

INDUSTRY STANDARD

**Furniture - Children's Domestic Furniture -  
Tables and desks – Requirements for  
strength, stability and durability**

For BPS Technical Committee Use Only



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**Contents**

Foreword	4
1. Scope	5
2. Normative references	6
3. Requirements	7
4. Tests	8
5. Test report	10
Annex A – Additional Test Methods	11

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**FOREWORD**

This Standard was created due to the absence of any British or European Standards applicable to children's domestic furniture. The standard has been based on the requirements for adult furniture, but adapted to suit the needs of children.

The Standard has been produced and endorsed by the Furniture Retail Quality Group whose members consist of:

ASDA  
BRITISH HOME STORES  
EARLY LEARNING CENTRE  
FIRA INTERNATIONAL LIMITED  
HABITAT  
HOME RETAIL GROUP  
INSTORE RETAIL  
JOHN LEWIS PARTNERSHIP  
MARKS & SPENCER  
MATALAN  
MAMAS & PAPAS  
MORRISONS  
MOTHERCARE  
NEXT  
TESCO  
TOYS R US  
WILKINSON  
WOOLWORTHS

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## 1. SCOPE

This Standard specifies safety, stability, strength and durability requirements for children's tables for domestic indoor, outdoor and camping use.

The standard is applicable to all types of domestic tables and desks for indoor, outdoor and camping use by children from 3 years old to 12 years old.

This Standard forms a suite of standards covering children's furniture:

FIRA/FRQG C001: 2008	Furniture - Children's domestic furniture – General safety requirements
FIRA/FRQG C002: 2008	Furniture - Children's domestic furniture – Seating – Requirements for strength, stability and durability
FIRA/FRQG C003: 2008	Furniture - Children's domestic furniture – Tables & desks – Requirements for strength, stability and durability
FIRA/FRQG C004	Furniture - Children's domestic furniture – Storage furniture – Requirements for strength, stability and durability

The standard does not cover educational furniture as British and European Standards currently exist.

The standard does not cover items with play features which will be classed as Toys and covered by National Legislation, however elements of this standard may be used to assess the suitability of a product containing both furniture and play aspects.

For furniture featuring functions not covered within this standard (e.g. electrical features, lighting etc), these functions should be assessed in accordance with the most appropriate Regulations or Standards.

The standard does not cover the requirements for fire retardency of upholstered product as National Legislation currently exists.

Note: Where furniture is designed for children under 3 years of age this standard may be used as a guide. However, due to the additional risks associated with this age group, reference should also be made other applicable standards such as the suite of toy standards (EN 71) and relevant childcare standards.

Annex A (Normative) contains additional test methods for tables featuring drawers in their construction.

## 2. NORMATIVE REFERENCES

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

FIRA/FRQG C001	<i>Furniture - Children's domestic furniture – General safety requirements</i>
FIRA/FRQG C002	<i>Furniture - Children's domestic furniture – Seating – Requirements for strength, stability and durability</i>
FIRA/FRQG C004	<i>Furniture - Children's domestic furniture – Storage furniture – Requirements for strength, stability and durability</i>
BS EN 1730	<i>Domestic furniture – Tables – Test methods for the determination of strength, durability and stability</i>
BS EN 581-3	<i>Outdoor furniture – Seating and tables for camping, domestic and contract use – Mechanical safety requirements and test methods for tables</i>

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### 3. REQUIREMENTS

#### 3.1 General

Tables which include other features, such as seating and storage (e.g. extension elements such as drawers and keyboard trays) shall also meet the appropriate requirements from FIRA/FRQG C002: 2008 and FIRA/FRQG C004: 2008.

#### 3.2 Safety requirements

All tables and desks shall satisfy the applicable general safety requirements as defined in FIRA/FRQG C001: 2008.

#### 3.3 Performance requirements

After the product has been tested in accordance with clause 4, at the selected test level (see 4.5), none of the following shall have occurred:

- a) The table shall not overturn when tested in accordance with the stability requirements of BS EN 1730 Clause 6.7, Annex A and BS EN 581-3 Clause 6.2.2;
- b) any fracture of any member, joint or component;
- c) any loosening, shown to be permanent of joints intended to be rigid;
- d) any deformation or cracks that adversely affect the performance of any part of the sample;
- e) any impairment of the operation of any mechanical part;
- f) the table top, or any part thereof (including extension pieces) shall not detach during test programme;
- g) In the horizontal static load test total movement of the top of the table when the load is applied first at one side and then at the opposite, of more than 2 mm for every 25N of horizontal force applied.

#### 4. TESTS

##### 4.1 Moisture content of timber components

Before testing, parts made of timber products shall be checked with an electric moisture meter to ensure that the moisture content is between 8 % and 12 %. If the moisture content is outside this range the sample shall be placed in a suitable environment until the moisture content is between 8 % and 12 %.

##### 4.2 Inspection before testing

Immediately before testing, the sample shall be thoroughly inspected. Any defects in the members, joints or attachments shall be noted so that they are not attributed to the tests. A complete dimensional check shall be carried out on all articles likely to suffer permanent deformation as a result of testing. The dimensions shall be recorded.

Any minor defects detected as a result of this inspection shall be recorded in the test report. If the sample is found to have a major defect as described in 3.3, the sample shall be rejected.

##### 4.3 Procedure

All the tests shall be carried out on the same sample. If any failure occurs during the sequence of tests, all the tests shall be repeated on a completely new test sample.

The sample shall be tested in accordance with BS EN 1730:2001. All tests shall be carried out at the same test level (see Table 1), and in the sequence given in Table 1.

##### 4.4 Test levels

###### 4.4.1 Tables for use by children from 3 years – 6 years old

Tables for use by children from 3 years to 6 years old shall be tested in accordance with test level 1 as shown in Table 1.

###### 4.4.2 Tables for use by children from 6 years – 12 years old

Tables for use by children from 6 years to 12 years old shall be tested in accordance with test level 2 as shown in Table 1.

###### 4.4.3 Tables for use by children from 3 years – 12 years old

Tables for use by children from 3 years to 12 years old shall be tested in accordance with test level 2 as shown in Table 1.

##### 4.5 Inspection after testing

Immediately after completion of the tests, the sample shall again be thoroughly inspected. Any apparent defects as given in 3.3 shall be noted, together with any other changes that have taken place since the initial inspection.



Table 1 - Tests

Test	Test Description	Loading	Test Level	
			1	2
BS EN 1730, 6.7	Stability under vertical load	Test force, N: V <sub>1</sub> V <sub>2</sub>	150 300	200 400
Annex A	Stability with drawers open	Test force N	200	200
BS EN 581-3, 6.2.2	Stability for tables supporting parasols	Test force N	30	30
BS EN 1730, 6.2	Horizontal static load	Test force, N: Number of cycles: 10	300	400
BS EN 1730, 6.3	Vertical static load	Test force, N: a) main working surface b) ancillary working surface Number of cycles 10	500 200	750 200
BS EN 1730, 6.4	Horizontal fatigue	Test force, N: Number of cycles:	200 5,000	300 10,000
BS EN 1730, 6.6	Vertical impact	Drop height, mm: Number of cycles 10	100	100
BS EN 1730, 6.7	Drop test	Nominal drop height, mm:	100	100

5. TEST REPORT

The test report shall contain at least the following:

- a) the number and date of this Standard, i.e. FIRA/FRQG C003: 2008;
- b) details of the article tested, e.g. specification and photographs;
- c) details of any defects observed before the tests (see 4.2);
- d) details of any defects and damage observed after the tests (see 3.3);
- e) the test result;
- f) details of any deviation from the test procedures;
- g) name and address of test facility;
- h) date of testing.

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ANNEX A (NORMATIVE)

ADDITIONAL TEST METHODS

**A.1 Stability for tables with drawers**

Load each drawers with 0,5 kg/dm<sup>3</sup>.

For tables with drawers not fitted with interlocks open all drawers in the least favourable combination. For tables with drawers fitted with interlocks open the two drawers with the largest loads without overriding the interlock. If an interlock device prevents any two of the drawers from being opened simultaneously, open the drawers with the largest load.

The table shall not overturn when the vertical force specified in Table 1 is applied to the centre of the front of the table, through a loading pad (EN 1730, 5.6), 50 mm from the edge.

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