

Column by Renzo van Riemsdijk (Masterenzo): Concrete!

As a prelude to the great triptych about loudness in mastering which will be published starting in June, this story is about concrete.

Concrete? Seriously? Absolutely, I'm dead serious. Let me explain.

In my studio there are four monitor speakers at my disposal. Two on the left side and two on the other side. The inner two speakers are placed on a couple of magnificent stands. There was only one problem: the stands were too low, ten centimetres to be exact. Tweeters placed on the same height as your ears, that's the ideal situation.

In my search for a solution to the problem I ran upon a big bag of concrete at the home depot. 25 kilograms of pure concrete mortar. That had to be the solution!

In my workshop I immediately started constructing the formwork.

Formwork? Certainly, the internet told me I had to make a formwork in which the concrete could be poured. And that is exactly what happened.

What happened next could be described as nothing less than sheer joy. Constructing the formwork, preparing the concrete mortar and pouring the concrete into the formwork is actually great fun!

Fun? Yes, concrete and also cement has something magic to it. It's easy to process and obtaining a good end result is not difficult at all.

A week after pouring the concrete it was time to release the formwork and to look at the final result: a pair of very heavy weight speaker risers made of solid concrete. It felt a bit like giving birth. It's probably not a coincidence I bought biscuits with mice to celebrate the birth.

Okay, so now what? You'll probably wonder what all this has to do with mastering and what the general benefits are.

I had to think about that for a while but if we zoom in on the acoustic qualities of concrete, it all becomes clear.

Concrete has acoustic dampening properties and also serves as a decoupler.

A decoupler? Right! When we place a loudspeaker for example directly on a table, you'll soon notice vibrations in the table caused by the lows coming from the speaker.

If we place the same speaker on the same table with the solid concrete placed on rubber feet between them, you'll notice that the vibrations in the table are greatly reduced and that the sound coming from the speaker is much tighter and focused.

Much of the energy leaking away via the table is now being transformed into musical energy coming from the speaker!

So get out of your chair, off to the home depot. For less than five euros you're a proud owner of 25 kilograms of concrete!

Renzo

Renzo (Masterenzo) is a Rotterdam based mastering engineer. He has worked for artists like Gery Mendes (GMB), Charlie Dée and Phil Bee's Freedom. More info about mastering can be found on his [website](#).