



bricks | european standard

This page explains the data shown in the brick information tables.

The harmonisation of the European market for building materials and the requirements of the Construction Products Directive affect all UK specifiers, users and manufacturers alike. The national product standard for clay facing bricks, BS 3921, will soon be replaced by the European Standard BS EN 771-1. For each brick featured within the brochure, physical properties to the two standards have been quoted for use during the statutory period of co-existence when both standards are valid.

However due to the differing test methods employed, it is imperative that only BS3921 product data is used in conjunction with BS5628 Structural Codes. Do not use BS EN 771-1 data for this purpose until the Structural Codes are suitably amended. Interim design data is available on the BDA website; www.brick.org.uk.

1 Product

Name of product.

2 Durability Designation

The BS3921 durability designations, e.g. FL, highlight the frost durability and soluble salt content together. However they are now separately classified in BS EN 771-1.

There are three categories for durability:

- F0 – suitable for passive exposure
- F1 – suitable for moderate exposure
- F2 – suitable for severe exposure

3 Active Soluble Salts

This compares with the BS3921 categories of L and N which were linked to durability.

There are three categories for soluble salts:

- S0 - suitable for completely dry applications
- S1 - suitable for normal exposure applications
- S2 - suitable for prolonged saturation applications

4 Compressive Strength

A new test method has been developed involving surface grinding and dry crushing of the brick. Most brick types will show an apparent increase in compressive strength with this method, therefore only the

appropriate product data should be used for structural calculations.

5 Water Absorption

A new test method has been developed involving a 24 hour soak in water. Some brick types may show an apparent change in water absorption with this new test method. The BS3921 five hour boil test is still used for Engineering and DPC (damp proof course) bricks.

1	2	3	4	5	6	7	8	9	10	11
	Durability Designation	Active Soluble Salts	Compressive Strength (≥ N/mm ²)	Water Absorption (%)	Size Tolerances Mean & Range	Configuration and % Voids	Type & Texture	Special Shaped Bricks	Factory and Location	Product Code
	BS3921 BS EN771-1	BS EN771-1	BS3921 BS EN771-1	BS3921 BS EN771-1	BS EN771-1					
Tonbridge Handmade Grey Brown	FL F2	S2	21 30	20 17	T1 R1	Single Frog 11-16	Handmade Sandcreased	all shapes available	Ashdown, East Sussex	4041
Tonbridge Handmade Heather Grey	FL F2	S2	21 30	20 17	T1 R1	Single Frog 11-16	Handmade Sandcreased	all shapes available	Ashdown, East Sussex	4042
West Hoathly Dark Multi Stock	FL F2	S2	15 15	18 16	T2 R1	Single Frog 8-13	Stock Sandfaced	all shapes available	West Hoathly, East Sussex	0735
Crowborough Multicoloured Stock	FL F2	S2	21 30	20 17	T1 R1	Single Frog 11-16	Stock Sandfaced	all shapes available	Ashdown, East Sussex	4002
Old Trinity Stock	FL F2	S2	14 30	20 17	T1 R1	Single Frog 11-16	Stock Sandfaced	all shapes available	Ashdown, East Sussex	4031
Aztec Multi Rustic	FL F2	S2	30 40	12 12	T2 R1	Vertically Perforated 15-20	Wirecut Dragfaced	all shapes available	Roughdales, St Helens	0401
Red Brindle	FL F2	S2	35 55	12 12	T2 R1	Vertically Perforated 20-25	Wirecut Dragfaced	limited shapes available	Aldridge, Walsall	0262
Bridgwater Red	FL F2	S2	35 60	9 9	T2 R1	Vertically Perforated 20-25	Wirecut Rolled	all shapes available	Pinhoe, Exeter	3231

During the period of co-existence of the old and new standards we will state the British Standard conformity information together with that of the European Standard requirements. However, due to the differing test methods employed **users should under no circumstances mix the resultant information.**

6 Size Tolerance

The three brick dimensions of length, width and height must be accurately measured along their mid point with callipers to establish compliance with the new standard.

Mean Value

10 individual bricks are measured and the mean value for the size is calculated. The mean categories (T) under BS EN 771-1 for bricks with a nominal size of 215mm in length are:

T1 (+/- 6mm) if the mean of the 10 bricks falls between a minimum of 209mm and a maximum of 221mm.

T2 (+/- 4mm) if the mean of the 10 bricks falls between a minimum of 211mm and a maximum of 219mm.

Tm - Manufacturer's declaration (may be wider or narrower than above).

A British Standard Publicly Available Specification, PAS70, has been published to provide a practical method of on-site size tolerance determination and also a site panel procedure for aesthetic acceptance purposes.

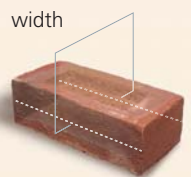
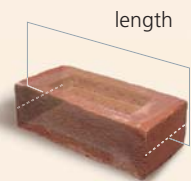
Range Value (optional measurement)

10 individual bricks are measured. The range categories (R) under BS EN 771-1 for bricks with a nominal size of 215mm in length are:

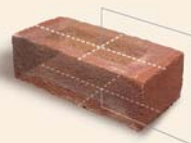
R1 if the difference between the smallest and largest brick in the batch of 10 is no more than 9mm.

R2 if the difference between the smallest and largest brick in the batch of 10 is no more than 4mm.

Rm - Manufacturer's declaration (may be wider or narrower than above).



height (mean of both directions)



7 Configuration & %Voids

This describes the direction of any perforations or type of frog and states these as a percentage of the total brick volume.

8 Type and Texture

This defines the type of brick e.g. stock and indicates the texture of the face e.g. smooth, sanded.

9 Special Shaped Bricks

This shows the range of special shaped bricks available. Your local Ibstock Sales Office will be able to advise further.

10 Factory and Location

The name of the factory where the product is made and the nearest town / city or county.

11 Product Code

The unique Ibstock code to clearly identify the product.

For further information contact the **Technical Services Helpline** on **0870 903 4017**