Specifications for Cu-DHP according to EN 1172 Copper and copper alloy sheet and strip for building purposes
Date: October 1996

Regulations		
Regulation	Symbol	Number
EN 1172	CU-DHP	CW024A
UNS*	C 12200	*Unified Numbering System (USA)

Chemical composition Composition in % (m/m) according to EN 1172		
Element	Min.	Max.
Cu	99,90	-
P	0,015	0,040

Mechanical properties of Cu-DHP according to EN 1172									
Material			Tensile strength R_m N/mm²		0,2% proof strength $R_{p\ 0,2}$ N/mm²		Elongation A_{50mm} for thickness up to 2,5 mm %	Hardness HV	
Symbol	Number	Material condition	Min.	Max.	Min.	Max.	Min.	Min.	Max.
Cu-DHP	CW024A	R220	220	260	-	140	33	-	-
		H040	-	-	-	-	-	40	65
		R240	240	300	180	-	8	-	-
		H065	-	-	-	-	-	65	95

Physical Properties of Cu-DHP	
density :	8,93 g/cm³
melting point:	1.083 °C
thermal conductivity at 20 °C :	293 - 364 W/mK
electrical conductivity at 20 °C :	42 – 52 m/Wmm²
coefficient of expansion :	ΔT 100 K : 1,7 mm/m
modulus of elasticity at 20 °C :	132 kN/mm²

For more information, please contact:

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Product specifications for TECU® Classic roofing quality (R240) thickness 0,50 – 1,00 mm	
width	500 mm – 1250 mm
width tolerance	0 / +2 mm
length tolerance for sheets	0 / +10 mm
thickness tolerance	± 0,02 mm
longitudinal edge straightness tolerance - sheets up to 3000 mm - strips	 up to 1 mm per 1000 mm gauge length, max. 3 mm for 3000 mm gauge length up to 1 mm per 1000 mm gauge length, max. 5 mm for 5000 mm gauge length
flatness transverse direction of rolling	< 0,2 % of band width
technical data	Tensile strength (R_m): 240 – 285 N/mm² Proof strength ($R_{p0,2}$): 180 - 230 N/mm² Elongation (A50): min. 15%
hardness HV	max. 90
mass per m² in dependence of thickness [1] [1]) calculated with a density of 8,9 g/cm³	0,5 mm – 4,45 kg/m² 0,6 mm – 5,34 kg/m² 0,7 mm – 6,23 kg/m² 0,8 mm – 7,12 kg/m² 1,0 mm – 8,90 kg/m²
availability	strips and sheets
coil inside diameter - ∅ - coil (small) - coil (big)	 300 mm, 400 mm 500 mm, 600 mm
surface	copper red mill finish
surface foliation	on request foliation on one side possible
application field	building purpose
Environmental Product Declaration	according to ISO 14025
CE	CE-marked according to EN 14783 and EU directive 89 / 106 / EEC (CPD) more information on www.kme.com/ce

mechanical processing and behaviour at the atmosphere	
cold-forming	very good
soft-soldering	very good
hard-soldering	very good
TIG-welding	very good
gas-shielded welding	very good
land-, sea- and / or industrial atmosphere	very good

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Information within this paper might be preliminary and subject to changes due to technical advance.
Please pay attention to the separate important application and processing instructions of this TECU® product.

Product specifications for TECU® Classic facade quality (R240) thickness 0,70 – 0,80 mm	
width	500 mm, 600 mm
width tolerance	0 / +2 mm
length tolerance for sheets	0 / +5 mm
thickness tolerance	± 0,02 mm
longitudinal edge straightness tolerance - sheets up to 3000 mm - strips	 up to 1 mm per 1000 mm gauge length, max. 3 mm for 3000 mm gauge length up to 1 mm per 1000 mm gauge length, max. 5 mm for 5000 mm gauge length
flatness transverse direction of rolling	< 0,2 % of band width
technical data	Tensile strength (R_m): 240 – 285 N/mm² Proof strength ($R_{p0,2}$): 180 - 230 N/mm² Elongation (A50): min. 15%
hardness HV	max. 90
mass per m² in dependence of thickness [1] [1]) calculated with a density of 8,9 g/cm³	0,7 mm – 6,23 kg/m² 0,8 mm – 7,12 kg/m²
availability	strips and sheets
coil inside diameter - ∅ - coil (small) - coil (big)	 400 mm 500 mm, 600 mm
surface	mill finish (copper red)
surface quality	almost free from scratches and striations on a homogeneous surface
surface foliation	foliation on one side
application field	building purpose (facade)
Environmental Product Declaration	according to ISO 14025
CE	CE-marked according to EN 14783 and EU directive 89 / 106 / EEC (CPD) more information on www.kme.com/ce

mechanical processing and behaviour at the atmosphere	
cold-forming	cold-forming
soft-soldering	soft-soldering
hard-soldering	hard-soldering
TIG-welding	TIG-welding
gas-shielded welding	gas-shielded welding
land-, sea- and / or industrial atmosphere	land-, sea- and / or industrial atmosphere

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