d², Inc. design dynamics, Inc.
Thomas M. Shingler, P.E.

NEGATIVE LOAD SPAN CHART FOR : PETERSEN 7.2 PANEL 36" X 0.050" ALUM. (perf.)			
Span, ft.	SINGLE SPAN	TWO EQUAL SPANS	THREE EQUAL SPANS
	W (psf)	W (psf)	W (psf)
1.00	448.80	498.67	623.33
1.50	199.47	221.63	277.04
2.00	112.20	124.67	155.83
2.50	71.81	79.79	99.73
3.00	49.87	55.41	69.26
3.50	36.64	40.71	50.88
4.00	28.05	31.17	38.96
4.50	22.16	24.63	30.78
5.00	17.95	19.95	24.93
5.50	14.84	16.48	20.61
6.00	12.47	13.85	17.31
6.50	10.62	11.80	14.75
7.00	9.16	10.18	12.72

Alloy : 3003-H14

I_{xx} = 0.2600 in^4

$S_{xx(top)}$ = 0.1000 in^3

$S_{xx(bott)}$ = 0.0900 in^3

W = Allowable Uniform Wind Load, psf

1. Theoretical section properties have been calculated per AISI 2012 North American Specification for the Design of Cold-Formed Steel Structural Member.
   Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2012 specifications considering bending, shear, combined bending and shear and deflection.
3. Allowable load does not address web crippling, fasteners, connection strength or support material.
4. Panel weight is not considered.
5. Load/Span values are based on theoretical computations and not load testing.
6. Deflection consideration is limited by a maximum deflection ratio of **L/120** of span.
7. Allowable loads do not include a 1/3 stress increase for wind.
8. Panel is perforated with 1/8" ϕ holes spaced 3/16" on center yielding 40% open area.