

Paura & Associates Inc.
Structural Engineering for the Building Envelope Industry

Amico Mesh Panel Design Guide

Date: 3/23/2021
Client: AMICO

Paura & Associates Inc.
Structural Engineering for the Building Envelope Industry

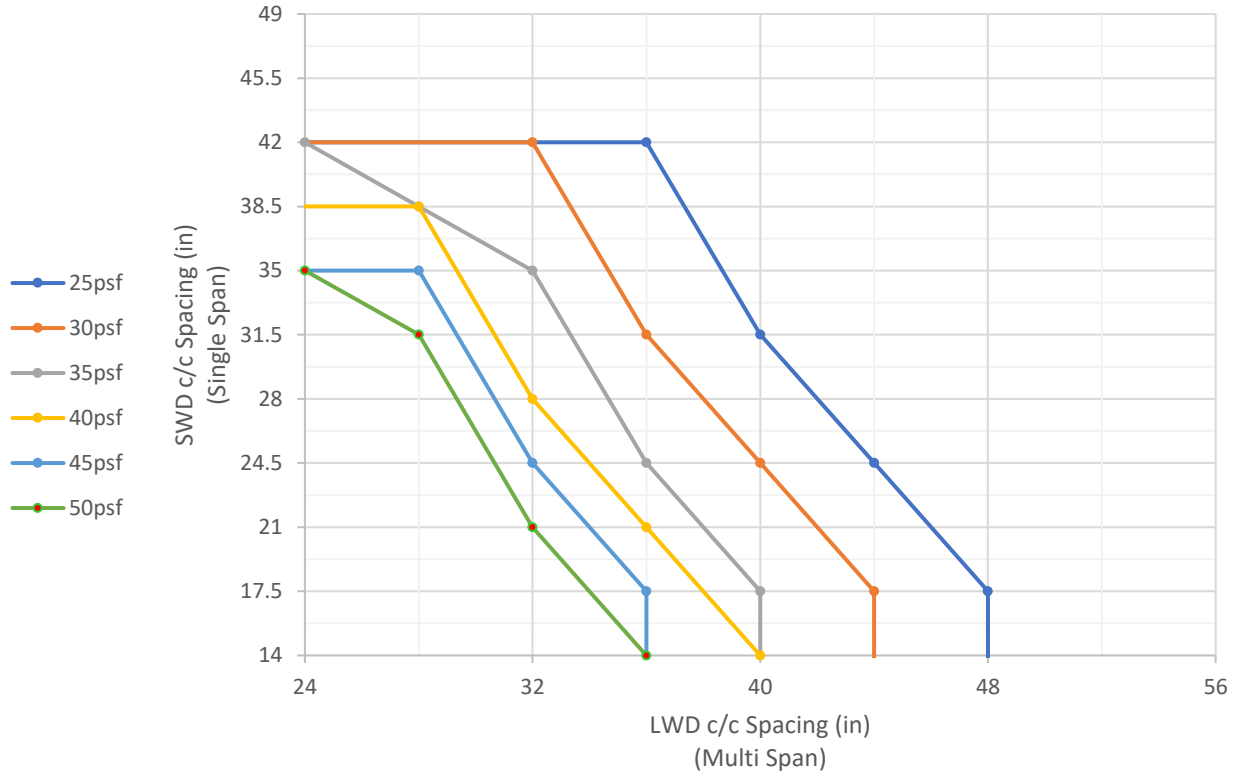
Mesh Panel Wind Load Charts

Date: 3/23/2021
Client: AMICO

APEX01 Landscape 5005-O Material 1/8" Thick

Wind Load Chart

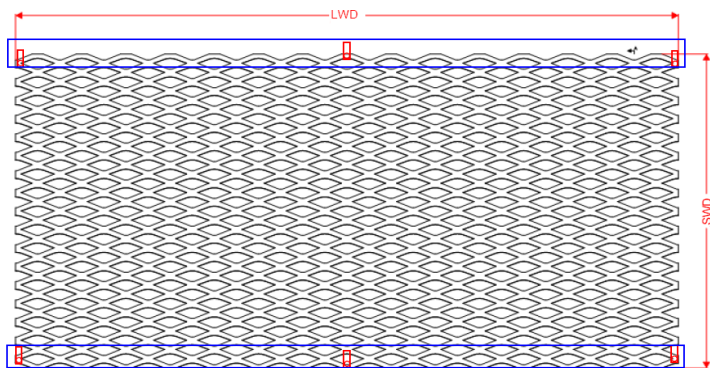
Single Span SWD



APEX01 Landscape Style:
 -8" LWD x 3.5" SWD
 -46% open area

To use wind chart:
 -Determine maximum wind load for project
 -Select appropriate wind load curve
 -If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

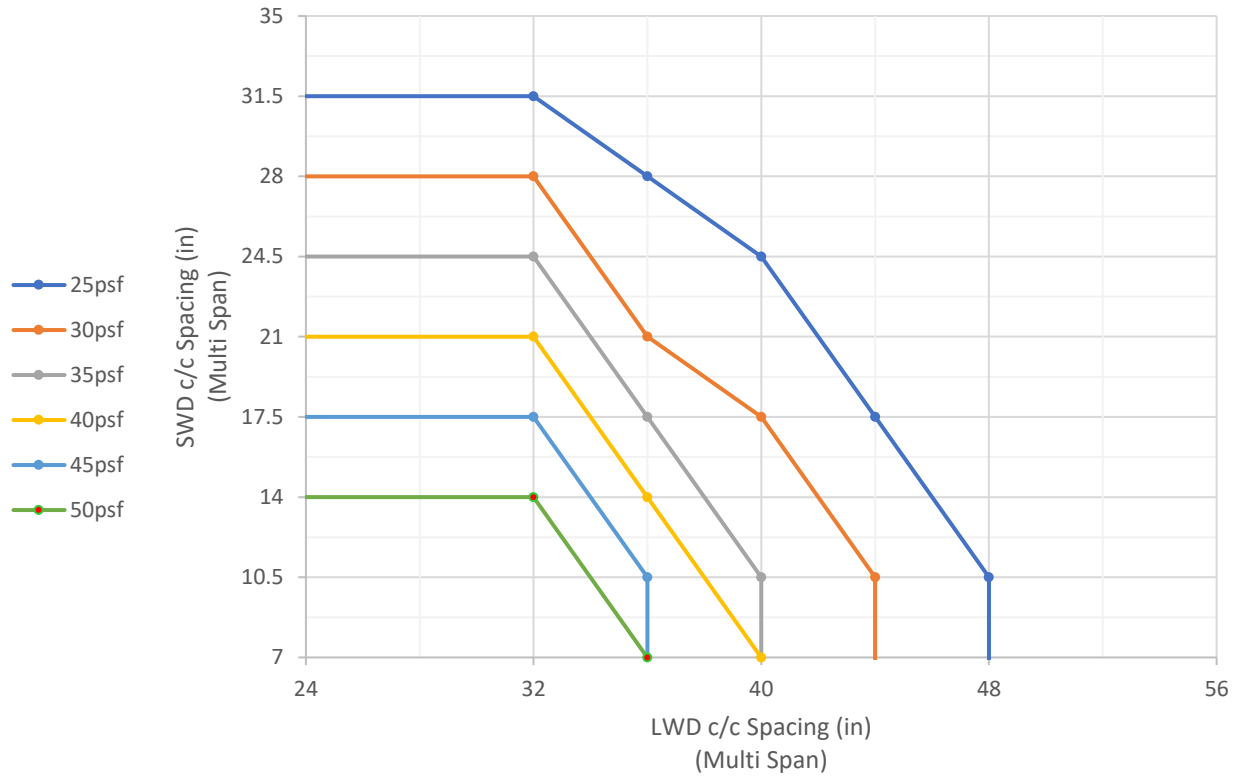
Design Criteria:
 - Min. of $L/60$ or 1" deflection criteria where
 L is the largest clip spacing
 -5005-O Allowable stress of 5.27ksi
 - Assumed no cantilever at edges



APEX01 Landscape 5005-O Material 1/8" Thick

Wind Load Chart

Multispan LWD & SWD



APEX01 Landscape Style:

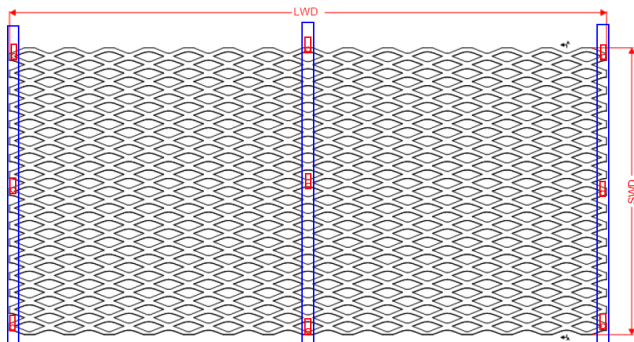
- 8" LWD x 3.5" SWD
- 46% open area

To use wind chart:

- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

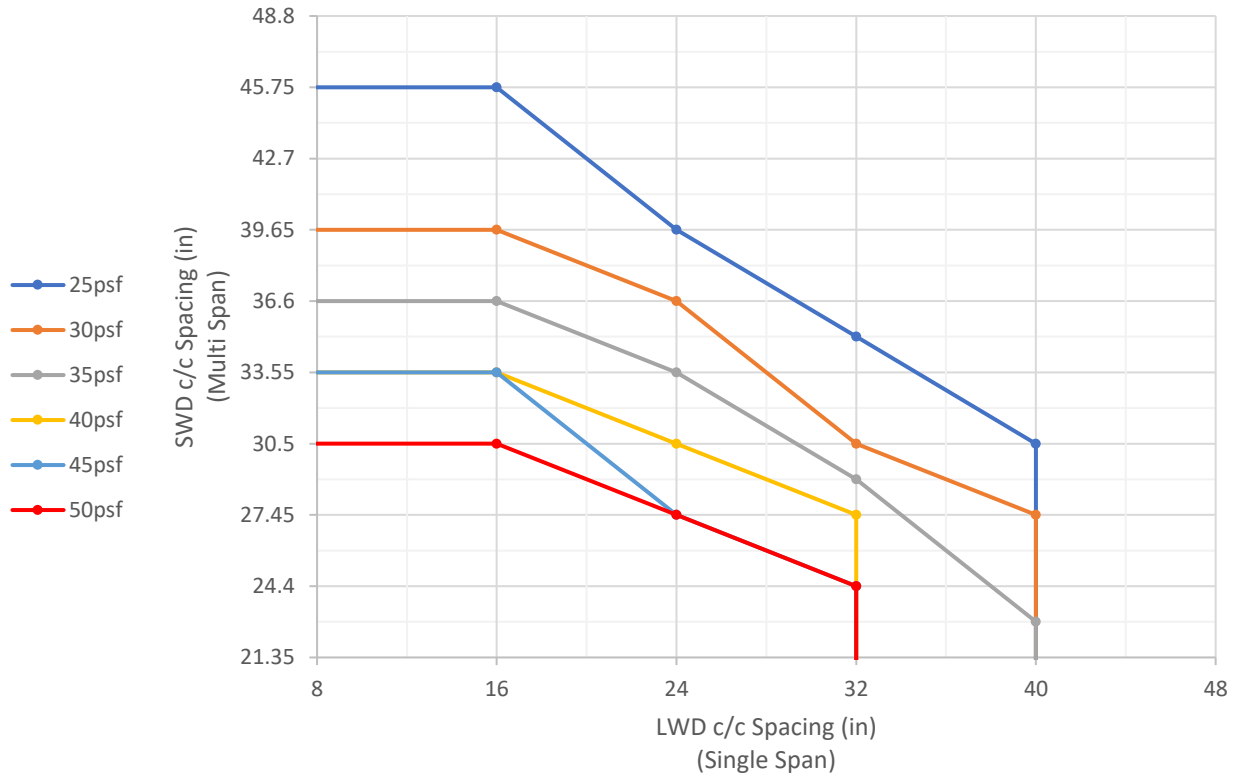
Design Criteria:

- Min. of L/60 or 1" deflection criteria where L is the largest clip spacing
- 5005-O Allowable stress of 5.27ksi
- Assumed no cantilever at edges



APEX01 Portrait 5005-O Material 1/8" Thick Wind Load Chart

Single Span LWD



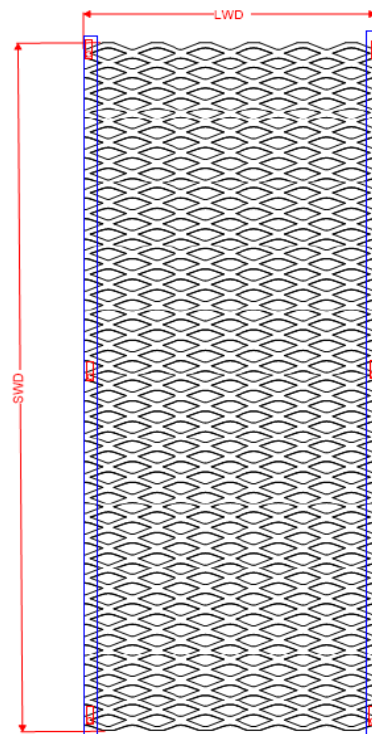
APEX01 Portrait Style:
 -8" LWD x 3.05" SWD
 -40% open area

To use wind chart:

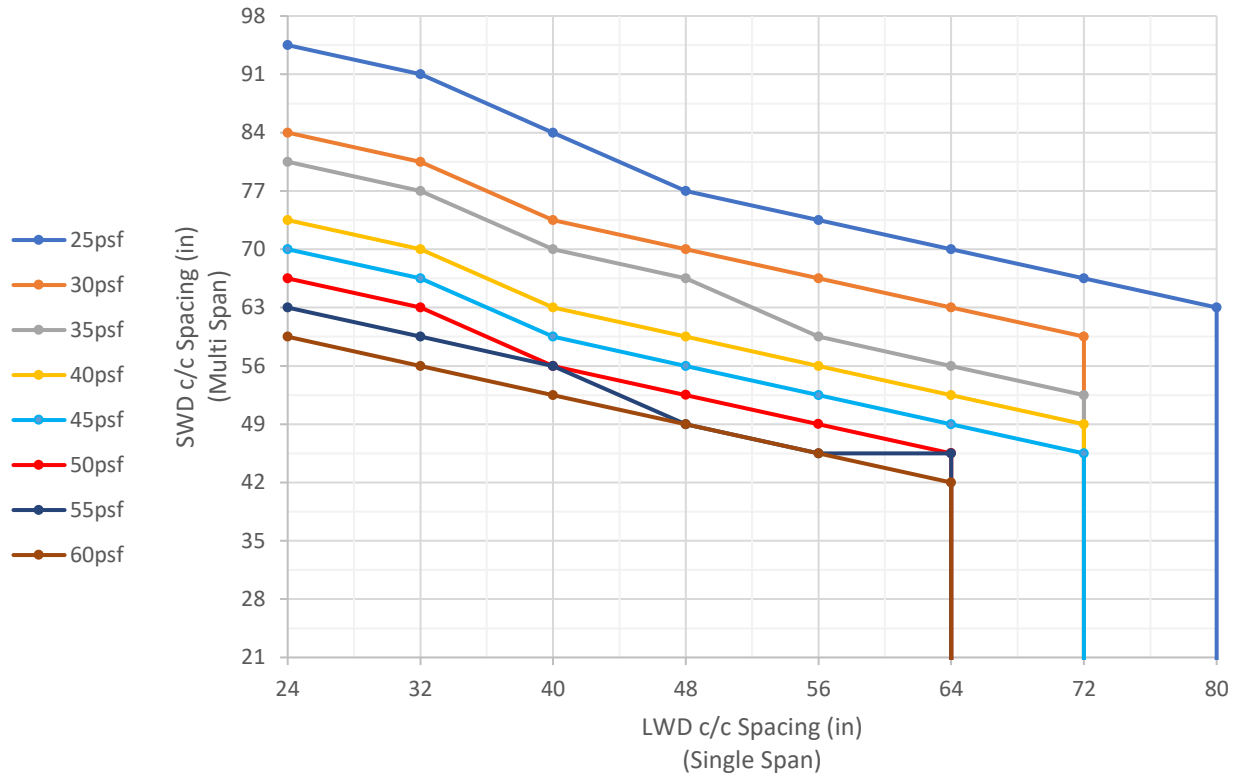
- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:

- Min. of L/60 or 1" deflection criteria where L is the largest clip spacing
- 5005-O Allowable stress of 5.27ksi
- Assumed no cantilever at edges



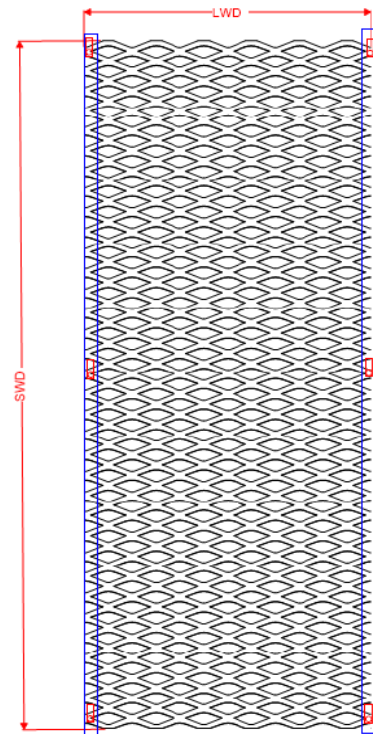
APEX02 5005-O Material 1/4" Thick Wind Load Chart Single Span LWD



APEX02:
 -8" LWD x 3.5" SWD
 -46% open area

To use wind chart:
 -Determine maximum wind load for project
 -Select appropriate wind load curve
 -If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

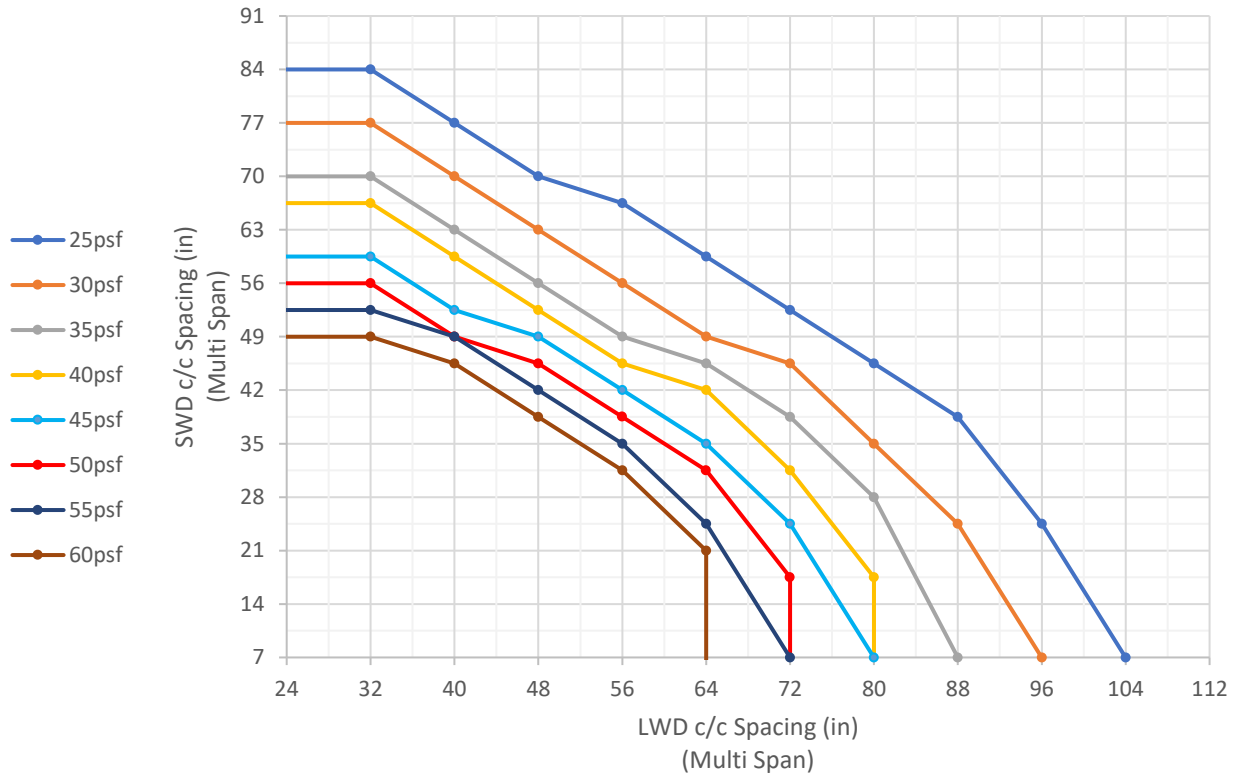
Design Criteria:
 - Min. of L/60 or 1" deflection criteria where L is the largest clip spacing
 -5005-O Allowable stress of 5.27ksi
 - Assumed no cantilever at edges



APEX02 5005-O Material 1/4" Thick

Wind Load Chart

Multispan LWD & SWD



APEX02:

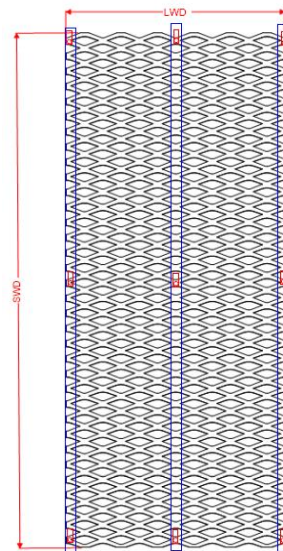
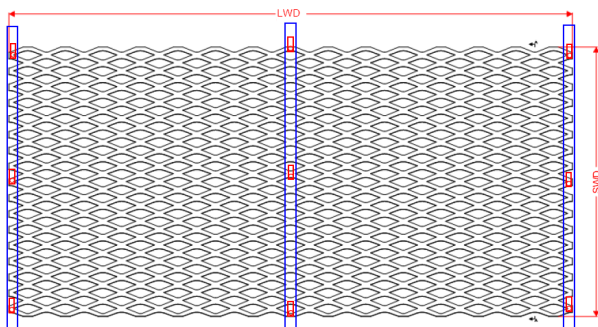
- 8" LWD x 3.5" SWD
- 46% open area

Design Criteria:

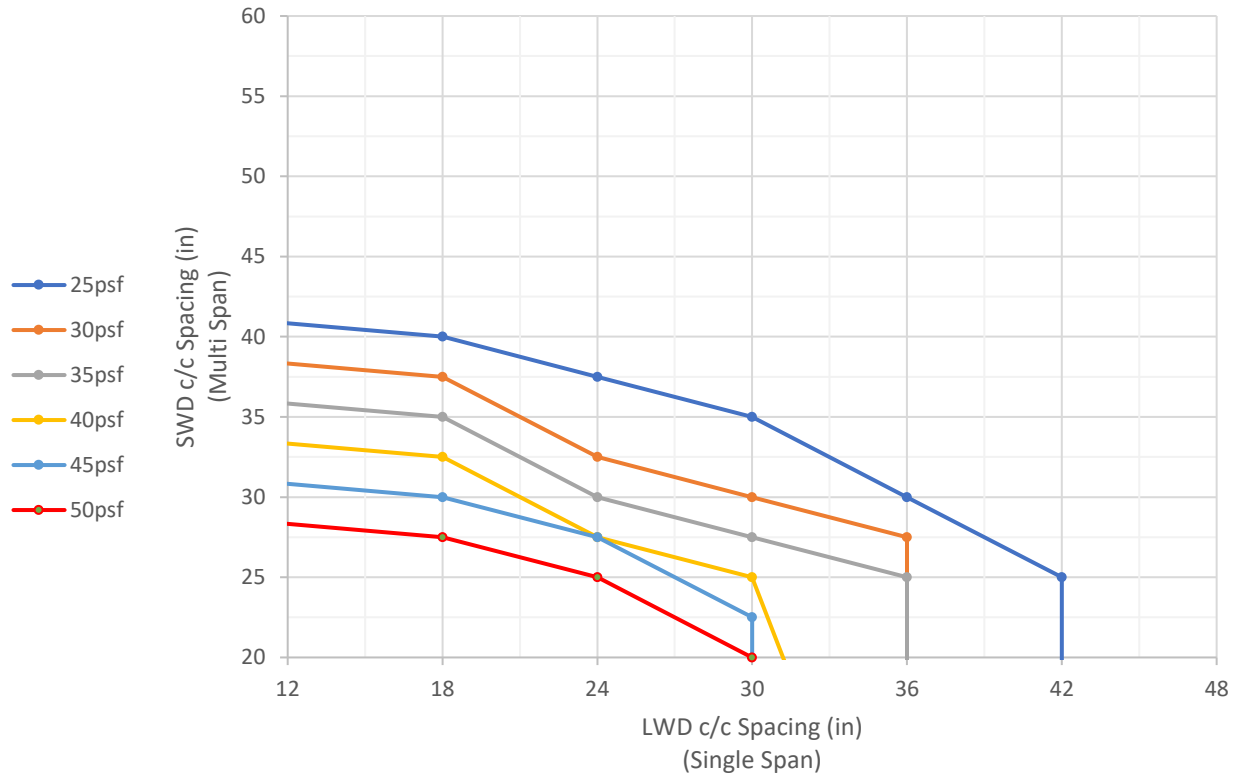
- Min. of $L/60$ or 1" deflection criteria where L is the largest clip spacing
- 5005-O Allowable stress of 5.27ksi
- Assumed no cantilever at edges

To use wind chart:

- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable



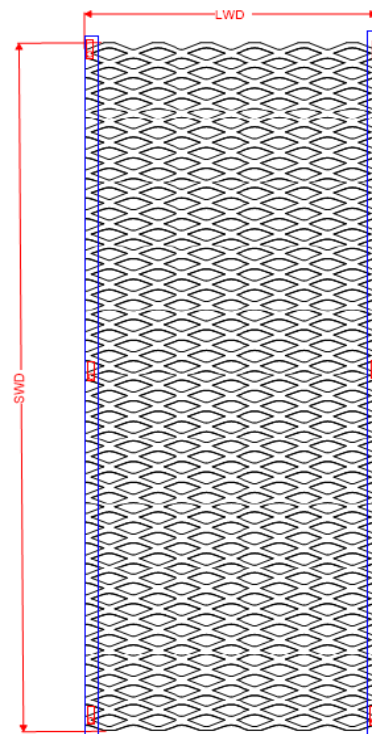
APEX03 5005-O Material 1/8" Thick Wind Load Chart Single Span LWD



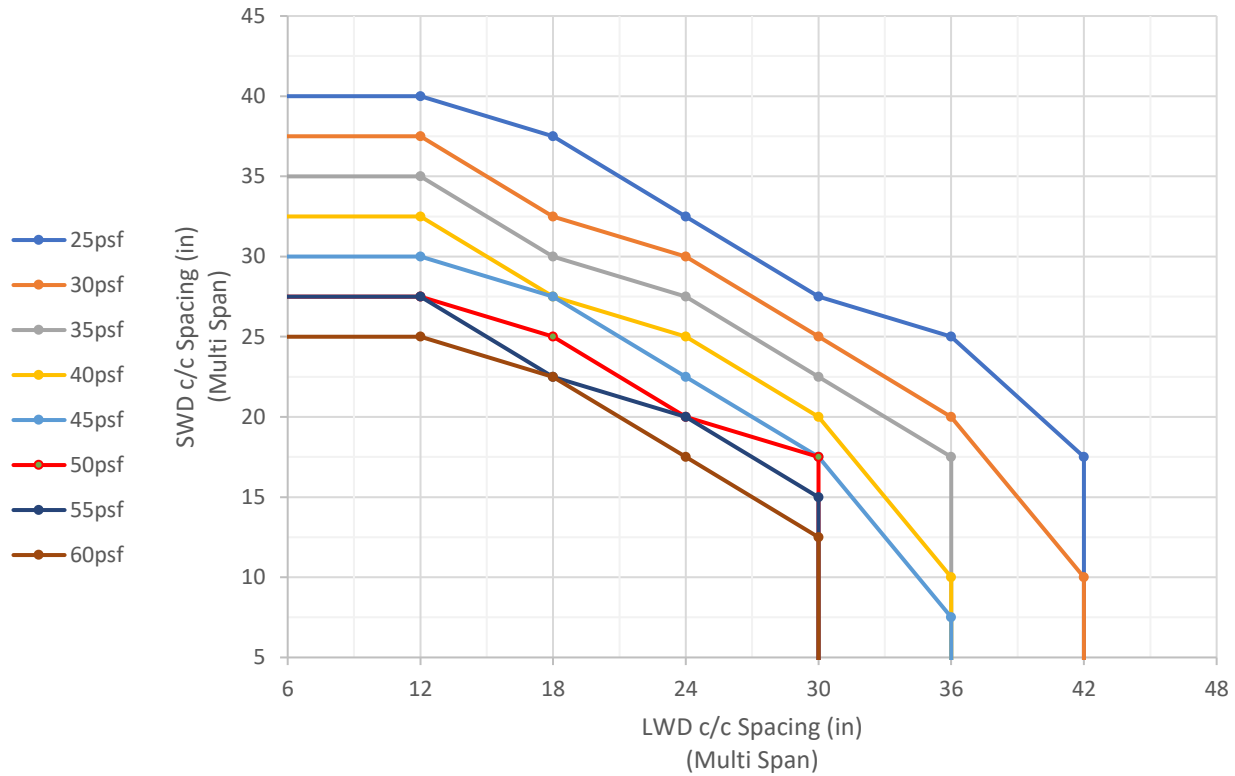
APEX03:
 -6" LWD x 2.5" SWD
 -26% open area

To use wind chart:
 -Determine maximum wind load for project
 -Select appropriate wind load curve
 -If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:
 - Min. of L/60 or 1" deflection criteria where L is the largest clip spacing
 -5005-O Allowable stress of 5.27ksi
 - Assumed no cantilever at edges



APEX03 5005-O Material 1/8" Thick Wind Load Chart Multispan LWD & SWD



APEX03:

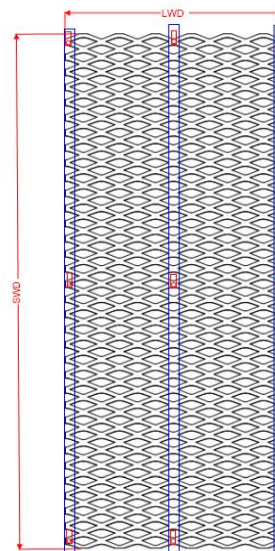
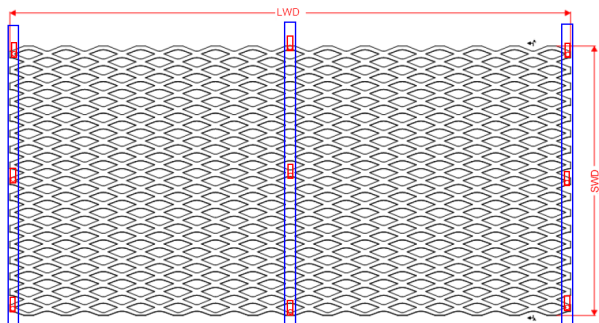
- 6" LWD x 2.5" SWD
- 26% open area

To use wind chart:

- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:

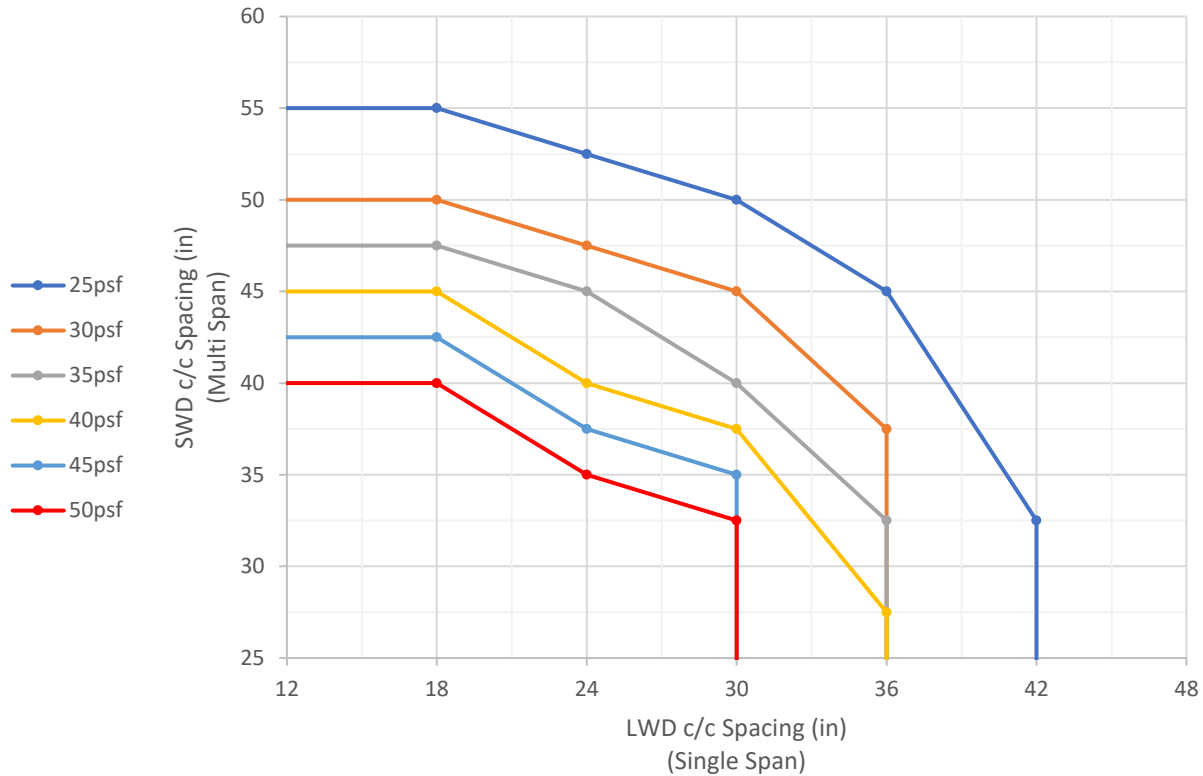
- Min. of $L/60$ or 1" deflection criteria where L is the largest clip spacing
- 5005-O Allowable stress of 5.27ksi
- Assumed no cantilever at edges



APEX03 3003-H14 Material 1/8" Thick

Wind Load Chart

Single Span LWD



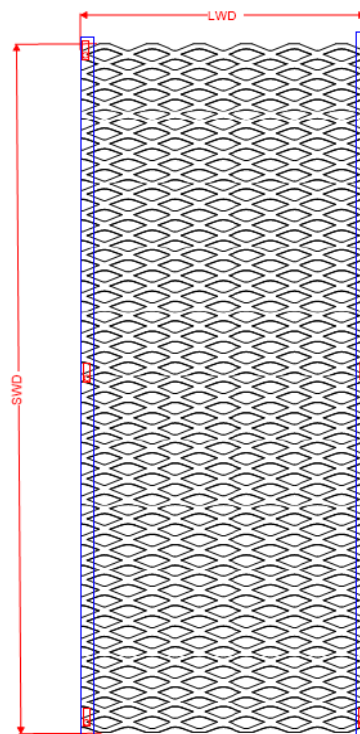
APEX03:
 -6" LWD x 2.5" SWD
 -26% open area

To use wind chart:

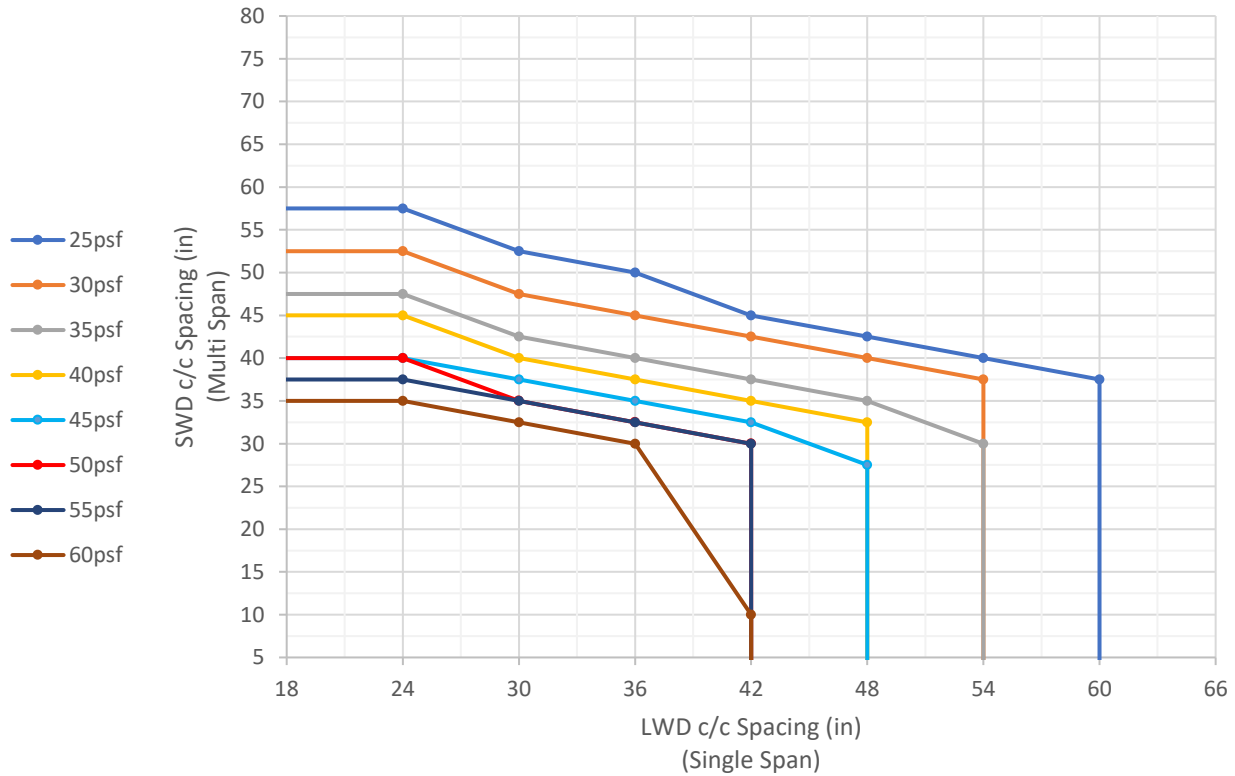
- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:

- Min. of L/60 or 1" deflection criteria where L is the largest clip spacing
- 3003-H14 Allowable stress of 10.3ksi
- Assumed no cantilever at edges



APEX03 5005-O Material 3/16" Thick Wind Load Chart Single Span LWD



APEX03:

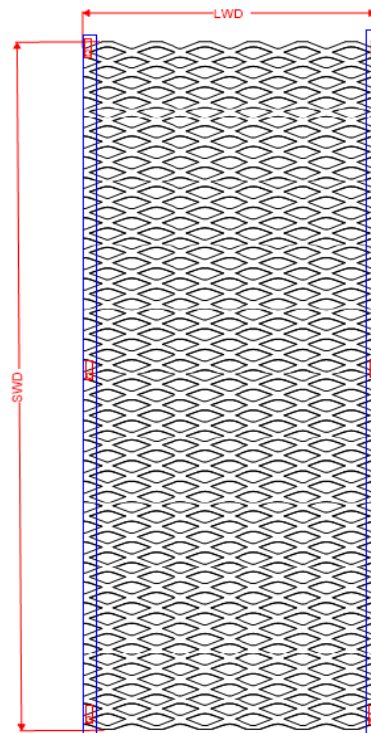
- 6" LWD x 2.5" SWD
- 26% open area

To use wind chart:

- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:

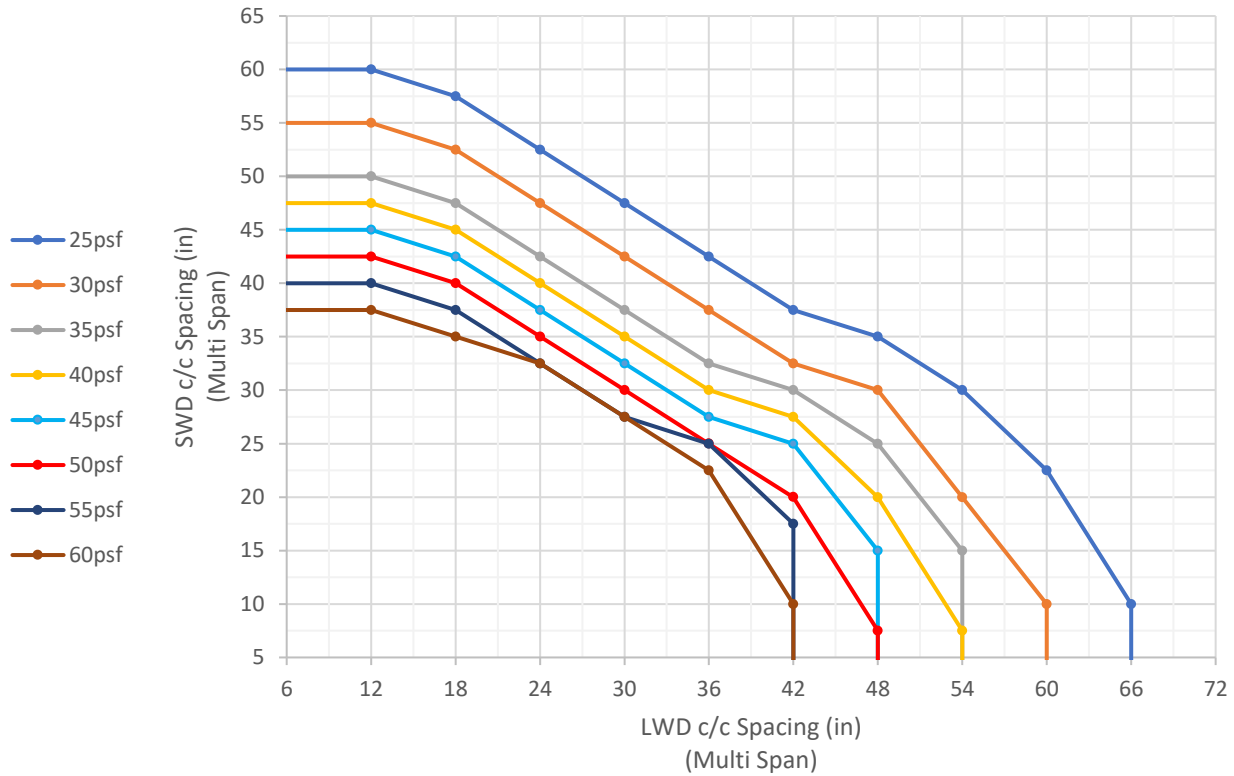
- Min. of $L/60$ or 1" deflection criteria where L is the largest clip spacing
- 5005-O Allowable stress of 5.27ksi
- Assumed no cantilever at edges



APEX03 5005-O Material 3/16" Thick

Wind Load Chart

Multispan LWD & SWD



APEX03:

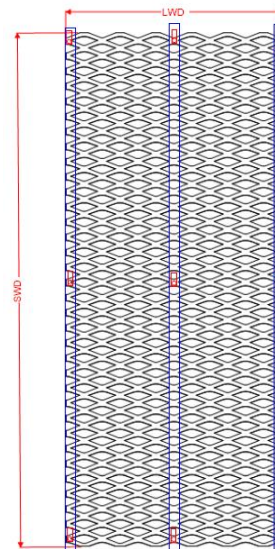
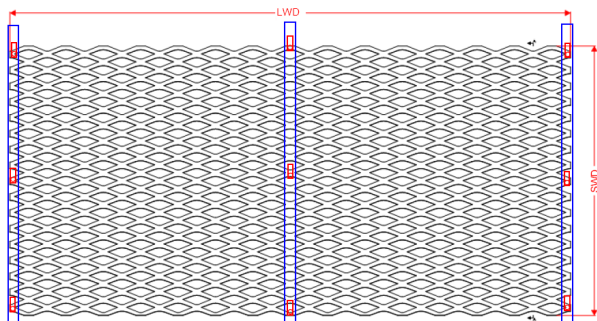
- 6" LWD x 2.5" SWD
- 26% open area

To use wind chart:

- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:

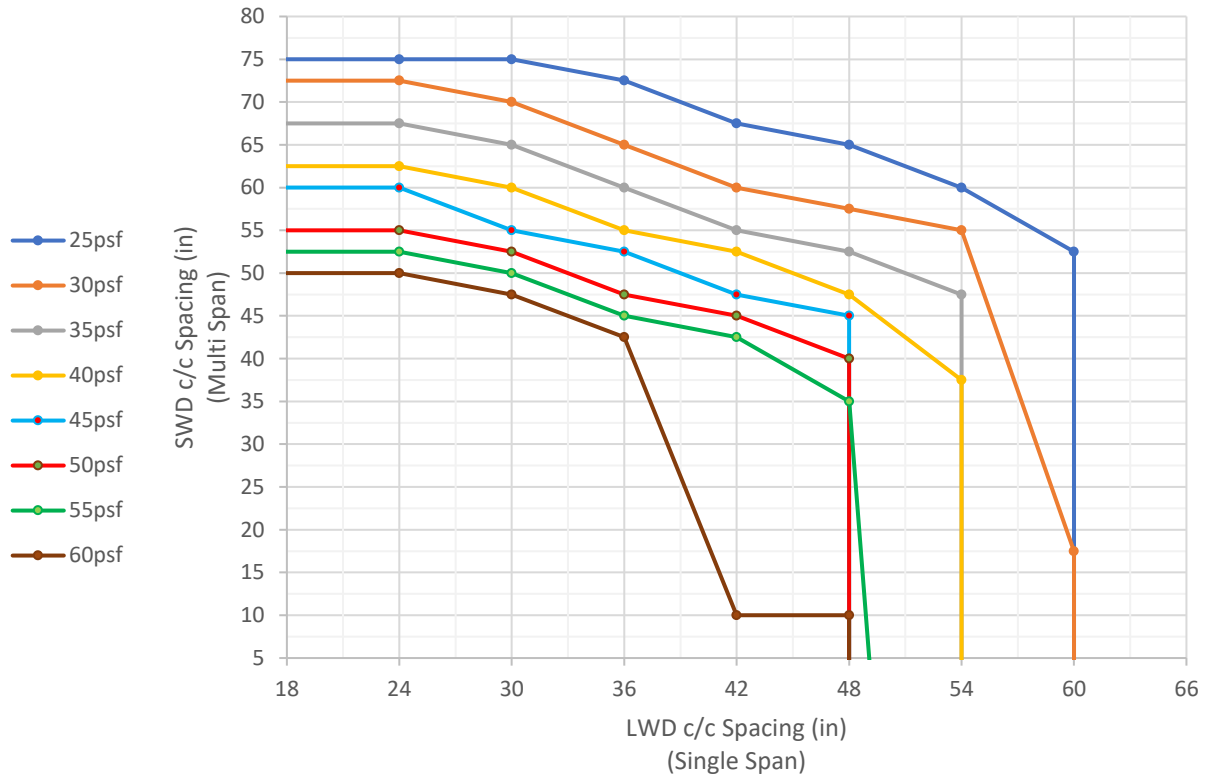
- Min. of L/60 or 1" deflection criteria where L is the largest clip spacing
- 5005-O Allowable stress of 5.27ksi
- Assumed no cantilever at edges



APEX03 3003-H14 Material 3/16" Thick

Wind Load Chart

Single Span LWD



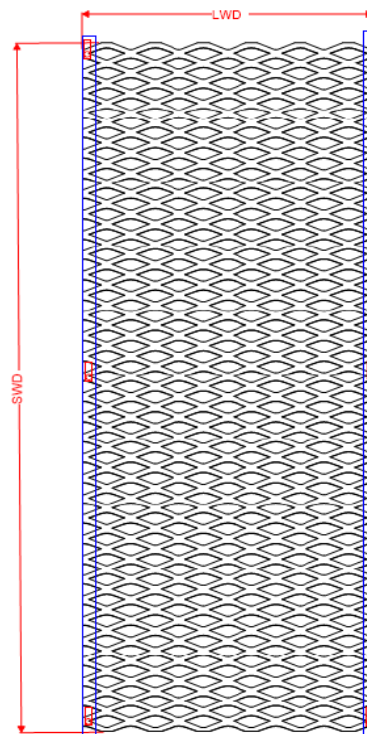
APEX03:
 -6" LWD x 2.5" SWD
 -26% open area

To use wind chart:

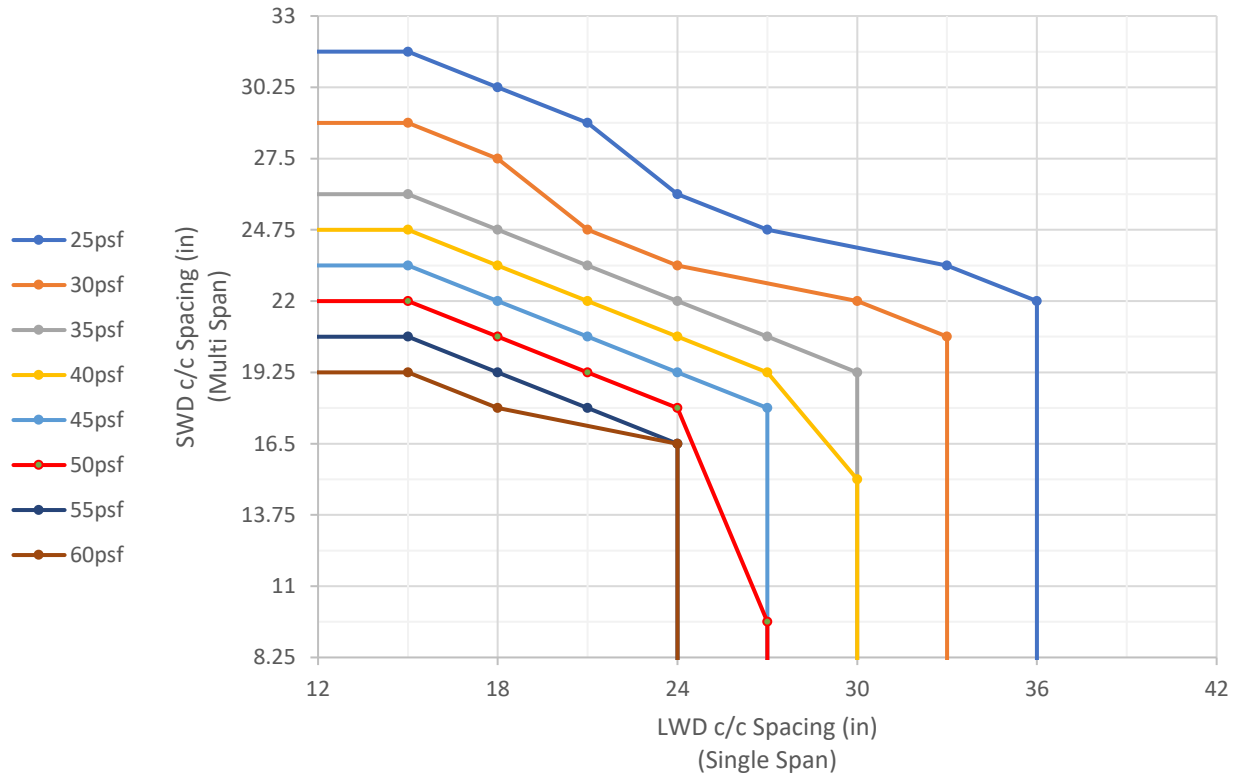
- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:

- Min. of L/60 or 1" deflection criteria where L is the largest clip spacing
- 3003-H14 Allowable stress of 10.3ksi
- Assumed no cantilever at edges



Apex04 5005-O Material 1/8" Thick Wind Load Chart Single Span LWD



Apex04:

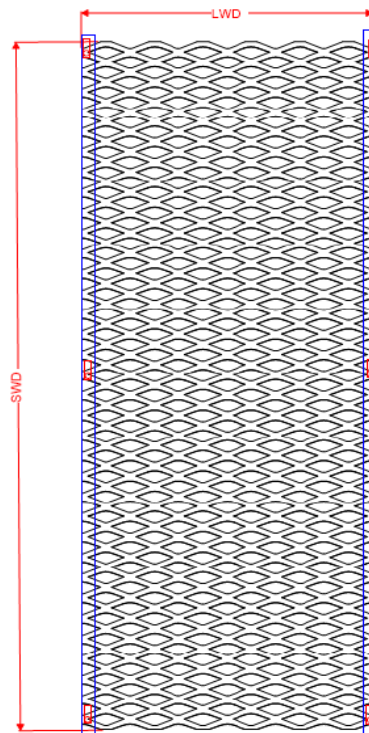
- 3" LWD x 1.375" SWD
- 6.25% open area

To use wind chart:

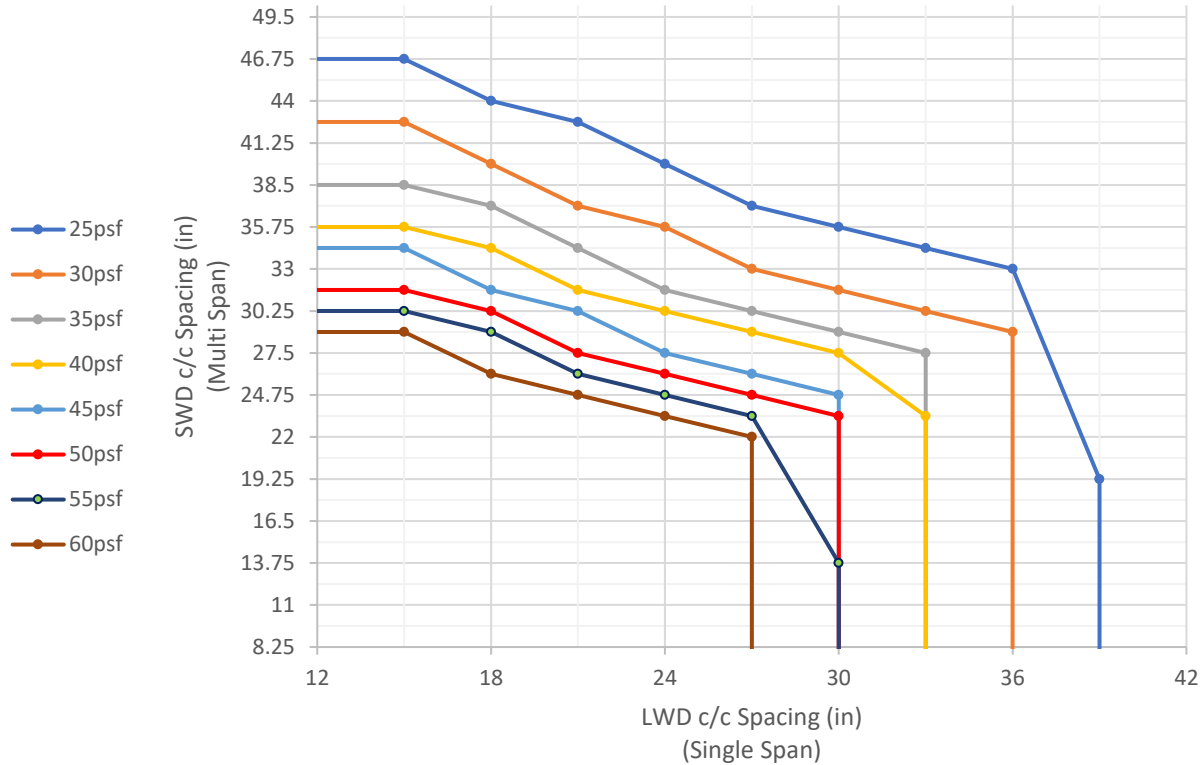
- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:

- Min. of $L/60$ or 1" deflection criteria where L is the largest clip spacing
- 5005-O Allowable stress of 5.27ksi
- Assumed no cantilever at edges



Apex04 3003-H14 Material 1/8" Thick Wind Load Chart Single Span LWD



Apex04:

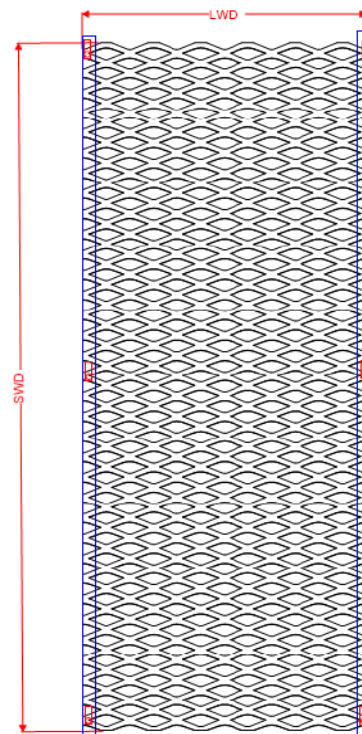
- 3" LWD x 1.375" SWD
- 6.25% open area

To use wind chart:

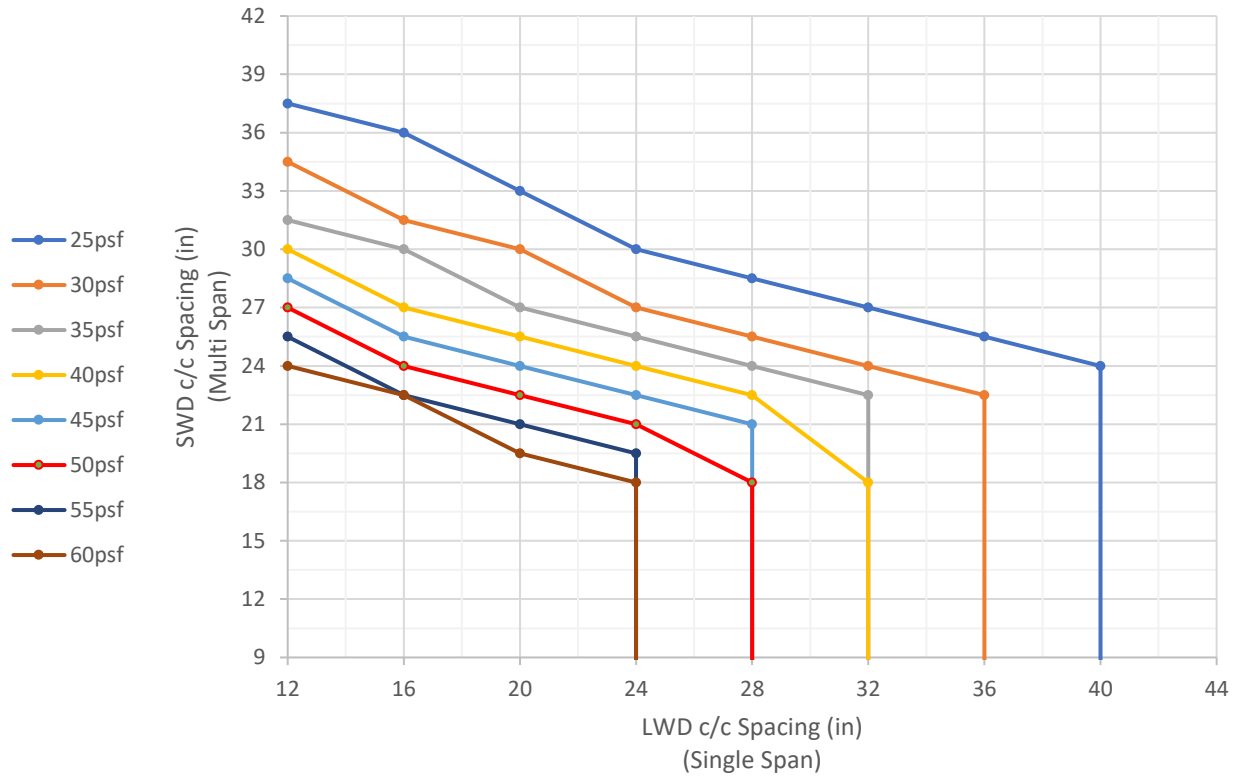
- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:

- Min. of $L/60$ or 1" deflection criteria where L is the largest clip spacing
- 3003-H14 Allowable stress of 10.3ksi
- Assumed no cantilever at edges



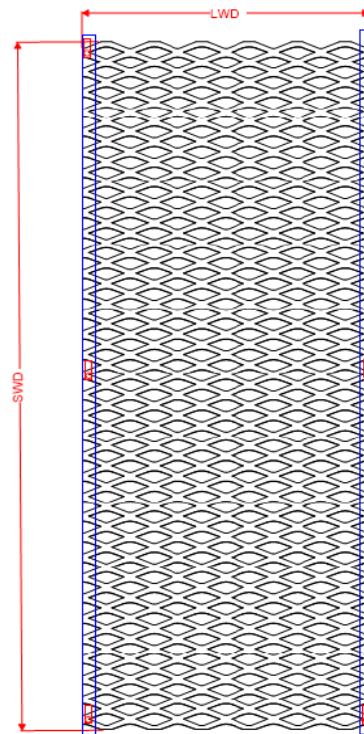
Bilbao 5005-O Material 1/8" Thick Wind Load Chart Single Span LWD



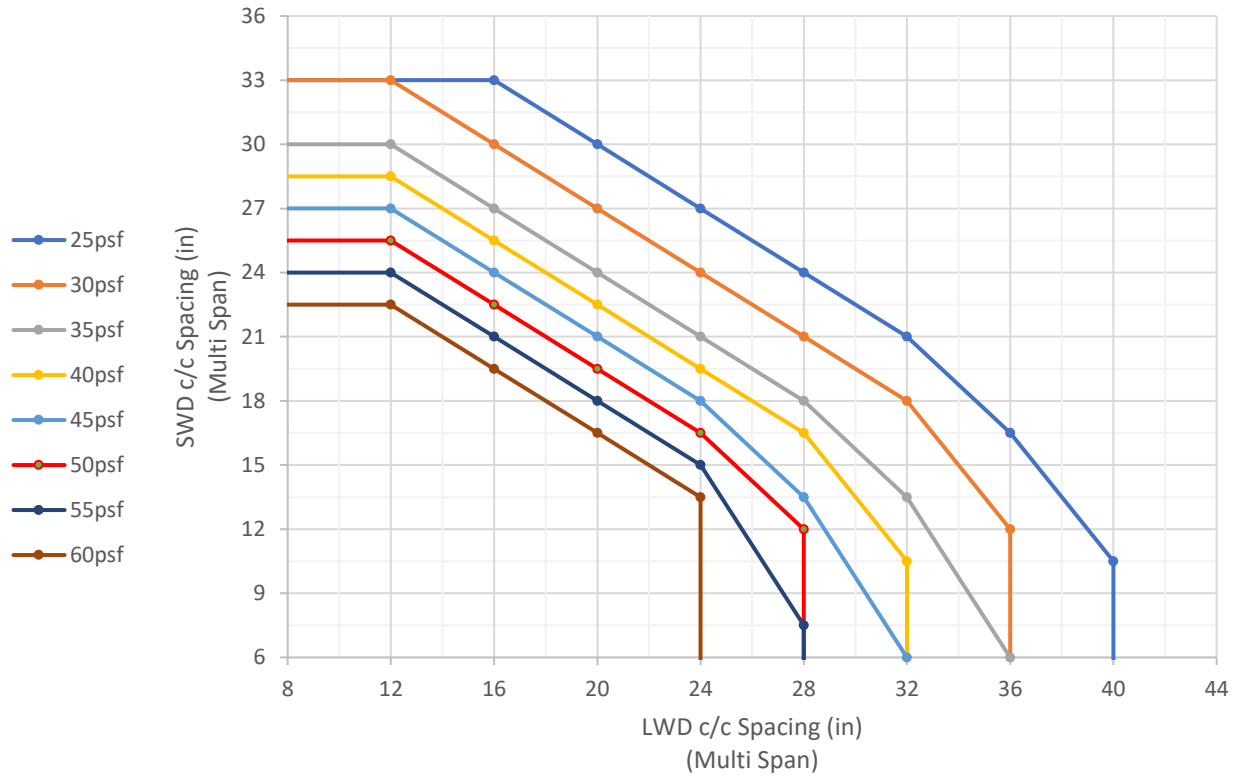
Bilbao:
 -4" LWD x 1.5" SWD
 -18% open area

To use wind chart:
 -Determine maximum wind load for project
 -Select appropriate wind load curve
 -If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:
 - Min. of $L/60$ or 1" deflection criteria where L is the largest clip spacing
 -5005-O Allowable stress of 5.27ksi
 - Assumed no cantilever at edges



Bilbao 5005-O Material 1/8" Thick Wind Load Chart Multispan LWD & SWD



Bilbao:

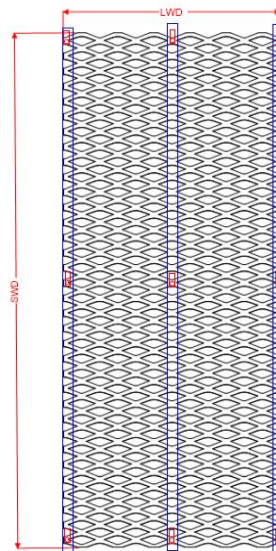
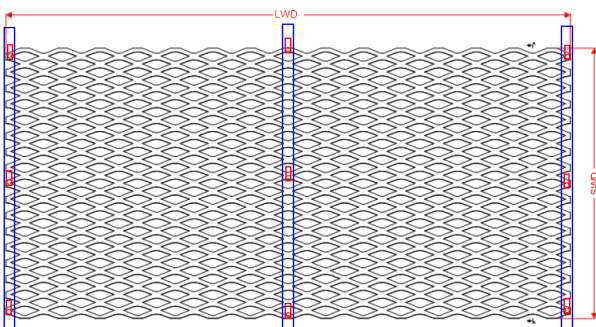
- 4" LWD x 1.5" SWD
- 18% open area

To use wind chart:

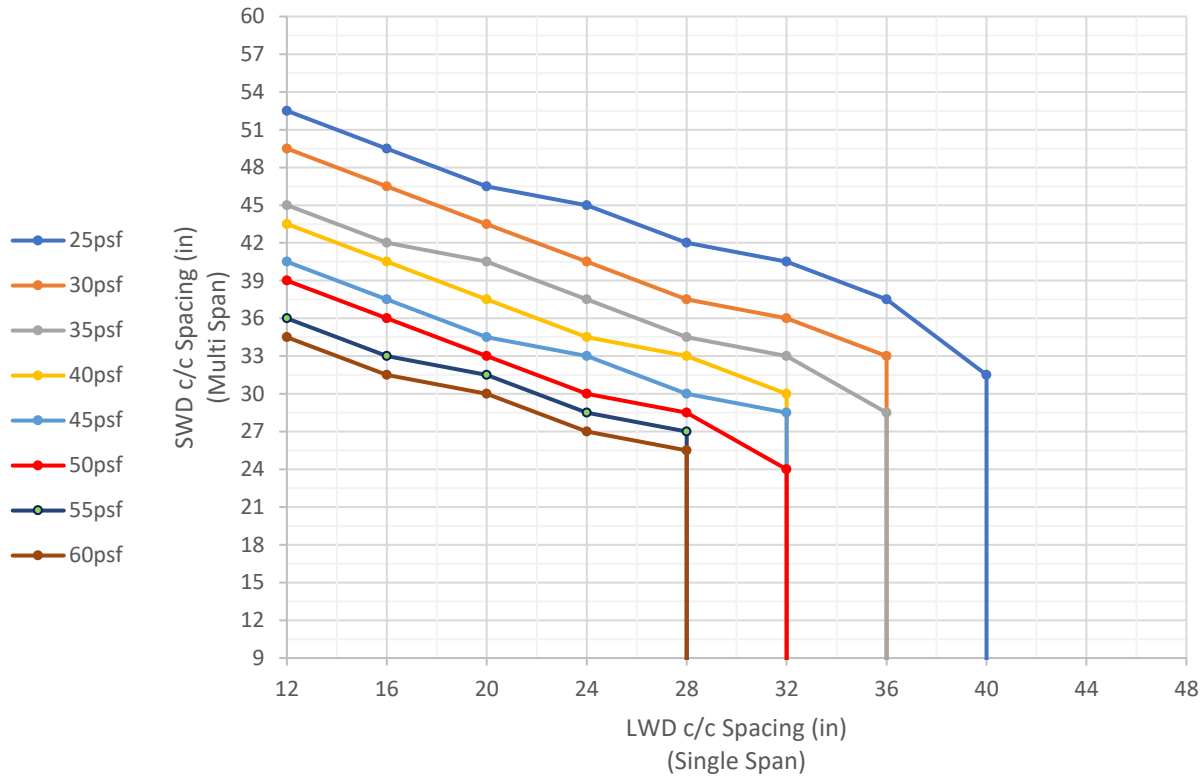
- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:

- Min. of $L/60$ or 1" deflection criteria where L is the largest clip spacing
- 5005-O Allowable stress of 5.27ksi
- Assumed no cantilever at edges



Bilbao 3003-H14 Material 1/8" Thick Wind Load Chart Single Span LWD



Bilbao:

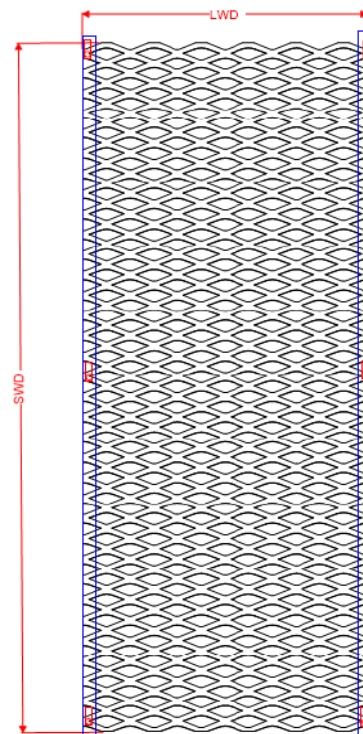
- 4" LWD x 1.5" SWD
- 18% open area

To use wind chart:

- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:

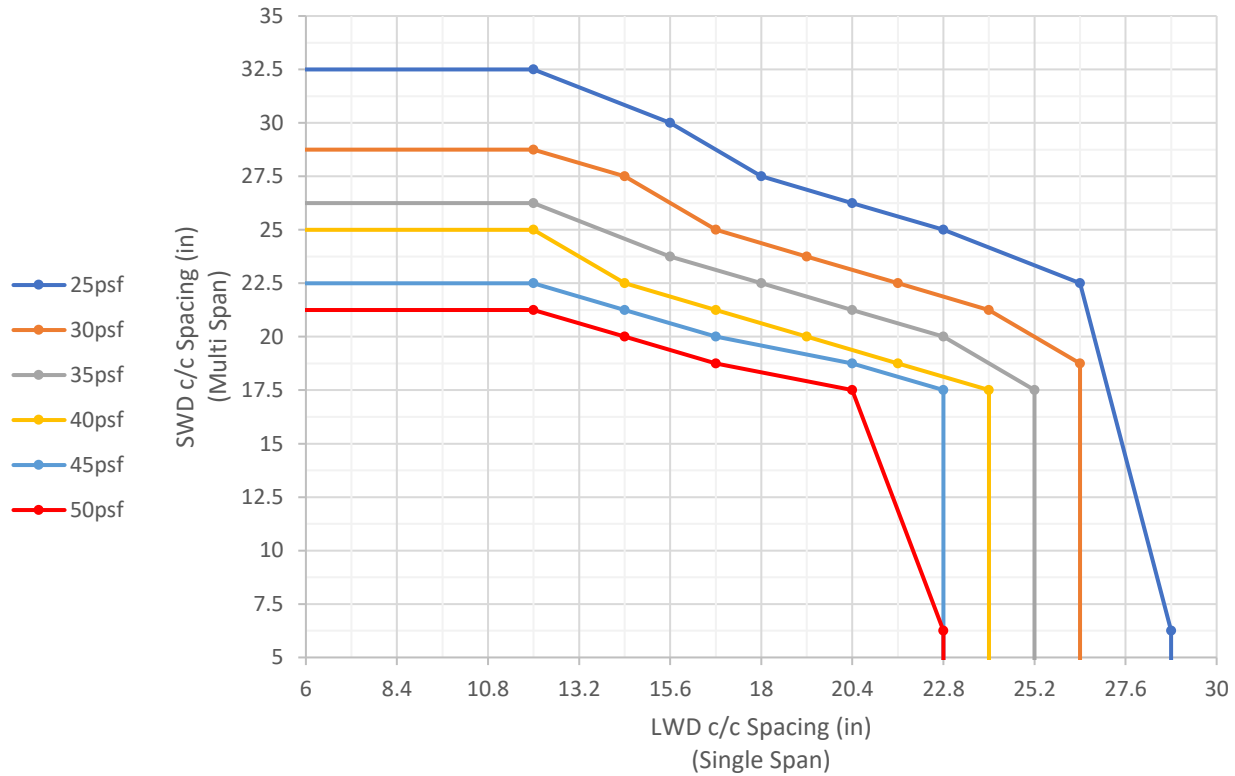
- Min. of $L/60$ or 1" deflection criteria where L is the largest clip spacing
- 3003-H14 Allowable stress of 10.3ksi
- Assumed no cantilever at edges



Sunshade 5005-H34 Material 0.081" Thick

Wind Load Chart

Single Span LWD



Sunshade:

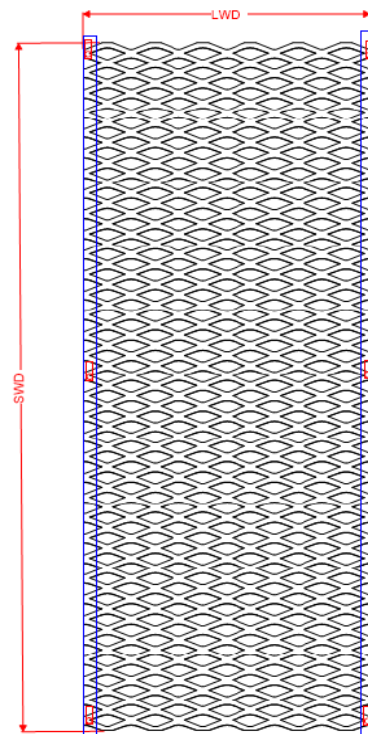
- 1.2" LWD x 0.625" SWD
- 36% open area

To use wind chart:

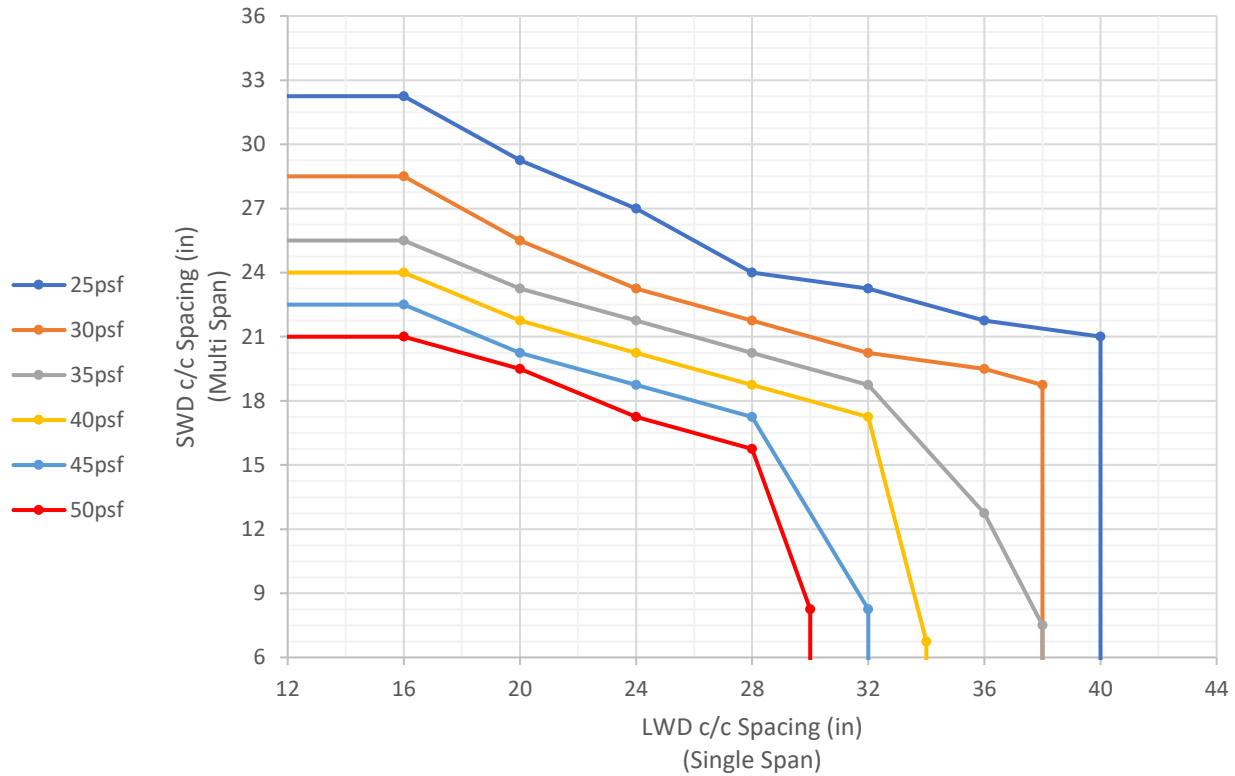
- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:

- Min. of L/60 or 1" deflection criteria where L is the largest clip spacing
- 5005-H34 Allowable stress of 9.10ksi
- Assumed no cantilever at edges



Crescent 5005-O Material 1/8" Thick Wind Load Chart Single Span LWD



Crescent:

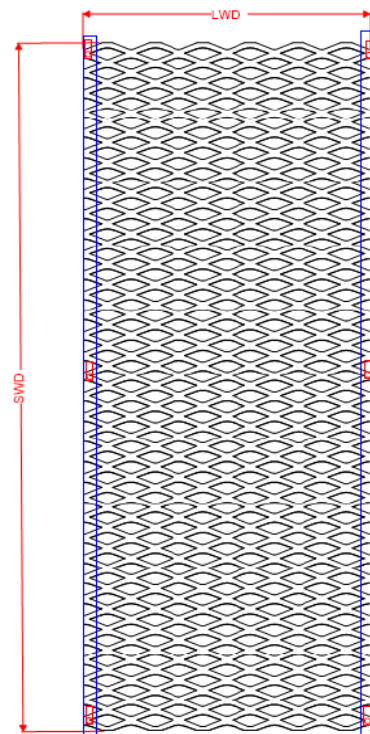
- 4" LWD x 0.375" SWD
- 25% open area

To use wind chart:

- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:

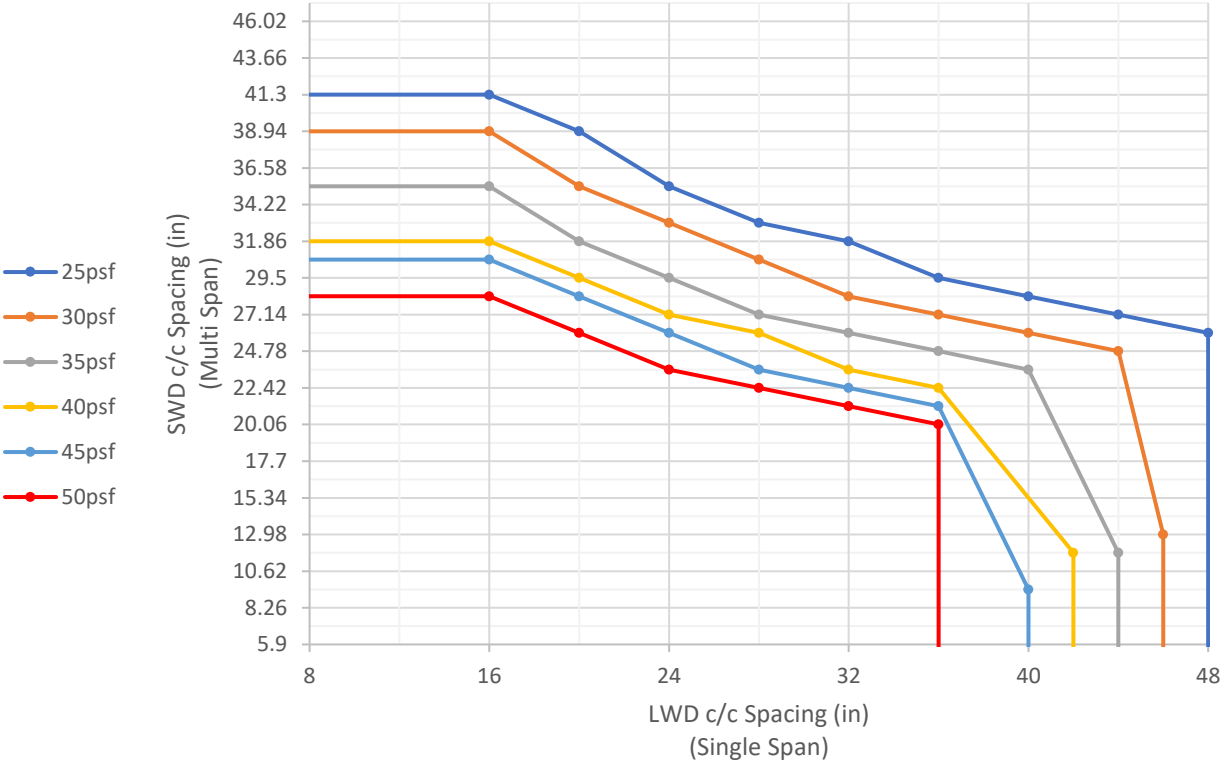
- Min. of L/60 or 1" deflection criteria where L is the largest clip spacing
- 5005-O Allowable stress of 5.27ksi
- Assumed no cantilever at edges



Pisa 5005-O Material 1/8" Thick

Wind Load Chart

Single Span LWD



Pisa:

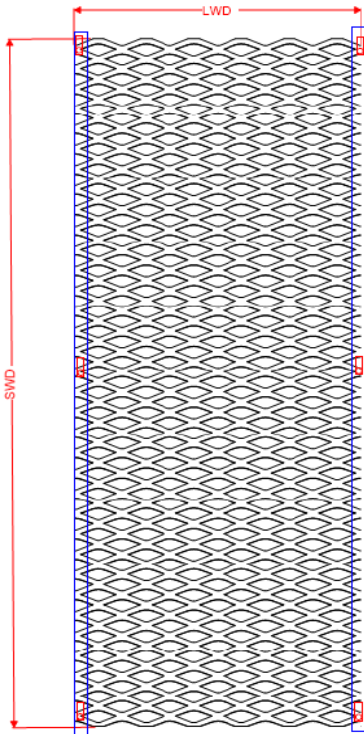
- 4" LWD x 0.59" SWD
- 52% open area

To use wind chart:

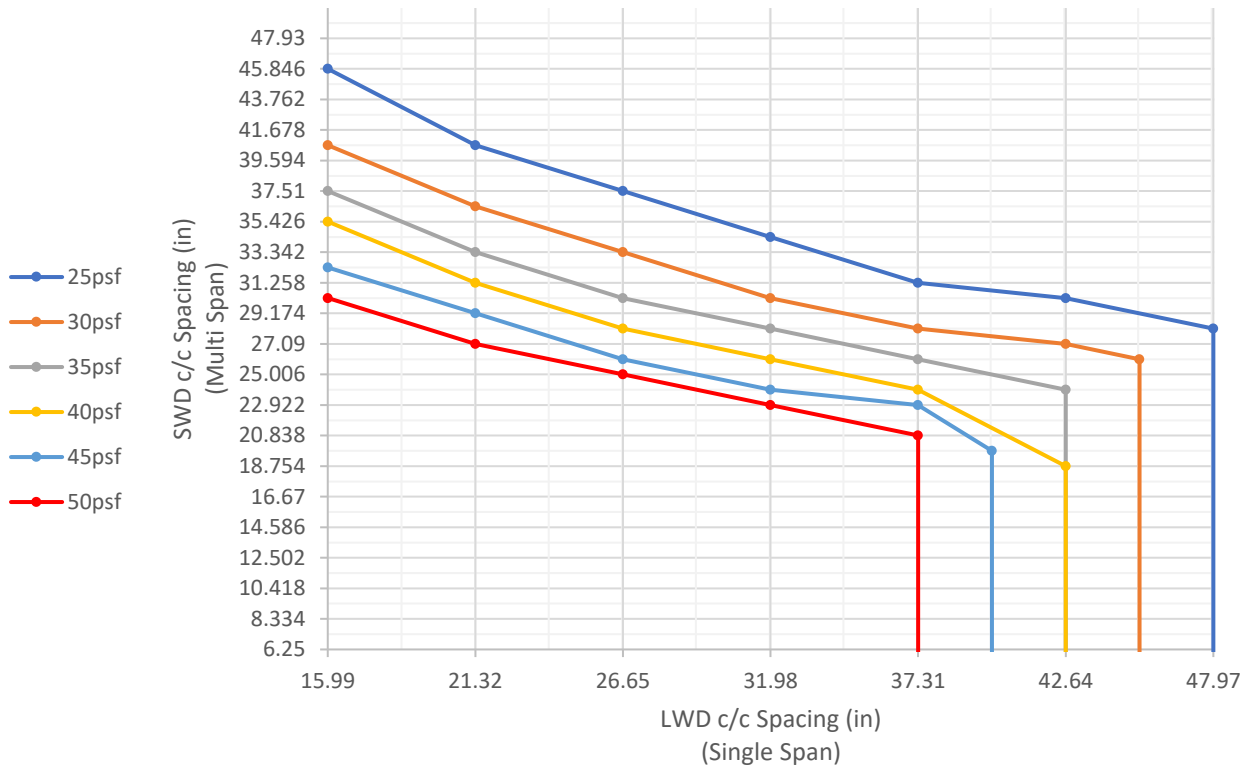
- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:

- Min. of L/60 or 1" deflection criteria where L is the largest clip spacing
- 5005-O Allowable stress of 5.27ksi
- Assumed no cantilever at edges



Venetian 5005-O Material 1/8" Thick Wind Load Chart Single Span LWD



Venetian:

-5.33" LWD x 0.521" SWD

-55% open area

To use wind chart:

- Determine maximum wind load for project
- Select appropriate wind load curve
- If proposed LWD and SWD clip spacing falls below curve then proposed is acceptable

Design Criteria:

- Min. of L/60 or 1" deflection criteria where L is the largest clip spacing
- 5005-O Allowable stress of 5.27ksi
- Assumed no cantilever at edges

