

# Lloyds building research paper sample

[Countries](#), [England](#)



## **Abstract**

This research paper aims to explore the construction methods of the Lloyds of London. It highlights the history of this magnificent structure and also tells what ideology was followed while building it. This paper also tells us the different architectural influences that are impacted on this structure and the building materials used. Lloyds of London have become a source of inspiration for many architects who wish to incorporate convenience in their design. This paper also tells us that if such a structure was built in times today, how it would be.

## **Introduction**

Lloyd's Building is raised in the metropolitan city of London, England and is located at 1, Lime Street since the early 19th century. The £75 million pure steel and glass masterpiece of Architect, Richard Rogers stands tall amongst the skyline of London. It covers an area of 55, 000m<sup>2</sup> and rises approximately 600 feet above ground. The fourteen floored high rise has 12 elevators. Its antenna spire measures 95. 1 m (312 ft.) whereas the roof alone measures 88 m (289 ft.). The building is a classic example of 'Architectural Structural Expressionism' as it is built against all odds of construction clichés.

The Lloyds of London's building was successfully created with the assisted expertise of a highly qualified and experienced team that included:

- Structural Engineer: Ove Arup & Partners,
- Services Engineer: Ove Arup & Partners,
- Quantity Surveyor: Monk Dunstone Associates,

- Planning Consultant: Montagu Evans,
- Acoustic Consultant: Sandy Brown Associates,
- Lighting Consultant: Friedrich Wagner of Lichttechnische Planung and
- Main Contractor Bovis Construction Ltd.

## **Discussion**

Over the years, Lloyd's has become an iconic structure for London and has also made a mark in the insurance industry. The main reason why this building is so popular is because it serves as the best model of 'Radical Bowellism' architecture. This form of architecture is an art of maximizing the internal space by successfully locating and functioning the service facilities like ducts, sewerage pipelines and elevators of the building on the exterior!

### **Some salient features of the structural masterpiece are:**

- The building's architectural ideology is inspired by an earlier project, Centre Georges in Paris, of the same architect.
- The building houses fourteen floors and an enormous Atrium.
- The ground floor of the Atrium has the Lutine Bell that was recovered from the war against France in 1793. This bell plays the role of communication. It is rung once for good news and twice for bad news. The noise is echoed by the vast Atrium to every corner of the building.
- The Bell's podium on the ground is formed from mahogany and was brought from the old Lloyd's building of 1928.
- One of the most majestic rooms is the Adam's room, named after the man behind this Italian style wood-paneled Council room.
- All the vital service facilities are sited on the exterior of the building so the

space inside is uninterrupted and the internal capacity is maximized.

- The Lloyds building's height rises from seven stories
- The building is named after Sir Edward Lloyd who was the founder of a coffee shop on the same land in 1688
- The atrium's design and interior décor are influenced by the Crystal Palace of Sir Joseph Paxton 1851.
- The external windows are layered with solar control glass thrice with a cavity for ventilation. This system enables it to deflect black light within the room thus helping decrease its need for light after sunset.
- The twelve external glass elevators were the first of its kind in all of Britain.
- The Building is also one of the premium examples of British High-Tech architecture and is been described by many as a 'mechanical cathedral'.
- After the near completion, construction costs were approximately £75, 000, 000.
- The building was inaugurated on November 18th 1986 by Queen Elizabeth II and the Duke of Edinburgh.
- The building is famous because of its multi-story, free-standing escalators inside the atrium. The mechanisms and machinery of this set up are exposed and color-coded as warnings.

### **Materials used in the construction and their quantities are as follows:**

- Concrete: 33, 510 cubic meters
- Glass: 12, 000 square meters
- Stainless steel cladding: 30, 000 square meters
- anodizedaluminum frame: 5, 000 square meters

- painted steel: 2, 000 square meters
- window gasket seals: 1, 400 kilometers (864 miles)
- Ducts and pipes: 80 kilometers (49 miles).
- Underwriting area: The total possible is 19, 000 square meters.

**Because of its unique blend of exquisite architectural techniques, the project has received many awards:**

- The Eternity 8th International Prize for Architecture (special mention), 1988.
- The PA Award for Innovation in Building Design and Construction, 1988.
- The Supreme Award for Structural Engineering Excellence, the Award's highest accolade.
- the Civic Trust Award,
- the Concrete Society Commendation and Financial Times 'Architecture at Work' Award in 1987,
- The RIBA Award in 1988 recognition.
- The youngest building to Receive grade 1 listings only within 25 years of completion (Emporis and Lloyd's)

Lloyds built their first building in London in 1928 at 12 Leaden Halls Street. They planned expansion in 1958 and constructed another building right across the road at 51 Lime Street and then bought the Heysham and Cooper buildings which were proposed for an extension and Lloyds held a competition to get the best architectural designs. The contract was given to Richard Rogers to redevelop the building and the original building was demolished. The new Cooper's building was inaugurated by Queen Elizabeth II in 1986. However, the entrance of the old building had been preserved

as a token of remembrance but the old architectural entrance seems rather inappropriate for a building made on a totally different architectural ground. Later, the 1958 building was also demolished and reconstructed to make a 26 story towered Willis Building with a ten story building (Lloyd a).

On January 31st, 1922 Field Marshal Earl Haig inaugurated the showcasing of the original Lloyds War Memorial Arch designed by Sir Edward Cooper. It was made in honor of all those who had lost their lives during the great World War 1 and 2. The arch is made out of Portland Stone and is carefully preserved in the Lime Street building. Lord Levee of Portsoken, The Duke of Gloucester and the Bishop of London unveiled these arches in 2008. The symbols engraved on them represent Lloyds till date (Lloyd).

The sculpted globe in the middle of the motif epitomizes all the worldwide interests of Lloyds, whereas the female figure represents Commerce and a male figure represents shipping and the owl at his feet typifies foresightedness and wisdom of Lloyds, which is very vital in sea commerce. Lions show bravery and strength, bee hive shows that all the activities are done as a team. These war memorials commemorate the efforts of all those who gave up their lives during the battle and are also a tribute to all those individuals who stood strong protecting Lloyds during both the wars.

There was a time when it was the most controversial building in England when finished in 1986 and still remains one of London's most compelling architectural masterpieces. London's importance in trade led to an increased demand in ship and cargo insurance which was provided only by Lloyds at that time. And so, from a small beginning from a coffee shop, Lloyds today is one of the leading firms in the insurance specialists market (Lloyd's

Building).

The tragedy of the titanic is also linked with the history of Lloyd as the ship was under their insurance of about £1 million (Lloyd's b)

## **Criticism**

Many criticize Lloyds for its physically unappealing look. For someone who is an Arts visionary, Lloyds is not something for them to admire. But apart from its physical ugliness, the building's design and structure make it the most convenient and pragmatic building ever made. The elevator cavities, ducts, pipelines and restroom blocks are all exposed to the world as they are placed on the exterior of the building. Because the building's interior is made very grand and exquisite, delving inside the masterpiece for repairing or maintenance purposes was injustice to the efforts put in to create it in the first place. So, all the service elements of this building are on its exterior. This did cost Lloyds massively but the long term repair and maintenance costs would drastically decrease.

Richard's scheme was ridiculed at first, and taunted for its carbuncular ugliness but this did not set him back for he was very foresighted. Within first ten years of completion, it was termed as the most consistently innovative building of London and it is now the youngest building to be termed in the Grade 1 listings (Mount).

## **Conclusion**

Anyone can create buildings inspired by popular architectural ways and incorporate grand designs. But, to ensure such a huge level of convenience of the whole structure without ever having to disturb the interior is a true

example of art. Lloyds have surely inspired many builders to inculcate such contemporary methods into their buildings and focus more on the long term maintenance of their buildings. This formation has also simplified the process of future up gradation.

If buildings like the Lloyds would be built today, they would obviously be far better because of the technological advancements over the years. Modern architecture has created endless possibilities and they are ever growing. Architects of today focus most on space maximization so that they can incorporate more things into the same space confinement. The other major area of focus is the material used in construction. Pre-fabricated sheets, solar panels for power saving, gold plated wirings for maximum conduction of power and less corrosion, double layered glass to reflect away heat, insulated ceilings to trap a certain level of warmth, possibilities of swift alterations and up gradation likewise, effective exit routes and such play an integral part. The most important element of modern buildings is an architecturally challenging structure.

Location of a construction also matters, a building built over water will be more complex than one built on land. Innovation is key to success in this line. Something unique will automatically draw everybody's attention and executing that idea will lead to an architectural masterpiece. For example, a five star resort built under water!

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Mount, Harry. Why the Lloyd's of London building deserves its Grade I listing. The Telegraph. 2013.

Picture gallery:

A view of the complexed structure of Lloyds.