FAX

Date: 7/28/05

DCA05-DEC-151
FILING AND ACKNOWLEDGEMENT
FILED, on this date, with the designated Clerk, receipt of which is hereby acknowledged.
Paula P. Ford 7/28/05
Paula P. Ford Date
Commission Clerk

From: Bill Shoolbred, Area Rep.
243 Washington Avenue
Fitzgerald, GA 31750
(813) 368-2320
Fax: (813) 996-9956

To: Florida Building Commission
Florida Department Of Community Affairs
2555 Shumard Oak BLVD
Tallahassee, Florida 32399-2100

Attn: Mo Madani

Reference: DEC Statement for Product Approval, DEC Statement to Rule 9B72

Mr. Madani,

During the past meeting of the Commission in St. Petersburg, July 2005, our Engineer, Mr. Leonard Wood requested the classification of our product used as a roof-over system (as a shingle might be). We had initially submitted, January 2005, our application #4121 under Category "Roofing" and Sub-Category "Other". This was for the March 2005 meeting. At that meeting we were given a deferral, as the application was not complete.

The next meeting, April 2005, the application again was given a denied, because it was believed to be structural and not properly Validated. After that meeting A & A Arnold advised us to file a new application as we did with application # 4212 with the required Validation and reports. A & A Arnold directed we reset the application to Category "Structural Components)/Sub Roof decking, which we did not agree with, but did so in the effort to gain approval. A & A Arnold then

recommended deferral stating that they felt more testing and engineering would be needed for a structural roof.

We strongly believe this should be classified as "Roof/Other", as our testing and engineering are more adequate for that category.

Sir, Our product is a roll of aluminum of any length, manufactured from 4 foot panels up to sixteen feet wide; factory seamed as shown in the engineering. The panels and seam are qualified by the RADCO QA report in our application.

This product is used as a "roof over" of an existing roof, primarily used on Mobile Homes (single, double wide or more), over Florida Rooms and carports to provide a weather covering from a deteriorated original roof of metal, or shingle. The existing host roof determines the structural stability on which is covered.

The anchoring of this product to the host is demonstrated in the supplied engineering with our application.

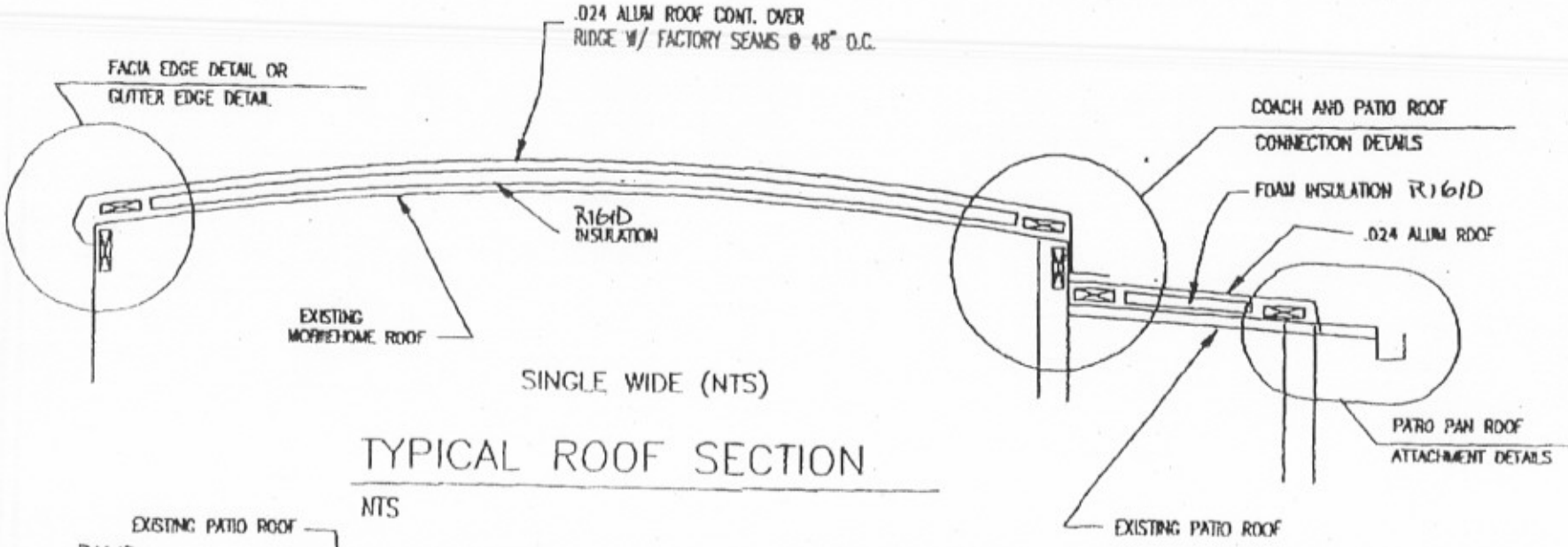
We respectfully request a determination of the requirement to be "Approved", which we most certainly would prefer as our competitors; pan over roofs and single ply. Metals USA FL 1779, Jones-Groff FL 3906, Town and Country FL 2711, Cooley FL 4274.

Unfortunately, I have to correspond with you, as our Engineer has not been available due to personal situations. We have been through 3 secessions of the Building Committee meetings and are we are suffering a significant financial impact.

Sincerely,

William Shoolbred

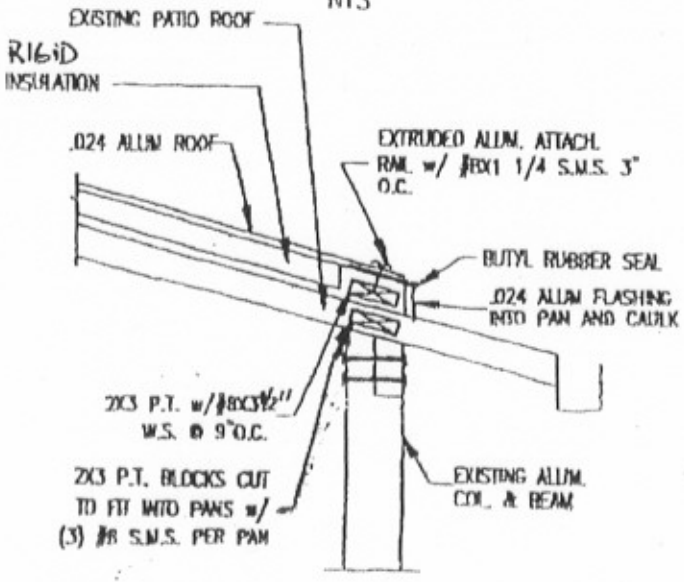
William Shoolbred, Elixir Industries



SINGLE WIDE (NTS)

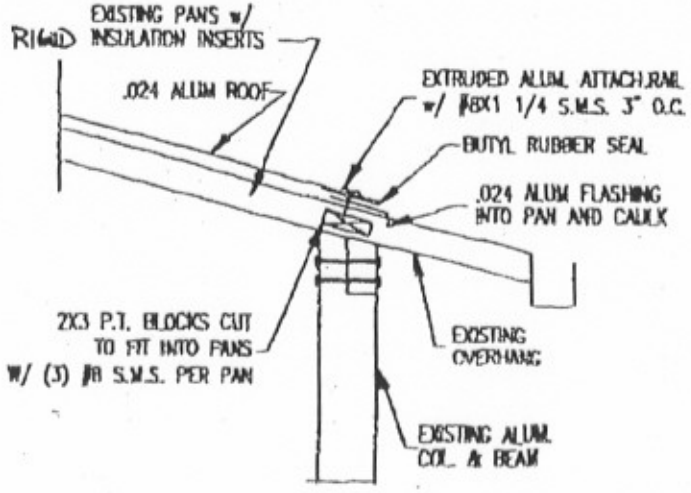
TYPICAL ROOF SECTION

NTS



ALTERNATE PATIO PAN ROOF ATTACHMENT DETAIL "A"

NTS



ALTERNATE PATIO PAN ROOF ATTACHMENT DETAIL "B"

NTS

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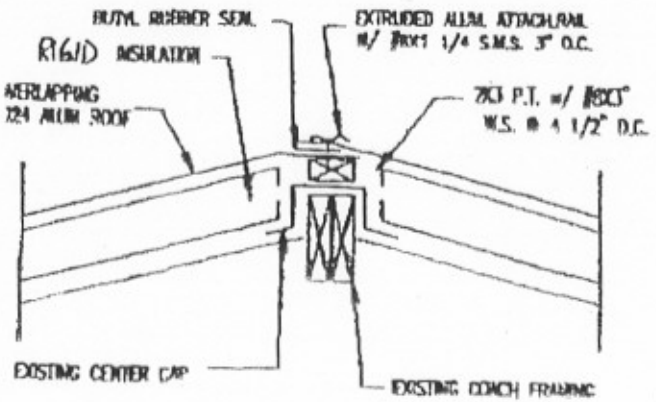
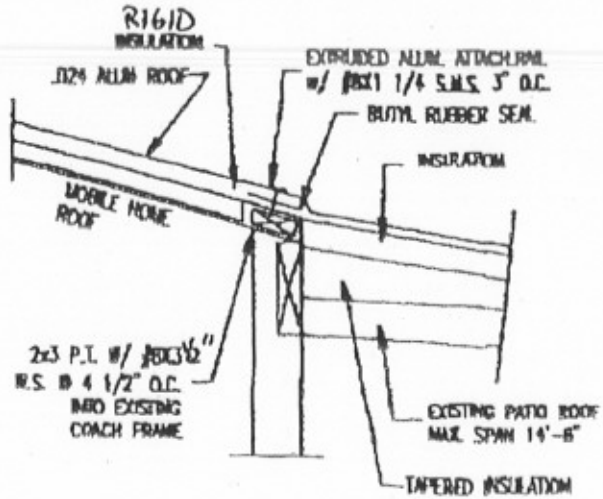
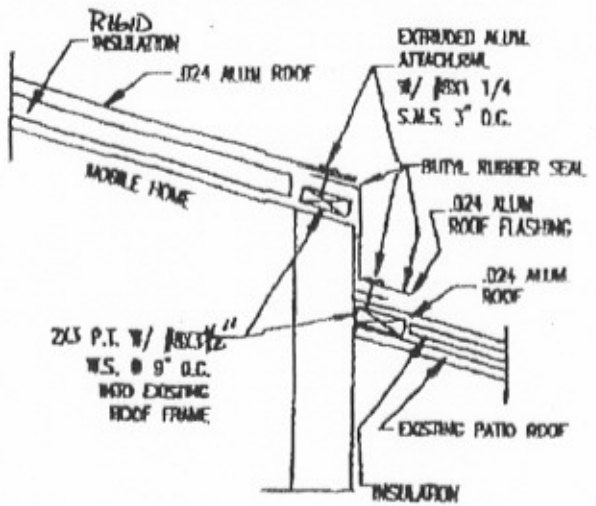


DOUBLE WIDE RIDGE DETAIL (NTS)



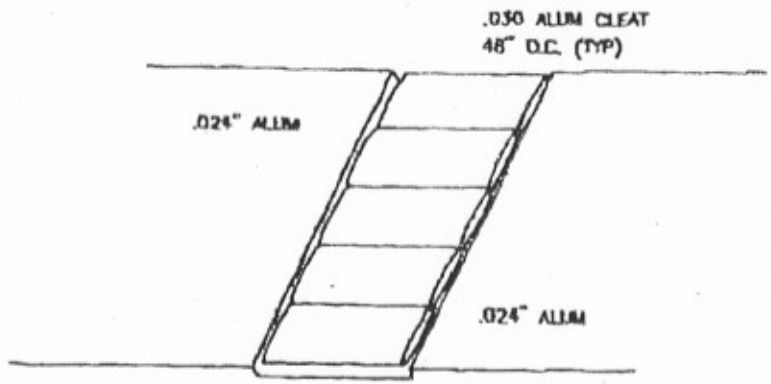
ALTERNATE COACH & PATIO ROOF ATTACHMENT #3

CONNECTION DETAIL (NTS)



ALTERNATE COACH & PATIO ROOF ATTACHMENT #2

CONNECTION DETAIL (NTS)



STYRENE–BUTADIENE RUBBER SEALANT BETWEEN SHEET & CLEAT

FACTORY SEAM DESIGN FOR ALUMINUM ROOF COVERINGS OVER SOLID ROOFS ONLY

NTS

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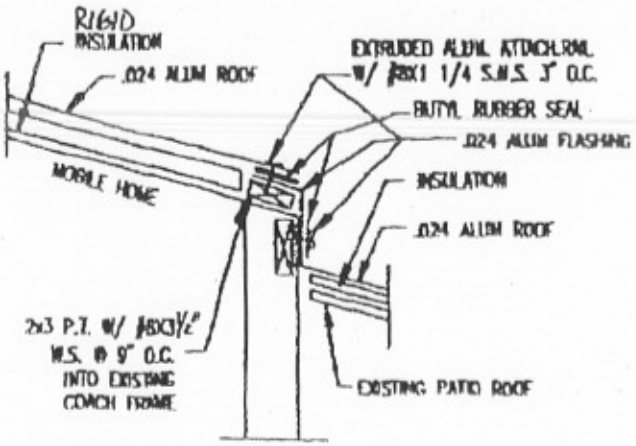
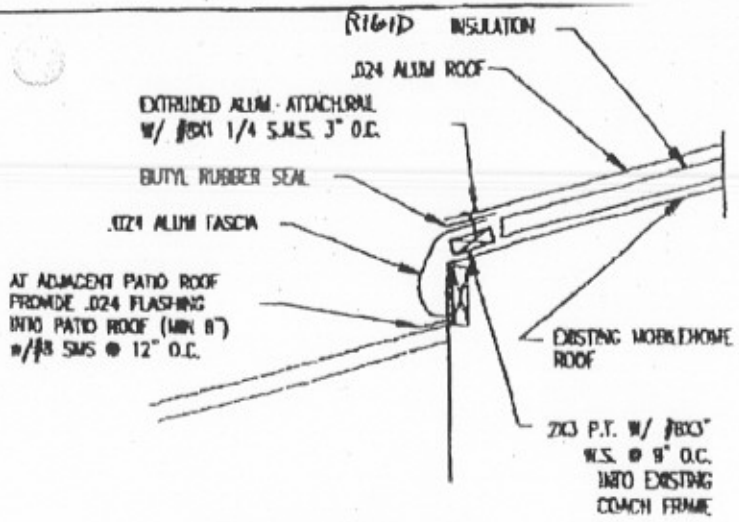


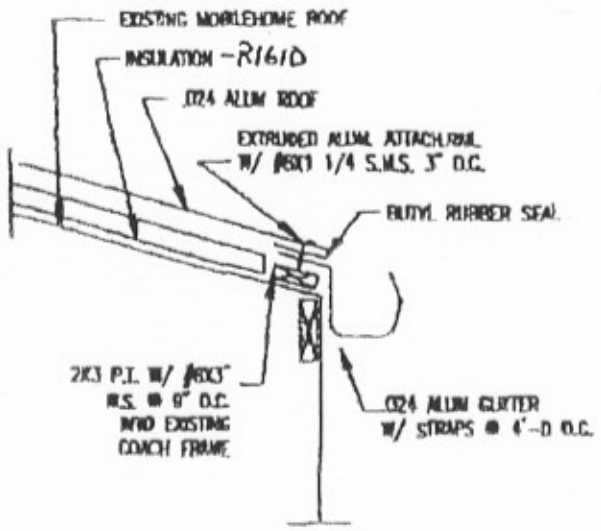
ALTERNATE COACH & PATIO ROOF ATTACHMENT #1

CONNECTION DETAIL (NTS)



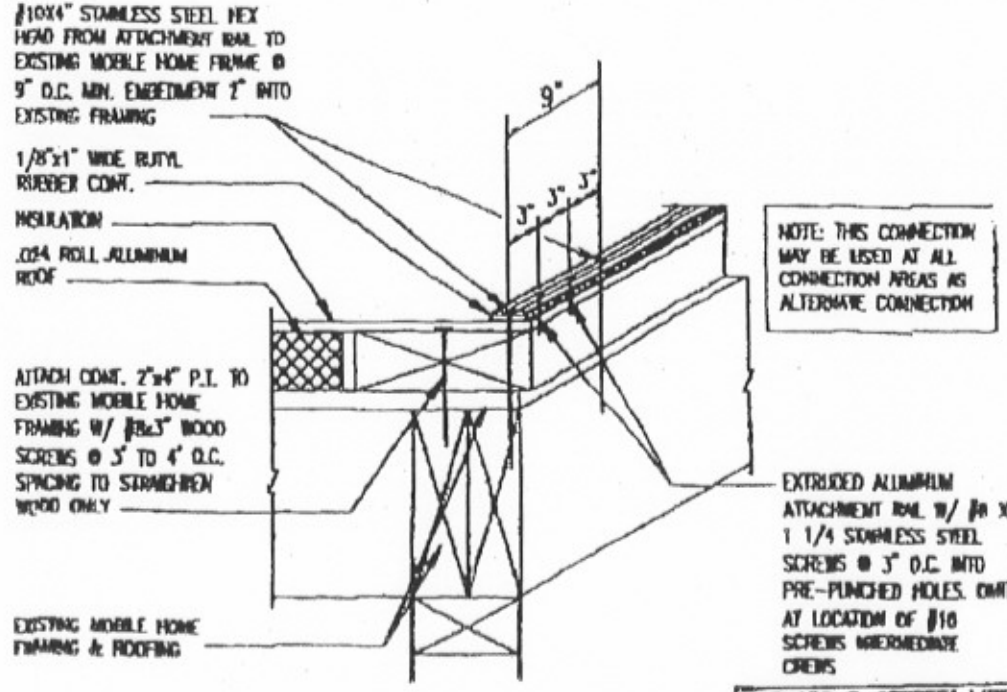
FACIA EDGE DETAIL (NTS)

NTS



GUTTER EDGE DETAIL (NTS)

NTS



ALTERNATE ATTACHMENT RAIL FASTENING #1

NTS

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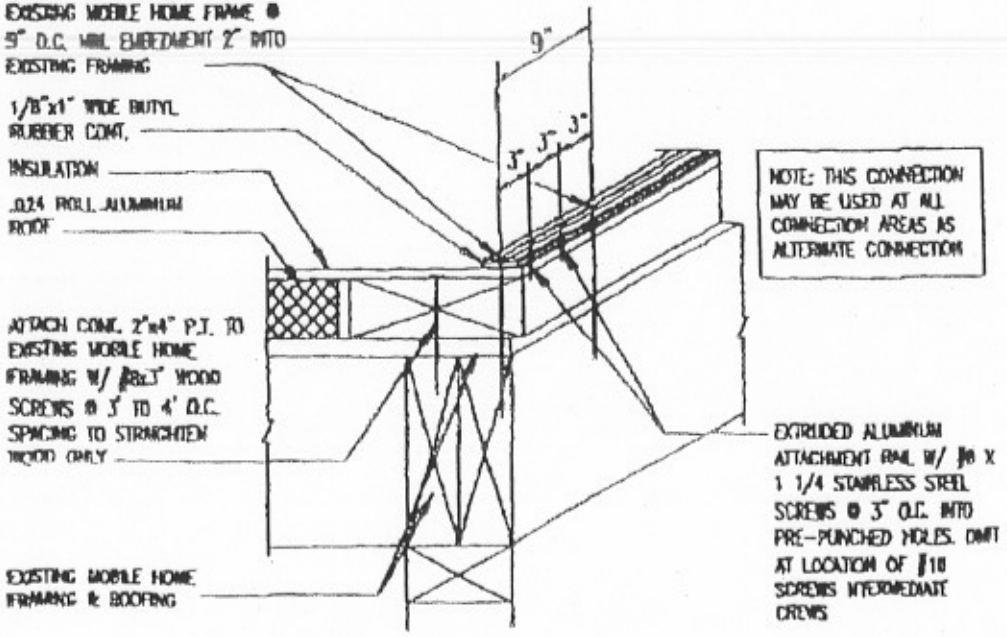

ALTERNATE ATTACHMENT RAIL FASTENING #1

NTS

NOTES:

1.) ALUMINUM ROOFING IS DESIGNED FOR USE OVER A SOLID ROOF ONLY. IT SHALL NOT BE USED AS A STRUCTURAL ROOF SYSTEM.

2.) THE ROOF COVERING SHALL NOT OVERHANG THE EXISTING ROOF.

3.) ENGINEER IS NOT RESPONSIBLE FOR STRUCTURAL INTEGRITY OF EXISTING ROOF.

4.) MAXIMUM WIDTH OF A SINGLE WIDE MOBILEHOME NOT TO EXCEED 14'-6.

5.) MAXIMUM WIDTH OF A DOUBLE WIDE MOBILE HOME NOT TO EXCEED 28'-0

6.) INSULATION TO BE POLYSTYRENE FOAM APROX. DENSITY 1# PER S.F.

7.) THIS DESIGN CONFORMS TO THE 2004 FLORIDA BUILDING CODE FOR WIND LOADING OF 135 MPH, EXPOSURE C AS DETERMINED BY ACSE STANDARD 7-98.

8.) 2"x4" PT MAY BE SUBSTITUTED IN LIEU OF 2"x3" PT.

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General Notes and Specifications:

1. The following structures are designed for the Elixir E5000 aluminum roof system to be married to wood frame roof structures of conventional construction, mobile homes and/manufactured homes. The roof-over system is designed primarily as roof repair systems and so not add or detract from the host structure's structural integrity. The contractor / homeowner shall verify that the host structure is in good condition and of sufficient strength to hold the proposed roof-over system.

2. If there is any question as to the host structure, the owner shall (at his own expense) hire am architect or engineer, or a certified home inspector company to perform an inspection of the structure capacity.

3. The Elixir E5000 roof-over system may be attached directly to any mobile home or manufactured home as stated above. The addition will not add significant dead load to the existing roof system. When utilized in conjunction with an addition, that is adjacent to a mobile /manufactured home shall use "fourth wall construction." This applies to all screen / glass rooms, and / or other structures to be attached.

4. When using TEK screws in lieu of S.M.S. longer screws must be used to compensate for drill head.

5. For roof-overs for mobile / manufactured homes which have a metal skin roof and do not have plywood sub sheathing, the roof-over shall be attached at the perimeter of the coach only. For pan roof systems, the perimeter fastening system can be a 0.030" break formed angle with #10 X 1'1/2" S.M.S. @ 8" o.c. for up to 130 MPH exposure "C". The limits of use shall include no use over 30' above grade and a roof slope not to exceed 25 degrees. Not to be used in HVHZ.

6. The sample was tested with uniform dead loading to form a negative pressure and deformed and began breaking the aluminum skin at 93.75 PSF. This equates for the test data a maximum of 62.5 PSF maximum loading. With an added safety factor of 2, for high velocity hurricane zones, where the minimum live load / approved load is 31.25 PSF.

7. The Elixir E5000 roof-over system is designed for solid roofs on existing structures that are subject to positive wind loads and negative wind loads on the lee side of any roof system. The design wind loads used are from ASCE 7-98 Section 6.5, Analytical Procedure and are in accordance with 2004 Florida Building Code. The loads assume a mean roof height of less than 30 feet, with a roof slope from 0 to 25 degrees and an importance factor of 1.00. Negative internal pressure coefficient is 0.18 fore enclosed and 0.55 for partially enclosed structures. All pressures shown in the table below are in PSF (#/SF).

General Notes and Specifications For Table Below:

Design Loads for Roof Panels
For Enclosed Structures

Wind Velocity	Roofs Note 1	Overhang / Cantilever Note 1
100 M.P.H	+20 / - Note 3	+20 / - Note 3
110 M.P.H	+20 / - " "	+20 / - " "
120 M.P.H	+20 / - " "	+20 / - " "
123 M.P.H	+20 / - " "	+20 / - " "
130 M.P.H	+20 / - " "	+20 / - " "
140A M.P.H	+20 / - " "	+20 / - " "
140B M.P.H	+30 / - " "	+30 / - " "
150 M.P.H	+30 / - " "	+30 / - " "

Note 1: Per ASCE 7-98 Analytical Method for Components & Cladding.

Note 2: Roof over systems are self supporting between supports and are thus considered to be main frame resistance components, but since these systems are also cladding components, design loads are from components and cladding tables for enclosed buildings.

Note 3: To develop the design load tables for roof over systems, the edge strip and interior corner loads were prorated. The algorithm used to generate the allowable span tables selects the final design load used based on the affective wind area of the roof panel section.

Design test of E5000 Roof-over System

An 8 foot by 4 foot section of the roof-over system was attached to a wooden framework of suitable material to match conditions in the field, i.e. 2"x4" P.T. lumber with the approved screw connectors and loaded with a even distributed loading of dry building sand until a substantial deflection was noted and the load then weighed with an approved scale to determine the actual load. The 32 square foot sample was subjected to a 3000# load before rupture of the skin began, which equates to 94 PSF loading.

The testing was conduced on March 12, 2005, at 13764 West Rena Drive, Largo Florida, 34641, and was not in conformance with (TAS) 202-94. "Criteria for Testing Impact and Non Impact Resistant Building Envelope Components Using Uniform Static Air Pressure."

April 21, 2005

Ted Berman, P.E.
A.A. Arnold and Associates, Inc.
Senior Project Manager
1711 West 38th Place, Unit 1207
Hialeah, Florida 33012

Re: Certification of Independence

Dear Mr. Berman,

In conformance with Rile 9B.72.110F.A.C., "Criteria for Certification of Independence", I hereby certify that I am a registered Professional Engineer in the State of Florida. My Florida license number is 47377. I operate as an individual engineer.

In my work performing any evaluation for any company, I have not nor will I acquire a financial interest in any company manufacturing or distributing products of the reports, which I prepare.

In my work performing an evaluation, I do not have, nor will I acquire a financial interest in any other entity involved in the approval process of the product.

I trust that this is sufficient for the Florida Building commission's requirements. If there are any questions about this Certificate of Independence or any additional information is required, please advise me.

Sincerely,

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(863) 287-7073 cell
lgwood1@gte.net