

4" BOX RIB LOAD TABLES

WITH

GALVANIZED/COLD-ROLLED GRADE 30 KSI STEEL

(22 GA, 20 GA, 18 GA, & 16 GA)

3004-H14 ALUMINUM, $F_{TY} = 17$ KSI

(0.032 ALUM, 0.040 ALUM & 0.050 ALUM)

STAINLESS STEEL GRADE 30 KSI

(22 GA, 20 GA, 18 GA, & 16 GA)

HIGH STRENGTH GRADE 45 KSI STEEL

(22 GA, 20 GA, 18 GA, & 16 GA)

FOR

CORRUGATED METALS, INC.

SEPTEMBER 30, 2016



WILLETT HOFMANN
& ASSOCIATES INC

ENGINEERING ARCHITECTURE LAND SURVEYING

809 EAST 2ND STREET, DIXON, IL 61021-0367
T: 815-284-3381 DESIGN FIRM: #184-000918

A handwritten signature in blue ink that reads "Brian K. Converse". The signature is written in a cursive style and is positioned above a horizontal line.

Brian K. Converse, P.E., S.E.
Illinois Licensed Structural Engineer
License No. 081-005213
Expires: 11/30/2016
WHA # 1194D13

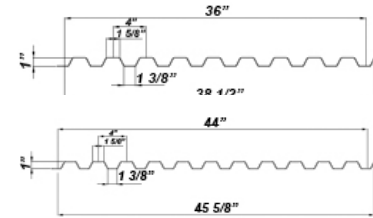


CORRUGATED METALS PRODUCTS: 4" Box Rib

Galvanized / Cold-Rolled & Aluminum Alloy / Galvalume

Section	Weight		Total Cross-Sectional Area	Allowable Stress	Top Flat in Compression			Bottom Flat in Compression		
	Sheet	Area			Moment of Inertia	Section Modulus	Allowable Moment	Moment of Inertia	Section Modulus	Allowable Moment
	lb/ft	lb/sf								
22 Ga	6.11	1.61	1.80	17964	0.081	0.164	246	0.081	0.152	228
20 Ga	7.87	2.07	2.31	17964	0.105	0.210	314	0.105	0.194	291
18 Ga	9.83	2.59	2.89	17964	0.131	0.259	387	0.131	0.240	359
16 Ga	12.17	3.20	3.58	17964	0.162	0.316	473	0.162	0.293	439
0.032 Alum.	2.19	0.58	1.85	9827	0.084	0.170	131	0.084	0.157	128
0.040 Alum.	2.74	0.72	2.31	10198	0.105	0.210	174	0.105	0.194	164
0.050 Alum.	3.42	0.90	2.89	10204	0.131	0.259	219	0.131	0.240	203
24 Ga Galvalume	5.31	1.40	1.56	29940	0.071	0.144	318	0.071	0.133	311

Table 1			Applied Load (PSF)					
Allowable Spans			10	20	30	40	50	60
Section	Span Limit	Span Type	Allowable Spans (ft)					
			22 Ga	L/60	1 Span	12'-2"	9'-2" *	7'-7" *
		2 Span	12'-6" *	9'-2" *	7'-7" *	6'-7" *	5'-11" *	5'-5" *
		3 Span	12'-11" *	9'-6" *	7'-10" *	6'-10" *	6'-2" *	5'-7" *
	L/240	1 Span	7'-8"	6'-3"	5'-6"	5'-0"	4'-8"	4'-5"
		2 Span	8'-7"	7'-0"	6'-2"	5'-8"	5'-3"	4'-11"
		3 Span	8'-5"	6'-10"	6'-0"	5'-6"	5'-1"	4'-10"
20 Ga	L/60	1 Span	13'-1"	10'-3" *	8'-6" *	7'-5" *	6'-8" *	6'-1" *
		2 Span	13'-11" *	10'-3" *	8'-6" *	7'-5" *	6'-8" *	6'-1" *
		3 Span	14'-4"	10'-7" *	8'-10" *	7'-8" *	6'-11" *	6'-4" *
	L/240	1 Span	8'-3"	6'-9"	5'-11"	5'-5"	5'-1"	4'-9"
		2 Span	9'-3"	7'-7"	6'-8"	6'-1"	5'-8"	5'-4"
		3 Span	9'-0"	7'-5"	6'-6"	5'-11"	5'-7"	5'-3"
18 Ga	L/60	1 Span	13'-11"	11'-3" *	9'-5" *	8'-3" *	7'-5" *	6'-9" *
		2 Span	15'-1" *	11'-3" *	9'-5" *	8'-3" *	7'-5" *	6'-9" *
		3 Span	15'-3"	11'-8" *	9'-8" *	8'-6" *	7'-8" *	7'-0" *
	L/240	1 Span	8'-9"	7'-2"	6'-4"	5'-10"	5'-5"	5'-1"
		2 Span	9'-10"	8'-1"	7'-2"	6'-6"	6'-1"	5'-9"
		3 Span	9'-7"	7'-11"	7'-0"	6'-5"	5'-11"	5'-7"
16 Ga	L/60	1 Span	14'-8"	12'-2" *	10'-3" *	9'-0" *	8'-1" *	7'-5" *
		2 Span	12'-4" *	12'-4" *	10'-3" *	9'-0" *	8'-1" *	7'-5" *
		3 Span	16'-1"	12'-9" *	10'-8" *	9'-4" *	8'-5" *	7'-8" *
	L/240	1 Span	9'-3"	7'-8"	6'-10"	6'-3"	5'-10"	5'-6"
		2 Span	10'-4"	8'-7"	7'-8"	7'-0"	6'-6"	6'-2"
		3 Span	10'-1"	8'-5"	7'-5"	6'-10"	6'-4"	6'-0"
0.032 Alum.	L/60	1 Span	8'-11"	7'-1" *	5'-10" *	5'-0" *	4'-6" *	4'-1" *
		2 Span	9'-10" *	7'-1" *	5'-10" *	5'-0" *	4'-6" *	4'-1" *
		3 Span	9'-9"	7'-4" *	6'-0" *	5'-2" *	4'-8" *	4'-3" *
	L/240	1 Span	5'-8"	4'-6"	3'-11"	3'-7"	3'-4"	3'-2"
		2 Span	6'-4"	5'-1"	4'-5"	4'-0"	3'-9"	3'-6"
		3 Span	6'-2"	4'-11"	4'-4"	3'-11"	3'-8"	3'-5"
0.040 Alum.	L/60	1 Span	9'-7"	7'-8"	6'-7" *	5'-8" *	5'-1" *	4'-8" *
		2 Span	10'-9"	8'-0" *	6'-7" *	5'-8" *	5'-1" *	4'-8" *
		3 Span	10'-6"	8'-3" *	6'-9" *	5'-11" *	5'-3" *	4'-10" *
	L/240	1 Span	6'-0"	4'-10"	4'-3"	3'-10"	3'-7"	3'-5"
		2 Span	6'-9"	5'-5"	4'-9"	4'-4"	4'-0"	3'-10"
		3 Span	6'-7"	5'-4"	4'-8"	4'-3"	3'-11"	3'-8"
0.050 Alum.	L/60	1 Span	10'-3"	8'-3"	7'-3"	6'-4" *	5'-8" *	5'-2" *
		2 Span	11'-6"	8'-10" *	7'-3" *	6'-4" *	5'-8" *	5'-2" *
		3 Span	11'-3"	9'-0"	7'-6" *	6'-6" *	5'-10" *	5'-4" *
	L/240	1 Span	6'-5"	5'-2"	4'-7"	4'-2"	3'-10"	3'-8"
		2 Span	7'-3"	5'-10"	5'-1"	4'-8"	4'-4"	4'-1"
		3 Span	7'-1"	5'-8"	5'-0"	4'-7"	4'-3"	4'-0"
24 Ga Galvalume	L/60	1 Span	11'-8"	9'-6"	8'-4"	7'-7"	7'-1"	6'-7" *
		2 Span	13'-2"	10'-8"	9'-2" *	8'-0" *	7'-2" *	6'-7" *
		3 Span	12'-10"	10'-5"	9'-2"	8'-3" *	7'-5" *	6'-9" *
	L/240	1 Span	7'-4"	6'-0"	5'-3"	4'-10"	4'-6"	4'-2"
		2 Span	8'-3"	6'-8"	5'-11"	5'-5"	5'-0"	4'-9"
		3 Span	8'-1"	6'-7"	5'-9"	5'-3"	4'-11"	4'-7"



Sample Calculation

Required Load = 40 psf
 Required Deflection Limit = L / 240
 Span Type = 2 Span

Allowable Span = 6'-1" (20 Ga Steel)

GENERAL NOTES

1. An asterisk (*) indicates allowable stress is reached.
2. For structural roofing & siding made of formed metal sheets, the total load deflection shall not exceed L/60.
3. Refer to Table 1604.3 limits & footnotes of the International Building Code (IBC) for additional guidance.
4. Allowable spans & loads DO include self-weight of panel.
5. All values are for one foot of panel width unless noted otherwise.

STEEL NOTES

1. Yield stress = Fy = 30,000 psi
2. Loads & spans for steel are based on the AISI Standard for Design of Cold-Formed Steel Structural Members (2007 Edition)

ALUMINUM NOTES (3003-H14)

1. Yield stress = Fty = 17,000 psi & Fcy = 15,300 psi
2. Loads & spans for aluminum are based on the Aluminum Design Manual (January 2015).

GALVALUME NOTES

1. Yield stress = Fy = 50,000 psi



CORRUGATED METALS PRODUCTS: 4" Box Rib

Galvanized / Cold-Rolled & Aluminum Alloy / Galvalume

Table 2			Trial Span (ft)									
Allowable Loads			3	4	5	6	7	8	9	10	11	12
Section	Span Limit	Span Type	Allowable Loads (PSF)									
22 Ga	L/60	1 Span	201 *	112 *	71 *	49 *	35 *	26 *	20 *	16 *	13 *	10
		2 Span	201 *	112 *	71 *	49 *	35 *	26 *	20 *	16 *	13 *	11 *
		3 Span	214 *	120 *	76 *	52 *	38 *	28 *	22 *	17 *	14 *	11 *
	L/240	1 Span	192	80	40	22	13	8	5	3	2	1
		2 Span	201 *	112 *	57	32	20	12	8	5	3	2
		3 Span	214 *	106	53	30	18	11	7	5	3	2
20 Ga	L/60	1 Span	256 *	143 *	90 *	62 *	45 *	34 *	26 *	21 *	17 *	13
		2 Span	256 *	143 *	90 *	62 *	45 *	34 *	26 *	21 *	17 *	14 *
		3 Span	273 *	153 *	97 *	66 *	48 *	36 *	28 *	22 *	18 *	15 *
	L/240	1 Span	248	103	51	29	17	11	7	4	3	1
		2 Span	256 *	143 *	74	42	25	16	11	7	5	3
		3 Span	273 *	136	69	39	23	15	10	6	4	3
18 Ga	L/60	1 Span	316 *	176 *	112 *	77 *	56 *	42 *	32 *	26 *	21 *	16
		2 Span	316 *	176 *	112 *	77 *	56 *	42 *	32 *	26 *	21 *	17 *
		3 Span	338 *	189 *	120 *	82 *	60 *	45 *	35 *	28 *	22 *	18 *
	L/240	1 Span	309	128	64	36	21	13	8	5	3	2
		2 Span	316 *	176 *	92	52	32	20	13	9	6	4
		3 Span	338 *	170	86	48	29	19	12	8	5	3
16 Ga	L/60	1 Span	386 *	216 *	137 *	94 *	68 *	51 *	40 *	31 *	25 *	20
		2 Span	386 *	216 *	137 *	94 *	68 *	51 *	40 *	31 *	25 *	21 *
		3 Span	413 *	231 *	146 *	100 *	73 *	55 *	43 *	34 *	27 *	22 *
	L/240	1 Span	382	159	80	44	27	17	11	7	4	2
		2 Span	386 *	216 *	114	65	39	25	17	11	7	5
		3 Span	413 *	210	106	60	36	23	15	10	7	4
0.032 Alum.	L/60	1 Span	113 *	63 *	40 *	27 *	20 *	14	9	6	5	3
		2 Span	113 *	63 *	40 *	27 *	20 *	15 *	12 *	9	7	5
		3 Span	121 *	68 *	43 *	29 *	21 *	16 *	12 *	9	6	5
	L/240	1 Span	69	28	14	8	4	3	2	1	0	0
		2 Span	98	41	20	11	7	4	3	2	1	0
		3 Span	91	38	19	10	6	4	2	1	1	0
0.040 Alum.	L/60	1 Span	145 *	81 *	52 *	35 *	26 *	17	12	8	6	4
		2 Span	145 *	81 *	52 *	35 *	26 *	19 *	15 *	12 *	9	6
		3 Span	155 *	87 *	55 *	38 *	28 *	21 *	16	11	8	6
	L/240	1 Span	86	36	18	10	6	3	2	1	1	0
		2 Span	122	51	25	14	8	5	3	2	1	1
		3 Span	113	47	24	13	8	5	3	2	1	1
0.050 Alum.	L/60	1 Span	180 *	101 *	64 *	44 *	32 *	22	15	10	7	5
		2 Span	180 *	101 *	64 *	44 *	32 *	24 *	19 *	15 *	11	8
		3 Span	192 *	108 *	68 *	47 *	34 *	26 *	20	14	10	8
	L/240	1 Span	107	44	22	12	7	4	3	2	1	0
		2 Span	152	63	32	18	11	7	4	3	2	1
		3 Span	141	59	29	16	10	6	4	2	1	1
24 Ga Galvalume	L/60	1 Span	292 *	163 *	104 *	72 *	51	34	23	16	12	9
		2 Span	292 *	163 *	104 *	72 *	52 *	39 *	31 *	24	18	13
		3 Span	312 *	175 *	111 *	77 *	56 *	42 *	31	22	16	12
	L/240	1 Span	167	69	35	19	11	7	4	3	2	1
		2 Span	237	99	50	28	17	11	7	5	3	2
		3 Span	220	92	46	26	16	10	6	4	3	2

GENERAL NOTES

1. An asterisk (*) indicates allowable stress is reached.
2. A Strikethrough (~~100~~) indicates less than 10 psf ASCE minimum.
3. For structural roofing & siding made of formed metal sheets, the total load deflection shall not exceed L/60.
4. Refer to Table 1604.3 limits & footnotes of the International Building Code (IBC) for additional guidance.
5. Allowable spans & loads DO include self-weight of panel.
6. All values are for one foot of panel width unless noted otherwise.

GALVALUME NOTES

1. Yield stress = Fy = 50,000 psi

STEEL NOTES

1. Yield stress = Fy = 30,000 psi
2. Loads & spans for steel are based on the AISI Standard for Design of Cold-Formed Steel Structural Members (2007 Edition)

ALUMINUM NOTES (3003-H14)

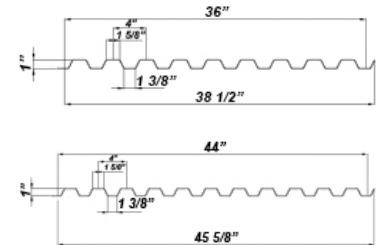
1. Yield stress = Fty = 17,000 psi & Fcy = 15,300 psi
2. Loads & spans for aluminum are based on the Aluminum Design Manual (January 2015).

CORRUGATED METALS PRODUCTS: 4" Box Rib

Stainless Steel

Section	Weight		Total Cross-Sectional Area	Allowable Stress	Top Flat in Compression			Bottom Flat in Compression		
	Sheet	Area			Moment of Inertia	Section Modulus	Allowable Moment	Moment of Inertia	Section Modulus	Allowable Moment
	lb/ft	lb/sf			A (in ²)	Fa (psi)	I (in ⁴ /ft)	S (in ³ /ft)	Ma (lb-ft/ft)	I (in ⁴ /ft)
22 Ga SS	6.11	1.61	1.80	17964	0.081	0.164	240	0.081	0.152	228
20 Ga SS	7.87	2.07	2.31	17964	0.105	0.210	314	0.105	0.194	291
18 Ga SS	9.83	2.59	2.89	17964	0.131	0.259	387	0.131	0.240	359
16 Ga SS	12.17	3.20	3.58	17964	0.162	0.316	473	0.162	0.293	439

Table 1			Applied Load (PSF)					
Allowable Spans			10	20	30	40	50	60
Section	Span Limit	Span Type	Allowable Spans (ft)					
22 Ga SS	L/60	1 Span	11'-5"	9'-2" *	7'-7" *	6'-7" *	5'-11" *	5'-5" *
		2 Span	12'-6" *	9'-2" *	7'-7" *	6'-7" *	5'-11" *	5'-5" *
		3 Span	12'-6"	9'-6" *	7'-10" *	6'-10" *	6'-2" *	5'-7" *
	L/240	1 Span	7'-2"	5'-10"	5'-2"	4'-8"	4'-4"	4'-1"
		2 Span	8'-1"	6'-7"	5'-9"	5'-3"	4'-11"	4'-8"
		3 Span	7'-10"	6'-5"	5'-8"	5'-2"	4'-9"	4'-6"
20 Ga SS	L/60	1 Span	12'-3"	10'-0"	8'-6" *	7'-5" *	6'-8" *	6'-1" *
		2 Span	13'-9"	10'-3" *	8'-6" *	7'-5" *	6'-8" *	6'-1" *
		3 Span	13'-5"	10'-7" *	8'-10" *	7'-8" *	6'-11" *	6'-4" *
	L/240	1 Span	7'-9"	6'-4"	5'-7"	5'-1"	4'-9"	4'-6"
		2 Span	8'-8"	7'-1"	6'-3"	5'-9"	5'-4"	5'-0"
		3 Span	8'-5"	6'-11"	6'-1"	5'-7"	5'-2"	4'-11"
18 Ga SS	L/60	1 Span	13'-0"	10'-8"	9'-5" *	8'-3" *	7'-5" *	6'-9" *
		2 Span	14'-7"	11'-3" *	9'-5" *	8'-3" *	7'-5" *	6'-9" *
		3 Span	14'-3"	11'-8" *	9'-8" *	8'-6" *	7'-8" *	7'-0" *
	L/240	1 Span	8'-2"	6'-9"	6'-0"	5'-5"	5'-1"	4'-10"
		2 Span	9'-2"	7'-7"	6'-8"	6'-1"	5'-9"	5'-5"
		3 Span	9'-0"	7'-5"	6'-6"	6'-0"	5'-7"	5'-3"
16 Ga SS	L/60	1 Span	13'-9"	11'-5"	10'-1"	9'-0" *	8'-1" *	7'-5" *
		2 Span	15'-5"	12'-4" *	10'-3" *	9'-0" *	8'-1" *	7'-5" *
		3 Span	15'-1"	12'-6"	10'-8" *	9'-4" *	8'-5" *	7'-8" *
	L/240	1 Span	8'-8"	7'-2"	6'-4"	5'-10"	5'-5"	5'-2"
		2 Span	9'-9"	8'-1"	7'-2"	6'-6"	6'-1"	5'-9"
		3 Span	9'-6"	7'-10"	7'-0"	6'-5"	5'-11"	5'-7"



4" Box Rib Profile
Sample Calculation

Required Load = 40 psf
Required Deflection Limit = L / 240
Span Type = 2 Span

Allowable Span = 5'-9" (20 Ga SS)

GENERAL NOTES

1. An asterisk (*) indicates allowable stress is reached.
2. For structural roofing & siding made of formed metal sheets, the total load deflection shall not exceed L/60.
3. Refer to Table 1604.3 limits & footnotes of the International Building Code (IBC) for additional guidance.
4. Allowable spans & loads DO include self-weight of panel.
5. All values are for one foot of panel width unless noted otherwise.
6. "SS" indicates Stainless Steel

STEEL NOTES

1. Yield stress = Fy = 30,000 psi
2. Loads & spans for steel are based on the ASCE "Specification for the Design of Stainless Steel Cold-Formed Structural Members" (ASCE 8-02) and AISC Steel Design Guide 27 for "Structural Stainless Steel"



CORRUGATED METALS PRODUCTS: 4" Box Rib

Stainless Steel

Table 2			Trial Span (ft)									
Allowable Loads			3	4	5	6	7	8	9	10	11	12
Section	Span Limit	Span Type	Allowable Loads (PSF)									
22 Ga SS	L/60	1 Span	201 *	112 *	71 *	49 *	35 *	26 *	20 *	15	11	8-
		2 Span	201 *	112 *	71 *	49 *	35 *	26 *	20 *	16 *	13 *	11 *
		3 Span	214 *	120 *	76 *	52 *	38 *	28 *	22 *	17 *	14 *	11
	L/240	1 Span	157	65	32	18	10	6-	4-	2-	1-	0-
		2 Span	201 *	93	47	26	16	10	6-	4-	2-	1-
		3 Span	208	86	43	24	14	9-	6-	4-	2-	1-
20 Ga SS	L/60	1 Span	256 *	143 *	90 *	62 *	45 *	34 *	26 *	20	14	10
		2 Span	256 *	143 *	90 *	62 *	45 *	34 *	26 *	21 *	17 *	14 *
		3 Span	273 *	153 *	97 *	66 *	48 *	36 *	28 *	22 *	18 *	14
	L/240	1 Span	203	84	42	23	14	8-	5-	3-	2-	1-
		2 Span	256 *	120	60	34	20	13	8-	5-	3-	2-
		3 Span	268	111	56	31	19	12	7-	5-	3-	2-
18 Ga SS	L/60	1 Span	316 *	176 *	112 *	77 *	56 *	42 *	32 *	25	18	13
		2 Span	316 *	176 *	112 *	77 *	56 *	42 *	32 *	26 *	21 *	17 *
		3 Span	338 *	189 *	120 *	82 *	60 *	45 *	35 *	28 *	22 *	18
	L/240	1 Span	253	105	52	29	17	10	6-	4-	2-	1-
		2 Span	316 *	150	75	42	25	16	10	7-	4-	3-
		3 Span	334	139	70	39	23	15	9-	6-	4-	2-
16 Ga SS	L/60	1 Span	386 *	216 *	137 *	94 *	68 *	51 *	40 *	30	22	16
		2 Span	386 *	216 *	137 *	94 *	68 *	51 *	40 *	31 *	25 *	21 *
		3 Span	413 *	231 *	146 *	100 *	73 *	55 *	43 *	34 *	27 *	22
	L/240	1 Span	313	130	65	36	21	13	8-	5-	3-	1-
		2 Span	386 *	185	93	52	32	20	13	8-	5-	3-
		3 Span	412	172	86	48	29	18	12	8-	5-	3-

GENERAL NOTES

1. An asterisk (*) indicates allowable stress is reached.
2. A Strikethrough (~~100~~) indicates less than 10 psf ASCE minimum.
3. For structural roofing & siding made of formed metal sheets, the total load deflection shall not exceed L/60.
4. Refer to Table 1604.3 limits & footnotes of the International Building Code (IBC) for additional guidance.
5. Allowable spans & loads DO include self-weight of panel.
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7. "SS" indicates Stainless Steel

STEEL NOTES

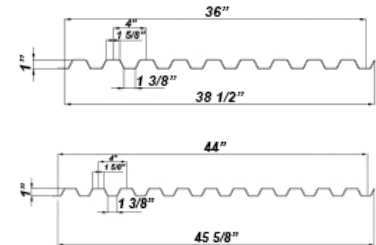
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2. Loads & spans for steel are based on the ASCE "Specification for the Design of Stainless Steel Cold-Formed Structural Members" (ASCE 8-02) and AISC Steel Design Guide 27 for "Structural Stainless Steel"

CORRUGATED METALS PRODUCTS: 4" Box Rib

High-Strength Steel

Section	Weight		Total Cross-Sectional Area	Allowable Stress	Top Flat in Compression			Bottom Flat in Compression		
	Sheet	Area			Moment of Inertia	Section Modulus	Allowable Moment	Moment of Inertia	Section Modulus	Allowable Moment
	lb/ft	lb/sf								
22 Ga	6.11	1.61	1.80	26946	0.081	0.164	342	0.081	0.152	340
20 Ga	7.87	2.07	2.31	26946	0.105	0.210	471	0.105	0.194	436
18 Ga	9.83	2.59	2.89	26946	0.131	0.259	581	0.131	0.240	538
16 Ga	12.17	3.20	3.58	26946	0.162	0.316	710	0.162	0.293	658

Table 1			Applied Load (PSF)					
Allowable Spans			10	20	30	40	50	60
Section	Span Limit	Span Type	Allowable Spans (ft)					
22 Ga	L/60	1 Span	12'- 2"	9'- 11"	8'- 9"	8'- 0"	7'- 3" *	6'- 8" *
		2 Span	13'- 8"	11'- 1"	9'- 4" *	8'- 1" *	7'- 3" *	6'- 8" *
		3 Span	13'- 4"	10'- 10"	9'- 7"	8'- 5" *	7'- 6" *	6'- 11" *
	L/240	1 Span	7'- 8"	6'- 3"	5'- 6"	5'- 0"	4'- 8"	4'- 5"
		2 Span	8'- 7"	7'- 0"	6'- 2"	5'- 8"	5'- 3"	4'- 11"
		3 Span	8'- 5"	6'- 10"	6'- 0"	5'- 6"	5'- 1"	4'- 10"
20 Ga	L/60	1 Span	13'- 1"	10'- 8"	9'- 5"	8'- 8"	8'- 0"	7'- 6" *
		2 Span	14'- 8"	12'- 0"	10'- 5" *	9'- 1" *	8'- 2" *	7'- 6" *
		3 Span	14'- 4"	11'- 9"	10'- 4"	9'- 5" *	8'- 6" *	7'- 9" *
	L/240	1 Span	8'- 3"	6'- 9"	5'- 11"	5'- 5"	5'- 1"	4'- 9"
		2 Span	9'- 3"	7'- 7"	6'- 8"	6'- 1"	5'- 8"	5'- 4"
		3 Span	9'- 0"	7'- 5"	6'- 6"	5'- 11"	5'- 7"	5'- 3"
18 Ga	L/60	1 Span	13'- 11"	11'- 5"	10'- 1"	9'- 3"	8'- 7"	8'- 2"
		2 Span	15'- 7"	12'- 10"	11'- 4"	10'- 1" *	9'- 1" *	8'- 4" *
		3 Span	15'- 3"	12'- 6"	11'- 1"	10'- 2"	9'- 4" *	8'- 7" *
	L/240	1 Span	8'- 9"	7'- 2"	6'- 4"	5'- 10"	5'- 5"	5'- 1"
		2 Span	9'- 10"	8'- 1"	7'- 2"	6'- 6"	6'- 1"	5'- 9"
		3 Span	9'- 7"	7'- 11"	7'- 0"	6'- 5"	5'- 11"	5'- 7"
16 Ga	L/60	1 Span	14'- 8"	12'- 2"	10'- 9"	9'- 11"	9'- 3"	8'- 8"
		2 Span	16'- 6"	13'- 8"	12'- 1"	11'- 0" *	9'- 11" *	9'- 2" *
		3 Span	16'- 1"	13'- 4"	11'- 10"	10'- 10"	10'- 1"	9'- 5" *
	L/240	1 Span	9'- 3"	7'- 8"	6'- 10"	6'- 3"	5'- 10"	5'- 6"
		2 Span	10'- 4"	8'- 7"	7'- 8"	7'- 0"	6'- 6"	6'- 2"
		3 Span	10'- 1"	8'- 5"	7'- 5"	6'- 10"	6'- 4"	6'- 0"



4" Box Rib Profile
Sample Calculation

Required Load = 40 psf
 Required Deflection Limit = L / 240
 Span Type = 2 Span

Allowable Span = 6'-1" (20 Ga)

GENERAL NOTES

1. An asterisk (*) indicates allowable stress is reached.
2. For structural roofing & siding made of formed metal sheets, the total load deflection shall not exceed L/60.
3. Refer to Table 1604.3 limits & footnotes of the International Building Code (IBC) for additional guidance.
4. Allowable spans & loads DO include self-weight of panel.
5. All values are for one foot of panel width unless noted otherwise.

STEEL NOTES

1. Yield stress = Fy = 45,000 psi
2. Loads & spans for steel are based on the AISI Standard for Design of Cold-Formed Steel Structural Members (2007 Edition)



CORRUGATED METALS PRODUCTS: 4" Box Rib

High-Strength Steel

Table 2			Trial Span (ft)									
Allowable Loads			3	4	5	6	7	8	9	10	11	12
Section	Span Limit	Span Type	Allowable Loads (PSF)									
22 Ga	L/60	1 Span	302 *	169 *	107 *	74 *	54 *	39	27	19	14	10
		2 Span	302 *	169 *	107 *	74 *	54 *	41 *	32 *	25 *	20	15
		3 Span	323 *	181 *	115 *	79 *	58 *	44 *	34 *	26	19	14
	L/240	1 Span	192	80	40	22	13	8	5	3	2	1
		2 Span	273	114	57	32	20	12	8	5	3	2
		3 Span	254	106	53	30	18	11	7	5	3	2
20 Ga	L/60	1 Span	385 *	215 *	137 *	94 *	69 *	50	35	24	18	13
		2 Span	385 *	215 *	137 *	94 *	69 *	52 *	40 *	32 *	26	20
		3 Span	411 *	230 *	146 *	101 *	73 *	56 *	43 *	33	24	18
	L/240	1 Span	248	103	51	29	17	11	7	4	3	1
		2 Span	352	147	74	42	25	16	11	7	5	3
		3 Span	327	136	69	39	23	15	10	6	4	3
18 Ga	L/60	1 Span	476 *	266 *	169 *	117 *	85 *	63	43	31	22	16
		2 Span	476 *	266 *	169 *	117 *	85 *	64 *	50 *	40 *	33 *	25
		3 Span	508 *	285 *	181 *	125 *	91 *	69 *	54 *	41	30	23
	L/240	1 Span	309	128	64	36	21	13	8	5	3	2
		2 Span	438	183	92	52	32	20	13	9	6	4
		3 Span	407	170	86	48	29	19	12	8	5	3
16 Ga	L/60	1 Span	581 *	325 *	207 *	143 *	104 *	78	53	38	28	20
		2 Span	581 *	325 *	207 *	143 *	104 *	79 *	61 *	49 *	40 *	30
		3 Span	621 *	348 *	221 *	153 *	111 *	84 *	66 *	51	37	28
	L/240	1 Span	382	159	80	44	27	17	11	7	4	2
		2 Span	542	226	114	65	39	25	17	11	7	5
		3 Span	503	210	106	60	36	23	15	10	7	4

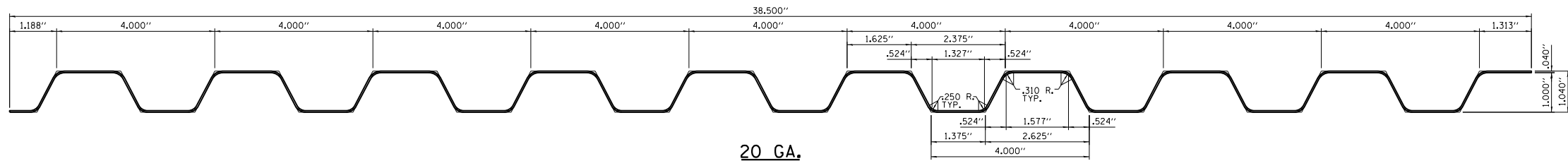
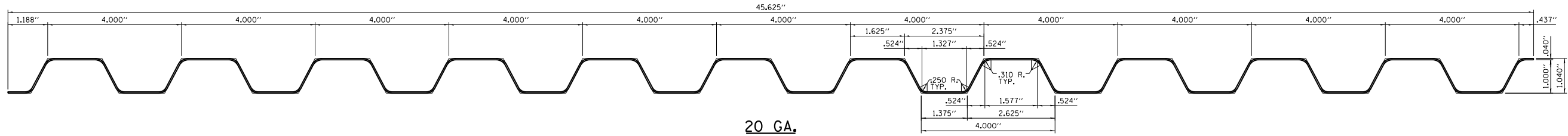
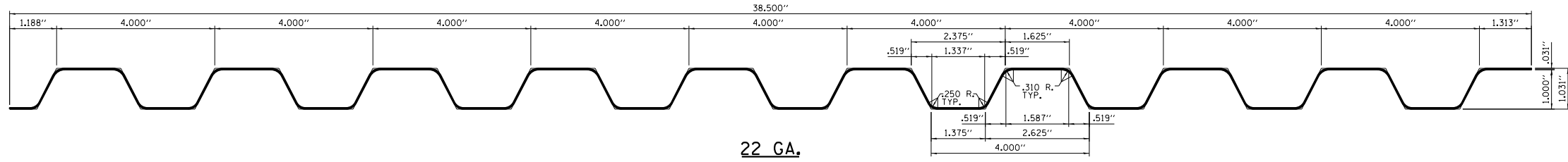
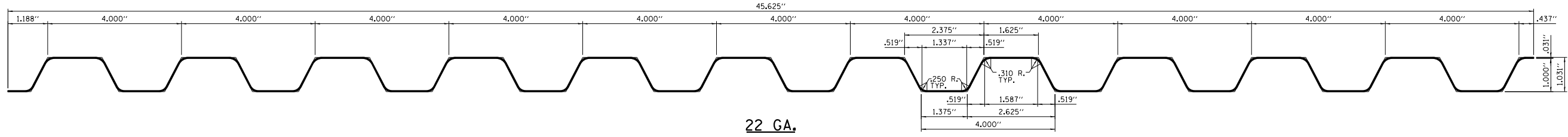
GENERAL NOTES

1. An asterisk (*) indicates allowable stress is reached.
2. A Strikethrough (~~100~~) indicates less than 10 psf ASCE minimum.
3. For structural roofing & siding made of formed metal sheets, the total load deflection shall not exceed L/60.
4. Refer to Table 1604.3 limits & footnotes of the International Building Code (IBC) for additional guidance.
5. Allowable spans & loads DO include self-weight of panel.
6. All values are for one foot of panel width unless noted otherwise.

STEEL NOTES

1. Yield stress = Fy = 45,000 psi
2. Loads & spans for steel are based on the AISI Standard for Design of Cold-Formed Steel Structural Members (2007 Edition)

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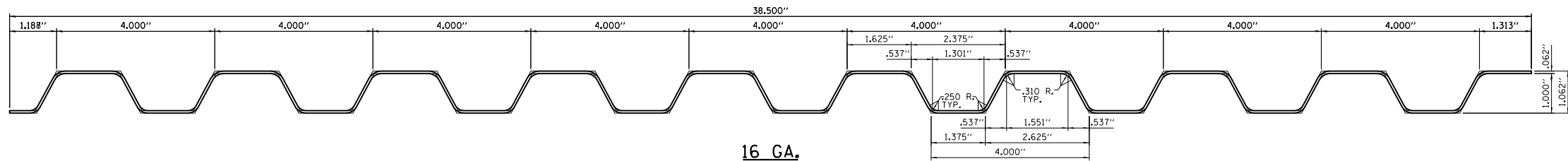
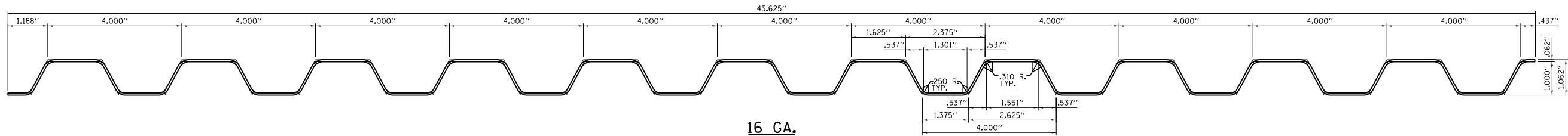
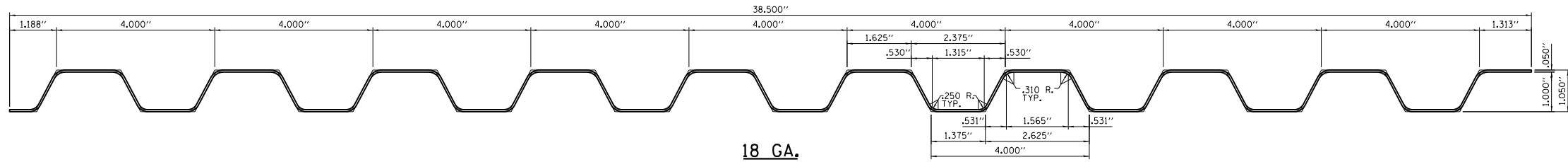
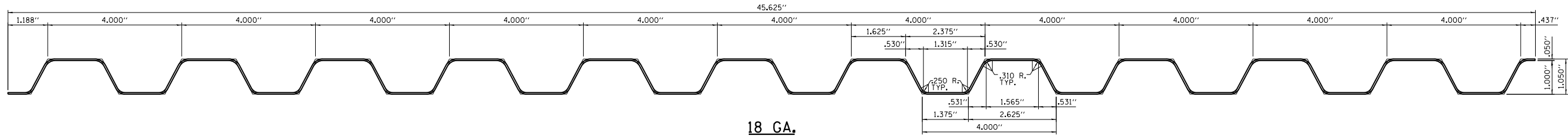
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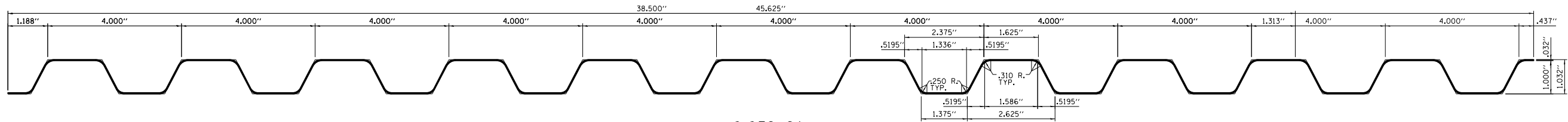
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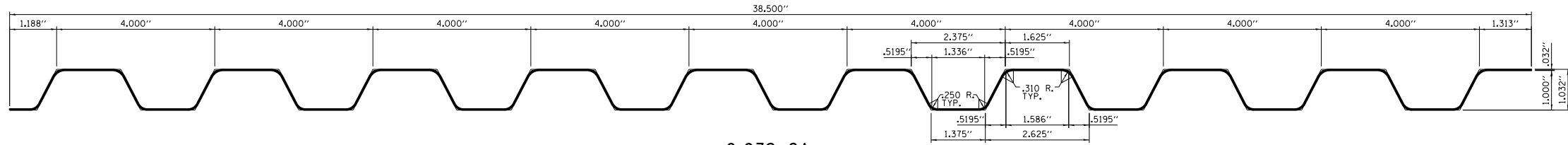
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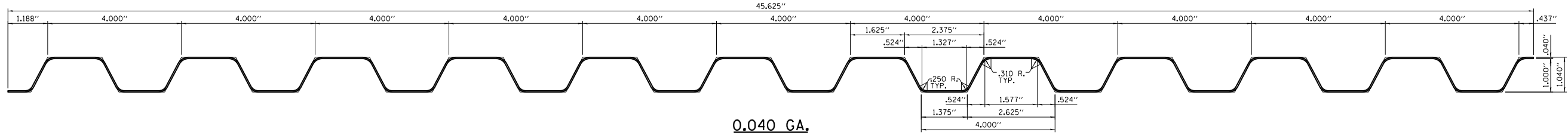
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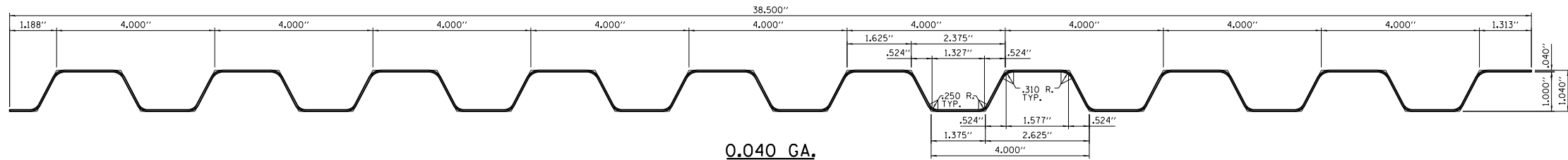
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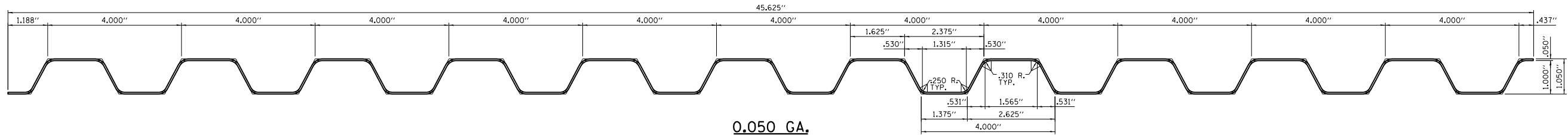
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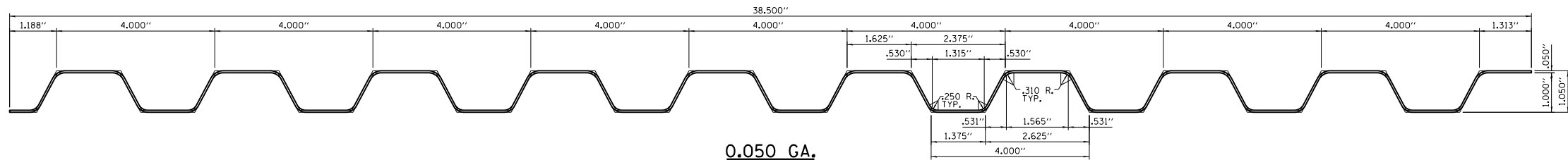
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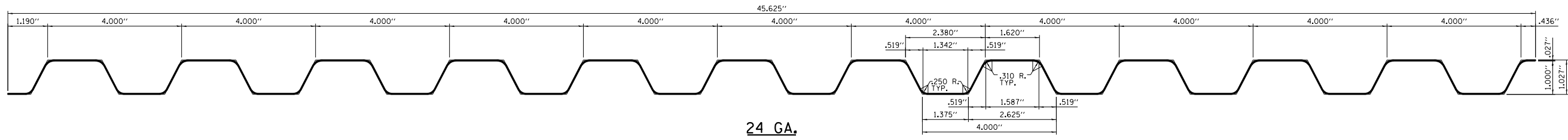
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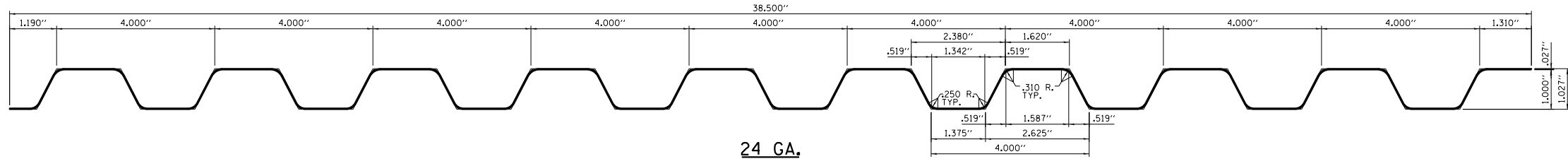
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