

Multi-Dwelling Residential Units – Version 3.0



Addendum and Clarifications on IGBC Green Homes Rating System (Version 3.0)

(w.e.f. 01 November 2025)

SD CR 4: Universal Design

- 1. The project shall adhere to the accessibility design requirements outlined in Part 3, Annex 2 of the National Building Code (NBC) for persons with disabilities.
- Parking provisions for differently abled users shall comply with Section B-3.5, mandating a clear space of 3900 mm × 5400 mm. For shared parking arrangements, the required clear space for two parking slots shall be 6300 mm × 5400 mm).

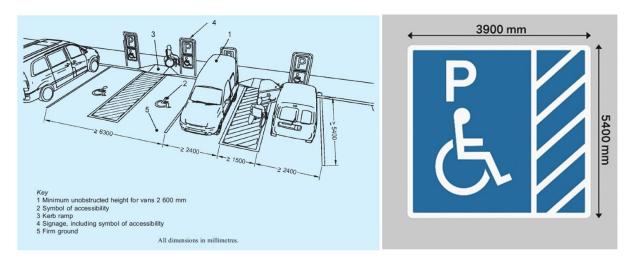


Figure 1 Accessible Parking spaces with one Shared Transfer Area (Source: NBC, 2016)

3. The project should maintain uniform floor levels across common and external areas to ensure smooth, hindrance-free movement. Ramps, with handrails provided on at least one side, should be incorporated as needed. The design and specifications of the ramps should follow Table 10 of Part 3, NBC 2016.

SI No.	Level Difference	Maximum Gradient of Ramp	Ramp Width mm	Handrail on Both Sides	Other Requirements
(1)	(2)	(3)	(4)	(5)	(6)
i)	150 mm to 300 mm	1:12	1 200	√	_
ii)	301 mm to 750 mm	1:12	1 500	√	Landings after every 5 m of ramp run
iii)	751 mm to 3 000mm	1:15	1 800	\checkmark	Landings after every 9 m of ramp run
iv)	More than 3 000 mm	1:20	1 800	\checkmark	Landings after every 9 m of ramp run

Figure 2 Requirement for Ramps (Source: NBC, 2016)



Multi-Dwelling Residential Units – Version 3.0



4. For ramps designed with multiple flights, the project should meet the landing requirements outlined in NBC 2016.

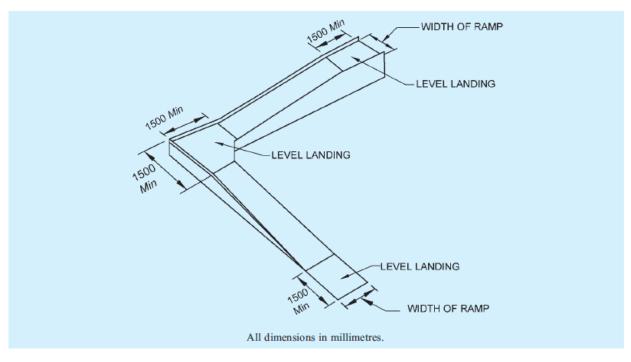


Figure 3 Illustration on Landing Details (Source: NBC, 2016)

5. Toilets for differently abled users shall be designed in accordance with Section B-9.2 of Part 3, NBC 2016, specifically following **Type A and Type B configurations**. Please note that toilets designed only for ambulant disabled users are not eligible for credit compliance.

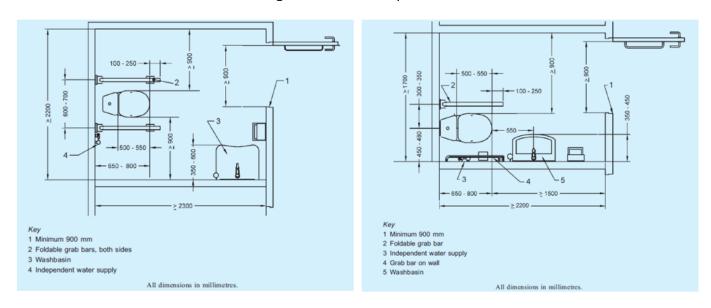


Figure 4 Type A and Type B toilets for Differently Abled (Source: NBC, 2016)



Multi-Dwelling Residential Units - Version 3.0



Stretcher lift requirements should meet the Car size requirement as per NBC 2016. The snapshot of the same is attached below.

								Tab	le 13 —	(Concl	uded)									
SI No.	No. of Passengers	Rated	Rounded off Rated	Car	Size	2P Hospital Bed / Stretcher Lifts with Machine TSPD					hine Roo	n: Shaft	Sizes							
			Load			Door	Rated Speed ≤ 1 m/s		0.6 m/s ≤ Rated Speed ≤ 2.5 m/s		3.0 m/s ≤ Rated Speed ≤ 3.5 m/s		4.0 m/s ≤ Rated Speed ≤ 5.0 m/s		Rated Speed = 6.0 m/s		7.0 m/s ≤ Rated Speed ≤ 8.0 m/s		9.0 m/s ≤ Rated Speed ≤ 10.0 m/s	
							Shaf	t Size	Shaf	t Size	Shaf	t Size	Shaf	1 Size	Shaf	t Size	Shaf	A Size	Shaft	1 Size
		kg	kg	Width	Depth	Width	Depth	Width	Depth	Width	Depth	Width	Depth	Width	Depth	Width	Depth	Width	Depth	Width
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
i)	15	1 020		1 000	2 400	800	1 800	3 000	1 800	3 000										
ii)	20	1 360		1 300	2 400	1 200			2 300	3 000	2 350	3 000	2 350	3 000	2 350	3 000	2 500	3 000	2 500	3 000
iii)	26	1 768	1 800	1 400	2 550	1 200			2 500	3 050	2 500	3 050	2 500	3 050	2 500	3 050	2 600	3 150	2 650	3 150

Figure 5 Car Size requirements for Stretcher Lift (Source: NBC, 2016)

7. Visual warning signages shall comply with Annex B of NBC 2016 (Part 3). All signages must be installed and painted in accordance with these specifications. For example, signages should be placed at a height of 2.1 m, and accessible parking spaces should be appropriately marked/painted on the floor surface.

SD CR 5: Green Parking Facility

1. Ventilation for Basement

Basement ventilation shall be designed in accordance with Part 8 of NBC 2016, Section 3 — Air Conditioning, Heating and Mechanical Ventilation. Please note: The vent openings specified in Part 4, which are designed for fire and smoke control, shall not be considered for meeting normal ventilation requirements or for credit compliance.

2. Electric charging facility

For providing EV charging facilities in common areas or visitor parking, the project may refer to the table below to determine the equivalent EV parking calculation, based on the "Amendments in Model Building Bye-Laws (MBBL–2016) for Electric Vehicle Charging Infrastructure" (February 2019). The project team should ensure that the total number of parking spaces is considered appropriately.

Table 2: Charging Infrastructure requirements for PCS (commercial use) **Building Type** Ownership of Station Service provider Commercial Metering and Payment Connection and Metering as per min. requirements specified in MoP Guidelines (refer Annexure IV) Types of Charger PCS service providers shall install additional number of kiosk/chargers beyond the minimum specified requirements to meet the ratio of charging points as Additional chargers prescribed below (by the type of vehicles) PV (Buses) Norms of Provisions for SC - each 3 EVs 1 SC - each 2 EVs 1 SC - each 2 EVs 1 FC - each 10 EVs charging points FC - each 10EVs

Figure 6 Equivalent EV consideration (Source: MBBL, 2019)

Projects shall also comply with the required charger connector types for Fast Charging (FC) and Slow/Moderate Charging (SC). For identifying charger types, please refer to *Annexure II of the "Charging Infrastructure for Electric Vehicles (EV) – Revised Consolidated Guidelines and Standards" issued by the Ministry of Power (14 December 2022)*.

Please note that a charger installed in a **dedicated parking space for a specific resident or tenant shall be counted as only one EV**.



Multi-Dwelling Residential Units - Version 3.0



Charger Type	S. No.	Charger Connectors*	Rated OutputVoltage(V)	No. of No. of Connector guns (CG)	Charging vehicle type(W=wheeler)	
	1	Combined Charging System(CCS) (min 50 kW)	200-750or higher	1 CG	4W	
Fast	2	CHArgedeMOve (CHAdeMO) (min 50 kW)	200-500or higher	1 CG	4W	
	3	Type-2 AC (min 22 kW)	380- 415	1 CG	4W, 3W, 2W	
	4	Bharat DC-001 (15 kW)	48	1 CG	4W, 3W, 2W	
Slow/ Moderate	5.	Bharat DC-001 (15 kW)	72 or higher	1 CG	4W	
Moderate	6.	Bharat AC-001 (10 kW)	230	3 CG of 3.3 kW each	4W, 3W, 2W	

Figure 7 Classification of Charger Types as per Ministry of Power (MoP) [Note: Project shall consider the latest revisions as per MoP]

WE MR 1 & CR 1: Water Efficient Plumbing Fixtures

Alternative Compliance:

In the absence of cutsheet for 4 bar pressure. The project team should submit the technical cutsheet at 3 Bar pressure and submit the supplementary calculation to indicate the flowrates at 4 Bar pressure along with individual cutsheet of the water fixture.

Project can use the following formula to calculate the approximate flowrates based on fluid dynamics:

$$Q_2 = Q_1 \sqrt{\frac{P_2}{P_1}}$$

Where, $Q_1 \& P_1$ are the known flow rate (Q_1) and known pressure (P_1) . The resulting flow rate (Q_2) is calculated for the pressure applied (P_2)

Note: The use of flow regulators is acceptable to show the compliance. The project must demonstrate the flowrate deduction at 4 Bar pressure only. Also, the flowrates will be verified during the Site Audit at the time of Certification.

Multi-Dwelling Residential Units - Version 3.0



WE MR 2 & CR 6: Rainwater Harvesting

For Rainfall Data: Indian Metrological Department data → Customized Rainfall Information System (CRIS) → Rainfall Statistics → District Wise Rainfall Last 5 years

Link: https://hydro.imd.gov.in/hydrometweb/(S(5gpg5f310b5rqcb2clu35k55))/DistrictRaifall.aspx

Consider the percolation/infiltration rate as per soil type as per "Manual on Artificial Recharge of Ground Water, CGWB (2007)"

Sl. No.	Class	Rates	hr in	Remarks				
		Inches Millimeters						
1.	Very Low	Below 0.1	Below 2.5	Highly clayey soils				
2.	Low	0.1 - 0.5	2.5 - 12.5	Shallow soils, clay soils,				
				soils low in organic matter				
3.	Medium	0.5 - 1.0	12.5 - 25.0	Sandy loams, silt loams				
4.	High	Above 1.0	Above 25.0	Deep sands, well aggregated				
				soils				

Figure 8 Infiltration Rates (Source: CGWB, 2007)

Note: Please exclude the capacity of desilting chamber/ oil and grease pits in the calculation of Rainwater Harvesting Capacity.

WE CR 4: Recycle & Reuse of Waste Water

1. Waste Water Treatment: (2 points) - No Changes.

2. Waste Water Reuse: (2 points)

Reuse treated waste water for flushing, landscaping, car washing or any other purposes, as applicable. The treated grey water for reuse must conform to the water quality standards as per the CPCB norms or local Government Authority. The treated waste water reuse must be 25% of the treated water generated.

Points are awarded as below:

Percentage of treated waste water used	Points			
Upto 50%	1			
Upto 75%	2			

MR CR 2: Optimization of Structural Design

Note: In the advent of alternate construction technology such as monolithic construction, the structural optimisation report should indicate the overall optimisation of resources (cement & steel) for both structural and non-structural elements compared to the conventional RCC construction.



Multi-Dwelling Residential Units - Version 3.0



EE MR 2 & CR 1: Minimum and Enhanced Energy Performance

1. Prescriptive Approach:

Must meet the mandatory requirement of U Value of wall, U value of roof, Glazing properties as per IGBC latest addendum. Also, the projects must submit the RETV calculation to meet mandatory requirement.

Note: The projects using standard monolithic construction (Mivan/RCC wall) will have U value more than 2.8 W/m².K. Hence, these projects must attempt through simulation approach for mandatory and credit compliance.

RETV Calculation of all the Buildings

Note: In case of multiple buildings, The weighted average RETV of the total residential project shall be computed using the formula given in section 6.4.2 of ENS Part-2 (2021)

$$RETV_{weighted\ average} = \sum_{i} (RETV_{bldg} \times EA_{bldg}) / EA_{total}$$

$$= \frac{(RETV_{bldg1} \times EA_{bldg1}) + (RETV_{bldg2} \times EA_{bldg2}) / + (RETV_{bldg3} \times EA_{bldg3})}{(EA_{total})}$$
Where,
$$RETV_{weighted\ average}: \text{ is the combined RETV of the overall residential development project}$$

$$RETV_{bldg}: \text{ is the individual RETV of each residential block}$$

$$EA_{bldg}: \text{ is the total envelope area of the individual building or the total residential project}$$

$$EA_{total}: \text{ is the total envelope area of the individual building or the total residential project}$$

2. Performance Approach:

The project can offset the on-site renewable energy generation in the overall energy savings calculation for credit compliance.



Multi-Dwelling Residential Units - Version 3.0



RHW MR 1 & CR 1: Minimum Daylighting & Enhanced Daylighting

1. Prescriptive Approach:

The glazing factor calculation is only applicable for room space which are directly exposed to openings. Please find the below illustrations to understand the compliance area consideration.

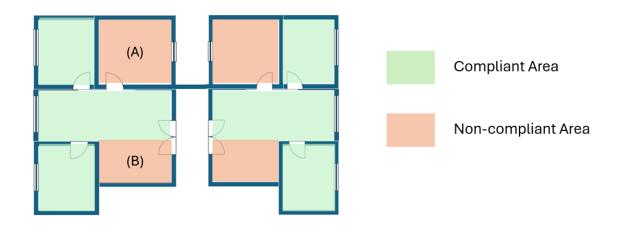


Figure 9 Sample Compliant Area applicable for Prescriptive Approach

Note for Interpretation:

Space A: Non-compliance is observed due to the obstruction angle not meeting the required criteria. Space B: Non-compliance is observed due to the absence of a direct line of sight to the opening.

Note: Openings having opaque shutters cannot be considered for Daylight compliance

2. Simulation Approach:

The project shall demonstrate compliance with the prerequisites specified in the IGBC Green Homes Rating System (Version 3.0).

Please Note: Compliance shall be demonstrated for all dwelling unit types, covering best-case, average-case, and worst-case floor level scenarios, to meet both mandatory and credit requirements. The Daylight illumination range for compliance is 110 -2200 lux.

Example: If the project has 2 BHK units of same type, the project must conduct simulation at lowest, mid and top floor level (as illustrated in Fig 8)

Note for Simulation approach: Projects using customizable tools (e.g., Rhino with Honeybee plug-in) or any software that does not generate a comprehensive report must submit the complete simulation files for review.

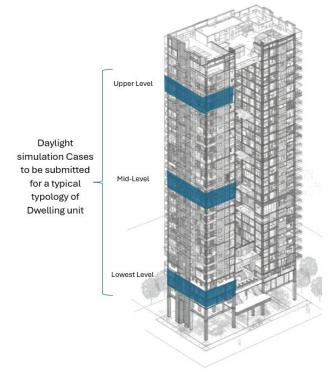


Figure 10 Sample Illustration for identification of scenarios



Multi-Dwelling Residential Units - Version 3.0

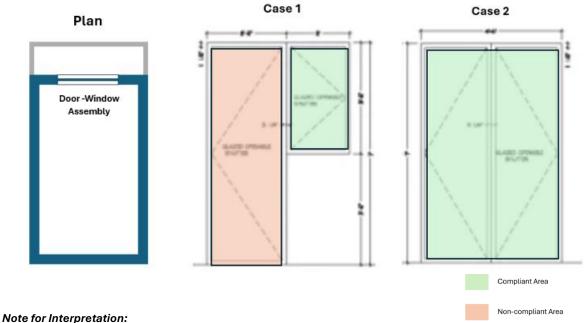


RHW MR 2 & CR 2: Ventilation Design & Enhanced Daylighting

Natural Ventilation Spaces

Note: Doors having intermittent use cannot be considered for Fresh Air compliance such as Main Door. Please find the sample illustration given below for your reference.

Sample Room:



- Case 1: Only the Window will be considered for ventilation compliance calculation.
- Case 2: The whole French Window will be considered for ventilation compliance calculation.

RHW CR 3: Cross Ventilation

Rooms can show the compliance for the space if shall have an opening (ventilators/ windows) to the outdoor environment, in at least two of the orientations.

Regularly occupied spaces with an opening to the outdoors only in one orientation can also be considered for calculations, if there is a permanent opening to the adjoining room which meets cross ventilation criteria (refer figure no 11).

Note: For cross ventilation, the naturally ventilated area shall extend between the openings separated by a distance not greater than five times the height of the ceiling (<5H, where H is the clear height of the Ceiling)



Multi-Dwelling Residential Units – Version 3.0



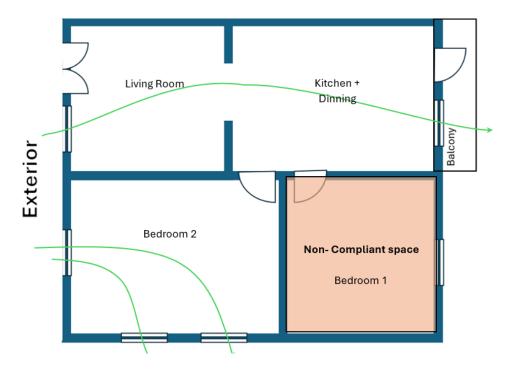


Figure 11 Sample Cross Ventilation

ID CR 1.1 – 1.4: Innovation & Exemplary Performance

Compliance Options:

Exemplary performance above requirements set by the IGBC Green Homes rating system and/or innovative performance in green homes categories not specifically addressed by the IGBC Green Homes Rating System.

Documentation Requirement (Only for Innovations):

- Detailed narrative highlighting:
 - Intent, requirements, proposed potential strategies and technologies to be adopted to achieve the respective innovation credits. Strategies adopted must be significantly better than standard sustainable design practices.
- Tentative quantitative performance improvements, comparing baseline and design case.
- Other supporting documents such as drawings, illustrations, cut-sheets, test-reports, etc., as applicable.

--- End of the Report ---