

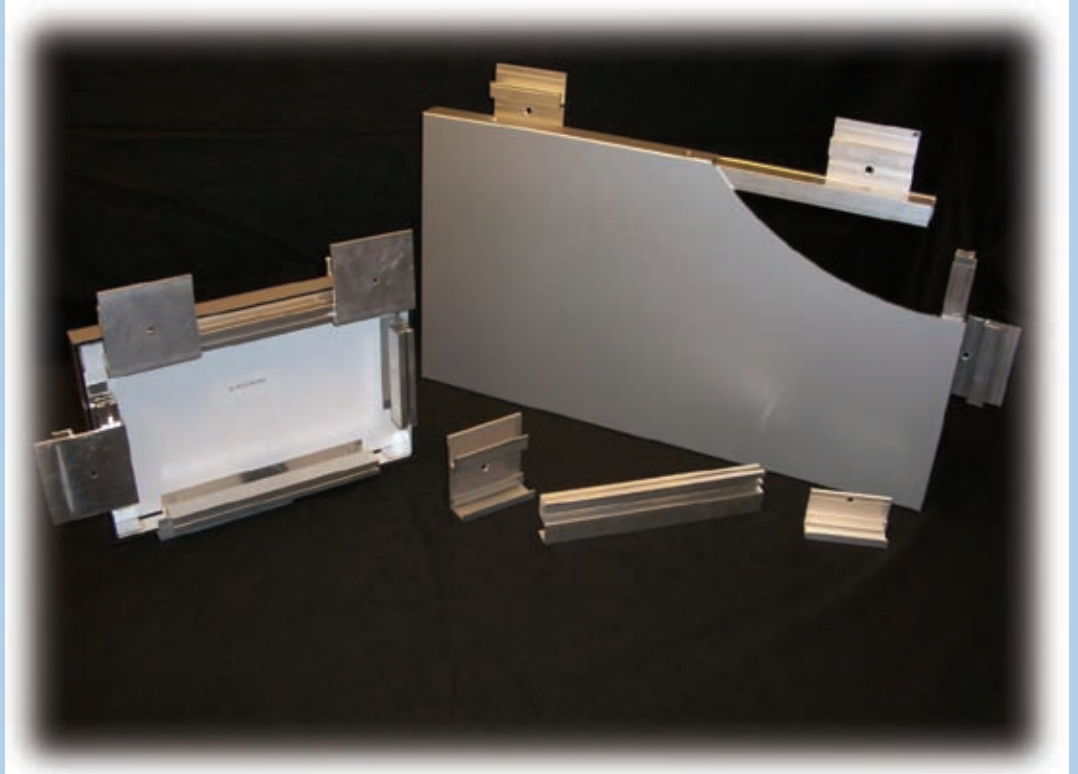
**Accu-Trac®**

***Revolutionizing the Wall Panel Industry***



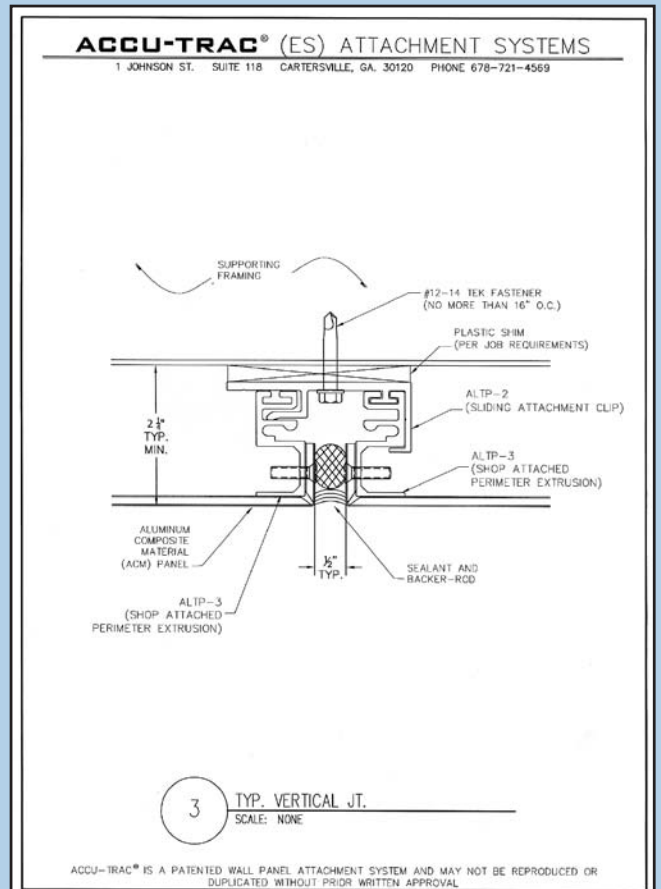
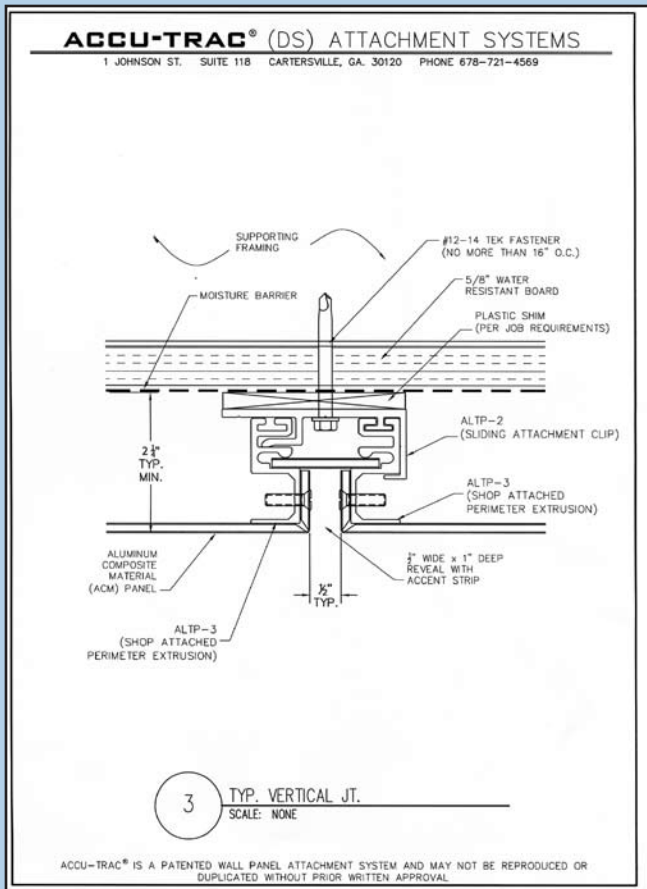
***The Accu-Trac® Advantage***

# PERFORMANCE MADE SIMPLE



## DS Details

## ES Details



## VERTICAL & HORIZONTAL JT. ACCU-TRAC® DS & ES DETAILS

# NATIONAL CERTIFIED TESTING LABORATORIES



## NATIONAL CERTIFIED TESTING LABORATORIES

8350 PARKLINE BLVD SUITE 300 • ORLANDO, FLORIDA 32809 • TELEPHONE (407) 240-1356  
FAX (407) 240-8882  
www.nctlinc.com

November 24, 2004

Altech Panel Systems  
1 Johnson Street, Suite 118  
Cartersville, GA 30120

### RE: STRUCTURAL TEST RESULTS SUMMARY

Mr. Jerry Radford:

On November 23, 2004, tests were conducted by our laboratory on Altech Panel Systems' 16 Gauge Composition Wall Panel System in accordance with the ASTM E283, E331, E330, and E1886/1996 Test Methods.

Test Method	Title of Test	Test Results
ASTM E283	Air Infiltration	Pass
	1.57 psf (25 mph)	Pass
ASTM E331	Water Resistance	Pass
	5.0 gph/ft <sup>2</sup>	Pass
ASTM E330	WTP= 15 psf	Pass
	Uniform Load Structural	Pass
ASTM E1886	75 psf exterior	Pass
	75 psf interior	Pass
ASTM E1886	Cycle Test	Pass
ASTM E1896	Impact Test	Pass

\*\* No glass breakage or permanent damage causing the unit to be inoperable.

The specimen tested met the performance criteria for the above referenced specifications.

A full report containing the details of the above referenced tests are forthcoming at the time of this letter.

PROFESSIONALS IN THE SCIENCE OF TESTING



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### RE: STRUCTURAL TEST RESULTS SUMMARY

Mr. Jerry Radford:

On November 23, 2004, tests were conducted by our laboratory on Altech Panel Systems' 16 Gauge Composition Wall Panel System in accordance with the TAS 201, 202, 203 Test Methods.

Test Method	Title of Test	Test Results
TAS 202	Air Infiltration	Pass
	1.57 psf (25 mph)	Pass
TAS 202	Water Resistance	Pass
	5.0 gph/ft <sup>2</sup>	Pass
TAS 202	WTP= 15 psf	Pass
	Uniform Load Structural	Pass
TAS 202	75 psf exterior	Pass
	75 psf interior	Pass
TAS 201	Impact Test	Pass
TAS 203	Cycle Test	Pass

\*\* No glass breakage or permanent damage causing the unit to be inoperable.

The specimen tested met the performance criteria for the above referenced specifications.

A full report containing the details of the above referenced tests are forthcoming at the time of this letter.

PROFESSIONALS IN THE SCIENCE OF TESTING

## UNITED STATES PATENT

### The Director of the United States Patent and Trademark Office

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

### United States Patent

Grants to the person(s) having title to this patent the right to exclude others from making, using, offering for sale, or selling the invention throughout the United States of America or importing the invention into the United States of America, and if the invention is a process, of the right to exclude others from using, offering for sale or selling throughout the United States of America, or importing into the United States of America, products made by that process, for the term set forth in 35 U.S.C. 154(a)(2) or (c)(1), subject to the payment of maintenance fees as provided by 35 U.S.C. 41(b). See the Maintenance Fee Notice on the inside of the cover.

David J. Kappas

Director of the United States Patent and Trademark Office

The United States of America



US007716891B2

### (12) United States Patent Radford

(10) Patent No.: **US 7,716,891 B2**  
(45) Date of Patent: **May 18, 2010**

#### (54) ATTACHMENT SYSTEM FOR PANEL OR FACIADE

(75) Inventor: Jerry L. Radford, Dallas, GA (US)  
(73) Assignee: Altech Panel Systems, LLC, Cartersville, GA (US)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1147 days.

(21) Appl. No.: 11/177,770

(22) Filed: Jul. 8, 2005

(65) Prior Publication Data  
US 2009/0145671 A1 Jun. 11, 2009

(51) Int. Cl. (2006.01)  
E04B 2/00 (2006.01)  
E04B 5/00 (2006.01)  
E04H 9/00 (2006.01)  
E04H 1/00 (2006.01)

(52) U.S. Cl. (2006.01)  
52/506.08; 52/235; 52/506.05;  
52/506.06; 52/506.07; 52/474

(58) Field of Classification Search (2006.01)  
52/235, 52/506.05, 506.06, 506.07, 506.08, 506.09, 52/474, 475, 476

See application file for complete search history.

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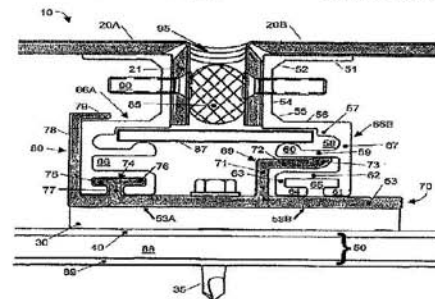
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Primary Examiner—Richard E. Chilcutt, Jr.  
Assistant Examiner—Andrew J. Trigg  
(74) Attorney, Agent, or Firm—Charles L. Warner, II; Bryan Cave LLP

#### (57) ABSTRACT

Panels (20A, 20B) are attached to extrusions (66A, 66B) by fasteners 90. Clips (70) are attached to a structure (50) by fasteners (85). The extrusions and the clips engage in a manner which allows the panels to move in any direction, as needed, without the panel detaching from the structure and falling. The extrusions also provide for the use of optional reveal strips (87). An extrusion has a restraining area (86), a reveal strip stop area (58), and a slot (65). A clip has a T-channel (74), a tensioning stop arm (69), and a secondary retaining arm (80). The panels can be installed in rows, in columns, or diagonally, as desired.

25 Claims, 4 Drawing Sheets



## ***ACCU-TRAC® IS INNOVATIVE***

- ◆ The developers of Accu-Trac® continue to pursue enhancement and innovation of the Accu-Trac® Systems. The current system provides for a 2 ¼” depth from panel surface to the substrate. Soon to be released will be a low profile system suitable for use in both interior and exterior applications in lower wind load areas that provide the same, proven sliding clip technology.



## ***ACCU-TRAC® SYSTEM IS AVAILABLE***

- ◆ As a complete package from Altech Panel Systems, for engineered, fabricated and delivered panels for a specific project.
- ◆ The Accu-Trac® extrusion system may be purchased directly from Altech Panel Systems, LLC by authorized fabricators, distributors and installers after reaching agreements with Altech Panel Systems with regards to the use, applications, requirements, and rights of use of the Accu-Trac® Systems.
- ◆ Licensing agreements are available for Accu-Trac® which permit the reproduction for use and distribution of the Accu-Trac® and/or the sliding clip technology. A licensing fee and royalty schedule will be required in all such cases.
- ◆ Details, technical advice, fabricator and installer training are available from Altech Panel Systems, LLC.

**Contact us at 678-721-4569 or  
[www.altechpanel.com](http://www.altechpanel.com) for more information**

# **ACCU-TRAC® IS THE BEST SOLUTION FOR TODAY'S WALL PANELS**

**BE THE FIRST FABRICATOR IN YOUR AREA TO TAKE ADVANTAGE OF  
THE #1 ATTACHMENT SYSTEM IN THE INDUSTRY**

## ***What our Customers are saying....***

**“We are really impressed with how easy the Accu-Trac® system is to install and were able to complete the project quicker than we had estimated.”**

Mike Browning  
Diamond Point Glass, LLC

**“As the Barbara Loar Library comes to completion, I want to commend you and your team for bringing our design to reality.”**

Jason Swichtenberg  
Richard Wittschiede Hand

**“I’ve been working with aluminum composite material for over 20 years and by far this system goes together better than any other system that I have seen installed.”**

Tom Walsh  
St. Louis Metal Works



**Northlake-Barbara Loar Library**

**Contact us at 678-721-4569 or  
[www.altechpanel.com](http://www.altechpanel.com) for more information**

## ***THE ACCU-TRAC® ADVANTAGE***

- ◆ The first patented sliding clip extrusion system designed for the attachment of ACM/MCM as well as other materials to structures of varied shapes, sizes and substrates.
- ◆ Can be used with 3, 4 and 6mm ACM/MCM materials without any modification. Accu-Trac® may also be used with other materials such as plate, fiber, phenolic and some other thicker materials without modification.
- ◆ For the first time in the ACM industry the sliding clip design allows for expansion and contraction in all directions while maintaining positive attachment on all sides of the panel. This eliminates face distortion and allows the ACM panels to expand and contract independently of the structure.
- ◆ Tested attachment system meeting the rigid standards of Miami-Dade County Requirements. Can withstand wind loads exceeding category 3 hurricanes. Passes small and large missile impact requirements without the use of secondary barrier or Kevlar.
- ◆ Proven in 6 years use as a high performance, easy to install attachment system. Numerous installers from the very experienced to novice crews have been impressed with the adaptability and user friendly characteristics of the Accu-Trac® System. According to many installers, Accu-Trac® has proven to be faster, easier, and more accurately installed than any other system they've used, potentially saving 10% or more in installation costs. The sliding clip technology allows for location and attachment of the clip simply by sliding it to the proper location.
- ◆ Can be used as an exposed sealant attachment system or as a rear ventilated "rain screen" system over many moisture barriers which provides for crisp recessed reveals at joints and drainage where required. Joint widths may be varied from ½" to several inches.
- ◆ Allows flexibility from flat walls to varying radius conditions and can be installed over almost any substrate.
- ◆ The heavy construction of the Accu-Trac® System eliminates the need for stiffeners in most applications. Extreme wind load conditions may require stiffeners on very large panels. Extremely large soffit panels require stiffening to eliminate weight sag.
- ◆ Allows for single panel replacement without the necessity of removing adjacent panels, should a panel become damaged.
- ◆ Specifiable, giving architects the confidence that their designs will be fabricated and installed with a high performance, high quality system providing many years of problem free service.