

## 5/8" Security Chain Link Mesh Variables 11-1/2 ga to 9 ga

5/8" Mesh Wind & Weight Values				
Gauge	Dia (in)	$\epsilon$	$C_{fw}$	$D_m$ (psf)
5	0.207	-	-	-
6	0.192	-	-	-
8	0.162	-	-	-
9	0.148	0.37	1.5	2.3
10	0.135	0.34	1.5	2
11	0.120	0.31	1.5	1.6
11-1/2	0.113	0.30	1.3	1.3

$\epsilon$  = solidity ratio for chain link

$\epsilon'$  = solidity ratio for iced chain link

$C_{fw}$  = wind force coefficient

$C_{fi}$  = wind on ice force coefficient

$D_m$  = estimated weight of chain link mesh - verify with supplier

$D_i$  = estimated weight of ice (includes 0.7 ASD factor)

The values below are only valid for Risk Category I and  $K_{zt} = 1.0$

For heights not shown, round up to the nearest 5', or interpolate

For ice thickness not shown, round up to nearest value

5/8" Security Mesh (all gauges) Estimated Ice Loading Risk Category I $K_{zt} = 1.0$												
ASCE 7-10 Nominal Ice Thickness, t (in)	Fence Height, h											
	5'			10'			15'			20'		
	$\epsilon'$	$C_{fi}$	$D_i$ (psf)	$\epsilon'$	$C_{fi}$	$D_i$ (psf)	$\epsilon'$	$C_{fi}$	$D_i$ (psf)	$\epsilon'$	$C_{fi}$	$D_i$ (psf)
0.25	1.00	See solid wall Case A or Case C tables	2.3	1.00	See solid wall Case A or Case C tables	2.5	1.00	See solid wall Case A or Case C tables	2.7	1.00	See solid wall Case A or Case C tables	2.8
0.50	1.00		5.3	1.00		5.7	1.00		6.0	1.00		6.2
0.75	1.00		8.1	1.00		8.7	1.00		9.1	1.00		9.4
1.00	1.00		10.9	1.00		11.7	1.00		12.2	1.00		12.5
1.25	1.00		13.6	1.00		14.6	1.00		15.2	1.00		15.7
1.50	1.00		16.4	1.00		17.6	1.00		18.3	1.00		18.8
ASCE 7-16 Nominal Ice Thickness, t (in)	Fence Height, h											
ASCE 7-16 Nominal Ice Thickness, t (in)	5'			10'			15'			20'		
	$\epsilon'$	$C_{fi}$	$D_i$ (psf)	$\epsilon'$	$C_{fi}$	$D_i$ (psf)	$\epsilon'$	$C_{fi}$	$D_i$ (psf)	$\epsilon'$	$C_{fi}$	$D_i$ (psf)
0.25	0.86	See solid wall Case A or Case C tables	1.0	0.88	See solid wall Case A or Case C tables	1.1	0.89	See solid wall Case A or Case C tables	1.1	0.90	See solid wall Case A or Case C tables	1.2
0.50	1.00		2.3	1.00		2.5	1.00		2.7	1.00		2.8
0.75	1.00		3.9	1.00		4.2	1.00		4.4	1.00		4.6
1.00	1.00		5.3	1.00		5.7	1.00		6.0	1.00		6.2
1.25	1.00		6.7	1.00		7.2	1.00		7.5	1.00		7.8
1.50	1.00		8.1	1.00		8.7	1.00		9.1	1.00		9.4
1.75	1.00		9.5	1.00		10.2	1.00		10.6	1.00		10.9
2.00	1.00		10.9	1.00		11.7	1.00		12.2	1.00		12.5
2.25	1.00		12.3	1.00		13.1	1.00		13.7	1.00		14.1
2.50	1.00	13.6	1.00	14.6	1.00	15.2	1.00	15.7				
ASCE 7-22 Nominal Ice Thickness, t (in)	Fence Height, h											
ASCE 7-22 Nominal Ice Thickness, t (in)	5'			10'			15'			20'		
	$\epsilon'$	$C_{fi}$	$D_i$ (psf)	$\epsilon'$	$C_{fi}$	$D_i$ (psf)	$\epsilon'$	$C_{fi}$	$D_i$ (psf)	$\epsilon'$	$C_{fi}$	$D_i$ (psf)
0.25	0.94	See solid wall Case A or Case C tables	1.3	0.95	See solid wall Case A or Case C tables	1.4	0.96	See solid wall Case A or Case C tables	1.5	0.97	See solid wall Case A or Case C tables	1.6
0.50	1.00		3.1	1.00		3.4	1.00		3.5	1.00		3.7
0.75	1.00		5.0	1.00		5.4	1.00		5.6	1.00		5.8
1.00	1.00		6.7	1.00		7.2	1.00		7.5	1.00		7.8
1.25	1.00		8.5	1.00		9.1	1.00		9.5	1.00		9.8
1.50	1.00		10.2	1.00		10.9	1.00		11.4	1.00		11.7
1.75	1.00		11.9	1.00		12.8	1.00		13.3	1.00		13.7
2.00	1.00		13.6	1.00		14.6	1.00		15.2	1.00		15.7
2.25	1.00		15.4	1.00		16.5	1.00		17.2	1.00		17.7
2.50	1.00		17.1	1.00		18.3	1.00		19.1	1.00		19.6

# Chain Link Mesh

## 5/8" x 9 ga

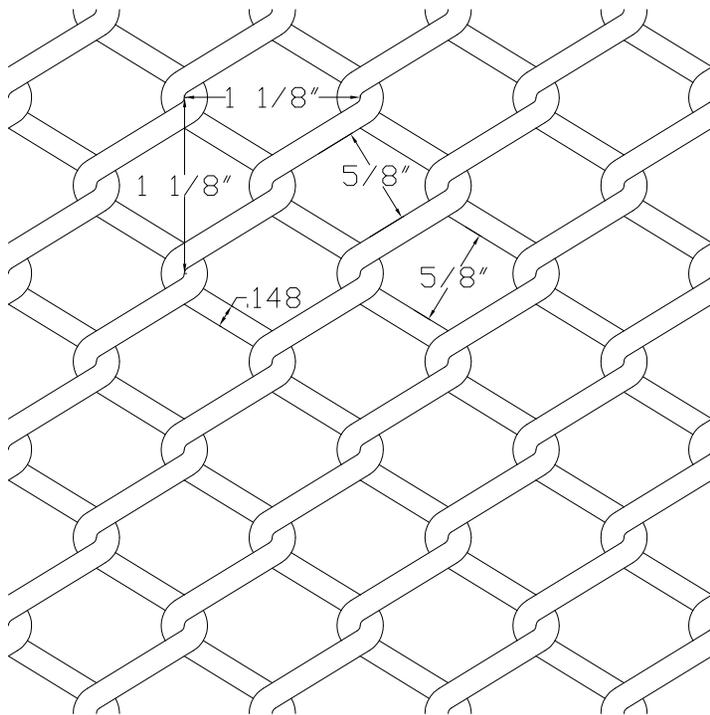
Wind Area,  $A = 52.6 \text{ in}^2 / \text{ft}^2$

$\epsilon = 0.365$

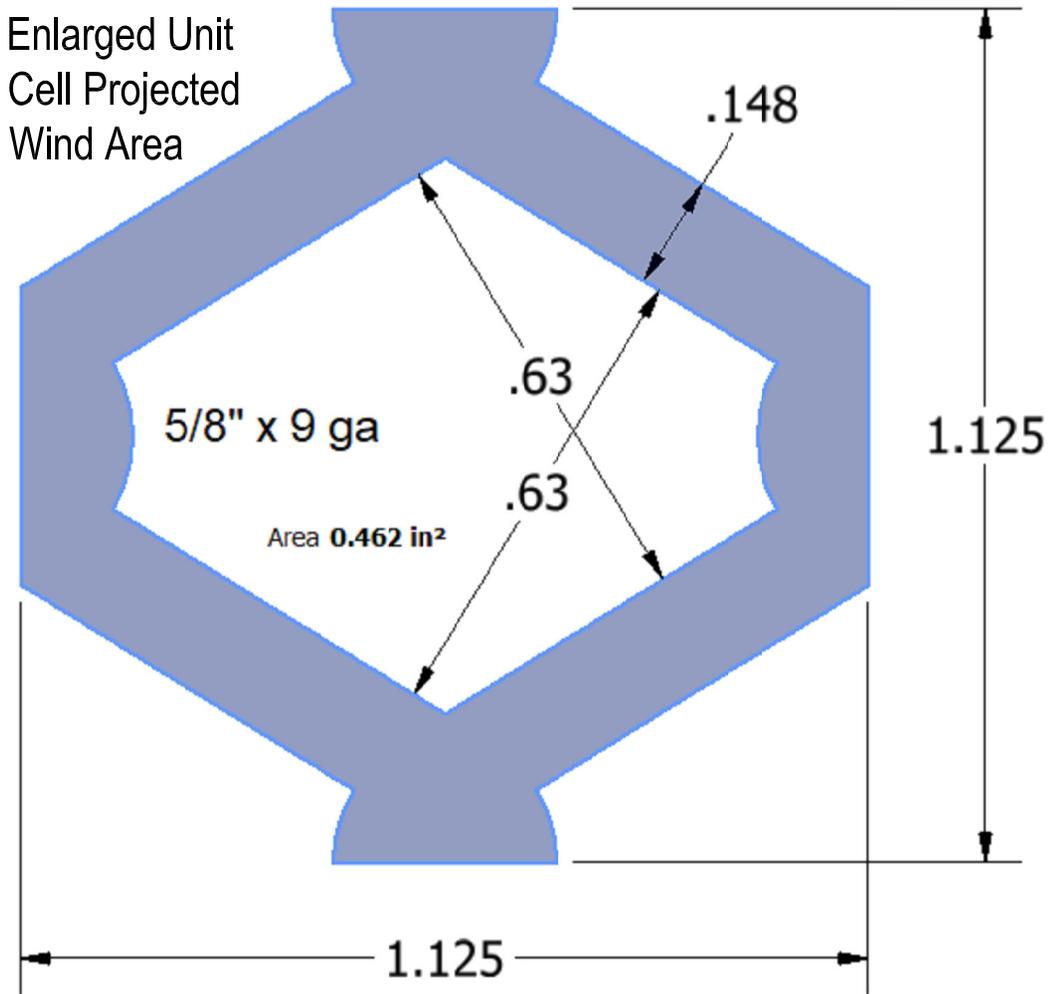
$C_{fw} = 1.5$

$D_m = 2.3 \text{ psf}^*$

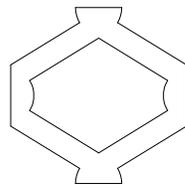
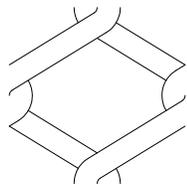
\*estimated weight - check with manufacturer



Enlarged Unit  
Cell Projected  
Wind Area



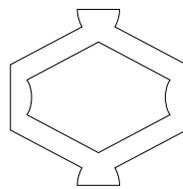
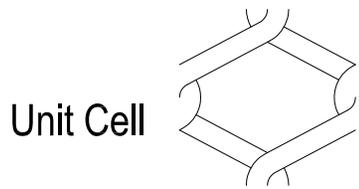
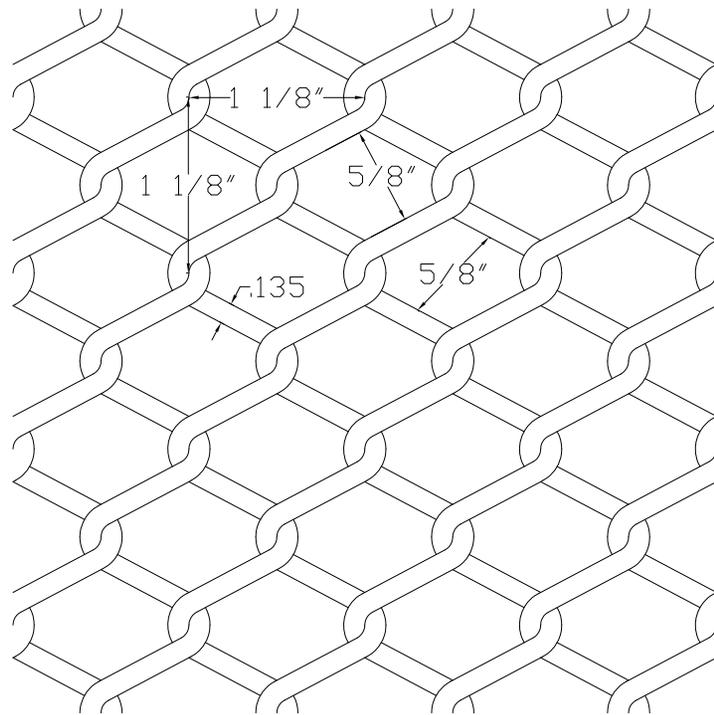
Unit Cell



Projected  
Wind Area

# Chain Link Mesh

## 5/8" x 10 ga



Unit Cell

Projected Wind Area

Wind Area,  $A = 49.2 \text{ in}^2 / \text{ft}^2$

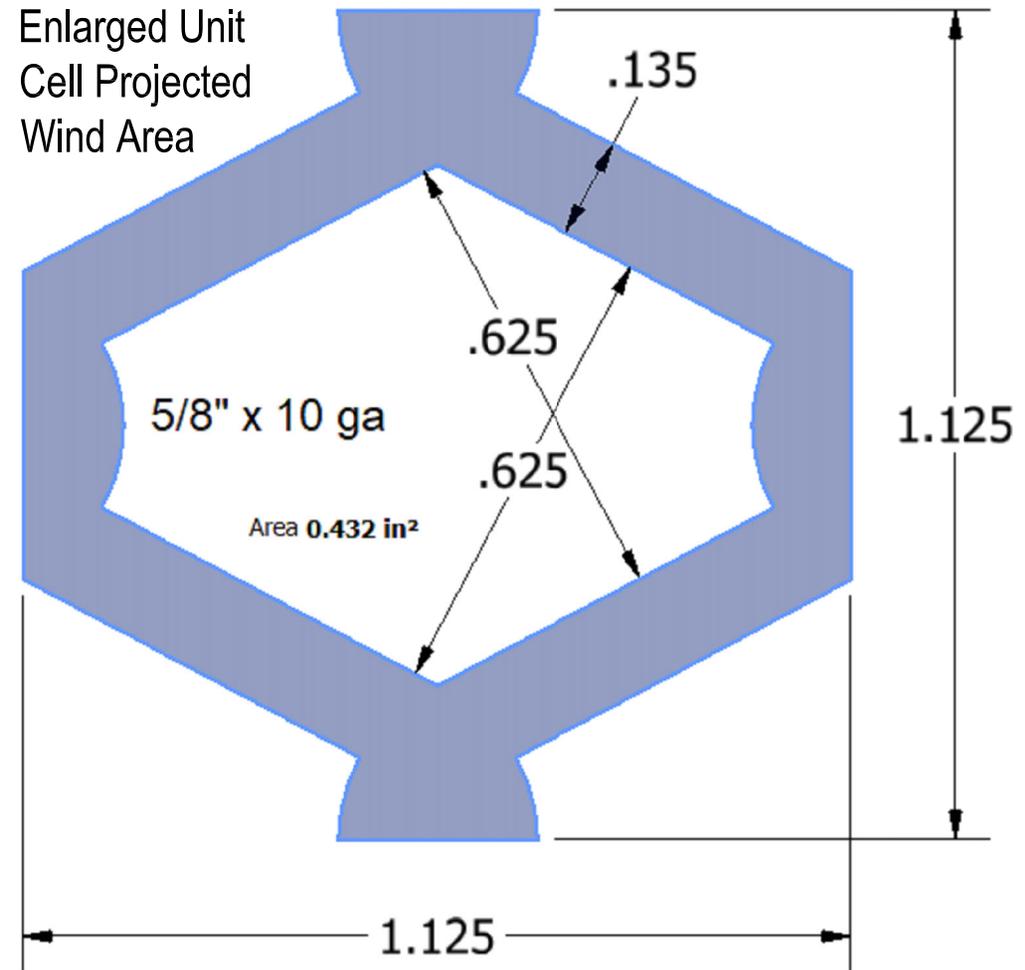
$\epsilon = 0.341$

$C_{fw} = 1.5$

$D_m = 2.0 \text{ psf}^*$

\*estimated weight - check with manufacturer

Enlarged Unit Cell Projected Wind Area



# Chain Link Mesh

## 5/8" x 11 ga

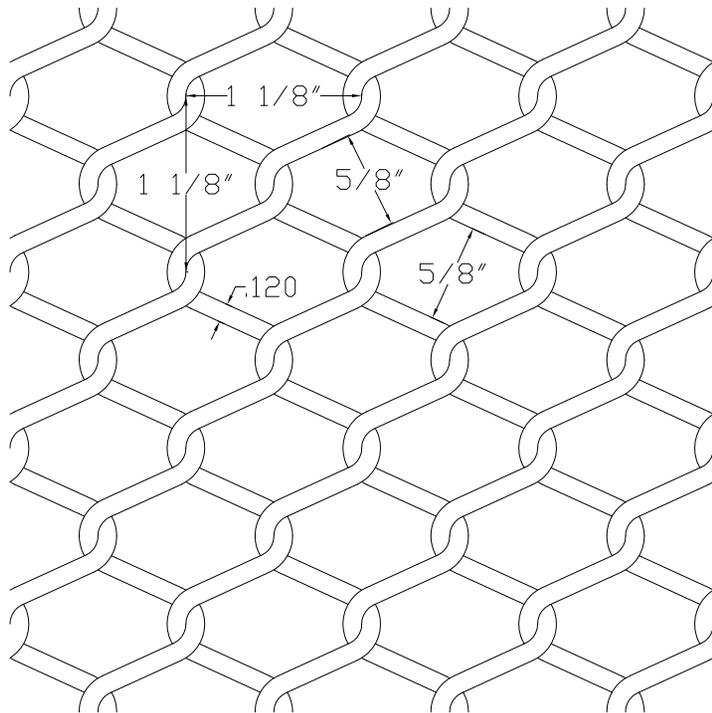
Wind Area,  $A = 44.7 \text{ in}^2 / \text{ft}^2$

$\epsilon = 0.311$

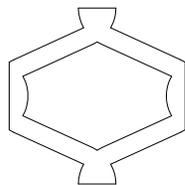
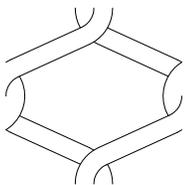
$C_{fw} = 1.5$

$D_m = 1.6 \text{ psf}^*$

\*estimated weight - check with manufacturer

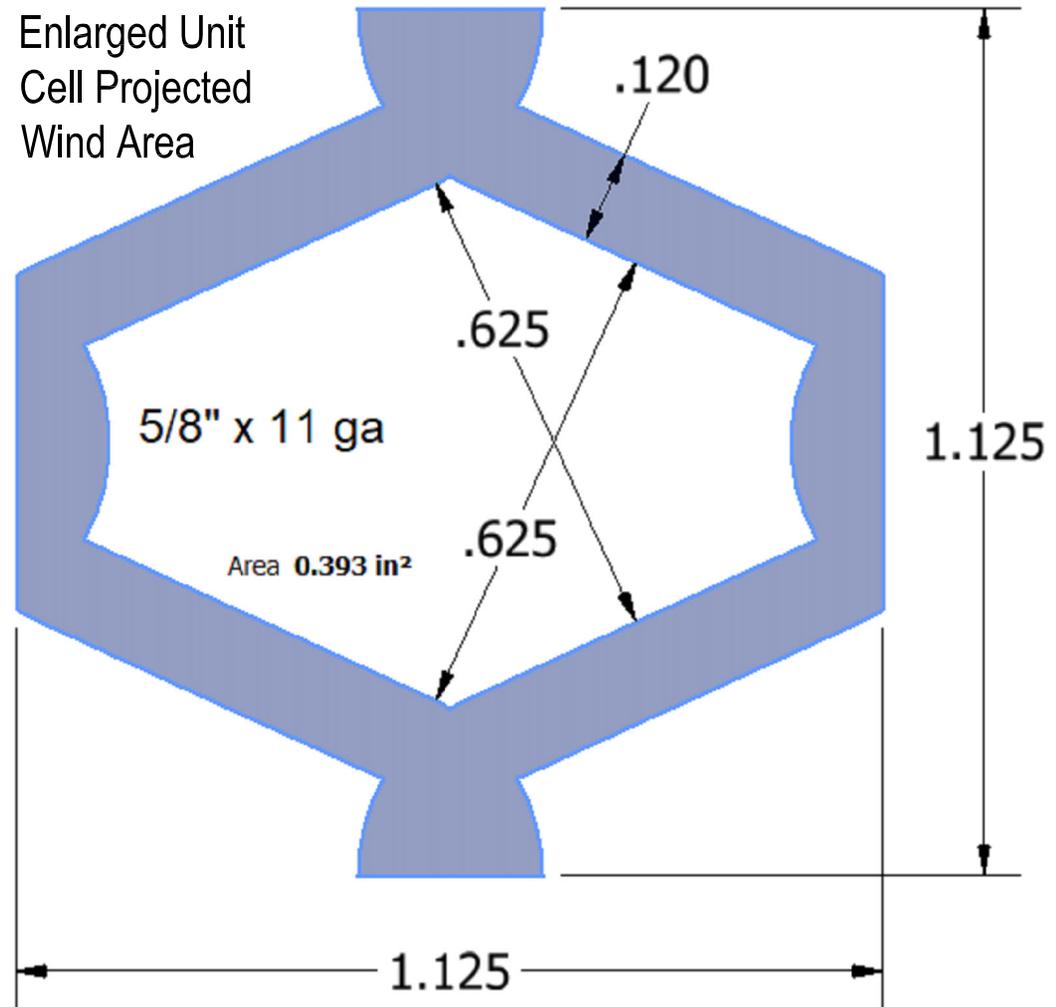


Unit Cell



Projected  
Wind Area

Enlarged Unit  
Cell Projected  
Wind Area



# Chain Link Mesh

## 5/8" x 11-1/2 ga

Wind Area,  $A = 42.4 \text{ in}^2 / \text{ft}^2$

$\epsilon = 0.295$

$C_{fw} = 1.3$

$D_m = 1.3 \text{ psf}^*$

\*estimated weight - check with manufacturer

