

# FORCON INTERNATIONAL

**ALAN C. GROSSMAN, P.E.**

## **EDUCATION**

B.A. Chemistry - Drew University  
M.B.A. Drexel University  
J.D. Rutgers Law School

## **PROFESSIONAL LICENSES**

2010 Professional Engineer - Florida  
1995 Professional Engineer – Pennsylvania  
1986 Professional Engineer - New Jersey  
1989 Member of the Bar – Pennsylvania  
1989 Member of the Bar - New Jersey  
1989 Admitted to the U S District Court for the Eastern District of Pennsylvania  
1989 Admitted to the U S District Court for the District of New Jersey  
1987-2002 New Jersey Electrical Contractors License  
Certified Mediator, New Jersey

## **CAREER HISTORY**

### **FORCON International – Mechanical Engineer**

Conduct forensic engineering investigations and provide expert witness testimony for cases involving HVAC system and plumbing failures, gas explosions, water and steam damage, fire damage, fire suppression failures, and power and control wiring for commercial, industrial and institutional businesses.

### **HUDSON INTERNATIONAL**

Providing expert technical consulting services based on more than 30 years' experience in design/build projects including field supervision of projects involving HVAC, chilled water plants, refrigeration systems including freon and ammonia systems, walk-in freezers/refrigerators, cold storage warehouses, ice builders, blast freezers heated oil projects, heat recovery, geothermal, steam, natural gas, propane, wet/dry fire suppression, plumbing, power and control wiring for commercial, industrial and institutional clients.

### **Consulting Engineer, HVAC**

Clients include Discmakers, Audio Visual Labs, The Union League of Philadelphia, Crowell Corp., Helvoet Pharma.

**United States District Court for the District of New Jersey** - Mediator/Arbitrator for Magistrate Judges Hedges and Arleo.

### **Attorney, Construction Law - Solo Practitioner**

### **West Jersey Mechanical Services - CEO and Chief Design Engineer**

Duties included design/build engineering, field supervision of mechanical construction (HVAC-Plumbing-Electrical), management, quality assurance/commissioning, electrical power/control installation, specification of wet/dry fire protection systems. Clients included commercial and industrial firms as well as educational institutions located in Eastern Pennsylvania, Southern New Jersey and Delaware.

### **West Jersey Air Conditioning - Junior Designer, Senior Designer, Commercial Sales, Field Supervisor.**

Various titles and duties over 14 years of increasing responsibilities. Design/Build projects include chilled water plants, ice builders, high temperature heated oil systems, clean rooms, evaporative spray systems for static control, clean rooms, office air conditioning, hospital surgical O.R.s, heat recovery, waste heat steam boilers, hot water/steam systems, ATC systems.

**Manufacturing Engineer/Plant Liaison**, Polyester Films, Imperial Chemical Industries.

## **REPRESENTATIVE CASES – PROPERTY AND CASUALTY**

Natural Gas Explosion - Death of resident and serious injuries to others. Public utility's gas service piping in residence vandalized leading to the explosion of the residence, death, injuries and complete collapse of the structure.

Carbon Monoxide Poisoning- Death of tenant due to landlord's improper renovation of residence, failure to provide adequate combustion air and failure to properly maintain natural gas burning equipment.

Carpenter's Burn Injuries - Worker injured when construction heater ignited his clothing due to heater manufacturer's failure to warn of danger.

Water Damage - Fifty-two story building located Manhattan suffered water damage due to central station air handler coils freezing due to building operator's improper operation of the HVAC system and defectively installed Automatic Temperature Control (ATC/BMS) system.

EIFS Damage at condominium complex - Improper sealing of mechanical contractor's wall sleeves and improper flashing by follow-on trades lead to wholesale replacement of exterior EIFS wall systems at a 20 building complex.

Water Damage - Delayed repairs of a fire sprinkler system by a plumbing contractor at a large, multi-story industrial building allowed the sprinkler main to fail, resulting in flooding the basement and loss of electrical equipment, water damage to the structure and damage to equipment stored there.

Water Damage - Owner failed to service a "dry" fire sprinkler system at a Rehabilitation facility prior to winter. Residual condensed water froze in piping leading to the fire sprinkler activation and resultant water damage on two floors of one wing of the facility.

Steam Damage - Central humidification system at a surgical center failed when its control valve stem fractured, allowing the system to run wild. Valve manufacturer's stem sub-contract manufacturer improperly machined valve stem, resulting in its failure.

Mold and Water Damage - Defective design by the Project Architect and defective construction of the building required replacement of significant portions of the structure and mold remediation.

Fire Damage - Kitchen exhaust hood's "Ansul" type fire suppression system failure to extinguish a deep fryer cooking oil fire due to Owner's failure to maintain equipment and lead to remediation of damage in the 50,000 square foot building. Prepared Building Code review to support our party's claim that the Owner's claims were excessive.

Fire Damage - Commercial laundry dryer investigation; total loss of the building and contents.

Fire Damage - Automobile paint shop's fire protection system failure to extinguish the fire due to Owner's failure to minimize combustible materials as required by Code.

Chemical Reactor Tank Failure - Owner modified pressure relief devices rendering them ineffective leading to tank failure and dangerous chemical discharge with-in and outside the plant.

Investigation of the cause of a fire loss aboard 90 foot maritime vessel associated with a failure of the climate control system.

Investigation of claimed failures of water source heat pumps at a newly constructed 40 story luxury apartment condominium.

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Investigation of the cause of the corrosion of the condenser water distribution piping at an office condominium.

Investigation of a water damage claim aboard a 140 foot maritime vessel where a condensate piping connection was inadvertently connected to condenser water piping drain.

Investigation of the loss of a 200 ton air conditioning system that was damaged as a result of a hurricane.

Investigation of the failure of a six story condominium's CPVC fire sprinkler system where the pipe exhibited stress cracks and solvent fitting failures.

Investigation of the maintenance failure of an oil injected rotary screw air compressor, which led to personal injuries.

Investigation of the cause of the failure and complete destruction of a high pressure reciprocating air compressor, which was used to provide breathing air/SCBA.

Investigation of a 500 ton centrifugal chiller failure due to erosion of the condenser tube bundle.

Investigation of the failure of an ammonia refrigeration system serving an ice-skating rink including damage to compressors, the under floor brine system and the under floor frost heave prevention system.

Investigation of a chemical fire suppression system's inadvertent discharge at a factory clean room/control room.

Investigation of a loss due to improper design & construction of HVAC systems at a pharmaceutical manufacturing plant.

Investigation of a claim of failing to properly install a fire hydrant associated with the death of a motor vehicle driver.

Investigation of an explosion associated with a propane gas fueled stove installed in a recreational vehicle resulting in personal injuries.

Investigation of the failure of a 320- panel photovoltaic (PV) solar system providing electricity to a factory's main electrical bus. The failure resulted in a fire and the loss of the panels, inverters and switchgear.

Design, construction and commissioning of clean rooms: an ISO 7 for a compact disc (CD) mastering facility, an ISO 7 for a pharmaceutical container manufacturer, ISO 7 for several hospital operating rooms and a series of control rooms for a petrochemical refiner.

Investigation of the mechanical design and failure of a pharmaceutical manufacturer's clean room facilities to meet current good manufacturing practices (cGMP). The cleanrooms included the manufacture of both sterile and non-sterile compounding and were subject to FDA requirements of Good Manufacturing Practice Section 503 of the Food, Drug & Cosmetic Act, State of Florida requirements and the Standards set forth by the United States Pharmacopeial Convention (USP) 795 and 797.

Investigation of the contamination of a semiconductor fabrication plant's (chip fab) clean room facilities, remediation and requalification.

Investigation of alleged deficient construction of the fire sprinkler system and bathroom showers at each floor of a 46 story condominium.

## **REPRESENTATIVE CASES – SURETY**

Owner claimed that General Contractor failed to provide temperature and humidity levels it deemed appropriate in its classrooms. General contractor built the project as required by the project plans and specifications which was not a performance specification. Project Engineer held at fault and subsequently modified control sequences.

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Owner terminated General Contractor's Agreement for failure to complete the college building on schedule. Completed review of elements of construction requiring completion. Negotiated with Public Owner. Contacted existing sub-contractors and additional sub-contractors to bid on the completion of the project. Took bids for completion.

Owner claimed mechanical contractor failed to properly install the building's HVAC system, leading to moisture damage to the building. Remedial work proved the Project Engineer not the contractor was at fault for failure to properly specify the required amount of mechanical insulation for the project.

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## ALAN C. GROSSMAN, P.E. – Deposition and Trial Summary

<b>Date</b>	<b>Case Name</b>	<b>Client</b>	<b>Location</b>	<b>Issue/Matter</b>
06/10/2020	Regalia on the Ocean Condominium Association <b>Deposition (D)</b>	Larry Cook, Esq. The Barthelet Law Firm	Miami-Dade County, FL	Plumbing, Fire Sprinkler
05/22/2020 05/08/2020	2020 Ponce Condominium Assoc. v. 2020 Ponce, LLC, et al <b>Deposition (D)</b>	Christine Freer, Esq. Galloway, Johnson, Tomkins, Burr & Smith	Miami-Dade County, FL	HVAC
09/17/2019	Glenn Best v. Roberts Equipment <b>Deposition (D)</b>	Renee Lundy, Esq. Dean, Ringers, Morgan & Lawton, PA	Orange County, FL	Mechanical Equipment Failure with Injury
03/10/2017	Giddens <b>Deposition (D)</b>	Brett Henson, Esq. Dickinson & Gibbons	Collier County, FL	HVAC
03/16/2016	Riverside Club of Ft. Myers v. Michael Senek <b>Deposition (P)</b>	Diane Simon, Esq.	Lee County, FL	Plumbing
02/05/2016	Norfolk Southern Railroad v. Johnson Controls <b>Deposition (D)</b>	Steve Lowe, Esq. Leach & Lowe	Fulton County, GA	HVAC Maintenance Contract Dispute
09/04/2015	Nunn v. Grace & Public Service of NJ <b>Deposition (P)</b>	Dennis Brotman, Esq. Fox Rothschild, LLP	Camden County, NJ	Natural Gas Explosion
01/31/2012	Compos v. Silva <b>Deposition (D)</b>	Colette Pete, Esq. Philadelphia Gas Works	Philadelphia County, PA	Carbon Monoxide Plumbing/HVAC
07/01/2009	Camden County College <b>Deposition (D)</b>	Thomas Krick, Esq. Reger, Rizzo & Darnall, LLP	Camden County, NJ	Fire/Explosion in Food Service Department