


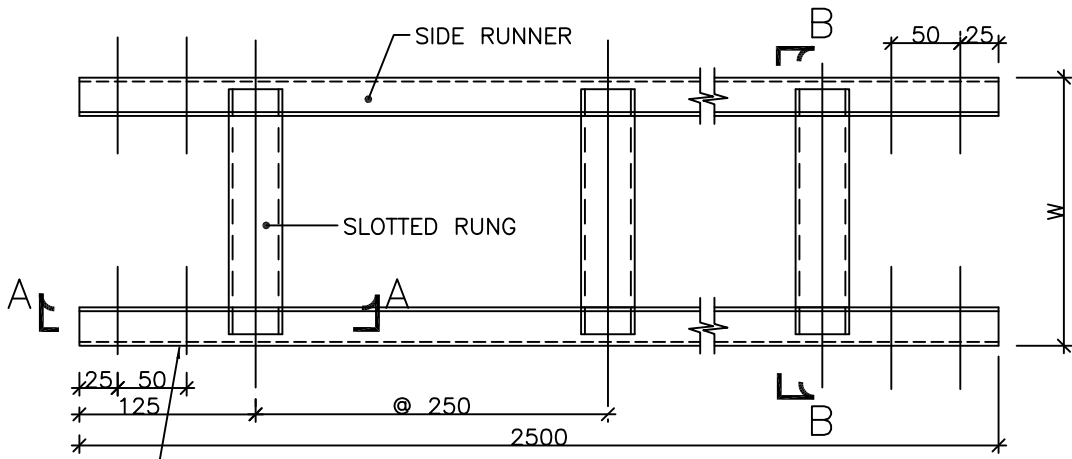
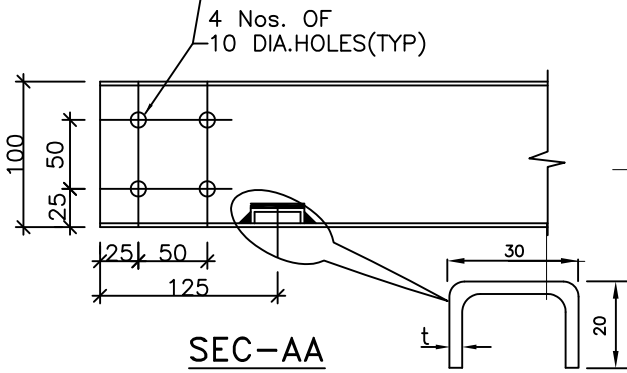


TYPICAL DETAILS OF CABLE TRAYS AND ACCESSORIES

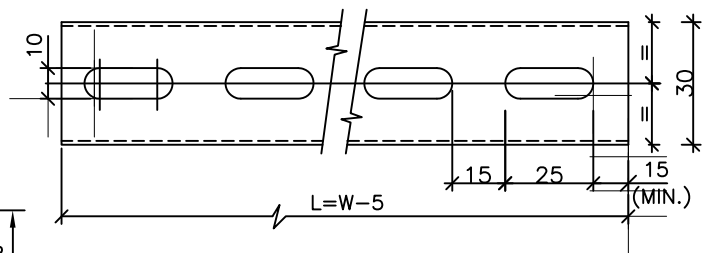
PROJECT										2X660MW ENNORE SEZ SUPERCRITICAL THERMAL POWER PROJECT AT ASH DYKE OF NCTPS,CHENNAI									
										OWNER		TAMIL NADU GENERATION & DISTRIBUTION CORPORATION LIMITED							
										OWNER'S CONSULTANT		DESEIN PRIVATE LIMITED, DESEIN HOUSE,NEW DELHI							
										EPC CONTRACTOR		BHARAT HEAVY ELECTRICALS LIMITED POWER SECTOR PROJECT ENGINEERING MANAGEMENT NOIDA(U.P) INDIA							
REV	DATE	DRN	CHD	APPD.	REV	DATE	DRN	CHD	APPD.	DOCUMENT TITLE: TYPICAL DETAILS OF CABLE TRAYS AND ACCESSORIES				DPT CODE--E		NAME	SIGN	DATE	
04	19.5.15	AAT	SL	RG	03	14.5.15	AAT	SL	RG							DRN	AAT	--SD--	13.3.15
REVISD DRAWING TO INCORPORATE 50MM WIDE PERFORATED TRAY.					REVISD DRAWING AS PER CUSTOMER COMMENTS DATE ON 11.05.2015.					DOCUMENT NO: PE-DG-412-507-E005				APP		CHD	SL	--SD--	13.3.15
REVISD DRAWING AS PER CUSTOMER COMMENTS DATE ON 07.04.2015.					REVISD DRAWING AS PER CUSTOMER COMMENTS DATE ON 13.2.2015.											APP	RG	--SD--	13.3.15
										SHT. 01 OF 11				REV.04					



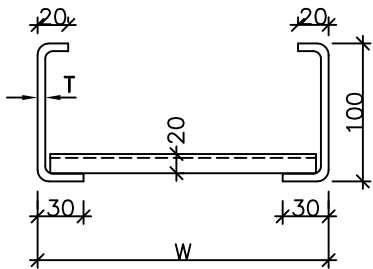
LADDER TYPE CABLE TRAY



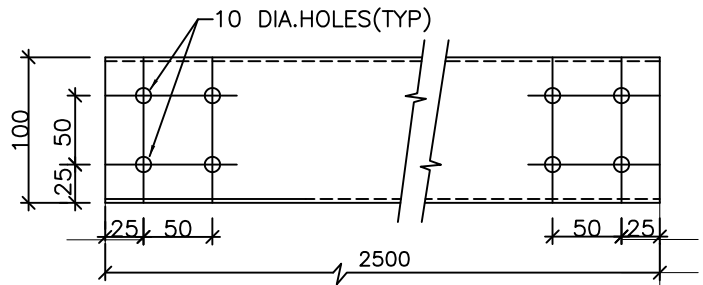
SEC-AA



SLOTTED RUNG



SEC-BB



SIDE RUNNER

W	150	300	450	600
L	145	295	445	595
T	2	2	2	2
t	2	2	2	2

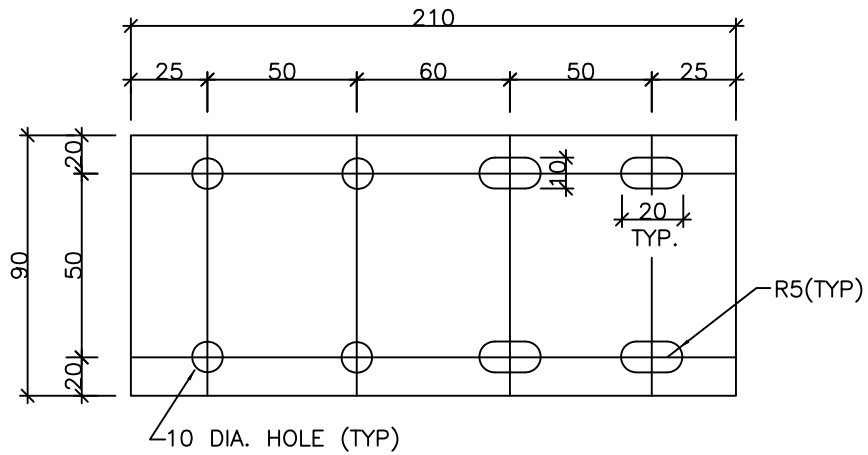
FOR GENERAL NOTES REFER SHEET 11 OF 11



TYPICAL DETAILS OF CABLE TRAYS AND ACCESSORIES

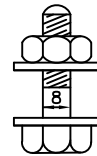
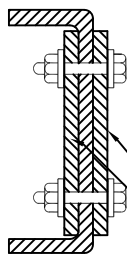
DWG. NO.
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**SIDE COUPLER PLATE FOR
LADDER/PERFORATED TYPE TRAYS**
(600/450/300/150W TRAYS)

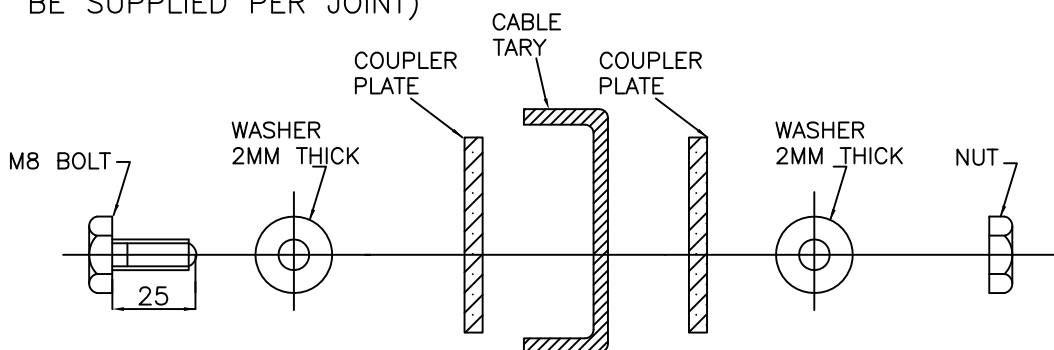
QTY. REQUIRED/TRAY SECTION : 4 NOS.



QTY. REQD/TRAY SECTION

- A) 16 NOS. M8 BOLTS
- B) 16 NOS. NUTS
- C) 32 NOS. WASHERS

(2 NOS. COUPLER PLATES
OF 3 MM THICKNESS TO
BE SUPPLIED PER JOINT)



SEQUENCE OF M8 BOLT, WASHER, NUT, COUPLER PLATE & CABLE TRAY
FOR TYPICAL CABLE TRAY JOINT

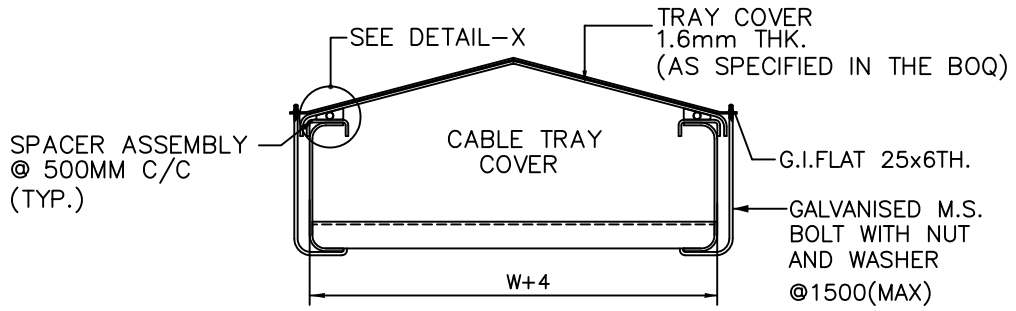
FOR GENERAL NOTES REFER SHEET 11 OF 11



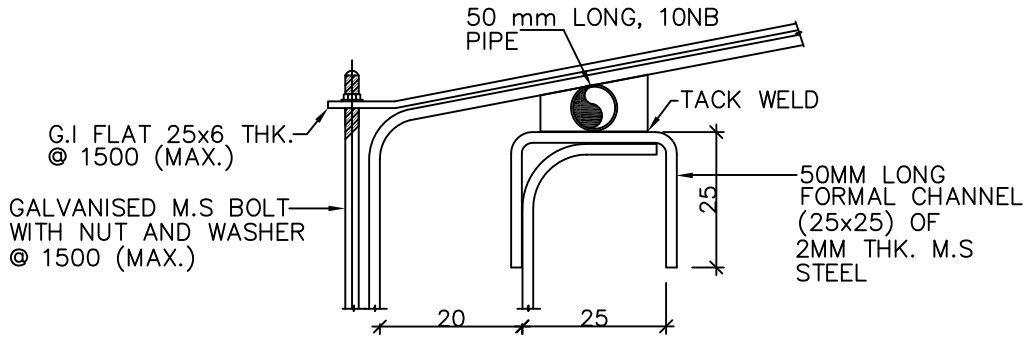
TYPICAL DETAILS OF CABLE TRAYS AND
ACCESSORIES

DWG. NO.
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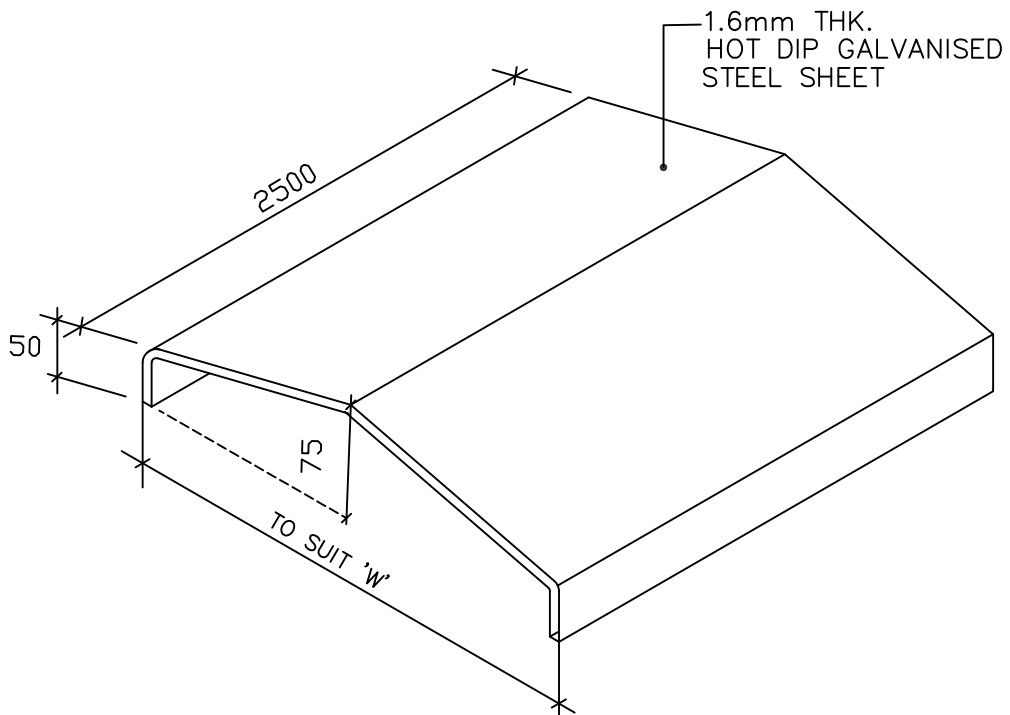
SHT. 03 OF 11 REV.04



COVER FIXING (TYP.)



DETAIL-X



CABLE TRAY COVER

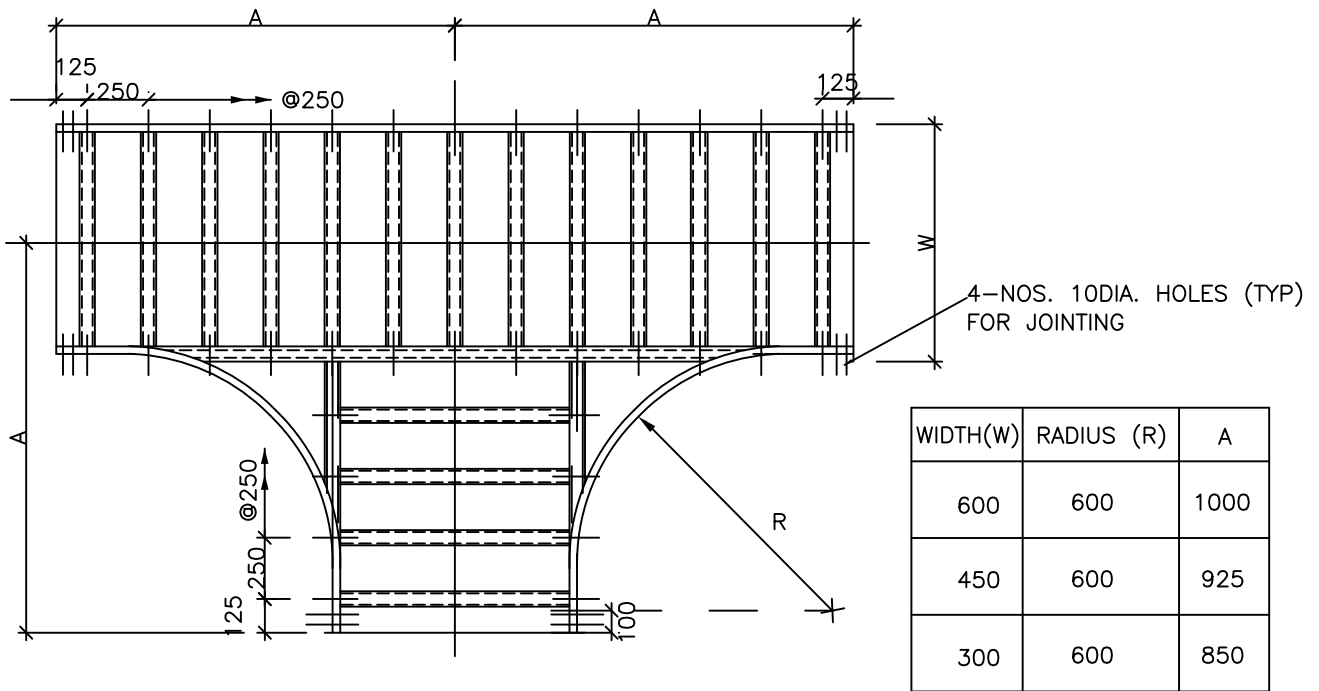
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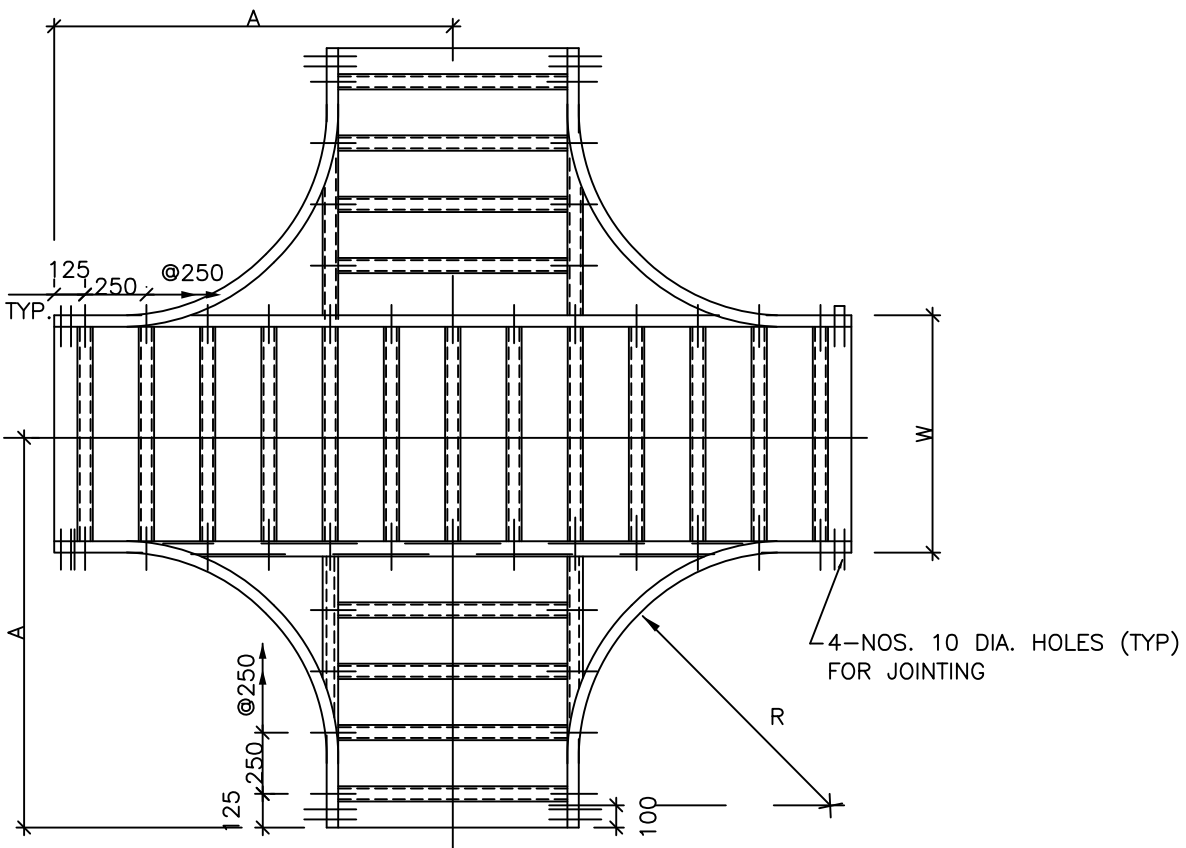
TYPICAL DETAILS OF CABLE TRAYS AND
ACCESSORIES

DWG. NO.
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HORIZONTAL TEE-PLAN



HORIZONTAL CROSS-PLAN

LADDER TYPE ACCESSORIES

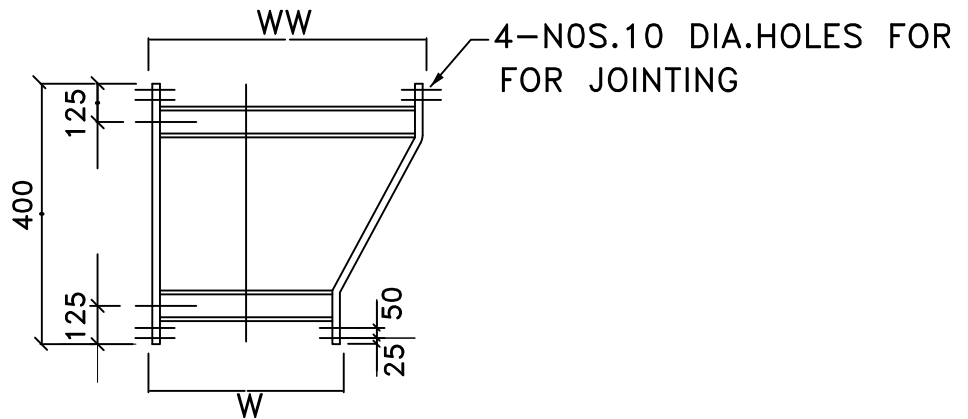
FOR GENERAL NOTES REFER SHEET 11 OF 11



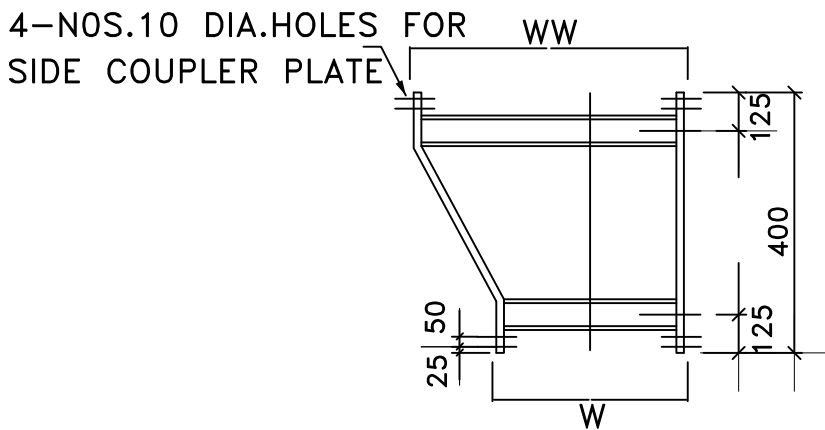
TYPICAL DETAILS OF CABLE TRAYS AND ACCESSORIES

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LEFT HAND REDUCER-PLAN



RIGHT HAND REDUCER-PLAN

WIDTH	WW	600	600	450
	W	450	300	300

LADDER TYPE ACCESSORIES

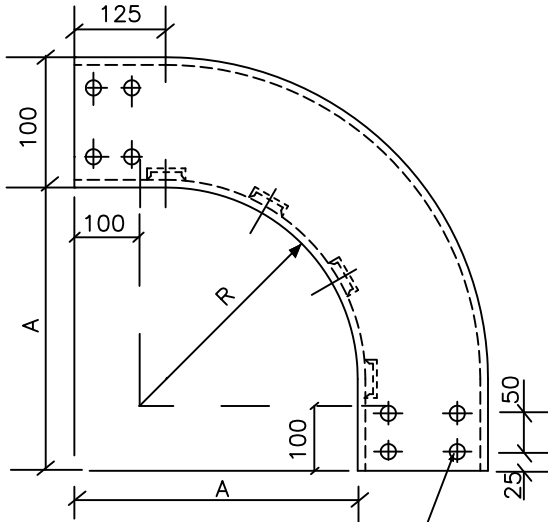
FOR GENERAL NOTES REFER SHEET 11 OF 11



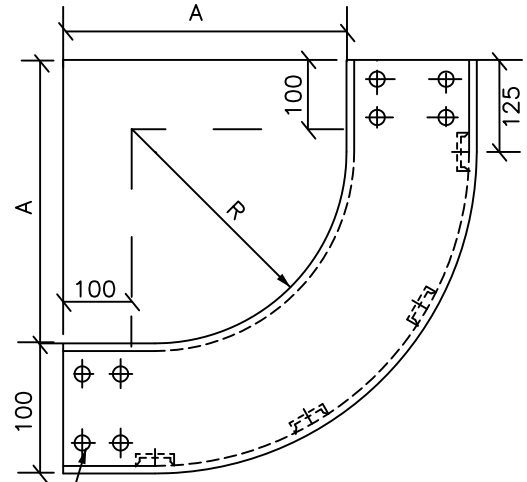
TYPICAL DETAILS OF CABLE TRAYS AND ACCESSORIES

DWG. NO.
PE-DG-412-507-E005

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ELEVATION
90° VERTICAL BEND
(OUTSIDE)

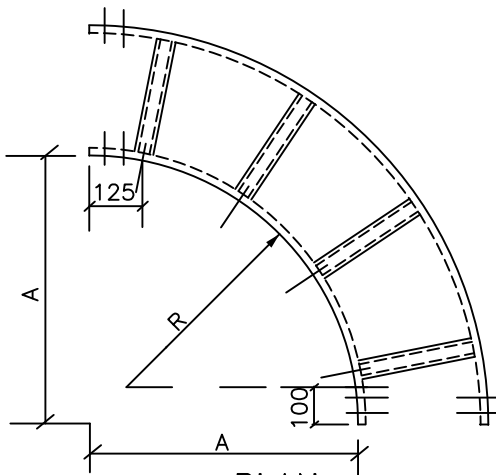


ELEVATION
90° VERTICAL BEND
(INSIDE)

4 NOS. 10 DIA. HOLES
FOR JOINTING

LADDER TYPE TRAYS

WIDTH(W)	RADIUS (R)	A
600	600	700
450	600	700
300	600	700



PLAN
90° HORIZONTAL BEND

LADDER TYPE ACCESSORIES

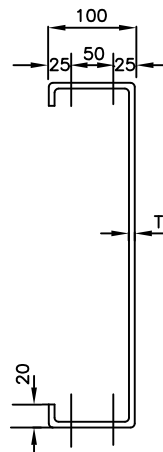
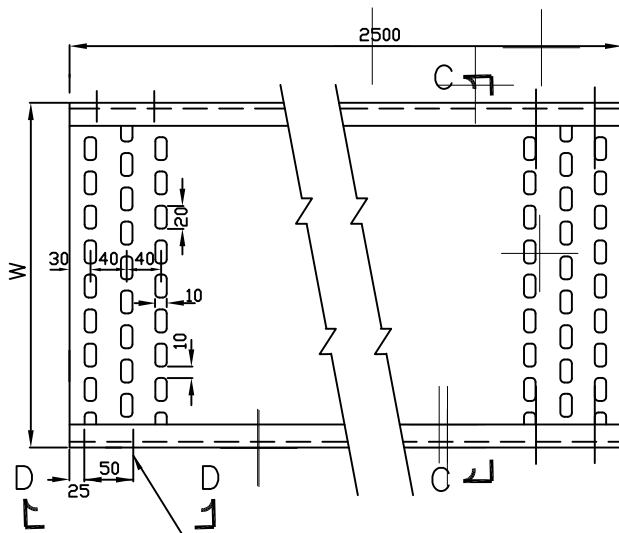
FOR GENERAL NOTES REFER SHEET 11 OF 11



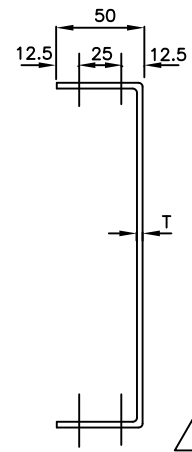
TYPICAL DETAILS OF CABLE TRAYS AND
ACCESSORIES

DWG. NO.
PE-DG-412-507-E005

SHT. 07 OF 11 REV. 04



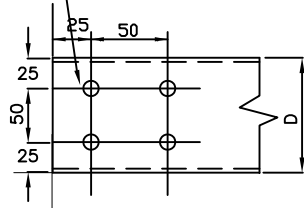
SECTION-CC
(600/450/300/150
TRAYS)



SECTION-CC
(100/50 TRAYS)

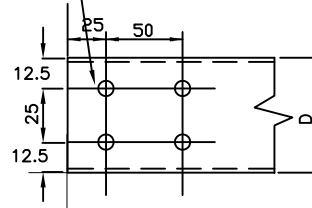
REV
04A

4 HOLES 10mm DIA.

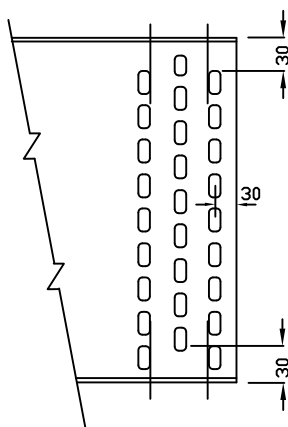


VIEW-DD
(600/450/300/
150W TRAYS)

4 HOLES 10mm DIA.



VIEW-DD
(100/50W
TRAYS)



ARRANGEMENT OF
PERFORATIONS

REV
04

TRAY WIDTH W (mm)	600	450	300	150	100	50
TRAY DEPTH D (mm)	100	100	100	100	50	50
T (mm)	2	2	2	2	2	2

PERFORATED TYPE TRAY

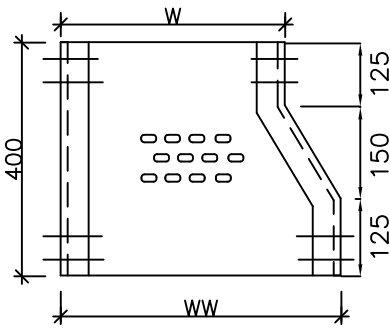
FOR GENERAL NOTES REFER SHEET 11 OF 11



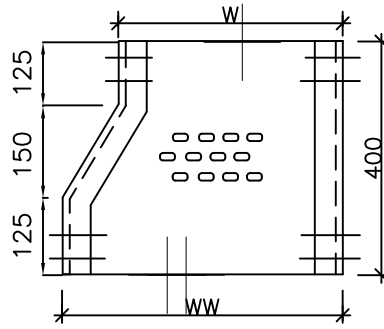
TYPICAL DETAILS OF CABLE TRAYS AND
ACCESSORIES

DWG. NO.
PE-DG-412-507-E005

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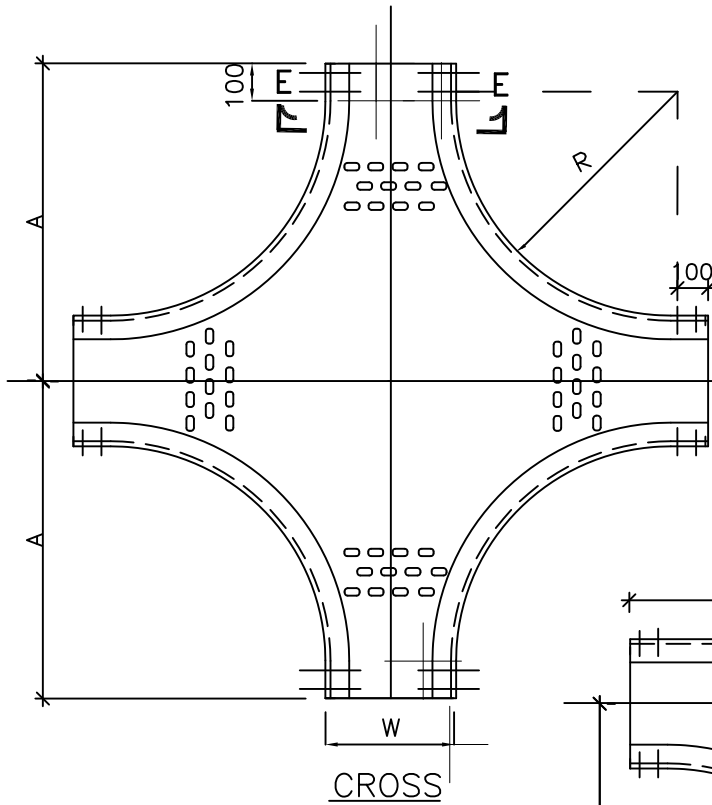
LEFT HAND REDUCER



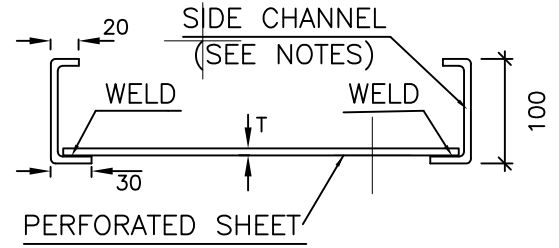
RIGHT HAND REDUCER

WW	W	DEPTH	THICKNESS
600	450	100	2
600	300	100	2
450	300	100	2

PERFORATED TYPE



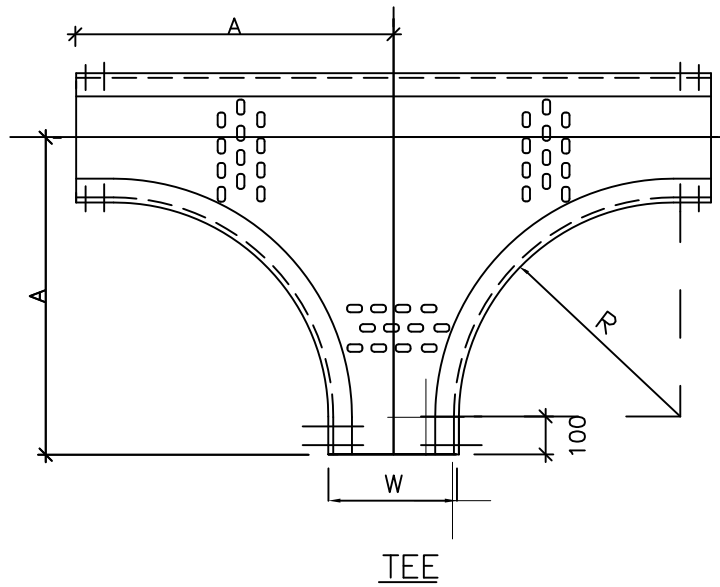
CROSS



SECTION-EE

PERFORATED TYPE

WIDTH(W)	RADIUS (R)	A	T
600	600	1000	2
450	600	925	2
300	600	850	2



TEE

PERFORATED TYPE ACCESSORIES

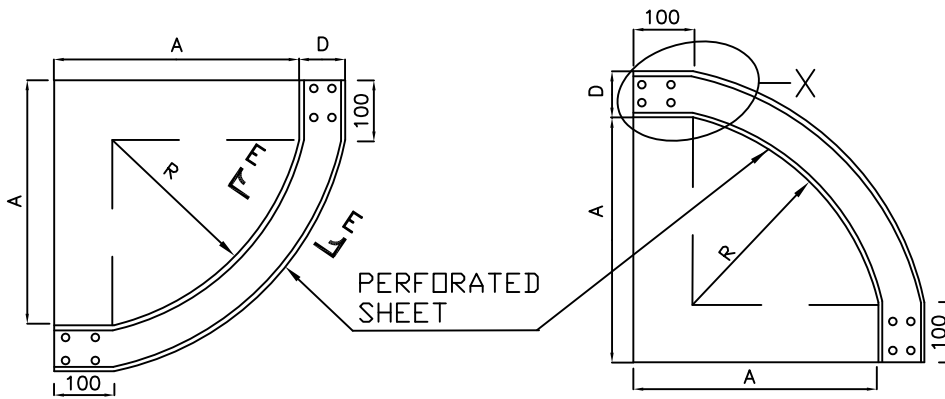
FOR GENERAL NOTES REFER SHEET 11 OF 11



TYPICAL DETAILS OF CABLE TRAYS AND ACCESSORIES

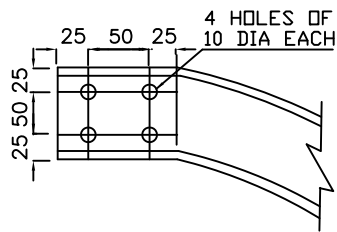
DWG. NO.
PE-DG-412-507-E005

SHT. 09 OF 11 REV. 04

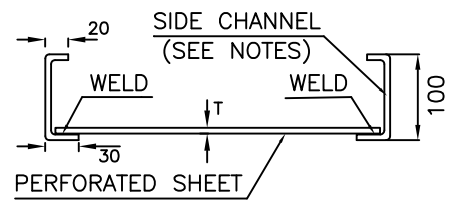


INSIDE TYPE

OUTSIDE TYPE

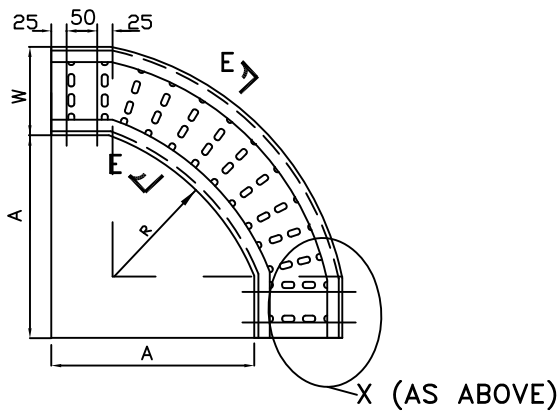


ENLARGED VIEW OF "X"



SECTION-EE

90° VERTICAL BEND - PERFORATED TYPE



90° HORIZONTAL BEND - PERFORATED TYPE

WIDTH(W)	RADIUS (R)	A	T
600	600	700	2
450	600	700	2
300	600	700	2

PERFORATED TYPE ACCESSORIES

FOR GENERAL NOTES REFER SHEET 11 OF 11






TYPICAL DETAILS OF CABLE TRAYS AND ACCESSORIES

DWG. NO.
PE-DG-412-507-E005

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NOTES:-

1. THE LADDER AND PERFORATED TYPE CABLE TRAYS AND ACCESSORIES (INCLUDING SIDE RUNNERS OF LADDER TYPE TRAYS & ACCESSORIES) SHALL BE MADE OF 2MM HOT ROLLED M.S. SHEET. ALL THE COUPLER PLATE SHALL BE 3 MM THICK. THESE TRAYS SHALL BE USED IN ALL AREAS OF POWER HOUSE EXCEPT FOR AREAS LIKE INTAKE RAW WATER PUMP HOUSE, DESALINATION PLANT, CHP, BATTERY ROOM, NDCT, ESP AREA AND CHEMICAL HOUSE WHERE FRP CABLE TRAYS SHALL BE USED. 
2. THE CABLE TRAYS & ACCESSORIES SHALL BE HOT DIP GALVANISED AS PER IS 2629. THE MASS OF ZINC COATING SHALL NOT BE LESS THAN 610 gm/m² AND THICKNESS SHALL BE 86 MICRONS (MINIMUM).
3. FOR LADDER TYPE CABLE TRAYS AND ACCESSORIES, ALL RUNGS SHALL BE SLOTTED.
4. PERFORATED TRAYS SHALL BE FABRICATED OUT OF A SINGLE M.S. SHEET.
5. STANDARD TRAY ACCESSORIES SHALL BE WITH THE RADIUS INDICATED IN THIS DRAWING.
6. SIDE CHANNELS OF PERFORATED TYPE CABLE TRAY ACCESSORIES SHALL BE WELDED WITH THE PERFORATED SHEET AT INTERVALS OF 100mm.
7. LENGTH OF WELDING SHALL NOT BE LESS THAN 25mm FOR CABLE TRAYS. THE THICKNESS OF WELDING SHALL BE AS PER IS 9595.
8. ALL TRAY CORNERS SHALL BE SMOOTH AND FREE OF SHARP EDGES.
9. THE CABLE TRAY COVER SHALL BE OF 1.6MM THICK MS SHEET AND SHALL BE HOT DIP GALVANISED.
10. THE DEPTH, WIDTH AND LENGTH OF TRAYS & TRAY COVERS SHALL BE WITHIN A TOLERANCE OF (+/-) 2 mm. THE THICKNESS TOLERANCE IS OF (+/-) 0.2 mm AS PER IS 1852.
11. THE THICKNESS OF THE FINISHED GALVANISED PRODUCT SHALL NOT BE LESS THAN 2MM.
12. TO FACILITATE ASSEMBLY, ALL ACCESSORIES AT ENDS SHALL HAVE 100mm STRAIGHT PORTION.
13. ALL NUTS, BOLTS, WASHERS ETC., SHALL BE HOT DIP GALVANISED AS PER IS:1367 PART XIII FOR SIZES 12 MM & ABOVE, AND ELECTROPLATED/ZINC PASSIVATED FOR SIZES UPTO 12 MM.
14. ALL CUTTING & FORMING OPERATIONS SHALL BE COMPLETED PRIOR TO GALVANIZING.
15. FINISHED TRAYS SHALL BE FREE FROM BURRS AND SHARP EDGES.
16. ALL DIMENSIONS ARE IN mm UNLESS NOTED OTHERWISE.
17. WIDTH OF CABLE TRAYS PROPOSED TO BE USED FOR THE PROJECT ARE AS UNDER:
 - A) LADDER TYPE: 600W, 450W, 300W, 150W.
 - B) PERFORATED TYPE: 600W, 450W, 300W, 150W, 100W, 50W. 
18. THE DEPTH OF 600W, 450W, 300W, 150W TRAYS & ACCESSORIES SHALL BE 100MM. THE DEPTH OF 100W, 50W TRAYS & ACCESSORIES SHALL BE 50MM. 
19. 600MM WIDE TYPE CABLE TRAYS SHALL BE SUITABLE FOR A CABLE WEIGHT OF 100 Kg PER METRE (INCLUDING LIVE LOAD) OF RUNNING LENGTH OF TRAY.
20. PEM SHALL BE MARKED ON SIDE RUNNER OF EACH TRAY SECTION.



TYPICAL DETAILS OF CABLE TRAYS AND ACCESSORIES

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