

Standard Fabrication Tolerances		NTS-E	N-S-7.1
Revision #	Revision Date	Approved By	Page(s)
00	08/09/2024	BCT	Page 1 of 5

Component	<u>Dimension</u>	<u>Tolerance</u>
 . .	Permitted variations over specified thickness for widths	
Flat Plate Tolerances Before	given in inches	ASTM A6
Cutting	Permitted variations in waviness	

Permitted variations in waviness

10TM 16

1		ASTM A6
	Trapezoid	
	Length:	+ 1", - 1/8"
	Width:	±1/8"
	Squareness:	±1/8"
	Bevels (All Sides):	+10°, -5°
	Cut or Drilled Holes/Slots	,
	Diameter:	+1/16", -1/16"
	Location (Elevation):	±1/8"
	Location (Flat Centerline):	±1/4"
	Spacing:	±1/8"
	Lifting Holes/Slots	
	Height, Width, Radius:	±1/8"
	Location (Elevation):	±1/4"
	Location (Flat Centerline):	±1/4"
	Ground Sleeve	
Cut	Length:	+ 1", - 1/8"
	Width:	±1/8"
<u> Folerances</u>	Squareness:	±1/8"
	Bevels (All Sides):	+10°, -5°
	Bearing Plates	
	Diameter:	+1", - 1/8"
	Diameter of cutout:	+1/8", -1/2"
	Thickness:	+ 1/4", -0"
	Pole Caps (Non-Structural)	
	Diameter:	+1", - 1/8"
	Thickness:	+ 1/16", -0"
	Pole Caps (Structural)	
	Diameter:	±1/8"
	Thickness:	+ 1/4", -0"
	Cut or Drilled Holes/Slots	
	Diameter:	+1/16", -1/32"
	Location:	±1/16"
	Spacing:	±1/16"

© 2024 Nucor Towers & Structures. All rights reserved. Copyright in the whole and every part of this document belongs to Nucor Towers & Structures and may not be used, sold, transferred, copied, or reproduced in whole or in part in any manner or form or in or on any media to any person without the prior written consent of Nucor Towers and Structures.



Standard Fabrication Tolerances		NTS-EN-S-7.1	
Revision #	Revision Date	Approved By	Page(s)
00	08/09/2024	BCT	Page 2 of 5

Component	Dimension	Tolerance
	Flange Plates	
	Diameter:	+1", - 1/8"
	Diameter of cutout:	+1/8", -1/2"
	Thickness:	+1/16" -0
	Cut or Drilled Holes/Slots	
	Diameter:	+1/16", -1/32"
	Location:	±1/16"
	Spacing:	±1/16"
	Base Plates	
	Diameter:	+1", - 1/8"
	Diameter of cutout:	+1/8", -1/2"
	Thickness:	+3/4", -0
	Cut or Drilled Holes/Slots	
	Diameter:	+1/8", -1/16"
	Location:	±1/8"
	Spacing:	±1/8"
	Boxes/Brackets	
	Length:	±1/8"
	Width:	+1/8", -1/16"
	Thickness:	ASTM A6
	Cut or Drilled Holes/Slots	
	Diameter:	+1/16", -1/32"
	Location:	±1/16"
	Spacing:	±1/16"
	Hole to edge:	±1/8"
	Vangs/Through Plates	
	Length:	±1/8"
	Width:	±1/16"
	Radius:	±1/16"
	Thickness:	ASTM A6
	Chamfer:	±1/16"
	Cut or Drilled Holes/Slots	
	Diameter:	+1/16", -1/32"
	Location:	±1/16"
	Spacing:	±1/16"
	Hole to edge:	±1/8"
	Anchor Bolt Templates	
	Length:	+1", - 1/8"



Standard Fabrication Tolerances		NTS-EI	N-S-7.1
Revision #	Revision Date	Approved By	Page(s)
00	08/09/2024	BCT	Page 3 of 5

Component	<u>Dimension</u>	<u>Tolerance</u>
	Width:	+1", - 1/8"
	Thickness:	ASTM A6
	Cut or Drilled Holes/Slots	
	Diameter:	±1/16"
	Location:	±3/32"
	Spacing:	±1/8"
	Ground Brackets/Pads	
	Length:	±1/8"
	Width:	+1/8", -1/16"
	Thickness:	ASTM A6
	Cut or Drilled Holes/Slots	
	Diameter:	+1/16", -1/32"
	Location:	±1/16"
	Spacing:	±1/16"
	Trapezoid	
	Layout Lines:	±1/8"
	Width:	±1/8"
	Bend Lines:	±1/8"
	Bend Angle:	±2º/Bend, ±5º Cumulative
	Bend Angle at long seam:	±5°
	Ground Sleeve	
Forming	Layout Lines:	±1/8"
Folerances	Width:	±1/8"
i Olci allices	Bend Lines:	±1/8"
	30.10.2.100	±2°/Bend, ±5°
	Bend Angle:	Cumulative
	Boxes/Brackets	
	Bend Angle:	3°
	Leg Length:	±1/8"
	Leg Spacing:	+1/4", -1/16"
	Squareness:	±3/16"
0	All Sections	
<u>Seamer</u> <u>Tolerances</u>	Mismatch(Hi-lo):	±10% Material Thickness
i vici allues	Misalignment:	±1/16"



Standard Fabrication Tolerances		NTS-EN-S-7.1	
Revision #	Revision Date	Approved By	Page(s)
00	08/09/2024	BCT	Page 4 of 5

Component	<u>Dimension</u>	Tolerance
	Twist	
	Direct Embedment	
	2 Pc Structure	
	Top Section	4º
	Base Section	4º
	3 Pc Structure	
	Top Section	4º
	Mid Section	3°
	Base Section	3º
	Base/Flange Plated & Through Vang Structures	
	2 Pc Structure	
	Top Section	4º
	Base Section	2º
	3 Pc Structure	
	Top Section	2º
	Mid Section	2º
	Base Section	2º
	Shaft	
	Length	±1"
	Arm Diameters	1/4"
	Pole Diameters	
	Slip Joints, Dia < 15":	±3/8"
	Slip Joints, Dia < 15" < Dia < 40":	±1/2"
	Slip Joints, Dis > 40":	±3/4"
	Base Plates & Flange:	±1/2"
Lay Out	C-Welds:	±1/4"
<u>——</u> Гolerances	Sealer Plates, Either Section or Vangs Within 5':	±3/8"
. <u> </u>	All Other:	±1"
	Circumference	
	At Slip JointInner Section:	±1/8"
	At Slip Joint Outer Section:	±1/8"
	Camber (Shown on Drawings) or Straightness	1/8"per 10' length
	Arm Rise	1"
	Orientation (angular)	2°

© 2024 Nucor Towers & Structures. All rights reserved. Copyright in the whole and every part of this document belongs to Nucor Towers & Structures and may not be used, sold, transferred, copied, or reproduced in whole or in part in any manner or form or in or on any media to any person without the prior written consent of Nucor Towers and Structures.



Standard Fabrication Tolerances		NTS-EN-S-7.1	
Revision #	Revision Date	Approved By	Page(s)
00	08/09/2024	BCT	Page 5 of 5

Component	Dimension	Tolerance
	<u>Hardware</u>	
	ID Tags	± 1" any axis
	Grounding	± 1" any axis
	Climbing	
	Ladder Clip Groups	±1/2"
	Clips within a group	±1/8"
	Jacking Nut Spacing	±1/16"
	Through Vangs	
	Elevation	±1/8"
	Straightness	1/8"
	Holes on one side	+0", -1/8"
	Holes on both sides	1", -0
	Base Plate to pole shaft	
	Centered on pole	±1/4"
	Squareness	1º
	Flange Plate to pole shaft	
	Centered on pole	±1/4"
	Squareness	.3°
	Brackets	1/4"
	Anchor Bolts	
	Overall Length	+1", -0
	Thread Length	+1", -0
	Galvanized Length	+6", -0
	Twist	2°
	Dents	1/8"