
ORIGINATION FORM

Proposed Revisions to a Standard Plans Index
(Please provide all information — Incomplete forms will be returned)

Contact Information:

Date: June 29, 2023
Originator: Dana Knox
Phone: (850) 410-5413
Email: Dana.Knox@dot.state.fl.us

Standard Plans:

Index Number: 700-030
Sheet Number (s): 1
Index Title: Wind and Hanger Beams for Overhead Signs

Summary of the changes:

Changed all reference of length to width and all reference to depth to height.

Commentary / Background:

The change is to be consistent with how the MUTCD dimensions signs. Section 700 and 995 will also need to be updated to be consistent with MUTCD.

Other Affected Offices / Documents: (Provide name of person contacted)

- | Yes | No | |
|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other Standard Plans – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | FDOT Design Manual – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Basis of Estimates Manual – |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Standard Specifications – Daniel Strickland |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Approved Product List – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Construction – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Maintenance – |

Origination Package Includes: (Submit package to Rick Jenkins)

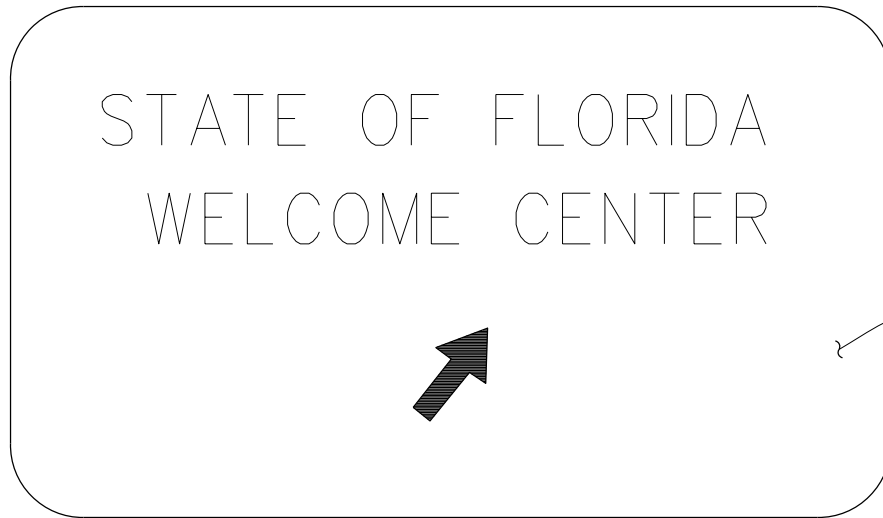
- | Yes | N/A | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Redline Mark-ups |
| <input type="checkbox"/> | <input type="checkbox"/> | Revised or Proposed Standard Plan Instruction (SPI) |
| <input type="checkbox"/> | <input type="checkbox"/> | Other Support Documents |

Implementation:

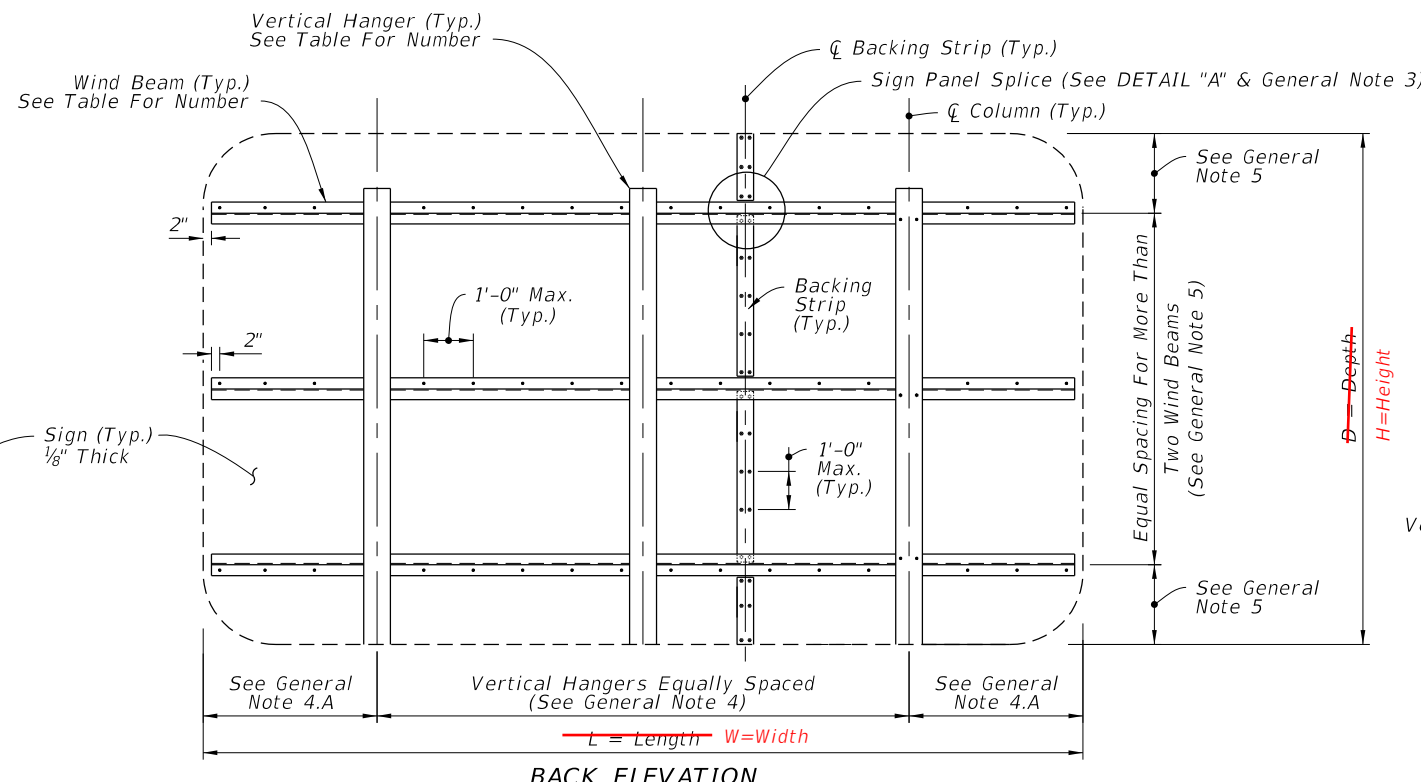
- | | |
|-------------------------------------|----------------------------------|
| <input type="checkbox"/> | Design Bulletin (Interim) |
| <input type="checkbox"/> | DCE Memo |
| <input type="checkbox"/> | Program Mgmt. Bulletin |
| <input checked="" type="checkbox"/> | FY-Standard Plans (Next Release) |

Contact the Roadway Design Office for assistance in completing this form

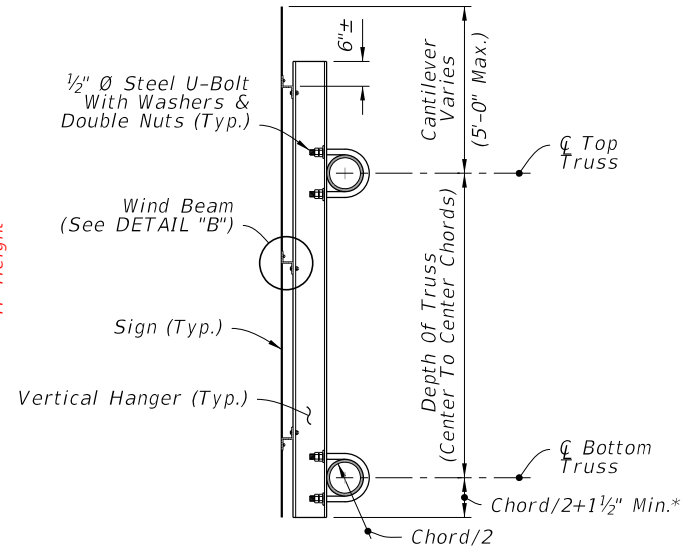
Email to: Rick Jenkins rick.jenkins@dot.state.fl.us and Darren Martin darren.martin@dot.state.fl.us



FRONT ELEVATION

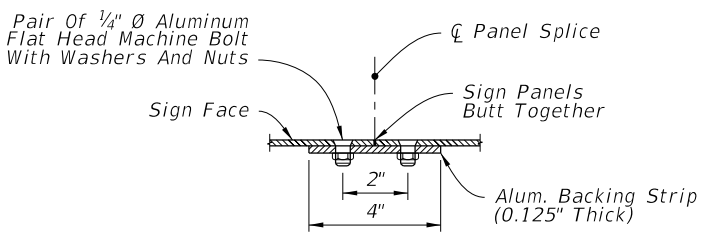


BACK ELEVATION



SIDE ELEVATION

TYPICAL SIGN FOR OVERHEAD TRUSS



PLAN VIEW

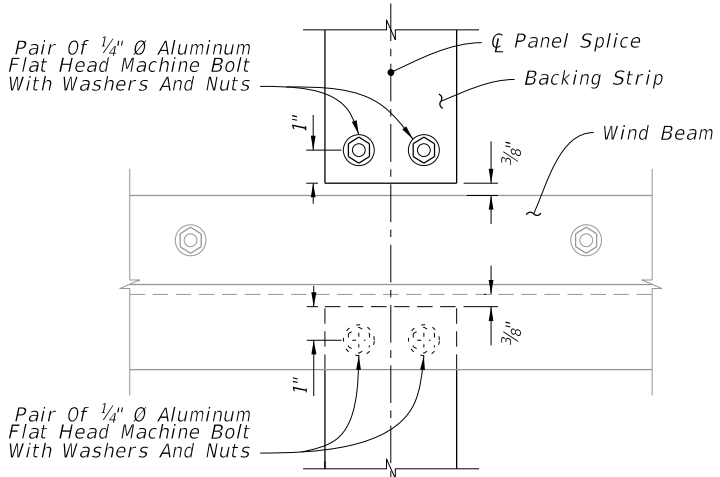
WIND BEAM TABLE (Z 3 x 2 11/16 x 2.33)					
Number of Horizontal Wind Beams Based on Sign Depth (D)					
2 Beams	3 Beams	4 Beams	5 Beams	6 Beams	
$D \leq 5'$	$5' < D \leq 9'$	$9' < D \leq 12'$	$12' < D \leq 15'$	$15' < D \leq 18'$	

CHANGED TO: Height (H)

HANGER TABLE (I 6 X 4 x 4.69 or Z 5 x 3 1/4 x 4.01)						
Number of Vertical Hanger Beams Based on Wind Speed and Sign Length (L)						
	2 Hangers	3 Hangers	4 Hangers	5 Hangers	6 Hangers	
130 mph	$L \leq 20'$	$20' < L \leq 30'$	$30' < L \leq 40'$	$40' < L \leq 50'$	--	
150 mph	$L \leq 18'$	$18' < L \leq 27'$	$27' < L \leq 35'$	$35' < L \leq 45'$	$45' < L \leq 50'$	
170 mph	$L \leq 15'$	$15' < L \leq 20'$	$20' < L \leq 28'$	$28' < L \leq 35'$	$35' < L \leq 43'$	

CHANGED TO: Width (W)

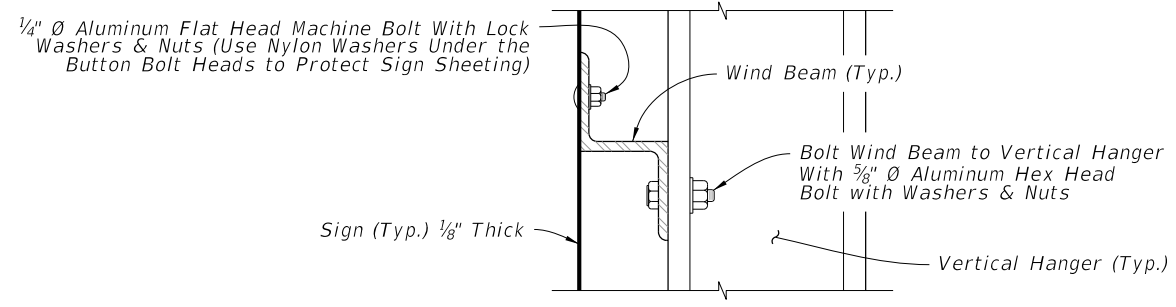
NOTE: For Monroe County designs, use 170 mph values but with Z 5 x 3-1/4 x 6.19 vertical hanger beams only.



ELEVATION

SIGN PANEL SPLICE

DETAIL "A"



DETAIL "B"

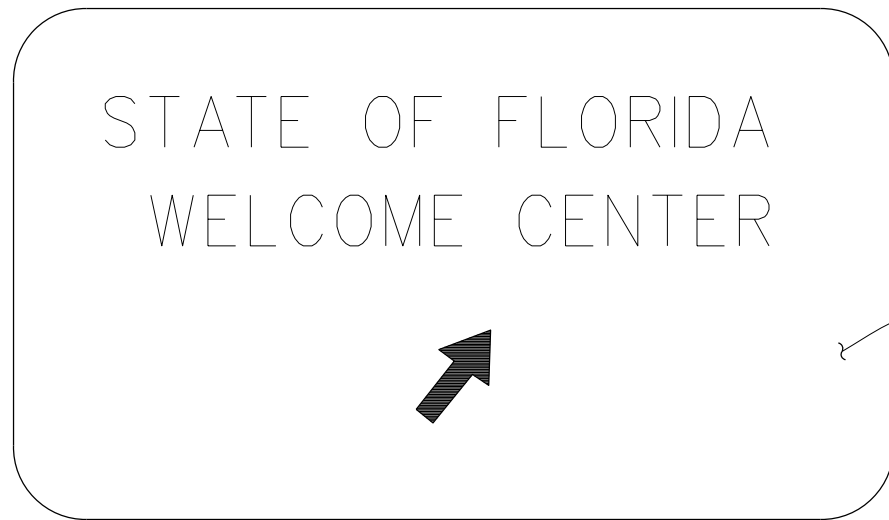
GENERAL NOTES

1. Meet the requirements of Specification 700. with Index 700-040 and 700-041.
3. The number and location of the Panel Splices are determined by the Sign Face supplier.
4. Spacing of Vertical Hangers:
 - A. Two Vertical Hanger = 21.0% L
 - Three Vertical Hanger = 15.0% L
 - Four Vertical Hanger = 11.0% L
 - Five Vertical Hanger = 9.0% L
 - Six Vertical Hanger = 7.0% L
 - B. Spacing of vertical hangers may be varied slightly as necessary to clear the truss struts and diagonals at panel points
5. Spacing of Wind Beams:
 - Two Wind Beams = 21.0% D
 - Three Wind Beams = 15.0% D
 - Four Wind Beams = 11.0% D
 - Five Wind Beams = 9.0% D
 - Six Wind Beams = 7.0% D
6. Shop Drawings:
 - A. Required for Sign Panels deeper than 10'-0" with a horizontal panel splice.
 - B. Splice must be located in between interior Zee Supports and only allowed on signs greater than 10'-0".
7. Wind Speed by county: see Index 715-010.

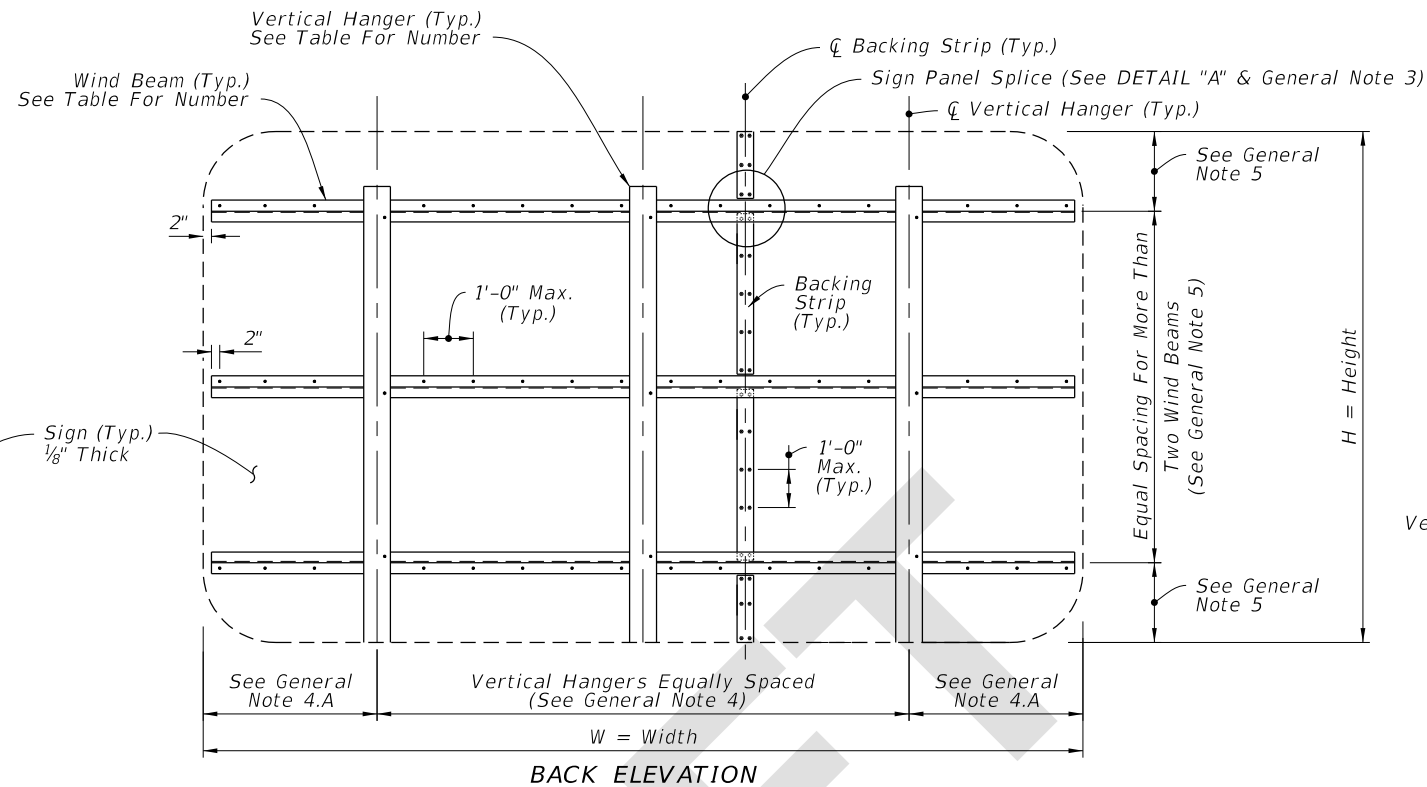
Change to "W"

Change to "H"

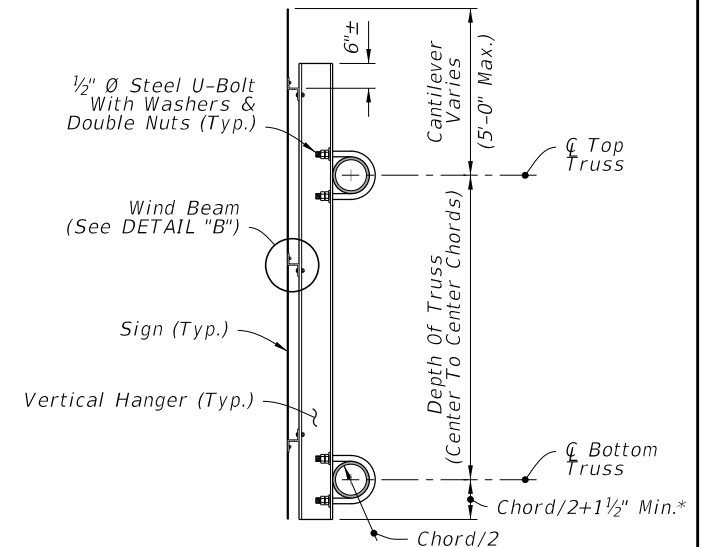
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FRONT ELEVATION



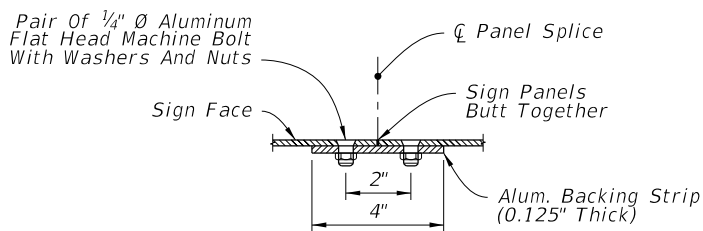
BACK ELEVATION



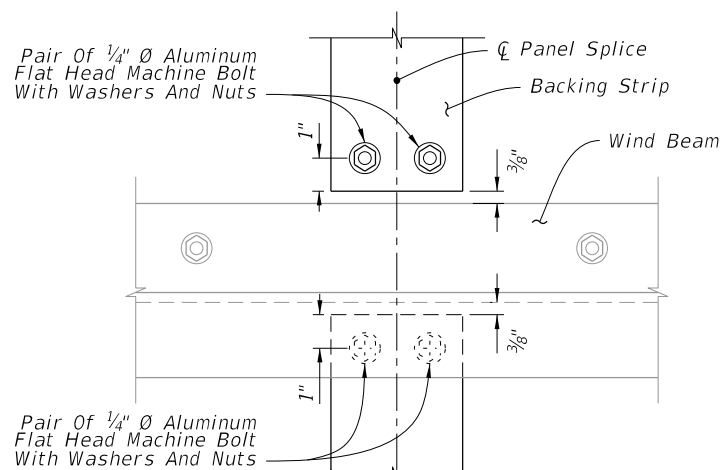
SIDE ELEVATION

*Bottom Justified Shown, Center Justified Similar.

TYPICAL SIGN FOR OVERHEAD TRUSS



PLAN VIEW



ELEVATION

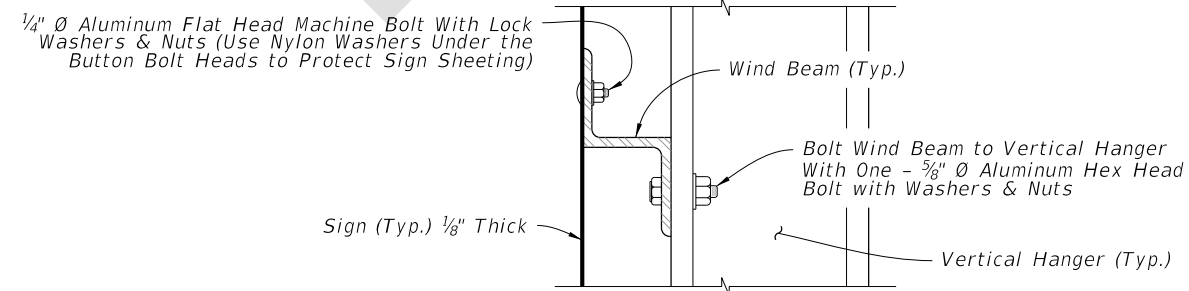
SIGN PANEL SPLICE

DETAIL "A"

WIND BEAM TABLE (Z 3 x 2 ¹¹ / ₁₆ x 2.33)					
Number of Horizontal Wind Beams Based on Sign Height (H)					
2 Beams	3 Beams	4 Beams	5 Beams	6 Beams	
H ≤ 5'	5' < H ≤ 9'	9' < H ≤ 12'	12' < H ≤ 15'	15' < H ≤ 18'	

HANGER TABLE (I 6 X 4 x 4.69 or Z 5 x 3 ¹ / ₄ x 4.01)					
Number of Vertical Hanger Beams Based on Wind Speed and Sign Width (W)					
	2 Hangers	3 Hangers	4 Hangers	5 Hangers	6 Hangers
130 mph	W ≤ 20'	20' < W ≤ 30'	30' < W ≤ 40'	40' < W ≤ 50'	--
150 mph	W ≤ 18'	18' < W ≤ 27'	27' < W ≤ 35'	35' < W ≤ 45'	45' < W ≤ 50'
170 mph	W ≤ 15'	15' < W ≤ 20'	20' < W ≤ 28'	28' < W ≤ 35'	35' < W ≤ 43'

NOTE: For Monroe County designs, use 170 mph values but with Z 5 x 3-1/4 x 6.19 vertical hanger beams only.



DETAIL "B"

GENERAL NOTES

1. Meet the requirements of Specification 700.
2. Work this Index with Index 700-040 and 700-041.
3. The number and location of the Panel Splices are determined by the Sign Face supplier.
4. Spacing of Vertical Hangers:
 - A. Two Vertical Hanger = 21.0% W
 - Three Vertical Hanger = 15.0% W
 - Four Vertical Hanger = 11.0% W
 - Five Vertical Hanger = 9.0% W
 - Six Vertical Hanger = 7.0% W
 - B. Spacing of vertical hangers may be varied slightly as necessary to clear the truss struts and diagonals at panel points
5. Spacing of Wind Beams:
 - Two Wind Beams = 21.0% H
 - Three Wind Beams = 15.0% H
 - Four Wind Beams = 11.0% H
 - Five Wind Beams = 9.0% H
 - Six Wind Beams = 7.0% H
6. Shop Drawings:
 - A. Required for Sign Panels deeper than 10'-0" with a horizontal panel splice.
 - B. Splice must be located in between interior Zee Supports and only allowed on signs greater than 10'-0".
7. Wind Speed by county: see Index 715-010.

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