

Fire Safety & Insurance Implications.

19/10/2016.

FIRE SAFETY & INSURANCE IMPLICATIONS.

BASIC PRINCIPLE OF INSURANCE?

**The Contributions of the Many pay for the Misfortunes
of the Few.**

FIRE SAFETY & INSURANCE IMPLICATIONS.

The history of insurance consisted of the development of the modern business of Insurance against risks, especially regarding Cargo, Property, Death, Automobile Accidents, and Medical Treatment.

The property / fire insurance industry traditionally helped to manage & eliminate risks (e.g. advising on the implementation of safe practices, the installation of hydrants, the design & commission of automatic sprinkler systems, etc.) and spread any risks from the individual to the larger community.

FIRE SAFETY & INSURANCE IMPLICATIONS.

The first methods of transferring or distributing risk in a monetary economy, were practised by Chinese and Babylonian traders in the 3rd and 2nd millennia BC, respectively.

Chinese merchants travelling treacherous river rapids would redistribute their wares across many vessels to limit the loss due to any single vessel's capsizing.

The Babylonians developed a system which was recorded in the famous Code of Hammurabi, c. 1750 BC, and practised by early Mediterranean sailing merchants. If a merchant received a loan to fund his shipment, he would pay the lender an additional sum in exchange for the lender's guarantee to cancel the loan should the shipment be stolen or lost at sea.

FIRE SAFETY & INSURANCE IMPLICATIONS.

Code of Hammurabai – 1760 B.C.

282 Rules: 3 sections – Property Law, Family Law, Laws relating to Retaliation & Restitution & 5 Rules for Building Contracts:

No. 229: If a builder builds a house for a man and does not make its construction firm and the house which he has built collapses and causes the death of the owner of the house that builder shall be put to death;

No. 230: If it causes the death of the son of the owner of the house they shall put to death a son of the builder;

No. 231: If it causes the death of a slave of the owner of the house he shall give to the owner of the house a slave of equal value;

No. 232: If it destroys property, he shall restore whatever it destroyed and because he did not make the house which he built firm and it collapsed, he shall rebuild the house which collapsed at his own expense;

No. 233: If a builder builds a house for a man and does not make his constructions meet the requirements and a wall falls in, that builder shall strengthen the wall at his own expense.

FIRE SAFETY & INSURANCE IMPLICATIONS.

Separate insurance contracts (i.e. insurance policies not bundled with loans or other kinds of contracts) were invented in Genoa in the 14th century, as were insurance pools backed by pledges of landed estates.

The first known insurance contract dates from Genoa in 1347, and in the next century maritime insurance developed widely and premiums were intuitively varied with risks.

These new insurance contracts allowed insurance to be separated from investment, a separation of roles that first proved useful in Marine Insurance.

FIRE SAFETY & INSURANCE IMPLICATIONS.

Insurance became more sophisticated and some forms of insurance developed in London in the early decades of the 17th century.

For example, the will of the English colonist Robert Hayman mentioned two "policies of insurance" taken out with the Diocesan Chancellor of London, Arthur Duck. Of the value of £100 each, one related to the safe arrival of Hayman's ship in Guyana and the other was in regard to "one hundred pounds assured by the said Doctor Arthur Ducke on my life".

FIRE SAFETY & INSURANCE IMPLICATIONS.

Property Insurance and indeed fire safety as we know it today can be traced to the Great Fire of London, which in 1666 devoured more than 13,000 houses.

The devastating effects of the fire converted the development of insurance *"from a matter of convenience into one of urgency"*, a change of opinion reflected in Sir Christopher Wren's inclusion of a site for 'the Insurance Office' in his new plan for London in 1667.

A number of attempted fire insurance schemes came to nothing, but in 1681, economist Nicholas Barton and eleven associates established the first fire insurance company, the "Insurance Office for Houses", at the back of the Royal Exchange to insure brick and frame homes. Initially, 5,000 homes were insured by his Insurance Office.

FIRE SAFETY & INSURANCE IMPLICATIONS.

In the wake of this first successful venture, many similar companies were founded in the following decades. Initially, each company employed its own Fire Department to prevent and minimise the damage from conflagrations on properties insured by them.

They also began to issue '*Fire Insurance Marks*' to their customers. These would be displayed prominently above the main door of the property and allowed the insurance company to positively identify properties that had taken out insurance with them.

One such notable company was the Hand In Hand Fire & Life Insurance Society, founded in 1696 at Tom's Coffee House in St. Martin's Lane in London. It was structured as a Mutual Society, and for 135 years it operated its own fire brigade and played an important part in shaping fire fighting and prevention. The Sun Fire Office is the earliest still existing property insurance company, dating from 1710.

FIRE SAFETY & INSURANCE IMPLICATIONS.

This system was soon exposed as terribly flawed, as rival brigades often ignored burning buildings once they discovered that it had no insurance policy with their company. Eventually, a solution was agreed upon in which all the insurance companies would supply money and equipment to a Municipal Authority charged with stationing fire prevention assets and fire-fighters equally around the city to respond to all fires.

This did not solve the problem entirely, as the brigades still tended to favour saving insured buildings to those without any insurance at all.

FIRE SAFETY & INSURANCE IMPLICATIONS.

At the same time, the first insurance schemes for the underwriting of business ventures became available. By the end of the seventeenth century, London's growing importance as a centre for trade was increasing demand for Marine Insurance.

In the late 1680s, Edward Lloyd opened a coffee house on Tower Street in London. It soon became a popular haunt for ship owners, merchants, and ships' captains, and thereby a reliable source of the latest shipping news. It became the meeting place for parties in the shipping industry wishing to insure cargoes and ships, and those willing to underwrite such ventures.

FIRE SAFETY & INSURANCE IMPLICATIONS.

These informal beginnings led to the establishment of the insurance market Lloyd's of London and several related shipping and insurance businesses.

In 1774, long after Lloyd's death (1713), the participating members of the insurance arrangement formed a committee and moved to the Royal Exchange on Cornhill as the Society of Lloyd's.

FIRE SAFETY & INSURANCE IMPLICATIONS.

In Colonial America, the first insurance company that underwrote fire insurance was formed in Charles Town (modern-day Charleston), South Carolina, in 1732.

Benjamin Franklin helped to popularize and make standard the practice of insurance, particularly Property Insurance to spread the risk of loss from fire, in the form of Perpetual Insurance. In 1752, he founded the Philadelphia Contributorship for the Insurance of Houses from Loss by Fire.

Franklin's company made contributions toward fire prevention. Not only did his company warn against certain fire hazards, it refused to insure certain buildings where the risk of fire was too great, such as all wooden houses.

FIRE SAFETY & INSURANCE IMPLICATIONS.

RISK TAKING BEHAVIOUR.

Risk-Averse.

Risk-Neutral.

**Risk-Taker
(Risk-Seeker, Risk-Lover).**



FIRE SAFETY & INSURANCE IMPLICATIONS.

RISK & UNCERTAINTY.

RISK: A situation in which several different outcomes are possible resulting in injury to a person or damage to property.

Uncertainty: The perception that several different outcomes are possible or the likelihood such a particular event can occur.



FIRE SAFETY & INSURANCE IMPLICATIONS.

CATEGORISE RISK:

PURE RISK Vs. SPECULATIVE RISK.

DIVERSIFIABLE RISK Vs. NON-DIVERSIFIABLE RISK.

FUNDAMENTAL RISKS & PARTICULAR RISKS.

FIRE SAFETY & INSURANCE IMPLICATIONS.

PURE RISK Vs. SPECULATIVE RISKS.

Speculative Risks are Usually Chosen:

- *Stock Appreciation;*
- *Manufacturing and Selling a Product*
e.g. Furby.

Pure Risks are Usually a By-product:

- *Automobile Accident;*
- *Sports Injury.*



FIRE SAFETY & INSURANCE IMPLICATIONS.

DIVERSIFICATION.

Pooling Similar Risks -

- *INSURANCE.*

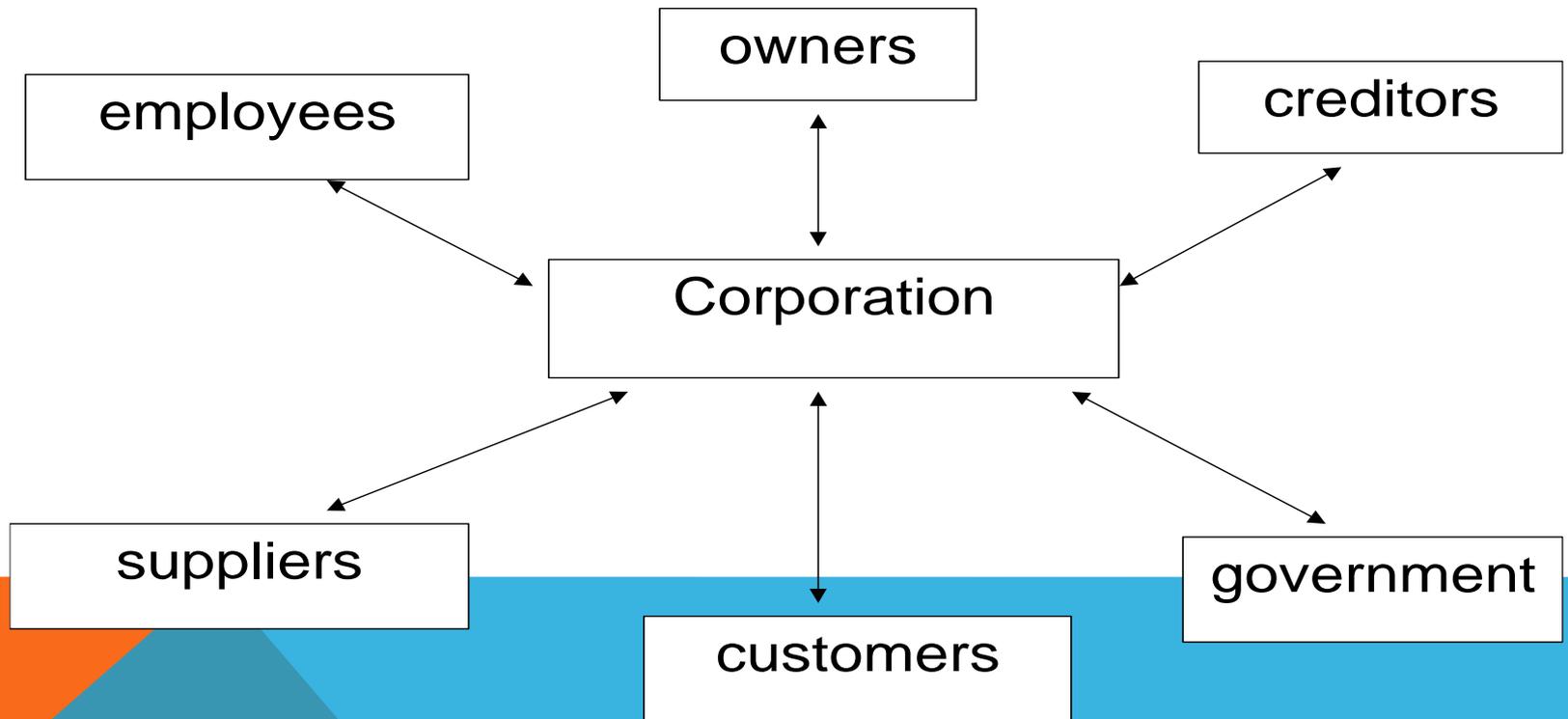
Pooling Offsetting Risks -

- *A DIVERSIFIED PORTFOLIO.*



FIRE SAFETY & INSURANCE IMPLICATIONS.

Why Manage Risks: Corporation / Company (Nexus of Contracts).



FIRE SAFETY & INSURANCE IMPLICATIONS.

Prior to 1950's: Insurance Purchase.

Risk Managers:

- *Finance Department, Freestanding or Human Resource Department.*
- *Larger Companies.*
- *Companies Facing Greater Risk.*

FIRE SAFETY & INSURANCE IMPLICATIONS.

RISK MANAGER.

Minimise adverse Consequences of Risk.

Avoidance;

Loss Control;

Self-Insurance;

Purchase Insurance;

Anticipate Risk.

FIRE SAFETY & INSURANCE IMPLICATIONS.

DUTIES OF RISK MANAGERS.

Buy Insurance;

Identify Risk;

Loss Prevention & Loss Control;

Contract Review;

Safety Training & Education;

Government Compliance with Safety Issues;

Risk Finance;

Claims Management & Litigation Support;

Employee Benefits.

FIRE SAFETY & INSURANCE IMPLICATIONS.

RISK MANAGEMENT PROCESS.

Hazard / Mission Identification;

Risk Identification;

Risk Analysis;

Consider Alternatives;

- *Risk Control;*
- *Risk Finance.*

Implement & Monitor.

FIRE SAFETY & INSURANCE IMPLICATIONS.

AVOIDANCE

Lost Benefits of Risk.

Perhaps not Possible.

- Government Imposed Risks;
- Nature of the Risk.

May Result in Worse Risks.

FIRE SAFETY & INSURANCE IMPLICATIONS.

PRE-LOSS OBJECTIVES.

Economy;

Reduction in Anxiety;

- *Owners;*
- *Suppliers;*
- *Lenders;*
- *Customers;*
- *Government Agencies.*

Meeting Externally Imposed Obligations;

Social Responsibility.

FIRE SAFETY & INSURANCE IMPLICATIONS.

POST-LOSS OBJECTIVES.

Survival of the Organization;

Continuity of Operations;

Earnings Stability;

Continued Growth;

Social Responsibility.

FIRE SAFETY & INSURANCE IMPLICATIONS.

HAZARD IDENTIFICATION & RISK ASSESSMENT.

Hazards / Risk Factors / Perils / Exposures.

***New Laws:* e.g. Building Regulations, Health & Safety Acts, etc.**

***New Discoveries:* e.g. new illnesses - SARS (severe acute respiratory syndrome); Zika, Passive Smoking, etc.**

***Existing Illnesses:* e.g. Foot & Mouth Disease, Mad Cow Disease, Ebola, etc.**

***Changing Societal Attitudes:* e.g. Product Liability, Cigarettes, etc.**

FIRE SAFETY & INSURANCE IMPLICATIONS.

SOURCES OF RISK.

Physical Environment.

Social Environment.

Political Environment.

Legal Environment.

Operational Environment.

Economic Environment.

Cognitive Environment.

FIRE SAFETY & INSURANCE IMPLICATIONS.

LOSS ANALYSIS.

Severity = Losses (€) / No. of Losses.

Frequency = No. of Losses / No. of Exposures.

Expected Loss = Losses (€) / No. of Exposures.

FIRE SAFETY & INSURANCE IMPLICATIONS.

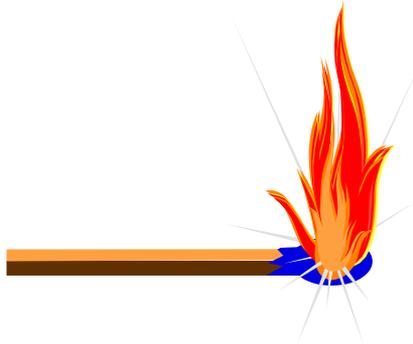
LOSS SEVERITY CALCULATION.

Maximum Possible Loss / Estimated Maximum Loss.

Maximum Probable Loss / Estimated Maximum Loss.

FIRE SAFETY & INSURANCE IMPLICATIONS.

COMMONLY INSURED PERILS - TRADITIONAL.



Fire.
Lightning.
Windstorm.
Hail.
Explosion.
Smoke.

Aircraft & Vehicle Damage.

Riot.

Vandalism (Malicious Mischief).

Falling Objects.

Weight of Snow, Ice or Sleet.

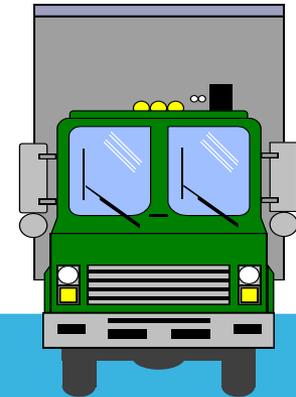
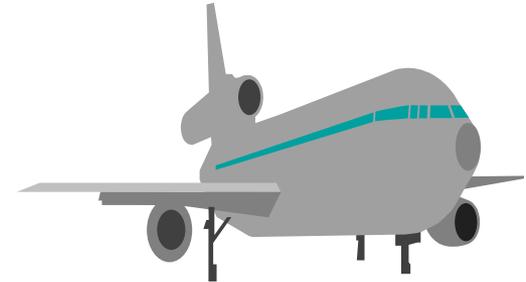
Water Damage.

Glass Breakage.

Sprinkler Leakage.

Perils of Transportation.

Crime Perils.



FIRE SAFETY & INSURANCE IMPLICATIONS.

DIFFICULT TO INSURE.

Earth Movement.

Floods.

Nuclear Reaction.

FIRE SAFETY & INSURANCE IMPLICATIONS.

UNINSURABLE PERILS.

Against Public Policy.

Under the Control of the Insured e.g. suicide.

Probability of Loss is Too High.

Simultaneous Destruction.

War, Terrorism, Rebellion & Insurrection.

Intentional Losses.

Fading, Rust, Dry Rot & Settling.

Production, Marketing & Political Risks.

FIRE SAFETY & INSURANCE IMPLICATIONS.

FINANCIAL CONSEQUENCES OF A LOSS.

Reduction in Value.

Debris Removal.

Business Interruption.

Contingent Business Interruption.

Loss of Rental Income.

Loss of Rental Value.

Loss of Leasehold Interest.

Inability to Reconstruct Records.

Loss of Use Value in Improvements & Betterments.

Demolition Costs & Increased Cost of Reconstruction.

FIRE SAFETY & INSURANCE IMPLICATIONS.

VALUATION OF A LOSS.

Market Value.

Replacement Cost.

Actual Cash Value.

(Replacement Cost & Depreciation).

Present Value of the Asset's Contribution.

FIRE SAFETY & INSURANCE IMPLICATIONS.

NEGLIGENCE.

Acts of Omission.

Acts of Commission.

Elements: Legal Duty.

Breach.

Damages {*Compensatory (Special, General), Punitive*}.

Proximate Cause.

FIRE SAFETY & INSURANCE IMPLICATIONS.

DEFENCES TO NEGLIGENCE.

Contributory Negligence.

Comparative Negligence.

Assumption of Risk.

Statute of Limitations.

Immunities {Sovereign, Charitable Institutions, Public Officials}.

FIRE SAFETY & INSURANCE IMPLICATIONS.

RISK CONTROL: Avoidance / Prevention / Reduction /
Information Management / Risk Transfers.

RISK AVOIDANCE: Proactive Avoidance / Abandonment.

LOSS REDUCTION: Salvage / Subrogation / Litigation Management
Management / Catastrophe (Contingency) Plans /
Duplication / Separation.

RISK TRANSFER: Property or Activity Transferred / Contractually
Pass the Liability. {*Insurance, Non-insurance
Transfers (Do Not Satisfy Conditions to be Insurance; Provide
External Funding) / Hedging (Taking an Offsetting Risk;
Not Possible for Many Types of Risks – Interest Rate, Exchange
Rate, Commodity Price, Oil Price)*}.

FIRE SAFETY & INSURANCE IMPLICATIONS.

ELEMENTS OF INSURANCE.

Contract.

Premium.

Conditional Benefits.

Pooling of Resources.

Bodies Involved: Buyer Side of the Market {*Risk Managers, Brokers, Consultants*}.

Supplier Side of the Market {*Insurance Company, Underwriters, Claims Adjusters, Agent, Actuaries, etc.*}.

FIRE SAFETY & INSURANCE IMPLICATIONS.

RETENTION Vs. TRANSFER.

Ability to Bear the Loss.

Cost & Effectiveness of a Transfer.

Degree of Control over the Risk.

Insurance Loading Fees.

Additional Insurer Services.

Insurance as a Signal.

Opportunity Costs.

Taxes.

FIRE SAFETY & INSURANCE IMPLICATIONS.

RISK FINANCING.

Guaranteed Cost - Insurance {*Underwriting with Premium Depending on Classification Groupings & Premium Calculated*}.

Experience-Rated Insurance.

Retrospective Rating.

FIRE SAFETY & INSURANCE IMPLICATIONS.

INSURABLE RISK.

Large Number of Homogenous Exposure Units.

Accidental.

Determinable & Measurable.

No Simultaneous Destruction.

Probability Calculable & Not Too High.

*{suicide, space shuttle, mental illness, war,
early flight & computers, terminally ill, etc.}*

FIRE SAFETY & INSURANCE IMPLICATIONS.

VALUE OF INSURANCE.

Stability.

Indemnification.

Reduction in Reserve Funds.

Insurers' Ability to Invest.

Satisfies Financial Requirements.

Specialization in Loss Prevention.

Adequate Sum Insured Vs. Underinsured.

FIRE SAFETY & INSURANCE IMPLICATIONS.

SOCIAL COSTS OF INSURANCE.

Insurers' Operating Costs.

Moral Hazard.

Exaggeration of Losses.

Cheating.

{*Insurer:* Failure to Honor the Contract / Misleading / Contracts / False Advertising / Inappropriate Sales}.

{*Insured:* Fraud}.

Cheating leads to increased Litigation & Regulation.

FIRE SAFETY & INSURANCE IMPLICATIONS.

REQUIREMENTS FOR AN INSURABLE CONTRACT.

Offer & Acceptance.

Consideration.

Competent Parties.

Legal Purpose.

FIRE SAFETY & INSURANCE IMPLICATIONS.

INDEMNITY.

**Based on Valuation {*Property*: ACV; *Liability*: Actual Damages}.
{*Apparent Exceptions*: Valued Policies / Replacement
Cost Insurance / Life Insurance}.**

INSURABLE INTEREST.

***Property & Liability*: {Time of Loss / Ownership / Potential Legal Liability /
Secured Creditors}.**

***Life Insurance*: {Time of Policy Purchase / Close Ties (Love, Blood, Marriage) /
Pecuniary Interest}.**

FIRE SAFETY & INSURANCE IMPLICATIONS.

SUBROGATION.

{Prevents Double Indemnification / Holds Down Insurance Costs}.

UTMOST GOOD FAITH.

{Representations / Concealment / Warranty / Material Fact}.

FIRE SAFETY & INSURANCE IMPLICATIONS.

INSURANCE REGULATION.

Licensing.

Solvency.

Rate Approval.

Agents' Activities.

Insurance Contracts.

FIRE SAFETY & INSURANCE IMPLICATIONS.

INSOLVENCY OF INSURANCE COMPANIES.

Bad Management.

Poor Underwriting.

Inadequate Reserves.

Bad Investing.

Inattentive to Loss Prevention.

Competitive Pressures.

FIRE SAFETY & INSURANCE IMPLICATIONS.

OPEN COMPETITION IN INSURANCE.

**Advantages: Flexibility / Increased Availability of Insurance /
Avoid Political Fights / Frees up Time of Regulators.**

Disadvantages: Price Gouging / Risk of Insolvency / Fair.

**Causes of Market Failure: Adverse Selection / Individuals
Underestimate the Loss Potential / Insurance Costs Too
Much / Pooling Not Possible / Insurers Can Not Estimate
the Loss Potential.**

FIRE SAFETY & INSURANCE IMPLICATIONS.

Construction Methods .

Legislative Requirements.

Building Standards & Regulations - Building Regulations.

Insurance Covers, Implications, Requirements & Problems.

Life Safety Issues.

Claims Problems.

FIRE SAFETY & INSURANCE IMPLICATIONS.

HOW IS INSURANCE PLACED?

Someone (Insured or their representative) makes a submission;

Insurer reviews the contents of the submission;

**Insurer decides on premium & informs Insured / Proposer of any
Conditions / Warranties / Endorsements / Excesses /
Deductibles applicable;**

**Insured / Proposer accepts offer of Insurance Cover & pays
premium;**

Insurance Cover activated by Insurer from a specific time and date.

FIRE SAFETY & INSURANCE IMPLICATIONS.

What construction system was utilised in the apartments / houses a company insures?

Masonry.

Timber Framed.

Metal Framed.

Foam.

Others.

Old or New.

Do you know what materials were utilised in the construction of ‘your’ apartments / houses?

Were those materials suitable for purpose & for the expected conditions?

FIRE SAFETY & INSURANCE IMPLICATIONS.

BASIC KNOWLEDGE OF HOUSE CONSTRUCTION.

Traditional / New Systems.

Suitable Materials.

Structurally Sound / Waterproofed.

Ease of Access & Egress.

Means of Fire Spread (Internal & External).

Cavities / Shafts.

Fire Safety & Building Regulation Requirements.

Means of Escape.

FIRE SAFETY & INSURANCE IMPLICATIONS.

NEW BUILDINGS / SYSTEMS.

Is there a design available?

**Has the design been tested in real life test situations to confirm
Fire Safety requirements?**

**Is there an Agrément Certificate for the particular design / innovative
product / system?**

**Are there clear Manufacturer's Instructions in relation to the
erection, fitting out, future maintenance, etc. for the new
building system?**

Is the finished unit certified correctly by a Competent Person?

FIRE SAFETY & INSURANCE IMPLICATIONS.

Understand:

Test Case: *MILLFIELD MANOR, NEWBRIDGE, CO. KILDARE.*

What Happened: *Millfield Manor is a development constructed c. 2006 consisting of approximately 98 houses in terraces of 3, 6 and 8 houses and apartments by Barrack Construction Ltd.*

On the afternoon of the 31st March 2015 a fire commenced as a result of alleged arson in a house in one of the terraces of 6 houses and spread to total destruction of the terrace of houses within 25 minutes.

The Fire Brigade arrived relatively quickly and in interviews the Chief Fire Officer stated that their function was to stop it spreading to an adjacent terrace of houses.

Lot of comment about malicious cause, strength of winds, etc. These are secondary factors in relation to the horizontal spread of fire internally.

FIRE SAFETY & INSURANCE IMPLICATIONS.



FIRE SAFETY & INSURANCE IMPLICATIONS.



FIRE SAFETY & INSURANCE IMPLICATIONS.
MILLFIELD MANOR VIDEO. (31/3/2015).



FIRE SAFETY & INSURANCE IMPLICATIONS.



FIRE SAFETY & INSURANCE IMPLICATIONS.



FIRE SAFETY & INSURANCE IMPLICATIONS.



FIRE SAFETY & INSURANCE IMPLICATIONS.



FIRE SAFETY & INSURANCE IMPLICATIONS.



FIRE SAFETY & INSURANCE IMPLICATIONS.



FIRE SAFETY & INSURANCE IMPLICATIONS.



FIRE SAFETY & INSURANCE IMPLICATIONS.



04.06.2015

FIRE SAFETY & INSURANCE IMPLICATIONS.



FIRE SAFETY & INSURANCE IMPLICATIONS.

REVIEW GROUP TERMS OF REFERENCE.

The review will -

1. Have regard to the typical risk profile faced by residents, their visitors and fire service personnel in and about apartment developments and housing estates;
2. Take account of normal hazards and relevant safety management arrangements as well as typical passive and active safety features;
3. Outline general advice and guidance which can be used by owners / residents and their professional advisers, to ensure that an adequate level of safety is in place for persons in and about their development. This may include making provision for –
 - *appropriate or enhanced fire detection and alarm measures;*
 - *checking that appropriate escape routes from the premises are available, designed in accordance with current standards;*
 - *ensuring evacuation plans are rehearsed in each premises in the event of a fire incident.*
4. Include a case study based on the Millfield Hawthorns estate at Newbridge, Co. Kildare;
5. Conclude at an early date, with a report to the Minister on or before 30th January 2016.

The review will be overseen by a Steering Group convened by Kildare County Council in conjunction with the Department of the Environment, Community and Local Government.

FIRE SAFETY & INSURANCE IMPLICATIONS.

Colindale, London – 220 Apartments:



FIRE SAFETY & INSURANCE IMPLICATIONS.

Colindale, London – 10 – 12 minutes into the Fire:



FIRE SAFETY & INSURANCE IMPLICATIONS.

Unprotected Attic Space – No Fire Stopping / Walls between Blocks:



FIRE SAFETY & INSURANCE IMPLICATIONS.

Opening in Protected Stairway Wall to Apartment:



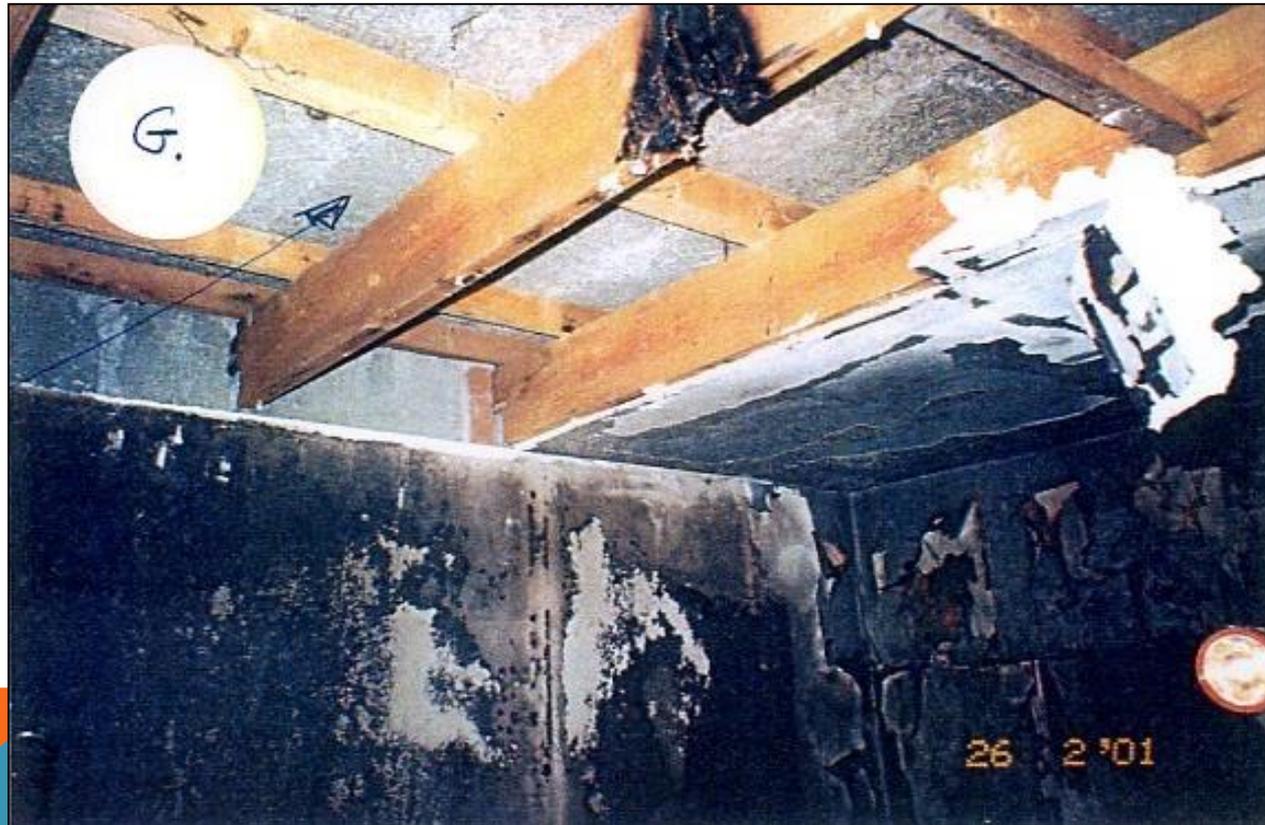
FIRE SAFETY & INSURANCE IMPLICATIONS.

Incorrect Installation of Fire Doors:



FIRE SAFETY & INSURANCE IMPLICATIONS.

Downlighter Overheating – Mother & Child Died.



FIRE SAFETY & INSURANCE IMPLICATIONS.

Sacrificial Ceiling Slab:



FIRE SAFETY & INSURANCE IMPLICATIONS.

Waste & Odds & Ends in Electrical Cupboards / Service Shafts:



FIRE SAFETY & INSURANCE IMPLICATIONS.

Fire Spread behind Plasterboard Walls in Cavities:



FIRE SAFETY & INSURANCE IMPLICATIONS.

Note Fire Damage under Slabs:



FIRE SAFETY & INSURANCE IMPLICATIONS.



Fire within the cavity of the gable end wall was not evident until part of the plaster slab was removed by fire fighters. Note no evidence of fire or smoke staining within the room itself.

FIRE SAFETY & INSURANCE IMPLICATIONS.

Fire Spread in Wall Cavities between Apartments:



FIRE SAFETY & INSURANCE IMPLICATIONS.

Fire Spread in Wall Cavities between Apartments.



FIRE SAFETY & INSURANCE IMPLICATIONS.

Central Hotel Fire, Bundoran – 8/8/1980:



FIRE SAFETY & INSURANCE IMPLICATIONS.

Bradford City Fire 1985:



FIRE SAFETY & INSURANCE IMPLICATIONS.

TECHNICAL GUIDANCE DOCUMENTS (T.G.D.): (1)

- Part A: Structure.**
- Part B: Fire Safety.**
- Part C: Site Preparation & Resistance to Moisture.**
- Part D: Materials & Workmanship.**
- Part E: Sound.**
- Part F: Ventilation.**
- Part G: Hygiene.**
- Part H: Drainage & Waste Water Disposal.**
- Part J: Heat Producing Appliances.**

FIRE SAFETY & INSURANCE IMPLICATIONS.

TECHNICAL GUIDANCE DOCUMENTS (T.G.D.): (2)

Part K: Stairways Ladders, Ramps & Guards.

Part L: Conservation of Fuel & Energy: Buildings other than Dwellings.

Part L: Conservation of Fuel and Energy: Dwellings.

Part M: Access & Use.

DEPARTMENT OF ENVIRONMENT – FIRE SAFETY GUIDES.

FIRE SAFETY & INSURANCE IMPLICATIONS.

DEPARTMENT OF ENVIRONMENT:

Building Standards.

The design and construction of buildings is regulated under the Building Control Acts 1990 to 2014, in order to ensure the safety of people within the built environment.

Building Control Act 1990.

Building Control Act 2007.

Building Control (Amendment) Regulations 2014.

FIRE SAFETY & INSURANCE IMPLICATIONS.

Structural Fire Precautions:

- 1. Elements of Structure.**
- 2. Fire Resistance.**
- 3. Fire Resistance for Elements of Structure.**
- 4. Mixed-User Buildings.**
- 5. High Fire Risk Areas.**
- 6. Construction Details.**
- 7. Wall & Ceiling Linings.**
- 8. Fire Doors.**

Building Services:

- 1. Electrical Installation.**
- 2. Gas Services.**
- 3. Heating Systems.**
- 4. Ventilation & Air-Conditioning Systems.**

FIRE SAFETY & INSURANCE IMPLICATIONS.

LEGAL TITLE:

When buying a house / apartment what are the minimum requirements for Conveyancing Purposes?

What is the purpose of Conveyancing? *To ensure good clean title.*

Pre – BCAR 2014: Probably most important document for a House / apartment was the availability of a HB 11 Certificate from HomeBond or Premier Insurance Completion Certificate.

Provided ‘10 Year Structural Guarantee’.

FIRE SAFETY & INSURANCE IMPLICATIONS.

HOME BOND GUARANTEE:

- 1. Guarantees the dwelling against major structural defects for ten years.**
 - 2. Guarantees the dwelling against water & smoke penetration for the first two years of the warranty period.**
 - 3. Guarantees protection against loss of deposit or stage payments before the house is completed.**
- 3 – 5 inspections per unit / property.**

FIRE SAFETY & INSURANCE IMPLICATIONS.

LAW SOCIETY CONVEYANCING HANDBOOK STATES:

All lenders require that new dwellings are HomeBond protected & registered with the HomeBond scheme.

Before a Solicitor allows his client to enter into a building contract with a builder he should ensure that the Form HB10 has issued which incorporates the protection that comes to his client from HomeBond.

Before completion & before the balance of purchase monies is paid over, the Solicitor should ensure that the Final Certificate HB11 has issued & he should not accept an undertaking with regard to same.

FIRE SAFETY & INSURANCE IMPLICATIONS.

Premier Insurance:

Compliance with Building Regulations:

The Standards in the Technical Manual require compliance with the current Building Regulations for England and Wales, Scotland and Northern Ireland as applicable, in force at the time the Initial Certificate was issued for the Housing Unit where applicable and require compliance with all other statutory requirements relating to the design and construction of dwellings. They also include some requirements which are not covered directly by Building Regulations, such as internal decorations and external works.

However not specified as such in Ireland.

4 – 11 inspections per unit / property – to ‘*check suitability for Insurance*’.

FIRE SAFETY & INSURANCE IMPLICATIONS.

Workmanship Requirement: All works shall be carried out in a neat and workmanlike manner in accordance with relevant Standards and Codes of Practice' .

Structural Design Requirement: Structural design shall be carried out by appropriately qualified persons in accordance with relevant Standards and Codes of Practice.

Enhanced Standards Requirement: Where a Housing Unit has been accepted for insurance and the standard of design and materials applicable to that Housing Unit is intended to result in a performance superior to the statutory requirements e.g. (but not limited to) the Code for Sustainable Housing, LPS 2020 and its enhanced performance modules, those higher standards will become part of the Functional Requirements.

FIRE SAFETY & INSURANCE IMPLICATIONS.

Structurally Complete means that stage of the construction of a Dwelling when a weather tight structure exists with windows in place or openings polythene sheeted, roof tiles on and all structural members including frames for stud partitions are in place.

FIRE SAFETY & INSURANCE IMPLICATIONS.

COMPARTMENTATION.

PASSIVE FIRE PROTECTION.

FIRE SAFETY & INSURANCE IMPLICATIONS.

Agrément Certificate:

Kingspan Century Medium Rise Timber Frame Construction System.

‘Establishes proof that the certified products are *‘proper materials’* suitable for their intended use under Irish Site conditions, and in accordance with the Building Regulations 1997 to 2006.

Up to 4 stories in height and of purpose groups 1(a), 1(b), 1(c), 2(b), 4(a) and 5 as defined in T.G.D. B. of the Building Regulations 1997 to 2006.

Also provides details of the expected & specific standards of construction for building of less floor levels as well. Complied with?

FIRE SAFETY & INSURANCE IMPLICATIONS.



FIRE SAFETY & INSURANCE IMPLICATIONS.

FIRE RISK ASSESSMENT (F.R.A.):

An essential record to have or to prepare.

The Original Fire Safety Certificate (F.S.C.) application will have included an F.R.A.

F.S.C. Application & Grant can be retrieved if not on record.

I.S.3218:2013 states all Residential Buildings should have an F.R.A.

F.R.A. must be carried out / prepared by a Competent Person.

Building Control Regulations (B.C.A.R.) emphasise the need for Risk Analysis.

Department of Environment in process of preparing an updated T.G.D. B with a separate section for Domestic Houses – at consultation stage at present.

FIRE SAFETY & INSURANCE IMPLICATIONS.

ISSUES OF CONCERN: (1)

- 1. Fire tests in the U.K. & Ireland are reported in the form of test results.**
- 2. Unlike North America and Germany, building authorities do not usually require written proof that the materials that have been installed on site are actually identical to the materials and products that were used in the test.**
- 3. Test reports are often interpreted by engineers, as the test results are not usually communicated in the form of uniformly structured listings.**

FIRE SAFETY & INSURANCE IMPLICATIONS.

ISSUES OF CONCERN:

(2)

- 4. In the U.K., Ireland and other countries which do not require certification, the proof that the manufacturer has not substituted other materials apart from those used in the original testing is based on trust in the ethics or the culpability of the manufacturer.**

- 5. In North America and Germany, Product Certification is the key to the success and legal defensibility of passive fire protection barriers. In addition alternate quality control certifications of specific installation companies and their work is *available*, though not a legislative or regulatory requirement.**

FIRE SAFETY & INSURANCE IMPLICATIONS.

- 6. There is a huge effort across Europe to get standardisation of various construction elements i.e. CE Marking, EN, Machinery Directives, EuroCodes, etc.**
- 7. How can one can be sure, apart from faith and trust in the vendor or manufacturer, that what was tested is identical to that which has been bought and installed? This is a matter of personal judgment & therefore concern.**
- 8. Crucially were the materials fire tested in the actual configuration of use?**

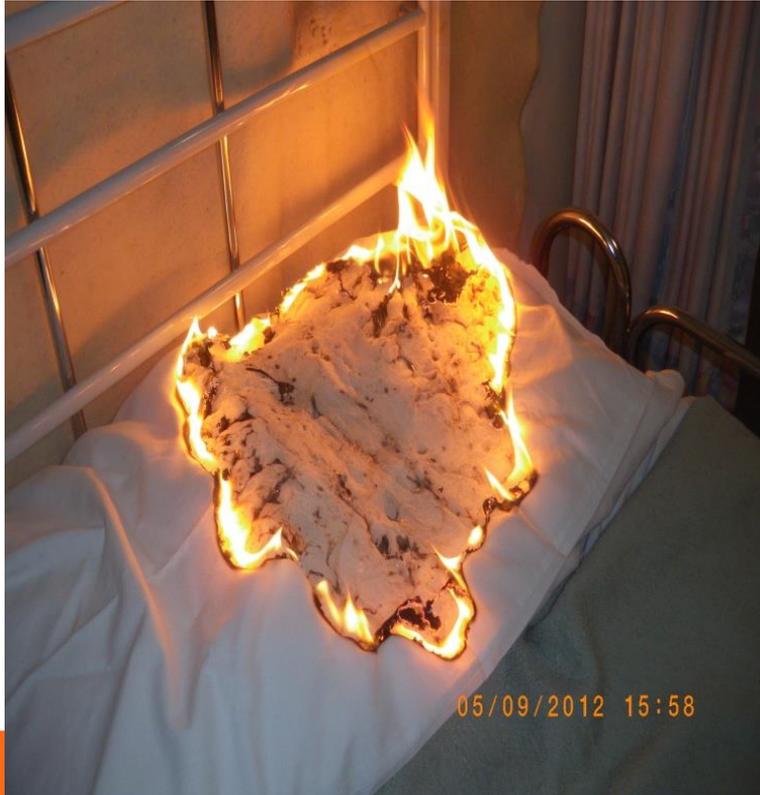
FIRE SAFETY & INSURANCE IMPLICATIONS.

WHO SAID THIS?

‘When anyone asks me how I can describe my nearly forty years at sea, I merely say uneventful. Of course there have been winter gales and storms and fog and the like, but in all my experience, I have never been in an accident of any sort worth speaking about. I have seen but one vessel in distress in all my years at sea... I have never been in a wreck nor was I ever in any predicament that threatened to end in disaster if any sort.’

FIRE SAFETY & INSURANCE IMPLICATIONS.

FIRE TEST - BEDCLOTHES.



FIRE SAFETY & INSURANCE IMPLICATIONS.

WHO HAS STATUTORY DUTIES & RESPONSIBILITIES IN RELATION TO FIRE SAFETY & HEALTH & SAFETY?

Managing Agent.

Employers.

Board Members.

Drivers.

Contractors / Builders / Developers.

Designers.

Architects.

P.S.D.P.

Equipment Operators.

Safety Officer.

Banks / Financial Institutions.

Home Owner.

Owner Management Company (O.M.C.).

Employees.

Maintenance.

Labourers / Porters.

Sub-Contractors.

Engineers.

P.S.C.S.

Equipment Installers.

Members of the Public.

Security.

Solicitors.

Insurers.

Etc.

FIRE SAFETY & INSURANCE IMPLICATIONS.

Competent Person:

{Safety, Health & Welfare at Work Act 2005}

- (a) For the purpose of the relevant statutory provisions, a person is deemed to be a competent person where, having regard to the task he or she is required to perform and taking account of the size or hazards (or both of them) of the undertaking or establishment in which he or she undertakes work, the person possesses sufficient training, experience and knowledge appropriate to the nature of the work to be undertaken.**
- (b) Account shall be taken, as appropriate, for the purposes of sub-paragraph (a) of the framework of qualifications referred to in the Qualifications (Education & Training) Act 1999.**

FIRE SAFETY IN APARTMENTS & HOUSES.

Your 'Insurance Policies':

Have you read them?

Do you read them?

Do you actually know the extent & range of covers?

Do you know the excesses / deductibles?

Do you know the conditions / warranties / exclusions?

How have you (or your broker) evaluated the covers / policies you have?

What were your instructions?

Do you actually know what your insurance policies cover?

Do they cover your actual liabilities & exposures?

HAVE YOU CONSIDERED WHAT CAN GO WRONG????

FIRE SAFETY & INSURANCE IMPLICATIONS.

CONCLUSIONS:

How fire safe is / are any apartments / houses that are insured? Who has control of your building?

If there is a fire in your apartment / house, can everyone get out quickly & safely?

If someone is trapped in their apartment / house, do they know what to do? Can they be reached by the Fire Brigade in time?

Are you a Landlord? Do you know your statutory responsibilities? Does your Insurer know how well, or not, you manage your properties?

FIRE SAFETY & INSURANCE IMPLICATIONS.

CONCLUSIONS: *Cont.*

Do you know the actual construction of your apartment / house?

Have you informed your Insurer of the details of construction of your apartment / house?

Does the Insurer care? If not why not?

FIRE SAFETY & INSURANCE IMPLICATIONS.

CONCLUSIONS: (Cont.).

Is your house insurance really in place and does it cover what you actually require cover for?

Do your House Insurers know what they are in fact providing cover for?

Are there any solutions to the identified problem? Have these issues been properly investigated & are they capable of appropriate certification?

Does the State that 'allowed these condition' have a responsibility in relation to what has happened, what will happen as a result of past practices and what will happen in the future?

FIRE SAFETY & INSURANCE IMPLICATIONS.

SOMETHING GOES WRONG???

Increased Insurance Costs;

Potential Legal Costs;

Possible prosecution;

Loss of reputation;

Loss of Property / Foreclosure;

Loss of Home;

Bankruptcy;

Jail;

etc.

FIRE SAFETY & INSURANCE IMPLICATIONS.

Major / Multiple death fires in Ireland.

Stardust (48) (1981).

Cavan (36) (1943).

Bantry (51) (1979).

Noyeks (8) (1972).

Portarlinton (6) (1977).

Burning of Cork (5) (1920).

Cabinteely (10) (2015)

Dalkey (13) (1974).

Tipperary (5) (1985).

Bundoran (10) (1980).

Loreto (6) (1986).

Pearse Street (3) (1936).

Bray (2) (2005).

Dromcolliher (48) (1926)

FIRE SAFETY & INSURANCE IMPLICATIONS.

Cavan Orphanage Fire – 1943:



**In Cavan there was a great fire,
Judge McCarthy was sent to inquire,
It would be a shame, if the nuns were to blame,
So it had to be caused by a wire.**

—Flann O'Brien & Tom O'Higgins

FIRE SAFETY & INSURANCE IMPLICATIONS.

THE FUTURE:

Need official acknowledgement that the Victims, i.e. the innocent householders, will be supported.

Need to set proper building standards in place – no self certification.

Need to ensure that there is proper accountability in all areas of the Building Industry.

Need to develop & ensure a much better competency among Engineers, Architects, Fire Officers, Building Control persons, etc. in relation to Fire Safety issues, Life Safety generally, etc.

FIRE SAFETY & INSURANCE IMPLICATIONS.

Need to set up a proper & consistent Fire Safety Authority & Building Control regime – need national consistency.

Develop & require proper protection insurance i.e. latent defects, professional indemnity, etc. & ensure they remain in place for minimum periods for all professional persons (minimum 15 years) – Purpose to protect the innocent householder / owner who has purchase a property in good faith.

Need to have Insurers be more pro-active, as in the past, in relation to ensuring proper fire safety standards during the construction period.

FIRE SAFETY & INSURANCE IMPLICATIONS.

Develop proper & correctly evaluated transparent standards & Agrèment Certificates for all innovative products & systems.

Look for & develop solutions to the known problems. Go forward with a positive approach to improving standards for the ultimate owners and not maximise profits for the Developers.

FIRE SAFETY & INSURANCE IMPLICATIONS.

**WILL THESE NECESSARY ISSUES BE
DEVELOPED???**

Any Questions.

FIRE SAFETY & INSURANCE IMPLICATIONS.

**THOMAS P. ENGLISH & ASSOCIATES,
165 Ballymun Road,
Glasnevin,
Dublin 9.**

Telephone: 01 – 8379000.

Mobile: 086 – 2425308.

E-mail: tpeng@connect.ie.