

Florida

SMACNA Inc.

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TECH/SPEC

NEWS

**TASTE TOTEMS COKES AROUND THE WORLD DISPLAY
NEW WORLD OF COCA COLA, ATLANTA, GA**



Sheet Metal Fabricator: Vickers Metal Works, Inc., Orlando, FL

TASTE TOTEMS COKES AROUND THE WORLD DISPLAY NEW WORLD OF COCA COLA, ATLANTA, GA



The scope of this project called for the construction of five serviceable and stylish stainless steel kiosks. These kiosks would dispense 24 flavors of coca cola products and house sixteen LCD video monitors.

For this project Vickers used Solidworks 3D design software to interpret and redesign the original AutoCAD 3D drawings prior to fabrication. Solidworks allowed for solid modeling as required ensuring that all the parts would fit together and operate as intended.

Flat patterns were then downloaded from Solidworks into Metal Soft or PCM for fabrication. The Steel Tube internal frames needed to support 2000 lbs of dispensing machines along with hidden florescent and LED lights located behind custom stainless steel perforated panels. The stainless steel panels were either burned on Vickers' high definition plasma table or punched out using their Nisshinbo Punch Press.

Working closely with Nassal Company for the video monitors, lighting and installation, Vickers was able to supply these unique kiosks, constructed of 16 ga brushed stainless steel panels, in approximately three months as required for installation by Nassal in the Cokes Around the World display.

Approximately 2,500 man hours were required for their fabrication.

Exhibit Fabricator: DPN, A Joint Venture Of The Nassal Company and Design and Production, Inc., Orlando, FL

Sheet Metal Fabricator: Vickers Metal Works, Inc. Orlando, FL

WEST ORANGE HIGH SCHOOL, WINTER GARDEN, FL



Architect: Schenkel Shultz Architecture, Orlando, FL
General Contractor: Clark Construction, Orlando, FL
Mechanical Contractor: Randall Mechanical, Orlando, FL
Sheet Metal Contractor: Lapin Sheet Metal Company, Inc.,
Orlando, FL



**WEST ORANGE HIGH SCHOOL,
WINTER GARDEN, FL**



WEST ORANGE HIGH SCHOOL, WINTER GARDEN, FL



The scope of work provided by Lapin Sheet Metal Company, Inc. in the construction of West Orange High School in Winter Garden, Florida consisted of the fabrication and installation of all HVAC ductwork, the setting of roof curbs and exhaust fans including hurricane tie-downs, the installation of all VAV's and fans powered boxes for nine separate buildings.

The high school buildings included three two-story classroom buildings, a gymnasium, a cafeteria, an auditorium, an administrative building, a library and a football locker room.

Galvanized steel (18 to 26 ga) was used for the ductwork for HVAC systems, aluminum ductwork was provided for all shower and locker rooms and 18 ga stainless steel in the kitchen exhaust system.

The major challenge of the project was the close coordination required of Lapin Sheet Metal and all of the MEP trades in above ceiling rough-in because of structural changes, equipment installation and owner directed change orders.

Daniel Lapin, Project Manager, expressed his thanks to Clark Construction Co. and to Randall Mechanical and also recognized Lapin's Foreman, Rigo Rangel, and other employees who worked on this project. The project was especially meaningful to Daniel Lapin who was a graduate of West Orange High School.



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OTHER CONTRIBUTORS TO THE FLORIDA SHEET METAL INDUSTRY

Air Duct, Inc.

Apollo Construction & Engineering

D&J Sheet Metal

DKG & Associates

Digital Climate & Control

EK Installations

EMC2 Sheet Metal

Florida Metal Art

FCR Mechanical Contractors

Industrial Steel

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JV Installation

MFH Sheet Metal Fabricators, Corp.

Precision Mechanical, Inc.

Quality Metal Works, Inc.

SDB Engineers and Constructors, Inc.

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SMACNA'S ARCHITECTURAL SHEET METAL FASCIA AND COPING WIND TEST MEETS INDUSTRY STANDARDS

Results of how architectural fascia and coping wind tests prove custom sheet metal meets industry wind design standards is now available. SMACNA's "Architectural Sheet Metal Fascia and Coping Wind Test Report" describes the performance of edge metal systems commonly found within the SMACNA "Architectural Sheet Metal Manual," sixth edition.

In recent years, pre-manufactured edge and coping products have proliferated—both imported and domestically produced—and the wind design standard ANSI/SPRI ES-1 was adopted into the model building codes. These factors and events led SMACNA's Technical Resources Committee, with the guidance of the Architectural Sheet Metal Council Steering Committee, to con-

duct wind testing of custom-fabricated gravel stop fascia and coping design shown in the SMACNA "Architectural Sheet Metal Manual." This testing was done to provide the design community documentation that proved custom sheet metal met the wind design standards.

Specimens for testing were produced in accordance with the "Architectural Sheet Metal Manual" and the gage requirements of the ANSI/SPRI ES-1 2003 "Wind Design Standard for Edge Systems Used for Low Slope Roofing Systems." These specimens were tested at Architectural Testing Inc., of York, Pennsylvania, an ANSI accredited testing laboratory according to the ANSI/ ES-1 requirements.

The specimens fabricated and tested were

Figures 2-1 and 3-1 of the SMACNA "Architectural Metal Manual." This first set of test data is for formed aluminum which successfully passed the test requirements of ANSI/SPRI ES-1. Copper and steel gravel stop and coping will be tested later this year and the results of those tests will be added to the report during 2008.

This test data can be used by designers and contractors to determine the site and building-specific requirements for wind uplift and pull-off of edge metal systems.

The test results synopsis "Architectural Sheet Metal Fascia and Coping Wind Test Report" is available at <http://www.smacna.org> under the Technical Papers area of the Web site.

Florida

SMACNA Inc.

• SMACNA'S CONSTRUCTION STANDARDS

- Accepted Industry Standards for Sheet Metal Lagging.
- Architectural Sheet Metal Manual.
- Architectural Sheet Metal Manual, CADD Version 2.0
- Fire Smoke and Radiation Damper Installation Guide for HVAC Systems.
- Guide for Steel Stack Construction.
- Guidelines for Roof Mounted Outdoor Air-Conditioner Installations.
- HVAC Duct Systems Inspection Guide.
- Kitchen Ventilation Systems & Food Service Equipment Guidelines.
- Managers' Guide for Welding.
- Residential Sheet Metal Guidelines.
- Seismic Restraint Manual: Guidelines for Mechanical Systems.
- SMACNA/ASHRAE Seismic

Restraint Applications CD-ROM.

- Standard Practice in Sheet Metal Work.

• SMACNA'S DUCT STANDARDS

- Duct Research Destroys Design Myths (Bubble Video).
- Duct System Calculator - Imperial.
- Ducted Electric Heat Guide for Air Handling Systems.
- HVAC Duct Design Home Study
- HVAC Systems - Duct Design.

• SMACNA'S DESIGN GUIDELINES

- Accepted Industry Practice for Industrial Duct Construction.
- Fibrous Glass Duct Construction Standards.
- HVAC Air Duct Leakage Test Manual.
- HVAC Duct Construction Standards - Metal and Flexible.
- Rectangular Industrial Duct Construction Standards.
- Residential Comfort System Installation Standards Manual.

- Round Industrial Duct Construction Standards.
- Round Industrial Duct Construction Standards (RIDCS) Software Version 2.0.
- Thermoplastic Duct (PVC) Construction Manual.
- Thermoset FRP Duct Construction Manual.

• SMACNA'S ENVIRONMENTAL PUBLICATIONS

- Building Systems Analysis and Retrofit Manual.
- Energy Systems Analysis and Management.
- HVAC Systems - Applications.
- HVAC Systems - Commissioning Manual.
- HVAC Systems - Testing, Adjusting & Balancing.
- IAQ Guidelines for Occupied Buildings Under Construction.
- Indoor Air Quality - A Systems Approach.
- TAB Procedural Guide.



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