Change Adapt Improve

Quality and Accreditation Institute

Centre for Accreditation of Health and Social Care

GUIDELINES FOR FIRE & LIFE SAFETY REQUIREMENTS

FIRST EDITION

JULY 2024

These guidelines are developed to support applicant/ accredited Health Care Facilities (HCFs). These guidelines constitute addendum to the requirements under various QAI accreditation standards and are applicable to applicant/ accredited HCFs. All applicant/ accredited HCFs may like to adopt and comply with these guidelines.

QAI assessors of various accreditation programmes under the Centre for Accreditation of Health & Social Care (CAHSC) should check the adherence to these guidelines during assessments.

1. Adherence to Fire & Life Safety norms is not only a statutory and accreditation compliance requirement, but also an essential component of safety of patients, staff and visitors in the Healthcare Facility (HCF).
2. As such all HCFs must adhere to Fire & Life Safety requirements as applicable to their district/ state/ country as well as those given in applicable accreditation standards. For example, In India the applicable Fire & Life Safety norms are given in National Building Code 2016, Part 4 published by Bureau of Indian Standards (NBC 2016).
3. A summary of applicable structural requirements for HCF that admit patients for overnight stay are given on the next page. For full set of requirements, it is necessary to refer to the NBC 2016 in India or equivalent code outside India.
4. Obtaining No Objection Certificate (NOC) - (or Fire License or any other local nomenclature) and/ or its renewal (as applicable) is mandatory where applicable/ mandated by local government (s)/ Fire Department.
5. In case the fire NOC is not applicable, the HCF is required to submit any valid document confirming non-applicability of Fire NOC – such as government order, instructions, letters/ notifications issued by Fire Department or reference of NBC 2016 etc.
6. In case Fire NOC is applicable but is not available or not renewed (for the reasons beyond the control of the HCF), the HCF will undertake the following measures -
   (a) Submit fire & life safety inspection certificate from a third-party service provider (certified or licensed or empanelled with fire department). All observations reported during such inspection must have been satisfactory closed and this fact must be recorded in the certificate.
   (b) Ensure all safety measures, provisions, practices, protocols and trained responders are in place.
   (c) Submit an undertaking on official stationery authenticated and signed by the HCF Head that all fire & life safety measures including protocols, procedures and trained responders are in place.
   (d) Obtain and submit Fire NOC within a period of 1 year.
7. Fire and life safety inspection certificate from a third-party service provider will be considered valid only for a maximum period of 1 year from the date of issue.
8. Assessors will verify that all fire & life safety requirements are met. In particular the following will be verified and reported in the assessment report (AF 4-assessment summary) –
   (a) Availability of fire NOC or fire & life safety inspection certificate
   (b) Functional status of structural requirements including necessary fire-fighting equipment for fire & life safety.
   (c) Adequacy of fire safety signages
   (d) Duly demarcated, unobstructed escape routes / fire exits.
   (e) Satisfactory demonstration of fire safety drill including evacuation.

Table 1: Summary of Structural Requirements for Fire & Life Safety (NBC 2016)

Sl No.	Type of Building Occupancy	Type of Installation								Water Supply (litre)		Pump Capacity (litre/min)	
		Fire Exting-uisher	First Aid Hose Reel	Wet Riser	Down Comer	Yard Hydrant	Automatic Sprinkler System	Manually Operated Electronic Fire Alarm Systems (*see* Note 1)	Automatic Detection and Alarm System (*see* Note 2)	Under-ground Static Water Storage Tank Combined Capacity for Wet Riser, Yard Hydrant and Sprinklers per Set of Pumps	Terrace Tank over Respective Tower Terrace	Pump Near Underground Static Water Storage Tank (Fire Pump) with Minimum Pressure of 3.5 kg/cm^2 at Remotest Location	At the Terrace Tank Level with Minimum Pressure of 3.5 kg/cm^2
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
INSTITUTIONAL BUILDINGS (C) (*see* Note 16)													
a)	**Hospitals, Sanatoria and Nursing Homes (C-1)**												
1)	Less than 15 m in height with plot area up to 1 000 m^2												
	i) Up to ground plus one storey, with no beds	R	NR	NR	NR	NR	R (*see* Note 4)	R	NR	NR	(5 000) (*see* Note 6)	NR	(450) (*see* Note 6)
	ii) Up to ground plus one storey with beds	R	R	NR	NR	NR	R (*see* Note 4)	R	NR	NR	5 000 (5 000) (*see* Note 6)	NR	450 (450) (*see* Note 6)
	iii) Ground plus two or more storeys, with no beds	R	R	NR	R	NR	R (*see* Note 4)	R	R	NR	10 000 (5 000) (*see* Note 6)	NR	900 (450) (*see* Note 6)
	iv) Ground plus two or more storeys, with beds	R	R	R	NR	NR	R	R (*see* Note 1)	R	75 000	10 000	(*see* Note 14)	NR
2)	Less than 15 m in height with plot area more than 1 000 m^2	R	R	R	NR	R	R	R (*see* Note 1)	R	1 00 000	10 000	(*see* Note 14)	NR
3)	15 m and above but not exceeding 24 m in height	R	R	R	NR	R	R	R	R	150 000	20 000	(*see* Note 10)	NR
4)	Above 24 m and not exceeding 45 m in height	R	R	R	NR	R	R	R	R	200 000	20 000	(*see* Note 11)	NR

R – Required
NR – Not Required

NOTES

1 MOEFA System shall also include talk-back system and public address system for the occupancies given in the table for (d) (1) (iii) under A-5, (a) (1) (iv) and (a) (2) under C-1, and (a) (2) under D-1 to D-5, in all buildings 15 m and above in height, except for A-3 and A-4 occupancies where these shall be provided for buildings of height 24 m and above. These shall also be provided in car parking areas more than 300 m^2 and in multi-level car parking irrespective of their areas.

2 Automatic detection and alarm system is not required to be provided in car parking area. Such detection system shall however be required in other areas of car parking such as electrical rooms, cabins and other areas.

3 Buildings above 15 m in height are not to be permitted for occupancies A-1 and A-2.

4 Required to be installed in basement, if area of basement exceeds 200 m^2.

5 Required to be provided if basement area exceeds 200 m^2.

6 Additional value given in parenthesis shall be added if basement area exceeds 200 m^2.

7 Required to be provided for buildings with more than two storeys (Ground + One).

8 Required to be provided for buildings with height above 15 m and above.

9 Sprinklers shall be fed water from both underground static water storage tank and terrace tank.

10 Provide required number of sets of pumps each consisting of one electric and one diesel pump (stand by) of capacity 2 280 litre/min and one electric pump of capacity 180 litre/min (*see* Fig. 11) (*see also* notes 22 and 23).

11 Provide required number of sets of pumps each consisting of two electric and one diesel pump (stand by) of capacity 2 280 litre/min and two electric pump of capacity 180 litre/min (*see* Fig. 12) (*see also* Notes 22 and 23).

12 Provide required number of sets of pumps each consisting of two electric and one diesel pump (stand by) of capacity 2 850 litre/min and two electric pump of capacity 180 litre/min (*see* Fig. 12) (*see also* Notes 22 and 23).

13 Lower levels in high rise buildings 60 m or above in height are likely to experience high pressure and therefore, it is recommended to consider multi-stage, multi-outlet pumps (creating pressure zones) or variable frequency drive pumps or any other equivalent arrangement.

14 Provide required number of sets of pumps each consisting of one electric and one diesel pump (stand by) of capacity 1 620 litre/min and one electric pump of capacity 180 litre/min (*see* Fig. 11) (*see also* Notes 22 and 23).

15 Required to be provided for buildings with more than one storey.

16 Buildings above 30 m in height not to be permitted for Group B, Group C, Group D and Group F occupancies.

17 The requirements given in this table for Group G Industrial Buildings are for small scale industry units. For other industries the requirements will have to be worked out on the basis of relevant Indian Standards and also in consultation with the local fire authorities.

18 Buildings above 18 m in height not to be permitted for G-1 and G-2 occupancies.

19 Buildings above 15 m in height not to be permitted for G-3 occupancies.

20 Buildings above 15 m in height not to be permitted for Group H and Group J occupancies. However, buildings above 45 m in height shall not be permitted for multi-level car parking (MLCP) occupancy.

21 Pump capacity shall be based on the covered area of the building.

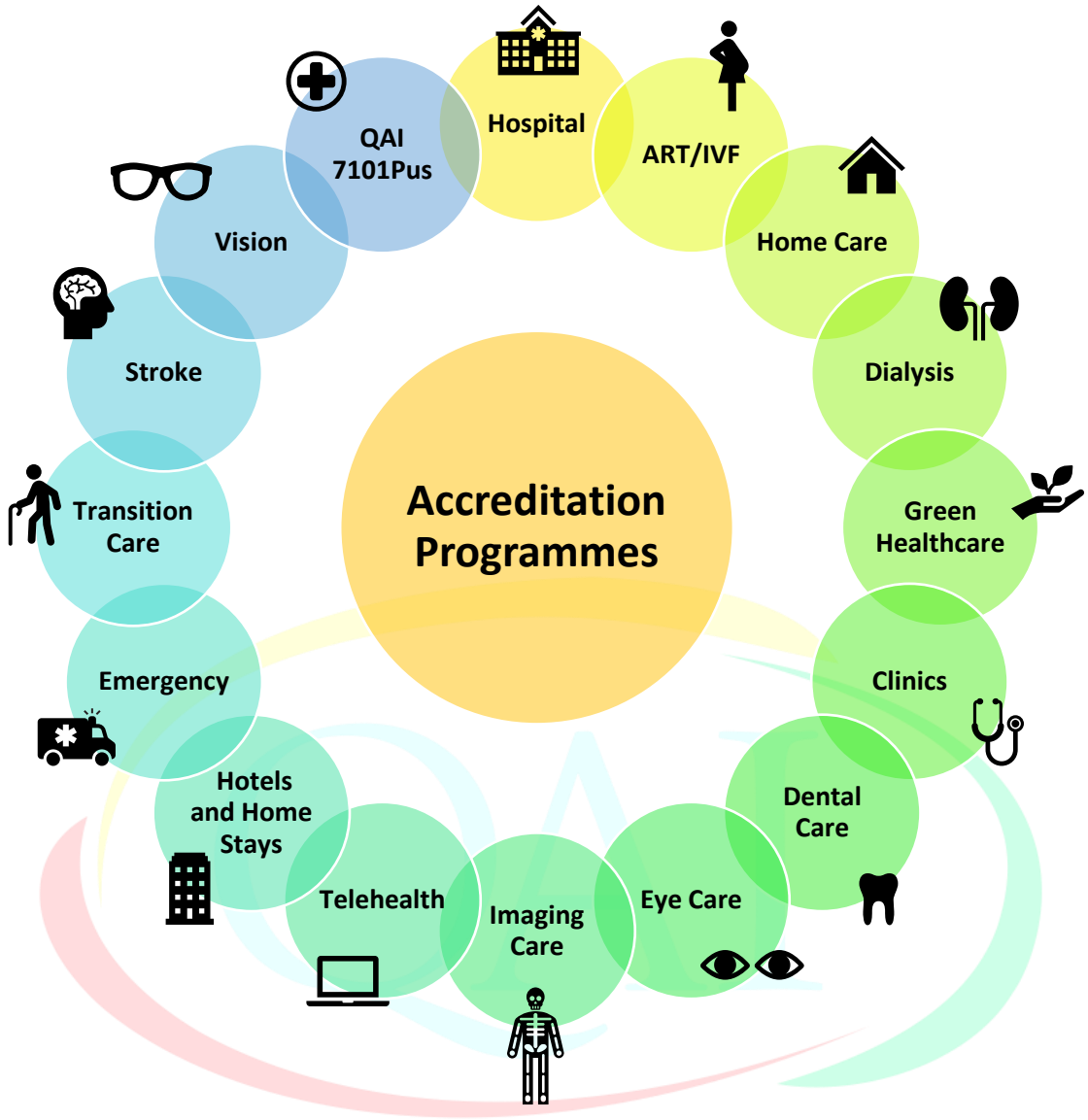
22 One set of pumps shall be provided for each 100 hydrants or part thereof, with a maximum of two sets. In case of more than one pump set installation, both pump sets shall be interconnected at their delivery headers.

23 Alternative to provisions of additional set of pumps, the objective can be met by providing additional diesel pump of the same capacity and doubling the water tank capacity as required for one set of pumps.

24 As per the requirement of local authority dry riser may be used in hilly areas, industrial areas or as required.

References:

1. National Building Code of India 2016 (Volume 2), Bureau of Indian Standards, https://fire.py.gov.in/sites/default/files/nbc-2016-volume-2.pdf



Quality and Accreditation Institute
Centre for Accreditation of Health & Social Care
709, Wave Silver Tower, Sector 18, Noida-201301, India
Email: info@qai.org.in Website: www.qai.org.in
M: +91 8287841146
Ph No.: +91 120-6664981
LinkedIn |Twitter |Facebook |YouTube |Instagram