## LETTERS



1 December 1995

American Limestone Company 2811 McKinney Avenue Suite 16 Dallas, TX 75204

ALC 2000 System Re:

The ALC 2000 System, which utilizes one foot (1') tall by two feet (2') wide by one inch (1") thick limestone panels, is a lightweight cladding material. For this reason, it is ideal for use in the earthquake prone United States. The basic system is designed for a 20 psf wind pressure. Unlike heavier traditional limestone walls, the forces on the stone and anchorage are more critical from the 20psf wind than from zone 4 seismic forces.

The gravity load from each stone in the ALC 2000 System is anchored individually back to the substrate. Also, individual stones are separated by high performance structural silicone. Because of these two features, minor temporary movement in the building such as that from earthquakes, will not affect the structural integrity of the system. The cladding is dependent on the performance and resiliency of the substrate and underlying foundation.

This is the only standardized high performance exterior stone cladding system we know of. It's acceptance and popularity to the architectural community and end user should be immediate and widespread. Therefore, it is critical that all parties involved recognize that the design charts and details in your Panel and Profiles Handbook are based on a 70 mph wind zone, a semi-dry climate, such as Dallas, and limited stone panel sizes. Differing criteria and unique applications should be reviewed by a professional engineer to verify its adequacy.

Yours very truly,

Jeffrey A. Bayer, P.E

CDC, Inc.

Headquarters: 9101 LBJ Freeway

Suite 500, Box 12 Dallas, Texas

75243 USA tel. 214/437.4200 fax. 214/437.4562

General@cdchost1

CompuServe:

California Office: 333 S. Beaudry Ave.

Suite 211, Box 19 Los Angeles, CA 90017 USA tel. 213/250.4244

fax. 213/250.1922

CompuServe: 102365,3543

Asia Office: 5th Floor, Room B CDC Limited Lockhart Centre

301-307 Lockhart Road Wanchai, Hong Kong tel. 852.2511.0233 fax. 852.2519.7362

CompuServe: 100452,1070

AMERICAN LIMESTONE COMPANY

A TEXAS CORPORATION WWW.AMERICANLIMESTONE.COM INFO@AMERICANLIMESTONE.COM CDC LETTER - ALC SOLUTION

4.2.1



## FAX TRANSMITTAL

DATE: 2 February 1998 CDC JOB NUMBER: \$125

COMPANY:

American Limestone Company

FAX NUMBER:

214 747 2639

FROM:

Jeff Bayer

TOTAL PAGES:

1, including this sheet

PROJECT NAME:

Houston Residential Construction

RF:

Upgrades due to Increased Wind Pressure

## Gentlemen,

Per your request, CDC has reviewed the requirements to upgrade the design charts from a 70 mph wind speed to a 90 mph wind speed. Structurally, this added wind pressure effects the stone panels ability to span between anchors and the capacity of the anchors themselves. Our analysis indicates the following:

- Champagne (assume one inch thickness) can span 21 inches vertically between supports.
- Burnished Silver (assume one inch thickness) can span 24 inches vertically between supports.
- The anchor lengths on the "Required Anchor Width/Stone Kerf Strength" chart must be increased by a factor of 1.65. Therefore, the typical 1.5" long clips are now 2.5" long and the 2" long clips need to be 3.3" long and so forth.
- The number of fasteners for each anchor can be determined using the length versus number of fasteners information provided on the existing "Required Anchor Width/Deadweight" chart. Therefore, the longer clips will require additional fasteners.

This information is adequate for normal residential construction. Commercial construction and unusual residential construction should be reviewed on a project by project basis.

Headquarters: 9101 LBJ Freeway

Suite 500, 8 ax 12 Dallas, Texas 75243 USA tel. 972/437.4200 fax. 972/437.4562

jbayer@cdo-usa.com CompuServe

Catifornia Office: 333 S. Beaudry Avc.

Suite 211, Box 19 Los Angeles, CA 90017 USA tel. 213/250.4244 fax. 213/250.1922 102365,3543

Asla Office: 5th Floor, Room B CDC Limited Chinactem Johnston Plaza 178-186 Johnston Road Road Wanchai, Hong Kong tel. 852.2511.0233 fax. 852 2519.7362

CompuServe: 100452,1070

If you do not receive a clear, complete transmission, please call 214/437.4200

AMERICAN LIMESTONE COMPANY

Email

A TEXAS CORPORATION WWW.AMERICANLIMESTONE.COM INFO@AMERICANLIMESTONE.COM CDC LETTER - WIND PRESSURE UPGRADES

4.2.2



## FAX TRANSMITTAL

DATE:

January 31, 2003

CDC JOB NUMBER:

New

DOCUMENT NUMBER: CDC-JB-002

FORT WORTH

DALLAS

LOS ANGELES

COMPANY:

American Limestone Company

LAS VEGAS

FAX NUMBER:

214-747-2639

CHICAGO

FROM:

Jeff Bayer

BALTIMORE

TOTAL PAGES:

1, including this sheet

NEW ENGLAND

RE:

Aluminum Stone Anchors

HONG KONG

MONTERREY

MONTREAL

CDC recommends your aluminum anchors be coated with Kynar paint even though the anchors are 6000 series aluminum and exhibit excellent corrosion - resistance without any coating. Kynar is an organic coating based on polyvinylidene fluoride resins and have exhibited excellent weatherability since its development 40 years ago. By painting the aluminum, American Limestone Company is certain the stone anchors will long exceed the anticipated lifespan of the building.

It is not necessary to paint the edges of the aluminum where the extrusions have been cut to length nor is it necessary to paint where holes have been drilled for fasteners. Aluminum alloys are inherently corrosion-resistant by the formation of a protective oxide film when exposed to air. The small surface areas exposed will not hamper the performance of the anchor.

Sincerely,

Jeff Bayer, P.E.

Principal CDC, Inc.

7502 Greenville Ave. Suite 800 Dallas, Texas 75231 USA tel. 972/437-4200 fax. 972/437-4562 general@cdc-usa.com

If you do not receive a clear, complete transmission, please

AMERICAN LIMESTONE COMPANY

A TEXAS CORPORATION WWW.AMERICANLIMESTONE.COM INFO@AMERICANLIMESTONE.COM CDC LETTER - ALUMINUM STONE ANCHORS

4.2.3