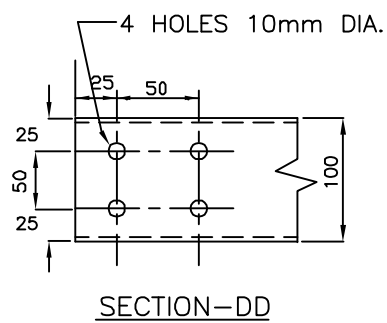
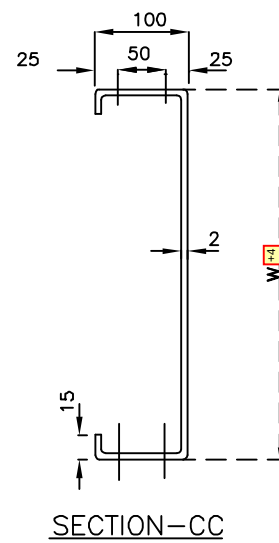


TYPICAL DETAILS OF CABLE TRAYS AND ACCESSORIES

CUSTOMER	NATIONAL THERMAL POWER CORPORATION						
PROJECT	2X800 MW NTPC KARIMNAGAR TELANGANA STPP PHASE-I (SG ISLAND PACKAGE)						
NTPC DRG NO.	9591-102-104-PVE-Y-006 (ESP AREA)						
	BHARAT HEAVY ELECTRICALS LIMITED BOILER AUXILLIARIES PLANT RANIPET, TAMILNADU INDIA	DPT CODE-E	DRN	NAME	SIGN	DATE	
			DSN	GSN	-sd-	29.07.17	
			CHD	GSN	-sd-	29.07.17	
			APP	KPM	-sd-	29.07.17	
		DWG. NO.		3-00-115-40205			
		SHT. 01 OF 11 REV. 00					



PERFORATED TYPE TRAY

SEE GENERAL NOTES IN SHEET 11.



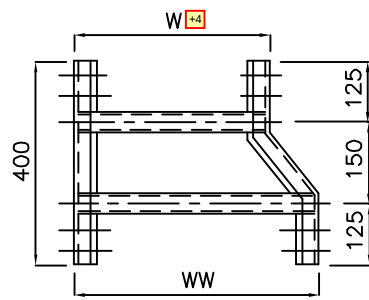
TYPICAL DETAILS OF CABLE TRAYS AND ACCESSORIES

DRAWING NO.

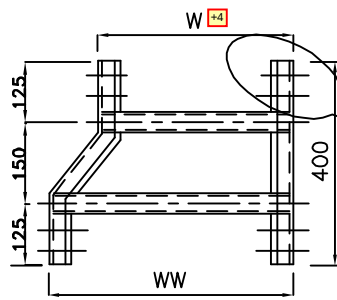
3-00-115-40205

SH 3 OF 11

REV 06

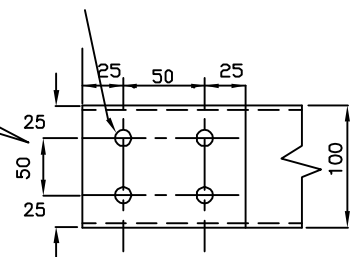


LEFT HAND REDUCER



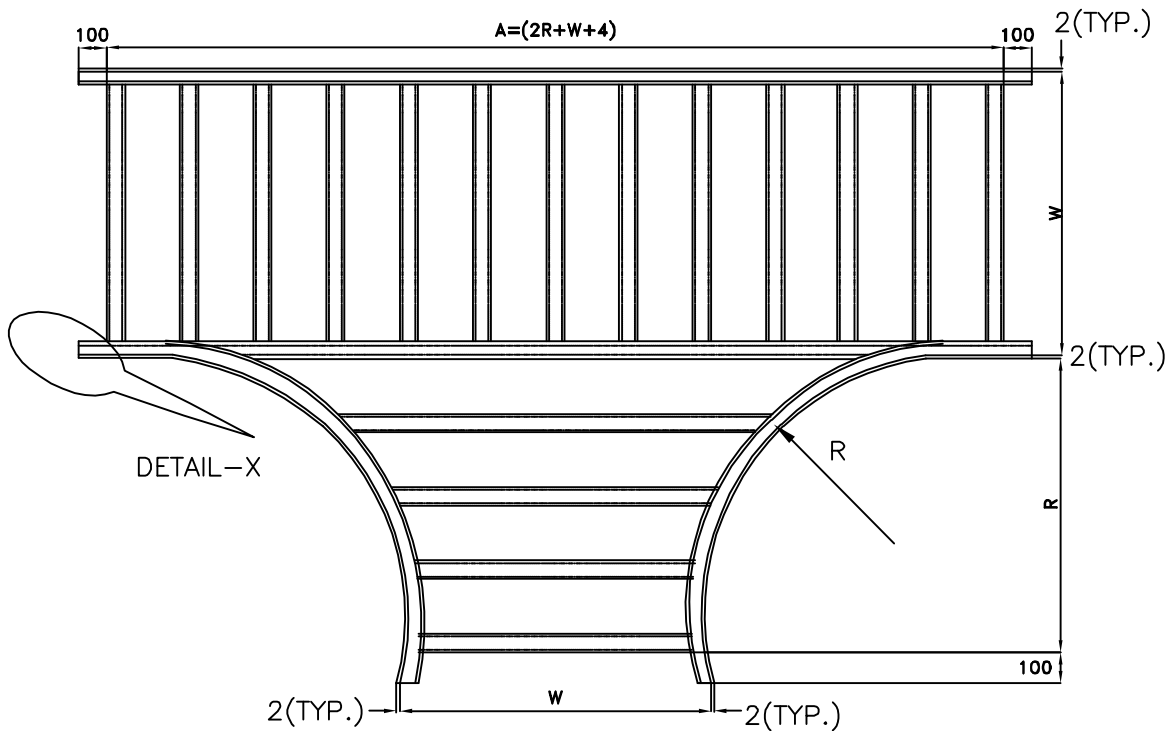
RIGHT HAND REDUCER

10mm DIA. HOLES

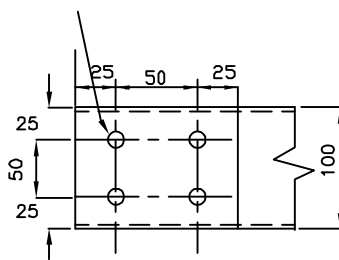


WW	W	DEPTH
600	300	100
600	150	100
300	150	100

LADDER TYPE



10mm DIA. HOLES



DETAIL-X

WIDTH W	BENDING RADIUS R	DEPTH	A		
			W		
			150	300	600
150, 300 & 600	600	100	1354	1504	1804

Note: Bending Radius 600mm is envisaged

SEE GENERAL NOTES IN SHEET 11.

LADDER TYPE



TYPICAL DETAILS OF
CABLE TRAYS AND ACCESSORIES

DRAWING NO.

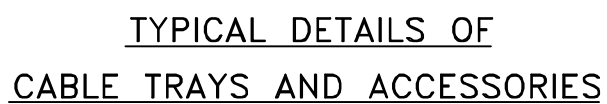
3-00-115-40205

SH 4 OF 11

REV 06

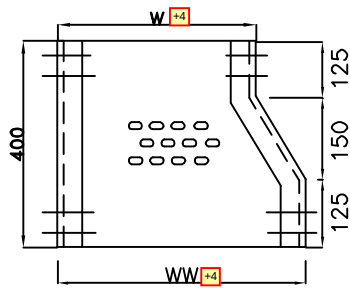


SEE GENERAL NOTES IN SHEET 11.

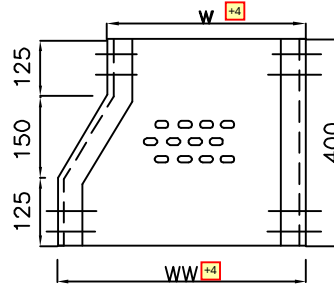


3-00-115-40205

REV 06



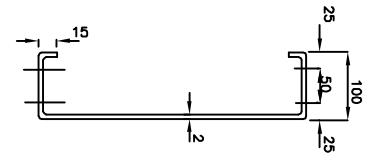
LEFT HAND REDUCER



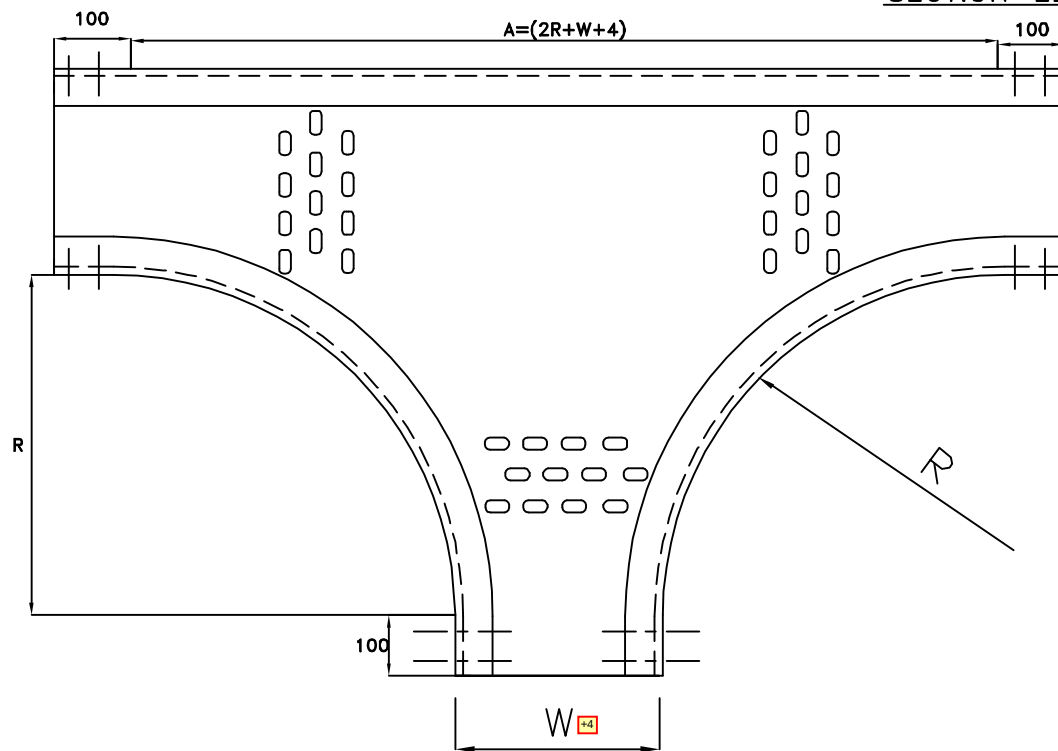
RIGHT HAND REDUCER

WW	W	DEPTH
600	300	100
600	150	100
300	150	100

PERFORATED TYPE



SECTION-EE



TEE

WIDTH W	BENDING RADIUS R	DEPTH	A		
			W		
			150	300	600
150, 300 & 600	600	100	1354	1504	1804

Note: Bending Radius 600mm is envisaged

SEE GENERAL NOTES IN SHEET 11.

PERFORATED TYPE



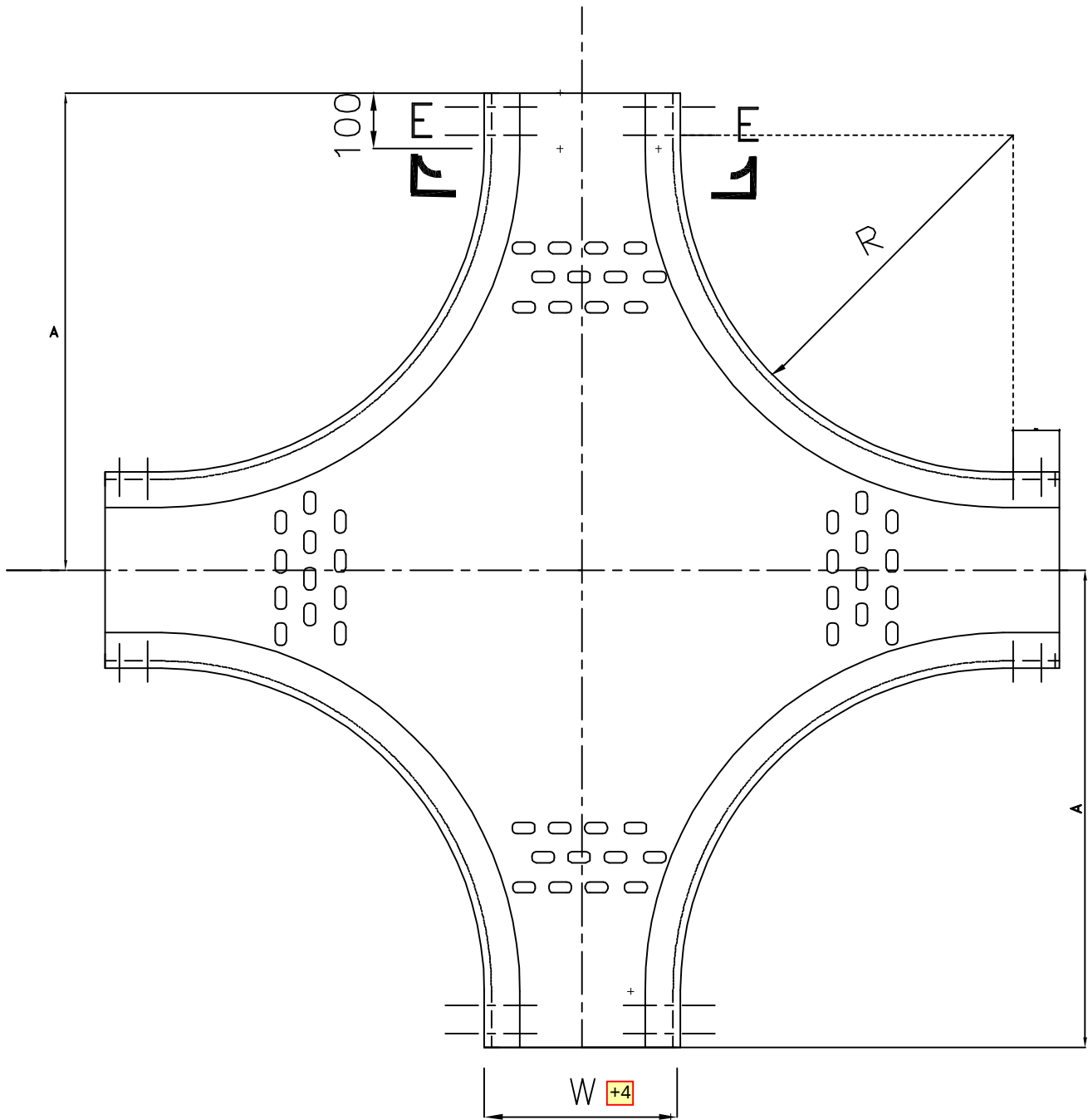
TYPICAL DETAILS OF
CABLE TRAYS AND ACCESSORIES

DRAWING NO.

3-00-115-40205

SH 6 OF 11

REV 06



CROSS

WIDTH W	BENDING RADIUS R	$A=R+W/2+100$
600	600	1000
300	600	850

SEE GENERAL NOTES IN SHEET 11.

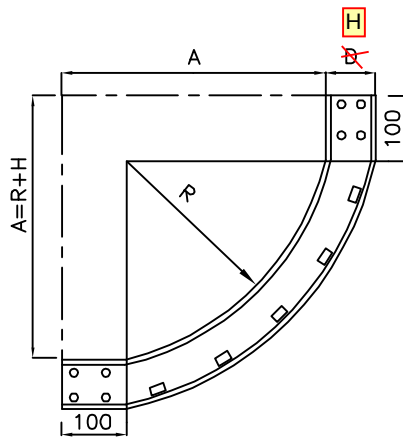


TYPICAL DETAILS OF
CABLE TRAYS AND ACCESSORIES

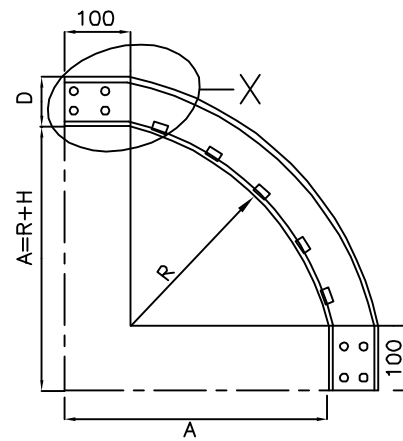
DRAWING NO.
3-00-115-40205

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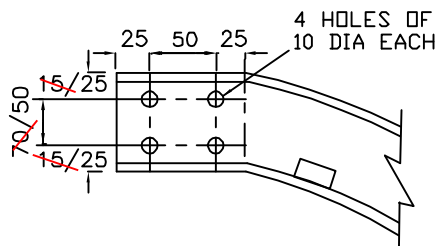
REV 06



INSIDE TYPE



OUTSIDE TYPE

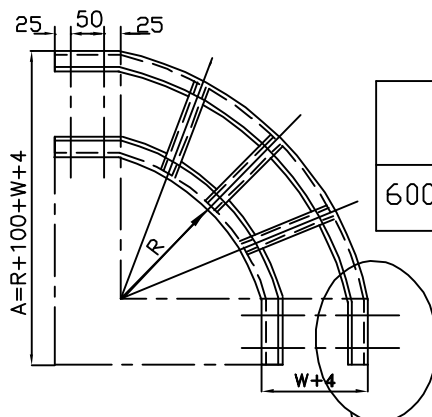


ENLARGED VIEW OF "X"

VERTICAL ELBOW 90 DEG UP/DOWN

INSIDE WIDTH W	BENDING RADIUS R	DEPTH	A
600, 300 & 150	600	100	700

90° VERTICAL BEND - LADDER TYPE



LADDER TYPE

X (AS ABOVE)

HORIZONTAL ELBOW 90 DEG

INSIDE WIDTH W	BENDING RADIUS R	DEPTH	A		
			150	300	600
600, 300 & 150	600	100	854	1004	1304
			754	904	1204

90° HORIZONTAL BEND - LADDER TYPE

SEE GENERAL NOTES IN SHEET 11.



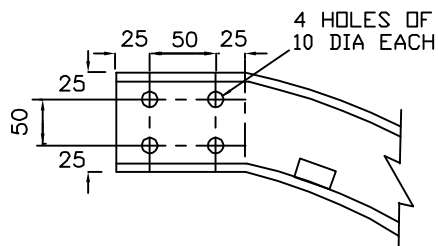
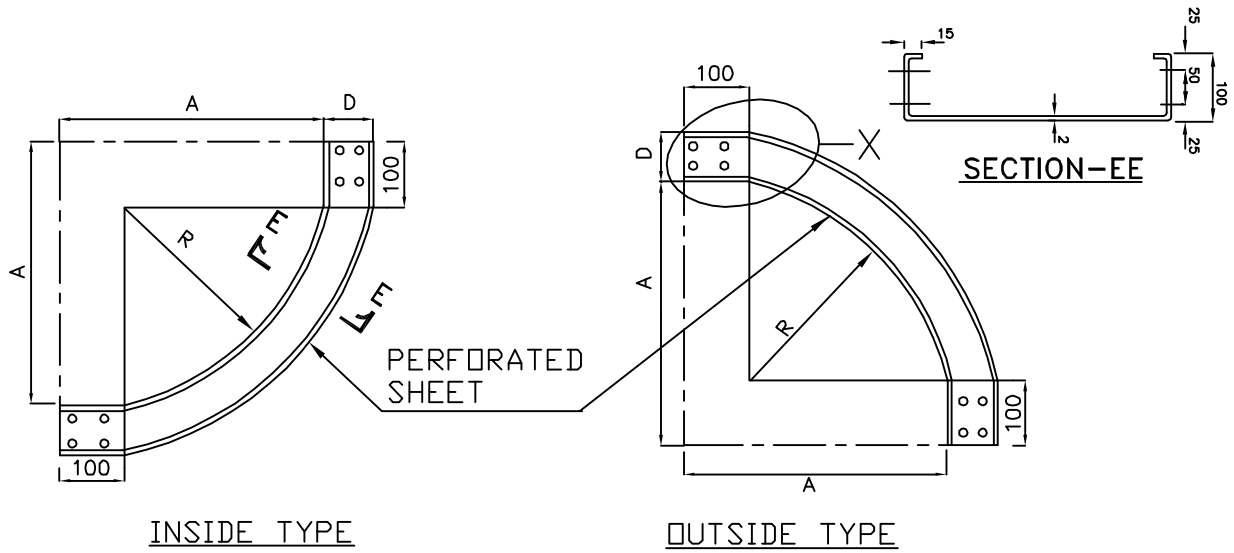
TYPICAL DETAILS OF
CABLE TRAYS AND ACCESSORIES

DRAWING NO.

3-00-115-40205

SH 8 OF 11

REV 06

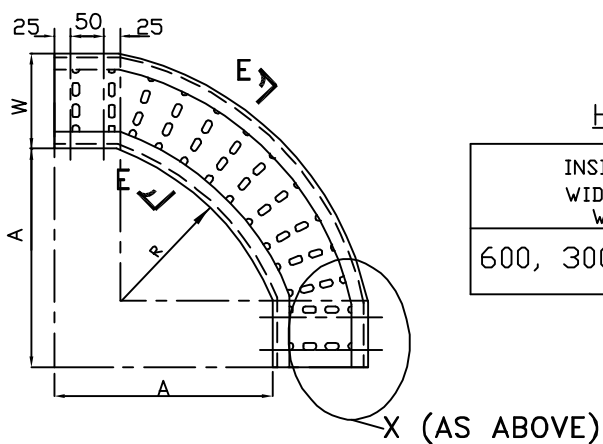


ENLARGED VIEW OF "X"

90° VERTICAL BEND - PERFORATED TYPE

VERTICAL ELBOW 90 DEG UP/DOWN

INSIDE WIDTH W	BENDING RADIUS R	DEPTH	A
600, 300 & 150	600	100	700



90° HORIZONTAL BEND - PERFORATED TYPE

SEE GENERAL NOTES IN SHEET 11.

HORIZONTAL ELBOW 90 DEG

INSIDE WIDTH W	BENDING RADIUS R	DEPTH	A		
			150	300	600
600, 300 & 150	600	100	854	1004	1304
			754	904	1204



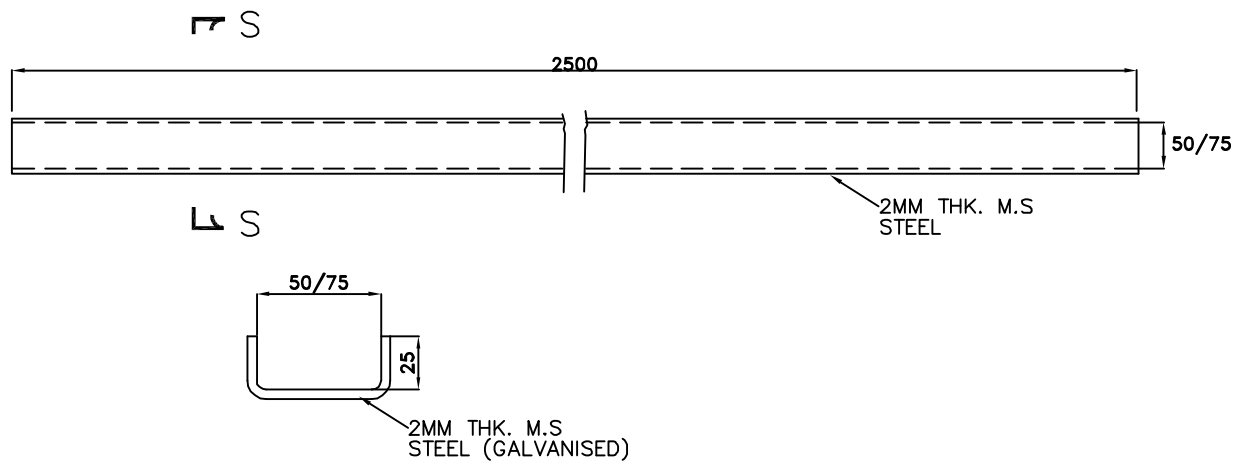
TYPICAL DETAILS OF
CABLE TRAYS AND ACCESSORIES

DRAWING NO.

3-00-115-40205

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REV 06



SECTION S-S

CABLE TROUGHS (NOT APPLICABLE FOR ESP AREA)

SEE GENERAL NOTES IN SHEET 11.



TYPICAL DETAILS OF
CABLE TRAY AND ACCESSORIES

BHEL DRAWING NO.
3-00-115-40205

SH 10 OF 11

REV 06

NOTES:—

1. THE CABLE TRAYS AND ACCESSORIES SHALL BE MADE OF 2mm HOT ROLLED M.S.SHEET CONFIRMING TO IS:1079. ALL THE COUPLER PLATE SHALL BE OF 3 MM THICK.
2. THE CABLE TRAYS AND ACCESSORIES SHALL BE HOT DIP GALVANISED AS PER IS 2629.
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. THE DIMENSIONS OF ALL BENDS, TEES, CROSSES, ETC. FOR PERFORATED CABLE TRAYS SHALL BE THE SAME AS FOR LADDER TYPE TRAY FITTINGS.
6. SIDE CHANNELS OF PERFORATED TRAY ACCESSORIES SHALL BE WELDED WITH THE PERFORATED SHEET AT INTERVALS OF 100mm.
7. LENGTH OF WELDING SHALL NOT BE LESS THAN 25mm. WELDING SHALL BE AS PER IS 9595.
8. PREFERABLY SINGLE MS PERFORATED SHEET SHALL BE USED AS BASE OF ALL PERFORATED TYPE TRAY ACCESSORIES. HOWEVER, IF USE OF PIECES OF PERFORATED SHEET IS UNAVOIDABLE FOR BASE, PIECES SHALL BE WELDED WITH EACH OTHER IN LINE WITH THE ABOVE.
9. ALL TRAY CORNERS SHALL BE FREE OF SHARP EDGES & SMOOTH.
10. THE DEPTH, WIDTH AND LENGTH OF TRAYS AND ACCESSORIES SHALL BE WITHIN A TOLERANCE AS PER RELEVANT IS
11. TO FACILITATE ASSEMBLY, ALL ACCESSORIES AT ENDS SHALL HAVE 100mm STRAIGHT PORTION.
12. ALL NUTS, BOLTS, WASHERS ETC., SHALL BE HOT DIP GALVANISED AS PER IS 1367 FOR SIZES ABOVE 12MM AND ELECTROPLATED/ELECTROGALVANISED FROM SIZE BELOW 12MM.
13. ALL DIMENSIONS ARE IN mm UNLESS NOTED OTHERWISE.
14. TRAY ACCESSORIES SHOWN IN THIS DRAWING SHALL BE FACTORY FABRICATED FOR USE AT SITE AS PER APPROVED LAYOUT DRAWINGS. FOR SPECIFIC SITE REQUIREMENTS (E.G. IRREGULAR ANGLE BENDS SUCH AS 30°/60° BENDS, ETC) AS PER SITE LAYOUT CONDITIONS, TRAY ACCESSORIES SHALL BE FABRICATED AT SITE FROM THE STRAIGHT LENGTH OF RESPECTIVE SIZES AS REQUIRED. GALVANISATION DAMAGED DURING CUTTING/WELDING OPERATIONS SHALL BE BRUSHED AND RED LEAD PRIMER, OIL PRIMER AND ALUMINIUM PAINT SHALL BE APPLIED BEFORE INSTALLATION OF THE ACCESSORIES.
15. WIDTH OF CABLE TRAYS PROPOSED TO BE USED FOR PROJECT ARE AS UNDER :
LADDER TYPE CABLE TRAY (MM) : 600,300 & 150.
PERFORATED TYPE CABLE TRAY (MM) : 600,300 & 150.
16. 600MM WIDE CABLE TRAY SHALL BE SUITABLE FOR WEIGHT OF 100KG/M INCLUDING LIVE LOAD OF RUNNING LENGTH OF CABLE TRAY.
17. CABLE TROUGHS SHALL BE USED FOR BRANCHING OUT FEW CABLES FROM MAIN CABLE ROUTE.
18. MAKE OF ALL ITEMS SHALL BE AS PER NTPC QA APPROVAL.



TYPICAL DETAILS OF CABLE TRAYS AND ACCESSORIES

DRAWING NO.

3-00-115-40205

SH 11 OF 11

REV 00