

How to design *an interior*

that fits your place, your climate and your everyday life.

01

LIGHT

Daylight, shade and moving air

02

ROOMS

Cooking, sitting, sleeping and bathing

03

MATERIALS

Choose for use and exposure

04

SAFETY

Services, escape and the final check

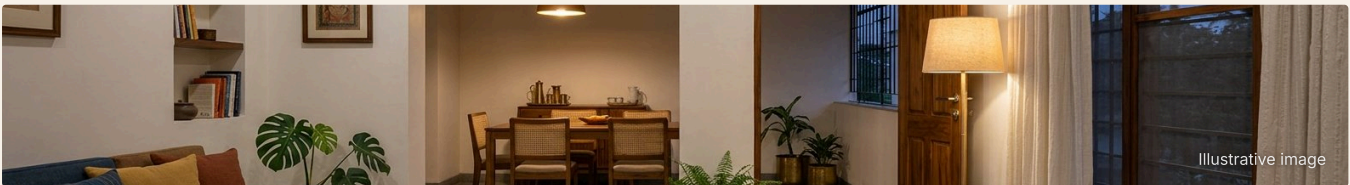
Before the finishes.

Start with the place and the people. Then make room for what they do.

01	Light and air	03
02	Kitchen	07
03	Living and dining	11
04	Bedroom	13
05	Bath	15
06	Materials	18
07	Safety	21
08	Checklist	24

HOW TO READ THIS BOOK

Numbers carry their source below. Model rules, accessibility guidance and comfort recommendations have different uses. Photographs are illustrative; measured drawings are original SVGs.





CHAPTER 01

Light and air

A room belongs to its climate before it belongs to a colour chart. Watch the sun, open the windows and find out where the breeze can go.

Source: ENS 2018, Annexure 2, Figure 5 and Table 4. ENS 2018, Annexures 6–7: orientation and external-shading calculations. The accompanying design and material-selection suggestions are editorial proposals to test on site.

Same room, *another climate.*

The place changes how you shade and open a room. These opening fractions are model provisions, not a promise that the room will feel cool.

01

Hot and dry

Ahmedabad, Jaisalmer

Shade the opening. Test night air before relying on heavy walls to stay cool.

1/10

of the floor area as opening,
at least

02

Warm and humid

Mumbai, Chennai, Kochi

Keep useful breezes moving. Protect open windows from driving rain.

1/6

of the floor area as opening,
at least

03

Composite

New Delhi, Hyderabad, Rajkot

Change with the season: shade summer sun and admit useful winter sun.

1/8

intermediate-climate model
fraction

04

Temperate

Bengaluru

Balance daylight and ventilation against the buildings around you.

1/8

intermediate-climate model
fraction

05

Cold

Leh, Manali, Srinagar

Keep winter warmth. MBBL overrides its cold fraction with floor area/10.

1/12

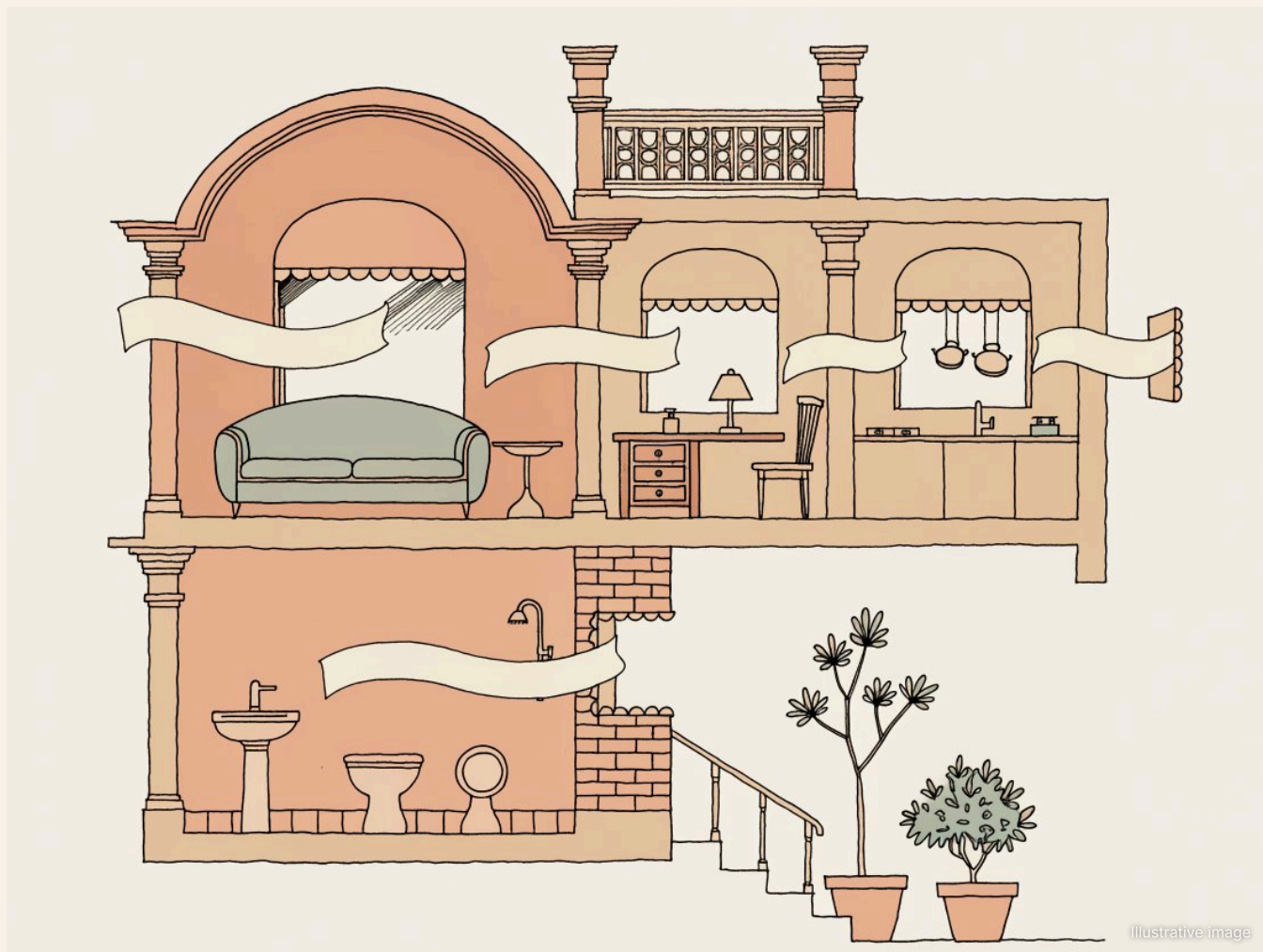
cold fraction before the
MBBL override



illustrative image

Let light in, *let used air out.*

Glass, an opening and an exhaust fan do different jobs. Draw all of them, along with the building outside your window.



Living, bedroom and study. Keep furniture away from the air path. Place a desk where daylight reaches the page without a harsh reflection. Test shade, curtains and neighbouring walls. Doors do not count in the model opening calculation; fixed glass does not count as openable area.

Kitchen and bath. Show an outdoor exhaust route and where replacement air enters. A kitchen needs 25% more opening than its climate fraction, then the floor-area/10 check. Do not count a window as proof of exhaust performance.

Light for *the task.*

Lux measures light arriving at a surface. A brighter bulb elsewhere in the room may still leave your book in shadow.



200_{lux}

Kitchen minimum illumination,
where applicable

Eco Niwas Samhita 2024 (BEE), Table 39

100_{lux}

Bathroom minimum illumination,
where applicable

Eco Niwas Samhita 2024 (BEE), Table 39

300_{lux}

Reading/study minimum
illumination, where applicable

Eco Niwas Samhita 2024 (BEE), Table 39

Ask the designer to check the task surface and glare. These entries belong to the ENS framework; they do not set a lamp count for every home. Confirm applicability before treating them as requirements.



CHAPTER 02

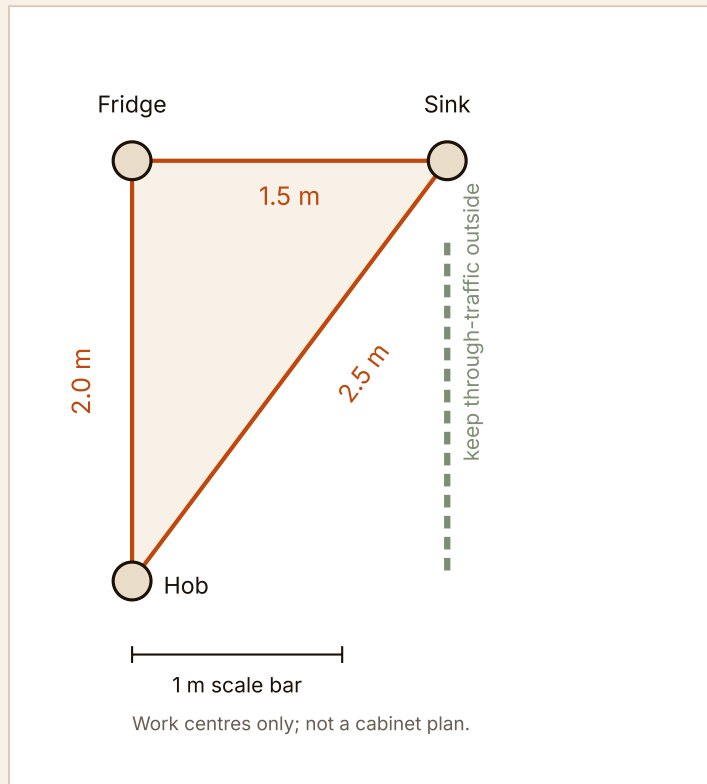
Kitchen

A kitchen is a sequence: bring food in, store it, wash it, prepare it, cook it and serve it. Make room for the people and the open doors along that route.

Source: NKBA Kitchen Planning Guidelines, Guidelines 3, 6–7, 11–12 and 17. Published comfort guidance, not Indian law.

The triangle *is a test.*

The fridge, sink and hob are work centres. Join them on the plan, then check where people pass and where appliance doors open.



1.2–2.7 m

Approximate recommended range for each leg

≤ 7.9 m

Approximate recommended total

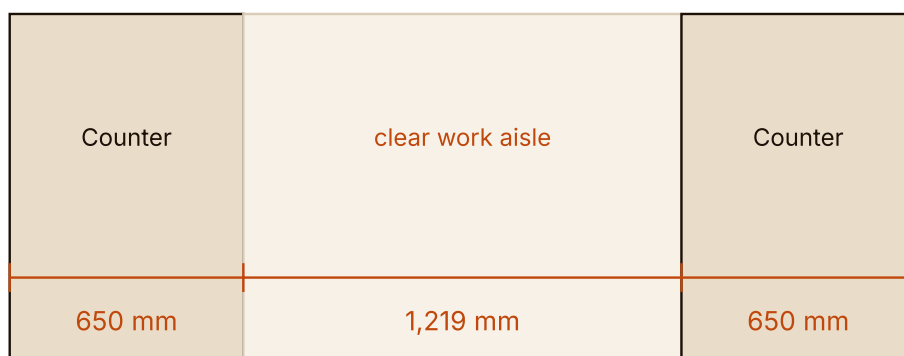
Example: $1.5 + 2.0 + 2.5 = 6.0$ m. Each leg and the total fit the recommendation. This does not check the aisle, landing surfaces or storage.



An aisle is *not a walkway.*

Standing at the counter takes more room than walking through. Measure between opposing counter fronts, tall cabinets or appliance fronts, whichever restrict the aisle.

A multiple-cook aisle is working space



2,519 mm inside width

1,000 mm scale bar

Cut across counters; their length is not specified.

Pick the right clearance. NKBA recommends at least 1,067 mm for a one-cook work aisle, 1,219 mm for multiple cooks and 914 mm for a walkway. Test open drawers, the fridge and the oven as well.

Read the example. The counter depths are assumed actual product dimensions. A 2,500 mm room leaves 1,200 mm between them, which is 19 mm short of the multiple-cook recommendation. Measure your own units before ordering.



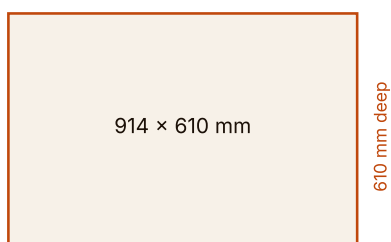
Leave a place *to put things down.*

Beside the sink

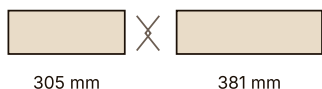


Sink omitted: fit the selected product between.

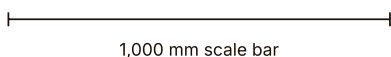
A clear preparation surface



Beside the hob



Hob omitted: follow its installation instructions.



Landing widths are to scale; strip depths are schematic.
Qualifying NKBA landing surfaces are at least 406 mm deep and 711–1,143 mm above the finished floor.

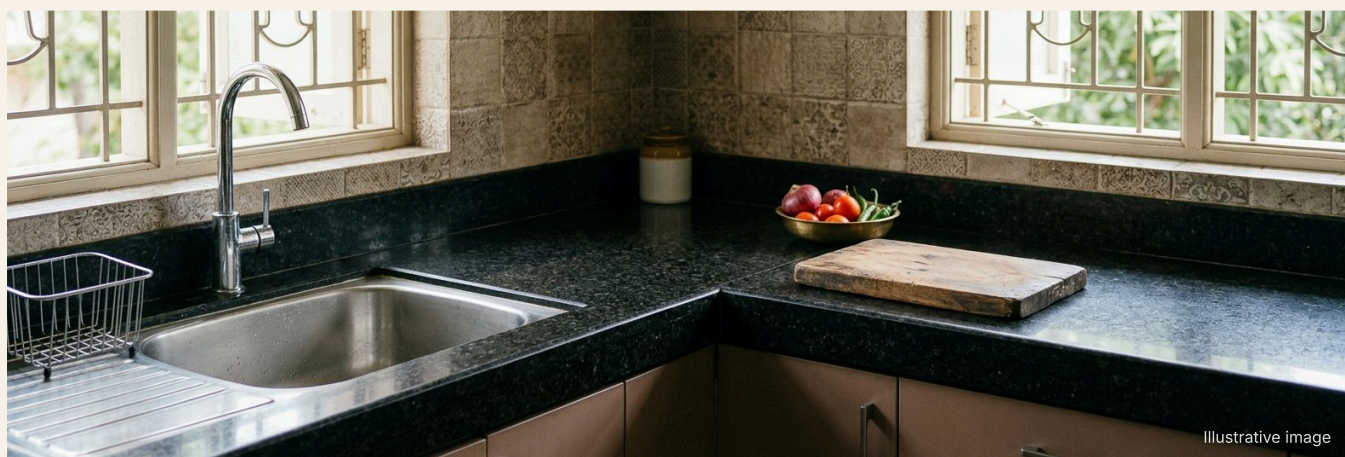
A hot pan and a washed vegetable need a clear surface. Storage must not use up the worktop that makes cooking possible.

Sink landings. Landing widths are to scale; strip depths are schematic. Qualifying NKBA landing surfaces are at least 406 mm deep and 711–1,143 mm above the finished floor. Keep the recommended space on each side. Use the actual sink and draining-board drawing to fit the counter.

Preparation. Keep the preparation surface clear and immediately beside the sink. Plan grain jars, steel pots, wet utensils and waste storage below or beside it.

Hob landings. Fit the selected hob between the landing surfaces. Follow its instructions for support, heat and service access.

There is no universal counter height here. Test the work surface with the people who will use it and confirm appliance and fabricator details.



Illustrative image



CHAPTER 03

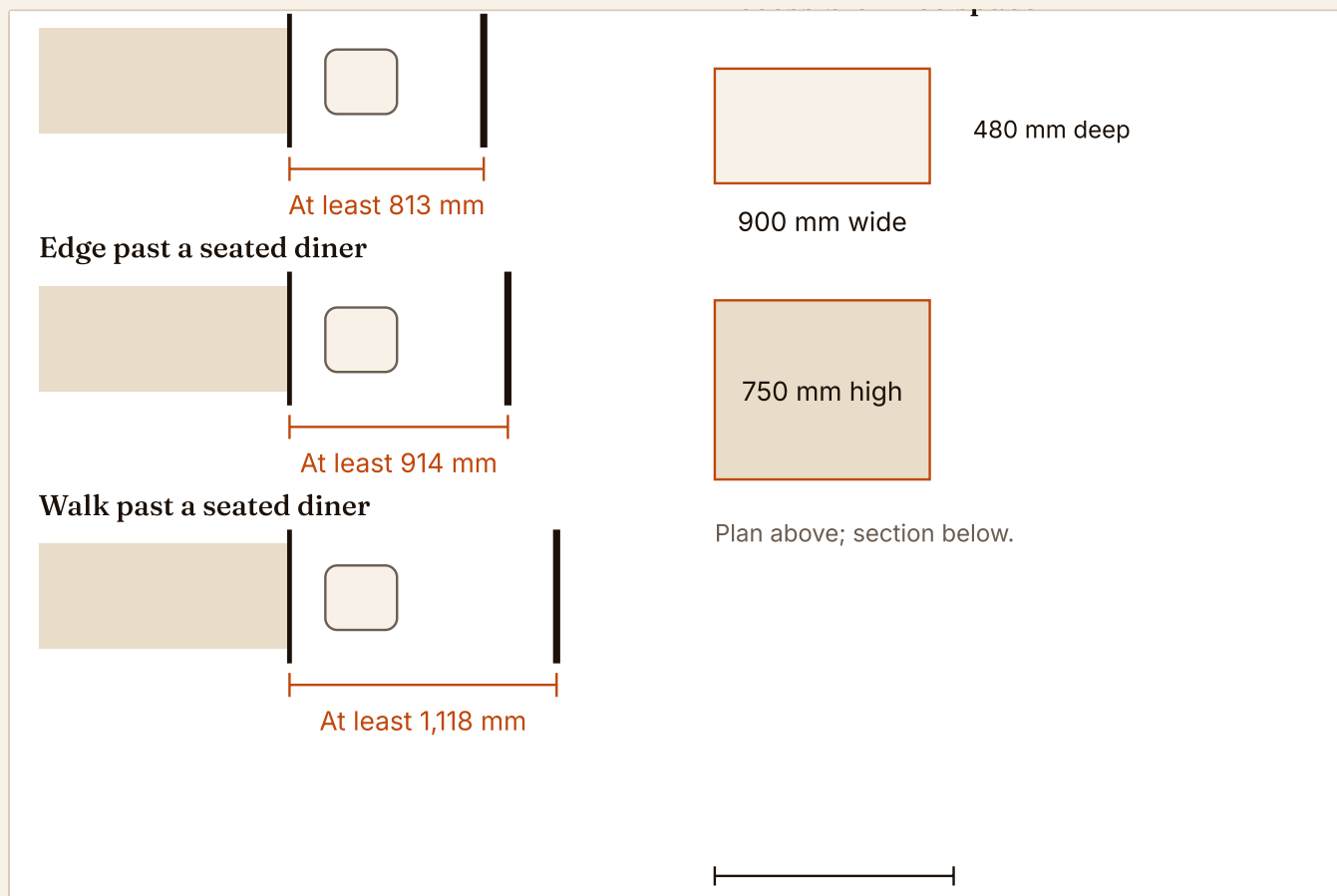
Living and dining

Plan the room while the chairs are occupied. The path to the kitchen, balcony and front door must still work when everyone is at home.

Source: NKBA Guidelines 8–9; Harmonised Guidelines 2021, 6.1.3 and 6.1.6, Furniture Layout. Use actual furniture dimensions.

Space behind *the chair.*

A seat against a quiet wall and a seat beside a busy route need different clearances. Choose the activity first, then the number.



A place at the table. At a 762 mm-high table, NKBA recommends at least 610 mm-wide × 457 mm-deep knee space per seated diner. Draw the actual table and occupied chairs. Accessible dining needs the clear knee space shown, not a table leg in the way.

A route through the room. Keep 900 mm clear circulation under the accessibility guidance and a 1,500 mm-diameter turning space at the living-room entry. Test door swings and furniture in use. These are different checks from dining clearance.





CHAPTER 04

Bedroom

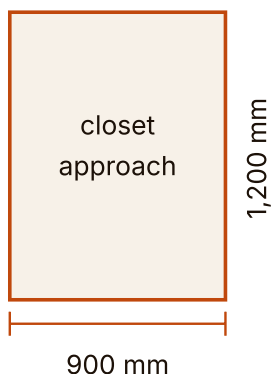
Start with the actual bed and the people who use it. Leave room to dress, open the wardrobe, reach the window and get help if mobility changes.

Source: Harmonised Guidelines 2021, 6.1.6, Bedroom, items 1-5; Furniture Layout, 2. Accessible design guidance; check local applicability.

Furniture fits *when people fit.*

Put the empty-space overlays on your measured plan. Then draw the bed, wardrobe doors and drawers without filling those spaces.

Keep the approach empty



Turning space:
check all doors
and the bed's
transfer side.

1,500 mm clear space



900 mm clear circulation

Draw your actual bed, door and drawers around it.

Separate overlays, not a complete bedroom plan.

Storage you can reach

rail 1,200 mm

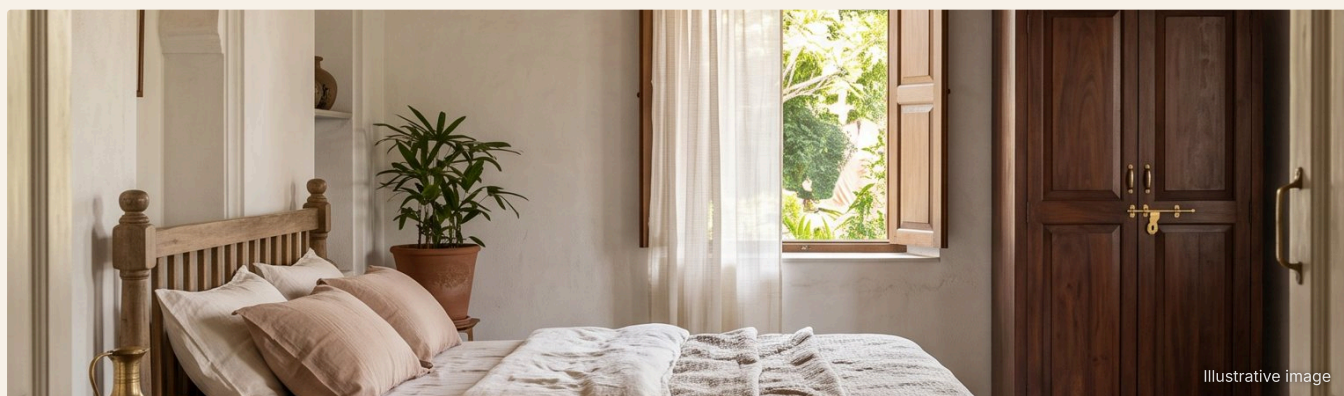
shelves
300–1,150 mm



1,000 mm scale bar

At the bed. Accessible bed height is 450–480 mm. Bedside tables are 450–900 mm high. Keep the turning space near all doors and at the bed's transfer side. The bedroom guidance is shown as a clear-space overlay, not an invented turning radius.

At the wardrobe. Preserve the 900 × 1,200 mm approach. Keep daily storage within reach and test the open doors. Accessible hooks are 1,100–1,300 mm high. Measure the real bed frame, not just its mattress or marketing name.





CHAPTER 05

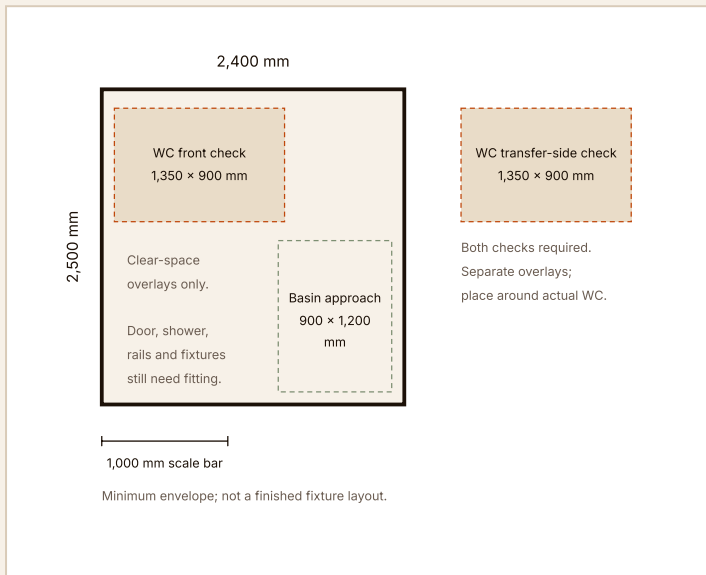
Bath

A bathroom must work when the floor is wet and when someone needs help. Plan the fixtures, clear approach, door and drainage together.

Source: Harmonised Guidelines 2021, 4.9.9, 4.9.11, 4.9.17.1. Wet-area selection criteria are editorial proposals.

An accessible bath *needs a clear plan.*

A room envelope alone does not prove access. Use the actual fixture drawings and check how a person approaches, transfers and leaves.



1,350 × 900 mm

WC clearance: at least 1,350 mm deep × 900 mm wide, both in front and on the transfer side. Seat height 450–480 mm

900 × 1,200 mm

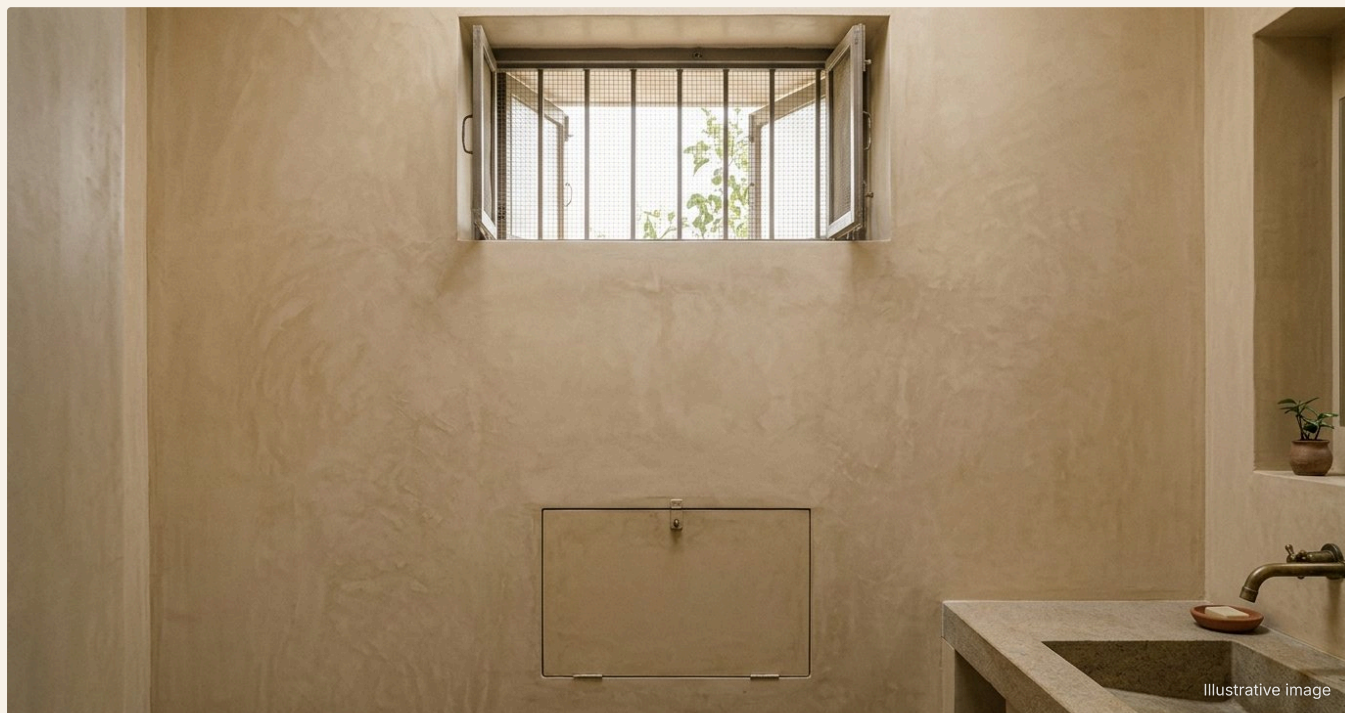
Basin approach; upper edge 750–850 mm high

Accessible door clear opening is at least 900 mm with the leaf at 90°. Prefer a level entry. An unavoidable threshold is at most 12 mm; bevel it above 5 mm. Draw the opening leaf and plan help/rescue access.



Small room, *separate checks.*

Check the room, its opening and its services separately. A room that fits on paper may still be hard to clean, ventilate or use.



1.8 m²

Bathroom minimum area; width at least 1.2 m

NBC 2016 Part 3 (dated baseline), 12.4.2

1.1 m²

WC minimum area; width at least 0.9 m

NBC 2016 Part 3 (dated baseline), 12.4.2

2.8 m²

Combined bath/WC minimum area; width at least 1.2 m

NBC 2016 Part 3 (dated baseline), 12.4.2

0.3 m²

Model minimum opening area; smallest side at least 0.3 m

Model Building Bye-Laws 2016 (MoHUA), 4.5.3(f)

1 m

Model impervious wall-finish height, at least

Model Building Bye-Laws 2016 (MoHUA), 4.5.3(d)

≈ 6 /h

Bathroom/WC air changes: dated ventilation guidance

IS 3362:1977, 4.3.3

IS 1172 asks for separate bath and WC accommodation where the dwelling has only one WC. Resolve this with the authority; the combined-room area alone does not settle it. Coordinate drains, waterproofing and service access.



CHAPTER 06

Materials

Choose a surface for what happens to it: water, heat, feet, sunlight and cleaning. A small sample is the beginning of a choice, not its proof.

Editorial selection worksheet: compare room use and climate exposure. Request product and complete-system evidence; these criteria are planning proposals.

Choose by room, *keep the evidence.*

Fill this sheet with your designer. Record a product, a sample and the evidence that supports each choice.

LIVING AND BEDROOM

- ☐ **Floor and wall choice:** _____
Compare comfort, scratches, glare, sound and cleaning.
- ☐ **Sample / product data:** _____
Cleaning instructions and declared limitations.

KITCHEN

- ☐ **Counter and cabinet choice:** _____
Stains, heat, support, cut-outs, joints and cleanability.
- ☐ **Fabricator detail:** _____
Keep the approved edges, supports and product limits.

BATH AND WET AREAS

- ☐ **Floor and system choice:** _____
Slip resistance, drainage and waterproofing compatibility.
- ☐ **Test / maintenance record:** _____
Request tested product information and complete system details.

PAINTED WALLS

- ☐ **Substrate / primer / finish:** _____
Confirm compatibility, emissions and repair method.
- ☐ **VOC evidence:** _____
ENS sets a maximum VOC content of 50 g/L, less water, for the listed flat and non-flat interior paints. Check applicability.



Illustrative image

Choose by climate, *not by habit.*

The same board or fitting may face very different conditions in Kochi and Manali. Add the exposure to your selection sheet.

01

Humid and coastal

Moisture, board edges and metal fittings

Request declared exposure suitability. Read the moisture and corrosion exclusions in the warranty. Choice: _____

Edges
protection and repair detail

02

Cold interiors

Surface comfort and insulation together

Compare the complete assembly. A timber finish alone is not evidence that a wall or floor is insulated. Choice: _____

Layers
assembly specification

03

Sun and seasonal use

Hot-dry, composite and temperate rooms

Test samples in the room's actual light. Coordinate shade and openings with the finish; keep glare and cleaning in view. Choice: _____

Sample
check in the real room



Illustrative image



CHAPTER 07

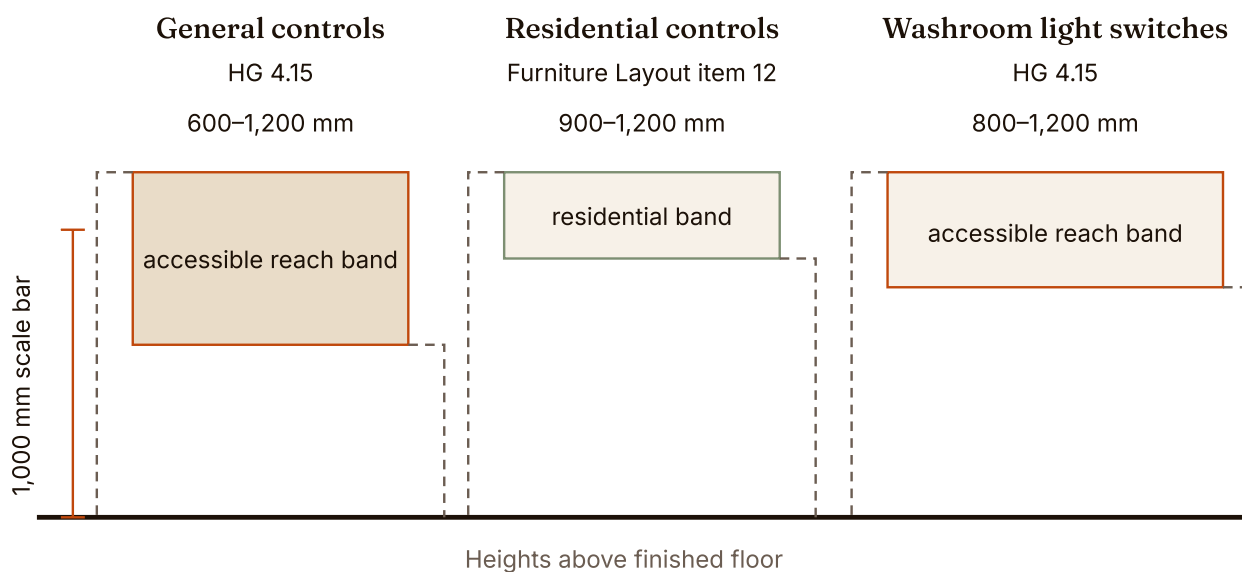
Safety

Decide where services run before a cabinet or ceiling hides them. A beautiful room must still let you isolate a fault and leave the home safely.

Source: IS 732:2019, sections 5.1–5.2 and 6.2. Use qualified trades and local requirements.

Put services *on the plan.*

Mark appliances, lights, controls and access panels before finishes are ordered. The electrical designer turns those needs into a circuit schedule.



Ask the designer to resolve applicability.

Accessibility guidance; not a universal domestic socket-height rule.

Coordinate before closing. Ask for equipment and wiring selection, routes and separation from other services. Preserve access to the distribution board and isolating controls. Photograph concealed routes and retain the final circuit schedule.

Verify before use. Have the qualified electrical team record the applicable continuity, insulation, polarity and protective-device tests. General controls, HG 4.15: 600–1,200 mm. Residential controls, Furniture Layout item 12: 900–1,200 mm. Ask the designer to resolve applicability. The height bands above serve accessible use. They do not establish a socket count.



Keep a way *out of every room.*

Trace the route from sleeping and sitting spaces to the outside. Check it with furniture in place, not only on an empty floor plan.



Walk the real route. Keep escape paths usable and coordinate electrical and gas arrangements with qualified trades. Mark service isolation and agree an outdoor meeting place with the household. Check doors, storage and any shared corridor.

Ask what your home requires. The designer must identify the occupancy and local fire requirements, including detection and firefighting provisions. An apartment's common arrangements matter too. This book gives no universal detector count or extinguisher position.

Before you approve *the interior.*

Print this page and take it to your designer.
Check the drawings, product details and
records before you approve the work.

PLACE, LIGHT AND AIR

- ☐ **Have we recorded the climate, sun and neighbouring obstructions?**
- ☐ **Does each room have usable light, an air path and suitable exhaust?**
Openable area and task lighting checked separately.

ROOMS

- ☐ **Are actual furniture, fixtures and opening doors drawn?**
Kitchen work aisle, landings and occupied dining chairs.
- ☐ **Are turning, transfer and approach spaces preserved where needed?**
Bedroom storage, bath entry and reachable controls.

MATERIALS

- ☐ **Is each choice backed by a sample and product/system details?**
Room use, climate exposure, cleaning and warranty exclusions.

SAFETY AND RECORDS

- ☐ **Are circuits, service routes and access agreed with qualified trades?**
Retain installation verification and concealed-route records.
- ☐ **Are escape routes usable and local fire requirements recorded?**
Include common services in an apartment.
- ☐ **Have we recorded the authority, reviewer and unresolved decisions?**
Authority / reviewer / date: _____



Illustrative image

Make the choices, *then keep the records.*

A good interior is more than the day it is finished. Keep the drawings, samples and instructions that make repair and change easier.

Your interior file

Measured plan, actual furniture and appliance drawings, material choices, circuit schedule, test records and cleaning instructions.

Your local check

Record the authority and adopted editions. Resolve accessibility, ventilation and fire requirements for your own building.

Volume three: Structure

Understand footings, columns, beams and slabs, and check the work with your engineer.

Volume four: Footing to finish

Follow the stages of construction and the checks before work is covered.

Free tools

Plan, cost and estimate your house at nirmandost.in.

Found a mistake?

Report a possible error at nirmandost.in; include the volume, edition and page.



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Free tools for people who build · nirmandost.in

Edition: October 2026. NBC 2016 is a dated baseline; National Building Construction Standards 2026 (SP 7:2026) local adoption is unverified. Keeping drawings, samples and handover records is a planning recommendation. Qualified designers, trades and your local authority resolve project requirements.