



U.S. Department
of Transportation

**Federal Highway
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

June 5, 1995

Refer to: HNG-14

Mr. Adam T. Wright
ARW Polywood, Inc.
700 E. Wayne Street
Lima, Ohio 45802

Dear Mr. Wright:

Thank you for your May 22 letter requesting Federal Highway Administration's (FHWA) acceptance of your company's ARW Polywood guardrail blockouts. Your letter was preceded by a package including a brochure on ARW Polywood and engineering information certified by the United States Testing Company (USTC), Inc.

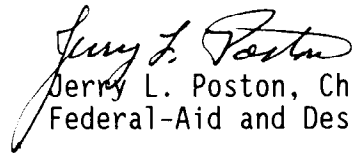
On January 9 we wrote to Mr. Russell A. Walker, President of Ramco International, a distributor of ARW Polywood under the name of "Poly Lumber." In that letter we found 140-mm by 190-mm (nominal 6-inch by 8-inch) blockouts of Poly Lumber acceptable for use with compatible wood post guardrail systems. The materials information that Mr. Walker provided in support of his request for acceptance of Poly Lumber blockouts is the same engineering information from USTC that was submitted for ARW Polywood.

Because the material in "Poly Lumber" guardrail blockouts is the same as ARW Polywood manufactured by your company, ARW Polywood guardrail blockouts will be acceptable for use on the National Highway System, if proposed by a State. We anticipate that the States will require certification from ARW Polywood, Inc., that the blockouts furnished have essentially the same composition and physical and mechanical properties as the material used in the static tests referred to in our January 9 letter.

Your brochure illustrated ARW Polywood used for guardrail posts. To date, we have not found any form of recycled or composite plastic materials to be acceptable for use as guardrail posts. Because the static bending test results of ARW Polywood are much lower than those for wood, ARW Polywood is not likely to perform the same as wood in a guardrail post. Therefore, it will not be acceptable as guardrail posts unless proven with full-scale crash testing. A copy of our memorandum "Procedures for Determining Acceptability of Highway Features" dated November 12, 1993, is enclosed for your information should you be interested in crash testing your product.

Because the ARW Polywood blackout is a proprietary product, to be used in a Federal-aid Highway Project: (a) it must be supplied through competitive bidding with equally suitable unpatented items; (b) the highway agency must certify that it is essential for synchronization with existing highway facilities or that no equally suitable alternate exists; or (c) it must be used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes. Our regulations concerning proprietary products are contained in Title 23, Code of Federal Regulations, Section 635.411, a copy of which is enclosed.

Sincerely yours,


Jerry L. Poston, Chief
Federal-Aid and Design Division

2 Enclosures

Federal Highway Administration
HNG-14:NArtimovich:366-1331:gm:6-2-95:WRIGHT
copies to:
HPD-1 HNG-1 HNG-10 HNG-14
Reader, 3128 File, 3128 RAs HFL-1
HNG-20 HHS-10 HRS-10

Additional Supplement to Geometric and Roadside Design Acceptance Letter
Number B-29