

# AENOR



## 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)

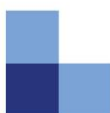
Production site AUTOVIA A-4, KM 303 23730 VILLANUEVA DE LA REINA (Jaen - España)

Certification scheme This Certificate has been granted in accordance with the stipulations of AENOR Specific Rules RP 034.01

This certificate supersedes 034/002005, dated 2022-07-05

First issued on 2022-02-23  
Modified on 2024-07-05  
Validity 2029-07-05

Rafael GARCÍA MEIRO  
CEO



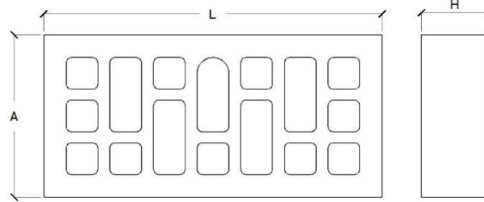
**AENOR CONFÍA S.A.U.**  
Génova, 6. 28004 Madrid. España  
Tel. 91 432 60 00.- [www.aenor.com](http://www.aenor.com)

**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, BAILÉN GLAZED KLINKER, NEVADA + KLINKER, RED ENGLISH KLINKER, BAILÉN KLINKER, LEATHER KLINKER, BROWN KLINKER, NORDIC BROWN KLINKER
SURFACE COLOURS:	Applicable to models: DEEP RED FLASHED KLINKER, BAILÉN 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 cracked units	Visual over 6 pieces	No pieces with flakings/delaminations		
	chip units	UNE 67039 EX	≤ 1 cracked piece	≤ 1 cracked piece	
Dimensional tolerances	Mean value	EN 772-16	No pieces with chips upper to 15 mm		
			Range	± 4	± 4
				± 3	± 3
	± 2, ± 2, ± 2			± 2, ± 2, ± 2	
	Range		± 5	± 5	
			± 3	± 3	
± 2, ± 2, ± 3		± 2, ± 2, ± 3			
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	N/A	N/A	
			l > 300 mm	≤ 3	
			300 ≥ 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 <sup>2</sup> x min))		EN 772-11	≤ 0,6		
Damp proof courses (%)		EN 772-7	N/A		
Characteristic normalized compressive strength (N/mm <sup>2</sup> )		EN 772-1	≥ 40,0	≥ 10,0	
Density	Net dry (Kg/m <sup>3</sup> )		2.230		
	Gross dry (Kg/m <sup>3</sup> )		1.340		
	Tolerance (%)		± 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		
λ <sub>piece</sub> (W/m x k)		Catalog CTE	0,35		
R <sub>wall</sub> (m <sup>2</sup> 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 <sup>2</sup> )		Annex C EN 998-2	≥ 0,15		
SURFACE COLOURS:		Annex D.3 RP 34.01	Applicable to models: DEEP RED FLASHED KLINKER, BAILÉN GLAZED KLINKER, NEVADA + KLINKER		
Accessory units			YES		
Remarks:					

Stamp and signature:

(For the final qualification, this technical form should be stamped and signed by the manufacturer)

Details from the construction where it's placed the material named in this technical form:

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.