



**For Builder and Engineer magazine  
27 July 2004**

Here we ask Jason Saunders, Business Manager, Architectural Noise Control at IAC of Winchester, for the manufacturer's perspective on BB93.

**What is your overall reaction to BB93?**

From the manufacturer's perspective the general reaction has to be positive. It's a good central point of reference for all parties involved in the design and construction of new school buildings. As providers of noise control solutions, our problem in the past has been trying to tie down the precise specification of exactly what is required. The lack of guidelines has generally meant it's the client asking 'Well, what can you do?' It's like asking how long is a piece of string – it is not always just sound absorption that's required, more often than not a greater noise insulation maybe required, involving acoustic doors, windows and partitions.

I'd wholly concur with BB93 where it states that although the constructional standards previously quoted within BB87 as the standard for acoustics in schools, many designers were unaware of its actual requirements and the standards were rarely enforced.

BB93 is definitely a comfort factor for local authorities and central government regarding both the quality of the buildings being constructed and the background ambience for teachers and pupils alike. While the Building Regs do not apply to alteration and refurbishment work, BB93 provides designers with a useful benchmark when upgrading premises to satisfy the School Premises Regulations and the Disability Discrimination Act.

**How important is this structured approach to design and build of new schools as outlined in BB93?**

Crucial because without it many factors can be overlooked. Take 'selection of the site' for example – choosing a location away from flight paths and busy roads has long been in the regulations for new hospital builds, so it's long overdue in the education arena. Whilst solutions are available in the form of acoustic barriers – something we also provide – clearly prevention is better than cure. We are pleased to see that BB93 requires architects to evaluate the sound insulation profile of the building envelope itself – Emphasis on roof construction, and so rain noise, external walls, ventilation openings, external doors and windows. All these factors affect the way noise travels and reverberates within the final structure.

Even when designing and installing a fully soundproofed and isolated room we have seen that the external structure, such as roof design and construction, can impinge greatly on the room's final acoustic performance. Another aspect is the noise generated both by and within ventilation systems. To meet the guidelines on recommended intake of fresh air per person in any one room, mechanical ventilation

systems are a must and, of course, these generate their own noise attenuation needs. These are all factors that need to be taken into account in the very early stages of building design.

As manufacturers we are pleased to see that BB93 sets out the appropriate sound transmission, impact noise levels and reverberation levels for various activities within the different room types. It's useful to have it fully broken down in this way. Children and teachers working within these spaces will benefit immensely from the clarity that such an approach brings.

### **Do you agree with many in the industry who say that BB93 makes for further confusion?**

No, not at all, totally the other extreme. BB93 provides a common design guide for all parties involved. The only task that then remains is the selection of the appropriate solution in light of other factors such as budget constraints and timescales. From where I'm standing, BB93 acts to draw together the various elements effectively, lessening opportunities for misunderstandings that can so often arise, and it gets all parties broadly singing from the same hymn sheet.

Whilst BB93 is generally pretty prescriptive, which can be a help on the financing side, the scope of the recommendations is such that the architect's desire for flamboyance can also be accommodated where desired. It strikes the right balance between steering all parties towards a clear end result and allowing flexibility of approach. From the manufacturing side so often in the past we've been torn between the architect's dream on one side and budget constraints on the other. We're seeing now that having a clear path forward from the start is already ironing out many of these problems.

### **How are you utilising BB93 on a day-to-day basis?**

In our discussions with architects and designers we're already finding an increased understanding of acoustics generally, which is very encouraging. For so long it's been an afterthought. I'd say our role is gradually moving away from educator to one of provider of specialist supplier information and finetuning. Also they are coming to see that noise control is not just about shutting noise out or keeping noise in, it's also a question of sound *quality*. When it comes to the crunch, though, most professional specifiers still prefer our turnkey approach.

As I see it, BB93 is good news for our kids. People say that kids don't listen in school any more, but maybe it's just because they can't hear! BB93 heralds a whole new era of school construction, where schools will be better able to educate the next generation. It's good to know that what we've been doing in noise control for the past 40 plus years is now subject to building control and will be a higher priority.

Jason Saunders can be contacted on 01982 873027 direct line or [jasons@iacl.co.uk](mailto:jasons@iacl.co.uk)