SMACMA Inc.

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TECH/SPEC

NEWS

MIAMI INTERNATIONAL AIRPORT, CONCOURSE H, INTERNATIONAL MODIFICATIONS, MIAMI, FL



Architect: Perez & Perez, Miami, FL

Engineer: SDM Consulting Engineers, Inc., Coral Gables, FL

Construction Managers: Parsons-Odebrecht Joint Venture, Miami, FL

Sheet Metal Contractor: Dodec, Inc., Hialeah Gardens, FL

MIAMI INTERNATIONAL AIRPORT, CONCOURSE H, INTERNATIONAL MODIFICATIONS, MIAMI, FL



The duct was manufactured by MFH Sheet Metal Fabricators, Corp. of North Miami Beach. MFH Sheet Metal Fabricators, Corp. recently purchased the fabrication division of TES of South Florida. MFH produces lined, unlined, single & double-wall metal duct, fiberglass duct, stainless steel and kitchen exhaust duct to the customer's specifictions.

The main challenges that the Concourse H Project presented were: 1) Portions of the work had already been performed by It appeared that the previous contractor was unable to adequately communicate with the engineer and thus was unable to complete the job.

Dodec, Inc. took over the project and after surveying the conditions, met with the engineer and reviewed the challenges presented by the job and their scope with him. Dodec and the engineer were able to communicate the job challenges.

Dodec assisted the engineer in solving design RFI's and was able to get the job rolling again. Dodec's portion of the job

is now complete and the entire concourse will shortly be finished.

Sometimes jobs that appear to be difficult at first glance turn out to be just the opposite. A simple meeting of the minds at the site was all it took for a successful performance.

The client has expressed their satisfaction with the project, and as a result Dodec, Inc. has been called upon to do additional work.

BREVARD COUNTY DETENTION CENTER EXPANSION, COCOA, FL



Architect: Rogers, Lovelock & Fritz, Inc., Winter Park, FL **Mechanical Contractor:** Precision Mechanical, Inc., Cocoa, FL

Sheet Metal Contractor: Lapin Sheet Metal Company, Inc., Orlando, FL

The Brevard County Detention Center Expansion project was unusual because it required the installation of duct work into Sprung Instant Structures or stressed membrane structures, which are engineered relocatable clear span structure systems referred to by the Detention Center as "tents". For more information on these unique structures see www.sprung.com.

Lapin Sheet Metal Company, Inc. contracted to install HVAC duct in four detention tents and in one masonry struture, the laundry facility.

All duct was galvanized sheet metal fabricated and installed according to SMACNA standards.



BREVARD COUNTY DETENTION CENTER EXPANSION, COCOA, FL



Additionally, Eastern Sheet Metal, Co. provided dual wall spiral duct and Price Air Devices were used in all four tents. The Price Air Devices and Greenheck Duct Specialties provided by Stan Weaver Company were utilized in all four tents.

One of the unique aspects of the project was the upper hanger attachments which were used to support the mechanical systems. These attachments had to mate with slots in the ribs of the building steel and were positioned along these slots at required locations to mate with the mechanical systems they were to support.

The attachment locations required a coordinated effort on the part of all the contractors involved. There was also a mechanical mezzanine in each tent which housed the air handling unit.

The \$262,500.00 project was fast track starting in May, 2006 and completed in July, 2006 ready for owner occupancy.

Lapin Sheet Metal Company, Inc. recognized the Precision Mechanical, Inc. crew for their support in making the timely completion of the project a reality.



DAYTONA BEACH COMMUNITY COLLEGE MORI HOSSEINI CENTER, DAYTONA BEACH, FL



Architect: Florida Architect, Inc., Orlando, FL

Engineer: Cape Design Engineering, Cape Canaveral, FL

Construction Manager: PPI, Gainesville, FL **Mechanical Contractor:** W. W. Gay, Orlando, FL

Sheet Metal Contractor: Lee's Sheet Metal & Air Conditioning, Inc., East Palatka, FL **Drafting Services Contractor:** Cadvantage Drafting Service, Inc., St. Petersburg, FL

The Daytona Beach Community College Mori Hosseini Center project consists of the construction of a new facility for the relocation and expansion of the college's hospitality, tourism and culinary programs and for the Southeast Museum of Photography.

The scope of the project for Lee's Sheet Metal & Air Conditioning, Inc. of East Palatka includes providing the fabrication and installation of the HVAC duct system for the new two-story, 67,000 square-foot Mori Hosseini Center.

Lee's Sheet Metal contracted with Cadvantage Drafting Services, Inc. of St. Petersburg to provide coordination and fabrication drawings for the project.

Cadvantage utilizes an in-house custom 3-D Autocad®based software program for duct work design. The program allows Cadvantage to produce drawings that help Lee's Sheet Metal stay on schedule. It also helps addresses coordination problems prior to fabrication.

Cadvantage Drafting Service's President, Dan Sinclair, emphasizes the importance of good communication between architects, owners, engineers and project managers.

"In today's construction environment, effective coordination is the key to a successful project. Our 3-D drawings enable these professionals to pinpoint problem areas before they can have a negative impact."

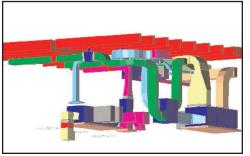
The expected completion date for this project is July 10, 2007.

Jimmy Lee, president of Lee's Sheet Metal & Air Conditioning, Inc., expressed his sincere gratitude to everyone involved in the coordination phase of this project.

Special thanks go to James Cason of PPI Construction, Jack Sanderson of W. W. Gay Mechanical, Claude Evans of Southeast Fire Protection, Dan Sinclair of Cadvantage and Brian McCord of Lee's Sheet Metal.



Cadvantage Detailers Mike Reiss and Felipe Arango Reviewing Equipment Room Drawing.



FLORIDA SMACNA, INC. MEMBER FIRMS

In the sheet metal and air conditioning business, nobody knows excellence quite the way SMACNA Contractors do. After all, they wrote the book on it. Why take a chance on doing business with anyone who offers less.

Air Managment Stystems, Inc.

16215 15th Avenue Miami, FL 33169 305-651-0440 Jim Hightower

All Southern Fabricators, Inc.

5010 126th Avenue N. Clearwater, FL 33760 727-573-4846 Manuel Santana, Jr.

Anderson Technical Systems, Inc.

333 W. Marion Avenue Edgewater, FL 32131 386-423-2500 Tim Anderson

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BSA Sheet Metal

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CADVANTAGE Drafting

Service, Inc. 2220 1st Avenue S. St. Petersburg, FL 33713 727-321-2072 Dan Sinclair

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3140 W. 84th Street, Bay #2 Hialeah, FL 33018 305-826-4022 Trevor Pantry

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Gordon Metal Fabricators

1209 Old Hopewell Road Tampa, FL 33619 813-663-9884 Christopher Gordon

Lapin Sheet Metal Company

3825 Gardenia Avenue Orlando, FL 32839 407-423-9897 Ronald J. Lapin

Lee's Sheet Metal Works, Inc.

P.O. Box 756 East Palatka, FL 32131 386-328-5563 James Lee

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Magnum Sheet Metal, Inc.

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MetalFab, Inc.

28212 Rice Road San Antonio, FL 33576 352-588-9901 Wally Ruda

National Sheet Metal Co.

8318 Atlantic Blvd. Jacksonville, FL 32211 904-724-7476 Ed Dickey

Omega Test and Balance

126 Wisteria Avenue Fort Pierce, FL 34982 772-216-7362 **Hugh Grimes**

R. Neth & Son, Inc.

360 E. Landstreet Road Orlando, FL 32824 407-855-9096 Steven Woodley

Ray's Metal Works, Inc.

P.O. Box 700 Alachua, FL 32615 386-462-1415 Ray Burnsed, Sr.

Sheet Metal Experts, Inc.

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5217 NE Shore Village Terrace Stuart, FL 34996 954-647-6457 Wayne Bozer

United Sheet Metal Company

14945 NW 25th Court Miami, FL 33054 305-685-3526 Rich Applegate

Vickers Metal Works, Inc.

6701 Edgewater Commerce Pkwy. Orlando, FL 32810 407-297-7546 Tim Vickers

OTHER CONTRIBUTORS TO THE FLORIDA SHEET METAL INDUSTRY

Air Duct, Inc.

Apollo Construction & Engineering

D&J Sheet Metal Draft-Tronics EK Installations

FCR Mechanical Contractors

Florida Metal Art

1st Plumbing and Air Conditioning of Florida **Industrial Steel** JP Sheet Metal

JV Installation MFH Sheet Metal Fabricators, Corp.

Precision Mechanical, Inc.

Quality Metal Works, Inc.

SDB Engineers and Constructors, Inc.

Triple M Roofing Corp. **Universal Fabrication Services** Walt Disney World Company

EARLY START-UP OF PERMANENTLY INSTALLED HVAC SYSTEMS

Contractors are increasingly being required to perform early start-up of HVAC Systems for the use of temporary heating, cooling or dehumidification during the construction process.

This practice can pose a significant impact to the integrity of the HVAC equipment and HVAC distribution system.

SMACNA has developed several documents in reference to concerns related to early start-up of HVAC systems.

The document on Temporary Uses of HVAC Systems in Building Construction Projects outlines the realities and risks of using temporary heating, cooling and dehumidification equipment.

Early start-up of HVAC systems can often create serious issues and concerns with regard to warranties and service.

To view the documents on early start-up, visit the SMACNA website *www.smacna.org*.

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.

Florida





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