Plasterboard sheets for walls and ceilings

Plasterboard is bought in whole sheets, so the job is not an area question, it is a rounding question: work out the area to cover, add an allowance for cuts, divide by the sheet, and round up. This guide takes a room through that in order, and then counts the screws and the scrim tape that go with it.

Step one: the area to board

The plasterboard calculator starts from the room, not from a total you have to work out yourself. Give it the length, the width and the wall height, and say how many walls you are lining. The run of wall it works from depends on that choice:

- **Four walls** — the whole room, so 2 × (length + width).
- **Three walls** — both long walls and one end, so 2 × length + width.
- **Two walls** — both long walls, so 2 × length.
- **One wall** — a single length.

Multiply that run by the height and you have the wall area. If the ceiling is being boarded too, tick the box and the calculator adds length × width on top. Wall area plus ceiling area is the **gross area** — the area actually covered in board.

Step two: the waste allowance

Sheets are rectangular; rooms are not. Every doorway, window, socket and corner takes a cut, and a cut sheet leaves an offcut that usually cannot be used. That is what the waste allowance covers, and the calculator's default is **10%**.

Ten per cent is a sensible middle. A plain box room with one door may come in under it; a ceiling dotted with downlights, or a room with several windows and a chimney breast, will run over. Change the percentage in the box rather than guessing at the end.

Step three: divide by the sheet

The calculator's default board is a **2400 × 1200 mm sheet, 12.5 mm thick**, which is 2.88 m² of board. The count is the gross area with the waste allowance added, divided by 2.88, and rounded *up* — you cannot buy part of a sheet.

Both the size and the thickness are boxes on the page. If your merchant stocks a different sheet, or you are going up to a 15 mm board for a ceiling on wider centres, change them: a different sheet area changes the count directly.

Worked example: a 4 m × 3 m room, 2.4 m walls

Take a 4 m × 3 m room with 2.4 m walls, all four walls and the ceiling boarded, in standard 2400 × 1200 mm, 12.5 mm sheets with the default 10% waste allowance.

The plasterboard calculator returns exactly this:

Inputs and the result from the plasterboard calculator for a 4 m × 3 m room

ITEM	VALUE
Room length / width / wall height	**4.00 m / 3.00 m / 2.40 m**
Walls being boarded	**4 (the whole room)**
Ceiling	**Included**
Board size and thickness	**2,400 × 1,200 mm, 12.5 mm**
Waste allowance	**10%**
Total area to board	**45.6 m² — 33.6 m² walls + 12.0 m² ceiling**
Waste allowance	**10% — +4.6 m² for cuts and offcuts**
Board size	**2,400 × 1,200 mm — 2.88 m² per sheet, 12.5 mm thick**
Plasterboard sheets needed	**18 sheets — 50.2 m² ÷ 2.88 m², rounded up**
Drywall screws 32 mm	**2 boxes — ≈ 1,368 screws at 30 per m²**
Scrim (joint) tape, 90 m roll	**1 roll — ≈ 69 m for joints and corners**

Read the last two rows carefully, because they are where an order usually goes wrong. The run is 2 × (4 + 3) = 14 m, which at 2.4 m high is 33.6 m² of wall; adding the 12.0 m² ceiling gives 45.6 m²; and 10% takes it to 50.2 m². Divide by 2.88 and you need 17.4 sheets, which rounds up to **18**.

Screws and scrim: where the tidy numbers come from

The calculator uses two planning rates, both stated on the page: **30 drywall screws per square metre**, sold in boxes of 1,000, and **1.5 m of scrim tape per square metre**, sold in 90 m rolls.

Both are counted on the **gross area** — the 45.6 m² actually being boarded — not on the waste-inflated figure, and that is deliberate. Offcuts mean you never fix the full square metre of every sheet, so counting fixings on the boarded area is the honest version. For this room: 45.6 × 30 = 1,368 screws, so two boxes of 1,000, and 45.6 × 1.5 = 69 m of tape, so one 90 m roll.

Joint filler is deliberately left as an estimate rather than a figure, because it depends on how much joint there is and what the tub says. The page works on roughly **1 kg per 4 m²** of joints as a starting point, and tells you to check the tub instructions — which is the right way round for a product with no standard coverage.

Finishing the room: skirting

Once the walls are boarded, the skirting is the next order, and it is calculated a different way — as a linear run of timber, not an area. The skirting board calculator takes the room perimeter, subtracts the doorways, adds a waste allowance for the cuts at every corner, and divides by the stock length.

For the same 4 m × 3 m room with one 900 mm doorway, 2400 mm boards and the default 10% waste allowance, it returns a perimeter of 14.00 m, less 0.90 m of opening, so a 13.10 m run. Adding 10% gives 14.41 m, which divides by 2.4 m into **7 lengths**. That is 16.80 m of board bought for a 13.10 m run, with 3.70 m left over.

Plasterboard FAQs

- **How many plasterboard sheets for a 4 m by 3 m room with a 2.4 m ceiling?**
- **What waste allowance should I use for plasterboard?**
- **How many screws and how much scrim tape do I need?**
- **What size plasterboard does the calculator assume?**
- **Does the screw count include the waste allowance?**

Rules that touch a boarded wall

Sizing the board is a quantity question; what the board has to do is a regulations question, and two parts of the library are relevant:

- **Approved Document B — linings.** Linings are classified by European reaction-to-fire class, written as three parts such as class D-s3, d2, and the document also sets fire-resistance ratings and boundary distances. Read the requirement.
- **Approved Document E — sound.** The library quotes targets of 45 dB DnT,w + Ctr for separating walls and floors, 62 dB for impact sound, and 40 dB Rw for internal walls and floors. Read the requirement.

> **Guidance only.** The sheet, screw and tape counts above are planning estimates from the ProjectCalc calculators, not a quote and not a specification. This guide sizes a quantity; it does not choose a board type or a build-up for you. Where a wall is part of a separating wall, a protected escape route or a fire-resisting element, the lining is part of a controlled build-up — confirm with your local building control.