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APPENDIX 17

(ITEM NO. 5)

Fire Safety Certificate issued by Competent
Authority



OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES, MUMBAI

(FIRE & EMERGENCY SERVICE)

Huns Bhugra Marg, Kalina, Santacruz (East), Mumbai - 400 098

Ph. No. 022-26677555

Fax No. 022-26677666

No. F.E.S./930/C.F.O.

Date :- 10/12/2018

To,

- 1) CFO.
Kalamna Zone
NMC, Nagpur.
- 2) M/s KaviKulguru Institute of Technology & Science,
Post. K. K. Nagar, Ramtek - 441 106
Dist. Nagpur (Maharashtra)

Sub. :- Recommendation in respect of adequate and effective installation of Fire safety measures in the **KaviKulguru Institute of Technology & Science Buildings.**

Site - Electrical Engineering Department

Ref. :- Letter No. KITS/Fire/01/18/1489, Dated 24/09/2018

With above reference and application of owner and architect dated 24.09.2018 and the copy of the Existing building plan provided along with the relevant title papers submitted by M/s KaviKulguru Institute of technology & Science, recommendation in respect of adequate and effective installation of Fire safety measures are being suggested for **Educational building** At. Post KK Nagar, Ramtek, Dist. Nagpur. The same should be strictly adhered to and complied with.

It is expected from the applicant/ builder to inform the Station Officer to call him for inspection during the construction of RCC structure and at final completion stage so as to ensure timely of compliance of the fire norms as also to incorporate amendments, if any, due to changes in fire norms.

Each of any of the recommendation mentioned below shall automatically render this certificate invalid and cancelled and will render the concerned builder / owner occupier / chairperson / secretary of N.M.C. and M.R.T.P. Act. As per D.C. 2000, Maharashtra Fire prevention & Life Safety measures act 2006 and its rules framed there under and may also include cancellation of Building Use Permission and / or shall be liable for disconnection of essential supplied to the buildings.

After these recommendations are fully complied you should apply with the Chief Fire Officer for the compliance certificate. If the concern Station Officer recommends for compliance and base on the report Chief Fire Officer will issue compliance certificate.

This is a more Fire recommendation to be complied by builder / owner the building can be occupied for trade / business can be run under after obtaining compliance certificate from Fire Brigade Department & obtaining occupier certificate from N.M.C.

The validity of this recommendation certificate is only for one year from the date of issue.

Firefighting apparatus provided in the building should be properly maintained by entering in to Annual maintenance contract for the same with License agencies.

The undersigned reserves the right to make any additional recommendations deemed fit during stage wise inspection in accordance with National Building Code 2005 part IV & Maharashtra fire prevention & Maharashtra fire prevention & Life safety measures act 2006 recommendation.

1) Building Details

Owner Name: KaviKulguru Institute of Technology & Science, Mauza Persoda, Survey No. 28, 29, 30, 62 & 63, Ramtek Taluka, Dist. Nagpur

| | |
|--------------------|------------------------|
| Total Plot Area | : 42625.Sq.mtr. |
| B.U. Area | : 6393.Sq.mtr. |
| No of Building | : One |
| Height of Building | : 12.375 Mtr |
| No of Floors | : G+2 Floor |
| Type of Building | : Educational Building |

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OFFICIATING PRINCIPAL
Kavikulguru Instt. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)

Present Position : Existing

Margin:- Front: 6.00 mtr. Rear side: 3.00 mtr. Side: (i) 3.00 mtr. (ii) 3.00 mtr. Approach Road – North Side 12 meter road.

Automatic Sump Pump for dewatering. Shall be provided.

II) Recommendation with respect to Fire Prevention, Fire protection and Life safety Measures.

1. One Internal staircase of width 1.5 mtr. Shall be provided.
 2. At least one emergency staircase shall be provided of width 1.20 mtrs. Away from main staircase and directly connected to the ground floor (from terrace) Fire escape staircase shall be of enclosed type separated by fire resistance door of two hours.
 3. Staircase corridor, exit way, escape route shall be free from any obstruction.
 4. The travel distance required for escape during emergency shall be provided. (as per NBC Part IV)
 5. Proper roads in the premises shall be provided for easy mobility of the Fire Brigade Appliance & marginal spaces shall be kept free from obstructions all the time. If ramps provided in open marginal spaces. It shall not affect the easy mobility of Fire Engines around the building.
 6. Separate duct for electric wiring/ cable at each floor shall be provided and the duct shall be sealed at every landing. Electrical duct shall not pass through staircases. The electric circuit shall be safety devices as circuit breaker arrangement that is MCB, ELCB, etc.
 7. Stand-by electric generator alternate electric supply to operate fire pump, lift corridor light, emergency light so as to meet NBC norms shall be provided.
- Fire Protection arrangement/ Water availability and fire-fighting Installations.**
8. Overhead water storage tank :- 10,000 liters capacity for firefighting purpose separate.
 9. Fire Pumps at terrace level :- 01 electric pump of capacity 900 Liters/Minutes Discharge.
 10. Wet Riser – Cum – down corner (Location shown in plan) :- 100 mm. G.I. pipe "C" type in vertical position connected to water source through pump with hydrant outlet on each floor (0.9 mtrs. Above landing) shall be provided as per I.S. specification.
 11. Hose Box with front side glass containing hose pipe of 30 mtrs. Length & branch pipe shall be provided on each floor near hydrant connection & shall be as per I.S. specification.
 12. Hose Reel 30 mtrs. Length shall be provided on each floor on riser connection with shut off nozzle as per I.S. specification near each landing valve.
 13. Two way fire Service Inlet shall be provided.
 14. Courtyard hydrant :- surrounding the building at 30 mtr. Distance between one hydrants shall be provided.
 15. Manual fire alarm system shall be provided on all floors.
 16. Air-Conditioning system : If provided with AHU or centralized A/c plant than :- shall conform to part 8 section 3 of NBC. (Note :- Dampers & AC ducts according with good practice 4:12. Utility ducts shaft C 1.0 & C 1.10 as per NBC. Electric ducts/shaft each floor non combustible)
 - 1) Automatic fire damers shall be provided in duct and at the inlet of the fresh air
 - 2) A/C/dampers shall be closed automatically upon operation of a detector/ sprinkler.
 - 3) Air ducts for every floor shall be separated.
 - 4) Separate AHU for each floor.
 17. **First Aid Fire fighting arrangement shall be provided.**
 - A) 20 Nos, ABC type store pressure extinguisher of 6 kg. capacity & 02 No. Mechanical Foam extinguisher of 5 kg. capacity & Sand buckets on each floor.
 - B) One DCP 5 kg.
 - C) One 4.5 kg. Co2 extinguisher near the meter room/generator.

All the Fire extinguisher shall be as per BIS: 15683:2006 and bearing ISI Mark.
 18. Balconies / terrace shall not be covered and shall be kept open to serve as refuge area.
 19. Lightening arrester shall be provided to this building.
 20. Electrical services are to be provided as per Annexure C1.12 (NBC Part 4)
 21. House – keeping to be maintain as per Annexure C7 (NBC Part 4.)
 22. No inflammable liquid shall be stored in this building other than domestic use.
 23. No mobile tower to be erected over this building without prior permission from chief Fire Officer, Nagpur Fire & Emergency Service, NMC.
 24. All the Fire and life safety system & the equipment shall be installed by approved license agency & fire fitness certificate shall be submitted to this department twice in the year i.e. in the month of July and January as per the provision of Maharashtra Fire prevention and life safety measures act 2006.
 25. Underground water storage tank. Rain water harvesting pit in open marginal space and RCC slab on underground ramp shall not cause obstruction and shall be constructed as to bear load of Fire Brigade Vehicle. (45 tons as pe N.B.C.)
 26. Control panels shall be installed at the ground floor level in the service/core area connected to control room as per NBC, C-5.
 27. Alternate electric supply, capable to run fire pumps, emergency lighting and fire lift shall be provided.
 28. Fire drills & evacuation procedures shall be carried out at specified intervals.

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OFFICIATING PRINCIPAL
Kavikulguru Instt. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)

29. The plans of this proposed building shall be approved by the competent planning authority according development control Rule and deviation, corrections if any shall be intimated to this department. If this building plan is rejected the same shall also be informed to this department.
30. The internal roads and podium shall be able to withstand the vehicular load of minimum 45 Tones.
31. Fire Evacuation drill shall be carried out at regular interval and record shall be maintained for inspection of fire service department.
32. It shall be ensured that security staff for the building are trained in handling fire fighting equipments & fire fighting.
33. Cautionary boards such as "DANGER", "NO SMOKING", "EXIT", "FIRE ESCAPE" strategic location to guide the occupants in case of emergency. The signs shall be of florescent type and shall glow in dark.
34. Emergency lights shall be provided in all the staircase & corridors, passageways, Gangways etc.
35. FRLS (Fire retardant Low Smoke) cables shall be used for all installations.
36. All other Fire & Life safety provisions shall be as per N.B.C. Part IV 2005 & D.C.R. 2000.
37. Following arrangement of fire protection & preventions measure shall be maintained during the time of construction work.
 - i. Dry riser of minimum 100mm dia pipe with hydrant out let on the floors constructed with a fire service inlet.
 - ii. Drums filled with water of 2000 capacity with two fire bucket on each floor.
 - iii. A water storage tank of minimum 20,000 liter capacity which may be used for other construction purpose also.

On above terms and conditions the fire prevention and protection recommendation certificate is hereby granted. Applicant/owner shall obtained compliance occupancy certificate from this department.



OFFICER IN CHARGE
MUMBAI

[Signature]

Chief Fire Officer
Fire and Emergency Service
OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES,
MUMBAI

Encl : One copy of Map.
Copy to: 1) Station Officer,
Kalamna Fire Station

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~~_____~~
OFFICIATING PRINCIPAL
Kavikulguru Instt. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)



OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES, MUMBAI
(FIRE & EMERGENCY SERVICE)

Huns Bhugra Marg, Kalina, Santacruz (East), Mumbai - 400 098

Ph. No. 022-26677555

Fax No. 022-26677666

No. F.E.S./930/C.F.O.

Date :- 10/12/2018

To,

- 1) CFO,
Kalamna Zone
NMC, Nagpur
- 2) M/s KaviKulguru Institute of Technology & Science,
Post. K. K. Nagar, Ramtek - 441 106
Dist. Nagpur (Maharashtra)

Sub. :- Recommendation in respect of adequate and effective installation of Fire safety measures in the **KaviKulguru Institute of Technology & Science Buildings.**

Site - Mechanical Engineering Department DMS & UCO Bank

Ref. :- Letter No. KITS/Fire/01/18/1489, Dated 24/09/2018

With above reference and application of owner and architect dated 24.09.2018 and the copy of the Existing building plan provided along with the relevant title papers submitted by M/s KaviKulguru Institute of technology & Science, recommendation in respect of adequate and effective installation of Fire safety measures are being suggested for **Educational & Business building** At. Post KK Nagar, Ramtek, Dist. Nagpur. The same should be strictly adhered to and complied with.

It is expected from the applicant/ builder to inform the Station Officer to call him for inspection during the construction of RCC structure and at final completion stage so as to ensure timely of compliance of the fire norms as also to incorporate amendments, if any, due to changes in fire norms.

Breach of any of the recommendation mentioned below shall automatically render this certificate invalid and cancelled and will render the concerned builder / owner occupier / chairperson / secretary of N.M.C. and M.R.T.P. Act. As per D.C.R. 2000. Maharashtra Fire prevention & Life Safety measures act 2006 and its rules framed there under and may also include cancellation of Building Use Permission and / or shall be liable for disconnection of essential supplied to the buildings.

After these recommendations are fully complied you should apply with the Chief Fire Officer for the compliance certificate. If the concern Station Officer recommends for compliance and base on the report Chief Fire Officer will issue compliance certificate.

The Fire recommendation to be complied by builder / owner the building can be occupied for trade / business can be run under after obtaining compliance certificate from Fire Brigade Department & obtaining occupier certificate from N.M.C.

The validity of this recommendation certificate is only for one year from the date of issue.

Firefighting apparatus provided in the building should be properly maintained by entering in to Annual maintenance contract for the same with License agencies.

The undersigned reserves the right to make any additional recommendations deemed fit during stage wise inspection in accordance with National Building Code 2005 part IV & Maharashtra fire prevention & Maharashtra fire prevention & Life safety measures act 2006 recommendation.

- 1) Building Details
Owner Name: KaviKulguru Institute of Technology & Science, Mauza Persoda, Survey No. 28, 29, 30, 62 & 63,
Ramtek Taluka, Dist. Nagpur
Total Plot Area : 42625 Sq.mtr

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Kavikulguru Inatt. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)

B.U. Area : 1859.89 Sq.mtr.
 No of Building : One
 Height of Building : 8.0 Mtr
 No of Floors : G+1 Floor + 2 Sheds
 Type of Building : Educational + Business Building.
 Present Position : Existing

Margin:- Front: 6.00 mtr. Rear side: 3.00 mtr. Side: (i) 3.00 mtr. (ii) 3.00 mtr. Approach Road – North Side 12 meter road.

Automatic Sump Pump for dewatering. Shall be provided.

II) Recommendation with respect to Fire Prevention, Fire protection and Life safety Measures.

1. One Internal staircase of width 1.5 mtr. Shall be provided.
2. At least one emergency staircase shall be provided of width 1.20 mtrs. Away from main staircase and directly connected to the ground floor (from terrace) Fire escape staircase shall be of enclosed type separated by fire resistance door of two hours.
3. Staircase corridor, exit way, escape route shall be free from any obstruction.
4. The travel distance required for escape during emergency shall be provided. (as per NBC Part IV)
5. Proper roads in the premises shall be provided for easy mobility of the Fire Brigade Appliance & marginal spaces shall be kept free from obstructions all the time. If ramps provided in open marginal spaces. It shall not affect the easy mobility of Fire Engines around the building.
6. Separate duct for electric wiring/ cable at each floor shall be provided and the duct shall be sealed at every landing. Electrical duct shall not pass through staircases. The electric circuit shall be safety devices as circuit breaker arrangement that is MCB, ELCB, etc.
7. Stand-by electric generator alternate electric supply to operate fire pump, lift corridor light, emergency light so as to meet NBC norms shall be provided.

Fire Protection arrangement/ Water availability and fire-fighting Installations.

8. Overhead water storage tank: - 20,000 liters capacity for firefighting purpose separate.
9. Fire Pumps at terrace level: - 01 electric pump of capacity 1600 Liters/Minutes Discharge & 01 No of Jockey Pump of 10.8 HP
10. Wet Riser – Cum – down corner (Location shown in plan) :- 100 mm. G.I. pipe "C" type in vertical position connected to water source through pump with hydrant outlet on each floor (0.9 mtrs. Above landing) shall be provided as per I.S. specification.
11. Hose Box with front side glass containing hose pipe of 30 mtrs. Length & branch pipe shall be provided on each floor near hydrant connection & shall be as per I.S. specification.
12. Hose Reel 30 mtrs. Length shall be provided on each floor on riser connection with shut off nozzle as per I.S. specification near each landing valve.
13. Two way fire Service Inlet shall be provided.
14. Courtyard hydrant: - surrounding the building at 30 mtr. Distance between one hydrants shall be provided.
15. Automatic fire alarm system shall be provided on all floors.
16. Air-Conditioning system: If provided with AHU or centralized A/c plant than: - shall conform to part 8 section 3 of NBC. (Note: - Dampers & AC ducts according with good practice 4:12. Utility ducts shaft C 1.0 & A/C/dampers shall be closed automatically upon operation of a detector/ sprinkler. Air Ducts for every floor shall be separated. Separate AHU for each floor.

First Aid Fire fighting arrangement shall be provided.

- A) 15 Nos. ABC type store pressure extinguisher of 6 kg. Capacity & 02 No. Mechanical Foam extinguisher of 5 kg. capacity & Sand buckets on each floor.
- B) One 4.5 kg. Co2 extinguisher near the meter room/generator.
All the Fire extinguisher shall be as per BIS: 15683:2006 and bearing ISI Mark.
18. Balconies / terrace shall not be covered and shall be kept open to serve as refuge area.
19. Lightening arrester shall be provided to this building.
20. Electrical services are to be provided as per Annexure C1.12 (NBC Part 4)
21. House – keeping to be maintain as per Annexure C7 (NBC Part 4.)
22. No inflammable liquid shall be stored in this building other than domestic use.
23. No mobile tower to be erected over this building without prior permission from chief Fire Officer, Nagpur Fire & Emergency Service, NMC.
24. All the Fire and Life safety system & the equipment shall be installed by approved license agency & fire fitness certificate shall be submitted to this department twice in the year i.e. in the month of July and January as per the provision of Maharashtra Fire prevention and life safety measures act 2006.

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OFFICIATING PRINCIPAL


Kavikulguru Instt. of Tech. & Science,
 RAMTEK-441106, Dist. Nagpur (MS)

25. Underground water storage tank. Rain water harvesting pit in open marginal space and RCC slab on underground ramp shall not cause obstruction and shall be constructed as to bear load of Fire Brigade Vehicle. (45 tons as per N.B.C.)
26. Control panels shall be installed at the ground floor level in the service/core area connected to control room as per NBC, C-5.
27. Alternate electric supply, capable to run fire pumps, emergency lighting and fire lift shall be provided.
28. Fire drills & evacuation procedures shall be carried out at specified intervals.
29. The plans of this proposed building shall be approved by the competent planning authority according development control Rule and deviation, corrections if any shall be intimated to this department. If this building plan is rejected the same shall also be informed to this department.
30. The internal roads and podium shall be able to withstand the vehicular load of minimum 45 Tones.
31. Fire Evacuation drill shall be carried out at regular interval and record shall be maintained for inspection of fire service department.
32. It shall be ensured that security staff for the building are trained in handling fire fighting equipments & fire fighting.
33. Cautionary boards such as "DANGER", "NO SMOKING", "EXIT", "FIRE ESCAPE" strategic location to guide the occupants in case of emergency. The signs shall be of florescent type and shall glow in dark.
34. Emergency lights shall be provided in all the staircase & corridors, passageways, Gangways etc.
35. FRLS (Fire retardant Low Smoke) cables shall be used for all installations.
36. All other Fire & Life safety provisions shall be as per N.B.C. Part IV 2005 & D.C.R. 2000.
37. Following arrangement of fire protection & preventions measure shall be maintained during the time of construction work.
 - i. Dry riser of minimum 100mm dia pipe with hydrant out let on the floors constructed with a fire service inlet.
 - ii. Drums filled with water of 2000 capacity with two fire bucket on each floor.
 - iii. A water storage tank of minimum 20,000 liter capacity which may be used for other construction purpose also.

On above terms and conditions the fire prevention and protection recommendation certificate is hereby granted. Applicant/ owner shall obtained compliance occupancy certificate from this department.



OFFICE OF FIRE ADVISOR
MUMBAI


Chief Fire Officer
Fire and Emergency Service
OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES,
MUMBAI

Encl : One copy of Map.
Copy to: 1) Station Officer,
Kalamna Fire Station

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OFFICIATING PRINCIPAL
Kavikulguru Instt. of Tech. & Science,
RAMTEK-441105, Dist. Nagpur (MS)



OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES, MUMBAI

(FIRE & EMERGENCY SERVICE)

Huns Bhugra Marg, Kalina, Santacruz (East), Mumbai - 400 098

Ph. No. 022-26677555

Fax No. 022-26677666

No. F.E.S./930/C.F.O.

Date :- 10/12/2018

To,

- 1) CFO.
Kalamna Zone
NMC, Nagpur
- 2) M/s KaviKulguru Institute of Technology & Science,
Post. K. K. Nagar, Ramtek - 441 106
Dist. Nagpur (Maharashtra)

Sub. :- Recommendation in respect of adequate and effective Installation of Fire safety measures in the **KaviKulguru Institute of Technology & Science Buildings.**

Site - Civil & Architecture Department

Ref. :- Letter No. KITS/Fire/01/18/1489, Dated 24/09/2018

With above reference and application of owner and architect dated 24.09.2018 and the copy of the Existing building plan provided along with the relevant title papers submitted by M/s KaviKulguru Institute of technology & Science, recommendation in respect of adequate and effective installation of Fire safety measures are being suggested for **Educational building** At. Post KK Nagar, Ramtek, Dist. Nagpur. The same should be strictly adhered to and complied with.

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The undersigned reserves the right to make any additional recommendations deemed fit during stage wise inspection in accordance with National Building Code 2005 part IV & Maharashtra fire prevention & Maharashtra fire prevention & Life safety measures act 2006 recommendation.

1) Building Details

Owner Name: KaviKulguru Institute of Technology & Science, Mauza Persoda, Survey No. 28, 29, 30, 62 & 63,
Ramtek Taluka, Dist. Nagpur

Total Plot Area : 42625.Sq.mtr.

B.U. Area : 2684.Sq.mtr.

No of Building : One

Height of Building : 12 Mtr

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OFFICIATING PRINCIPAL
Kavikulguru Instt. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)

No of Floors : G+2 Floor
 Type of Building : Educational Building.
 Present Position : Existing

Margin:- Front: 6.00 mtr. Rear side: 3.00 mtr. Side: (i) 3.00 mtr. (ii) 3.00 mtr. Approach Road – North Side 12 meter road.

Automatic Sump Pump for dewatering. Shall be provided.

ii) Recommendation with respect to Fire Prevention, Fire protection and Life safety Measures.

1. One Internal staircase of width 1.5 mtr. Shall be provided.
 2. At least one emergency staircase shall be provided of width 1.20 mtrs. Away from main staircase and directly connected to the ground floor (from terrace) Fire escape staircase shall be of enclosed type separated by fire resistance door of two hours.
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 11. Hose Box with front side glass containing hose pipe of 30 mtrs. Length & branch pipe shall be provided on each floor near hydrant connection & shall be as per I.S. specification.
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 29. Fire drills & evacuation procedures shall be carried out at specified intervals.

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OFFICIATING PRINCIPAL

K. V. GURU Instt. of Tech. & Science,
 RAMTEK-441100, Dist. Nagpur (MS)

- 29. The plans of this proposed building shall be approved by the competent planning authority according development control Rule and deviation, corrections if any shall be intimated to this department. If this building plan is rejected the same shall also be informed to this department.
- 30. The internal roads and podium shall be able to withstand the vehicular load of minimum 45 Tones.
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 - iii. A water storage tank of minimum 20,000 liter capacity which may be used for other construction purpose also.

On above terms and conditions the fire prevention and protection recommendation certificate is hereby granted. Applicant/owner shall obtained compliance occupancy certificate from this department.



RECEIVED
MUMBAI

[Handwritten Signature]

Chief Fire Officer
Fire and Emergency Service
OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES,
MUMBAI

Encl : One copy of Map.
Copy to: 1) Station Officer,
Kalamna Fire Station

TRUE COPY
ATTESTED

[Handwritten Signature]

OFFICIATING PRINCIPAL
Kavikulguru Instt. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)



OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES, MUMBAI

(FIRE & EMERGENCY SERVICE)

Huns Bhugra Marg, Kalina, Santacruz (East), Mumbai - 400 098

Ph. No. 022-26677555

Fax No. 022-26677666

No. F.E.S./950/C.F.O.

Date :- 10/12/2018

To,

- 1) CFO.
Kalamna Zone
NMC, Nagpur
- 2) M/s KaviKulguru Institute of Technology & Science,
Post. K. K. Nagar, Ramtek - 441 106
Dist. Nagpur (Maharashtra)

Sub. :- Recommendation in respect of adequate and effective Installation of Fire safety measures in the **KaviKulguru Institute of Technology & Science Buildings.**

Site - **Administrative Block, Hydraulic Lab, Electrical Machines Lab., 506, 507, 508 & 509**

Ref. :- Letter No. KITS/Fire/01/18/1489, Dated 24/09/2018

With above reference and application of owner and architect dated 24.09.2018 and the copy of the Existing building plan provided along with the relevant title papers submitted by M/s KaviKulguru Institute of technology & Science, recommendation in respect of adequate and effective installation of Fire safety measures are being suggested for **Educational building + Business Building** At. Post KK Nagar, Ramtek, Dist. Nagpur. The same should be strictly adhered to and complied with.

It is expected from the applicant/ builder to inform the Station Officer to call him for inspection during the construction of RCC structure and at final completion stage so as to ensure timely of compliance of the fire norms as also to incorporate amendments, if any, due to changes in fire norms.

Breach of any of the recommendation mentioned below shall automatically render this certificate invalid and cancelled. ~~Who will~~ render the concerned builder / owner occupier / chairperson / secretary of N.M.C. and M.R.T.P. Act. As per B.C.R. 2000. Maharashtra Fire prevention & Life Safety measures act 2006 and its rules framed there under and may also include cancellation of Building Use Permission and / or shall be liable for disconnection of essential supplied to the buildings.

After these recommendations are fully complied you should apply with the Chief Fire Officer for the compliance certificate. If the concern Station Officer recommends for compliance and base on the report Chief Fire Officer will issue compliance certificate.

This is a more Fire recommendation to be complied by builder / owner the building can be occupied for trade / business can be run under after obtaining compliance certificate from Fire Brigade Department & obtaining occupier certificate from N.M.C.

The validity of this recommendation certificate is only for one year from the date of issue.

Firefighting apparatus provided in the building should be properly maintained by entering in to Annual maintenance contract for the same with License agencies.

The undersigned reserves the right to make any additional recommendations deemed fit during stage wise inspection in accordance with National Building Code 2005 part IV & Maharashtra fire prevention & Maharashtra fire prevention & Life safety measures act 2006 recommendation.

1) Building Details

Owner Name: KaviKulguru Institute of Technology & Science, Mauza Persoda, Survey No. 28, 29, 30, 62 & 63,
Ramtek Taluka, Dist. Nagpur
Total Plot Area : 42625 Sq.mtr.
B.U. Area : 9150 Sq.mtr.
No. of Building : Six

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Kavikulguru Inett. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)

Height of Building : 14.0 Mtr
 No of Floors : G+3 Floor
 Type of Building : Educational Building + Business Building
 Present Position : Existing

Margin:- Front: 6.00 mtr. Rear side: 3.00 mtr. Side: (i) 3.00 mtr. (ii) 3.00 mtr. Approach Road – North Side 12 meter road.

Automatic Sump Pump for dewatering. Shall be provided.

II) Recommendation with respect to Fire Prevention, Fire protection and Life safety Measures.

1. One Internal staircase of width 1.5 mtr. Shall be provided.
 2. At least one emergency staircase shall be provided of width 1.20 mtrs. Away from main staircase and directly connected to the ground floor (from terrace) Fire escape staircase shall be of enclosed type separated by fire resistance door of two hours.
 3. Staircase corridor, exit way, escape route shall be free from any obstruction.
 4. The travel distance required for escape during emergency shall be provided. (as per NBC Part IV)
 5. Proper roads in the premises shall be provided for easy mobility of the Fire Brigade Appliance & marginal spaces shall be kept free from obstructions all the time. If ramps provided in open marginal spaces. It shall not affect the easy mobility of Fire Engines around the building.
 6. Separate duct for electric wiring/ cable at each floor shall be provided and the duct shall be sealed at every landing. Electrical duct shall not pass through staircases. The electric circuit shall be safety devices as circuit breaker arrangement that is MCB, ELCB, etc.
 7. Stand-by electric generator alternate electric supply to operate fire pump, lift corridor light, emergency light so as to meet NBC norms shall be provided.
- Fire Protection arrangement/ Water availability and fire-fighting Installations.**
8. Overhead water storage tank: - 20,000 liters capacity for firefighting purpose separate.
 9. Fire Pumps at terrace level: - 01 electric pump of capacity 900 Liters/Minutes Discharge & 01 No of Jockey Pump of 10.8 HP.
 10. Wet Riser – Cum – down corner (Location shown in plan) :- 100 mm. G.I. pipe "C" type in vertical position connected to water source through pump with hydrant outlet on each floor (0.9 mtrs. Above landing) shall be provided as per I.S. specification.
 11. Hose Box with front side glass containing hose pipe of 30 mtrs. Length & branch pipe shall be provided on each floor, near hydrant connection & shall be as per I.S. specification.
 12. Hose Reel 30 mtrs. Length shall be provided on each floor on riser connection with shut off nozzle as per I.S. specification near each landing valve.
 13. Fire Service Inlet shall be provided.
 14. Fire Hydrant: - surrounding the building at 30 mtr. Distance between one hydrants shall be provided.
 15. Automatic fire alarm system shall be provided on all floors.
 16. Air-Conditioning system: If provided with AHU or centralized A/c plant than: - shall conform to part 8 section 3 of NBC. (Note: - Dampers & AC ducts according with good practice 4:12. Utility ducts shaft C 1.0 & C 1.10 as per NBC. Electric ducts/shaft each floor non combustible)
 - 1) Automatic fire dampers shall be provided in duct and at the inlet of the fresh air
 - 2) A/C/dampers shall be closed automatically upon operation of a detector/ sprinkler.
 - 3) Air ducts for every floor shall be separated.
 - 4) Separate AHU for each floor.
 17. First Aid Fire fighting arrangement shall be provided.
 - A) 15 Nos, ABC type store pressure extinguisher of 6 kg. Capacity & 02 No. Mechanical Foam extinguisher of 5 kg. capacity & Sand buckets on each floor.
 - B) One DCP 5 kg. extinguisher near the meter room/generator.
 - C) One 4.5 kg. Co2 extinguisher near the meter room/generator.

All the Fire extinguisher shall be as per BIS: 15683:2006 and bearing ISI Mark.
 18. Balconies / terrace shall not be covered and shall be kept open to serve as refuge area.
 19. Lightening arrester shall be provided to this building.
 20. Electrical services are to be provided as per Annexure C1.12 (NBC Part 4)
 21. House – keeping to be maintain as per Annexure C7 (NBC Part 4.)
 22. No inflammable liquid shall be stored in this building other than domestic use.
 23. No mobile tower to be erected over this building without prior permission from chief Fire Officer, Nagpur Fire & Emergency Service, NMC.
 24. All the Fire and Life safety system & the equipment shall be installed by approved license agency & fire fitness certificate shall be submitted to this department twice in the year i.e. in the month of July and January as per the provision of Maharashtra Fire prevention and life safety measures act 2006.
 25. Underground water storage tank. Rain water harvesting pit in open marginal space and RCC slab on underground ramp shall not cause obstruction and shall be constructed as to bear load of Fire Brigade Vehicle. (45 tons as per N.B.C.)

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OFFICIATING PRINCIPAL
 Kavikulguru Instt. of Tech. & Science,
 RAJSEK-441106, Dist. Nagpur (MS)

26. Control panels shall be installed at the ground floor level in the service/core area connected to control room as per NBC, C-5.
27. Alternate electric supply, capable to run fire pumps, emergency lighting and fire lift shall be provided.
28. Fire drills & evacuation procedures shall be carried out at specified intervals.
29. The plans of this proposed building shall be approved by the competent planning authority according development control Rule and deviation, corrections if any shall be intimated to this department. If this building plan is rejected the same shall also be informed to this department.
30. The internal roads and podium shall be able to withstand the vehicular load of minimum 45 Tones. .
31. Fire Evacuation drill shall be carried out at regular interval and record shall be maintained for inspection of fire service department.
32. It shall be ensured that security staff for the building are trained in handling fire fighting equipments & fire fighting.
33. Cautionary boards such as "DANGER", "NO SMOKING", "EXIT", "FIRE ESCAPE" strategic location to guide the occupants in case of emergency. The signs shall be of florescent type and shall glow in dark.
34. Emergency lights shall be provided in all the staircase & corridors, passageways, Gangways etc.
35. FRLS (Fire retardant Low Smoke) cables shall be used for all installations.
36. All other Fire & Life safety provisions shall be as per N.B.C. Part IV 2005 & D.C.R. 2000.
37. Following arrangement of fire protection & preventions measure shall be maintained during the time of construction work.
 - i. Dry riser of minimum 100mm dia pipe with hydrant out let on the floors constructed with a fire service inlet.
 - ii. Drums filled with water of 2000 capacity with two fire bucket on each floor.
 - iii. A water storage tank of minimum 20,000 liter capacity which may be used for other construction purpose also.

On above terms and conditions the fire prevention and protection recommendation certificate is hereby granted. Applicant/ owner shall obtained compliance occupancy certificate from this department.



Shant

Chief Fire Officer
Fire and Emergency Service
OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES,
MUMBAI

Encl : One copy of Map.
Copy to: 1) Station Officer,
Kalamna Fire Station

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[Signature]
OFFICIATING PRINCIPAL
Kavikulguru Instt. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)



OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES, MUMBAI
(FIRE & EMERGENCY SERVICE)

Huns Bhugra Marg, Kalina, Santacruz (East), Mumbai – 400 098

Ph. No. 022-26677555

Fax No. 022-26677666

No. F.E.S./330/C.F.O.

Date :- 10/12/2018

To,

- 1) CFO,
Kalamna Zone
NMC, Nagpur
- 2) M/s KaviKulguru Institute of Technology & Science,
Post. K. K. Nagar, Ramtek – 441 106
Dist. Nagpur (Maharashtra)

Sub. :- Recommendation in respect of adequate and effective Installation of Fire safety measures in the **KaviKulguru Institute of Technology & Science Buildings.**

Site - **Indoor Sports Complex, Project Engineering & RO Plant.**

Ref. :- Letter No. KITS/Fire/01/18/1489, Dated 24/09/2018

With above reference and application of owner and architect dated 24.09.2018 and the copy of the Existing building plan provided along with the relevant title papers submitted by M/s KaviKulguru Institute of technology & Science, recommendation in respect of adequate and effective installation of Fire safety measures are being suggested for **Assemble building** At. Post KK Nagar, Ramtek, Dist. Nagpur. The same should be strictly adhered to and complied with.

It is expected from the applicant/ builder to inform the Station Officer to call him for inspection during the construction of RCC structure and at final completion stage so as to ensure timely of compliance of the fire norms as also to incorporate amendments, if any, due to changes in fire norms.

Breach of any of the recommendation mentioned below shall automatically render this certificate invalid and cancelled and will render the concerned builder / owner occupier / chairperson / secretary of N.M.C. and M.R.T.P. Act. As per D.C.R. 2000. Maharashtra Fire prevention & Life Safety measures act 2006 and its rules framed there under and may also include cancellation of Building Permisson and / or shall be liable for disconnection of essential supplied to the buildings.

After the recommendations are fully complied you should apply with the Chief Fire Officer for the compliance certificate. If the concern Station Officer recommends for compliance and base on the report Chief Fire Officer will issue compliance certificate.

This is a more Fire recommendation to be complied by builder / owner the building can be occupied for trade / business can be run under after obtaining compliance certificate from Fire Brigade Department & obtaining occupier certificate from N.M.C.

The validity of this recommendation certificate is only for one year from the date of issue.

Firefighting apparatus provided in the building should be properly maintained by entering in to Annual maintenance contract for the same with License agencies.

The undersigned reserves the right to make any additional recommendations deemed fit during stage wise inspection in accordance with National Building Code 2005 part IV & Maharashtra fire prevention & Maharashtra fire prevention & Life safety measures act 2006 recommendation.

1) Building Details

Owner Name: KaviKulguru Institute of Technology & Science, Mauza Persoda, Survey No. 28, 29, 30, 62 & 63, Ramtek

- Taluka, Dist. Nagpur
- Total Plot Area : 42625.Sq.mtr.
- B.U. Area : 1640.Sq.mtr.
- No of Building : One
- Height of Building : 17.313 Mtr
- No of Floors : G+1 Floor
- Type of Building : Assembly Building.
- Present Position : Existing

Margin:- Front: 6.00 mtr. Rear side: 3.00 mtr. Side: (i) 3.00 mtr. (ii) 3.00 mtr. Approach Road – North Side 12 meter road.

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OFFICIATING PRINCIPAL
 Kavikulguru Inatt. of Tech. & Science,
 RAMTEK-441106, Dist. Nagpur (MS)

Automatic Sump Pump for dewatering. Shall be provided.

II) Recommendation with respect to Fire Prevention, Fire protection and Life safety Measures.

1. One Internal staircase of width 1.5 mtr. Shall be provided.
2. At least one emergency staircase shall be provided of width 1.20 mtrs. Away from main staircase and directly connected to the ground floor (from terrace) Fire escape staircase shall be of enclosed type separated by fire resistance door of two hours.
3. Staircase corridor, exit way, escape route shall be free from any obstruction.
4. The travel distance required for escape during emergency shall be provided. (as per NBC Part IV)
5. Proper roads in the premises shall be provided for easy mobility of the Fire Brigade Appliance & marginal spaces shall be kept free from obstructions all the time. If ramps provided in open marginal spaces. It shall not affect the easy mobility of Fire Engines around the building.
6. Separate duct for electric wiring/ cable at each floor shall be provided and the duct shall be sealed at every landing. Electrical duct shall not pass through staircases. The electric circuit shall be safety devices as circuit breaker arrangement that is MCB, ELCB, etc.
7. Stand-by electric generator alternate electric supply to operate fire pump, lift corridor light, emergency light so as to meet NBC norms shall be provided.

Fire Protection arrangement/ Water availability and fire-fighting Installations.

8. Overhead water storage tank: - 20,000 liters capacity for firefighting purpose separate.
9. Fire Pumps at terrace level: - 01 electric pump of capacity 1600 Liters/Minutes Discharge & 01 No of Jockey Pump of 10.8 HP
10. Wet Riser - Cum - down corner (Location shown in plan) :- 100 mm, G.I. pipe "C" type in vertical position connected to water source through pump with hydrant outlet on each floor (0.9 mtrs. Above landing) shall be provided as per I.S. specification.
11. Hose Box with front side glass containing hose pipe of 30 mtrs. Length & branch pipe shall be provided on each floor near hydrant connection & shall be as per I.S. specification.
12. Hose Reel 30 mtrs. Length shall be provided on each floor on riser connection with shut off nozzle as per I.S. specification near each landing valve.
13. Two way fire Service Inlet shall be provided.
14. Automatic Sprinkler System shall be provided.
15. Courtyard hydrant: - surrounding the building at 30 mtr. Distance between one hydrants shall be provided.
16. Automatic fire alarm system shall be provided on all floors
17. Air-Conditioning system: If provided with AHU or centralized A/c plant than: - shall conform to part 8 section 3 of NBC. (Note: - Dampers & AC ducts according with good practice 4:12. Utility ducts shaft C 1.0 & C 1.10 as per NBC. Electric ducts/shaft each floor non combustible)
 - 1) Automatic fire dampers shall be provided in duct and at the inlet of the fresh air
 - 2) A/C/dampers shall be closed automatically upon operation of a detector/ sprinkler.
 - 3) Air ducts for every floor shall be separated.
 - 4) Separate AHU for each floor.

18. First Aid Fire fighting arrangement shall be provided.

- A) 15 Nos, ABC type store pressure extinguisher of 6 kg. Capacity & Sand buckets on each floor.
- B) One DCP 5 kg. & 1 No. Co2 extinguisher near the meter room/generator.
- C) One 4.5 kg. Co2 extinguisher near the meter room/generator.

All the Fire extinguisher shall be as per BIS: 15683:2006 and bearing ISI Mark.

19. Balconies / terrace shall not be covered and shall be kept open to serve as refuge area.
20. Lightening arrester shall be provided to this building.
21. Electrical services are to be provided as per Annexure C1.12 (NBC Part 4)
22. House keeping to be maintain as per Annexure C7 (NBC Part 4.)
23. No inflammable liquid shall be stored in this building other than domestic use.
No mobile tower to be erected over this building without prior permission from chief Fire Officer, Nagpur Fire & Emergency Service, NMC.
24. All the Fire and life safety system & the equipment shall be installed by approved license agency & fire fitness certificate shall be submitted to this department twice in the year i.e. in the month of July and January as per the provision of Maharashtra Fire prevention and life safety measures act 2006.

26. Underground water storage tank. Rain water harvesting pit in open marginal space and RCC slab on underground ramp shall not cause obstruction and shall be constructed as to bear load of Fire Brigade Vehicle. (45 tons as per N.B.C.)

27. Control panels shall be installed at the ground floor level in the service/core area connected to control room as per NBC, C-5.

28. Alternate electric supply, capable to run fire pumps, emergency lighting and fire lift shall be provided.

29. Fire drills & evacuation procedures shall be carried out at specified intervals.

30. The plans of this proposed building shall be approved by the competent planning authority according development control Rule and deviation, corrections if any shall be intimated to this department. If this building plan is rejected the same shall also be informed to this department.

31. The internal roads and podium shall be able to withstand the vehicular load of minimum 45 Tones.

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OFFICIATING PRINCIPAL

Kanjilguru Inett. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)

32. Fire Evacuation drill shall be carried out at regular interval and record shall be maintained for inspection of fire service department.
33. It shall be ensured that security staff for the building are trained in handling fire fighting equipments & fire fighting.
34. Cautionary boards such as "DANGER", "NO SMOKING", "EXIT", "FIRE ESCAPE" strategic location to guide the occupants in case of emergency. The signs shall be of florescent type and shall glow in dark.
35. Emergency lights shall be provided in all the staircase & corridors, passageways, Gangways etc.
36. FRLS (Fire retardant Low Smoke) cables shall be used for all installations.
37. All other Fire & Life safety provisions shall be as per N.B.C. Part IV 2005 & D.C.R. 2000.
38. Following arrangement of fire protection & preventions measure shall be maintained during the time of construction work.
 - i. Dry riser of minimum 100mm dia pipe with hydrant out let on the floors constructed with a fire service inlet.
 - ii. Drums filled with water of 2000 capacity with two fire bucket on each floor.
 - iii. A water storage tank of minimum 20,000 liter capacity which may be used for other construction purpose

On above terms and conditions the fire prevention and protection recommendation certificate is hereby granted. Applicant owing to obtain compliance occupancy certificate from this department.



OFFICE OF FIRE ADVISOR
MUMBAI

[Signature]

Chief Fire Officer
Fire and Emergency Service

OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES, MUMBAI

Encl : One copy of Map.

Copy to: 1) Station Officer,
Kalamna Fire Station

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[Signature]
OFFICIATING PRINCIPAL
Kavikulguru Instt. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)



OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES, MUMBAI

(FIRE & EMERGENCY SERVICE)

Huns Bhugra Marg, Kalina, Santacruz (East), Mumbai - 400 098

Ph. No. 022-26677555

Fax No. 022-26677666

No. F.E.S./ 930/C.F.O.

Date :- 10/12/2018

To,

- 1) CFO.
Kalamna Zone
NMC, Nagpur
- 2) M/s KaviKulguru Institute of Technology & Science,
Post. K. K. Nagar, Ramtek - 441 106
Dist. Nagpur (Maharashtra)

Sub. :- Recommendation in respect of adequate and effective Installation of Fire safety measures in the **KaviKulguru Institute of Technology & Science Buildings.**

Site - Girls Hostel New Kaveri (Old & New)

Ref. :- Letter No. KITS/Fire/01/18/1489, Dated 24/09/2018

With above reference and application of owner and architect dated 24.09.2018 and the copy of the Existing building plan provided along with the relevant title papers submitted by M/s KaviKulguru Institute of technology & Science, recommendation in respect of adequate and effective installation of Fire safety measures are being suggested for **Residential building (A-3)** At. Post KK Nagar, Ramtek, Dist. Nagpur. The same should be strictly adhered to and complied with.

It is expected from the applicant/ builder to inform the Station Officer to call him for inspection during the construction of RCC structure and at final completion stage so as to ensure timely of compliance of the fire norms as also to incorporate amendments, if any, due to changes in fire norms.

Breach of any of the recommendation mentioned below shall automatically render this certificate invalid and cancelled and will render the concerned builder / owner occupier / chairperson / secretary of N.M.C. and M.R.T.P. Act. As per C.R. 2000, Maharashtra Fire prevention & Life Safety measures act 2006 and its rules framed there under and may also include cancellation of Building Use Permission and / or shall be liable for disconnection of essential supplied to the buildings.

After these recommendations are fully complied you should apply with the Chief Fire Officer for the compliance certificate. If the concern Station Officer recommends for compliance and base on the report Chief Fire Officer will issue compliance certificate.

This is a more Fire recommendation to be complied by builder / owner the building can be occupied for trade / business can be run under after obtaining compliance certificate from Fire Brigade Department & obtaining occupier certificate from N.M.C.

The validity of this recommendation certificate is only for one year from the date of issue.

Firefighting apparatus provided in the building should be properly maintained by entering in to Annual maintenance contract for the same with License agencies.

The undersigned reserves the right to make any additional recommendations deemed fit during stage wise inspection in accordance with National Building Code 2005 part IV & Maharashtra fire prevention & Maharashtra fire prevention & Life safety measures act 2006 recommendation.

1) Building Details

Owner Name: KaviKulguru Institute of Technology & Science, Mauza Persoda, Survey No. 28, 29, 30, 62 & 63,
Ramtek Taluka, Dist. Nagpur

Total Plot Area : 42625 Sq.mtr.
B.U. Area : 4927 Sq.mtr.
No of Building : Four
Height of Building : 12.0 Mtr

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Kavikulguru Instt. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)

No of Floors : G+2 Floor
 Type of Building : Residential Building (A-3)
 Present Position : Existing
 Margin:- Front: 6.00 mtr. Rear side: 3.00 mtr. Side: (i) 3.00 mtr. (ii) 3.00 mtr. Approach Road – North Side 12 meter road.

Automatic Sump Pump for dewatering. Shall be provided.

II) Recommendation with respect to Fire Prevention, Fire protection and Life safety Measures.

1. One Internal staircase of width 1.5 mtr. Shall be provided.
2. At least one emergency staircase shall be provided of width 1.20 mtrs. Away from main staircase and directly connected to the ground floor (from terrace) Fire escape staircase shall be of enclosed type separated by fire resistance door of two hours.
3. Staircase corridor, exit way, escape route shall be free from any obstruction.
4. The travel distance required for escape during emergency shall be provided. (as per NBC Part IV)
5. Proper roads in the premises shall be provided for easy mobility of the Fire Brigade Appliance & marginal spaces shall be kept free from obstructions all the time. If ramps provided in open marginal spaces. It shall not affect the easy mobility of Fire Engines around the building.
6. Separate duct for electric wiring/ cable at each floor shall be provided and the duct shall be sealed at every landing. Electrical duct shall not pass through staircases. The electric circuit shall be safety devices as circuit breaker arrangement that is MCB, ELCB, etc.
7. Stand-by electric generator alternate electric supply to operate fire pump, lift corridor light, emergency light so as to meet NBC norms shall be provided.

Fire Protection arrangement/ Water availability and fire-fighting Installations.

8. Overhead water storage tank: - 10,000 liters capacity for firefighting purpose separate.
9. Fire Pumps at terrace level: - 01 electric pump of capacity 900 Liters/Minutes.
10. Wet Riser – Cum – down corner (Location shown in plan) :- 100 mm. G.I. pipe "C" type in vertical position connected to water source through pump with hydrant outlet on each floor (0.9 mtrs. Above landing) shall be provided as per I.S. specification.
11. Hose Box with front side glass containing hose pipe of 15 mtrs. Length & branch pipe shall be provided on each floor near hydrant connection & shall be as per I.S. specification.
12. Hose Reel 30 mtrs. Length shall be provided on each floor on riser connection with shut off nozzle as per I.S. specification near each landing valve.
13. Two way fire Service Inlet shall be provided.
14. Courtyard hydrant: - surrounding the building at 30 mtr. Distance between one hydrants shall be provided.
15. Automatic fire alarm system shall be provided on all floors.
16. Air-Conditioning system: If provided with AHU or centralized A/c plant than: - shall conform to part 8 section 3 of NBC. (Note: - Dampers & AC ducts according with good practice 4:12. Utility ducts shaft C 1.0 & C 1.10 as per NBC. Electric ducts/shaft each floor non combustible)
 - 1) Automatic fire dampers shall be provided in duct and at the inlet of the fresh air
 - 2) A/C/dampers shall be closed automatically upon operation of a detector/ sprinkler.
 - 3) Air ducts for every floor shall be separated.
 - 4) Separate AHU for each floor.

17. First Aid Fire fighting arrangement shall be provided.

- A) 13 Nos. ABC type store pressure extinguisher of 6 kg. Capacity & 02 No. Mechanical Foam extinguisher of 5 kg. capacity & Sand buckets on each floor.
- B) One CO₂ 5 kg. & 1 No. Co2 extinguisher near the meter room/generator.
- C) One 4.5 kg. Cb2 extinguisher near the meter room/generator.
- D) All the Fire extinguisher shall be as per BIS: 15683:2006 and bearing ISI Mark.

18. Balconies / terrace shall not be covered and shall be kept open to serve as refuge area.

19. Lightning arrester shall be provided to this building.

20. Electrical services are to be provided as per Annexure C1.12 (NBC Part 4)

21. House – keeping to be maintain as per Annexure C7 (NBC Part 4.)

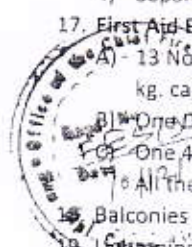
22. No inflammable liquid shall be stored in this building other than domestic use.

23. No mobile tower to be erected over this building without prior permission from chief Fire Officer, Nagpur Fire & Emergency Service, NMC.

24. All the Fire and Life safety system & the equipment shall be installed by approved license agency & fire fitness certificate shall be submitted to this department twice in the year i.e. in the month of July and January as per the provision of Maharashtra Fire prevention and life safety measures act 2006.

25. Underground water storage tank. Rain water harvesting pit in open marginal space and RCC slab on underground ramp shall not cause obstruction and shall be constructed as to bear load of Fire Brigade Vehicle (45 tons as per N.B.C.)

26. Control panels shall be installed at the ground floor level in the service/core area connected to control room as per NBC, C-5.



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 ATTESTED

OFFICIATING PRINCIPAL
 Kavayatee Vastu Sangrahalaya, Dept. of Tech. & Science,
 RANTEX-441106, Dist. Nagpur (MS)

27. Alternate electric supply, capable to run fire pumps, emergency lighting and fire lift shall be provided.
28. Fire drills & evacuation procedures shall be carried out at specified intervals.
29. The plans of this proposed building shall be approved by the competent planning authority according development control Rule and deviation, corrections if any shall be intimated to this department. If this building plan is rejected the same shall also be informed to this department.
30. The internal roads and podium shall be able to withstand the vehicular load of minimum 45 Tones.
31. Fire Evacuation drill shall be carried out at regular interval and record shall be maintained for inspection of fire service department.
32. It shall be ensured that security staff for the building are trained in handling fire fighting equipments & fire fighting.
33. Cautionary boards such as "DANGER", "NO SMOKING", "EXIT", "FIRE ESCAPE" strategic location to guide the occupants in case of emergency. The signs shall be of florescent type and shall glow in dark.
34. Emergency lights shall be provided in all the staircase & corridors, passageways, Gangways etc.
35. FRLS (Fire retardant Low Smoke) cables shall be used for all installations.
36. All other Fire & Life safety provisions shall be as per N.B.C. Part IV 2005 & D.C.R. 2000.
37. Following arrangement of fire protection & preventions measure shall be maintained during the time of construction work.
 - i. Dry riser of minimum 100mm dia pipe with hydrant out let on the floors constructed with a fire service inlet.
 - ii. Drums filled with water of 2000 capacity with two fire bucket on each floor.
 - iii. A water storage tank of minimum 10,000 liter capacity which may be used for other construction purpose also.

On above terms and conditions the fire prevention and protection recommendation certificate is hereby granted. Applicant/owner shall obtained compliance occupancy certificate from this department.



[Handwritten signature]
 Chief Fire Officer

[Handwritten signature]
 Chief Fire Officer
 Fire and Emergency Service
 OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES,
 MUMBAI

Encl : One copy of Map.
 Copy to: 1) Station Officer,
 Kalamna Fire Station

TRUE COPY
 ATTESTED

[Handwritten signature]
 OFFICIATING PRINCIPAL
 Kavikulguru Instt. of Tech. & Science,
 RAMTEK-441106, Dist. Nagpur (MS)



OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES, MUMBAI
(FIRE & EMERGENCY SERVICE)

Huns Bhugra Marg, Kalina, Santacruz (East), Mumbai - 400 098

Ph. No. 022-26677555

Fax No. 022-26677666

No. F.E.S./930/C.F.O.

Date :- 10/12/2018

To,

- 1) CFO.
Kalamna Zone
NMC, Nagpur
- 2) M/s KaviKulguru Institute of Technology & Science,
Post. K. K. Nagar, Ramtek - 441 106
Dist. Nagpur (Maharashtra)

Sub. :- Recommendation in respect of adequate and effective installation of Fire safety measures in the **KaviKulguru Institute of Technology & Science Buildings.**

Site - Jamuna Hostel

Ref. :- Letter No. KITS/Fire/01/18/1489, Dated 24/09/2018

With above reference and application of owner and architect dated 24.09.2018 and the copy of the Existing building plan provided along with the relevant title papers submitted by M/s KaviKulguru Institute of technology & Science, recommendation in respect of adequate and effective installation of Fire safety measures are being suggested for **Residential building (A-3)** At. Post KK Nagar, Ramtek, Dist. Nagpur. The same should be strictly adhered to and complied with.

It is expected from the applicant/ builder to inform the Station Officer to call him for inspection during the construction of RCC structure and at final completion stage so as to ensure timely of compliance of the fire norms as also to incorporate amendments, if any, due to changes in fire norms.

Breach of any of the recommendation mentioned below shall automatically render this certificate invalid and cancelled and will render the concerned builder / owner occupier / chairperson / secretary of N.M.C. and M.R.T.P. Act. As per D.C.R. 2000, Maharashtra Fire prevention & Life Safety measures act 2006 and its rules framed there under and may also include cancellation of Building Use Permission and / or shall be liable for disconnection of essential supplied to the buildings.

After these recommendations are fully complied you should apply with the Chief Fire Officer for the compliance certificate. If the concern Station Officer recommends for compliance and base on the report Chief Fire Officer will issue compliance certificate.

This is a more Fire recommendation to be complied by builder / owner the building can be occupied for trade / business can be run under after obtaining compliance certificate from Fire Brigade Department & obtaining occupier certificate from N.M.C.

The validity of this recommendation certificate is only for one year from the date of issue.

Firefighting apparatus provided in the building should be properly maintained by entering in to Annual maintenance contract for the same with License agencies.

The undersigned reserves the right to make any additional recommendations deemed fit during stage wise inspection in accordance with National Building Code 2005 part IV & Maharashtra fire prevention & Maharashtra fire prevention & Life safety measures act 2006 recommendation.

1) Building Details

Owner Name: KaviKulguru Institute of Technology & Science, Mauza Persoda, Survey No. 28, 29, 30, 62 & 63,
Ramtek Taluka, Dist. Nagpur
Total Plot Area : 42625 Sq.mtr.
B.U. Area : 2927 Sq.mtr.
No of Building : One
Height of Building : 12.0 Mtr

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OFFICIATING PRINCIPAL
Kavikulguru Instt. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)

No of Floors : G+2 Floor
 Type of Building : Residential Building (A-3)
 Present Position : Existing

Margin:- Front: 6.00 mtr. Rear side: 3.00 mtr. Side: (i) 3.00 mtr. (ii) 3.00 mtr. Approach Road – North Side 12 meter road.

Automatic Sump Pump for dewatering. Shall be provided.

ii) Recommendation with respect to Fire Prevention, Fire protection and Life safety Measures.

1. One Internal staircase of width 1.5 mtr. Shall be provided.
2. At least one emergency staircase shall be provided of width 1.20 mtrs. Away from main staircase and directly connected to the ground floor (from terrace) Fire escape staircase shall be of enclosed type separated by fire resistance door of two hours.
3. Staircase corridor, exit way, escape route shall be free from any obstruction.
4. The travel distance required for escape during emergency shall be provided. (as per NBC Part IV)
5. Proper roads in the premises shall be provided for easy mobility of the Fire Brigade Appliance & marginal spaces shall be kept free from obstructions all the time. If ramps provided in open marginal spaces. It shall not affect the easy mobility of Fire Engines around the building.
6. Separate duct for electric wiring/ cable at each floor shall be provided and the duct shall be sealed at every landing. Electrical duct shall not pass through staircases. The electric circuit shall be safety devices as circuit breaker arrangement that is MCB, ELCB, etc.
7. Stand-by electric generator alternate electric supply to operate fire pump, lift corridor light, emergency light so as to meet NBC norms shall be provided.

Fire Protection arrangement/ Water availability and fire-fighting Installations.

8. Overhead water storage tank: - 20,000 liters capacity for firefighting purpose separate.
9. Fire Pumps at terrace level: - 01 electric pump of capacity 1600 Liters/Minutes Discharge & 01 No of Jockey Pump of 10.8 HP
10. Wet Riser – Cum – down corner (Location shown in plan) :- 100 mm. G.I. pipe "C" type in vertical position connected to water source through pump with hydrant outlet on each floor (0.9 mtrs. Above landing) shall be provided as per I.S. specification.
11. Hose Box with front side glass containing hose pipe of 30 mtrs. Length & branch pipe shall be provided on each floor near hydrant connection & shall be as per I.S. specification.
12. Hose Reel 30 mtrs. Length shall be provided on each floor on riser connection with shut off nozzle as per I.S. specification near each landing valve.
13. Two way fire Service Inlet shall be provided.
14. Courtyard hydrant: - surrounding the building at 30 mtr. Distance between one hydrants shall be provided.
15. Automatic fire alarm system shall be provided on all floors.
16. Air-Conditioning system: If provided with AHU or centralized A/c plant than: - shall conform to part 8 section 3 of NBC. (Note: - Dampers & AC ducts according with good practice 4:12. Utility ducts shaft C 1.0 & C 1.10 as per NBC. Electric ducts/shaft each floor non combustible)
17. Automatic fire dampers shall be provided in duct and at the inlet of the fresh air
18. AC/dampers shall be closed automatically upon operation of a detector/ sprinkler.
19. Air ducts for every floor shall be separated.
20. Separate AHU for each floor.

First Aid Fire fighting arrangement shall be provided.

- A) 12 Nos. ABC type store pressure extinguisher of 6 kg. Capacity & 02 No. Mechanical Foam extinguisher of 5 kg. capacity & Sand buckets on each floor.
- B) One 4.5 kg. Co2 extinguisher near the meter room/generator.

All the Fire extinguisher shall be as per BIS: 15683:2006 and bearing ISI Mark.

18. Balconies / terrace shall not be covered and shall be kept open to serve as refuge area.
19. Lightening arrester shall be provided to this building.
20. Electrical services are to be provided as per Annexure C1.12 (NBC Part 4)
21. House – keeping to be maintain as per Annexure C7 (NBC Part 4.)
22. No inflammable liquid shall be stored in this building other than domestic use.
23. No mobile tower to be erected over this building without prior permission from chief Fire Officer, Nagpur Fire & Emergency Service, NMC.
24. All the Fire and Life safety system & the equipment shall be installed by approved license agency & fire fitness certificate shall be submitted to this department twice in the year i.e. in the month of July and January as per the provision of Maharashtra Fire prevention and life safety measures act 2006.
25. Underground water storage tank. Rain water harvesting pit in open marginal space and RCC slab on underground ramp shall not cause obstruction and shall be constructed as to bear load of Fire Brigade Vehicle. (45 tons as per N.B.C.)
26. Control panels shall be installed at the ground floor level in the service/core area connected to control room as per NBC, C-5

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OFFICIATING PRINCIPAL

RAMTEK-441106, Dist. Nagpur (MS)

27. Alternate electric supply, capable to run fire pumps, emergency lighting and fire lift shall be provided.
28. Fire drills & evacuation procedures shall be carried out at specified intervals.
29. The plans of this proposed building shall be approved by the competent planning authority according development control Rule and deviation, corrections if any shall be intimated to this department. If this building plan is rejected the same shall also be informed to this department.
30. The internal roads and podium shall be able to withstand the vehicular load of minimum 45 Tones.
31. Fire Evacuation drill shall be carried out at regular interval and record shall be maintained for inspection of fire service department.
32. It shall be ensured that security staff for the building are trained in handling fire fighting equipments & fire fighting.
33. Cautionary boards such as "DANGER", "NO SMOKING", "EXIT", "FIRE ESCAPE" strategic location to guide the occupants in case of emergency. The signs shall be of florescent type and shall glow in dark.
34. Emergency lights shall be provided in all the staircase & corridors, passageways, Gangways etc.
35. FRLS (Fire retardant Low Smoke) cables shall be used for all installations.
36. All other Fire & Life safety provisions shall be as per N.B.C. Part IV 2005 & D.C.R. 2000.
37. Following arrangement of fire protection & preventions measure shall be maintained during the time of construction work.
 - i. Dry riser of minimum 100mm dia pipe with hydrant out let on the floors constructed with a fire service inlet.
 - ii. Drums filled with water of 2000 capacity with two fire bucket on each floor.
 - iii. A water storage tank of minimum 10,000 liter capacity which may be used for other construction purpose also.

On above terms and conditions the fire prevention and protection recommendation certificate is hereby granted. Applicant/ owner shall obtained compliance occupancy certificate from this department.



Encl: One copy of Map.
Copy to: 1) Station Officer,
Kalamna Fire Station

[Handwritten Signature]

Chief Fire Officer
Fire and Emergency Service
OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES,
MUMBAI

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ATTESTED**

[Handwritten Signature]

OFFICIATING PRINCIPAL
Kavikulguru Inatt. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)



OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES, MUMBAI

(FIRE & EMERGENCY SERVICE)

Huns Bhugra Marg, Kalina, Santacruz (East), Mumbai – 400 098

Ph. No. 022-26677555

Fax No. 022-26677666

No. F.E.S./330/C.F.O.

Date :- 10/12/2018

To,

- 1) CFO.
Kalamna Zone
NMC, Nagpur
- 2) M/s KaviKulguru Institute of Technology & Science,
Post. K. K. Nagar, Ramtek – 441 106
Dist. Nagpur (Maharashtra)

Sub. :- Recommendation in respect of adequate and effective Installation of Fire safety measures in the **KaviKulguru Institute of Technology & Science Buildings.**

Site – New Guest House Building.

Ref. :- Letter No. KITS/Fire/01/18/1489, Dated 24/09/2018

With above reference and application of owner and architect dated 24.09.2018 and the copy of the Existing building plan provided along with the relevant title papers submitted by M/s KaviKulguru Institute of technology & Science, recommendation in respect of adequate and effective installation of Fire safety measures are being suggested for **One or Two Family Privet Dwelling** At. Post KK Nagar, Ramtek, Dist. Nagpur. The same should be strictly adhered to and complied with.

It is expected from the applicant/ builder to inform the Station Officer to call him for inspection during the construction of RCC structure and at final completion stage so as to ensure timely of compliance of the fire norms as also to incorporate amendments, if any, due to changes in fire norms.

Breach of any of the recommendation mentioned below shall automatically render this certificate invalid and cancelled and will render the concerned builder / owner occupier / chairperson / secretary of N.M.C. and M.R.T.P. Act. As per D.C.R. 2000. Maharashtra Fire prevention & Life Safety measures act 2006 and its rules framed there under and may also include cancellation of Building Use Permission and / or shall be liable for disconnection of essential supplied to the buildings.

After these recommendations are fully complied you should apply with the Chief Fire Officer for the compliance certificate. If the concerned Station Officer recommends for compliance and base on the report Chief Fire Officer will issue compliance certificate. **This is a mere Fire recommendation to be complied by builder / owner the building can be occupied for trade / business can be run under after obtaining compliance certificate from Fire Brigade Department & obtaining occupier certificate from Competent authority.**

The validity of this recommendation certificate is only for one year from the date of issue.

Firefighting apparatus provided in the building should be properly maintained by entering in to Annual maintenance contract for the same with License agencies.

The undersigned reserves the right to make any additional recommendations deemed fit during stage wise inspection in accordance with National Building Code 2005 part IV & Maharashtra fire prevention & Maharashtra fire prevention & Life safety measures act 2006 recommendation.

1) Building Details

Owner Name: KaviKulguru Institute of Technology & Science, Mauza Persoda, Survey No. 28, 29, 30, 62 & 63,
Ramtek Taluka, Dist. Nagpur

Total Plot Area : 42625.Sq.mtr.
B.U. Area : 516.66 Sq.mtr.
No of Building : One
Height of Building : 9.0 Mtr
No of Floors : G+2 Floor
Type of Building : Residential Building (A-2)

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OFFICIATING PRINCIPAL
Kavikulguru Instt. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)

Present Position : Existing

Margin:- Front: 6.00 mtr. Rear side: 3.00 mtr. Side: (i) 3.00 mtr. (ii) 3.00 mtr. Approach Road – North Side 12 meter road.

Automatic Sump Pump for dewatering. Shall be provided.

ii) Recommendation with respect to Fire Prevention, Fire protection and Life safety Measures.

1. One Internal staircase of width 1.5 mtr. Shall be provided.
 2. At least one emergency staircase shall be provided of width 1.20 mtrs. Away from main staircase and directly connected to the ground floor (from terrace) Fire escape staircase shall be of enclosed type separated by fire resistance door of two hours.
 3. Staircase corridor, exit way, escape route shall be free from any obstruction.
 4. The travel distance required for escape during emergency shall be provided. (as per NBC Part IV)
 5. Proper roads in the premises shall be provided for easy mobility of the Fire Brigade Appliance & marginal spaces shall be kept free from obstructions all the time. If ramps provided in open marginal spaces. It shall not affect the easy mobility of Fire Engines around the building.
 6. Separate duct for electric wiring/ cable at each floor shall be provided and the duct shall be sealed at every landing. Electrical duct shall not pass through staircases. The electric circuit shall be safety devices as circuit breaker arrangement that is MCB, ELCB, etc.
 7. Stand-by electric generator alternate electric supply to operate fire pump, lift corridor light, emergency light so as to meet NBC norms shall be provided.
- Fire Protection arrangement/ Water availability and fire-fighting Installations.**
8. Overhead water storage tank: - 10,000 liters capacity for firefighting purpose separate.
 9. Fire Pumps at terrace level: - 01 electric pump of capacity 450 Liters/Minutes Discharge.
 10. Wet Riser – Cum – down corner (Location shown in plan) :- 100 mm. G.I. pipe "C" type in vertical position connected to water source through pump with hydrant outlet on each floor (0.9 mtrs. Above landing) shall be provided as per I.S. specification.
 11. Hose Box with front side glass containing hose pipe of 30 mtrs. Length & branch pipe shall be provided on each floor near hydrant connection & shall be as per I.S. specification.
 12. Hose Reel 15 mtrs. Length shall be provided on each floor on riser connection with shut off nozzle as per I.S. specification near each landing valve.
 13. Two way fire Service Inlet shall be provided.
 14. Courtyard hydrant: - surrounding the building at 30 mtr. Distance between one hydrants shall be provided.
 15. Air-Conditioning system: If provided with AHU or centralized A/c plant than: - shall conform to part 8 section 3 of NBC. (Note: - Dampers & AC ducts according with good practice 4:12. Utility ducts shaft C 1.0 & C 1.10 as per NBC Electric ducts/shaft each floor non combustible)
 - 1) Automatic fire dampers shall be provided in duct and at the Inlet of the fresh air
 - 2) A/C/dampers shall be closed automatically upon operation of a detector/ sprinkler.
 - 3) Air ducts for every floor shall be separated.
 - 4) Separate AHU for each floor.
16. **First Aid Fire fighting arrangement shall be provided.**
- A) 5 Nos, ABC type store pressure extinguisher of 6 kg. Capacity & 01 No. Mechanical Foam extinguisher of 9 ltr. capacity & Sand buckets on each floor.
 - B) One DCP 5 kg. & 1 No. Co2 extinguisher near the meter room/generator.
- All the Fire extinguisher shall be as per BIS: 15683:2006 and bearing ISI Mark.
17. Balconies / terrace shall not be covered and shall be kept open to serve as refuge area.
 18. Lightening arrester shall be provided to this building.
 19. Electrical services are to be provided as per Annexure C1.12 (NBC Part 4)
 20. House – keeping to be maintain as per Annexure C7 (NBC Part 4.)
 21. No inflammable liquid shall be stored in this building other than domestic use.
 22. No mobile tower to be erected over this building without prior permission from chief Fire Officer, Nagpur Fire & Emergency Service, NMC.
 23. All the Fire and Life safety system & the equipment shall be installed by approved license agency & fire fitness certificate shall be submitted to this department twice in the year i.e. in the month of July and January as per the provision of Maharashtra Fire prevention and life safety measures act 2006.
 24. Underground water storage tank. Rain water harvesting pit in open marginal space and RCC slab on underground ramp shall not cause obstruction and shall be constructed as to bear load of Fire Brigade Vehicle. (45 tons as per N.B.C.)
 25. Control panels shall be installed at the ground floor level in the service/core area connected to control room as per NBC, C-5.
 26. Alternate electric supply, capable to run fire pumps, emergency lighting and fire lift shall be provided.
 27. Fire drills & evacuation procedures shall be carried out at specified intervals.
 28. The plans of this proposed building shall be approved by the competent planning authority according to development control Rule and deviation, corrections if any shall be intimated to this department. If this building plan is rejected the same shall also be informed to this department.
 29. The internal roads and podium shall be able to withstand the vehicular load of minimum 45 Tones.

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OFFICIATING PRINCIPAL

Kavikuliguru Instt. of Tech. & Science,
Wadgaon - 441106, Dist. Nagpur (MS)

- 30. Fire Evacuation drill shall be carried out at regular interval and record shall be maintained for inspection of fire service department.
- 31. It shall be ensured that security staff for the building are trained in handling fire fighting equipments & fire fighting.
- 32. Cautionary boards such as "DANGER", "NO SMOKING", "EXIT", "FIRE ESCAPE" strategic location to guide the occupants in case of emergency. The signs shall be of florescent type and shall glow in dark.
- 33. Emergency lights shall be provided in all the staircase & corridors, passageways, Gangways etc.
- 34. FRLS (Fire retardant Low Smoke) cables shall be used for all installations.
- 35. All other Fire & Life safety provisions shall be as per N.B.C. Part IV 2005 & D.C.R. 2000.
- 36. Following arrangement of fire protection & preventions measure shall be maintained during the time of construction work.
 - i. Dry riser of minimum 100mm dia pipe with hydrant out let on the floors constructed with a fire service inlet.
 - ii. Drums filled with water of 2000 capacity with two fire bucket on each floor.
 - iii. A water storage tank of minimum 10,000 liter capacity which may be used for other construction purpose also.

On above terms and conditions the fire prevention and protection recommendation certificate is hereby granted. Applicant/ owner shall obtained compliance occupancy certificate from this department.



[Signature]
 Chief Fire Officer
 Fire and Emergency Service
 OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES,
 MUMBAI

Encl : One copy of Map.
 Copy to: 1) Station Officer,
 Kalamna Fire Station

**TRUE COPY
 ATTESTED**

[Signature]
OFFICIATING PRINCIPAL,
 Kavikulguru Instt. of Tech. & Science,
 RAMTEK-441106, Dist. Nagpur (MS)



OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES, MUMBAI

(FIRE & EMERGENCY SERVICE)

Huns Bhugra Marg, Kalina, Santacruz (East), Mumbai - 400 098

Ph. No. 022-26677555

Fax No. 022-26677666

No. F.E.S./930/C.F.O.

Date :- 10/12/2018

To,

- 1) CFO.
Kalamna Zone
NMC, Nagpur
- 2) M/s KaviKulguru Institute of Technology & Science,
Post. K. K. Nagar, Ramtek - 441 106
Dist. Nagpur (Maharashtra)

Sub :- Recommendation in respect of adequate and effective Installation of Fire safety measures in the **KaviKulguru Institute of Technology & Science Buildings.**

Site - Boys Hostel Triveni

Ref :- Letter No. KITS/Fire/01/18/1489, Dated 24/09/2018

With above reference and application of owner and architect dated 24.09.2018 and the copy of the Existing building plan provided along with the relevant title papers submitted by M/s KaviKulguru Institute of technology & Science, recommendation in respect of adequate and effective installation of Fire safety measures are being suggested for **Residential building (A-3)** At. Post KK Nagar, Ramtek, Dist. Nagpur. The same should be strictly adhered to and complied with.

It is expected from the applicant/ builder to inform the Station Officer to call him for inspection during the construction of RCC structure and at final completion stage so as to ensure timely of compliance of the fire norms as also to incorporate amendments, if any, due to changes in fire norms.

Breach of any of the recommendation mentioned below shall automatically render this certificate invalid and cancelled and will render the concerned builder / owner occupier / chairperson / secretary of N.M.C. and M.R.T.P. Act. As per D.C.R. 2000. Maharashtra Fire prevention & Life Safety measures act 2006 and its rules framed there under and may also include cancellation of Building Use Permission and / or shall be liable for disconnection of essential supplied to the buildings.

After these recommendations are fully complied you should apply with the Chief Fire Officer for the compliance certificate. If the concern Station Officer recommends for compliance and base on the report Chief Fire Officer will issue compliance certificate.

This is a more Fire recommendation to be complied by builder / owner the building can be occupied for trade / business can be run under after obtaining compliance certificate from Fire Brigade Department & obtaining Occupier certificate from N.M.C.

The validity of this recommendation certificate is only for one year from the date of issue.

Firefighting apparatus provided in the building should be properly maintained by entering in to Annual maintenance contract for the same with License agencies.

The undersigned reserves the right to make any additional recommendations deemed fit during stage wise inspection in accordance with National Building Code 2005 part IV & Maharashtra fire prevention & Maharashtra fire prevention & Life safety measures act 2006 recommendation.

1) Building Details

Owner Name: KaviKulguru Institute of Technology & Science, Mauza Persoda, Survey No. 29, 30, 62 & 63, Ramtek Taluka, Dist. Nagpur
 Total Plot Area : 42625 Sq.mtr
 B.U. Area : 3926 Sq.mtr.
 No of Building : Four
 Height of Building : 11.25 Mtr

OFFICIATING PRINCIPAL

K. N. D. G. of Tech. & Science,
 RAMTEK-441106, Dist. Nagpur (MS)

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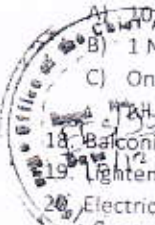
NO. OF FLOORS : G+2 FLOOR
 Type of Building : Residential Building (A-3)
 Present Position : Existing

Margin:- Front: 6.00 mtr. Rear side: 3.00 mtr. Side: (i) 3.00 mtr. (ii) 3.00 mtr. Approach Road – North Side 12 meter road.

Automatic Sump Pump for dewatering. Shall be provided.

II) Recommendation with respect to Fire Prevention, Fire protection and Life safety Measures.

1. One Internal staircase of width 1.5 mtr. Shall be provided.
 2. At least one emergency staircase shall be provided of width 1.20 mtrs. Away from main staircase and directly connected to the ground floor (from terrace) Fire escape staircase shall be of enclosed type separated by fire resistance door of two hours.
 3. Staircase corridor, exit way, escape route shall be free from any obstruction.
 4. The travel distance required for escape during emergency shall be provided. (as per NBC Part IV)
 5. Proper roads in the premises shall be provided for easy mobility of the Fire Brigade Appliance & marginal spaces shall be kept free from obstructions all the time. If ramps provided in open marginal spaces. It shall not affect the easy mobility of Fire Engines around the building.
 6. Separate duct for electric wiring/ cable at each floor shall be provided and the duct shall be sealed at every landing. Electrical duct shall not pass through staircases. The electric circuit shall be safety devices as circuit breaker arrangement that is MCB, ELCB, etc.
 7. Stand-by electric generator alternate electric supply to operate fire pump, lift corridor light, emergency light so as to meet NBC norms shall be provided.
- Fire Protection arrangement/ Water availability and fire-fighting Installations.**
8. Overhead water storage tank: - 20,000 liters capacity for firefighting purpose separate.
 9. Fire Pumps at terrace level: - 01 electric pump of capacity 1600 Liters/Minutes Discharge.
 10. Wet Riser – Cum – down corner (Location shown in plan) :- 100 mm. G.I. pipe "C" type in vertical position connected to water source through pump with hydrant outlet on each floor (0.9 mtrs. Above landing) shall be provided as per I.S. specification.
 11. Hose Box with front side glass containing hose pipe of 15 mtrs. Length & branch pipe shall be provided on each floor near hydrant connection & shall be as per I.S. specification.
 12. Hose Reel 30 mtrs. Length shall be provided on each floor on riser connection with shut off nozzle as per I.S. specification near each landing valve.
 13. Two way fire Service Inlet shall be provided.
 14. Courtyard hydrant: - surrounding the building at 30 mtr. Distance between one hydrants shall be provided.
 15. Automatic fire alarm system shall be provided on all floors.
 16. Air-Conditioning system: If provided with AHU or centralized A/c plant than: - shall conform to part 8 section 3 of NBC. (Note: - Dampers & AC ducts according with good practice 4:12. Utility ducts shaft C 1.0 & C 1.10 as per NBC. Electric ducts/shaft each floor non combustible)
 - 1) Automatic fire dampers shall be provided in duct and at the inlet of the fresh air
 - 2) A/C/dampers shall be closed automatically upon operation of a detector/ sprinkler.
 - 3) Air ducts for every floor shall be separated.
 - 4) Separate AHU for each floor.
 17. First Aid Fire fighting arrangement shall be provided.
 - A) 10 Nos. ABC type store pressure extinguisher of 6 kg. Capacity & Sand buckets on each floor.
 - B) 1 No. Co2 extinguisher near the meter room/generator.
 - C) One 4.5 kg. Co2 extinguisher near the meter room/generator.
 - D) All the Fire extinguisher shall be as per BIS: 15683:2006 and bearing ISI Mark.
 18. Balconies & terrace shall not be covered and shall be kept open to serve as refuge area.
 19. Lightning arrester shall be provided to this building.
 20. Electrical services are to be provided as per Annexure C1.12 (NBC Part 4)
 21. House – keeping to be maintain as per Annexure C7 (NBC Part 4.)
 22. No inflammable liquid shall be stored in this building other than domestic use.
 23. No mobile tower to be erected over this building without prior permission from chief Fire Officer, Nagpur Fire & Emergency Service, NMC.
 24. All the Fire and Life safety system & the equipment shall be installed by approved license agency & fire fitness certificate shall be submitted to this department twice in the year i.e. in the month of July and January as per the provision of Maharashtra Fire prevention and life safety measures act 2006.
 25. Underground water storage tank. Rain water harvesting pit in open marginal space and RCC slab on underground ramp shall not cause obstruction and shall be constructed as to bear load of Fire Brigade Vehicle. (45 tons as per N.B.C.)
 26. Control panels shall be installed at the ground floor level in the service/core area connected to control room as per NBC, C-5.
 27. Alternate electric supply, capable to run fire pumps, emergency lighting and fire lift shall be provided.
 28. Fire drills & evacuation procedures shall be carried out at specified intervals.

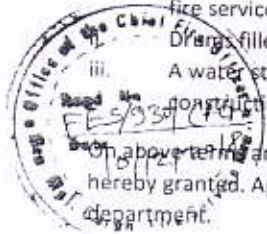


TRUE COPY
 ATTESTED

OFFICIATING PRINCIPAL
 Kavikulam Instt. of Tech. & Science,
 RAMTEK-441106, Dist. Nagpur (MS)

29. The plans of this proposed building shall be approved by the competent planning authority according development control Rule and deviation, corrections if any shall be intimated to this department. If this building plan is rejected the same shall also be informed to this department.
30. The internal roads and podium shall be able to withstand the vehicular load of minimum 45 Tones.
31. Fire Evacuation drill shall be carried out at regular interval and record shall be maintained for inspection of fire service department.
32. It shall be ensured that security staff for the building are trained in handling fire fighting equipments & fire fighting.
33. Cautionary boards such as "DANGER", "NO SMOKING", "EXIT", "FIRE ESCAPE" strategic location to guide the occupants in case of emergency. The signs shall be of florescent type and shall glow in dark.
34. Emergency lights shall be provided in all the staircase & corridors, passageways, Gangways etc.
35. FRLS (Fire retardant Low Smoke) cables shall be used for all installations.
36. All other Fire & Life safety provisions shall be as per N.B.C. Part IV 2005 & D.C.R. 2000.
37. Following arrangement of fire protection & preventions measure shall be maintained during the time of construction work.

- i. Dry riser of minimum 100mm dia pipe with hydrant out let on the floors constructed with a fire service inlet.
- ii. Drains filled with water of 2000 capacity with two fire bucket on each floor.
- iii. A water storage tank of minimum 10,000 liter capacity which may be used for other construction purpose also.



On above terms and conditions the fire prevention and protection recommendation certificate is hereby granted. Applicant/ owner shall obtained compliance occupancy certificate from this department.

CHIEF FIRE OFFICER
FIRE AND EMERGENCY SERVICE

gsh
Chief Fire Officer
Fire and Emergency Service
OFFICE OF FIRE ADVISOR MAHARASHTRA FIRE SERVICES, MUMBAI

Encl : One copy of Map.
Copy to: 1) Station Officer,
Kalamna Fire Station

TRUE COPY
ATTESTED

4/2/20
OFFICIATING PRINCIPAL
Kavikulguru Instt. of Tech. & Science,
RAMTEK-441106, Dist. Nagpur (MS)