



# NGG LTD., INC.

& glass integration solutions  
& exterior wall systems

TM

WWW.NGGLTD.COM

NATIONAL GLASS AND GLAZING, INC.

NGGLTD

NGG LTD, INCORPORATED  
1050 CRAFTSMAN ROAD, Ste. 100  
St. Louis, Missouri 63146  
Tel 314-336-2615  
Fax 314-336-2621

Professional Seal

28 YEARS  
1982 - 2010

Sub. No.	Rev. No.	Date	Drawn By	Submital/Revision Description
2	1	11/30/09	MGA	FOR CONSTRUCTION
1		11/11/09	MGA	FOR PRINT

#### Proprietary Notice

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Project Name	WWW.NGGLTD.COM
Location	ANYWHERE, USA
Architect	YOUR NAME HERE
Location	ANYWHERE, USA
Contractor	YOUR NAME HERE
Location	ANYWHERE, USA
Owner	ANYWHERE, USA
Location	ANYWHERE, USA
Drawn Date	11/01/2009
Scale	1:1
NGG'S PROJECT #	2010
Drawing Title	MARKETING MATERIAL
Drawn By	MGA
Sheet No.	NGG-01

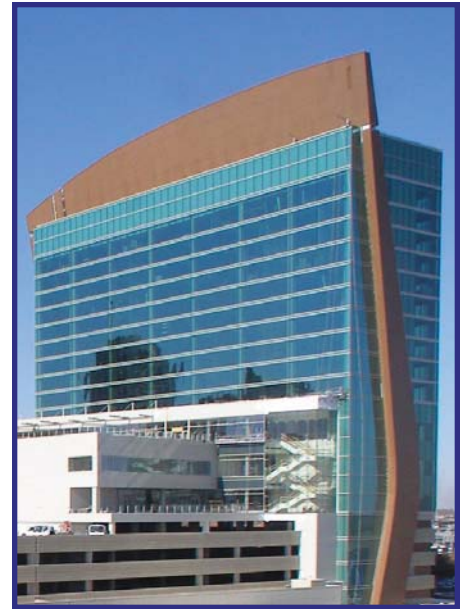


NGG Ltd., Inc. is a privately owned, full service curtain wall contracting company established in 1982. Since that time NGG has been in the core business of design, fabrication and installation of custom curtain wall systems. Our systems meet the most challenging aesthetic design intent and rigorous technical standards. Through the years NGG has serviced clients in Missouri, Illinois, Kansas, Texas, Virginia, Mississippi, Oklahoma and Washington.

## HISTORY

With an industry proven track record of 28 years and more than 250 projects, NGG has the capability, and experience providing a fully integrated solution to meet any architect's imagination and vision.

NGG Ltd., Inc. owns two subsidiary companies, National Glass and Glazing, Inc. and LH Erection Company Inc. Both subsidiary companies oversee the various job site installation activities and factory operations.



Four Seasons Luxury Hotel, NGG Custom System



Northwest Towers (Barnes Jewish Hospital), NGG Custom System

## QUALITY

NGG Ltd., Inc. is dedicated to being the leader in providing quality products and services which meet or exceed the expectations of our customers. Achievement of superior customer satisfaction levels is a priority of NGG. We are committed to a company-wide focus on quality which allows us to anticipate and provide a quality product and to comply with established standards and requirements.

NGG believes excellence can best be achieved by preventing or foreseeing problems rather than correcting them after they occur. Sustained excellence requires continuous improvement in both the processes performed by employees and the abilities of employees. This means, regardless of how good present performance may be, it can become better. The Management team has the authority to revise the systems, processes, and programs as needed to meet the requirements of a project.

NGG has a total commitment to Quality and through the continuous development and design of innovative custom curtain wall systems maintains its lead as a quality contractor.

**“Our systems  
meet  
the most  
challenging  
aesthetic  
design intent  
and rigorous  
technical  
standards.”**



Continuous Flow Manufacturing Facility



Insulating Spandrel Glass



Ranken Jordan, NGG Custom System



Dierbergs Headquarters, NGG Custom System



St. John's Heart Hospital, NGG Custom System

## PRODUCTS

Our glass integration solutions start with custom unitized enclosures. As a single source glass supplier, NGG offers the customer vast capabilities in management, design, manufacturing and installation. We can glaze a myriad of glass types not limited to insulated, laminated, tempered, monolithic,

and blast resistant. NGG can also scope our enclosures to include pre-manufactured curtain wall systems, skylights, canopies, composite metal panels, metal panels, stone and pre-cast panels, ceramic tile panels, sunshades, trims, tile, fins, mesh screens and sunscreens. With these capabilities we are able to offer our customers a single source for the exterior envelope of most buildings, thereby simplifying the complex coordination requirements that general contractors and construction managers face on projects.

## SERVICES

At NGG we combine core ingredients of Aluminum, Glass, Quality, Project Management and Safety to provide a fully integrated

solution. NGG designs, manufactures and installs all of its own wall systems. Our focus in the industry is mid-sized construction with custom curtain wall applications. While we do specialize in Custom Curtain Wall, our philosophy is to provide a single source solution to the general contractor and customer and at the request of the client can expand our scope to include any additional aspect of the exterior envelope.



NGG Custom Unitized System

## PROJECT MANAGEMENT

NGG Ltd., Inc. dedicates a full time Project Manager professional and support team to all of our projects. We dedicate management staff to a project consisting of project managers, superintendents, administrative staff, quality control managers and safety managers, all customized to the individual project.

All projects follow NGG's Project Management System. The focus of our system rests on pre-project planning resulting in a Project Execution Plan (PEP) for each and every project. The structure created by the PEP guides the project through the life cycle until completion. NGG's planning systems include resource loaded schedules, control budgets, issue and risk management and customized quality and safety programs. In addition, each project is on a weekly and monthly reporting cycle that involves NGG's senior management and which provides proper oversight of each project.

**“NGG offers the customer a vast capacity in management, design, manufacture and installation”**

## SAFETY

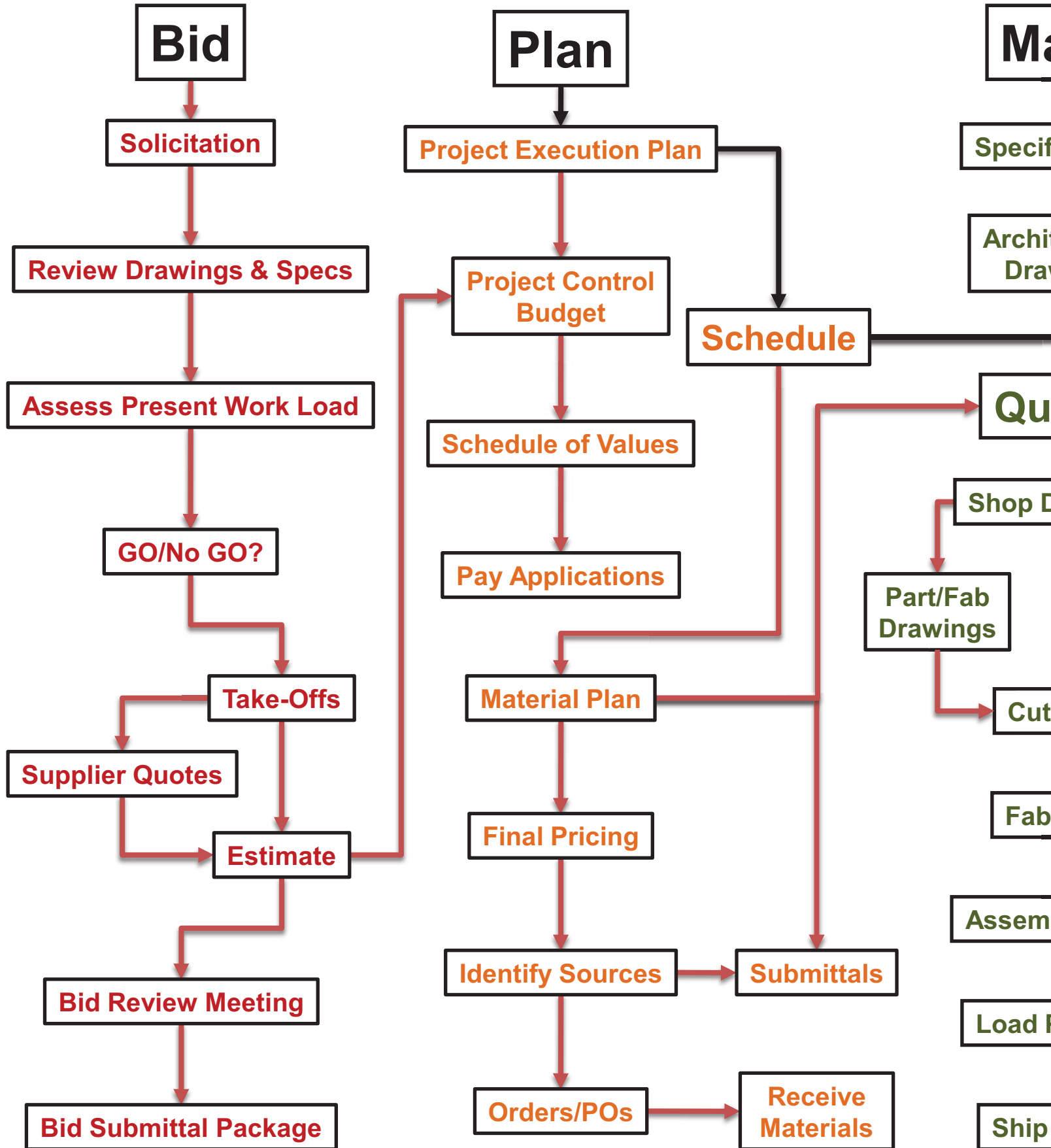
NGG Ltd., Inc. has impeccable standards and a strong commitment to governmental and local safety laws and compliance. NGG assures safe and healthy working conditions for working men and women by requiring enforcement of the standards developed and providing for information, education, and training in the field of occupational safety and health. Dedication to continuous improvement in a safe and environmentally conscious manner is a core of NGG's philosophies.



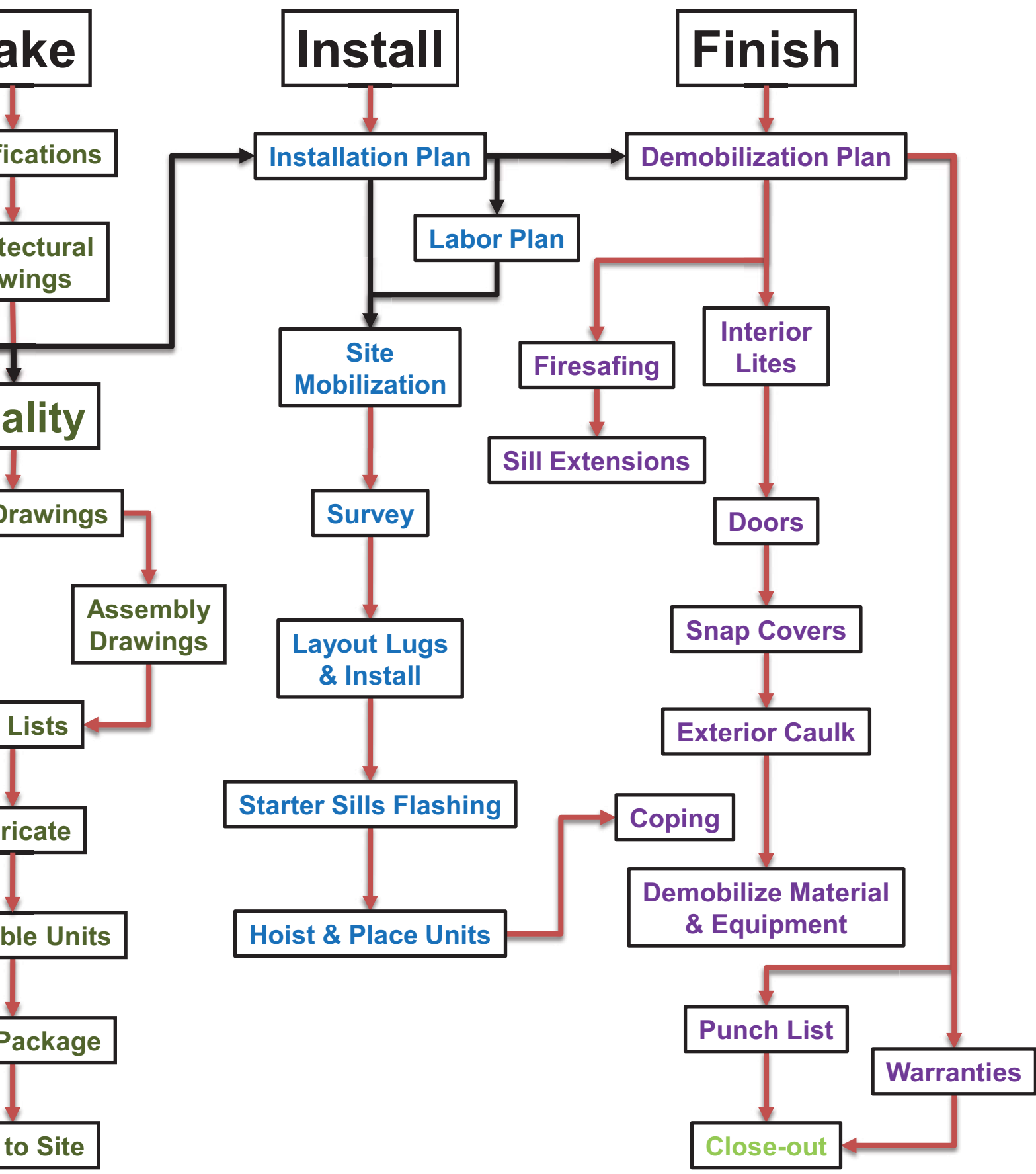
Field Service



# NGG BUSINESS

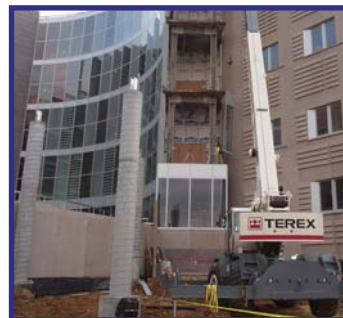
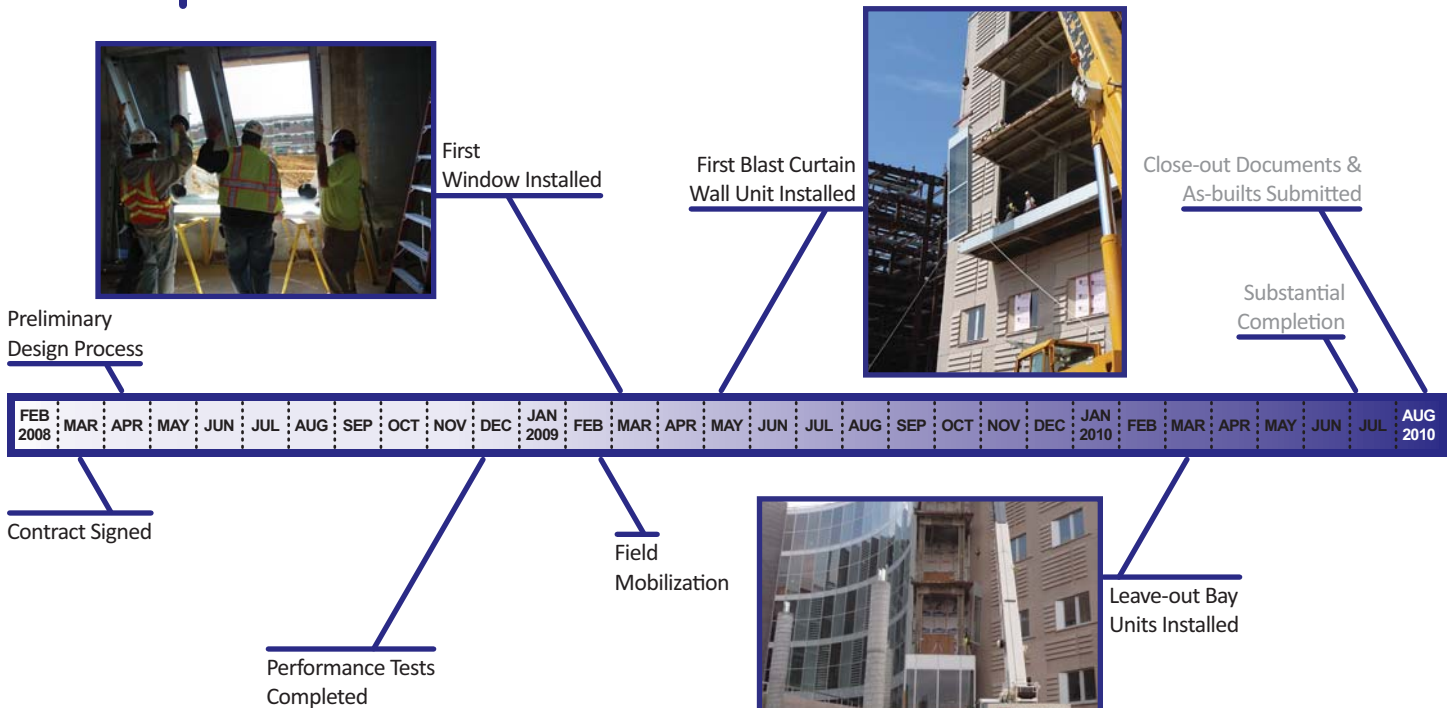


# PROCESS MAP



# PROJECT CASE STUDY

<b>name</b>	United States Federal Courthouse
<b>value</b>	\$9M
<b>location</b>	Jackson, Mississippi
<b>architect</b>	H3 Hardy Collaboration Architecture, LLC
<b>gc/ cm</b>	W. G. Yates & Sons Construction Co.
<b>scope</b>	Exterior and Interior Glazing Package 65,000 SF including Custom Blast Systems
<b>glazing</b>	Viracon
<b>framing</b>	Unitized Custom Blast Curtain Wall & Windows by NGG & Custom Window Company (CWC)
<b>completed</b>	2010
<b>description</b>	GSA Blast-Resistant Custom System for punch, ribbon windows, bay and rotunda curtain wall. Custom stainless steel coping. Two custom sunshade systems installed at corners and at long precast wall. Project also includes interior and exterior entrances, courtroom clerestory and custom glass vertical fins.




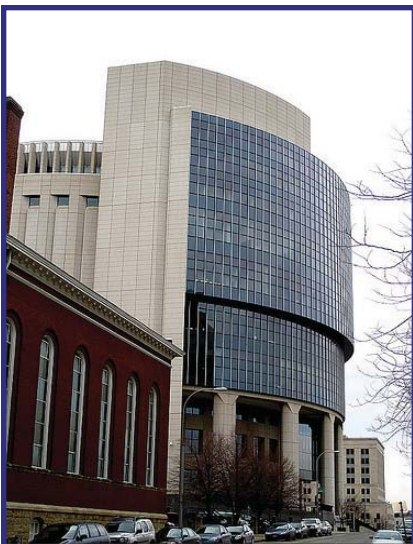
## project reference

**W. G. Yates & Sons Construction Co.**  
 Allen Reitchick  
 781 Larson Street  
 Jackson, Mississippi 39202

**Jacobs Engineering**  
 Tim Madeira  
 PO Box 704  
 Jackson, Mississippi 39205

# PROJECT CASE STUDY

<b>name</b>	Charles Evans Whittaker U.S. Courthouse	
<b>value</b>	\$5.3M	
<b>location</b>	Kansas City, Missouri	
<b>architect</b>	Ellerbe Becket	
<b>gc/ cm</b>	J.E. Dunn Construction	
<b>scope</b>	Exterior Glazing Package 95,000 SF - 4,560 openings	
<b>glazing</b>	Viracon	
<b>framing</b>	Convention Series Curtain Wall by NGG	
<b>completed</b>	1998	
<b>description</b>	Overlooking the Missouri River in downtown Kansas City, Missouri, this 12-story, crescent-shaped courthouse includes 16 courtrooms. 4 Sided Structurally Glazed System on the south elevation and a Pressure Plate Captured System on the north.	



## project reference

### *Ellerbe Becket*


2380 McGee  
Suite 200  
Kansas City, Missouri 64108

### *Heitmann & Associates, Inc.*

14323 South Outer 40  
Suite 604  
Chesterfield, Missouri 63017



# PROJECT CASE STUDY

<b>name</b>	Rush Hudson Limbaugh Senior U.S. Courthouse	
<b>value</b>	\$2.3M	
<b>location</b>	Cape Girardeau, Missouri	
<b>architect</b>	Fentress Bradburn Architects	
<b>gc/ cm</b>	PCL Construction Services, Inc.	
<b>scope</b>	Exterior Glazing Package 40,000 SF including Custom Blast Systems	
<b>glazing</b>	Viracon	
<b>framing</b>	Unitized Custom Blast Curtain Wall & Windows by NGG Custom Composite Metal Panels by NGG	
<b>completed</b>	2005	
<b>description</b>	Sits on a three-acre site and rests on concrete piers socketed into solid bedrock making the building able to withstand a significant seismic event. The main entry glass atrium spans the entire four stories.	




## project reference

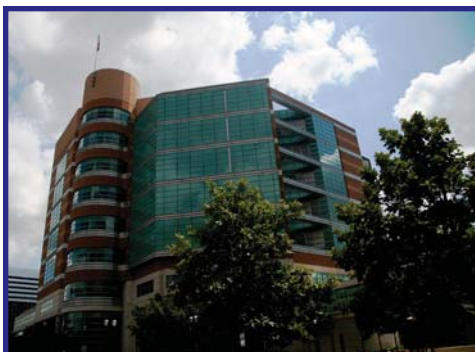
**Fentress Bradburn Architects**  
421 North Broadway  
Denver, Colorado 80203

**Heitmann & Associates, Inc.**  
14323 South Outer 40  
Suite 605  
Chesterfield, Missouri 63017



# PROJECT CASE STUDY

<b>name</b>	Saint Louis County Justice Center	
<b>value</b>	\$5.7M	
<b>location</b>	Clayton, Missouri	
<b>architect</b>	HOK Group, Inc.	
<b>gc/ cm</b>	McCarthy Building Companies, Inc.	
<b>scope</b>	Exterior Glazing Package 76,000 SF	
<b>glazing</b>	Viracon	
<b>framing</b>	Convention Series Curtain Wall by NGG	
<b>completed</b>	1998	
<b>description</b>	High performance, high span Convention Series Curtain Wall with structural twin beams that were claded with aluminum panels in a controlled shop environment.	



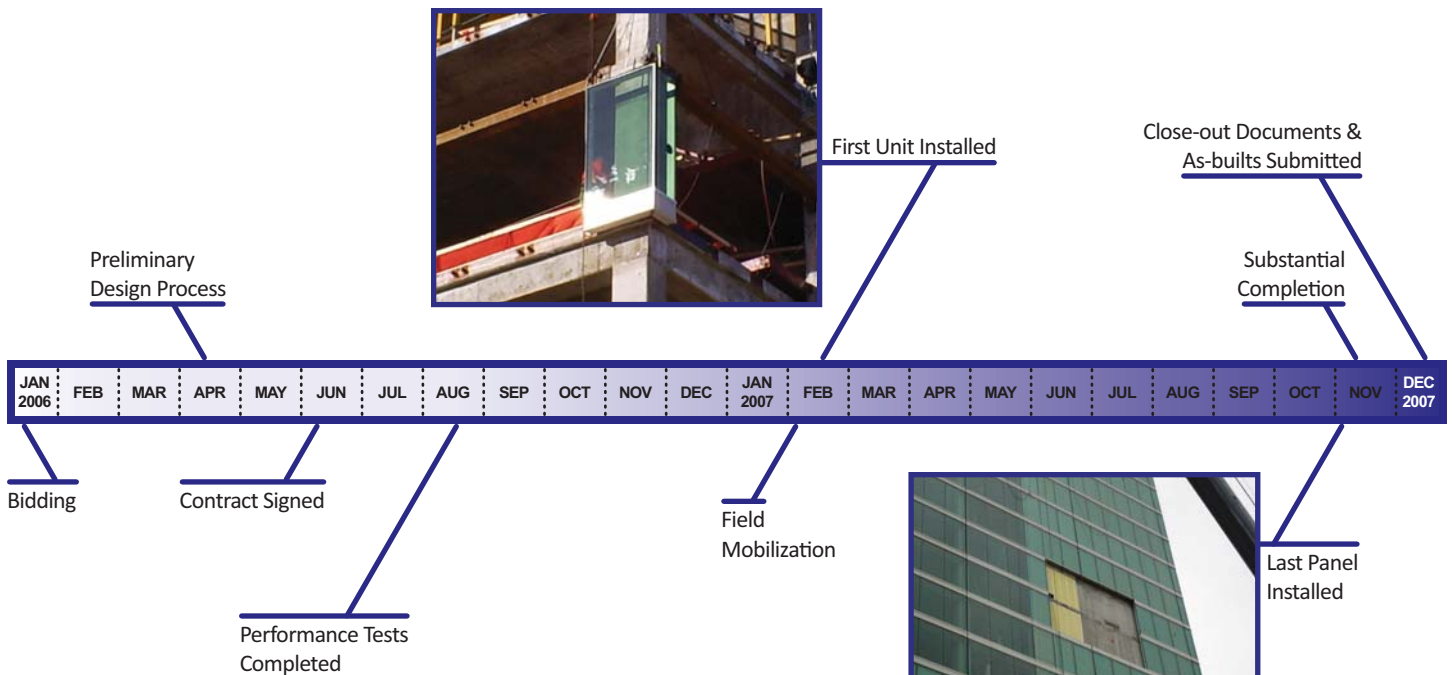
## project reference

**TriTeg**  
Robert Weible  
11132 South Town Square  
Suite 104  
Saint Louis, Missouri 63123  
**HOK Group, Inc.**  
211 North Broadway  
Suite 700  
Saint Louis, Missouri 63102

# PROJECT CASE STUDY

<b>name</b>	Pinnacle Hotel and Casino
<b>value</b>	\$9M
<b>location</b>	Saint Louis, Missouri
<b>architect</b>	Marnell Architecture & HOK
<b>gc/ cm</b>	McCarthy Building Companies, Inc.
<b>scope</b>	Design-Build 100,000 SF of Custom Curtain Wall
<b>glazing</b>	Viracon
<b>framing</b>	Pinnacle Series Custom Unitized Curtain Wall by NGG
<b>completed</b>	2007

**description** 3" x 7-1/2" system with integrated window washing track, structurally glazed and horizontally captured at the head and sill. NGG was involved in the Design-Build of the building, designed the system, built the units in our own factory, and installed using our crews and supervision. Completed in 18 months, from contract to completion.



## project reference

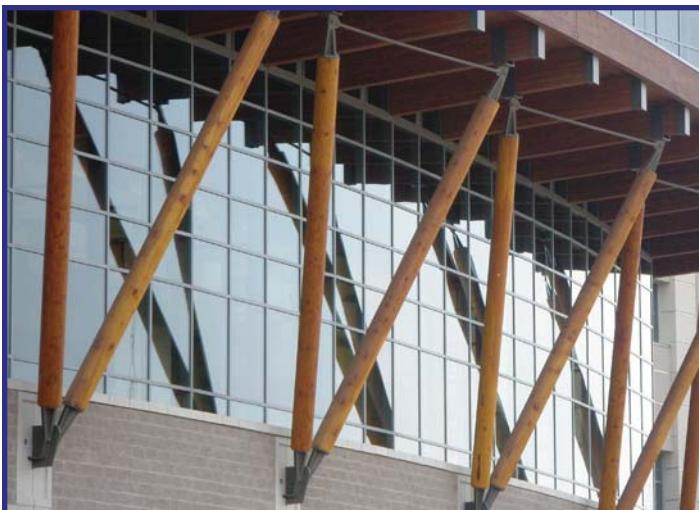
**Mid America Testing Laboratory, Inc.**  
Rick Heitmann  
10525 Signal Hill Drive  
Catawissa, Missouri 63015

**Larson Engineering, Inc.**  
Keith Quick  
5757 Phantom Drive  
Suite 200  
Saint Louis, Missouri 63042



# PROJECT CASE STUDY

<b>name</b>	Branson Hilton Hotel and Convention Center
<b>value</b>	\$3.5M
<b>location</b>	Branson, Missouri
<b>architect</b>	TVS & Associates
<b>gc/ cm</b>	Killian Construction
<b>scope</b>	Exterior Glazing Package 75,000 SF
<b>glazing</b>	Viracon and Tristar
<b>framing</b>	Vistawall ICW-250 and Reliance Fully Captured Curtain Wall
<b>completed</b>	2007
<b>description</b>	2-1/2" x 7-1/4" typical curtain wall at the first 2 floors highlighted by a monumental 240' by 22' high serpentine wall. Floors 3 through 12 were inside glazed curtain wall/window wall hybrid.



## project reference

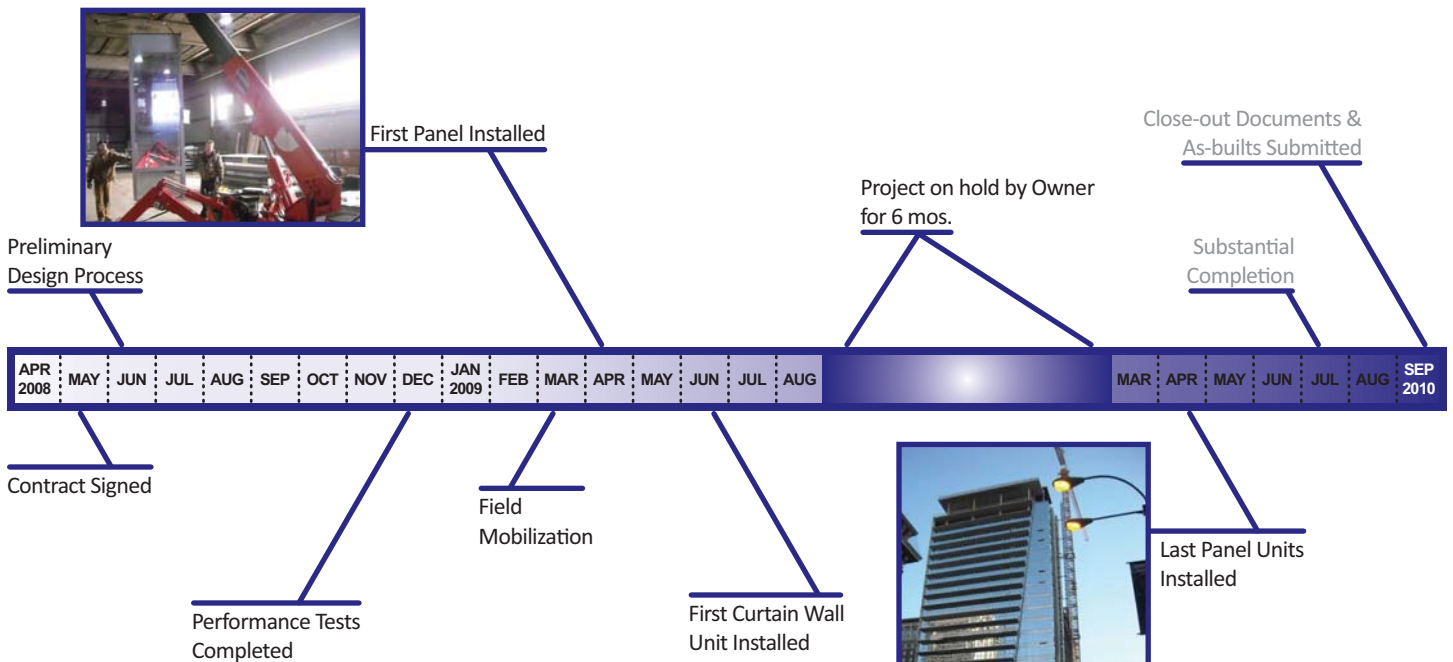
**Killian Construction**  
Tony Hopkins  
2664 East Kearney Street  
Springfield, Missouri 65803

**TVS & Associates**  
1230 Peachtree Street Northeast  
Atlanta, Georgia 30309



# PROJECT CASE STUDY

<b>name</b>	Roberts Tower
<b>value</b>	\$3.7M
<b>location</b>	Saint Louis, Missouri
<b>architect</b>	Trivers Associates
<b>gc/ cm</b>	Alberici Constructors, Inc.
<b>scope</b>	21,000 SF custom designed unitized curtain wall 19,000 SF pre-fabricated window wall 5,000 SF custom designed stick built curtain wall
<b>glazing</b>	Viracon
<b>framing</b>	NGG Custom Unitized, CWC Series 8400 Window Wall and NGG Custom Stick-built Curtain Wall
<b>completed</b>	2010
<b>description</b>	Consists of 2 depths of unitized curtain wall, a separate window wall system and NGG's own stick-built system for the 25th and 26th story penthouse floors. All framing systems were installed on or ahead of schedule. 90% of the exterior systems were factory assembled and glazed.



## project reference

**Alberici Constructors, Inc.**  
JD Long  
8800 Page Avenue  
Saint Louis, Missouri 63114

**Heitmann & Associates Inc**  
John Sturdevant  
14323 South Outer 40  
Suite 604  
Chesterfield, Missouri 63017

# PROJECT CASE STUDY

name	St. John's Mercy Medical Center - Heart Hospital; Tower C
value	\$4.6M
location	Saint Louis, Missouri
architect	Christner Inc.
gc/ cm	McCarthy Building Companies, Inc.
scope	Exterior Glazing Package including skylight 85,000 SF
glazing	Viracon
framing	Convention Series Curtain Wall by NGG
completed	2006
description	Large custom composite panel scope includes coping, canopy, column covers and vertical fins. Serpentine curtain wall connection to main hospital. Tied new system to old system of the main hospital for seamless design integration. High span curtain wall at atrium entrance.




## project reference

**Heitmann & Associates, Inc.**  
14323 South Outer 40  
Suite 604  
Chesterfield, Missouri 63017

**Christner Inc.**  
7711 Bonhomme Avenue  
Suite 100  
St. Louis, Missouri 63105



# PROJECT CASE STUDY

<b>name</b>	Northwest Tower - Washington University, School of Medicine	
<b>value</b>	\$3M	
<b>location</b>	Saint Louis, Missouri	
<b>architect</b>	Christner Inc.	
<b>gc/ cm</b>	McCarthy Building Companies, Inc.	
<b>scope</b>	Exterior Glazing Package 40,000 SF	
<b>glazing</b>	Viracon	
<b>framing</b>	Convention Series Curtain Wall by NGG	
<b>completed</b>	2006	
<b>description</b>	This building was constructed atop the parking garage of St. Louis Children's Hospital, located just to the north across Children's Place. 3" x 7-1/2" system unitized curtain wall to the fullest extent. Units as big as 40' by 13' were installed.	




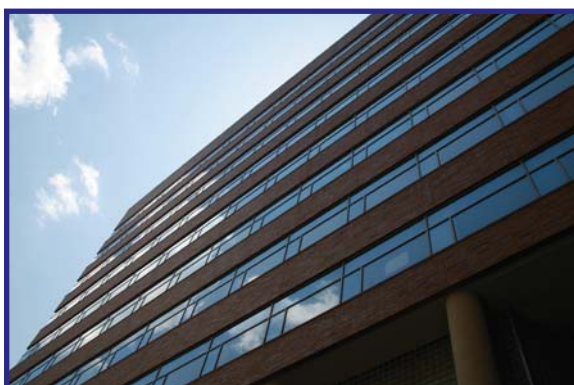
## project reference

**Larson Engineering, Inc.**  
Keith Quick  
5757 Phantom Drive  
Suite 200  
Saint Louis, Missouri 63042  
**Christner Inc.**  
7711 Bonhomme Avenue  
Suite 100  
St. Louis, Missouri 63105



# PROJECT CASE STUDY

<b>name</b>	McDonnell Pediatric and Basic Cancer Research Building, Washington University	
<b>value</b>	\$4.9M	
<b>location</b>	Saint Louis, Missouri	
<b>architect</b>	Perkins & Will	
<b>gc/ cm</b>	Jacobs/ Sverdrup Facilities, Inc.	
<b>scope</b>	Exterior and Interior Glazing Package 60,000 SF Curtain Wall	
<b>glazing</b>	Guardian	
<b>framing</b>	NGG Unitized Custom Curtain Wall & Windows	
<b>completed</b>	2000	
<b>description</b>	Gently curved transparent custom curtain wall utilizing 4 different depths of framing, multi-plane exterior trim, and rigid wrapping. Custom awning made of composite metal overhangs the building at the roof. Two massive clear span walls. Pedestrian bridge was constructed by reclaiming the original window system and improving to current industry standards.	




## project reference

**Perkins & Will**  
330 North Wabash Avenue  
Suite 3600  
Chicago, Illinois 60611

**Jacobs Engineering**  
501 North Broadway  
Saint Louis, Missouri 63102

# PROJECT CASE STUDY

<b>name</b>	Lutheran General Hospital - Yacktmann Children's Pavilion	
<b>value</b>	\$1.1M	
<b>location</b>	Park Ridge, Illinois	
<b>architect</b>	Watkins Carter Hamilton Architects	
<b>gc/ cm</b>	Berglund Construction	
<b>scope</b>	Exterior Glazing Package 22,000 SF	
<b>glazing</b>	Viracon	
<b>framing</b>	Convention Series Curtain Wall by NGG	
<b>completed</b>	1996	
<b>description</b>	Convention Series Curtain wall incorporating a mixed use of shapes and curtain wall to achieve a unique award winning -Architecture for Health Design Award – Grand Prize Best All Around, IIDA Silver Award, Healthcare- architectural design.	



## project reference

**Berglund Construction Co.**  
8410 S South Chicago Avenue  
Chicago, Illinois 60617

**Watkins Carter Hamilton Architects**  
Suite 300  
6575 West Loop South  
Bellaire, Texas 77401



# PROJECT CASE STUDY

<b>name</b>	The Pulitzer Foundation for the Arts
<b>value</b>	\$0.5M
<b>location</b>	Saint Louis, Missouri
<b>architect</b>	Tadao Ando
<b>gc/ cm</b>	BSI Constructors, Inc.
<b>scope</b>	Exterior Glazing Package 3,000 SF
<b>glazing</b>	Hehr
<b>framing</b>	Curtain Wall System by Wausau
<b>completed</b>	2000

## **description**

"The central courtyard is covered with water, so that it is in effect an exhibition room with water for its floor and the sky for its ceiling... The sunlight, reflected and softened by the water, plays over the surfaces of the gallery. This gallery is filled, not with even light, but with a light that suggests the movement of the sun and the clouds outside, the passing of time, and the changing seasons." (T. Ando)




## **project reference**

**The Pulitzer Foundation for the Arts**  
Steve Morby  
3716 Washington Boulevard  
Saint Louis, Missouri 63108

**BSI Constructors, Inc.**  
6767 Southwest Avenue  
Saint Louis, Missouri 63143



# PROJECT CASE STUDY

<b>name</b>	Tetra Pak Inc., U.S. Headquarters	
<b>value</b>	\$1.3M	
<b>location</b>	Chicago, Illinois	
<b>architect</b>	Solomon Cordwell Buenz & Associates Inc.	
<b>gc/ cm</b>	Power Construction Company	
<b>scope</b>	Exterior Glazing Package 38,000 SF	
<b>glazing</b>	Viracon	
<b>framing</b>	Convention Series Curtain Wall by NGG	
<b>completed</b>	2001	
<b>description</b>	The building is open, flexible, and flooded with natural light and views to the surrounding oak forest. Featuring exposed steel trusses, mechanical systems and high tech components, the building recalls the client's streamlined operation and product.	



## project reference

**Power Construction Company**  
2360 Palmer Drive  
Schaumburg, Illinois 60173

**Solomon Cordwell Buenz & Associates Inc.**  
625 North Michigan Avenue  
Suite 800  
Chicago, Illinois 60611

# PROJECT CASE STUDY

<b>name</b>	Ranken Jordan Pediatric Rehabilitation Center
<b>value</b>	\$1.2M
<b>location</b>	Saint Louis, Missouri
<b>architect</b>	Lighthouse Architects, Inc.
<b>gc/ cm</b>	McCarthy Building Companies, Inc.
<b>scope</b>	Exterior Glazing Package 28,000 SF
<b>glazing</b>	Cardinal
<b>framing</b>	Convention Series Curtain Wall by NGG
<b>completed</b>	2003
<b>description</b>	High span Convention Series curtain wall, structurally glazed with custom steel fabrication. (Center panels: 10 feet wide by 48 feet tall).




## project reference

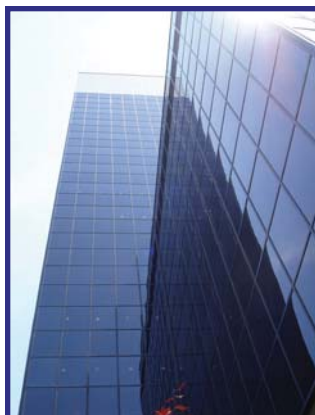
**McCarthy Building Companies, Inc.**  
1341 North Rock Hill Road  
Saint Louis, Missouri 63124

**Lighthouse Architects, Inc.**  
14323 South Outer 40  
Suite 604  
Chesterfield, Missouri 63017



# PROJECT CASE STUDY

<b>name</b>	Wachovia Securities Headquarters, formerly various A.G. Edwards buildings	
<b>value</b>	\$8.5M	
<b>location</b>	Saint Louis, Missouri	
<b>architect</b>	Raymond E Maritz & Sons Inc.	
<b>gc/ cm</b>	BSI Constructors Inc.	
<b>scope</b>	Exterior Glazing Package including 9 story Pedestrian Bridge 200,000 SF	
<b>glazing</b>	Viracon	
<b>framing</b>	Custom Curtain Wall by NGG	
<b>completed</b>	1998	
<b>description</b>	Granite and glass composite wall. Panels sizes were up to 50' wide by 12' tall. Custom revolving doors and custom 6" parapet handrail. 20' radius dormer windows.	



## project reference

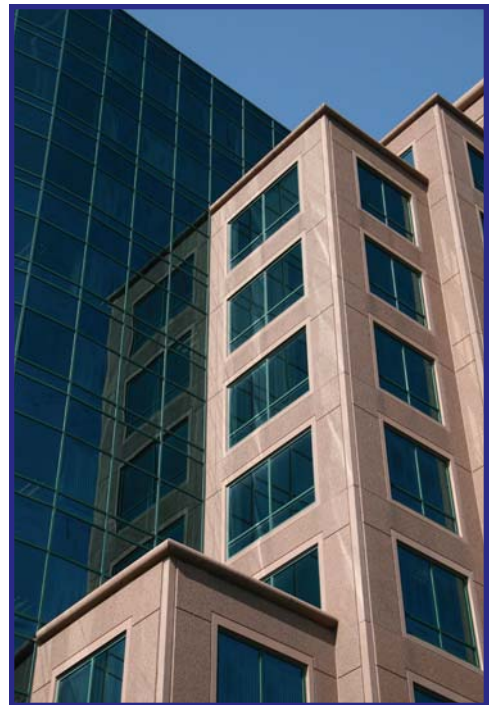
**BSI Constructors Inc.**  
Fred McCall  
6767 Southwest Avenue  
Saint Louis, Missouri 63143

**Raymond E Maritz & Sons Inc.**  
712 North 2nd Street  
Suite 10  
Saint Louis, Missouri 63102



# PROJECT CASE STUDY

<b>name</b>	MDSI Riverport
<b>value</b>	\$1.8M
<b>location</b>	Maryland Heights, Missouri
<b>architect</b>	Sverdrup Facilities, Inc.
<b>gc/ cm</b>	Sverdrup Facilities, Inc.
<b>scope</b>	Exterior Glazing Package 67,000 SF
<b>glazing</b>	Guardian
<b>framing</b>	Convention Series Curtain Wall by NGG
<b>completed</b>	1992
<b>description</b>	Convention Series curtain wall, with a fully captured application, comprising an 11 story radius curtain wall.



## project reference

**Jacobs Sverdrup Constructors Inc.**  
501 North Broadway  
St Louis, Missouri 63102

**Stock & Associates Consulting Engineers**  
2127 Innerbelt Business Center Drive  
Saint Louis, Missouri 63114

# PROJECT CASE STUDY

<b>name</b>	America's Center Convention Complex
<b>value</b>	\$2.3M
<b>location</b>	Saint Louis, Missouri
<b>architect</b>	HOK Group, Inc.
<b>gc/ cm</b>	McCarthy Building Companies, Inc.
<b>scope</b>	Exterior Glazing Package 28,000 SF
<b>glazing</b>	Cardinal
<b>framing</b>	Convention Series Curtain Wall by NGG
<b>completed</b>	1991
<b>description</b>	High span Convention Series curtain wall, structurally glazed with custom steel fabrication. (Center panels: 10 feet wide by 48 feet tall).



## project reference

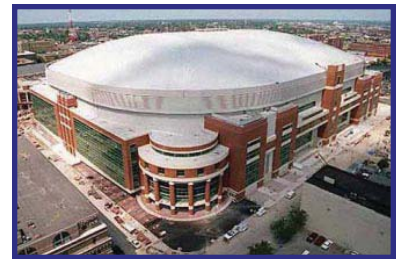
**McCarthy Building Companies, Inc.**  
1341 North Rock Hill Road  
Saint Louis, Missouri 63124

**HOK Group, Inc.**  
211 North Broadway  
Suite 700  
Saint Louis, Missouri 63102



# PROJECT CASE STUDY

<b>name</b>	Edward Jones Dome
<b>value</b>	\$3.8M
<b>location</b>	Saint Louis, Missouri
<b>architect</b>	HOK
<b>gc/ cm</b>	Alberici Constructors, Inc.
<b>scope</b>	Exterior Glazing Package 110,000 SF
<b>glazing</b>	Pilkington
<b>framing</b>	Convention Series Curtain Wall by NGG
<b>completed</b>	1995
<b>description</b>	The Edward Jones Dome is the home of the National Football League's St. Louis Rams.



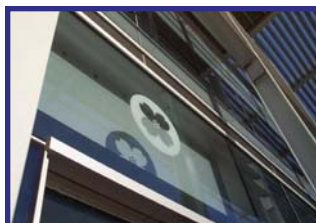
## project reference

**Alberici Constructors, Inc.**  
8800 Page Avenue  
Saint Louis, Missouri 63114

**HOK Group, Inc.**  
211 North Broadway Avenue  
Suite 700  
Saint Louis, Missouri 63102

# PROJECT CASE STUDY

<b>name</b>	Central Bank Financial Center
<b>value</b>	\$2M
<b>location</b>	Jefferson City, Missouri
<b>architect</b>	SOM
<b>gc/ cm</b>	McCarthy Building Companies, Inc.
<b>scope</b>	Exterior Glazing Package 24,000 SF
<b>glazing</b>	Viracon
<b>framing</b>	Convention Series Curtain Wall by NGG
<b>completed</b>	2003
<b>description</b>	High span Convention Series custom curtain wall, structurally glazed, accented with a 1/2 inch aluminum margin in the butt-glazed area. This wall incorporated high performance thermal resistance.



## project reference

**McCarthy Building Companies, Inc.**  
1341 North Rock Hill Road  
Saint Louis, Missouri 63124

**SOM Chicago**  
224 S. Michigan Avenue  
Suite 1000  
Chicago, Illinois 60604