

---

Subject: Re: 4PI cabinet drawing

Posted by [Wayne Parham](#) on Wed, 27 Nov 2019 22:40:24 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

That all sounds very good. From what you are saying, it may be even better than Baltic Birch where voids are concerned.

Do check one more thing though. Plywoods and fiberboards are good because they are made of multiple types of fibers and glue. The construction and the use of dissimilar materials tends to make the panels somewhat self-damping. When you strike one, it doesn't ring for a long time. It sounds like a dull thud rather than a sharp almost drum-head sound, like some hardwoods do. If you look at this on a measurement system, you'll see the undamped hardwood panel rings for tens of milliseconds, sometimes nearly 100mS. An MDF panel decays much more quickly.

So you might want to compare the damping of this new bamboo product against MDF to see how they stack up. If you're interested and willing to do this, get two sheets of the same size and thickness and measure them. Mount a loudspeaker to each, but don't cut a hole. Put the measurement microphone on the opposite side of the panel as the speaker, and suspend the panel or set it up on a cradle. Then do an impulse measurement. What we will see is the impulse response of the panel. The speaker will have an effect too, but it will be minimized by the fact that there is no hole in the wood. We will be measuring mostly what is radiated by the panel after it is "struck" by the impulse from the loudspeaker.

If all that's not possible, simply get two sheets of similar dimensions and strike them with your knuckle. Compare how they sound. The one that sounds more dead wins.

---