

Datasheet: EN CuBe2 / CW101C Less than 5 % alloying elements Rolled Product for general purposes Alumeco ApS 23-05-2025				Internal alloy name: CW101C Metal: Copper Chemical Symbol: CuBe2 EN: EN CuBe2 UNS: C17200 SS: - GB: - DIN: 2.1247 Also known as: Beryllium Copper Alloy type: Engineering Copper																																																	
Main usage: - Bearings - Electrical connectors - Welding electrodes - Corrosion resistant components - Moulds and general cooling inserts Main properties: - High strength - Excellent cold workability - Good hot formability - Good electrical conductivity				Important norms and literature: General Standards EN 1652: Copper and copper alloys – Plate, sheet, strip and circles for general purposes Geometric Tolerance: EN 1652: Copper and copper alloys – Plate, sheet, strip and circles for general purposes																																																	
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Tolerances for Rolled of CW101C

Dimensions: EN 1652:1997*				
Tolerances on thickness of cold rolled products (sheet, strip and circles)				
Values in millimetres				
Nominal thickness t	Tolerance on thickness for nominal widths w			
	$w \leq 350$	$350 < w \leq 700$	$700 < w \leq 1000$	$1000 < w \leq 1250$
$0,1 < t \leq 0,2$	$\pm 0,018$	-	-	-
$0,2 < t \leq 0,3$	$\pm 0,022$	$\pm 0,03$	$\pm 0,04$	-
$0,3 < t \leq 0,4$	$\pm 0,025$	$\pm 0,04$	$\pm 0,05$	$\pm 0,07$
$0,4 < t \leq 0,5$	$\pm 0,030$	$\pm 0,05$	$\pm 0,06$	$\pm 0,08$
$0,5 < t \leq 0,8$	$\pm 0,040$	$\pm 0,06$	$\pm 0,07$	$\pm 0,09$
$0,8 < t \leq 1,2$	$\pm 0,050$	$\pm 0,07$	$\pm 0,09$	$\pm 0,10$
$1,2 < t \leq 1,8$	$\pm 0,060$	$\pm 0,08$	$\pm 0,10$	$\pm 0,11$
$1,8 < t \leq 2,5$	$\pm 0,070$	$\pm 0,09$	$\pm 0,11$	$\pm 0,13$
$2,5 < t \leq 3,2$	$\pm 0,080$	$\pm 0,10$	$\pm 0,13$	$\pm 0,17$
$3,2 < t \leq 4,0$	$\pm 0,10$	$\pm 0,12$	$\pm 0,15$	$\pm 0,20$
$4,0 < t \leq 5,0$	$\pm 0,12$	$\pm 0,14$	$\pm 0,17$	$\pm 0,23$
$5,0 < t \leq 6,0$	$\pm 0,14$	$\pm 0,16$	$\pm 0,20$	$\pm 0,26$
$6,0 < t \leq 7,0$	$\pm 0,16$	$\pm 0,19$	$\pm 0,23$	$\pm 0,29$
$7,0 < t \leq 8,0$	$\pm 0,18$	$\pm 0,22$	$\pm 0,26$	$\pm 0,32$
$8,0 < t \leq 9,0$	$\pm 0,20$	$\pm 0,25$	$\pm 0,29$	$\pm 0,35$
$9,0 < t \leq 10,0$	$\pm 0,22$	$\pm 0,28$	$\pm 0,32$	$\pm 0,38$

* Values are referred from Table 5 of EN 1652:1997

Dimensions: EN 1652:1997*							
Tolerances on width of cold rolled strip							
Values in millimetres							
Nominal thickness t	Tolerance on thickness for nominal widths w						
	$w \leq 50$	$50 < w \leq 100$	$100 < w \leq 200$	$200 < w \leq 350$	$350 < w \leq 500$	$500 < w \leq 700$	$700 < w \leq 1250$
$0,1 < t \leq 1,0$	+0,2 0	+0,3 0	+0,4 0	+0,6 0	+1,0 0	+1,5 0	+2,0 0
$1,0 < t \leq 2,0$	+0,3 0	+0,4 0	+0,5 0	+1,0 0	+1,2 0	+1,5 0	+2,0 0
$2,0 < t \leq 2,5$	+0,5 0	+0,6 0	+0,7 0	+1,2 0	+1,5 0	+2,0 0	+2,5 0
$2,5 < t \leq 3,0$	+1,0 0	+1,1 0	+1,2 0	+1,5 0	+2,0 0	+2,5 0	+3,0 0
$3,0 < t \leq 4,0$	+2,0 0	+2,3 0	+2,5 0	+3,0 0	+4,0 0	+5,0 0	+6,0 0

* Values are referred from Table 6 of EN 1652:1997

Dimensions: EN 1652:1997*			
Tolerances on width of plate and sheet			
Values in millimetres			
Nominal thickness t	Tolerance on thickness for nominal widths w		
	$w \leq 350$	$350 < w \leq 1250$	$1250 < w$
$t \leq 2,0$	+2,0 0	+6,0 0	By agreement
$2,0 < t \leq 5,0$	+4,0 0	+8,0 0	
$5,0 < t$	+8,0 0	+10,0 0	

* Values are referred from Table 7 of EN 1652:1997

Dimensions: EN 1652:1997*		
Tolerances on length of plate, sheet and strip cut for lengths up to 5000 mm		
Values in millimetres		
Length	Nominal thickness	Tolerance on length
As Manufactured (ML)	$t \leq 15$	± 50
Fixed length (FL)	$t \leq 5,0$	+10 0
	$5,0 < t$	+15 0

* Values are referred from Table 8 of EN 1652:1997

Dimensions: EN 13599:2014*			
Squareness of cut plate and sheet			
Nominal width w	Maximum allowable differences between diagonals, for lengths l		
	$1000 < l \leq 2000$	$2000 < l \leq 3000$	$3000 < l$
$350 < w \leq 700$	6	7	8
$700 < w \leq 1250$	8	9	10
$1250 < w$	By agreement		

* Values are referred from Table 9 of EN 1652:1997

Dimensions: EN 1652:1997*			
Tolerances on diameter for circles			
Nominal diameter d	Maximum allowable differences between diagonals, for lengths l		
	$1000 < l \leq 2000$	$2000 < l \leq 3000$	$3000 < l$
$d \leq 500$	± 1	$\pm 1,5$	± 2
$500 < d \leq 1000$	± 2	$\pm 2,5$	± 3
$1000 < d \leq 2000$	± 3	$\pm 3,5$	± 4
$700 < d$	-	-	By agreement

* Values are referred from Table 10 of EN 1652:1997

Dimensions: EN 1652:1997*		
Edgewise curvature c		
Nominal width w	Maximum edgewise curvature c for thicknesses t	
	$t \leq 1,0$	$1,0 < t \leq 4,0$
$3 < w \leq 8$	12	-
$8 < w \leq 15$	8	10
$15 < w$	4	6

* Values are referred from Table 11 of EN 1652:1997