

**Project Report**

**Implications of using timber in construction of building and subsequent suggestions based  
on laws and information on Acts available**

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## **Summary**

In the given case a client intends to build a 200 bedroom 5 story hotel in the city center. Initially the design included using concrete blocks internally over concrete slabs. But upon contractors advice the structural decision was mentioned to use timber instead of using concrete blocks.

### **1. Structural implications of changes from block to timber.**

The design and construction shall be in such an order that it shall minimize the risks of hazards associated with work place for not only the client, but also for people outside the construction premises such as other people who will be affected by the design. Recommendations from the Fire safety acts and regulations clearly mention the steps to be taken in order to minimize the risks of fire at the particular site. Since this site is intended to be used for commercial purposes, hence this design comes under the gambit of non-domestic construction, that is, intended for person other than that who is constructing it for commercial purposes. According to the latest acts, its directed that no such designs shall be entertained which puts the risks of health and safety of people due to the changes in the design format. Timber such as is highly flammable material as compared to concrete blocks. Hence, at the time of fire emergency it would be difficult to control the impact of fire broken at the site and may thus put the life of people inside the premises at higher risks. It is therefore recommended that the person who intends the construction of 200 bedrooms to be constructed from a contractor shall not pass such a design which is violations to the present acts and regulations as directed by the local authorities. It is also recommended that the client gets the design passed from local authorities before

giving a green signal towards constructing a site using timber material. It is full responsibility of the client to ensure all regulations regarding the health and safety precautions are taken into consideration while getting the site constructed from the hands of contractor. It may be difficult to allocate budgets for getting the site constructed using concrete blocks but the point is it has to be made clear that the site during or upon completion do not pose threat to the health and safety of people directly or indirectly associated with the site and client. Hence its is highly recommended that using timber material as construction material instead of using concrete blocks would pose threat to people and would also put the client in danger of getting penalties or jailed for putting the people's health and safety at risks. The latest acts and regulations clearly demarked the steps to be taken by the person involved in order to minimize the risks associated with the construction site. Whether it is the Fire Risks or it be the Health and Safety of people at risk. It is duty of client to abide by the rules and follow the rules religiously in order to prevent adverse effects in the future course of time (Fire protection regulations, 2017).

## **2. Implications for construction methods of using timber frame and possible solutions such as off site manufacture.**

If the client really wants to go for getting timber material passed for construction of the building. He has to ensure that all fire safety norms are fully in place in accordance with the new regulations and acts imposed by the government authorities in the domestic area.

Since the client will himself not use the site for his personal use, it would be for commercial use he has to make sure that all safety norms are taken into care in order to reduce the Risks of Fire at the Site.

All people who are directly or indirectly involved with the construction site come under direct responsibility of client to ensure their health and safety have been taken care of religiously.

It is sole responsibility of the client to ensure Health and safety of following representatives,

- a.) Commercial clients,
- b.) Domestic clients,
- c.) Designers,
- d.) Principal designers,
- e.) Principal contractors,
- f.) Contractors,
- g.) Workers

Hence it is sole duty of the person to ensure all safety norms have been taken care of. All risks are at minimum level and all safety precautions are implemented religiously (<http://www.hse.gov.uk>).

### **3. Conclusion whether this change should be accepted or not**

Well during complete reading and understanding of different regulations and updated acts, it is completely clear that Health and Safety of workers and Fire regulations shall be followed practically in all the duties performed.

Use of timber material does pose threat to the health and safety and put the lives of people at risks. Since, timber is highly flammable in nature.

At the time of fire broke and emergency irrespective of precautions and safety measures taken into considerations, it would be challenge to control the effect of fire of safety of health at the time of emergency, Hence it is highly recommended to not to pass this change and I would not recommend this change at any costs (<https://broker.aviva.co.uk>, 2017).

### References

1. Fire protection regulations. (2017). Accessed from: [http://regions.aps.org.uk/visageimages/Documents/PDFs/regional\\_cpd/Northern\\_England/Construction\\_Checklist\\_GT27\\_7\\_09\\_lores.pdf](http://regions.aps.org.uk/visageimages/Documents/PDFs/regional_cpd/Northern_England/Construction_Checklist_GT27_7_09_lores.pdf) (Accessed on: 27.03.2017).
2. CDM 2015. (2017). Accessed from: <http://www.hse.gov.uk> (Accessed on: 27.03.2017).
3. Fire prevention on Construction site. (2017). Accessed from: [https://broker.aviva.co.uk/document-library/files/fi/fire\\_prevention\\_on\\_construction\\_sites\\_joint\\_code\\_of\\_practice.pdf](https://broker.aviva.co.uk/document-library/files/fi/fire_prevention_on_construction_sites_joint_code_of_practice.pdf) (Accessed on: 27.03.2017).