

## FLAMMABILITY OF BEDS, SOFA-BEDS AND HEADBOARDS

### A SUMMARY OF THE LEGAL FRAMEWORK

#### BEDS

The distinction between “domestic” and “contract” is an important one in the context of this subject. “Domestic” sector means not only private use in the home, but also holiday homes and residential furnished accommodation let in the course of business. “Contract” sector means uses other than “domestic”.

#### (1) *Domestic sector*

There are two sets of legal requirements that have to be observed. One set of requirements arises from *product-specific* Regulations and the other arises from *general* safety Regulations (applicable to domestic products generally).

##### (i) Product-specific Regulations

- Since 1 March 1989, there has been – and continues to be – a requirement for *fillings* (both foam and other fillings) in *new* beds to resist ignition in the way and to the degree specified in The Furniture and Furnishings (Fire) (Safety) Regulations 1988.

Since 1 March 1993, that same legal requirement, in relation to *fillings*, has also applied to *second-hand* beds supplied to consumers in the course of business.

- In order for mattresses and bed-bases to be compliant with the 1988 Regulations, the following requirements must be met:
  - (i) Where the product contains polyurethane foam – whether as the only filling or as part of a composite fillings assembly – the foam must be “combustion-modified”. That means the foam must satisfy the test requirements specified in schedule 1 part 1 of the Regulations (ignition source 5 of BS 5852 : Part 2 using the specified cover).
  - (ii) Where the product contains latex foam, the foam must satisfy the prescribed test requirement given in schedule 1 part 3 (ignition source 2 of BS 5852 : Part 2 using the specified cover).
  - (iii) Where the product consists of a single filling other than foam, that single non-foam filling must satisfy the prescribed test requirement given in schedule 2 Part 1 (ignition source 2 of BS 5852 : Part 2 using the specified cover).

- (iv) Where the product consists of more than one filling, ie there is a composite fillings assembly, there are two alternative routes to compliance with the Regulations, ie:
  - (a) Each separate filling to be tested individually
  - OR
  - (b) Application of the prescribed test for *composite* fillings: schedule 2 part 4 (ignition source 2 of BS 5852 : Part 2 using BS 6807 as the method of test).

With reference to (b) above, it is stressed that, *where foam is part of the composite, the foam must be “combustion-modified”*.

- The 1988 Regulations did not impose – nor has any subsequent legislation introduced – any additional requirements relative to mattresses and bed-bases. They did not, for example, require labelling of beds, nor did they require ticking to be independently resistant to ignition.

(ii) General safety Regulations

- Under The General Product Safety Regulations 2005, it is an offence to supply products that are unsafe: “no producer shall place a product on the market unless the product is a safe product”. This is known as the “general safety requirement”.

Although it is by no means an *absolute* determinant of safety (nor would it necessarily afford an *absolute* defence in the event of a prosecution for a breach of the Regulations) compliance with a relevant British Standard encompassing product safety is the expected and commonsense way for a supplier of any given consumer product to seek to fulfil his obligations under the Regulations. It is what Trading Standards Officers look for.

So, against that background, what is the recognised British Standard for the flammability of beds – and how is compliance with it achieved?

- The recognised British Standard is BS 7177, ie the “Specification for resistance to ignition of mattresses, divans and bed bases”.

The following points apply:-

- (a) The tests determine the resistance to ignition of the products in their *finished form*. Tests are conducted on both the mattress *and* the bed base, both being required to comply.
- (b) The mattress and the base both require to be *labelled*, to show compliance with BS 7177 – otherwise, ie without being so labelled, the products cannot be deemed to comply with that standard even if the products satisfy the standard’s requirements in all other respects.
- (c) Only the “domestic use (low hazard)” provisions of BS 7177 are applicable; conformity with that entails, amongst other things, products being tested to demonstrate compliance with the relevant British Standard methods of test, ie:

Smouldering cigarette:      BS EN 597-1  
Match flame equivalent:      BS EN 597-2

- (d) It is essential to note that compliance is not achieved *solely* on the basis on securing positive results from testing to BS EN 597-1 and BS EN 597-2: all the other requirements of BS 7177 that are relevant to “domestic use (low hazard)” have also to be satisfied.

*An absolutely crucial example of those other requirements is the necessity for the fillings to comply with The Furniture and Furnishings (Fire) (Safety) Regulations 1988. This requirement is explicitly written into BS 7177 – so unless the fillings are “legal”, any claim to compliance with BS 7177 is automatically rendered invalid. That said, compliance with BS7177 does not entail a requirement to re-test fillings that are compliant with The Furniture and Furnishings (Fire) (Safety) Regulations 1988.*

Compliance with BS 7177 also entails the need to adhere to its provisions on sampling and frequency of testing – and the need (in the circumstances specified in the standard) to test at ignition source O/NS (smouldering cigarette/non-smoulderable bed covers) of BS 6807.

- Although the General Product Safety Regulations and BS 7177 address the safety of the end product, ie in its finished form, suppliers of materials do not entirely escape the risk of liability. For example, ticking suppliers – who might have considered themselves outside the scope of both sets of Regulations (ie product-specific and general) – have a vulnerability under the General Product Safety Regulations that might have escaped their attention. If a ticking supplier were to provide his customer – the bed manufacturer – with ticking which, when used in conjunction with other materials, resulted in the failure of the finished product to comply with BS 7177, it is entirely conceivable that the enforcement authorities would bring legal proceedings against the ticking supplier if they took the view that, in the particular circumstances prevailing, the ticking had been contributory to the test failure and the ticking supplier had failed to demonstrate due diligence in preventing such a failure. It is even conceivable that legal proceedings would be taken against the ticking supplier alone, ie without such proceedings also being taken against his bed manufacturer customer.

## (2) **Contract sector**

- Arising as they do from consumer law (The Consumer Protection Act 1987), The Furniture and Furnishings (Fire) (Safety) Regulations 1988 do not apply to the contract sector. Whether (and if so to what extent) The General Product Safety Regulations 2005 (arising from the UK’s implementation of a European Directive) apply to the contract sector is a matter perhaps best left to the legal profession. In the context of flammability, these things are in any case academic: commonsense and realism tell us that beds supplied for contract sector application *must*, for practical reasons, only contain fillings that are adequately resistant to ignition and *must* in their finished form, resist ignition to a degree *greater than* that which applies in the domestic situation (where generally the risk is lower).
- That principle is enshrined in BS 7177, included in which is a table giving recommendations as to what “hazard level” (medium or high or very high) is applicable to a diverse list of end-use environments – the greater the perceived risk, the higher the hazard level and, in consequence, the more stringent the test requirement in terms of the ignition sources that apply.

It is of crucial importance to note that, as a direct result of an amendment to BS 7177 in 2003, beds supplied for contract use cannot be deemed to comply with BS 7177 if they contain fillings which fail to meet flammability requirements contained in an annexe to that Standard. As that annexe imports *exactly the same requirements as apply to the domestic sector*, it follows that it is not possible to comply with BS 7177 at the contract levels (medium, high or very high) using fillings that fail to comply with The Furniture and Furnishings (Fire) (Safety) Regulations 1988.

- There is no *requirement* for BS 7177 (or the end-use table contained therein) to be adopted for contract sector application. It is there to provide guidance and amounts to a recommendation. At the end of the day, it is for specifiers to specify and, in so doing, they might need to take into account a number of factors (ie the stated requirements of their local fire safety officer) that lead them in directions other than BS 7177.

## **PRODUCTS ANCILLARY TO BEDS**

### **Sofa-beds**

In the case of sofa-beds which have a separate mattress (ie stored under the surface), the product is subject to two parallel legal requirements, ie: -

- That which applies to the product in its seating form, ie, as an item of upholstered furniture.
- That which applies to the product in its sleeping form, ie, as a mattress.

That means that it is not sufficient for the sofa-bed merely to comply with the full panoply of requirements built into the 1988 Regulations (as amended), as they apply to upholstered furniture. It is also necessary for the mattress to comply with the 1988 Regulations in terms of its filling materials – and for the mattress in its finished form also to be adequately resistant to ignition (compliance with BS 7177 at the “domestic use (low hazard)” level would be appropriate).

### **Headboards**

The requirements for upholstered headboards are covered in some detail in the enclosed extract from the DTI guide to the 1988 Regulations (see Appendix A hereto). It is, however, worth taking the opportunity to develop one particular sentence contained elsewhere in that guide: “you should note that the fabric on the back of a headboard is a visible fabric for the purposes of the Regulations”. We have sought to develop this point in Appendix B hereto.

**HEADBOARDS FOR BEDS**

<b>TEST DESCRIPTION</b>	<b>TEST REQUIREMENT</b>
Cigarette resistance of visible parts of upholstery	The cigarette test of BS 5852: Part 1 as modified by Schedule 4, Part I of the Regulations. The test is applied to the actual composite used.
<b>Foam fillings</b>	
Polyurethane foam in slab or cushion form	Ignitions Source 5 of BS 5852: Part 2 using cover specified in Schedule 1, Part I of the Regulations.
Polyurethane foam in crumb form	Must be derived from above and meet Ignition Source 2 of BS 5852: Part 2 using cover specified in Schedule 1, Part I of the Regulations.
Latex rubber foam	Ignition Source 2 of BS 5852: Part 2 using cover specified in Schedule 1, Part I of the Regulations.
<b>Non-foam fillings</b>	
Single fillings	Ignition Source 2 of BS 5852: Part 2 using cover specified in Schedule 1, Part I of the Regulations.
Composite fillings	Ignition Source 2 of BS 5852: Part 2 using cover specified in Schedule 1, Part I of the Regulations.
<b>Match resistance test for all visible covers</b> except stretch covers, scatter cushion covers and limited range of cover fabrics when used over specified interliners.	The match test of BS 5852: Part 1, over foam specified in Schedule 5, Part I of the Regulations.

Source: DTI – A Guide to the Furniture and Furnishings (Fire) (Safety) Regulations

**FLAMMABILITY OF COVERING FABRICS ON HEADBOARDS**

It has been apparent over the years that some headboard manufacturers have failed to demonstrate an awareness that flammability requirements in respect of the covering materials do not just apply to the front of the headboard – they also apply to the *reverse* side of the headboard.

It would seem that some headboard manufacturers are either unaware of that fact – or are labouring under a misapprehension that the legal requirement in respect of covering materials on the reverse side of the headboard is less stringent than that in respect of the front.

Both of those “understandings” are utterly false. The legal requirements in respect of the flammability of covering materials on headboards, as laid down in the 1988 Regulations, apply both to the front *and* the reverse side – and are *exactly the same for both sides*.

If there has been some misunderstanding on this issue, it is possible to trace one potential source for that. We have in mind that it was, at one stage, thought possible that the Government would see fit to introduce (through the 1989 amendments to the 1988 Regulations) an expansion to the list of so-called “invisible fabrics” so as to include the scrim material used on the reverse side of headboards. Had the Government so decided, such a material used in such a way would indeed have been subject to a less stringent form of match testing, ie, over combustion-modified foam, without a water wash procedure – but the Government did *not* so decide.

We would also like to dispel any confusion which might have arisen as to the situation which applies in the case of “matching” headboards, ie, where the fabric used to cover the headboard is the same as the fabric used as ticking for the bed. Do not make the mistake of concluding that, just because beds are specifically exempt from any legal requirement whereby the ticking has to be independently resistant to ignition, that same exemption applies when identical fabric is used as headboard covering material. No such exemption applies – headboards are classified as “upholstered furniture” in the context of the 1988 Regulations and it therefore follows that covering fabrics on headboards must, by law, be independently resistant to ignition in the way and to the degree specified. To the extent that that entails the application of a water wash procedure, the fabrics in question must be permanently treated; if interliners are being used, then care has to be taken to ensure that the fibre content of the fabric is as described in the Regulations. More specifically, where a matching headboard fabric is needed – and where the fabric composition is at least 75% natural fibre, a non-FR or non-permanent FR fabric can be used over a schedule 3 interliner.