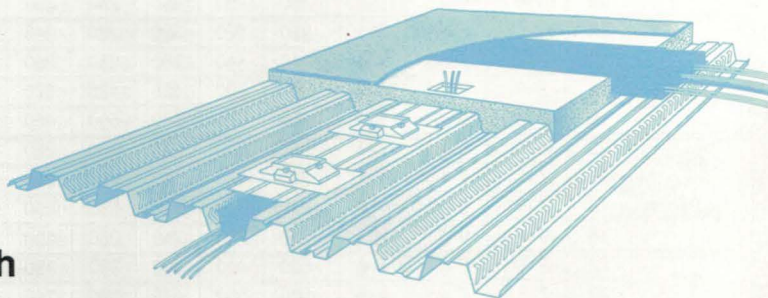
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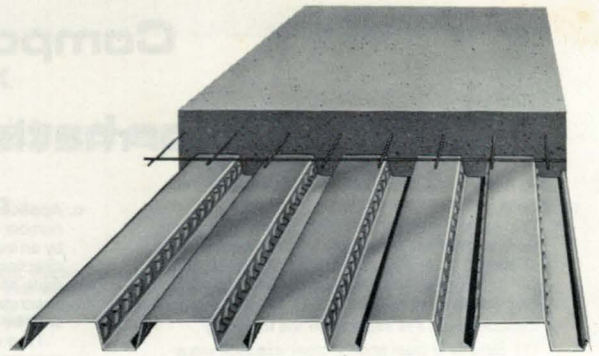
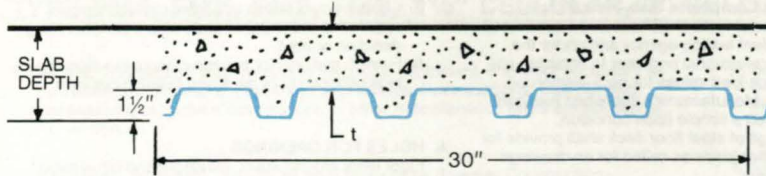




# 1 1/2" V-GRIP

## Composite floor deck

(Can be used either with or without composite beams)



### SECTION PROPERTIES OF FORM / FT.

GAGE	WEIGHT PSF*		I	S <sub>p</sub>	S <sub>n</sub>
	PTD.*	GALV.			
22	1.75	1.79	.158	.187	.197
20	2.10	2.14	.203	.243	.251
18	2.80	2.83	.298	.332	.344
16	3.50	3.54	.387	.423	.429

### GENERAL INFORMATION

SLAB THICKNESS	4"	4 1/2"	4 3/4"	5"	5 1/2"	5 3/4"	6"
Vol. Conc. Yds./100 SF	.93	1.09	1.16	1.24	1.39	1.46	1.54
Conc. Wt. PSF (Normal Wt.)	36	42	45	48	54	57	60
Conc. Wt. PSF (Light Wt.)	28	32	35	37	41	43	46
Recommended W.W.F. 6" x 6"	# 10/10	# 8/8	# 8/8	# 6/6	# 6/6	# 6/6	# 6/6

\*phosphatized on Conc. Side, Prime painted on exposed

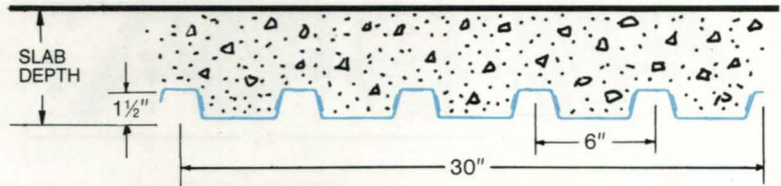
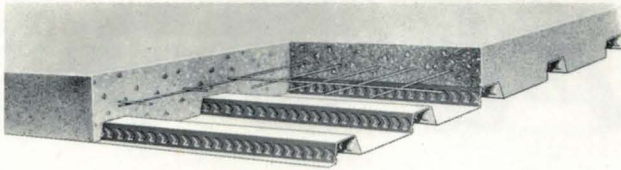
	SLAB DEPTH	DECK GAGE	ALLOWABLE UNSHORED CLEAR SPAN			SUPERIMPOSED LIVE LOAD, PSF													FIRE RATING REFERENCES SEE PAGE 9	
						CLEAR SPAN, FT.														
			1 SPAN	2 SPAN	3 SPAN	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"		
NORMAL WEIGHT CONCRETE (144 PCF)	4"	(t=2½")	22	6'-8"	6'-9"	7'-6"	250	250	250	230	200	180	160	145	130	115				D708, D726
			20	7'-5"	7'-7"	8'-6"	250	250	250	250	240	210	185	170	150	135				D816, D824
			18	8'-8"	8'-10"	9'-10"	250	250	250	250	250	250	240	215	195	175				D831, D832
			16	9'-8"	9'-9"	10'-11"	250	250	250	250	250	250	250	250	235	215				D833, D838
	4½"	(t=3")	22	6'-3"	6'-5"	7'-2"	435	370	320	280	245	215	195	175	155	140	130	115	105	
			20	7'-1"	7'-2"	8'-1"	500	440	380	330	290	255	230	205	185	170	150	140	130	
			18	8'-3"	8'-5"	9'-4"	500	500	485	425	370	330	295	265	240	215	195	180	165	
			16	9'-3"	9'-4"	10'-5"	500	500	500	500	450	400	355	320	290	260	240	215	200	
	5"	(t=3½")	22	6'-0"	6'-1"	6'-10"	250	250	250	250	250	250	230	205	185	170	155	140	130	D902, D916
			20	6'-9"	6'-11"	7'-9"	250	250	250	250	250	250	250	240	220	200	180	165	150	
			18	7'-11"	8'-0"	9'-0"	250	250	250	250	250	250	250	250	250	250	230	210	195	
			16	8'-10"	8'-11"	10'-0"	250	250	250	250	250	250	250	250	250	250	250	250	240	
	5½"	(t=4")	22	5'-9"	5'-10"	6'-7"	250	250	250	250	250	250	250	240	215	195	175	160	150	D902, D916
			20	6'-6"	6'-7"	7'-5"	250	250	250	250	250	250	250	250	250	230	210	190	175	
			18	7'-7"	7'-8"	8'-7"	250	250	250	250	250	250	250	250	250	250	250	250	225	
			16	8'-6"	8'-7"	9'-7"	250	250	250	250	250	250	250	250	250	250	250	250	250	
	6"	(t=4½")	22	5'-6"	5'-8"	6'-4"	250	250	250	250	250	250	250	250	245	220	200	185	170	D902, D916
			20	6'-3"	6'-4"	7'-1"	250	250	250	250	250	250	250	250	250	250	235	215	200	
			18	7'-4"	7'-5"	8'-4"	250	250	250	250	250	250	250	250	250	250	250	250	250	
			16	8'-2"	8'-3"	9'-3"	250	250	250	250	250	250	250	250	250	250	250	250	250	
LIGHT WEIGHT CONCRETE (110 PCF)	4"	(t=2½")	22	7'-1"	7'-3"	8'-2"	250	250	250	230	200	180	160	145	130	115				D902, D916
			20	8'-1"	8'-2"	9'-2"	250	250	250	250	240	210	185	170	150	135				
			18	9'-4"	9'-6"	10'-8"	250	250	250	250	250	250	240	215	195	175				
			16	10'-6"	10'-7"	11'-10"	250	250	250	250	250	250	250	250	235	215				
	4½"	(t=3")	22	6'-9"	7'-0"	7'-10"	250	370	320	280	245	215	195	175	155	140	130	115	105	
			20	7'-9"	7'-10"	8'-9"	250	440	380	330	290	255	230	205	185	170	150	140	130	
			18	9'-0"	9'-1"	10'-2"	250	500	485	425	370	330	295	265	240	215	195	180	165	
			16	10'-0"	10'-1"	11'-4"	250	500	500	500	450	400	355	320	290	260	240	215	200	
	4¾"	(t=3¼")	22	6'-8"	6'-10"	7'-7"	250	250	250	250	250	240	210	190	170	155	140	130	120	D733, D826, D840, D902, D907, D916
			20	7'-7"	7'-8"	8'-7"	250	250	250	250	250	250	250	225	200	180	165	150	140	
			18	8'-9"	8'-11"	10'-0"	250	250	250	250	250	250	250	250	235	215	195	180		
			16	9'-10"	9'-11"	11'-1"	250	250	250	250	250	250	250	250	250	250	250	240	220	
	5"	(t=3½")	22	6'-6"	6'-8"	7'-6"	500	440	380	330	290	255	230	205	185	170	155	140	130	
			20	7'-5"	7'-6"	8'-5"	500	500	445	390	340	300	270	240	220	200	180	165	150	
			18	8'-7"	8'-9"	9'-10"	500	500	500	500	440	390	350	310	280	255	230	210	195	
			16	9'-8"	9'-9"	10'-11"	500	500	500	500	500	475	425	380	345	310	285	260	240	
	5¾"	(t=4¼")	22	6'-2"	6'-4"	7'-1"	250	250	250	250	250	250	250	250	230	210	190	175	160	D902, D916
			20	7'-0"	7'-1"	8'-0"	250	250	250	250	250	250	250	250	250	245	225	205	190	
			18	8'-2"	8'-4"	9'-3"	250	250	250	250	250	250	250	250	250	250	250	250	245	
			16	9'-2"	9'-3"	10'-4"	250	250	250	250	250	250	250	250	250	250	250	250	250	



# 1 1/2" RV-GRIP

## Composite floor deck

(Can be used either with or without composite beams)



### SECTION PROPERTIES OF FORM / FT.

GAGE	WEIGHT PSF*		I	S <sub>p</sub>	S <sub>n</sub>
	PTD.*	GALV.			
22	1.75	1.79	.158	.197	.187
20	2.10	2.14	.208	.251	.243
18	2.80	2.83	.298	.344	.332
16	3.50	3.54	.387	.429	.423

### GENERAL INFORMATION

SLAB DEPTH	4"	4 1/2"	4 3/4"	5"	5 1/2"	5 3/4"	6"
Vol. Conc.—Yds./100 S.F.	1.06	1.21	1.29	1.37	1.52	1.60	1.67
Conc. Wt. PSF (Normal Wt.)	41	47	50	53	59	62	65
Conc. Wt. PSF (Light Wt.)	31	36	38	41	45	47	50
Recommended W.W.F. 6" x 6"	#10/10	#8/8	#8/8	#6/6	#6/6	#6/6	#6/6

\*phosphatized on Conc. Side, Prime painted on exposed

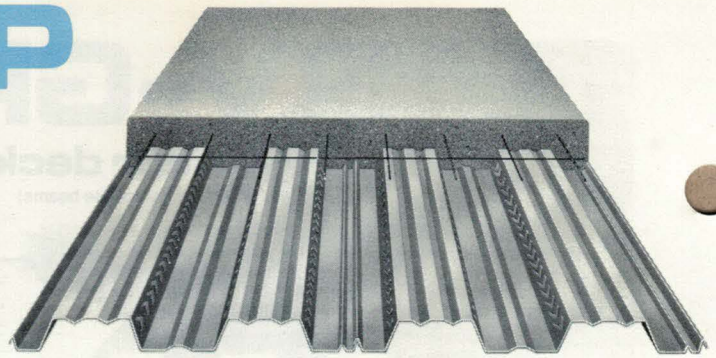
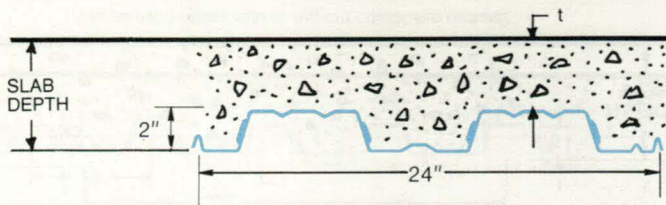
	SLAB DEPTH	DECK GAGE	ALLOWABLE UNSHORED CLEAR SPAN			SUPERIMPOSED LIVE LOAD, PSF													FIRE RATING REFERENCES SEE PAGE 9
						CLEAR SPAN, FT.													
			1 SPAN	2 SPAN	3 SPAN	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	
NORMAL WEIGHT CONCRETE (144 PCF)	4"	22	6'-6"	6'-4"	7'-0"	460	395	340	295	260	230	205	185	165	150				D708, D726
		20	7'-3"	7'-2"	8'-0"	500	465	400	350	305	270	240	215	195	175				D816, D824
		18	8'-6"	8'-4"	9'-4"	500	500	500	450	395	350	315	280	255	230				D831, D832
		16	9'-5"	9'-4"	10'-5"	500	500	500	500	485	430	385	345	310	280				D833, D838
	4½"	22	6'-2"	6'-0"	6'-9"	500	465	400	350	305	250	240	215	195	175	160	145	135	
		20	7'-0"	6'-10"	7'-8"	500	500	475	410	360	320	285	255	230	210	190	175	160	
		18	8'-1"	7'-11"	8'-11"	500	500	500	500	470	415	370	330	300	270	245	225	205	
		16	9'-0"	8'-11"	10'-0"	500	500	500	500	500	500	450	405	365	330	300	275	255	
	5"	22	5'-11"	5'-9"	6'-5"	500	500	460	400	350	310	275	250	225	205	185	170	155	D902, D909
		20	6'-8"	6'-7"	7'-4"	500	500	500	475	415	370	330	295	265	240	220	200	185	D916
		18	7'-9"	7'-8"	8'-6"	500	500	500	500	500	480	425	385	345	315	285	260	240	
		16	8'-8"	8'-7"	9'-7"	500	500	500	500	500	500	500	470	425	385	350	320	295	
	5½"	22	5'-8"	5'-7"	6'-2"	500	500	500	455	400	355	315	280	255	230	210	190	175	D902, D916
		20	6'-5"	6'-4"	7'-1"	500	500	500	500	475	420	375	335	300	275	250	230	200	
		18	7'-6"	7'-4"	8'-3"	500	500	500	500	500	500	485	435	395	355	325	295	270	
		16	8'-4"	8'-3"	9'-3"	500	500	500	500	500	500	500	500	480	435	400	365	335	
	6"	22	5'-6"	5'-4"	6'-0"	500	500	500	500	445	395	355	315	285	260	235	215	200	D902, D916
		20	6'-2"	6'-1"	6'-10"	500	500	500	500	500	470	420	375	340	305	280	255	235	
		18	7'-3"	7'-1"	7'-11"	500	500	500	500	500	500	500	490	440	400	365	335	305	
		16	8'-0"	8'-0"	8'-11"	500	500	500	500	500	500	500	500	500	490	445	410	375	
LIGHT WEIGHT CONCRETE (110 PCF)	4"	22	7'-0"	6'-10"	7'-8"	460	395	340	295	250	230	205	185	165	150				D902, D916
		20	7'-11"	7'-9"	8'-8"	500	465	400	350	305	270	240	215	195	175				
		18	9'-2"	9'-0"	10'-1"	500	500	500	450	395	350	315	280	255	230				
		16	10'-2"	10'-1"	11'-4"	500	500	500	500	485	430	385	345	310	280				
	4½"	22	6'-9"	6'-7"	7'-4"	500	465	400	350	305	250	240	215	195	175	160	145	135	D905
		20	7'-7"	7'-6"	8'-4"	500	500	475	410	360	320	285	255	230	210	190	175	160	
		18	8'-10"	8'-8"	9'-8"	500	500	500	500	470	415	370	330	300	270	245	225	205	
		16	9'-10"	9'-9"	10'-10"	500	500	500	500	500	500	450	405	365	330	300	275	255	
	4¾"	22	6'-7"	6'-5"	7'-2"	500	500	430	375	330	290	260	230	210	190	175	160	145	D733, D826
		20	7'-5"	7'-4"	8'-2"	500	500	500	440	390	345	305	275	250	225	205	185	170	D840, D902
		18	8'-8"	8'-6"	9'-6"	500	500	500	500	500	445	400	355	320	290	265	245	225	D907, D916
		16	9'-7"	9'-6"	10'-8"	500	500	500	500	500	500	485	435	395	355	325	300	275	
	5"	22	6'-6"	6'-4"	7'-1"	500	500	460	400	350	310	275	250	225	205	185	170	155	
		20	7'-4"	7'-2"	8'-0"	500	500	500	475	415	370	330	295	265	240	220	200	185	
		18	8'-6"	8'-4"	9'-4"	500	500	500	500	500	480	425	385	345	315	285	260	240	
		16	9'-5"	9'-4"	10'-6"	500	500	500	500	500	500	500	470	425	385	350	320	295	
	5¾"	22	6'-2"	6'-0"	6'-9"	500	500	500	480	425	375	335	300	270	245	225	205	190	D902, D916
		20	6'-11"	6'-10"	7'-7"	500	500	500	500	500	445	395	355	320	290	265	240	220	
		18	8'-1"	7'-11"	8'-10"	500	500	500	500	500	500	500	465	415	380	395	315	290	
		16	9'-0"	8'-11"	9'-11"	500	500	500	500	500	500	500	500	500	465	425	385	355	



# 212 V-GRIP

## Composite floor deck

(Can be used either with or without composite beams)



### SECTION PROPERTIES OF FORM / FT.

GAGE	WEIGHT PSF*		I	S <sub>p</sub>	S <sub>n</sub>
	PTD.*	GALV.			
20	2.05	2.10	.437	.415	.403
18	2.73	2.78	.583	.551	.551
16	3.42	3.47	.730	.686	.686

### GENERAL INFORMATION

SLAB THICKNESS	4½"	5"	5¼"	5½"	6"	6¼"	6½"
Vol. Conc. Yds./100 SF	1.06	1.21	1.29	1.37	1.52	1.60	1.68
Conc. Wt. PSF (Normal Wt.)	41	47	50	53	59	62	65
Conc. Wt. PSF (Light Wt.)	31	36	38	41	45	47	50
Recommended W.W.F. 6" x 6"	# 10/10	# 8/8	# 8/8	# 6/6	# 6/6	# 6/6	# 6/6

\*phosphatized on Conc. Side, Prime painted on exposed

	SLAB DEPTH	DECK GAGE	ALLOWABLE UNSHORED CLEAR SPAN		SUPERIMPOSED LIVE LOAD, PSF														FIRE RATING REFERENCES SEE PAGE 9
					CLEAR SPAN, FT.														
			1 SPAN	2 SPAN	3 SPAN	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	
NORMAL WEIGHT CONCRETE (144 Pcf)	4½" (t = 2½")	20	7'-6"	8'-11"	9'-1"	200	200	200	175	150	135	115	105	90					D703, D742
		18	8'-7"	10'-7"	10'-9"	200	200	200	190	165	145	130	115	100					D831, D832
		16	10'-1"	12'-5"	12'-7"	200	200	200	200	180	160	140	125	110					
	5½" (t = 3½")	20	6'-10"	8'-1"	8'-3"	200	200	200	200	195	170	150	135	120	105	95	85	75	D742, D902
		18	7'-10"	9'-7"	9'-9"	200	200	200	200	200	200	200	175	160	140	125	115	105	D916
		16	9'-3"	11'-4"	11'-6"	200	200	200	200	200	200	200	190	170	155	140	125	115	
	6" (t = 4")	20	6'-7"	7'-9"	7'-10"	200	200	200	200	200	190	165	150	130	115	105	95	85	D902, D916
		18	7'-7"	9'-3"	9'-4"	200	200	200	200	200	200	200	200	185	165	150	135	120	
		16	8'-11"	10'-11"	11'-0"	200	200	200	200	200	200	200	200	200	185	170	150	135	
	6½" (t = 4½")	20	6'-4"	7'-5"	7'-6"	200	200	200	200	200	200	185	165	145	130	115	105	90	D902, D916
		18	7'-4"	8'-10"	9'-0"	200	200	200	200	200	200	200	200	200	185	165	150	135	
		16	8'-7"	10'-6"	10'-7"	200	200	200	200	200	200	200	200	200	200	200	180	165	
LIGHT WEIGHT CONCRETE (110 Pcf)	4½" (t = 2½")	20	8'-2"	9'-9"	9'-11"	200	200	200	175	155	135	120	110	95					D703, D831
		18	9'-4"	11'-7"	11'-9"	200	200	200	200	195	170	155	135	125					D832, D902
		16	11'-0"	13'-7"	13'-9"	200	200	200	200	200	185	165	145	130					D916
	5¼" (t = 3¼")	20	7'-8"	9'-1"	9'-3"	200	200	200	200	175	155	140	125	110	100	90	80		D840, D902
		18	8'-9"	10'-10"	11'-0"	200	200	200	200	200	200	190	170	150	135	125	110		D916
		16	10'-4"	12'-9"	12'-11"	200	200	200	200	200	200	200	195	175	160	145	130		
	6¼" (t = 4¼")	20	7'-2"	8'-5"	8'-7"	200	200	200	200	200	200	180	160	145	130	115	105	95	D902, D916
		18	8'-2"	10'-0"	10'-2"	200	200	200	200	200	200	200	200	200	180	165	145	135	
		16	9'-8"	11'-10"	11'-11"	200	200	200	200	200	200	200	200	200	200	200	190	175	

### Integral Hanger Tabs

(WHEN SPECIFIED)

AVAILABLE IN DECK GAGES OF 20, 18 and 16.

TYPES FM2, FM3, and V-GRIP



ALLOWABLE LOAD = 100 # / TAB

### Non-piercing hanger tab



ALLOWABLE LOAD = 100 # / TAB

### Piercing hanger tab

#### ALLOWABLE LOADS

(Factor of Safety = 2.0)

DECK GA.	ALLOW. LOAD
16 to 20	450 #
22	375 #
24	315 #
26	250 #
28	225 #



MINIMUM SIZE OF HANGER WIRE NO. 12, F.S. ≥ 2

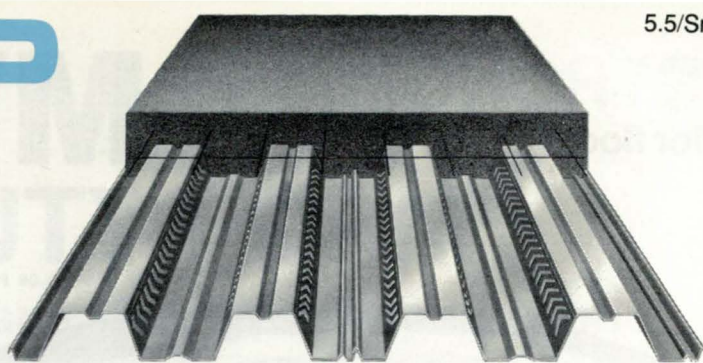
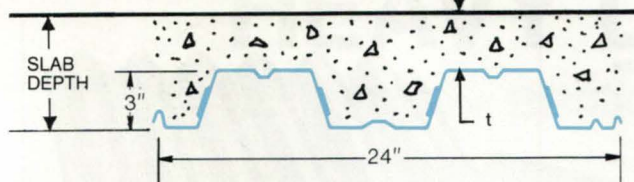


# 312 V-GRIP

5.5/Smi

## Composite floor deck

(Can be used either with or without composite beams)



### SECTION PROPERTIES OF FORM / FT.

GAGE	WEIGHT PSF*		I	S <sub>p</sub>	S <sub>n</sub>
	PTD.*	GALV.			
20	2.25	2.31	1.030	.590	.640
18	3.00	3.06	1.381	.856	.856
16	3.75	3.81	1.730	1.069	1.069

### GENERAL INFORMATION

SLAB THICKNESS	5½"	6"	6¼"	6½"	7"	7¼"	7½"
Vol. Conc. Yds./100 SF	1.23	1.39	1.46	1.54	1.69	1.77	1.85
Conc. Wt. PSF (Normal Wt.)	45	54	57	60	66	69	72
Conc. Wt. PSF (Light Wt.)	37	41	43	46	50	53	55
Recommended W.W.F. 6" x 6"	#10/10	#8/8	#8/8	#6/6	#6/6	#6/6	#6/6

\*phosphatized on Conc. Side, Prime painted on exposed

	SLAB DEPTH	DECK GAGE	ALLOWABLE UNSHORED CLEAR SPAN			SUPERIMPOSED LIVE LOAD, PSF														FIRE RATING REFERENCES SEE BELOW
						CLEAR SPAN, FT.														
			1 SPAN	2 SPAN	3 SPAN	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"	12'-6"	13'-0"	13'-6"	14'-0"	14'-6"	15'-0"		
NORMAL WEIGHT CONCRETE (144 PCF)	5½" (t = 2½")	20	8'-9"	10'-2"	10'-4"	200	175	155	140	125	110	100	90	80	70				D703, D742	
		18	11'-3"	13'-1"	13'-4"	200	195	175	155	140	125	110	100	90	80				D831, D832	
		16	12'-7"	15'-0"	15'-2"	200	200	190	170	150	135	120	110	100	90					
	6½" (t = 3½")	20	8'-1"	9'-4"	9'-5"	200	200	200	175	155	140	125	110	100	90	80			D742, D902	
		18	10'-4"	12'-0"	12'-2"	200	200	200	200	200	185	170	150	135	125	110			D916	
		16	11'-8"	13'-10"	13'-11"	200	200	200	200	200	200	185	165	150	135	125				
	7" (t = 4")	20	7'-10"	8'-11"	9'-1"	200	200	200	195	175	155	140	125	110	100	90	80	75	D902, D916	
		18	10'-0"	11'-7"	11'-9"	200	200	200	200	200	200	195	175	160	145	130	120	110		
		16	11'-3"	13'-3"	13'-5"	200	200	200	200	200	200	200	195	180	165	150	135	125		
	7½" (t = 4½")	20	7'-7"	8'-7"	8'-9"	200	200	200	200	190	170	150	135	120	110	100	90	80	D902, D916	
		18	9'-8"	11'-2"	11'-4"	200	200	200	200	200	200	195	175	160	145	130	120			
		16	10'-11"	12'-10"	13'-0"	200	200	200	200	200	200	200	200	200	190	175	160	145		
LIGHT WEIGHT CONCRETE (110 PCF)	5½" (t = 2½")	20	9'-7"	11'-3"	11'-5"	200	180	160	145	130	115	105	95	85	75				D703, D831	
		18	12'-3"	14'-5"	14'-8"	200	200	200	185	165	150	135	125	110	100				D832, D902	
		16	13'-9"	16'-6"	16'-8"	200	200	200	195	175	160	145	130	120	110				D916	
	6¼" (t = 3¼")	20	9'-1"	10'-7"	10'-9"	200	200	200	200	175	160	145	130	115	105	95			D840, D902	
		18	11'-7"	13'-7"	13'-9"	200	200	200	200	200	200	200	180	165	150	135			D916	
		16	13'-0"	15'-6"	15'-8"	200	200	200	200	200	200	200	200	190	175	160				
	7¼" (t = 4¼")	20	8'-6"	9'-10"	10'-0"	200	200	200	200	200	195	175	160	145	130	120	110	100	D902, D916	
		18	10'-0"	12'-8"	12'-10"	200	200	200	200	200	200	200	200	200	185	170	155	140		
		16	12'-2"	14'-6"	14'-8"	200	200	200	200	200	200	200	200	200	200	200	200	185		

Bowman floor deck has been tested and approved for use in the most practical and economical assemblies. The table is a partial listing of approved designs. For a more complete description refer to UL fire resistance index. Fire ratings for 1½" V-Grip are also applicable to 1½" RV-Grip.

### FIRE RATINGS for V-GRIP

U.L. DESIGN NO.	CONCRETE COVER INCHES	DECK DEPTH INCHES			PROTECTION			RATING HOURS			CONCRETE STRENGTH f. (min.)
		1½	2	3	CLG.	SP ON	NONE	R	UR	BM	
D703	2½ N	—	x	x	—	x	—	3	1½	1½	3,500
D708	2½ N	x	—	—	—	x	—	3	3	3	4,000
D726	2½ N	x	—	—	—	x	—	2	1	1	3,000
D733	3¼ L	(x)	—	—	—	x	—	2	1½	1½	3,000
D742	2½ N	—	x	x	—	x	—	2	½	1	3,500
D742	3½ N	—	x	x	—	x	—	3	½	1½	3,500
D816	2½ N	x	—	—	—	x	—	3	2	2	3,000
D824	2½ N	x	—	—	—	x	—	2	1	1	3,000
D826	3¼ L	(x)	—	—	—	x	—	2	2	2	3,000
D831	2½ N	(x)	x	x	—	x	—	3	2	2	3,000
D832	2½ N	x	x	x	—	x	—	3	3	3	3,500
D833	2½ N	x	—	—	—	x	—	3	3	1½	3,500
D838	2½ N	x	—	—	—	x	—	3	2	2	3,500
D840	3¼ L	(x)	(x)	(x)	—	x	—	2	1½	1½	3,000
D902	3½ N	(x)	(x)	(x)	—	x	—	1	0	1½	3,500

Brackets ( ) indicate finish may be phos/painted . . .  
... otherwise finish must be galvanized.

U.L. DESIGN NO.	CONCRETE COVER INCHES	DECK DEPTH INCHES			PROTECTION			RATING HOURS			CONCRETE STRENGTH f. (min.)
		1½	2	3	CLG.	SP ON	NONE	R	UR	BM	
D902	4 N	(x)	(x)	(x)	—	—	x	1½	0	1½	3,500
D902	4½ N	(x)	(x)	(x)	—	—	x	2	0	1½	3,500
D902	2½ L	(x)	(x)	(x)	—	—	x	1	0	1½	3,000
D902	3 L	(x)	(x)	(x)	—	—	x	1½	0	1½	3,000
D902	3¼ L	(x)	(x)	(x)	—	—	x	2	0	1½	3,000
D902	4¾ L	(x)	(x)	(x)	—	—	x	3	0	1½	3,000
D905	3 L	RV	—	—	—	—	x	1½	1½	2	2,000
D907	3¼ L	(x)	—	—	—	—	x	2	2	2	3,000
D909	3½ N	RV	—	—	—	—	x	1	0	1	3,000
D916	3½ N	(x)	(x)	(x)	—	—	x	1	0	1½	3,500
D916	4 N	(x)	(x)	(x)	—	—	x	1½	0	1½	3,500
D916	4½ N	(x)	(x)	(x)	—	—	x	2	0	1½	3,500
D916	2½ L	(x)	(x)	(x)	—	—	x	1	0	1½	3,000
D916	3 L	(x)	(x)	(x)	—	—	x	1½	0	1½	3,000
D916	3¼ L	(x)	(x)	(x)	—	—	x	2	0	1½	3,000
D916	4¾ L	(x)	(x)	(x)	—	—	x	3	0	1½	3,000

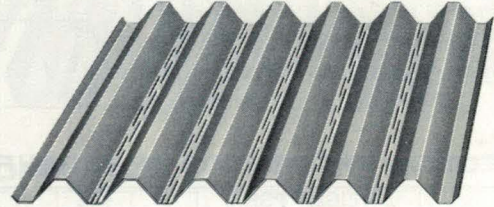
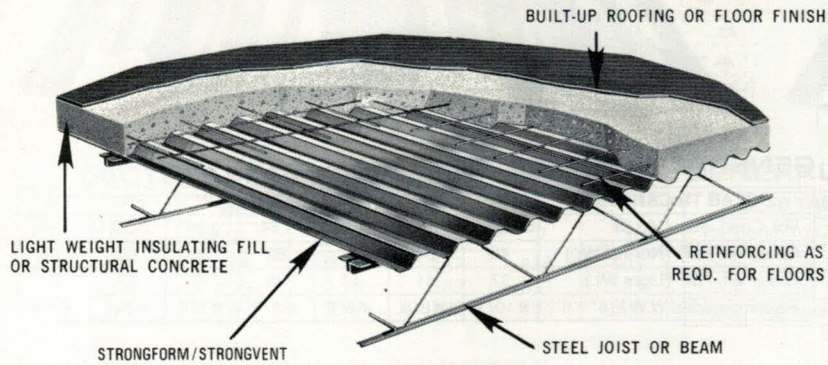


# STRONGFORM

for floors

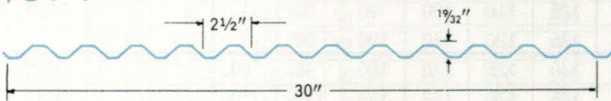
# STRONGVENT

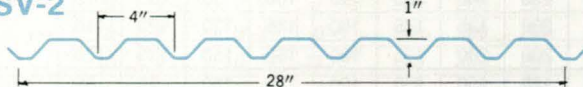
for roofs

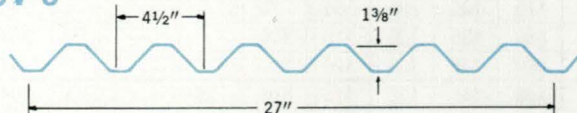


STRONGVENT supports light weight insulating concrete roof slabs with all the structural characteristics and advantages of STRONGFORM, plus bottom slots to accelerate drying time. STRONGVENT provides 1.5% venting area per sq. ft. of roof to permit most favorable drying time.

## Section Properties (per ft. of width)

SF-1/SV-1		Gage	Weight (psf.)*		I (in.) <sup>4</sup>	Sp (in.) <sup>3</sup>	Sn (in.) <sup>3</sup>
			Black	Galv.			
	SF-1/SV-1	28	.75	.84	.011	.035	.036

SF-2/SV-2		Gage	Weight (psf.)*		I (in.) <sup>4</sup>	Sp (in.) <sup>3</sup>	Sn (in.) <sup>3</sup>
			Black	Galv.			
	SF-2/SV-2	26	.96	1.06	.039	.071	.075

SF-3/SV-3		Gage	Weight (psf.)*		I (in.) <sup>4</sup>	Sp (in.) <sup>3</sup>	Sn (in.) <sup>3</sup>						
			Black	Galv.									
				SF-3/SV-3				24	1.33	1.44	.101	.137	.137
				22				1.65	1.75	.127	.171	.171	
	20	1.98	2.08	.152	.204	.204							

## Allowable Uniform Loads – (PSF) for three span conditions

	Gage	Span																	
		2'0"	2'6"	3'0"	3'6"	4'0"	4'6"	5'0"	5'6"	6'0"	6'6"	7'0"	7'6"	8'0"	8'6"	9'0"	9'6"	10'0"	
SF-1/SV-1	28 TL LL	222 172	142 88	99 51	73 32	56 21	44 15	36 11											
SF-2/SV-2	26 TL LL			209 179	154 113	118 76	93 53	75 39	62 29	52 22	45 18	38 14							
SF-3/SV-3	24 TL LL					214 196	169 138	137 100	113 75	95 58	81 46	70 37	61 30	54 25	47 20	42 17	38 15		
	22 TL LL					267 246	211 172	171 126	141 94	119 73	101 57	87 46	76 37	67 31	59 26	53 22	47 18	43 16	
	20 TL LL					319 295	252 207	204 151	169 114	142 87	121 69	104 55	91 45	80 37	71 31	63 26	57 22	51 19	

### NOTES:

- (1) The allowable total loads (TL) shown in the table are based on a fiber stress of 30 ksi.
- (2) The live loads (LL) shown in the table are live loads that produce a deflection of L/240 of the span length.
- (3) Material is roll-formed from structural quality steel having yield strengths in excess of 80 ksi.

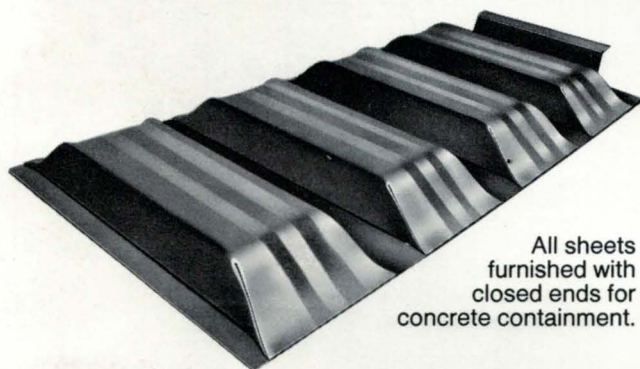
- (4) Sectional properties and load tables were determined by computer and comply with latest edition of "Specifications for the Design of Cold-Formed Structural Steel Members" as published by AISI.

- (5) Sheet lengths are available up to 30'0".



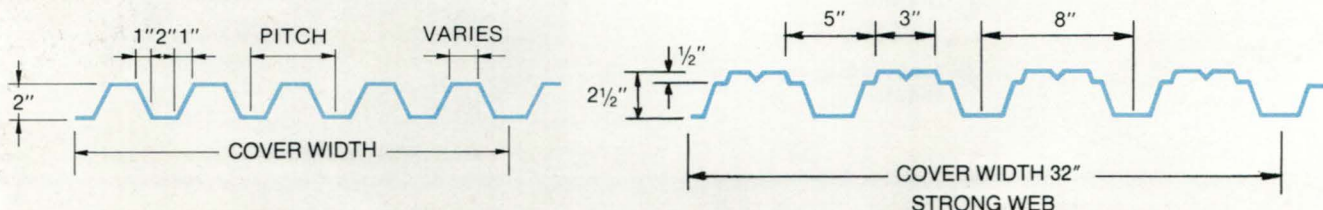
# BOWMAN HEAVY DUTY FORM

For BRIDGE and BUILDING construction



All sheets  
furnished with  
closed ends for  
concrete containment.

A complete line of deck forms in a variety of steel gages, specifically designed for construction of Bridges and Buildings. The forms are roll formed from Structural Quality Steel Sheet conforming to ASTM Designation A446 Grade C having a minimum yield strength of 40 ksi. Finish is Hot Dipped Galvanize conforming to ASTM Designation A525 with coating weight of G165. Lighter weight coatings such as G90 and G60 are also available on orders of 40,000 # or more



## Section Properties (per ft. of width)

DEPTH			2"							2½"
PITCH			5"	5½"	6"	6½"	7"	7½"	8"	8"
COVER WIDTH			25"	27½"	30"	26"	28"	30"	32"	32"
GAGE	22	Section Modulus In. <sup>3</sup>	.306	.299	.282	.268	.251	.237	.294	.388
		Moment of Inertia In. <sup>4</sup>	.354	.349	.328	.311	.291	.274	.343	.527
		Weight PSF	2.29	2.18	2.12	2.10	2.04	2.00	1.96	2.02
	21	Section Modulus In. <sup>3</sup>	.336	.338	.321	.305	.287	.271	.324	.427
		Moment of Inertia In. <sup>4</sup>	.389	.391	.369	.351	.329	.310	.377	.580
		Weight PSF	2.50	2.38	2.32	2.29	2.23	2.18	2.14	2.21
	20	Section Modulus In. <sup>3</sup>	.366	.378	.361	.344	.325	.307	.354	.465
		Moment of Inertia In. <sup>4</sup>	.425	.433	.411	.391	.368	.347	.412	.663
		Weight PSF	2.71	2.58	2.51	2.48	2.42	2.36	2.32	2.39
	19	Section Modulus In. <sup>3</sup>	.426	.459	.443	.425	.403	.381	.406	.541
		Moment of Inertia In. <sup>4</sup>	.495	.506	.495	.474	.447	.422	.476	.738
		Weight PSF	3.12	2.97	2.89	2.86	2.79	2.73	2.67	2.76
18	Section Modulus In. <sup>3</sup>	.487	.527	.530	.512	.487	.462	.439	.617	
	Moment of Inertia In. <sup>4</sup>	.567	.580	.582	.560	.531	.504	.478	.844	
	Weight PSF	3.54	3.37	3.28	3.24	3.16	3.09	3.03	3.13	
17	Section Modulus In. <sup>3</sup>	.547	.592	.618	.602	.574	.539	.507	.717	
	Moment of Inertia In. <sup>4</sup>	.639	.653	.658	.649	.619	.590	.561	.951	
	Weight PSF	3.95	3.77	3.67	3.62	3.53	3.45	3.39	3.50	
16	Section Modulus In. <sup>3</sup>	.608	.657	.699	.688	.644	.605	.570	.769	
	Moment of Inertia In. <sup>4</sup>	.711	.727	.732	.738	.709	.677	.646	1.058	
	Weight PSF	4.37	4.16	4.05	4.00	3.90	3.82	3.74	3.87	
15	Section Modulus In. <sup>3</sup>	.683	.738	.784	.779	.731	.688	.648	.869	
	Moment of Inertia In. <sup>4</sup>	.802	.819	.825	.831	.822	.789	.755	1.204	
	Weight PSF	4.89	4.66	4.53	4.48	4.36	4.27	4.19	4.31	
14	Section Modulus In. <sup>3</sup>	.757	.818	.869	.865	.817	.769	.726	.970	
	Moment of Inertia In. <sup>4</sup>	.891	.910	.916	.923	.915	.899	.864	1.339	
	Weight PSF	5.41	5.16	5.02	4.95	4.83	4.73	4.63	4.75	

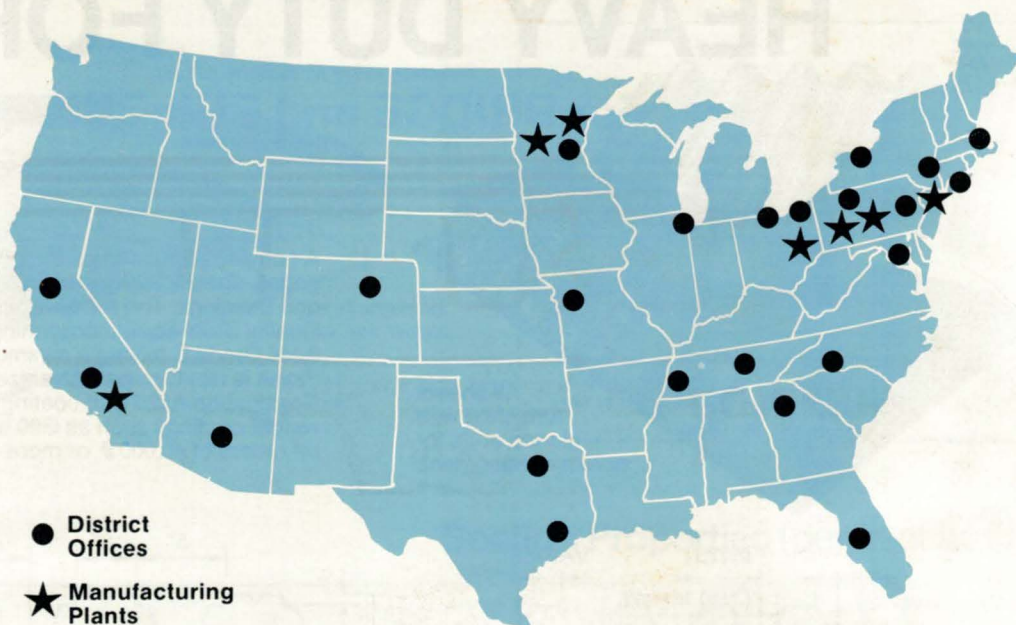
Allowable bending stress  $F_b$  for Buildings =  $0.6 F_y = 24$  ksi.

Allowable bending stress  $F_b$  for Bridges =  $0.725 F_y = 29$  ksi.

Sheet lengths will be fabricated to your specific job requirements ranging from 4'-0" to 11'-8". For other lengths consult your nearest Bowman sales office.



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