

# HR

**HR Engineering, Inc.**

427 Kings Mill Road  
York, PA 17403

28 September 2005

Alan F. Hoying, Technical and Codes Engineer  
Alcoa Home Exteriors  
2600 Campbell Road  
Sidney, Ohio 45365-0132

RE: Pro-Series Beaded Vinyl Soffit, 8", FBC 2004

Dear Alan;

The following Alcoa vinyl soffit product; Pro-Series Beaded, with 8" exposure, has been tested at Architectural Testing as reported in ATI-19585-1, and analyzed in conformance with ASTM D 3679 as required by Florida Building Code 2004, paragraph 1404.9. There are two configurations for this product; triple 2.67" solid with product code number PBS80N, and triple 2.67" vented with product code PBS80V. The material thickness must be a minimum of 0.040".

The allowable design wind pressures for this product, with nails, in the following eave widths are; 12" wide +/- 69.5 psf, 15" wide +/- 53.5 psf, 18" wide +/- 43.4 psf, 21" wide +/- 36.6 psf, and 24" wide +/- 31.6 psf. The allowable design wind pressures for this product, with staples, in the following eave widths are; 12" wide +/- 250 psf, 15" wide +/- 192 psf, 18" wide +/- 156 psf, 21" wide +/- 131 psf, 24" wide +/- 113.5 psf. Installation is with an "F" channel at the wall and with a fastener through each nail hem into the fascia board at the outside end. Nails are galvanized steel 1-1/2" long roofing nails with 1/8" diameter shanks and 3/8" diameter heads. Staples are 0.062" diameter (16 gage) with 1-1/2" long legs. These pressures were determined by comparative analyses.

There is no separate allowable design wind pressure requirement in the Florida Building Code 2004 for soffits. I trust that this information is sufficient for your needs. If there are any questions about this, please contact me.

Sincerely yours;

*Allen N. Reeves*  
Allen N. Reeves, P.E.  
Chief Engineer  
28 SEPTEMBER 2005  
ANR:anr  
Cc: 05090009

