



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

March 18, 2010

In Reply Refer To:  
HSSD/ WZ-289

Mr. Paul R. Grime  
President  
Panel Resource Group, Inc.  
12206 Nithdale Court  
Chesterfield, VA 23838

Dear Mr. Grime:

In your correspondence of August 11, 2009, you requested the Federal Highway Administration (FHWA) acceptance of Alcopla-Lite sign substrates up to 4mm thick. Accompanying your request were product specifications. You requested acceptance of Alcopla-Lite sign substrates for use with accepted sign stands on the National Highway System (NHS) under the provisions of the National Cooperative Highway Research Program (NCHRP) Report 350 "Recommended Procedures for the Safety Performance Evaluation of Highway Features."

The material properties of the Alcopla-Lite substrates are nearly identical and considered equivalent to other previously accepted 2mm, 3mm, and 4mm light weight aluminum composite material to be used as sign substrates. Our records indicate that 2mm, 3mm, and 4mm aluminum composite material signs have been successfully crash tested on portable stands made by a number of manufacturers and are limited to use on the tested and accepted stands.

Mr. Matt Lupes of my office replied on August 18, 2009, with a letter stating that Alcopla-Lite sign substrates were essentially equivalent to other aluminum laminate substrates found acceptable by FHWA and were likewise acceptable for use. On March 12, 2010, you requested a formal numbered FHWA Acceptance Letter documenting this action.

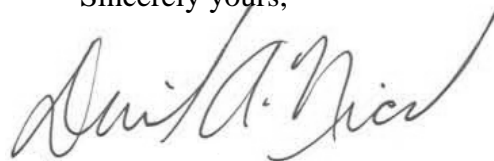
As the FHWA already accepts the use of lightweight aluminum composite material as sign substrates, we will also consider Alcopla-Lite sign substrates with thicknesses up to and including 4mm, for use on the NHS under the range of conditions that equivalent materials have been tested and accepted, when proposed by a State.



Please note the following standard provisions that apply to FHWA letters of acceptance:

- This acceptance is limited to the crashworthiness characteristics of the systems and does not cover their structural features, nor conformity with the Manual on Uniform Traffic Control Devices.
- Any changes that may adversely influence the crashworthiness of the system will require a new acceptance letter.
- Should the FHWA discover that in-service performance reveals unacceptable safety problems, or that the system being marketed is significantly different from the versions that were accepted, we reserve the right to modify or revoke our acceptance.
- You will be expected to supply potential users with sufficient information on design and installation requirements to ensure proper performance.
- You will be expected to certify to potential users that the hardware furnished has essentially the same chemistry, mechanical properties, and geometry as that submitted for acceptance, and that it will meet the crashworthiness requirements of the FHWA and the NCHRP Report 350.
- To prevent misunderstanding by others, this letter of acceptance is designated as number WZ-289 and shall not be reproduced except in full. This letter and the test documentation upon which it is based are public information. All such letters and documentation may be reviewed at our office upon request.
- Alcopla-Lite sign substrates are patented products and considered proprietary. If proprietary systems are specified by a highway agency for use on Federal-aid projects, except exempt, non-NHS projects, (a) they must be supplied through competitive bidding with equally suitable unpatented items; (b) the highway agency must certify that they are essential for synchronization with the existing highway facilities or that no equally suitable alternative exists; or (c) they 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.
- This acceptance letter shall not be construed as authorization or consent by the FHWA to use, manufacture, or sell any patented system for which the applicant is not the patent holder. The acceptance letter is limited to the crashworthiness characteristics of the candidate system, and FHWA is neither prepared nor required to become involved in issues concerning patent law. Patent issues, if any, are to be resolved by the applicant.

Sincerely yours,



David A. Nicol, P.E.  
Director, Office of Safety Design  
Office of Safety

Enclosure



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

1200 New Jersey Avenue, SE  
Washington, D.C. 20590

August 17, 2009

In Reply Refer To:  
HSSD

Re: Xxentria Technology Materials Co., LTD's,  
Alcopla-Lite Aluminum Composite Material

Mr. Paul R. Grime  
President  
Panel Resource Group, Inc.

Dear Mr. Grime :

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Please let me know if you have any questions or need further information.

Sincerely,

Matt Lupes, P.E.  
Highway Safety Engineer  
Federal Highway Administration  
Office of Safety Design - HSSD, Room E71-109  
1200 New Jersey Avenue, SE  
Washington, DC 20590  
[matt.lupes@dot.gov](mailto:matt.lupes@dot.gov)

