

A Small Book on Fire Safety Engineering

Chrisason Fire Protection

This book showcases some of the tools, skills, and ways of working we have garnered over the past 34+ years in the industry. You would get a better look and perspective into our company's values and how we do what we do. Take this journey with us to fully experience our unique functional expertise that ensures that our clients get exactly what they need to protect their employees and assets against fire. .

3 Introduction

We have always assembled the best of our company's expertise for each client. A range of new capabilities and ways of working boosts the impact of safer fire protection approach.

5 Core Competencies

Our core competencies are Supply, Installation, Servicing + Maintenance, Training, Refurbishing + Fabrication. The depth and breadth of our company's expertise is unmatched. We continue to add new engineers, technical capabilities, and ways of providing our clients with quality UK & US products and service quality.

Our Products

Protecting our clients people and assets is what drives us. Increasingly, that means using the highest industry standard equipment for client work, to ensure the safety of your people and assets.

Our Functions

Our functions, our practice areas, and safety partners around the globe are developing new ways of working at scale, to reach our clients with greater speed, depth, and relevance. We have built expertise with all the IOCs in Nigeria and many other engineering firms.

Introduction Fire Protection Engineering

Chrisason Fire Protection is the country's leading Fire Protection Engineering organisation. We take pride in providing safety solutions and simplifying operational challenges for our clients in public and private sectors across the globe.

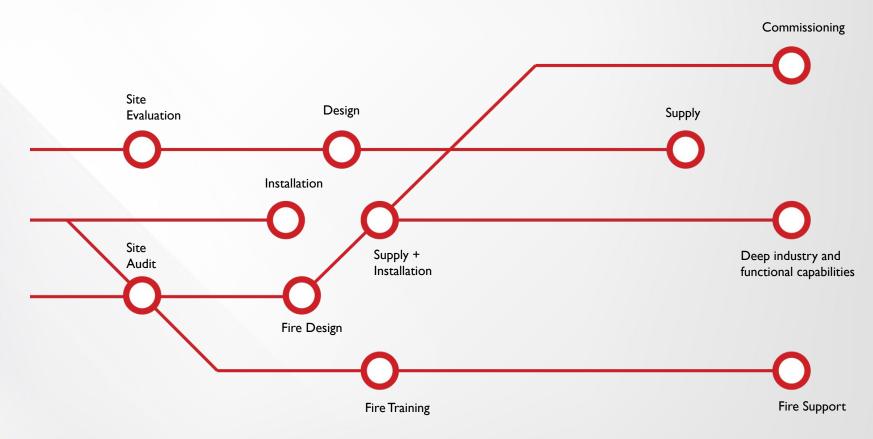
At Chrisason Fire, we understand that no two company problems are the same, we help each of our clients design safety solutions tailored specifically to meet their asset needs. Our vast industry and engineering expertise, including safety partners across the globe, emergency technology and robust installation and commissioning expertise, allows us to address problems in the continent, in unique ways that no one else can.

We provide fire consultation, fire building designs, fire strategy and training services of the highest quality to help you build stronger teams, install and commission - UK approved fire equipment. Our clients are fully involved in the processes since we provide personalised solutions to the safety problems.

We design, supply, install, commission and service - Fire Fighting Equipment, such as, Fire Extinguishers, Fire Trucks, Fire Hose Reel, Fire Fighting Foam & Powders, Foam, Equipment Sprinkler System, ${\rm CO_2}$ Total Flooding Systems, Fire Detection System (Smoke, Heat, Flame, Explosion Sensors), Fire Hydrant Equipment, FM 200, Argon, Inergen, Fog Water, Fire Fighting Systems, Dry Powder, Fire Fighting Systems, Portable and Trolley units.

We have an enhanced capacity to implement change, build capacity, and help organisations implement UK standard safety measures, ensuring the total safety of their people and assets.

Combining the full scope of our offer today with the strengths of our clients will spark and drive effective fire management across client organisations.



Introduction How we work: A client example

We put together a special blend of skills, experts and equipment for each organisation. The consequence is a safer workplace for our clients + their assets. As our clients safety challenges are simplified through our intelligent processes, longer-term organisational health and safety is also increased. Here is what that means for you as a client.

Once the client site has been evaluated, the next thing we need to do is diagnose the safety problems we need to resolve.

Diagnosis

Specialised projects require a fire design that outlines exactly what needs to be where prior to building a fire system.

Fire Systems

Design

Once the project is complete, Chrisason Fire will commission the project + coach two internal safety personnels to ensure the smooth running of the system.

Commissioning +

Internal Coaching

Ongoing servicing and maintenance will be provided to ensure the effectiveness + longevity of the systems + equipments.

The first thing we do on our projects is a site evaluation. This allows us learn about the client's working environment + build out essential safety recommendations for the

client.

Site Evaluation

Chrisason Fire then researches the best solves for the client safety problems, analysing how they'll help ensure the most effective safety of the client site.

Research and Analytics

Once the fire design is complete, Chrisason Fire Protection then shares a BOM with the client + then begins supply + project installation on

client site.

Supply + Installation

Safety Skill-Building Workshops Ongoing Servicing +
Maintenance

Once the fire systems are commissioned, Chrisason Fire Protection will develop + execute safety skill-building workshops to help improve the safety acumen of the entire organisation.

₩2.4B

worth of value, added to the client's safety line in 13 months

Core Competencies Design, Supply, Installation + Maintenance

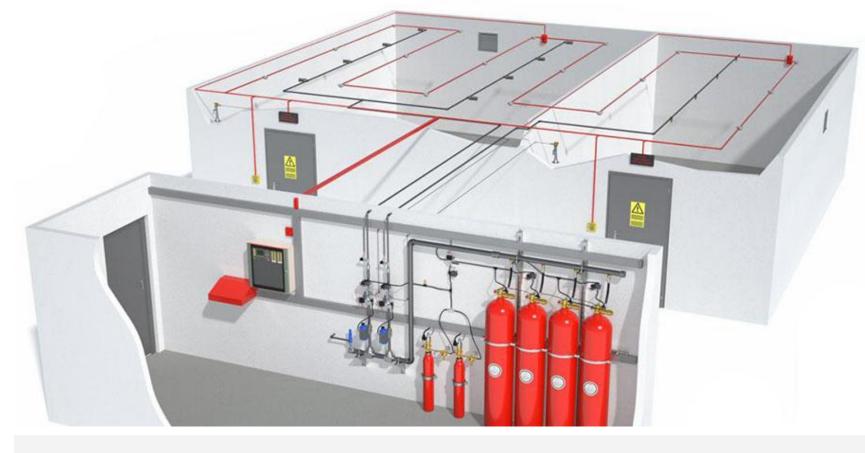
Design – Fire suppression systems are a critical component of a comprehensive fire protection system. Unique to the buildings for which they are designed, fire suppression systems can be incredibly complex involving an intricate system of wiring, piping, equipment, and other components. Hence why we start out with a clear fire engineering design. In addition, fire designs must be designed in accordance with a stringent set of rules, laws, and codes to ensure that in the event of a fire, the systems will function properly to suppress fire + fuel.

Supply – With Chrisason Fire Protection as your safety partner, you are rest assured that the components, wirings + fittings for your fire systems will be of the Industries highest quality. We will also allow you the option of choosing between the industry leader and other safe options so you can make the best choice for your safety. We supply IOCs, Government Institutions, and other International organisations.

Installation & Maintenance — Chrisason Fire Protection installs fire systems with well trained experts. This allows us manage your project with the highest efficiencies and priority. When we finish installing your system we go through an extensive checking procedure to make sure it works correctly and is installed to the correct design. This includes full witness testing and sign off of commissioning, handover procedures and any certification for your compliance.

130+

installation projects across many industries and functions in the three decades.



Fire Safety Designs

Buildings need to be designed to offer an acceptable level of fire safety and minimise the risks from heat and smoke. The primary objective is to reduce to within acceptable limits the potential for death or injury to the occupants of a building and others who may become involved, such as the fire and rescue service.

Chrisason Fire Protection's next critical role is to ensure business continuity after a fire. Also crucial are protecting contents and ensuring that as much as possible of a building can continue to function after a fire - and that it can be repaired. The risk to adjoining properties also needs to be considered, as well as possible environmental pollution. A good fire safety design takes all of these into consideration, while allowing for adequate planning of the safety of people and assets in the event of a fire outbreak.

Installing Fire Protection Systems

In order for fire protection systems to perform as intended it is important to understand that fire protection at a facility consists not of just a few sprinkler heads, but of a network of engineered systems that must all function in synchrony to get the intended effect.

For this reason, the specification, design, installation and testing of fire protection systems need to closely adhere to accepted industry fire protection standards.

Active Fire Protection

Active fire protection systems include hoses, water spray, deluge, sprinklers, firewater monitors, and steam rings around flanges. In most cases the principal firefighting medium is water. However, other agents such as carbon dioxide can also be used. Generally firewater has two functions. The first is to cool the fire and the area around the fire. The second is to suppress the fire itself. The presence of steam inside the flame reduces the amount of oxygen that is available for the flames.

Core Competencies Fire Training

Our fire safety training courses offer comprehensive, accredited training to individuals, managers and organisations. We offer fire safety courses in basic fire safety training, fire risk assessment, the principles of fire safety for the workplace, fire warden (fire marshal) training and fire risk assessment and management training.

Today's most exceptional organisations take the safety of the people and assets very seriously. In this stead, they invite experts to train, equip and inform their team on how to stay safe and protect company assets in the event of a fire outbreak.

Chrisason Fire Protection offers a host of fire training workshops to help organisations understand how to fight small fires, know when to evacuate and safely protect assets. It is also a legal requirement for certain members of staff to be trained in fire safety procedures in the workplace.

Our Training includes: safety measures to proactively practice in the workplace to prevent fire, what action they should take on the discovery of a fire, know the difference between different fire classes, which extinguisher to use for which fire and what the evacuation procedure is.

5+

people across solution teams

75+
people trained in the past year



Fires destroy property, cause injuries, and take lives. A fire in the workplace can also mean the termination of jobs, as many of the offices and factories destroyed by fire in the country are never rebuilt. One of the key strategies to maintaining a safe workplace and preventing fires is fire safety training.

With proper training workers can eliminate fire hazards and respond quickly and efficiently if a fire breaks out. Without proper training a small occurrence can quickly grow to become a major incident with devastating outcomes.

Everyone is at risk if there is a fire. However, there are some workers who may be at greater risk because of when or where they work, or because they're not familiar with the premises or the equipment at the work site.

Fire safety training can teach workers how to recognize fire hazards, conduct a fire safety risk assessment, prevent a workplace fire, and respond if a fire occurs

In addition to Fire Safety Training, Chrisason Fire Protection offers training workshops in

- Active shooter/Hostile event response
- Alternative Fuel Vehicles Safety Training
- Building and life safety
- Electrical
- Emergency response
- Fire protection systems
- Health care
- Wildfire hazards and mitigation
- Hot work
- Industrial hazards

Servicing + Maintenance

Alongside detailed planning and proper installation, maintenance and servicing are the crux of fire safety and ensure that your devices and systems last a long time.

Maintenance involves checking and looking after your fire safety systems and equipment, so that it continues to work for your organisation as long as possible, without needing repairs. Depending on the type of fire safety system/equipment, it might be cleaned, adjusted and lubricated, or wear parts might be replaced, for example. Servicing is where a Chrisason Fire Protection engineer/technician fixes any faults in the fire safety equipment to get it working properly again.

Maintenance Schedule -

At least once a year:

- Wall-mounted fire hose reels with "wet/dry" or "wet" riser
- Above-ground and underground hydrants
- Securing devices for fire doors and gates
- Smoke and heat extractors
- Fixed extinguishing systems
- Emergency lighting

At least quarterly:

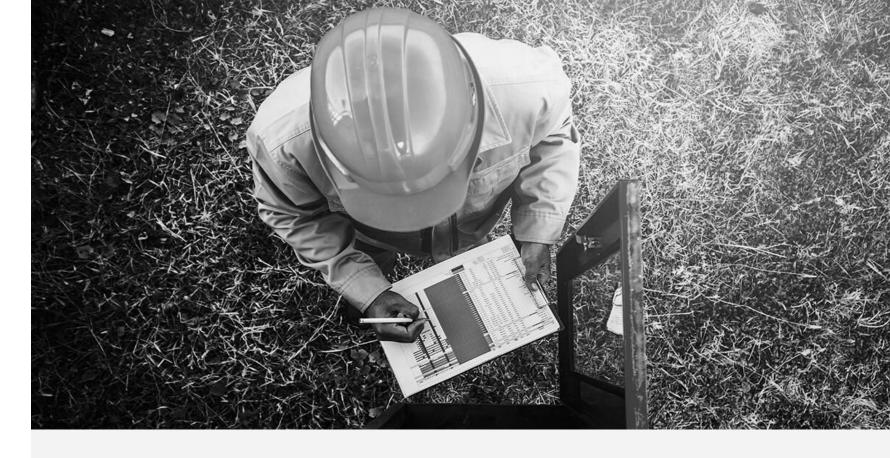
- Fire alarm systems

34+

Years of servicing and maintaining fire systems

5,000+

maintenance projects in the past 30years



Chrisason Fire Protection makes maintenance easy – our committed and experienced technicians manage your equipment maintenance and repair records electronically. This creates accessible documentation and assists with cost reductions, budgeting, scheduling, planning, inspections, and maintenance. Our fire equipment services include repair and maintenance of the following:



Fire Sprinkler Systems



Emergency Lighting Systems



Fire Alarm Systems



Fire Extinguishers



Kitchen Suppression Systems



Back Flow Systems



Fire Alarm Monitoring



Water System



Fire Doors



Special Hazards

Safety Advisory

Optimal fire protection requires the right advice, planning and execution in and around the building. We are happy to take care of every step - right up to the official documentation.

Fire Safety is multifaceted. Our Fire Protection Engineers can help you understand and address the fire risk in your organisation through assessments, consulting services, and more.

Our Fire Safety Advisory team interventions can reassure insurers, employees and other stakeholders that your company is fully protected.

Our fire protection consulting services provide answers to all your fire-related questions, carry out fire protection risk assessments, create customised fire safety action plans and offer support on-site. As a result, you and your employees are protected from the risks of fire and explosions at work.

We have the resources, including assessment tools and technologies, specialised personnel and a thorough knowledge of compliance issues, that are necessary for effective fire prevention.

50+

relationships with organisations as Safety Consultants + Advisors



CFPL HSE Policy

Chrisason Fire Protection actively seeks to create and maintain a working environment safe from the risks of fire, in compliance with the Regulatory Reform (Fire Safety) Order UK 2005 and The Management of Health and Safety at Work Regulations 1999. CFPL will ensure, so far as is reasonably practicable, the health, safety and welfare with regard to fire, of all its employees, contractors and visitors and any others on our premises. We also acknowledge our responsibility to protect our clienteles' buildings and assets from the threat of the accidental outbreak of fire.

The Fire Safety Plan and Procedures in our Health and Safety Policy - CFPL will:

- I. Provide information, instruction, training and supervision to enable all employees to carry out their duties effectively and safely following health + safety guidelines
- 2. Provide safe equipment and systems of work to ensure the safety of our team
- 3. Carry out meaningful fire risk assessments for all areas and implement appropriate remedial actions
- 4. Be proactive in fire prevention and reactive in fire and near miss investigation

CFPL is committed to understanding and meeting the quality needs and expectations of our customers. We strives to achieve a reputation for delivering quality components. We have established a comprehensive quality assurance system that allows our company to meet all of the requirements of the ISO 9001:2008 quality assurance standard. Our quality assurance system focuses on the following principles: We will continue to ensure that client satisfaction is achieved at all times. We will share a comprehensive quality policy prior to the start of a project / engagement so as to be aligned with the client company in ensuring the safe performance of our team while executing on client sites.

Our Products Safety Supplies

Optimal fire protection requires the right advice, planning and execution in and around the building. We are happy to take care of every step - right up to the official documentation.

Our Guarantee

We recommend and stock mainly Angus and Kidde fire safety equipment. We are an authorised dealer in many safety industrial companies and work closely with safety partners to ensure you get the most innovative equipments to safeguard your people and assets in the event of a fire. Here are a few of our equipment, but do reach out if you have specific requirements we haven't listed on here due to the need to be concise.











FIRE HOSE

WATER DELIVERY HOSE

FIRE FIGHTING CHEMICALS



known international fire safety manufacturing companies.



FOAM EQUIPMENT



MONITORS



BREATHING AIR SYSTEMS

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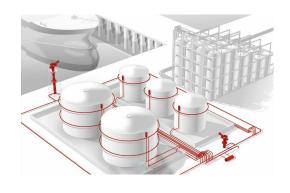
known international fire safety manufacturing companies.







FIRE EXTINGUISHERS



FIRE PROTECTION SYSTEMS







FIRE FIGHTING GEARS



About Chrisason Fire

Our History

We were founded in 1987. Since then, our fire protection engineering company has been a quiet reasoning partner alongside a number of international oil companies, government organisations + private companies, in a variety of sectors. Working hand-in-hand with top tier executives and safety units like yours, we guide them through the rough patches of building robust and fire protected organisations.

Our Mission

Our mission is to help build the next generation of some of the safest companies in the world.

Values

Our values are Safety. Innovation + Excellence.

- **Safety:** we believe safety should come before profits.

We have a robust history of creating safer companies for our clientele, we go the extra mile to ensure this.

- **Innovation:** we help companies find the most innovative ways to improve safety.
- **Excellence:** we work with exceptional clients whom

we support to build excellence in safety engineering.

Vision

We want to be the most trusted, indigenious go-to

70%

of our clients are engineering companies, with a sizable portion of international engineering companies.



Some Key Clients

































Our People

Key Executives

Our team is made up of people from diverse backgrounds and fields.

Who joined CFPL for the opportunity to apply create safer working environments for companies in Nigeria. We have 15 professionals made up of Fire Safety Engineers, Fire Safety Technicians, and Engineering Interns



Christian R. lyire Chairman + CEO

Christian is the founder, CEO + Chairman of Chrisason Fire Protection. He has been played a key role in Safety since the late 1970s. He has spearheaded projects with nearly all the IOCs in Nigeria and has executed projects for some of the best engineering companies in the world. He is an engineer that understands the fundamentals of the trade as well as the innovativeness necessary to keep abreast of all the new developments in safety engineering.



Christian Reuben

Christian is a safety strategy consultant and executive coach. He helps companies in the continent simplify challenges and build teams. He has a 7+years of experience in fire safety engineering and understands how particularly important, safety is in our country + continent. He has spearheaded a variety of safety initiatives, including fire systems installations and maintenance for a few international companies.

He has a robust knowledge of safety.



Engr. Daniel Meke PMP. CSM. Lead Safety Engineer Ex-Chevron

Engr. Daniel is a result-driven and adaptable with extensive experience managing combined project values up to \$6B. Excel at leading and developing high-performing teams to deliver projects within schedules and under budget. Major highlight - Daniel, spearheaded \$1B in projects that involved building a data center, integrated controls center, and 5K accommodation for the operations team to control 1% of the world's oil production.



Victor lyire Lead Safety Technician

Victor has a background in Geo Sciences, and has worked in fire safety for 10+years. His speciality is services and maintenance of fire suppression systems, fire alarm systems and fire quality control. He started his career with the Nigerian Gas Company (an NNPC subsidiary), as a Technical Lead before refocusing on fire safety. He supports the company, building fire safety systems for client companies, ensuring they work efficiently, commissions once done.

Our Functions Our Clients

Our work with clients has always been at the intersection of deep industry expertise and extensive functional capabilities. We will continue to develop new safety disciplines to ensure our clients experience results that are bigger, faster, and more sustainable than ever before.

Our clientele spans from international nonprofits to Government institutions and Universities. Here are a few companies we have a working relationship with:

Industries

Advanced Electronics

Aerospace & Defense

Automotive & Assembly

Capital Projects & Infrastructure

Chemicals

Consumer Packaged Goods

Electric Power & Natural Gas

Financial Services

Healthcare Systems & Services

High Tech

Media & Entertainment

Metals & Mining

Oil & Gas

Paper & Forest Products

Pharmaceuticals & Medical Products

Private Equity & Principal Investors

Public Sector

Retail

Semiconductors

Social Sector

Telecommunications

Travel, Transport & Logistics

Functions

Safety Assessment

Fire Design

Digital Fire Safety

Fire Training

Implementation

Installation

Commissioning

Operations

Organisation

Recovery & Transformation Services

Risk Assessment

Strategy & Corporate Finance

Sustainability & Resource

Fire Trucks

Fire Systems

Fire Hose Reel

Fire Fighting Foam + Powders

Foam Equipment Sprinkler Systems

CO₂ Total Flooding Systems

Fire Detection System (Smoke, Heat, Flame,

Explosion Sensors)

Fire Hydrant Equipment

Fire Fighting Systems,

FM 200, Argon, Inergen, Fog Water

Our People Our geographic reach

We keep expanding our global network of suppliers and experts, capabilities, and tools. With strong links with suppliers in the UK, US and UAE.

12 cities

countries



At Chrisason Fire Protection, we have worked hard for years to keep pace with the changes in safety technologies. In recent years, as our clients have faced more rapid transformation and disruption of their businesses and organisations, we too have accelerated our pace of innovation. In today's working environment, we consistently hear two themes from our clients. First, they need us to bring new forms of expertise and insight to solve their most challenging safety issues. We are constantly upgrading the capabilities that we bring to our clients.

We are also hiring more safety professionals who bring expertise in areas such as fire systems digital design, machine learning, robotics and drone technology, to augment our traditional client service staff. All told, in 9 months, colleagues with new capabilities in these areas will account for one-third of our total professional team..

Secondly, we hear consistently that the line between installation and servicing work has blurred, and that clients want us to serve not just as safety contractors but as true impact safety partners in delivering exceptional value from our work.

Through fire safety design, supply, project implementation and commissioning, we work with clients to deliver exceptional work on ground. Our confidence in our safety before profits approach is reflected by the fact that 25 percent of our engagements now link our fees to supply, prudent cost reductions, procurement savings, and other metrics.

This transformation in how we work is also exemplified by our recently created Safety innovation team, which focuses on identifying and fostering innovations and integrating them into our client service. The group provides an enhanced foundation for the culture of entrepreneurialism we have always had.

While much is changing, some things about CFPL never do—like our unrelenting commitment to put our clients' interests first, our deep investment in our exceptional people and safety acumen, and our shared set of values across our company.

As we move forward, we are excited by the dual challenge of preserving our core and innovating to meet the safety needs of our clients. We hope this book helps explain what is new at Chrisason Fire Protection, and our commitment to meet these new challenges head-on.

Christian R. lyire Chairman + CEO In the midst of all that is changing in the world, some things are constant. We remain true to our basic company values: Safety, Innovation and Excellence.

These help ensure we always remain relevant and up to date to provide companies with the appropriate advice and tools to grow.

For more information, visit https://chrisasonfire.com

Contact

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