



**BANGALORE
APARTMENTS'
FEDERATION**



**Bengaluru Apartments Making Bengaluru
Operationally Outstanding & Sustainable**

FIRE SAFETY and COMPLIANCE

3RD NOVEMBER, 2018

Fire Preparedness at Mantri Tranquil

Total Apartments : 1131

Total Area : 19 Acres

Residents : 3000





- **What insures you against fire**

Fire safety training & Active participation in fire drill

are like paying life insurance premium - you don't like to pay it, but it gives you a better handle on life - 'should something unfortunate happen'



- **Fire Protection Systems in Mantri Tranquil**





- **Fire hydrants**

Main Fire sumps

- Phase 1- 450000 L
- Phase 2 – 375000 L

Fire Tanks

- At Each Tower – 10000 L (gets filled up ahead of water sump & tank)

Back up 1

- Can be sourced from main overhead tanks if sumps fail / pressure fails to build

Back up 2

- If pumps dry, Fire Brigade can connect to inlets at Main Gate

Low pressure Hydrants – Red rubber pipes

- At Lift lobbies, can be used by any resident with minimal training

High Pressure hydrants – Canvas hose pipes

- Used by fire brigade / Trained security personnel



Fire alarm

Location : Lift Lobbies & Clubhouse

Activation : Breaking glass

Fireman's switch

Location : Basement – near lift

Activation : Break glass to deactivate lifts



Fire panel & PA system:

Location : Basement of each tower

Activation : In a glass enclosure keys with security, housing the fire panel (indication of source of fire alarm) & PA system (microphone & amplifier)



- **Sprinkler at parking area**

Bulb breaks under heat to release water.
Source of water – same as the fire hydrant source.

- **PA system:**

- Each tower & clubhouse has a two-way PA system.
- Announcements made from the basement enclosure is audible at all floors.
- When co-ordinated , (along with alarm panels) the system can be activated.
- Once done, announcements can be heard at the lobby (uses same speaker as the one feeding the hooter).
- PA system runs on a separate battery feed (24V) and works even when main power is switched off.



• OTHER ACCESSORIES



- **Wheel chairs & stretchers** – Alternative towers
- **Fire blankets** Alternative towers
- **Megaphone** - available with Property Manager
- **Sand buckets**
- **UPS** for the lights in one staircase of each block
- **First aid kit** at each tower, Main gate, FM vendor office, clubhouse



- **FIRE DRILL**



- FIRE DRILL – STAGE I

WHO

- All residents (regular occupants, guests, maids and other workers)

WHEN

- On hearing the fire alarm or when instructed by ERT volunteers

WHAT TO DO

- Stop all activities
- Switch off the power supply mains from the MCB panel
- Turn off the LPG regulator
- Pick up only your mobile and door key, come out of your apartment and start walking.
- Take the staircase – NEVER use lift in fire.
- Remember : Mohandas Karamchand Gandhi – MKG
- M Mains off, Mobile take
- K- Keys take
- G- Gas turn off

- **GOAL:**
- **TO REACH THE SAFE ASSEMBLY POINT**



STAIRCASE A

SLOW MOVING FAMILY MEMBERS

- **ERT VOLUNTEERS**
- **SECURITY PERSONNEL**
- **FIRE SAFETY PERSONNEL**
- **STRETCHERS & WHEELCHAIR**
- **PETS ON LEASH**

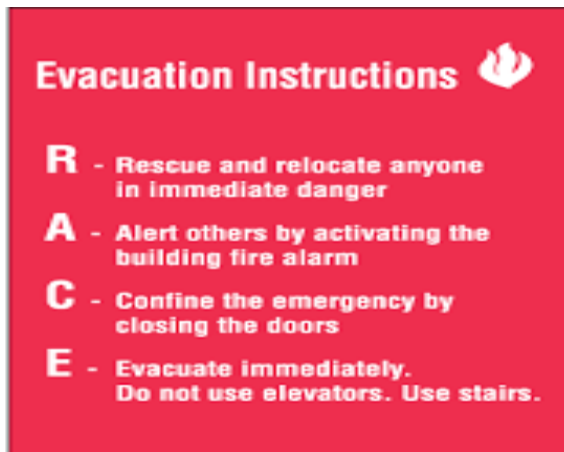
STAIRCASE B

- **ALL EXCEPT ABOVE CATEGORIES**

Evacuation rules

- Be calm and do not give any room for panic.
- 'Walk briskly, do not run.
- Walk in a single line
- Keep close to the railing.
- Don't talk on mobile
- Do not walk side by side.
- If there are announcements in the public announcement system, follow the instructions.
- If the announcer is asking for some information from a specific floor, use the microphone in the lift lobby to communicate back to the announcer.
- Keep walking down the staircase till you reach ground floor (basement in some towers).
- Do not go up to the roof of the building.
- Do not take refuge in the toilet.
- Do not return to collect personal belongings.
- If you encounter heavy smoke, crawl on the floor, do not walk.
- Cover nose and mouth with wet cloth if possible.
- Don't stop anywhere between your apartment and the safe assembly area.
- Stay at the assembly area and do not attempt to re-enter the building till all clear is announced.
- Maintain order at the assembly area.
- Co-operate with the ERT members and help them locate or call up missing residents.
- Make sure that your and your family members' attendance are recorded properly.

Instructions – fighting a fire



- On spotting a fire, trigger the fire alarm by breaking the glass window in the manual call point in lift lobby. If the hooter doesn't go off, rush to the next one immediately.
- Notify your ERT block rep or block security. Unless someone has already called up fire brigade, give them a call (dial 101). Don't hang up: give them all the information they ask for, including your phone number (where they can call you to ascertain your identity), landmark etc., and stay on line till they hang up.
- Try to douse the fire, provided you feel that it is safe to do so. Don't use fire extinguishers unless you are trained to do so. Use proper appliances for putting out the fire:
 - Do not use water on electrical fires or fires involving petrol, oil etc.
 - Switch off the main power supply immediately for electrical fires.
 - For kitchen oil fire, switch off the burner.
- If your clothes catch fire - lie down immediately, cover your face with hands and roll yourself on the ground. Never run.
- If somebody else's clothes catch fire – cover him with a blanket or lay him down and roll on the ground.
- If there are combustible materials near the place of fires all such materials should be removed to a safer place. If any materials cannot be removed, these should be cooled by spraying water to put a check on the possibility of any further spread of fire.



ERT VOLUNTEERS – 6-7 MEMBERS per Tower (One to be the Tower captain)

GENERAL OBSERVER – GO- 1 per tower

SPECIAL OBSERVER – SO – 1 per tower

ERT Preparation for Fire Drill

Each block to form a team of 4-6 members, one being designated as block captain

Usually takes between one and two weeks for the preparation:

- Visit each flat, explain the procedures, and collect resident details such as number of members, their contact number, detail of disabled & infirm members, pets, etc

- Identify the General and Special Observer (family) from the same block and explain their roles

- Decide the exact time for alarm to go off (usually co-ordinated with other blocks) and inform the GO & SO (keep it secret from residents)

- Check the fire equipment (PA system, alarm system & audibility of alarms, fire extinguisher including refill dates, low pressure hydrant), assess security preparedness (informal chat with guards)

An updated database of residents along with ERT cap and chalk sticks to be kept together in a bag (ERT Kit) in the ERT member's house at all times, preferably near the main door

Resident database to be used to record attendance, and an attendance sheet along with GO/SO checklists to be submitted to Property Manager for archival

Fire drill SCRIPT

‘Special observer’ initiates the drill by breaking a call point, calls up ERT volunteers & security guards, notes down response times and other items in SO checklist

‘General observer’ makes note of overall evacuation in GO checklist,

ERT starts moving between the floors, banging on doors and marking them with chalk stick once evacuated.

One of them make announcements through PA system,

Residents evacuate to safe assembly area, helped by ERT volunteers & security guards,

Post evacuation completion, attendance is taken, and all clear is given by ERT members

- On hearing an alarm or receiving a call from a resident - talk to other ERT members (same block first, other blocks next) and block security (if you don't have easy access to call up centrex, call up main gate security landline number).
- One person from the team takes position at the basement fire station, finds out which floor is under fire, activates the PA system and starts making announcements. This person also needs to check with security and ensure fireman's switch is activated to ground all the lifts.
- Unless someone has already done so, call up fire brigade and ambulance - don't hang-up till you have provided all the information that are asked (location, landmark, your mobile number etc.)
- Try to identify the location of the fire (also if this is a false alarm), divide yourselves among the floors, go on check the flats. Carry mobile if possible.
- Use staircase 'B' both while moving up and down. Keep next to the wall and don't block the residents evacuating the building. Don't show signs of panic. Monitor the staircase for potential congestion and ensure evacuation is smooth and orderly.

Person on PA system - keep talking:

ask not to panic,

keep stressing need for evacuation: all residents need to come out, nobody should be going back to the flat, nothing to be carried along, everyone needs to walk briskly without crowding the staircase, control the two-way communication judiciously to let residents and ERT volunteers in the impacted floors seek help by talking into the speakers,

optionally, if location of fire is known, use that information to sequence the evacuation - e.g. if fire is in 4th floor, evacuate in this order – 4th, 5th, 6th, 7th, 3rd, 8th, 9th, 2nd, 10th, 11th etc (ascending and descending). Note: this level of co-ordination may not be required always – all the residents can be asked to evacuate simultaneously, unless there are reasons to believe that it will lead to congestion or other confusion.

GENERAL OBSERVER ROLE

General observer is a resident from same or other block, appointed by the block captain, typically from outside the ERT team.

GO's roles include:

- Time check – note down alarm trigger time, time for start of announcement, time for the last person evacuation

- Observe (don't correct) people's behavior on staircase, also ERT behavior.

- Observe audibility of alarm (all floors, within flat), clarity and content of PA announcement

- Observe security behavior

General Observer needs to fill up the observer check list and hand over to the ERT members

General Observer Checklist:

Time when alarm was triggered (if triggered by GO):

Floor where alarm was triggered (if triggered by GO):

Did the hooter go off when alarm was triggered (if triggered by GO):

Was the hooter audible in all floors (if not, note the floor numbers)?

Time when PA system announcement started

Announcements were audible and instructions were clear and easy to

ERT members were seen carrying out all assigned duties (staircase monitoring, floor search, head count, etc.)

Did the residents move down the staircase in a smooth and orderly manner, maintaining a single queue and a continuous, brisk pace?

Did the security personnel actively participate in the drill?

Was there any congestion seen in any of the staircases, or the roads leading to the assembly area?

All elevators were grounded and main floor was kept open

Did the evacuation proceed in a smooth and orderly manner?

SPECIAL OBSERVER ROLE

Special observer is a resident family from the same block, appointed by the block captain, typically from outside of the ERT team. This family plays a very important role and 'pretend' to be under fire. They are responsible for

- Activating hooter by breaking a manual call point, noting the time,

- Calling up one of the ERT members and noting response time,

- Calling up block security and noting response time,

- Time when the low pressure hydrant is activated (jet is opened on a pre-designated point inside the flat, typically the toilet),

- Time when the high pressure hydrant is activated (jet reaches the balcony).

Special observer needs to fill up the observer check list and hand over to the ERT members.

Special Observer Checklist:

Time when alarm was triggered (if triggered by SO):

Floor where alarm was triggered (if triggered by SO):

Did the hooter go off when alarm was triggered (if triggered by SO):

Flat that was 'under fire'

Time when security was called

Time when security arrived

Time when ERT was called

Time when ERT arrived

Time when stretcher was requested

Time when stretcher arrived

Time when internal hydrant was activated

Time when external hydrant was activated

How many floors was the 'volunteer' carried down on the stretcher

Time taken to carry the stretcher down the floors

Stretcher was carried safely and comfortably

SECURITY ROLE – PREPARATION FOR DRILL

Training all security guards:

- Clear instructions on their role during fire, including their own safety

- Fire panel, fireman's switch, usage of fire extinguisher & hydrants

- Wheelchair & stretcher – locations, usage

- Training records (name, training date & status, name of trainer) to be compiled & kept with Property Manager

Equipping them with:

- Torch, gloves, first aid access

SECURITY ROLE – DURING DRILL

On hearing the alarm:

One guard to check fire panel for location of fire, ensure it is real alarm, deactivate fireman's switch,

Other guard to walk up to the floor and be with the affected family

Other block/main gate guards to join. Keep first aid kit handy.

If requested by affected family, arrange for stretcher.

Use only staircase

Instruct/guide evacuating residents to assembly area

After the drill, work with Property Manager to get the call point glasses replaced.

PROPERTY MANAGER – PREPARATION

Facilitate ERT formation – make note of teams (blockwise)

Check all fire equipment – carry out any rectification work that may be needed, make sure first aid kits are ready and accessible

Check ALL interfaces with equipment/service providing agencies (fire panel OEM/supplier, FE service/supplier) & the agreement/arrangement with them

Train security and also other staff (housekeeping, landscaping, management staff) on evacuation

Security training records to be completed at least 2 days before the drill

Line up ambulance on need basis

PROPERTY MANAGER – DURING THE DRILL

Supervise the whole process – fire officer or security supervisor to take overall responsibility

Call up fire station and facilitate their operations on campus

Make sure attendance records and observer checklists are handed to you and archived (need to maintain for at least 3 years)

Replace glasses in the call points broken during the drill

Submit a report to MC in a week's time, mention date for next drill

FIRE SAFETY DO'S AND DON'TS

DO'S	DONT'S
Please be Calm	Do not panic
If trapped shout for help	Do not take shelter in toilets
Before opening door, feel it with the back of your hand.If the door is hot,do not open it.	Never place oil lamps,agarbathis or candles on the floor or near combustible material
Switch off the electrical supply of the fire affected areas	Do not plug too many electrical appliances in one socket
Keep matches,lighters and crackers away from children	Do not lay wires under carpets mats of doorways
Keep your refrigerator away and separated from LPG gas cylinder	Never reach for any article over Fire
Switch off appliances after use and remove the plug from the socket	Never have temporary or naked joints on wiring
Turn off the cylinder valve and burner knob of the gas stove after cooking	Do not wear loose, flowing clothes while cooking.Avoid synthetic clothing
Evacuate Calmly and quickly whenever Fire Alarm sounds	Do not block escape routes
If you encounter smoke during your evacuation stay low to the floor	Do not dispose off lighted cigarette ends carelessly
Always position yourself with an exit at your back before you attempt to use an extinguisher to put out a fire	Do not use extinguisher without knowing how to operate
Cover nose and mouth with wet handkerchief	Do not inhale smoke and fumes
Use near stairs to exit	Do not use elevators (Lifts)
Go to the Safe Assembly Point area	Do not go back to the flat until it is safe
Folow the ERT member's direction	Do not misuse First Aid Fire Fighting equipments

STAY WELL!! STAY SAFE!!

THANK YOU!