



WITH OVER 40 YEARS OF EXPERIENCE, RCL ENGINEERING GROUP HAS EXPANDED ROOFING CONSULTANTS, LTD. TO AN INTERDISCIPLINARY FIRM OF ROOF CONSULTANTS, STRUCTURAL ENGINEERS, AND ARCHITECTS THAT SPECIALIZE IN THE INVESTIGATION ANALYSIS AND DESIGN OF SOLUTIONS FOR THE BUILDING ENCLOSURE. WE ARE UNIQUELY QUALIFIED AND EQUIPPED TO PERFORM MANY DIFFERENT SERVICES. UNLIKE MOST GENERIC ENGINEERING FIRMS, WE SPECIALIZE IN ROOFING, WALLS AND OTHER BUILDING ENVELOPE COMPONENTS. AT THE SAME TIME, HAVING PROFESSIONALS ON STAFF GIVES US THE ABILITY TO PERFORM STRUCTURAL ANALYSIS, STAMP DRAWINGS AND PROVIDE OTHER SERVICES THAT MANY OTHER ROOF-CONSULTING FIRMS SIMPLY CAN'T OFFER. FURTHERMORE, THE MAJORITY OF OUR STAFF HAS EARNED CREDENTIALS THROUGH THE IIBEC, THE INTERNATIONAL INSTITUTE OF BUILDING ENCLOSURE CONSULTANTS AND OTHER INDUSTRY SPECIFIC ORGANIZATIONS. ALL OF THIS MEANS THAT RCL ENGINEERING GROUP HAS THE STAFF, EXPERIENCE AND CREDENTIALS TO MEET THE NEEDS OF A WIDE RANGE OF CUSTOMERS.



## INVESTIGATIONS

- > Roof and Wall Condition Analysis
- > Core Sampling
- > Non-Destructive Moisture Testing
  - Infrared Thermography
  - Nuclear Impedance Spectoscopy (EIS)
- > Long-Range Budget Planning
- > Drone Services

#### COMMERCIAL

- > Industrial
- > Commercial
- > Retail
- > Institutional
- > Restaurants
- > Religious Facilities
- > Medical Facilities

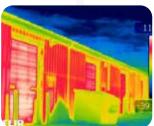
#### MULTI-FAMILY/RESIDENTIAL

- > Condominiums
- > Apartment Complexes
- > Senior Living Facilities
- > Single Family

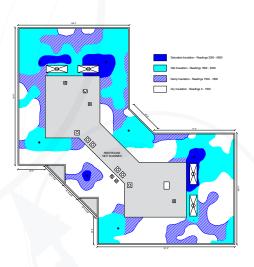








COMMERCIAL RESIDENTIAL ROOFING SYSTEMS WALL SYSTEMS STRUCTURES

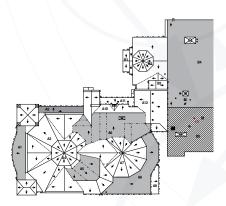


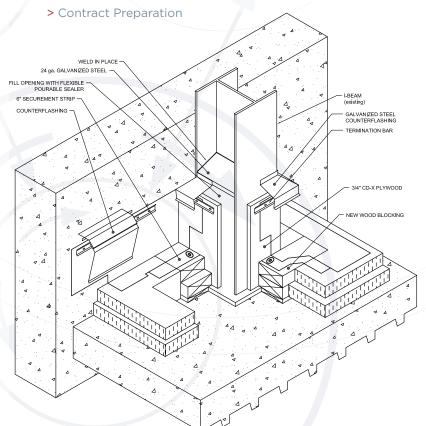
# SPECIFICATION DESIGN

- > New/Retrofit Design
- > CAD Drafting
- > Code Review
- > Bid Document Compilation
- > Peer Review

#### **BID PROCESS MANAGEMENT**

- > Assistance with Contractor Selection
- > Pre-Bid Meeting
- > Bid Review & Recommendation





COMMERCIAL RESIDENTIAL ROOFING SYSTEMS WALL SYSTEMS STRUCTURES









## PROJECT MANAGEMENT

- > Quality Assurance
- > Submittal/Review Approval
- > Pre-Construction Meeting
- > In-Progress Inspections
- > Final Inspection/Punch List
- > Pay Application Approval
- > Project Closeout

# BUILDING ENVELOPE COMMISSIONING

- > Architectural Plan Review
- > Collaboration with General Contractor







COMMERCIAL RESIDENTIAL ROOFING SYSTEMS WALL SYSTEMS STRUCTURES

## FORENSIC INVESTIGATIONS

RCL Engineering Group has the expertise to assist owners property managers, insurance companies and other clients with damage assessment. We have been called upon to evaluate the extent of damage caused by Structural Failures, Faulty Workmanship and Design Flaws.

- > Water Infiltration
- > Collapses
- > Vehicle Impact
- > Storm Damage
  - Wind
  - Hurricanes
  - Hail
  - Flood
  - Tornados
  - Snow/Ice
  - Structural
- > Catastrophe
  - Fire
  - Explosion
- > Contractor Error
- > Manufacturer's Defects
- > Drone Services













## AREAS OF EXPERTISE

## LOW-SLOPE & STEEP-SLOPE ROOF SYSTEMS

- > Built-Up Roof (Asphalt, Coal Tar)
- > Single Ply Membranes (EPDM, TPO, PVC)
- > Modified Bitumen (SBS, APP)
- > Structural Metal Panel
- > Spray Polyurethane Foam
- > Green/Vegetative Roofing
- > Plaza Decks
- > Composition Shingle
- > Wood Shake/Wood Shingle
- > Slate
- > Clay/Concrete Tile
- > Asbestos Tile
- > Architectural & Structural Metal Panel

#### **STRUCTURAL**

- > New Building, Additions, Alterations
- > Building & Equipment Foundations
- > Existing Structure Loading Capacity

#### **WALL SYSTEMS**

- > Aluminum /Vinyl Siding
- > Masonry Brick/Block
- > Exterior Insulating/ Finishing Systems (EIFS)
- > Metal Panel
- > Windows
- > Stucco
- > Curtain Walls
- > Manufactured Stone
- > Pre-Cast Panels

## STRUCTURAL ENGINEERING

- > Load Capacity Calculation
- > Structural Condition Assessment
- > New Building, Additions, Alterations
- > Building & Equipment Foundations
- > Facade Examinations

- > Due Diligence Surveys
- > Wind Load Calculations
- > Deck/Balcony Examinations

## EXPERT LEGAL TESTIMONY





## **EDUCATIONAL SEMINARS**

RCL Engineering Group offers seminars for property managers, facility managers and maintenance managers on a wide range of roofing, building envelope and storm damage topics.

## CERTIFIED PERSONNEL

We have Professional Engineers (PE), Structural Engineers (SE) and Licensed Architects on staff that are licensed nationwide.

In addition, we have Registered Roof Consultant (RRC), Registered Roof Observer (RRO), Registered Waterproofing Consultant (RWC), Registered Exterior Wall Consultant (REWC) and Registered Building Envelope Consultant (RBEC) certified personnel on staff. These certifications are achieved through IIBEC, The International Institute of Building Enclosure Consultants.

## NATIONWIDE RESPONSE





### RCL Engineering Group

Forensic & Structural Engineering

### Roofing Consultants, Ltd.

Engineers, Architects & Building Envelope Specialists