

DRYWALL CALCULATION REFERENCE

Standard area, sheet, material, and weight formulas for drywall estimation.

Core Area Formula

Room By Room Calculations

Wall Area = $2(L \times H) + 2(W \times H)$

Ceiling Area = $L \times W$

Openings = Sum of (Width × Height × Count)

Net Area = Wall Area + Ceiling Area - Openings

Waste & Sheet Calculation

| |
|---|
| Waste Area = Net Area × (Waste% ÷ 100) |
| Area with Waste = Net Area × (1 + Waste% ÷ 100) |
| Sheets Needed = Area with Waste ÷ Sheet Coverage (Round up) |
| Weight = Net Area × lbs per sq ft |
| Demo Weight = Board Weight × 1.12 (accounts for mud/tape/paint) |

Sheet Size Reference

| Sheet Size | Coverage | Typical Use |
|----------------------------|-----------|------------------------|
| 4'x8' | 32 sq ft | Standard 8 ft ceilings |
| 4'x10' | 40 sq ft | 9 ft ceilings |
| 4'x12' | 48 sq ft | Long walls/ceilings |
| 4.5'x8' | 36 sq ft | 9 ft ceilings no seam |
| Drywall Wight By Thickness | | |
| Thickness | lbs/sq ft | 4x8 weight |
| 1/4" | 1.2 | 38 lbs |
| 3/8" | 1.5 | 48 lbs |
| 1/2" | 1.8 | 58 lbs |
| 5/8" | 2.2 | 70 lbs |

Material Coverage Defaults

| Joint Compound Level 4 | Joint Tape | Drywall Screws | Corner Bead |
|--------------------------|-----------------------------------|----------------------|--|
| 1 gallon per 100 sq ft | 38 linear ft per 100 sq ft | 1.5 screws per sq ft | 8-ft pieces |
| 4.5-gal pail ~ 450 sq ft | 500-ft roll ~ 1300 sq ft coverage | ~200 per 1-lb box | Pieces = Outside Corners x Wall Height ÷ 8 |
| Level 5 uses 1.35x more | | | |

Quick Reference Formulas

- Wall Area = $2(L \times H) + 2(W \times H)$
- Ceiling Area = $L \times W$
- Net Area = Walls + Ceiling - Openings
- With Waste = Net × (1 + Waste%)
- Sheets = Area ÷ Sheet Coverage (round up)
- Mud = Area ÷ 100 (Level 4)
- Tape = Area × 0.38
- Screws = Area × 1.5
- Weight = Net Area × lbs/sq ft

Example Calculation

EXAMPLE : 12 × 12 ROOM (8 ft ceilings)

Wall Area = $2(12 \times 8) + 2(12 \times 8) = 384$ sq ft

Ceiling = $12 \times 12 = 144$ sq ft

Openings = 1 door (21) + 2 windows (24) = 45 sq ft

Net Area = $(384 - 45) + 144 = 483$ sq ft

With 10% Waste = $483 \times 1.10 = 531$ sq ft

Sheets (4x8) = $531 \div 32 = 17$ sheets

Weight (1/2") = $483 \times 1.8 = 869$ lbs

Whole-House Layout Multipliers

| Drywall Area = Floor Area × Layout Multiplier (8-ft ceilings) | |
|---|------------|
| Layout | Multiplier |
| Ranch | 3.6x |
| Two-Story | 3.3x |
| Townhouse | 3.1x |
| Split-Level | 3.5x |
| Wall portion scales with ceiling height. | |