



In Reply Refer To: HSSD/WZ-256

Mr. Peter Nee 9592 Deereco Road Timonium, MD 21093

Dear Mr. Nee:

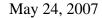
Thank you for your correspondence requesting the Federal Highway Administration's (FHWA) acceptance of C-Bond 2 mm and 3 mm thick sign substrate. Accompanying your letter were product specification certificates and samples of the substrate. You requested acceptance of C-Bond as a sign substrate for use 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."

Upon request, you provided samples of the C-Bond sign substrate to the FHWA and a copy of the product specifications. The C-Bond product specifications are enclosed. The C-Bond sign substrate is a brand name of aluminum laminate material. The material properties of the 2 mm and 3 mm C-Bond substrate are nearly identical and considered to be equivalent to other previously accepted 2 mm and 3 mm aluminum laminate sign substrates. Our records indicate that 2 mm, 3 mm, and 4 mm aluminum laminate 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. Therefore, the FHWA accepts the use of C-Bond 2 mm and 3 mm aluminum laminate sign substrates 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 the FHWA letters of acceptance:

- This acceptance is limited to the crashworthiness characteristics of the devices 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 device will require a new acceptance letter.
- Should the FHWA discover that the qualification testing was flawed, that in-service
 performance reveals unacceptable safety problems, or that the device being marketed is
 significantly different from the version that was crash tested, it reserves the right to modify or
 revoke its acceptance.







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- 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 they will meet the crashworthiness requirements of the FHWA and the NCHRP Report 350.
- To prevent misunderstanding by others, this letter of acceptance, designated as number WZ-256, shall not be reproduced except in full. This letter, and the test documentation upon which this letter is based, is public information. All such letters and documentation may be reviewed at our office upon request.
- The C-Bond is a patented product and considered proprietary. If proprietary devices are specified by a highway agency for use on Federal-aid projects, except exempt, non-NHS projects, they: (a) 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 device for which the applicant is not the patent holder. The acceptance letter is limited to the crashworthiness characteristics of the candidate device, and the 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,

George E. Rice, Jr.

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Acting Director, Office of Safety Design

Office of Safety

Enclosure



CGATE ALUMINUM COMPOSITE PANELS



MATERIAL ID	COMPOSITE THICKNESS mm	COMPOSITE THICKNESS inches	SKIN THICKNESS mm	SKIN THICKNESS inches	SHEET SIZE 5'x10' (see note 2)	SHEET SIZE 4'x8'	
ALS02-15	2	0.08	0.15	0.006	N/A		
ALS02-20	2	0.08	0.20	0.008	N/A	~	
ALS02-30	2	0.08	0.30	0.012	V *	V	
ALS03-15	3	0.12	0.15	0.006	N/A	V	
ALS03-20	3	0.12	0.20	0.008	~	V	
ALS03-30	3	0.12	0.30	0.012	~	~	
ALS04-15	4	0.16	0.15	0.006	N/A	V	
ALS04-20	4	0.16	0.20	0.008	~	V	
ALS04-30	4	0.16	0.30	0.012	~	~	

^{* 2.5}mm thick composite

- 1. Minimum order 3 pallets
- 2. Sheet sizes 5' x10' available min order 3500 sq.y.
- 3. Panels can be ordered in any RAL color code, including metallic colours
- 4. Special brushed metallic finish can be ordered
- 5. Single or double sided colors are available



Cbond is the brand name for Cgate's Composite Aluminum panel products

Contact us for more information:

FEBRUARY 2005

Cell: 617 429 6056 Office: 727 367 9793

Email: CGATEUSA@aol.com

Cgate Enterprise Ltd. 2915 Pass a Grille Way St. Pete Beach, FL 33706



WWW.CGATE-ENTERPRISE.COM

CGATE ALUMINUM COMPOSITE PANELS - PALLET CAPACITY & WEIGHT INFORMATION

MATERIAL ID	COMPOSITE THICKNESS mm	THE PROPERTY OF THE PROPERTY O	SKIN THICKNESS inches	WEIGHT lbs/sqf	WEIGHT lbs/sqy	SHEETS PER PALLET 4'×8'	SHEETS PER PALLET 5'x10'	SQY PER PALLET 4'x8'	SQM PER PALLET 5'x10
ALS02-15	2	0.15	0.006	0.5	4.2	137	N/A	487.7	N/A
ALS02-20	2	0.20	0.008	0.5	4.6	127	82	452.2	448.7
ALS02-30	2	0.30	0.012	0.6	5.3	111	72	395.2	394.0
T. C. C.	A CA			St. Land			466		
ALS03-15	3	0.15	0.006	0.7	5.9	99	N/A	352.5	N/A
ALS03-20	3	0.20	0.008	0.7	6.3	94	61	334.6	333.8
ALS03-30	3	0.30	0.012	0.8	7.0	83	55	295.5	300.9
			eropanie Calaban						1 243
ALS04-15	4	0.15	0.006	0.8	7.5	77	N/A	274.1	N/A
ALS04-20	4	0.20	0.008	0.9	7.9	74	49	263.5	268.1
ALS04-30	4	0.30	0.012	1.0	8.6	12.4	45	238.5	246.3

Note: Each pallet weighs approximately 2,200 lbs

Contact us for more information Cell: 617 429 6056 January 2004
Office: 727 367 9793

Email: CGATEUSA@aol.com

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