श्रेणी SERIES: I

Daman 15<sup>th</sup> January, 2010, 25 Pausa 1931 (Saka)

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GAZET

भारत सरकार

# संघ प्रदेश दमण एवं दीव प्रशासन

U.T. ADMINISTRATION OF DAMAN & DIU

प्राधिकरण द्वारा प्रकाशित
PUBLISHED BY AUTHORITY

## U.T. ADMINISTRATION OF DAMAN AND DIU TOWN AND COUNTRY PLANNING DEPARTMENT MOTI DAMAN

No ATP/DMN/Spi Rules(B)/1294/09/556

Dated:24/ 12/2009

# **NOTIFICATION**

In exercise of the powers conferred by Section 140 of the Daman & Diu Town and Country Planning (Amendment) regulation, 1999 (Read with principal Act Goa, Daman & Diu Town and Country Planning Act 1974), the Administrator is pleased to make the following Special Regulations for Buildings Vulnerable to manmade disaster in whole U.T of Daman and Diu .

- 1. Short Title, Extent and : (1) These rules shall be called as Special Regulations Commencement (Building) 2009.
  - (2) These regulations shall be applicable to the whole U.T of Daman and Diu from the date of its notification in the Official Gazette.
  - (3) These Special Regulations shall be applicable to the building Vulnerable to terrorist attack within the U.T of Daman and Diu.
- 2. Savings: In these rules unless the context otherwise requires, the terms and expressions shall have the same meaning as indicated in the Development Control Rules, 2005 of Daman District. The terms and expressions not defined in those rules have the same meaning as in the Goa, Daman & Diu Town and Country Planning Act, 1974( Act 21 of 1975).

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#### 3. Definitions:

- (i) building enlisted below shall be "The Building Vulnerable to manmade Disasters" like terrorist attack etc.
  - (a) All buildings that have been specified specially identified by the appropriate Authority of the U.T Administration.
  - (b) All Assembly Buildings.
  - Institutional buildings of Government, Semi Government Organizations, Prisons, Courts(having built up area exceeding 10,000 Sq.mt or occupancy over 1000)
  - (d) Institutional Building of registered Trust which are used for Medical or other treatments, Hospitals (having built up area exceeding 10,000 Sq. mt or occupancy over 1,000)
  - (e) Educational Building of School/Colleges (having built up area exceeding 10,000 Sq mt or occupancy over 1,000)
  - (f) Building which attract or are likely to attract large number of people/ public, such as shopping malls, Markets, Religious Building. Large intercontinental Hotels, Monuments, Places of Tourist importance, Exclusive Business Building (like world trade Center, Stock Exchange) etc.
  - (g) Hazardous Buildings as defined in National Building Code.
  - (h) Any other Building specifically categorized by Government/UT Administration.
- (ii) "Appropriate "or "Competent Authority" of Police Department as mentioned in these regulations shall mean Deputy Inspector General of Police, Superintendent of Police, Additional Superintendent of Police and the Chief of Police in districts of U.T of Daman and Diu.
- (iii) "Building Security Advisory Committee" shall mean such a committee of officials and experts specially appointed for purpose of security and general advice to the Concerned Authority or Planning Authority on any Security proposals for new building or for existing buildings vulnerable to terrorist attack.

## 4.0 General Requirements:

- 4.1 Open Spaces for "The Buildings Vulnerable to terrorist Attack" shall be provided with a safe perimeter or blast stand off distance delineated with positive barriers and a system that prevents any attackers approaching within that Zone.
- 4.2 Marginal Distances required as follows:

As per building line prescribed for National Highway State Highway/ Major road or 9m from the boundary of the road, whichever is more.

4.3 Compound wall shall be 2.0 m in height or as specified in these regulations. (The height may be reduced to 0.75 m if line of sight gets affected in which case the balance height shall be made up of vertical strong steel rods).

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- 4.4 At the corner plot the boundary wall for length of 10 mt on the front and side of the intersection shall be constructed of masonry/Concrete up to a height of 0.75m and the balance height shall be made of iron mesh or a railing of suitable size and thickness. However, this provision shall not be applicable to the boundary walls of jails.
- 4.5 The approach to the building shall be provided with sufficient restraints to prevent any direct movement of vehicles towards the structures. There shall not be ordinarily more than two entry points, one for persons & other for materials. The outer perimeter except porch entrance area of the structure shall be protected with an RCC kerb of height not less than that 600mm and thickness not less than 450 mm.
- 4.6 An additional standoff shall be provided to reduce the effect of an explosion at closer distance of not less than that approved by the competent authority of the Police Department.
- 4.7 Parking shall not be provided in the minimum marginal open spaces.
- 4.8 In case of building requiring security control measures, a security outpost shall be provided near the entry control as stipulate in these regulations. It shall be mandatory to provide a Security outpost while constructing the above mentioned public buildings.
- 4.9 The area of control room/security outpost provided in such buildings not exceeding the area as per the requirements of the appropriate authority appointed for this purpose (but not more than 45 sq. mts) shall be excluded from computation of FSI.
- 4.10 The detailed requirement of the Security outpost are as below:
- (a) There shall be one security post not less than 45 sq. mt built up area, if the plot area of such a public building is more than 5,000 sq. mt and 30 sq.mt built up area. If the plot area of such a public building is less than 5,000 sq.mt and shall be located near the entrance gate.
  - (b) Fire resistant material shall be used for construction (two hours fire rating)
  - (c) The security outpost shall have minimum one store room along with the toilet block and two doors. Windows shall be made using bullet proof glass with shatterproof membrane on either side.
  - (d) Latest electronic system for surveillance purpose shall be provided in consultation with the Appropriate Authority of Police Department.

#### Note:

- (i) The area of such type of security outpost shall not be counted in the F.S.I of the building, up to a maximum of 45 sq mt.
- (ii) Such type of construction may be used as the normal security post of the owner for entry control but shall be handed over free of cost for use to Police Department whenever demanded/required during emergencies or for monitoring visits.
- (iii) Minimum clear distance between the main building and the security post shall be 4.50 mt.

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- 4.11 It is mandatory that a control room be provided for use by the owner/occupier controlling and monitoring various Security and Surveillance operations.
- 4.12 The requirements of the Control room shall be as given below:
  - (a) The control room shall be centrally located but shall be away from the material entrance of the building.
  - (b) Control rooms shall be provided with escape routes at suitable locations.
  - (c) Control rooms shall be designed as blast resistant strong rooms and shall be sustaining with full independent provisions for water, electricity a communications. These rooms shall be provided with essential survival kits for least 72 hour period.
  - (d) The walls of control rooms shall be made of either 60 cm thick reinforce masonry using bricks or PCC Blocks of strength not less than 50 Kgs/sq. mt 45 cm thick R.C.C. with a minimum reinforcement of 0.2% or normal water armored with 12 mm thick steel sheets or fiber wrapping of equivalent strength
  - (e) The door shall be provided with steel guard bars or grills. The main entry in the room or the control area shall be provided with steel armored gates having a minimum thickness of 12 mm.
  - (f) The control room should also house the centralized control system of the building. Any window for ventilation shall be suitably protected with bullet proand shatter proof membranes.
  - (g) The control room shall be suitably ventilated and care taken to ensure foolpro safety of this ventilation arrangement .
- 4.13 Adequate water discharging capacity and provisions shall be made to prevent flood in case of damages to overhead water tanks, water supply lines etc.
- 4.14 A proper access control from the terrace to the building shall be provided in the form of locked door with proximity control to be activated and deactivated from the Control of t

# 5.0 Requirements for Electrical and Electronics Systems.

- 5.1 Electronic Surveillance Systems shall be installed at various locations in and out of the building as may be required and with previous approval of the Appropriate Authority Police Department having regard to the degree of perceived risk. A suitable controom shall be provided within the premises for monitoring as mentioned earlier in 11.1 above.
- 5.2 CCTV coverage of all important locations and vital installations shall be done including main gate, reception, utility areas and common open areas on floors, lifts, lobbies and the compound. Perimeter lighting outside the building shall be adequate with focus a critical areas and movable search lights at corners.

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- 5.3 All electronic systems, electrical systems, security systems and minimum services to the Control Room shall be provided with three tier system arrangement consisting of (1) main supply (2) Standby generating system (3) inverter or UPS system, so as to have continuous and interrupted supply and shall comply with the provisions of IS codes. Indian Electricity Rules, 1956 and National building Code.
- 5.4 All provisions of National Building Code in respect of electrification shall be applicable. In addition, the following requirements shall also apply regarding the illumination levels etc. in different areas in respect of security:-
  - (a) Maximum to average ratio of luminance should not be more than 3:1.
  - (b) Luminance level for vertical illumination at 1.5 m above ground should be equal to horizontal luminance level at that point to enable clear detection.
  - (c) The design should be such that uniform lux level is maintained considering the utility of the area which is dependent on the following points and is to be decided by its previous history and the environment:
    - · Crime status of area
    - Nature of site (Business, malls, restaurants)
    - Degree of obstruction (Landscape designs, building configuration)
    - · Ambient brightness of surrounding area.
    - Impacts on surrounding areas (stray light from security lighting trespass)
  - (d) In controlled sites, public spaces, important places, the illumination level for different areas may be maintained as per Table No 4 in Section 1 of part 8 (building services) of the National building Code.
  - (e) Light Controls: These should be of timer clock, photo control, dimmers and motion detectors. Lighting control should be energized lighting when ambient natural light level is less than 1.6 times the minimum horizontal security luminance value or 15 lux whichever is higher.
  - (f) For façade lighting the illumination level on building faces should be kept as required with an arrangement to increase or reduce this whenever essential on the situation and vital nature of the building. There should be rotating search/flood lights for very important buildings.
  - (g) For vital buildings on the compound wall or on the fence, electrical fencing of lower voltage(below 30 volts) can be proposed with sensor arrangement.
  - (h) In addition to the main supply to the license through a transformer and /or a stand by generating system to fulfill minimum basic requirements in case of failure of the main supply an invertors or UPS system for the centralized security system & for access control shall be provided. The generating system and transformer should preferably be provided outside the building with necessary security and the electrical cables should be underground/ metallic covered.

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(i) The usual provisions for maintenances of the Power Supply System and luminaries shall be properly scheduled for periodical servicing tests, inspections, repairs, security audits for electrical installations. Etc.

#### 6 Fire requirements:

All provisions of fire in the National Building Code and the existing D.C regulations shall be complied. In addition the following provision shall be made against fire.

- (a) Provisions of automatic dampers to the main fresh air dust at individual floors.
- (b) Protection of entire area with sprinkler system.
- (c) Provision of micro processor ceased wireless addressable detector system with connectivity to the nearest Police Station and fire Station including basements and mezzanine floors.
- (d) Florescent signage showing directions of escape routes/staircases.
- (e) We risers and sprinkler systems shall always be kept on automation mode.
- (f) Provisions of 10/15 Kg capacity water bases mist system 300 bar operating pressure portable extinguisher near the staircase or lift lobby on every alternate floor.
- (g) Cooking below or within the building shall be disallowed and provision only made for heating with oven, hotplate, tea/coffee machine, etc in the pantry. However, this restriction shall not apply to star hotels, Hospitals and other buildings with core functions requiring food service, in which case the kitchen shall be provided with adequate precautions as directed by the Fire officer and designed for 4 hour fir resistance. It is preferable to carry/out cooking in a detached building.
- (h) Fire retardant coat shall be applied to all combustible partitions.
- (i) Provisions of minimum two open able windows shall be made on each face of the building.
- (j) All windows and glazing on outer walls shall be provided with shatter proof protection film.
- (k) In addition any more stringent provisions in existing DC regulations and the guidelines issued in National Building code Part 4 Fire and Life Safety shall be followed.

# 7.0 Requirements for quick Evacuation during emergencies:

- 7.1 Adequate provision within the building for quick and safe evacuation shall be made in accordance with the standards of National Building Code including number and width of exit doors, passages to be used as escape routes, staircase, longitudinal and cross aisle and passages in the offices with built up furniture.
- 7.2 All external cladding shall be provided with shatter proof membranes to the glass walls and open able shutters at intervals for access to rescue teams and to release air pressure due to any blast.
- 7.3 Maps of exit routes shall be displayed at various spots within the building.

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- 7.4 A separate entry and separate exit are to be provided for each wing of a building having different activities i.e. Malls, Multiplexes, Offices, etc.
- 7.5 Emergency light operation on UPS or inverters lasting for 48 hours shall be provided.
- 7.6 A trained safety squad shall be provided for monitoring quick and safe evacuation in case of emergency. Every building shall have a building-specific safety manual to be got approved from Fire Officer and Police Department containing the duties & responsibilities of various squad members/floor marshals etc.
- 7.7 The following provision shall be made in respect of quick and safe evacuation during emergencies outside the building and within the compound of premises:
  - Additional exit exit routes in case of emergencies to be provided on the rear side, which could be normally kept closed and used only during emergencies.
  - Provision of direct outlets for tall buildings by way of Skywalks across the open areas discharging the persons outside, additional external staircases and fire escapes etc.
  - (c) Every tall building should store canvas vertical chutes for vertical descent from upper floors.
  - (d) In addition ,any special provision required by Fire Authority shall be made.

## 8.0 Blast resistant design of buildings.

- 8.1 the building shall be designed for blast resistance in accordance with the guidelines given in I.S. 4991-1968.
- 8.2 The following requirements should be taken into account in planning and design:
  - (a) Provisions of optimal combination of mass stiffness in the building structure, enough structural redundancy in the building members strength proportioned as per capacity design concept consideration of reversal of loading, strong connections, etc.
  - (b) The building should be designed with at least one corner/critical column removed, without collapse. For critical and complex structures, progressive collapse shall be examined by detailed non-linear and dynamic analysis under the application of blast loading in order to demonstrate the robustness of the design chosen.
  - (c) Important building shall not be provided with open stilts. All the exposed columns shall be armored with 12mm steel plates up to 2m height staring from 15 cm. below ground level or wrapping of suitable fiber material of equivalent strength to prevent column collapse when shattered.
  - The wall facing a direct vehicular approach shall be of R.C.C. 45 cm thick suitably reinforced.
  - (e) The main grid beams at the first floor level shall be provided with equal reinforcement at top and bottom to cater to any stress reversal.
  - (f) The minimum thickness of stilt members in the ground floor and floors below shall be of fire resistance of 3 hours as specifies in I.S. 456.

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- (g) The various architectural control shall be so provided that the building is away fro hub activities. Roads should not lead straight into the building in question. The number of roads to the building must be minimum Provision for effective entry control for persons, vehicles and materials, provision of spikes to puncture tyres preventing inbound vehicles from using outbound lanes, provision of passive and active barriers etc. shall be made.
- (h) The parking lot should be located away from as high rise building with proper entry control and away from the standoff zone.
- (i) Parking under the building and in the basement within its internal courtyard is to be prohibited to the extent possible and where unavoidable visibility in and out of the garages must be maximized and entry should be strictly controlled as it is for approaches /entry in to the building. It shall be ensured that the ramps for the basement shall not start directly from the front open space of the building.
- (j) Orientation of the building should be such that walls with glazing are perpendicular to street side façade. Reentrant comers must be avoided must be avoided on the building exterior.
- (k) Provision shall be made for a separate depository room away for the main building for depositing the personal baggage of visitors.
- 8.3 The various other provision detailed in the site and building envelope mitigation measures as per National Building Code of India 2005 or its latest version should also be given due consideration as may be feasible and applicable for a particular site.

#### 9.0 Other Provisions

- 9.1 All existing building considered vulnerable to terrorist attack shall also make provision for compliance with these regulations except those which are not applicable or feasible or possible to be complied with in the opinion of the Planning Authority or the Competent Authority of the Police Department. This includes retrofitting as may be required to comply with these provisions.
- 9.2 Owners/Occupier of the premises shall have his own security management administration with trained personnel, execution procedures, fire & evacuation drills, security audits & a manual containing various requirements and procedures for security control with properly defining duties and line of control and directions which shall be got approved from the Police Department.
- 9.3 Proper monitoring and periodical security audit of S&SS system shall be done and its report shall be submitted to the Specified Authority of the Police Department.
- 9.4 The owners/occupies of such specified building shall assist the Police or State authorities in arranging and carrying out third party security Audit at specified intervals as directed.
- 9.5 For Hazardous building the provision of D.C. Regulations and the National Building Code, whichever are more stringent, shall apply. In addition, these special Regulations, shall also apply to such buildings as may be found feasible and necessary in the opinion of the Planning Authority and the Competent Authority of the Police department.

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- 9.6 No relevation from these Security Regulations is permissible.
- 9.7 The developer shall furnish 3 copies of approved digital maps of the building with all account modifications before issue of occupation certificate.

Fire Fighting Equipments, the following devices should be installed.

- Indoor, out Door Cameras (CCTV) with proper lighting, Monitors and data recording facility covering all important points esp. Entry/exit, Parking, litterbins and other critical areas
- 2. Door Frame Metal Detector (DFMD)
- 3. Hand Held Metal Detector (HHMD)
- 4. Search tool kit (Torch, Extension Mirror, Prodder, Screw driver set, Nylon Cord etc.)
- 5. Under vehicle search mirrors.
- 6. Search Lights.
- 7. X-ray Baggage Scanner
- 8. Automatic/Manual Barrier/Slide Gate
- 9. Emergency P.A. System
- 10. Intercom/Wireless facility at all important points.

Apart from these equipments, the following features should also be provided.

- 1. Stand-off distance
  - Minimum stand-off of the mall building from the public roads should be maintained to help in vehicle management during rush hours/any contingency.
- 2. Security Control Room.
- 3. Safe Room/cloak Room near the entrance for the deposit of bags.
- 4. Voice recording capability to monitor threat calls.
- Minimum litterbins to be kept and must be clearly covered and monitored by CCTV systems.
- 6. All the staffs should be provided with Bio-metric identity card to avoid unauthorized access to critical areas.
- 7. They should prepare CMP and conduct period mock drills.

This Notification will take effect from the date of publication in the Official Gazette of Daman and Diu.

By Order and in the name of the Administrator, DD and D&NH

Sd/-Joint Secretary (UD) Daman & Diu

## UT Administration Of Daman and Diu Urban Development Department Daman

No.ATP/DMN/Slum/3145/2012/5/1

#### OFFICE MEMORANDUM

The Parliamentary Standing Committee on Urban Development(2007-08) presented thirty second report in 14th Lok Sabha containing recommendations at Serial No.19 (34th report) in paragraph No.4.26(32nd Report) on vertical development of Slums. The Committee in its recommendations mentioned that with rapid pace of urbanization, land space in cities has been constantly shrinking and the horizontal development of slums devoid of basic facilities/amenities, open spaces, proper roads etc. The Committee conveyed its recommendation to the Ministry of Housing & Urban Poverty Alleviation, GOI and urged to adopt approach of vertical development of slums areas with provisions of all basic amenities. Accordingly, the Ministry of HUPA has informed vide its letter No.G-20011 /13/2007-BSUP/JNNURM(Vol.II) dated 16.07.2010 to this UT Administration to take into account the approach of vertical development for the Slum up gradation projects under IHSDP and projects of housing schemes for EWS as recommended by the Parliamentary Standing Committee.

In this context, it is hereby directed that all agencies including Municipalities in UT of Daman and Diu implementing the slum up gradation projects under IHSDP or any other housing scheme for EWS should explore the feasibility of vertical development of slums areas with provisions of all basic amenities, open space, proper roads etc. and should be implemented in letter and spirit within the norms of DC's Rules.

This is issued with the approval of the Administrator of Daman and Diu and DNH vide diary 7984 dated 17.10.2012.

Deputy Secretary(UD)

Dated: 19/10/2012

Copy to:

All concerned Agencies including OIDC implementing the Slums up gradation programmes and Housing Schemes of EWS in UT of Daman and Diu for compliance.

Copy also forwarded for kind information to:-

The Director (JNNURM), Ministry of Housing & Urban Poverty Alleviation, GOI, JNNURM Directorate, Nirman Bhavan, New Delhi in reference to its letter No. G-20011/13/2007-BSUP/JNNURM(Vol.II) dated 16.07.2010 and 31.08.2012

