## **PERSONNEL QUALIFICATIONS**



# Christopher C. Buente | Senior Associate



## **EDUCATION**

- Lehigh University
  - Bachelor of Science,
    Civil Engineering, 2008
  - Master of Engineering, Structural Engineering, 2009

## **PRACTICE AREAS**

- Failure/Damage Investigations
- Repair and Rehabilitation
- Structural Analysis/ Computer Applications
- Nondestructive Evaluation
- Windows and Curtain Walls

## **REGISTRATIONS**

■ Professional Engineer in PA

## **PROFESSIONAL AFFILIATIONS**

 American Society of Civil Engineers (ASCE)

## CONTACT

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#### **EXPERIENCE**

Since joining WJE in 2009, Christopher Buente has been involved in numerous projects involving the investigation, analysis, and repair of a variety of structures. His projects include parking garages, warehouses, residential structures, and retail stores. Mr. Buente has specific experience in the structural analysis of existing structures as well as repair and rehabilitation of existing structures. He specifically has used computer modeling of structures to calculate member forces and stresses under a variety of loading conditions.

Mr. Buente is also experienced in the development of repair drawings for concrete and steel structures as well as construction period services for waterproofing, concrete slab repairs, and curtain wall fabrication and installation.

#### REPRESENTATIVE PROJECTS

### **Failure/Damage Investigations**

- Schiffer Publishing Warehouse Atglen, PA:
  Collapse investigation of cold-formed steel storage rack system
- Dulles Airport Hangar Collapse Dulles, VA: Investigation of aircraft hangar collapse

## **Repair and Rehabilitation**

- Cherry Hill Towers Cherry Hill, NJ: Design of repairs to strengthen existing concrete parking garage
- Admiralty Condominiums Monmouth Beach, NJ: Concrete parking garage waffle slab and waterproofing investigation, repair design, and construction documents
- Fashion Center Paramus, NJ: Repair design and construction period services for deteriorated steel structure
- Major Retail Store Altoona, PA: Investigation, analysis, repair design, and construction period services for failed wood joist members
- Metropolitan Opera New York City, NY: Design of travertine repairs and preparation of construction documents
- Stevens Institute Hoboken, NJ: Repair design, construction documents, and construction period services for masonry wall failures

- Artist Lake Middle Island, NY: Investigation and construction period services for failed wood trusses
- Executive House Philadelphia, PA:
  Construction period services for concrete parking garage repairs

## **Structural Analysis/Computer Applications**

- Hartz Warehouse Collapse Newark, NJ: Evaluation of extent of damage and code upgrade redesign
- Major Retail Store Uniondale, NY: Analysis of existing concrete slab to determine structural capacity
- Greenwich Township Water Treatment Plant -Greenwich Township, NJ: Analysis of existing concrete water storage tank
- Numerous Stores for Major Retailer Various Locations: Inspection and analysis of openweb steel joists
- Einstein Hospital East Norriton, PA:
  Structural analysis and computer modeling of composite slabs
- Geisinger Hospital Danville, PA: Structural analysis and computer modeling of concrete slab
- Springfield High School Springfield, PA:
  Computer analysis of open-web steel joist

#### **Nondestructive Evaluation**

 Geisinger Hospital - Danville, PA: Assessment of slab reinforcing using ground penetrating radar

## **Windows and Curtain Walls**

 Princeton Pike - Lawrenceville, NJ: Mock-up testing and construction period services for curtain wall fabrication and installation

