



AENOR Product Certificate



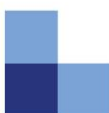
034/001949

AENOR certifies that the organization

CERAMICA MALPESA, S.A.

registered office	AUTOVIA A-4, KM 303 23730 VILLANUEVA DE LA REINA (Jaen - España)
supplies	U Units Category I for unprotected masonry
in compliance with	UNE-EN 771-1:2011+A1:2016 (EN 771-1:2011+A1:2015)
Nº Technical Form	0830139 (see annex)
Production site	AUTOVIA A-4, KM 303 23730 VILLANUEVA DE LA REINA (Jaen - España)
Certification scheme	This Certificate has been granted in accordance with the stipulations of the Specific Rules RP034.01
	This certificate supersedes 034/001949, dated 2018-11-28
First issued on	2017-06-27
Modified on	2022-07-20
Validity date	2027-07-20

Rafael GARCÍA MEIRO
Chief Executive Officer

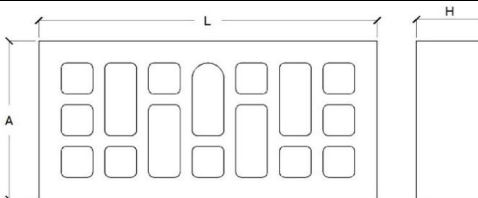


U UNITS CATEGORY I FOR UNPROTECTED MASONRY
TECHNICAL FORM N°: 0830139

MANUFACTURER - MADE IN:	CERÁMICA MALPESA S.A. - VILLANUEVA DE LA REINA (JAÉN), SPAIN
PRODUCT DESCRIPTION:	U CLAY UNIT (G2) CLINKER R-40 OF 235 x 113 x 36-49-73
DESIGNATION CODE:	CL - U - I - 40 - 1340(D1) - 235x113x36-49-73 - C - L0,350 - T2 - R2 - E(3, 2) - N2230(D1) - G2 - FR40 - B0,15 - W≤6 - I≤0,6 - M≤0,5
BRAND NAME:	MINK FLASHED KLINKER, ROSE KLINKER, DUN KLINKER, TERRACOTTA KLINKER
SURFACE COLOURS:	Applicable to models: MINK FLASHED KLINKER
MASS COLOURS:	ROSEWOOD AND DARK TERRACOTTA RED



PIECE SKETCH



TECHNICAL CHARACTERISTICS

Characteristic		Test method	Manufacturer ensured values	AENOR required values	
Appearance and structure	flakings and delaminations	Visual over 6 pieces	No pieces with flakings/delaminations		
	cracked units		≤ 1 cracked piece	≤ 1 cracked piece	
	chip units		≤ 1 piece with m.i.d between 7/15 mm	≤ 1 piece with m.i.d between 7/15 mm	
Dimensional tolerances	Mean value	UNE 67039 EX	No pieces with chips upper to 15 mm		
			length (l)	± 4	± 4
	width (w)		± 3	± 3	
	height (h)		± 2, ± 2, ± 2	± 2, ± 2, ± 2	
	Range		length (l)	± 5	± 5
			width (w)	± 3	± 3
height (h)	± 2, ± 2, ± 3	± 2, ± 2, ± 3			
Wall thickness (mm)	unprotected face shells	EN 772-16	≥ 15,0	≥ 15,0	
	protected face shells		≥ 10,0	≥ 10,0	
	webs		≥ 5,0	≥ 5,0	
Plane parallelism of bed faces (mm)			N/A		
Flatness of bed faces (mm)	Diagonals	EN 772-20	l > 300 mm	N/A	
			300 ≥ l ≥ 250 mm	≤ 3	
			l ≤ 250 mm	≤ 2	
Percentage of voids (%)	Stated value (%)	EN 772-3	40	≤ 45	
	Tolerance (%)		Min: 36 - Máx: 44		
Volume of the largest void (% of (l x w x h))		EN 772-9	≤ 12,5	≤ 12,5	
Combined thickness of webs and shells (%)		EN 772-16	≥ 20	≥ 20	
Water absorption (%)		EN 772-21	≤ 6	≤ 6	
Water repellent treatment			NO		
Initial rate of water absorption (Kg/(m ² x min))		EN 772-11	≤ 0,6		
Damp proof courses (%)		EN 772-7	N/A		
Characteristic normalized compressive strength (N/mm ²)		EN 772-1	≥ 40,0	≥ 10,0	
Density	Net dry (Kg/m ³)		2.230		
	Gross dry (Kg/m ³)		1.340		
	Tolerance (%)		± 10	± 10	
Weight (g)	Reduction for density: NO	Annex D.2 RP 34.01	Minimum value ensured: 1.035 - 1.450 - 2.095	Minimum value required: 1.035 - 1.405 - 2.095	
Efflorescences		UNE 136029	No efflorescent	Slightly efflorescent	
Durability (Freeze/thaw)		UNE 67028 EX	N/A		
		EN 722-22	F2		
Thermal properties (Method)			Constructive Elemens Catalog Value		
λpiece (W/m x k)		Catalog CTE	0,35		
Rwall (m ² x k/w)			0,180 - 0,180 - 0,210		
Water vapour permeability - μ		Annex A EN 1745	50/100		
Content of active soluble salts		EN 772-5	S2		
Moisture movement (mm/m)		UNE 67036	≤ 0,50		
Fire reaction performance (% organic materials < 1 %)		EN 13501-1	CLASS A1		
Bond strength (N/mm ²)		Annex C EN 998-2	≥ 0,15		
SURFACE COLOURS:		Annex D.3 RP 34.01	Applicable to models: MINK FLASHED KLINKER		
Accessory units			YES		

Stamp and signature:

Details from the construction where it's placed the material named in this technical form: (For the final qualification, this technical form should be stamped and signed by the manufacturer)

Remarks:
Combined thickness declared corresponding at heat flow direction in the masonry
Different surface finishes are made (smooth, dragfaced, rough, sandfaced, etc). They may have a notch in one or both headers and/or other types of perforations. Only plaquettes are certified as special shaped bricks.