# FALCON GROUP

**ENGINEERS, ARCHITECTS, RESERVE SPECIALISTS** 



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NJ D.C. DE FL PA

# Who We Are

Our team of experts at The Falcon Group have come together to provide full-service engineering, architectural, and capital reserve study consulting services along with forensic testing and litigation support. Falcon's primary focus is on evaluating and restoring existing facilities; including site, building envelope and energy improvements.

Here at Falcon, we are committed to forming meaningful connections and partnerships. We value our diverse workforce and as a result, are a blended family of skilled, educated professionals committed to innovation. Just within our 150+ employees, we have over 20 languages spoken.

Falcon takes pride in our work to ensure that our client expectations are exceeded every single time. We look forward to partnering with you on your next project. No matter the complexity, our team of experts will ensure a succussful project completion.



# **The Falcon Difference**

#### **BUSINESS FOCUS & EFFICIENT PROJECT MANAGEMENT**

Our project management and financial overview process allows us to consistently deliver projects on schedule and within your budget. We are able to minimize our clients' expenditures while maximizing savings and return on investment.

#### **SUPERIOR RESULTS**

Our staff holds the highest level of skillsets and certifications in the industry, which in turn yields a higher-level of craftsmanship.

## **CREATIVITY, FLEXIBILITY & INGENUITY**

Having a seasoned, diverse staff with many different backgrounds allows us to customize solutions for specific situations; creatively and effectively solving problems as they arise.

# **ACTIVELY ENGAGED SENIOR MANAGEMENT**

Our Principals maintain a visible role on projects to ensure that relevant issues will be anticipated and resolved in a timely fashion.

## **ACCESSIBLE STAFF & UNPARALLELED PERSONAL ATTENTION**

Our clients have peace of mind knowing we are "always on the job" 24 hours a day, 7 days a week. We are personally available to address any issues or emergencies that may arise while monitoring your project's progress.

# **RESPONSIVE, PROACTIVE & TIMELY COMMUNICATION**

We are diligent about keeping clients informed regarding the status of all projects. Our commitment to clear, effective and timely communication truly sets us apart from our competition.



# **DESIGN PLANS & SPECIFICATIONS**

Clients receive customized, well-conceived design plans and specifications for initial, as well as remedial, site and building-related construction projects. We take great pride in ensuring that all our recommendations are practical, economically feasible and efficient.

- Building Cladding / Waterproofing
- EIFS / Stucco Remediation
- Curtain Walls
- Roof Systems
- · Building Foundation Waterproofing
- Fire Reconstruction
- Parking Garage Restoration
- · Recreational Facilities
- Retaining Walls
- Sidewalk Vaults

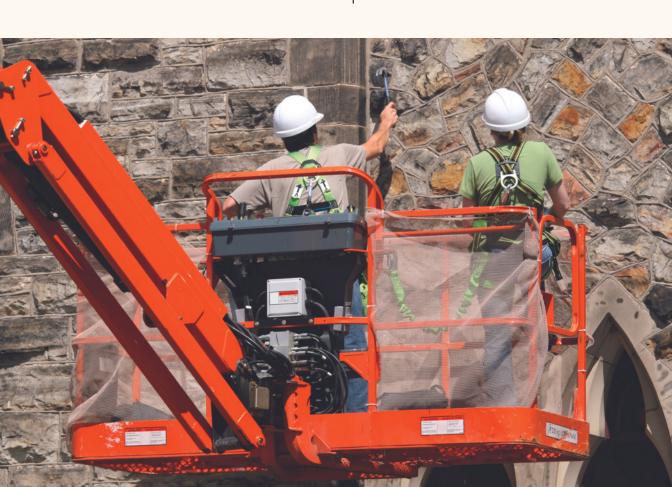
- Site / Building Capital Improvements
- Asphalt Roadway / Driveway / Parking Area Improvements
- Site Drainage Improvements
- Stormwater Analysis
- Soils Investigation / Subsurface Disposal
- Mechanical, Electrical & Plumbing Design
- Water Distribution & Plumbing Systems
- HVAC (Boilers, Chillers, Cooling Towers)

## **FAÇADE INSPECTION**

With years of experience gained from working with a variety of building types and cladding systems, we have developed specialized expertise in investigating and evaluating building façades, designing appropriate, long-lasting economical repairs and providing the necessary oversight to ensure proper project execution.

- Facilitate Compliance with Local Building Department Requirements
- Façade Inspection Safety Program (FISP) (Formally known as Local Law 11)
- Rope Access Inspections
- Project Planning, Budgeting & Management
- Specifications for Building Repair & Maintenance

- Construction Administration & Inspection
- Identification of Deteriorated Components & Potentially Unsafe Conditions
- Non-destructive Test Methods to Identify Concealed Defects
- Evaluation of Thermal & Moisture Concerns





#### **ROOF CONSULTING**

Our multi-disciplinary in-house staff is unique in the roof consulting field. We are able to look beyond just the roof to better understand our clients needs when planning a roof replacement project. This allows us to better identify the most appropriate roofing repair and replacement strategies.

- Roof Inspections
- Preventative Maintenance
- Drone Inspections
- Moisture Surveys
- Plans & Specifications for Roof Replacement & Repair
- Project Management

- Storm Damage Inspections
- Insurance Claim Inspections
- Expert Testimony / Expert Witness
- · Cool Roof & Green Roof Designs
- Solar Roof Design

#### **BUILDING CONDITION ASSESSMENTS**

Sites, buildings and their systems require ongoing monitoring and maintenance to ensure that they fulfill their designed purpose. Weather, age, natural disaster, poor construction, and substandard materials all contribute to deterioration. We offer a complete range of testing services to anticipate and diagnose potential and current problems.

- Pavement Coring
- · Concrete Coring & Testing
- Mold Testing
- EIFS / Stucco Moisture Testing
- Lighting Analysis
- Temperature
- Water Pressure Evaluation
- Piping Condition

- Sound Transmission
- Retaining Wall Inspections
- Roofing Moisture Surveys
- · Structural Movement Monitoring
- Window, Siding, Roofing, Insulation Destructive & Non-destructive Testing & Analysis
- HVAC Systems





#### **ALTERATIONS**

From conception to creation, we provide inspired architecture. Our well-conceived designs are strategically sculpted for function but aesthetically shaped for beauty. We specialize in blending new with the old and our clients receive customized services and personalized attention from a licensed architect ensuring a high-quality design tailored to their needs.

- Design Development
- Additions / Alterations
- Office & Retail
- Tenant Fit Out
- · Change of Use

- · Building Code Review
- Roof Deck Conversion
- Fire & Water Damage Reconstruction
- Lobby & Corridor Renovation
- ADA Analysis & Compliance Renovations

#### STRUCTURAL & CIVIL ENGINEERING

The Falcon Group uses classical design methods, along with current software, to analyze existing structures and design new structural elements and systems. We have experience in all types of structural systems, specializing in the evaluation, analysis and design of the repair, rehabilitation and adaptive reuse of existing structures.

- Reinforced & Plain Concrete
- Composite Slab, Clay Tile & Brick Arch
- · Metropolitan Catenary Slab, Sawn
- Engineered Wood, Stone, Steel & Cast Iron
- Foundation Evaluation for Increased Loads
- Design for New Construction & Additions
- Evaluation of Structural Capacity
- Effects of Steel Corrosion, Concrete
  Deterioration & Decay of Wood Members
- Sidewalk Vault Evaluation & Restoration Design

- · Retaining Wall Evaluation & Design
- Evaluation & Design Mechanical Equipment Supports & Dunnage
- Design of Structural Repairs & Strengthening Using Traditional & Modern Approaches
- Wind & Seismic Analysis
- Design & Inspection of Underpinning & Excavating Support
- Signed & Sealed Calculations for Façade Attachments & Fenestration





## CAPITAL NEEDS PLANNING / CAPITAL RESERVE FUND ANALYSIS

The primary purpose of a Capital Reserve Study is to offer recommendations as to the amount of money a community, building or other organization should set aside on a yearly basis for the future replacement or major refurbishment of their commonly owned elements. A properly funded reserve program is essential to keeping a community's physical assets in prime condition. We recommend updating your Capital Reserve Study every three (3) years, so that repairs and maintenance can be handled in a proactive, rather than reactive manner.

- Sustain / Increase Property Value By Upholding Exterior Appearances Through
- Timely Repair or Replacement of Common Elements
- Facilitating Project Efficiency & Cost Effectiveness
- Reduce Member Dissatisfaction Associated with the Passage of Large or Sudden Assessments

- Inspection & Testing
- Evaluation for Repair / Replacement
- Develop Realistic Repair / Replacement Plans & Budgets
- Prepare a Comprehensive Report in Accordance with CAI & APRA Standards & Guidelines
- Minimize Disruptions & Inconveniences
- Life Cycle Analysis

#### MEP / ENERGY SERVICES

Our expert team of licensed and accredited engineers and architects provide the most comprehensive services in our industry for assessment, design services and project administration. We offer full-service mechanical, electrical and plumbing (MEP) designs and specifications, inspections, troubleshooting, building commissioning and energy studies.

- Energy Audits
- Mechanical, Electrical, Plumbing Analysis / Design
- Building Modeling & Simulation Commissioning
- Sub-metering Analysis / Design
- Testing, Adjusting & Balancing
- Renewable Energy
- Local Law 43
- Local Law 87/88
- Local Law 97

- · Feasibility Studies
- Life Cycle Evaluations
- Control System Analysis / Design
- Energy Rebate & Incentive Analysis
- Solar & Alternative Energy Design
- Electric Vehicle Charging Stations
- Benchmarking





## **DRONES**

Aerial photo, videography and imaging services elevates projects to new heights, ensuring inspection and analysis happen faster. Our industrial-grade drones deliver the newest, most innovative aerial imaging solutions. As pioneers in Drone inspections, our expert engineers operating the drones know what information to capture and where to focus to maximize client's ROI.

- Inspect Roofs, Façades & Vegetation
- Scanning for Timely Construction Updates
- Promotion & Website Enhancement
- Disaster Recovery Surveying for Insurance Claims
- Supporting Data for Forensic Engineering
- New Construction & Renovation Progress
- Monitoring & Documentation

#### **EXPEDITING**

Falcon will coordinate and facilitate the preparation of drawings, plan filings, necessary forms and supporting documentation as required to obtain approvals / resolutions from local municipal agencies.

- New York City Department of Buildings
- Landmarks Preservation Commission
- Fire Department of New York
- Department of Transportation
- Metropolitan Transportation Authority
- ECB & DOB Violation Hearings
- New York City Department of Parks & Recreations

- Mayor's Office for People with Disabilities
- New York City Department of Finance
- The Department of Environmental Protection
- The Board of Standard Appeals
- City Planning Commission
- Public Design Commission





#### **LITIGATION SUPPORT**

For virtually any type of property or project, Falcon's Litigation Department provides a variety of analytic and related services to assist clients in obtaining successful litigation outcomes with a proven track record of recoveries exceeding \$500 million for our clients. Our expert engineering and architecture staff is on hand to partner with our litigators.

- Developer Transition / Turnover
- Construction Defect Reports & Claims
- Infrared Imaging
- Building Envelope Testing & Evaluation
- Repair Design Forensics
- Storm Damage Assessment & Insurance Claims
- Cost to Cure Estimate
- Invasive Investigations & Documentation
- Material Defect Claims
- Expert Witness / Professional Testimony
- Mediation / Arbitration Services
- Cause & Origin Reports

#### **NEW YORK CITY SPECIAL INSPECTIONS**

In NYC, it is imperative that Special Inspections are conducted during the construction phase of applicable projects when required by code and *l* or specified by the design professional in order to verify that the work is being done in accordance with code, approved plans and specifications. Special Inspections can only be performed by NY State certified Special Inspectors. The Falcon Group is certified to perform in the following fields:

- · Structural Steel Welding
- · Structural Steel Details
- Structural Steel High Strength Bolting
- Structural Cold Formed Steel
- Concrete Cast-in-place
- Concrete Precast
- Concrete Prestressed
- Wood Installation of High Load Diaphragms
- Wood Installation of Metal-plate-connected Trusses
- · Wood Installation of Prefabricated I-joists
- Subgrade Inspection
- Subsurface Conditions Fill Replacement & In-place Density
- Subsurface Investigations (Borings/Test Pits)
- Deep Foundation Elements
- · Retaining Wall Inspections
- Helical Piles (BB#2014-020)
- Vertical Masonry Foundation Elements
- Wall Panels, Curtain Walls & Veneers

- Masonry
- Sprayed Fire Resistant Materials
- Mastic & Intumescent Fire-Resistant Coatings
- Exterior Insulation & Finish Systems (EIFS)
- Smoke Control Systems
- Mechanical Systems
- Fuel-oil Storage & Fuel-oil Piping Systems
- Structural Stability Existing Buildings
- Excavations Sheeting, Shoring & Bracing
- Underpinning
- Private On-site Storm Water Drainage Disposal Systems & Detention Facilities Installation
- Sprinkler Systems
- Standpipe Systems
- Heating Systems
- Fire-resistant Penetrations & Joints
- Flood Zone Compliance
- Emergency & Standby Power Systems
- Post-installed Anchors (BB#2014-018, 2014-019)



#### PARKING GARAGE RESTORATION / LOCAL LAW 126

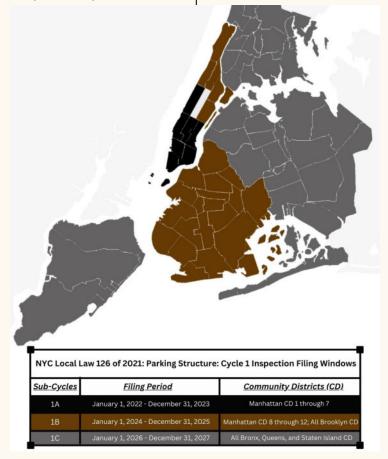
This law mandates periodic assessment of all parking structures within the five boroughs of New York City every six years to ensure they're maintained in a safe condition. Parking structures must be examined by a Qualified Parking Structure Inspector (QPSI), and a report filed with the DOB. Local Law 126 comprises a section of the NYC Administrative Code (1 RCNY 103-13) explained in a rule promulgated by the DOB.

# <u>Commercial Parking Garage Structural</u> Restoration

- Expansion Joint Repair & Replacement
- Bearing Pad Replacement
- Repair Horizontal and Vertical Spalled Concrete
- Epoxy Injection
- Concrete Spandrel Panel Repairs
- Double 'T' and Inverted 'T' Repair
- Concrete Pan Slab Replacement
- Structural Wraps
- Structural Steel Repair & Replacement

# <u>Commercial Parking Garage Maintenance & Protective Restoration</u>

- Vehicular and Pedestrian Traffic Bearing
- Waterproof Coatings
- Water Repellents
- Expansion Joints
- Joint Sealants
- Elastomeric Coatings
- Installation of Drainage Systems
- Caulking



# **Staff Credentials**

AIA - American Institute of Architects

**APRA - Certified Professional Reserve Analysts** 

AHERA Asbestos Inspector

**BETC -Certified Building Envelope Consultant** 

**Certified Building Commissioning Professional** 

**Certified Energy Manager** 

Commercial Building/Residential Building Contractor

CPSI - Certified Playground Safety Inspector

**EIFS Inspector** 

FBRSE - Florida Board Recognized Structural Engineer

**General Contractor** 

HHS - High-Rise / Hazardous Specialists, Building & Fire Inspectors

IBEC - Integrated Bureau for Engineering & Consultations

ICC - International Code Council Certified Building & Mechanical Inspectors

Lead Renovation, Repair and Painting (RRP)

**LEVEL I & II- Certified Infrared Thermographers** 

**LEVEL I & II Unbonded PT Inspector** 

LEED AP - Leadership in Energy and Environmental Design Accredited Professionals

LEED AP+BD+C - (Leadership in Energy & Environmental Design Accredited Professionals Building Design & Construction)

LEED GA - Leadership in Energy & Environmental Design Green Associate

LLS - Licensed Land Surveyor

ME - Licensed Mechanical Engineers in NJ, NY, PA

Montgomery County MD Benchmarking Ambassador

NCARB - National Council of Architectural Registration Boards

NFPA - Fire Prevention Inspector

New Jersey Special Inspectors Certification for EIFS (Exterior Insulation & Finish System) & Concrete

NJ Building Inspector (RCS and ICS)

**NJ Certified Benchmarkers** 

**NJ Division of Codes - Inspector Licenses** 

NJSAT - Society of Asphalt Technologists of New Jersey

NYC - Class 2 Special Inspection Agency

PE - Licensed Professional Engineers (CT, DC, DE, FL, GA, MD, MI, NJ, NY, PA, VA, VT, WV)

PMP - Project Management Professional

Post-Disaster Safety Assessment Evaluators (Architecture & Engineering)

PRA - Professional Reserve Analyst

**QEWI (Qualified Exterior Wall Inspector (NYC))** 

QPSI (Qualified Parking Structure Inspector)

**QRWI (Qualified Retaining Wall Inspector) NYC Department of Buildings** 

RA - Registered Architect, DE, FL, MD, NJ, NY, PA, WDC, VA, FL

RCS - Licensed Residential Construction Specialists / Building Inspectors

RRC - Registered Roof Consultants with the Roof Consultants Institute

RRO - Registered Roof Observer

RS - Community Associations Institute Certified Reserve Specialists

SAP Evaluator – Safety Assessment Program

SHRM Certified Professional

SPRAT Level 1 Rope Access Technician



Providing Engineering Solutions for over 27 Years!