



Cable Trays · Ducts · Brackets

2026 Product Catalog · REV. 2026.01 (1st revision of 2026)

Revisions

Date	Category	Details
2023. 09.	Listed in POSCO Electrical Design Standard Drawings	CR PosMAC CABLE TRAY & DUCT drawings · Use of Patent No. 10-1746130
2024	Drawing rev.	Added Detail "B", etc.
2026. 09.	Full revision · REV. 2026.01	2024 revisions applied · TYPE A/B retained · HVT drawing Nos. unified · tray bracket drawings included

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How to read an item number

1288 items · by drawing number

HVT-

HE

90

W2

R3

A

HANVIT

Type

Angle

Width 200
Width

Radius 300
Radius

Conn. A

- The code itself shows type, angle, width, radius and connection
- One code identifies one specification and is not reused for another specification
- Summaries use ranges: HE90W[2–10]R[3,6][A,B] (HVT- omitted · ; = alternatives)
Ranges: [2–10] integers · [3,6] / [A,B] choices · ; alternatives · HVT- omitted

ST	Straight tray	HE	Horizontal elbow	VEI · VEO	Vertical elbow inside · outside
HT · HX	Tee · cross	RD · RDL · RDR	Reducer · left · right	...C	Tray cover (e.g. HEC; SPC = clamp)
D...	Duct = D + tray code Duct: ST→DST · HT→DHT · HX→DHX	SP · SPC	Separator · clamp	CN · RC · BC	Straight · riser · bendable connector
HC · BE	Hold-down clamp · blind end	BJ · DCB	Bonding jumper · duct cover band	DCN · DSP	Duct connector · duct separator
BR	Bracket (followed by TYPE)	W2 · W10W9	Width 200 · 1000 to 900	R3	Radius 300
A · B	Connection A (2-slot) · B (4-slot)	T12	Thickness 1.2 (fixed: connectors, clamps) Thickness 1.2 (fixed for connectors and clamps)	N4	Nominal 400 (bracket D3)
CHS · CHD	Single / double channel	PBS · PBD	Single / double post base	PBWS · PBWD	Square washer, single / double Washer for single / double channel

CH/PB: W · H = actual mm · P = decimal point · T = 0.1 mm (W41P4 = 41.4 mm · T26 = 2.6 mm)

How to order

- 1

Choose values in brackets and send the expanded item code with the quantity.

e.g. DVEI45W[2–10]R[3,6][A,B] → W2 · R3 · A → HVT-DVEI45W2R3A
- 2

For codes listed on the Order Details page, also state the detail shown there (e.g. Confirm height H).
- 3

Dimensions and materials follow each drawing’s table and REMARK.

Order unit EA = 1 pc · dimensions in mm (straight length = L value, e.g. L3000)
Order unit EA = one piece · dimensions in mm (length of straight pieces is shown as L, e.g. L3000)

For the codes below, please state the listed details with your order.

CH · PB: W/H in actual mm · P = decimal point · T in 0.1 mm
CH · PB: W41P4 = 41.4 mm · H110 = 110 mm · T26 = 2.6 mm

HVT-BR-007

Specify bolt length L

HVT-BRD1W4 HVT-BRD1W5 HVT-BRD1W6

HVT-BR-008

Specify bolt length L

HVT-BRD2W7 HVT-BRD2W8

HVT-BR-009

Specify bolt length L

HVT-BRD3N4 HVT-BRD3N5 HVT-BRD3N6

HVT-BR-010

Specify cut length L (mm)

HVT-CHDW41P4H82P8T26 HVT-CHSW41P4H41P4T26

HVT-BR-011

Confirm washer hole dia.

HVT-PBWSW41T60

HVT-BR-012

Confirm washer hole dia.

HVT-PBWDW41T60

HVT-CR-033

Confirm connection geometry

HVT-RC310T10 HVT-RC310T12 HVT-RC310T14

HVT-CR-034

Confirm connection geometry

HVT-BC260T10 HVT-BC260T12 HVT-BC260T14

HVT-CR-037

Confirm assembly dimensions, terminals and fasteners

HVT-BJ35

HVT-CR-053

Confirm length L

HVT-DCNW2 HVT-DCNW10

HVT-CR-054

Confirm bolt length

HVT-DCBW2 HVT-DCBW3 HVT-DCBW4 HVT-DCBW5 HVT-DCBW6 HVT-DCBW7
HVT-DCBW8 HVT-DCBW9 HVT-DCBW10

HVT-CR-055

Confirm height H and fixing positions

Confirm length L

HVT-DSPW2 HVT-DSPW10

HVT-CR-055

Confirm height H and fixing positions

HVT-DSPW3 HVT-DSPW4 HVT-DSPW5 HVT-DSPW6 HVT-DSPW7 HVT-DSPW8 HVT-DSPW9

HVT- prefix omitted · [2–10] integer range · [3,6] · [A,B] choices · ; alternatives

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HVT-CR-001-B · STRAIGHT TRAY	p. 09
STW[2–10]B	
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STCW[2–10]	
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HE90W[2–10]R[3,6][A,B]	
HVT-CR-004 · 90° HORIZONTAL TRAY ELBOW COVER	p. 12
HEC90W[2–10]R[3,6]	
HVT-CR-005 · 60° HORIZONTAL TRAY ELBOW	p. 13
HE60W[2–10]R[3,6][A,B]	
HVT-CR-006 · 60° HORIZONTAL TRAY ELBOW COVER	p. 14
HEC60W[2–10]R[3,6]	
HVT-CR-007 · 45° HORIZONTAL TRAY ELBOW	p. 15
HE45W[2–10]R[3,6][A,B]	
HVT-CR-008 · 45° HORIZONTAL TRAY ELBOW COVER	p. 16
HEC45W[2–10]R[3,6]	
HVT-CR-009 · TRAY TEE	p. 17
HTW[2–10]R[3,6][A,B]	
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HTCW[2–10]R[3,6]	
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HXW[2–10]R[3,6][A,B]	
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HVT-CR-026 · STRAIGHT TRAY REDUCER COVER	p. 34
RDC[W3W2,W4W2,W4W3,W5W3,W5W4,W6W4,W6W5,W7W5,W7W6,W8W6,W8W7,W9W7,W9W8,W10W8,W10W9]	

HVT-CR-027 · LEFT HAND STRAIGHT TRAY REDUCER	p. 35
RDL[W3W2,W4W2,W4W3,W5W3,W5W4,W6W4,W6W5,W7W5,W7W6,W8W6,W8W7,W9W7,W9W8,W10W8,W10W9][A,B]	
HVT-CR-028 · LEFT HAND TRAY REDUCER COVER	p. 36
RDLC[W3W2,W4W2,W4W3,W5W3,W5W4,W6W4,W6W5,W7W5,W7W6,W8W6,W8W7,W9W7,W9W8,W10W8,W10W9]	
HVT-CR-029 · RIGHT HAND STRAIGHT TRAY REDUCER	p. 37
RDR[W3W2,W4W2,W4W3,W5W3,W5W4,W6W4,W6W5,W7W5,W7W6,W8W6,W8W7,W9W7,W9W8,W10W8,W10W9][A,B]	
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RDRC[W3W2,W4W2,W4W3,W5W3,W5W4,W6W4,W6W5,W7W5,W7W6,W8W6,W8W7,W9W7,W9W8,W10W8,W10W9]	
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HVT-CR-056 · TRAY VERTICAL SEPARATOR	p. 40
VSP65	
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HSP75	
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HVT-CR-035 · HOLD DOWN CLAMP	p. 45
HCT[14,20]	
HVT-CR-036 · BLIND END	p. 46
BEW[2–10]	

HVT- prefix omitted · [2–10] integer range · [3,6] · [A,B] choices · ; alternatives

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BJ[16,35]	
HVT-CR-038 · STRAIGHT DUCT	p. 48
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HVT-CR-039 · 90° HORIZONTAL DUCT ELBOW	p. 49
DHE90W[2–10]R[3,6][A,B]	
HVT-CR-040 · 60° HORIZONTAL DUCT ELBOW	p. 50
DHE60W[2–10]R[3,6]	
HVT-CR-041 · 45° HORIZONTAL DUCT ELBOW	p. 51
DHE45W[2–10]R[3,6][A,B]	
HVT-CR-042 · DUCT TEE	p. 52
DHTW[2–10]R[3,6][A,B]	
HVT-CR-043 · DUCT CROSS	p. 53
DHXW[2–10]R[3,6][A,B]	
HVT-CR-044 · 90° VERTICAL DUCT ELBOW (INSIDE)	p. 54
DVEI90W[2–10]R[3,6][A,B]	
HVT-CR-045 · 90° VERTICAL DUCT ELBOW (OUTSIDE)	p. 55
DVEO90W[2–10]R[3,6][A,B]	
HVT-CR-046 · 60° VERTICAL DUCT ELBOW (INSIDE)	p. 56
DVEI60W[2–10]R[3,6]	
HVT-CR-047 · 60° VERTICAL DUCT ELBOW (OUTSIDE)	p. 57
DVEO60W[2–10]R[3,6]	
HVT-CR-048 · 45° VERTICAL DUCT ELBOW (INSIDE)	p. 58
DVEI45W[2–10]R[3,6][A,B]	
HVT-CR-049 · 45° VERTICAL DUCT ELBOW (OUTSIDE)	p. 59
DVEO45W[2–10]R[3,6][A,B]	

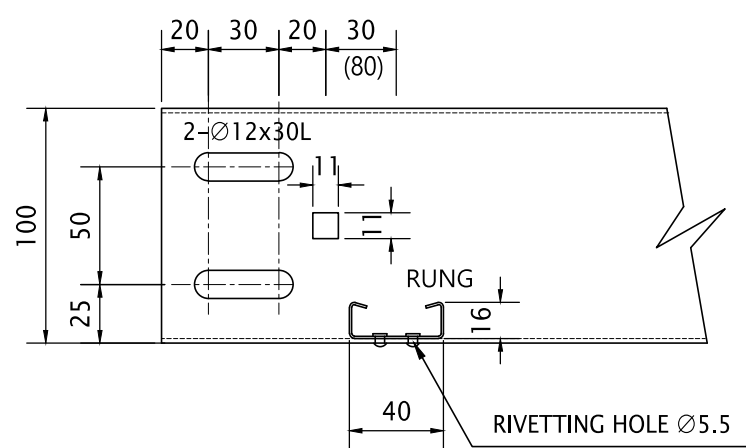
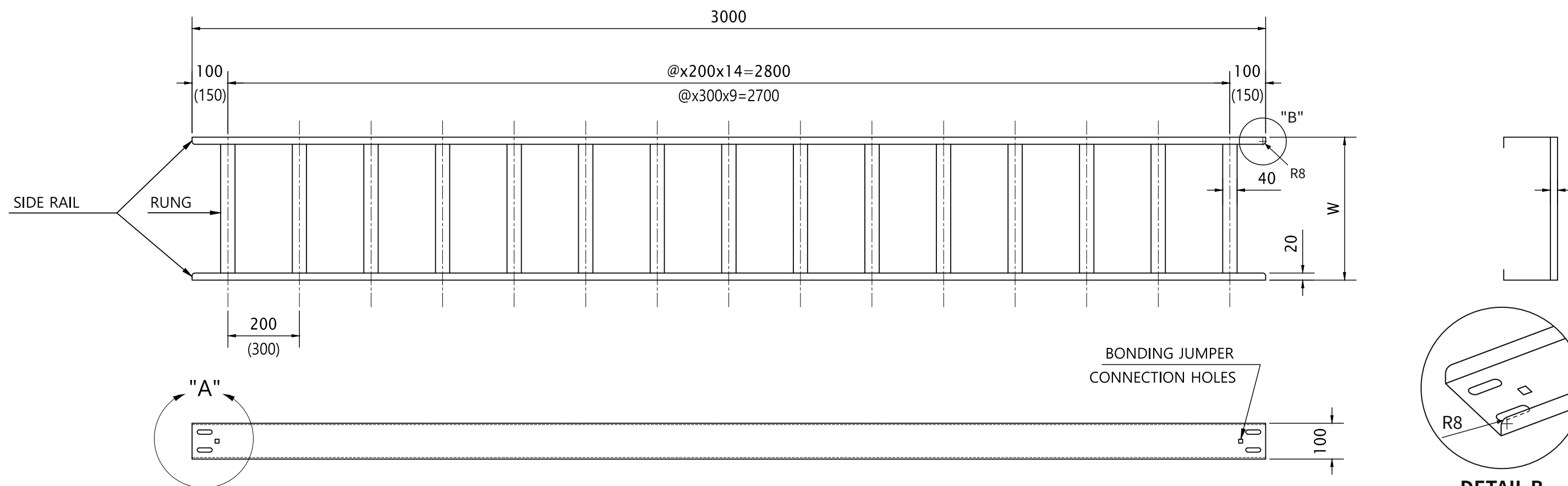
HVT-CR-050 · STRAIGHT DUCT REDUCER	p. 60
DRD[W3W2,W4W2,W4W3,W5W3,W5W4,W6W4,W6W5,W7W5,W7W6,W8W6,W8W7,W9W7,W9W8,W10W8,W10W9][A,B]	
HVT-CR-051 · LEFT HAND STRAIGHT DUCT REDUCER	p. 61
DRDL[W3W2,W4W2,W4W3,W5W3,W5W4,W6W4,W6W5,W7W5,W7W6,W8W6,W8W7,W9W7,W9W8,W10W8,W10W9][A,B]	
HVT-CR-052 · RIGHT HAND STRAIGHT DUCT REDUCER	p. 62
DRDR[W3W2,W4W2,W4W3,W5W3,W5W4,W6W4,W6W5,W7W5,W7W6,W8W6,W8W7,W9W7,W9W8,W10W8,W10W9][A,B]	
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PBSAW135H110T120; PBWSW41T60	
HVT-BR-012 · DOUBLE CHANNEL POST BASE / SQUARE WASHER	p. 78
PBD4W150H140T120; PBDBW150H140T120; PBWDW41T60	

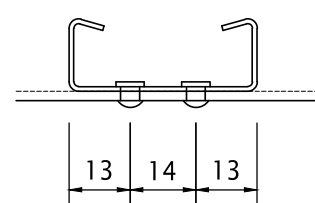
CR TRAY STRAIGHT (3.0m)

TYPE A

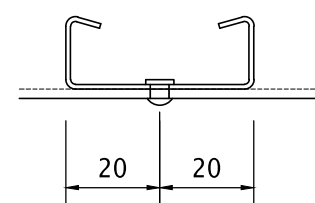
UNIT mm · N.S.



DETAIL "A"



RIVETING A-TYPE
(first and last RUNG)



RIVETING B-TYPE
(middle RUNGs)

W(mm)	CR PosMAC (kg/EA)	Item No.
200	7.94	HVT-STW2A
300	8.7	HVT-STW3A
400	9.46	HVT-STW4A
500	12.33	HVT-STW5A
600	13.27	HVT-STW6A
700	14.21	HVT-STW7A
800	17.8	HVT-STW8A
900	18.92	HVT-STW9A
1000	20.03	HVT-STW10A

REMARK (KS D 3030)	
Material · plate unit weight	
Hot-dip coated steel sheet (KS D 3506, KS D 3030) - CR PosMA	
PLATE	1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ²
Rung · side rail section	
RUNG	Up to 800W : 40×16×9×1.0t 900W, 1000W : 40×16×9×1.2t
SIDE RAIL	Up to 700W : 100H×20×1.2t 750W~1000W : 100H×20×1.4t
Rung spacing	
	Up to 700W : 300mm 750W~1000W : 200mm
Coating mass (total, both sides)	
PLATE	: 1.0t, 1.2t, 1.4t : 250g/m ²
Rivet	
RIVET	: 5Ø×7.0L (brass alloy)
Fabrication basis	
	See fabrication specification

HANVIT TRAY Co., Ltd.

DRAWING NO.

HVT-CR-001-A

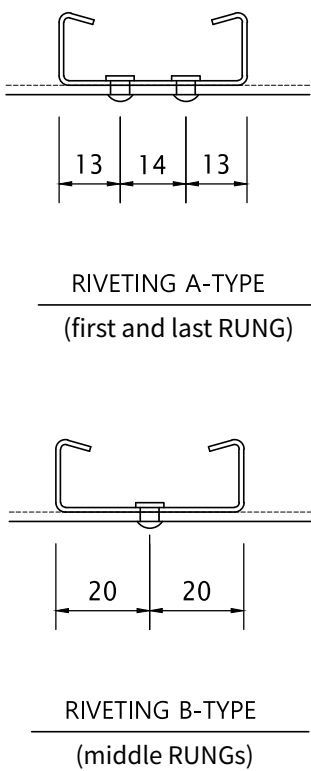
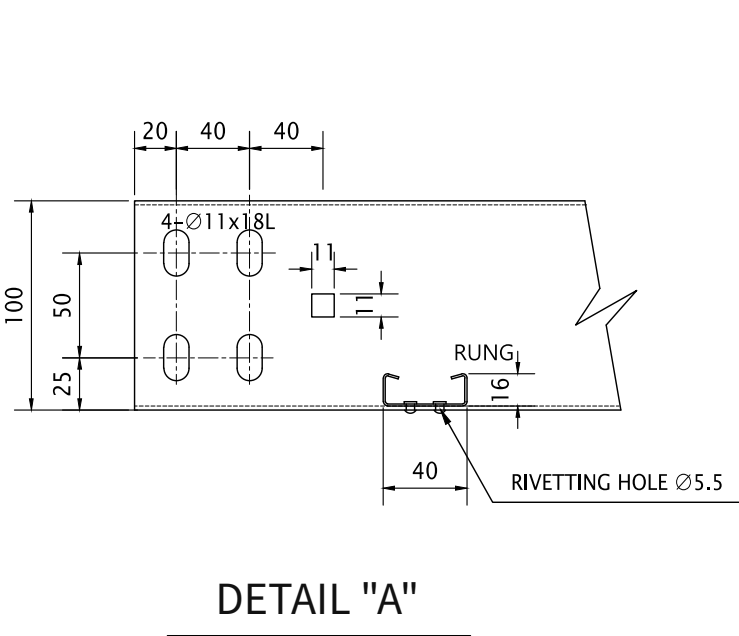
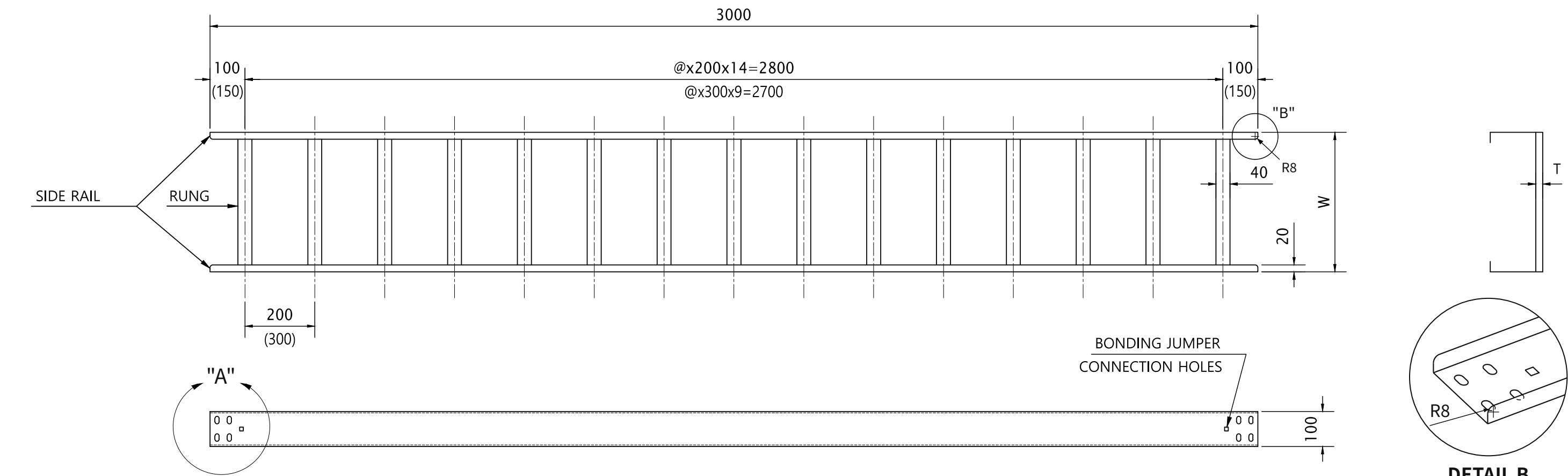
UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

CR TRAY STRAIGHT (3.0m)

TYPE B

UNIT mm · N.S.



W(mm)	CR PosMAC (kg/EA)	Item No.
200	7.94	HVT-STW2B
300	8.7	HVT-STW3B
400	9.46	HVT-STW4B
500	12.33	HVT-STW5B
600	13.27	HVT-STW6B
700	14.21	HVT-STW7B
800	17.8	HVT-STW8B
900	18.92	HVT-STW9B
1000	20.03	HVT-STW10B

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D 3030) - CR PosMAC PLATE 1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ²
Rung · side rail section RUNG Up to 800W : 40×16×9×1.0t 900W, 1000W : 40×16×9×1.2t SIDE RAIL Up to 700W : 100H×20×1.2t 750W~1000W : 100H×20×1.4t
Rung spacing Up to 700W : 300mm 750W~1000W : 200mm
Coating mass (total, both sides) PLATE : 1.0t, 1.2t, 1.4t : 250g/m ²
Rivet RIVET : 5Ø×7.0L (brass alloy)
Fabrication basis See fabrication specification

HANVIT TRAY Co., Ltd.

DRAWING NO.

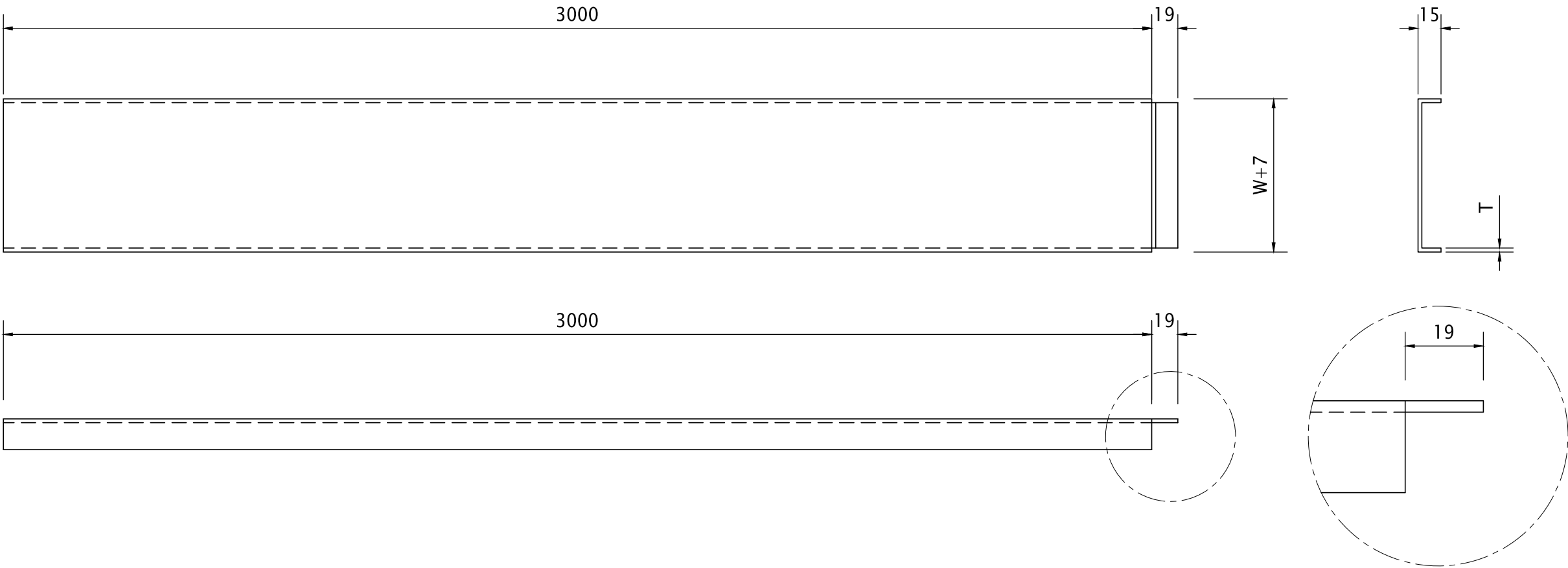
HVT-CR-001-B

UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

CR COVER FOR TRAY STRAIGHT (3.0m)

UNIT mm · N.S.



W(mm)	CR PosMAC (kg/EA)	Item No.	REMARK (KS D 3030)
200	5.8	HVT-STCW2	Material · plate unit weight Hot-dip coated steel sheet CR PosMAC PLATE 1.0t : 6.42kg/m ² Coating mass (total, both sides) PLATE : 1.0t, 250g/m ² Fabrication basis See fabrication specification
300	8.3	HVT-STCW3	
400	10.7	HVT-STCW4	
500	13.2	HVT-STCW5	
600	15.68	HVT-STCW6	
700	18.15	HVT-STCW7	
800	20.62	HVT-STCW8	
900	23.09	HVT-STCW9	
1000	25.56	HVT-STCW10	

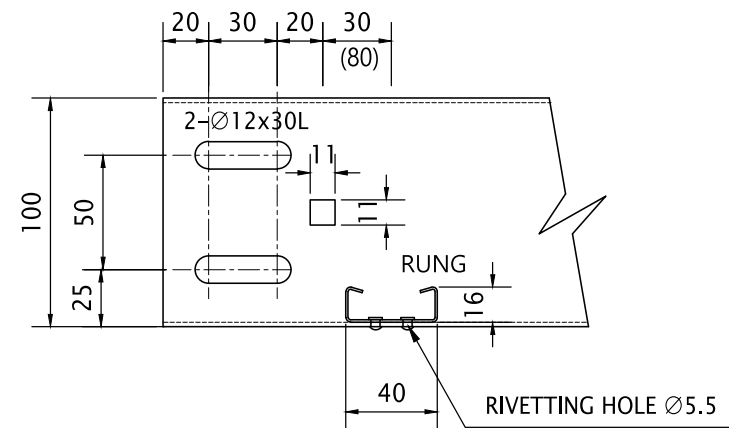
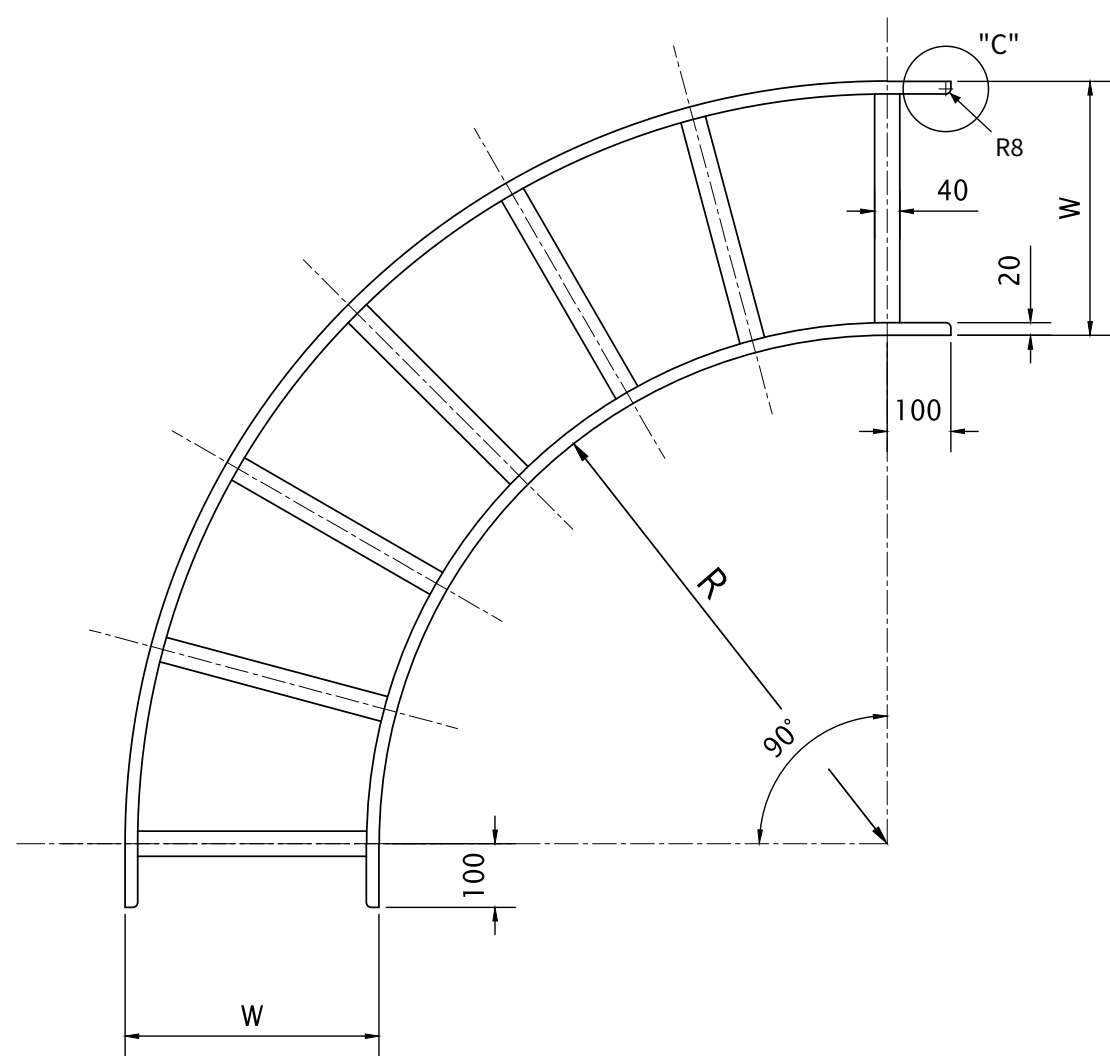
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-002

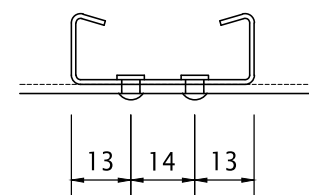
UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

90° CR HORIZONTAL TRAY ELBOW

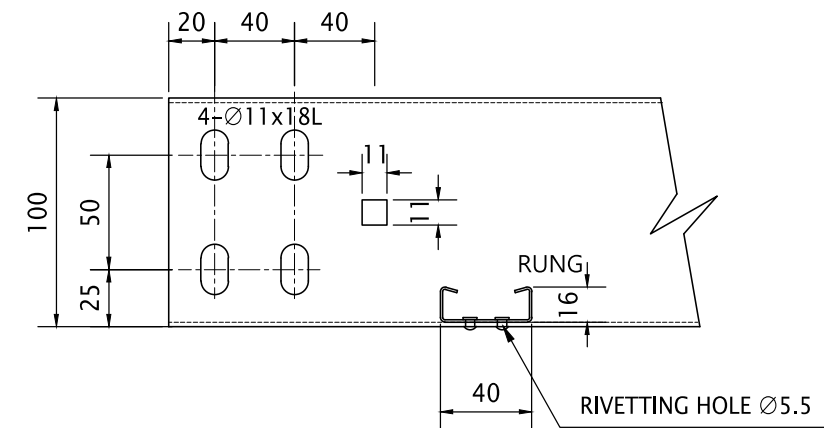
UNIT mm · N.S.



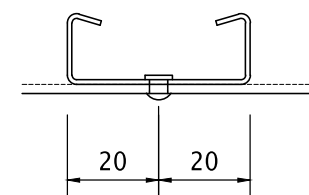
DETAIL "A"



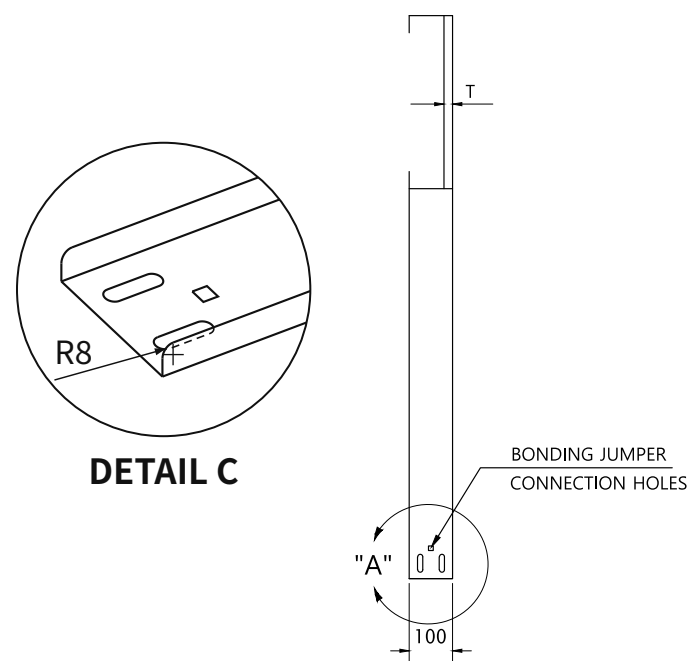
RIVETING A-TYPE
(first and last RUNG)



DETAIL "B"



RIVETING B-TYPE
(middle RUNGS)



W(mm)	CR PosMAC (kg/EA)			
	R=300	Item No.	R=600	Item No.
200	2.73	A HVT-HE90W2R3A B HVT-HE90W2R3B	4.23	A HVT-HE90W2R6A B HVT-HE90W2R6B
300	3.25	A HVT-HE90W3R3A B HVT-HE90W3R3B	5.04	A HVT-HE90W3R6A B HVT-HE90W3R6B
400	3.77	A HVT-HE90W4R3A B HVT-HE90W4R3B	5.84	A HVT-HE90W4R6A B HVT-HE90W4R6B
500	4.6	A HVT-HE90W5R3A B HVT-HE90W5R3B	7.13	A HVT-HE90W5R6A B HVT-HE90W5R6B
600	5.19	A HVT-HE90W6R3A B HVT-HE90W6R3B	8.05	A HVT-HE90W6R6A B HVT-HE90W6R6B
700	6.22	A HVT-HE90W7R3A B HVT-HE90W7R3B	9.64	A HVT-HE90W7R6A B HVT-HE90W7R6B
800	8.55	A HVT-HE90W8R3A B HVT-HE90W8R3B	13.25	A HVT-HE90W8R6A B HVT-HE90W8R6B
900	10.16	A HVT-HE90W9R3A B HVT-HE90W9R3B	15.75	A HVT-HE90W9R6A B HVT-HE90W9R6B
1000	11.07	A HVT-HE90W10R3A B HVT-HE90W10R3B	17.16	A HVT-HE90W10R6A B HVT-HE90W10R6B

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D 3030) - CR PosMAC PLATE 1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ²
Rung · side rail section RUNG Up to 800W : 40×16×9×1.0t 900W, 1000W : 40×16×9×1.2t SIDE RAIL Up to 700W : 100H×20×1.2t 750W~1000W : 100H×20×1.4t
Rung spacing Up to 700W : 300mm 750W~1000W : 200mm
Coating mass (total, both sides) PLATE : 1.0t, 1.2t, 1.4t : 250g/m ²
Rivet RIVET : 5Ø×7.0L (brass alloy)
Fabrication basis See fabrication specification

HANVIT TRAY Co., Ltd.

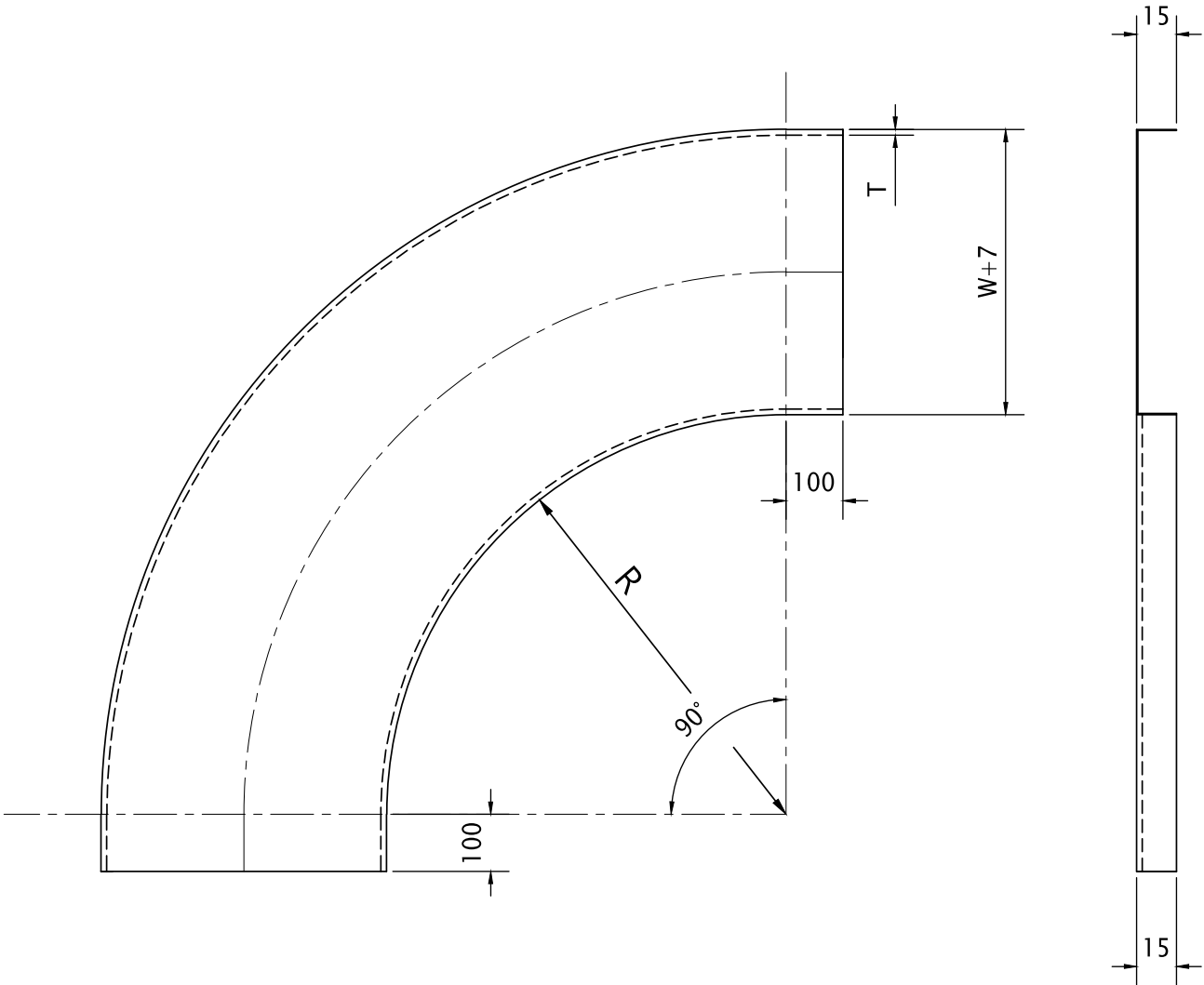
DRAWING NO.
HVT-CR-003

UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

CR COVER FOR 90° HORIZONTAL TRAY ELBOW

UNIT mm · N.S.



W(mm)	CR PosMAC (kg/EA)			
	R=296.5	Item No.	R=596.5	Item No.
200	1.58	HVT-HEC90W2R3	2.45	HVT-HEC90W2R6
300	2.46	HVT-HEC90W3R3	3.81	HVT-HEC90W3R6
400	3.46	HVT-HEC90W4R3	5.36	HVT-HEC90W4R6
500	5.52	HVT-HEC90W5R3	8.56	HVT-HEC90W5R6
600	7.04	HVT-HEC90W6R3	10.91	HVT-HEC90W6R6
700	8.71	HVT-HEC90W7R3	13.51	HVT-HEC90W7R6
800	10.52	HVT-HEC90W8R3	16.31	HVT-HEC90W8R6
900	12.49	HVT-HEC90W9R3	19.36	HVT-HEC90W9R6
1000	14.61	HVT-HEC90W10R3	22.64	HVT-HEC90W10R6

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet CR PosMAC PLATE 1.0t : 6.42kg/m ² Coating mass (total, both sides) PLATE : 1.0t : 250g/m ² Fabrication basis See fabrication specification

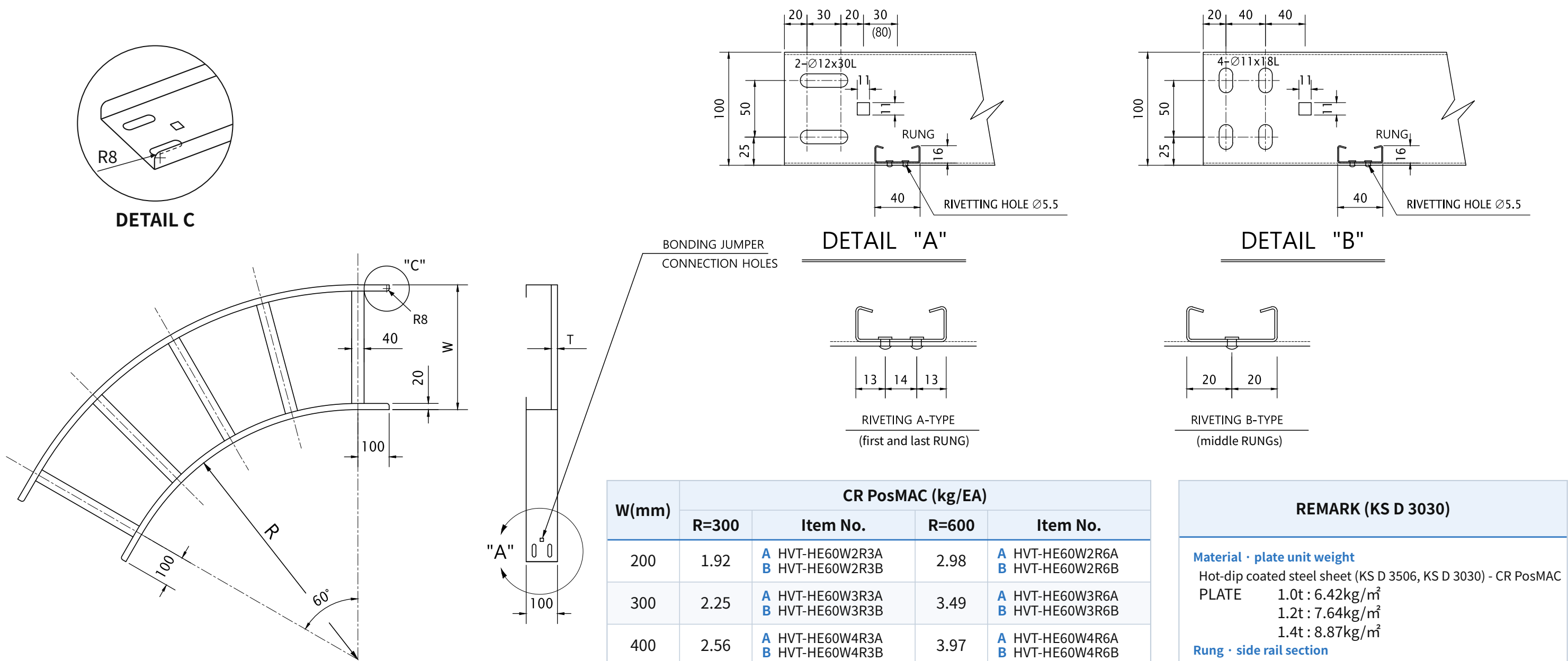
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-004

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

60° CR HORIZONTAL TRAY ELBOW

UNIT mm · N.S.



HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-005

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR COVER FOR 60° HORIZONTAL TRAY ELBOW

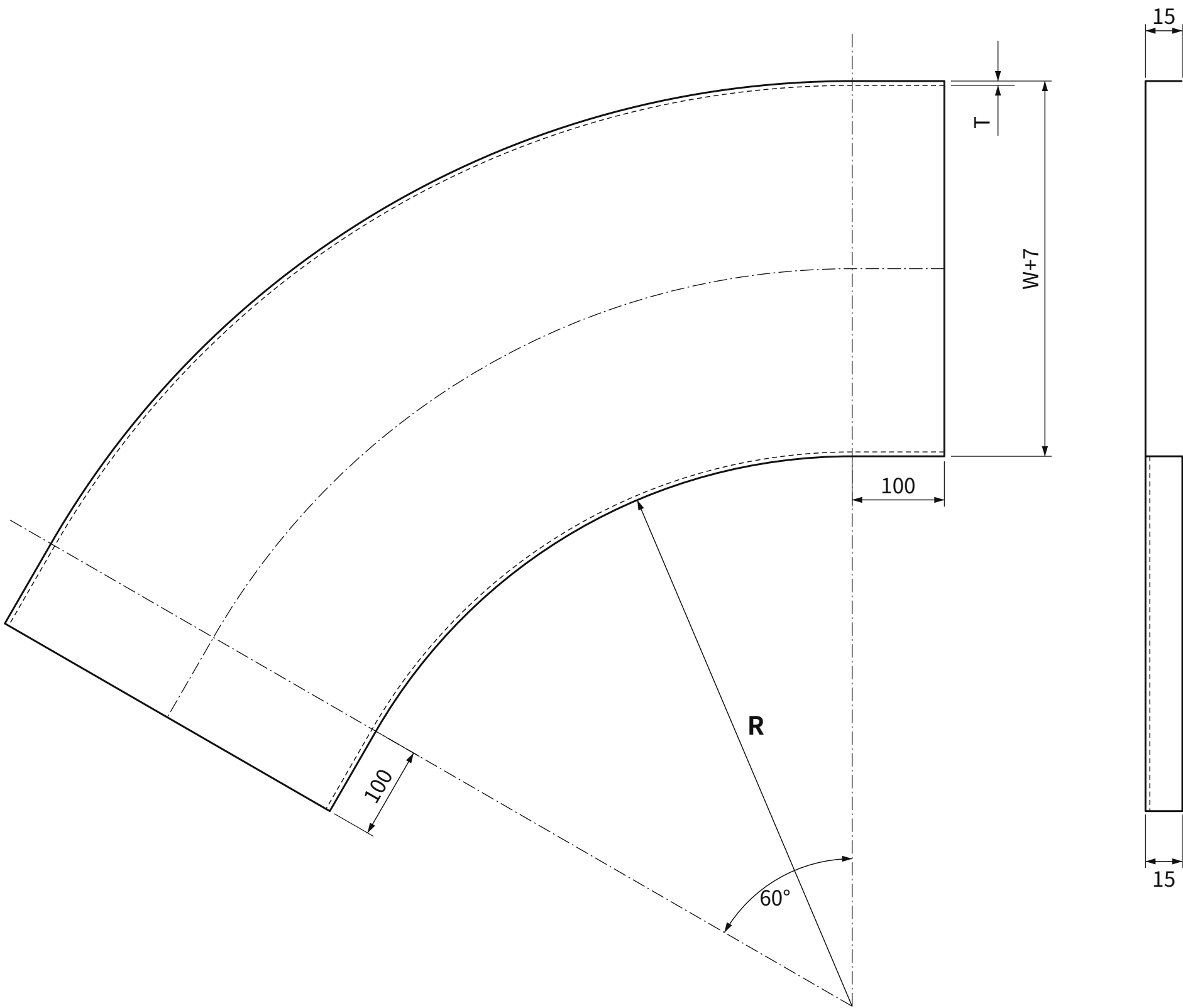
UNIT mm · N.S.

Size table · CR PosMAC

W (mm)	CR PosMAC (kg/EA)			
	R=296.5	Item No.	R=596.5	Item No.
200	1.09	HVT-HEC60W2R3	1.61	HVT-HEC60W2R6
300	1.68	HVT-HEC60W3R3	2.4	HVT-HEC60W3R6
400	2.34	HVT-HEC60W4R3	3.27	HVT-HEC60W4R6
500	3.06	HVT-HEC60W5R3	4.21	HVT-HEC60W5R6
600	3.86	HVT-HEC60W6R3	5.2	HVT-HEC60W6R6
700	6.7	HVT-HEC60W7R3	6.31	HVT-HEC60W7R6
800	5.67	HVT-HEC60W8R3	7.46	HVT-HEC60W8R6
900	6.68	HVT-HEC60W9R3	8.68	HVT-HEC60W9R6
1000	7.76	HVT-HEC60W10R3	9.98	HVT-HEC60W10R6

REMARK (KS D 3030)

Material · plate unit weight
Hot-dip coated steel sheet CR PosMAC
PLATE 1.0t : 6.42 kg/m²
Coating mass (total, both sides)
PLATE 1.0t : 250 g/m²
Fabrication basis
See fabrication specification



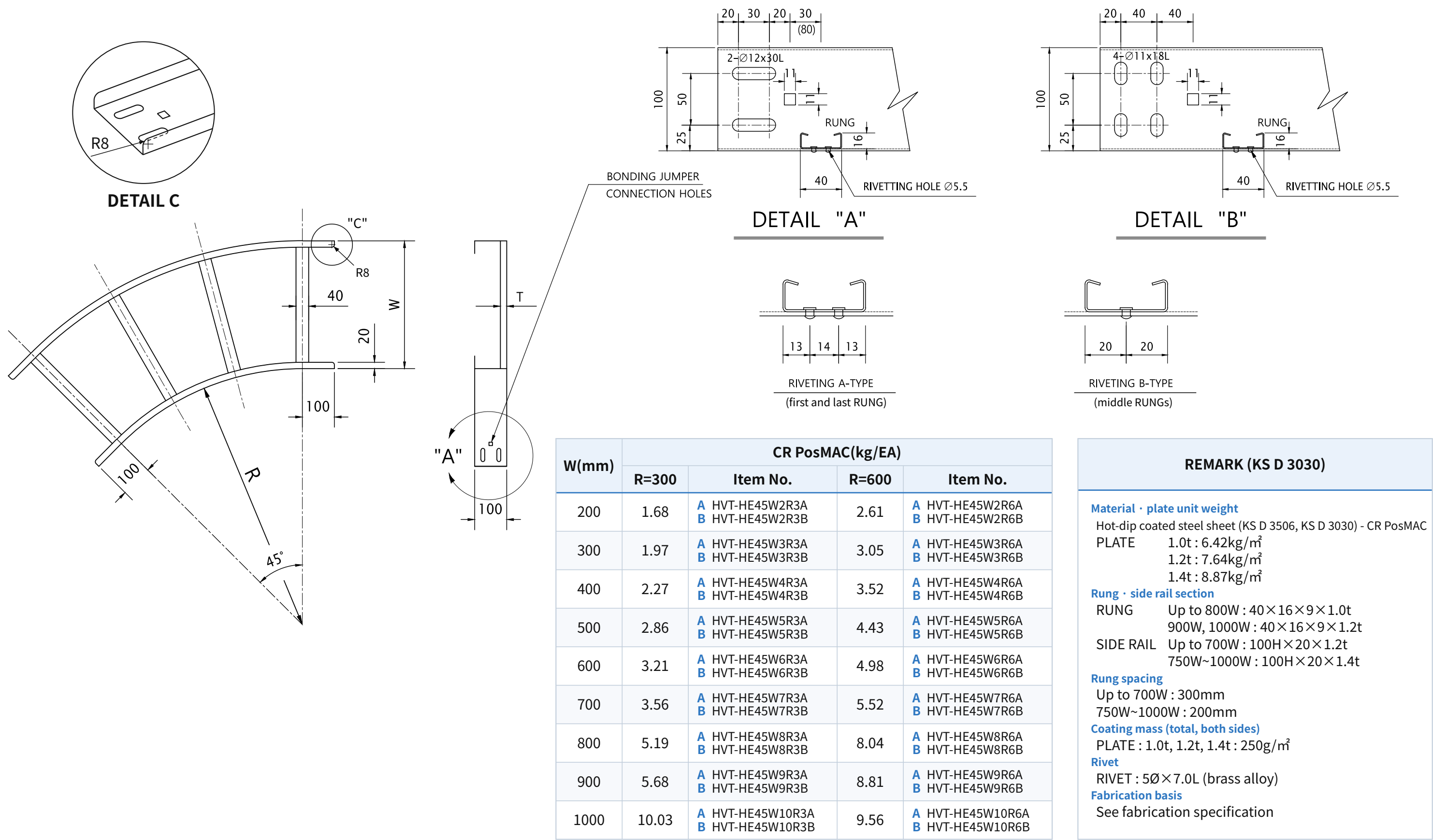
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-006

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

45° CR HORIZONTAL TRAY ELBOW

UNIT mm · N.S.



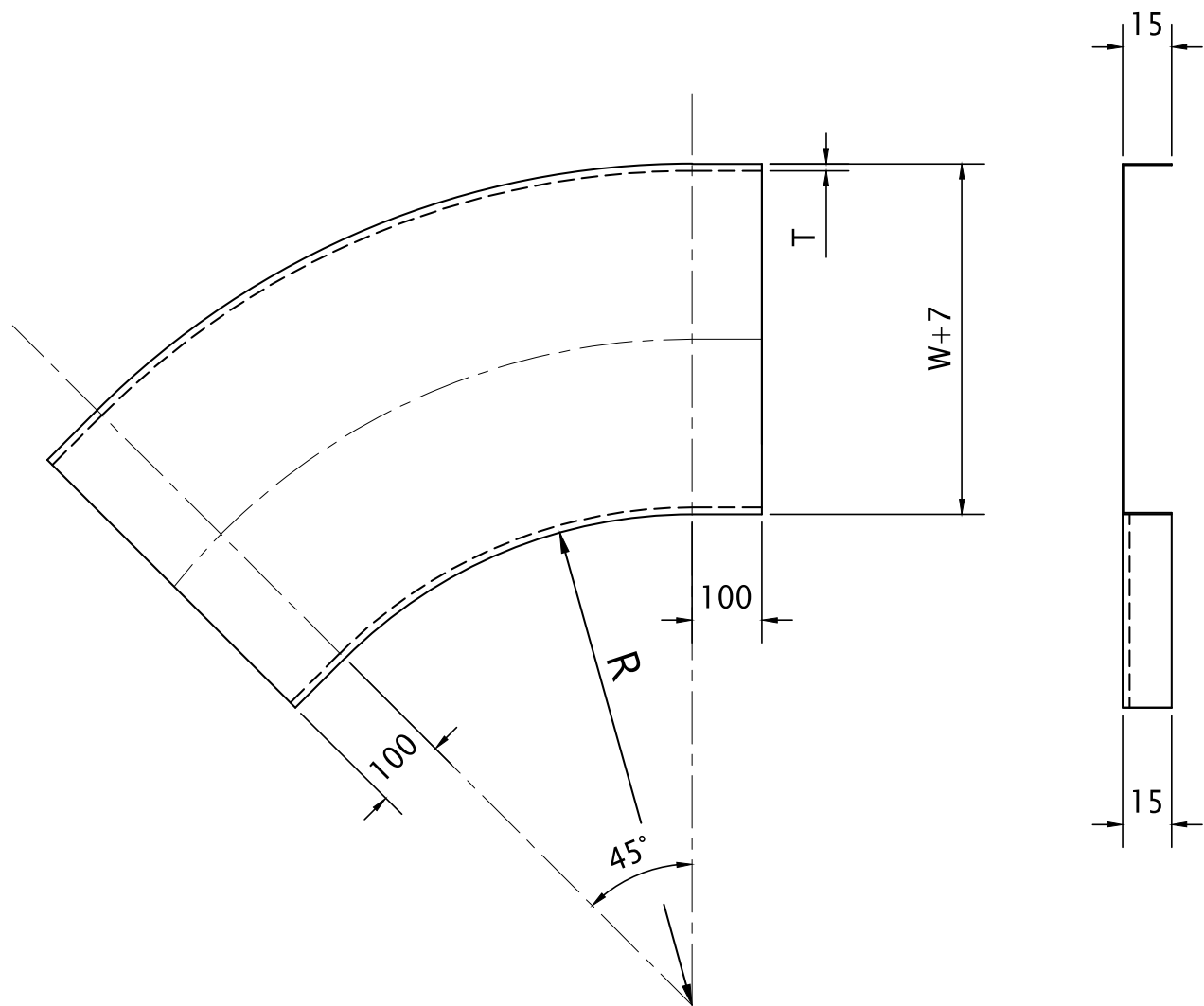
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-007

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR COVER FOR 45° HORIZONTAL TRAY ELBOW

UNIT mm · N.S.



W(mm)	CR PosMAC (kg/EA)			
	R=296.5	Item No.	R=596.5	Item No.
200	0.98	HVT-HEC45W2R3	1.52	HVT-HEC45W2R6
300	1.5	HVT-HEC45W3R3	2.33	HVT-HEC45W3R6
400	2.08	HVT-HEC45W4R3	3.22	HVT-HEC45W4R6
500	3.29	HVT-HEC45W5R3	5.09	HVT-HEC45W5R6
600	4.14	HVT-HEC45W6R3	6.41	HVT-HEC45W6R6
700	5.07	HVT-HEC45W7R3	7.86	HVT-HEC45W7R6
800	6.08	HVT-HEC45W8R3	9.42	HVT-HEC45W8R6
900	7.16	HVT-HEC45W9R3	11.09	HVT-HEC45W9R6
1000	8.31	HVT-HEC45W10R3	12.88	HVT-HEC45W10R6

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet CR PosMAC PLATE 1.0t : 6.42kg/m ² Coating mass (total, both sides) PLATE : 1.0t : 250g/m ² Fabrication basis See fabrication specification

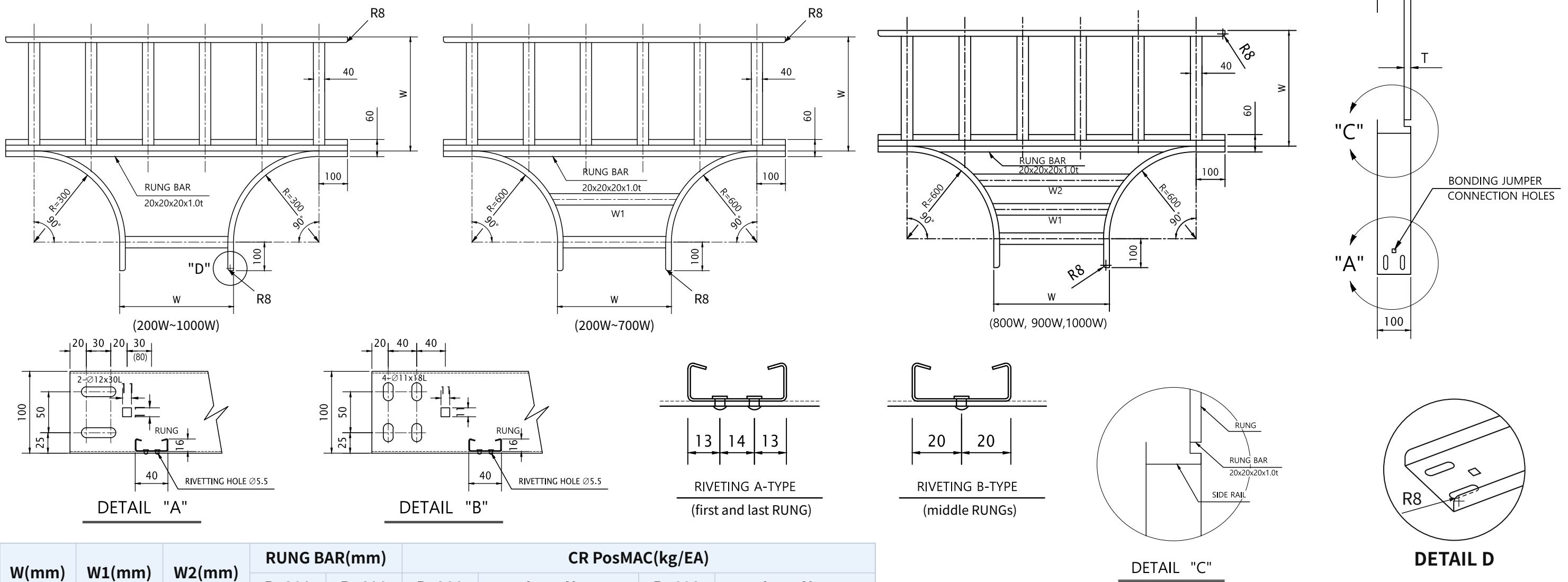
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-008

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR TRAY TEE

UNIT mm · N.S.



W(mm)	W1(mm)	W2(mm)	RUNG BAR(mm)		CR PosMAC(kg/EA)			
			R=300	R=600	R=300	Item No.	R=600	Item No.
200	376		755	1355	3.72	A HVT-HTW2R3A B HVT-HTW2R3B	5.77	A HVT-HTW2R6A B HVT-HTW2R6B
300	476		855	1455	4.36	A HVT-HTW3R3A B HVT-HTW3R3B	6.76	A HVT-HTW3R6A B HVT-HTW3R6B
400	576		955	1555	4.75	A HVT-HTW4R3A B HVT-HTW4R3B	7.36	A HVT-HTW4R6A B HVT-HTW4R6B
500	676		1055	1655	5.56	A HVT-HTW5R3A B HVT-HTW5R3B	8.62	A HVT-HTW5R6A B HVT-HTW5R6B
600	776		1155	1755	6.12	A HVT-HTW6R3A B HVT-HTW6R3B	9.49	A HVT-HTW6R6A B HVT-HTW6R6B
700	876		1255	1855	7.12	A HVT-HTW7R3A B HVT-HTW7R3B	11.04	A HVT-HTW7R6A B HVT-HTW7R6B
800	876	1133	1355	1955	9.12	A HVT-HTW8R3A B HVT-HTW8R3B	14.13	A HVT-HTW8R6A B HVT-HTW8R6B
900	976	1233	1455	2055	10.53	A HVT-HTW9R3A B HVT-HTW9R3B	16.32	A HVT-HTW9R6A B HVT-HTW9R6B
1000	1076	1333	1555	2155	11.34	A HVT-HTW10R3A B HVT-HTW10R3B	17.58	A HVT-HTW10R6A B HVT-HTW10R6B

REMARK (KS D 3030)	
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D 3030) - CR PosMAC PLATE 1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ²	Rung spacing Up to 700W : 300mm 750W~1000W : 200mm Coating mass (total, both sides) PLATE : 1.0t, 1.2t, 1.4t : 250g/m ² Rivet RIVET : 5Ø×7.0L (brass alloy) Fabrication basis See fabrication specification
Rung · side rail section RUNG Up to 800W : 40×16×9×1.0t 900W, 1000W : 40×16×9×1.2t SIDE RAIL Up to 700W : 100H×20×1.2t 750W~1000W : 100H×20×1.4t	

HANVIT TRAY Co., Ltd.

DRAWING NO.

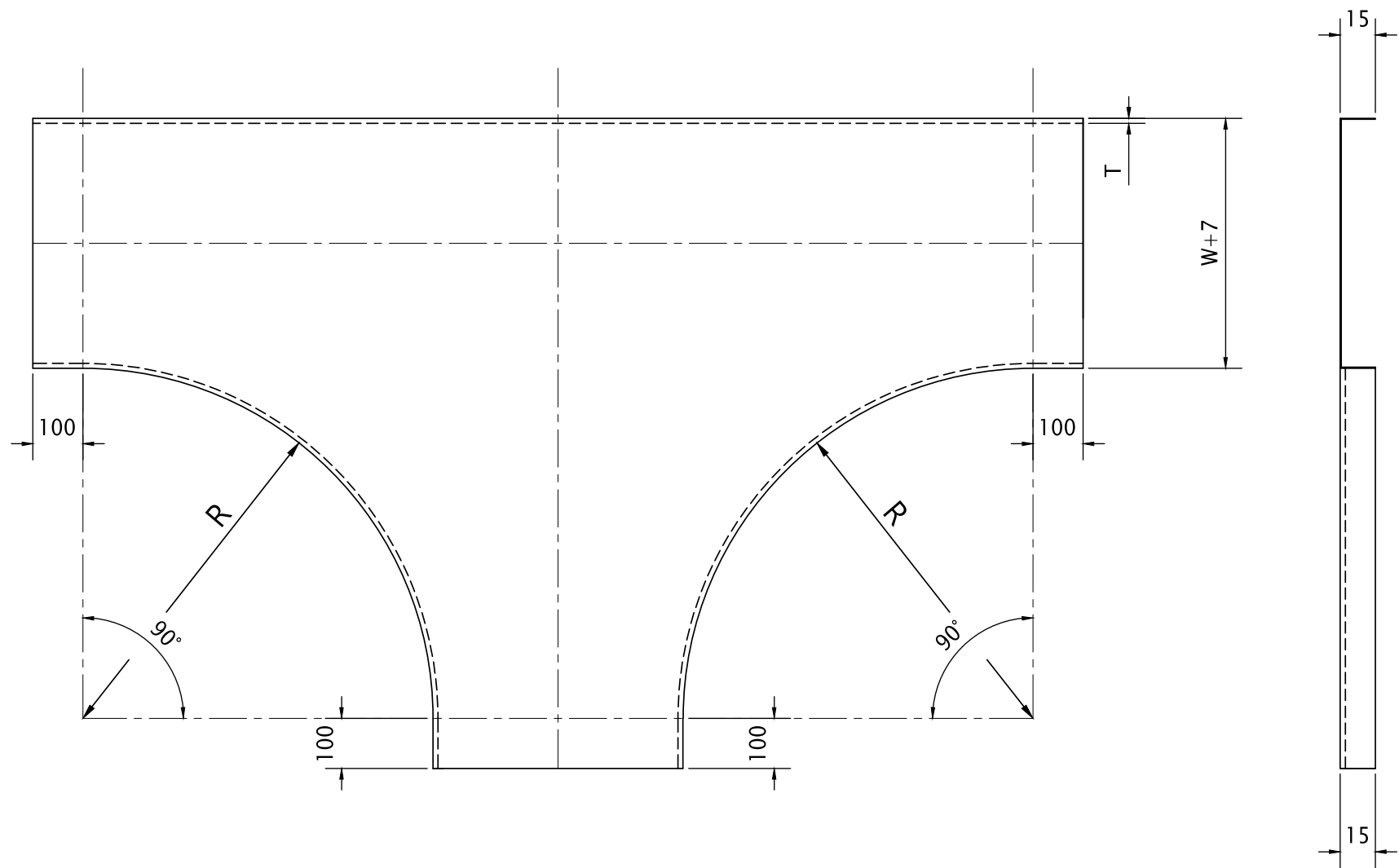
HVT-CR-009

UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

CR COVER FOR TRAY TEE

UNIT mm · N.S.



W(mm)	CR PosMAC (kg/EA)			
	R=296.5	Item No.	R=596.5	Item No.
200	2.87	HVT-HTCW2R3	4.45	HVT-HTCW2R6
300	4.24	HVT-HTCW3R3	6.57	HVT-HTCW3R6
400	5.76	HVT-HTCW4R3	8.92	HVT-HTCW4R6
500	8.94	HVT-HTCW5R3	13.86	HVT-HTCW5R6
600	11.16	HVT-HTCW6R3	17.29	HVT-HTCW6R6
700	13.56	HVT-HTCW7R3	21.01	HVT-HTCW7R6
800	16.17	HVT-HTCW8R3	25.06	HVT-HTCW8R6
900	18.96	HVT-HTCW9R3	29.39	HVT-HTCW9R6
1000	21.95	HVT-HTCW10R3	34.02	HVT-HTCW10R6

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet CR PosMAC PLATE 1.0t : 6.42kg/m² Coating mass (total, both sides) PLATE : 1.0t : 250g/m² Fabrication basis See fabrication specification

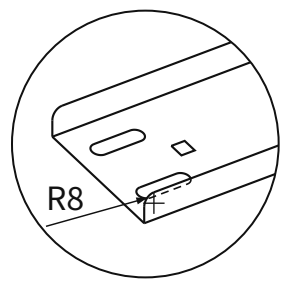
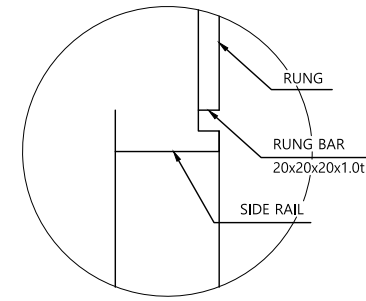
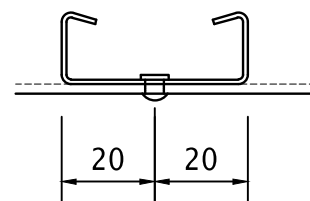
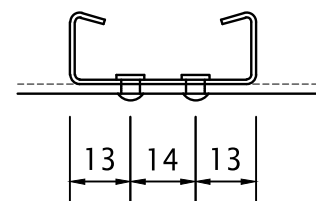
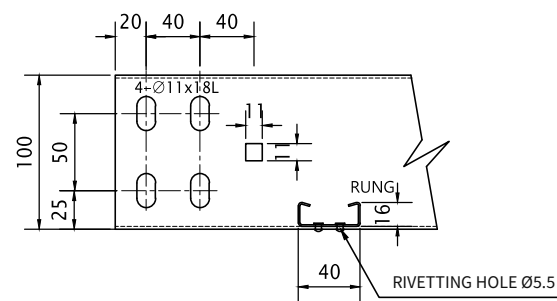
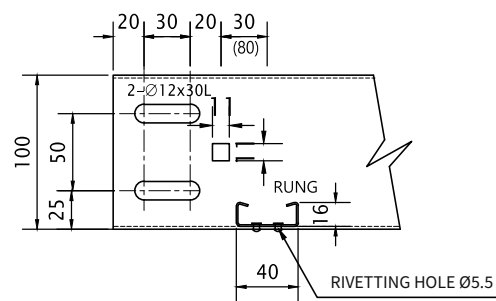
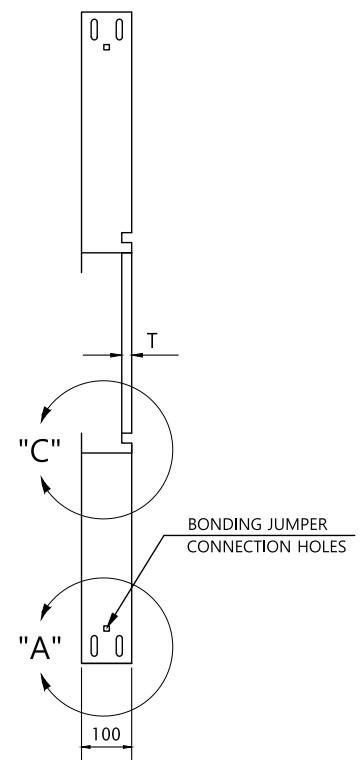
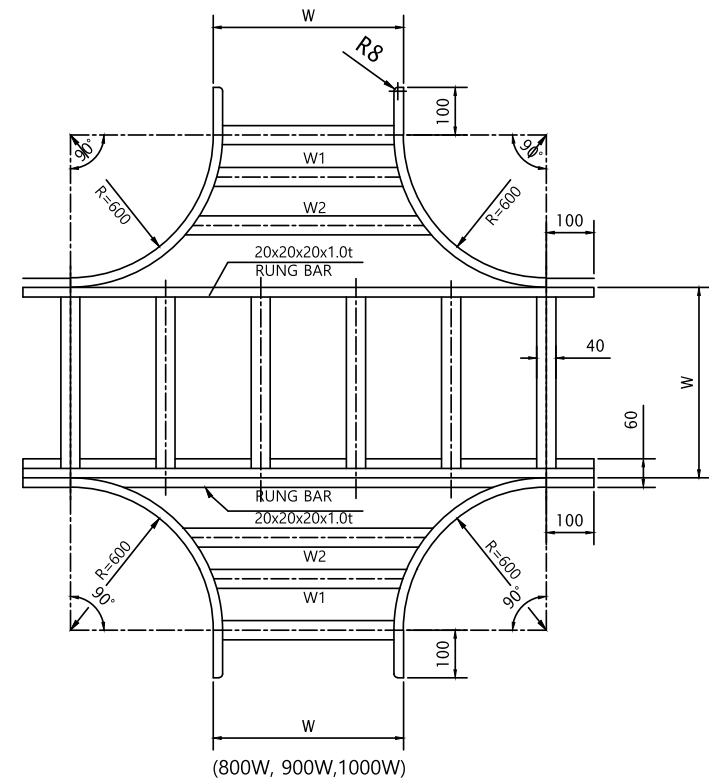
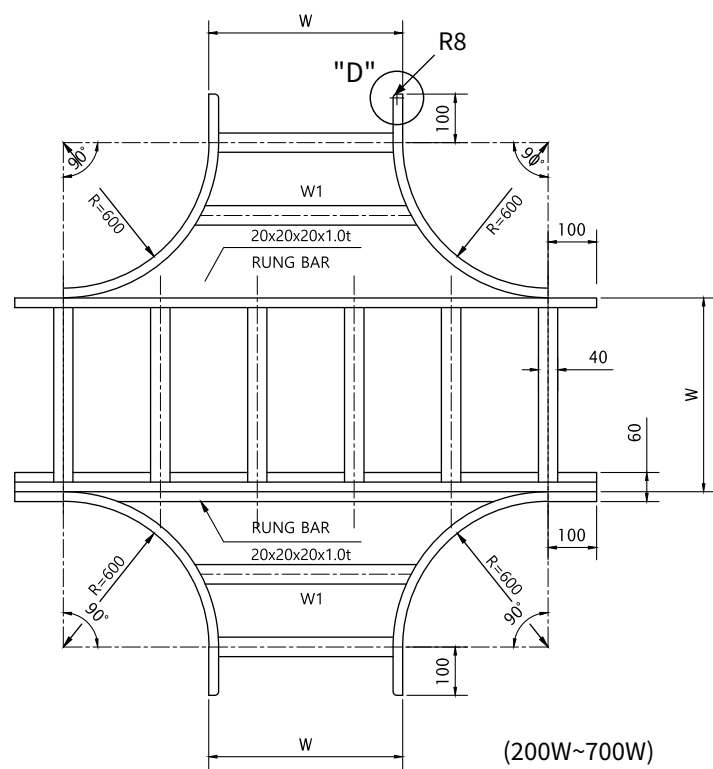
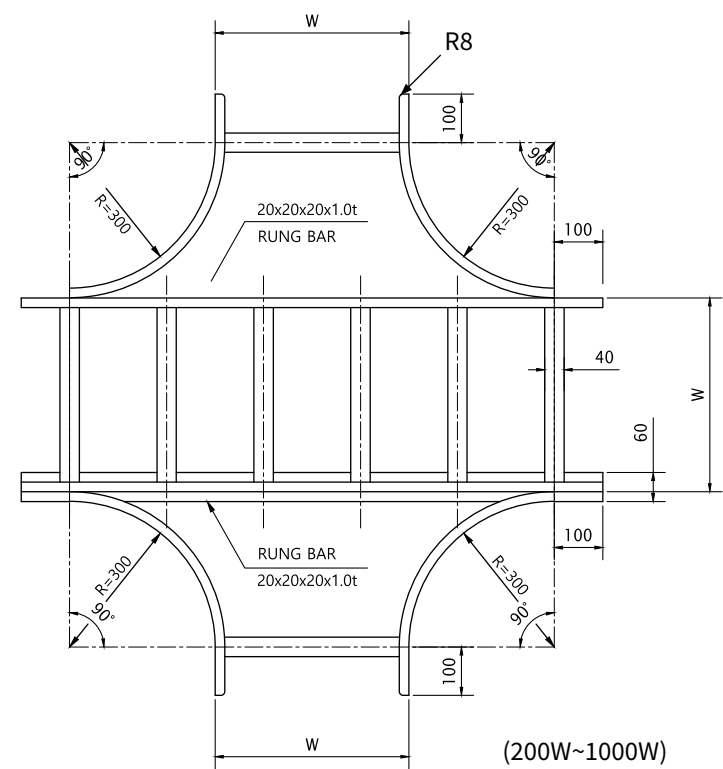
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-010

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR TRAY CROSS

UNIT mm · N.S.



W(mm)	W1(mm)	W2(mm)	RUNG BAR(mm)		CR PosMAC(kg/EA)		Item No. · HVT- prefix omitted			
			R=300	R=600	R=300	R=600	R=300 A	R=300 B	R=600 A	R=600 B
200	376		755	1355	4.28	6.63	HXW2R3A	HXW2R3B	HXW2R6A	HXW2R6B
300	476		855	1455	4.73	7.33	HXW3R3A	HXW3R3B	HXW3R6A	HXW3R6B
400	576		955	1555	5.18	8.03	HXW4R3A	HXW4R3B	HXW4R6A	HXW4R6B
500	676		1055	1655	6.4	9.92	HXW5R3A	HXW5R3B	HXW5R6A	HXW5R6B
600	776		1155	1755	7	10.85	HXW6R3A	HXW6R3B	HXW6R6A	HXW6R6B
700	876		1255	1855	7.36	11.41	HXW7R3A	HXW7R3B	HXW7R6A	HXW7R6B
800	876	1133	1355	1955	9.33	14.46	HXW8R3A	HXW8R3B	HXW8R6A	HXW8R6B
900	976	1233	1455	2055	10.68	16.55	HXW9R3A	HXW9R3B	HXW9R6A	HXW9R6B
1000	1076	1333	1555	2155	11.42	17.7	HXW10R3A	HXW10R3B	HXW10R6A	HXW10R6B

REMARK (KS D 3030)

Material · plate unit weight
Hot-dip coated steel sheet (KS D 3506, KS D 3030) - CR PosMAC
PLATE 1.0t : 6.42kg/m²
1.2t : 7.64kg/m²
1.4t : 8.87kg/m²

Rung · side rail section
RUNG Up to 800W : 40×16×9×1.0t
900W, 1000W : 40×16×9×1.2t
SIDE RAIL Up to 700W : 100H×20×1.2t
750W~1000W : 100H×20×1.4t

Rung spacing
Up to 700W : 300mm
750W~1000W : 200mm

Coating mass (total, both sides)
PLATE : 1.0t, 1.2t, 1.4t : 250g/m²

Rivet
RIVET : 5Ø×7.0L (brass alloy)

Fabrication basis
See fabrication specification

HANVIT TRAY Co., Ltd.

DRAWING NO.

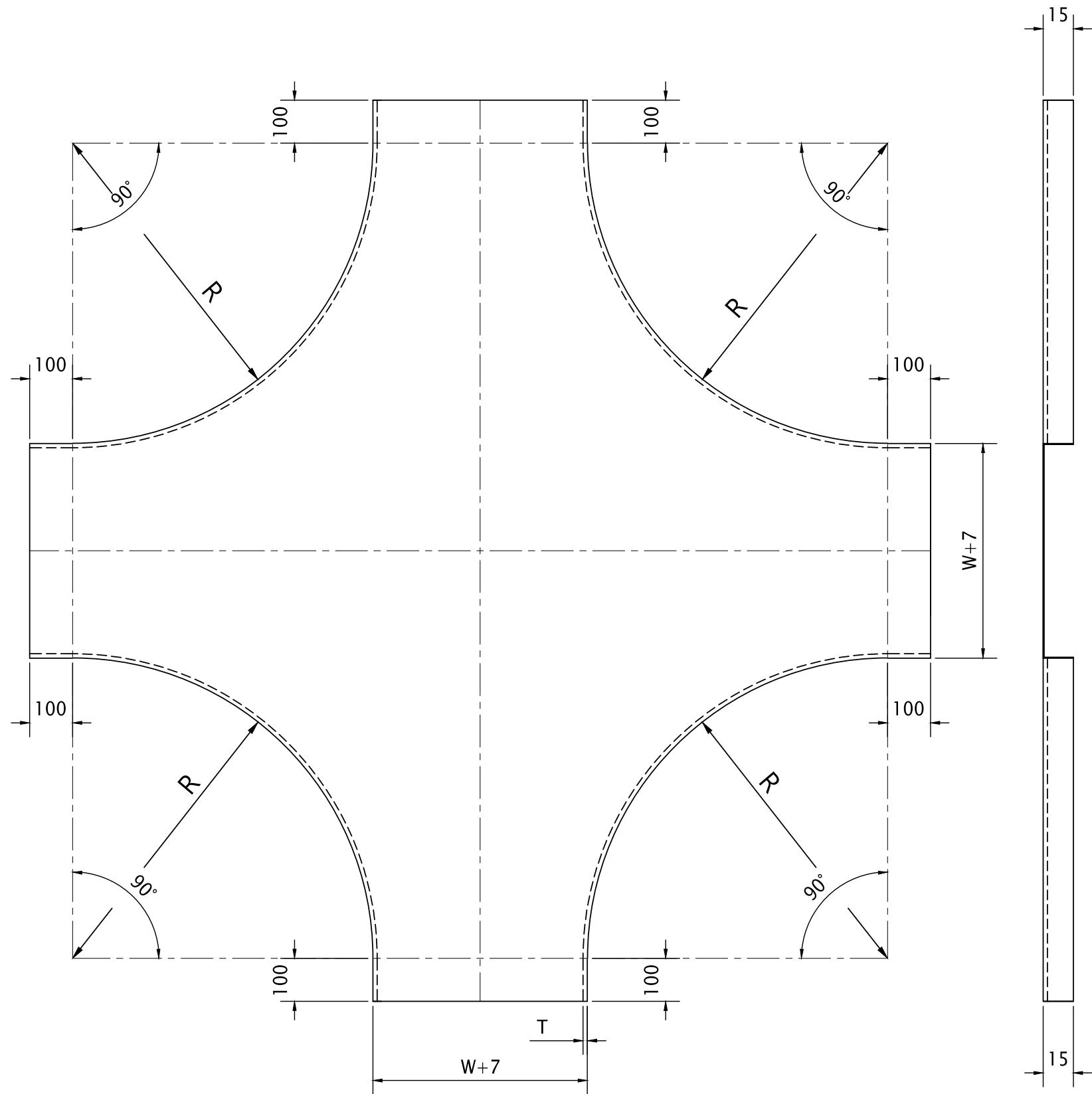
HVT-CR-011

UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

CR COVER FOR TRAY CROSS

UNIT mm · N.S.



W(mm)	CR PosMAC (kg/EA)			
	R=296.5	Item No.	R=596.5	Item No.
200	3.85	HVT-HXCW2R3	5.96	HVT-HXCW2R6
300	5.52	HVT-HXCW3R3	8.56	HVT-HXCW3R6
400	7.35	HVT-HXCW4R3	11.39	HVT-HXCW4R6
500	11.21	HVT-HXCW5R3	17.37	HVT-HXCW5R6
600	13.79	HVT-HXCW6R3	21.37	HVT-HXCW6R6
700	16.56	HVT-HXCW7R3	25.67	HVT-HXCW7R6
800	19.53	HVT-HXCW8R3	30.27	HVT-HXCW8R6
900	22.69	HVT-HXCW9R3	35.17	HVT-HXCW9R6
1000	26.03	HVT-HXCW10R3	40.35	HVT-HXCW10R6

REMARK (KS D 3030)

Material · plate unit weight
Hot-dip coated steel sheet CR PosMAC
PLATE 1.0t : 6.42kg/m²
Coating mass (total, both sides)
PLATE : 1.0t : 250g/m²
Fabrication basis
See fabrication specification

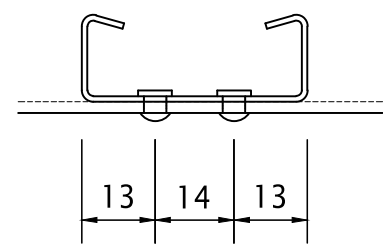
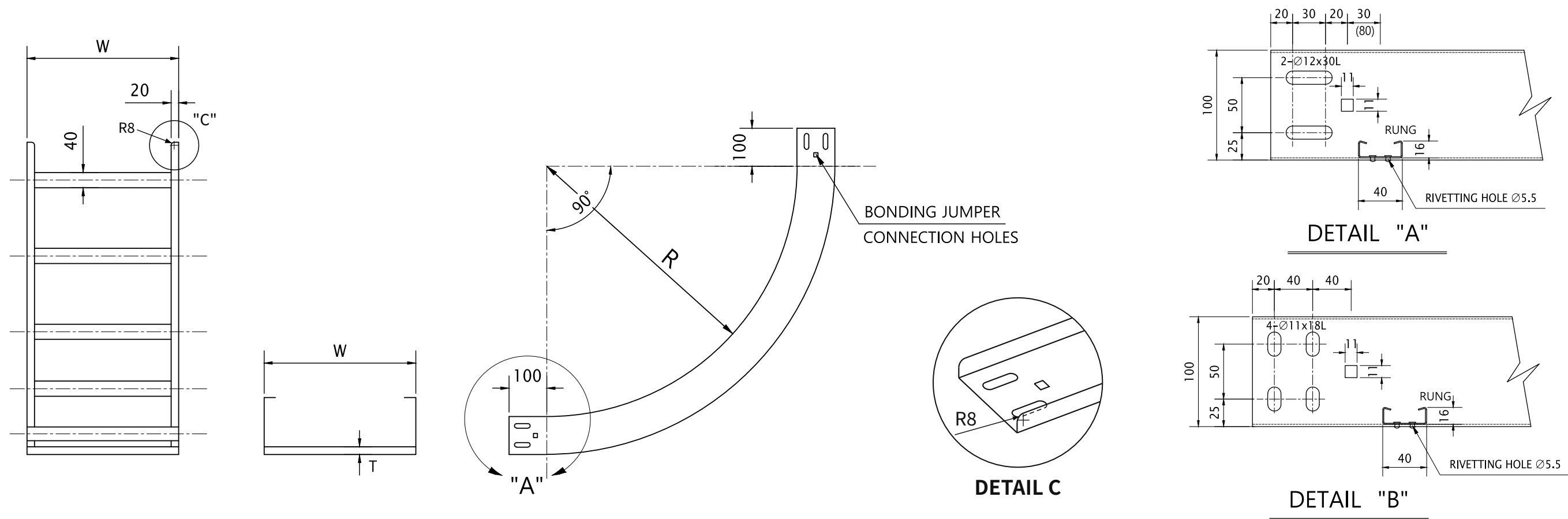
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-012

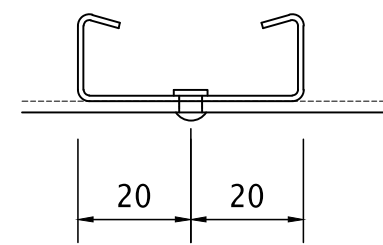
UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

90° CR VERTICAL TRAY ELBOW (INSIDE)

UNIT mm · N.S.



RIVETING A-TYPE
(first and last RUNG)



RIVETING B-TYPE
(middle RUNGs)

W(mm)	CR PosMAC (kg/EA)			
	R=300	Item No.	R=600	Item No.
200	2.33	A HVT-VEI90W2R3A B HVT-VEI90W2R3B	3.61	A HVT-VEI90W2R6A B HVT-VEI90W2R6B
300	2.58	A HVT-VEI90W3R3A B HVT-VEI90W3R3B	3.9	A HVT-VEI90W3R6A B HVT-VEI90W3R6B
400	2.83	A HVT-VEI90W4R3A B HVT-VEI90W4R3B	4.39	A HVT-VEI90W4R6A B HVT-VEI90W4R6B
500	3.08	A HVT-VEI90W5R3A B HVT-VEI90W5R3B	4.77	A HVT-VEI90W5R6A B HVT-VEI90W5R6B
600	3.33	A HVT-VEI90W6R3A B HVT-VEI90W6R3B	5.16	A HVT-VEI90W6R6A B HVT-VEI90W6R6B
700	3.58	A HVT-VEI90W7R3A B HVT-VEI90W7R3B	5.55	A HVT-VEI90W7R6A B HVT-VEI90W7R6B
800	3.83	A HVT-VEI90W8R3A B HVT-VEI90W8R3B	5.94	A HVT-VEI90W8R6A B HVT-VEI90W8R6B
900	4.08	A HVT-VEI90W9R3A B HVT-VEI90W9R3B	6.32	A HVT-VEI90W9R6A B HVT-VEI90W9R6B
1000	4.33	A HVT-VEI90W10R3A B HVT-VEI90W10R3B	6.71	A HVT-VEI90W10R6A B HVT-VEI90W10R6B

REMARK (KS D 3030)	
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D 3030) - CR PosMAC PLATE 1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ²	
Rung · side rail section RUNG Up to 800W : 40×16×9×1.0t 900W, 1000W : 40×16×9×1.2t SIDE RAIL Up to 700W : 100H×20×1.2t 750W~1000W : 100H×20×1.4t	
Rung spacing Up to 700W : 300mm 750W~1000W : 200mm	
Coating mass (total, both sides) PLATE : 1.0t, 1.2t, 1.4t : 250g/m ²	
Rivet RIVET : 5Ø×7.0L (brass alloy)	
Fabrication basis See fabrication specification	

HANVIT TRAY Co., Ltd.

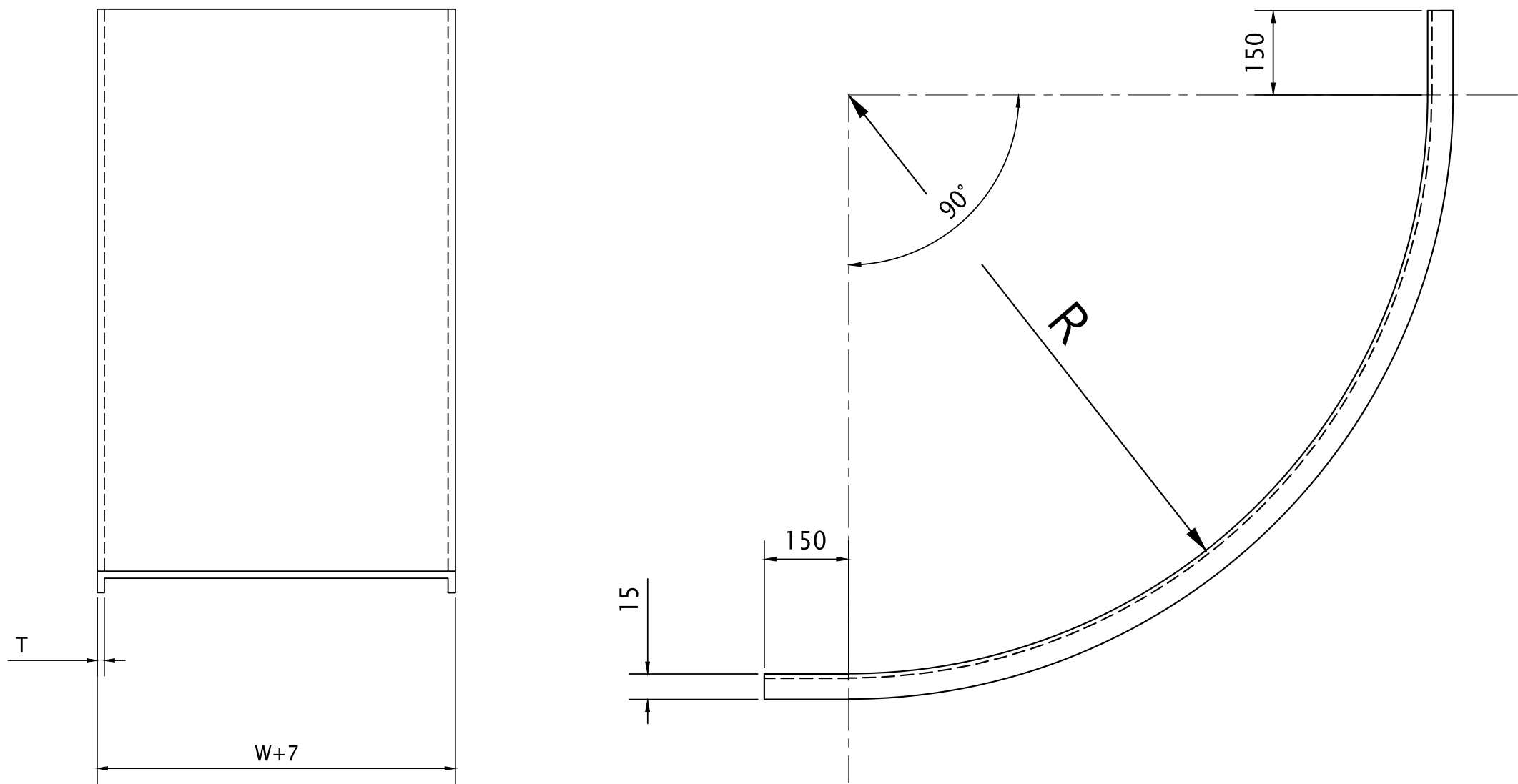
DRAWING NO.
HVT-CR-013

UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

CR COVER FOR 90° VERTICAL TRAY ELBOW (INSIDE)

UNIT mm · N.S.



W(mm)	CR PosMAC (kg/EA)			
	R=296.5	Item No.	R=596.5	Item No.
200	1.28	HVT-VEIC90W2R3	1.98	HVT-VEIC90W2R6
300	1.82	HVT-VEIC90W3R3	2.82	HVT-VEIC90W3R6
400	2.36	HVT-VEIC90W4R3	3.66	HVT-VEIC90W4R6
500	3.47	HVT-VEIC90W5R3	5.38	HVT-VEIC90W5R6
600	4.12	HVT-VEIC90W6R3	6.39	HVT-VEIC90W6R6
700	4.77	HVT-VEIC90W7R3	7.39	HVT-VEIC90W7R6
800	5.41	HVT-VEIC90W8R3	8.38	HVT-VEIC90W8R6
900	6.06	HVT-VEIC90W9R3	9.39	HVT-VEIC90W9R6
1000	9.71	HVT-VEIC90W10R3	15.05	HVT-VEIC90W10R6

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet CR PosMAC PLATE 1.0t : 6.42kg/m ² Coating mass (total, both sides) PLATE : 1.0t : 250g/m ² Fabrication basis See fabrication specification

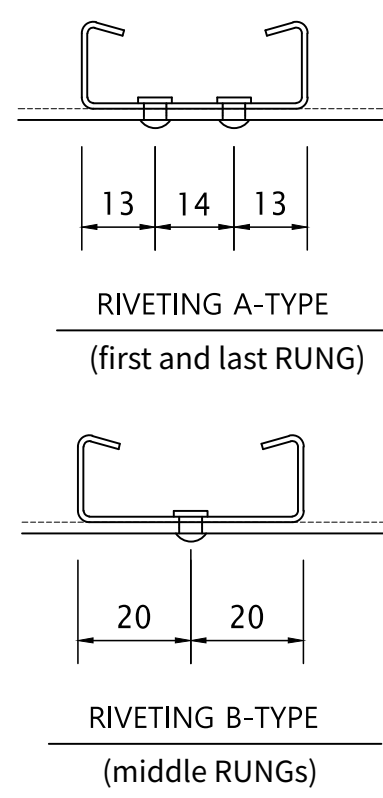
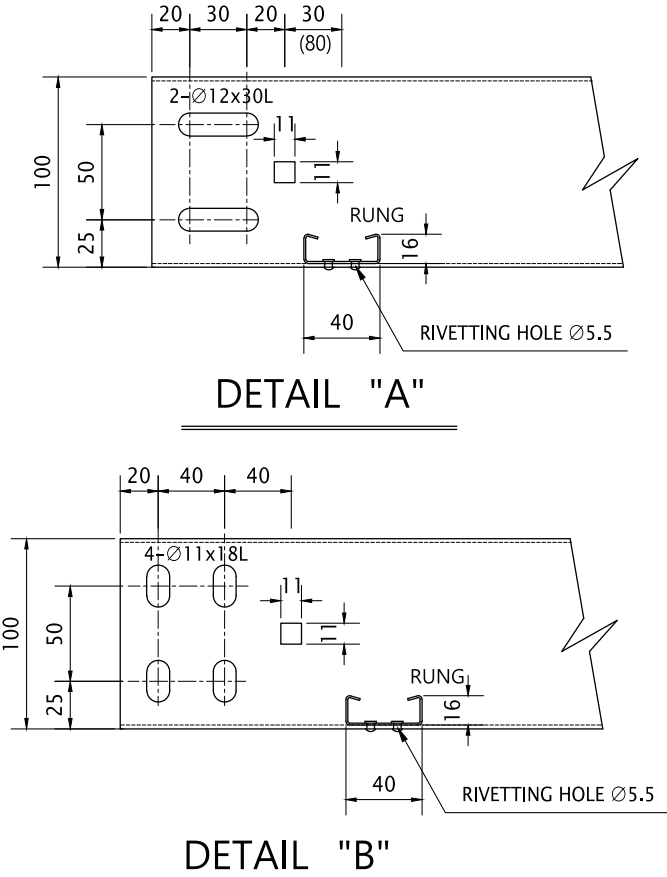
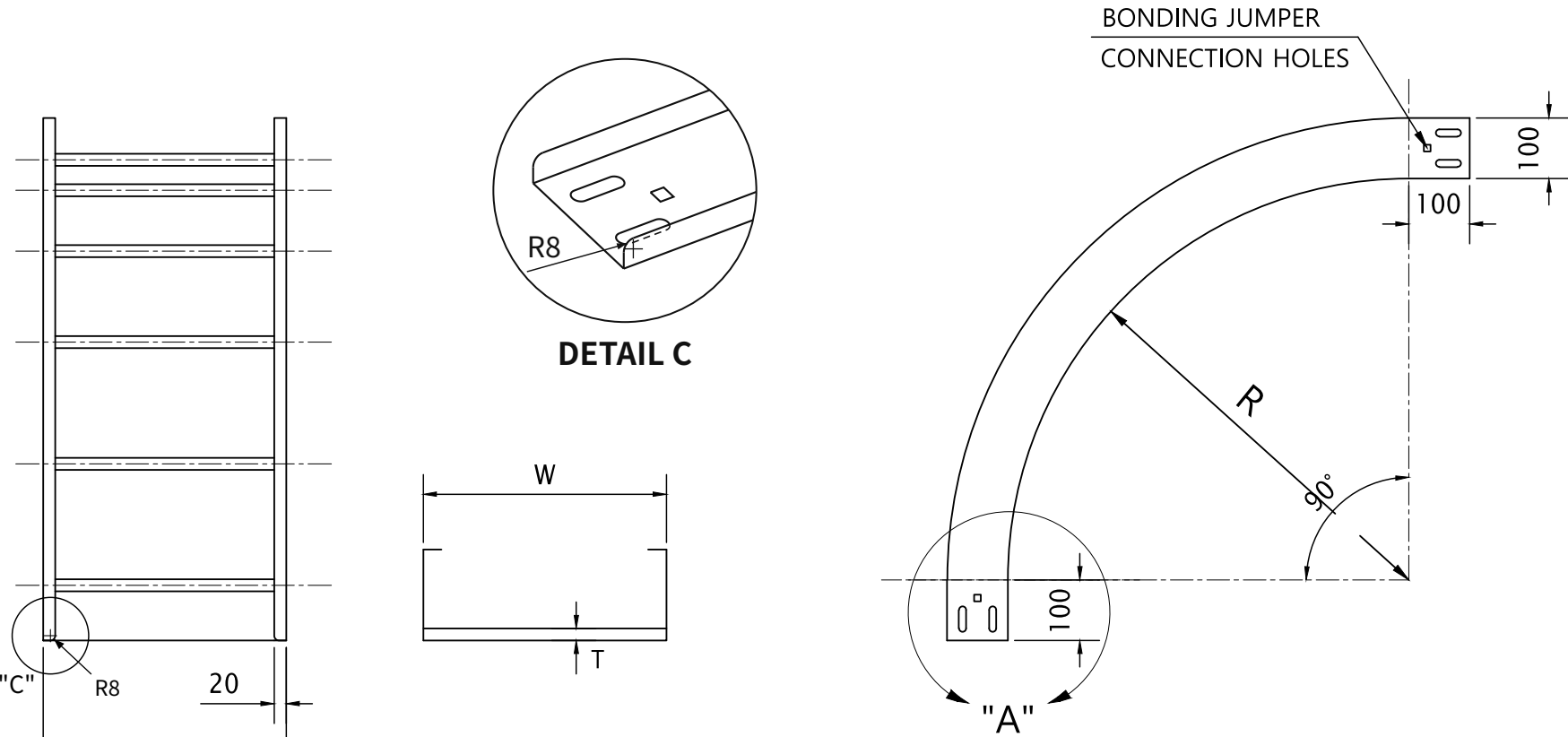
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-014

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

90° CR VERTICAL TRAY ELBOW (OUTSIDE)

UNIT mm · N.S.



W(mm)	CR PosMAC (kg/EA)			
	R=300	Item No.	R=600	Item No.
200	2.33	A HVT-VEO90W2R3A B HVT-VEO90W2R3B	3.61	A HVT-VEO90W2R6A B HVT-VEO90W2R6B
300	2.58	A HVT-VEO90W3R3A B HVT-VEO90W3R3B	3.9	A HVT-VEO90W3R6A B HVT-VEO90W3R6B
400	2.83	A HVT-VEO90W4R3A B HVT-VEO90W4R3B	4.39	A HVT-VEO90W4R6A B HVT-VEO90W4R6B
500	3.08	A HVT-VEO90W5R3A B HVT-VEO90W5R3B	4.77	A HVT-VEO90W5R6A B HVT-VEO90W5R6B
600	3.33	A HVT-VEO90W6R3A B HVT-VEO90W6R3B	5.16	A HVT-VEO90W6R6A B HVT-VEO90W6R6B
700	3.58	A HVT-VEO90W7R3A B HVT-VEO90W7R3B	5.55	A HVT-VEO90W7R6A B HVT-VEO90W7R6B
800	3.83	A HVT-VEO90W8R3A B HVT-VEO90W8R3B	5.94	A HVT-VEO90W8R6A B HVT-VEO90W8R6B
900	4.08	A HVT-VEO90W9R3A B HVT-VEO90W9R3B	6.32	A HVT-VEO90W9R6A B HVT-VEO90W9R6B
1000	4.33	A HVT-VEO90W10R3A B HVT-VEO90W10R3B	6.71	A HVT-VEO90W10R6A B HVT-VEO90W10R6B

REMARK (KS D 3030)	
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D 3030) - CR PosMAC PLATE 1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ²	
Rung · side rail section RUNG Up to 800W : 40×16×9×1.0t 900W, 1000W : 40×16×9×1.2t SIDE RAIL Up to 700W : 100H×20×1.2t 750W~1000W : 100H×20×1.4t	
Rung spacing Up to 700W : 300mm 750W~1000W : 200mm	
Coating mass (total, both sides) PLATE : 1.0t, 1.2t, 1.4t : 250g/m ²	
Rivet RIVET : 5Ø×7.0L (brass alloy)	
Fabrication basis See fabrication specification	

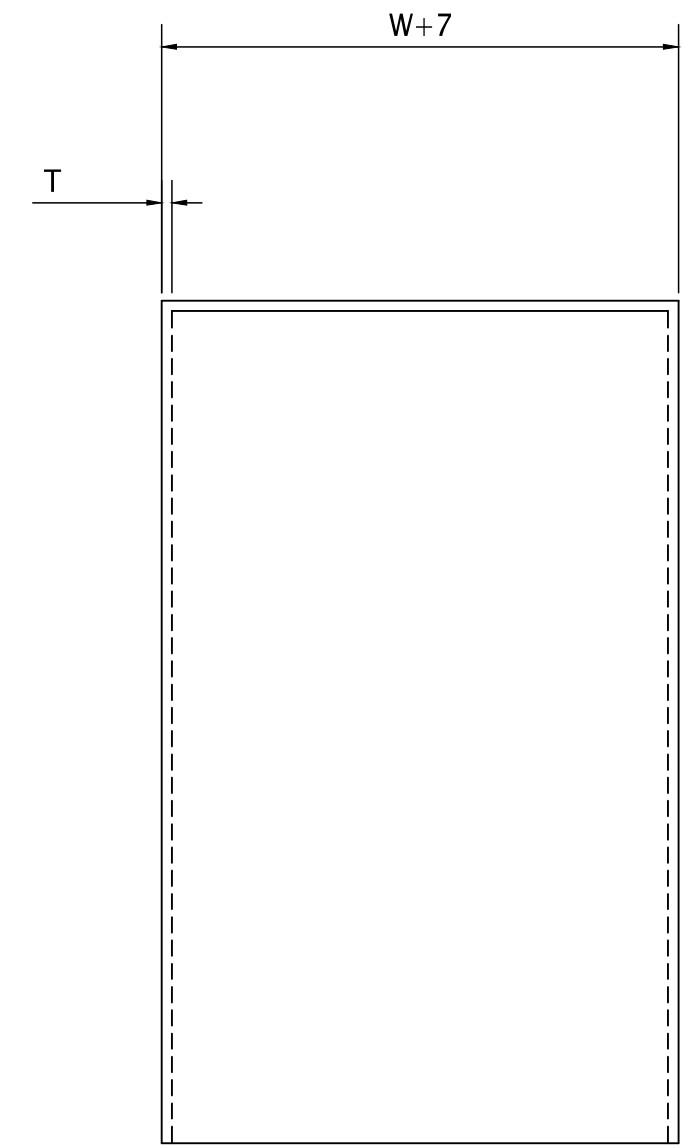
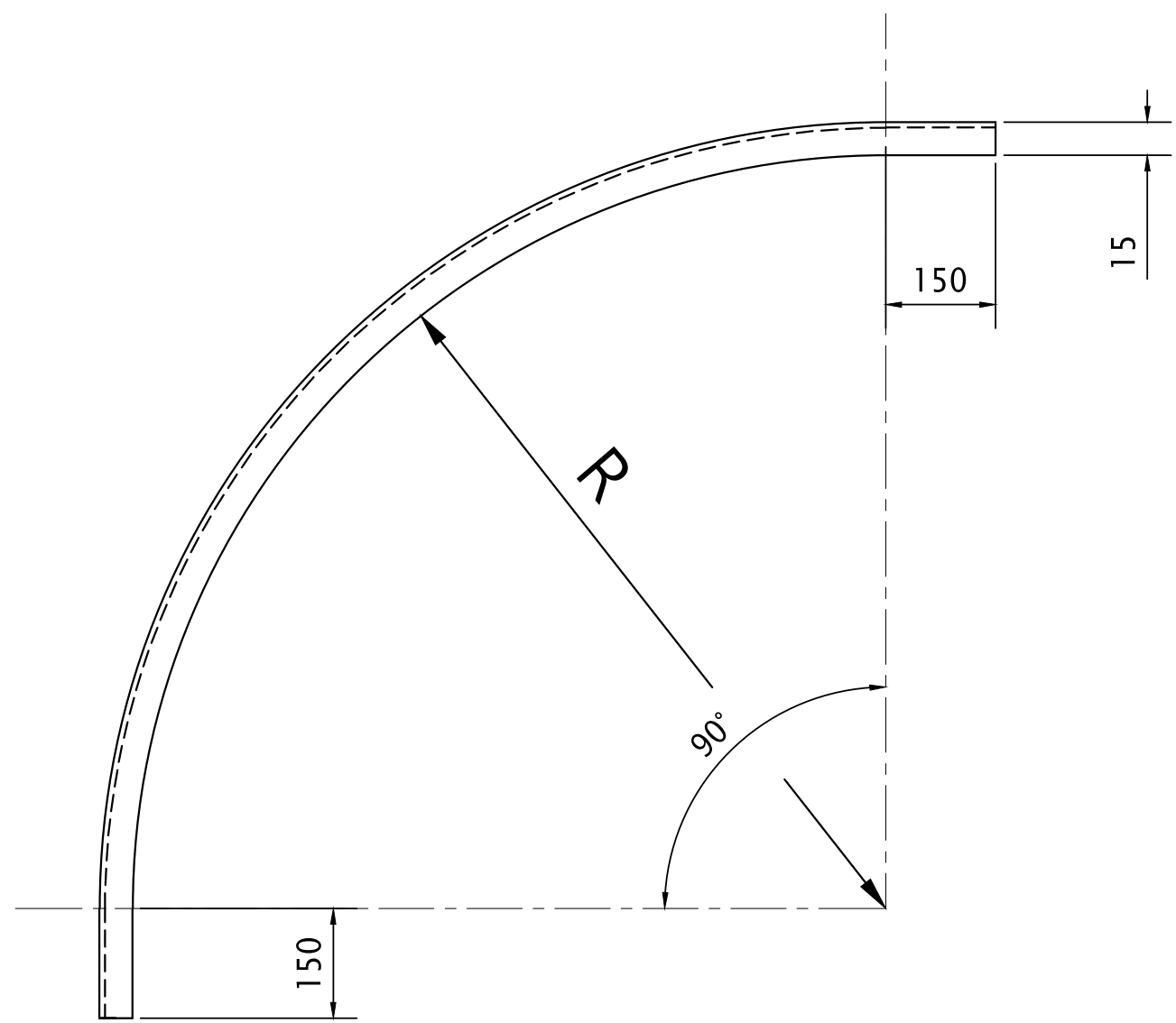
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-015

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR COVER FOR 90° VERTICAL TRAY ELBOW (OUTSIDE)

UNIT mm · N.S.



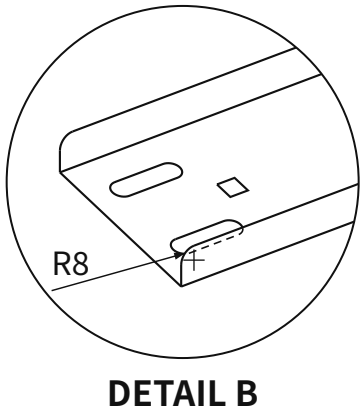
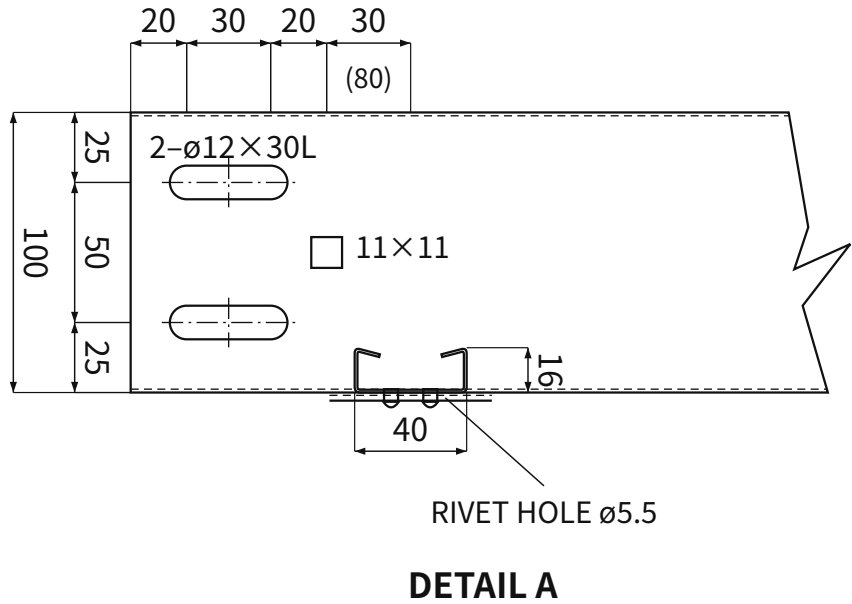
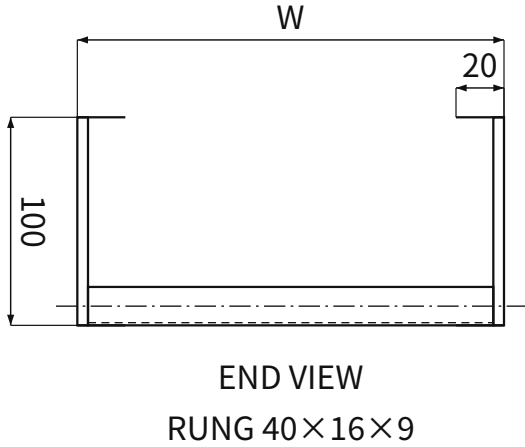
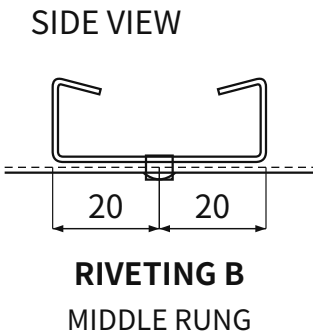
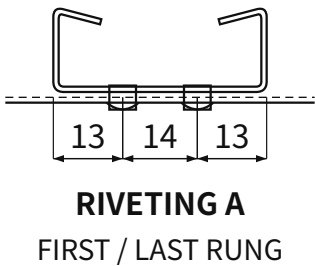
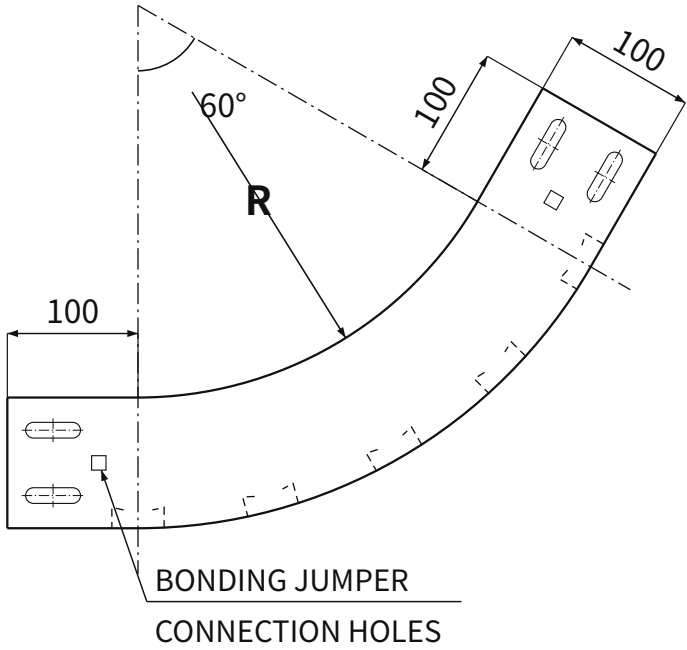
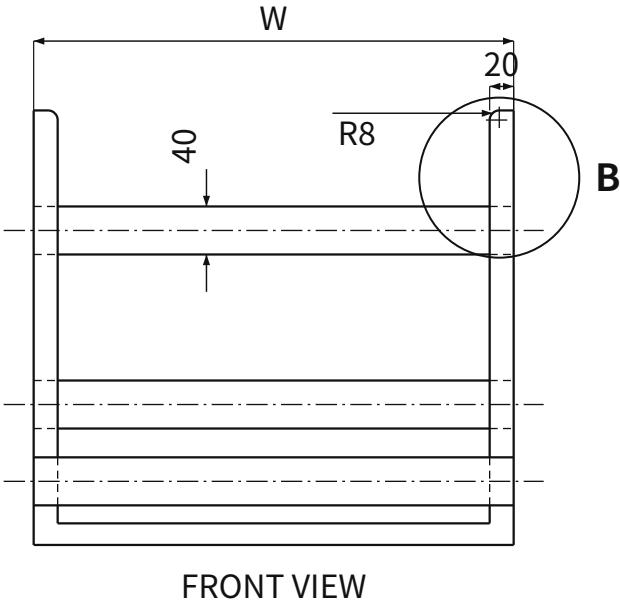
W(mm)	CR PosMAC (kg/EA)			
	R=296.5	Item No.	R=596.5	Item No.
200	1.28	HVT-VEOC90W2R3	1.98	HVT-VEOC90W2R6
300	1.82	HVT-VEOC90W3R3	2.82	HVT-VEOC90W3R6
400	2.36	HVT-VEOC90W4R3	3.66	HVT-VEOC90W4R6
500	3.47	HVT-VEOC90W5R3	5.38	HVT-VEOC90W5R6
600	4.12	HVT-VEOC90W6R3	6.39	HVT-VEOC90W6R6
700	4.77	HVT-VEOC90W7R3	7.39	HVT-VEOC90W7R6
800	5.41	HVT-VEOC90W8R3	8.38	HVT-VEOC90W8R6
900	6.06	HVT-VEOC90W9R3	9.39	HVT-VEOC90W9R6
1000	9.71	HVT-VEOC90W10R3	15.05	HVT-VEOC90W10R6

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet CR PosMAC PLATE 1.0t : 6.42kg/m² Coating mass (total, both sides) PLATE : 1.0t : 250g/m² Fabrication basis See fabrication specification

60° CR VERTICAL TRAY ELBOW (INSIDE)

R 300 / 600

UNIT mm · N.S.



W (mm)	R=300 CR PosMAC kg/EA	Item No.	R=600 CR PosMAC kg/EA	Item No.
200	1.74	HVT-VEI60W2R3	2.72	HVT-VEI60W2R6
300	1.93	HVT-VEI60W3R3	2.97	HVT-VEI60W3R6
400	2.09	HVT-VEI60W4R3	3.21	HVT-VEI60W4R6
500	2.25	HVT-VEI60W5R3	3.46	HVT-VEI60W5R6
600	2.42	HVT-VEI60W6R3	3.71	HVT-VEI60W6R6
700	2.57	HVT-VEI60W7R3	3.95	HVT-VEI60W7R6
800	3.76	HVT-VEI60W8R3	6.06	HVT-VEI60W8R6
900	4.56	HVT-VEI60W9R3	7.39	HVT-VEI60W9R6
1000	4.86	HVT-VEI60W10R3	7.89	HVT-VEI60W10R6

REMARK (KS D 3030)	
Material · plate unit weight Hot-dip coated steel sheet CR PosMAC KS D 3506 / KS D 3030 PLATE 1.0t: 6.42 kg/m ² PLATE 1.2t: 7.64 kg/m ² PLATE 1.4t: 8.87 kg/m ²	Rung spacing Up to 700W: 300 mm 750W~1000W: 200 mm
Rung · side rail section RUNG up to 800W: 40×16×9×1.0t RUNG 900W, 1000W: 40×16×9×1.2t SIDE RAIL up to 700W: 100H×20×1.2t SIDE RAIL 750W~1000W: 100H×20×1.4t	Coating mass (total, both sides) PLATE 1.0t, 1.2t, 1.4t: 250 g/m ²
	Rivet RIVET: ø5×7.0L (brass alloy)
	Fabrication basis See fabrication specification

HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-017

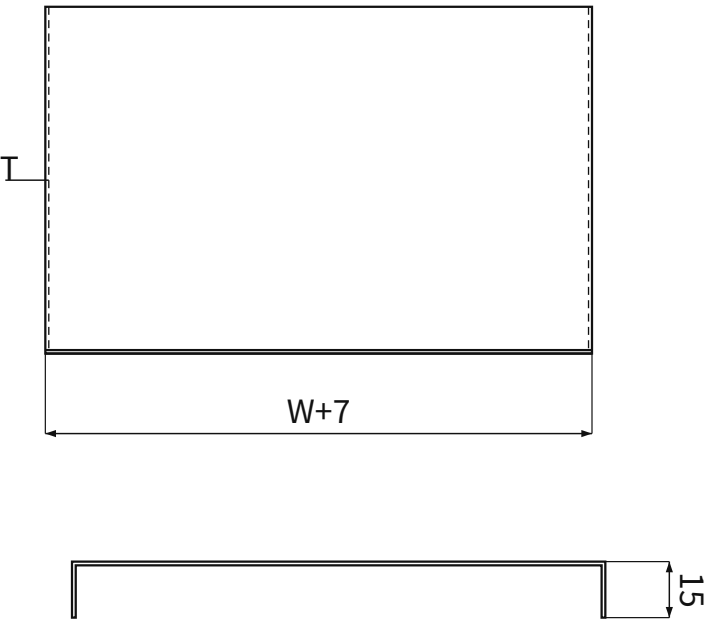
UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

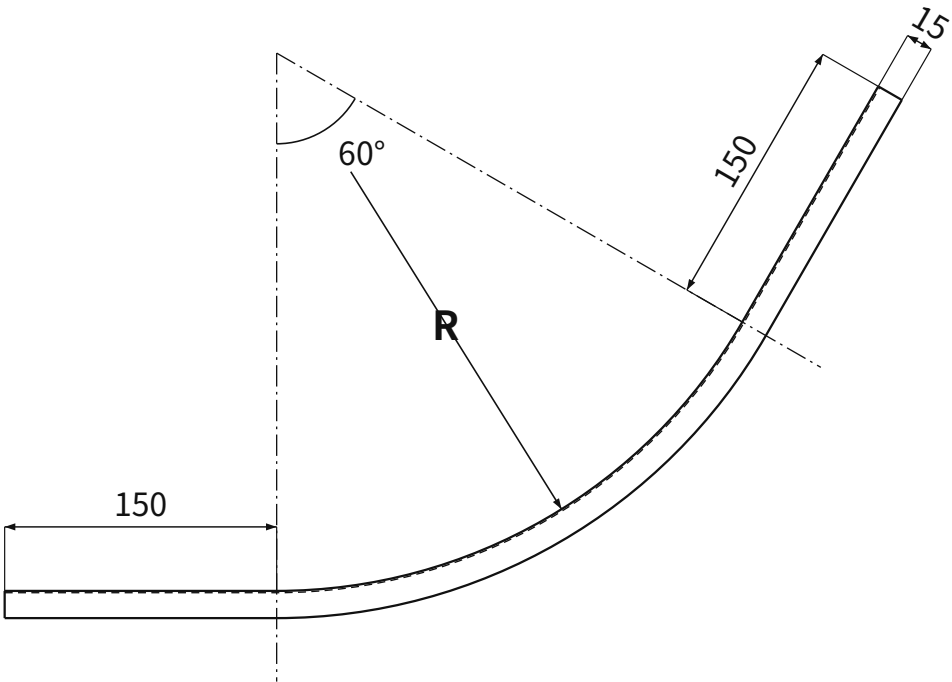
CR COVER FOR 60° VERTICAL TRAY ELBOW (INSIDE)

R 296.5 / 596.5

UNIT mm · N.S.



END SECTION · T=1.0



SIDE VIEW

W (mm)	R=296.5 CR PosMAC kg/EA	Item No.	R=596.5 CR PosMAC kg/EA	Item No.
200	1.09	HVT-VEIC60W2R3	1.77	HVT-VEIC60W2R6
300	1.56	HVT-VEIC60W3R3	2.52	HVT-VEIC60W3R6
400	2.02	HVT-VEIC60W4R3	3.27	HVT-VEIC60W4R6
500	2.48	HVT-VEIC60W5R3	4.02	HVT-VEIC60W5R6
600	2.95	HVT-VEIC60W6R3	4.77	HVT-VEIC60W6R6
700	3.41	HVT-VEIC60W7R3	5.51	HVT-VEIC60W7R6
800	3.88	HVT-VEIC60W8R3	6.26	HVT-VEIC60W8R6
900	4.34	HVT-VEIC60W9R3	7.01	HVT-VEIC60W9R6
1000	4.81	HVT-VEIC60W10R3	7.76	HVT-VEIC60W10R6

REMARK (KS D 3030)	
Material · plate unit weight Hot-dip coated steel sheet CR PosMAC PLATE 1.0t: 6.42 kg/m ²	Coating mass (total, both sides) PLATE 1.0t: 250 g/m ² Fabrication basis See fabrication specification

HANVIT TRAY Co., Ltd.

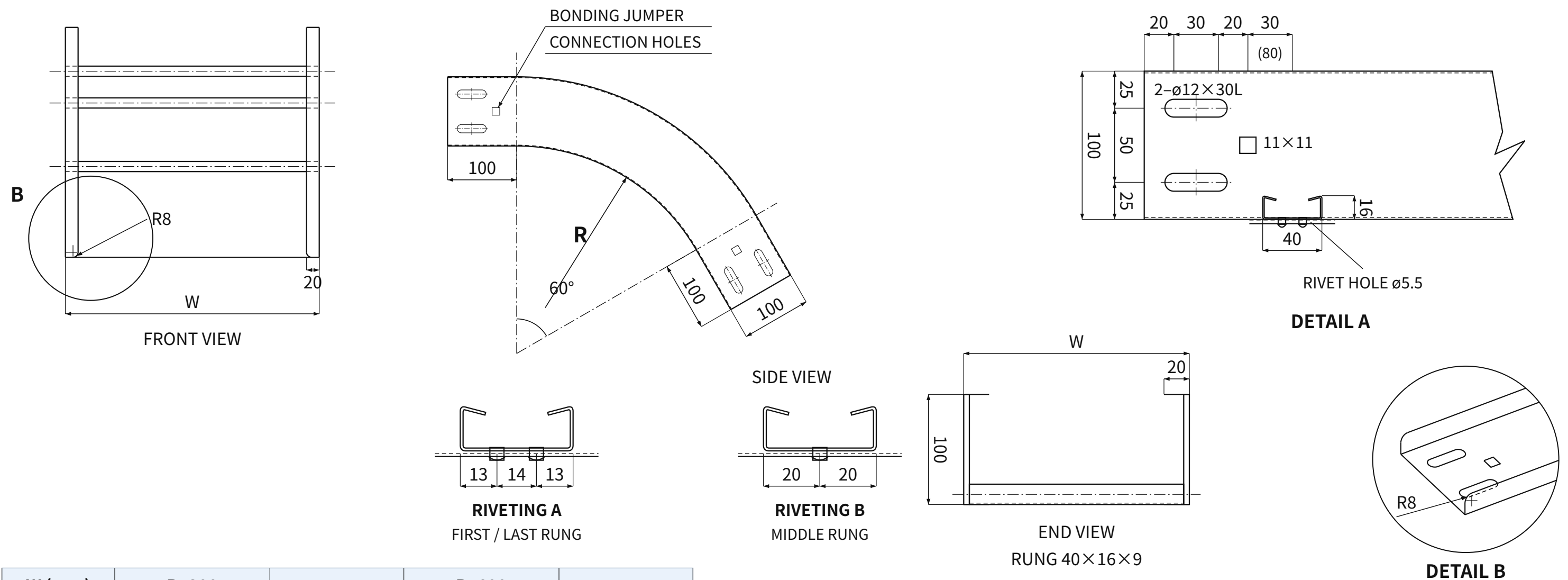
DRAWING NO.
HVT-CR-018

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

60° CR VERTICAL TRAY ELBOW (OUTSIDE)

R 300 / 600

UNIT mm · N.S.



W (mm)	R=300 CR PosMAC kg/EA	Item No.	R=600 CR PosMAC kg/EA	Item No.
200	1.74	HVT-VEO60W2R3	2.72	HVT-VEO60W2R6
300	1.93	HVT-VEO60W3R3	2.97	HVT-VEO60W3R6
400	2.09	HVT-VEO60W4R3	3.21	HVT-VEO60W4R6
500	2.25	HVT-VEO60W5R3	3.46	HVT-VEO60W5R6
600	2.42	HVT-VEO60W6R3	3.71	HVT-VEO60W6R6
700	2.57	HVT-VEO60W7R3	3.95	HVT-VEO60W7R6
800	3.76	HVT-VEO60W8R3	6.06	HVT-VEO60W8R6
900	4.56	HVT-VEO60W9R3	7.39	HVT-VEO60W9R6
1000	4.86	HVT-VEO60W10R3	7.89	HVT-VEO60W10R6

REMARK (KS D 3030)	
Material · plate unit weight Hot-dip coated steel sheet CR PosMAC KS D 3506 / KS D 3030 PLATE 1.0t: 6.42 kg/m ² PLATE 1.2t: 7.64 kg/m ² PLATE 1.4t: 8.87 kg/m ²	Rung spacing Up to 700W: 300 mm 750W~1000W: 200 mm
Rung · side rail section RUNG up to 800W: 40×16×9×1.0t RUNG 900W, 1000W: 40×16×9×1.2t SIDE RAIL up to 700W: 100H×20×1.2t SIDE RAIL 750W~1000W: 100H×20×1.4t	Coating mass (total, both sides) PLATE 1.0t, 1.2t, 1.4t: 250 g/m ²
	Rivet RIVET: ø5×7.0L (brass alloy)
	Fabrication basis See fabrication specification

HANVIT TRAY Co., Ltd.

DRAWING NO.

HVT-CR-019

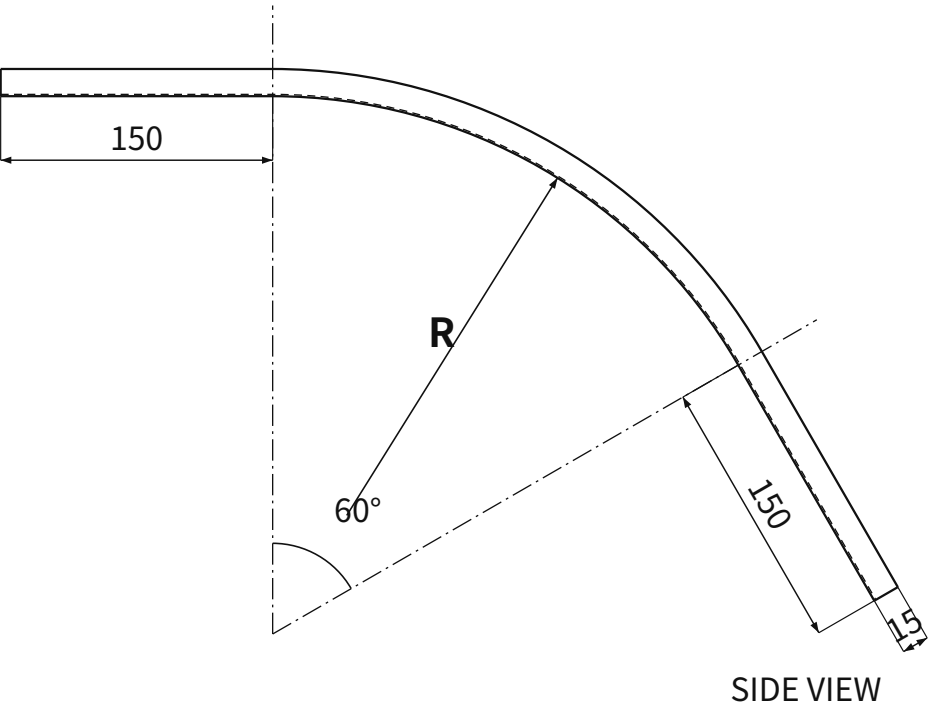
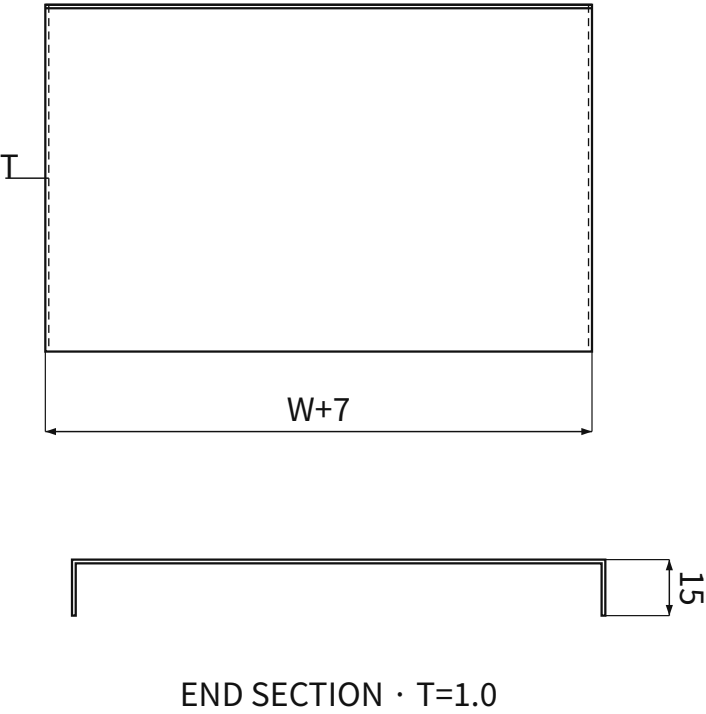
UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

CR COVER FOR 60° VERTICAL TRAY ELBOW (OUTSIDE)

R 296.5 / 596.5

UNIT mm · N.S.



W (mm)	R=296.5 CR PosMAC kg/EA	Item No.	R=596.5 CR PosMAC kg/EA	Item No.
200	1.09	HVT-VEOC60W2R3	1.77	HVT-VEOC60W2R6
300	1.56	HVT-VEOC60W3R3	2.52	HVT-VEOC60W3R6
400	2.02	HVT-VEOC60W4R3	3.27	HVT-VEOC60W4R6
500	2.48	HVT-VEOC60W5R3	4.02	HVT-VEOC60W5R6
600	2.95	HVT-VEOC60W6R3	4.77	HVT-VEOC60W6R6
700	3.41	HVT-VEOC60W7R3	5.51	HVT-VEOC60W7R6
800	3.88	HVT-VEOC60W8R3	6.26	HVT-VEOC60W8R6
900	4.34	HVT-VEOC60W9R3	7.01	HVT-VEOC60W9R6
1000	4.81	HVT-VEOC60W10R3	7.76	HVT-VEOC60W10R6

REMARK (KS D 3030)	
Material · plate unit weight Hot-dip coated steel sheet CR PosMAC PLATE 1.0t: 6.42 kg/m ²	Coating mass (total, both sides) PLATE 1.0t: 250 g/m ² Fabrication basis See fabrication specification

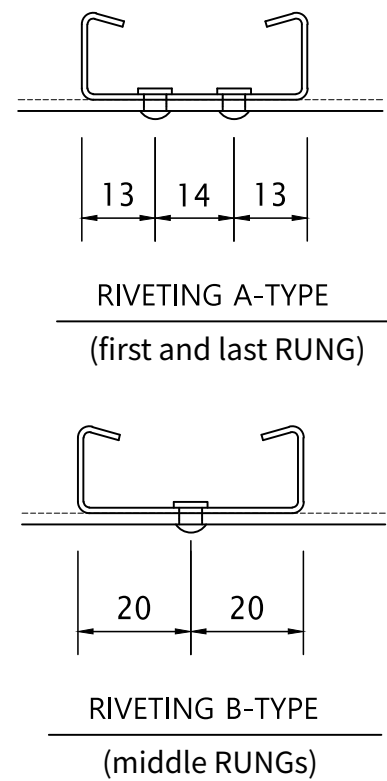
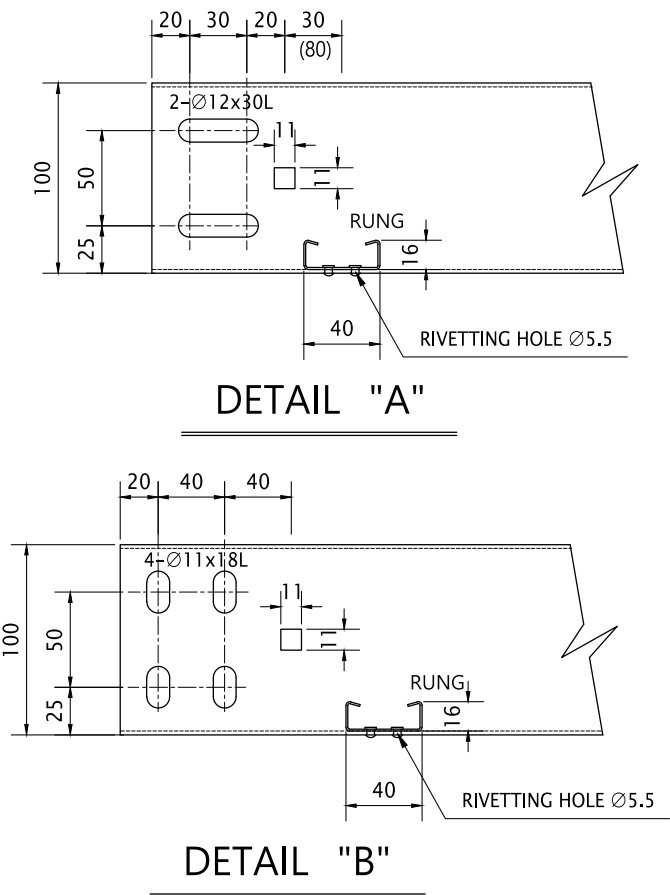
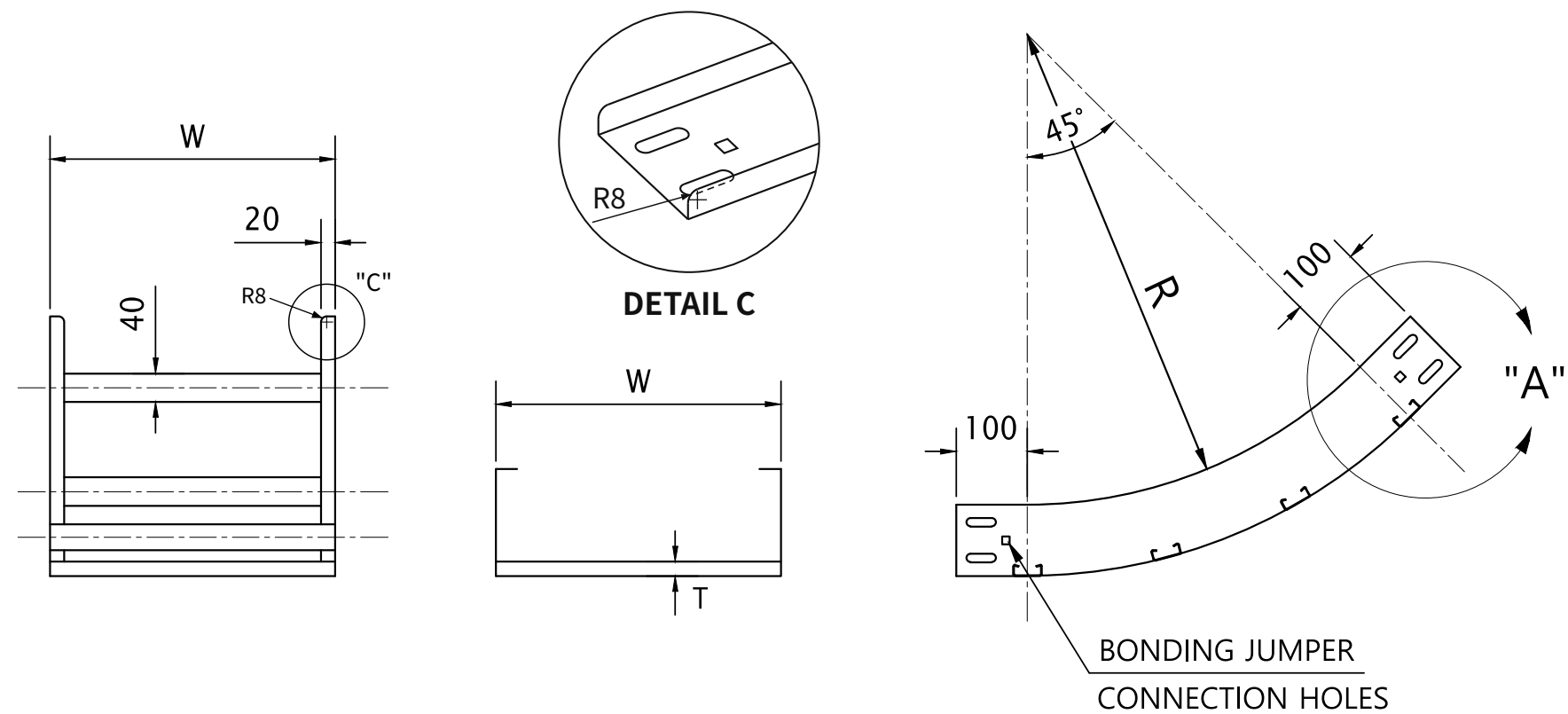
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-020

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

45° CR VERTICAL TRAY ELBOW (INSIDE)

UNIT mm · N.S.



W(mm)	CR PosMAC (kg/EA)			
	R=300	Item No.	R=600	Item No.
200	1.55	A HVT-VEI45W2R3A B HVT-VEI45W2R3B	2.4	A HVT-VEI45W2R6A B HVT-VEI45W2R6B
300	1.73	A HVT-VEI45W3R3A B HVT-VEI45W3R3B	2.68	A HVT-VEI45W3R6A B HVT-VEI45W3R6B
400	1.92	A HVT-VEI45W4R3A B HVT-VEI45W4R3B	2.97	A HVT-VEI45W4R6A B HVT-VEI45W4R6B
500	2.11	A HVT-VEI45W5R3A B HVT-VEI45W5R3B	3.27	A HVT-VEI45W5R6A B HVT-VEI45W5R6B
600	2.3	A HVT-VEI45W6R3A B HVT-VEI45W6R3B	3.56	A HVT-VEI45W6R6A B HVT-VEI45W6R6B
700	2.48	A HVT-VEI45W7R3A B HVT-VEI45W7R3B	3.84	A HVT-VEI45W7R6A B HVT-VEI45W7R6B
800	2.67	A HVT-VEI45W8R3A B HVT-VEI45W8R3B	4.14	A HVT-VEI45W8R6A B HVT-VEI45W8R6B
900	2.86	A HVT-VEI45W9R3A B HVT-VEI45W9R3B	4.43	A HVT-VEI45W9R6A B HVT-VEI45W9R6B
1000	3.05	A HVT-VEI45W10R3A B HVT-VEI45W10R3B	4.73	A HVT-VEI45W10R6A B HVT-VEI45W10R6B

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D 3030) - CR PosMAC PLATE 1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ²
Rung · side rail section RUNG Up to 800W : 40×16×9×1.0t 900W, 1000W : 40×16×9×1.2t SIDE RAIL Up to 700W : 100H×20×1.2t 750W~1000W : 100H×20×1.4t
Rung spacing Up to 700W : 300mm 750W~1000W : 200mm
Coating mass (total, both sides) PLATE : 1.0t, 1.2t, 1.4t : 250g/m ²
Rivet RIVET : 5Ø×7.0L (brass alloy)
Fabrication basis See fabrication specification

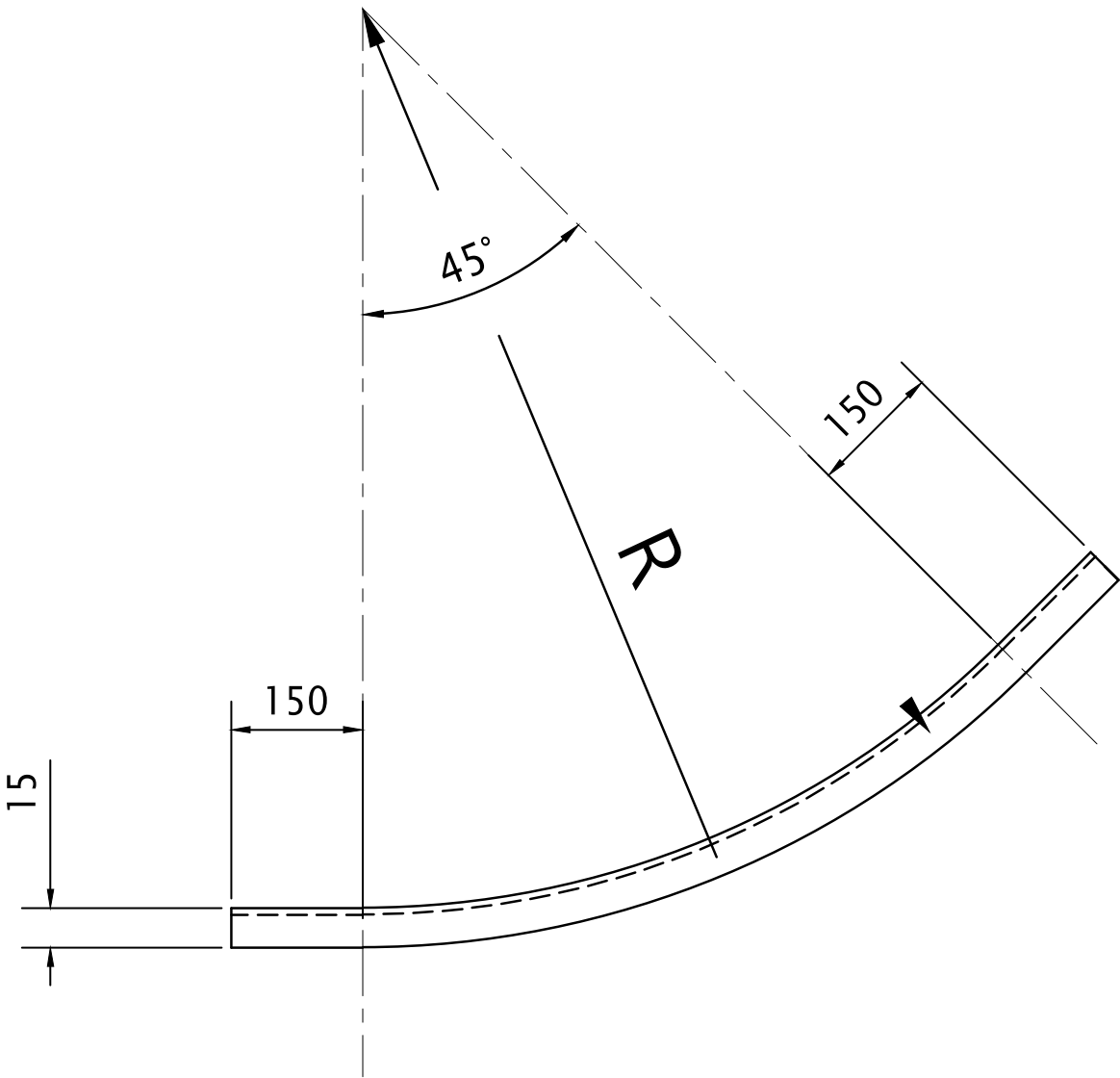
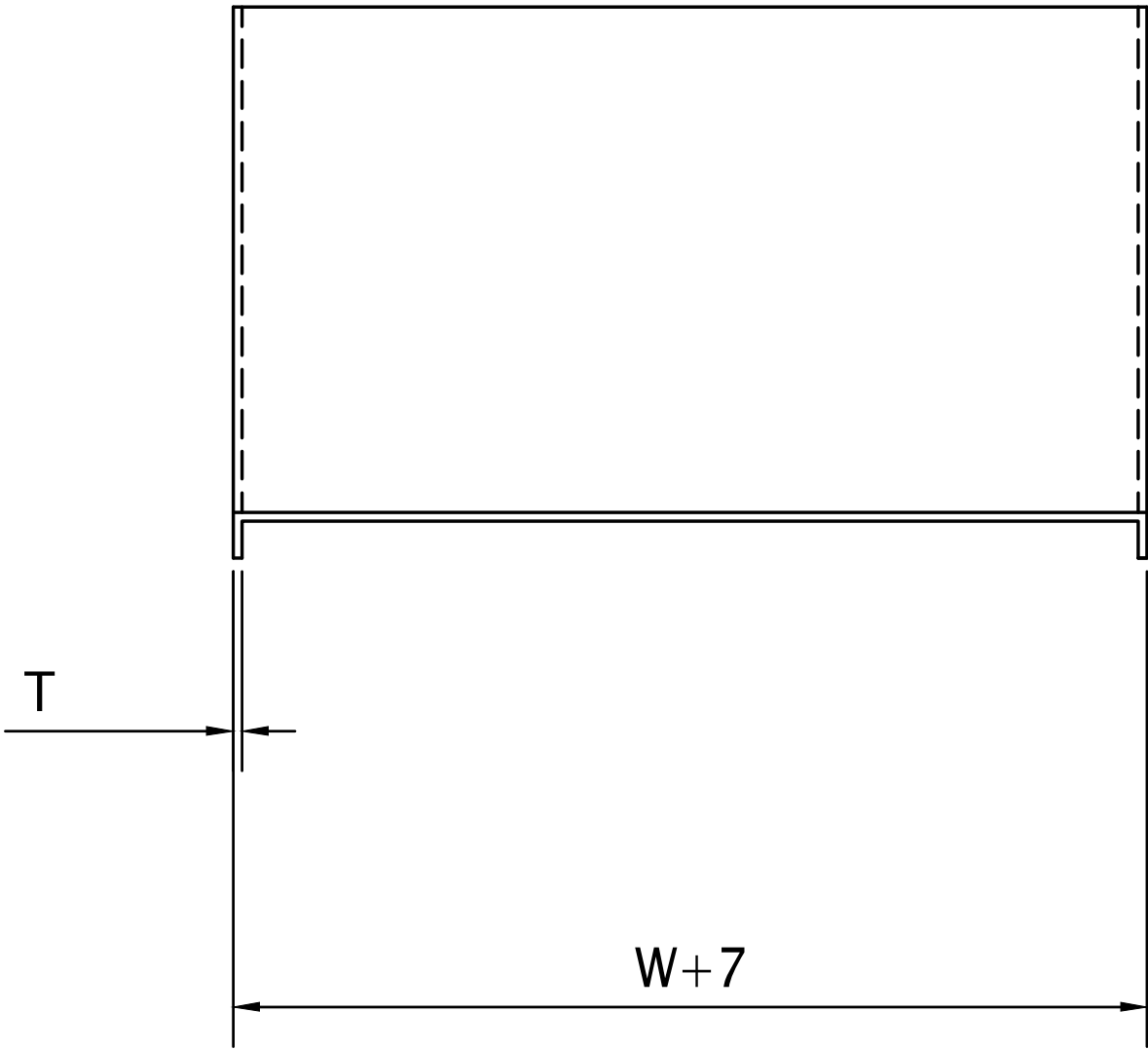
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-021

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR COVER FOR 45° VERTICAL TRAY ELBOW (INSIDE)

UNIT mm · N.S.



W(mm)	CR PosMAC (kg/EA)			
	R=296.5	Item No.	R=596.5	Item No.
200	0.83	HVT-VEIC45W2R3	1.28	HVT-VEIC45W2R6
300	1.18	HVT-VEIC45W3R3	1.83	HVT-VEIC45W3R6
400	1.53	HVT-VEIC45W4R3	2.37	HVT-VEIC45W4R6
500	2.26	HVT-VEIC45W5R3	3.51	HVT-VEIC45W5R6
600	2.68	HVT-VEIC45W6R3	4.15	HVT-VEIC45W6R6
700	3.09	HVT-VEIC45W7R3	4.79	HVT-VEIC45W7R6
800	3.52	HVT-VEIC45W8R3	5.46	HVT-VEIC45W8R6
900	3.95	HVT-VEIC45W9R3	6.12	HVT-VEIC45W9R6
1000	4.37	HVT-VEIC45W10R3	6.77	HVT-VEIC45W10R6

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet CR PosMAC PLATE 1.0t : 6.42kg/m² Coating mass (total, both sides) PLATE : 1.0t : 250g/m² Fabrication basis See fabrication specification

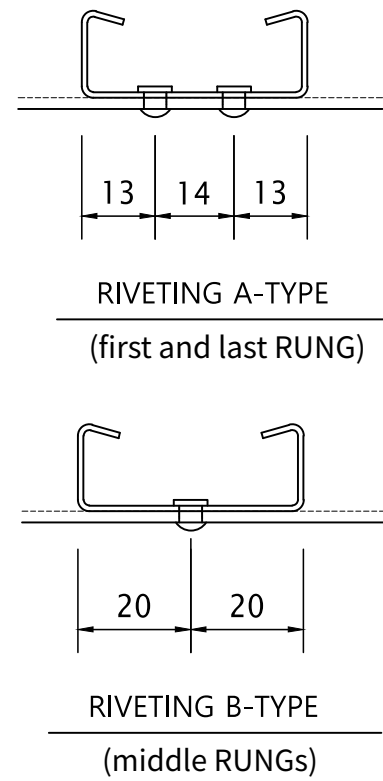
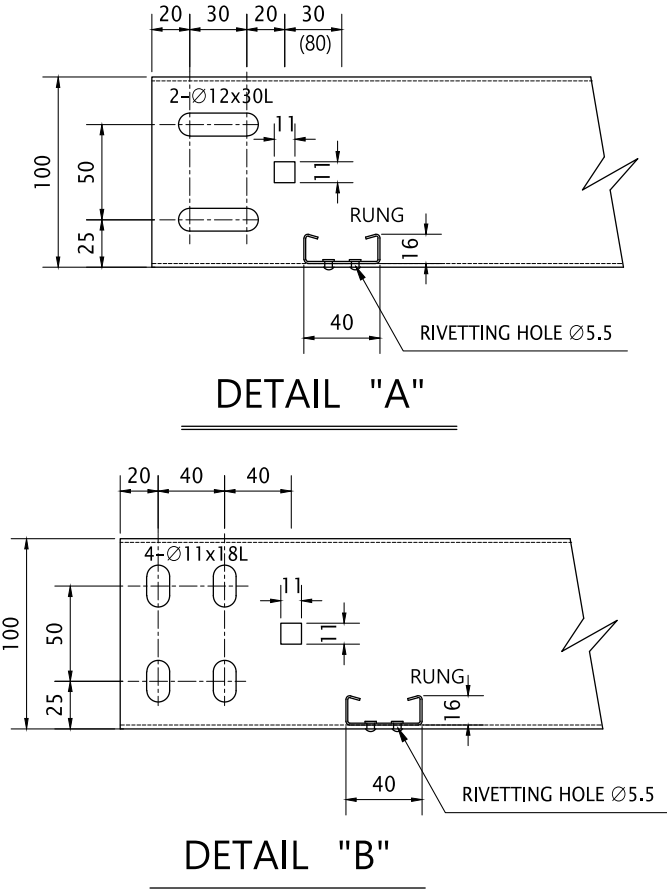
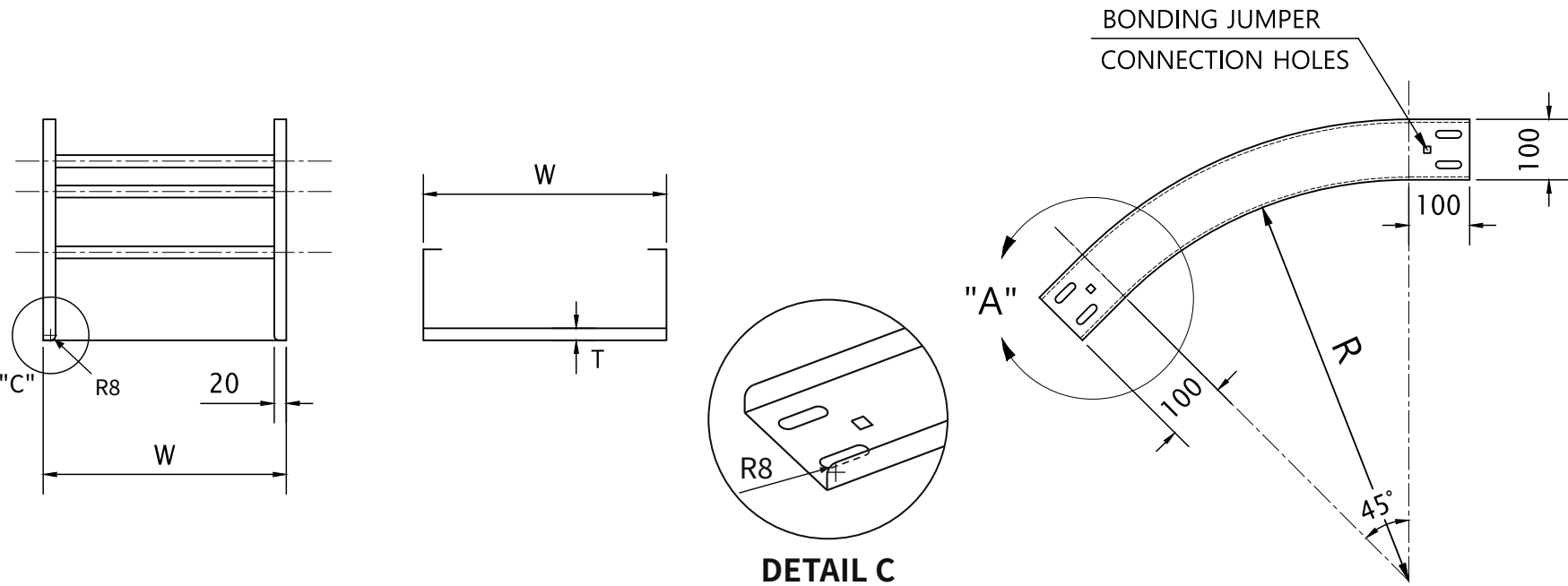
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-022

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

45° CR VERTICAL TRAY ELBOW (OUTSIDE)

UNIT mm · N.S.



W(mm)	CR PosMAC (kg/EA)			
	R=300	Item No.	R=600	Item No.
200	1.55	A HVT-VEO45W2R3A B HVT-VEO45W2R3B	2.4	A HVT-VEO45W2R6A B HVT-VEO45W2R6B
300	1.73	A HVT-VEO45W3R3A B HVT-VEO45W3R3B	2.68	A HVT-VEO45W3R6A B HVT-VEO45W3R6B
400	1.92	A HVT-VEO45W4R3A B HVT-VEO45W4R3B	2.97	A HVT-VEO45W4R6A B HVT-VEO45W4R6B
500	2.11	A HVT-VEO45W5R3A B HVT-VEO45W5R3B	3.27	A HVT-VEO45W5R6A B HVT-VEO45W5R6B
600	2.3	A HVT-VEO45W6R3A B HVT-VEO45W6R3B	3.56	A HVT-VEO45W6R6A B HVT-VEO45W6R6B
700	2.48	A HVT-VEO45W7R3A B HVT-VEO45W7R3B	3.84	A HVT-VEO45W7R6A B HVT-VEO45W7R6B
800	2.67	A HVT-VEO45W8R3A B HVT-VEO45W8R3B	4.14	A HVT-VEO45W8R6A B HVT-VEO45W8R6B
900	2.86	A HVT-VEO45W9R3A B HVT-VEO45W9R3B	4.43	A HVT-VEO45W9R6A B HVT-VEO45W9R6B
1000	3.05	A HVT-VEO45W10R3A B HVT-VEO45W10R3B	4.73	A HVT-VEO45W10R6A B HVT-VEO45W10R6B

REMARK (KS D 3030)	
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D 3030) - CR PosMAC PLATE 1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ²	
Rung · side rail section RUNG Up to 800W : 40×16×9×1.0t 900W, 1000W : 40×16×9×1.2t SIDE RAIL Up to 700W : 100H×20×1.2t 750W~1000W : 100H×20×1.4t	
Rung spacing Up to 700W : 300mm 750W~1000W : 200mm	
Coating mass (total, both sides) PLATE : 1.0t, 1.2t, 1.4t : 250g/m ²	
Rivet RIVET : 5Ø×7.0L (brass alloy)	
Fabrication basis See fabrication specification	

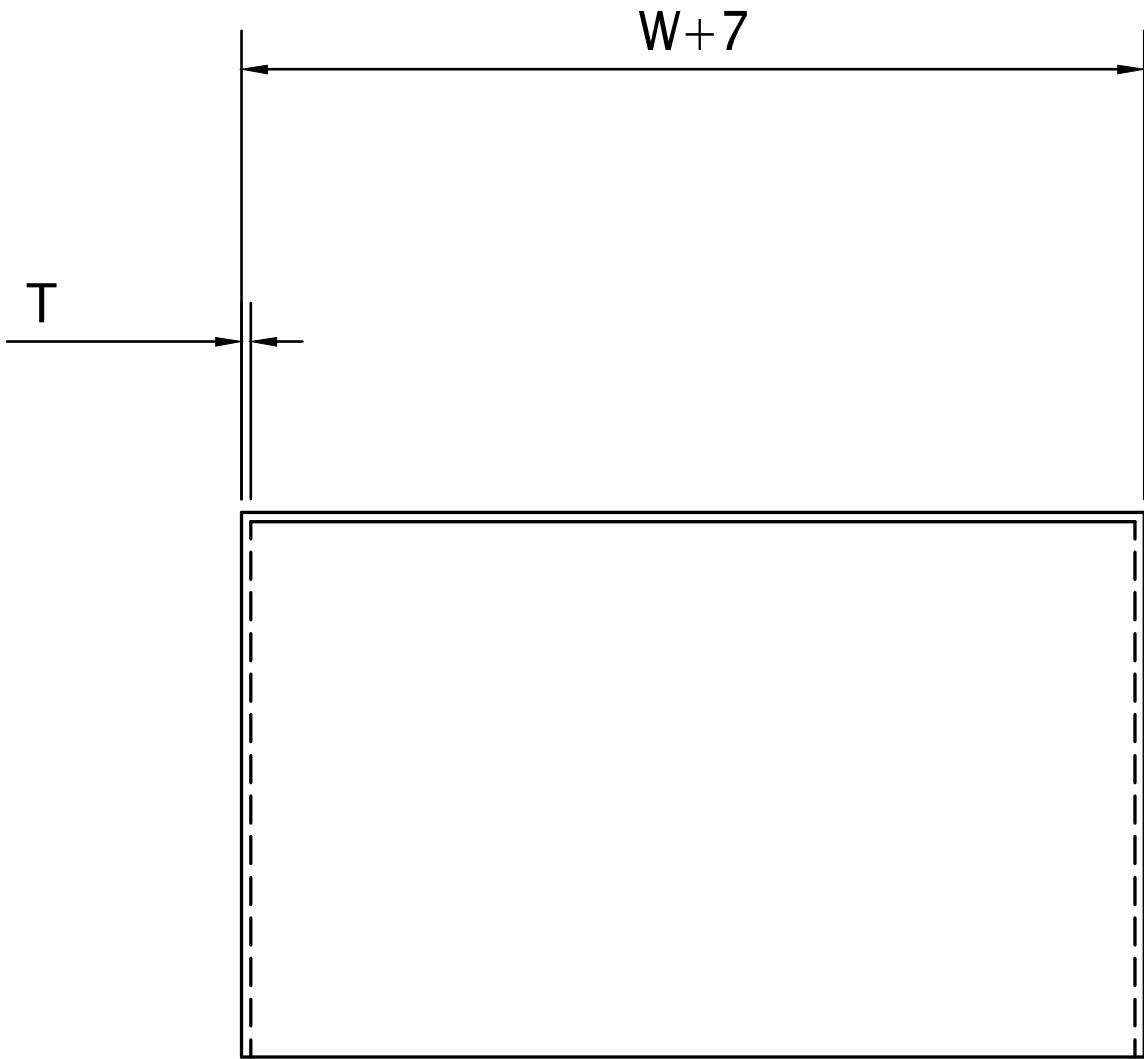
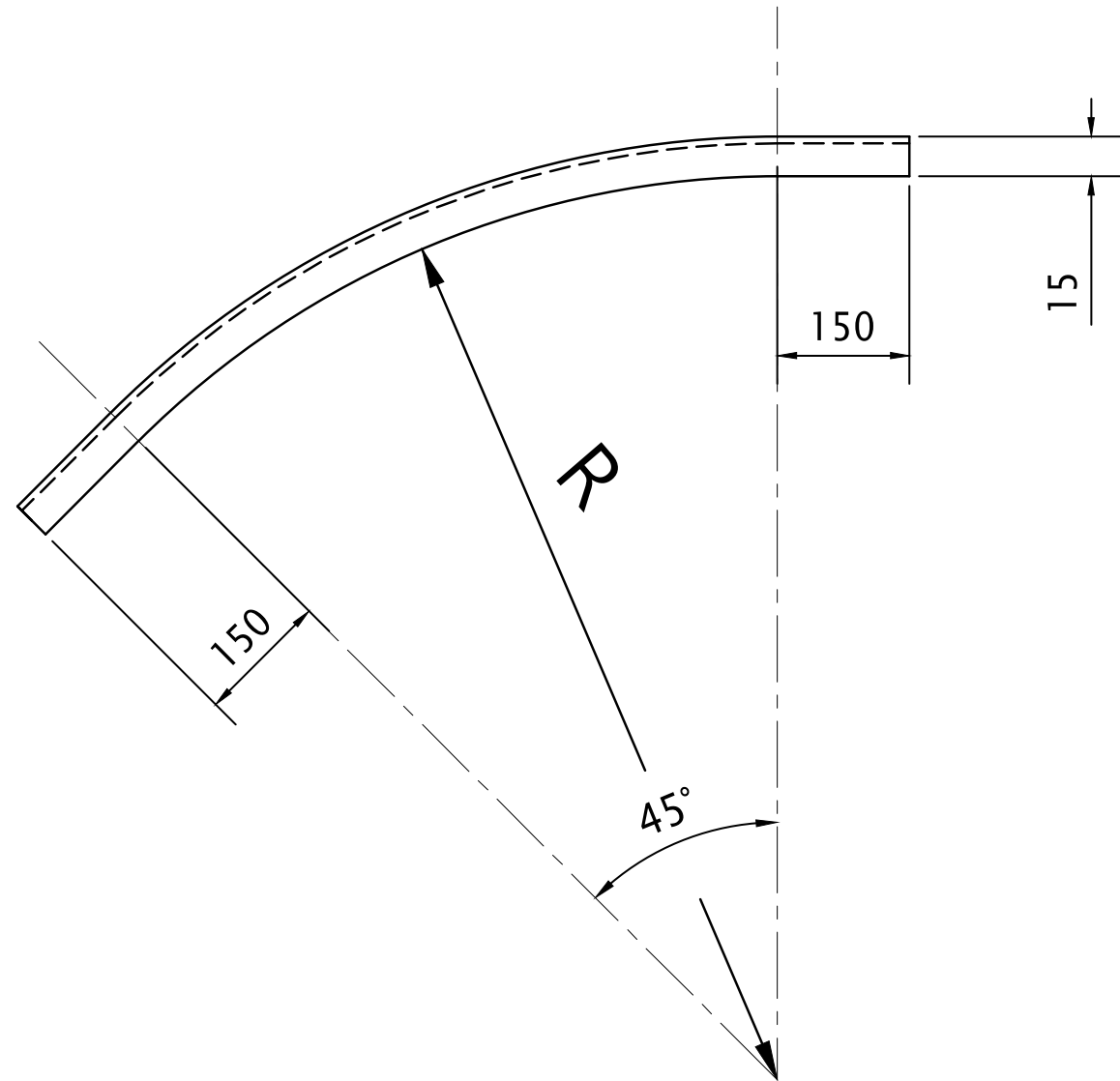
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-023

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR COVER FOR 45° VERTICAL TRAY ELBOW (OUTSIDE)

UNIT mm · N.S.



W(mm)	CR PosMAC (kg/EA)			
	R=296.5	Item No.	R=596.5	Item No.
200	0.83	HVT-VEOC45W2R3	1.28	HVT-VEOC45W2R6
300	1.18	HVT-VEOC45W3R3	1.83	HVT-VEOC45W3R6
400	1.53	HVT-VEOC45W4R3	2.37	HVT-VEOC45W4R6
500	2.26	HVT-VEOC45W5R3	3.51	HVT-VEOC45W5R6
600	2.68	HVT-VEOC45W6R3	4.15	HVT-VEOC45W6R6
700	3.09	HVT-VEOC45W7R3	4.79	HVT-VEOC45W7R6
800	3.52	HVT-VEOC45W8R3	5.46	HVT-VEOC45W8R6
900	3.95	HVT-VEOC45W9R3	6.12	HVT-VEOC45W9R6
1000	4.37	HVT-VEOC45W10R3	6.77	HVT-VEOC45W10R6

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet CR PosMAC PLATE 1.0t : 6.42kg/m² Coating mass (total, both sides) PLATE : 1.0t : 250g/m² Fabrication basis See fabrication specification

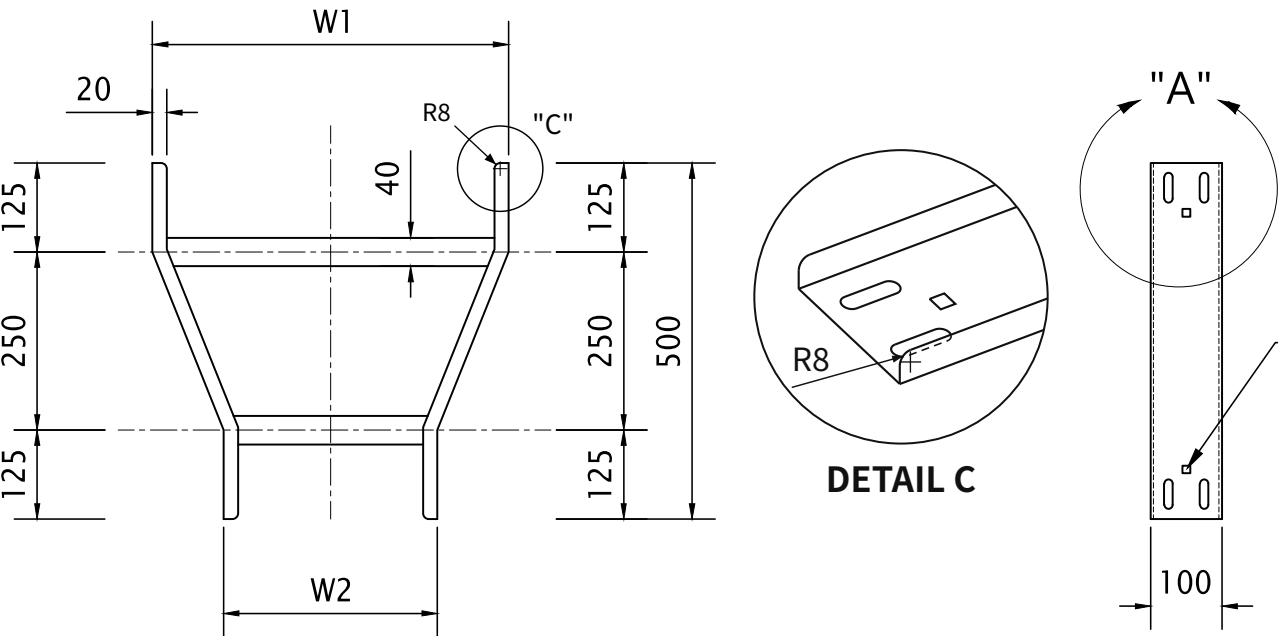
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-024

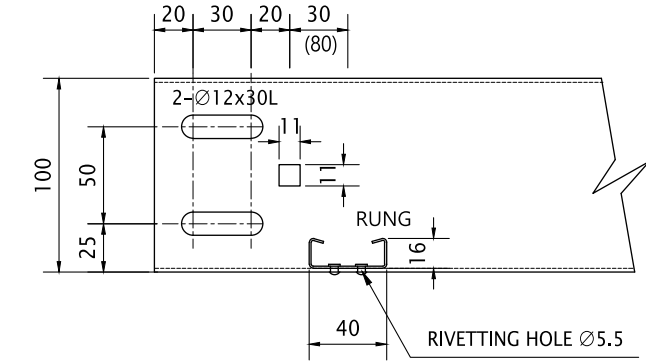
UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR STRAIGHT TRAY REDUCER

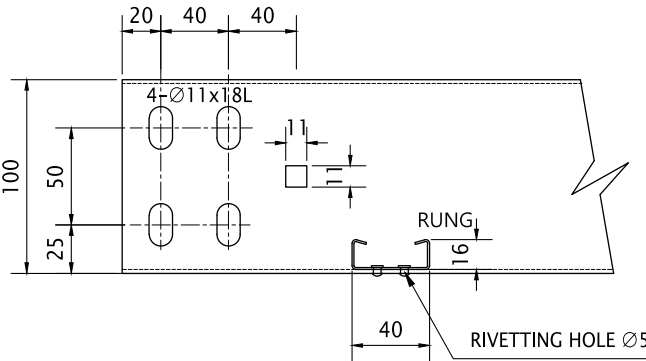
UNIT mm · N.S.



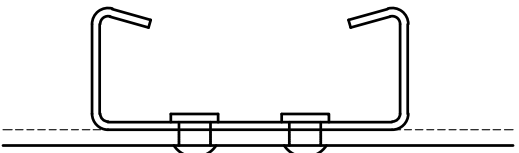
W1(mm)	W2(mm)	CR PosMAC (kg/EA)	Item No.
300	200	1.65	A HVT-RDW3W2A B HVT-RDW3W2B
400	200	1.84	A HVT-RDW4W2A B HVT-RDW4W2B
400	300	1.81	A HVT-RDW4W3A B HVT-RDW4W3B
500	300	1.99	A HVT-RDW5W3A B HVT-RDW5W3B
500	400	1.96	A HVT-RDW5W4A B HVT-RDW5W4B
600	400	2.15	A HVT-RDW6W4A B HVT-RDW6W4B
600	500	2.11	A HVT-RDW6W5A B HVT-RDW6W5B
700	500	2.30	A HVT-RDW7W5A B HVT-RDW7W5B
700	600	2.26	A HVT-RDW7W6A B HVT-RDW7W6B
800	600	2.79	A HVT-RDW8W6A B HVT-RDW8W6B
800	700	2.72	A HVT-RDW8W7A B HVT-RDW8W7B
900	700	3.24	A HVT-RDW9W7A B HVT-RDW9W7B
900	800	3.18	A HVT-RDW9W8A B HVT-RDW9W8B
1000	800	3.42	A HVT-RDW10W8A B HVT-RDW10W8B
1000	900	3.37	A HVT-RDW10W9A B HVT-RDW10W9B



DETAIL "A"



DETAIL "B"



RIVETING A-TYPE

(first and last RUNG)

REMARK (KS D 3030)

Material · plate unit weight
Hot-dip coated steel sheet (KS D 3506, KS D 3030) - CR PosMAC
PLATE 1.0t : 6.42kg/m²
1.2t : 7.64kg/m²
1.4t : 8.87kg/m²

Rung · side rail section
RUNG Up to 800W : 40×16×9×1.0t
900W, 1000W : 40×16×9×1.2t
SIDE RAIL Up to 700W : 100H×20×1.2t
750W~1000W : 100H×20×1.4t

Rung spacing
Up to 700W : 300mm
750W~1000W : 200mm

Coating mass (total, both sides)
PLATE : 1.0t, 1.2t, 1.4t : 250g/m²

Rivet
RIVET : 5Ø×7.0L (brass alloy)

Fabrication basis
See fabrication specification

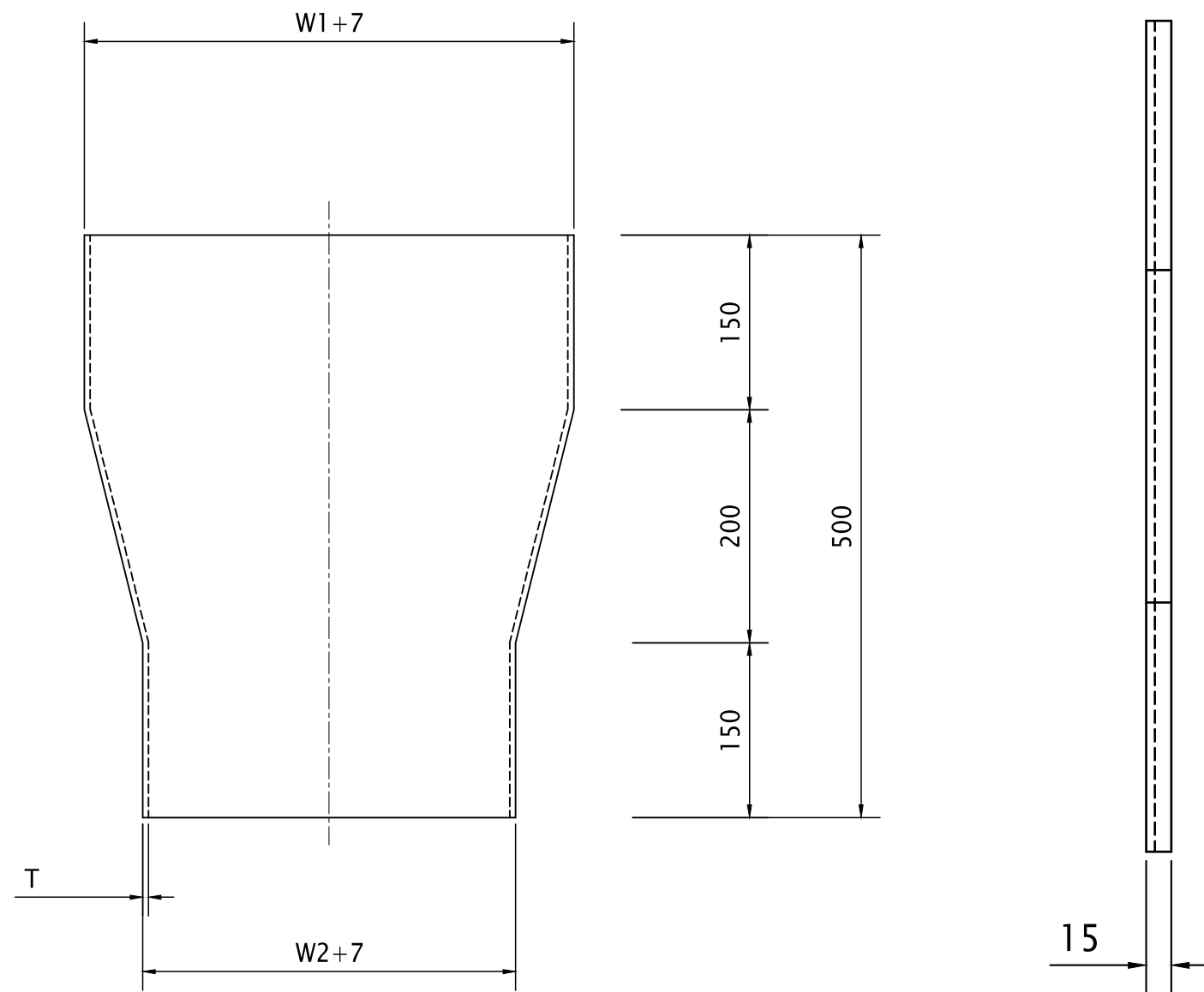
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-025

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR COVER FOR STRAIGHT TRAY REDUCER

UNIT mm · N.S.



REMARK (KS D 3030)

Material · plate unit weight
Hot-dip coated steel sheet CR PosMAC
PLATE 1.0t : 6.42kg/m²
Coating mass (total, both sides)
PLATE : 1.0t : 250g/m²
Fabrication basis
See fabrication specification

W1(mm)	W2(mm)	CR PosMAC (kg/EA)	Item No.
300	200	2.29	HVT-RDCW3W2
400	200	2.61	HVT-RDCW4W2
400	300	2.74	HVT-RDCW4W3
500	300	2.88	HVT-RDCW5W3
500	400	3.19	HVT-RDCW5W4
600	400	3.51	HVT-RDCW6W4
600	500	3.65	HVT-RDCW6W5
700	500	3.96	HVT-RDCW7W5
700	600	4.08	HVT-RDCW7W6
800	600	4.41	HVT-RDCW8W6
800	700	4.53	HVT-RDCW8W7
900	700	4.86	HVT-RDCW9W7
900	800	4.98	HVT-RDCW9W8
1000	800	5.31	HVT-RDCW10W8
1000	900	5.43	HVT-RDCW10W9

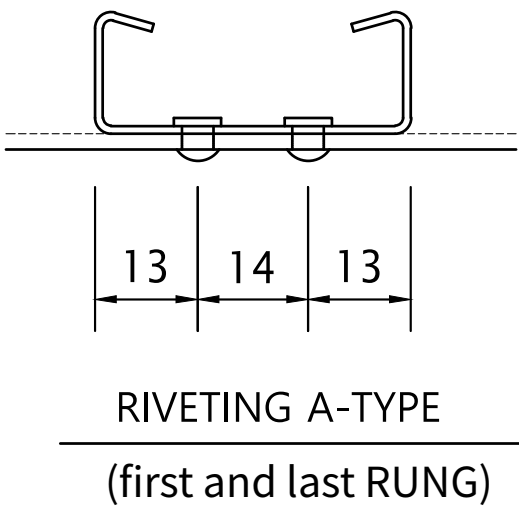
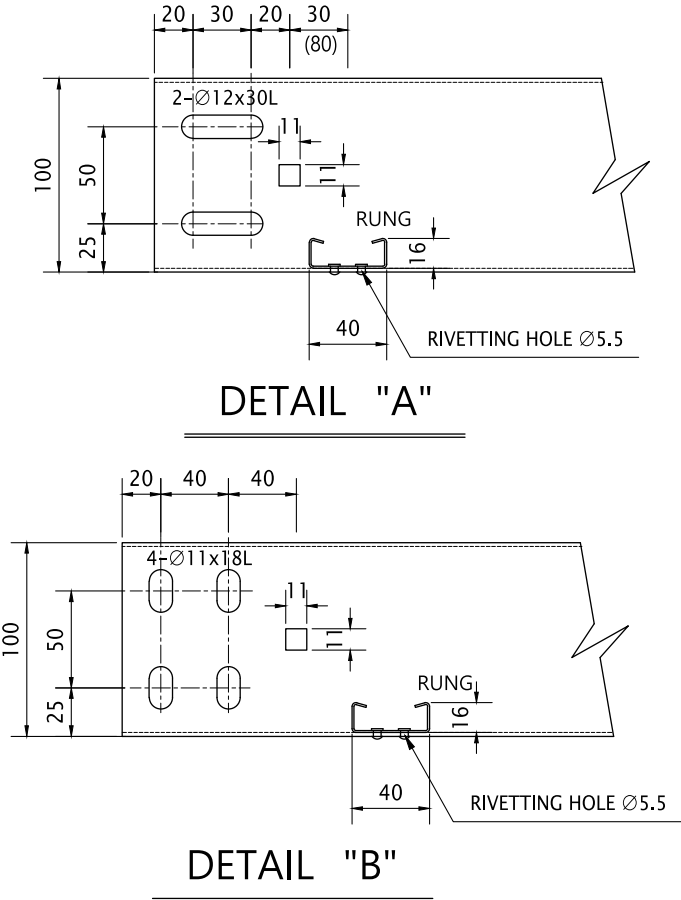
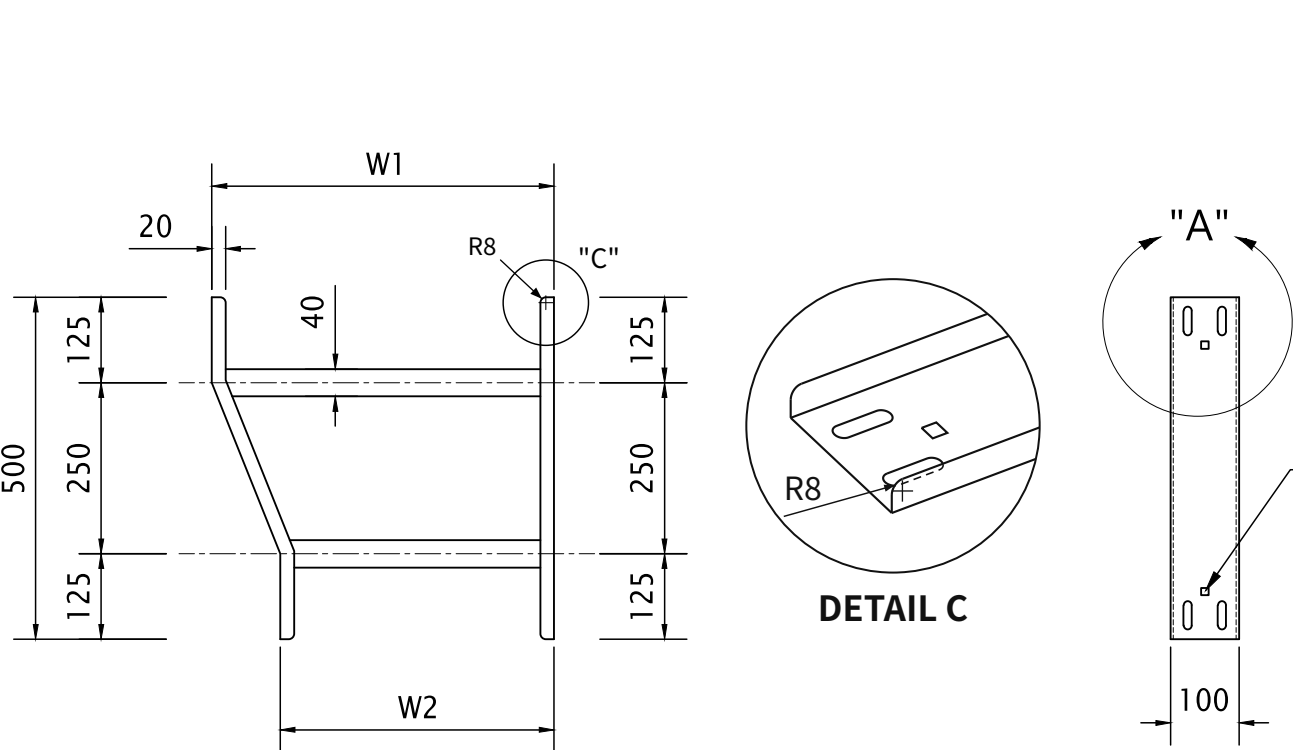
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-026

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR LEFT HAND STRAIGHT TRAY REDUCER

UNIT mm · N.S.



W1(mm)	W2(mm)	CR PosMAC (kg/EA)	Item No.
300	200	1.65	A HVT-RDLW3W2A B HVT-RDLW3W2B
400	200	1.84	A HVT-RDLW4W2A B HVT-RDLW4W2B
400	300	1.81	A HVT-RDLW4W3A B HVT-RDLW4W3B
500	300	1.99	A HVT-RDLW5W3A B HVT-RDLW5W3B
500	400	1.96	A HVT-RDLW5W4A B HVT-RDLW5W4B
600	400	2.15	A HVT-RDLW6W4A B HVT-RDLW6W4B
600	500	2.11	A HVT-RDLW6W5A B HVT-RDLW6W5B
700	500	2.30	A HVT-RDLW7W5A B HVT-RDLW7W5B
700	600	2.26	A HVT-RDLW7W6A B HVT-RDLW7W6B
800	600	2.79	A HVT-RDLW8W6A B HVT-RDLW8W6B
800	700	2.72	A HVT-RDLW8W7A B HVT-RDLW8W7B
900	700	3.24	A HVT-RDLW9W7A B HVT-RDLW9W7B
900	800	3.18	A HVT-RDLW9W8A B HVT-RDLW9W8B
1000	800	3.42	A HVT-RDLW10W8A B HVT-RDLW10W8B
1000	900	3.37	A HVT-RDLW10W9A B HVT-RDLW10W9B

REMARK (KS D 3030)

Material · plate unit weight
Hot-dip coated steel sheet (KS D 3506, KS D 3030) - CR PosMAC
PLATE
1.0t : 6.42kg/m²
1.2t : 7.64kg/m²
1.4t : 8.87kg/m²

Rung · side rail section
RUNG
Up to 800W : 40×16×9×1.0t
900W, 1000W : 40×16×9×1.2t
SIDE RAIL
Up to 700W : 100H×20×1.2t
750W~1000W : 100H×20×1.4t

Rung spacing
Up to 700W : 300mm
750W~1000W : 200mm

Coating mass (total, both sides)
PLATE : 1.0t, 1.2t, 1.4t : 250g/m²

Rivet
RIVET : 5Ø×7.0L (brass alloy)

Fabrication basis
See fabrication specification

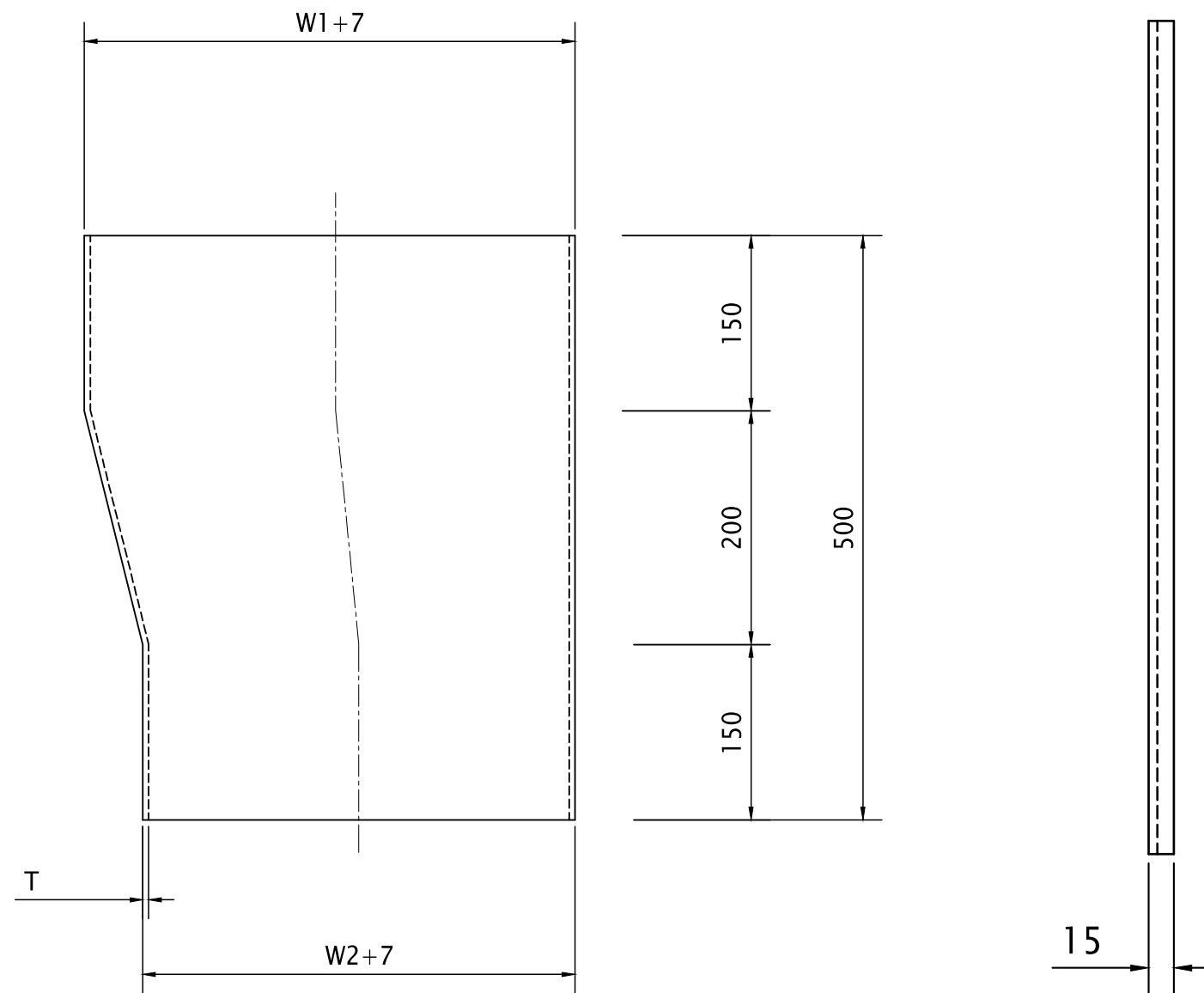
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-027

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR COVER FOR LEFT HAND TRAY REDUCER

UNIT mm · N.S.



W1(mm)	W2(mm)	CR PosMAC (kg/EA)	Item No.
300	200	2.29	HVT-RDLCW3W2
400	200	2.61	HVT-RDLCW4W2
400	300	2.74	HVT-RDLCW4W3
500	300	2.88	HVT-RDLCW5W3
500	400	3.19	HVT-RDLCW5W4
600	400	3.51	HVT-RDLCW6W4
600	500	3.65	HVT-RDLCW6W5
700	500	3.96	HVT-RDLCW7W5
700	600	4.08	HVT-RDLCW7W6
800	600	4.41	HVT-RDLCW8W6
800	700	4.53	HVT-RDLCW8W7
900	700	4.86	HVT-RDLCW9W7
900	800	4.98	HVT-RDLCW9W8
1000	800	5.31	HVT-RDLCW10W8
1000	900	5.43	HVT-RDLCW10W9

REMARK (KS D 3030)

Material · plate unit weight

Hot-dip coated steel sheet CR PosMAC

PLATE	1.0t : 6.42kg/m ²
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Coating mass (total, both sides)

PLATE : 1.0t : 250g/m²

Fabrication basis

See fabrication specification

HANVIT TRAY Co., Ltd.

DRAWING NO.

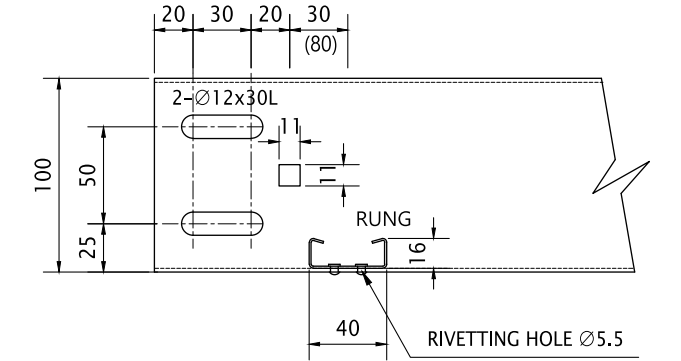
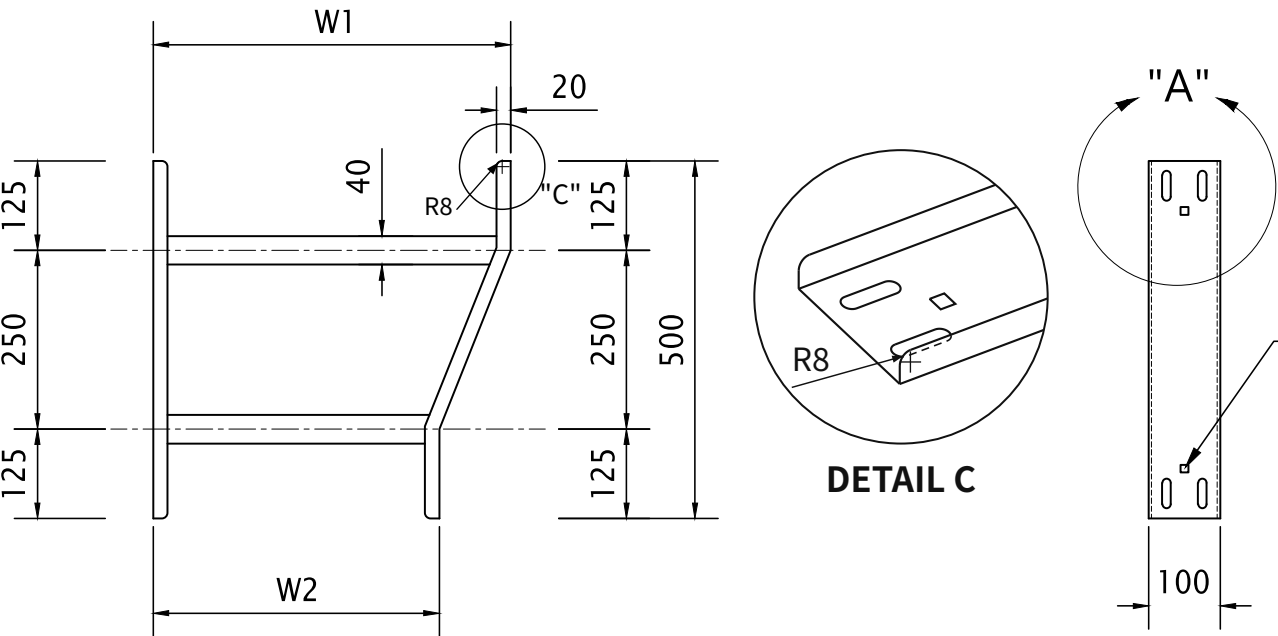
HVT-CR-028

UNIT mm · SCALE N.S.

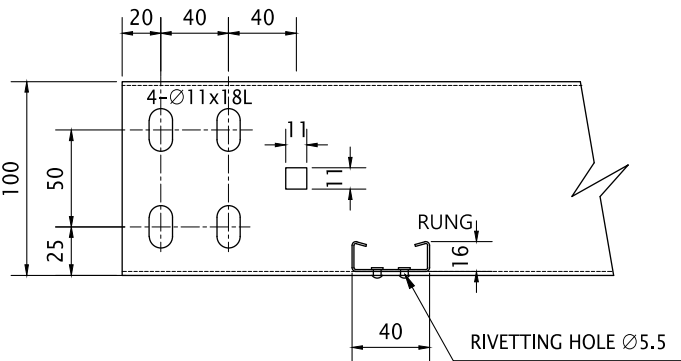
REV. 2026.01 · 2026-09-14

CR RIGHT HAND STRAIGHT TRAY REDUCER

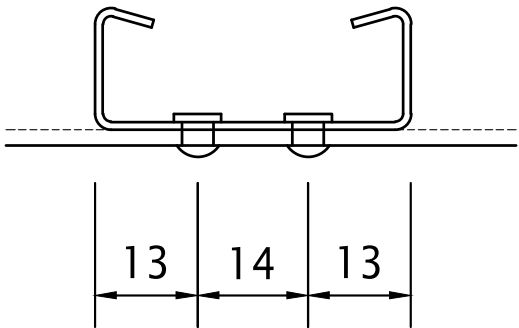
UNIT mm · N.S.



DETAIL "A"



DETAIL "B"



RIVETING A-TYPE

(first and last RUNG)

W1(mm)	W2(mm)	CR PosMAC (kg/EA)	Item No.
300	200	1.65	A HVT-RDRW3W2A B HVT-RDRW3W2B
400	200	1.84	A HVT-RDRW4W2A B HVT-RDRW4W2B
400	300	1.81	A HVT-RDRW4W3A B HVT-RDRW4W3B
500	300	1.99	A HVT-RDRW5W3A B HVT-RDRW5W3B
500	400	1.96	A HVT-RDRW5W4A B HVT-RDRW5W4B
600	400	2.15	A HVT-RDRW6W4A B HVT-RDRW6W4B
600	500	2.11	A HVT-RDRW6W5A B HVT-RDRW6W5B
700	500	2.30	A HVT-RDRW7W5A B HVT-RDRW7W5B
700	600	2.26	A HVT-RDRW7W6A B HVT-RDRW7W6B
800	600	2.79	A HVT-RDRW8W6A B HVT-RDRW8W6B
800	700	2.72	A HVT-RDRW8W7A B HVT-RDRW8W7B
900	700	3.24	A HVT-RDRW9W7A B HVT-RDRW9W7B
900	800	3.18	A HVT-RDRW9W8A B HVT-RDRW9W8B
1000	800	3.42	A HVT-RDRW10W8A B HVT-RDRW10W8B
1000	900	3.37	A HVT-RDRW10W9A B HVT-RDRW10W9B

REMARK (KS D 3030)

Material · plate unit weight
Hot-dip coated steel sheet (KS D 3506, KS D 3030) - CR PosMAC
PLATE
1.0t : 6.42kg/m²
1.2t : 7.64kg/m²
1.4t : 8.87kg/m²

Rung · side rail section
RUNG
Up to 800W : 40×16×9×1.0t
900W, 1000W : 40×16×9×1.2t
SIDE RAIL
Up to 700W : 100H×20×1.2t
750W~1000W : 100H×20×1.4t

Rung spacing
Up to 700W : 300mm
750W~1000W : 200mm

Coating mass (total, both sides)
PLATE : 1.0t, 1.2t, 1.4t : 250g/m²

Rivet
RIVET : 5Ø×7.0L (brass alloy)

Fabrication basis
See fabrication specification

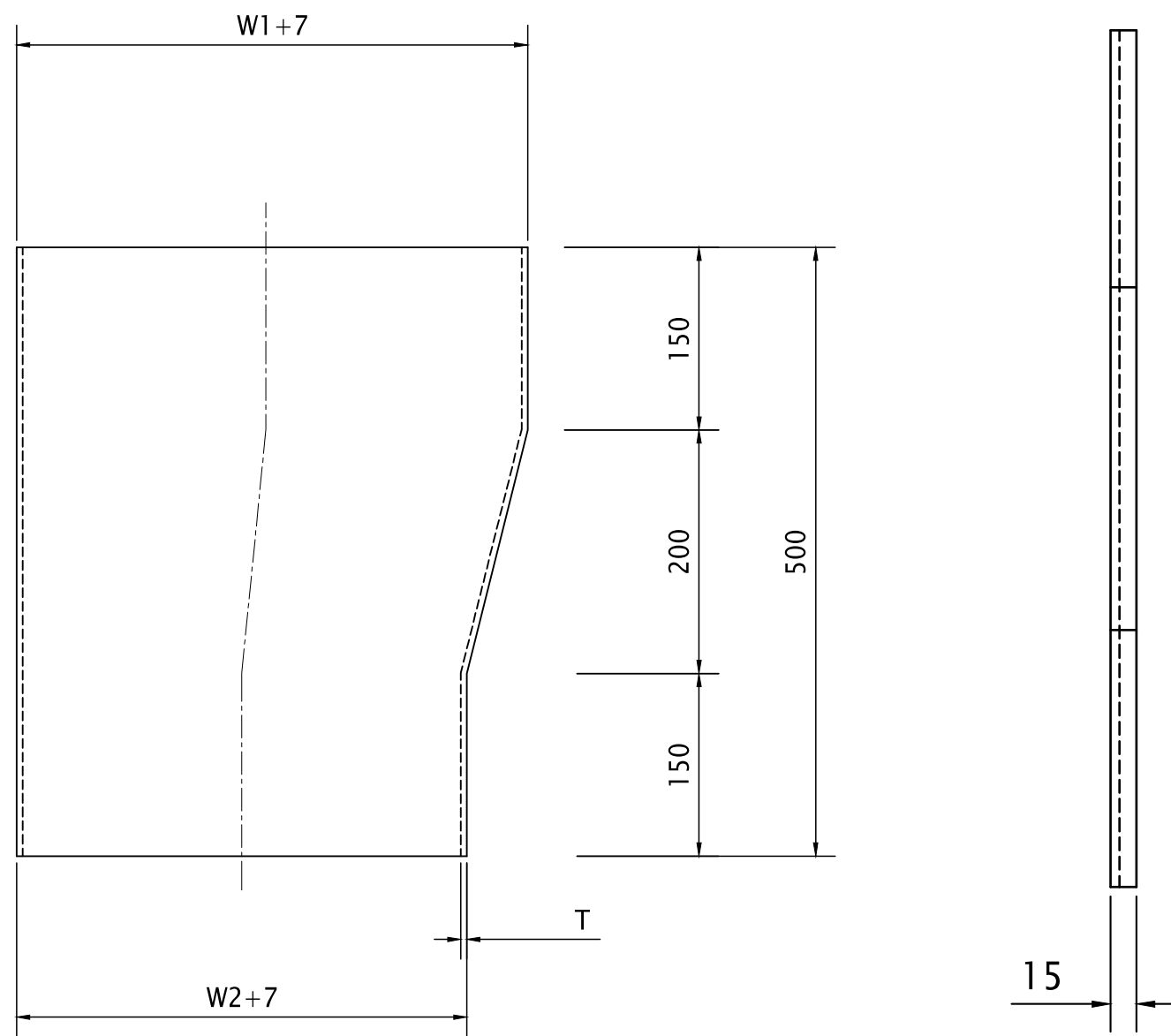
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-029

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR COVER FOR RIGHT HAND TRAY REDUCER

UNIT mm · N.S.



REMARK (KS D 3030)

Material · plate unit weight
Hot-dip coated steel sheet CR PosMAC
PLATE 1.0t : 6.42kg/m²
Coating mass (total, both sides)
PLATE : 1.0t : 250g/m²
Fabrication basis
See fabrication specification

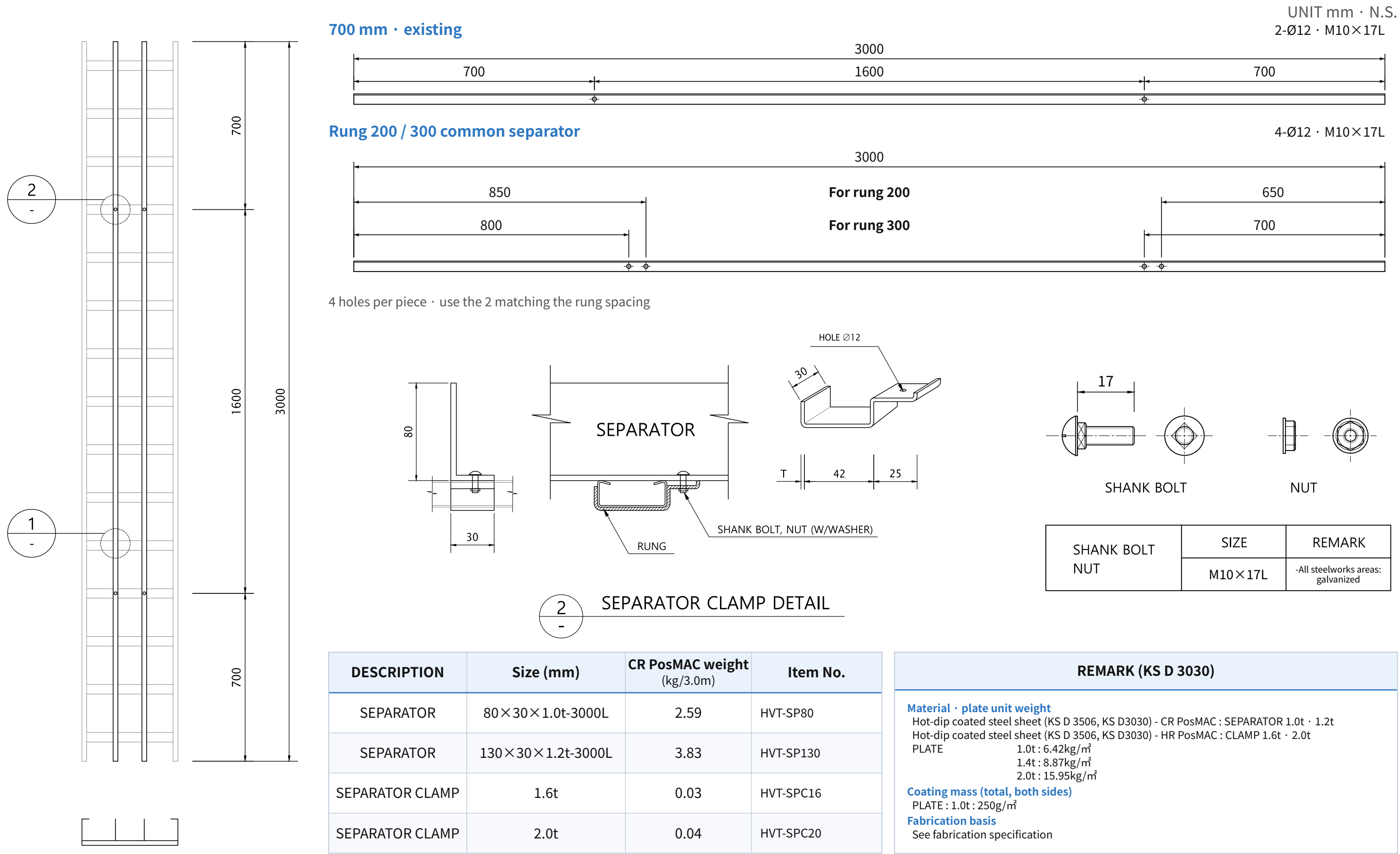
W1(mm)	W2(mm)	CR PosMAC (kg/EA)	Item No.
300	200	2.29	HVT-RDRCW3W2
400	200	2.61	HVT-RDRCW4W2
400	300	2.74	HVT-RDRCW4W3
500	300	2.88	HVT-RDRCW5W3
500	400	3.19	HVT-RDRCW5W4
600	400	3.51	HVT-RDRCW6W4
600	500	3.65	HVT-RDRCW6W5
700	500	3.96	HVT-RDRCW7W5
700	600	4.08	HVT-RDRCW7W6
800	600	4.41	HVT-RDRCW8W6
800	700	4.53	HVT-RDRCW8W7
900	700	4.86	HVT-RDRCW9W7
900	800	4.98	HVT-RDRCW9W8
1000	800	5.31	HVT-RDRCW10W8
1000	900	5.43	HVT-RDRCW10W9

HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-030

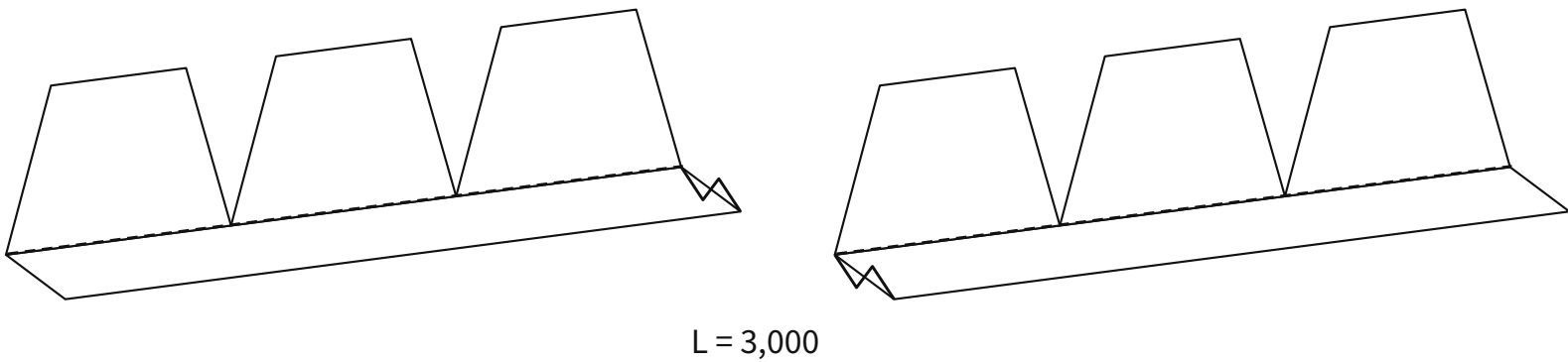
UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR TRAY SEPARATOR



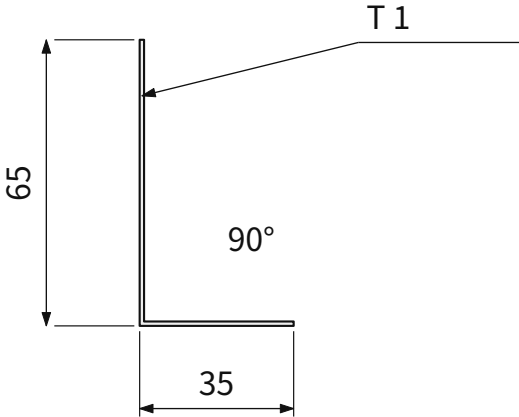
UNIT mm · N.S.

Isometric · as-bent shape



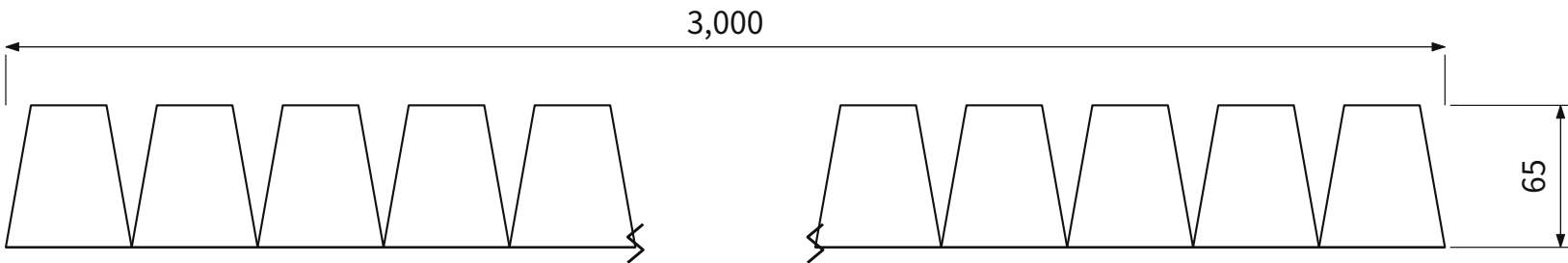
Mid-length omitted

Section · outside dims



Dims: outside, after bending

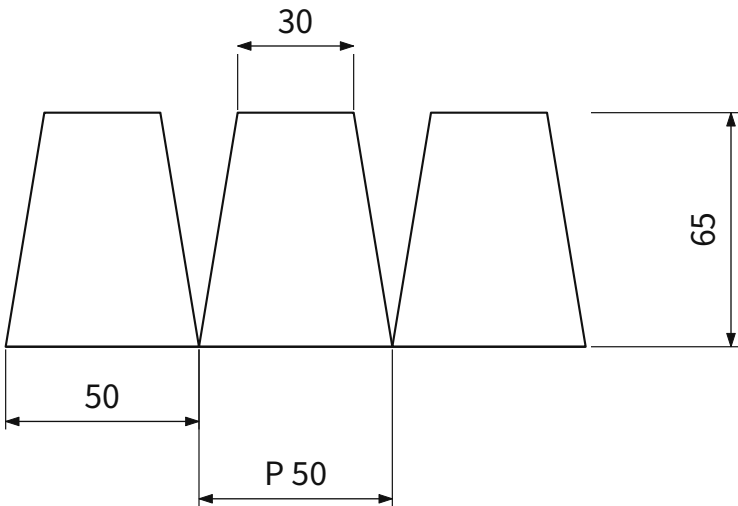
Front · vertical slots



End margin E = 0

Pitch P = 50 · 60 trapezoidal tabs

Detail A · trapezoidal tab



Size table · CR PosMAC

L	H (outside)	B (outside)	T	P	E (both ends)	Tab root / tip	Item No.
3000	65	35	1	50	0	50 / 30	HVT-VSP65

Material: CR PosMAC · bend angle: 90° · section dims: outside, after bending · 80H size (100H max incl. rung) · actual height 65
Slots repeat at P = 50 · no end margin · excess cut off at stock length L
L: length H: height B: bottom width T: thickness P: pitch E: end margin

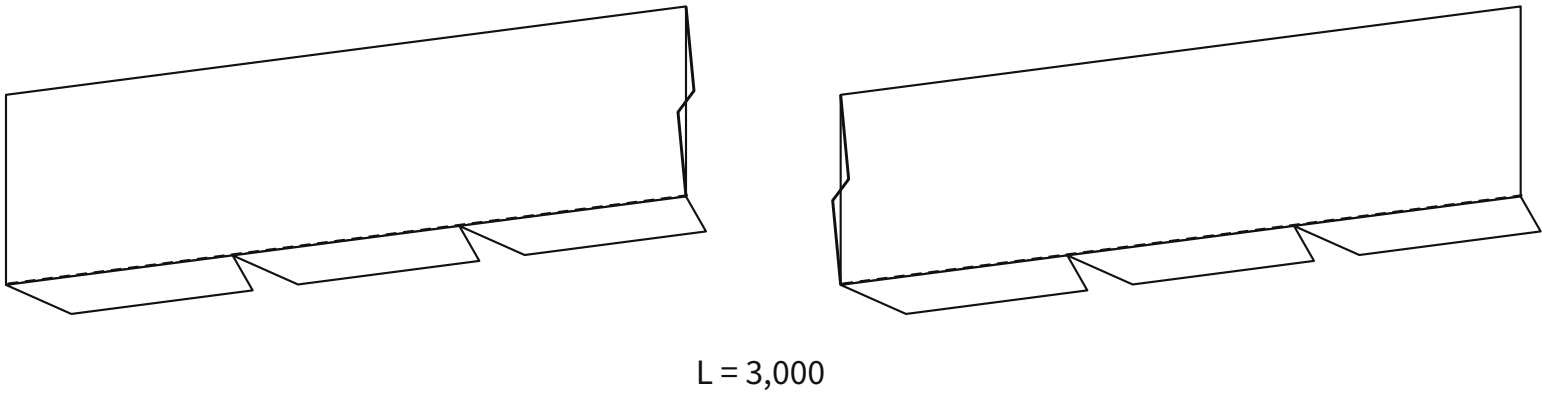
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-056

UNIT mm · SCALE N.S.
REV. 2026.02 · 2026-09-15

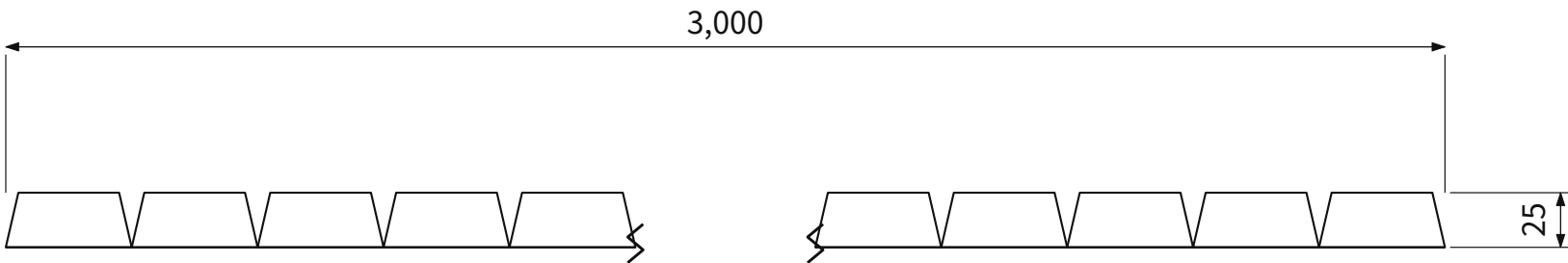
UNIT mm · N.S.

Isometric · as-bent shape



Mid-length omitted

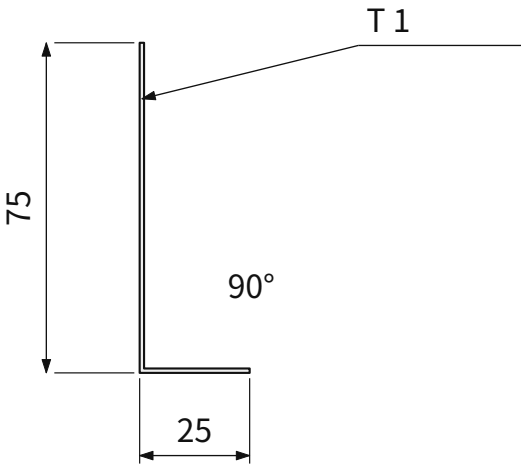
Plan · horizontal slots



End margin E = 0

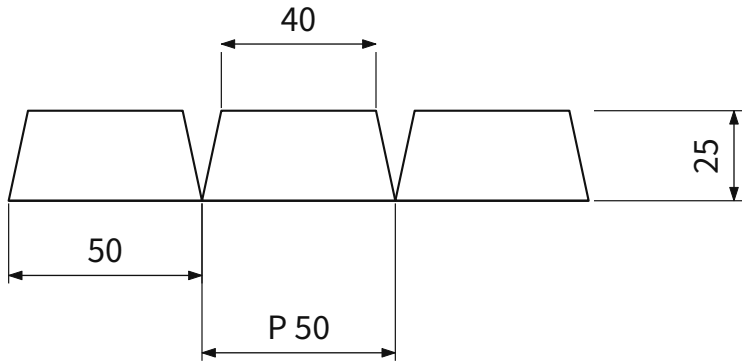
Pitch P = 50 · 60 trapezoidal tabs

Section · outside dims



Dims: outside, after bending

Detail A · trapezoidal tab



Size table · CR PosMAC

L	H (outside)	B (outside)	T	P	E (both ends)	Tab root / tip	Item No.
3000	75	25	1	50	0	50 / 40	HVT-HSP75

Material: CR PosMAC · bend angle: 90° · section dims: outside, after bending · 80H size (100H max incl. rung) · actual height 75
Slots repeat at P = 50 · no end margin · excess cut off at stock length L
L: length H: height B: bottom width T: thickness P: pitch E: end margin

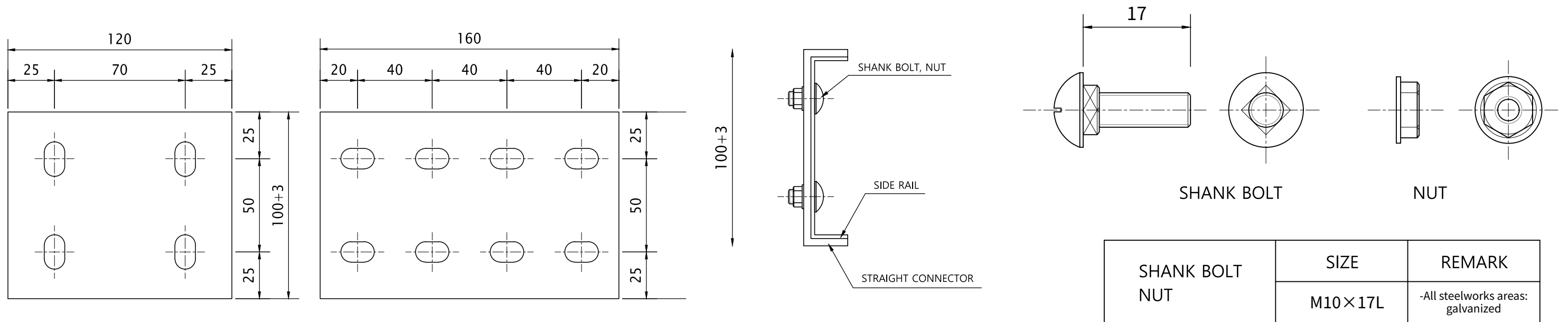
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-057

UNIT mm · SCALE N.S.
REV. 2026.02 · 2026-09-15

CR STRAIGHT TRAY CONNECTOR

UNIT mm · N.S.



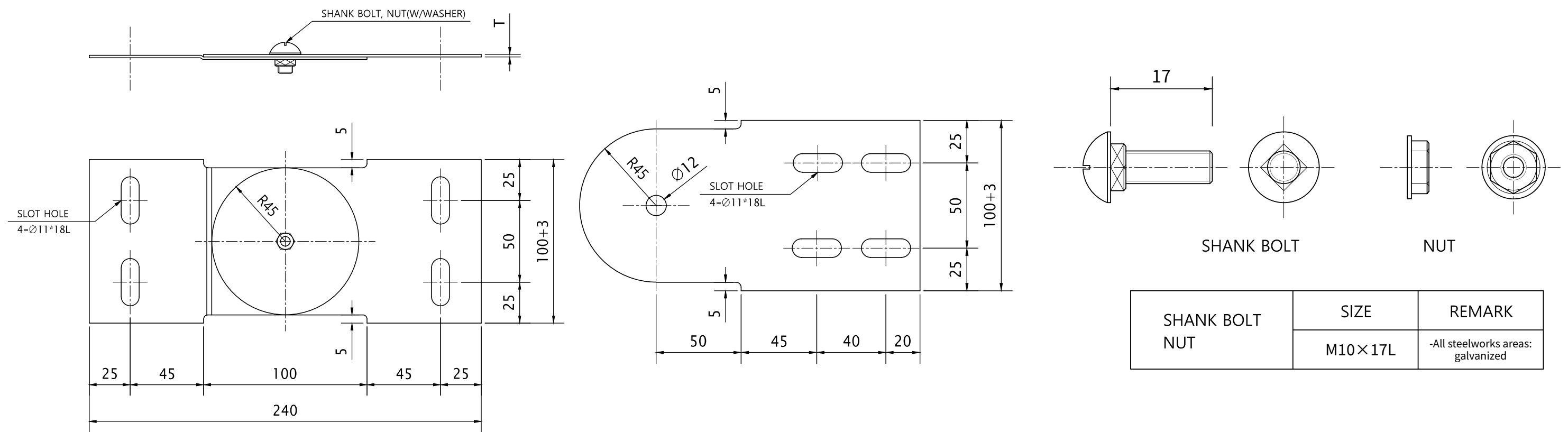
DESCRIPTION	Size (mm)	Item No.
JOINT CONN'	103×120×1.2t	HVT-CN120T12
JOINT CONN'	103×120×1.4t	HVT-CN120T14
JOINT CONN'	103×120×2.0t	HVT-CN120T20
Type 120 basis		

Type	T(mm)	Item No.
Type 160	1.0	HVT-CN160T10
Type 160	1.2	HVT-CN160T12
Type 160	1.4	HVT-CN160T14

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC : 1.2t · 1.4t Hot-dip coated steel sheet (KS D 3506, KS D3030) - HR PosMAC : 2.0t PLATE 1.2t × 120×138 : 0.162kg/m² 1.4t × 120×138 : 0.188kg/m² 2.0t × 120×138 : 0.27kg/m² Coating mass (total, both sides) PLATE 1.2t, 1.4t : 250g/m² Fabrication basis See fabrication specification

CR ADJ. RISER CONNECTOR

UNIT mm · N.S.



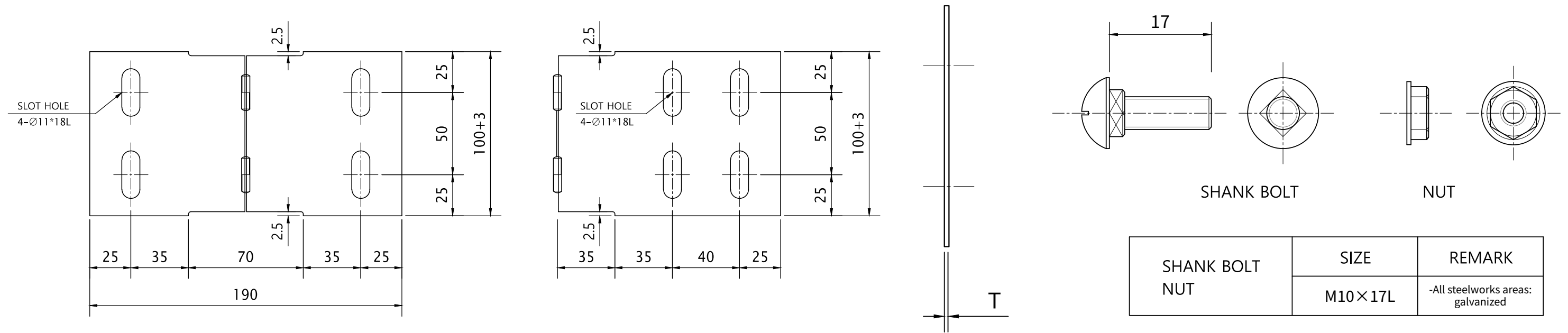
DESCRIPTION	Size (mm)	Item No.
RISER CONN'	103×240×1.2t	HVT-RC240T12
RISER CONN'	103×240×1.4t	HVT-RC240T14
RISER CONN'	103×240×2.0t	HVT-RC240T20
Type 240 basis		

Type	T(mm)	Item No.
Type 310	1.0	HVT-RC310T10
Type 310	1.2	HVT-RC310T12
Type 310	1.4	HVT-RC310T14

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC : 1.2t · 1.4t Hot-dip coated steel sheet (KS D 3506, KS D3030) - HR PosMAC : 2.0t PLATE 1.2t × 175×138×2 : 0.473kg/m² 1.4t × 175×138×2 : 0.549kg/m² 2.0t × 175×138×2 : 0.78kg/m² Coating mass (total, both sides) PLATE 1.2t, 1.4t : 250g/m² Fabrication basis See fabrication specification

CR BENDABLE HORIZONTAL CONNECTOR

UNIT mm · N.S.



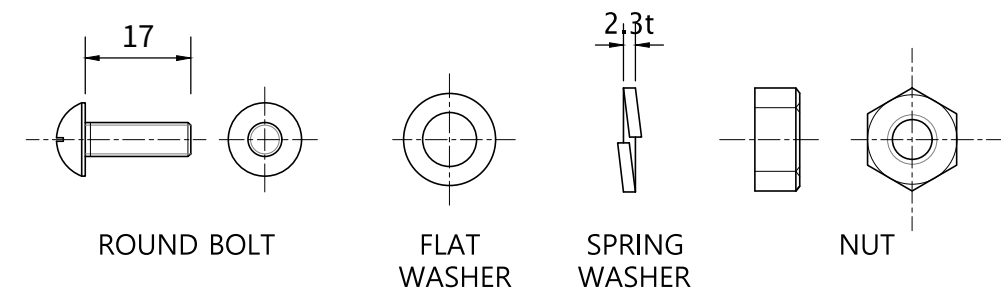
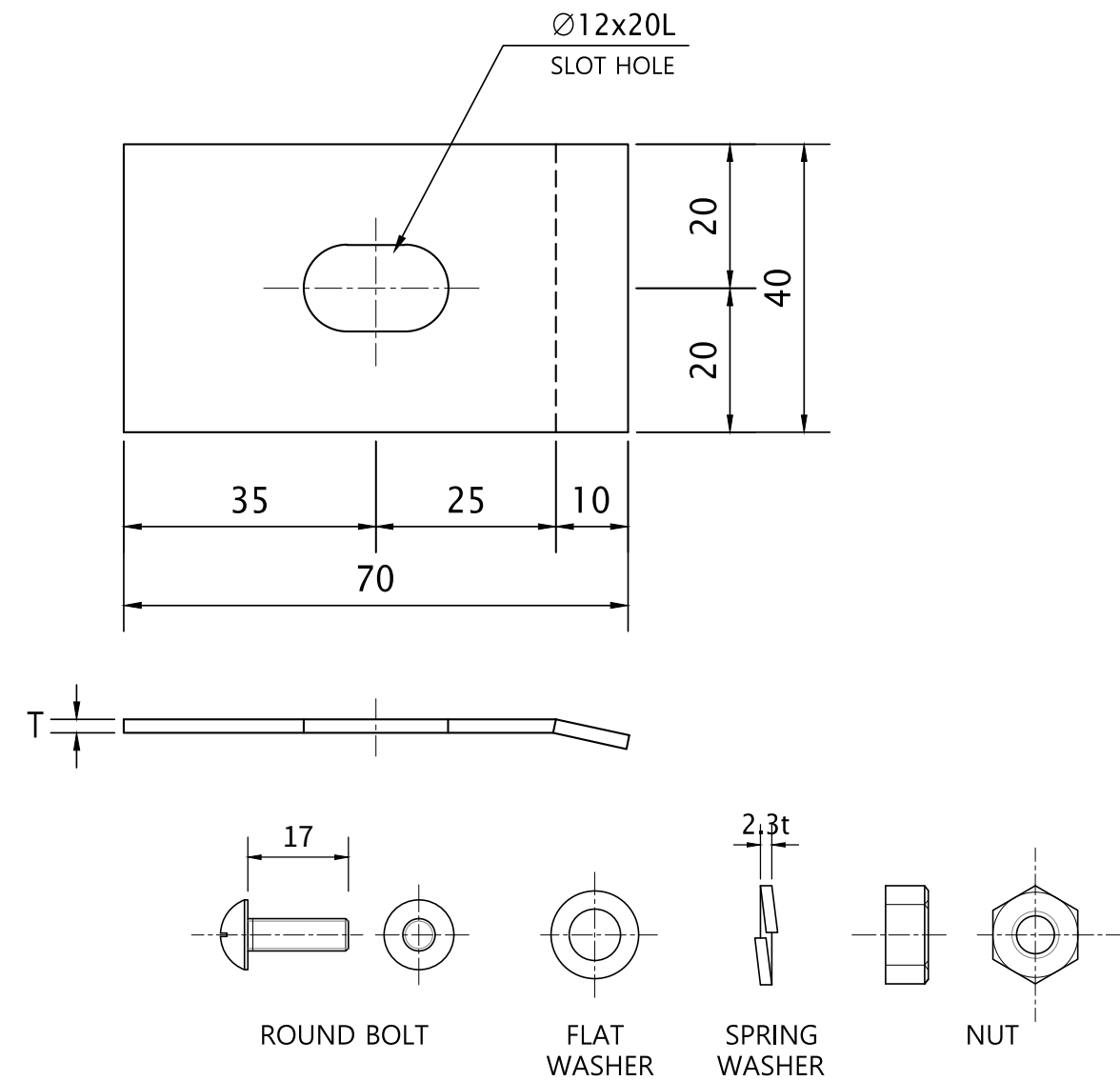
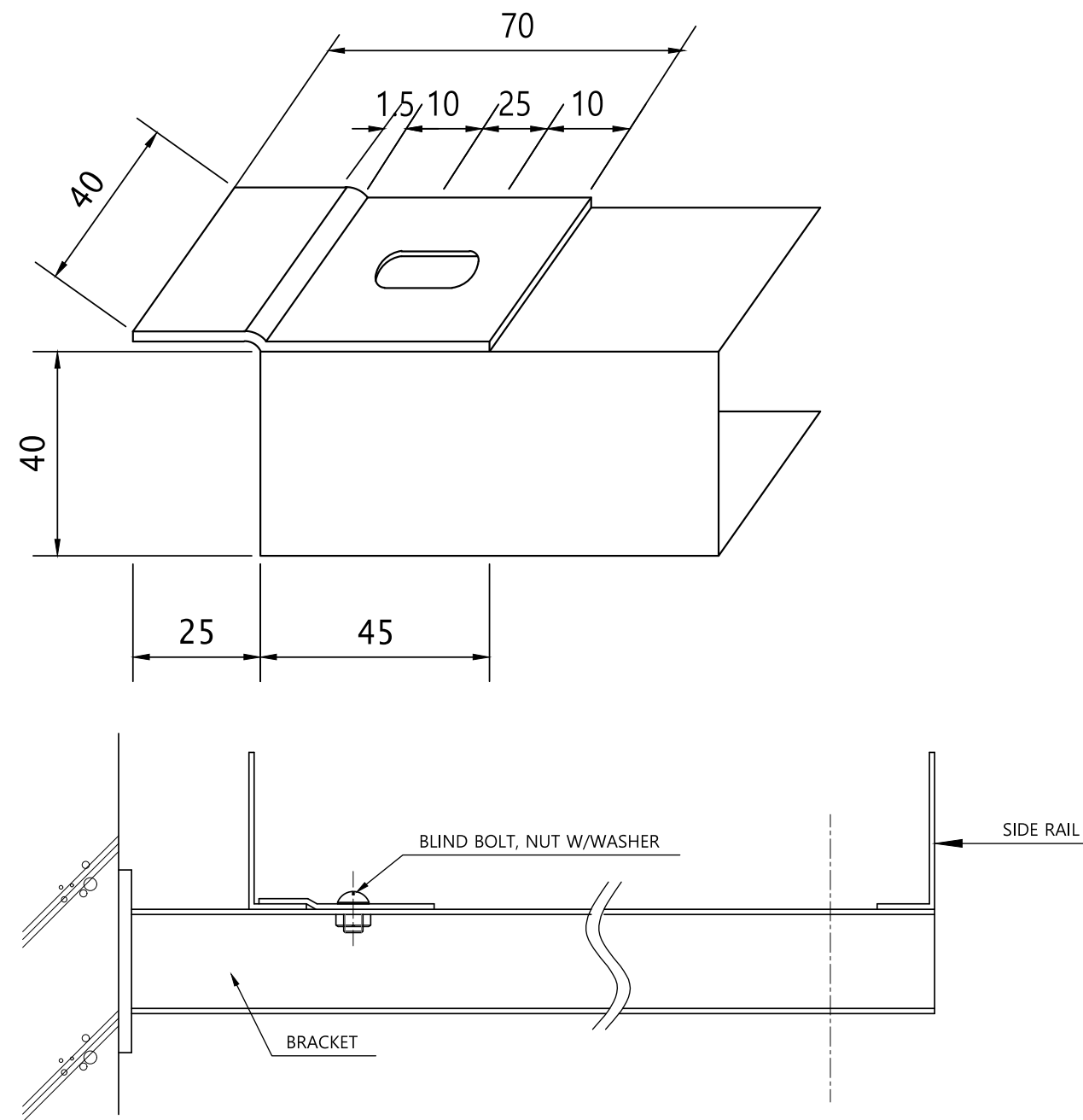
DESCRIPTION	Size (mm)	Item No.
HOR` CONN'	103×190×1.2t	HVT-BC190T12
HOR` CONN'	103×190×1.4t	HVT-BC190T14
HOR` CONN'	103×190×2.0t	HVT-BC190T20
Type 190 basis		

Type	T(mm)	Item No.
Type 260	1.0	HVT-BC260T10
Type 260	1.2	HVT-BC260T12
Type 260	1.4	HVT-BC260T14

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC : 1.2t · 1.4t Hot-dip coated steel sheet (KS D 3506, KS D3030) - HR PosMAC : 2.0t PLATE 1.2t × 115×138×2 : 0.311kg/m² 1.4t × 115×138×2 : 0.361kg/m² 2.0t × 115×138×2 : 0.52kg/m² Coating mass (total, both sides) PLATE 1.2t, 1.4t : 250g/m² Fabrication basis See fabrication specification

CR HOLD DOWN CLAMP

UNIT mm · N.S.



ROUND BOLT NUT W/WASHER	SIZE	REMARK
	M10×17L	-All steelworks areas: galvanized

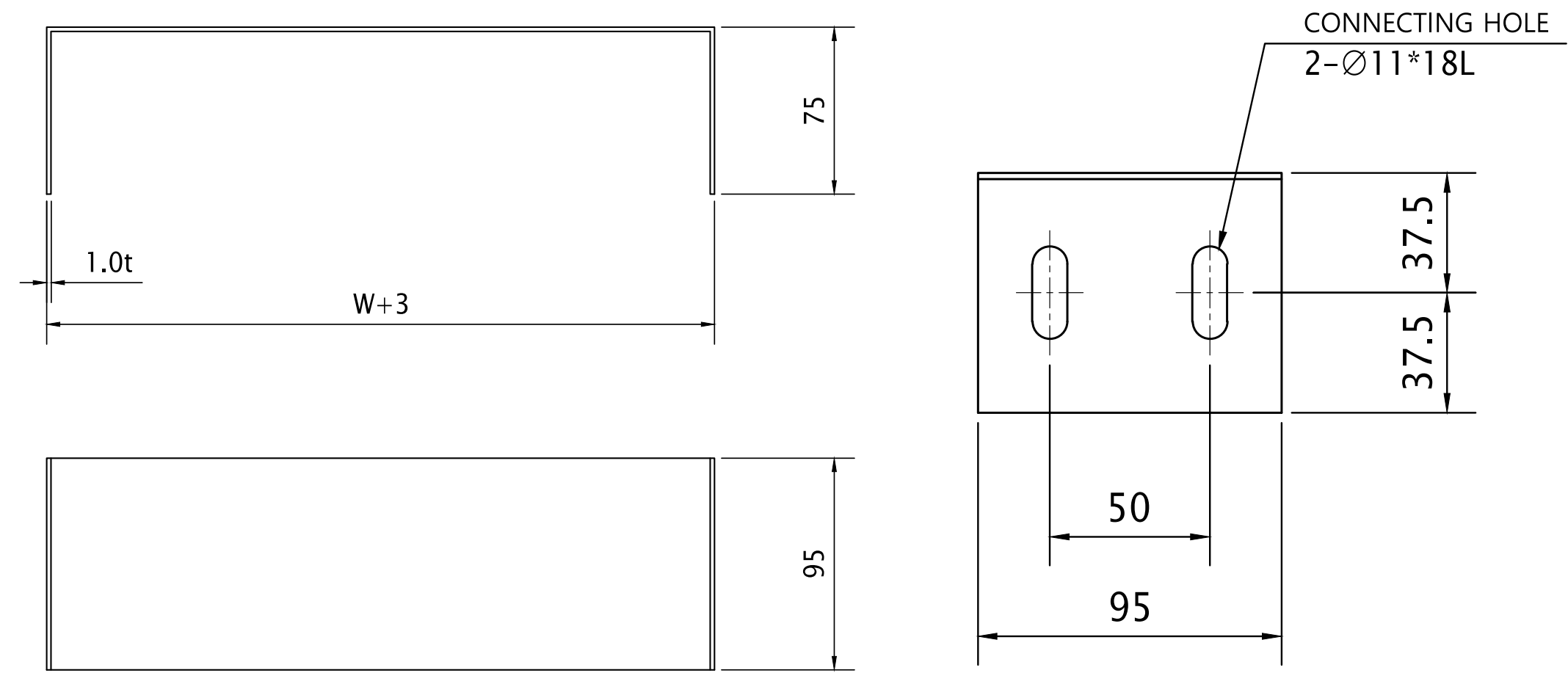
DESCRIPTION	Size (mm)	Item No.
H.D.C	70×40×1.4t	HVT-HCT14
H.D.C	70×40×2.0t	HVT-HCT20

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC : 1.4t Hot-dip coated steel sheet (KS D 3506, KS D3030) - HR PosMAC : 2.0t PLATE 1.4t × 70×40×2 : 0.032kg/m ² 2.0t × 70×40×2 : 0.045kg/m ² Coating mass (total, both sides) PLATE 1.4t : 250g/m ² Fabrication basis See fabrication specification

HANVIT TRAY Co., Ltd.	DRAWING NO. HVT-CR-035	UNIT mm · SCALE N.S. REV. 2026.01 · 2026-09-14
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CR BLIND END

UNIT mm · N.S.

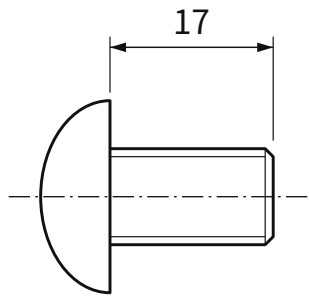
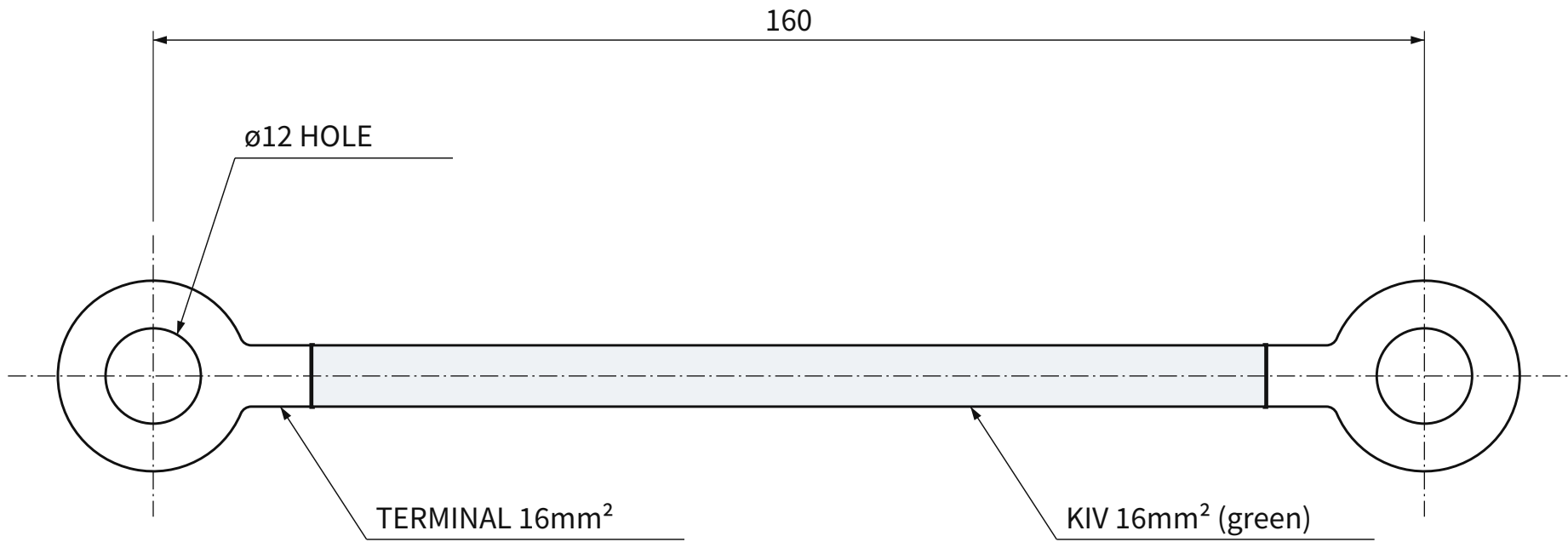


W(mm)	CR PosMAC(Kg /EA)	Item No.
200	0.27	HVT-BEW2
300	0.35	HVT-BEW3
400	0.42	HVT-BEW4
500	0.5	HVT-BEW5
600	0.58	HVT-BEW6
700	0.66	HVT-BEW7
800	0.73	HVT-BEW8
900	0.81	HVT-BEW9
1000	0.89	HVT-BEW10
END CAP · 100H		

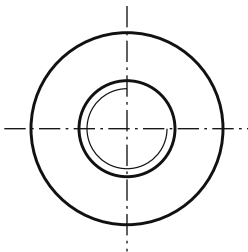
REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC PLATE 1.0t : 6.42kg/m² Coating mass (total, both sides) PLATE 1.0t : 250g/m² Fabrication basis See fabrication specification

CR GROUND BONDING JUMPER

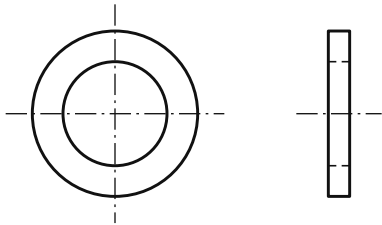
UNIT mm · N.S.



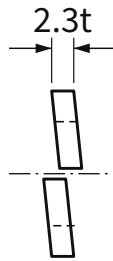
ROUND BOLT



FLAT WASHER



SPRING WASHER



NUT

Parts · Specs

Part name	Specification	Notes
KIV	16mm ² (green)	
TERMINAL	16mm ² · ø12 HOLE	
ROUND BOLT · NUT W/WASHER	M10×17L	All steelworks areas: galvanized
SPRING WASHER	2.3t	

Specification	Item No.
KIV 16mm ² (green) · TERMINAL 16mm ²	HVT-BJ16
CABLE TRAY BONDING JUMPER for 154kV · TYPE 35mm ²	HVT-BJ35

REMARK
Specification by voltage CABLE TRAY BONDING JUMPER for 154kV TYPE 35mm² Application conditions A-TYPE locations: iron and steelmaking areas, coastal areas, outdoor areas

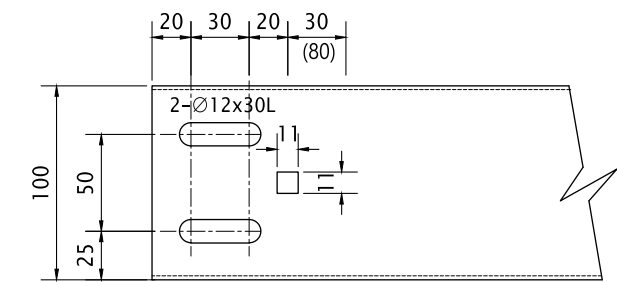
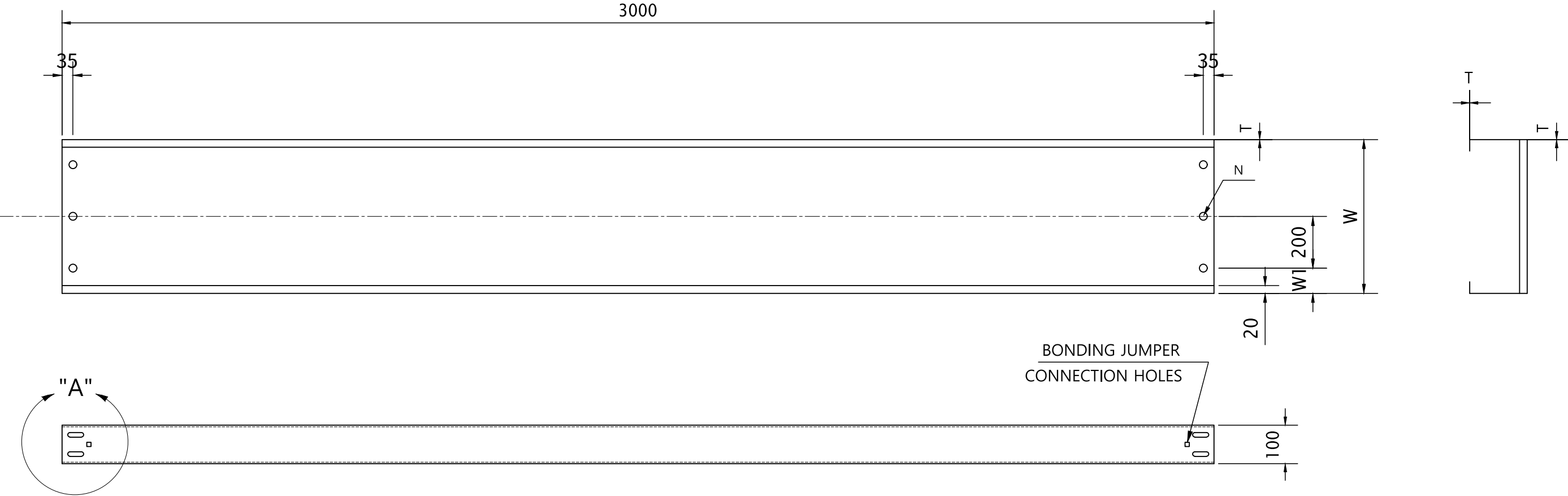
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-037

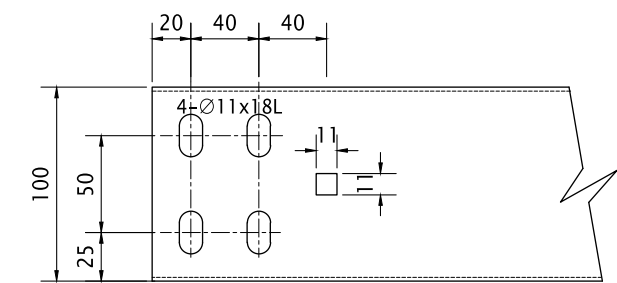
UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR DUCT STRAIGHT (3.0m)

UNIT mm · N.S.



DETAIL "A"



DETAIL "B"

DIMENSION			CR PosMAC(Kg /3.0m) · 100H		Item No.
W(mm)	W1(mm)	N(EA) (No. of HOLES per side)	T(mm)	WEIGHT	
200			1.2	12.64	A HVT-DSTW2A B HVT-DSTW2B
300	50	2	1.2	15.18	A HVT-DSTW3A B HVT-DSTW3B
400	100	2	1.2	18.53	A HVT-DSTW4A B HVT-DSTW4B
500	50	3	1.2	21.61	A HVT-DSTW5A B HVT-DSTW5B
600	100	3	1.4	28.32	A HVT-DSTW6A B HVT-DSTW6B
700	50	4	1.4	31.13	A HVT-DSTW7A B HVT-DSTW7B
800	100	4	1.4	35.13	A HVT-DSTW8A B HVT-DSTW8B
900	50	5	1.4	38.55	A HVT-DSTW9A B HVT-DSTW9B
1000	100	5	1.4	41.96	A HVT-DSTW10A B HVT-DSTW10B

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC PLATE 1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ² Coating mass (total, both sides) PLATE : 1.2t, 1.4t : 250g/m ² Rivet RIVET : Ø5×7.0L (brass alloy) CABLE DUCT support spacing ※CABLE DUCT 100H: based on SUPPORT spacing of 2M Fabrication basis See fabrication specification

HANVIT TRAY Co., Ltd.

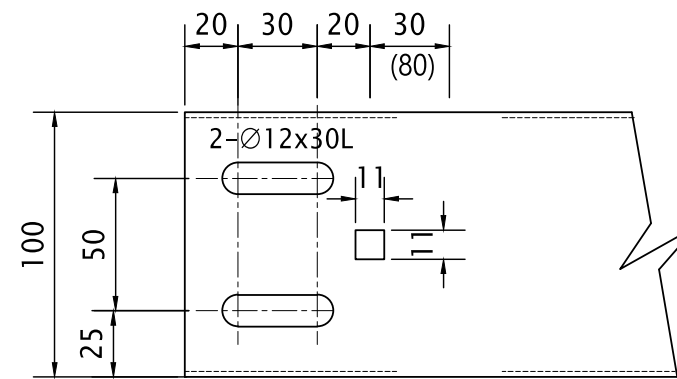
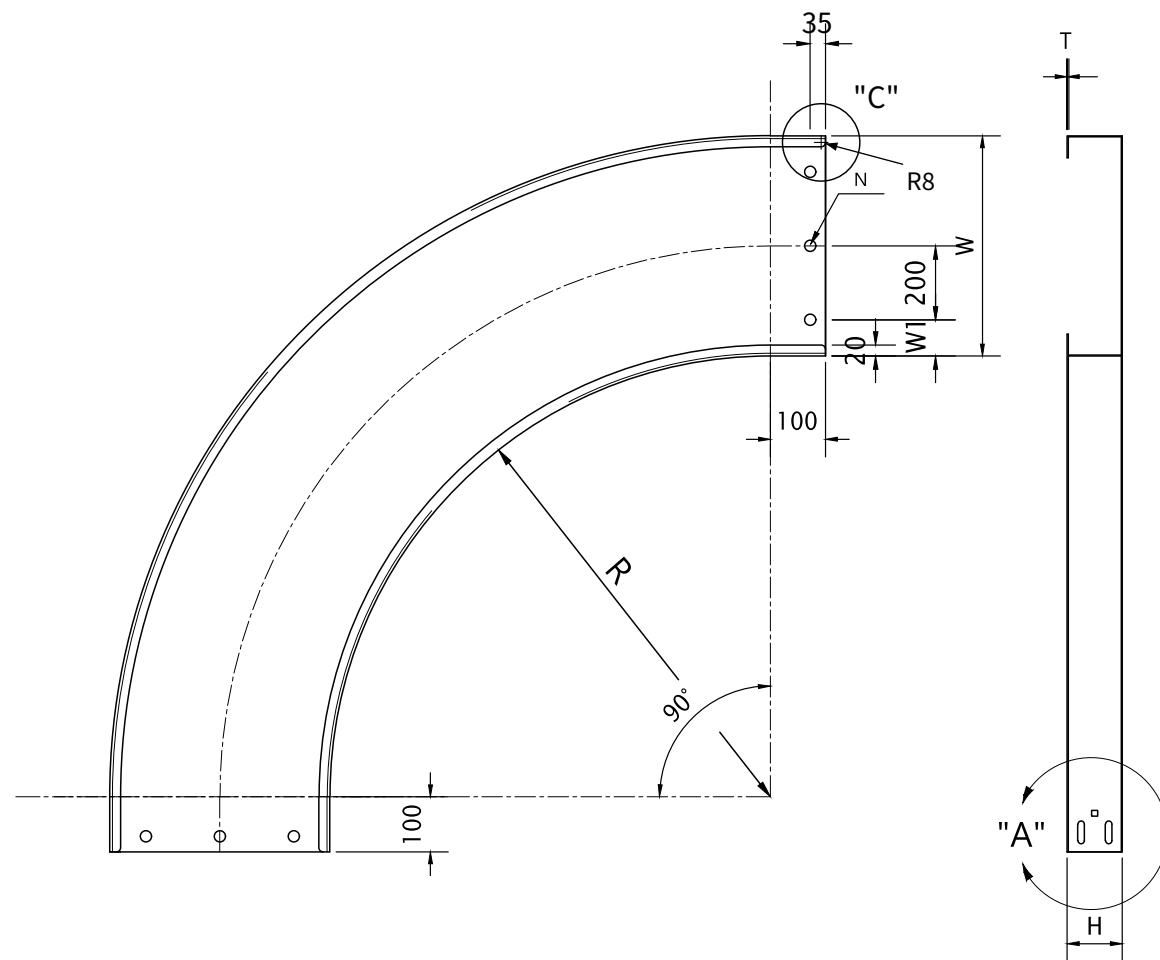
DRAWING NO.
HVT-CR-038

UNIT mm · SCALE N.S.

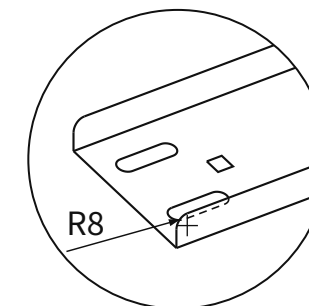
REV. 2026.01 · 2026-09-14

90° CR HORIZONTAL DUCT ELBOW

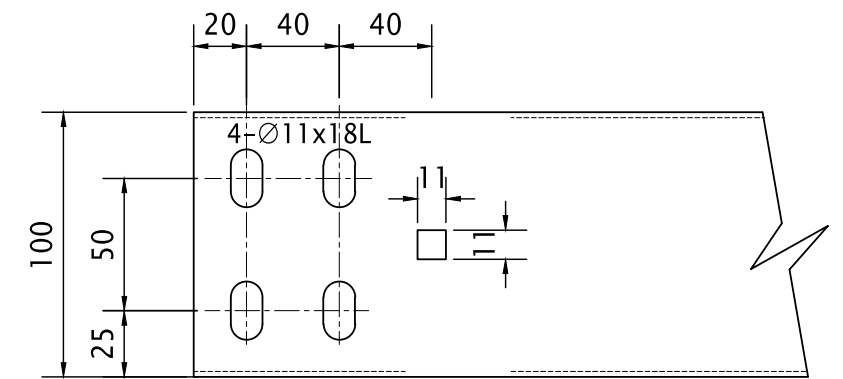
UNIT mm · N.S.



DETAIL "A"



DETAIL C



DETAIL "B"

DIMENSION			CR PosMAC(Kg /EA) · 100H					
W(mm)	W1(mm)	N(EA) (No. of HOLES per side)	300R			600R		
			T(mm)	WEIGHT	Item No.	T(mm)	WEIGHT	Item No.
200			1.2	3.78	A HVT-DHE90W2R3A B HVT-DHE90W2R3B	1.2	5.86	A HVT-DHE90W2R6A B HVT-DHE90W2R6B
300	50	2	1.2	5.08	A HVT-DHE90W3R3A B HVT-DHE90W3R3B	1.2	7.87	A HVT-DHE90W3R6A B HVT-DHE90W3R6B
400	100	2	1.2	6.53	A HVT-DHE90W4R3A B HVT-DHE90W4R3B	1.2	10.12	A HVT-DHE90W4R6A B HVT-DHE90W4R6B
500	50	3	1.2	8.16	A HVT-DHE90W5R3A B HVT-DHE90W5R3B	1.2	18.64	A HVT-DHE90W5R6A B HVT-DHE90W5R6B
600	100	3	1.4	11.41	A HVT-DHE90W6R3A B HVT-DHE90W6R3B	1.4	17.68	A HVT-DHE90W6R6A B HVT-DHE90W6R6B
700	50	4	1.4	13.65	A HVT-DHE90W7R3A B HVT-DHE90W7R3B	1.4	21.41	A HVT-DHE90W7R6A B HVT-DHE90W7R6B
800	100	4	1.4	22.27	A HVT-DHE90W8R3A B HVT-DHE90W8R3B	1.4	34.51	A HVT-DHE90W8R6A B HVT-DHE90W8R6B
900	50	5	1.4	25.89	A HVT-DHE90W9R3A B HVT-DHE90W9R3B	1.4	40.13	A HVT-DHE90W9R6A B HVT-DHE90W9R6B
1000	100	5	1.4	29.77	A HVT-DHE90W10R3A B HVT-DHE90W10R3B	1.4	46.14	A HVT-DHE90W10R6A B HVT-DHE90W10R6B

REMARK (KS D 3030)

Material · plate unit weight

Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC

PLATE	1.0t : 6.42kg/m ²
	1.2t : 7.64kg/m ²
	1.4t : 8.87kg/m ²

Coating mass (total, both sides)

PLATE : 1.2t, 1.4t : 250g/m²

Rivet

RIVET : Ø5×7.0L (brass alloy)

CABLE DUCT basis

CABLE DUCT 100H: based on SUPPORT spacing of 2M

Fabrication basis

See fabrication specification

HANVIT TRAY Co., Ltd.

DRAWING NO.

HVT-CR-039

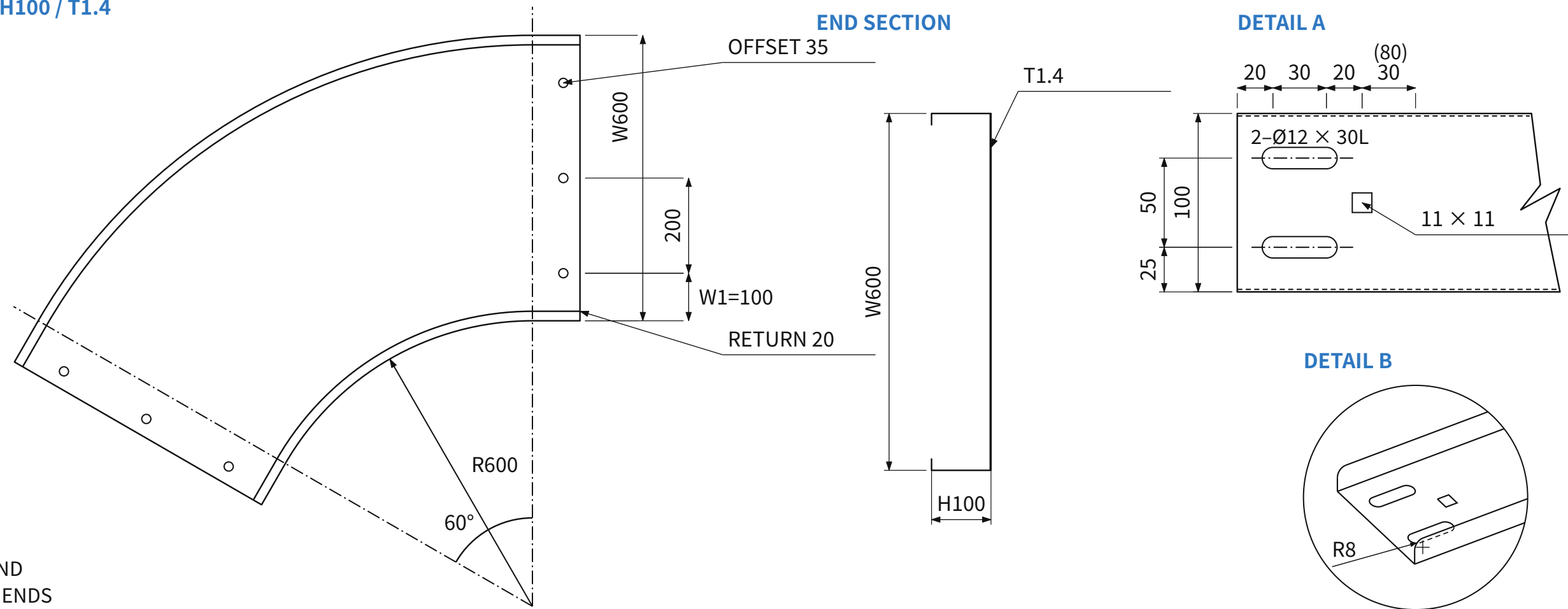
UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

60° CR HORIZONTAL DUCT ELBOW

UNIT mm · N.S.

PLAN · W600 / R600 / H100 / T1.4



N = 3 HOLES PER END
100 mm STRAIGHT ENDS

Size table · CR PosMAC / 100H

W (mm)	W1 (mm)	N / per side	300R T (mm)	300R kg/EA	Item No.	600R T (mm)	600R kg/EA	Item No.
200			1.2	2.82	HVT-DHE60W2R3	1.2	4.26	HVT-DHE60W2R6
300	50	2	1.2	3.76	HVT-DHE60W3R3	1.2	5.51	HVT-DHE60W3R6
400	100	2	1.2	4.74	HVT-DHE60W4R3	1.2	6.85	HVT-DHE60W4R6
500	50	3	1.2	5.95	HVT-DHE60W5R3	1.2	8.36	HVT-DHE60W5R6
600	100	3	1.4	8.27	HVT-DHE60W6R3	1.4	11.41	HVT-DHE60W6R6
700	50	4	1.4	9.85	HVT-DHE60W7R3	1.4	14.01	HVT-DHE60W7R6
800	100	4	1.4	15.99	HVT-DHE60W8R3	1.4	21.37	HVT-DHE60W8R6
900	50	5	1.4	18.52	HVT-DHE60W9R3	1.4	24.42	HVT-DHE60W9R6
1000	100	5	1.4	21.21	HVT-DHE60W10R3	1.4	27.63	HVT-DHE60W10R6

REMARK (KS D 3030)

Material · plate unit weight
Hot-dip coated steel sheet CR PosMAC
KS D 3506 / KS D 3030
PLATE 1.0t: 6.42 kg/m²
PLATE 1.2t: 7.64 kg/m²
PLATE 1.4t: 8.87 kg/m²
Coating mass (total, both sides)
PLATE 1.2t · 1.4t: 250 g/m²
Rivet
RIVET Ø5×7.0L (brass alloy)
Installation conditions
CABLE DUCT 100H: based on SUPPORT spacing of 2M
Fabrication basis
See fabrication specification

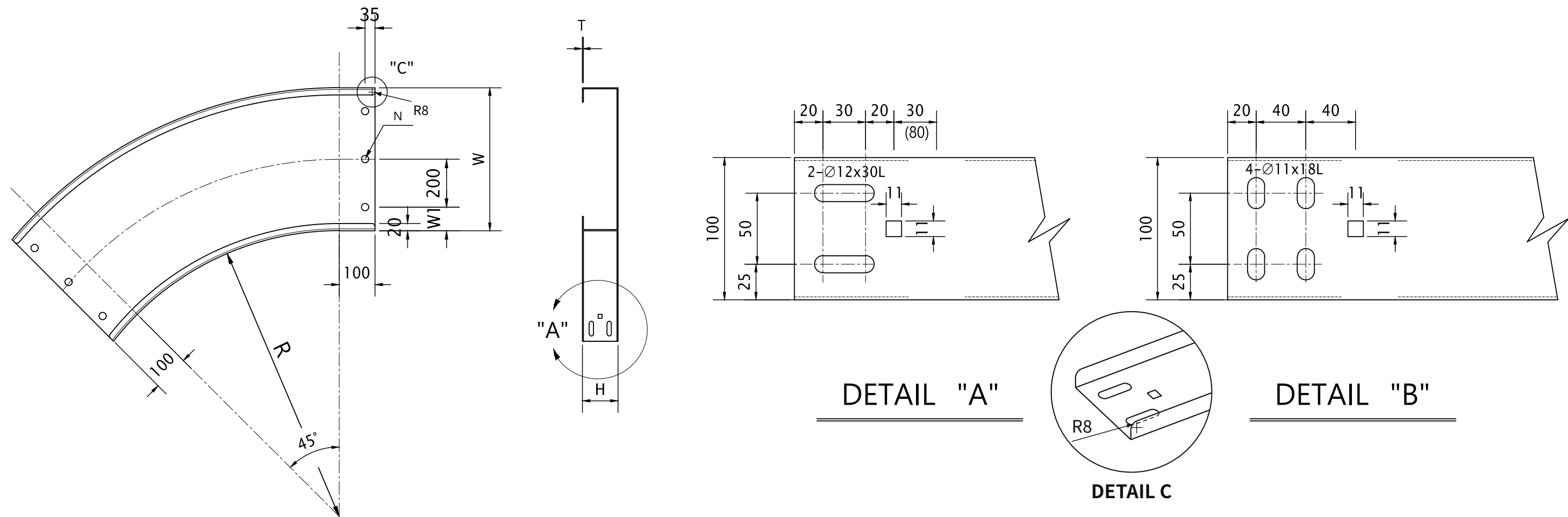
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-040

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

45° CR HORIZONTAL DUCT ELBOW

UNIT mm · N.S.

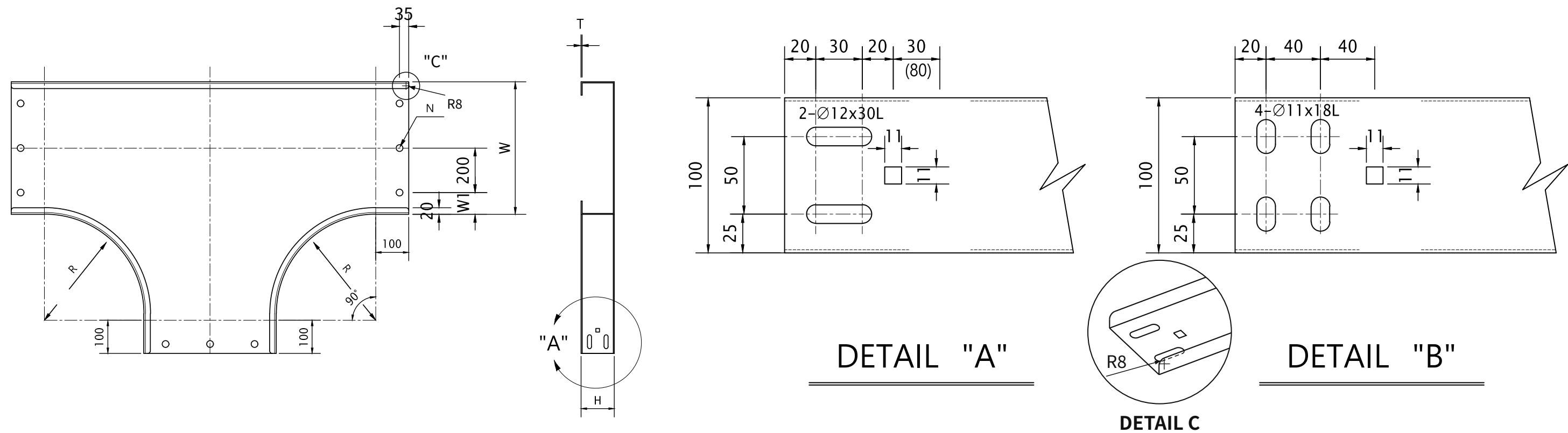


DIMENSION			CR PosMAC(Kg /EA) · 100H					
W(mm)	W1(mm)	N(EA) (No. of HOLES per side)	300R			600R		
			T(mm)	WEIGHT	Item No.	T(mm)	WEIGHT	Item No.
200			1.2	2.34	A HVT-DHE45W2R3A B HVT-DHE45W2R3B	1.2	3.63	A HVT-DHE45W2R6A B HVT-DHE45W2R6B
300	50	2	1.2	3.11	A HVT-DHE45W3R3A B HVT-DHE45W3R3B	1.2	4.82	A HVT-DHE45W3R6A B HVT-DHE45W3R6B
400	100	2	1.2	3.93	A HVT-DHE45W4R3A B HVT-DHE45W4R3B	1.2	7.52	A HVT-DHE45W4R6A B HVT-DHE45W4R6B
500	50	3	1.2	4.85	A HVT-DHE45W5R3A B HVT-DHE45W5R3B	1.2	7.52	A HVT-DHE45W5R6A B HVT-DHE45W5R6B
600	100	3	1.4	6.71	A HVT-DHE45W6R3A B HVT-DHE45W6R3B	1.4	10.41	A HVT-DHE45W6R6A B HVT-DHE45W6R6B
700	50	4	1.4	7.94	A HVT-DHE45W7R3A B HVT-DHE45W7R3B	1.4	12.31	A HVT-DHE45W7R6A B HVT-DHE45W7R6B
800	100	4	1.4	12.85	A HVT-DHE45W8R3A B HVT-DHE45W8R3B	1.4	19.92	A HVT-DHE45W8R6A B HVT-DHE45W8R6B
900	50	5	1.4	14.83	A HVT-DHE45W9R3A B HVT-DHE45W9R3B	1.4	22.98	A HVT-DHE45W9R6A B HVT-DHE45W9R6B
1000	100	5	1.4	16.93	A HVT-DHE45W10R3A B HVT-DHE45W10R3B	1.4	26.24	A HVT-DHE45W10R6A B HVT-DHE45W10R6B

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC PLATE 1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ²
Coating mass (total, both sides) PLATE : 1.2t, 1.4t : 250g/m ²
Rivet RIVET : Ø5×7.0L (brass alloy)
CABLE DUCT basis CABLE DUCT 100H: based on SUPPORT spacing of 2M
Fabrication basis See fabrication specification

CR DUCT TEE

UNIT mm · N.S.



DIMENSION			CR PosMAC(Kg /EA) · 100H					
W(mm)	W1(mm)	N(EA) (No. of HOLES per side)	300R			600R		
			T(mm)	WEIGHT	Item No.	T(mm)	WEIGHT	Item No.
200			1.2	6.22	A HVT-DHTW2R3A B HVT-DHTW2R3B	1.2	9.64	A HVT-DHTW2R6A B HVT-DHTW2R6B
300	50	2	1.2	8.1	A HVT-DHTW3R3A B HVT-DHTW3R3B	1.2	12.56	A HVT-DHTW3R6A B HVT-DHTW3R6B
400	100	2	1.2	10.19	A HVT-DHTW4R3A B HVT-DHTW4R3B	1.2	15.79	A HVT-DHTW4R6A B HVT-DHTW4R6B
500	50	3	1.2	12.49	A HVT-DHTW5R3A B HVT-DHTW5R3B	1.2	19.36	A HVT-DHTW5R6A B HVT-DHTW5R6B
600	100	3	1.4	17.23	A HVT-DHTW6R3A B HVT-DHTW6R3B	1.4	26.71	A HVT-DHTW6R6A B HVT-DHTW6R6B
700	50	4	1.4	20.35	A HVT-DHTW7R3A B HVT-DHTW7R3B	1.4	31.54	A HVT-DHTW7R6A B HVT-DHTW7R6B
800	100	4	1.4	32.84	A HVT-DHTW8R3A B HVT-DHTW8R3B	1.4	50.91	A HVT-DHTW8R6A B HVT-DHTW8R6B
900	50	5	1.4	37.82	A HVT-DHTW9R3A B HVT-DHTW9R3B	1.4	58.62	A HVT-DHTW9R6A B HVT-DHTW9R6B
1000	100	5	1.4	43.13	A HVT-DHTW10R3A B HVT-DHTW10R3B	1.4	66.85	A HVT-DHTW10R6A B HVT-DHTW10R6B

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC PLATE 1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ²
Coating mass (total, both sides) PLATE : 1.2t, 1.4t : 250g/m ²
Rivet RIVET : Ø5×7.0L (brass alloy)
CABLE DUCT basis CABLE DUCT 100H: based on SUPPORT spacing of 2M
Fabrication basis See fabrication specification

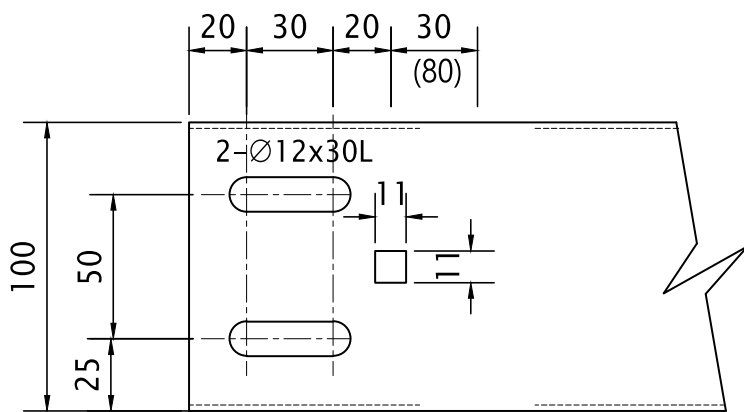
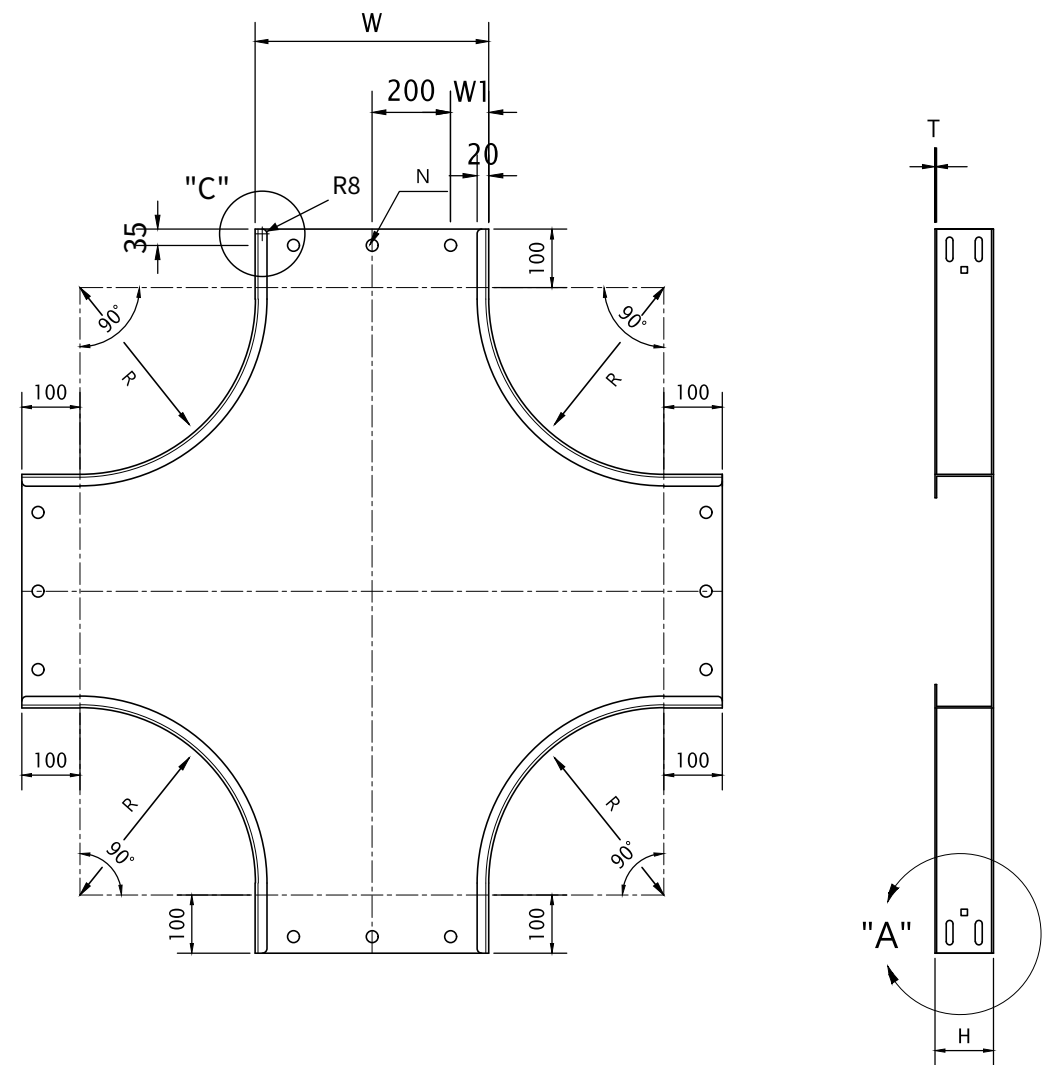
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-042

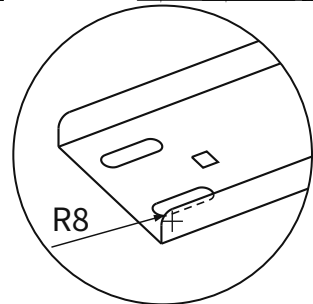
UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR DUCT CROSS

UNIT mm · N.S.



DETAIL "A"



DETAIL "B"

REMARK (KS D 3030)

Material · plate unit weight
Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC
PLATE 1.0t : 6.42kg/m²
 1.2t : 7.64kg/m²
 1.4t : 8.87kg/m²
Coating mass (total, both sides)
PLATE : 1.2t, 1.4t : 250g/m²
Rivet
RIVET : Ø5×7.0L (brass alloy)
CABLE DUCT basis
CABLE DUCT 100H: based on SUPPORT spacing of 2M
Fabrication basis
See fabrication specification

DIMENSION			CR PosMAC(Kg /EA) · 100H					
W(mm)	W1(mm)	N(EA) (No. of HOLES per side)	300R			600R		
			T(mm)	WEIGHT	Item No.	T(mm)	WEIGHT	Item No.
200			1.2	7.87	A HVT-DHXLW2R3A B HVT-DHXLW2R3B	1.2	12.19	A HVT-DHXLW2R6A B HVT-DHXLW2R6B
300	50	2	1.2	10.05	A HVT-DHXLW3R3A B HVT-DHXLW3R3B	1.2	15.58	A HVT-DHXLW3R6A B HVT-DHXLW3R6B
400	100	2	1.2	12.43	A HVT-DHXLW4R3A B HVT-DHXLW4R3B	1.2	19.26	A HVT-DHXLW4R6A B HVT-DHXLW4R6B
500	50	3	1.2	15.03	A HVT-DHXLW5R3A B HVT-DHXLW5R3B	1.2	23.29	A HVT-DHXLW5R6A B HVT-DHXLW5R6B
600	100	3	1.4	20.46	A HVT-DHXLW6R3A B HVT-DHXLW6R3B	1.4	31.71	A HVT-DHXLW6R6A B HVT-DHXLW6R6B
700	50	4	1.4	23.92	A HVT-DHXLW7R3A B HVT-DHXLW7R3B	1.4	37.08	A HVT-DHXLW7R6A B HVT-DHXLW7R6B
800	100	4	1.4	38.25	A HVT-DHXLW8R3A B HVT-DHXLW8R3B	1.4	59.28	A HVT-DHXLW8R6A B HVT-DHXLW8R6B
900	50	5	1.4	43.69	A HVT-DHXLW9R3A B HVT-DHXLW9R3B	1.4	67.72	A HVT-DHXLW9R6A B HVT-DHXLW9R6B
1000	100	5	1.4	49.47	A HVT-DHXLW10R3A B HVT-DHXLW10R3B	1.4	76.68	A HVT-DHXLW10R6A B HVT-DHXLW10R6B

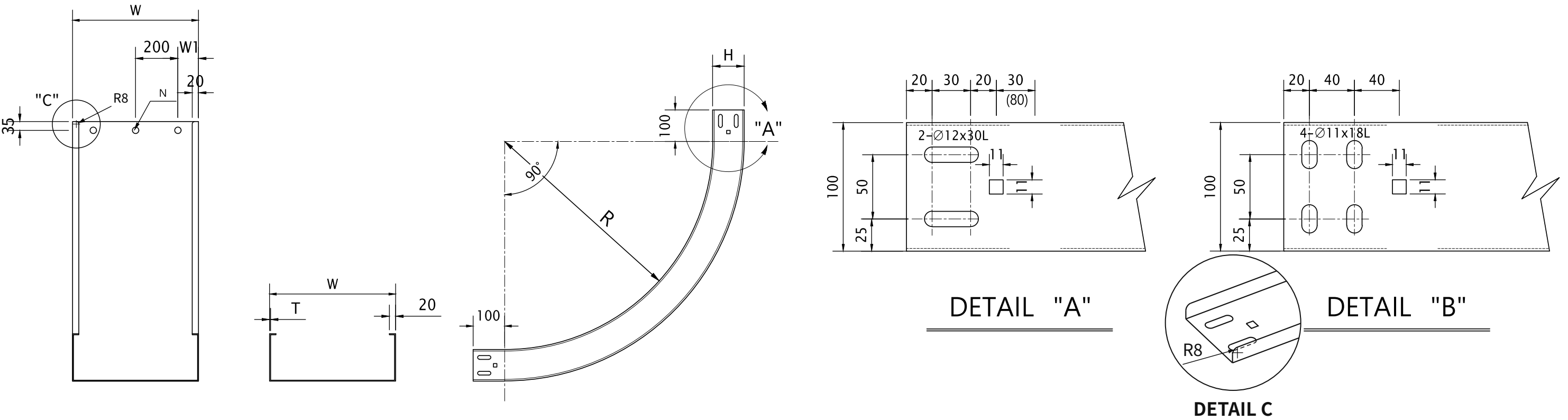
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-043

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

90° CR VERTICAL DUCT ELBOW (INSIDE)

UNIT mm · N.S.



DIMENSION			CR PosMAC(Kg /EA) · 100H					
W(mm)	W1(mm)	N(EA) (No. of HOLES per side)	300R			600R		
			T(mm)	WEIGHT	Item No.	T(mm)	WEIGHT	Item No.
200			1.2	4.82	A HVT-DVEI90W2R3A B HVT-DVEI90W2R3B	1.2	7.47	A HVT-DVEI90W2R6A B HVT-DVEI90W2R6B
300	50	2	1.2	5.97	A HVT-DVEI90W3R3A B HVT-DVEI90W3R3B	1.2	9.25	A HVT-DVEI90W3R6A B HVT-DVEI90W3R6B
400	100	2	1.2	7.13	A HVT-DVEI90W4R3A B HVT-DVEI90W4R3B	1.2	11.05	A HVT-DVEI90W4R6A B HVT-DVEI90W4R6B
500	50	3	1.2	8.28	A HVT-DVEI90W5R3A B HVT-DVEI90W5R3B	1.2	12.83	A HVT-DVEI90W5R6A B HVT-DVEI90W5R6B
600	100	3	1.4	10.84	A HVT-DVEI90W6R3A B HVT-DVEI90W6R3B	1.4	16.81	A HVT-DVEI90W6R6A B HVT-DVEI90W6R6B
700	50	4	1.4	12.17	A HVT-DVEI90W7R3A B HVT-DVEI90W7R3B	1.4	18.86	A HVT-DVEI90W7R6A B HVT-DVEI90W7R6B
800	100	4	1.4	18.69	A HVT-DVEI90W8R3A B HVT-DVEI90W8R3B	1.4	28.96	A HVT-DVEI90W8R6A B HVT-DVEI90W8R6B
900	50	5	1.4	20.53	A HVT-DVEI90W9R3A B HVT-DVEI90W9R3B	1.4	31.82	A HVT-DVEI90W9R6A B HVT-DVEI90W9R6B
1000	100	5	1.4	22.37	A HVT-DVEI90W10R3A B HVT-DVEI90W10R3B	1.4	34.67	A HVT-DVEI90W10R6A B HVT-DVEI90W10R6B

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC PLATE 1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ²
Coating mass (total, both sides) PLATE : 1.2t, 1.4t : 250g/m ²
Rivet RIVET : Ø5×7.0L (brass alloy)
CABLE DUCT basis CABLE DUCT 100H: based on SUPPORT spacing of 2M
Fabrication basis See fabrication specification

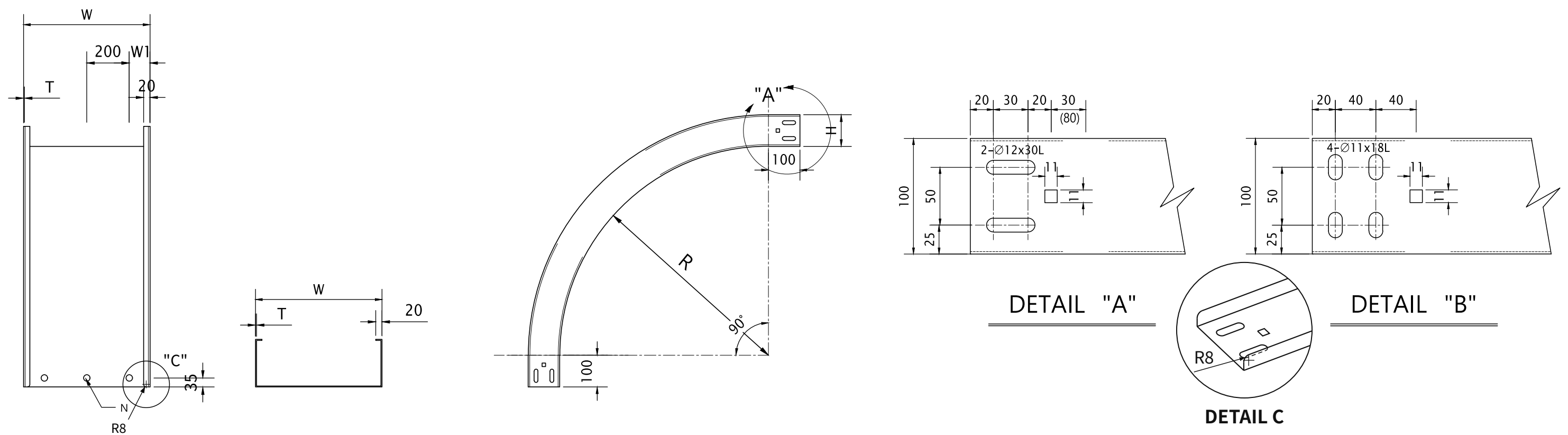
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-044

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

90° CR VERTICAL DUCT ELBOW (OUTSIDE)

UNIT mm · N.S.



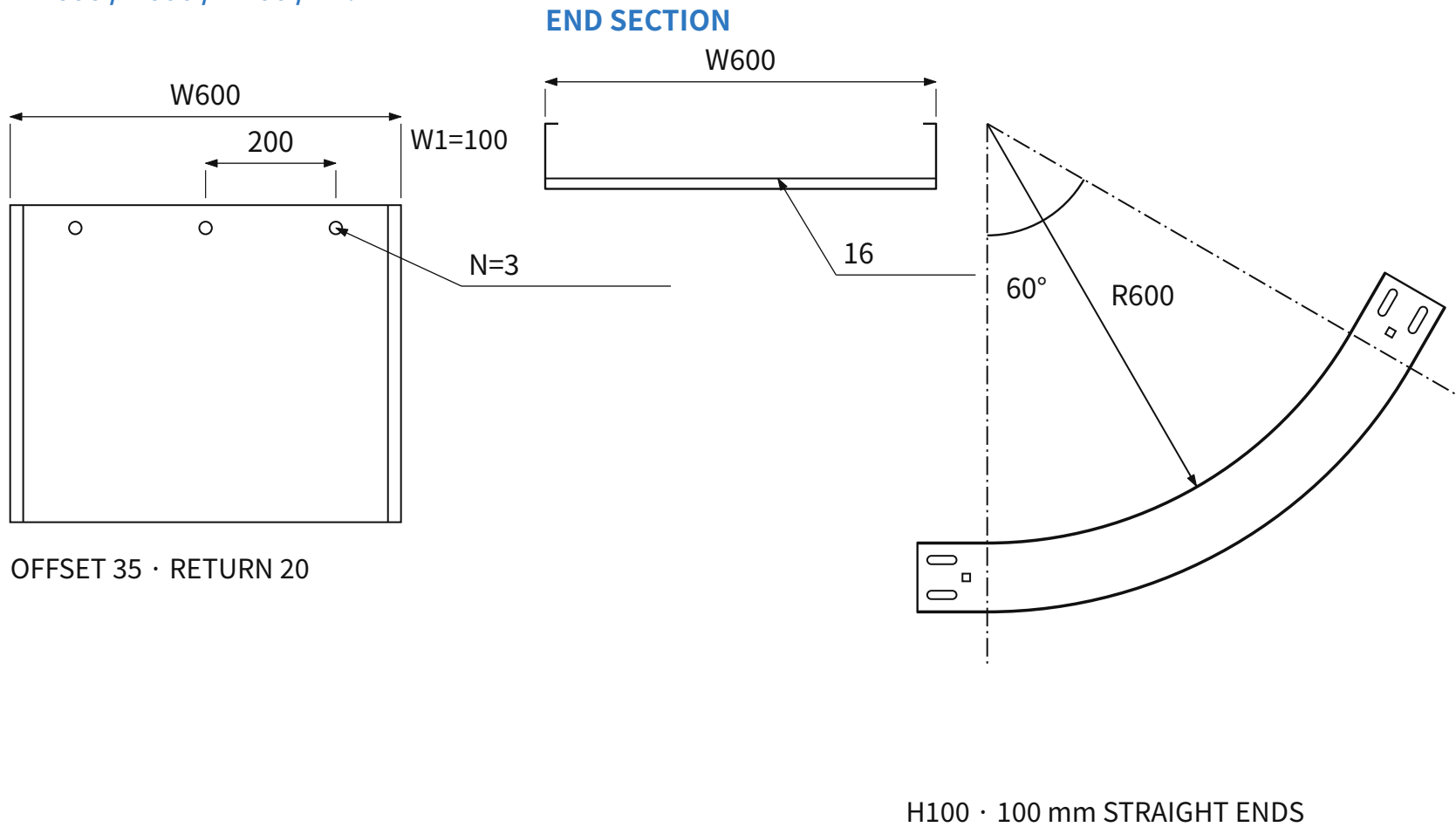
DIMENSION			CR PosMAC(Kg /EA) · 100H					
W(mm)	W1(mm)	N(EA) (No. of HOLES per side)	300R			600R		
			T(mm)	WEIGHT	Item No.	T(mm)	WEIGHT	Item No.
200			1.2	4.82	A HVT-DVEO90W2R3A B HVT-DVEO90W2R3B	1.2	7.47	A HVT-DVEO90W2R6A B HVT-DVEO90W2R6B
300	50	2	1.2	5.97	A HVT-DVEO90W3R3A B HVT-DVEO90W3R3B	1.2	9.25	A HVT-DVEO90W3R6A B HVT-DVEO90W3R6B
400	100	2	1.2	7.13	A HVT-DVEO90W4R3A B HVT-DVEO90W4R3B	1.2	11.05	A HVT-DVEO90W4R6A B HVT-DVEO90W4R6B
500	50	3	1.2	8.28	A HVT-DVEO90W5R3A B HVT-DVEO90W5R3B	1.2	12.83	A HVT-DVEO90W5R6A B HVT-DVEO90W5R6B
600	100	3	1.4	10.84	A HVT-DVEO90W6R3A B HVT-DVEO90W6R3B	1.4	16.81	A HVT-DVEO90W6R6A B HVT-DVEO90W6R6B
700	50	4	1.4	12.17	A HVT-DVEO90W7R3A B HVT-DVEO90W7R3B	1.4	18.86	A HVT-DVEO90W7R6A B HVT-DVEO90W7R6B
800	100	4	1.4	18.69	A HVT-DVEO90W8R3A B HVT-DVEO90W8R3B	1.4	28.96	A HVT-DVEO90W8R6A B HVT-DVEO90W8R6B
900	50	5	1.4	20.53	A HVT-DVEO90W9R3A B HVT-DVEO90W9R3B	1.4	31.82	A HVT-DVEO90W9R6A B HVT-DVEO90W9R6B
1000	100	5	1.4	22.37	A HVT-DVEO90W10R3A B HVT-DVEO90W10R3B	1.4	34.67	A HVT-DVEO90W10R6A B HVT-DVEO90W10R6B

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC PLATE 1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ²
Coating mass (total, both sides) PLATE : 1.2t, 1.4t : 250g/m ²
Rivet RIVET : Ø5×7.0L (brass alloy)
CABLE DUCT support spacing CABLE DUCT 100H: based on SUPPORT spacing of 2M
Fabrication basis See fabrication specification

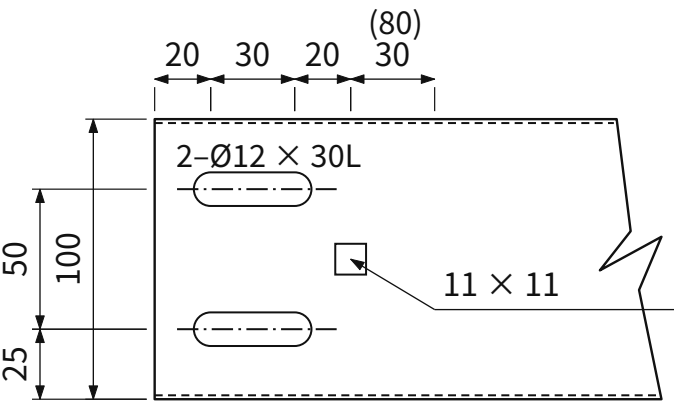
60° CR VERTICAL DUCT ELBOW (INSIDE)

UNIT mm · N.S.

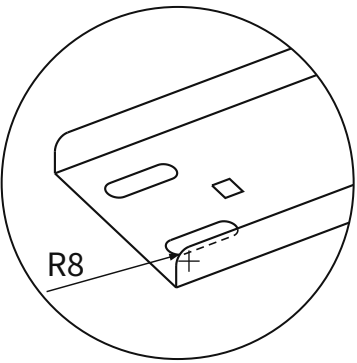
INSIDE · W600 / R600 / H100 / T1.4



DETAIL A



DETAIL B



Size table · CR PosMAC / 100H

W (mm)	W1 (mm)	N / per side	300R T (mm)	300R kg/EA	Item No.	600R T (mm)	600R kg/EA	Item No.
200			1.2	4.18	HVT-DVEI60W2R3	1.2	4.21	HVT-DVEI60W2R6
300	50	2	1.2	4.76	HVT-DVEI60W3R3	1.2	5.13	HVT-DVEI60W3R6
400	100	2	1.2	6.12	HVT-DVEI60W4R3	1.2	6.05	HVT-DVEI60W4R6
500	50	3	1.2	6.78	HVT-DVEI60W5R3	1.2	6.97	HVT-DVEI60W5R6
600	100	3	1.4	10.31	HVT-DVEI60W6R3	1.4	9.07	HVT-DVEI60W6R6
700	50	4	1.4	11.22	HVT-DVEI60W7R3	1.4	10.13	HVT-DVEI60W7R6
800	100	4	1.4	12.14	HVT-DVEI60W8R3	1.4	15.51	HVT-DVEI60W8R6
900	50	5	1.4	13.05	HVT-DVEI60W9R3	1.4	16.98	HVT-DVEI60W9R6
1000	100	5	1.4	13.96	HVT-DVEI60W10R3	1.4	18.45	HVT-DVEI60W10R6

REMARK (KS D 3030)

Material · plate unit weight
Hot-dip coated steel sheet CR PosMAC
KS D 3506 / KS D 3030
PLATE 1.0t: 6.42 kg/m²
PLATE 1.2t: 7.64 kg/m²
PLATE 1.4t: 8.87 kg/m²
Coating mass (total, both sides)
PLATE 1.2t · 1.4t: 250 g/m²
Rivet
RIVET Ø5×7.0L (brass alloy)
Installation conditions
CABLE DUCT 100H: based on SUPPORT spacing of 2M
Fabrication basis
See fabrication specification

HANVIT TRAY Co., Ltd.

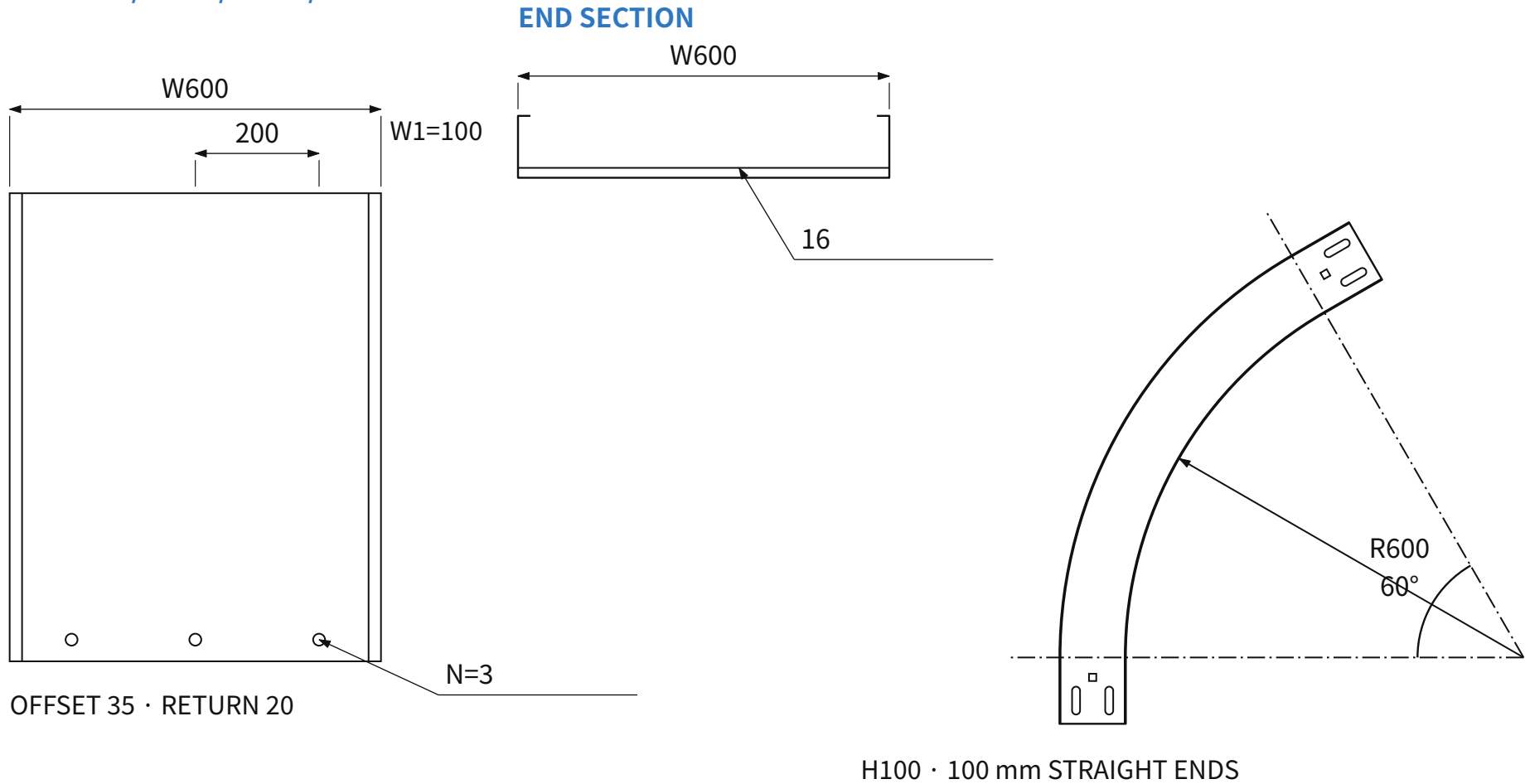
DRAWING NO.
HVT-CR-046

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

60° CR VERTICAL DUCT ELBOW (OUTSIDE)

UNIT mm · N.S.

OUTSIDE · W600 / R600 / H100 / T1.4



Size table · CR PosMAC / 100H

W (mm)	W1 (mm)	N / per side	300R T (mm)	300R kg/EA	Item No.	600R T (mm)	600R kg/EA	Item No.
200			1.2	4.18	HVT-DVEO60W2R3	1.2	4.21	HVT-DVEO60W2R6
300	50	2	1.2	4.76	HVT-DVEO60W3R3	1.2	5.13	HVT-DVEO60W3R6
400	100	2	1.2	6.12	HVT-DVEO60W4R3	1.2	6.05	HVT-DVEO60W4R6
500	50	3	1.2	6.78	HVT-DVEO60W5R3	1.2	6.97	HVT-DVEO60W5R6
600	100	3	1.4	10.31	HVT-DVEO60W6R3	1.4	9.07	HVT-DVEO60W6R6
700	50	4	1.4	11.22	HVT-DVEO60W7R3	1.4	10.13	HVT-DVEO60W7R6
800	100	4	1.4	12.14	HVT-DVEO60W8R3	1.4	15.51	HVT-DVEO60W8R6
900	50	5	1.4	13.05	HVT-DVEO60W9R3	1.4	16.98	HVT-DVEO60W9R6
1000	100	5	1.4	13.96	HVT-DVEO60W10R3	1.4	18.45	HVT-DVEO60W10R6

REMARK (KS D 3030)

Material · plate unit weight
Hot-dip coated steel sheet CR PosMAC
KS D 3506 / KS D 3030
PLATE 1.0t: 6.42 kg/m²
PLATE 1.2t: 7.64 kg/m²
PLATE 1.4t: 8.87 kg/m²
Coating mass (total, both sides)
PLATE 1.2t · 1.4t: 250 g/m²
Rivet
RIVET Ø5×7.0L (brass alloy)
Installation conditions
CABLE DUCT 100H: based on SUPPORT spacing of 2M
Fabrication basis
See fabrication specification

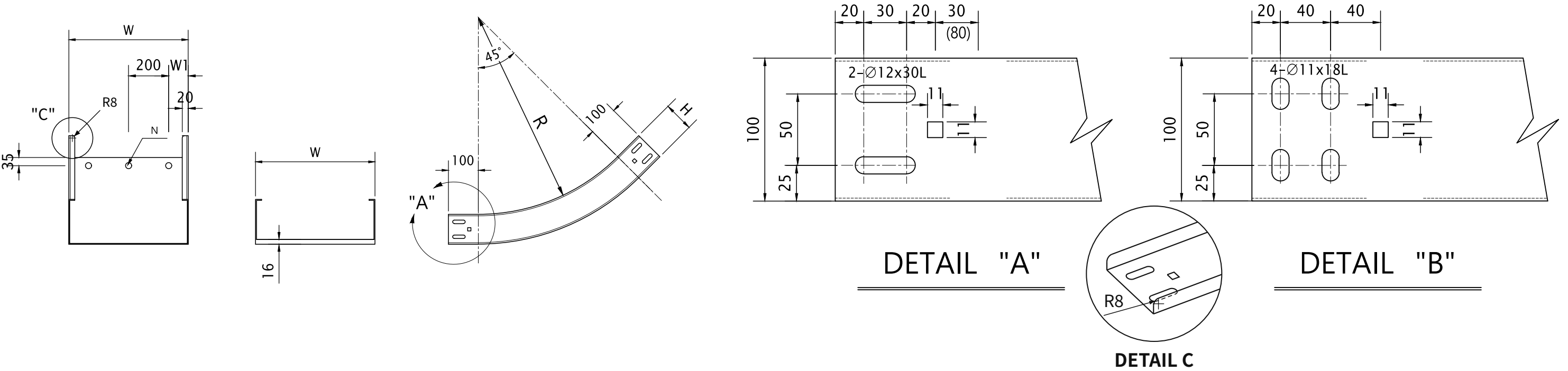
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-047

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

45° CR VERTICAL DUCT ELBOW (INSIDE)

UNIT mm · N.S.



DIMENSION			CR PosMAC(Kg /EA) · 100H					
W(mm)	W1(mm)	N(EA) (No. of HOLES per side)	300R			600R		
			T(mm)	WEIGHT	Item No.	T(mm)	WEIGHT	Item No.
200			1.2	3.1	A HVT-DVEI45W2R3A B HVT-DVEI45W2R3B	1.2	4.81	A HVT-DVEI45W2R6A B HVT-DVEI45W2R6B
300	50	2	1.2	3.84	A HVT-DVEI45W3R3A B HVT-DVEI45W3R3B	1.2	5.95	A HVT-DVEI45W3R6A B HVT-DVEI45W3R6B
400	100	2	1.2	4.59	A HVT-DVEI45W4R3A B HVT-DVEI45W4R3B	1.2	7.11	A HVT-DVEI45W4R6A B HVT-DVEI45W4R6B
500	50	3	1.2	6.21	A HVT-DVEI45W5R3A B HVT-DVEI45W5R3B	1.2	9.62	A HVT-DVEI45W5R6A B HVT-DVEI45W5R6B
600	100	3	1.4	8.12	A HVT-DVEI45W6R3A B HVT-DVEI45W6R3B	1.4	12.58	A HVT-DVEI45W6R6A B HVT-DVEI45W6R6B
700	50	4	1.4	9.11	A HVT-DVEI45W7R3A B HVT-DVEI45W7R3B	1.4	14.12	A HVT-DVEI45W7R6A B HVT-DVEI45W7R6B
800	100	4	1.4	14	A HVT-DVEI45W8R3A B HVT-DVEI45W8R3B	1.4	21.7	A HVT-DVEI45W8R6A B HVT-DVEI45W8R6B
900	50	5	1.4	15.37	A HVT-DVEI45W9R3A B HVT-DVEI45W9R3B	1.4	23.82	A HVT-DVEI45W9R6A B HVT-DVEI45W9R6B
1000	100	5	1.4	16.74	A HVT-DVEI45W10R3A B HVT-DVEI45W10R3B	1.4	25.95	A HVT-DVEI45W10R6A B HVT-DVEI45W10R6B

REMARK (KS D 3030)

Material · plate unit weight
Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC
PLATE 1.0t : 6.42kg/m²
1.2t : 7.64kg/m²
1.4t : 8.87kg/m²
Coating mass (total, both sides)
PLATE : 1.2t, 1.4t : 250g/m²
Rivet
RIVET : Ø5×7.0L (brass alloy)
CABLE DUCT support spacing
CABLE DUCT 100H: based on SUPPORT spacing of 2M
Fabrication basis
See fabrication specification

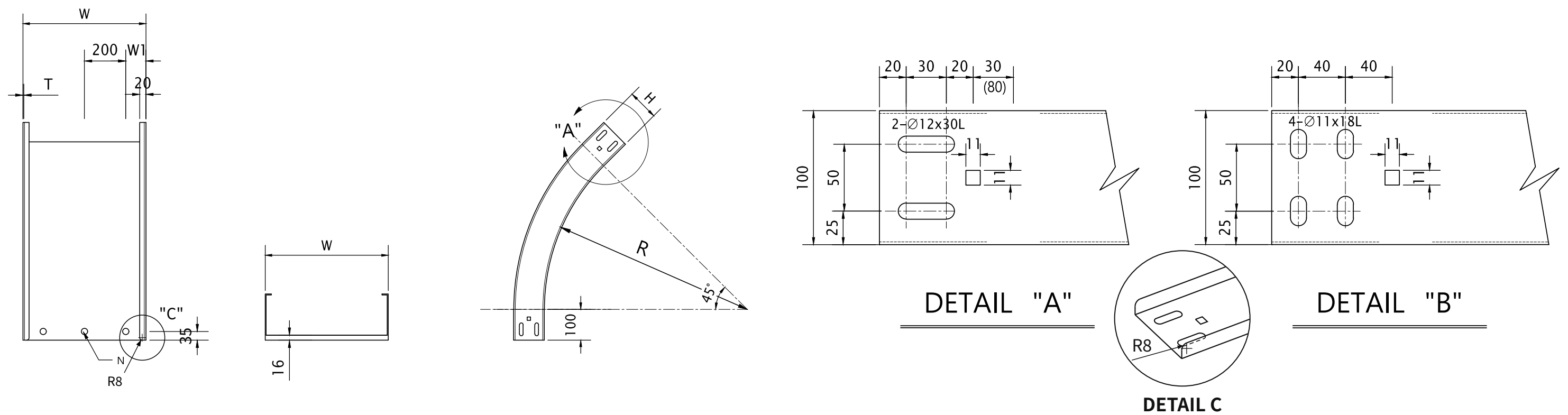
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-048

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

45° CR VERTICAL DUCT ELBOW (OUTSIDE)

UNIT mm · N.S.



DIMENSION			CR PosMAC(Kg /EA) · 100H					
W(mm)	W1(mm)	N(EA) (No. of HOLES per side)	300R			600R		
			T(mm)	WEIGHT	Item No.	T(mm)	WEIGHT	Item No.
200			1.2	3.1	A HVT-DVEO45W2R3A B HVT-DVEO45W2R3B	1.2	4.81	A HVT-DVEO45W2R6A B HVT-DVEO45W2R6B
300	50	2	1.2	3.84	A HVT-DVEO45W3R3A B HVT-DVEO45W3R3B	1.2	5.95	A HVT-DVEO45W3R6A B HVT-DVEO45W3R6B
400	100	2	1.2	4.59	A HVT-DVEO45W4R3A B HVT-DVEO45W4R3B	1.2	7.11	A HVT-DVEO45W4R6A B HVT-DVEO45W4R6B
500	50	3	1.2	6.21	A HVT-DVEO45W5R3A B HVT-DVEO45W5R3B	1.2	9.62	A HVT-DVEO45W5R6A B HVT-DVEO45W5R6B
600	100	3	1.4	8.12	A HVT-DVEO45W6R3A B HVT-DVEO45W6R3B	1.4	12.58	A HVT-DVEO45W6R6A B HVT-DVEO45W6R6B
700	50	4	1.4	9.11	A HVT-DVEO45W7R3A B HVT-DVEO45W7R3B	1.4	14.12	A HVT-DVEO45W7R6A B HVT-DVEO45W7R6B
800	100	4	1.4	14	A HVT-DVEO45W8R3A B HVT-DVEO45W8R3B	1.4	21.7	A HVT-DVEO45W8R6A B HVT-DVEO45W8R6B
900	50	5	1.4	15.37	A HVT-DVEO45W9R3A B HVT-DVEO45W9R3B	1.4	23.82	A HVT-DVEO45W9R6A B HVT-DVEO45W9R6B
1000	100	5	1.4	16.74	A HVT-DVEO45W10R3A B HVT-DVEO45W10R3B	1.4	25.95	A HVT-DVEO45W10R6A B HVT-DVEO45W10R6B

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC PLATE 1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ²
Coating mass (total, both sides) PLATE : 1.2t, 1.4t : 250g/m ²
Rivet RIVET : Ø5×7.0L (brass alloy)
CABLE DUCT support spacing CABLE DUCT 100H: based on SUPPORT spacing of 2M
Fabrication basis See fabrication specification

HANVIT TRAY Co., Ltd.

DRAWING NO.

HVT-CR-049

UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

CR STRAIGHT DUCT REDUCER

UNIT mm · N.S.

REMARK (KS D 3030)

Material · plate unit weight

Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC

PLATE 1.0t : 6.42kg/m²
1.2t : 7.64kg/m²
1.4t : 8.87kg/m²

Coating mass (total, both sides)

PLATE : 1.2t, 1.4t : 250g/m²

Rivet

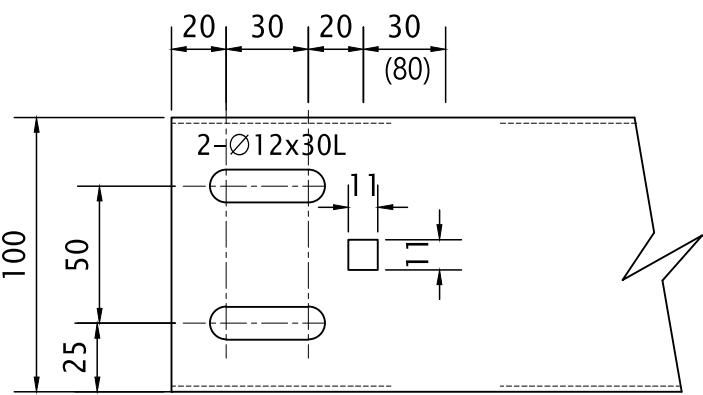
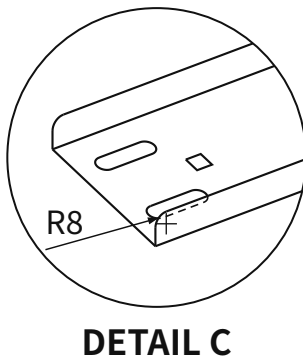
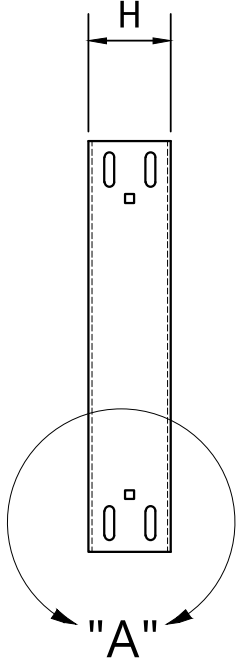
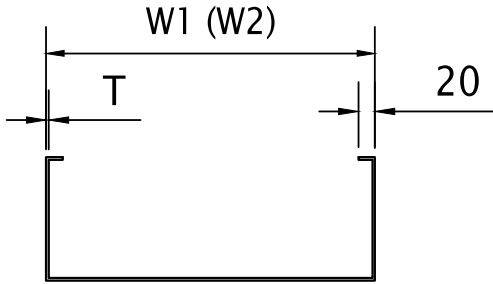
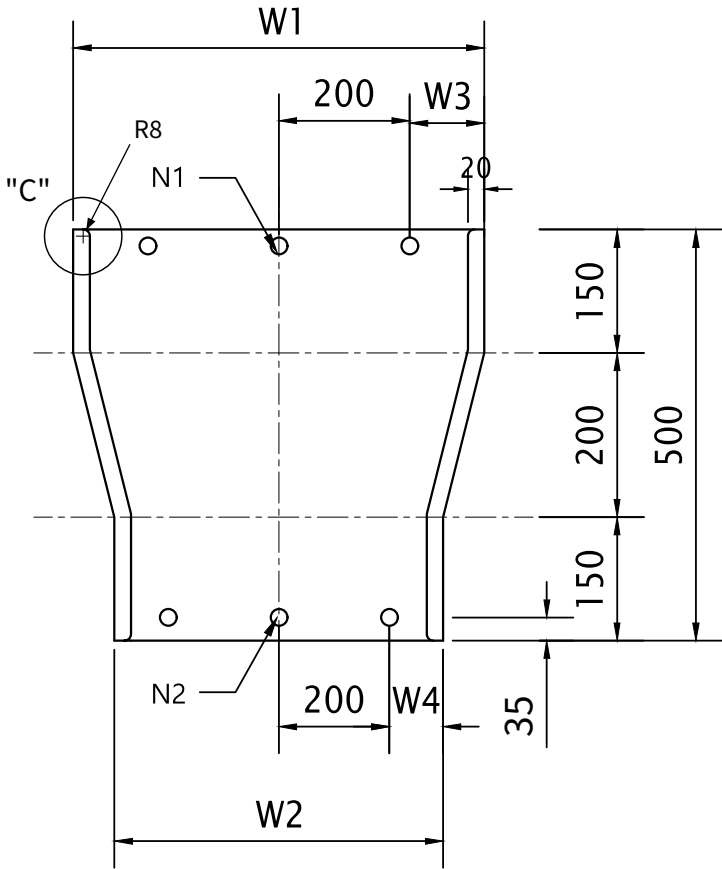
RIVET : Ø5×7.0L (brass alloy)

CABLE DUCT support spacing

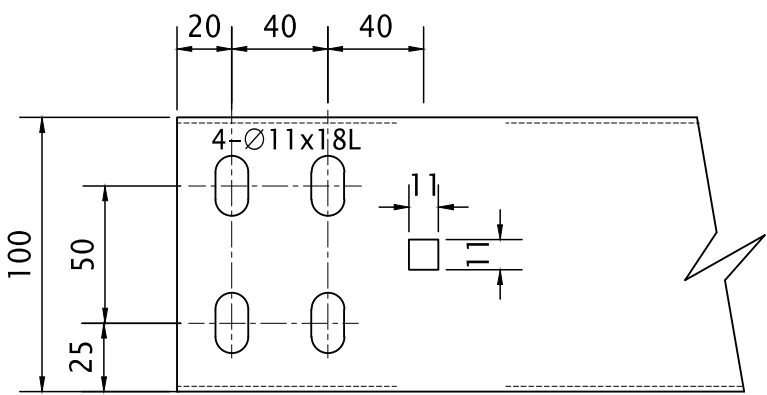
CABLE DUCT 100H: based on SUPPORT spacing of 2M

Fabrication basis

See fabrication specification



DETAIL "A"



DETAIL "B"

DIMENSION						CR PosMAC(Kg /EA)	
W1(mm)	W2(mm)	N1(EA) (No. of HOLES per side)	W3(mm)	N2(EA) (No. of HOLES per side)	W4(mm)	100H	
						T(mm)	WEIGHT
300	200	2	50			1.2	2.54
400	200	2	100			1.4	2.80
400	300	2	100	2	50	1.4	3.06
500	300	3	50	2	50	1.4	3.32
500	400	3	50	2	100	1.4	3.57
600	400	3	100	2	100	1.4	4.41
600	500	3	100	3	50	1.4	4.69
700	500	4	50	3	50	1.4	4.99
700	600	4	50	3	100	1.4	5.29
800	600	4	100	3	100	1.4	7.74
800	700	4	100	4	50	1.4	8.16
900	700	5	50	4	50	1.4	8.57
900	800	5	50	4	100	1.4	8.98
1000	800	5	100	4	100	1.4	9.39
1000	900	5	100	5	50	1.4	9.82

HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-050

UNIT mm · SCALE N.S.

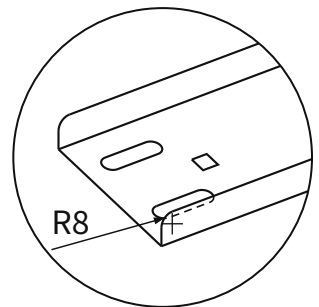
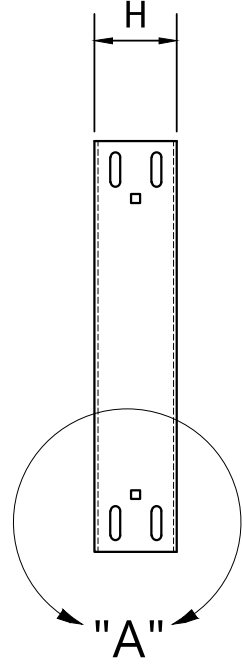
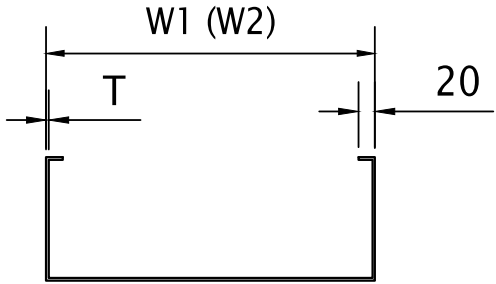
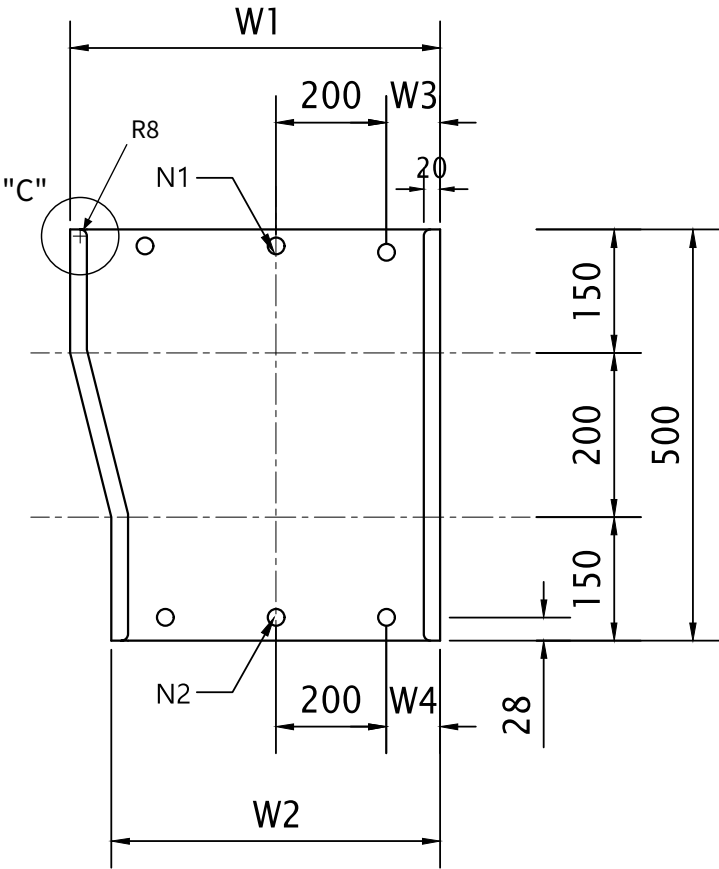
REV. 2026.01 · 2026-09-14

CR LEFT HAND STRAIGHT DUCT REDUCER

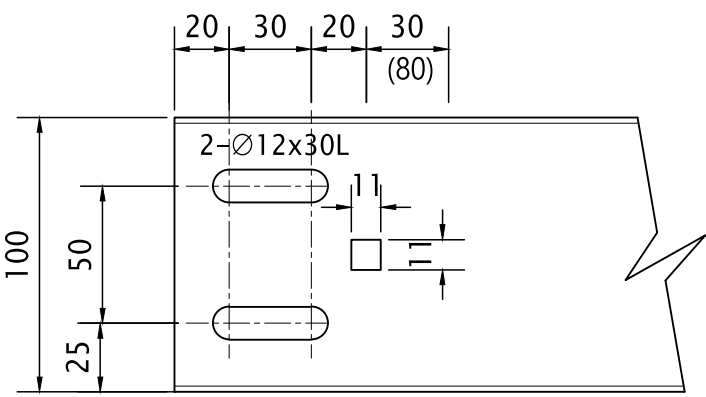
UNIT mm · N.S.

REMARK (KS D 3030)

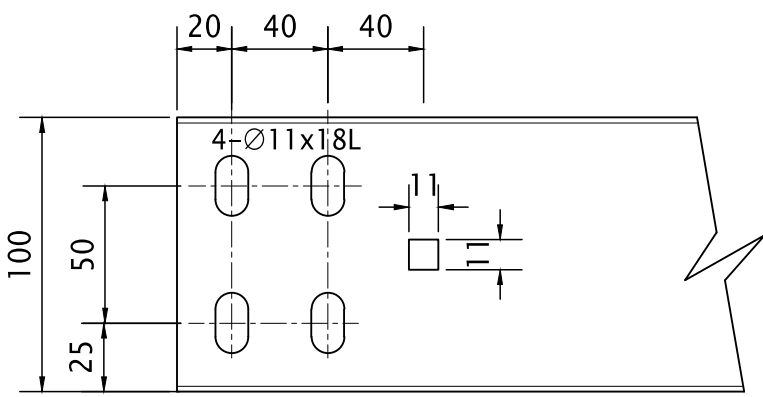
Material · plate unit weight
Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC
PLATE 1.0t : 6.42kg/m²
1.2t : 7.64kg/m²
1.4t : 8.87kg/m²
Coating mass (total, both sides)
PLATE : 1.2t, 1.4t : 250g/m²
Rivet
RIVET : Ø5×7.0L (brass alloy)
CABLE DUCT support spacing
CABLE DUCT 100H: based on SUPPORT spacing of 2M
Fabrication basis
See fabrication specification



DETAIL C



DETAIL "A"



DETAIL "B"

DIMENSION						CR PosMAC(Kg /EA)	
W1(mm)	W2(mm)	N1(EA) (No. of HOLES per side)	W3(mm)	N2(EA) (No. of HOLES per side)	W4(mm)	100H	
						T(mm)	WEIGHT
300	200	2	50			1.2	2.54
400	200	2	100			1.4	2.80
400	300	2	100	2	50	1.4	3.06
500	300	3	50	2	50	1.4	3.32
500	400	3	50	2	100	1.4	3.57
600	400	3	100	2	100	1.4	4.41
600	500	3	100	3	50	1.4	4.69
700	500	4	50	3	50	1.4	4.99
700	600	4	50	3	100	1.4	5.29
800	600	4	100	3	100	1.4	7.74
800	700	4	100	4	50	1.4	8.16
900	700	5	50	4	50	1.4	8.57
900	800	5	50	4	100	1.4	8.98
1000	800	5	100	4	100	1.4	9.39
1000	900	5	100	5	50	1.4	9.82

HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-051

UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

CR RIGHT HAND STRAIGHT DUCT REDUCER

UNIT mm · N.S.

REMARK (KS D 3030)

Material · plate unit weight

Hot-dip coated steel sheet (KS D 3506, KS D3030)

- CR PosMAC

PLATE 1.0t : 6.42kg/m²

1.2t : 7.64kg/m²

1.4t : 8.87kg/m²

Coating mass (total, both sides)

PLATE : 1.2t, 1.4t : 250g/m²

Rivet

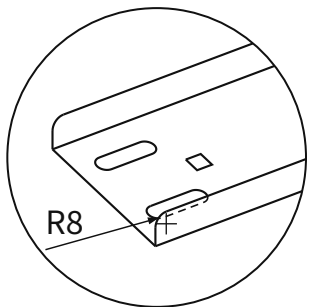
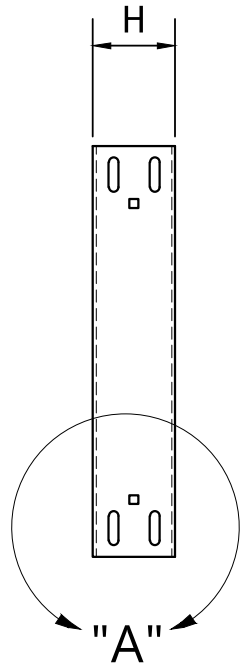
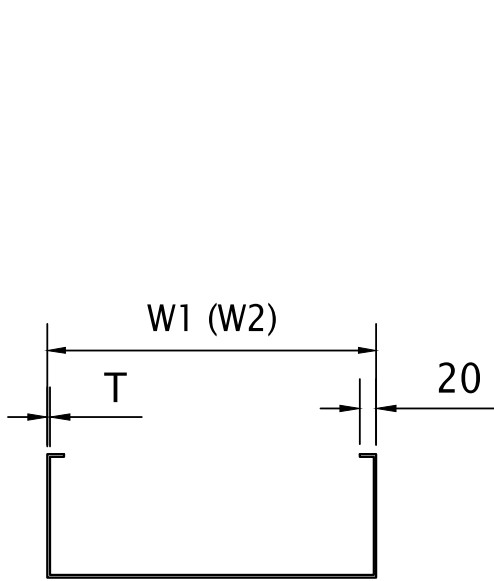
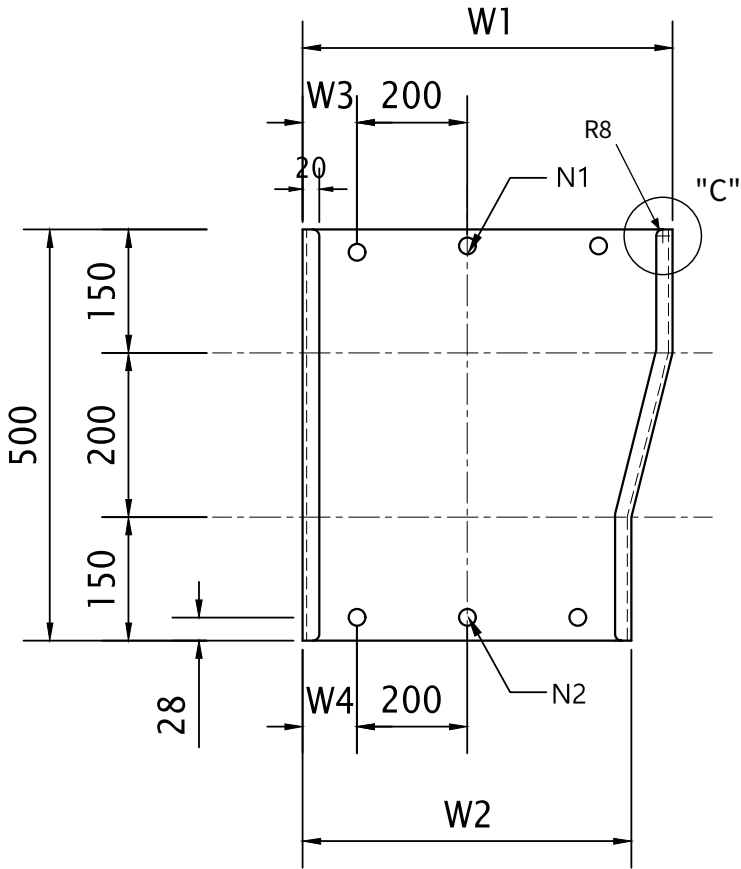
RIVET : Ø5×7.0L (brass alloy)

CABLE DUCT support spacing

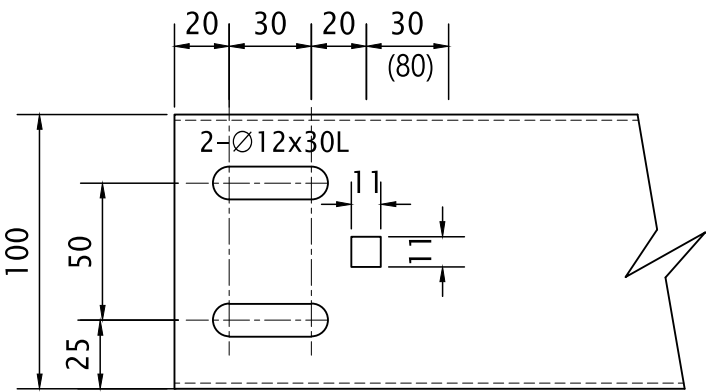
CABLE DUCT 100H: support spacing based on 2 M

Fabrication basis

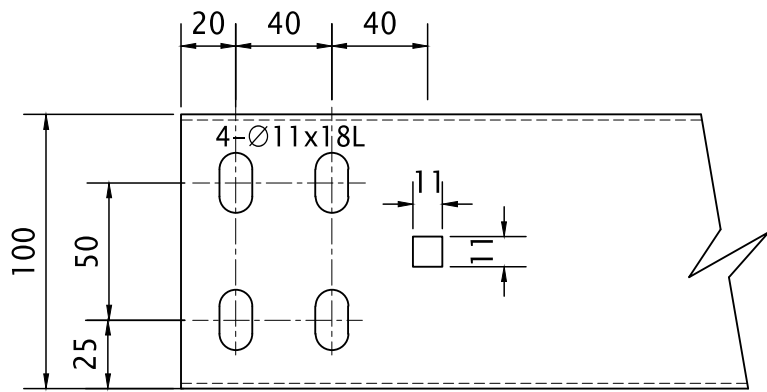
See fabrication specification



DETAIL C



DETAIL "A"



DETAIL "B"

DIMENSION						CR PosMAC(Kg /EA)	
W1(mm)	W2(mm)	N1(EA) (No. of HOLES per side)	W3(mm)	N2(EA) (No. of HOLES per side)	W4(mm)	100H	
						T(mm)	WEIGHT
300	200	2	50			1.2	2.54
400	200	2	100			1.4	2.80
400	300	2	100	2	50	1.4	3.06
500	300	3	50	2	50	1.4	3.32
500	400	3	50	2	100	1.4	3.57
600	400	3	100	2	100	1.4	4.41
600	500	3	100	3	50	1.4	4.69
700	500	4	50	3	50	1.4	4.99
700	600	4	50	3	100	1.4	5.29
800	600	4	100	3	100	1.4	7.74
800	700	4	100	4	50	1.4	8.16
900	700	5	50	4	50	1.4	8.57
900	800	5	50	4	100	1.4	8.98
1000	800	5	100	4	100	1.4	9.39
1000	900	5	100	5	50	1.4	9.82

HANVIT TRAY Co., Ltd.

DRAWING NO.

HVT-CR-052

UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

3 Duct Reducer Types: Straight · Left · Right

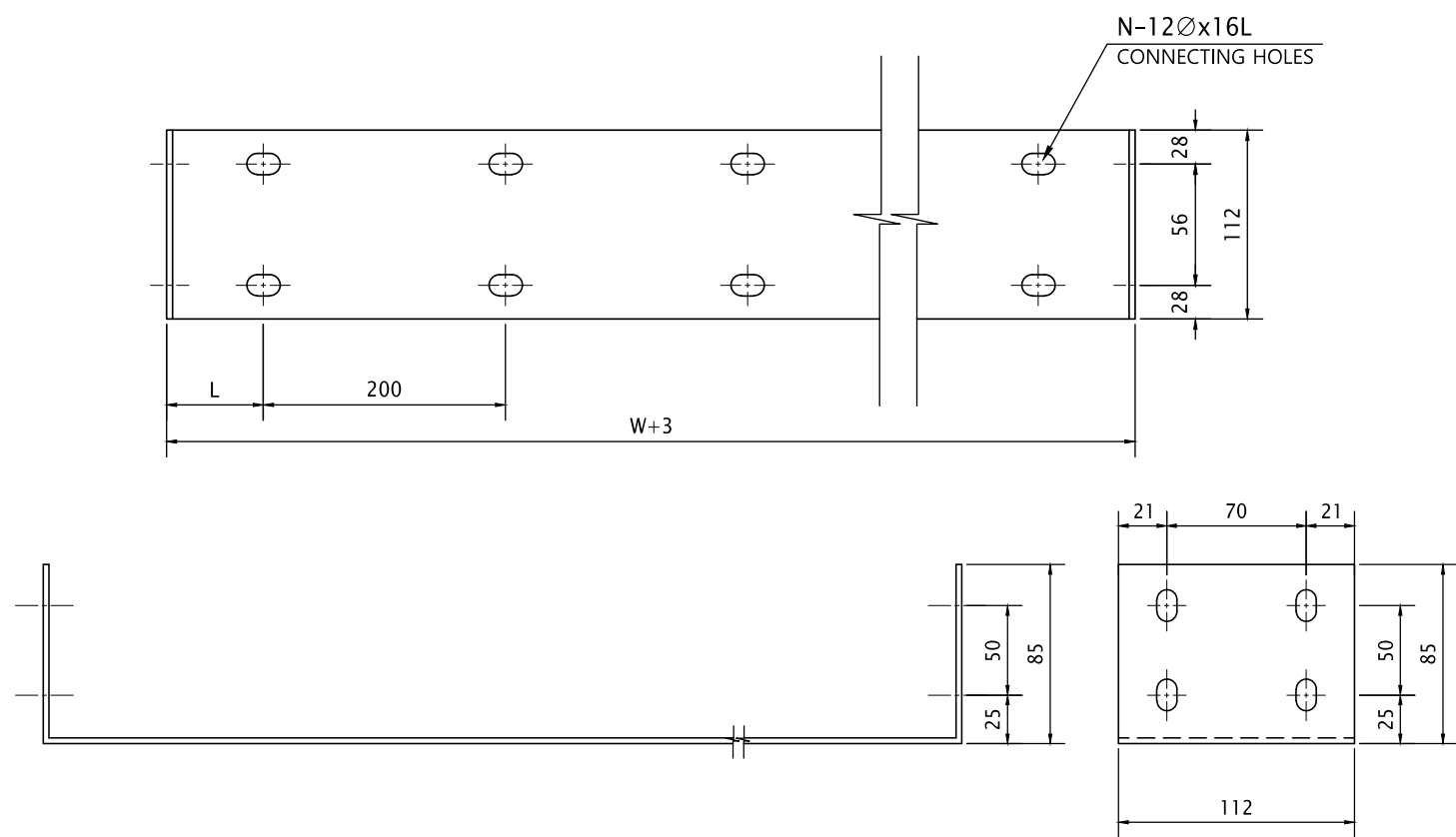
90 ITEM NUMBERS · UNIT mm

W1	W2	Straight Duct Reducer		Left Hand Straight Duct Reducer		Right Hand Straight Duct Reducer	
		HVT-CR-050 · p. 60		HVT-CR-051 · p. 61		HVT-CR-052 · p. 62	
		TYPE A	TYPE B	TYPE A	TYPE B	TYPE A	TYPE B
300	200	HVT-DRDW3W2A	HVT-DRDW3W2B	HVT-DRDLW3W2A	HVT-DRDLW3W2B	HVT-DRDRW3W2A	HVT-DRDRW3W2B
400	200	HVT-DRDW4W2A	HVT-DRDW4W2B	HVT-DRDLW4W2A	HVT-DRDLW4W2B	HVT-DRDRW4W2A	HVT-DRDRW4W2B
400	300	HVT-DRDW4W3A	HVT-DRDW4W3B	HVT-DRDLW4W3A	HVT-DRDLW4W3B	HVT-DRDRW4W3A	HVT-DRDRW4W3B
500	300	HVT-DRDW5W3A	HVT-DRDW5W3B	HVT-DRDLW5W3A	HVT-DRDLW5W3B	HVT-DRDRW5W3A	HVT-DRDRW5W3B
500	400	HVT-DRDW5W4A	HVT-DRDW5W4B	HVT-DRDLW5W4A	HVT-DRDLW5W4B	HVT-DRDRW5W4A	HVT-DRDRW5W4B
600	400	HVT-DRDW6W4A	HVT-DRDW6W4B	HVT-DRDLW6W4A	HVT-DRDLW6W4B	HVT-DRDRW6W4A	HVT-DRDRW6W4B
600	500	HVT-DRDW6W5A	HVT-DRDW6W5B	HVT-DRDLW6W5A	HVT-DRDLW6W5B	HVT-DRDRW6W5A	HVT-DRDRW6W5B
700	500	HVT-DRDW7W5A	HVT-DRDW7W5B	HVT-DRDLW7W5A	HVT-DRDLW7W5B	HVT-DRDRW7W5A	HVT-DRDRW7W5B
700	600	HVT-DRDW7W6A	HVT-DRDW7W6B	HVT-DRDLW7W6A	HVT-DRDLW7W6B	HVT-DRDRW7W6A	HVT-DRDRW7W6B
800	600	HVT-DRDW8W6A	HVT-DRDW8W6B	HVT-DRDLW8W6A	HVT-DRDLW8W6B	HVT-DRDRW8W6A	HVT-DRDRW8W6B
800	700	HVT-DRDW8W7A	HVT-DRDW8W7B	HVT-DRDLW8W7A	HVT-DRDLW8W7B	HVT-DRDRW8W7A	HVT-DRDRW8W7B
900	700	HVT-DRDW9W7A	HVT-DRDW9W7B	HVT-DRDLW9W7A	HVT-DRDLW9W7B	HVT-DRDRW9W7A	HVT-DRDRW9W7B
900	800	HVT-DRDW9W8A	HVT-DRDW9W8B	HVT-DRDLW9W8A	HVT-DRDLW9W8B	HVT-DRDRW9W8A	HVT-DRDRW9W8B
1000	800	HVT-DRDW10W8A	HVT-DRDW10W8B	HVT-DRDLW10W8A	HVT-DRDLW10W8B	HVT-DRDRW10W8A	HVT-DRDRW10W8B
1000	900	HVT-DRDW10W9A	HVT-DRDW10W9B	HVT-DRDLW10W9A	HVT-DRDLW10W9B	HVT-DRDRW10W9A	HVT-DRDRW10W9B

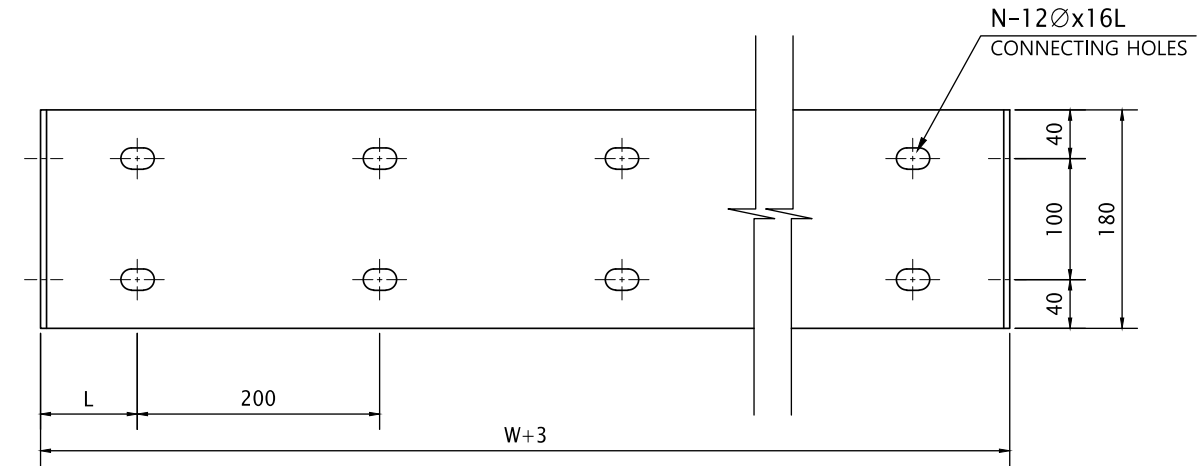
TYPE A: 2-slot connection · TYPE B: 4-slot connection
See the corresponding drawings for specifications and details.

CR DUCT CONNECTOR

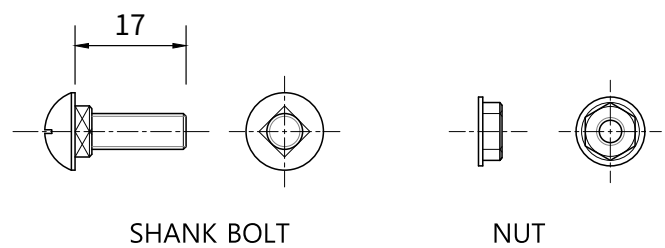
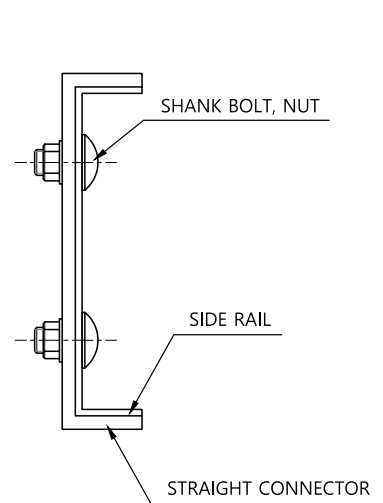
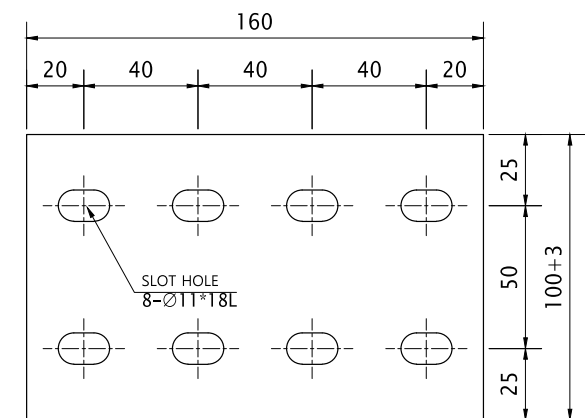
UNIT mm · N.S.



DETAIL "A"



DETAIL "B"



SHANK BOLT NUT	SIZE	REMARK
	M10×17L	-All steelworks areas: galvanized

DIMENSION		CR PosMAC(Kg /EA)		Item No.
W(mm)	N(EA)	T(mm)	WEIGHT · 100H	
200	8	1.4	0.47	HVT-DCNW2
300	12	1.4	0.59	HVT-DCNW3
400	12	1.4	0.71	HVT-DCNW4
500	14	1.4	0.84	HVT-DCNW5
600	14	1.4	0.96	HVT-DCNW6
700	16	1.4	1.09	HVT-DCNW7
800	16	1.4	1.21	HVT-DCNW8
900	18	1.4	1.34	HVT-DCNW9
1000	18	1.4	1.47	HVT-DCNW10
Per DETAIL A				

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC PLATE 1.0t : 6.42kg/m ² 1.2t : 7.64kg/m ² 1.4t : 8.87kg/m ² Coating mass (total, both sides) PLATE : 1.2t, 1.4t : 250g/m ² Rivet RIVET : Ø5×7.0L (brass alloy) L (length) conditions L 51.5mm: 300W, 500W, 700W, 900W 101.5mm: 400W, 600W, 800W, 100W Fabrication basis See fabrication specification

HANVIT TRAY Co., Ltd.

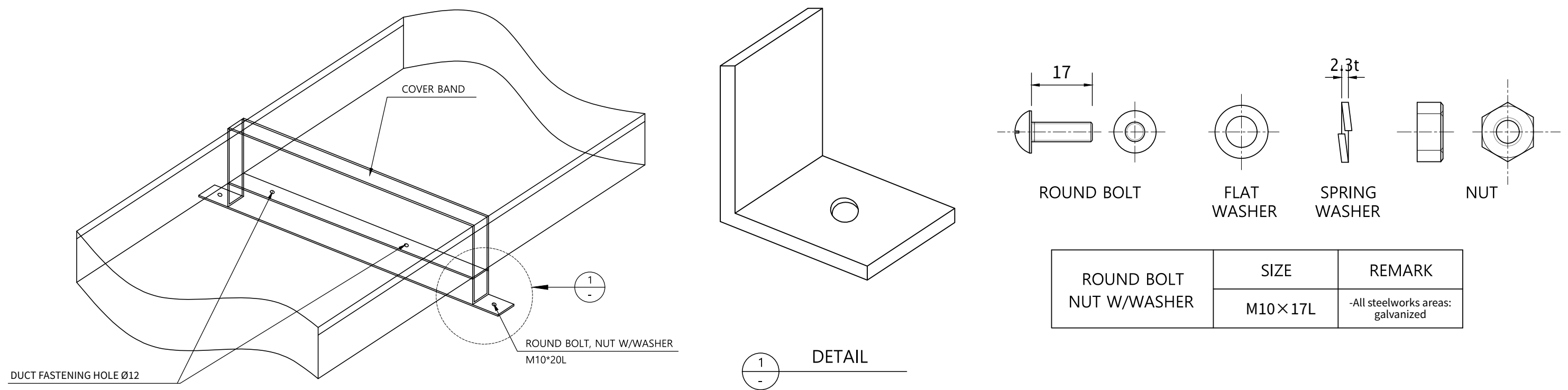
DRAWING NO.
HVT-CR-053

UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

CR COVER BAND

UNIT mm · N.S.



W(mm)	CR PosMAC(Kg /EA)	Item No.
200	0.36	HVT-DCBW2
300	0.45	HVT-DCBW3
400	0.54	HVT-DCBW4
500	0.63	HVT-DCBW5
600	0.72	HVT-DCBW6
700	0.81	HVT-DCBW7
800	0.91	HVT-DCBW8
900	0.99	HVT-DCBW9
1000	1.09	HVT-DCBW10

REMARK (KS D 3030)
Material · plate unit weight Hot-dip coated steel sheet (KS D 3506, KS D3030) - CR PosMAC : 1.4t Hot-dip coated steel sheet (KS D 3506, KS D3030) - HR PosMAC : 2.0t PLATE 1.4t : 8.87kg/m² 2.0t : 15.95kg/m² Coating mass (total, both sides) PLATE 1.4t : 250g/m²

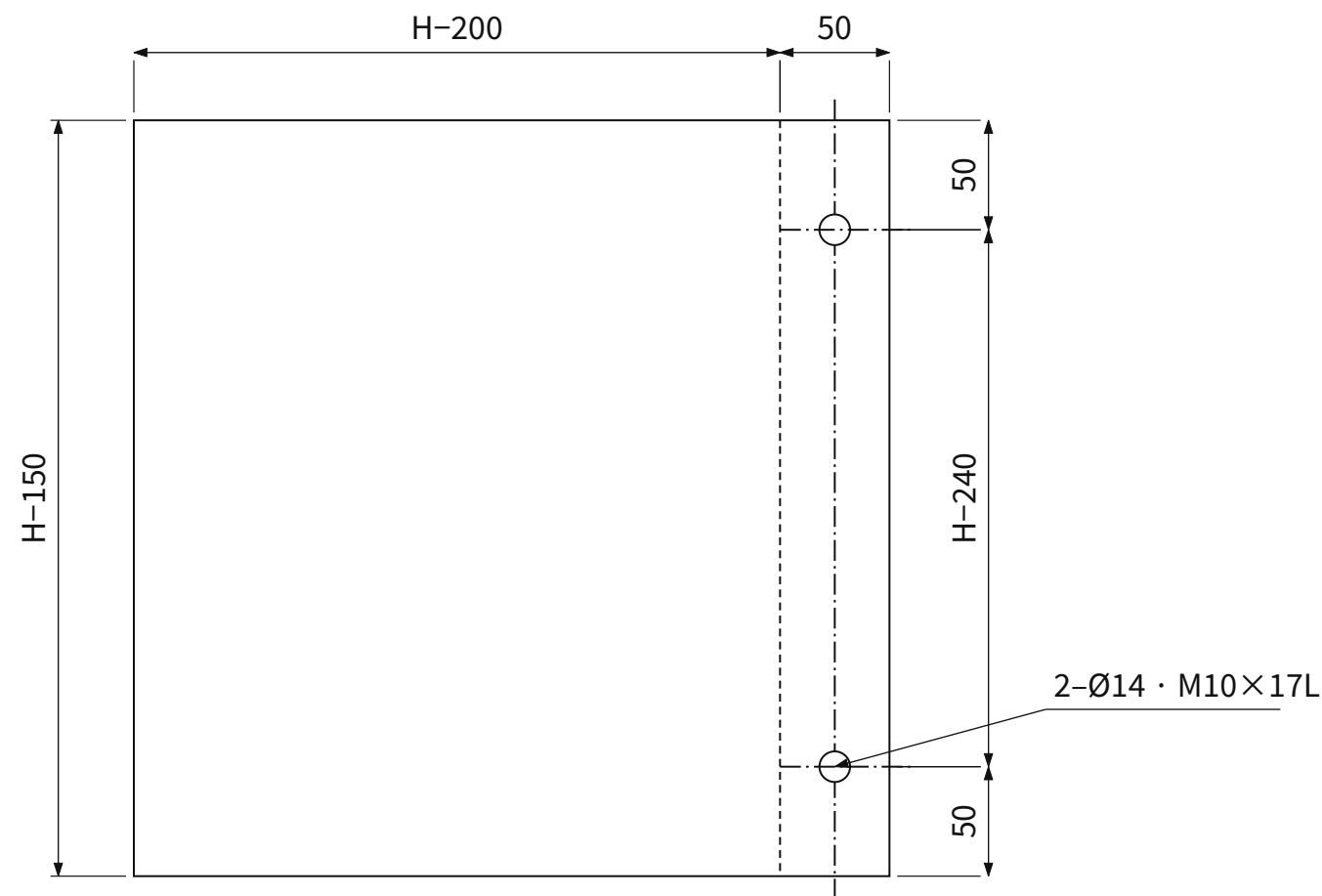
HANVIT TRAY Co., Ltd.

DRAWING NO.
HVT-CR-054

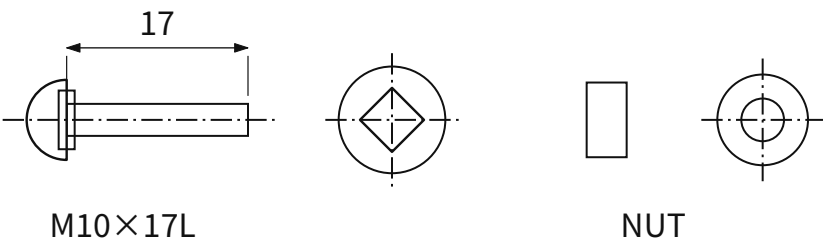
UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

CR VERTICAL DUCT SEPARATOR

UNIT mm · N.S.



SHANK BOLT / NUT



SIZE: M10×17L

REMARK: All steelworks areas · galvanized

Size table · CR PosMAC

W (mm)	T (mm)	Item No.
200	1.4	HVT-DSPW2
300	1.4	HVT-DSPW3
400	1.4	HVT-DSPW4
500	1.4	HVT-DSPW5
600	1.4	HVT-DSPW6
700	1.4	HVT-DSPW7
800	1.4	HVT-DSPW8
900	1.4	HVT-DSPW9
1000	1.4	HVT-DSPW10

Material · plate unit weight

Hot-dip coated steel sheet CR PosMAC
KS D 3506 / KS D 3030
PLATE 1.0t: 6.42 kg/m²
PLATE 1.2t: 7.64 kg/m²
PLATE 1.4t: 8.87 kg/m²

REMARK (KS D 3030)

Coating mass (total, both sides)

PLATE 1.2t · 1.4t: 250 g/m²

Rivet

RIVET Ø5×7.0L (brass alloy)

L (length) conditions

L 51.5 mm: 300W · 500W · 700W · 900W

L 101.5 mm: 400W · 600W · 800W · 100W

Fabrication basis

See fabrication specification

HANVIT TRAY Co., Ltd.

DRAWING NO.

HVT-CR-055

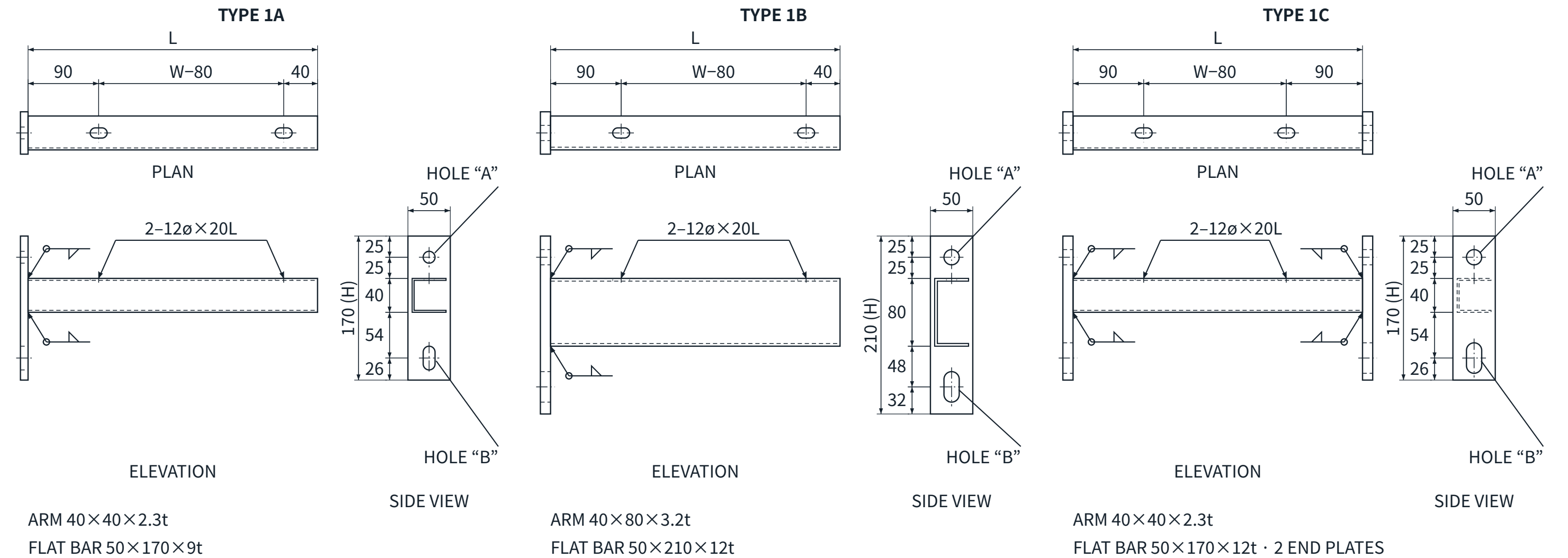
UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

Bracket Type 1

1A · 1B · 1C

UNIT mm · N.S.



Hot-dip galvanizing: KS D 8308 · Material: see fabrication spec.

Width W	BRACKET	FB width	FB height	FB t	A (ø)	B (ø×L)	Standard bolt	Chemical anchor	TYPE	Item No.
200	40×40×2.3t-250L	50	170	9	14	14×28L	M12	M10	1A	HVT-BR1AW2
300	40×40×2.3t-350L	50	170	9	14	14×28L	M12	M10	1A	HVT-BR1AW3
400	40×80×3.2t-450L	50	210	12	18	18×36L	M16	M16	1B	HVT-BR1BW4
500	40×80×3.2t-550L	50	210	12	18	18×36L	M16	M16	1B	HVT-BR1BW5
600	40×80×3.2t-650L	50	210	12	18	18×36L	M16	M16	1B	HVT-BR1BW6
700	40×80×3.2t-750L	50	210	12	18	18×36L	M16	M16	1B	HVT-BR1BW7
800	40×40×2.3t-900L	50	170	12	18	18×36L	M16	M16	1C	HVT-BR1CW8
900	40×40×2.3t-1000L	50	170	12	18	18×36L	M16	M16	1C	HVT-BR1CW9
1000	40×40×2.3t-1100L	50	170	12	18	18×36L	M16	M16	1C	HVT-BR1CW10

HANVIT TRAY Co., Ltd.

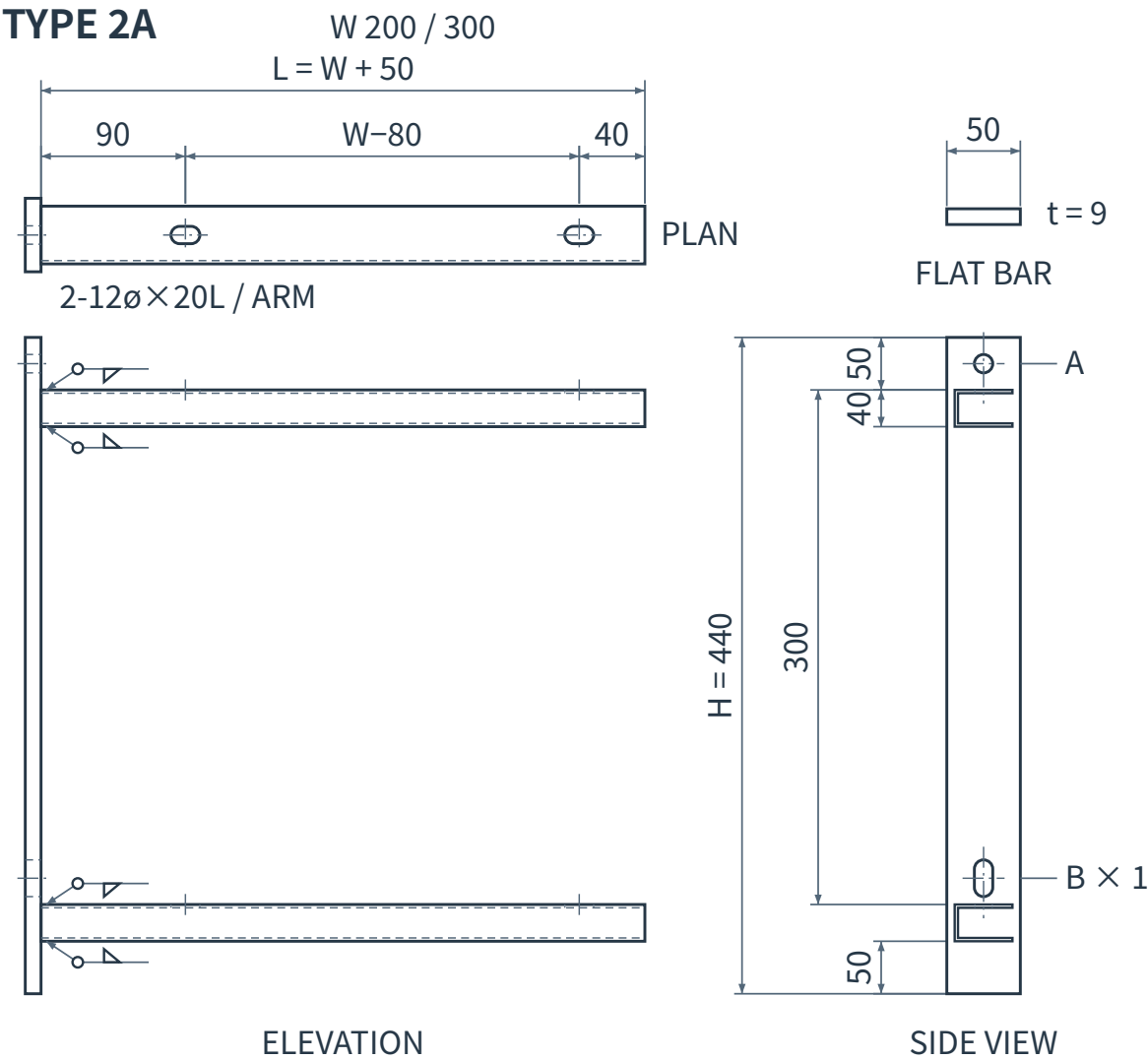
DRAWING NO.
HVT-BR-001

UNIT mm · SCALE N.S.
REV. 2026.01 · 2026-09-14

Bracket Type 2

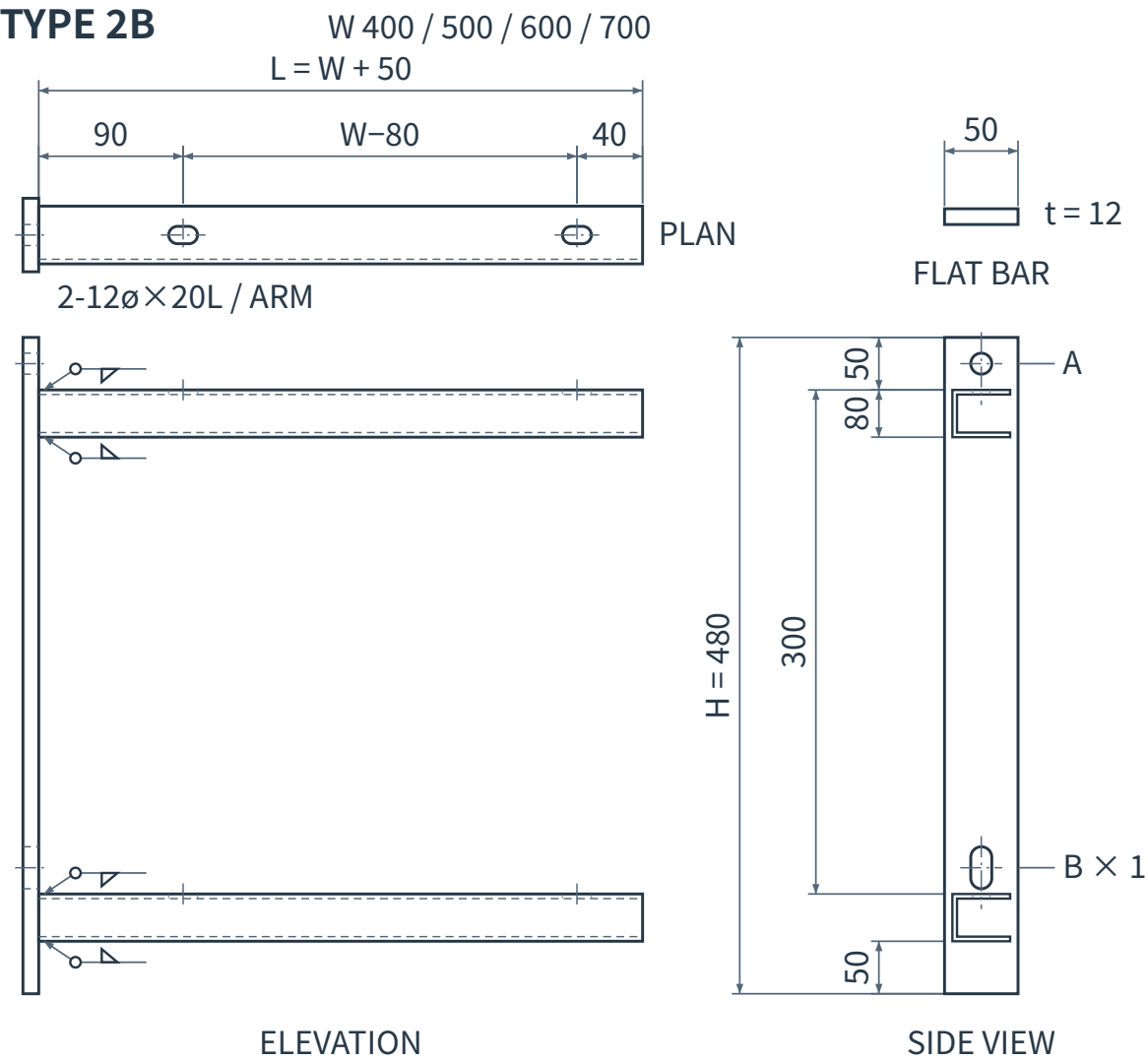
2A · 2B

UNIT mm · N.S.



A: ø14 × 1 · B: 14ø×28L × 1 · Hole center: 25 above arm

Hot-dip galvanizing (KS D 8308) · Material: see fabrication spec.



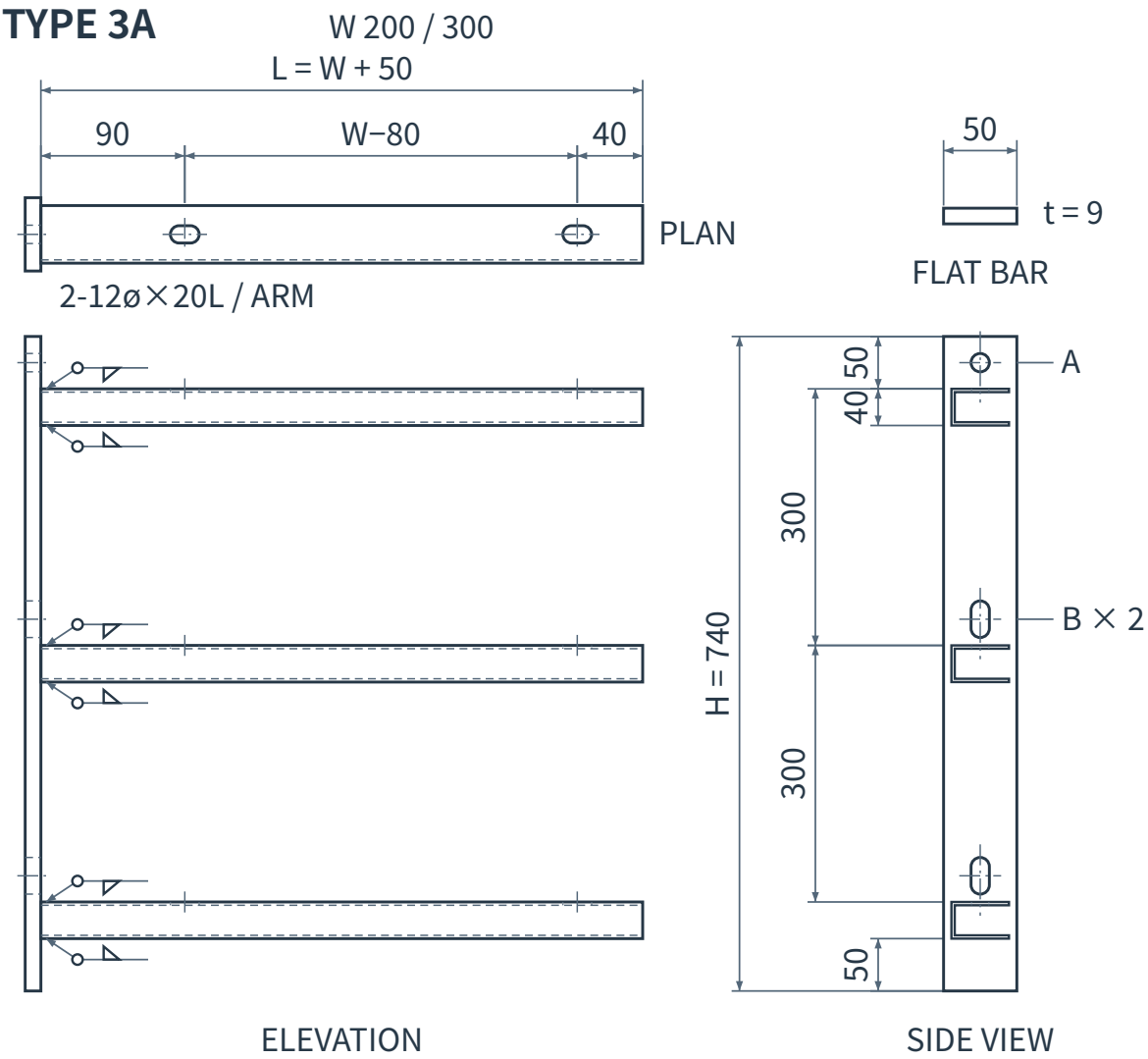
A: ø18 × 1 · B: 18ø×36L × 1 · Hole center: 25 above arm

W	Bracket (mm)	FB width	H	FB t	A (ø)	B (slot)	Standard bolt	Chemical anchor	TYPE	Item No.
200	40×40×2.3t-250L	50	440	9	14	14ø×28L	M12	M10	2A	HVT-BR2AW2
300	40×40×2.3t-350L	50	440	9	14	14ø×28L	M12	M10	2A	HVT-BR2AW3
400	40×80×3.2t-450L	50	480	12	18	18ø×36L	M16	M16	2B	HVT-BR2BW4
500	40×80×3.2t-550L	50	480	12	18	18ø×36L	M16	M16	2B	HVT-BR2BW5
600	40×80×3.2t-650L	50	480	12	18	18ø×36L	M16	M16	2B	HVT-BR2BW6
700	40×80×3.2t-750L	50	480	12	18	18ø×36L	M16	M16	2B	HVT-BR2BW7

Bracket Type 3

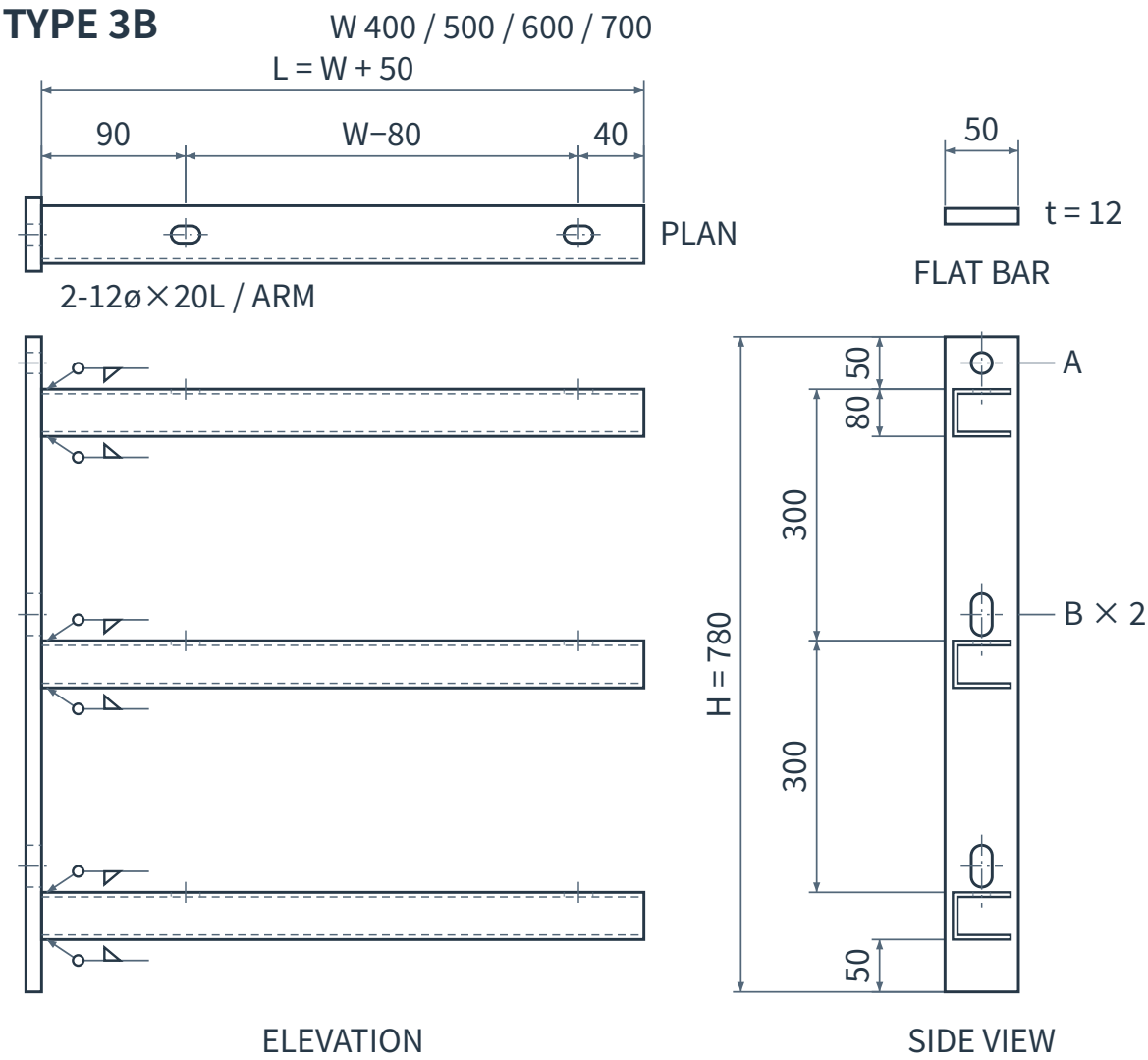
3A · 3B

UNIT mm · N.S.



A: ø14 × 1 · B: 14ø×28L × 2 · Hole center: 25 above arm

Hot-dip galvanizing (KS D 8308) · Material: see fabrication spec.



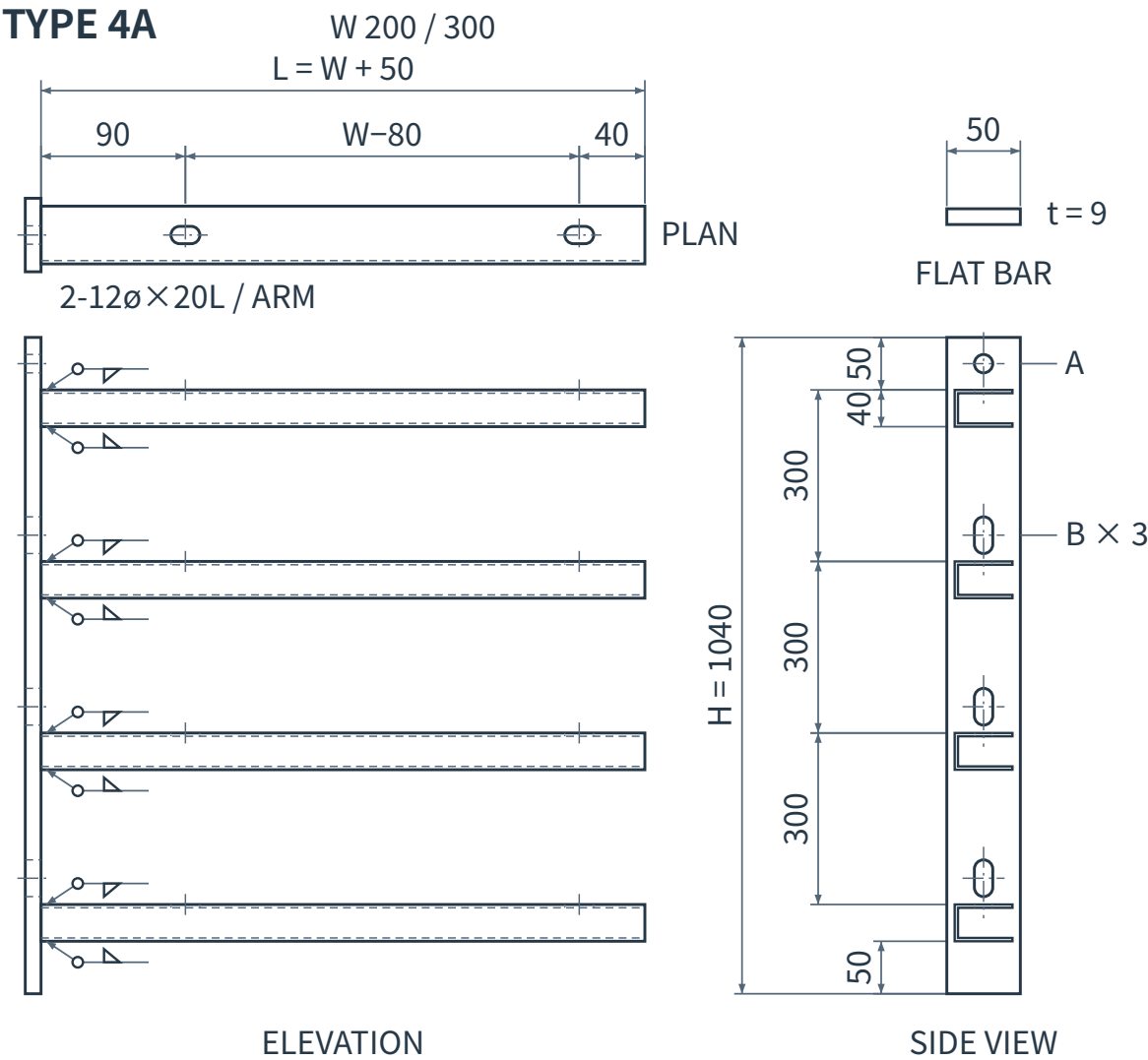
A: ø18 × 1 · B: 18ø×36L × 2 · Hole center: 25 above arm

W	Bracket (mm)	FB width	H	FB t	A (ø)	B (slot)	Standard bolt	Chemical anchor	TYPE	Item No.
200	40×40×2.3t-250L	50	740	9	14	14ø×28L	M12	M10	3A	HVT-BR3AW2
300	40×40×2.3t-350L	50	740	9	14	14ø×28L	M12	M10	3A	HVT-BR3AW3
400	40×80×3.2t-450L	50	780	12	18	18ø×36L	M16	M16	3B	HVT-BR3BW4
500	40×80×3.2t-550L	50	780	12	18	18ø×36L	M16	M16	3B	HVT-BR3BW5
600	40×80×3.2t-650L	50	780	12	18	18ø×36L	M16	M16	3B	HVT-BR3BW6
700	40×80×3.2t-750L	50	780	12	18	18ø×36L	M16	M16	3B	HVT-BR3BW7

Bracket Type 4

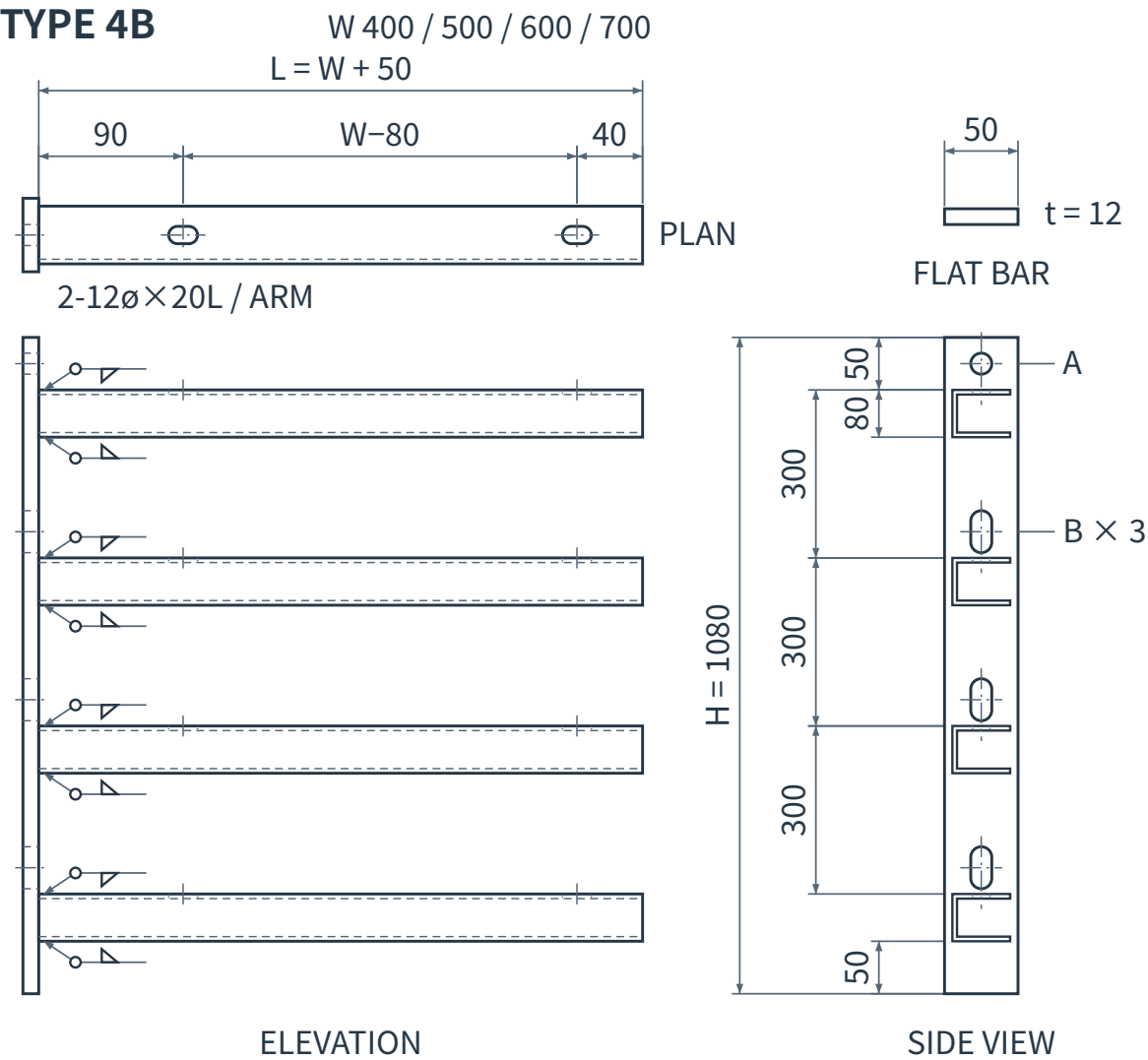
4A · 4B

UNIT mm · N.S.



A: ø14 × 1 · B: 14ø×28L × 3 · Hole center: 25 above arm

Hot-dip galvanizing (KS D 8308) · Material: see fabrication spec.



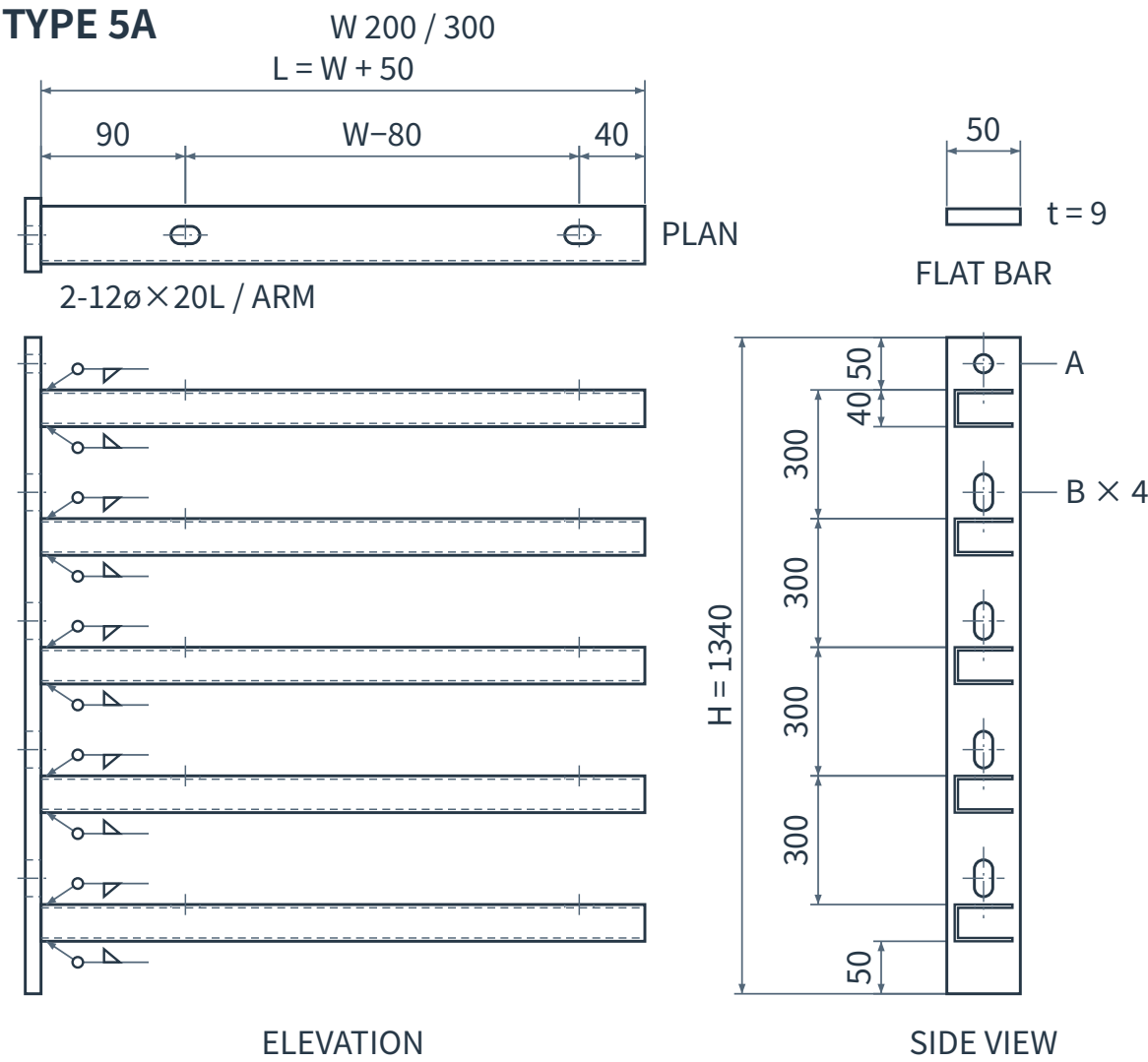
A: ø18 × 1 · B: 18ø×36L × 3 · Hole center: 25 above arm

W	Bracket (mm)	FB width	H	FB t	A (ø)	B (slot)	Standard bolt	Chemical anchor	TYPE	Item No.
200	40×40×2.3t-250L	50	1040	9	14	14ø×28L	M12	M10	4A	HVT-BR4AW2
300	40×40×2.3t-350L	50	1040	9	14	14ø×28L	M12	M10	4A	HVT-BR4AW3
400	40×80×3.2t-450L	50	1080	12	18	18ø×36L	M16	M16	4B	HVT-BR4BW4
500	40×80×3.2t-550L	50	1080	12	18	18ø×36L	M16	M16	4B	HVT-BR4BW5
600	40×80×3.2t-650L	50	1080	12	18	18ø×36L	M16	M16	4B	HVT-BR4BW6
700	40×80×3.2t-750L	50	1080	12	18	18ø×36L	M16	M16	4B	HVT-BR4BW7

Bracket Type 5

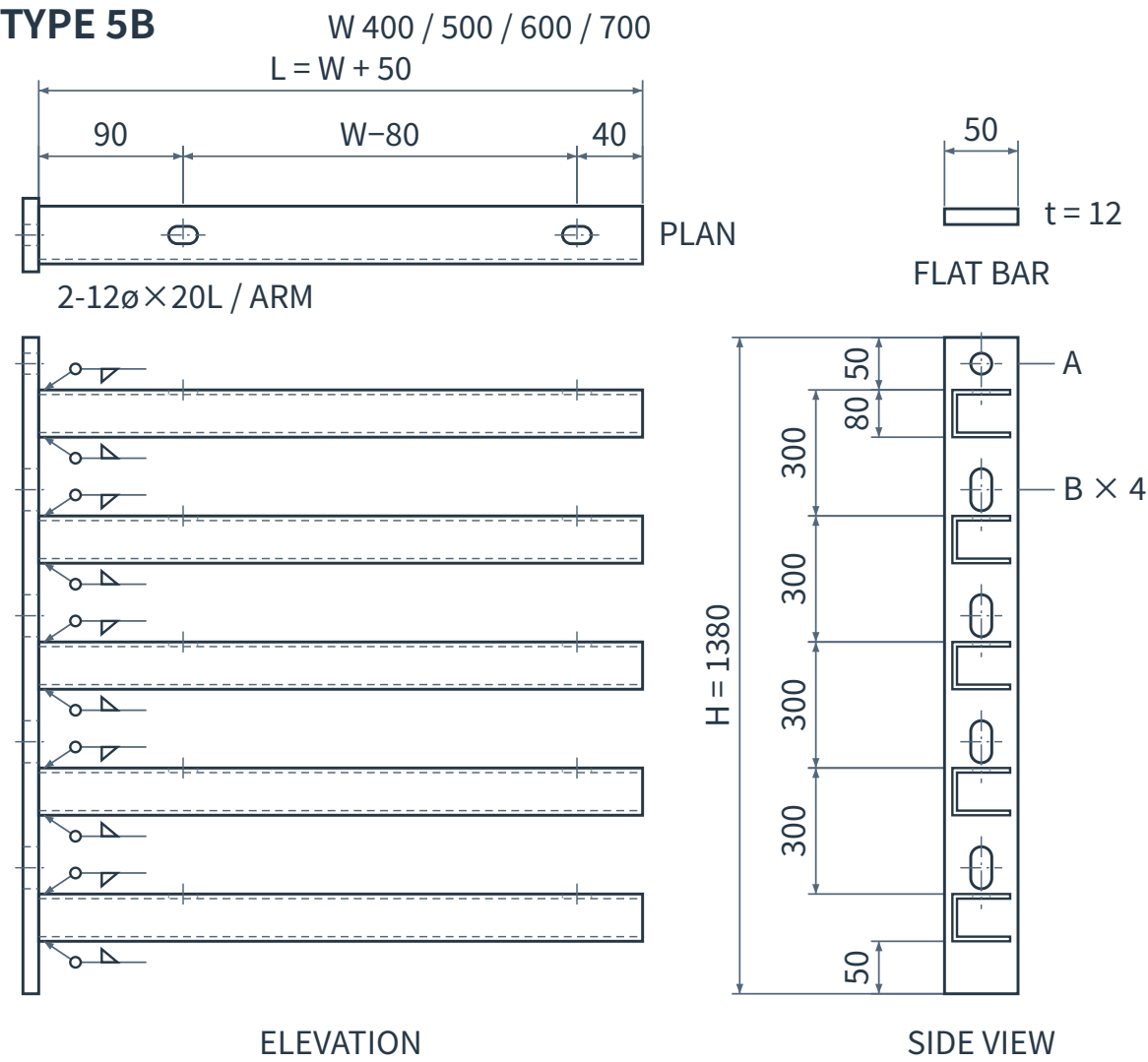
5A · 5B

UNIT mm · N.S.



A: ø14 × 1 · B: 14ø×28L × 4 · Hole center: 25 above arm

Hot-dip galvanizing (KS D 8308) · Material: see fabrication spec.



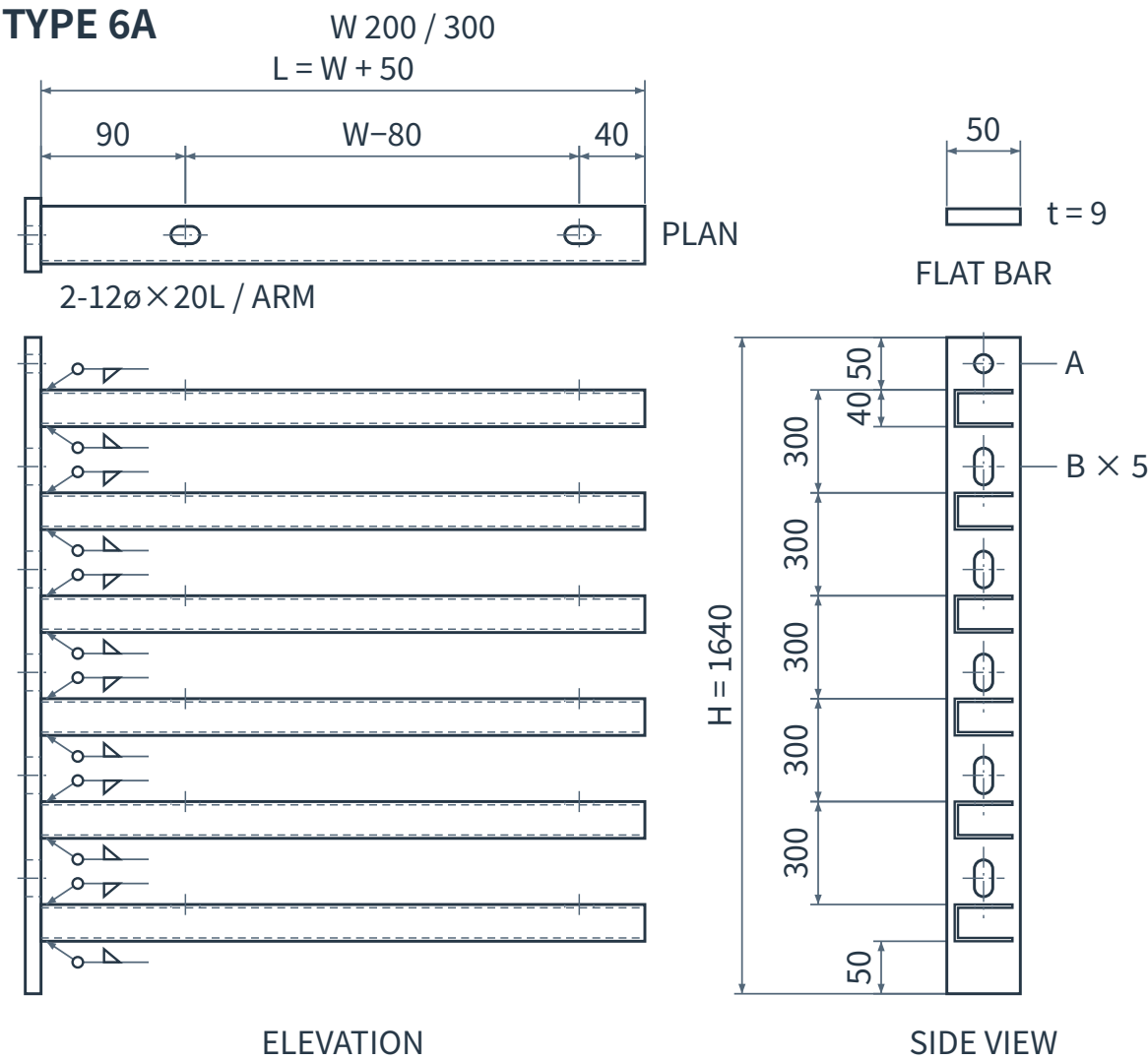
A: ø18 × 1 · B: 18ø×36L × 4 · Hole center: 25 above arm

W	Bracket (mm)	FB width	H	FB t	A (ø)	B (slot)	Standard bolt	Chemical anchor	TYPE	Item No.
200	40×40×2.3t-250L	50	1340	9	14	14ø×28L	M12	M10	5A	HVT-BR5AW2
300	40×40×2.3t-350L	50	1340	9	14	14ø×28L	M12	M10	5A	HVT-BR5AW3
400	40×80×3.2t-450L	50	1380	12	18	18ø×36L	M16	M16	5B	HVT-BR5BW4
500	40×80×3.2t-550L	50	1380	12	18	18ø×36L	M16	M16	5B	HVT-BR5BW5
600	40×80×3.2t-650L	50	1380	12	18	18ø×36L	M16	M16	5B	HVT-BR5BW6
700	40×80×3.2t-750L	50	1380	12	18	18ø×36L	M16	M16	5B	HVT-BR5BW7

Bracket Type 6

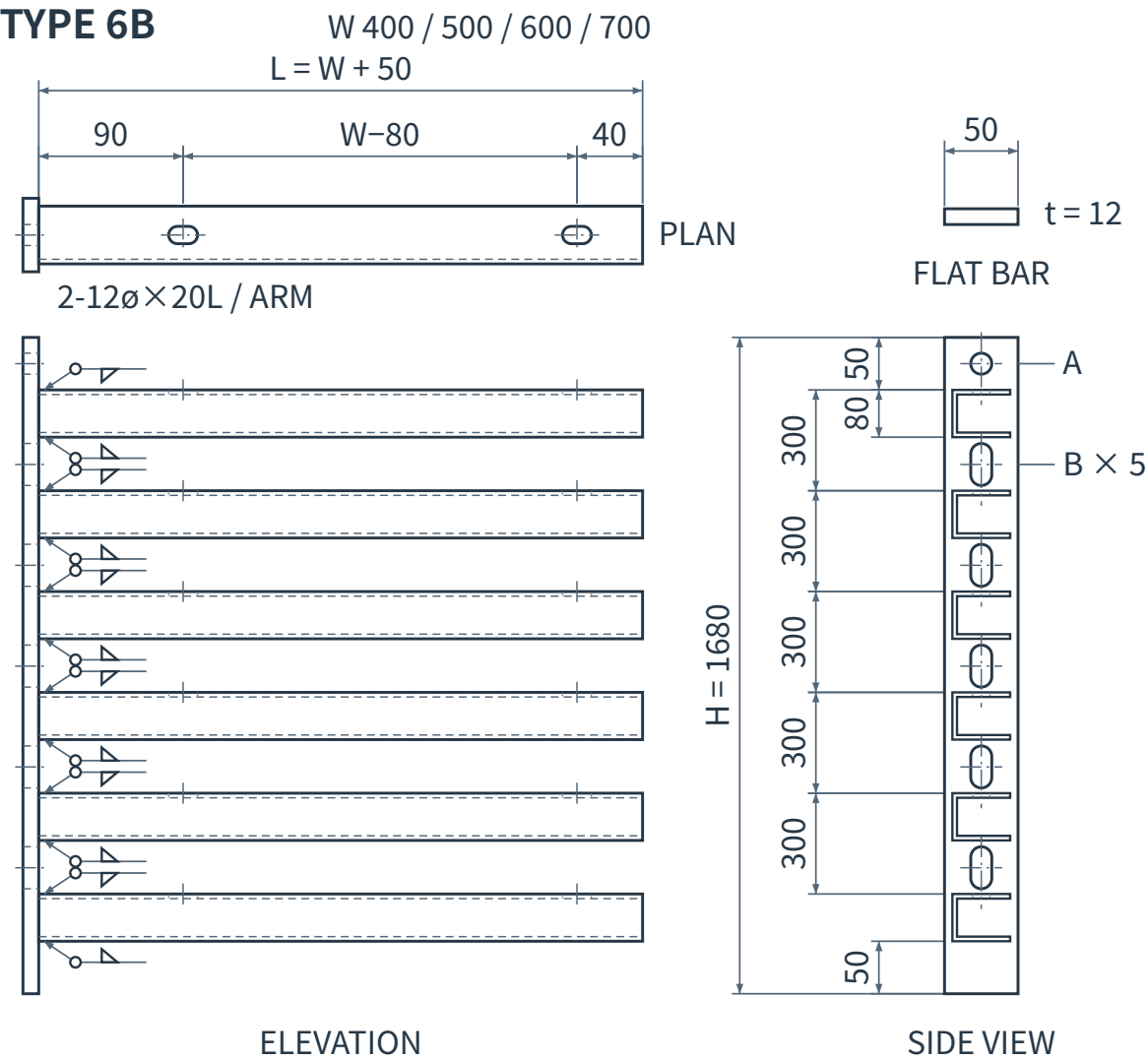
6A · 6B

UNIT mm · N.S.



A: ø14 × 1 · B: 14ø×28L × 5 · Hole center: 25 above arm

Hot-dip galvanizing (KS D 8308) · Material: see fabrication spec.



A: ø18 × 1 · B: 18ø×36L × 5 · Hole center: 25 above arm

W	Bracket (mm)	FB width	H	FB t	A (ø)	B (slot)	Standard bolt	Chemical anchor	TYPE	Item No.
200	40×40×2.3t-250L	50	1640	9	14	14ø×28L	M12	M10	6A	HVT-BR6AW2
300	40×40×2.3t-350L	50	1640	9	14	14ø×28L	M12	M10	6A	HVT-BR6AW3
400	40×80×3.2t-450L	50	1680	12	18	18ø×36L	M16	M16	6B	HVT-BR6BW4
500	40×80×3.2t-550L	50	1680	12	18	18ø×36L	M16	M16	6B	HVT-BR6BW5
600	40×80×3.2t-650L	50	1680	12	18	18ø×36L	M16	M16	6B	HVT-BR6BW6
700	40×80×3.2t-750L	50	1680	12	18	18ø×36L	M16	M16	6B	HVT-BR6BW7

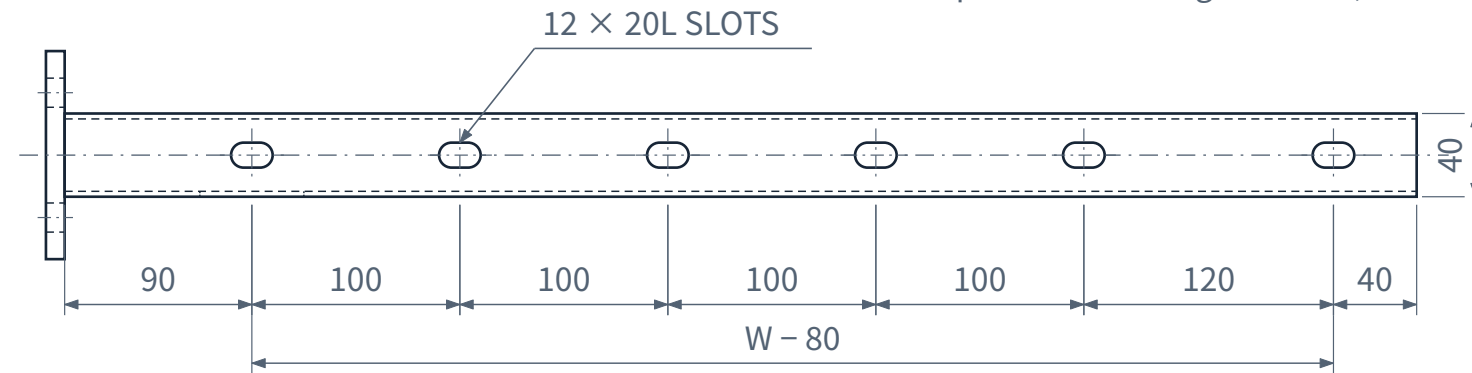
Tray Bracket · TYPE D1

01

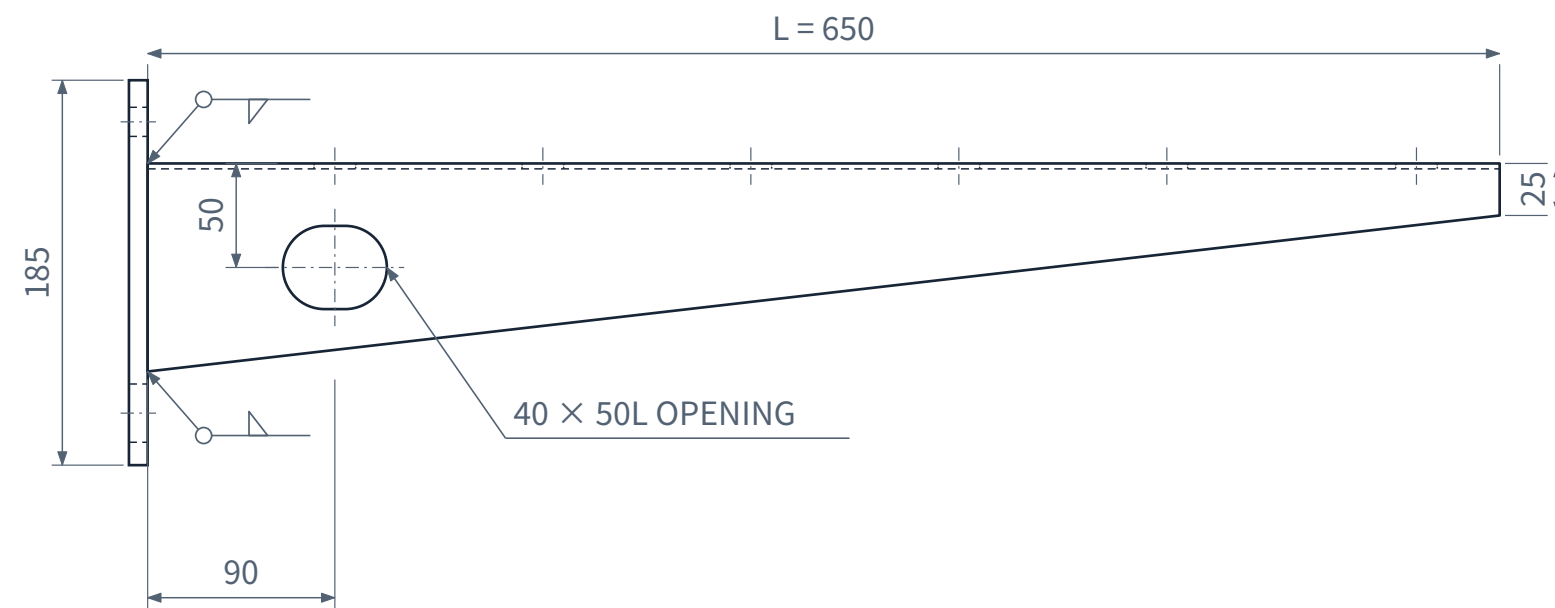
UNIT mm · N.S.

PLAN • TYPE D1

Representative length $L = 650$; N.S.



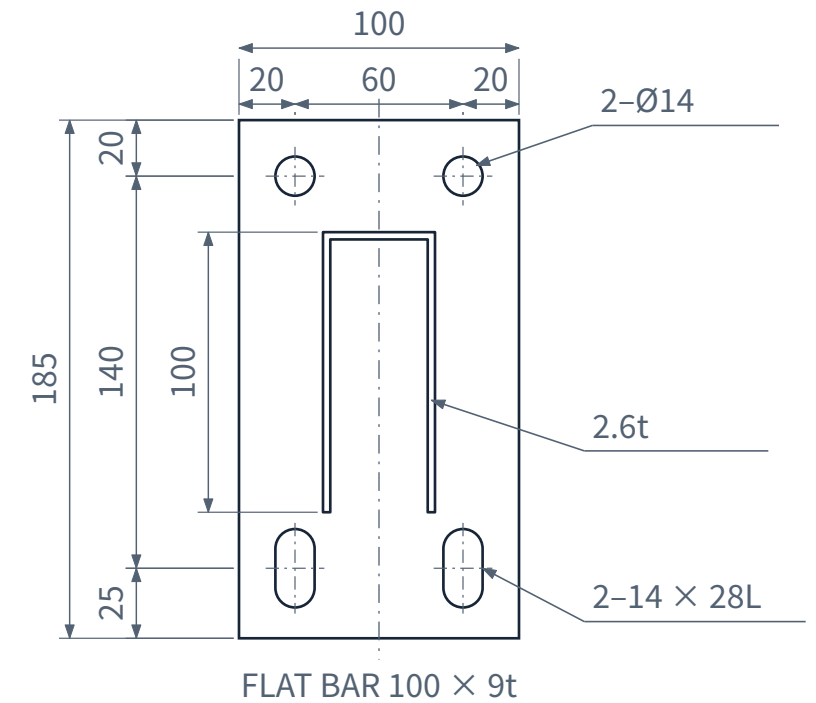
SIDE



Shown: W600 / L650 mm (slot layout for this length)

Hot-dip galvanizing: KS D 8308 · Material: see fabrication spec. · Bolt L: per SUPPORT.

MOUNTING END



TOP OFFSET 40 · U SECTION 40 × 100
M12×?L · NUT · FLAT / SPRING WASHER 2.3t
BOLT LENGTH L DEPENDS ON SUPPORT

TYPE	W (mm)	L (mm)	Plate t (mm)	Mounting plate (mm)	Bolt size	Item No.
D1	400	450	2.6	100×9t	M12×?L	HVT-BRD1W4
D1	500	550	2.6	100×9t	M12×?L	HVT-BRD1W5
D1	600	650	2.6	100×9t	M12×?L	HVT-BRD1W6

HANVIT TRAY Co., Ltd.

DRAWING NO.

HVT-BR-007

UNIT mm · SCALE N.S.

REV. 2026.01 · 2026-09-14

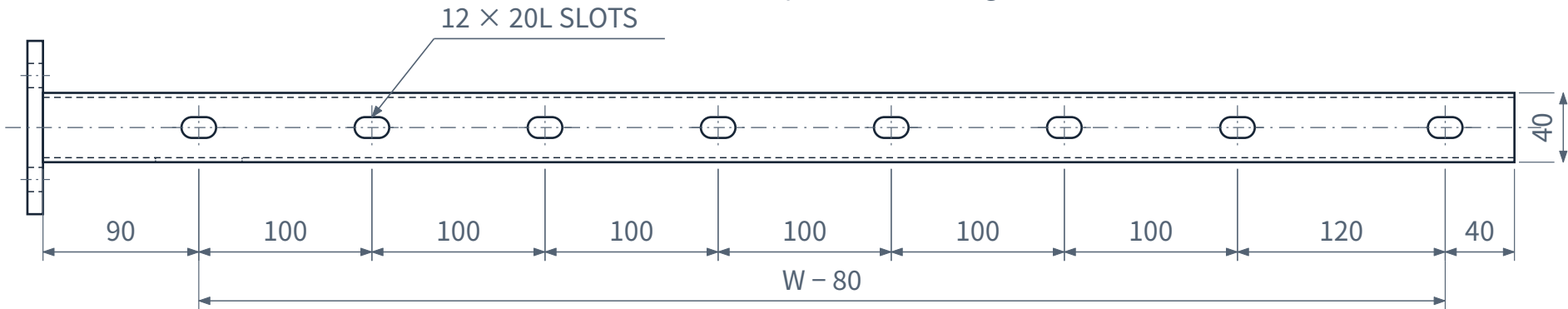
Tray Bracket · TYPE D2

D2

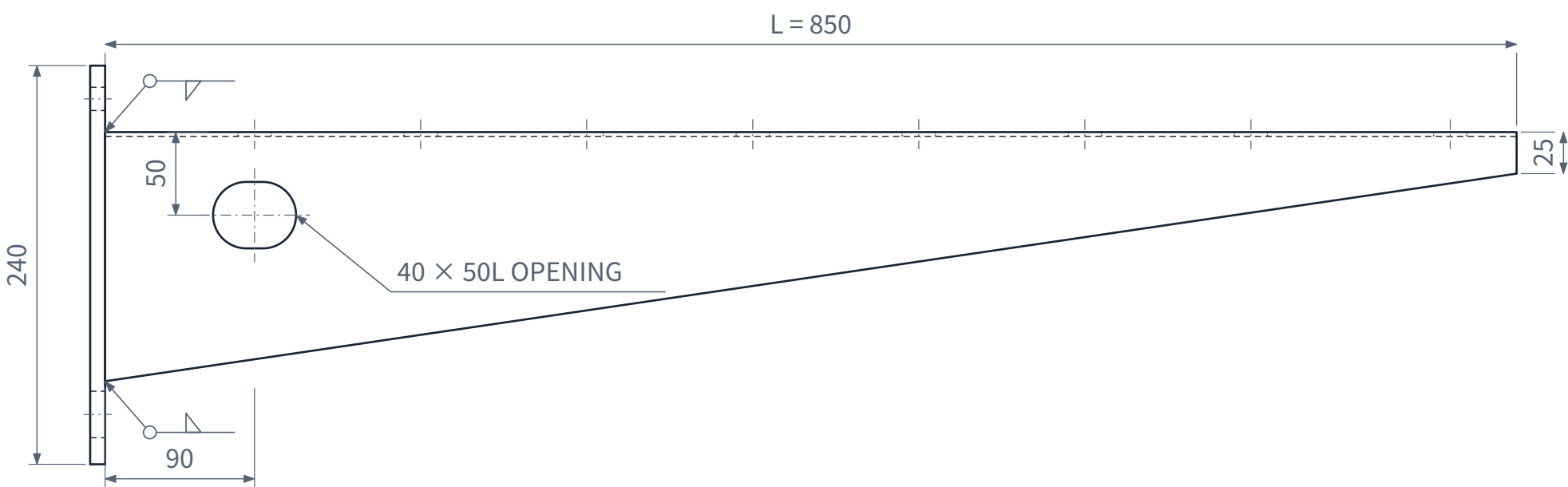
UNIT mm · N.S.

PLAN · TYPE D2

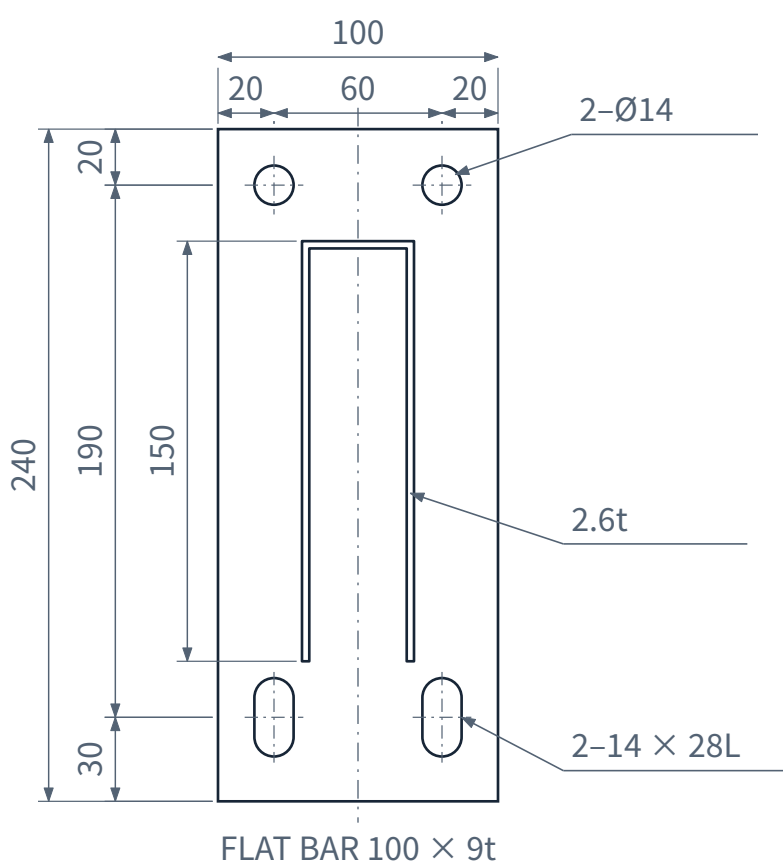
Representative length L = 850; N.S.



SIDE



MOUNTING END



TOP OFFSET 40 · U SECTION 40 × 150
M12×?L · NUT · FLAT / SPRING WASHER 2.3t
BOLT LENGTH L DEPENDS ON SUPPORT

Shown: W800 / L850 mm (slot layout for this length)
Hot-dip galvanizing: KS D 8308 · Material: see fabrication spec. · Bolt L: per SUPPORT.

TYPE	W (mm)	L (mm)	Plate t (mm)	Mounting plate (mm)	Bolt size	Item No.
D2	700	750	2.6	100×9t	M12×?L	HVT-BRD2W7
D2	800	850	2.6	100×9t	M12×?L	HVT-BRD2W8

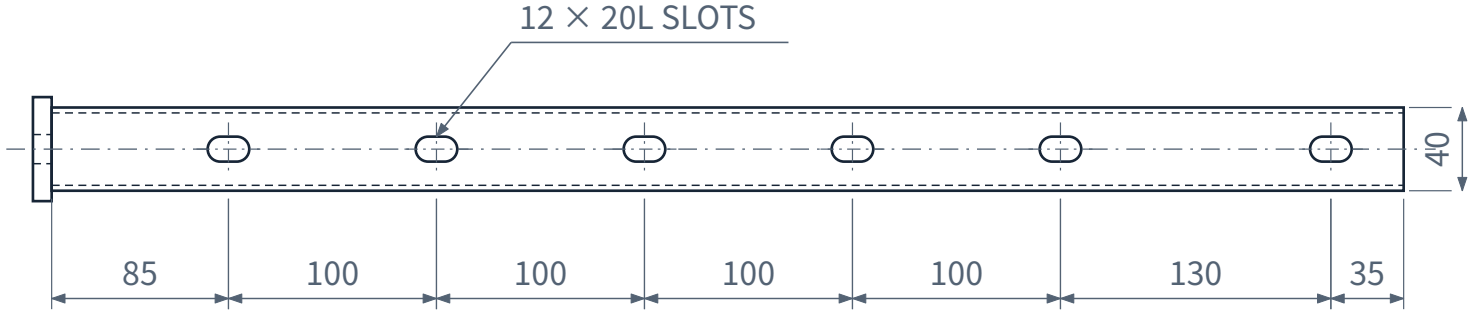
Tray Bracket · TYPE D3

D3

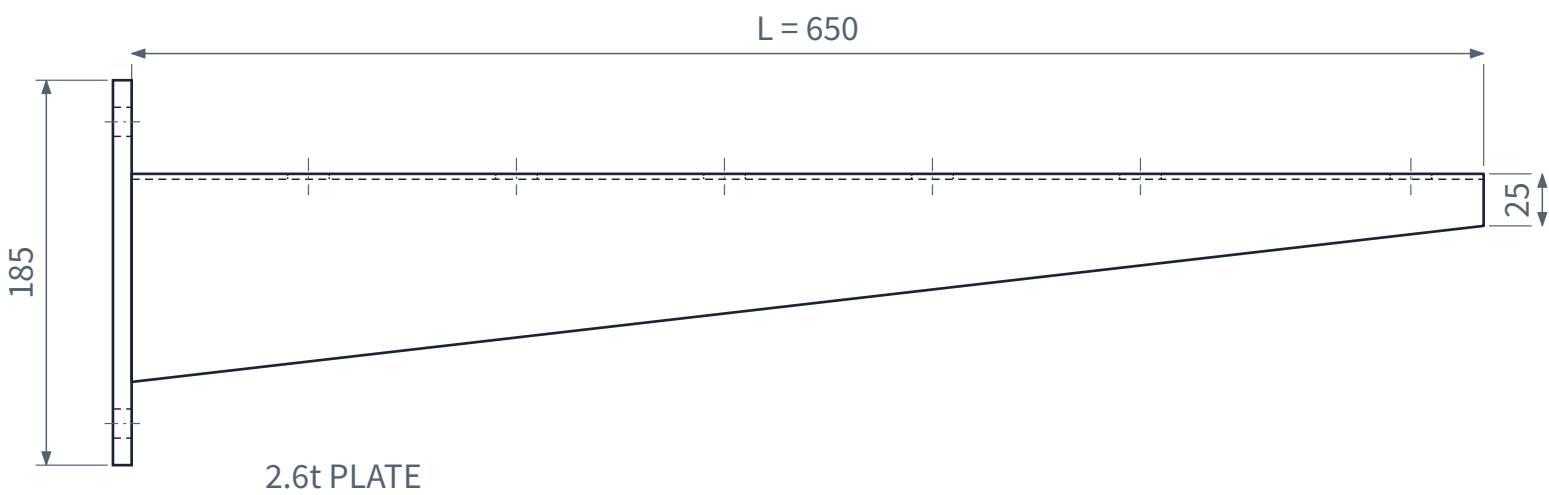
UNIT mm · N.S.

PLAN · TYPE D3

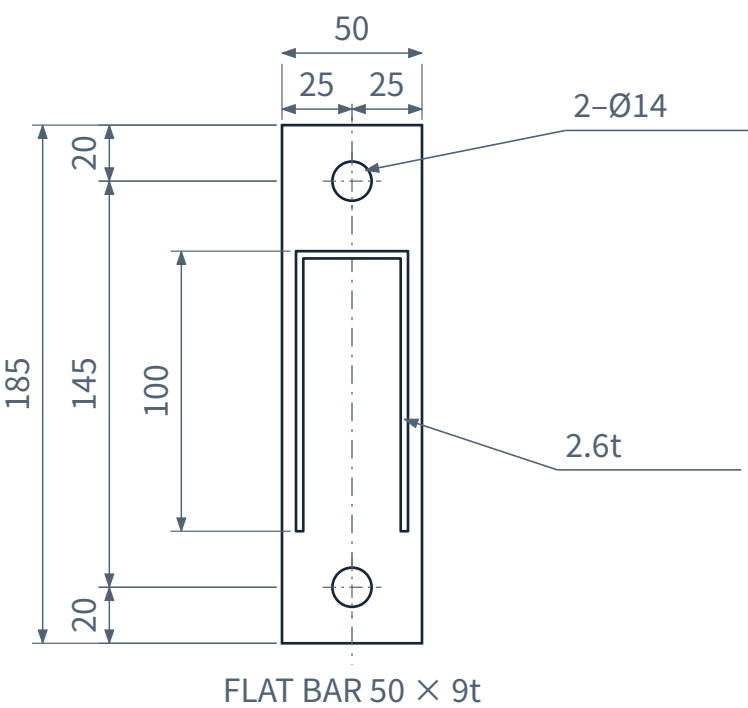
Representative length L = 650; N.S.



SIDE



MOUNTING END



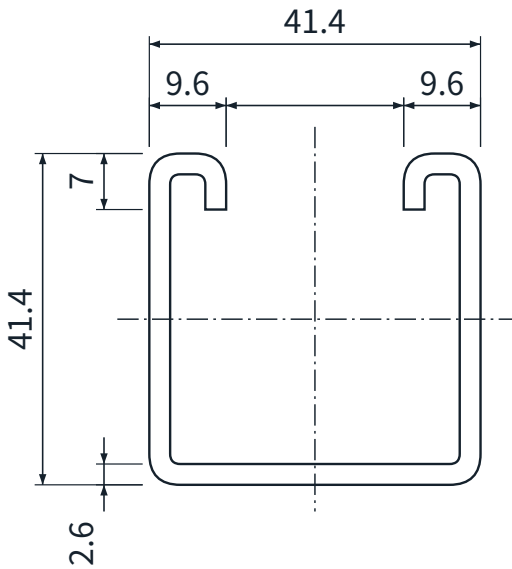
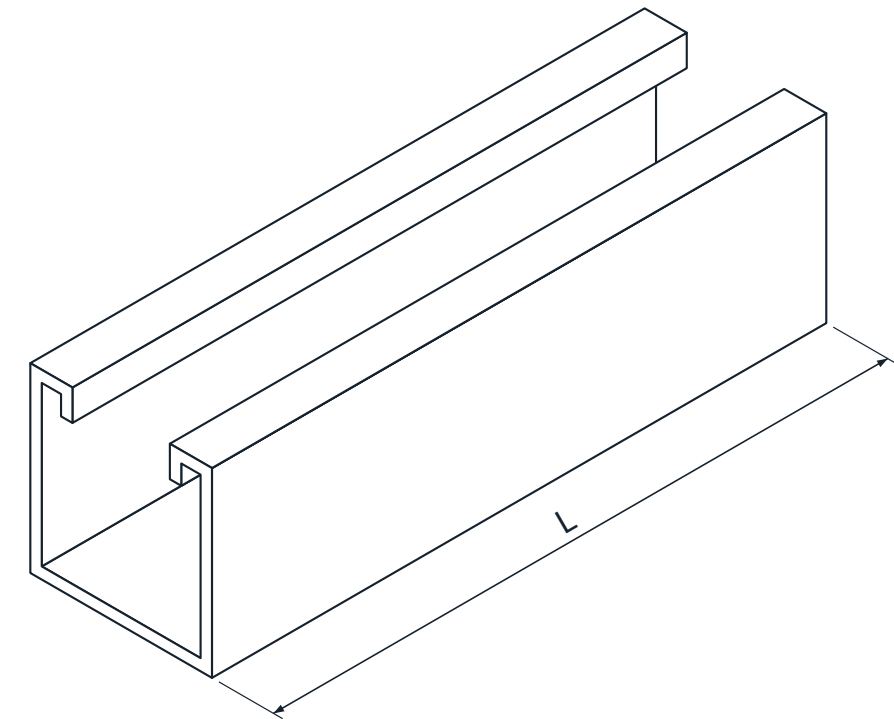
TOP OFFSET 45 · U SECTION 40 × 100
M12×?L · NUT · FLAT / SPRING WASHER 2.3t
BOLT LENGTH L DEPENDS ON SUPPORT

Shown: L650 mm (slot layout for this length)
Hot-dip galvanizing: KS D 8308 · Material: see fabrication spec. · Bolt L: per SUPPORT.

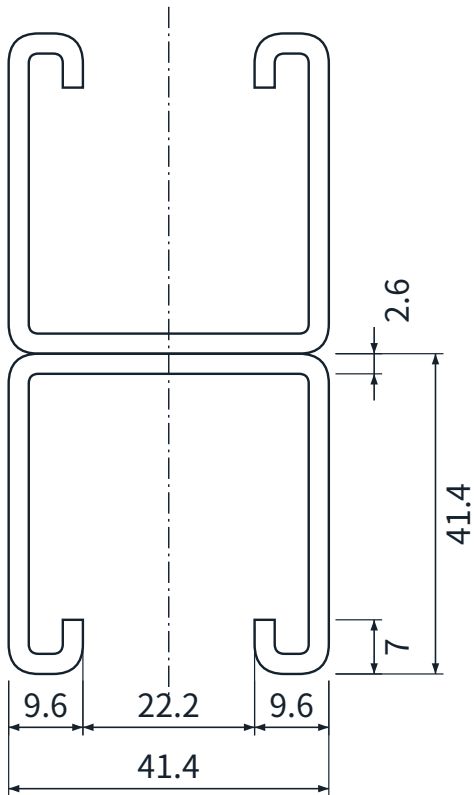
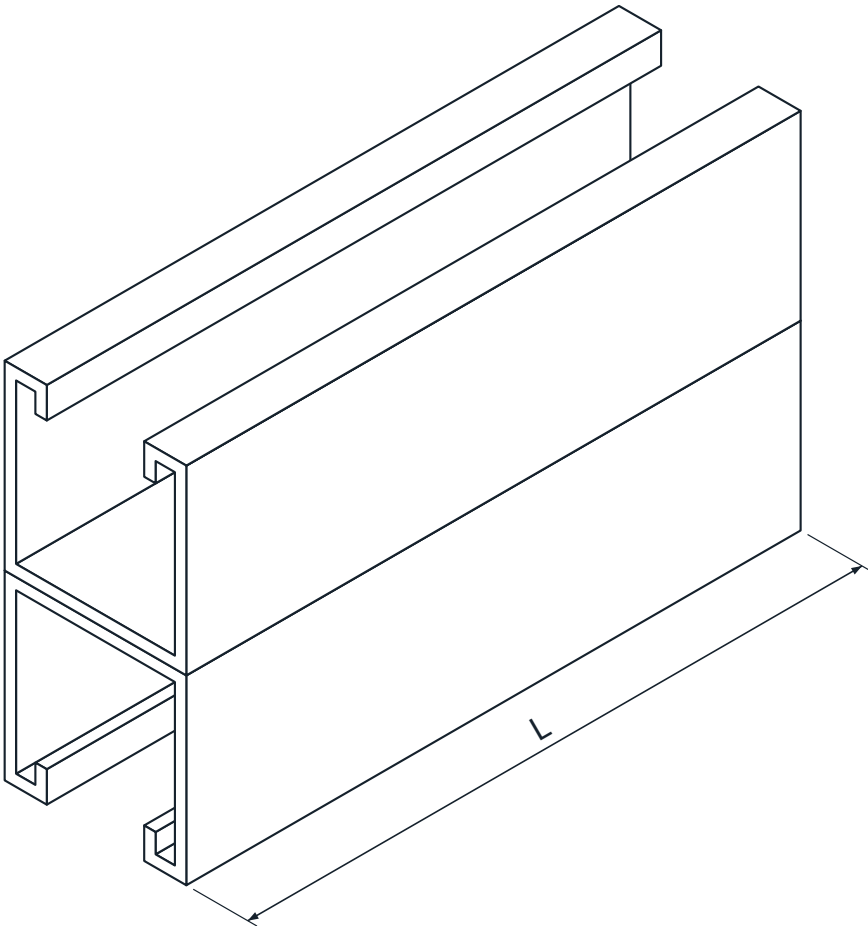
TYPE	Nominal	L (mm)	Plate t (mm)	Mounting plate (mm)	Bolt size	Item No.
D3	400	450	2.6	50 × 9t	M12 × ?L	HVT-BRD3N4
D3	500	550	2.6	50 × 9t	M12 × ?L	HVT-BRD3N5
D3	600	650	2.6	50 × 9t	M12 × ?L	HVT-BRD3N6

UNIT mm · N.S.

SINGLE CHANNEL (H.D.G)



DOUBLE CHANNEL (H.D.G)



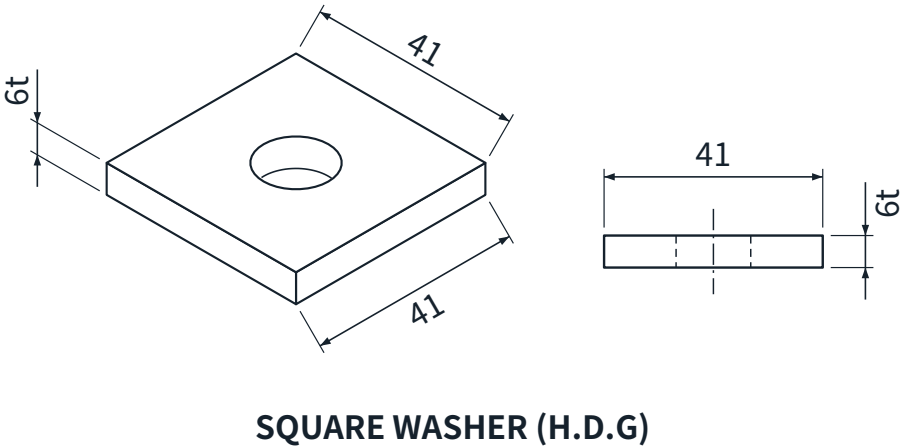
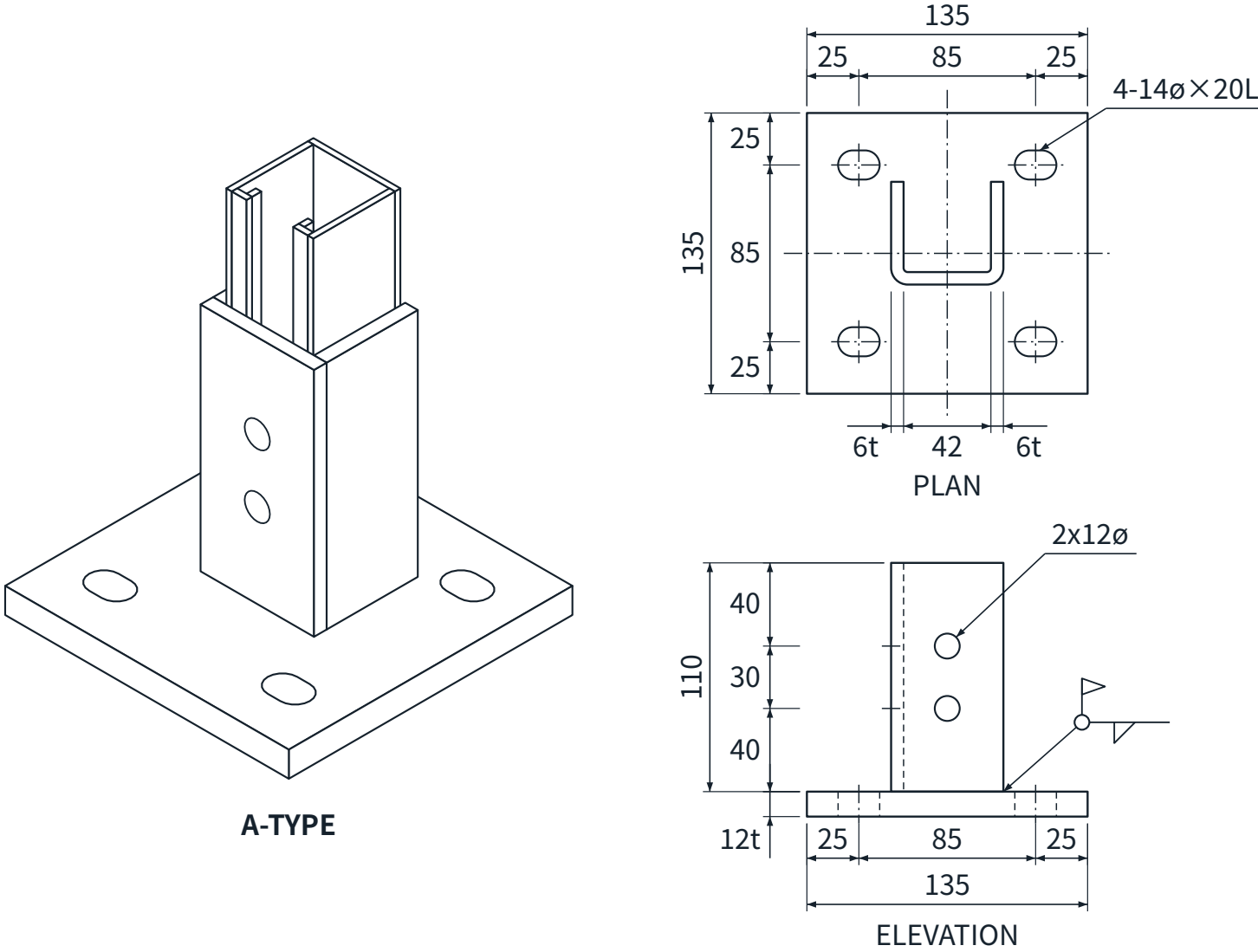
Hot-dip galvanizing: KS D 8308 · Material: see fabrication spec.

ITEM	SIZE	Item No.
SINGLE CHANNEL	41.4×41.4×2.6t	HVT-CHSW41P4H41P4T26
DOUBLE CHANNEL	41.4×82.8×2.6t	HVT-CHDW41P4H82P8T26

Single-Channel Post Base

A-TYPE

UNIT mm · N.S.



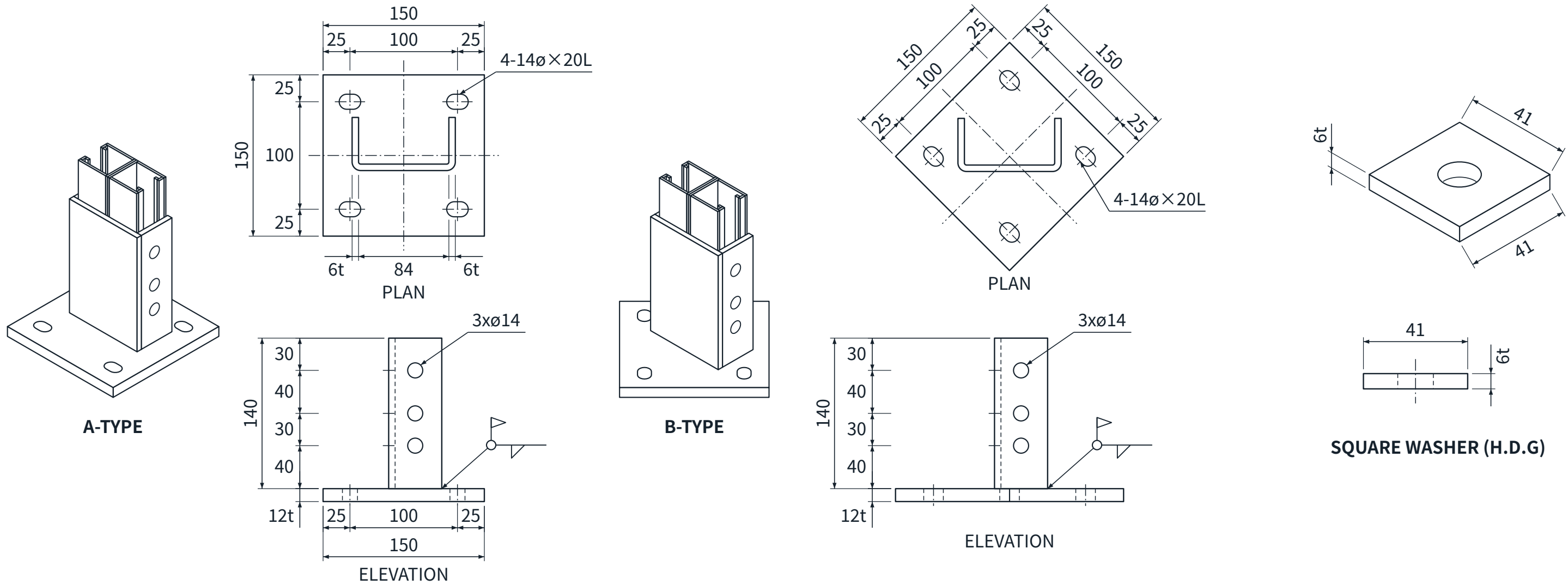
Hot-dip galvanizing: KS D 8308 · Material: see fabrication spec.

ITEM	TYPE	Item No.
SINGLE CHANNEL POST BASE	A-TYPE	HVT-PBSAW135H110T120
SINGLE CHANNEL BASE SQUARE WASHER	41×41×6t	HVT-PBWSW41T60

Double-Channel Post Base

A-TYPE · B-TYPE

UNIT mm · N.S.



Hot-dip galvanizing: KS D 8308 · Material: see fabrication spec.

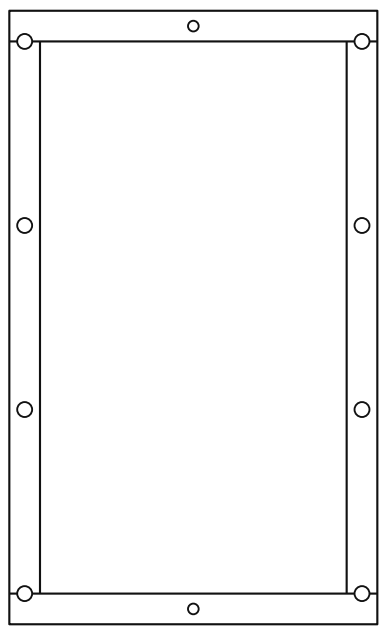
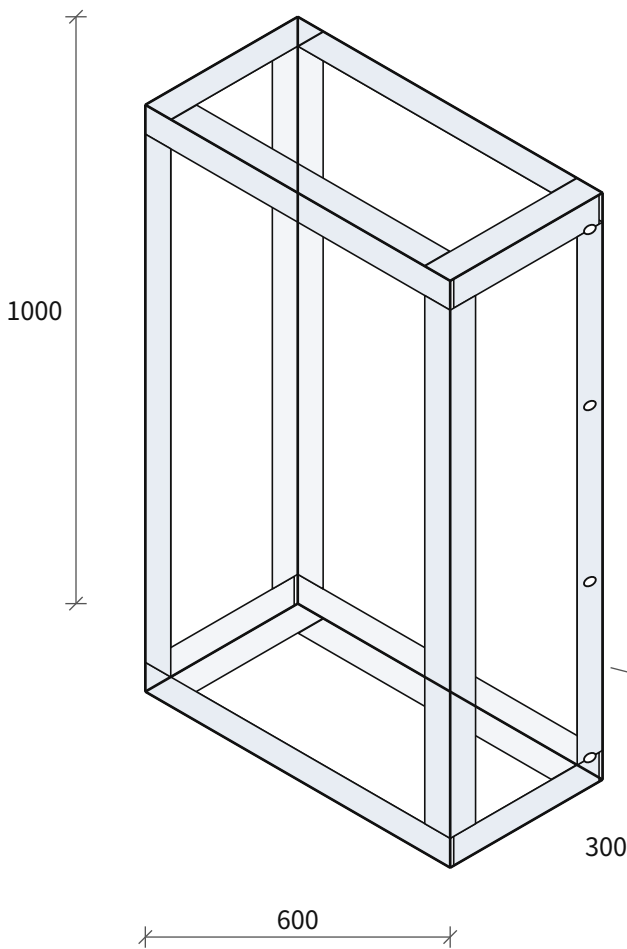
ITEM	TYPE	Item No.
DOUBLE CHANNEL POST BASE	A-TYPE	HVT-PBDAW150H140T120
DOUBLE CHANNEL POST BASE	B-TYPE	HVT-PBDBW150H140T120
DOUBLE CHANNEL BASE SQUARE WASHER	41 × 41 × 6t	HVT-PBWDW41T60

UNIT mm · N.S.

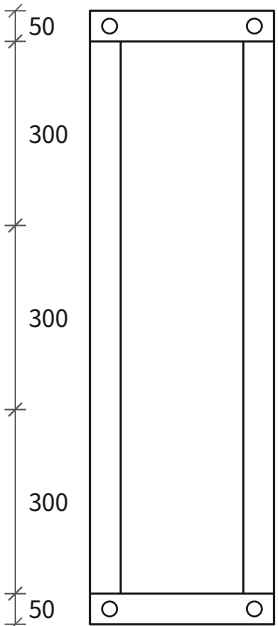
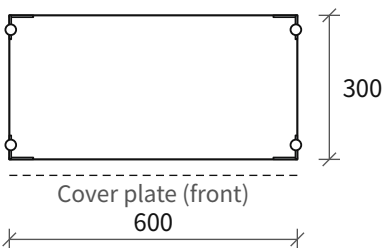
ISOMETRIC · 12 corner L angles · faces open · top · bottom face W flange 51 notch

12Ø × 4 · wall anchor M10

D 12Ø × 2 (25 · 236 · 25)

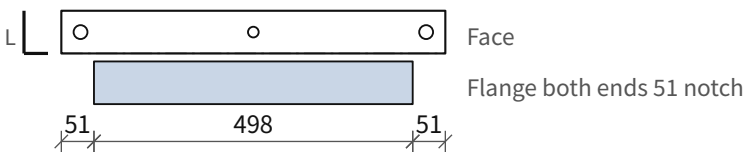


Rear (wall side)
Plan



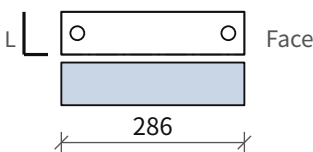
Side

W member · W · 4 pcs/set



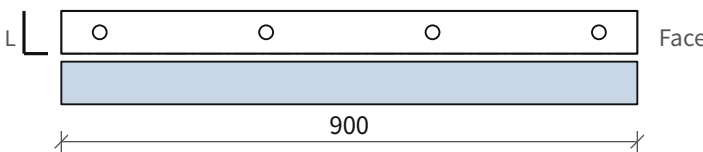
Rear 2: 12Ø · 12Ø · 8Ø · Front 2: 8Ø × 3 · Holes 30 · 270 · 270 · 30 (600 baseline)

D member · D – 14 · 4 pcs/set · no notch



12Ø × 2 · Holes 25 · 236 · 25 (286 baseline)

H member (post) · 900 · 4 pcs/set · no notch



Rear 2: 12Ø × 4 (300 pitch) · Front 2: 12Ø × 2 + 8Ø × 2

Item No.	DIMENSION (mm)				Notes
	W	D	H	T	
HVT-VD-100-D	100	100 ~ 1000	1000	2.3	on request
HVT-VD-150-D	150	100 ~ 1000	1000	2.3	on request
HVT-VD-200-D	200	100 ~ 1000	1000	2.3	
HVT-VD-300-D	300	100 ~ 1000	1000	2.3	
HVT-VD-400-D	400	100 ~ 1000	1000	2.3	
HVT-VD-500-D	500	100 ~ 1000	1000	2.3	
HVT-VD-600-300	600	300 (baseline)	1000	2.3	Baseline
HVT-VD-700-D	700	100 ~ 1000	1000	2.3	
HVT-VD-800-D	800	100 ~ 1000	1000	2.3	
HVT-VD-900-D	900	100 ~ 1000	1000	2.3	
HVT-VD-1000-D	1000	100 ~ 1000	1000	2.3	

REMARK (KS D 8308)

Material · plate

Body members 12 · body plates (rear · side) : HGI 2.3t (H.D.G · KS D 8308)

Cover plate : HR PosMAC 1.6t · 2.0t

Structure

12 box corners = L angles (flange 50) · on outer face · inside open

Corners lap-bolted (no welding) · unit H 1000 · stacked and joined vertically

Member length

W member = W (flange = W – 102 · 51 notch both ends) · D member = D – 14 · H member = 900

Holes · fastening

12Ø : wall anchor M10 chemical anchor · corner · unit joints M10 8Ø : plate · cover assembly M6

Fabrication basis

Baseline 600W × 300D × 1000H (shop drawing 2026.02) · other sizes same structure · see fabrication spec