

# KOTHEA

## BS7176 BS5852 Crib Test

## Designer's Worksheet

**BS7176** is, in summary, a watersoak plus the 'normal crib 5' plus the cigarette test plus the match test. This worksheet will try to put this in clear, non-technical terms so an Interior Designer or Architect knows what to do with the fabric without needing to become an expert on the intricacies of fire testing and fire treatment. Now read on for the detail.

For **contract** upholstery fabric in the UK your fabric needs to be treated to pass BS 5852 Part 2: 1990: Source 5 (Crib 5). So when you are getting a fabric treated you should **ask for it to be treated to that standard**. An interior designer normally only has to do that.

I am not a legal expert but my understanding is that you need to keep a record that your design has been implemented properly. Thus you will need the appropriate certification. Just having your fabric **treated** is not enough to cover yourself even if a certificate (of sorts) is issued with the treatment. It **will** need to be tested as well if you want to do things by the book.

Any treatment must be undertaken by a UKAS accredited company. That means they will do it properly. There are a variety of ways of treating fabrics to meet the standard. You don't need to know them all, that is the job of the treatment house. Just tell them what standard it needs to achieve AND that you will be getting it tested independently afterwards (that encourages them to do it properly). For safety also say that the fabric will be subject to a watersoak as part of the test.

The reason for stating that watersoaking will be used is that some older treatment methods, whilst 'legal' within the British Standard, can subsequently fail the test because of what happens during the watersoak. The FR treatments can contain phosphorous based chemicals and these chemicals can wash out in water. The problem with this is that the watersoak involves water! And out go the fire retardant chemicals and the treatment has been washed away. The test may well be failed unless the fabric is inherently fire retardant.

KOTHEA Limited  
T: 0870 285 4768  
F: 0870 284 3153  
E: [info@kothea.com](mailto:info@kothea.com)  
W: [www.kothea.com](http://www.kothea.com)

# KOTHEA

Some treatment houses do not have some of the more expensive machinery required to undertake some of the treatments. Many just immerse in a fire retardant bath of chemicals. This should sound alarm bells as this can be one of the ways the older treatments happens. Typically your fabric should be coated on the reverse side during the treatment.

As part of the treatment some treatment companies will also carry out an **indicative test**. You should get a certificate to confirm this after treatment. This means that essentially **your fabric should pass the crib test**. But it hasn't actually passed it. The crib test itself has not been carried out.

You probably need to check with your client if they are happy with this indicative test or if they want to pay the extra to have the full crib 5 test done with the extra fabric, extra cost and time delays that involves.

It's a fire regulation. You have to do this properly and take it seriously, you would be surprised that several companies do not take fire regulations seriously and the repercussions of not doing it are great indeed.

**In summary then, and as a minimum, you should get positive answers to the following:**

1. Ensure you are dealing with a UKAS accredited treatment company;
2. Say "Please treat this fabric to pass BS 5852 Part 2: 1990: Source 5 (Crib 5)";
3. Say "It will be watersoaked and tested afterwards"; and
4. Say "Please perform an indicative test at the end of the treatment and give me a certificate of treatment".

KOTHEA Limited  
T: 0870 285 4768  
F: 0870 284 3153  
E: [info@kothea.com](mailto:info@kothea.com)  
W: [www.kothea.com](http://www.kothea.com)

# KOTHEA

## Simple enough?

Well, actually no. What I have said above stands as **generally true**. Most of the UK fabric companies and designers work with Crib 5. However there is a slightly higher level of testing and certification called BS7176:1995. Strictly speaking I would say that everyone should use this standard...but they don't.

Q. When would you use this?

A. When a bit more certainty is required.

The BS7176:1995 test includes the Crib 5 test and also a cigarette and match test and also a watersoak. When specifying the test you would need to say how the fabric will be used e.g. in a hotel, in a prison, in a restaurant, in a hospital, offshore installation, and so on. These types of end-usage environments determine the HAZARD CATEGORY of the test that is undertaken. Additionally you will need to specify the EXACT foam that will be used in the installation, so the test will mimic the final end-use environment as much as possible.

So do you ask for your fabric to be treated to BS7176:1995 Medium Hazard? Well you can, it won't hurt. But the treatment will be the same as for Crib 5! Some of the UK fabric treatments houses that we spoke to have not heard of this British Standard, which was VERY surprising.

So really it is 'simple enough' as far as the treatment goes. Treat to Crib 5. If you do just that you can probably sleep easily at night. However to prove that you have done the job right you WILL need the test certificate.

Testing is more complicated. Essentially you are getting the fabric tested to ensure it will work in a specific situation and, as we've already said, the treatment to achieve that is the same as for Crib 5. If you are in a complex environment you should get an expert involved.

My understanding also is that if you are planning to sell furniture to the contract market then achieving a BS7176 pass will allow you to label your product as being suitable for certain environments.

KOTHEA Limited  
T: 0870 285 4768  
F: 0870 284 3153  
E: [info@kothea.com](mailto:info@kothea.com)  
W: [www.kothea.com](http://www.kothea.com)

# KOTHEA

Summary:

1. BS7176 Medium Hazard test covers most eventualities
2. Treatment to Crib 5 standard should be sufficient to pass all the tests specified in BS7176.

## Resources:

Treatment Companies: [TEK Treatments](#); [Textiles FR](#); [Essex Flameproofing](#).

Author: Verity du Sautoy,

Marketing At KOTHEA - <http://www.kothea.com/>

Designers' Fabric Knowledgebase – <http://blog.kothea.com/>

Source: [Variety of blog posts 2009/2010](#)

Possibly Related Design Resources: [Fire Retardancy](#), [shade change](#), [velvet upholstery](#), [colour fastness in fabrics](#).

Top market fabrics for the leading interior designers and architects. Exceptional quality, inspiring designs, extensive colourways. Core fabrics products for your design scheme: extended neutrals; striking designs; technical fabrics; professional support and guidance for fabric specification and treatment.

[Now, ask KOTHEA for samples.](#)

KOTHEA Limited

T: 0870 285 4768

F: 0870 284 3153

E: [info@kothea.com](mailto:info@kothea.com)

W: [www.kothea.com](http://www.kothea.com)