
ORINATION FORM

Proposed Revisions to a Standard Plans Index

(Please provide all information — Incomplete forms will be returned)

Contact Information:

Date: May 2, 2023

Originator: Joshua Turley

Phone: (850) 414-4475

Email: joshua.turley@dot.state.fl.us

Standard Plans:

Index Number: 700-030

Sheet Number (s): 1 of 1

Index Title: WIND AND HANGER BEAMS FOR OVERHEAD
SIGNS

Summary of the changes:

Sheet 1: Revise the bolts in the Hanger Beams to show correctly. Added language to Detail B bolt call out to clarify number of bolts required.

Commentary / Background:

We received a query about the required number of bolts per intersection of the hanger beam and the wind beams. The bolts were not showing correctly in the elevation details so we corrected it.

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

- | Yes | No | |
|-------------------------------------|-------------------------------------|--------------------------------|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Other Standard Plans – 700-020 |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | FDOT Design Manual – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Basis of Estimates Manual – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Standard Specifications – |
| <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)

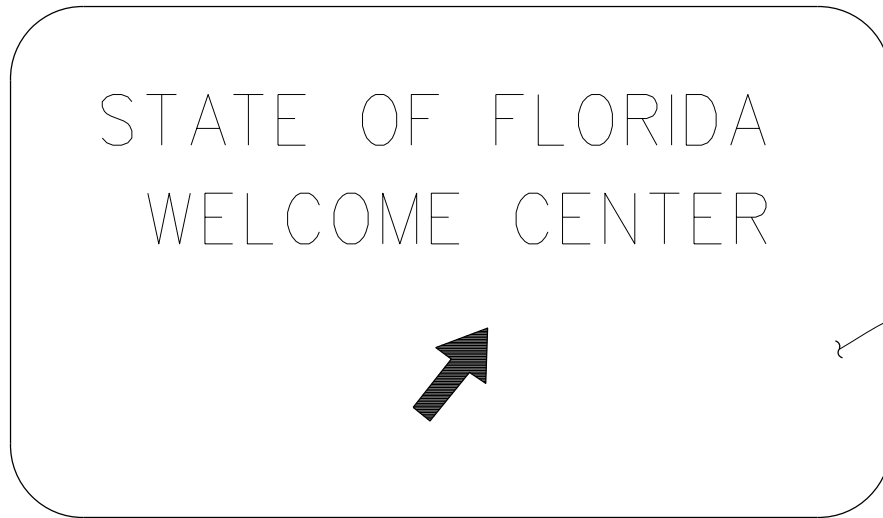
- | Yes | N/A | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Redline Mark-ups |
| <input type="checkbox"/> | <input type="checkbox"/> | Revised or Proposed Standard Plan Instruction (SPI) |
| <input type="checkbox"/>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

Implementation:

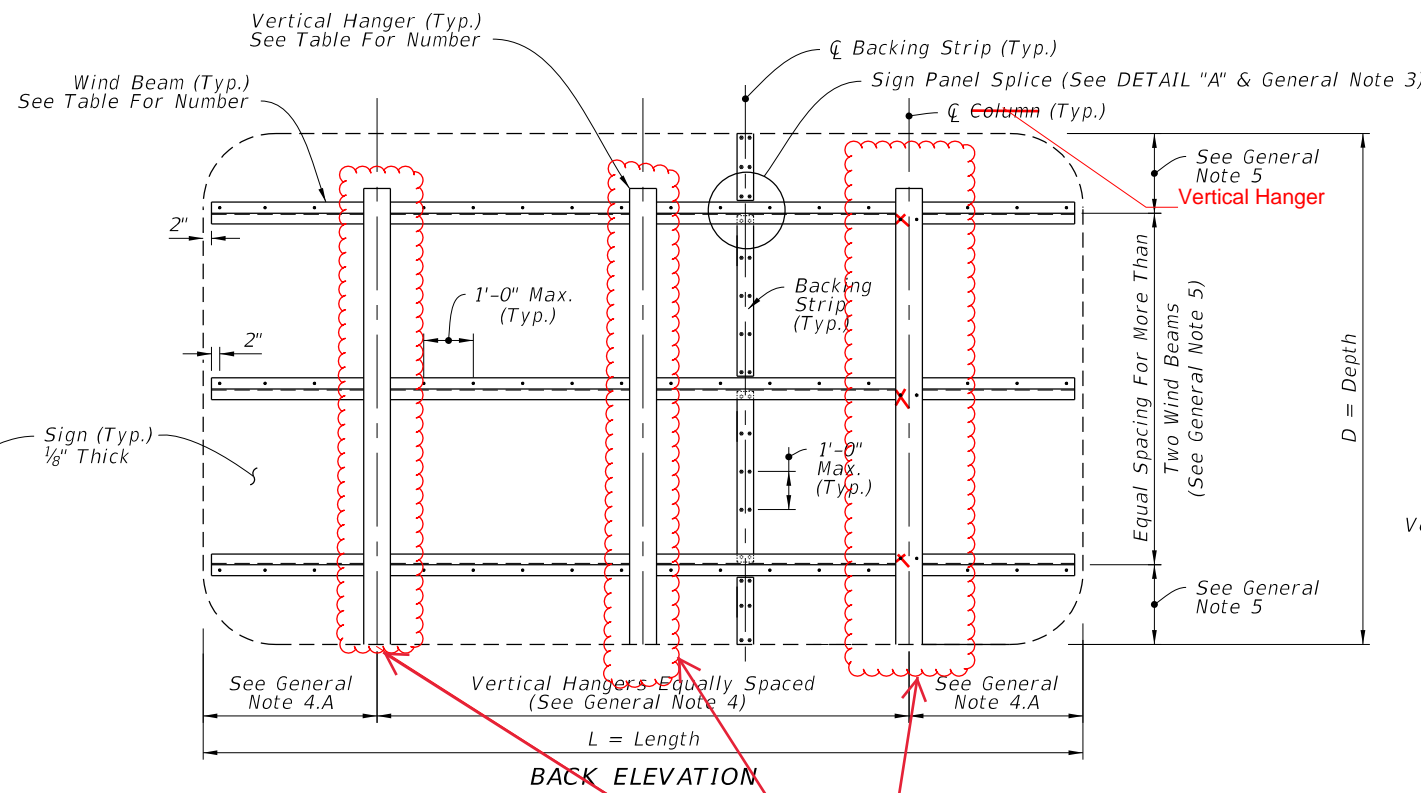
- | | |
|-------------------------------------|----------------------------------|
| <input type="checkbox"/> | Design Bulletin (Interim) |
| <input type="checkbox"/> | DCE Memo |
| <input type="checkbox"/> | Program Mgmt. Bulletin |
| <input checked="" type="checkbox"/> | FY-Standard Plans (Next Release)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

Contact the Roadway Design Office for assistance in completing this form

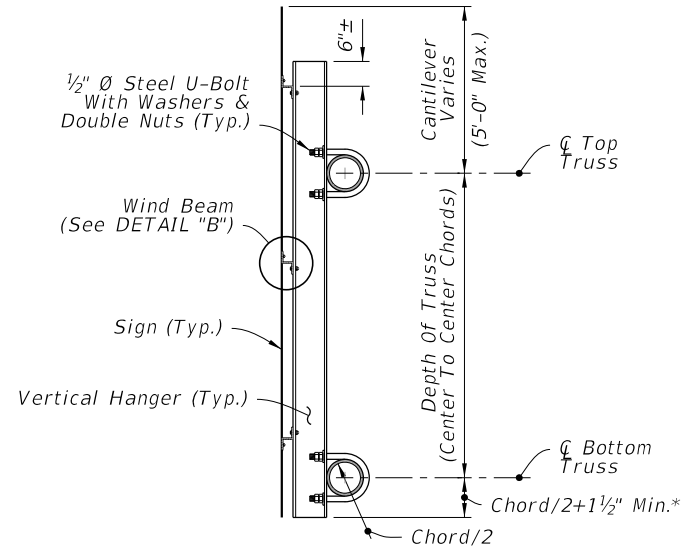
Email to: Rick Jenkins rick.jenkins@dot.state.fl.us and Darren Martin darren.martin@dot.state.fl.us



FRONT ELEVATION

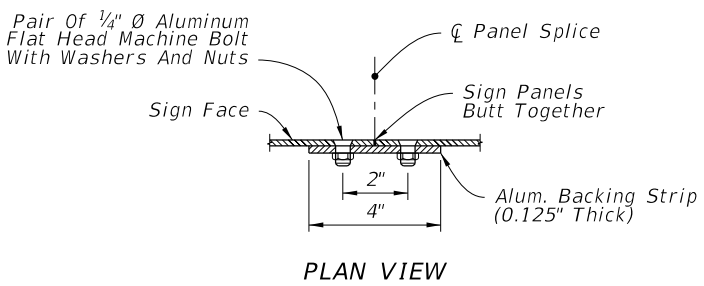


BACK ELEVATION

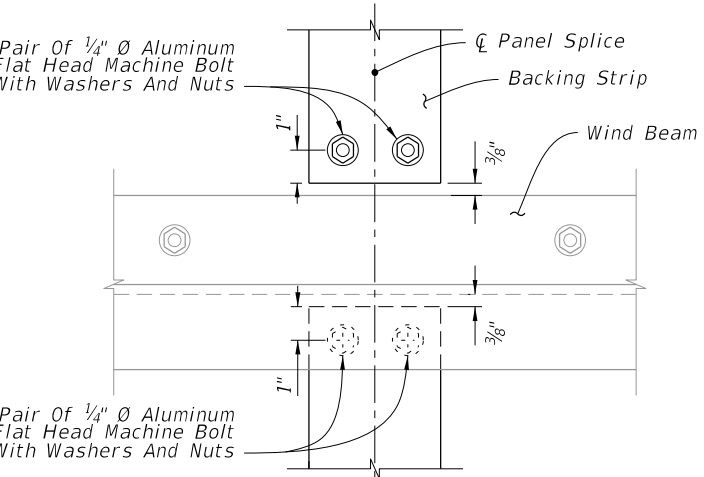


SIDE ELEVATION

TYPICAL SIGN FOR OVERHEAD TRUSS



PLAN VIEW



ELEVATION
SIGN PANEL SPLICE

DETAIL "A"

WIND BEAM TABLE (Z 3 x 2¹¹/₁₆ x 2.33)
Number of Horizontal Wind Beams Based on Sign Depth (D)

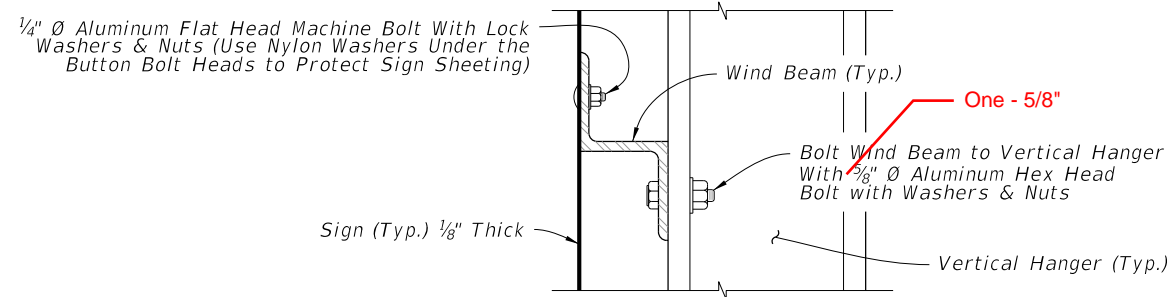
	2 Beams	3 Beams	4 Beams	5 Beams	6 Beams
D ≤ 5'					
5' < D ≤ 9'					
9' < D ≤ 12'					
12' < D ≤ 15'					
15' < D ≤ 18'					

Only show one bolt per intersection and show the bolts on the other beams as well.

HANGER TABLE (I 6 X 4 x 4.69 or Z 5 x 3¹/₄ 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 ≤ 20'	20' < L ≤ 30'	30' < L ≤ 40'	40' < L ≤ 50'	--
150 mph	L ≤ 18'	18' < L ≤ 27'	27' < L ≤ 35'	35' < L ≤ 45'	45' < L ≤ 50'
170 mph	L ≤ 15'	15' < L ≤ 20'	20' < L ≤ 28'	28' < L ≤ 35'	35' < L ≤ 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.

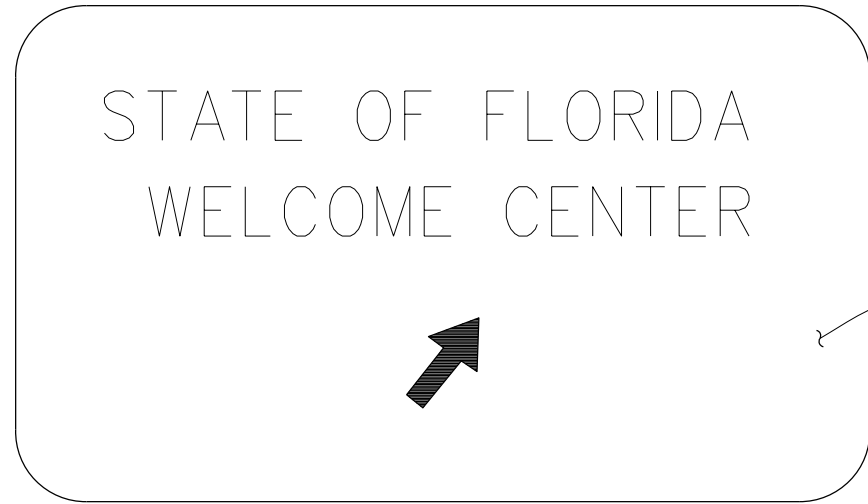


DETAIL "B"

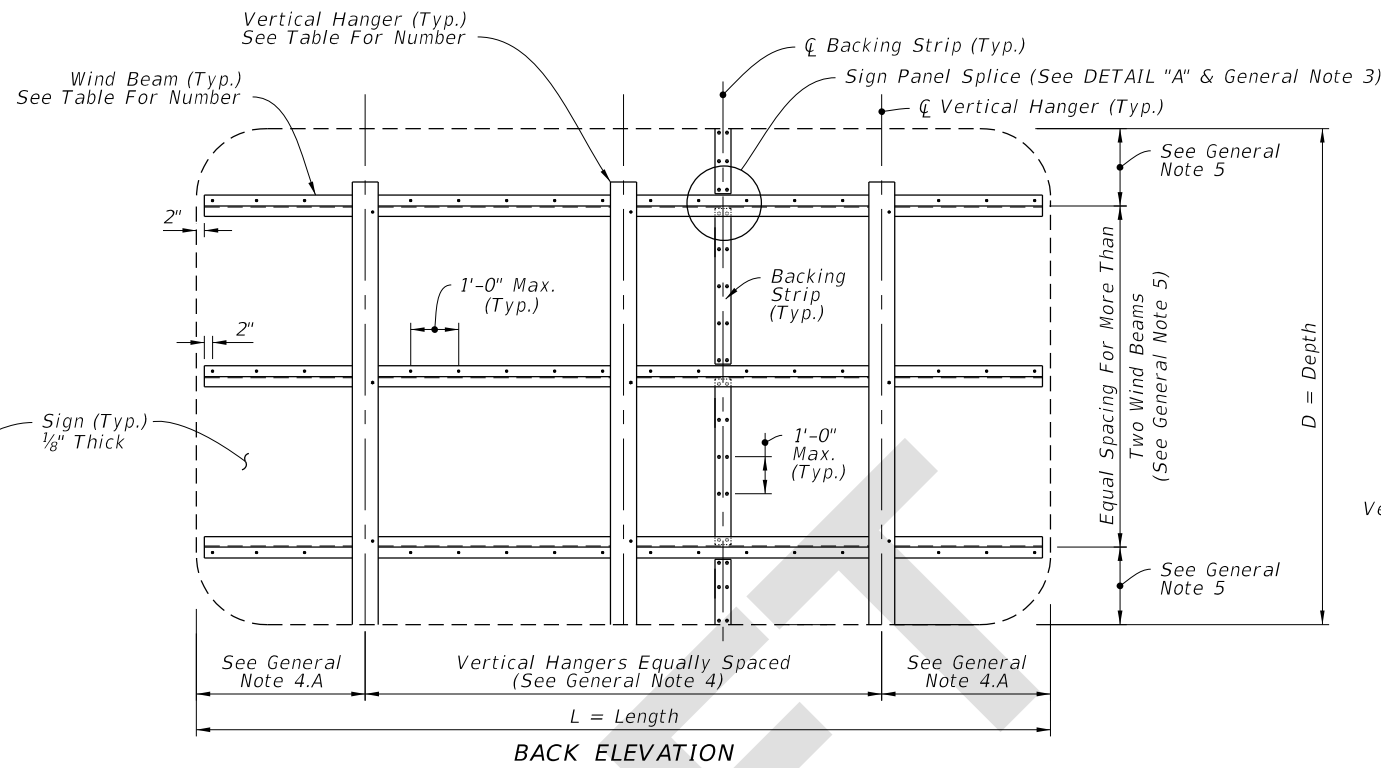
GENERAL NOTES

- Meet the requirements of Specification 700.
- Work this Index with Index 700-040 and 700-041.
- The number and location of the Panel Splices are determined by the Sign Face supplier.
- 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
- 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
- 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".
- Wind Speed by county: see Index 715-010.

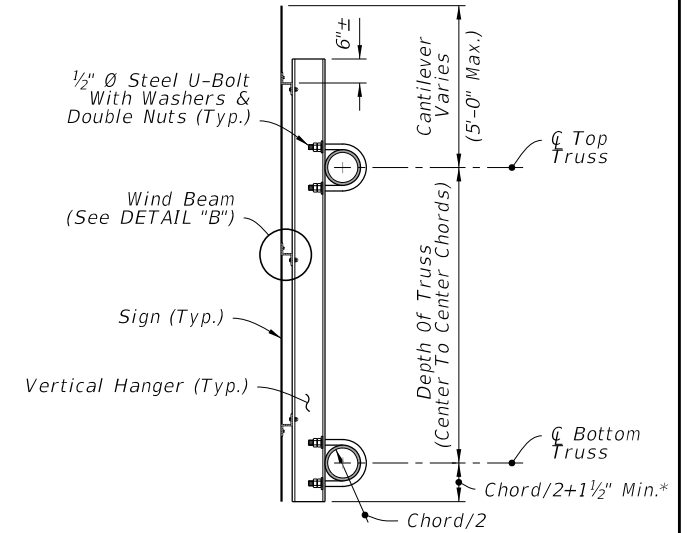
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FRONT ELEVATION

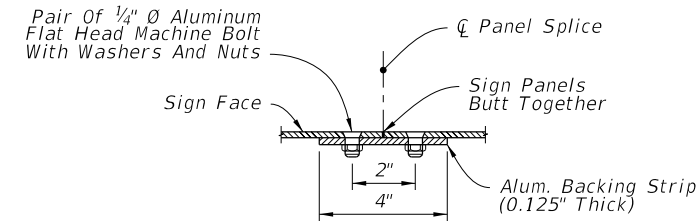


BACK ELEVATION

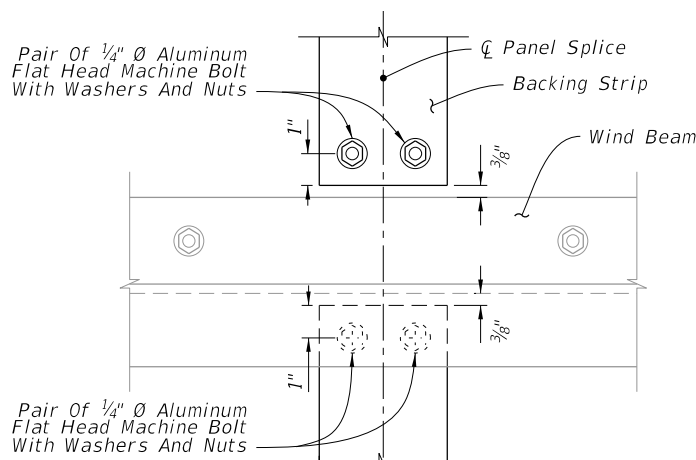


SIDE ELEVATION

TYPICAL SIGN FOR OVERHEAD TRUSS



PLAN VIEW



ELEVATION

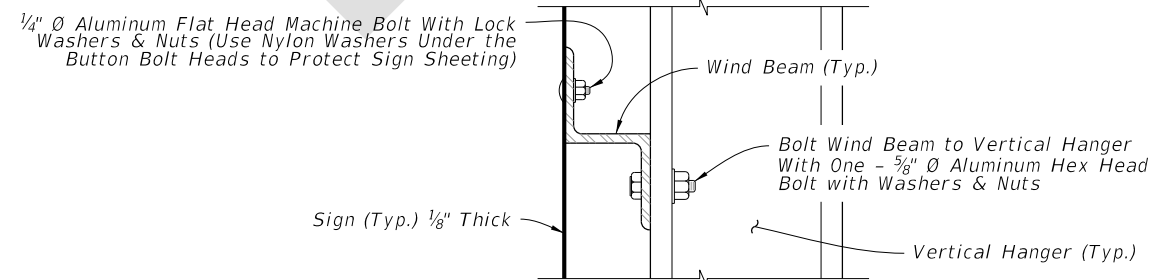
SIGN PANEL SPLICE

DETAIL "A"

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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:
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5. Spacing of Wind Beams:
 - Two Wind Beams = 21.0% D
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7. Wind Speed by county: see Index 715-010.

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