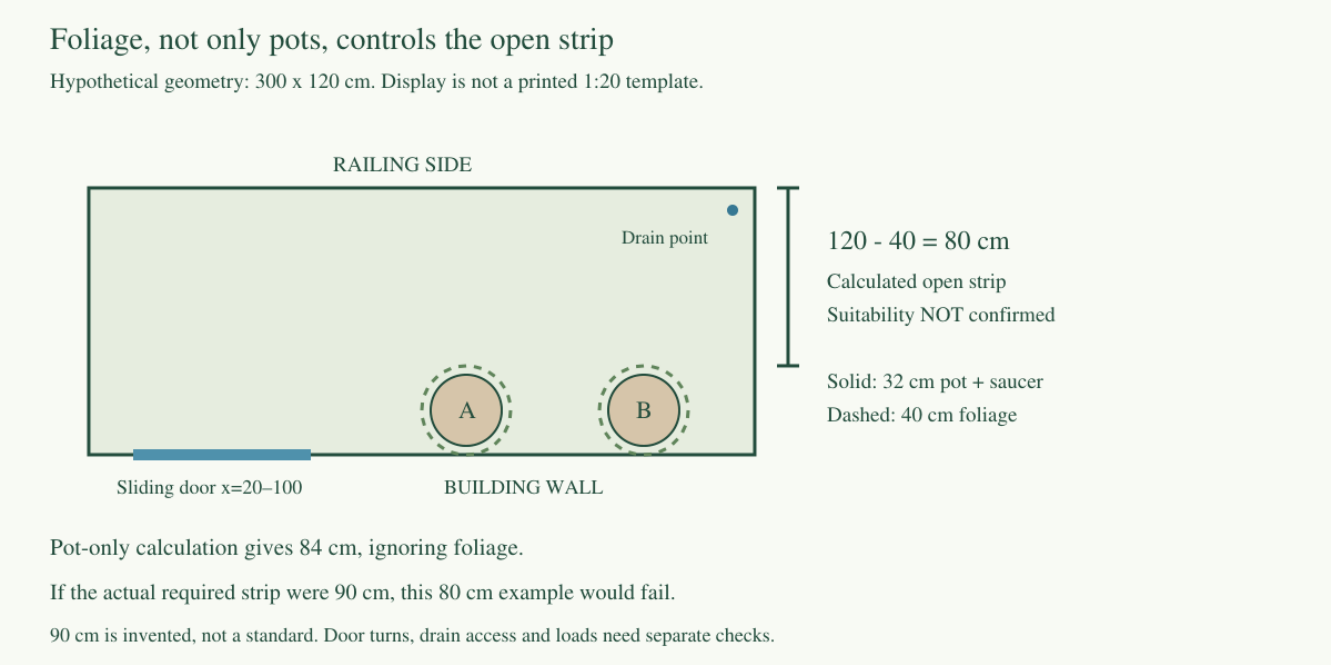
Draw a Practical Layout for a Narrow Balcony

Steadleaf Press



A practical growing guide with observation tools and original planning examples.

Turn the measurements of a narrow balcony into a simple scale plan that leaves room for people, plant growth, watering and drainage. The finished plan is a way to decide what fits before carrying out pots or buying furniture.

Draw the space you actually have

A narrow balcony often feels larger when it is empty than when a chair, open door and mature plant are all using it at once. Start by drawing those everyday activities, then place the garden around them.

You need paper, a pencil, an eraser and a tape measure. Graph paper is helpful but optional. Measure from a safe standing position inside the balcony. Do not lean over the edge, climb onto furniture or move a heavy container just to obtain a more precise number. Mark an inaccessible measurement as uncertain and resolve it before using that part of the plan.

This is a layout exercise for ordinary freestanding containers in permitted positions. A paper plan cannot establish a balcony's load capacity or approve an installation. The RHS advises checking building restrictions and weight limits before developing a roof or balcony garden. Obtain the information relevant to your own building before adding substantial loads. RHS: Roof gardens and balconies

Establish the limits before drawing plants

Find out which parts of the space are available for gardening. A lease, building manager or applicable local requirements may limit container placement, fixing objects to walls, attaching anything to a railing or obstructing access. Record the actual restriction rather than a rule remembered from another building.

If you cannot confirm the permitted load or positions, keep the drawing provisional. Do not use a generic weight-per-area figure from a gardening article to approve the balcony. Likewise, moving a heavy pot close to a wall is not a substitute for knowing where loads are allowed.

Write the known limits in a small box beside the plan:

Question	Confirmed information	What still needs checking
Where may containers stand?	_____	_____
What loading information applies?	_____	_____
What door and route clearances must remain?	_____	_____
What drains or service points need access?	_____	_____
Are there restrictions on outdoor furnishings?	_____	_____

The answer “not yet known” is useful. It tells you which purchase or placement decision should wait.

Measure the fixed outline

Measure the usable floor length and width. Include changes in shape rather than simplifying an awkward corner into extra imaginary space. Mark the inside of the railing, permanent pillars, steps, thresholds, door tracks, drains and any fixed equipment.

Measure the opening needed by each door. On the drawing, show a hinged door's full sweep as an arc. For a sliding door, mark the usable opening and the area needed to approach it. Do not assume that a plant can occupy a door's sweep because the door is usually kept partly closed.

Record measurements in one unit throughout. Centimetres are convenient for a small space, but inches work equally well if used consistently. Put the date on the plan so that a later furniture change does not leave you relying on an old drawing.

Fixed feature	Measurement or position	Notes
Usable floor length	_____	_____
Usable floor width	_____	_____
Door opening and sweep	_____	_____
Drain or drainage route	_____	_____
Permanent obstruction	_____	_____
Required clear area	_____	Source of requirement: _____

Choose a scale that is easy to repeat

A scale drawing uses the same reduction for every object. For example, at 1:20, one centimetre on paper represents twenty centimetres in the real space. A hypothetical balcony 300 cm long and 120 cm wide becomes a rectangle 15 cm by 6 cm. A round pot with an outer diameter of 32 cm becomes a circle 1.6 cm across.

These numbers demonstrate the calculation only. They are not recommended balcony dimensions, pot sizes or clearance standards.

Write your chosen scale at the top: “1 cm on paper = _____ cm in real life.” If the plan is too small to read comfortably, choose a larger drawing scale or use a larger sheet. Do not quietly change scale halfway through.

Check one length twice. A mistaken conversion can make a crowded layout look plausible. Keep measured dimensions on the drawing as well as the scale, because a photocopy or screen enlargement can change the apparent size.

Reserve movement space first

Shade the door sweep and any area that must remain clear. Draw a continuous route to the places people need to reach. Include the real activities: carrying a watering can, stepping outside, turning, sitting down, opening a door fully and reaching a drain.

Use the clearance requirements that apply to the building and the needs of everyone who uses the balcony. There is no single passage width in this guide that can certify a layout. A route that works for one person standing sideways may be unsuitable for another person's mobility aid, carrying task or emergency access.

If a chair is part of the plan, draw its occupied position and the space needed to move it. The chair's footprint when tucked away is not the whole space it uses. If a drying rack is present on some days, make a second plan for those days instead of treating it as invisible.

Give each container two outlines

The first outline is the widest physical footprint: pot rim, saucer, stand or projecting feet. The second is the expected spread of foliage at the size you intend to maintain. Label the second outline “plant space.”

This makes two different conflicts visible. A pot base can block a foot route even if its leaves are upright. A narrow pot can fit on the floor while its foliage blocks a door or makes watering the next plant awkward.

Use the actual mature dimensions of the selected plant or cultivar as the starting point. Do not use the small nursery plant as the final size. Colorado State Extension recommends sizing containers for mature roots and considering the weight after watering. Its guidance also notes the stability problem of tall plants in unsuitable containers. Colorado State: Container gardens

Cut out paper footprints if you want to compare arrangements. Keep all containers freestanding on suitable surfaces inside the permitted area. Do not solve a shortage of floor space by moving a pot onto the top or outside of a railing.

Add light and care access

Write the observed light conditions beside each candidate position. A plant at the far end may receive different light from one under an overhang. Mark wind exposure and places where rain does not reach, using your own observations.

Now test the gardening tasks on paper:

- Can I inspect the potting mix without stepping around the outside of a pot?

- Can I water near the root zone without stretching across another plant?

- Can I remove collected drainage water where necessary?

- Can I reach the drain without moving something too heavy?

- Can I inspect leaves and remove a spent plant without dismantling the whole group?

A layout that permits planting but makes routine care difficult is unfinished.

Work through one measured layout

Use this imaginary 300 cm by 120 cm rectangle to practise the method. The dimensions and positions below are arithmetic inputs, not a recommended balcony design. Draw it 15 cm wide by 6 cm deep at 1:20. Put the building wall along the bottom edge and the railing along the top. Label the bottom-left corner (0, 0); x increases to the right and y increases toward the railing. All coordinates in the table are real centimetres. Divide by 20 to place them on paper.

Assume a sliding-door opening on the building wall between x = 20 and x = 100. This example has no outward door sweep. A hinged door would need its measured sweep and approach area drawn separately; do not reuse this door assumption for it.

Feature	Real position in centimetres	Position on the 1:20 drawing
Balcony outline	x = 0–300, y = 0–120	15 cm by 6 cm rectangle
Sliding-door opening	x = 20–100, y = 0	Along bottom edge, 1–5 cm from left
Pot A outer footprint including saucer	Centre (170, 20), diameter 32	Centre (8.5, 1), diameter 1.6 cm
Pot B outer footprint including saucer	Centre (250, 20), diameter 32	Centre (12.5, 1), diameter 1.6 cm
Assumed mature foliage for each pot	Same centres, diameter 40	Same centres, diameter 2 cm
Drain point	(290, 110)	(14.5, 5.5)

Draw solid circles for the pot footprints and dashed circles for their assumed mature foliage. These are hypothetical compact plants, not a promise that a particular species stays this size. Each foliage circle extends from y = 0 to y = 40. Each pot and saucer extends only from y = 4 to y = 36. The foliage therefore controls the strip available beyond the planting: 120 − 40 = 80 cm. Measuring only the pots would incorrectly suggest 120 − 36 = 84 cm. Label the 80 cm strip on the drawing as “calculated open strip, suitability not yet confirmed.”

The foliage of Pot A begins at x = 150, leaving 50 cm horizontally between the end of the door opening at x = 100 and the first foliage. That number describes a separation, not an approach-space standard. Trace the complete movement from the door to the far end, including turns, before deciding whether the plan works. A continuous strip alone does not establish adequate turning room, emergency access or accessibility.

The drain point lies outside both foliage circles, but a point on paper is not enough. Mark the actual drain-cover size, its service clearance and the runoff route in your own plan. Reject any arrangement that prevents inspection, cleaning or normal drainage. The two sample pots are on the building side to demonstrate the geometry, not because that position has been structurally approved.

Compare the calculated gap with your requirement

First establish the clearance required for the actual location and users, including any larger space needed for turning or door access. Write down where that requirement came from. Do not choose the required number merely to make the pots fit.

For a straight strip with no other projections, calculate: usable balcony width minus the greatest planting projection from one side minus any opposing projection. Use the widest relevant outline, including mature foliage, stand feet and occupied furniture. Check the narrowest point along the whole route rather than averaging several widths.

Check	Example calculation	Your measurement
Straight open strip	120 − 40 − 0 = 80 cm	_____ − _____ − _____ = _____
Change if foliage reaches 60 cm across at the same centre	Foliage reaches y = 50, so strip becomes 70 cm; it also crosses the wall line	_____
Hypothetical required straight clearance of 90 cm	80 − 90 = −10 cm, so the example fails that requirement	Available _____ minus required _____
Door approach and turns	Must be checked separately, not established by strip width	_____
Drain access and runoff	Must remain usable	_____

The 90 cm requirement in the table is invented solely to show a failed comparison. It is not a code citation or a general recommendation. If your verified requirement is greater than the calculated gap, reduce or remove the planting and redraw. If foliage exceeds the assumed size, revise the plant choice or layout; do not rely on repeated pruning to make an unsuitable plant permanently fit. Where a plant, chair or obstruction crosses the planned route at a different height, check that conflict too.

Compare two small arrangements

Example A: a row that fails. Three pots fit along a hypothetical balcony wall on paper. Once mature foliage outlines are added, the middle plant spreads into the door sweep. Moving all three closer to the railing would narrow the route. The gardener keeps two pots and finds another suitable location for the third. The successful change is a smaller plan.

Example B: a corner that works only seasonally. A chair and two pots fit in summer, but a large plant must move to that corner during cold weather. The gardener makes separate warm-season and cold-season layouts, checks both against the same restrictions, and avoids buying another permanent container for the temporary space.

Neither example establishes a safe load or a compliant clearance. They show how drawing can expose a conflict before it becomes a physical problem.

Test the plan without creating an obstacle

Check the dimensions in the real space before filling containers. If practical, briefly place empty lightweight pots in the proposed positions while the area is supervised. Keep all required routes usable and remove the trial arrangement immediately if it obstructs them.

Open doors fully. Try ordinary movement without squeezing or reaching over the railing. Check from the indoor viewpoint as well as from the balcony. Do not lift a heavy wet pot alone to conduct the trial.

If the layout depends on a stand, fastening or raised platform that has not been checked, leave that part unoccupied. Do not treat a successful empty-pot trial as evidence that the loaded arrangement is safe.

The finished layout record

Review	Pass condition	My result
Scale	Every footprint uses the same scale	_____
Permission	Proposed positions and loading are confirmed	_____
Movement	Applicable clearances and users' needs are preserved	_____
Growth	Mature foliage has space	_____
Care	Each plant can be inspected and watered	_____
Drainage	Drains and runoff routes remain accessible	_____
Seasonal change	Likely moves have a place in the plan	_____

Keep the final drawing with the plant names and measurements. Review it when a plant grows beyond its outline, a new object arrives, a door changes or the season requires a move. A practical balcony plan leaves some space unfilled.

Sources and scope

The linked RHS and Colorado State Extension guidance was rechecked on 7 November 2026. RHS supports the need to check building restrictions and loading; Colorado State supports considering mature root space, wet container weight and stability. The measurement sequence, coordinate example, clearance calculations, worksheets and hypothetical layouts are original planning aids. Their invented measurements do not establish a safe load or a legal access standard. Structural capacity, local access requirements and permissions must be confirmed for the actual building.