

Section II D - 2023OVM018  
(Material Composition - Bill of materials (BOM))

RS01: ADANI CEILING GIRDER PACKAGE (FULL BILL OF MATERIALS) - 1855 MT				
Material Type	Grade/ Code	% age in full BoM	MATERIAL Description	% age in full BoM
PLATES	E350 BR	74.86%	PLATE-75 MM -IS2062E350GRBR	15.20%
			PLATE-32 MM -IS2062E350GRBR	13.50%
			PLATE-85 MM -IS2062E350GRBR	11.30%
			PLATE-25 MM -IS2062E350GRBR	10.37%
			PLATE-40 MM -IS2062E350GRBR	4.73%
			PLATE-20 MM -IS2062E350GRBR	4.57%
			PLATE-100 MM -IS2062E350GRBR	2.92%
			PLATE-50 MM -IS2062E350GRBR	2.58%
			PLATE 56 MM - IS2062E350BR	1.92%
			PLATE 16 MM-IS2062E350GRBR	1.70%
			PLATE-36 MM -IS2062E350GRBR	1.55%
			PLATE-28 MM -IS2062E350GRBR	1.55%
	E250 BR/A	15.02%	PLATE-45 MM -IS2062E350GRBR	1.17%
			PLATE-63 MM -IS2062E350GRBR	0.90%
			PLATE 12 MM - IS2062E350BR	0.90%
			PLATE 25.0 MM -IS2062E250BR	7.06%
			PLATE 75.0 MM - IS2062E250BR	2.57%
			PLATE 12.0 MM - IS2062E250A	2.43%
			PLATE 16.0 MM - IS2062E250A	1.21%
			PLATE 32.0 MM -IS2062E250BR	0.62%
			PLATE 20.0 MM - IS2062E250A	0.61%
			PLATE 100 MM - IS2062 E250BR	0.51%
			PLATE 10 MM-IS2062E250A	0.40%
			PLATE 5.00 MM-IS2062E250A	0.01%
				90.28%
ROLLED SECTIONS	E250 BR/A	9.63%	H BEAM 305X165 -IS2062E250BR	2.00%
			ANGLE 200 x 200 x 20-IS2062E250A	1.65%
			CHANNEL 200 x 75 -IS2062E250A	1.00%
			CHANNEL 250 x 82 -IS2062E250A	0.68%
			BEAM 600 x 210 -IS2062E250A	0.66%
			CHANNEL 150 x 75 -IS2062E250A	0.64%
			CHANNEL 400 x 100 -IS2062E250A	0.63%
			BEAM 200 x 100 -IS2062E250A	0.62%
			CHANNEL 300 x 90 -IS2062E250A	0.47%
			ANGLE 100 x 100 x 10-IS2062E250A	0.29%
			BEAM 250 x 125 -IS2062E250A	0.28%
			ANGLE 80 x 80 x 8 -IS2062E250A	0.10%
			BEAM 500 x 180 -IS2062E250A	0.10%
			BEAM 300 x 140 -IS2062E250A	0.10%
			ANGLE 130 x 130 x 12-IS2062E250A	0.10%
			ANGLE 75 x 75 x 6-IS2062E250A	0.10%
			CHANNEL 75 x 40 -IS2062E250A	0.08%
			BEAM 125 x 70 -IS2062E250A	0.08%
			BEAM 450 x 150 -IS2062E250A	0.03%
			BEAM 400 x 140 -IS2062E250A	0.02%
				9.63%
SHEETS	IS 513 CR2	0.03%	SHEET 1.6 MM - IS513 Gr.CR2	0.03%
				0.03%
FASTENERS	IS1362	0.06%	HEX HD BOLT M24X110-4.6 IS:1363(P-1)	0.01%
			HEX HD BOLT M24X160-4.6 IS:1363(P-1)	0.01%
			BOLT-M24x120 -4.6-IS1363P1	0.01%
			NUT -M24 -CL4-IS1363P3	0.01%
			BOLT-M24x100 -4.6-IS1363P1	0.01%
			BOLT-M24x80 -4.6-IS1363P1	0.01%
				0.06%
				100.00%

JOB WISE BILL OF MATERIALS				
MAIN GIRDERS (1,200 MT)				
Material Type	Grade/ Code	% age in full BoM	MATERIAL Description	% age in full BoM
PLATES	E350 BR	82.49%	PLATE-75 MM -IS2062E350GRBR	21.20%
			PLATE-85 MM -IS2062E350GRBR	17.48%
			PLATE-32 MM -IS2062E350GRBR	16.75%
			PLATE-25 MM -IS2062E350GRBR	14.94%
			PLATE-40 MM -IS2062E350GRBR	4.80%
			PLATE-100 MM -IS2062E350GRBR	4.52%
			PLATE-28 MM -IS2062E350GRBR	2.39%
			PLATE-50 MM -IS2062E350GRBR	0.41%
	E250 BR/A	14.31%	PLATE 25.0 MM -IS2062E250BR	8.15%
			PLATE 75.0 MM -IS2062E250BR	3.98%
			PLATE 100 MM - IS2062 E250BR	0.79%
			PLATE 16.0 MM - IS2062E250A	0.69%
			PLATE 12.0 MM - IS2062E250A	0.63%
			PLATE 20.0 MM - IS2062E250A	0.07%
ROLLED SECTIONS	E250 BR/A	3.11%	ANGLE 200 x 200 x 20-IS2062E250A	1.98%
			CHANNEL 150 x 75 -IS2062E250A	1.00%
			CHANNEL 75 x 40 -IS2062E250A	0.13%
				3.11%
SHEETS	IS 513 CR2	0.05%	SHEET 1.6 MM - IS513 Gr.CR2	0.05%
				0.05%
FASTENERS	IS1362	0.04%	HEX HD BOLT M24X110-4.6 IS:1363(P-1)	0.01%
			BOLT-M24x120 -4.6-IS1363P1	0.01%
			HEX HD BOLT M24X160-4.6 IS:1363(P-1)	0.01%
			NUT -M24 -CL4-IS1363P3	0.01%
				0.04%
				100.00%
CROSS GIRDERS (125 MT)				
Material Type	Grade/ Code	% age in full BoM	MATERIAL Description	%age in full BoM
PLATES	E350 BR	82.28%	PLATE-75 MM -IS2062E350GRBR	22.27%
			PLATE-45 MM -IS2062E350GRBR	17.30%
			PLATE-40 MM -IS2062E350GRBR	13.61%
			PLATE-63 MM -IS2062E350GRBR	13.43%
			PLATE-36 MM -IS2062E350GRBR	12.36%
			PLATE-50 MM -IS2062E350GRBR	11.66%
	E250 BR/A	9.34%	PLATE 25.0 MM -IS2062E250BR	7.52%
			PLATE 32.0 MM -IS2062E250BR	1.54%
			PLATE 12.0 MM - IS2062E250A	0.28%
				99.97%
FASTENERS	IS 1363	0.03%	HEX HD BOLT M24X160-4.6 IS:1363(P-1)	0.02%
			NUT -M24 -CL4-IS1363P3	0.01%
				0.03%
				100.00%

NOTE:

1. Vendor shall quote their rates considering the all the E350BR grade materials as E250GRA/BR grade. Extra rates will be provided in the POs for E350BR materials as per extra rate schedule provided in the tender.

2. Final design documents are yet to be released. So, the provided BoM includes a range of specific sizes for plates & rolled sections to offer an overall understanding of the material content, it's important to note that these percentages may vary within the types of materials. The composition of overall Plates & Rolled Sections may also exhibit slight variations but will remain within a close tolerance range.

CROSS BEAMS (455 MT)				
Material Type	Grade/ Code	% age in full BoM	MATERIAL Description	% age in full BoM
PLATES	E350 BR	62.92%	PLATE-20 MM -IS2062E350GRBR	18.63
			PLATE-32 MM -IS2062E350GRBR	10.87
			PLATE 56 MM - IS2062E350BR	7.84
			PLATE 16 MM-IS2062E350GRBR	6.95
			PLATE-50 MM -IS2062E350GRBR	6.24
			PLATE 12 MM - IS2062E350BR	3.68
			PLATE-36 MM -IS2062E350GRBR	2.92
			PLATE 25 MM -IS2062E350GRBR	2.91
			PLATE-40 MM -IS2062E350GRBR	2.88
	E250 BR/A	20.60%	PLATE 12.0 MM - IS2062E250A	7.57
			PLATE 25.0 MM -IS2062E250BR	4.56
			PLATE 16.0 MM - IS2062E250A	3.12
			PLATE 20.0 MM - IS2062E250A	2.18
			PLATE 32.0 MM -IS2062E250BR	2.10
			PLATE 10 MM-IS2062E250A	1.06
			PLATE 5.00 MM-IS2062E250A	0.01
ROLLED SECTIONS	E250 BR/A	16.45%	CHANNEL 200 x 75 -IS2062E250A	4.09
			CHANNEL 250 x 82 -IS2062E250A	2.78
			CHANNEL 400 x 100 -IS2062E250A	2.55
			CHANNEL 300 x 90 -IS2062E250A	1.90
			BEAM 600 x 210 -IS2062E250A	1.77
			ANGLE 200 x 200 x 20-IS2062E250A	1.51
			ANGLE 100 x 100 x 10-IS2062E250A	0.42
			ANGLE 80 x 80 x 8 -IS2062E250A	0.39
			ANGLE 75 x 75 x 6-IS2062E250A	0.38
			ANGLE 130 x 130 x 12-IS2062E250A	0.32
			BEAM 500 x 180 -IS2062E250A	0.13
			BEAM 450 x 150 -IS2062E250A	0.13
			BEAM 400 x 140 -IS2062E250A	0.08
FASTENERS	IS 1363	0.03%	BOLT-M24x100 -4.6-IS1363P1	0.01
			NUT -M24 -CL4-IS1363P3	0.01
			BOLT-M24x80 -4.6-IS1363P1	0.01
				0.03
				100.00

OTHER MEMBERS (75 MT)				
Material Type	Grade/ Code	% age in full BoM	MATERIAL Description	% age in full BoM
ROLLED SECTIONS	E250 BR/A	96.88%	H BEAM 305X165 -IS2062E250BR	49.54%
			BEAM 200 x 100 -IS2062E250A	15.25%
			BEAM 250 x 125 -IS2062E250A	6.92%
			BEAM 600 x 210 -IS2062E250A	5.50%
			ANGLE 100 x 100 x 10 -IS2062E250A	4.61%
			PLATE 25.0 MM -IS2062E250BR	4.03%
			PLATE 12.0 MM -IS2062E250A	3.60%
			BEAM 300 x 140 -IS2062E250A	2.40%
			BEAM 125 x 70 -IS2062E250A	1.96%
			BEAM 500 x 180 -IS2062E250A	1.63%
			PLATE 20.0 MM - IS2062E250A	0.59%
			ANGLE 130 x 130 x 12-IS2062E250A	0.44%
			PLATE 10 MM-IS2062E250A	0.23%
			ANGLE 80 x 80 x 8 -IS2062E250A	0.14%
ANGLE 75 x 75 x 6-IS2062E250A	0.04%			
				96.88%
PLATES	E250 BR/A	15.14%	PLATE 10 MM-IS2062E250A	3.12%
				3.12%
				100.00%

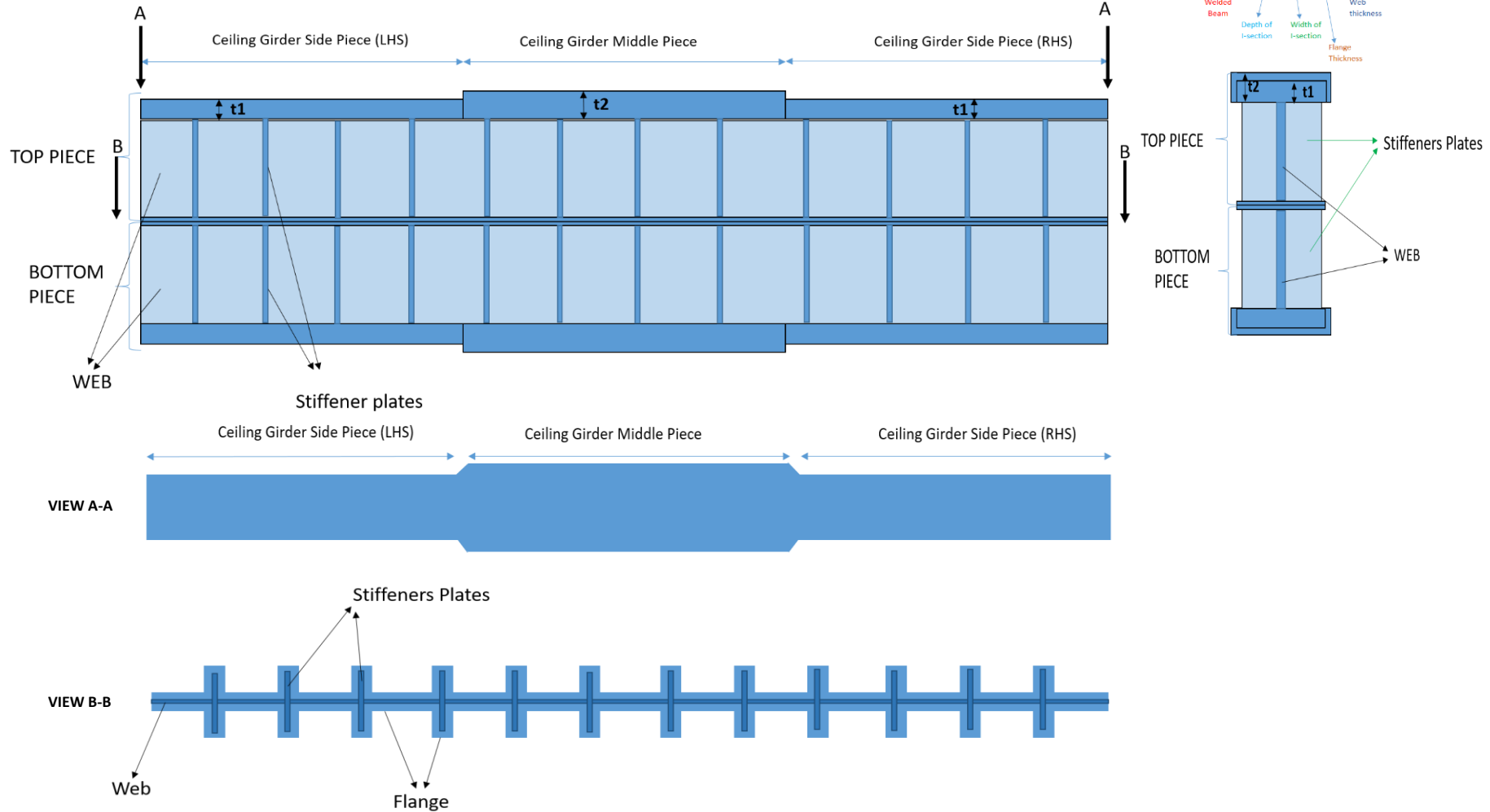
Refer Next Page for Details for Main Girder WEB & FLANGE Material Details



## Section II D - 2023OVM018 (Material Composition - Bill of materials (BOM))

CG NAME	CEILING GIRDER TOP/BOTTOM PIECE	LEFT HAND SIDE PIECE												MIDDLE PIECE												RIGHT HAND SIDE PIECE														
		TOP FLANGE				BOTTOM FLANGE				WEB				Approx Wt (MT)	TOP FLANGE				BOTTOM FLANGE				WEB				Approx Wt (MT)	TOP FLANGE				BOTTOM FLANGE				WEB				Approx Wt (MT)
		Width	Length	Thick	Qty	Width	Length	Thick	Qty	Depth	Length	Thick	Qty		Width	Length	Thick	Qty	Width	Length	Thick	Qty	Depth	Length	Thick	Qty		Width	Length	Thick	Qty	Width	Length	Thick	Qty	Depth	Length	Thick	Qty	
MAIN GIRDER 1	TOP PIECE	1100	9400	75	1	350	9400	25	1	3165	9700	32	1	14.45	1300	12750	85	1	350	12750	25	1	3165	12150	25	1	19.48	1100	9400	75	1	350	9400	25	1	3165	9700	32	1	14.45
	BOTTOM PIECE	350	9400	25	1	1100	9400	75	1	3165	9700	32	1	14.45	350	12750	25	1	1300	12750	85	1	3165	12150	25	1	19.48	350	9400	25	1	1100	9400	75	1	3165	9700	32	1	14.45
MAIN GIRDER 2	TOP PIECE	1000	9400	75	1	350	9400	25	1	2915	9700	32	1	13.28	1200	12750	85	1	350	12750	25	1	2915	12150	25	1	18.04	1000	9400	75	1	350	9400	25	1	2915	9700	32	1	13.28
	BOTTOM PIECE	350	9400	25	1	1000	9400	75	1	2915	9700	32	1	13.28	350	12750	25	1	1200	12750	85	1	2915	12150	25	1	18.04	350	9400	25	1	1000	9400	75	1	2915	9700	32	1	13.28
MAIN GIRDER 3	TOP PIECE	1200	9400	75	1	350	9400	25	1	3400	9700	40	1	17.64	1300	12750	100	1	350	12750	25	1	3400	12150	25	1	21.99	1200	9400	75	1	350	9400	25	1	3400	9700	40	1	17.64
	BOTTOM PIECE	350	9400	25	1	1200	9400	75	1	3400	9700	40	1	17.64	350	12750	25	1	1300	12750	100	1	3400	12150	25	1	21.99	350	9400	25	1	1200	9400	75	1	3400	9700	40	1	17.64
MAIN GIRDER 4	TOP PIECE	1000	9400	75	1	350	9400	25	1	2665	9700	32	1	12.67	1100	12750	85	1	350	12750	25	1	2665	12150	25	1	16.59	1000	9400	75	1	350	9400	25	1	2665	9700	32	1	12.67
	BOTTOM PIECE	350	9400	25	1	1000	9400	75	1	2665	9700	32	1	12.67	350	12750	25	1	1100	12750	85	1	2665	12150	25	1	16.59	350	9400	25	1	1000	9400	75	1	2665	9700	32	1	12.67
MAIN GIRDER 5	TOP PIECE	1000	9400	75	1	350	9400	25	1	2915	9700	32	1	13.28	1200	12750	85	1	350	12750	25	1	2915	12150	25	1	18.04	1000	9400	75	1	350	9400	25	1	2915	9700	32	1	13.28
	BOTTOM PIECE	350	9400	25	1	1000	9400	75	1	2915	9700	32	1	13.28	350	12750	25	1	1200	12750	85	1	2915	12150	25	1	18.04	350	9400	25	1	1000	9400	75	1	2915	9700	32	1	13.28
MAIN GIRDER 6	TOP PIECE	1000	9400	75	1	350	9400	25	1	2415	9700	28	1	11.33	1200	12750	85	1	350	12750	25	1	2415	12150	25	1	16.84	1000	9400	75	1	350	9400	25	1	2415	9700	28	1	11.33
	BOTTOM PIECE	350	9400	25	1	1000	9400	75	1	2415	9700	28	1	11.33	350	12750	25	1	1200	12750	85	1	2415	12150	25	1	16.84	350	9400	25	1	1000	9400	75	1	2415	9700	28	1	11.33
MAIN GIRDER 7	TOP PIECE	1100	9400	75	1	350	9400	25	1	3165	9700	32	1	14.45	1300	12750	85	1	350	12750	25	1	3165	12150	25	1	19.48	1100	9400	75	1	350	9400	25	1	3165	9700	32	1	14.45
	BOTTOM PIECE	350	9400	25	1	1100	9400	75	1	3165	9700	32	1	14.45	350	12750	25	1	1300	12750	85	1	3165	12150	25	1	19.48	350	9400	25	1	1100	9400	75	1	3165	9700	32	1	14.45

Main Girder Profile (Including both Top & Bottom Pieces)			
CG-NAME	END PIECES PROFILE	MID PIECE PROFILE	
GIRDER-1	WB6480X1100-75/32*	WB6500X1300-85/25*	
GIRDER-2	WB5980X1000-75/32*	WB6000X1200-85/25*	
GIRDER-3	WB6950X1200-75/40*	WB7000X1300-100/25*	
GIRDER-4	WB5480X1000-75/32*	WB5500X1100-85/25*	
GIRDER-5	WB5980X1000-75/32*	WB6000X1200-85/25*	
GIRDER-6	WB4980X1000-75/28*	WB5000X1200-85/25*	
GIRDER-7	WB6480X1100-75/32*	WB6500X1300-85/25*	



NOTE: Width and thickness for Bottom flange of Top piece of Girder & Top Flange of Bottom Piece of girder (i.e. intermediate flanges) are tentative