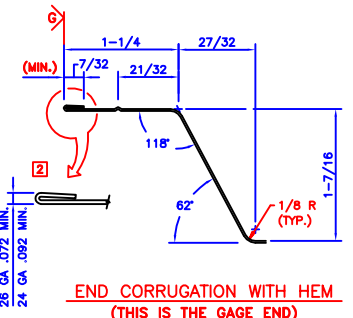
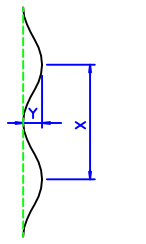


**CROSS SECTION**



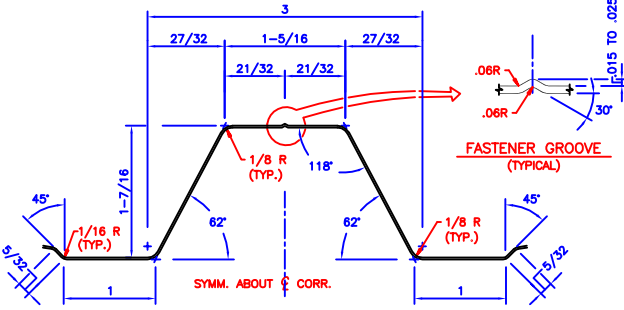
**END CORRUGATION WITH HEM**  
(THIS IS THE GAGE END)



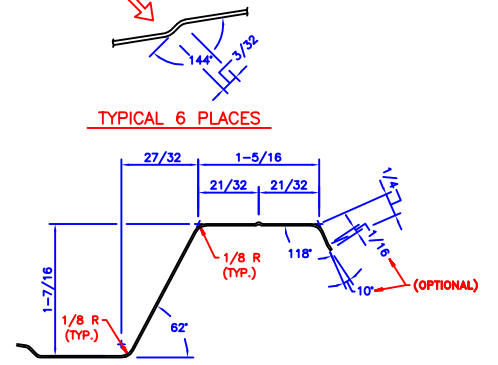
**ALLOWABLE OIL CAN**  
(FULLNESS)

X	Y
0° TO 9°	.010"
9° TO 18°	.025"
18° TO 27°	.035"
27° TO 36°	.045"

DIM. X = DISTANCE BETWEEN VALLEYS  
DIM. Y = MAXIMUM DEPTH ALLOWABLE



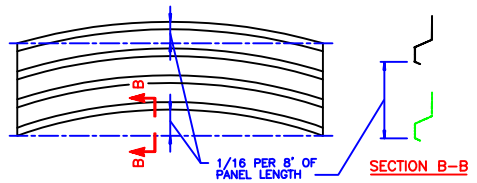
**TYPICAL CORRUGATION**



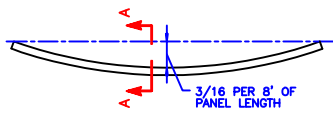
**END CORRUGATION WITH LIP**

**ALLOWABLE COMBINATION OF CAMBER AND BOW**  
(PER L' OF PANEL LENGTH)

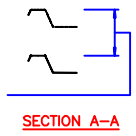
CAMBER IN L' OF PANEL LENGTH								BOW IN L' OF PANEL LENGTH							
32	28	24	20	16	12	8	0	8	12	16	20	24	28	32	
1/4	7/32	3/16	5/32	1/8	3/32	1/16	0	0	0	0	0	0	0	0	
3/16	11/64	9/64	1/8	3/32	5/64	3/64	1/32	3/64	1/16	5/64	3/32	7/64	1/8		
1/8	7/64	3/32	5/64	1/16	3/64	1/32	1/16	3/32	1/8	5/32	3/16	7/32	1/4		
1/8	7/64	3/32	5/64	1/16	3/64	1/32	3/32	9/64	3/16	15/64	9/32	21/64	3/8		
1/8	7/64	3/32	5/64	1/16	3/64	1/32	1/8	3/16	1/4	5/16	3/8	7/16	1/2		
1/16	1/16	3/64	3/64	1/32	3/64	1/64	5/32	15/64	5/16	25/64	15/32	35/64	5/8		
0	0	0	0	0	0	0	3/16	9/32	3/8	15/32	9/16	21/32	3/4		



**ALLOWABLE EDGE CAMBER-EITHER DIRECTION**



**ALLOWABLE BOW-EITHER DIRECTION**

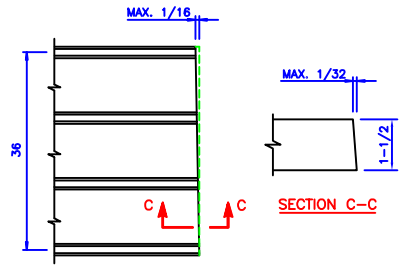


**SECTION A-A**

**NOTES:**

- ALL BEND RADII = 1/16 UNLESS NOTED OTHERWISE.
- ANGLE TOLERANCES ± 2°, EXCEPT AS SHOWN. HORIZONTAL PLANES ± 2" FROM HORIZONTAL, EXCEPT AS SHOWN. ANGLES TO BE MEASURED FROM A FLAT PLANE, WITH PANEL HELD TO THAT PLANE WITHOUT DISTORTION TO FABRICATED WIDTH, AND WITH OUTSIDE CORRUGATIONS FREE.
- CROSS SECTION TOLERANCES SHOWN TO BE HELD THROUGHOUT LENGTH OF PANEL EXCEPT WHERE PANEL IS DISTORTED BY SHEARING OR BENDING.
- MAXIMUM ALLOWABLE LATERAL OR VERTICAL DISTORTION BY THE SHEARING OPERATIONS IS ± 1/32 FROM ROLLED SHAPE.
- DIMENSIONS SHOWN ARE FOR PANEL HELD IN FLAT PLANE, WITHOUT DISTORTION OF FABRICATED WIDTH, AND WITH OUTSIDE CORRUGATIONS FREE.
- ANY REDUCTION IN AREA AT BEND RADII SHALL NOT EXCEED 10% OF ADJACENT MATERIAL THICKNESS.

MATERIALS			
FLAT MAT'L. ORDER WIDTH	THICKNESS & MATERIAL	MAT'L. SPECS.	WT. / INCH
43-1/4 ASTM A568 +3/16 -0	26 AND 24 GA. PRE-PAINTED STEEL	STEEL-SPEC. NO. 10090 GRADE 50	26 GA. = .280 24 GA. = .333



**SQUARENESS TOLERANCE**

FOR PANELS WITH OUTSIDE CORRUGATIONS CAMBERED IN OPPOSITE DIRECTIONS, THE TOTAL IS NOT TO EXCEED 1/16 PER 8' OF PANEL LENGTH.

NO.	REVISION	DRAWN REV. NO.	CHECKED SIGN.	DATE	NO.	REVISION	DRAWN REV. NO.	CHECKED SIGN.	DATE	TOLERANCES AS FOLLOWS UNLESS OTHERWISE NOTED:	DRAWN REV. NO.	REV'D.	PART NUMBER	NAME AND SIZE	MAT'L. OR SPEC.		
1	SHOW CHANGES TO CIVIL/AL. REVISED DATE 11/19/98. ALL DIMENSIONS TO BE TO CENTER UNLESS OTHERWISE SPECIFIED. GENERAL DIMENSIONING TO FACE UNLESS OTHERWISE SPECIFIED.	RHE	CMR	11/19/98						A. DIMENSIONS ± .015 B. SHEET METAL SHEARING TOLERANCE ± .015 C. STRUCTURAL LENGTH ± .1 D. BREAK PARTS ± .2 E. FINISHING LOCATION ± .1 F. ALL WELDING SYMBOLS PER BUTLER STDS. G. FOR DIMENSIONING SEE BUTLER STANDARD BOOK	RHE	CAG	CMR	9712	SHADOWALL PANEL	10-91	
2	REVISION TO ADD PANEL FINISHING TO FACE (LOW-CLOSE) PANEL MATERIALS.	RHE	CMR	11/19/98											11/19/98		
											ORDER NUMBER		BUTLER MANUFACTURING COMPANY	GENERAL OFFICES - KANSAS CITY, MISSOURI	D	043484	02