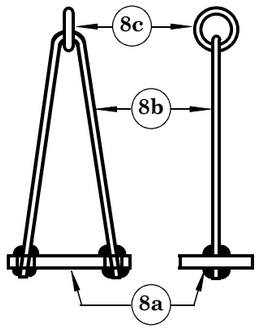
Part No.		Section [mm]	Quantity [nos]	Working Drawing	Weight kg / pc	Weight total kg
1	a	Flat 25/5 - 110	1	1 hole ϕ 18; 1 hole ϕ 14; drill holes after welding	0.09	0.09
	b	Flat 40/5 - 55	1	1 hole ϕ 18; drill holes after welding	0.07	0.07
	c	Flat 40/10 - 35	1	1 hole ϕ 14; drill holes after welding	0.10	0.10
2	a	Flat 25/5 - 110	1	1 hole ϕ 13.5 thread M16; 1 hole ϕ 10 thread M12; drill holes and cut threads after welding	0.09	0.09
	b	Flat 40/5 - 55	1	1 hole ϕ 13.5 thread M16; drill holes and cut threads after welding	0.07	0.07
	c	Flat 40/10 - 35	1	1 hole ϕ 10 thread M12; drill holes and cut threads after welding	0.10	0.10
3	a	Rod f 10 of different length, see suspender list		Ri = 12.5	------	------
	b	Flat 40/10 - 120	1	2 holes ϕ 11; 1 hole ϕ 13	0.35	0.35
	c	Rod f 10 - 512	1	Ri = 15; 250; 94	0.32	0.32
4		Hex bolt M16 - 60	1	40; IS 1363, galvanized acc. to: IS 1367, Part XIII	0.13	0.13C
5		Hex nut M16	1	24; 13; IS 1363, galvanized acc. to: IS 1367, Part XIII	0.03	0.03C
6		Hex bolt M12 - 60	1	40; IS 1363, galvanized acc. to: IS 1367, Part XIII	0.07	0.07C
7		Hex nut M12	1	19; 10; IS 1363, galvanized acc. to: IS 1367, Part XIII	0.02	0.02C
2 sets only for first crossbeam on both sides of the bridge, which has no suspender						
8	a	Flat 40/10-120	4	same as part no 3b	0.35	1.40
	b	Rod f 10- 518	4	same as part no 3c	0.32	1.28
	c	Rod f 10- 110	4	Ri = 12.5	0.07	0.28

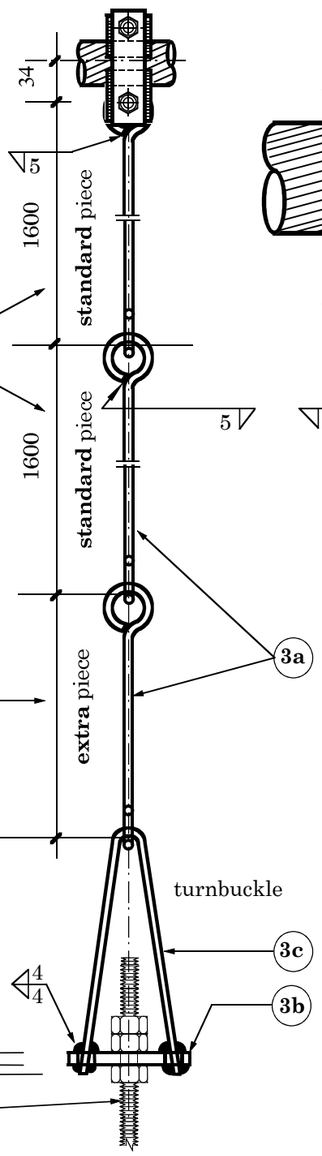
Part No. 8

for first crossbeam at the pylon foundation

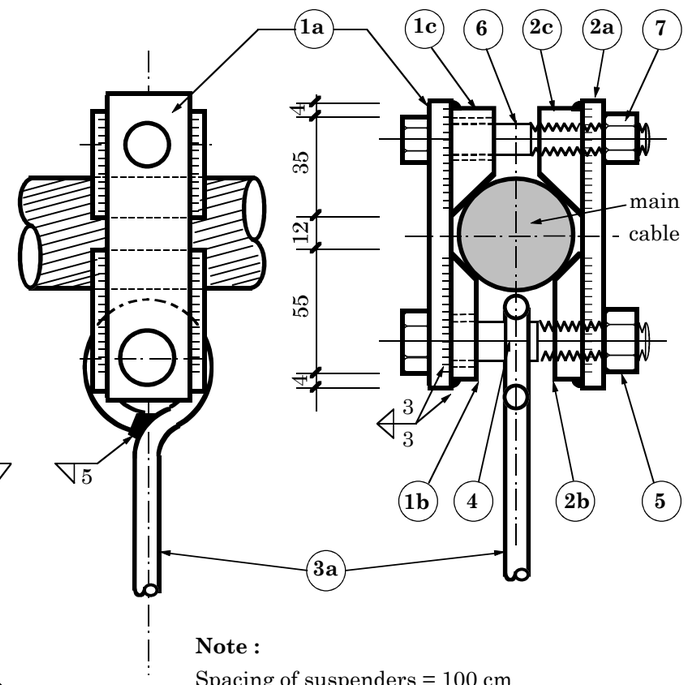


Fabricate each piece of **standard** length from rod ϕ 10, 1750 long

Fabricate this **extra** piece from rod ϕ 10 for cutting length see separate suspender list



Fabrication & Assembly Details



Note :
Spacing of suspenders = 100 cm
Fix turnbuckle directly to cable clamp where no standard piece and extra piece is provided

Specifications :
All structural steel must comply with:
IS 226 - 1975 for structural steel
IS 800 - 1984 for general construction in steel
All steel parts must be **hot dip galvanized** acc. to: IS 2629 & 2633, min. thickness = 80 µ m

For Delivery :
The suspenders, part no. 3, shall be folded together and to be bound with a binding wire

All finished suspenders shall be labeled acc. to the numbers of the suspenders list.

Calculation of steel weights

	Structural Steel [kg]	galvanized weight [kg]
Total number of suspenders (from separate suspender list) **N =**		
Total weight of suspender rods: (from separate suspender list)	.....	.....
Structural Steel: raw weight = (**N** x 1.19) + 2.96	.....	
g = galvanized weight = (**N** x 1.23) + 3.04		.....
Nuts & Bolts: = N x 0.25		.....
GRAND TOTAL WEIGHT	.....	.....

HMG / Ministry of Local Development
DoLIDAR / Short SpanTrail Bridge Standard

Bridge Name:
No: Span:

Steel Drawing:

Suspenders

for Suspension Bridges
for 2 Main Cables f 26 **or 32 mm**

Date : September 30, 2002 **Drawing No.31N**