

Commentary

Can We Ensure Fire Safety in Buildings That Don't Require NOC From the Fire Department?

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This commentary highlights the need for fire safety provisions in buildings that do not require a clearance from the Fire Department of Delhi before construction at the time of building plan approval. The National Human Rights Commission in a petition by the author has directed the Delhi Government and the Delhi Fire Services to look into the matter and provide a reply. This study has highlighted a newspaper article which has reported that ten out of 16 major fire incidents from 2015 have been in residential buildings. All residential buildings below 15 metres, and similar rules for business buildings, means a major stock of buildings in Delhi do not fall under the Delhi Fire Department's pre-construction fire check requirement. The author has suggested that a self certification method will not only put social pressure on the building owners, but will also create a grassroots movement without any compliance burden. The self certification can be manifested as a list of all fire safety installations put up at the entrance of a premises, assuring the visitor of some likelihood of safety against a fire. The intent of the commentary is to bring to light this gap so that awareness for its transformation can take place.

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The [Mundka Fire^{\[1\]}](#) incident earlier this year shook the conscience of Delhi. The National Human Rights Commission issued notice for a probe as many people lost their lives. Apart from the angle of rights of people who died and their compensation issue, there is an important issue of fire prevention. The National Building Code of India, 2016 or NBC-2016^[2] has been developed by the Bureau of Indian Standards which is India's top standard-making body under the Government of India. The National Building Code is not enforced by law, as building is a state subject in India. The state government through

building bye laws has to create regulations for buildings and may notify certain sections or the total of the national building code, making those portions of the NBC-2016 as enforceable by law^[3]. Most local bye-laws and fire acts of the states accept and notify part 4 of the NBC-2016, which deals with Fire and Life Safety.

Part 4 of the National Building Code has a three-pronged classification for dealing with Fire. This included Fire Prevention, Fire Protection and Life Safety. Fire Prevention is different from Fire Protection as it focuses on making provisions in the buildings so that there are no conditions for the fire to occur in the first place. Though the code itself states that absolute fire protection is not possible, there is hope as far as integrating fire provisions in buildings is concerned so that the occurrence of fire can reduce. With the implementation of the fire safety provisions, coupled with a NOC of the same by the Fire department, fire safety is achievable. But this Fire NOC in Delhi is only issued to buildings which fall under the categories of buildings listed in Section 27 of the Delhi Fire Service Rules, 2010^[4]

The problem with this is that it excludes a large chunk of building stock in Delhi, as they do not undergo the check by the fire department and only depend upon a self check that is provided in the building bye laws. A major exclusion that is due to this are residential buildings which are under the height of 15 metres, and therefore not under the requirement of fire NOC as under Section 27 of the Delhi Fire Services Rules, 2010^[4].

On plain reading and understanding, it would appear that residential buildings should not be requiring fire NOC and it may occur as an additional compliance burden for house owners. But the reality is far from this idealistic thinking. Most residential buildings *de facto* have some component of mixed-use, legally or illegally which means that there are offices and godowns running in basements and other non-conforming business activities happening in others. A glaring example of this is all the urban villages or '*lal dora*' areas in Delhi. The Master Plan of Delhi confers the status of 'residential' to all development in these urban villages. But, this appears only to be on paper. The urban villages are *de facto* commercial hubs of the city with all kinds of businesses including godowns and manufacturing units operating from them. But due to height requirements they are beyond the purview of fire NOC.

The gravity of this issue is highlighted in a newspaper article dated 23rd June 2022 which is titled '10 of 16 major fires since 2015 in Delhi were in residential buildings'^[5] Here, it was highlighted how multiple fire instances have occurred in residential buildings leading to loss of life and property. The problem is that these buildings form a large chunk of Delhi's urban built environment, but are not under the direct

purview of the fire department as it is not required to issue NOC before construction. But, it is the same fire department which is responsible to extinguish the fire in the same buildings which in the first place did not get approval from it.

What is required is that Fire Safety installation requirements, which Table 7 of Part 4 in NBC 2016 suggests for apartment buildings below 15 m and business buildings below 15 m, should be implemented. This means that a fire hose reel and fire extinguisher will have to be installed in such buildings. But, because of a possible lack of enforceability of the fire provisions in NBC-2016 to such buildings due to lack of the fire department issuing NOC, it seldom happens. This was highlighted in a *suo moto* petition in the Jharkhand High Court, initiated after a fire in a residential building in Dhanbad, India which stated as follows:

It is not that there is a legislative vacuum to regulate the fire safety measures in buildings. The bye-laws under the Municipal Act do provide for mandatory fire safety certification by the State agency of buildings as per the height of the building and the nature of construction. It seems that these bye-laws and fire safety measures have been observed more in breach than in compliance.^[6]

The above observation by the Hon'ble Jharkhand High Court first of all acknowledges that the fire safety certification is based on building height and occupation. Secondly it reaffirms that state agency for building certification has complied with bye-laws 'more in breach than in compliance.' This concern has been reiterated by other studies which state that developing countries may be having poor regulation and enforcement environments^[7]. Fire officers may argue that it is up to the building professionals to incorporate these in such buildings on their own, as the building may still need local body approval, where fire code have to be incorporated. But owners with cost reduction in their minds may seldom put any provisions which are non-mandatory as per law, or may just avoid them as they are exempt from the strict enforceability which fire department would otherwise provide, if issued NOC by it.

This matter was also raised before the National Human Rights Commission, which has directed the 'there is no doubt' that this is required 'for ensuring Right to Life' but has stated that this is up to the government authorities to take action upon^[8]. The file has been forwarded to the Director of Delhi Fire Services as well as the Chief Secretary and the Home Secretary. While some action is anticipated, some suggestions in this regard may be useful to consider. The foremost is to have a regime of self-certification. In this, the owners or occupants may list the fire provisions, and this list may be displayed

at the entry. This creates visibility for fire compliance and creates social pressure for including fire provisions in the buildings. This is resonated in another study which advocates for responsibility amongst the community for fire prevention^[9]. As the adage goes, 'out of sight is out of mind', the lack of awareness may downgrade their importance. On the other hand, general repetition of fire safety norms and existence of fire safety mechanisms will create unprecedented awareness. Another suggestion, apart from furthering the training of students of architecture for fire provisions^[10], is to further grassroots-level fire training for regular citizens.

There may be other mechanisms like the local building approval authority undergoing the inspection of buildings for fire provisions, but it may also be true that the experts of fire in the fire department may be entrusted with the task not only to prevent repetition, but because of their expertise in dealing with the eventual fire. The fire department must also possess, or use, if already possessing, *suo moto* power to inspect buildings on apprehension of these being fire unsafe. This may not only be larger buildings which are anyways under the fire department NOC purview, but average residential buildings which are large in number, and vulnerable to fire incidents. Once inspected, they must take a constructive approach and suggest changes, and only penalise if the suggested changes are not complied with. This will be an alternative to directly penalising if any building is found not following fire safety provisions. This will reduce the chances of misuse of authority, if it may occur, by the fire inspectors and may create a favourable environment for fire safety in buildings.

In conclusion, fire safety must become more common by making self certification based public display compliance and also implement further constructive inspections for all buildings regardless of their deemed use or height on the basis of which their risk of fire may be ascertained. Every building due to the complex urban dynamism is coming under the category of being under risk of fire. Our focus on making fire as a part of everyday experience must be enlarged and implemented across geographies.

References

1. [^]*Mundka Factory Fire Caused by Negligence, Many Haven't Received Compensation: Fact-Finding Report [Internet]. [cited 2022 Nov 2]. Available from: <https://thewire.in/labour/mundka-factory-fire-caused-by-negligence-many-havent-received-compensation-fact-finding-report>*
2. [^]*Bureau of Indian Standards, Government of India. SP 7: 2016 National Building Code of India 2016.*

3. [△]Raja Singh, Manoj Mathur, Anil Dewan. (2022). Analysis of the Delhi-Unified Buildings Bye Laws 2016 with respect to the integration of provisions of the National Building Code. Shelter, vol. 23 . HUDCO-HSMI.
4. [△][△]Delhi Fire Service Rules, 2010 under the Delhi Fire Service Act, 2007 [Internet]. Delhi Act 2 of 2009 Jun, 2009. Available from: https://upload.indiacode.nic.in/showfile?actid=AC_DL_64_806_00001_00001_1547013016775&type=rule&filename=dfs_rules_2010.pdf
5. [△]10 of 16 major fires since 2015 in Delhi were in residential buildings | Latest News Delhi - Hindustan Times [Internet]. [cited 2022 Nov 2]. Available from: <https://www.hindustantimes.com/cities/delhi-news/ten-of-16-major-fires-since-2015-in-delhi-were-in-residential-buildings-101655922053540.html>
6. [△]Hon'ble Jharkhand High Court in W.P.C 497 of 2023. (2023). Court on its own Motion vs The Chief Secretary, Government of Jharkhand.
7. [△]Venkatesh Kodur, Puneet Kumar, Muhammad Masood Rafi. (2019). Fire hazard in buildings: review, assessment and strategies for improving fire safety. PRR, vol. 4 (1), 1-23. doi:10.1108/prr-12-2018-0033.
8. [△]National Human Rights Commission. (2022). Case No. 6632/30/0/2022.
9. [△]Shubham Kumar Sanu, Smriti Rai, Vishwa Raj Sharma. (2022). Description of Fire as a Disaster with a Case Study of Delhi's Mundka Fire. Disaster & Development: Journal of the National Institute of Disaster Management, vol. 11 . National Institute of Disaster Management, Government of India.
10. [△]Raja Singh. (2023). Pedagogy for Teaching Fire Safety through Design-Based Immersion of the National Building Code 2016 with Feedback from Students of Undergraduate Architecture. The Scientific World Journal, vol. 2023 , 1-10. doi:10.1155/2023/4007123.

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