

INTRODUCTION

This information is designed to assist you in product selection, detailing and application. MBCI is prepared and staffed to provide professional assistance to architects, engineers, and contractors. At your request, assistance in budget development, product selection, design data, and application information will be provided.

In a continuing effort to refine and improve products, this manual is subject to change without notice. To ensure you have the latest information available, please inquire.

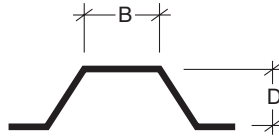
LiteFrame[®]

1" Subgirt.....	Page 2-3
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For complete performance specifications, product limitations and disclaimers, please consult MBCI's Paint and Galvalume[®] Plus warranties. Upon receipt of payment in full, these warranties are available upon request for all painted or Galvalume[®] Plus, prime products. Sample copies can be found at www.mbc.com or contact your local MBCI Sales Representative.

PRODUCT INFORMATION ARCHITECTURAL

1" SUBGIRT



SECTION PROPERTIES												
SECTION B x D 1.63 x 1				AXIS X - X							AXIS Y - Y	
				TOP IN COMPRESSION			BOTTOM IN COMPRESSION					
F _y	GAUGE	WEIGHT LB/FT	AREA IN ²	I _x IN ⁴	S _e IN ³	M _a KIP-FT	I _x IN ⁴	S _e IN ³	M _a KIP-FT	R _x IN	I _y IN ⁴	R _y IN
33	18	0.95	0.279	0.0466	0.0909	1.7686	0.0449	0.0844	1.6679	0.4086	0.5993	1.4655
57	16	1.19	0.350	0.0582	0.1122	3.7983	0.0556	0.1032	3.5217	0.4076	0.7529	1.4660
57	14**	1.45	0.416	0.0688	0.1312	4.4680	0.0681	0.1287	4.3920	0.4068	0.8939	1.4666

NOTES

1. All calculations for the properties of 1" Subgirt are calculated in accordance with the 2001 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members.
 2. Maxo is allowable bending movement.
 3. S_e is for bending.
 4. I_y is for the full section.
- ** 14 Gauge available as a press broken part only.

LOAD TABLES FOR SUBGIRTS (Fully Braced) CONTINUOUS 3 SPAN CONDITION

SECTION B x D	GAUGE	SPAN FT.	LIVE LOAD LB/FT	DEFLECTION IN.	REACTION		NEGATIVE WIND LOAD LB/FT
					END KIPS	INT KIPS	
1.63 x 1	18	2	347.5	0.05	0.28	0.76	491.3
		3	154.4	0.11	0.19	0.51	218.3
		4	86.9	0.19	0.14	0.38	122.8
		5	55.6	0.30	0.11	0.31	78.6
		6	35.6*	0.40	0.09	0.23	54.6
1.63 x 1	16	2	717.5	0.08	0.59	1.61	1055.1
		3	326.1	0.18	0.39	1.08	468.9
		4	150.0*	0.27	0.24	0.66	263.8
		5	76.8*	0.33	0.15	0.42	168.8
		6	44.5*	0.40	0.11	0.29	117.2
1.63 x 1	14**	2	845.2	0.08	0.68	1.86	1241.1
		3	395.4	0.19	0.47	1.30	551.6
		4	177.2*	0.27	0.28	0.78	310.3
		5	90.7*	0.33	0.18	0.50	198.6
		6	52.5*	0.40	0.13	0.35	137.9

NOTES

1. LOAD is allowable total load that can be supported by the section. The weight of the section has not been subtracted from these values.
 2. Allowable loads have been calculated in accordance with the 2001 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members for uniform span lengths and F_y of 33 KSI for 18 Ga. and 57 KSI for 16 and 14 gauges. Wind Load is for uplift for orientation as shown on Properties and Allowables. These values are valid for the compression flange being fully braced.
 3. Minimum bearing length of 1.5" required.
 4. Deflection values are the amount of deflection that occurs when the full allowable load is applied. For applications with special deflection requirements, it may be necessary to modify the allowable loads.
 5. * Indicates that a Deflection of L/180 controlled for allowable loads.
- **14 Gauge available as a press broken part only.

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ARCHITECTURAL PRODUCT INFORMATION

LOAD TABLES FOR SUBGIRTS (Unbraced) CONTINUOUS 3 SPAN CONDITION

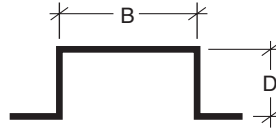
SECTION B x D	GAUGE	SPAN FT.	LIVE LOAD LB/FT	DEFLECTION IN.	REACTION		NEGATIVE WIND LOAD LB/FT
					END KIPS	INT KIPS	
1.63 x 1	18	2	180.30	0.03	0.15	0.40	270.2
		3	47.50	0.03	0.06	0.16	135.5
		4	20.00	0.05	0.03	0.09	59.1
		5	10.55	0.06	0.03	0.06	32.9
		6	6.35	0.08	0.02	0.05	21.2
1.63 x 1	16	2	264.90	0.03	0.21	0.59	601.0
		3	76.40	0.04	0.09	0.26	216.8
		4	34.40	0.06	0.06	0.16	100.2
		5	19.20	0.09	0.04	0.11	57.9
		6	12.00	0.12	0.03	0.09	38.0
1.63 x 1	14**	2	365.00	0.03	0.29	0.81	785.0
		3	112.80	0.05	0.14	0.38	318.6
		4	53.20	0.08	0.09	0.24	153.0
		5	30.60	0.12	0.06	0.18	90.5
		6	19.70	0.16	0.05	0.14	60.2

NOTES

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- Minimum bearing length of 1.5" required.
- Deflection values are the amount of deflection that occurs when the full allowable load is applied. For applications with special deflection requirements, it may be necessary to modify the allowable loads.
- * Indicates that a Deflection of $L/180$ controlled for allowable loads.
 **14 Gauge available as a press broken part only.

PRODUCT INFORMATION ARCHITECTURAL

1/2" SUBGIRT



SECTION PROPERTIES												
SECTION B x D 1.63 x 1				AXIS X - X							AXIS Y - Y	
				TOP IN COMPRESSION			BOTTOM IN COMPRESSION					
F _y	GAUGE	WEIGHT LB/FT	AREA IN ²	I _x IN ⁴	S _e IN ³	M _a KIP-FT	I _x IN ⁴	S _e IN ³	M _a KIP-FT	R _x IN	I _x IN ⁴	R _y IN
33	18	0.158	0.539	0.0069	0.0286	0.5739	0.0069	0.0255	0.5739	0.2094	0.0931	0.7665
57	16	0.197	0.670	0.0083	0.0337	1.0420	0.0083	0.0305	1.0420	0.2047	0.1159	0.7669

NOTES

1. All calculations for the properties of 1/2" Subgirt are calculated in accordance with the 2001 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members.
2. I_x is for deflection determination.
3. S_e is for bending.
4. M_{axo} is allowable bending movement.
4. I_y is for the full section.

LOAD TABLES FOR SUBGIRTS (Fully Braced) CONTINUOUS 3 SPAN CONDITION

SECTION B x D	GAUGE	SPAN FT.	LIVE LOAD LB/FT	DEFLECTION IN.	REACTION		NEGATIVE WIND LOAD LB/FT
					END KIPS	INT KIPS	
1.5 x .5	18	2	109.6	0.100	0.09	0.24	159.4
		3	42.4*	0.200	0.05	0.14	70.9
		4	17.9*	0.267	0.03	0.08	39.9
1.5 x .5	16	2	154.4*	0.133	0.12	0.34	266.0
		3	45.8*	0.200	0.05	0.15	118.2
		4	19.3*	0.267	0.03	0.08	66.5

NOTES

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2. Allowable loads have been calculated in accordance with the 2001 edition of the North American Specification For Design Of Cold-Formed Steel Structural Members for uniform span lengths and F_y of 33 KSI for 18 Ga. and 57 KSI for 16 and 14 gauges. Wind Load is for uplift for orientation as shown on Properties and Allowables. These values are valid for the compression flange being fully braced.
3. Minimum bearing length of 1.5" required.
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ARCHITECTURAL PRODUCT INFORMATION

LOAD TABLES FOR SUBGIRTS (Unbraced) CONTINUOUS 3 SPAN CONDITION

SECTION B x D	GAUGE	SPAN FT.	LIVE LOAD LB/FT	DEFLECTION IN.	REACTION		NEGATIVE WIND LOAD LB/FT
					END KIPS	INT KIPS	
1.5 x .5	18	2	80.90	0.08	0.07	0.18	132.6
		3	30.85	0.15	0.04	0.10	57.2*
		4	15.80	0.24	0.03	0.07	24.4*
1.5 x .5	16	2	140.3	0.110	0.11	0.31	228.0*
		3	49.8*	0.200	0.06	0.17	68.0*
		4	20.6*	0.267	0.03	0.09	29.1*

NOTES

- LOAD is allowable total load that can be supported by the section. The weight of the section has not been subtracted from these values.
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