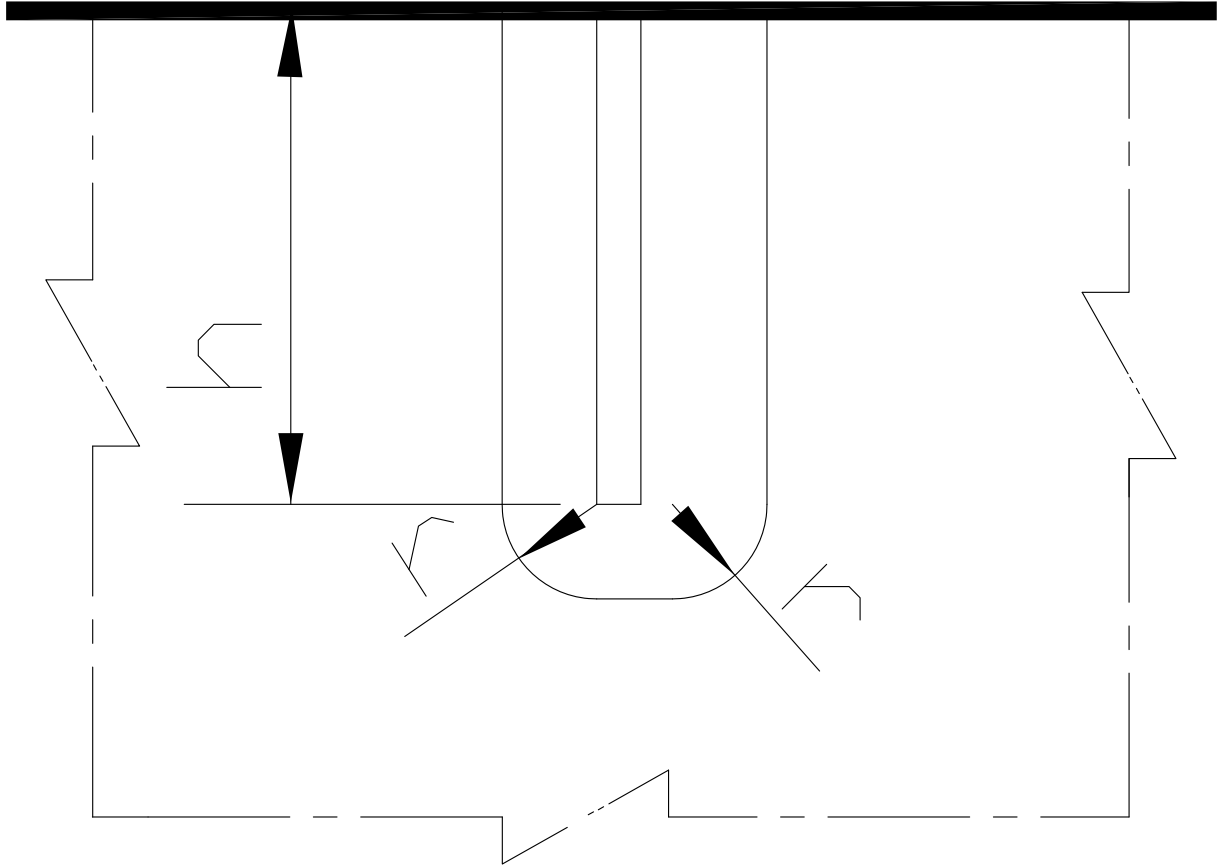
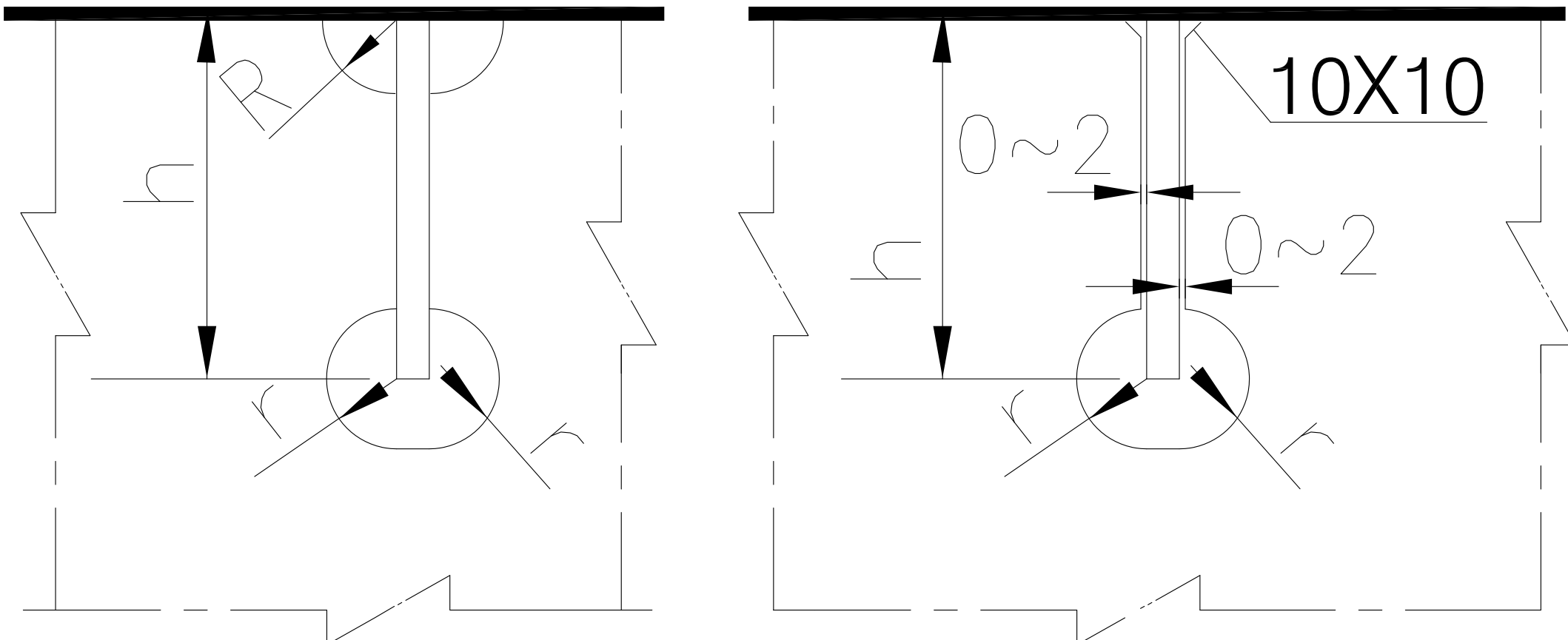
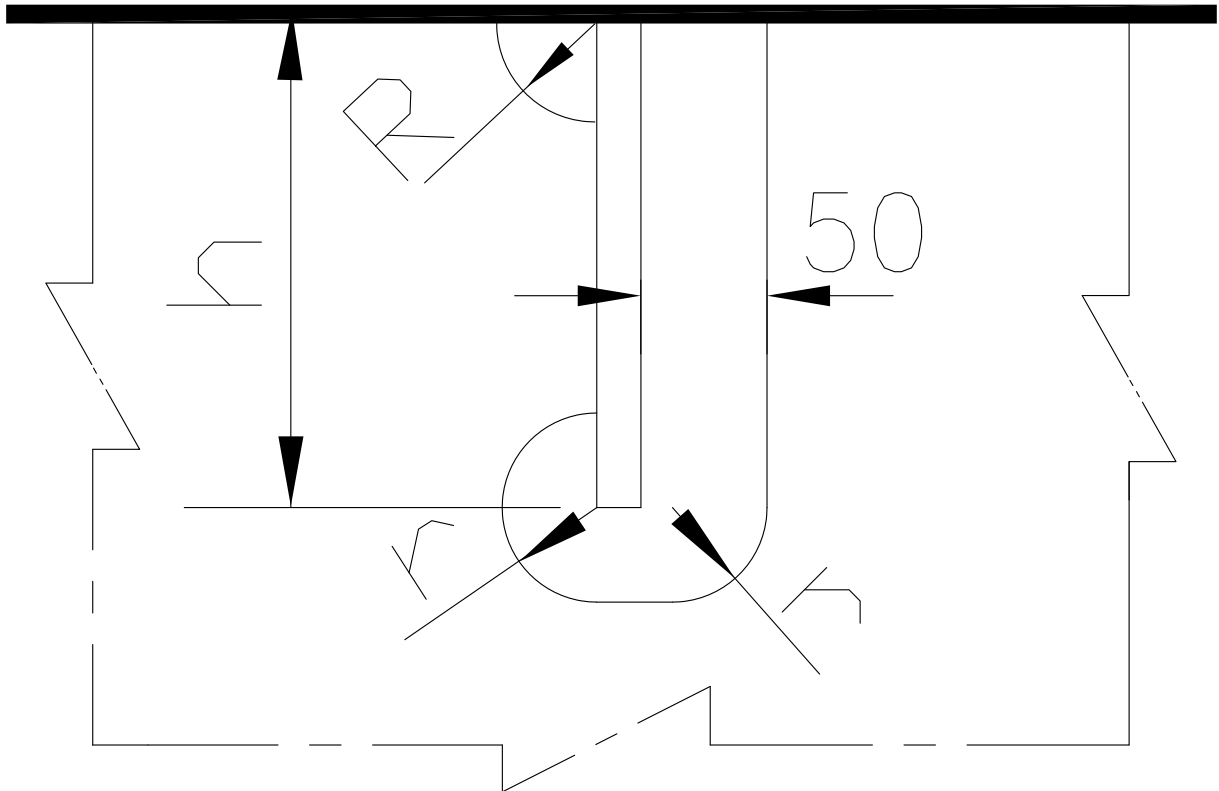
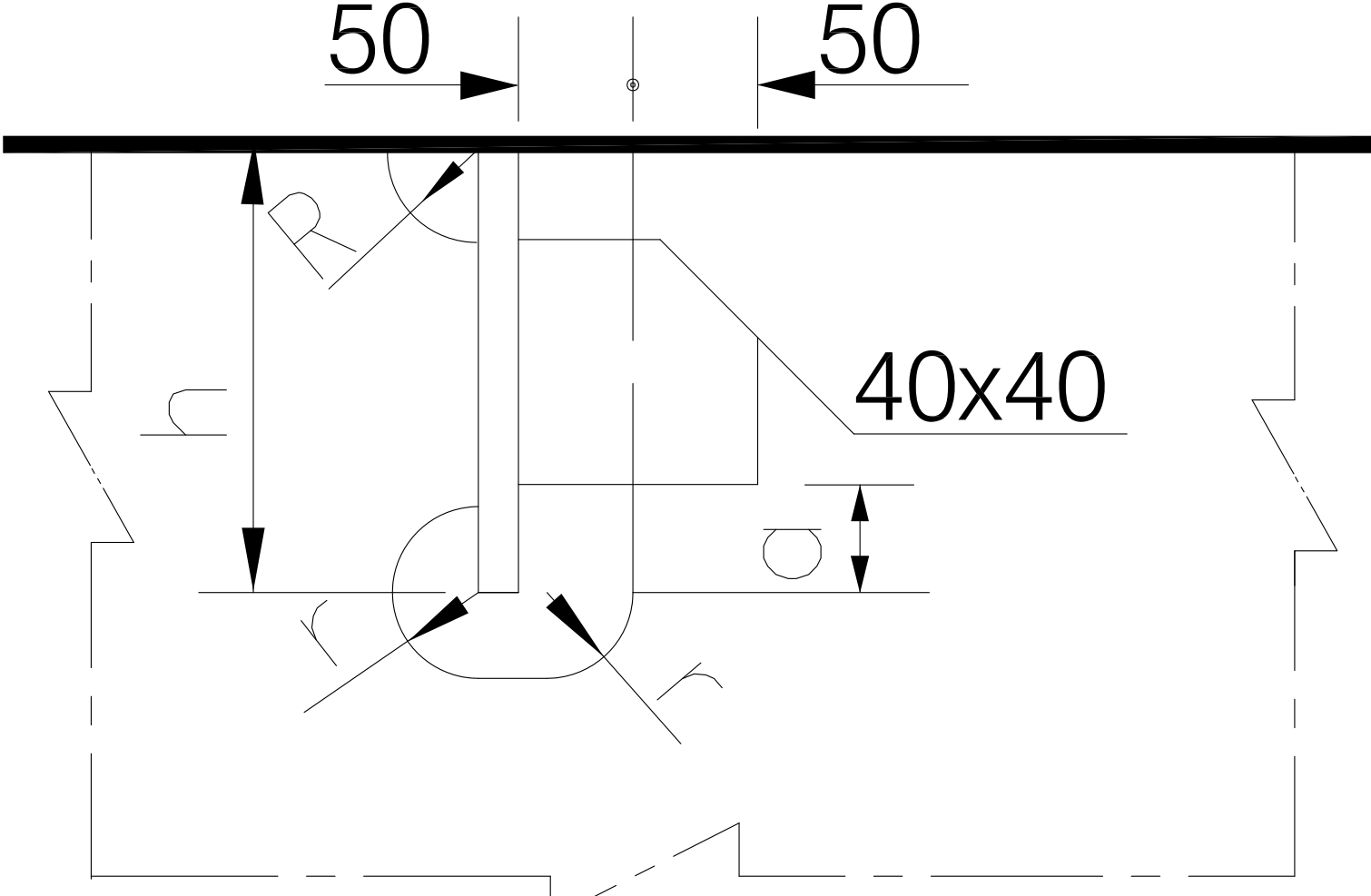
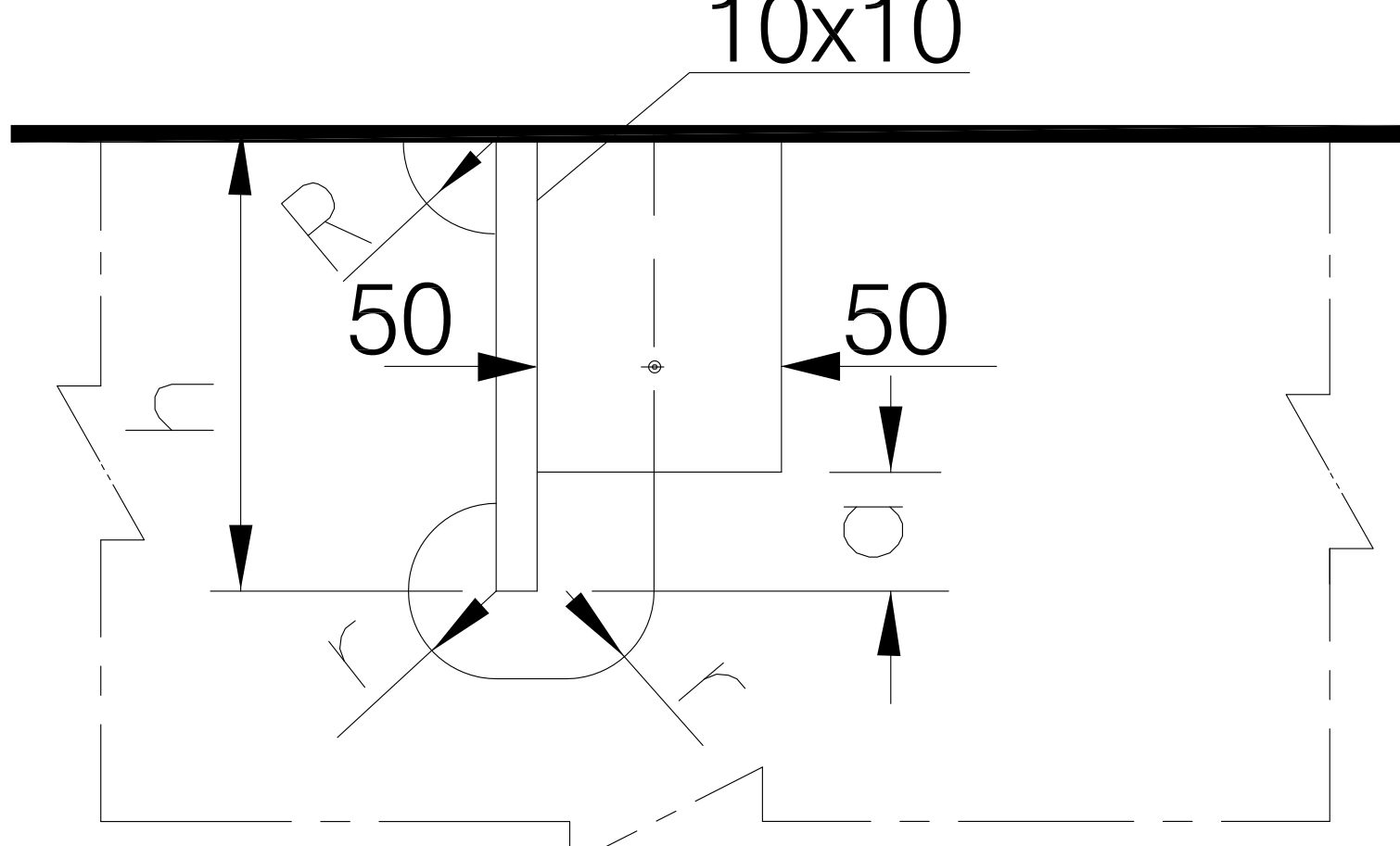
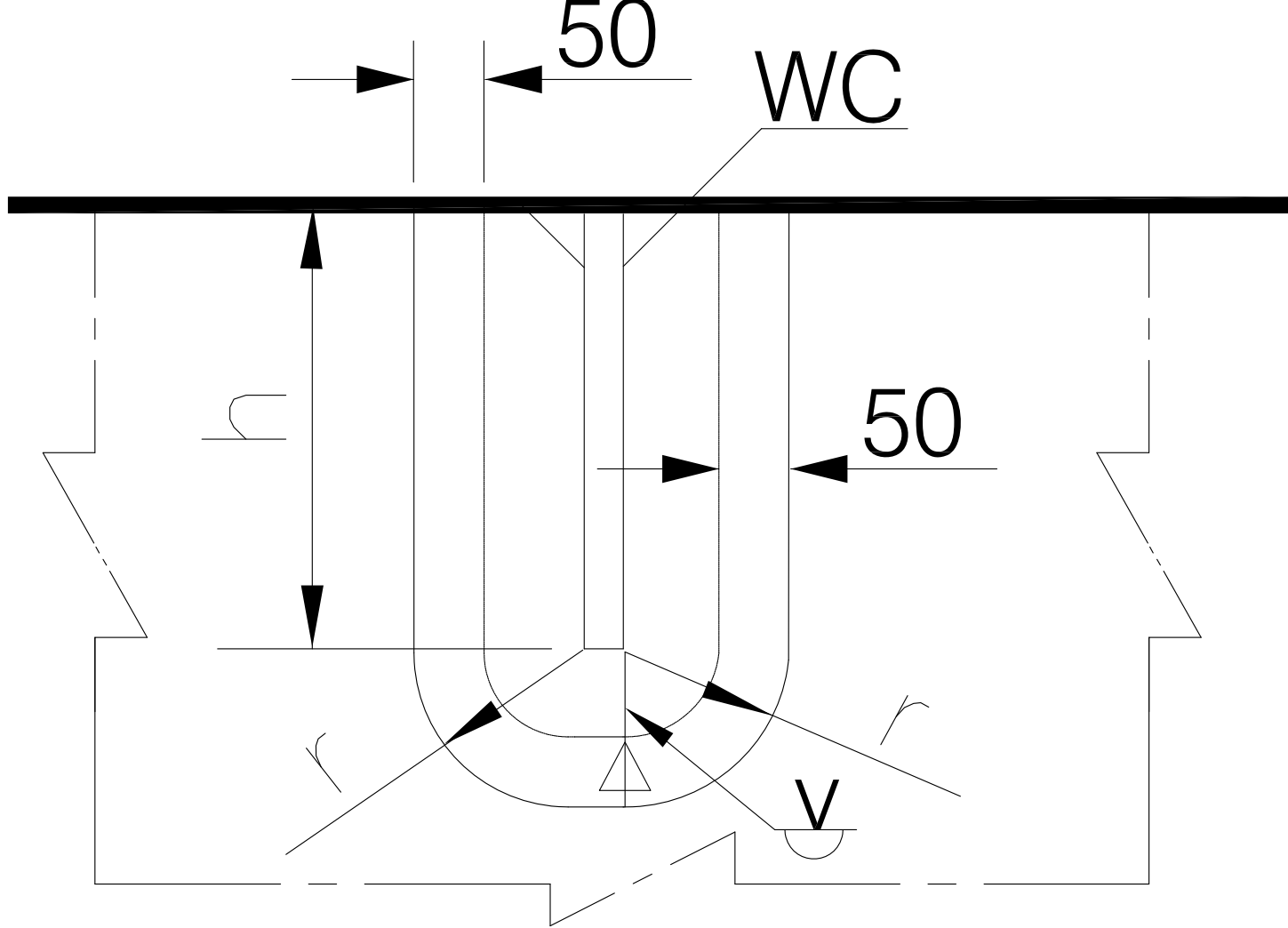
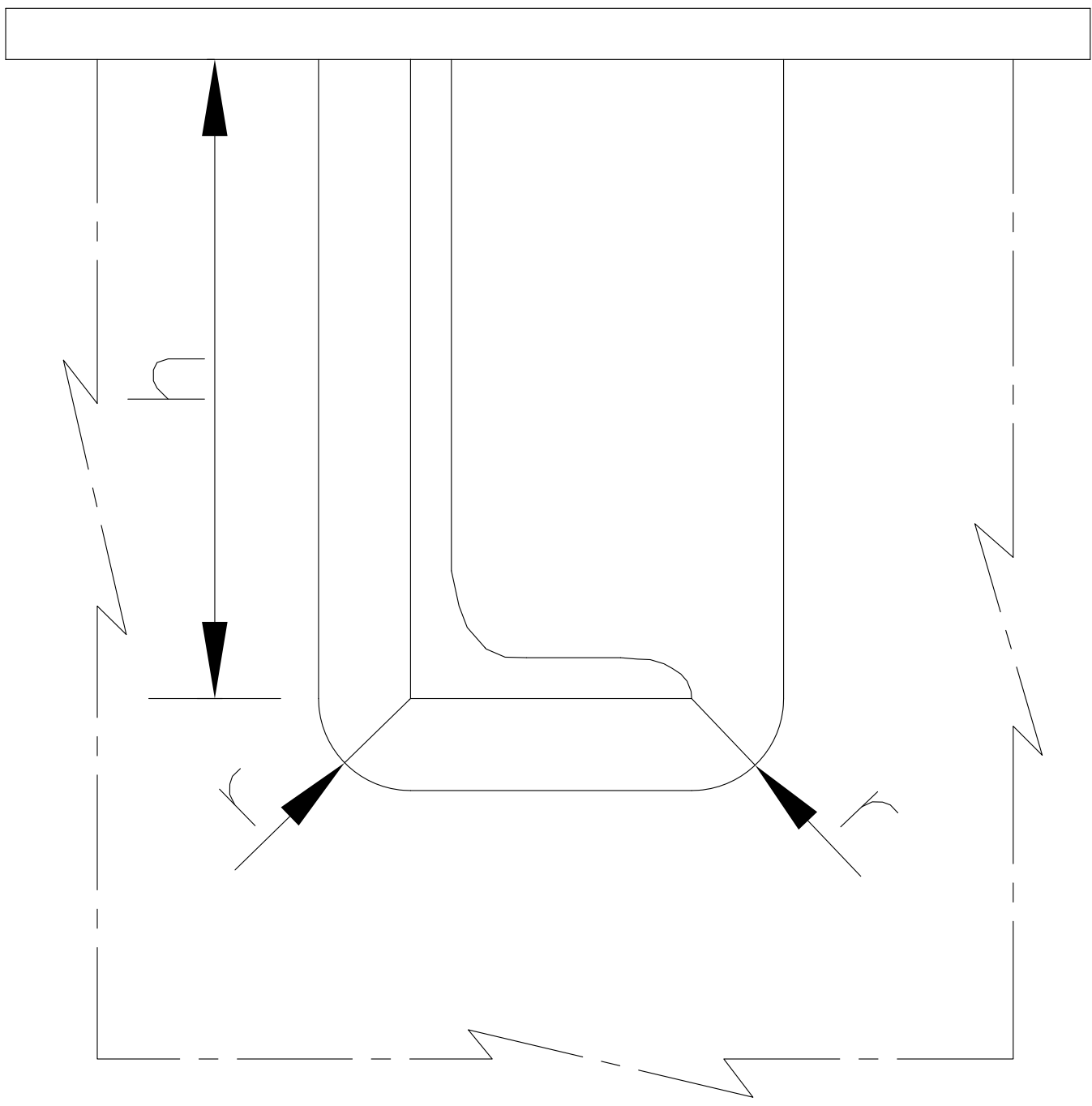
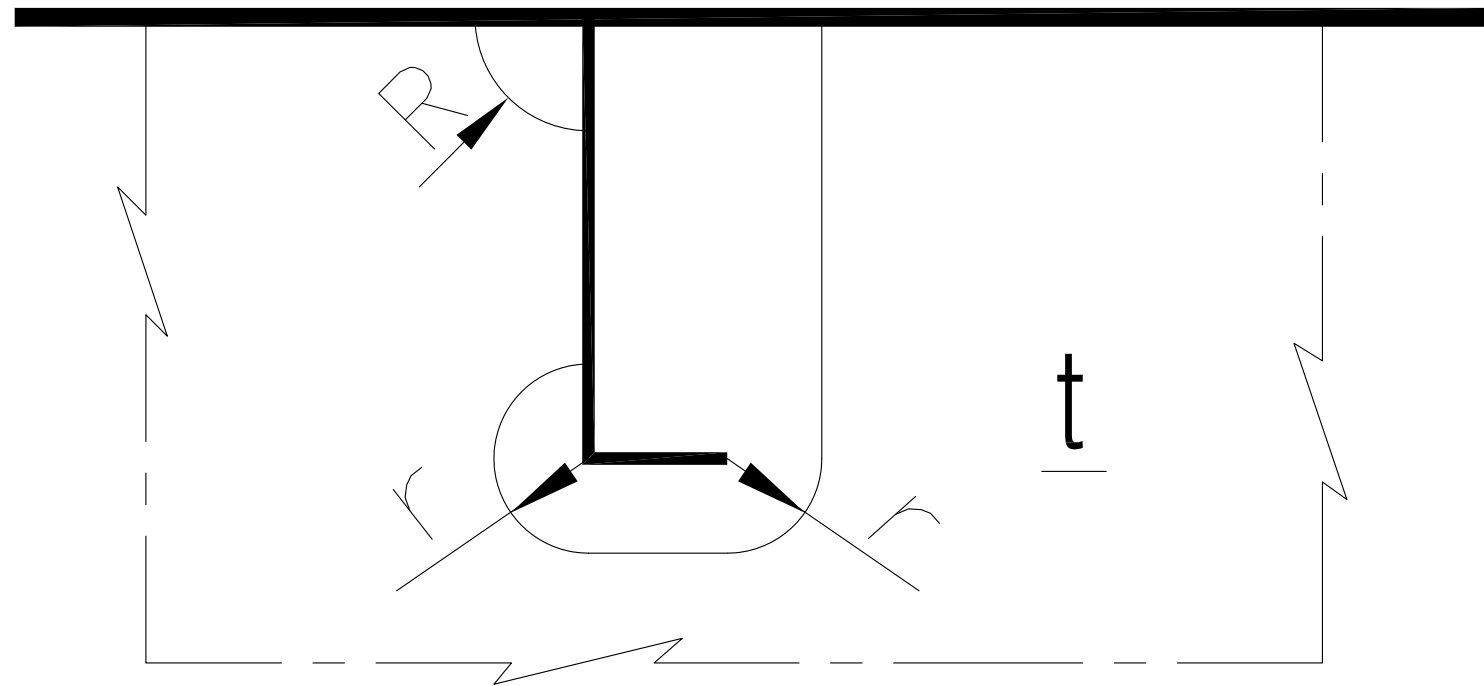
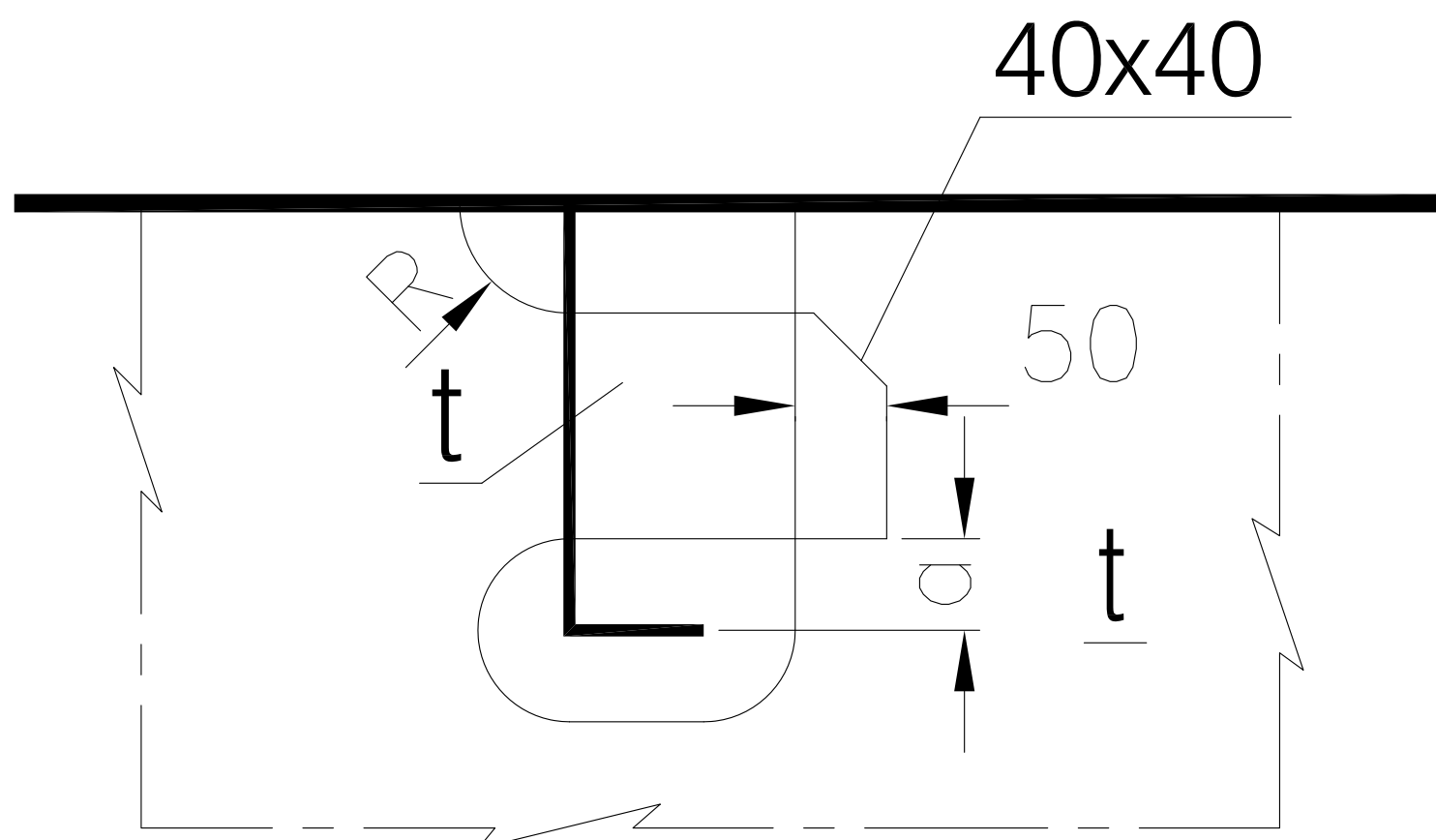
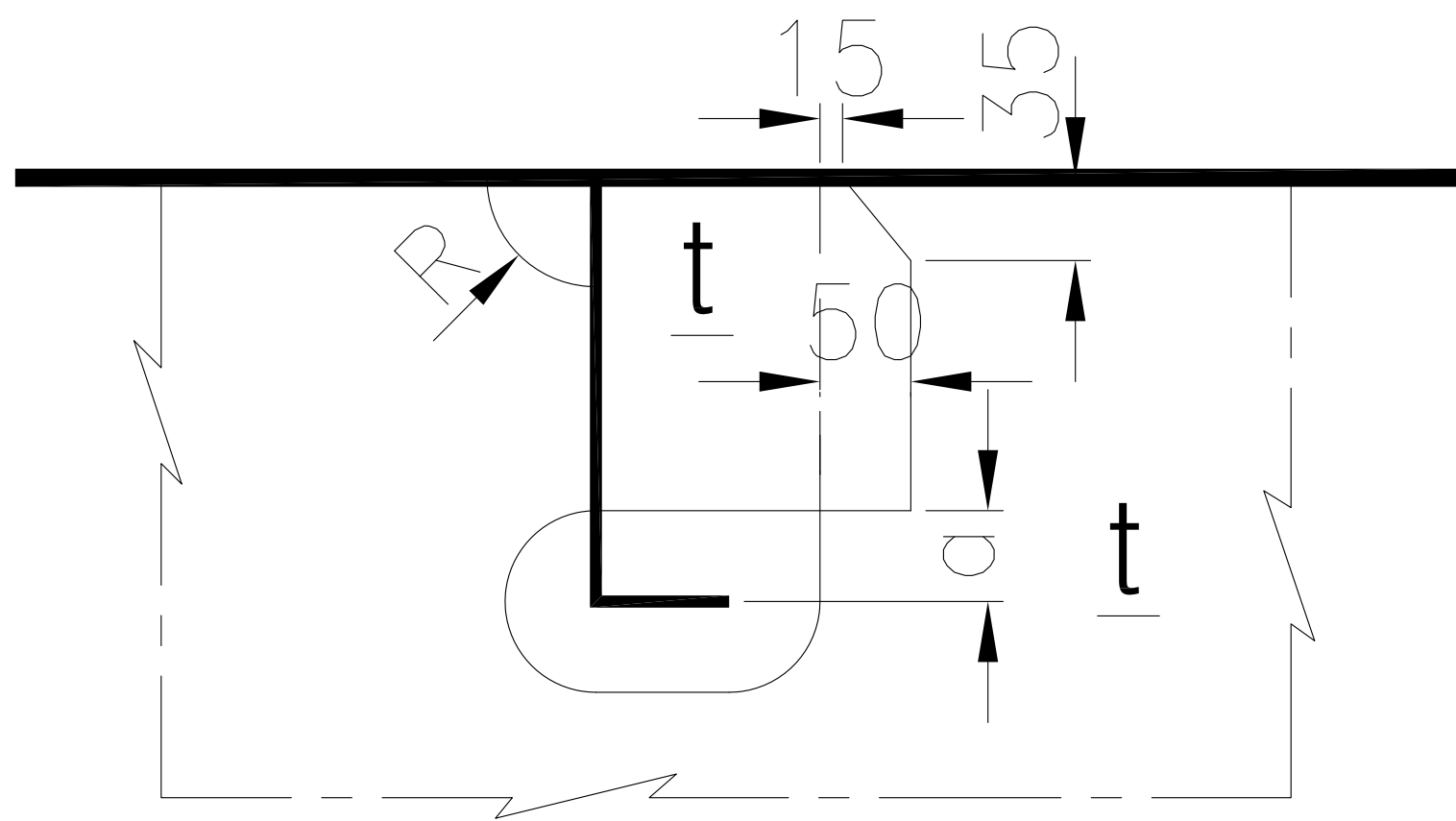
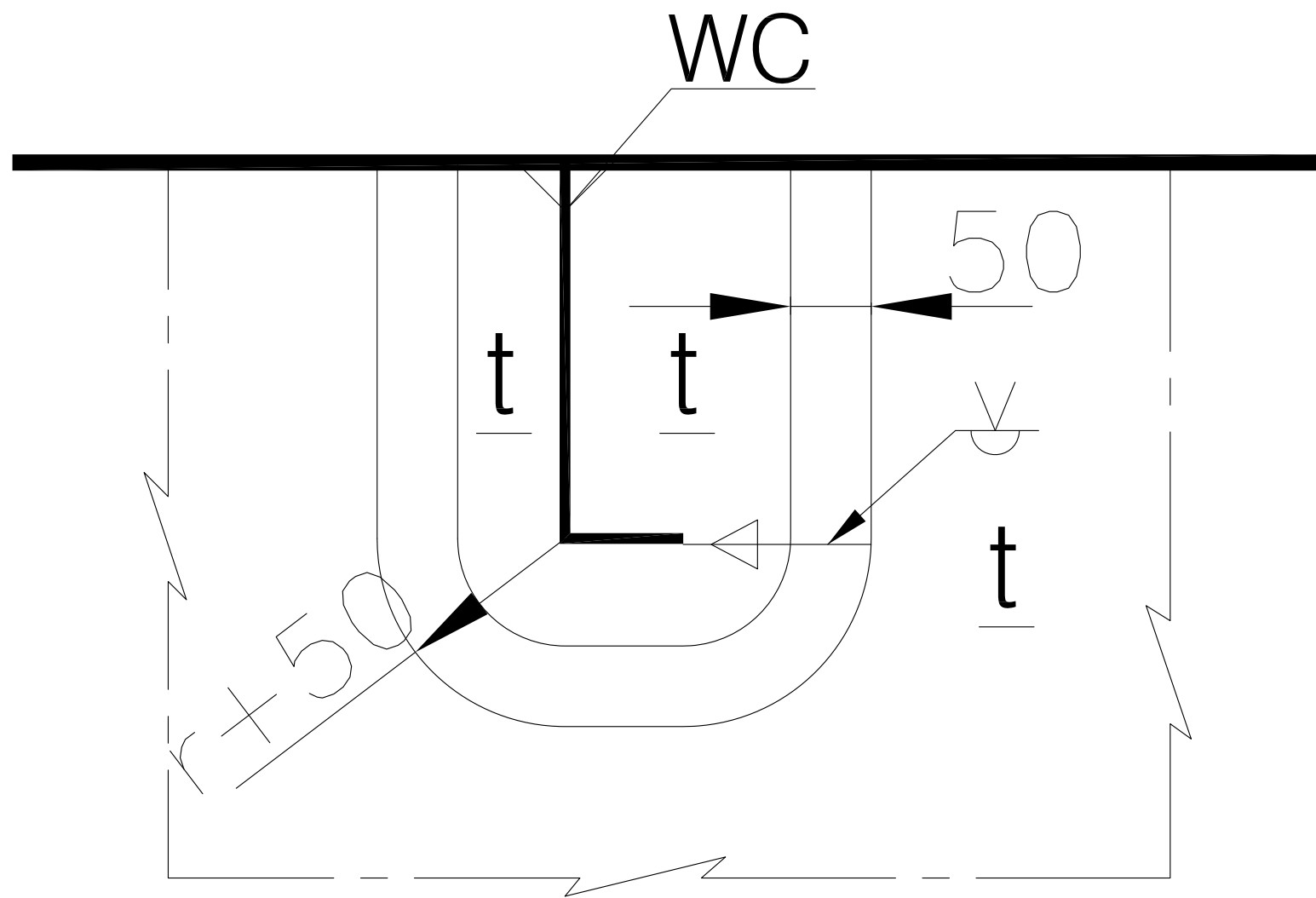


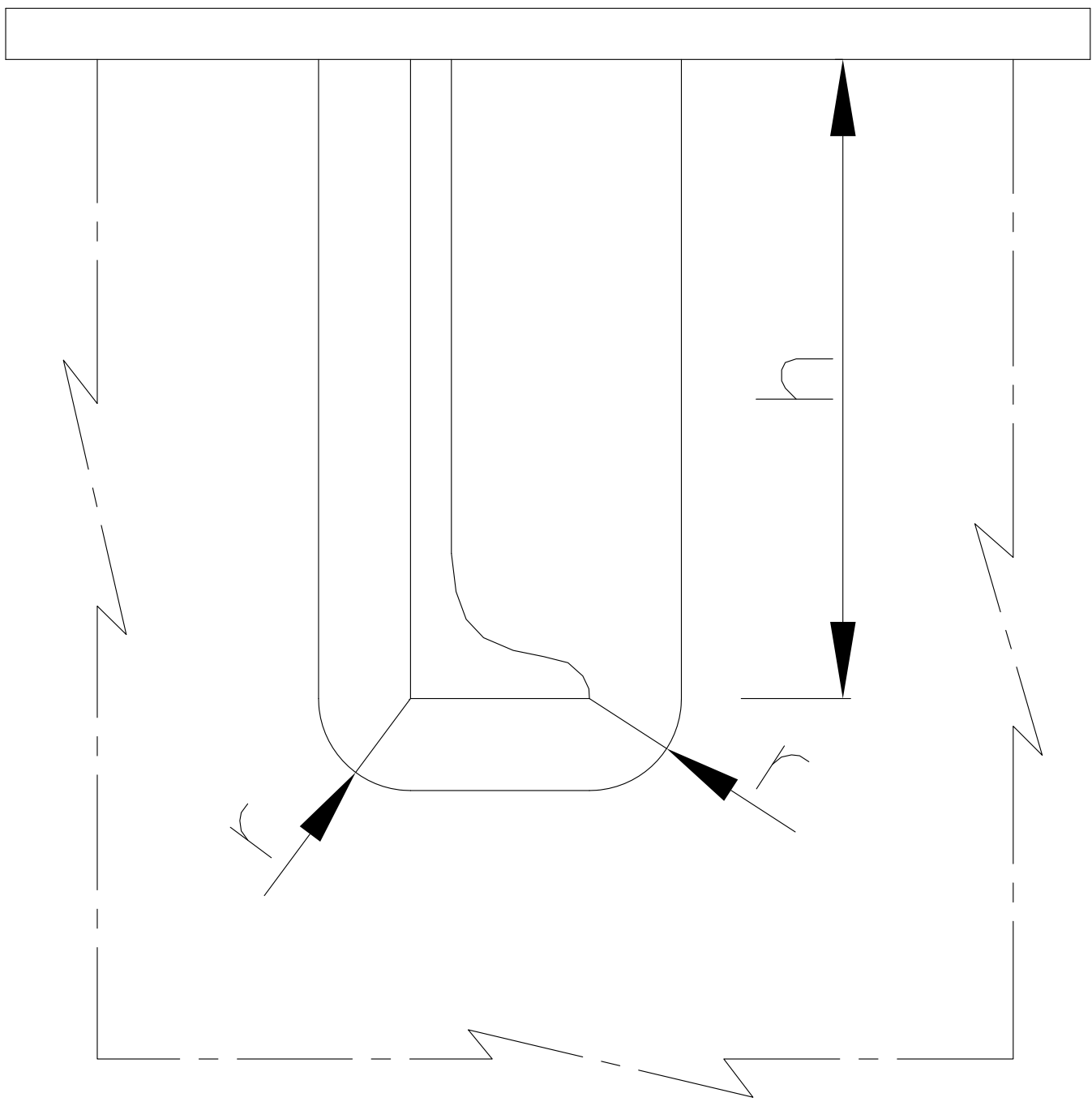
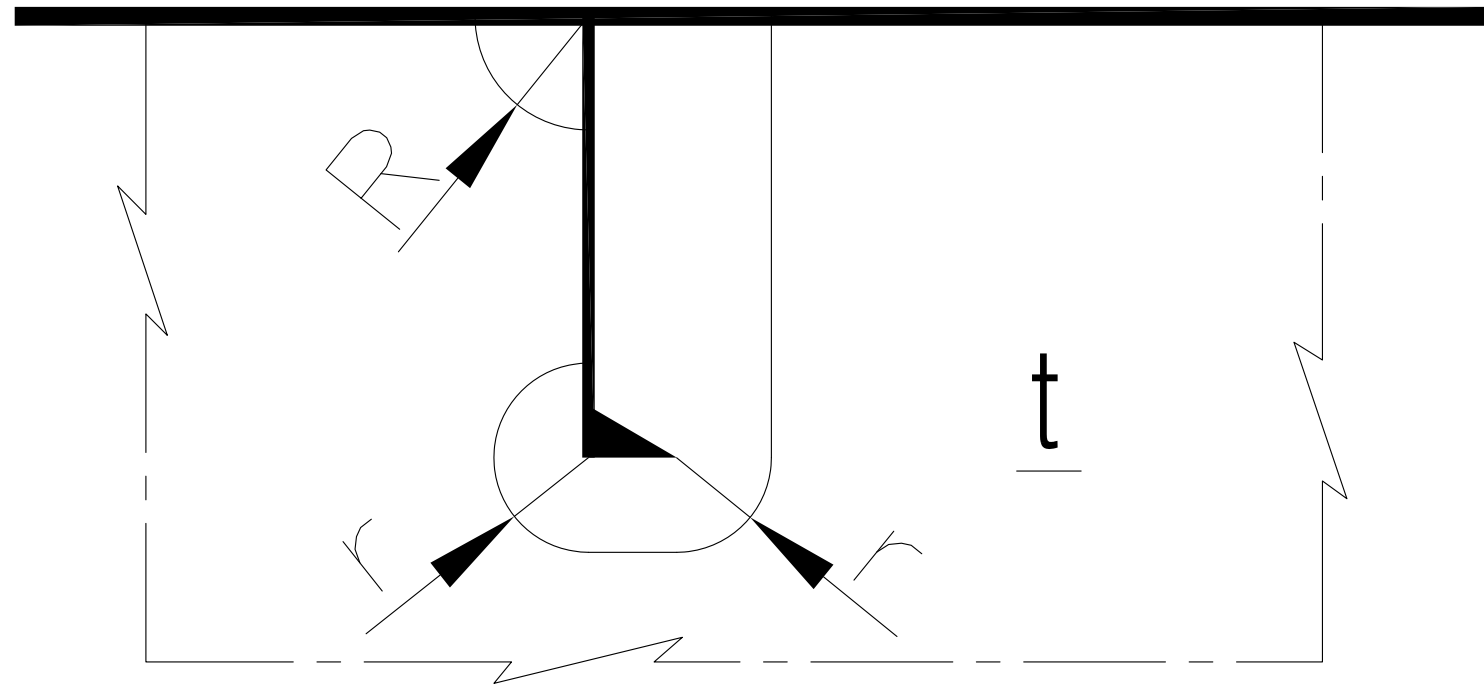
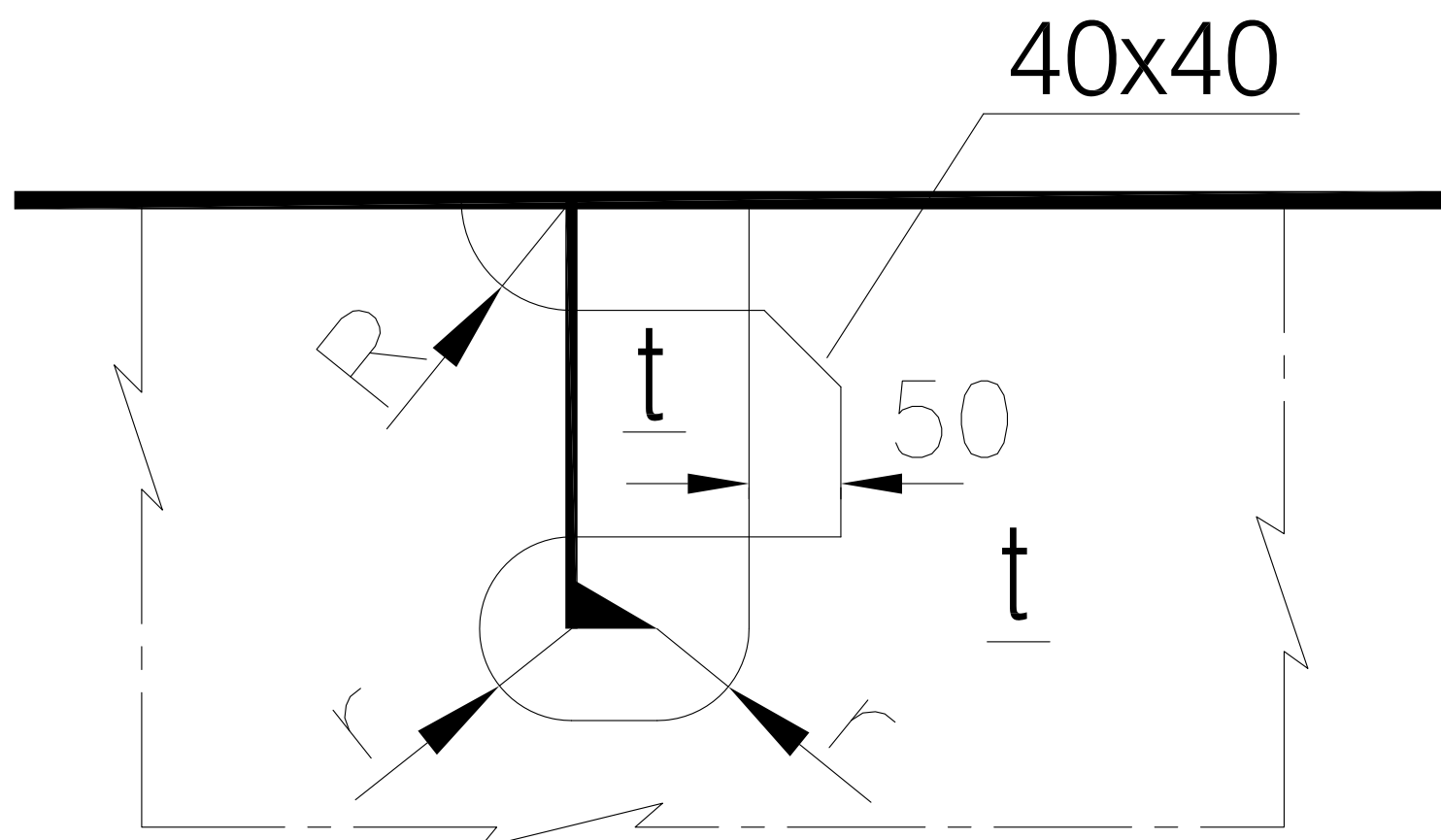
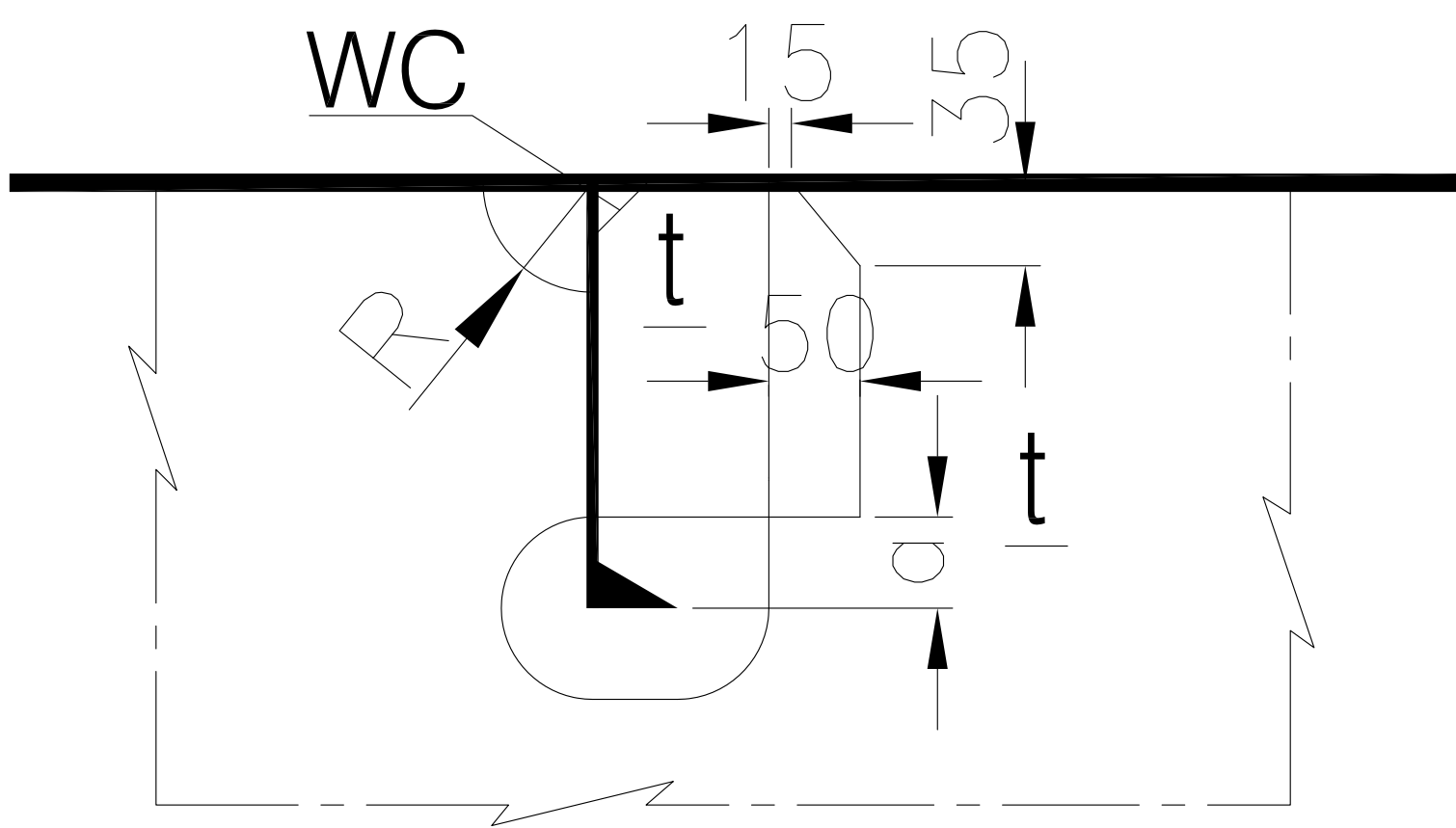
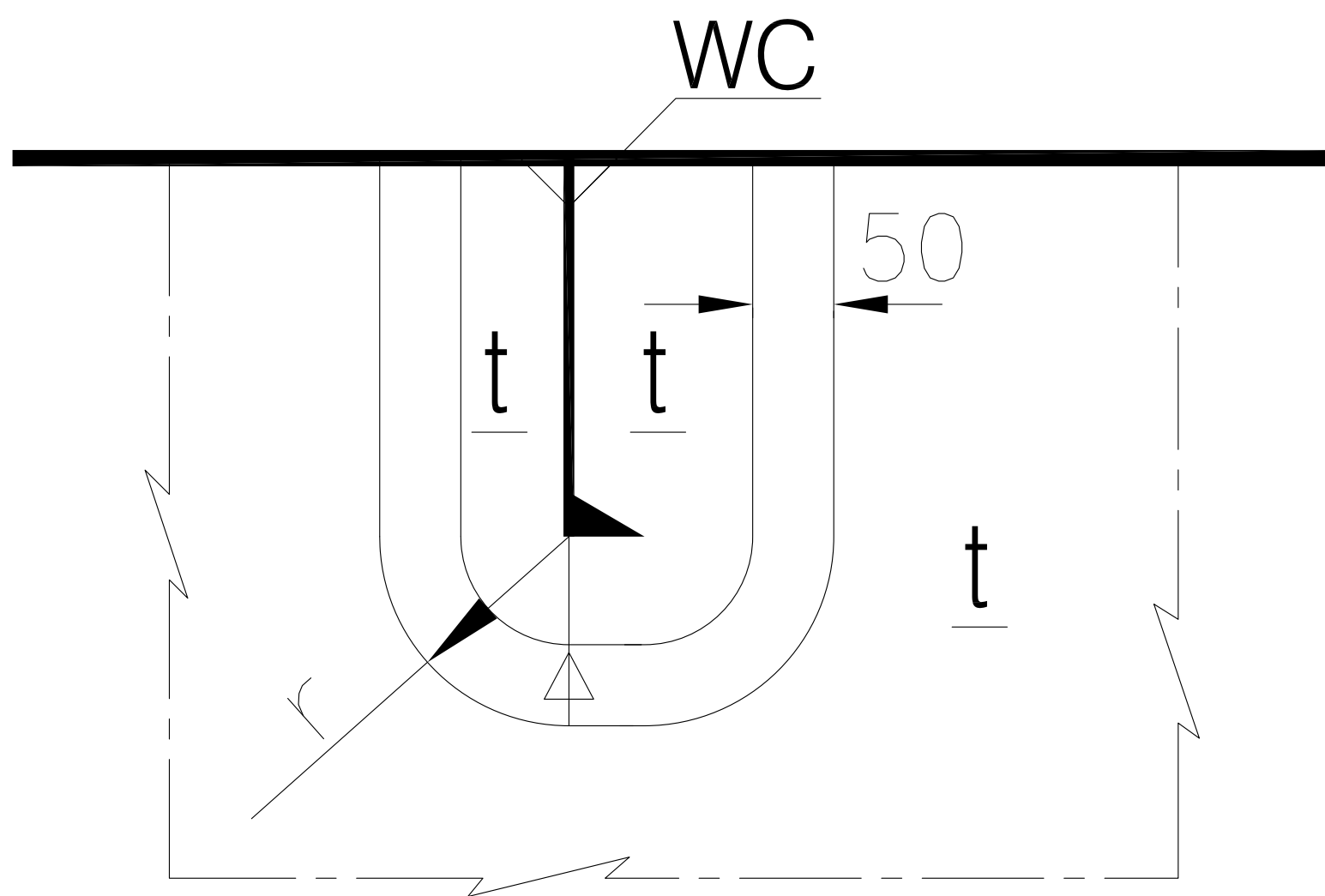
WH429-110-002

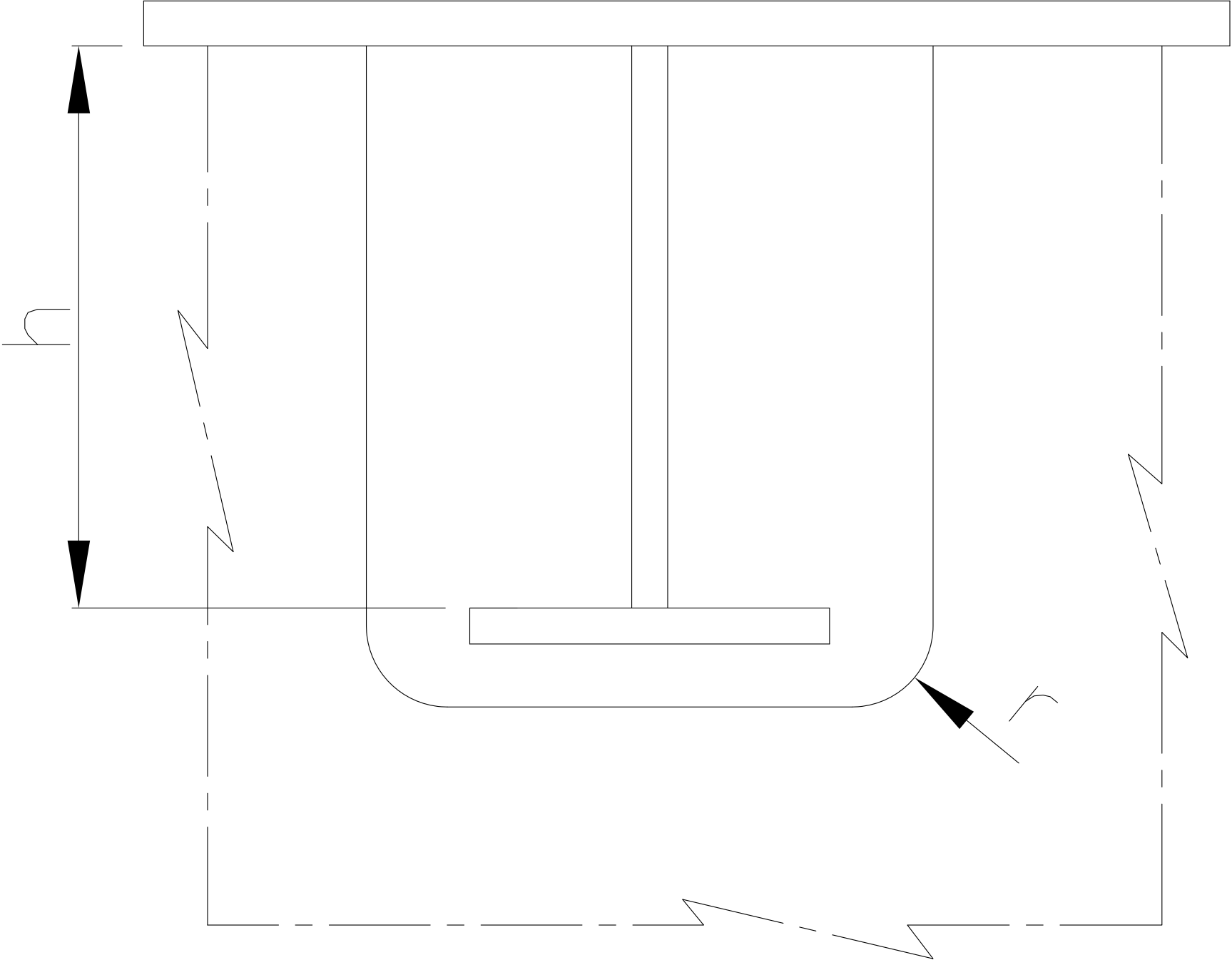
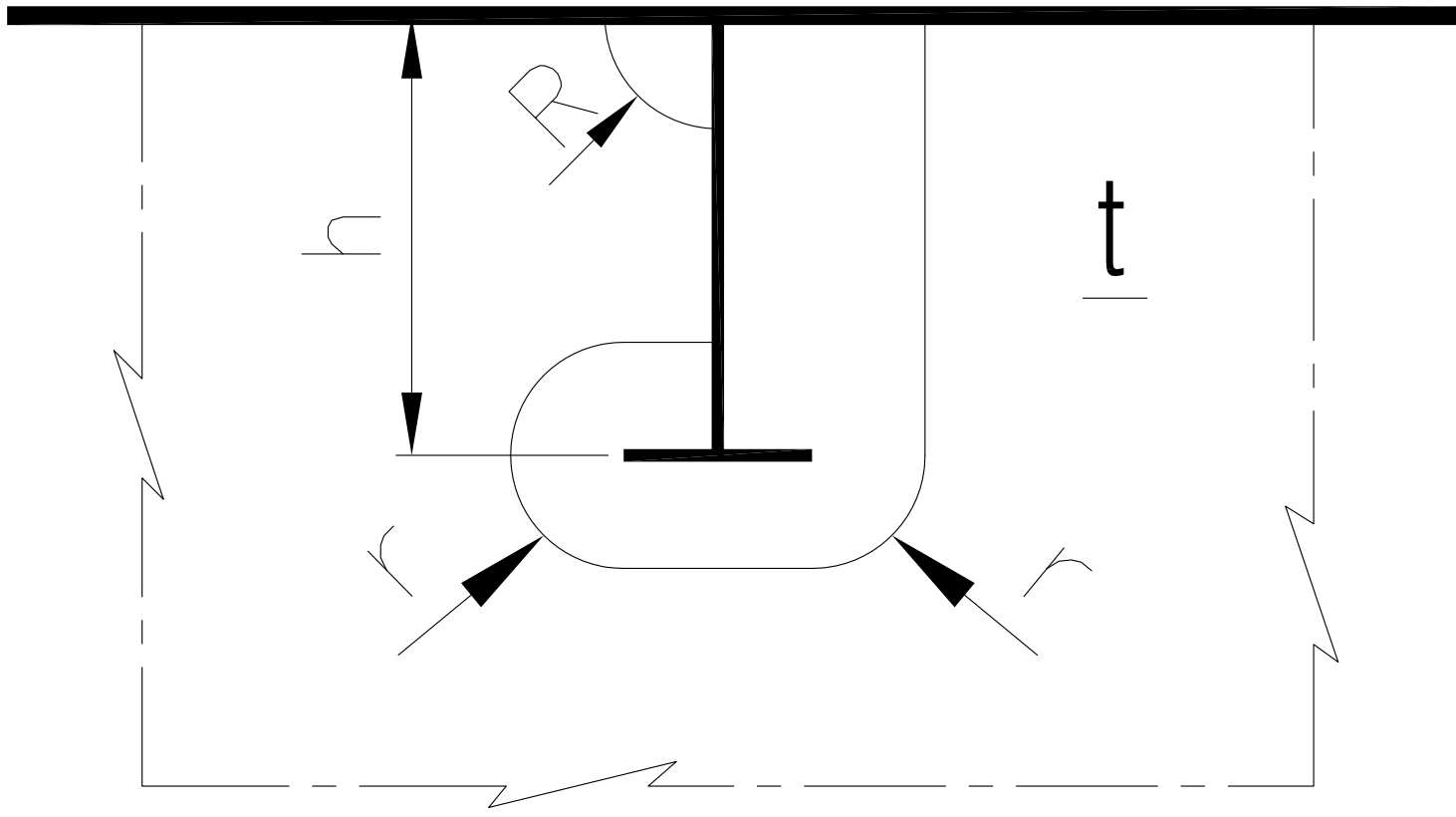
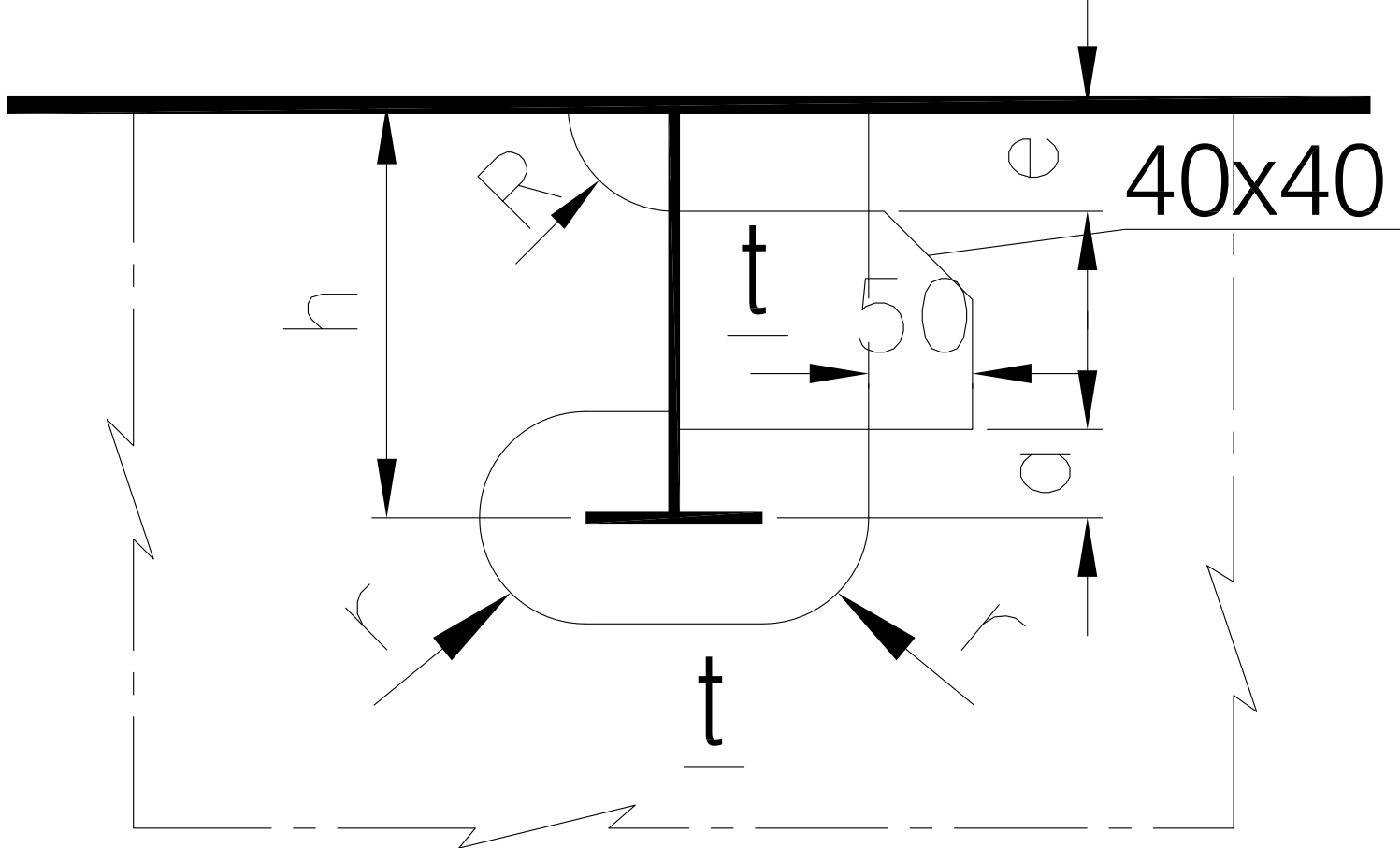
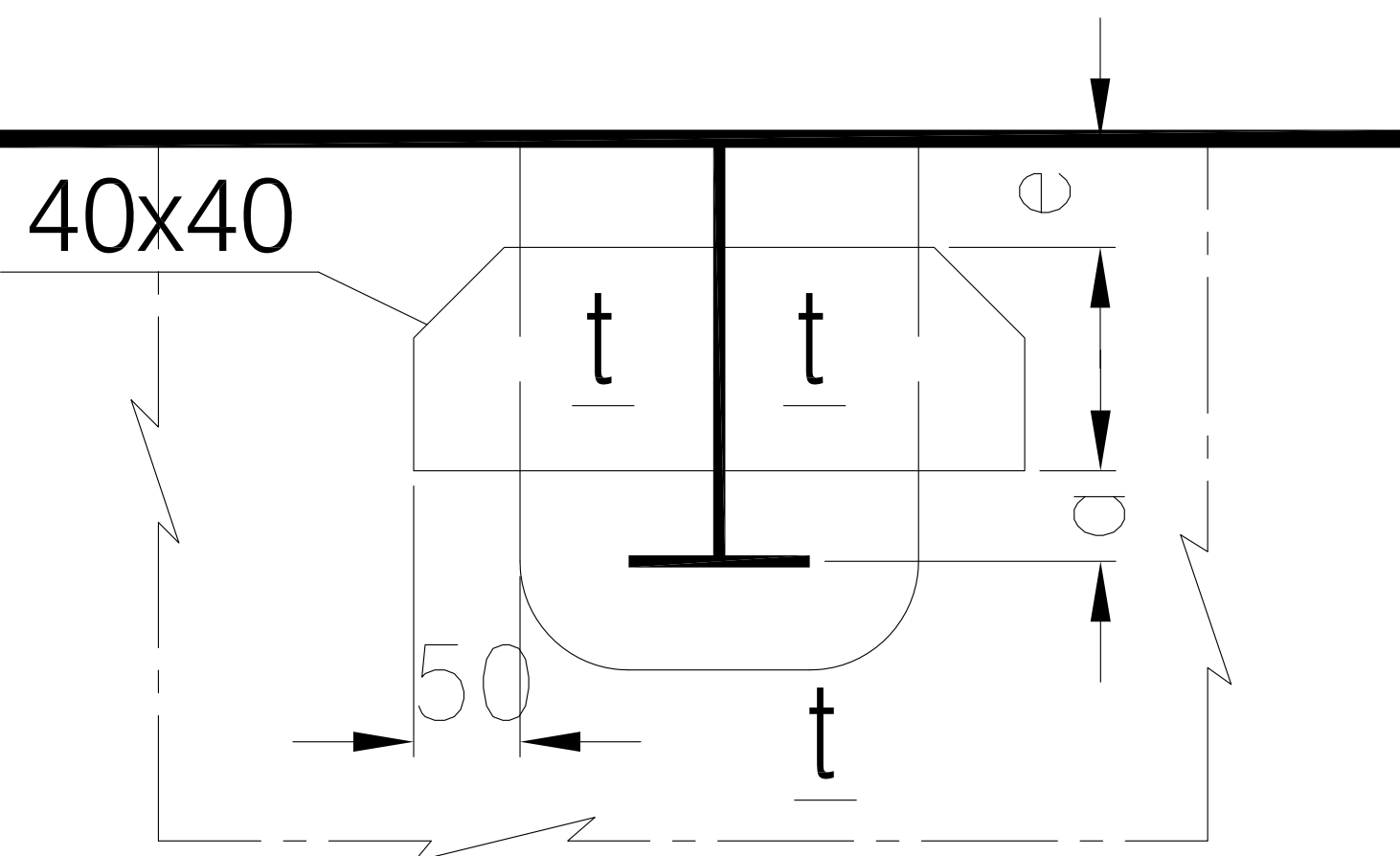
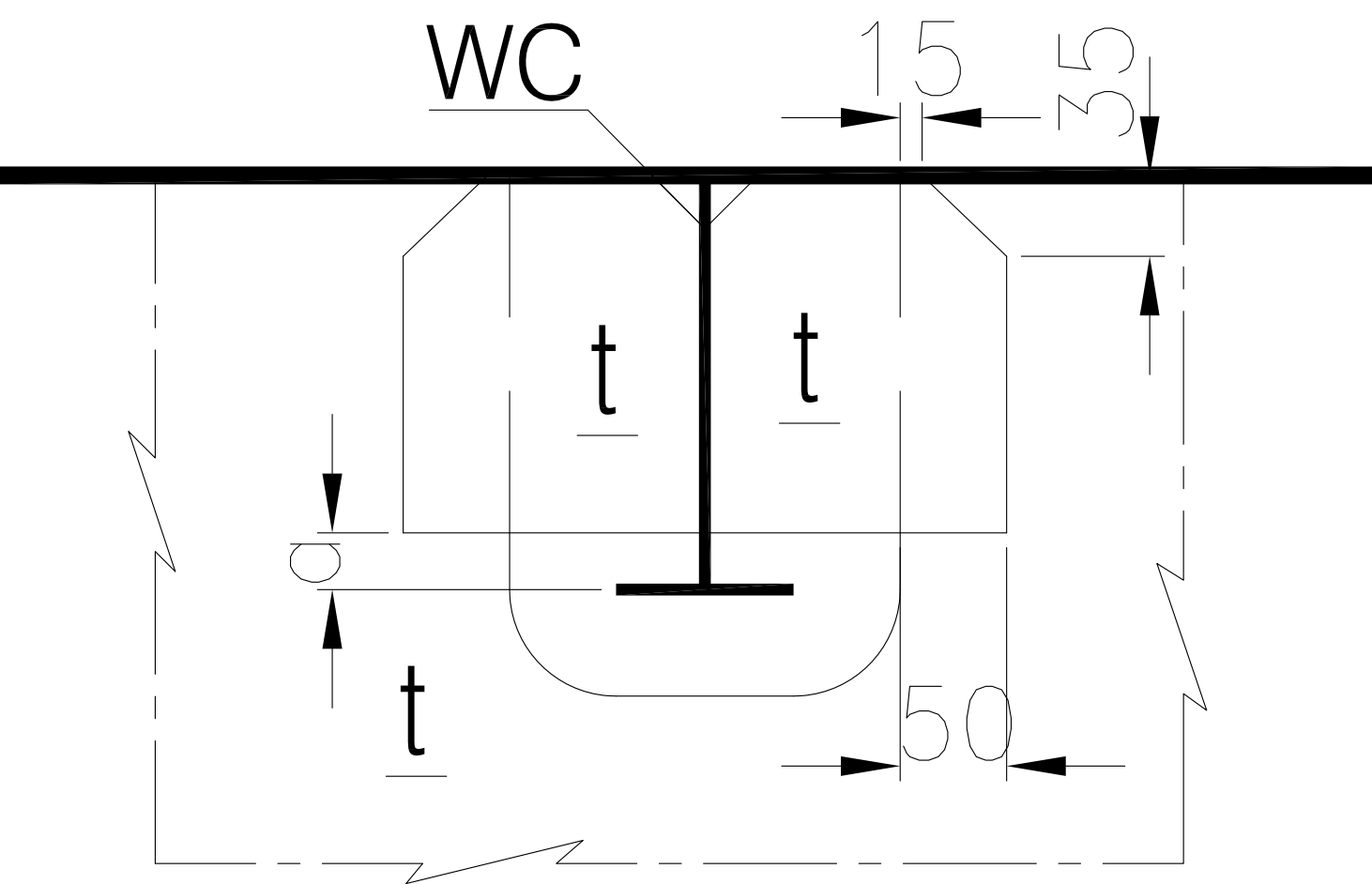
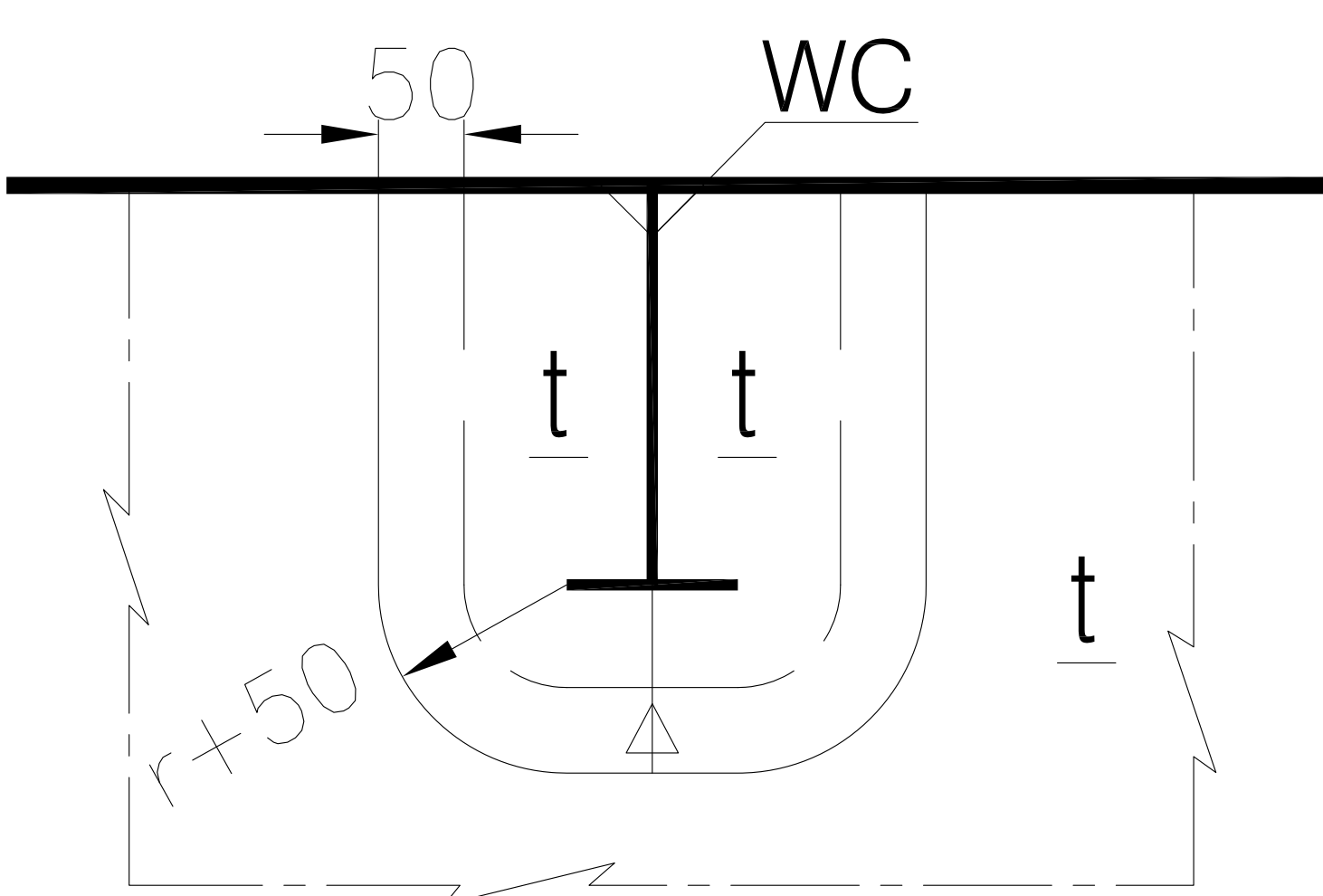
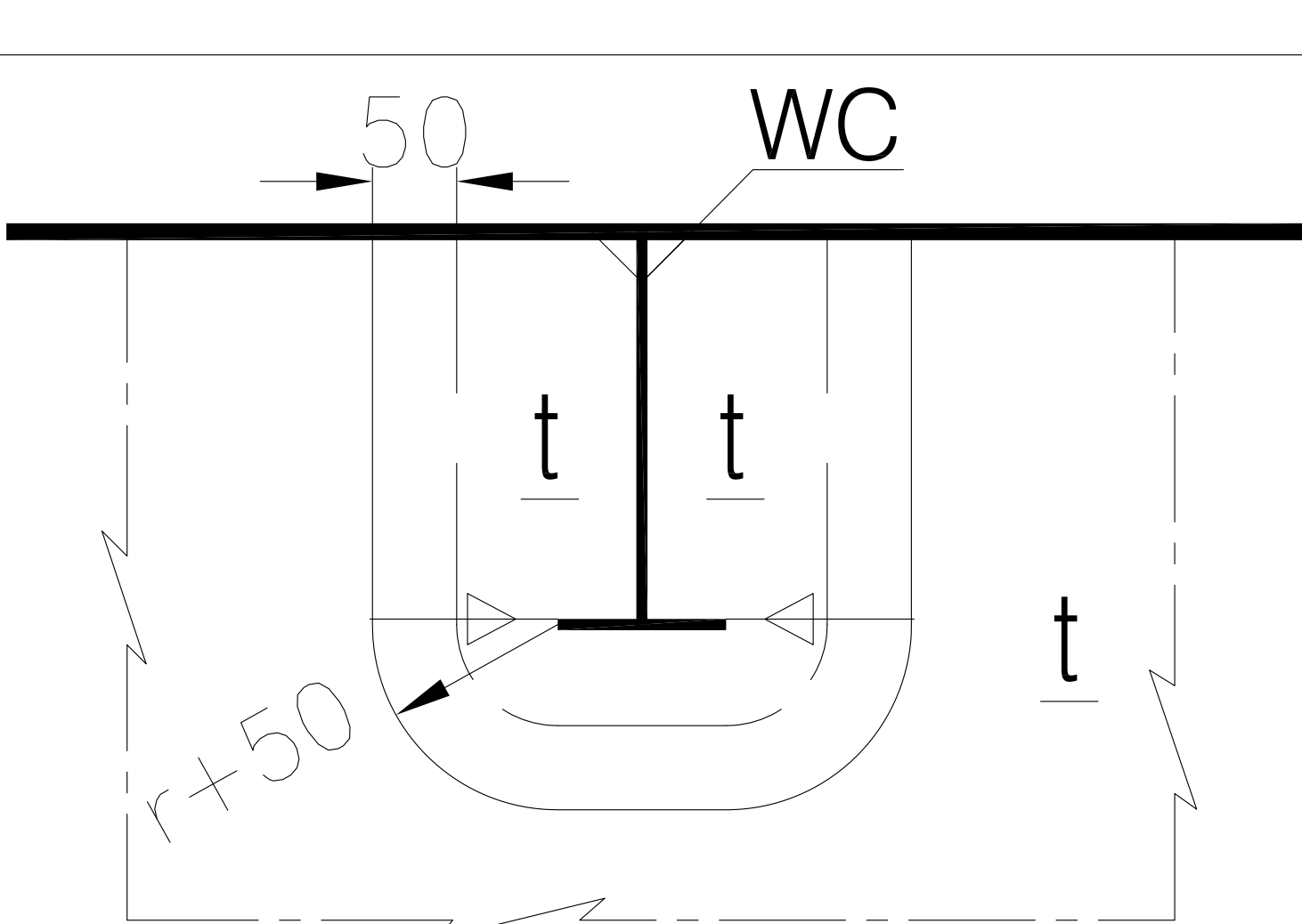
					船级社 CLASS	GL	船 号 SHIP'S NO.	W0811		
					24000 吨多用途船		设计阶段 DESIGN STAGE	生产设计		
标记	数量	修改单号	签字	日期	船体结构典型节点图册 DETAILS OF HULL CONSTRUCTION		WH429-110-002			
设计	DESIGNED	王 问 春					重量(kg) MASS		比例 SCALE	1:5
校对	CHECKED						共 16 页 TOTALE SHEETS		第 1 页 PAGE NO.	
审核	REVIEWED						芜 湖 新 联 造 船 有 限 公 司 WUHU XINLIAN SHIPBUILDING CO., LTD			
标检	CERTIFIED									
批准	APPROVED									



DETAILS OF HULL CONSTRUCTION 船体主要构件节点图册				WH429-110-002	3/16
1. SLOT AND CLIP COLLAR PLATE 型材穿越孔及其补板 1.1 SLOT AND CLIP COLLAR PLATE (FLAT BAR TYPE) 型材穿越孔及其补板(扁钢型)					TYPE
					FA
FA	SYMBOL	SLOT TYPE & C. PL. TYPE			REMARK
	FA-1				
	FA-2				
	FA-3				
	FA-4				
	FA-5				
h	R	r	a	THE COLLAR PLATE THINCHNESS IS SAME AS WEB PLATE 补板厚等于所补处腹板的厚度. WC SEE 4.3 SCALLOP FOR WELDING WC见3.通焊孔	
< 150	WC	30	30		
150 ≤ h < 250	35	30	35		
≥ 250	50	35	50		
					AREA: 0.06 m <sup>2</sup>

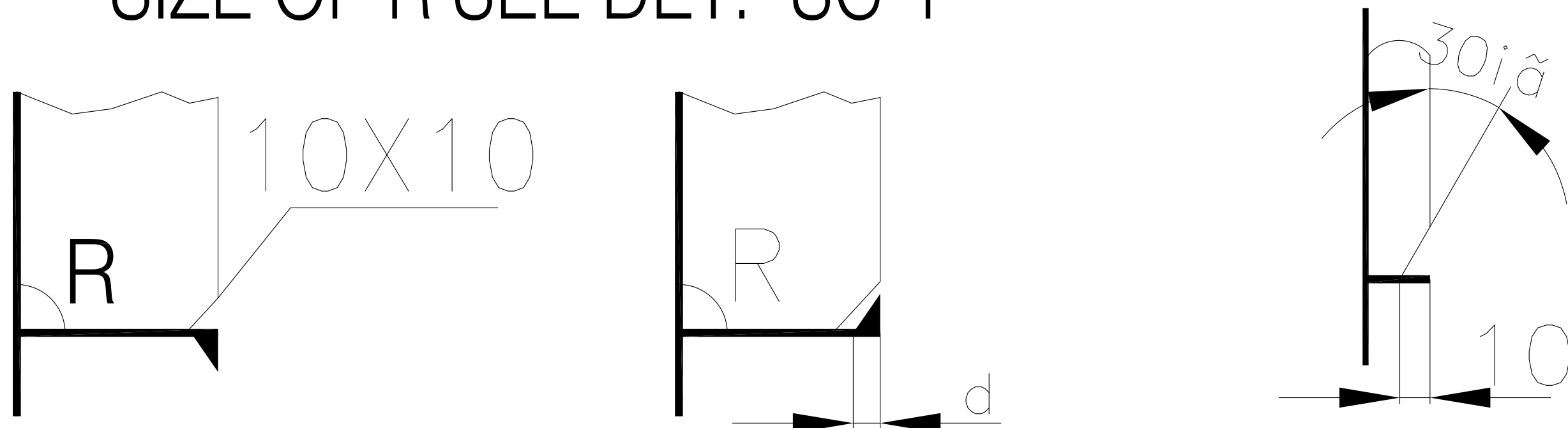
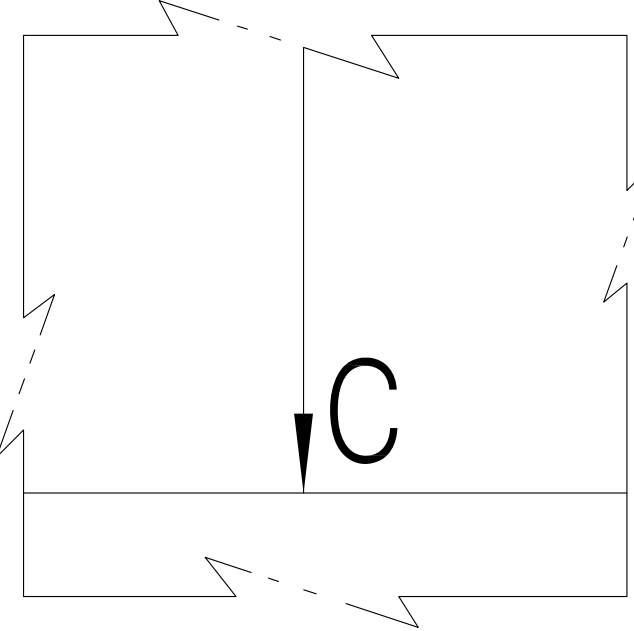
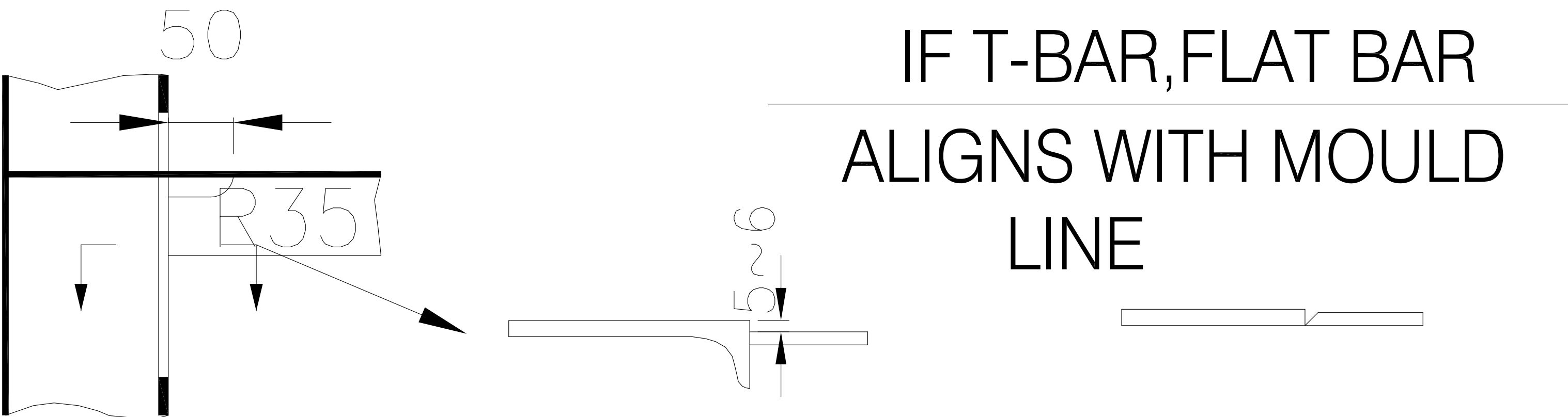
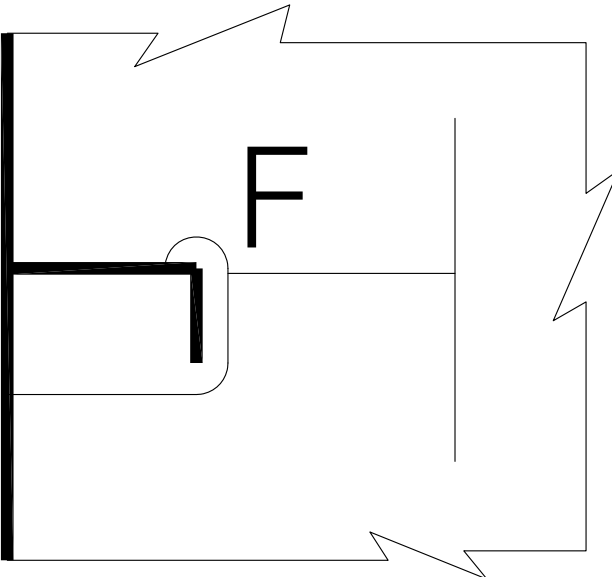
PRINCIPAL DETAILS OF HULL CONSTRUCTION 船体主要构件节点图册				WH429-110-002	4/16
1.2 SLOT AND CLIP COLLAR PLATE (ANGLE TYPE) 型材穿越孔及其补板(角钢型)				TYPE	
				AA	
AA	SYMBOL	SLOT TYPE & C. PL. TYPE			REMARK
	AA-1				
	AA-2				
	AA-3				
	AA-4				
h	R	r	a	THE COLLAR PLATE THINCHNESS IS SAME AS WEB PLATE 补板厚等于所补处腹板的厚度. WC SEE 4.3 SCALLOP FOR WELDING WC见3.通焊孔	
≤ 150	WC	30	35		
150 < h < 250	35	30	35		
≥ 250	50	35	50		
AREA: 0.06 m <sup>2</sup>					

PRINCIPAL DETAILS OF HULL CONSTRUCTION 船体主要构件节点图册				WH429-110-002	5/16
1.3 SLOT AND CLIP COLLAR PLATE (BULB TYPE) 型材穿越孔及其补板(球扁钢型)				TYPE	
				BA	
BA	SYMBOL	SLOT TYPE & C. PL. TYPE			REMARK
	BA-1				
	BA-2				
	BA-3				
	BA-4				
D	R	r	a	THE COLLAR PLATE THINCHNESS IS SAME AS WEB PLATE 补板厚等于所补处腹板的厚度. WC SEE 4.3 SCALLOP FOR WELDING WC见3.通焊孔	
< 150	WC	30	30		
150 ≤ D < 250	35	30	35		
≥ 250	50	35	50		
				AREA: 0.06 m <sup>2</sup>	


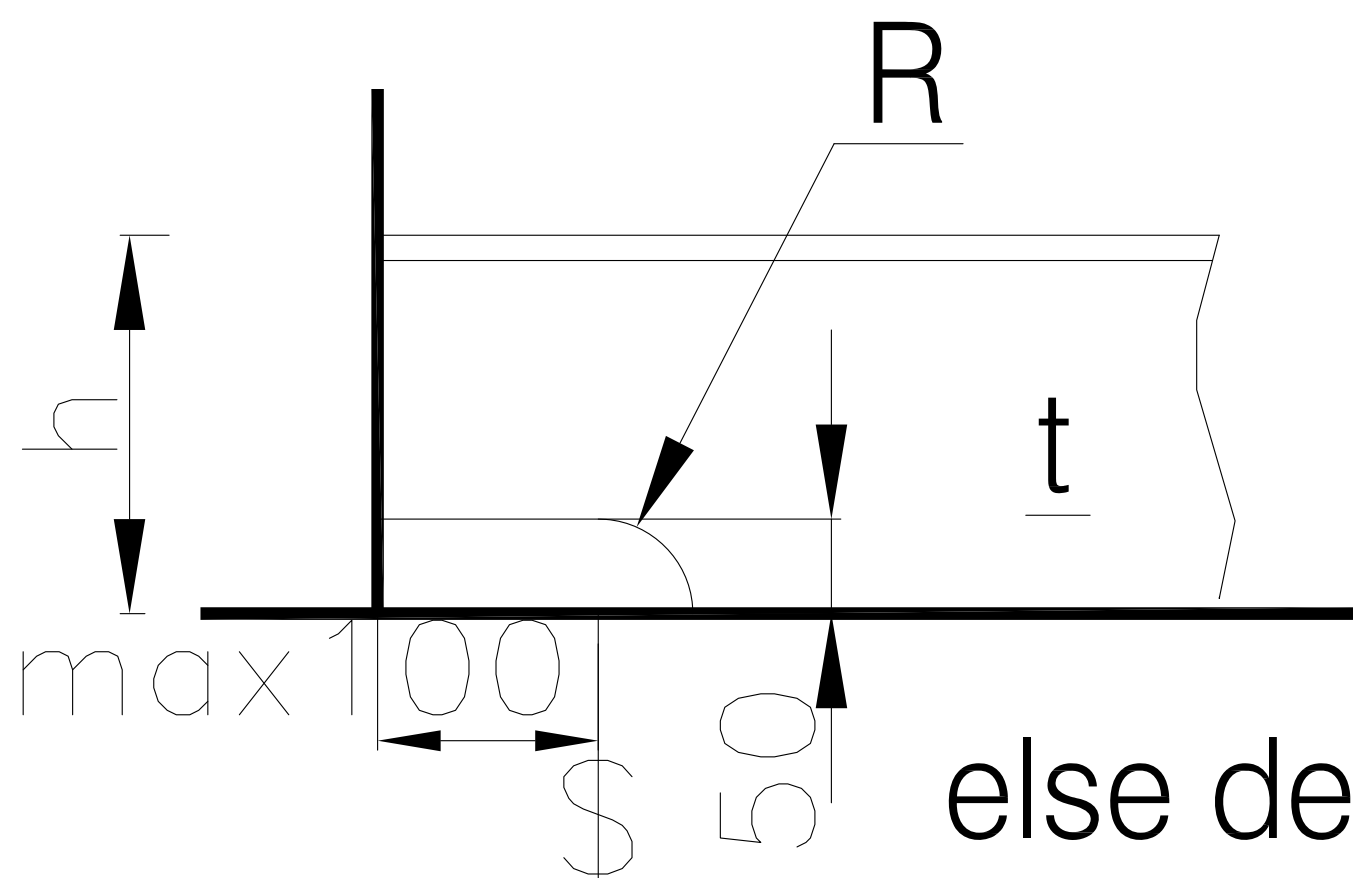
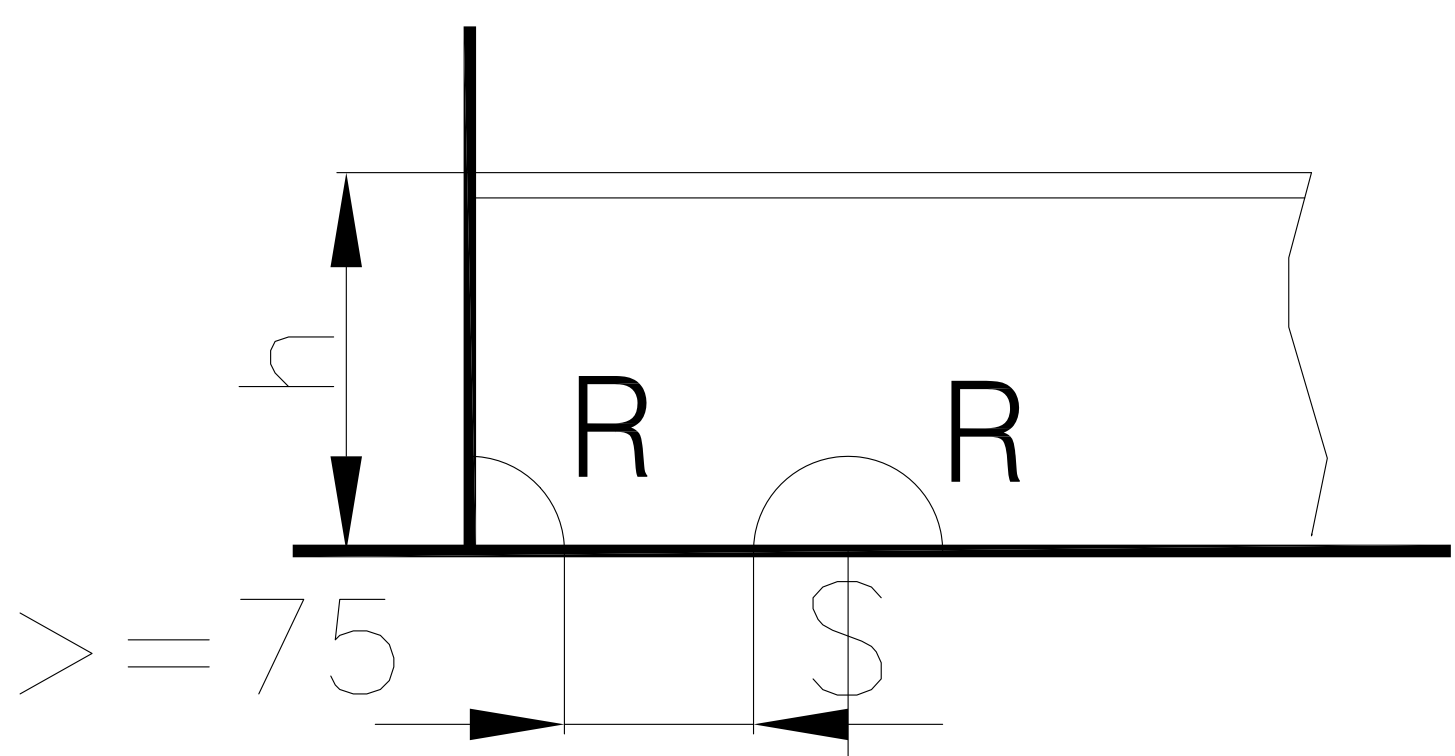
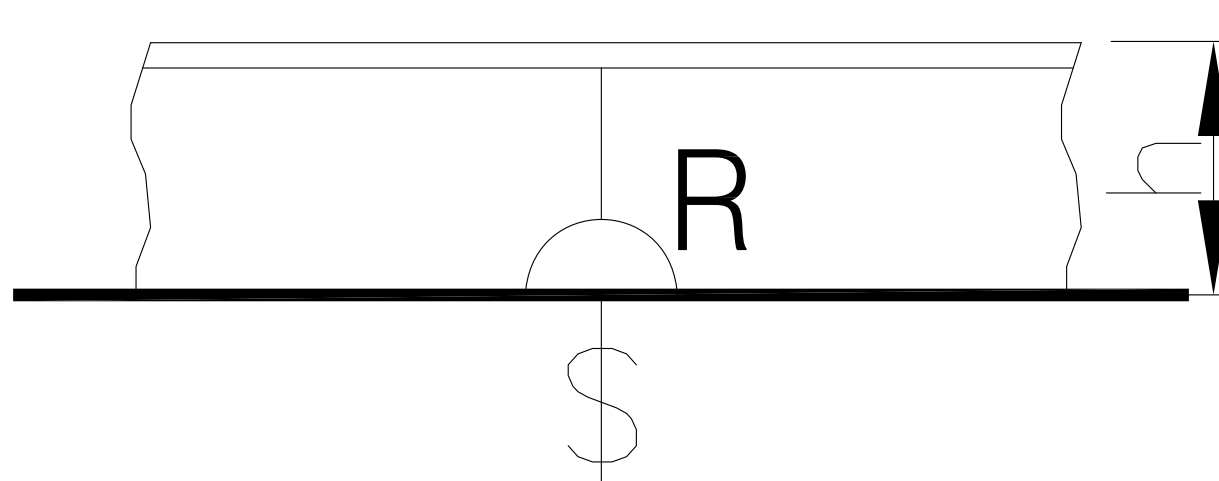
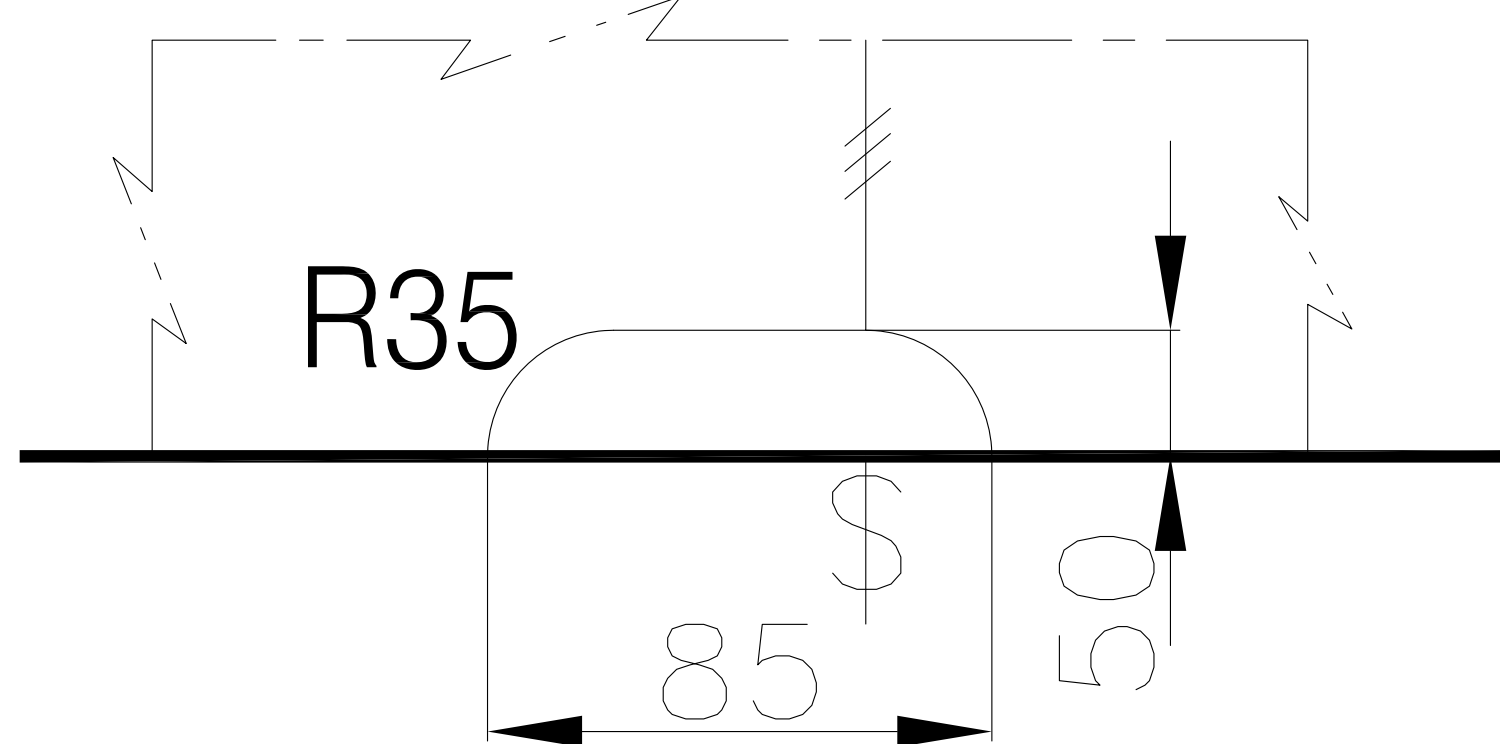
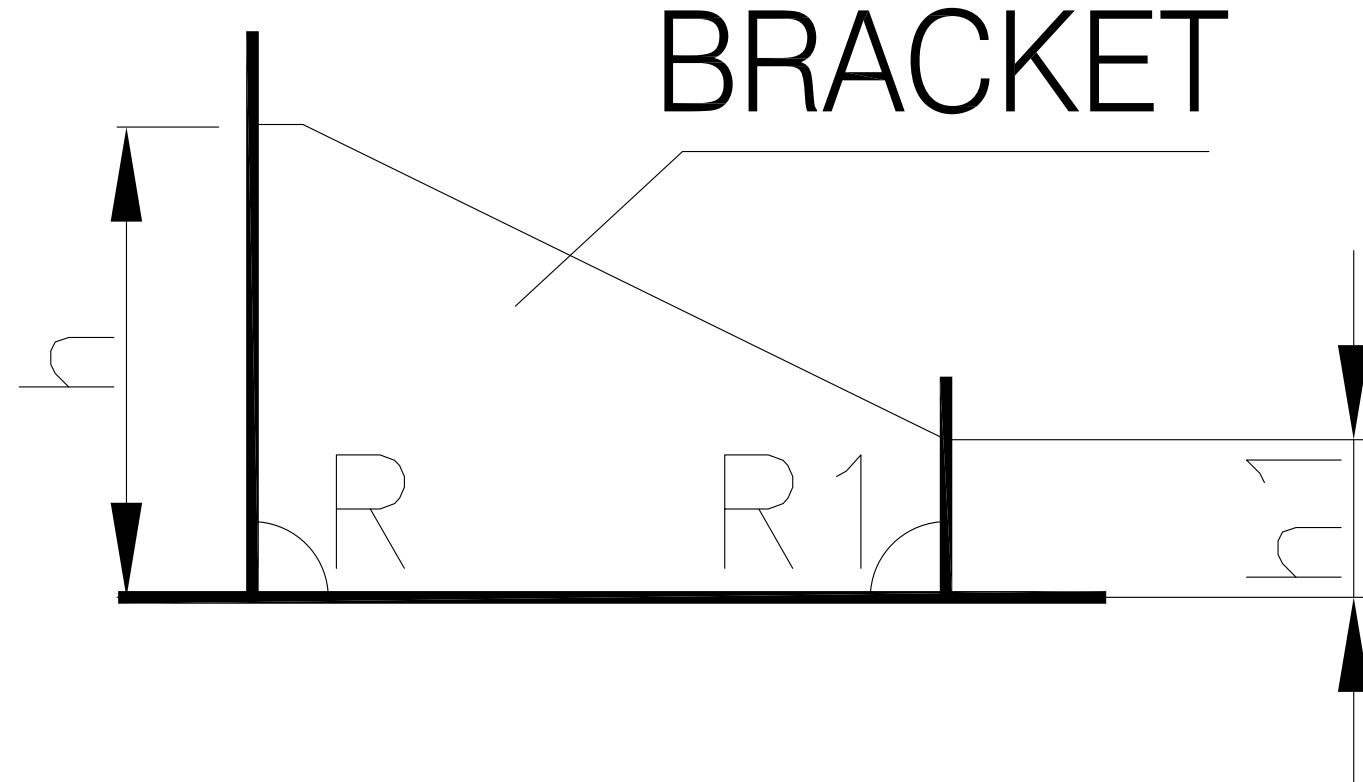
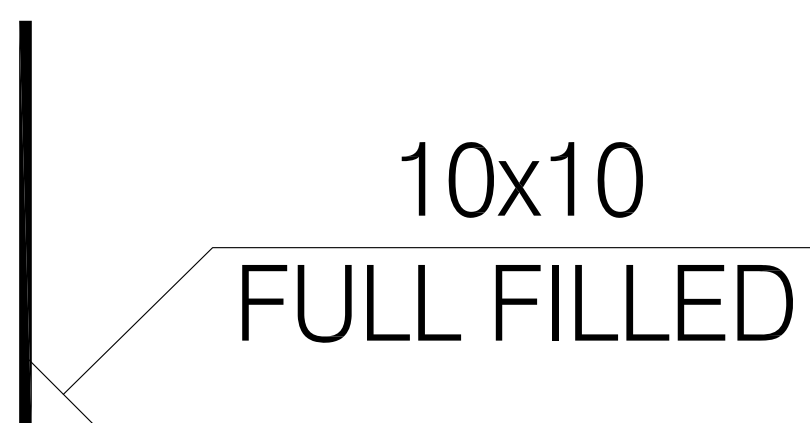
DETAILS OF HULL CONSTRUCTION 船体主要构件节点图册					WH429-110-002	6/16
1.4 SLOT AND CLIP COLLAR PLATE (T-BAR TYPE) 型材穿越孔及其补板(T型材)					TYPE	
					TA	
TA	SYMBOL	SLOT TYPE & C. PL. TYPE			REMARK	
	TA-1					
	TA-2					
	TA-3					
	TA-4					
	TA-5					
	TA-6					
h	R	r	a	e	THE COLLAR PLATE THINCHNESS IS SAME AS WEB PLATE 补板厚等于所补处腹板的厚度.	
$150 < D < 250$	35	30	35	35		
$\geq 250$	50	35	50	50		
					AREA: 0.06 m <sup>2</sup>	

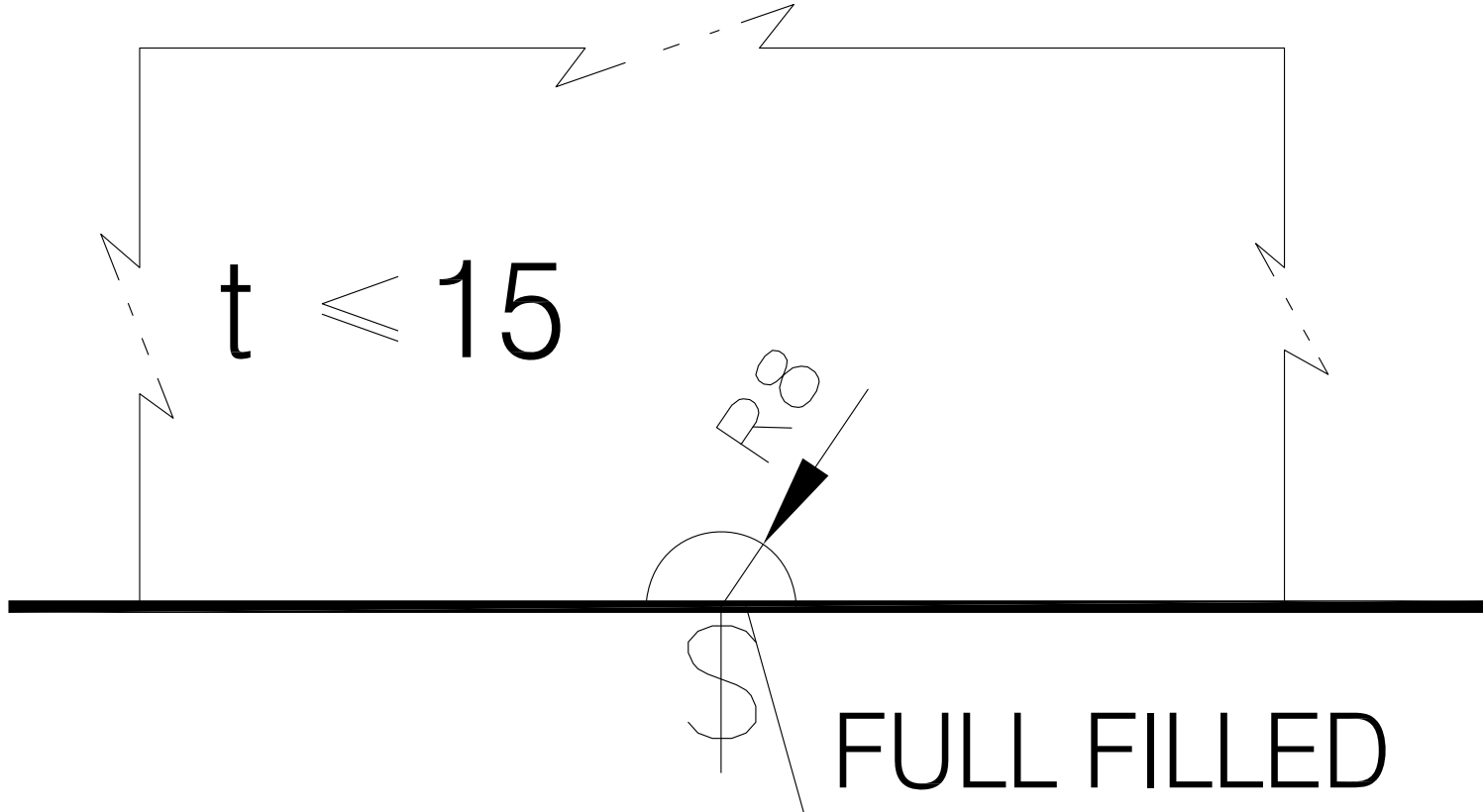
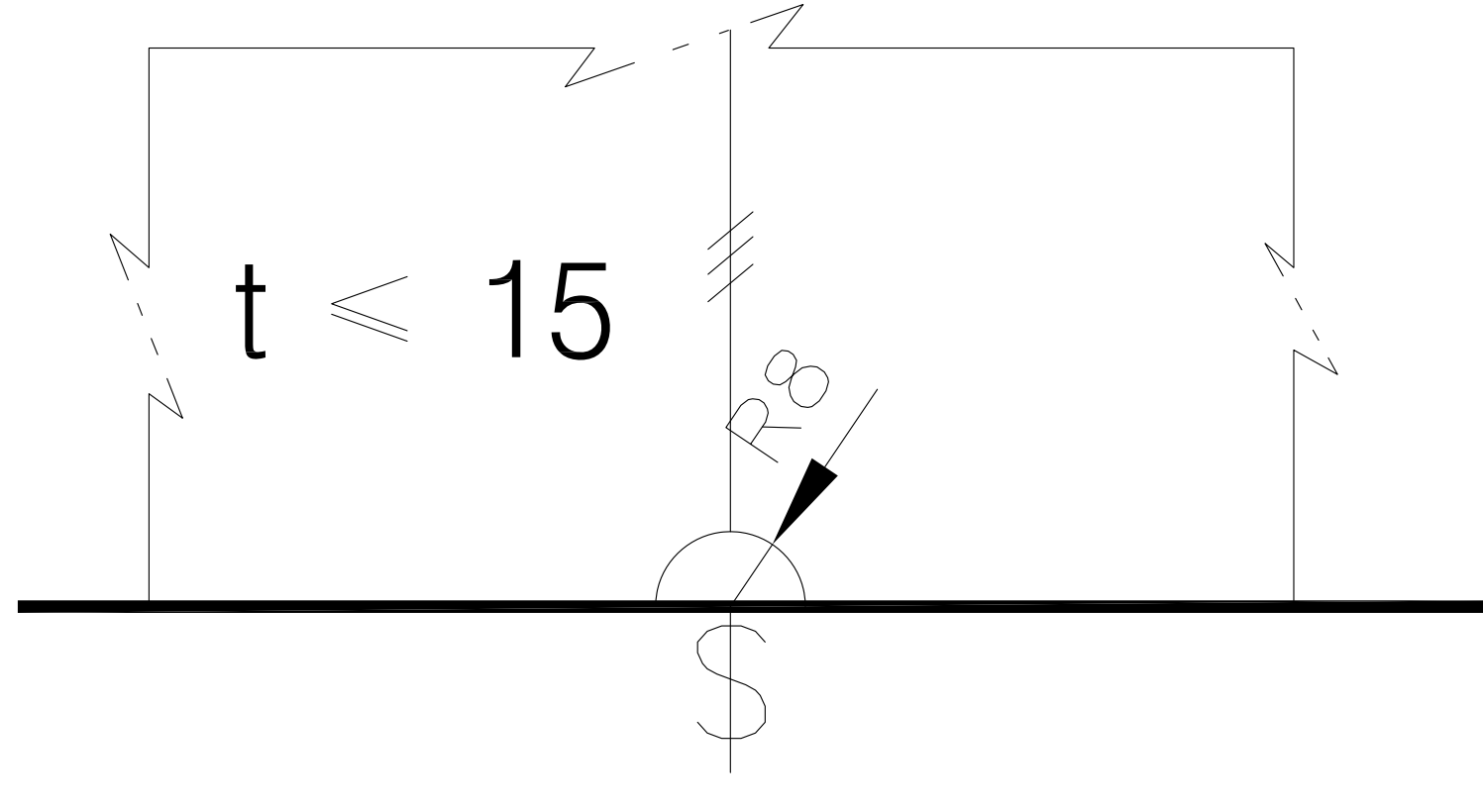
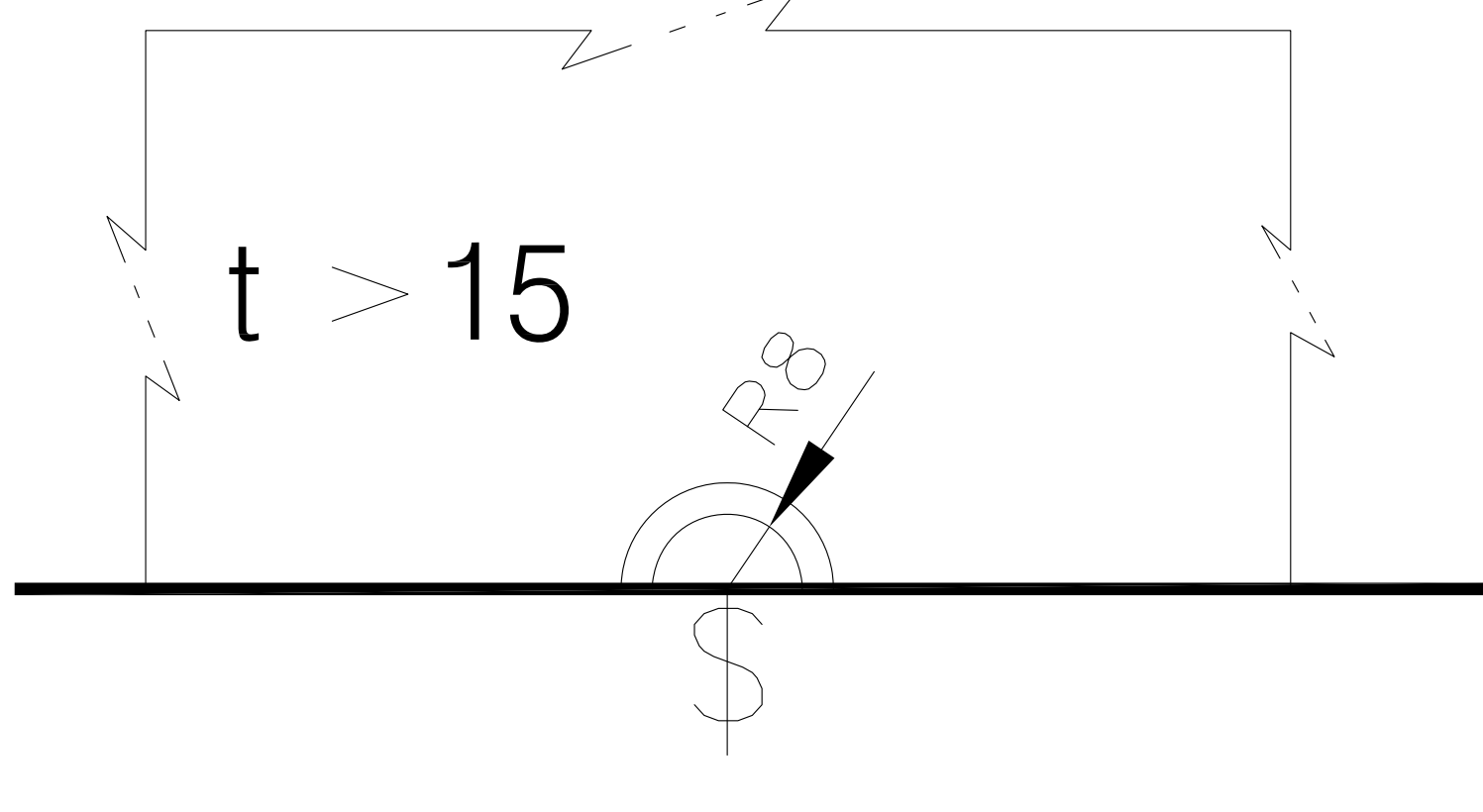
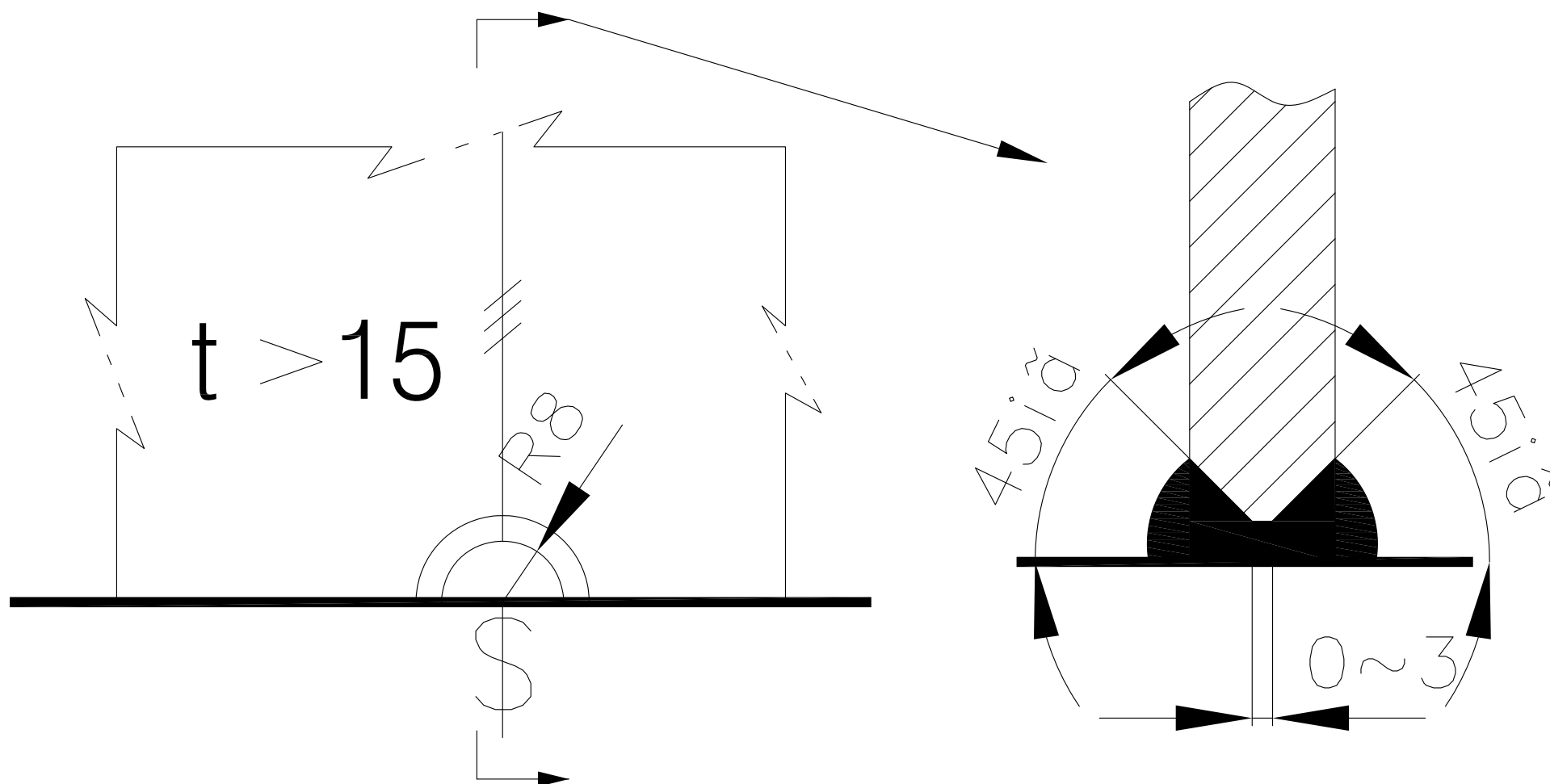
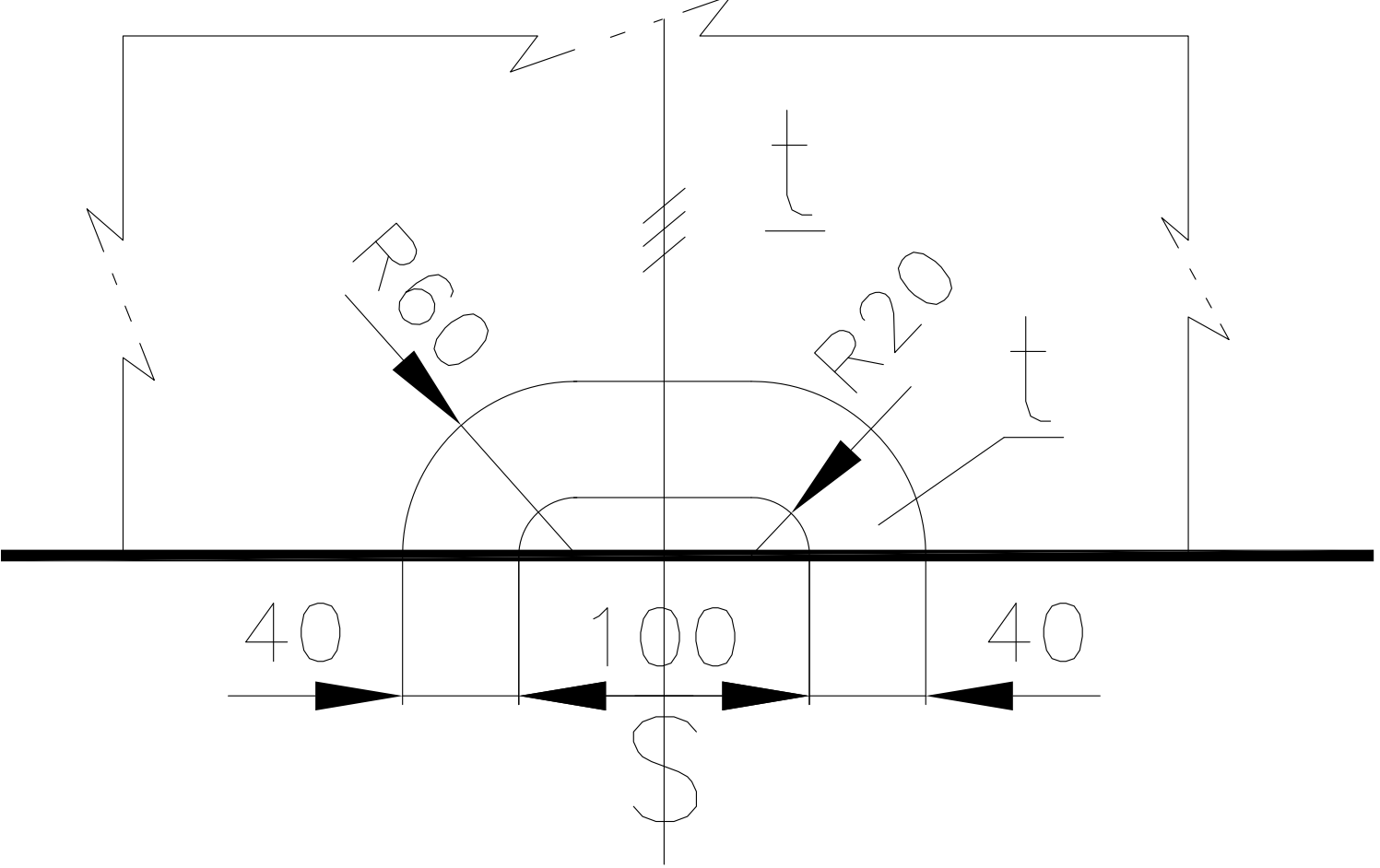
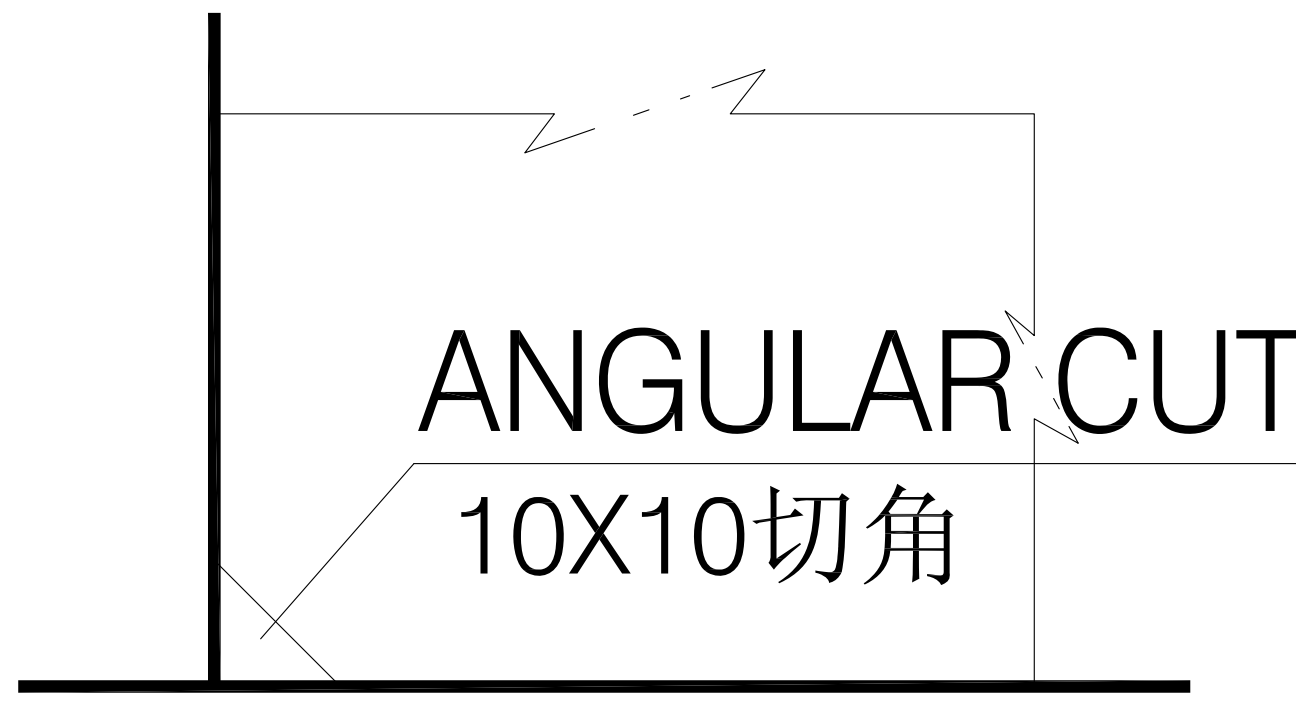
DETAILS OF HULL CONSTRUCTION 船体主要构件节点图册		WH429-110-002	7/16
2. END CONNECTION OF STIFFENER 型材端部连接		TYPE	
		S,W,B,T	
SYMBOL	TYPE & SIZE	DWG. EXPRESSION	
S	<div><div><p>FLAT BAR OR BULB PL.</p></div><div><p>FACE PL. OF ANGLE</p></div><div><p>WHEN <math>L \leq 5h</math></p></div></div>	<div></div>	
W	<div><div><p>FLAT BAR OR BULB PL.</p></div><div><p>ANGLE</p></div></div>	<div></div>	
B	<div><div><p>BULB PL. OR ANGLE</p></div><div><p>FLAT BAR, BULB PL. OR ANGLE</p></div><div><p>T-BAR</p></div></div>	<div></div> <p>NOTE: FOR BRACKET DIMENSIONS REFER CONSTRUCTION DRAWINGS.</p>	
T	<div><p>NOTE: FACE PLATE OF DET.</p><p>SIZE OF R SEE DET. "SC-1"</p></div>	<div></div>	
L	<div><p>15 25 30i</p></div>	<div></div>	
		AREA: 0.06 m <sup>2</sup>	

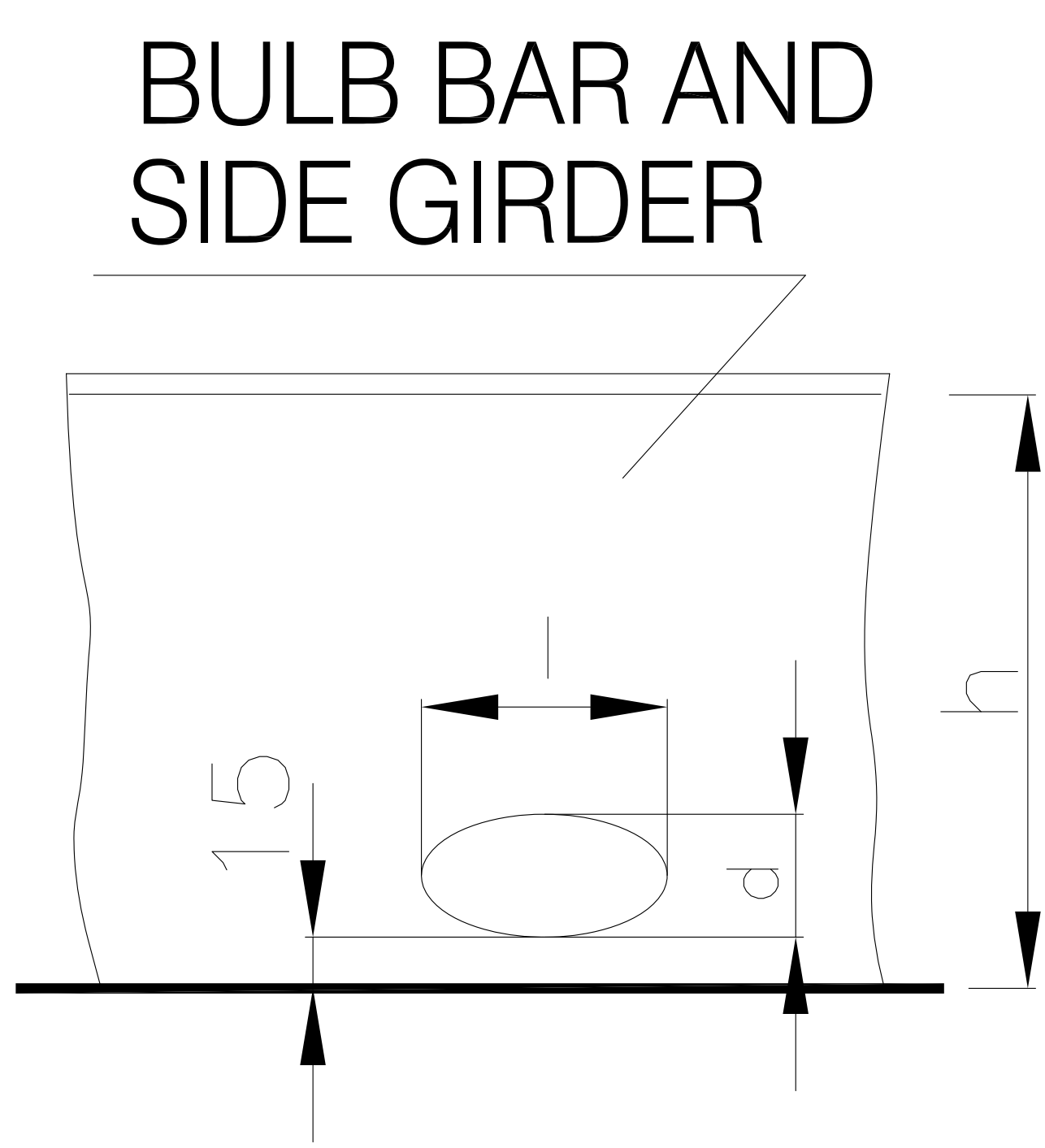
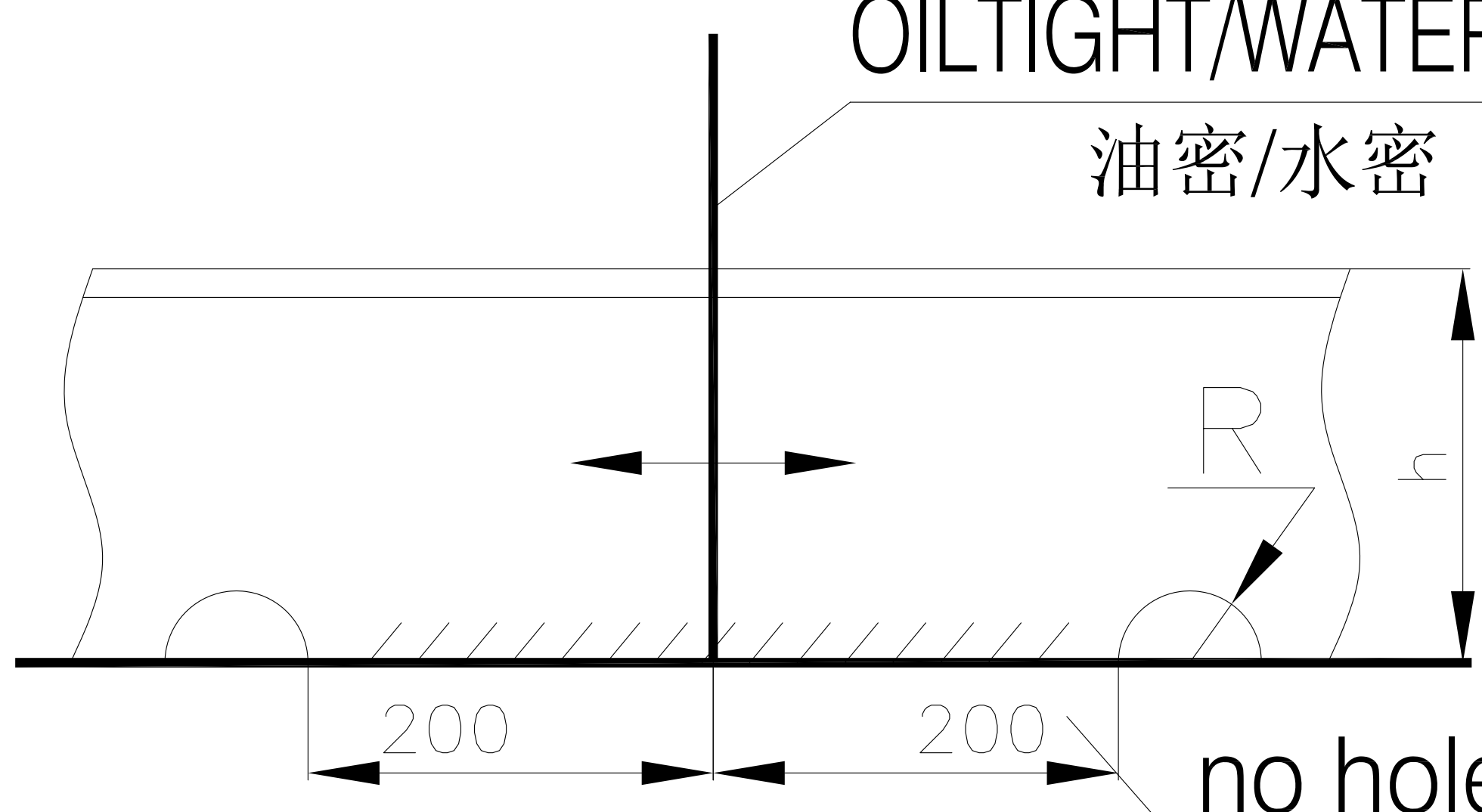
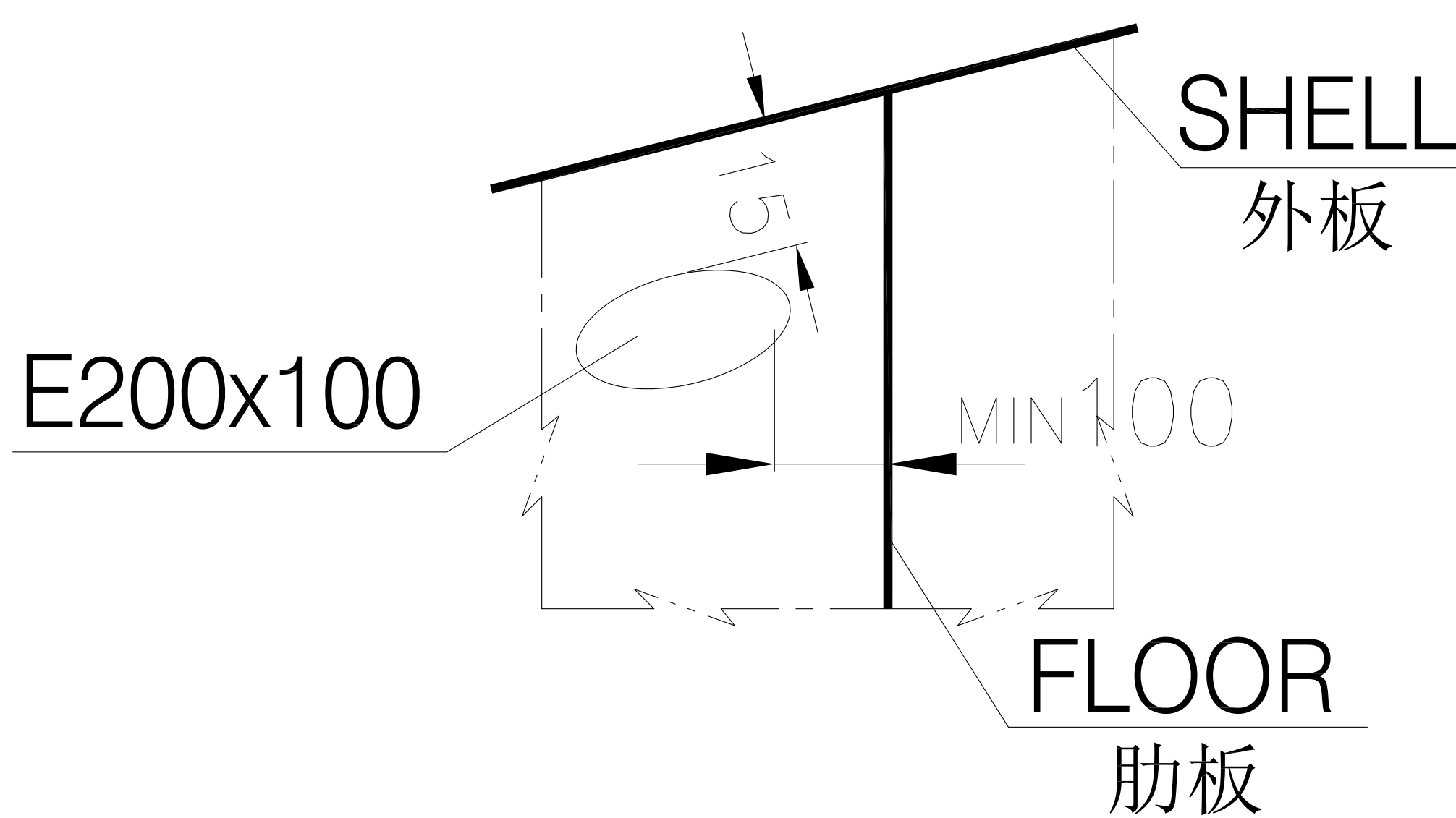
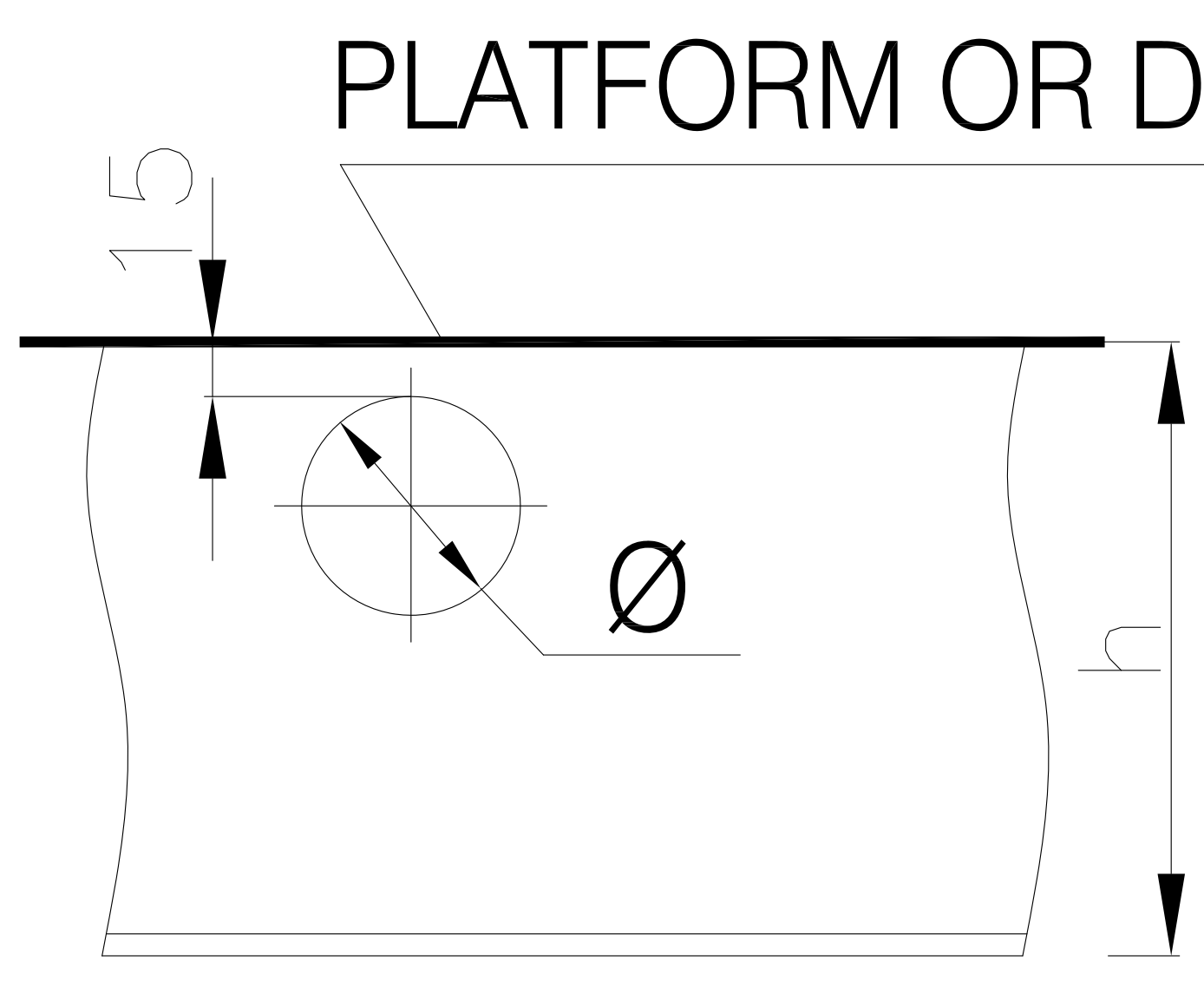


DETAILS OF HULL CONSTRUCTION 船体主要构件节点图册			WH429-110-002	8/16
END CONNECTION OF STIFFENER 型材端部连接			TYPE	
			C,F	
SYMBOL	TYPE & SIZE			DWG. EXPRESSION
C	SIZE OF R SEE DET. "SC-1" 			
F				
h	$h < 100$	$100 \leq h < 150$	$150 \leq h < 250$	$h \geq 250$
R	WC	30	35	50
profile edge to be kept free from welding				
AREA: 0.06 m <sup>2</sup>				



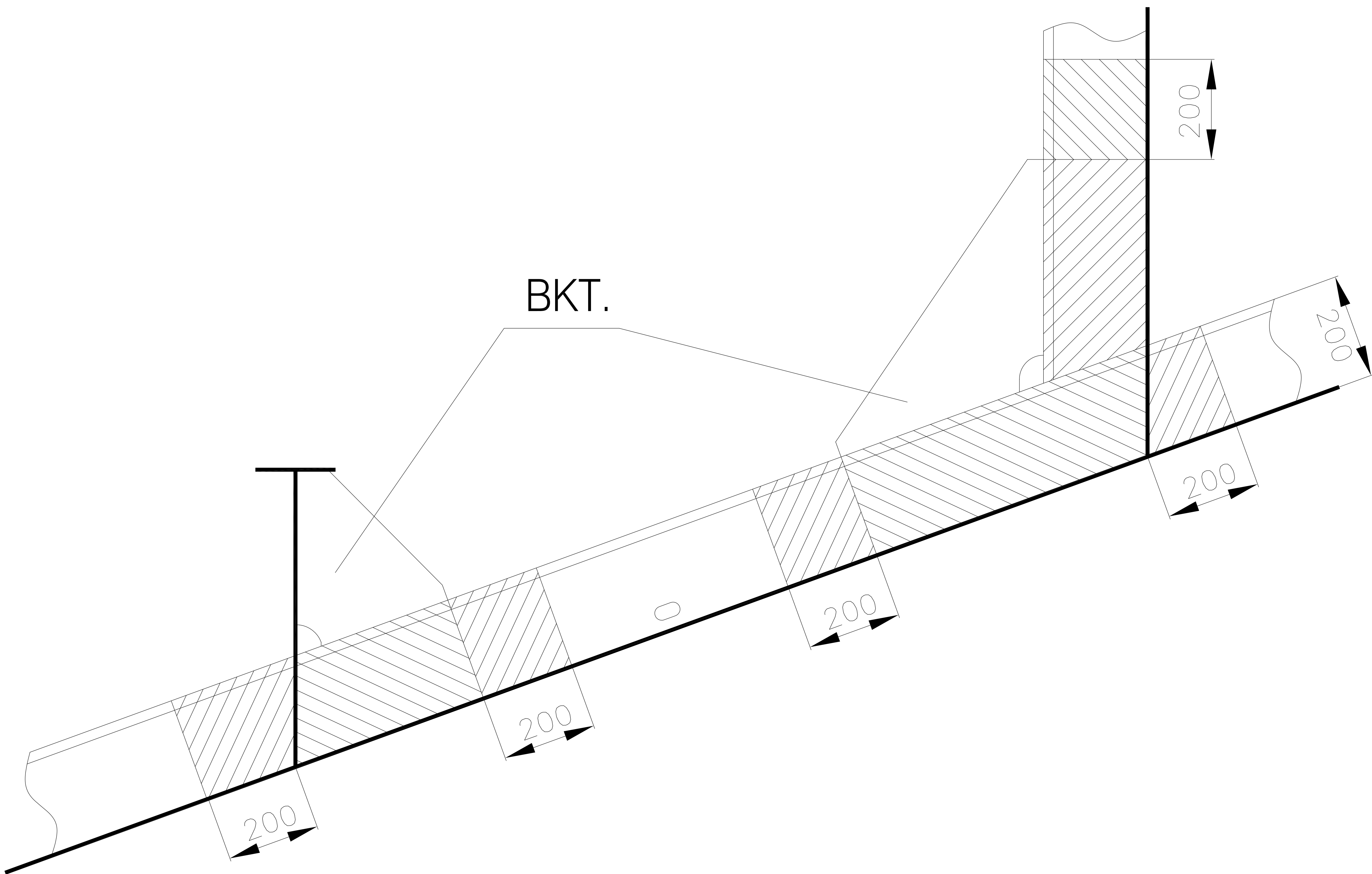
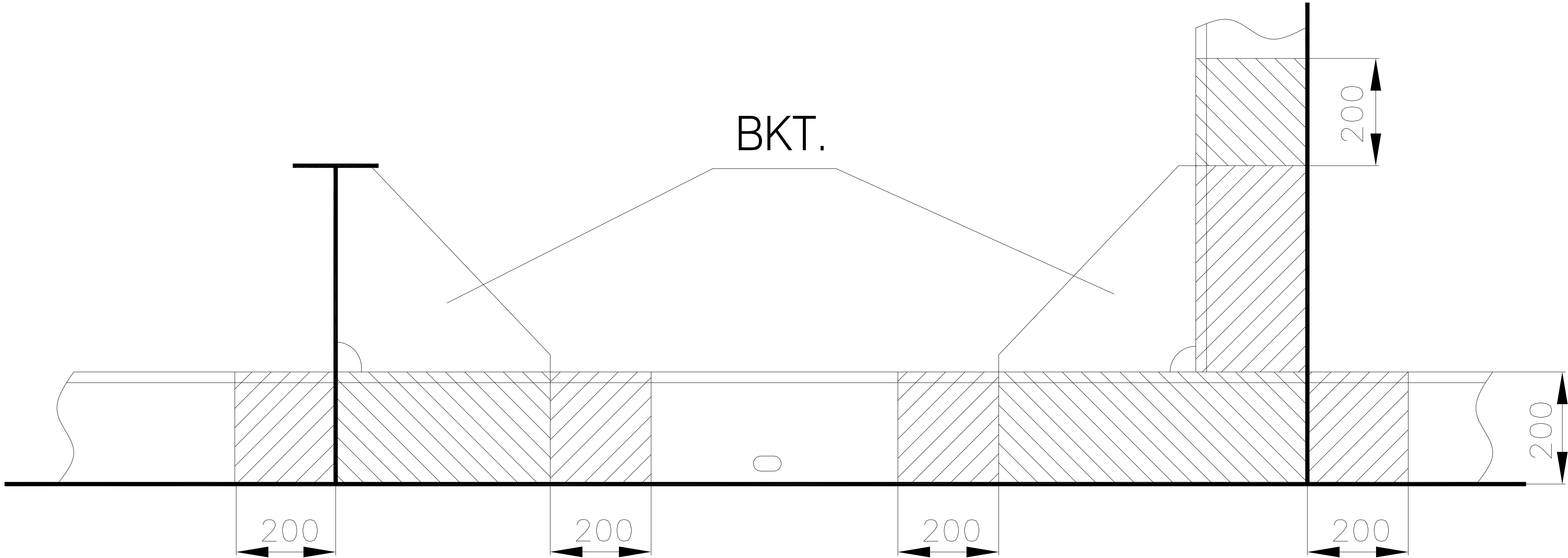
DETAILS OF HULL CONSTRUCTION 船体主要构件节点图册			WH429-110-002	9/16
3. SCALLOPS 3.1 SCALLOPS 通焊孔			TYPE	
			SC	
SYMBOL	SHAPE & SIZE			
SC-1		h	R	
		$< 100$	WC	
		$100 \leq h < 150$	30	
		$150 \leq h < 250$	35	
		$\geq 250$	50	
SC-2	 max 100	$h < 150$	30	
		$150 \leq h < 250$	35	
		$\geq 250$	50	
SC-3	 $\geq 75$	$h < 150$	30	
		$150 \leq h < 250$	35	
		$\geq 250$	50	
SC-4		$h < 150$	30	
		$150 \leq h < 250$	35	
		$\geq 250$	50	
SC-5	 R35 85	FOR BLOCK JOINT.		
SC-6	 BRACKET R1	h,h1	R,R1	
		$< 150$	WC	
		$150 \leq h < 250$	35	
		$\geq 250$	35	
WC	 10x10 FULL FILLED			

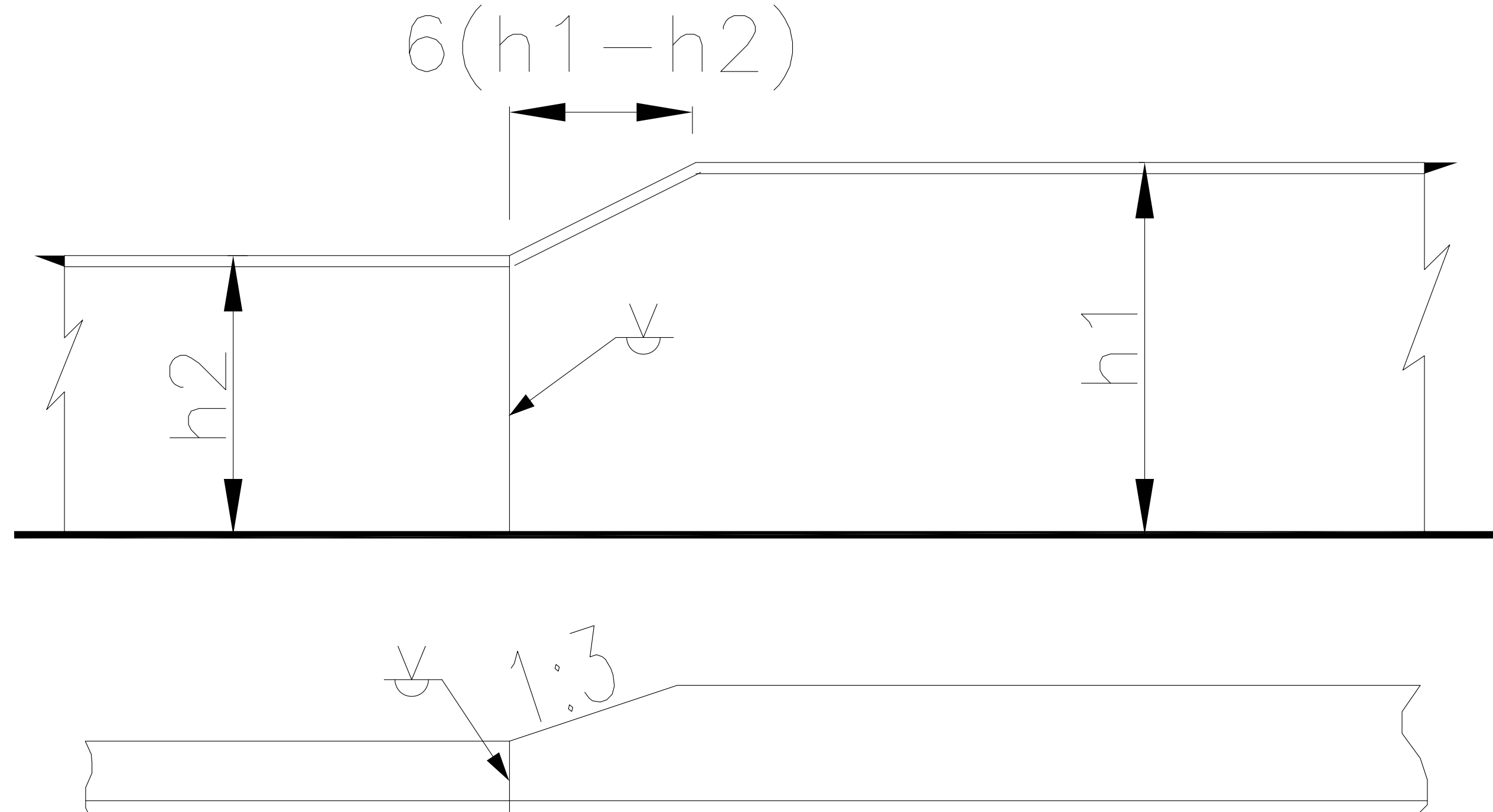
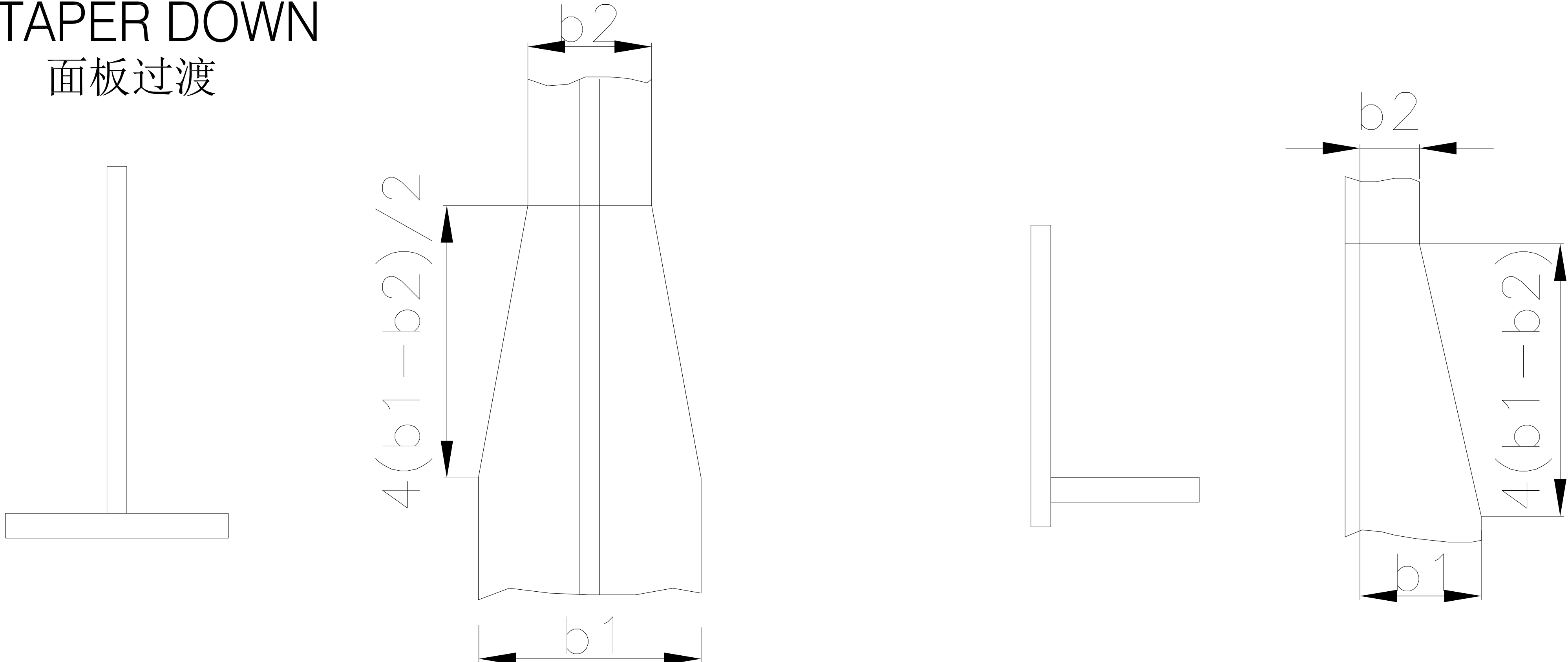
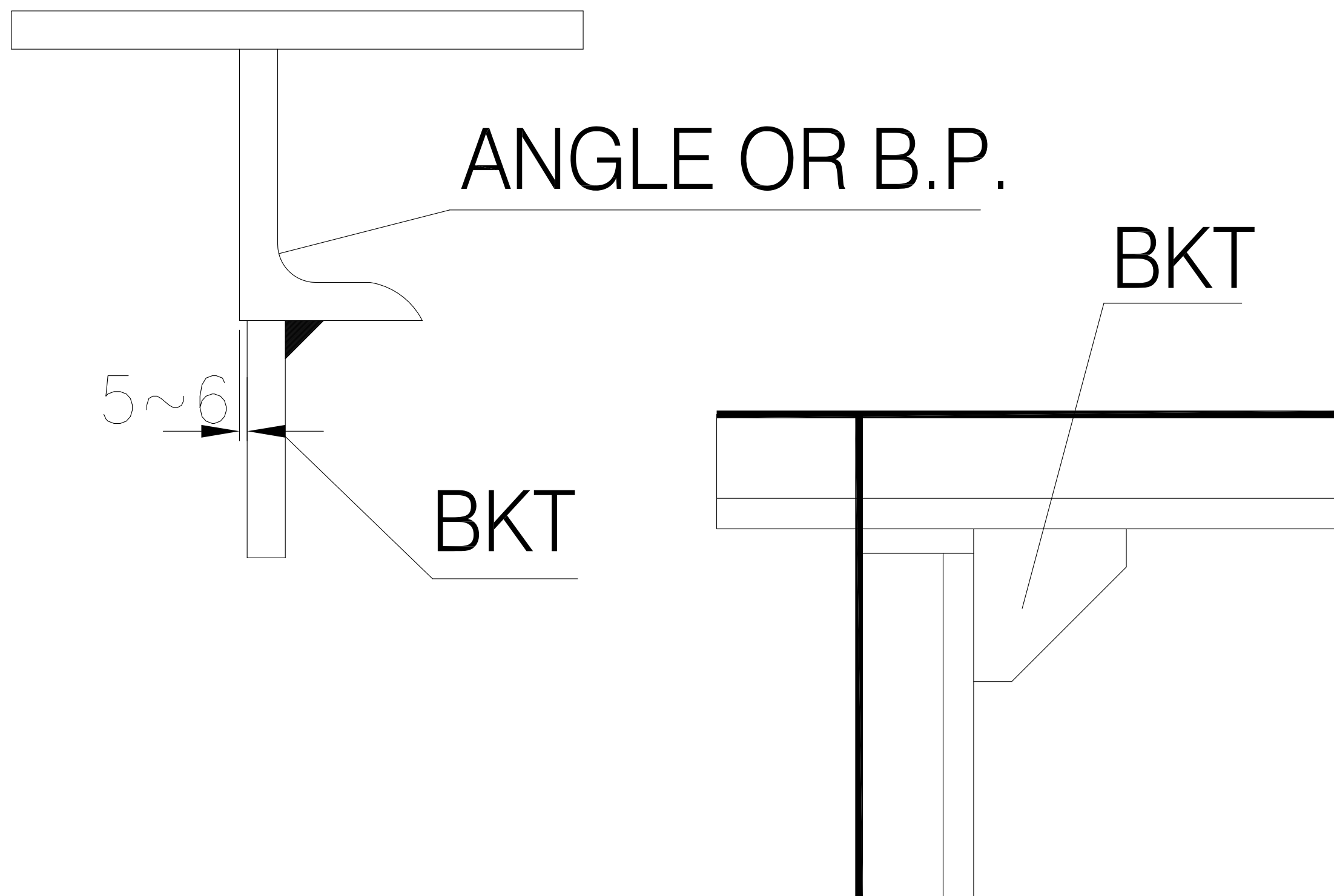
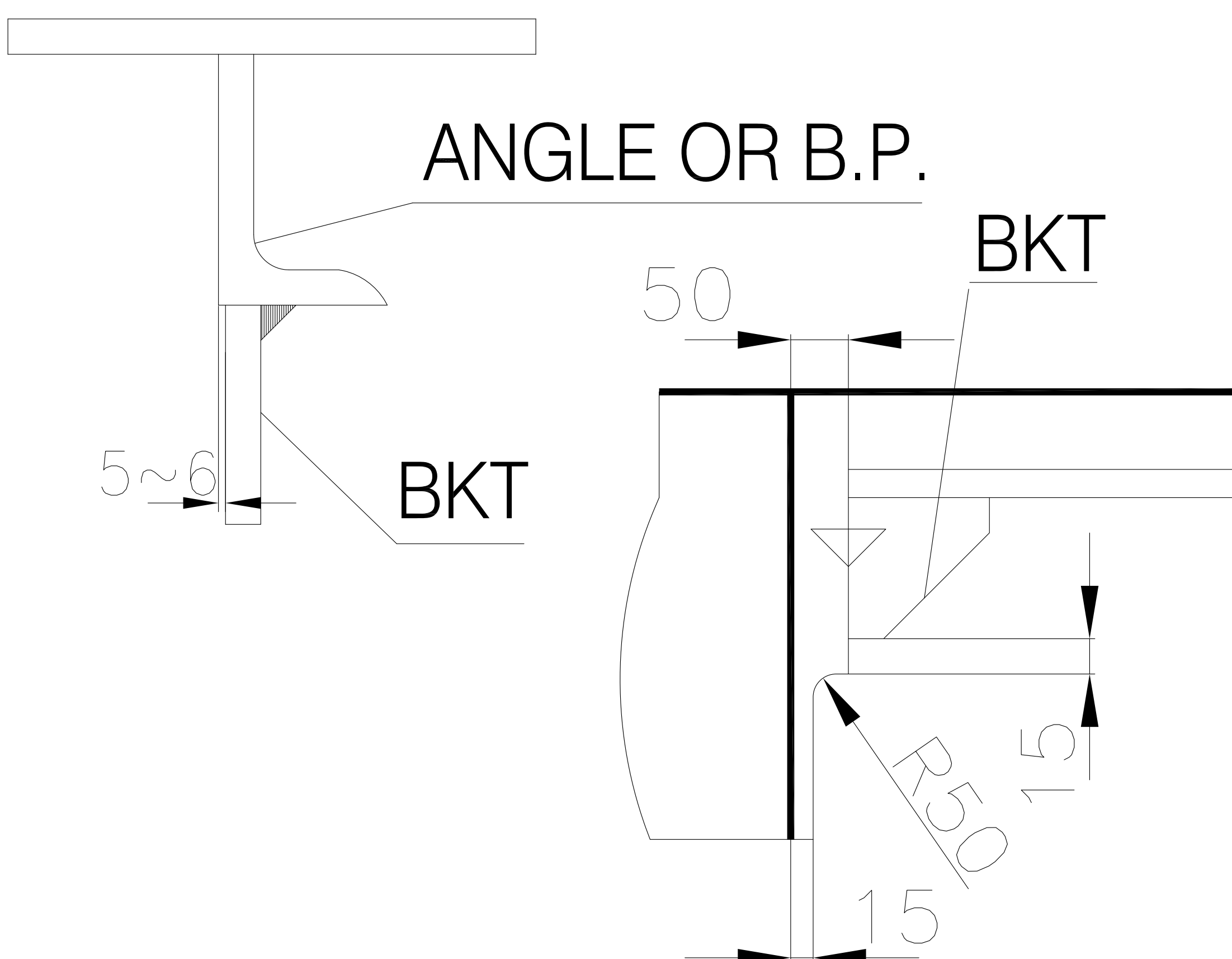
DETAILS OF HULL CONSTRUCTION 船体主要构件节点图册		WH429-110-002	10/16
3.2. W.T.CLEARANCE HOLE AND COLLAR PLATE 水密通焊孔及其补板		TYPE	
		SH	
SYMBOL	SHAPE & SIZE	SYMBOL	SHAPE & SIZE
SH-1		SH-2	
SH-3		SH-4	
SH-5		FOR BLOCK JOINT.	
WT. FILLET CLEARANCE HOLE 水密角焊缝通焊孔			
		ANGULAR CUT FILL WITH WELDING 焊缝通过后切 角用电焊填满	
SH-7			
		AREA: 0.06 m <sup>2</sup>	

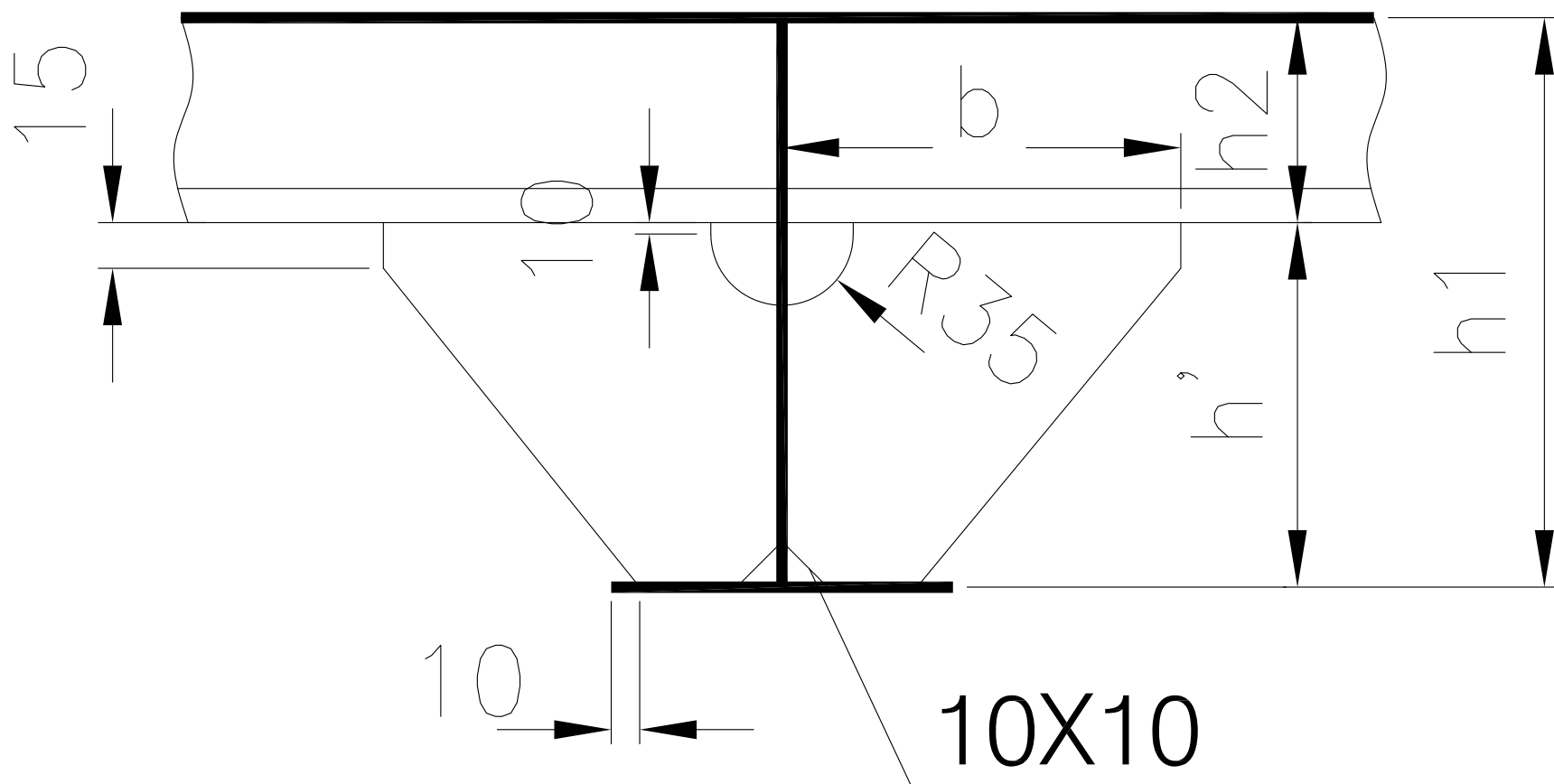
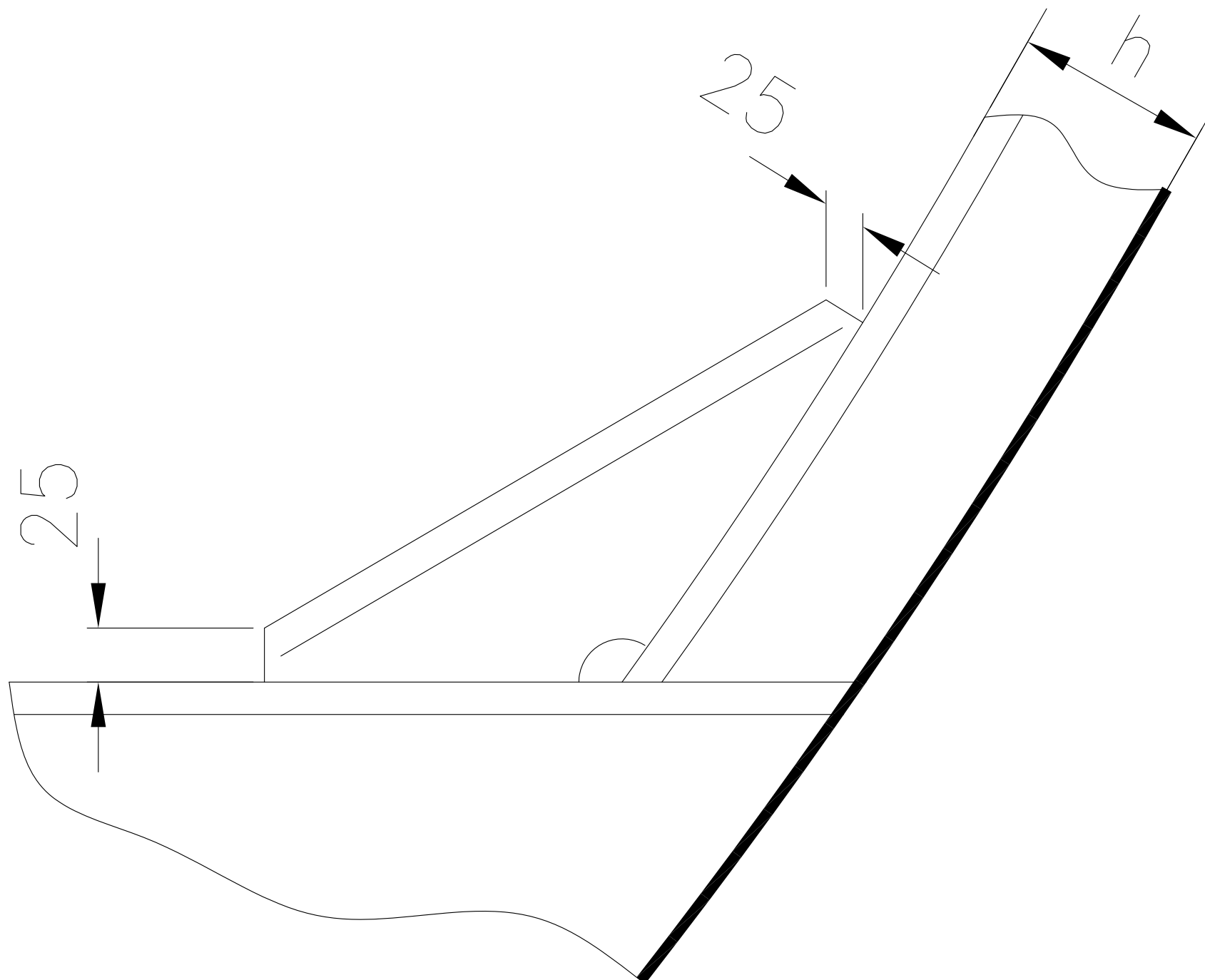
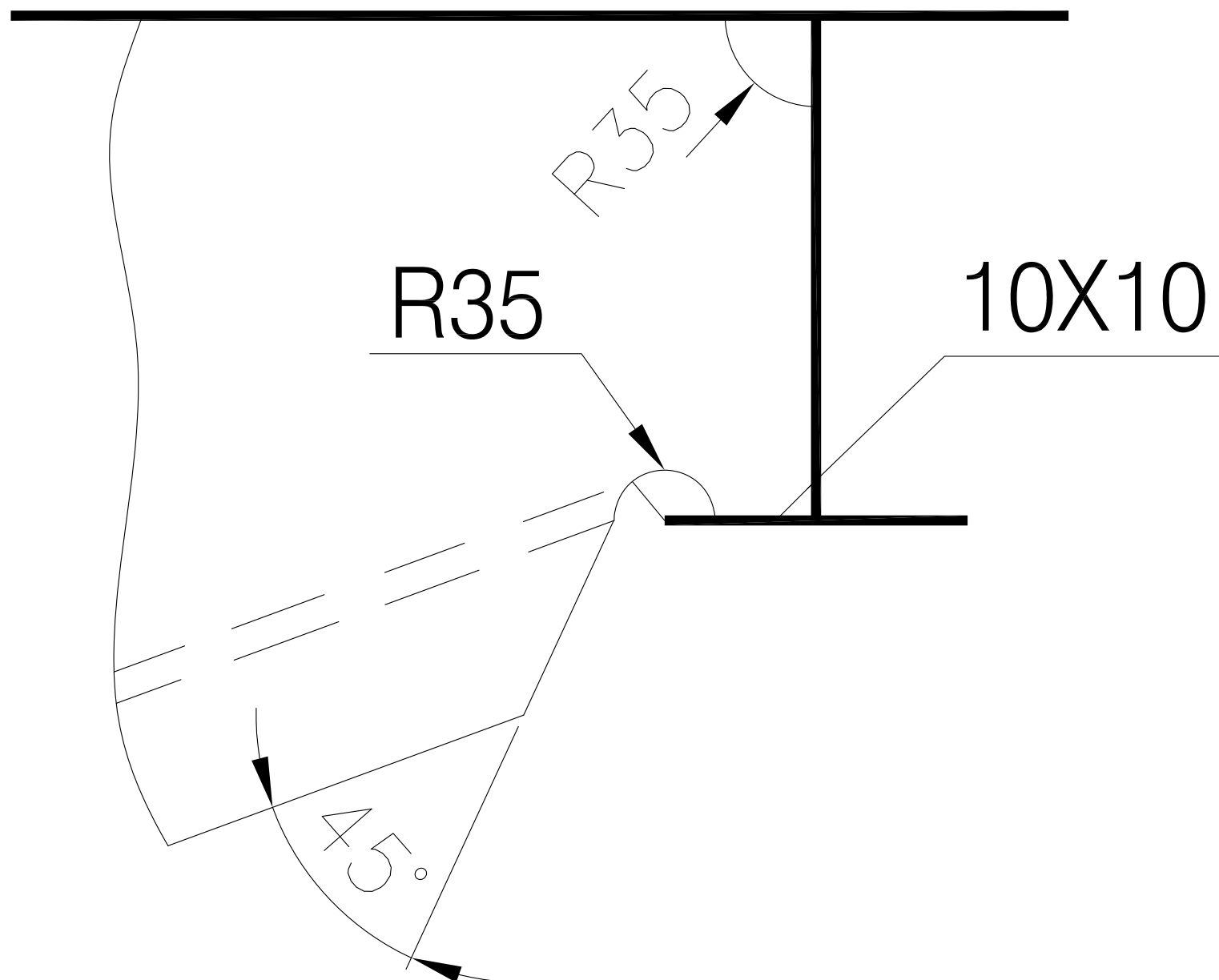
DETAILS OF HULL CONSTRUCTION 船体主要构件节点图册			WH429-110-002	11/16							
4. DRAIN & AIR HOLES 流水孔,透气孔			TYPE								
			H								
SYMBOL	DRAIN HOLE 流水孔										
H-1		h	Ø	d x l (ELLIPSE)							
		h < 120		25X50							
		120 ≤ h < 160		30X60							
		160 ≤ h < 200		40X80							
		200 ≤ h < 300		50X100							
		≥ 300		75X150							
H-2	LEAK OUT HOLE										
											
	<table><tr><td>h</td><td>R</td></tr><tr><td>&lt; 120</td><td>R10(FULL FILLED)</td></tr><tr><td>120 ≤ h &lt; 250</td><td>R30</td></tr><tr><td>h ≥ 250</td><td>R50</td></tr></table>				h	R	< 120	R10(FULL FILLED)	120 ≤ h < 250	R30	h ≥ 250
h	R										
< 120	R10(FULL FILLED)										
120 ≤ h < 250	R30										
h ≥ 250	R50										
H-3	DRAIN HOLE ON INNER BOTTOM AND PLATFORM 内底,平台流水孔										
											
	AIR HOLE 透气孔										
H-4		h	Ø								
		h < 120	25								
		120 ≤ h < 160	30								
		160 ≤ h < 250	40								
		≥ 250	50								
AREA: 0.06 m <sup>2</sup>											

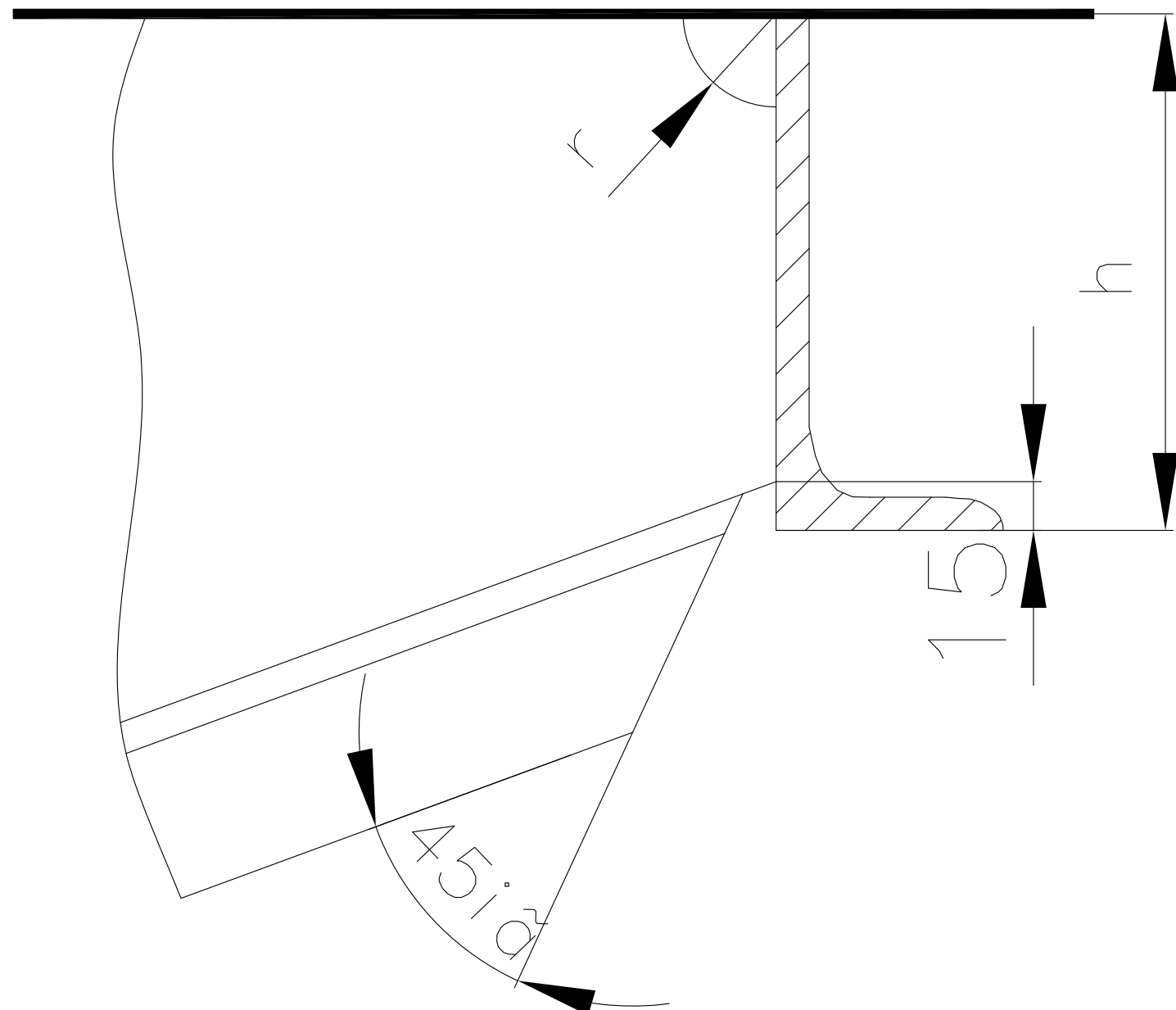
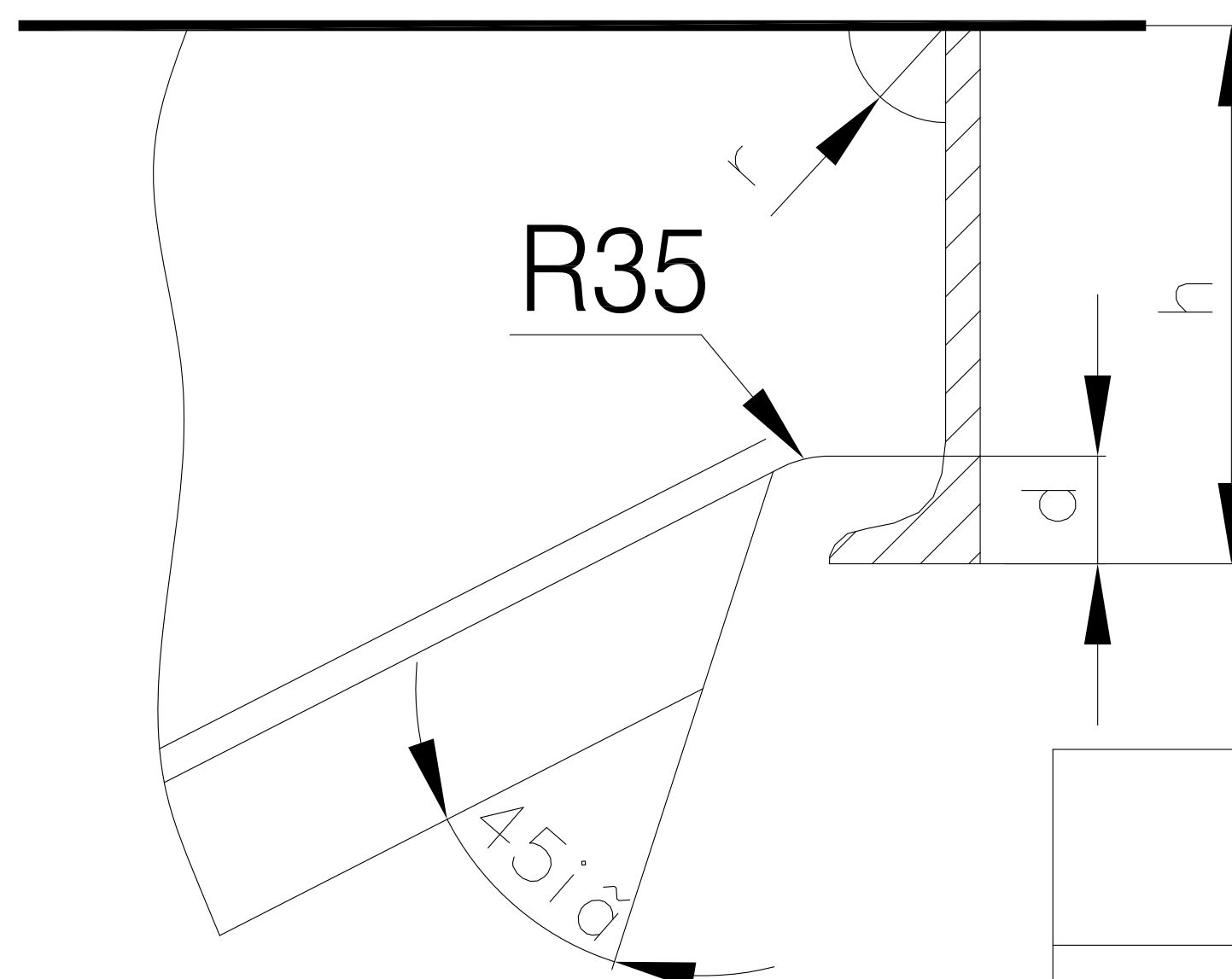
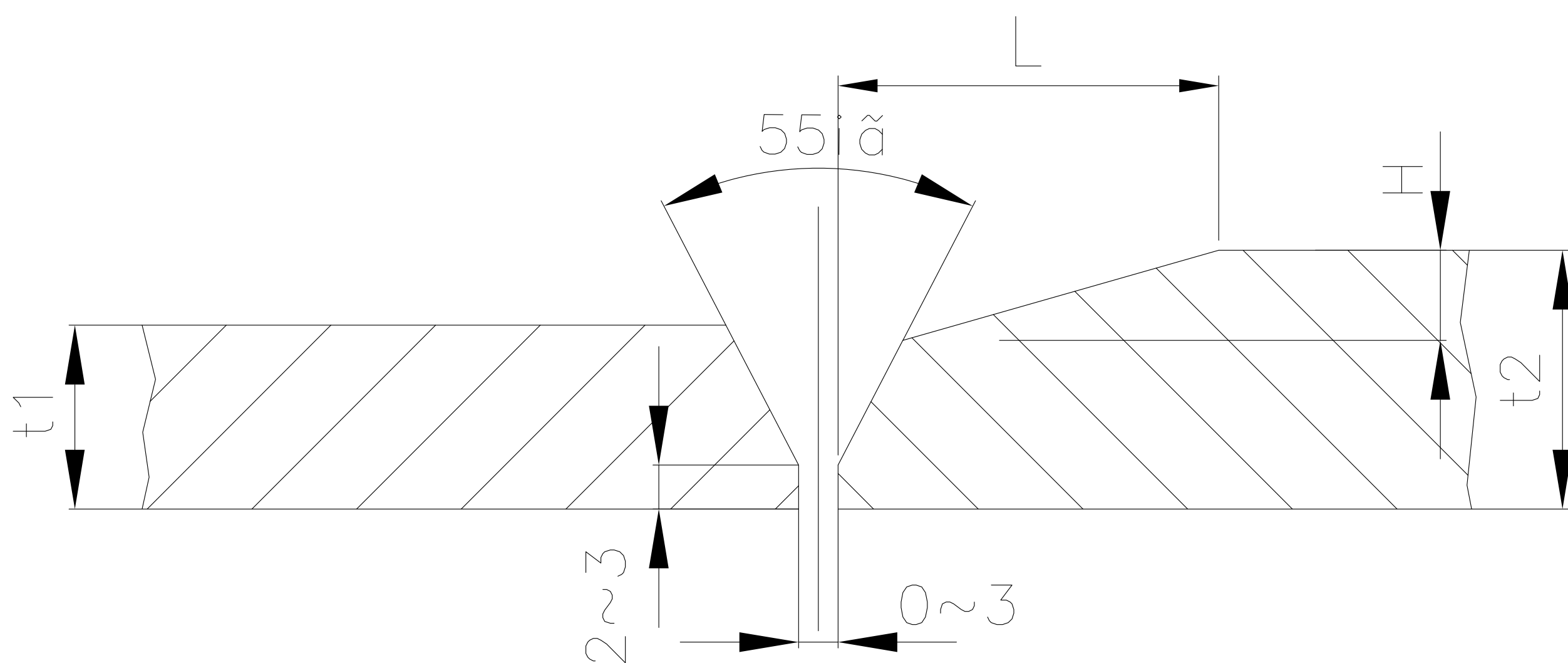
NO AIR HOLE AND DRAIN HOLE IN SHADE AREA

如下阴影区内不可开透气孔和流水孔



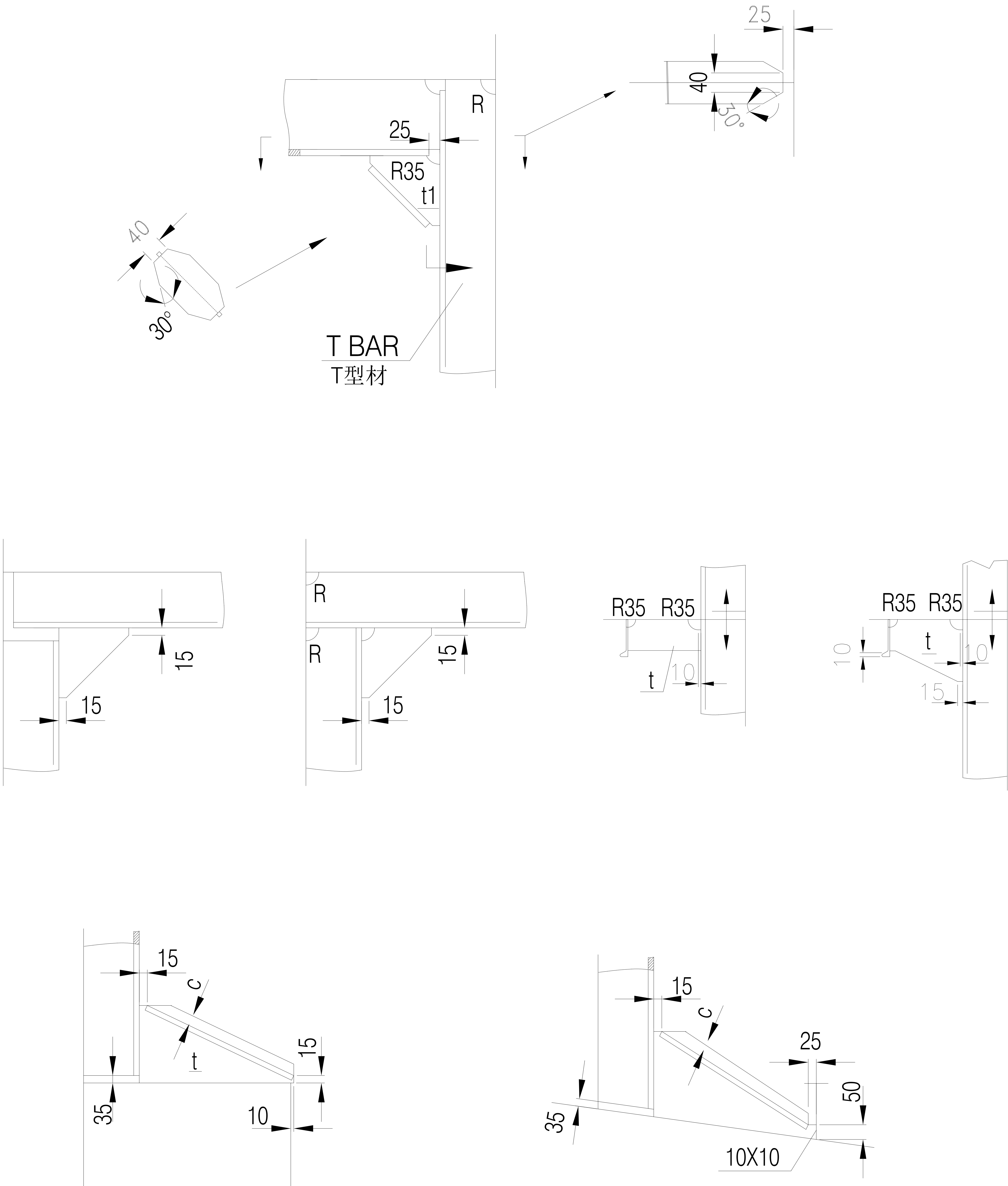
DETAILS OF HULL CONSTRUCTION 船体主要构件节点图册		WH429-110-002	13/16
5. TRANSITION JOINT OF DIFFERENT MEMBERS 不同型材对接		TYPE	
		TJ	
	<div>BULB PLATE AND BULB PLATE</div> <div></div>		
	<div>TAPER DOWN 面板过渡</div> <div></div>		
6. SUPERSTRUCTURE BRACKET CONNECTION WITH BEAM & STIFF 上层建筑肘板连接		TYPE	
		HB	
HB-1,HB-2		HB*	
<div></div>		<div></div>	
		AREA: 0.06 m <sup>2</sup>	

DETAILS OF HULL CONSTRUCTION 船体主要构件节点图册		WH429-110-002	14/16			
7. BRACKET AND END CONNECTION 肘板及其端部型式		TYPE				
		BC				
NAME	SYMBOL	SHAPE AND SIZE				
TRIPPING BRACKET 防倾肘板	BC-1					
		<table><tr><td>h2</td><td><math>h2 \leq 0.5h1</math></td><td><math>h2 &gt; 0.5h1</math></td></tr><tr><td>b</td><td>h'</td><td>0.5h1</td></tr></table>	h2	$h2 \leq 0.5h1$	$h2 > 0.5h1$	b
h2	$h2 \leq 0.5h1$	$h2 > 0.5h1$				
b	h'	0.5h1				
FRAME AND FLOOR CONNECTION 肋骨与肋板的连接	BC-2					
JOINT OF STIFFENED BRACKET AND T-BAR 加筋肘板与 T型材的连接	BC-3					
		AREA: 0.06 m <sup>2</sup>				

DETAILS OF HULL CONSTRUCTION 船体主要构件节点图册			WH429-110-002		15/16									
			TYPE											
			BC											
NAME	SYMBOL	SHAPE AND SIZE												
JOINT OF FLANGED BRACKET AND SHAPES  折边肘板与 型钢的连接	BC-4	<div><table><tr><th>h</th><th>r</th></tr><tr><td>≤ 250</td><td>35</td></tr><tr><td>&gt; 250</td><td>50</td></tr></table></div>				h	r	≤ 250	35	> 250	50			
	h	r												
≤ 250	35													
> 250	50													
	BC-5	<div><table><tr><th>h</th><th>r</th><th>d</th></tr><tr><td>≤ 250</td><td>35</td><td>50</td></tr><tr><td>&gt; 250</td><td>50</td><td>50</td></tr></table></div>				h	r	d	≤ 250	35	50	> 250	50	50
h	r	d												
≤ 250	35	50												
> 250	50	50												
8. BUTT JOINT OF PLATES WITH DIFFERENT THICKNESS 不同板厚对接坡口形式			TYPE											
			PJ											
PJ	<div><p>WHEN <math>H &gt; 3\text{mm}</math> <math>L=4\text{x}(\text{T1-T2})</math> <math>L^*=5\text{x}(\text{T1-T2})</math></p><p>*:FOR HIGH STRESS AREAS *:应用于高应力区</p></div>													
			AREA: 0.06 m <sup>2</sup>											



9. DETAIL OF CONNECTION  
结构连接节点



NOTE:  
1. DIMENSIONS OF BRACKET SEE DRA.  
2. FREE EDGE OF UNGED BRACKETS SHOULDN'T  
BE GREATER THAN 40\*t.