# PROFILE

The headquarters and communication centers at the Centers for Disease Control and Prevention in Atlanta feature architectural precast concrete spandrels in several finishes to create visual interest for the world-famous center.

# Collaboration Creates Success For TVS – Craig A. Shutt

Thompson, Ventulett, Stainback & Associates thinks globally and acts locally with studio system that meets the needs of clients in a wide range of market segments

he design philosophy at Thompson, Ventulett, Stainback & Associates in Atlanta can be summed up in one word, according to Ray Hoover, managing principal: collaboration. "Our approach to the market has been based from our infancy on true collaboration with our clients to achieve the maximum impact that design can bring to their project."

The company was founded in 1968, and for the first seven to eight years, the majority of the firm's work came from local commercial developers who were trying to get the most design, leasable space, square footage or other benefits for the least capital expenditure, he explains. "We worked with our clients almost daily to bounce around ideas and collaborate on what they wanted to achieve, and we've maintained that approach ever since."

#### **Unique Studio System Used**

The close communication is enhanced by the company's format, which emphasizes studios relating to individual clients and other members of the team through their groups. "Clients have heard of the studio concept before, but we use it differently than most firms," Hoover says. One of the principals heads up each of the teams, which number approximately 27 in all in the company's three offices in Atlanta, Chicago and Dubai, United Arab Emirates. The studio is responsible for procurement of commissions, working





#### CDC Arlen Specter Headquarters

& Emergency Operations Center and the Thomas R. Harkin Global Communications Center Location: Atlanta

**Project Type:** Operations center

Area: 525,000 square feet total

Designer: Thompson, Ventulett, Stainback & Associates

**Owner:** Centers for Disease Control and Prevention

**Contractor:** Turner Construction (Global Communications Center) and Skanska USA Building Inc. (Headquarters)

**PCI-Certified Precaster:** Metromont Corp., Greenville, S.C. (for technical information on the spotlight projects, contact the precaster; see the Plant Certification listing.)

**Description:** Both the new headquarters and communications center on CDC's main campus were designed featuring architectural precast concrete spandrels and large expanses of glass on their exterior to exude a professional yet traditional look that offered a high-quality image.

Both the 12-story headquarters building and smaller communications center feature flat and curved spandrels, which help the structures relate to the four-acre landscaped commons onto which they open. The designs shape the buildings to maximize the visual impact of the new landscaped areas and create interesting vistas as people move through the spaces.

Sandblasted and retarded finishes were used to create visually disparate textures on the precast components. The buildings each erected in three phases, starting at the bottom and working upward to the top of the structures, which required three mobilizations of the erection crew.

with the client, creating design and construction documents and ensuring the team accomplishes its goals. To that end, it can call on the resources available through its communication and interaction with other studios.

"We offer the resources, people and experience of a larger firm while also providing the attention and commitment from a small group of motivated practitioners who are there to deliver strictly for that client," he explains.

The studios' arrangement is based on the team members' interests, experiences and reputations. "Some of the principals have been with us for 30 years [as Hoover has been] while others are younger. Some studios gravitate to one particular market, while some are more generalized and handle a more diversified group of projects. What gets all of them going is just the challenge of an architectural commission, no matter what it is. All they have to do is convince a client to work with them."

#### Instant Communication Aids Collaboration

Collaboration among the studios is made easier by new technologies allowing instant communication around the globe. "Working on our projects is less about how you divvy it up among the offices and more about how you harvest the talent of our offices and bring the global resources to bear on one specific project, no matter where in the world it began.



Ray Hoover, managing principal TVS, Atlanta

"We offer the resources, people and experience of a larger firm while also providing the attention and commitment from a small group of motivated practitioners who are there to deliver strictly for that client." 'I'm seeing [precast concrete] used more often as an expressive element in itself.'

Dramatic column covers along with screen-wall panels were cast from architectural precast concrete for the new Washington, D.C., convention center, complementing the large expanses of glass and modernistic design. That's what excites me the most today."

One recent project in Washington, D.C., for instance, had its conceptual design created in Atlanta, its technical design produced in Chicago, its conceptual engineering done in London, illustrations delineated in China, project management and early master planning supervised from Dubai and assistance provided by a local architect in Washington, D.C. With project components spanning so many time zones, designers can pass along work or questions before they leave at night and receive an answer before they arrive the next morning. "It eliminates a lot of our jet lag," he says. "The business of architecture can truly be a 24-hour activity today."

Even 18 months ago, commissions were much harder to coordinate

than now, and the pace continues to accelerate, he notes. "The world is truly becoming a small place." That flexibility and communication makes it easier to retain talent and tap into what it can offer. "The whole world is your oyster today in picking talent, so the quality of the designs and construction documents that we can offer our clients is light years better than in the past. We have a real dedication to taking advantage of that to provide unwavering commitment to quality design."

#### **Global Markets Are Strong**

Those connections are helping the company reach globally in its key markets, including convention centers, cultural and performing arts, education, government, office and retail, none of which are in a decline,

#### **PROJECT SPOTLIGHT** Washington Convention Center

Location: Washington, D.C.

**Project Type:** Convention and exhibition center

Area: 3 million square feet

**Designer:** Thompson, Ventulett, Stainback & Associates

**Owner:** The Washington Convention Center Authority

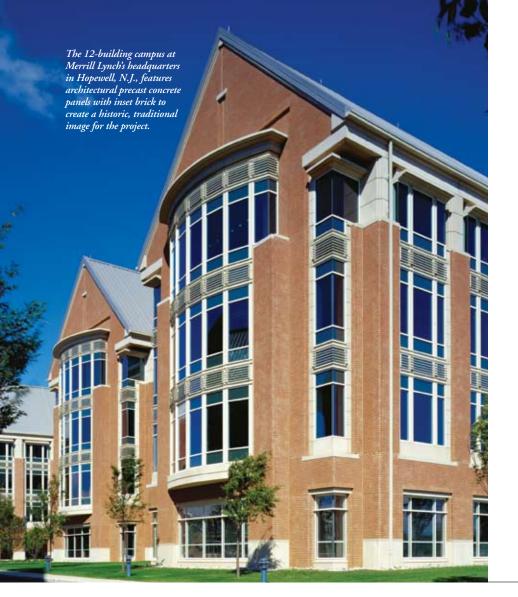
**Contractor:** *Clark/Smoot JV* 

**PCI-Certified Precaster:** Modern Mosaic Ltd., Niagara Falls, Ontario, Canada

**Description:** The design for this center acknowledged its prominent location to tie together a series of public monuments and preserve L'Enfant's master plan for the city grid. The team worked in continuous collaboration with the client and civic groups to achieve a modernistic look on a monumental scale, which also was aided by the use of architectural precast concrete for screen walls and for the "battered" column covers.

The wedge-shaped screen-wall panels span approximately 30 feet and are 5 feet wide. The lower screen-wall panels span end to end and are typically about 25 feet long. These panels were particularly challenging to create because they were only 2 feet high by 1'10<sup>7</sup>/<sub>8</sub>" thick, and all the connections, bearing and lateral, had to be concealed within the brick piers.





Merrill Lynch Corporate Campus Location: Hopewell, N.J. Project Type: Office buildings Area: 1.5 million square feet Designer: Thompson, Ventulett, Stainback & Associates Owner: Merrill Lynch & Co.

Contractor: Hunt Construction Co.

**PCI-Certified Precaster:** Universal Concrete Products Corp., Stow, Pa.

**Description:** Designers were challenged to create a dynamic corporate campus where social interaction and cohesiveness would foster a productive work environment for 6,000 employees. To create timeless quality and to relate to the architecture in the region, the 12 buildings in the project feature architectural precast concrete panels with inset brick. The goal was to achieve a masonry look while speeding construction.

The panels feature a light sandblast for exposed-concrete sections, producing a French-limestone appearance that was used primarily for window accents and other highlights.

he notes. "Globally, everything is doing well, although commercial offices in some parts of the United States are slower than others. Multitenant offices are showing signs of rebounding particularly in some markets, such as the west. But even retail, which is the most cyclical market we're in, is doing well now."

In that market, as well as in hospitality, renovation work and reflagging of existing properties for new operators are keeping commissions flowing in. "Our markets are enjoying good times."

The performing-arts market has brought the company some of its highest-profile commissions recently, including the Georgia Aquarium. "Much of the design work is topdrawer and stimulating," he says. These projects often have large oversight boards and committees that must approve designs, which can result in watering down the concept. But Hoover finds that today, the opposite seems to be occurring more often. "The bigger the group, the more there's a chance there are members who are committed to creating a great plan, which creates more design courage. That's very encouraging."

Education projects also are changing, taking on new programmatic needs beyond what has been expressed in the past, he notes. A recent project at the Georgia Institute of Technology exhibited the new approach, which looks to collaborating with the community to produce a structure that aids more than its educational needs. "The mixed-use design of the project represented a partnership with the community that is helping to nurture new business development and reinvigorate a part of the city that needed a shot in the arm. It has an incubator effect that serves as a catalyst for new business in addition to the education designs."

That type of collaboration is becoming more usual now in such

markets, he adds, though there isn't a long history of everyone pulling together for the overall good. "But today, leaders are better traveled and more aware of what's happening globally, and it's easier for them to see what's going on in the world and adapt it for their own needs. The world's experiences are easier to tap into."

Convention centers also continue to evolve, he says. "They are becoming the community's central meeting spaces, and their draw varies by need. Some are regional, national and even international." Each has a different strategy, he notes, requiring exhibition space, conference space, training facilities and other specialized functions. "The range of programmatic options must be met, and they must be able to adapt to the culture of the region, which can be different from other areas, particularly internationally," he says.

Those expanded programmatic needs, coupled with the desire for a



Gene Montezinos, principal TVS, Atlanta

"Our clients are knowledgeable and have in-house property- and construction-management teams, so they are familiar with precast concrete as a standard material. They never question our use of it."

global-quality of designs and the desire to help the community surrounding the project have made each project more complicated and specialized. "There are more technological demands and more specialized expertise required in the design and construction process. Projects are very challenging today in terms of their site and the complexity of meeting all of the needs, including the community needs."

But as the projects become more complicated to meet wider needs, they also serve more purpose. "There is a ripple effect on neighborhoods and community, so we're looking at the impact that can happen from anthropological, sociological and cultural aspects to ensure we've addressed all the issues. It requires more specialization, but it's a stimulating trend, because we can draw on those specialties around the world. It's creating an ever-increasing demand for thoughtful and creative design."

#### **Precast Helps Meets Needs**

Helping to meet these needs, particularly from aesthetic and budgetary perspectives, is the use of architectural precast concrete, particularly on façades that must project a strong image while also blending with surrounding architecture. The company has used the material on a wide range of projects in recent years, including the Washington Convention Center, Atlanta's flagship hotel for InterContinental Hotels, the Merrill Lynch Corporate Campus and a number of buildings at the Centers for Disease Control and Prevention. (For more on these projects and others using precast concrete, see the Project Spotlights accompanying this profile.)

"Precast concrete has changed dramatically in the past 50 years," he says. It used to be a more pragmatic and basic material. But now, it has become another terrific weapon in our arsenal. It's such a diverse product, and there's no limit to how it's used." Adds Gene Montezinos, a principal who works on corporate and commercial offices in particular. "The form varies

#### PROJECT SPOTLIGHT

## **TIAA-CREF Southern Service Center**

Location: Charlotte, N.C.

Project Type: Office buildings

**Area:** 441,772 square feet plus 1,564car parking structure

**Designer:** Thompson, Ventulett, Stainback & Associates

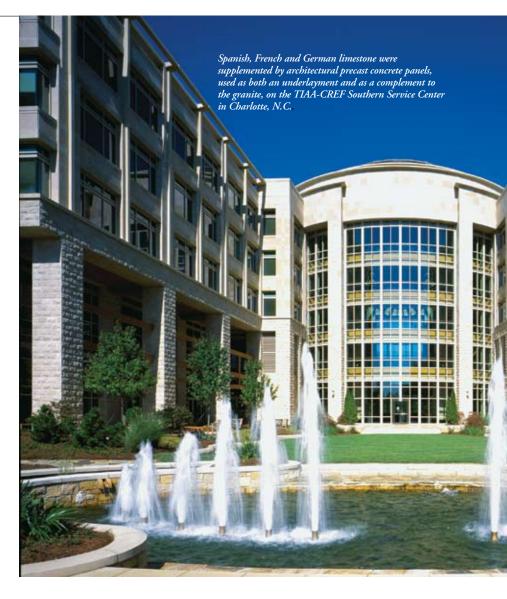
**Owner:** TIAA-CREF

Contractor: FN Thompson

**PCI-Certified Precaster:** Metromont Corp., Greenville, S.C.

**Description:** Intense collaboration with the board's chairman resulted in a classic academic-style campus reflecting the company's roots in pension management for education. The buildings share a large academic quadrangle punctuated by a central domed rotunda directing the way to major gathering places inside the main building.

Spanish, French and German limestone were supplemented by architectural precast concrete panels, both used as an underlayment and as a complement to the granite, to create a dramatic façade. Formliners and sandblast finishes were used to replicate the look of the luxurious limestones. A heavy eyebrow design was created across the top of the structure to provide visual interest.



from project to project based on the need, but it can be used with any building type we are designing."

A key way that TVS uses precast, Montezinos explains, is to replicate stone. "We often start with the idea of stone and use that at the base, transitioning to precast concrete further up. If we design it properly, people will think the entire building is stone, because the precast concrete can replicate the look so closely." The aggregates often are stone pieces, he notes, which provide the color and beauty of the actual material being replicated. "We can get a range of colors from the proper mix and finish."

But precast concrete's ability to replicate other materials isn't the only aesthetic purpose for which the firm uses it, says Hoover. "I'm seeing it used more often as an expressive element in itself." That use shows the level of quality that precasters can





Architectural precast concrete panels were used to clad the InterContinental Hotel in Atlanta because they could replicate the look of stone economically and could be erected quickly, saving time and money.

#### PROJECT SPOTLIGHT InterContinental Hotel

Location: Atlanta

Project Type: Hotel

Area: 21 stories, 590,000 square feet **Designer:** Thompson, Ventulett,

Stainback & Associates **Owner:** InterContinental Hotels Group

and The Hogan Group

Contractor: Hardin Construction Co.

**PCI-Certified Precaster:** *Gate Precast, Monroeville, Ala.* 

**Description:** The hotel's site is on a prominent bend on uptown Atlanta's Peachtree Road, requiring a dramatic image in keeping with its architecturally competitive neighbors. An elegant pedestrian scale was created at street level while an articulated tower top draws the eye upward.

Architectural precast concrete panels finished to resemble natural stone helped achieve the look the designers sought after stone was determined to be outside of the budget. Stone was woven into the precast at key points for rhythmic highlights. Fiber-optic lighting penetrates the precast to light curving surfaces of the façade, which in turn highlight the plastic nature of the precast. Granite was cast into the architectural precast panels on the ground floor and entry ways.

The precast face mix simulates granite with a complex matrix of different stone colors. Integrating the panel design with a sculptural aesthetic and incorporating accent panels of natural stone within the precast were key design challenges. By designing the panels to be two stories tall, large expanses could be erected quickly, allowing the building to dry-in faster. provide in the material.

Owners are recognizing that quality, Montezinos says. "Our clients are knowledgeable and have in-house propertyand construction-management teams, so they are familiar with it as a standard material. They never question our use of it." In fact, he adds, just the opposite is more likely to happen. "Some developers do not view masonry as a Class-A material; they want glass and precast concrete rather than block or brick."

In some cases, the two are combined to achieve a panelized system that creates the appearance of brick. This was done recently for the Merrill Lynch corporate campus, where 12 buildings were created with a historic appearance using thin brick inset onto precast concrete panels (see the Project Spotlight for more details).

#### **Precast Evolves, Adapts**

Precasters continue to evolve their techniques at a rapid pace, Montezinos notes. "We've done things in the past five years that we wouldn't have done 15 years ago. We've become much more adventurous with textures and color and combining multiple colors into one panel." A typical approach is to create reveals and provide a different, darker color for them to accentuate the reveal and contrast it with the panel facing.

"A lot of these ideas come from working closely with a group of precasters and asking what can be done and seeing what they're coming up with," Montezinos says. "We push them to try new things, and they learn what they can do and show us. Then we can take those ideas to another region to show other precasters what we were able to do."

In most cases, the architect brings in a precaster early in the design phase to work out key ideas. The drawings are then put out to bid. "We know who the best precasters in our regions are, and we work with them continuously." When repeat clients return for added work on their locations, of course, the original precaster is typically called in because of the familiarity with the project.

Precasters also aid in delineating where joints will go and how large the pieces will be, he says, and the firm often defers to their expertise. "We have to find the proper balance between size of panels and number of pieces to take full advantage of precast's speed of erection," he explains. "We often will create patterns and reveal positions that we like and then tell the precaster to divide up the panels however they want to provide the best economics. Sometimes, it works best to divide them column to column or some other way that we hadn't considered. We let them do whatever works best, and then we design the final look."

Such close collaboration with the precaster, as well as the client, has paid off well for the company. And it expects that collaboration to continue as the industry advances and brings new technologies to bear. "Precast concrete is only about 50 years old and it's done amazing things already," says Hoover. "It's got another 500 years of evolution and wonderful history ahead of it."

For more information on this or other projects visit www.pci.org/ascent.

#### **PROJECT SPOTLIGHT**

BellSouth Midtown Center

Location: Atlanta

**Project Type:** 8- and 16-story office buildings **Area:** 930,000 square feet plus 2,350-car parking structure

#### **Designer:** TVS

**Owner:** BellSouth Telecommunications Inc.

Contractor: Brasfield & Gorrie

PCI-Certified Precaster: Gate Precast, Monroeville, Ala.

**Description:** Adjacent to the company's headquarters and its underground rail station, the two-building BellSouth campus was designed to offer employees using mass transit an attractive transition from the suburbs. Architectural precast concrete panels clad both structures in the complex.

The precaster worked closely with the designers from the early stages of the project to create an economical way to master the intricate base designs for the two buildings. Three different mixes were used to simulate various granites, while seven finishes were used on the towers.

Precast concrete provided design flexibility in color and form, plus a durable cladding material for the high rises. Approximately 117,000 square feet of precast panels were used on the smaller building, while 126,000 square feet were used on the taller one.







CDC Arlen Specter Headquarters & Emergency Operations Center and the Thomas R. Harkin Global Communications Center

Location: Atlanta

Project Type: Operations center

Area: 525,000 square feet total

Designer: Thompson, Ventulett, Stainback & Associates

**Owner:** Centers for Disease Control and Prevention

**Contractor:** *Turner Construction (Global Communications Center) and Skanska USA Building Inc. (Headquarters)* 

PCI-Certified Precaster: Metromont Corp., Greenville, S.C.

**Description:** Both the new headquarters and communications center on CDC's main campus were designed featuring architectural precast concrete spandrels and large expanses of glass on their exterior to exude a professional yet traditional look that offered a high-quality image.

Both the 12-story headquarters building and smaller communications center feature flat and curved spandrels, which help the structures relate to the four-acre landscaped commons onto which they open. The designs shape the buildings to maximize the visual impact of the new landscaped areas and create interesting vistas as people move through the spaces.

Sandblasted and retarded finishes were used to create visually disparate textures on the precast components. The buildings each erected in three phases, starting at the bottom and working upward to the top of the structures, which required three mobilizations of the erection crew.



'There are more technological demands and more specialized expertise required in the design and construction process.'

# **PROJECT SPOTLIGHT**

Washington Convention Center Location: Washington, D.C. Project Type: Convention and exhibition center Area: 3 million square feet Designer: Thompson, Ventulett, Stainback & Associates Owner: The Washington Convention Center Authority Contractor: Clark/Smoot JV PCL Cortified Proceeder: Modorn Massia Ltd. Niagara Eal

**PCI-Certified Precaster:** Modern Mosaic Ltd., Niagara Falls, Ontario, Canada



**Description:** The design for this center acknowledged its prominent location to tie together a series of public monuments and preserve L'Enfant's master plan for the city grid. The team worked in continuous collaboration with the client and civic groups to achieve a modernistic look on a monumental scale, which also was aided by the use of architectural precast concrete for screen walls and for the "battered" column covers.

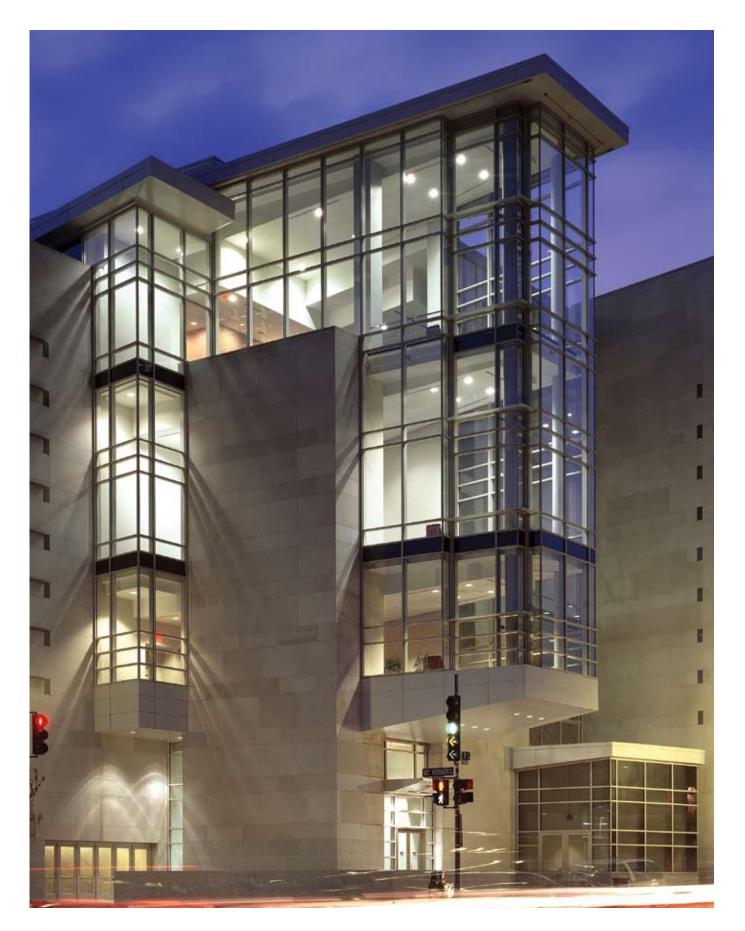
The wedge-shaped screen-wall panels span approximately 30 feet and are 5 feet wide. The lower screen-wall panels span end to end and are typically about 25 feet long. These panels were particularly challenging to create because they were only 2 feet high by 1'10 7/8" thick, and all the connections, bearing and lateral had to be concealed within the brick piers.

The battered column covers also posed challenges, as they were formed by C-shaped panels that formed a box around a structural steel tube. The panels were stacked on top of each other to form the 90-foot-tall columns. The columns are self-supporting and were attached to the tube inside for lateral support alone. All of the gravity loads for the panels were transferred to the floor slab below, located over the parking levels. Special installation procedures were required to jack up the precast after each progressive piece was installed to avoid deflection.

Generous fenestration and placement of concourses, registration areas and lobbies around the perimeter of the structure reveal the activity inside to the streets outside. The center provides the city's largest building, re-establishes the city's place in the meeting and convention industry and creates new economic opportunities for the surrounding neighborhoods.

The project recently was named the recipient of both the 2006 Award of Excellence from the Urban Land Institute and the Honor Award for Architecture from the American Institute of Architects.





# 'I'm seeing precast concrete used more often as an expressive element in itself.'

**PROJECT SPOTLIGHT** 

Merrill Lynch Corporate Campus Location: Hopewell, N.J. Project Type: Office buildings Area: 1.5 million square feet Designer: Thompson, Ventulett, Stainback & Associates Owner: Merrill Lynch & Co.

Contractor: Hunt Construction Co.



PCI-Certified Precaster: Universal Concrete Products of New Jersey, Folsom, N.J.

**Description:** Designers were challenged to create a dynamic corporate campus where social interaction and cohesiveness would foster a productive work environment for 6,000 employees. To create timeless quality and to relate to the architecture in the region, the 12 buildings in the project feature architectural precast concrete panels with inset brick. The goal was to achieve a masonry look while speeding construction.

The panels feature a light sandblast for exposed-concrete sections, producing a French-limestone appearance that was used primarily for window accents and other highlights. The plan originally was to use handset brick, but it was determined through early discussions with the precaster that design goals could be achieved cheaper and quicker by using brick-faced precast panels. Specialty forms were created to cast the panels to ensure the look of handset brick throughout the project. The entire campus includes 6,900 panels encompassing 548,000 square feet of precast concrete.

The 12 buildings were erected in approximately 18 months, with a series of three buildings (two main buildings and one support structure) erected at once before the crane moved onto the next group. The buildings were grouped around three main areas, Central Park, Town Square and an Academic Quad.

The result is a contemporary town-square design with a historic feel that houses such modern functions as the main assembly space, cafeterias, health club, employee services and all the needed offices. The design met the client's business objectives for its workplace while maintaining respect for the community and environment.



TIAA-CREF Southern Service Center

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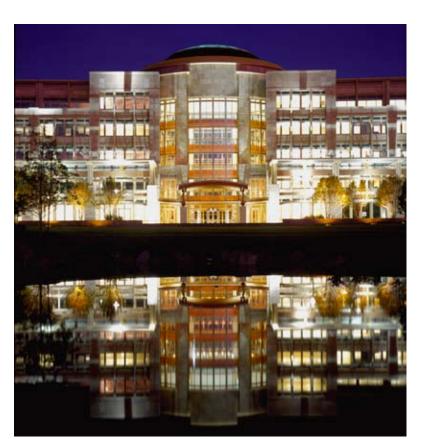
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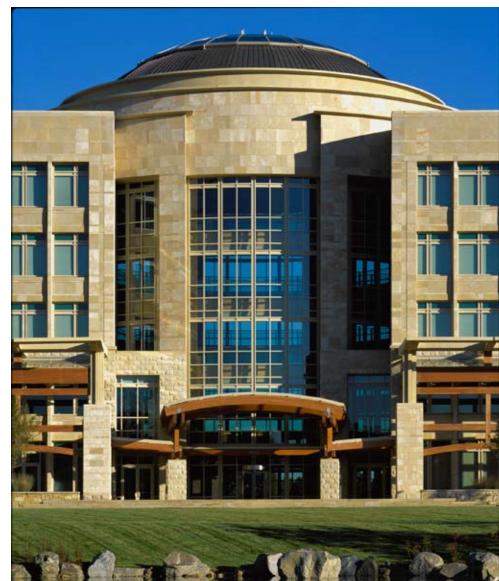
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Spanish, French and German limestone were supplemented by architectural precast concrete panels, both used as an underlayment and as a complement to the granite, to create a dramatic façade. Formliners and sandblast finishes were used to replicate the look of the luxurious limestones. A heavy eyebrow design was created across the top of the structure to provide visual interest.

A garden center, featuring precast concrete and large expanses of glass, also was created. The architectural spandrels were complemented by granite-clad precast concrete column covers and granite veneers to provide a visually pleasing texture at pedestrian level. An adjacent parking structure also was clad with the architectural panels to provide a similar look.

In all, 927 pieces, encompassing 90,286 square feet of precast concrete panels were used on the office building, with another 155 pieces comprising 21,400 square feet used on the garden center. The parking structure features 444 pieces covering 36,320 square feet.





# 'We've done things in the past five years that we wouldn't have done 15 years ago.'



#### PROJECT SPOTLIGHT InterContinental Hotel

Location: Atlanta

Project Type: Hotel

Area: 21 stories, 590,000 square feet

**Designer:** Thompson, Ventulett, Stainback & Associates

**Owner:** InterContinental Hotels Group and The Hogan Group

Contractor: Hardin Construction Co.

**PCI-Certified Precaster:** *Gate Precast, Monroeville, Ala.* 

**Description:** The hotel's site is on a prominent bend on uptown Atlanta's Peachtree Road, requiring a dramatic image in keeping with its architecturally competitive neighbors. An elegant pedestrian scale was created at street level while an articulated tower top draws the eye upward.

Architectural precast concrete panels finished to resemble natural stone helped achieve the look the designers sought after stone was determined to be outside of the budget. Stone was woven into the precast at key points for rhythmic highlights. Fiber-optic lighting penetrates the precast to light curving surfaces of the façade, which in turn highlight the plastic nature of the precast. Granite was cast into the architectural precast panels on the ground floor and entry ways.

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**Description:** Adjacent to the company's headquarters and its underground rail station, the two-building BellSouth campus was designed to offer employees using mass transit an attractive transition from the suburbs. Architectural precast concrete panels clad both structures in the complex.

The precaster worked closely with the designers from the early stages of the project to create an economical way to master the intricate base designs for the two buildings. Three different mixes were used to simulate various granites, while seven finishes were used on the towers.

Precast concrete provided design flexibility in color and form, plus a durable cladding material for the high rises, the designers said. Approximately 117,000 square feet of precast panels were used on the smaller building, while 126,000 square feet were used on the taller one. Architectural precast concrete spandrels were used to clad an adjacent parking structure as well, blending the look of the two projects.

