

COMPARISON BETWEEN THE FIRE SAFETY LEGISLATION OF INDIA – ITALY – ENGLAND

Nisarg Patel¹, Cristina Calmeiro²

¹ Instituto Politécnico de Castelo Branco. patelnisarg1204@gmail.com

² Instituto Politécnico de Castelo Branco. ccalmeiro@ipcb.pt

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**7.3 Térmica, acústica, ventilação e segurança
contra incêndios**

Apresentação em Vídeo

1. INTRODUCTION

Fire safety regulation is critical to safeguarding the protection of people and property in structures. The laws and regulations in force differ amongst countries, reflecting their respective cultural, economic, and social situations. This research analyzes fire safety regulations in India, Italy, and England, noting important similarities and variations. The fire safety legislation is a combination of laws, regulations, codes, and standards that are intended to avoid and mitigate the risks connected with fire events, assuring the protection of people and property. In India, the National Building Code [1] is critical in establishing regulations for fire prevention, life safety, and fire protection in structures. It addresses issues like as occupancy categorization, construction regulations, egress provisions, and fire protection elements. Furthermore, the Model Building Bye Laws of 2003 delegate responsibility for fire clearance to the Chief Fire Officer, highlighting the need of adherence to fire safety measures throughout construction. In Italy, fire safety rules are governed by the Fire Prevention and Control Code [2], which requires fire risk assessments, fire safety plans, and specific standards for fire safety equipment in structures. The National Fire Corps (Vigili del Fuoco) enforces these restrictions. In England, the Regulatory Reform (Fire Safety) [3] is a crucial piece of legislation that applies to all non-domestic properties and common areas of residential structures. It necessitates fire risk assessments, fire safety plans, and adherence to specified fire safety measures such as fire extinguishers, alarms, emergency lights, and escape routes. The Fire Safety Act 2021 [4] strengthens fire safety standards by establishing new provisions for multi-occupancy residential buildings. The objective of fire safety law is to create a framework that guarantees buildings have the required safeguards in place to successfully prevent, detect, and respond to fire accidents, thereby protecting lives and properties. Compliance with these regulations is critical for reducing fire hazards and improving overall safety standards in public places. Fire safety legislation refers to the rules, regulations, codes, and standards put in place to avoid and limit the hazards of fire incidents, thereby assuring the safety of people and property. These regulations specify the standards for fire prevention, fire protection, and emergency response procedures that buildings and enterprises must meet. Fire safety law often includes requirements for fire risk assessments, fire safety plans, fire detection and suppression systems, equipment maintenance, evacuation procedures, and occupant training. Compliance with fire safety rules is critical for reducing the impact of fires and protecting people and property from harm. Comparing fire safety legislation in India, Italy, and England reveals significant differences and similarities shaped by each country's legal frameworks, governance structures, and fire safety priorities.

2. COMPARISON OF FIRE SAFETY LEGISLATION

This comparison highlights the similarities and differences in fire safety legislation across these three countries, emphasizing the importance of comprehensive fire safety measures and regular enforcement to ensure occupant safety (Table 1).

Comparison Between the Fire Safety Legislation of India – Italy – England

Table 1. Fire safety legislation in three countries: India – Italy - England

Aspect	India	Italy	England
Primary Legislation	National Building Code (NBC) 2016	Codice di Prevenzione Incendi	Regulatory Reform (Fire Safety) Order 2005 (FSO)
	Factories Act, 1948	Ministerial Decrees (e.g., DM 3 August 2015)	Building Regulations 2010 (Part B)
	State-Specific Fire Safety Acts	Legislative Decree 81/2008	Fire and Rescue Services Act 2004
Enforcement Authority	State Fire Services	Corpo Nazionale dei Vigili del Fuoco (National Fire Brigade)	Local Fire and Rescue Services
Enforcement Approach	Decentralized, state-specific enforcement	Centralized, national standards with specific decrees	Centralized, risk-based approach
Key Compliance Requirements	Compliance with NBC mandatory for new constructions	Fire safety certificates and regular audits	Fire risk assessments and fire safety management plans
	Fire safety audits and inspections	Detailed evacuation procedures and fire safety systems	Compliance overseen by "responsible person"
Fire Protection Systems	Required for high-rises, public buildings, industries	Mandatory installation of fire alarms, sprinklers, etc.	Mandatory detection and alarm systems
	Fire alarms, sprinklers, hydrant systems	Fire-resistant construction materials	Emergency lighting and clearly marked escape routes
Building Design and Construction	Guidelines on fire-resistant materials, fire exits	Stringent requirements for fire-resistant materials	Structural fire resistance, means of escape
Emergency Preparedness	Regular fire drills and training	Mandatory risk assessments and safety plans	Regular fire safety training and drills
Evacuation Plans	Detailed provisions for escape routes and exits	Detailed guidelines for evacuation routes	Adequate escape routes and emergency lighting
Challenges	Inconsistent enforcement across states	Managing and updating complex regulations	Ensuring all responsible persons understand their duties

The comparison the Maximum Distance to Travel demonstrates that all three countries highlight the need of shorter travel distances in higher-risk scenarios while allowing longer distances in the presence of effective fire protection equipment. Each code seeks to ensure safe evacuation during a fire by adapting travel distances to the unique conditions and risks associated with various building kinds and uses (table 2).

Table 2. Maximum Distance to Travel

Building Use/Category	Italy	India (NBC 2016)	ENGLAND (BS 9999)
Residential Buildings	30 meters	30 meters	30 meters
Offices	60 meters	45 meters	45 meters
Assembly Buildings	60 meters	30 meters	45 meters
Industrial Buildings	45 meters	45 meters	45 meters
Hospitals	30 meters	30 meters	30 meters
Schools	60 meters	30 meters	45 meters
Hotels	30 meters	30 meters	35 meters

3. CONCLUSION

To summarize, while each country's fire safety legislation are tailored to individual demands, the shared commitment to strong standards indicates a worldwide grasp of key fire safety principles. Continuous improvement and international collaboration in fire safety can provide better protection for building inhabitants around the world. This comparative study offers useful insights for politicians, architects, and fire safety professionals who want to raise worldwide fire safety standards and create safer built environments.

4. REFERÊNCIAS

- [1] National Building Code of India (2016). Bureau of Indian Standards. P 4 Fire and Life Safety, p 88.
- [2] Codice di prevenzione incendi (2021). Technical fire prevention standards. p. 357.
- [3] Regulatory Reform (Fire Safety) Order 2005. Londres: UK Government, p. 44.
- [4] The Fire Safety Act (2021). CHAPTER 24, p. 8.