

Job Story:

CHALLENGE:

Find closed-cell insulation supplier capable of training and supporting large workforce throughout high profile expansion.

SOLUTION:

Choose AP Armaflex with expert onsite application training for 60+ technicians via the AQIP training program. Increase specialized insulation capability in growing Panamanian market!

Project:
Chilled Water Piping Insulation for Major Expansion at Tocumen International Airport

Location:
Avenida Domingo Díaz,
Panama City, Panama

Electromechanical Contractor:
Integ (Venezuela, Costa Rica,
Brazil, USA and Panama)

Engineering Firm:
Foster + Partners



Mechanical Contractor Advocates for Armaflex at Tocumen Airport Expansion

It takes vision to recognize the opportunities inherent within a large, multi-year construction project. You have to look past the present challenges, learning curve and even the paycheck to see how a given project might help you grow your business.

Integ, an electromechanical contractor with offices in Venezuela, Costa Rica, Brazil, USA and Panama, accepted a major challenge when it was awarded the contract to supply, fabricate and install all the HVAC equipment for an expansion at the Tocumen International Airport in Panama City, Panama. Integ also realized the project was an excellent opportunity to increase its marketability as an experienced installer of Armaflex closed-cell pipe insulation on large scale projects.

The expansion at Tocumen included the addition of a new \$697 million terminal that would increase the airport's current service capacity from 5,800,000 passengers to 18,000,000 million passengers per year. The new 860,000 sq. ft. South Terminal, created the need for an additional 5,750 tons of cooling capacity and 60,000 linear feet of chilled water piping, all of which had to be fabricated, installed, and insulated by Integ.

Integ coordinated the project's mechanical, electrical and plumbing obtaining a Level of Development specification (LOD-400). Armacell provided the necessary BIM (Building Information Models) information in order to generate a level of detail rarely seen in Latin America.



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Having had positive experiences installing Armaflex closed-cell elastomeric foam products in the past, Integ successfully advocated that Armaflex be used to insulate the chilled water piping at the airport. Integ knew that Armacell provided excellent customer support and product training, both of which would be needed to ensure the successful outcome of such a large-scale project. Acting on the advice of the contractor, Foster + Partners, the mechanical engineering firm for the Tocumen expansion, specified closed-cell elastomeric foam for the project.



Right Product, Right Partner

Armaflex pipe insulation is ideally suited for cold water applications, especially in humid climates like Panama where high dew points increase the chances for condensation on chilled water piping. Low thermal conductivity and a built-in vapor barrier effectively prevent the formation of condensation and spread of moisture, which can lead to mold and significant losses of thermal efficiency. But these weren't the only reasons that Integ advocated for Armaflex. The contractor's confidence in the brand was as much about Armacell's training and service as it was the superior performance characteristics of the product. Integ wanted a partner in this high-profile project.

"We started our relationship with Armacell several years ago when we used Armaflex to insulate the ductwork in Line 4 of the Caracas Metro in Venezuela, which includes 5 stations. For that project Armacell successfully trained more than 50 workers and we completed the job flawlessly. We knew that this kind of service was going to be required here in Panama to successfully complete this job, so Armaflex was the perfect choice," said Integ CEO / General Manager, Miguel Suarez.

Several of Integ's Panamanian technicians were already Armaflex Qualified Installer Program (AQIP) certified in the application of Armaflex insulation, and had used the material to insulate duct as well as piping. But this project was larger in scale than any other piping project Integ had encountered, plus it came with a demanding schedule and challenging logistics. Integ needed more trained manpower—a lot more. It was an excellent opportunity for the contractor to enhance the product skills of its Panamanian workforce, skills that would certainly give Integ a competitive edge on future large-scale chilled water projects.

"Not only has Armacell provided training courses for our staff, but they regularly come to the jobsite to ensure that the installers are doing a good job."

In preparation for the Tocumen project, 60 Integ technicians attended Armacell's AQIP sessions, taught by an Armaflex elastomeric foam application specialist at Integ's temporary warehouse located at airport jobsite.

The hands-on training included instruction on:

- How to cut, glue, seam and seal Armaflex material
- How to fabricate covers for fittings such as tees, elbows, and valves
- How to use Armaflex approved adhesives and tapes



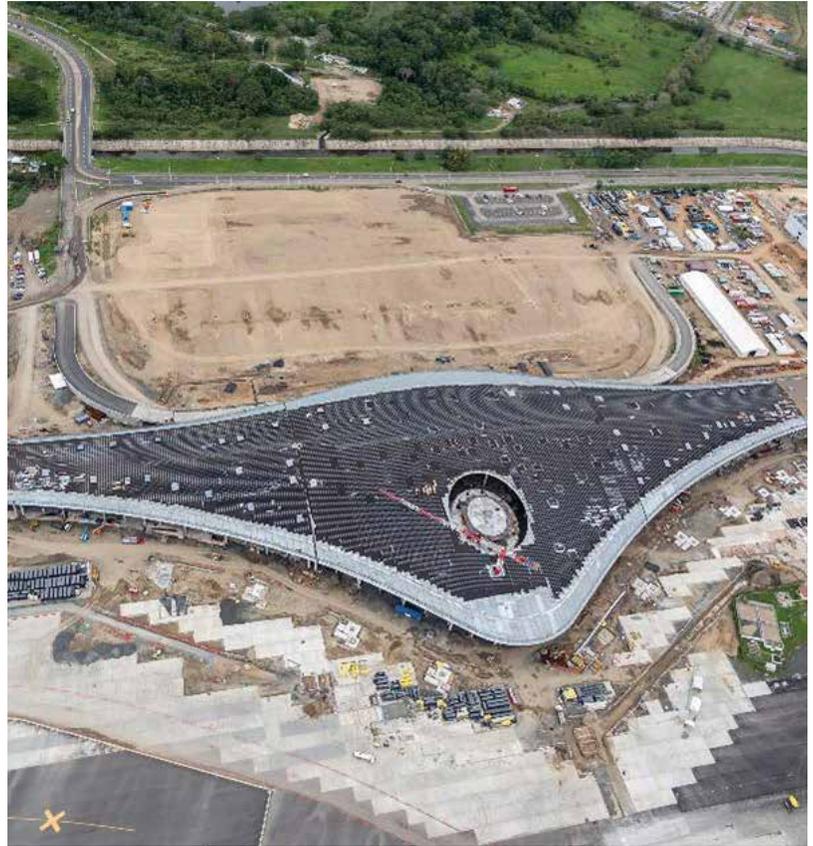
With this ready crew of skilled labor, Integ was able to set up an efficient pre-fabrication station within Integ's temporary warehouse located at airport jobsite. In this controlled environment, workers were able to pre-insulate all the piping (3/4 to 16-inch) and pre-fabricate Armaflex fitting covers using templates provided by Armacell.

"It was a different type of delivery process for this contractor, but one that enabled them to maintain a high degree of quality control without wasting time or product. They were very organized and efficient," said Rafael Briceño, Armacell's Sales & Marketing Manager in Northern Latin America.



Briceño, frequently accompanied by an Armacell elastomeric foam application training specialist, continued to visit the jobsite throughout the project, inspecting the installations and answering any questions the installers might have.

“The presence of Armacell throughout the project has been amazing. Not only have they provided training courses for our staff, but they regularly come to visit the jobsite to ensure that the installers are doing a good job, supply us with different tools, and give us recommendations to optimize the productivity. Rafael has always been there to help us work through any issue,” said Project Director, Jose Antonio Galavis.



Ready for Take-Off

The Tocumen airport expansion was initiated in response to the rapid economic growth in Panama over the last decade. Ultimately, the overall expansion will position Tocumen as the most important airport in Central America.

That's great news for Integ, a company that has made a name for itself as a leading mechanical contractor in Panama, Venezuela, Costa Rica, USA and Brazil. Now, with a squadron of technicians trained in the application of elastomeric foam insulation, the company's chilled water piping business is poised for even greater opportunity as the Panamanian economy takes flight.

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