



INNOVATIONS FOR LIVING™

Owens Corning Products Add Safety, Energy Efficiency & Comfort To Washington, DC's Largest Building



Washington Convention Center, Washington, DC

Case Study



Scott Weiss is no stranger to large construction projects. As a vice president at Kamco Building Supply, Weiss has visited many big building sites over the years. Still, he was impressed when he first saw the new Washington Convention Center in the District of Columbia.

“When we first saw the project, it was a tremendous hole in the ground,” said Weiss. “The excavation was so large the crane work and construction equipment actually looked like toy trucks in there.”

No wonder. The new Washington Convention Center is the largest public works project in the District since the city was first constructed. It will be the largest building in Washington and is being built in the largest excavation in the Western Hemisphere. To get the space they needed without violating the District's strict limits on building height, the 17-acre site was carved out to 50 feet below ground level. It will cover approximately six city blocks in the downtown business district.

To give you an idea of how much space the structure will enclose, the Sears Tower could comfortably fit inside. In the main exhibit hall, four 747's could sit on two major league baseball fields or six football fields. The new center will use as much steel as seven Eiffel Towers.

When completed in the Spring of 2003, the new Washington Convention Center will contain 2.3 million square feet of floor space, attract an estimated 2.5 million visitors, and is expected to bring \$1.4 billion in community economic stimulus each year.





In short, it will be a monumental building worthy of the nation's capital. Located in a neighborhood with interesting facades, the building will complement the surrounding townhouses with glass, brick, limestone and granite. At night, it will be a big lantern to the city. Grand light-filled spaces will usher visitors to meetings or exhibits.

Topping it all off will be the largest ballroom on the East Coast with a panoramic view of Washington's impressive monuments.

Working quietly and efficiently to conserve energy and keep everyone warm and cozy inside the building will be a variety of Owens Corning products, including PINK Foamular® extruded foam insulation, and a variety of commercial Fiberglas® and mineral wool insulation products.

Owens Corning All-Service Duct Wrap and ASI/SSL II Fiberglas pipe insulation were among the first products to go in. Advanced Specialty Contractors, Jessup, Md, installed them.

"We've used about 25 truckloads of material so far," says Kevin Sisk, construction superintendent for Advanced Specialty Contractors. "There were about 400 rolls of duct wrap and the rest of it has been pipe covering."

No stranger to large projects – Sisk also worked on the National Archive in Adelphi, Md., which included 10 buildings in a single endeavor – he admits that the Convention Center is special. He says the challenges are the same as any other job but they are



Owens Corning Products Installed At The New Washington Convention Center:

- Foamular® 250 extruded foam insulation
- Foamular® ThermaPink® 18 extruded foam insulation
- Foamular® 604 extruded foam waterproofing insulation
- Foamular® 1000 extruded foam waterproofing insulation
- ASI/SSL II Fiberglas® pipe insulation
- Fiberglas® All-Service Duct Wrap
- Safing insulation/Mineral Wool
- Fiberglas® Curtainwall insulation (CW225), unfaced and FRK foil-faced
- Sound Attenuation Fire Batts/Mineral Wool, 2" and 3"
- R-11 foil-faced Fiberglas® insulation



magnified by the fact that the Convention Center is two city blocks wide and six city blocks long.

"It's just like it is anywhere else these days," says Sisk. "They are all challenging, but in this case the amount of material and the movement of materials is especially challenging. And everything is up in the air; quite high, as a matter of fact. A lot of the work on the job must be done out of lifts; there is very little ladder work on that entire job."

Kamco Supply Corporation is supplying the exterior framing and interior package, and they are just getting started with the interior work, which couldn't begin until the exterior envelope was complete. Weiss says his company will supply more than a million square feet of Owens Corning products, including both fiberglass and mineral wool insulation. Applications include sound attenuation, fire safety and thermal performance.

"It's an enormous undertaking," says Weiss. "It's going to take quite a bit of manpower to supply. It's a good job for us. The steel framing and interior metal will total about 3 million lineal feet. The drywall alone is about 6 million square feet.

"We haven't even scratched the surface yet," he continues. "We'll be down there every day for many months."

A Road Runs Through It

One special feature of the new Washington Convention Center will be an underground plaza which goes right through the middle of the building. There will be exhibit and meeting space above the plaza, and a heated work area below. Exhibitors and others will be able to bring tractor-trailers into the center of the building to unload their displays and convention supplies.

Because parts of the plaza will be exposed to the elements and have heated areas underneath them, contractors are pouring concrete over Owens Corning Foamular® 1000 extruded foam insulation. Workers will first pour a concrete slab floor, then add a hot-fluid-applied waterproofing membrane, top that with Foamular® 1000, and then pour a topcoat of concrete.

"It's a roadway that's also a roof," says Steve Gordon, sales representative for Foamular insulation. "That's really what it is. They have to insulate the plaza deck because there is heated space under it."

Gordon says the job was originally designed for 60-pound board but there were concerns about the compressive strength of the





material. "We worked with the architect and engineer to change the specification. That was about a four-year project."

As a result, there will be about 400,000 square feet of Foamular® 1000 insulation in the plaza decks at the new Washington Convention Center.

Foamular® 1000 offers compressive strength of 100 pounds per square inch. It is designed for use in high load-bearing applications and is ideal for under slabs, concrete floors and over foundation walls. The superior water resistance of extruded foam insulation also assures stable thermal performance.

"Foamular® 1000 is heavy duty stuff," says Randy Newton, Owens Corning Area Sales Manager for commercial foam insulation products. "You could put almost anything you want over it."

Owens Corning foam insulation is also being used in two other applications. Foamular® 250 is being used as perimeter insulation around the foundation, and Foamular ThermaPink® 18 insulation is being installed in the wall cavity behind the exterior brick veneer.

Choosing Suppliers Carefully

Large projects always require good working relationships among manufacturers, distributors and contractors. The new Washington Convention Center is no exception.

"Basically, we are using Owens Corning products on this job because of the relationship that we have with Owens Corning," says Weiss. "We generally do business with them because of the relationship and because of the product; it's just a very good product and they have great technical support."

"A job like this is an ongoing project; it's not just a one-shot deal," he continues. "There needs to be flexibility in schedules, flexibility in delivery times, and there has got to be communication back and forth. We've had a long-standing relationship with Owens Corning. If there is a problem, we can get together with them and work it out."

Sisk says his good service relationship with Owens Corning was especially helpful recently when he and his crew were asked to meet a milestone deadline for getting chilled water online.

"The push was on to condition the building," says Sisk. "They had to control the humidity to do some of the finishing work in the building. They sent me a schedule and on the top it said, 'The Insulation Miracle – Let's get it done in two months.'"

"We're following behind the mechanical trades," continues Sisk. "When an area is released to us, it may be necessary to call Owens Corning and say, 'Give me a truck in three days.'" So, when that happened, the product was there, which helped me out a lot. Owens Corning did a good job with that."

The new Washington Convention Center is scheduled for completion by March 2003. The current budget estimate is \$799 million.

Convention Center Highlights

- 2.3 million square feet
- 725,000 square feet of exhibit space
- 150,000 square feet of meeting space
- 60,000 square foot ballroom
- 30,000 square feet of pre-function space
- 36,000 square feet of registration space
- 44,000 square feet of retail space
- Marshaling Yard located within 15 minutes
- State of the art technology

Project:

The new Washington Convention Center
Between 7th and 9th Streets NW
Mount Vernon Square
Washington, DC
www.dcconvention.com

Owner:

Washington Convention Center Authority
District of Columbia

Joint-Venture Architectural Team:

Thompson, Ventulett, Stainback & Associates, Inc. (TVS)
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(202) 483-2878

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Clark Construction Group, Inc.
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