



AENOR Product Certificate



034/002005

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 0830150 (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 034/002005, dated 2022-02-23

First issued on 2022-02-23

Modified on 2022-07-05

Validity date 2027-07-05

Rafael GARCÍA MEIRO
Chief Executive Officer



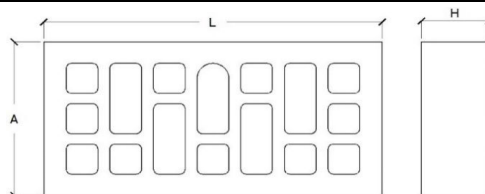
U UNITS CATEGORY I FOR UNPROTECTED MASONRY

TECHNICAL FORM N°: 0830150

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 - FR41 - B0,15 - W≤6 - L≤0,6 - M≤0,3
BRAND NAME:	DEEP RED FLASHED KLINKER, GRANADA GLAZED KLINKER, NEVADA + KLINKER, RED ENGLISH KLINKER, GRANADA KLINKER, NUTBROWN KLINKER, BROWN KLINKER, NORDIC BROWN KLINKER
SURFACE COLOURS:	Applicable to models: DEEP RED FLASHED KLINKER, GRANADA GLAZED KLINKER, NEVADA + KLINKER
MASS COLOURS:	Red, Deep Red and Brown



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		UNE 67039 EX	≤ 1 piece with m.i.d between 7/15 mm	≤ 1 piece with m.i.d between 7/15 mm	
			No pieces with chips upper to 15 mm		
Dimensional tolerances	Mean value	EN 772-16	T2	± 4	
				± 3	
	Range			± 2, ± 2, ± 2	± 2, ± 2, ± 2
				± 5	± 5
Wall thickness (mm)	unprotected face shells		≥ 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	41	≤ 45	
	Tolerance (%)		Min: 37 - Máx: 45		
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 Orientation loading: Bed	≥ 10,0	
Density	Net dry (Kg/m ³)	EN 772-13	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 - 1.405 - 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 Elements 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	≤ 0,30		
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 KLINKER ROJO GRANA FLASEADO, KLINKER GRANADA ESMALTADO, KLINKER NEVADA +		
Accessory units			YES		
Remarks:					

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)

Combined thickness declared corresponding at heat flow direction in the masonry
Different surface finishes are made (smooth, cork, 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.