

GRES ARAGÓN	CERTIFICATE OF PRODUCT BY MANUFACTURER	Come into effect from : 17/02/2017
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Gres de Aragón S.A.

Declares that:

Product **30x30 Duero Aranda** has been tested following the standards indicated in the table below, and the results have been as follows:

Signed by: 

José Ramón Hernando Encuentra
Industrial Manager Gres de Aragón S.A.



Name and address of laboratories that has been tested.

ITC (Instituto de Tecnología Cerámica) Campus Universitario Riu Sec 12006 CASTELLON (ESPAÑA)

ICT (Instituto Científico y Tecnológico) Universidad de Navarra Ctra. Del Sadar, s/n 31080 PAMPLONA (NAVARRA) (ESPAÑA)

Laboratorio Cerámico "Sebastián Carpi" Avenida del Mar, nº46 12003 CASTELLÓN (ESPAÑA)

TEST	Standard test	Standard Required values EN 14411	Gres de Aragon Result
Dimension tolerance 30x30 Porcelain	UNE-EN-ISO 10545-2	±1% Max. ±2 mm	293 ± 2 mm
Barefoot slip resistance Duero Aranda-Urbión	DIN 51097	Not required	C
Modulus of rupture Porcelain 30x30	UNE-EN-ISO 10545-4	> =28 N/mm ²	> =40 N/mm ²
Breaking strength Porcelain 30x30	UNE-EN-ISO 10545-4	> = 1300 N	> =2000 N
Resistance to surface abrasion Duero Aranda	UNE-EN-ISO 10545-7	Class to declare	PEI V
Linear thermal expansion Porcelain	UNE-EN-ISO 10545-8	Not required	5,6 x 10 ⁻⁶
Resistance to thermal shock Porcelain	UNE-EN-ISO 10545-9	Required	Resists
Moisture expansion Porcelain	UNE-EN-ISO 10545-10	Not required	< 0,1 mm/m

Crazing resistance Serie Duero	UNE-EN-ISO 10545-11	Resists	Resists
Frost resistance Porcelain	UNE-EN-ISO 10545-12	Required	Resists
Resistance to chemicals Serie Duero	UNE-EN-ISO 10545-13	Minimum GB	GHA/GLA
Resistance to stains Serie Duero	UNE-EN-ISO 10545-14	Minimum Class 3	Class 5
Slip resistance Pendulum Duero Aranda-Urbión	UNE ENV:12633:2003	Depends on location	Class 3
Slip resistance with footwear Duero Aranda-Urbión	DIN 51130	Not required	R10
Water absorption Porcelain	UNE-EN-ISO 10545-3	E <= 0,5%	<= 0,5
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