Screen Innovations Zero Edge Pure White 1.3 Adrienne Maxwell, March 5, 2014 <u>hometheaterreview.com</u>



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When most of us hear the name Screen Innovations, our minds probably go to Black Diamond, the company's popular ambient-light-rejecting screen material that helps projectors to perform better in brighter viewing environments. Suffice to say, that product line has been a huge success for the company, but it's not the only material that Screen Innovations offers. The subject of today's review is the Pure White 1.3 material, designed for use in a more traditional light-controlled home theater environment. This 1.3-gain white material is one of the



options that you can put in the company's Zero Edge fixed frame, which (as the name suggests) puts virtually no frame around the screen to create a sense that the projected image is floating in space. The Zero Edge design is also available with the new Slate material, the Black Diamond material, and a Pure Gray 0.85-gain material. The Zero Edge frame is available in a 16:9 aspect ratio up to 120 inches or a 2.35:1/2.40:1 aspect ratio up to 150 inches. My review sample was a 92-inch-diagonal, 16:9 screen that measures 45.9 inches high by 80 inches wide.

Additional Resources

Zero Edge screens are available through Screen Innovations dealers, as well as through authorized sites like ProjectorPeople.com, where my 92-inch review sample is currently selling for \$1,899.99. If you order this fixed-frame screen online, it comes pre-assembled in a very large box. There are two mounting options, the first being a standard wall-mount using two supplied wall brackets and four 1.5-inch deck screws. This is the route I chose, and my husband and I had the screen up in no time. All we had to do was decide exactly where we wanted to position it, attach the brackets to wall studs, and set the frame into the brackets. The screen material is covered with a peel-off adhesive sheet to protect it during shipping, and Screen Innovations even included two pairs of plastic gloves for us to wear during the installation process to further protect the screen. The second mounting option is to hang the screen from the ceiling using thin aircraft cables. I didn't go this route because I already have a ceiling-mounted motorized screen in place, but I have seen the suspension-mount option at trade shows, and it really serves as a great visual complement to the Zero Edge design, further accentuating that "floating in space" aesthetic. The Zero Edge design is as unobtrusive as it comes: there's about 0.25 inches (10mm) of black frame surrounding the screen, and the entire fixed-frame assembly has a depth of just two inches. If you want to add a bit more design flair, Screen Innovations sells an optional LED ambient lighting kit that surrounds the screen with small, adjustable-colored LEDs (256,000 colors are available)

that can also serve as a bias light to reduce eyestrain. I did not review this option.

The primary selling point of the Pure White 1.3 material is its ultra-fine granularity, and it is undoubtedly the smoothest, least textured screen material I've ever reviewed. Take a close look at most screens, and you can see the material's woven texture. The finer the weave, the less chance that the screen material will make its presence known and affect the finest, most subtle details within the projected image. SI's Pure White material



doesn't even look woven; the company employs a "patented coating process" that is so smooth and blemish-free, it almost looks like a machined piece of smooth glass or metal (just in smoothness, mind you, not in reflectivity). Screen Innovations labels the Pure White material as a "4K screen material" precisely because its ultra-fine granularity is ideally suited to higher-resolution sources. As a projector's resolution goes up, the pixel size goes down; the smaller the pixel, the more likely that a screen's weave, grit, or other imperfections can get in the way of the detail. I don't yet have a 4K projector to use with this material, but I can say that 1080p Blu-ray sources looked exceptionally clean, sharp, and pristine. I demoed scenes from Life of Pi, Kingdom of Heaven, and Casino Royale, using both an LCOS projector (Sony's VPL-HW30ES) and an LCD projector (Epson's Home Cinema 5020UBe), and I was very pleased with the picture quality. Even when I moved close to the screen, the only visible screen artifact was the 3LCD projector's own pixel structure, often labeled the screen-door effect. I'm a fan of JVC's and Sony's LCoS projectors precisely because I like how clean and crisp the picture can look, even up close; mating the Sony projector with the Pure White 1.3 screen only served to heighten the image's detail and clarity.

Color uniformity around the screen was also excellent. In comparing the Pure White material to my Visual Apex VAPEX9100SE 1.1-gain white screen, the Pure White material looked a bit blue, and measurements confirmed this. Using my Xrite I1Pro 2 meter and DVDO iScan pattern generator with the Epson 5020UBe, the Pure White screen had a correlated color temperature about 430 Kelvin higher (cooler) than that of the Visual Apex, and the RGB balance skewed more blue at higher brightness levels. It's not a huge difference and should be easily correctable if you have your projector/screen combo professionally calibrated (and if you're going to drop \$1,900 on a 92-inch screen, plus whatever projector you mate with it, you definitely should invest a few hundred more in a calibration). Higher-gain screens are designed to reflect back more light to help produce a brighter image. The potential drawback is a lack of brightness uniformity, where the screen is clearly brighter in the center than at the edges (called hotspotting). The Pure White material's 1.3 gain is not that high, but it is a step up from the 1.1-gain white screen I normally use. Taking some quick light readings using the X-rite I1Pro 2, the image was only a couple foot-lamberts brighter at the center than at the edges, nothing that I could see with my own eyes and pretty much on par with the brightness differences I got on the 1.1-gain screen.

High Points

- The Zero Edge fixed-frame design is attractive and unobtrusive, and you can add an optional LED lighting system.
- Wall-mounting the screen was very simple, and the Suspension Mount option makes a stylish statement.
- The Pure White 1.3 material is incredibly smooth and artifact-free, allowing the image's finest details to come through cleanly.
- · The screen's color and brightness uniformity are good.

High Points

- The Pure White material is not an ambient-light-rejecting material like Black Diamond. This material is designed for use in a room with some light control.
- The Pure White material is slightly blue to the eye.

Comparison and Competition

In terms of screen material, nearly all screen manufacturers say that their materials are suitable for a 4K resolution and beyond, and we're not going to get into that debate here. A couple of options that focus on having an ultra-fine granularity similar to that of the Pure White 1.3 material are the Da-lite JKP Affinity line and the Elite Screens AcousticPro 4K line. Stewart has added a label called "4k+" to screens that it considers optimal for 4K (and higher) projectors, including the CIMA line. From a design standpoint, one competitor to the Zero Edge fixed frame is dnp's SuperNova Blade, which is also virtually bezel-free and can be suspension-mounted from the ceiling with thin cables. Check out our Video Screens category page for more screen reviews.

Conclusion

Screen Innovations' Zero Edge Pure White 1.3 screen is a great choice for the front-projection fan who wants a fixedframe screen that looks more like a flat panel than a picture frame - and plans to use it primarily in a room with some light control. Although the Pure White 1.3 material is far less expensive than SI's Black Diamond material, this is still a higher-priced screen option that makes the most sense for the discerning videophile who demands the cleanest, sharpest projected image he/she can get. If you're thinking about making the jump to a 4K projector like one of Sony's new SXRD models, then the Pure White 1.3 screen is definitely one you'll want to audition.