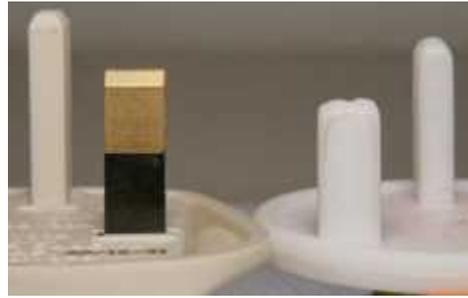


Information for Parents,
Child Carers and Nurseries

Socket Cover Fact Sheet

Does Size Matter?



British power sockets are fully regulated by government regulations. The BS 1363A standard for 13 Amp sockets is required by “*The Plugs and Sockets etc. (Safety) Regulations 1994*”. Sockets must be safe and include internal shutters to prevent children from poking objects into them. (BS 1363 was introduced in 1947!) Unfortunately the government does not also regulate socket covers; this means that perfectly safe sockets are made unsafe by inadequately designed, and totally unnecessary, socket covers.

BS 1363 starts by specifying the dimensions of the 13 Amp plug, and then specifies the requirements for sockets to be both safe and work properly with all 13 Amp plugs. **It is essential that only devices with the correct dimensions of a 13 Amp plug are ever inserted into sockets.** Unfortunately there appear to be no socket covers on the market which meet those dimensions, and the manufacturers of socket covers do not seem to understand the significance of that. (The picture above compares a typical socket cover to a real plug.)

It is impossible to predict how sockets will perform when incorrectly sized covers are used with them. FatallyFlawed has been unable to find any socket covers which have all pins the correct size and shape, as a result you can never be sure if a socket cover will be securely held in a socket. What works in one BS 1363 socket may well be very loose in another BS 1363 socket, and there are hundreds of slightly different sockets



in use in Britain, all work properly with plugs, but often not with socket covers. We cut away a typical 13 Amp socket to show how the pin of the real plug fits into the socket. A close-up of the same plug and socket, shows how the pin fills the contact. Apart from ensuring the electrical connection the socket's contacts serve to hold the plug in place in the socket. This close-up of the socket with a cover inserted shows how the pin is too short to be gripped by the contact. The spring



contact is actually squeezing the shaped end of the plastic pin, instead of exerting a firm grip on the straight sides. This often results in “pop out”, the socket cover being pushed slightly out



of the socket, as pictured left - the cover is not sitting firmly against the face of the socket making it very easy for a child to remove. (FatallyFlawed has found that most popular socket covers have short pins and show this effect.) You may try a cover in one socket and find it is a tight fit, but the same cover can be very loose in another socket. Remember, it is common to find that sockets of different types have been fitted throughout a house, especially when the house has been updated and improved.



One cover has pins so short that they do not reach the contacts, Which? Magazine found in recent tests that it was one of the easiest for children to remove. That cover relies on having an oversized earth pin to hold it in place, 8.28 by 4.44 (the maximum allowed by BS 1363 is 8.05mm by 4.05mm). Although very loose in some sockets it has to be forced into others, probably damaging the socket's contacts! Over half the covers tested have power pins which are too thick, again there is a potential for damaged contacts which are one of the causes of sockets catching fire.

Standards are created for a reason; BS 1363 ensures that plugs and sockets work together. In the absence of standards, anarchy rules.

Once a socket cover is in the hands of a child they can easily insert it into the socket in a way which defeats the internal shutters and makes the socket very unsafe. **YES – Size Does Matter!**