

INDIAN RAILWAYS



CHECK SHEETS

FOR

CRF SECTIONS OF BOGIE OPEN WAGON TYPE – BOXNHL(Design D)

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1.	October - 2011	First issue	-	--

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RESEARCH DESIGNS AND STANDARDS ORGANISATION
MINISTRY OF RAILWAYS
LUCKNOW-226 011

October, 2011

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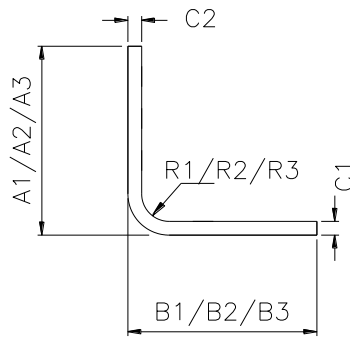
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Note:

- These check sheets do not detail all the dimensions or technical requirements of respective wagon assemblies/components. These check sheets are issued only for General Guidance & assistance of inspecting officials. Notwithstanding the above, the inspecting officials are advised to refer to relevant drawings and/or relevant specifications to confirm conformity to the specified dimensions and technical details.
- (a) In check sheets wherever it is indicated that two dimensions are to be measured, it means measurement of that dimension at two end locations of the component.

(b) In check sheets wherever it is indicated that three dimensions are to be measured, it means measurement of that dimension at two end locations of the component, and one at the center of the component.

CORNER STANCHION



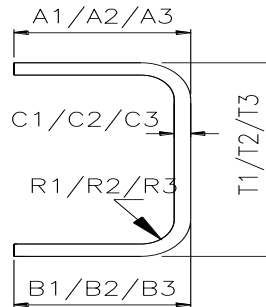
Ref: Drawing No. WD-09034-S-06 Item-3 & WD-09034-S-22 Item-2

Corner Stanchion				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions	As follows				
	LOCATION	Nominal Dimensions & Allowable Deviation		Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange(top)	A1	110± 1.5			
		A2				
		A3				
ii.	Flange(bottom)	B1	110±1.5			
		B2				
		B3				
iii.	Thickness	C1	8± 0.40			
		C2				
iv.	Length	Top	2122 (+3/-1)			
		Bottom				
v.	Radius	R1	16± 1.5			
		R2				
		R3				
vi.	Angle	-	± 1°			
vii.	Waviness	-	2 max.			
viii.	Bow	-	1 in 600			
ix.	Camber	-	1 in 600			
x.	Twist	-	1 deg./metre			
xi.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Side Top Coping

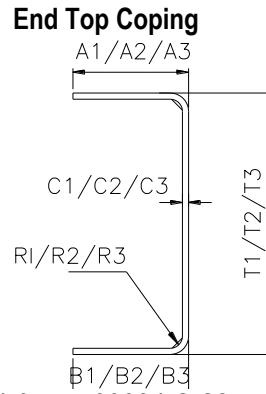


Ref: Drawing No. WD-09034-S-05 Item-3 & WD-09034-S-22 Item-3

Side Top Coping				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange (top)	A1	75± 1.5			
		A2				
		A3				
ii	Flange (bottom)	B1	75±1.5			
		B2				
		B3				
iii.	Thickness	C1	7 +0.35/-0.0			
		C2				
		C3				
iv.	Height	T1	110± 1.5			
		T2				
		T3				
v.	Length	Top	10042 (+4.0/-2.0)			
		Bottom				
vi.	Radius	R1	14± 1.50			
		R2				
		R3				
vii.	Angle	-	±1°			
viii.	Waviness	-	2 max			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

. All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

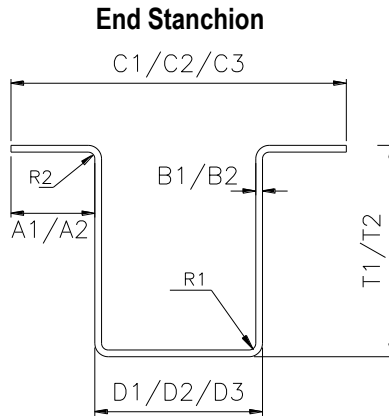


Ref: Drawing No. WD-09034-S-06 Item-4 & WD-09034-S-22 Item-4

End Top Coping				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange(top)	A1	75 +1.5/-0.0			
		A2				
		A3				
ii.	Flange (bottom)	B1	75 +1.5/-0.0			
		B2				
		B3				
iii.	Thickness	C1	4 ± 0.20			
		C2				
		C3				
iv.	Height	T1	170 +1.25/-0.0			
		T2				
		T3				
v.	Length	Top	3196 +3.0/-1.0			
		Bottom				
vi.	Radius	R1	8 ±1.50			
		R2				
		R3				
vii.	Angle	-	±1°			
viii.	Waviness	-	2 max			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	



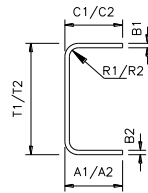
Ref: Drawing No. WD-09034-S-06 Item-1 & WD-09034-S-22 Item-5

End Stanchion				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange	A1	54 ± 1.25			
		A2				
ii.	Thickness	B1	4 ± 0.20			
		B2				
iii.	Top Width	C1	200 ± 1.5			
		C2				
		C3				
iv.	Bottom Width	D1	100 ± 1.0			
		D2				
		D3				
v.	Height	T1	125 ± 1.25			
		T2				
vi.	Length	Top	2092 +3.0/-1.0			
		Bottom				
vii.	Radius	R1	8± 1.50			
		R2				
viii.	Angle	-	±1°			
ix.	Waviness	-	2 max			
x.	Bow	-	1 in 600			
xi.	Camber	-	1 in 600			
xii.	Twist	-	1 deg./metre			
xiii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Cross Stringer



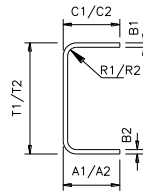
Ref: Drawing No. WD-09034-S-15 Item-13 & WD-09034-S-22 Item-6 (a)

Cross Stringer				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange I	A1	51 (+1.25/-0.0)			
		A2				
ii.	Flange II	C1	51 (+1.25/-0.0)			
		C2				
iii.	Thickness	B1	4 ± 0.20			
		B2				
iv.	Height	T1	100 +1.0/-0.0			
		T2				
v.	Length	Top	366.5 ±1.0			
		Bottom				
vi.	Radius	R1	8± 1.50			
		R2				
vii.	Angle	-	±1°			
viii.	Waviness	-	2 max			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Cross Stringer



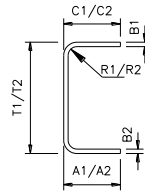
Ref: Drawing No. WD-09034-S-15 Item-12 & WD-09034-S-22 Item-6 (b)

Cross Stringer				Date:		
SL. NO.	STAGE	Works Inspection	Inspecting Authority	Remarks		
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange I	A1	51 (+1.25/-0.0)			
		A2				
ii.	Flange II	C1	51 (+1.25/-0.0)			
		C2				
iii.	Thickness	B1	4 ± 0.20			
		B2				
iv.	Height	T1	100 +1.0/-0.0			
		T2				
v.	Length	Top	389 ±1.0			
		Bottom				
vi.	Radius	R1	8± 1.50			
		R2				
vii.	Angle	-	±1°			
viii.	Waviness	-	2 max			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Cross Stringer



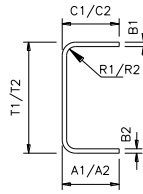
Ref: Drawing No. WD-09034-S-15 Item-11 & WD-09034-S-22 Item-6 (c)

Cross Stringer				Date:		
SL. NO.	STAGE	Works Inspection	Inspecting Authority	Remarks		
1.	Dimensions			As follows		
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange I	A1	51 (+1.25/-0.0)			
		A2				
ii.	Flange II	C1	51 (+1.25/-0.0)			
		C2				
iii.	Thickness	B1	4 ± 0.20			
		B2				
iv.	Height	T1	100 +1.0/-0.0			
		T2				
v.	Length	Top	586 ±1.0			
		Bottom				
vi.	Radius	R1	8± 1.50			
		R2				
vii.	Angle	-	±1°			
viii.	Waviness	-	2 max			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Stringer (Outer)



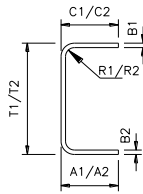
Ref: Drawing No. WD-09034-S-15 Item-2 & WD-09034-S-22 Item-6 (d)

Stringer (Outer)				Date:		
SL. NO.	STAGE	Works Inspection	Inspecting Authority	Remarks		
1.	Dimensions				As follows	
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange I	A1	51 (+1.25/-0.0)			
		A2				
ii.	Flange II	C1	51 (+1.25/-0.0)			
		C2				
iii.	Thickness	B1	4 ± 0.20			
		B2				
iv.	Height	T1	100 +1.0/-0.0			
		T2				
v.	Length	Top	628 ±1.0			
		Bottom				
vi.	Radius	R1	8± 1.50			
		R2				
vii.	Angle	-	±1°			
viii.	Waviness	-	2 max			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Stringer (End)



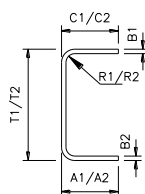
Ref: Drawing No. WD-09034-S-15 Item-1 & WD-09034-S-22 Item-6 (e)

Stringer (End)				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions					As follows
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange I	A1	51 (+1.25/-0.0)			
		A2				
ii.	Flange II	C1	51 (+1.25/-0.0)			
		C2				
iii.	Thickness	B1	4 ± 0.20			
		B2				
iv.	Height	T1	100 +1.0/-0.0			
		T2				
v.	Length	Top	628 ±1.0			
		Bottom				
vi.	Radius	R1	8± 1.50			
		R2				
vii.	Angle	-	±1°			
viii.	Waviness	-	2 max			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Stringer (Center)



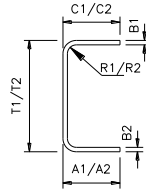
Ref: Drawing No. WD-09034-S-15 Item-4 & WD-09034-S-22 Item-6 (f)

Stringer Centre				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions					As follows
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange I	A1	51 (+1.25/-0.0)			
		A2				
ii	Flange II	C1	51 (+1.25/-0.0)			
		C2				
iii.	Thickness	B1	4 ± 0.20			
		B2				
iv.	Height	T1	100 +1.0/-0.0			
		T2				
v.	Length	Top	1658 ±1.0			
		Bottom				
vi.	Radius	R1	8± 1.50			
		R2				
vii.	Angle	-	±1°			
viii.	Waviness	-	2 max			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Stringer (Inner)



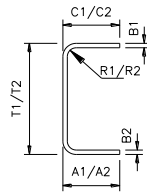
Ref: Drawing No. WD-09034-S-15 Item-3 & WD-09034-S-22 Item-6 (g)

Stringer Inner				Date:	
SL. NO.	STAGE	Works Inspection	Inspecting Authority	Remarks	
1.	Dimensions			As follows	
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension	
				Works Inspection	Inspecting Authority
i.	Flange I	A1	51 (+1.25/-0.0)		
		A2			
ii.	Flange II	C1	51 (+1.25/-0.0)		
		C2			
iii.	Thickness	B1	4 ± 0.20		
		B2			
iv.	Height	T1	100 +1.0/-0.0		
		T2			
v.	Length	Top	1684 ±1.0		
		Bottom			
vi.	Radius	R1	8± 1.50		
		R2			
vii.	Angle	-	±1°		
viii.	Waviness	-	2 max		
ix.	Bow	-	1 in 600		
x.	Camber	-	1 in 600		
xi.	Twist	-	1 deg./metre		
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects		

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Channel for APM Reservoir



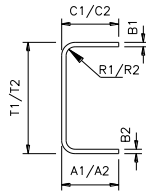
Ref: Drawing No. WD-09034-S-04 Item-23 & WD-09034-S-22 Item-6 (h)

Channel for APM Reservoir				Date:
SL. NO.	STAGE	Works Inspection	Inspecting Authority	Remarks
1.	Dimensions			As follows
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension
				Works Inspection
				Inspecting Authority
i.	Flange I	A1	51 (+1.25/-0.0)	
		A2		
ii.	Flange II	C1	51 (+1.25/-0.0)	
		C2		
iii.	Thickness	B1	4 ± 0.20	
		B2		
iv.	Height	T1	100 +1.0/-0.0	
		T2		
v.	Length	Top	586 ±1.0	
		Bottom		
vi.	Radius	R1	8± 1.50	
		R2		
vii.	Angle	-	±1°	
viii.	Waviness	-	2 max	
ix.	Bow	-	1 in 600	
x.	Camber	-	1 in 600	
xi.	Twist	-	1 deg./metre	
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects	

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Stinger for EQ. Lever Support Bracket



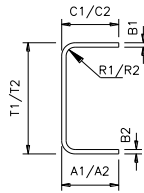
Ref: Drawing No. WD-09034-S-10 Item-27 & WD-09034-S-22 Item-6 (i)

Stringer for eq. lever support bracket				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions					As follows
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange I	A1	51 (+1.25/-0.0)			
		A2				
ii.	Flange II	C1	51 (+1.25/-0.0)			
		C2				
iii.	Thickness	B1	4 ± 0.20			
		B2				
iv.	Height	T1	100 +1.0/-0.0			
		T2				
v.	Length	Top	350 ±1.0			
		Bottom				
vi.	Radius	R1	8± 1.50			
		R2				
vii.	Angle	-	±1°			
viii.	Waviness	-	2 max			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Cross Stringer for EQ. Lever Support Bracket



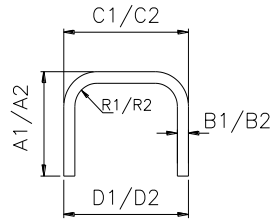
Ref: Drawing No. WD-09034-S-10 Item-28 & WD-09034-S-22 Item-6 (j)

Stringer for eq. lever support bracket				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions					As follows
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange I	A1	51 (+1.25/-0.0)			
		A2				
ii.	Flange II	C1	51 (+1.25/-0.0)			
		C2				
iii.	Thickness	B1	4 ± 0.20			
		B2				
iv.	Height	T1	100 +1.0/-0.0			
		T2				
v.	Length	Top	586 ±1.0			
		Bottom				
vi.	Radius	R1	8± 1.50			
		R2				
vii.	Angle	-	±1°			
viii.	Waviness	-	2 max			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Door Frame (Hori.)



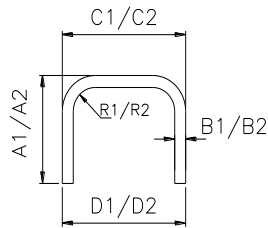
Ref: Drawing No. WD-09034-S-07 Item-5 & WD-09034-S-22 Item-7 (a)

Door Frame (Hori.)				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange	A1	36 ±1.0			
		A2				
ii.	Thickness	B1	4 ± 0.20			
		B2				
iii.	Top Width	C1	45 ±1.0			
		C2				
iv.	Bottom Width	D1	48 ±1.0			
		D2				
v.	Length	Top	1450 ±1.0			
		Bottom				
vi.	Radius	R1	8 ±1.50			
		R2				
vii.	Angle	-	± 1°			
viii.	Waviness	-	2 max.			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Door Frame (Vertical.)



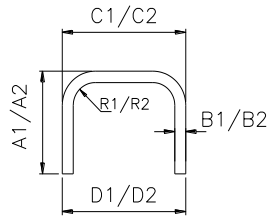
Ref: Drawing No. WD-09034-S-07 Item-5 & WD-09034-S-22 Item-7 (b)

Door Frame (Vertical.)				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange	A1	36 ±1.0			
		A2				
ii.	Thickness	B1	4 ± 0.20			
		B2				
iii.	Top Width	C1	45 ±1.0			
		C2				
iv.	Bottom Width	D1	48 ±1.0			
		D2				
v.	Length	Top	765 ±1.0			
		Bottom				
vi.	Radius	R1	8 ±1.50			
		R2				
vii.	Angle	-	± 1°			
viii.	Waviness	-	2 max.			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Door Frame (Center)



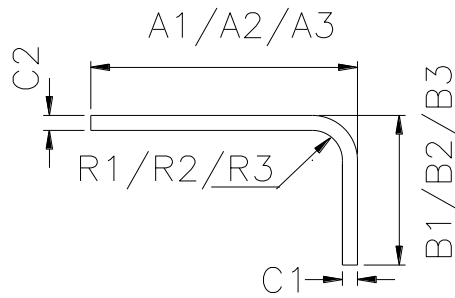
Ref: Drawing No. WD-09034-S-07 Item-5 & WD-09034-S-22 Item-7 (c)

Door Frame (Center)				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange	A1	36 ±1.0			
		A2				
ii.	Thickness	B1	4 ± 0.20			
		B2				
iii.	Top Width	C1	45 ±1.0			
		C2				
iv.	Bottom Width	D1	48 ±1.0			
		D2				
v.	Length	Top	672 ±1.0			
		Bottom				
vi.	Radius	R1	8 ±1.50			
		R2				
vii.	Angle	-	± 1°			
viii.	Waviness	-	2 max.			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Side Middle Coping



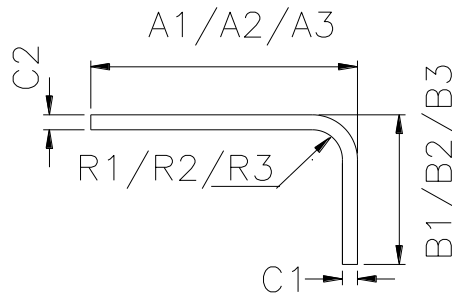
Ref: Drawing No. WD-09034-S-05 Item-5 & WD-09034-S-22 Item-8

Side Middle Coping				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange I	A1	71 ±1.25			
		A2				
		A3				
ii.	Flange II	B1	40 ±1.0			
		B2				
		B3				
iii.	Thickness	C1	4 ± 0.20			
		C2				
iv.	Length	Top	1504 ±1.0			
		Bottom				
v.	Radius	R1	8±1.50			
		R2				
		R3				
vi.	Angle	-	± 1°			
vii.	Waviness	-	2 max			
viii.	Bow	-	1 in 600			
ix.	Camber	-	1 in 600			
x.	Twist	-	1 deg./metre			
xi.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Side Middle Coping (Door Way)



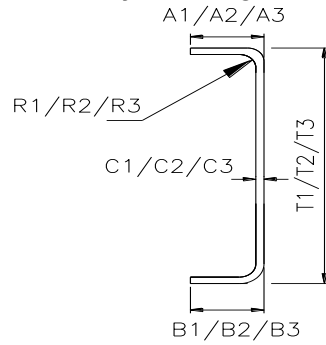
Ref: Drawing No. WD-09034-S-05 Item-6 & WD-09034-S-22 Item-9

Side Middle Coping (Door Way)				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange I	A1	71 ±1.25			
		A2				
		A3				
ii.	Flange II	B1	40 ±1.0			
		B2				
		B3				
iii.	Thickness	C1	4 ± 0.20			
		C2				
iv.	Length	Top	1530 ±1.0			
		Bottom				
v.	Radius	R1	8±1.50			
		R2				
		R3				
vi.	Angle	-	± 1°			
vii.	Waviness	-	2 max			
viii.	Bow	-	1 in 600			
ix.	Camber	-	1 in 600			
x.	Twist	-	1 deg./metre			
xi.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Door Way Stiffening Cross Bar



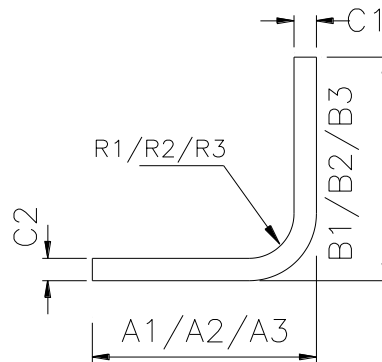
Ref: Drawing No. WD-09034-S-05 Item-2 & WD-09034-S-22 Item-10

Door Way Stiffening Cross Bar				Date:	
SL. NO.	STAGE	Works Inspection	Inspecting Authority	Remarks	
1.	Dimensions	As follows			
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension	
				Works Inspection	Inspecting Authority
i.	Flange(Top)	A1	36 ± 1.00		
		A2			
		A3			
ii.	Flange (bottom)	B1	36 ± 1.00		
		B2			
		B3			
iii.	Thickness	C1	4 ± 0.20		
		C2			
		C3			
iv.	Height	T1	145 ± 1.25		
		T2			
		T3			
v.	Length	Top	1530 ± 1.0		
		Bottom			
vi.	Radius	R1	8 ± 1.5		
		R2			
		R3			
vii.	Angle	-	± 1°		
viii.	Waviness	-	2 max.		
ix.	Bow	-	1 in 600		
x.	Camber	-	1 in 600		
xi.	Twist	-	1 deg./metre		
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects		

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

End Angle



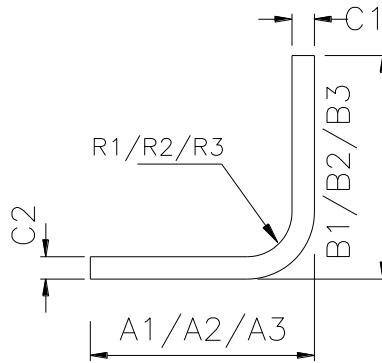
Ref: Drawing No. WD-09034-S-14 Item-4 & WD-09034-S-22 Item-11 (a)

End Angle		Date:		
SL. NO.	STAGE	Works Inspection	Inspecting Authority	Remarks
1.	Dimensions	As follows		
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension
				Works Inspection Inspecting Authority
i.	Flange(Bottom)	A1	50 ± 1.25	
		A2		
		A3		
ii.	Flange(Top)	B1	50 ± 1.25	
		B2		
		B3		
iii.	Thickness	C1	5 ± 0.25	
		C2		
iv.	Length	Top	3012 (+3.0/-1.0)	
		Bottom		
v.	Radius	R1	10 ± 1.50	
		R2		
		R3		
vi.	Angle	-	± 1°	
vii.	Waviness	-	2 max.	
viii.	Bow	-	1 in 600	
ix.	Camber	-	1 in 600	
x.	Twist	-	1 deg./metre	
xi.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects	

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Crib Angle Outer



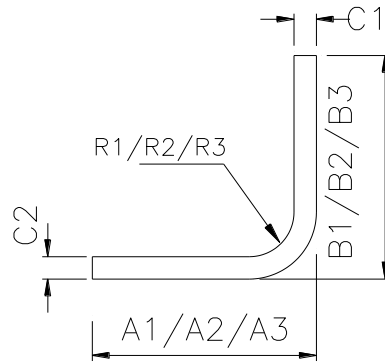
Ref: Drawing No. WD-09034-S-16 Item-3 & WD-09034-S-22 Item-11 (b)

Crib Angle Outer				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange(Bottom)	A1	50 ± 1.25			
		A2				
		A3				
ii.	Flange(Top)	B1	50 ± 1.25			
		B2				
		B3				
iii.	Thickness	C1	5 ± 0.25			
		C2				
iv.	Length	Top	2610 (+3.0/-1.0)			
		Bottom				
v.	Radius	R1	10 ± 1.50			
		R2				
		R3				
vi.	Angle	-	± 1°			
vii.	Waviness	-	2 max.			
viii.	Bow	-	1 in 600			
ix.	Camber	-	1 in 600			
x.	Twist	-	1 deg./metre			
xi.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Crib Angle Inner



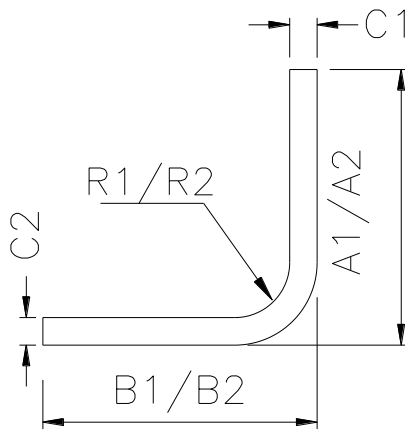
Ref: Drawing No. WD-09034-S-16 Item-4 & WD-09034-S-22 Item-11 (c)

Crib Angle Inner				Date:		
SL. NO.	STAGE	Works Inspection	Inspecting Authority	Remarks		
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange(Bottom)	A1	50 ± 1.25			
		A2				
		A3				
ii.	Flange(Top)	B1	50 ± 1.25			
		B2				
		B3				
iii.	Thickness	C1	5 ± 0.25			
		C2				
iv.	Length	Top	1894 ± 1.0			
		Bottom				
v.	Radius	R1	10 ± 1.50			
		R2				
		R3				
vi.	Angle	-	± 1°			
vii.	Waviness	-	2 max.			
viii.	Bow	-	1 in 600			
ix.	Camber	-	1 in 600			
x.	Twist	-	1 deg./metre			
xi.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Stay for end wall



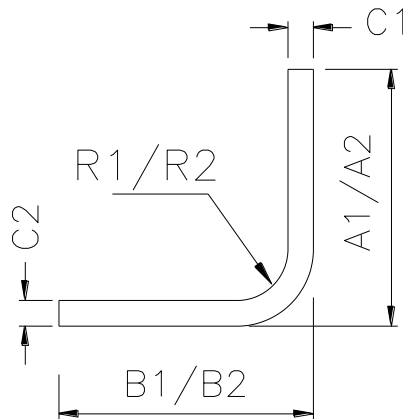
Ref: Drawing No. WD-09034-S-18 Item-1 & WD-09034-S-22 Item-11 (d)

Stay for End Wall			Date:			
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange(Top)	A1	50 ± 1.25			
		A2				
ii.	Flange(Bottom)	B1	50 ± 1.25			
		B2				
iii.	Thickness	C1	5 ± 0.25			
		C2				
iv.	Length(Top End)	L1	410 ± 1.0			
v.	Length(Bottom End)	L2	410 ± 1.0			
vi.	Radius	R1	10 ± 1.50			
		R2				
vii.	Angle	-	± 1°			
viii.	Waviness	-	2 max.			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Support Angle

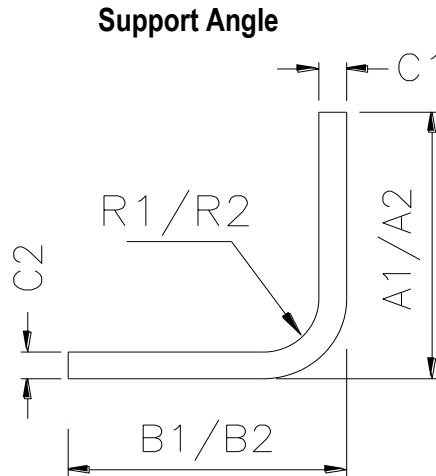


Ref: Drawing No. WD-09034-S-11 Item-43 & WD-09034-S-22 Item-11 (e)

Support Angle			Date:			
SL. NO.	STAGE	Works Inspection	Inspecting Authority		Remarks	
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange(Top)	A1	50 ± 1.25			
		A2				
ii.	Flange(Bottom)	B1	50 ± 1.25			
		B2				
iii.	Thickness	C1	5± 0.25			
		C2				
iv.	Length(Top End)	L1	366 ± 1.0			
v.	Length(Bottom End)	L2	366 ± 1.0			
vi.	Radius	R1	10 ± 1.50			
		R2				
vii.	Angle	-	± 1°			
viii.	Waviness	-	2 max.			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

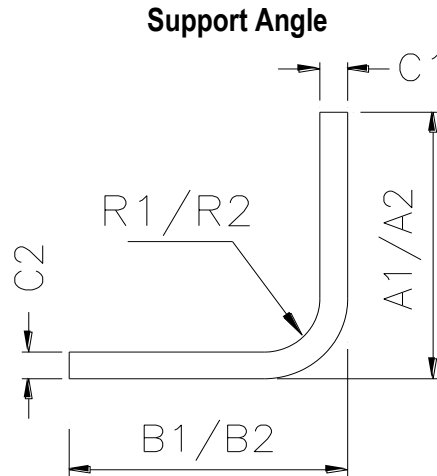


Ref: Drawing No. WD-09034-S-11 Item-26 & WD-09034-S-22 Item-11 (f)

Support Angle			Date:		
SL. NO.	STAGE	Works Inspection	Inspecting Authority		Remarks
1.	Dimensions	As follows			
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension	
				Works Inspection	Inspecting Authority
i.	Flange(Top)	A1 A2	50 ± 1.25		
ii.	Flange(Bottom)	B1 B2	50 ± 1.25		
iii.	Thickness	C1 C2	5± 0.25		
iv.	Length(Top End)	L1	285 ± 1.0		
v.	Length(Bottom End)	L2	285 ± 1.0		
vi.	Radius	R1 R2	10 ± 1.50		
vii.	Angle	-	± 1°		
viii.	Waviness	-	2 max.		
ix.	Bow	-	1 in 600		
x.	Camber	-	1 in 600		
xi.	Twist	-	1 deg./metre		
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects		

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

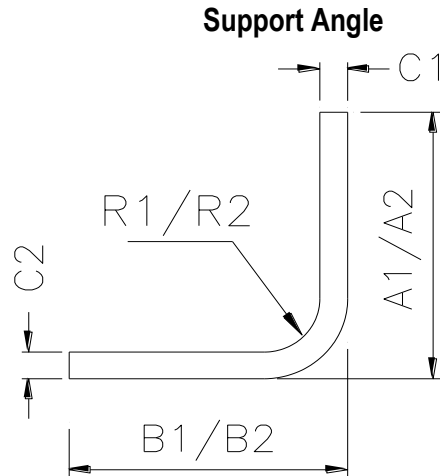


Ref: Drawing No. WD-09034-S-11 Item-42 & WD-09034-S-22 Item-11 (g)

Support Angle		Date:			
SL. NO.	STAGE	Works Inspection	Inspecting Authority	Remarks	
1.	Dimensions	As follows			
	LOCATION	Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
			Works Inspection	Inspecting Authority	
i.	Flange(Top)	A1 A2	50 ± 1.25		
ii.	Flange(Bottom)	B1 B2	50 ± 1.25		
iii.	Thickness	C1 C2	5 ± 0.25		
iv.	Length(Top End)	L1	151 ± 1.0		
v.	Length(Bottom End)	L2	151 ± 1.0		
vi.	Radius	R1 R2	10 ± 1.50		
vii.	Angle	-	± 1°		
viii.	Waviness	-	2 max.		
ix.	Bow	-	1 in 600		
x.	Camber	-	1 in 600		
xi.	Twist	-	1 deg./metre		
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects		

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

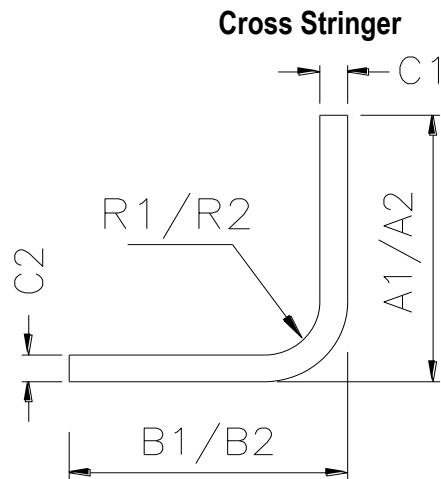


Ref: Drawing No. WD-09034-S-11 Item-25 & WD-09034-S-22 Item-11 (h)

Support Angle			Date:		
SL. NO.	STAGE	Works Inspection	Inspecting Authority		Remarks
1.	Dimensions	As follows			
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension	
				Works Inspection	Inspecting Authority
i.	Flange(Top)	A1 A2	50 ± 1.25		
ii.	Flange(Bottom)	B1 B2	50 ± 1.25		
iii.	Thickness	C1 C2	5 ± 0.25		
iv.	Length(Top End)	L1	455 ± 1.0		
v.	Length(Bottom End)	L2	455 ± 1.0		
vi.	Radius	R1 R2	10 ± 1.50		
vii.	Angle	-	± 1°		
viii.	Waviness	-	2 max.		
ix.	Bow	-	1 in 600		
x.	Camber	-	1 in 600		
xi.	Twist	-	1 deg./metre		
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects		

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

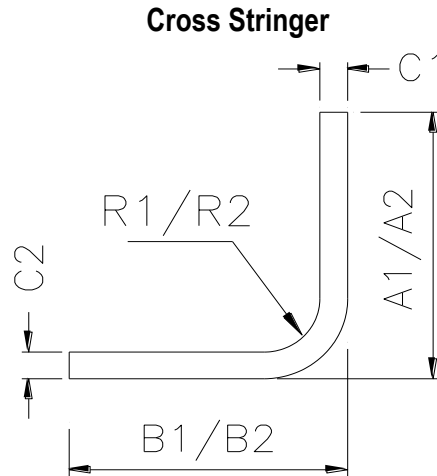


Ref: Drawing No. WD-09034-S-15 Item-15 & WD-09034-S-22 Item-11 (j)

Cross Stringer				Date:	
SL. NO.	STAGE	Works Inspection	Inspecting Authority	Remarks	
1.	Dimensions	As follows			
	LOCATION	Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
			Works Inspection	Inspecting Authority	
i.	Flange(Top)	A1 A2	50 ± 1.25		
ii.	Flange(Bottom)	B1 B2	50 ± 1.25		
iii.	Thickness	C1 C2	5 ± 0.25		
iv.	Length(Top End)	L1	389 ± 1.0		
v.	Length(Bottom End)	L2	389 ± 1.0		
vi.	Radius	R1 R2	10 ± 1.50		
vii.	Angle	-	± 1°		
viii.	Waviness	-	2 max.		
ix.	Bow	-	1 in 600		
x.	Camber	-	1 in 600		
xi.	Twist	-	1 deg./metre		
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects		

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	



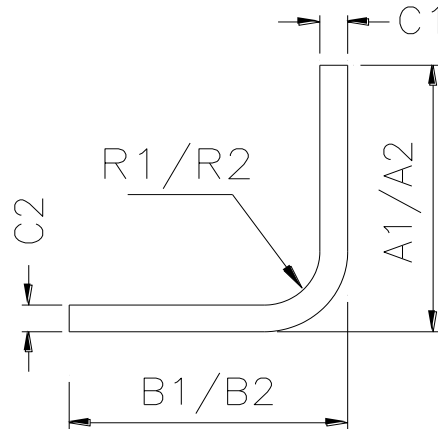
Ref: Drawing No. WD-09034-S-15 Item-14 & WD-09034-S-22 Item-11 (k)

Cross Stringer				Date:	
SL. NO.	STAGE	Works Inspection	Inspecting Authority	Remarks	
1.	Dimensions	As follows			
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension	
				Works Inspection	Inspecting Authority
i.	Flange(Top)	A1	50 ± 1.25		
		A2			
ii.	Flange(Bottom)	B1	50 ± 1.25		
		B2			
iii.	Thickness	C1	5 ± 0.25		
		C2			
iv.	Length(Top End)	L1	586 ± 1.0		
v.	Length(Bottom End)	L2	586 ± 1.0		
vi.	Radius	R1	10 ± 1.50		
		R2			
vii.	Angle	-	± 1°		
viii.	Waviness	-	2 max.		
ix.	Bow	-	1 in 600		
x.	Camber	-	1 in 600		
xi.	Twist	-	1 deg./metre		
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects		

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Part of Roller Bracket



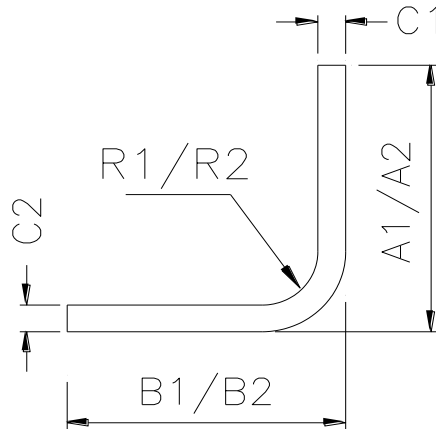
Ref: Drawing No. WD-09034-S-10 Item-16 & WD-09034-S-22 Item-11 (I)

Part of Roller Bracket				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange(Top)	A1	50 ± 1.25			
		A2				
ii.	Flange(Bottom)	B1	50 ± 1.25			
		B2				
iii.	Thickness	C1	5 ± 0.25			
		C2				
iv.	Length(Top End)	L1	586 ± 1.0			
v.	Length(Bottom End)	L2	586 ± 1.0			
vi.	Radius	R1	10 ± 1.50			
		R2				
vii.	Angle	-	± 1°			
viii.	Waviness	-	2 max.			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Horizontal Lever Hanger Bracket



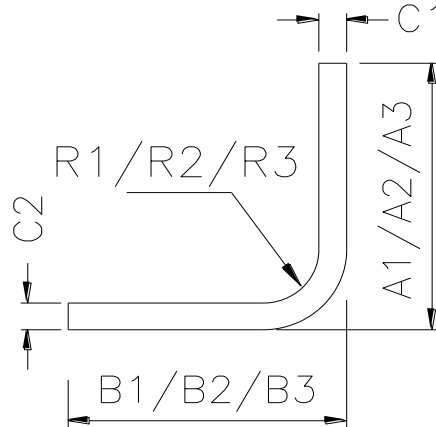
Ref: Drawing No. WD-09034-S-10 Item-23 & WD-09034-S-22 Item-11 (m)

Horizontal Lever Hanger Bracket				Date:		
SL. NO.	STAGE	Works Inspection		Inspecting Authority		Remarks
1.	Dimensions	As follows				
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension		Remarks
				Works Inspection	Inspecting Authority	
i.	Flange(Top)	A1	50 ± 1.25			
		A2				
ii.	Flange(Bottom)	B1	50 ± 1.25			
		B2				
iii.	Thickness	C1	5 ± 0.25			
		C2				
iv.	Length(Top End)	L1	440 ± 1.0			
v.	Length(Bottom End)	L2	440 ± 1.0			
vi.	Radius	R1	10 ± 1.50			
		R2				
vii.	Angle	-	± 1°			
viii.	Waviness	-	2 max.			
ix.	Bow	-	1 in 600			
x.	Camber	-	1 in 600			
xi.	Twist	-	1 deg./metre			
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects			

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Horizontal Lever Support Bracket (Small)



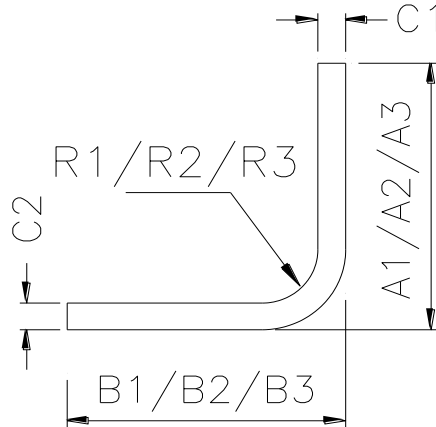
Ref: Drawing No. WD-09034-S-10 Item-24 & WD-09034-S-22 Item-11 (n)

Horizontal Lever Support Bracket (Small)				Date:	
SL. NO.	STAGE	Works Inspection	Inspecting Authority	Remarks	
1.	Dimensions	As follows			
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension	
				Works Inspection	Inspecting Authority
i.	Flange(Top)	A1	50 ± 1.25		
		A2			
		A3			
ii.	Flange(Bottom)	B1	50 ± 1.25		
		B2			
		B3			
iii.	Thickness	C1	5± 0.25		
		C2			
iv.	Length(Top End)	L1	1319 ± 1.0		
v.	Length(Bottom End)	L2	1319 ± 1.0		
vi.	Radius	R1	10 ± 1.50		
		R2			
		R3			
vii.	Angle	-	± 1°		
viii.	Waviness	-	2 max.		
ix.	Bow	-	1 in 600		
x.	Camber	-	1 in 600		
xi.	Twist	-	1 deg./metre		
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects		

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Horizontal Lever Support Bracket (Large)



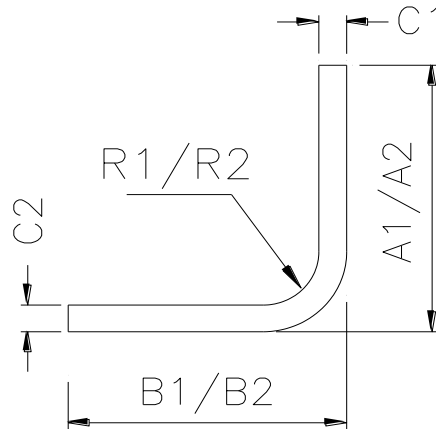
Ref: Drawing No. WD-09034-S-10 Item-25 & WD-09034-S-22 Item-11 (o)

Horizontal Lever Support Bracket (Large)				Date:	
SL. NO.	STAGE	Works Inspection	Inspecting Authority	Remarks	
1.	Dimensions	As follows			
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension	
				Works Inspection	Inspecting Authority
i.	Flange(Top)	A1	50 ± 1.25		
		A2			
		A3			
ii.	Flange(Bottom)	B1	50 ± 1.25		
		B2			
		B3			
iii.	Thickness	C1	5± 0.25		
		C2			
iv.	Length(Top End)	L1	2294 (+3,-1)		
v.	Length(Bottom End)	L2	2294 (+3,-1)		
vi.	Radius	R1	10 ± 1.50		
		R2			
		R3			
vii.	Angle	-	± 1°		
viii.	Waviness	-	2 max.		
ix.	Bow	-	1 in 600		
x.	Camber	-	1 in 600		
xi.	Twist	-	1 deg./metre		
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects		

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Bracket for Pipe of 32 NB



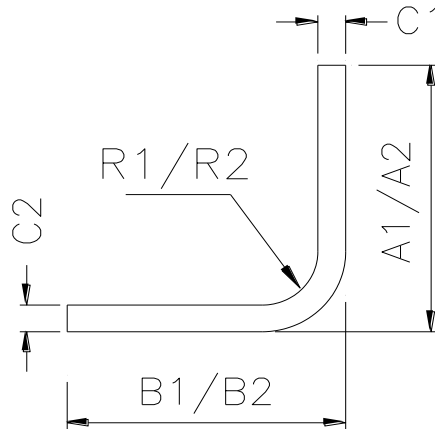
Ref: Drawing No. WD-09034-S-11 Item-54 & WD-09034-S-22 Item-11 (p)

Bracket for Pipe of 32 NB				Date:	
SL. NO.	STAGE	Works Inspection	Inspecting Authority	Remarks	
1.	Dimensions	As follows			
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension	
				Works Inspection	Inspecting Authority
i.	Flange(Top)	A1	50 ± 1.25		
		A2			
ii.	Flange(Bottom)	B1	50 ± 1.25		
		B2			
iii.	Thickness	C1	5 ± 0.25		
		C2			
iv.	Length(Top End)	L1	357 ± 1.0		
v.	Length(Bottom End)	L2	357 ± 1.0		
vi.	Radius	R1	10 ± 1.50		
		R2			
vii.	Angle	-	± 1°		
viii.	Waviness	-	2 max.		
ix.	Bow	-	1 in 600		
x.	Camber	-	1 in 600		
xi.	Twist	-	1 deg./metre		
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects		

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

CRF 50x50x5 Th. X 204 Long



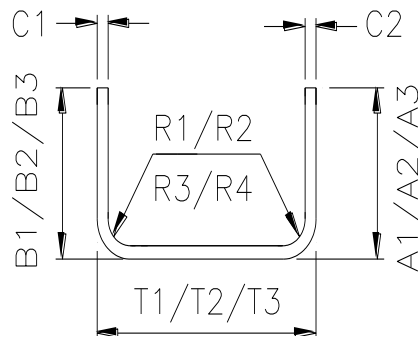
Ref: Drawing No. WD-09034-S-11 Item-61 & WD-09034-S-22 Item-11 (q)

CRF 50x50x5 Th. X 204 Long			Date:		
SL. NO.	STAGE	Works Inspection	Inspecting Authority		Remarks
1.	Dimensions	As follows			
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension	
				Works Inspection	Inspecting Authority
i.	Flange(Top)	A1	50 ± 1.25		
		A2			
ii.	Flange(Bottom)	B1	50 ± 1.25		
		B2			
iii.	Thickness	C1	5 ± 0.25		
		C2			
iv.	Length(Top End)	L1	204 ± 1.0		
v.	Length(Bottom End)	L2	204 ± 1.0		
vi.	Radius	R1	10 ± 1.50		
		R2			
vii.	Angle	-	± 1°		
viii.	Waviness	-	2 max.		
ix.	Bow	-	1 in 600		
x.	Camber	-	1 in 600		
xi.	Twist	-	1 deg./metre		
xii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects		

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Body Side Stanchion Channel

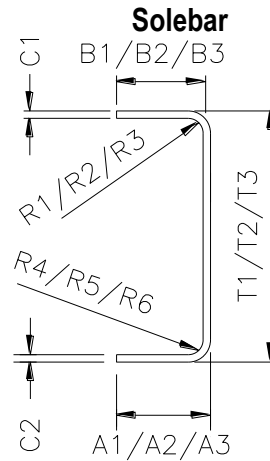


Ref: Drawing No. WD-09034-S-17 Item-2 & WD-09034-S-22 Item-12

Body Side Stanchion Channel			Date:		
SL. NO.	STAGE	Works Inspection	Inspecting Authority		Remarks
1.	Dimensions	As follows			
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension	
				Works Inspection	Inspecting Authority
i.	Flange(Right)	A1	102 ± 1.25		
		A2			
		A3			
ii.	Flange(Left)	B1	102 ± 1.25		
		B2			
		B3			
iii.	Flange(Bottom)	T1	160 ± 1.25		
		T2			
		T3			
iv.	Thickness	C1	8 ± 0.40		
		C2			
v.	Length(Top End)	L1	2094 (+3,-1)		
vi.	Length(Bottom End)	L2	2094 (+3,-1)		
vii.	Radius	R1	16 ± 1.50		
		R2			
		R3			
		R4			
viii.	Angle	-	± 1°		
ix.	Waviness	-	2 max.		
x.	Bow	-	1 in 600		
xi.	Camber	-	1 in 600		
xii.	Twist	-	1 deg./metre		
xiii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects		

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	



Ref: Drawing No. WD-09034-S-14 Item-1 & WD-09034-S-22 Item-13

Solebar			Date:		
SL. NO.	STAGE	Works Inspection	Inspecting Authority		Remarks
1.	Dimensions	As follows			
	LOCATION		Nominal Dimensions & Allowable Deviation	Actual Dimension	
				Works Inspection	Inspecting Authority
i.	Flange(Bottom)	A1	76 +1.25		
		A2	-0.0		
		A3			
ii.	Flange(Top)	B1	76 +1.25		
		B2	-0.0		
		B3			
iii.	Height	T1	204 +1.5		
		T2	-0.0		
		T3			
iv.	Thickness	C1	6± 0.30		
		C2			
v.	Length(Top End)	L1	10034 (+4,-2)		
vi.	Length(Bottom End)	L2	10034 (+4,-2)		
vii.	Radius	R1	12 ± 1.50		
		R2			
		R3			
		R4			
		R5			
		R6			
viii.	Angle	-	± 1°		
ix.	Waviness	-	2 max.		
x.	Bow	-	1 in 600		
xi.	Camber	-	1 in 600		
xii.	Twist	-	1 deg./metre		
xiii.	Appearance	-	Free From Deep Marks ,Cracks & Other Defects		

All dimensions are in mm

Works Inspector		Inspecting Authority	
Signature:		Signature:	
Name:		Name:	
Designation:		Designation:	
Date:		Date:	

Sampling plan											
S. No	Component s/ Operation /Product/ Process		Characteristics/ Parameters	Mode of Inspection/ Equipments	Internal Inspection Sample-		Reference documents/ Specification	Acceptance Criteria	Documents of Records	RDSO Inspection Sample-	
					Size	Frequency				Size	Frequency
1	Raw Material Receipt	a)	Source of Procurement	Visual	-	Every lot	Receipt Particulars & RDSO's Vendor List	Should be procured from RDSO approved sources only	Format no....	-	Every Lot
		b)	System of Unloading	Visual	Complete Lot	Every lot	Nil	No external damage should occur		AUDIT	
		c)	Quantity	Visual	Complete Lot	Every lot	Receipt particulars	To be as per receipt particulars			
		d)	Weight	Weighing Machine	One/Lot	Every lot					
2	Raw Material Inspection	a)	Identification of Coil/plate	Visual	Every coil/plate	Every coil/ plate	T.C.	Coil No. & Heat No. to be as per T.C.	Format no---	AUDIT	
		b)	Coil/Strip width & thickness	Measuring Tape/Steel Rule/ Micrometer	One per Coil/Plate	3 times (start, middle, end) of coil/plate	Indent & T.C.	To be as per indent/design requirement			
		c)	Grade	By means of suitable m/c / test equipment in house lab/NABL approved lab	Complete Lot	Every lot	Indent & T.C.	To be as per indent/design requirement		Complete Lot	Every lot
		d)	Mechanical Properties		Complete Lot	Every lot	Indent & T.C.	To be as per prescribed specification		Complete Lot	Every lot
		e)	Chemical Properties		Complete Lot	Every lot	Indent & T.C.	To be as per prescribed specification		Complete Lot	Every lot
		f)	Bend Test		Complete Lot	Every lot	Indent & T.C.	To be as per prescribed specification		Complete Lot	Every lot
		g)	Testing of Mechanical & Chemical Properties and Bend Testing		One/Lot	Every lot	Prescribed specification	To be as per prescribed specification		Format no....	2 (1 to be tested & 1 to be stored)
3	Raw Material & Final Product Storage	a)	Condition of storage area	visual	Complete lot	Daily	WD-01-CRF-08 with latest alt.	Covered area and protection from water	Format no---	AUDIT	
		b)	Availability of Racks/Packing					Proper racks and packing to be available			
		c)	Condition of Material					To be free from damages, dents & rust.			
4	Selection of coil for slitting	a)	Condition of Coil	Visual	Complete coil/plate	Every coil/ plate	-	Coil/plate to be free from damage & rust	Format no---	AUDIT	

S. No	Component s/ Operation /Product/ Process		Charcteristics/ Parameters	Mode of inspection/ equipments	Internal inspection sample		Ref documents/ specifications	Acceptance criteria	Documents of records	RDSO inspection Sample	
					Size	Frequency				Size	Frequ ency
5	Handling of coil/plates/Sections till despatch	a)	Care during movement	Visual	Every coil/plate/Section	Every coil/plate/section	-	No damage/dent to occur	Format no---	AUDIT	
6	Coil/plate slitting	a)	Coil/Plate width	Measuring Tape/ Steel Rule/Vernier	One per Coil/Plate	3 times (start, middle, end) of coil/plate	Design requirement	To be as per design requirement	Format no---	AUDIT	
		b)	Edge condition	Visual	Complete slitted Coil/Plate	Every slitted Coil/Plate	Should be smooth	To be free from burrs, sharp edges			
7	Setting of rolls on mill	a)	Correctness of rolls	Visual/Measuring Tape/ Steel Rule/Vernier	Every rolling mill	Twice in one shift		All rolls to be as per design requirement	Format no---	AUDIT	
8	In-process Inspection	a)	Profile of the section	Measuring tape, Vernier, Bevel protactor, Radius gauge	1 no.	3 times (start,middle, end) of coil/plate	Respective RDSO/P.O. drawing/check sheet	To be as per respective RDSO/P.O. drawing/check sheet	Format no---	AUDIT	
		b)	Marking of Coil/plate no.	Visual	1 no.	Every coil/plate	-	To be same as the selected coil	Format no---	AUDIT	
9	Post Roll Forming Operations	a)	Drilling	Vernier/Gauge	1 no.	Every section	Respective RDSO/P.O. drawing/check sheet	To be as per respective RDSO/P.O. drawing/check sheet	Format no---	AUDIT	
		b)	Notching	Visual							
		c)	Edge Preparation	Visual							
		d)	Profile cutting	Visual							
10	Welding	a)	Weld Preparation, Fixtures, Welding machine and current/voltage, welding electrodes, weld cleaning and condition of weld	Visual, Radiography (if, prescribed)	10%	Every lot	WPS, issued by RDSO	To be as per WPS, issued by RDSO	Format no---	5% (Minimum two set)	Each lot
11	Final Inspection	a)	Profile of the section	Measuring tape, Vernier, Bevel protactor, Radius gauge	10%	Every lot	Respective RDSO/P.O. drawing/check sheet	To be as per respective RDSO/P.O. drawing/check sheet	Format no---	5% (Minimum two set)	Each lot
		b)	Edge condition	Visual	10%	Every lot	Respective RDSO/P.O. drawing/check sheet	To be as per respective RDSO/P.O. drawing/check sheet and free from burrs & sharp edges	Format no---	5% (Minimum two set)	Each lot
		c)	Drilling	Plug Gauge/ Vernier	1 no.	Every section	Respective RDSO/P.O. drawing/check sheet	To be as per respective RDSO/P.O. drawing/check sheet	Format no---	AUDIT	
		d)	Notching	Visual							
		e)	Edge Preparation	Visual							
		f)	Profile cutting	Visual							

S. No	Component s/Operation/ Product/ Process		Characteristics/ parameters	Mode of inspection/ Equipments	Internal inspection sample		Reference documents/ specification	Acceptance criteria	Documents of records	RDSO inspection sample	
					Size	Frequency				Size	Frequen cy
12	Marking	a)	Correctness of marking	Visual	10%	Every lot	-	Month and year to be current and Coil No. to be same as Original No.	Format no---	5% (Minimum two set)	Each lot
		b)	Legibility of Marking	Visual	10%	Every lot	-	To be legible	Format no---	5% (Minimum two set)	Each lot
13	Linking of punched Coil No. with Grade of Material	a)	Material Properties	Visual	10%	Every lot	T.C. and lab Results	To be as per respective RDSO specification	Format no---	5% (Minimum two set)	Each lot
14	Packing of sections	a)	Condition of Packing	Visual	10%	Every lot	-	Packing to be sturdy and Marking on Packing should contain complete identification details of the Products	Format no---	Minimum Two packs	Each lot
		b)	Marking on Packing								
		c)	Condition of Packed Products								