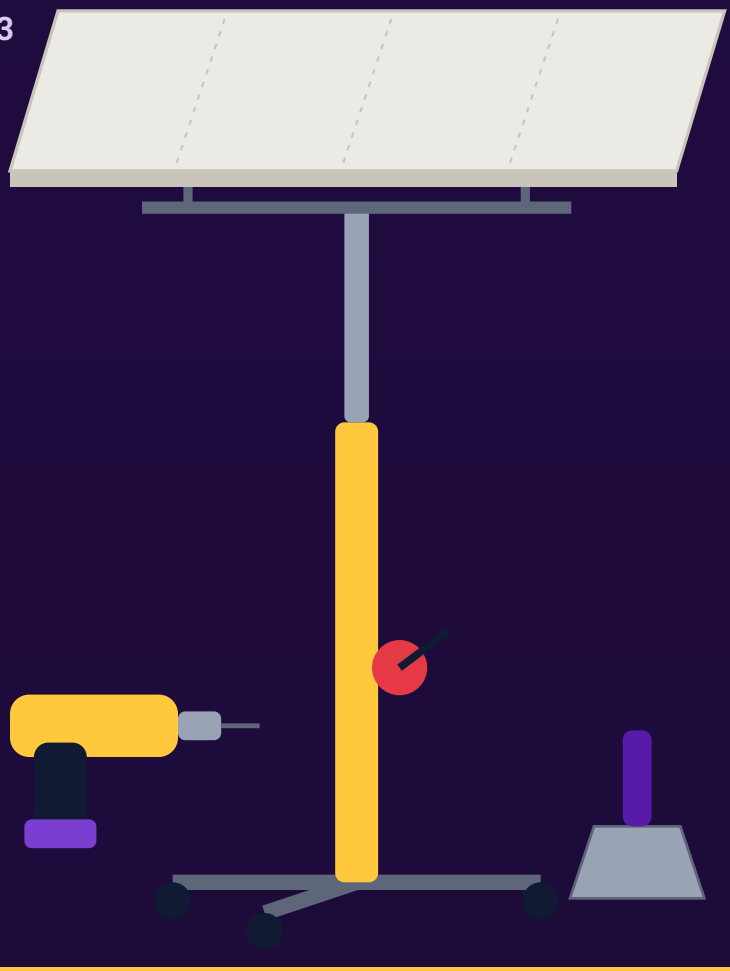
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FREE FIELD GUIDE · USA

DRYWALL CEILING

How to hang and finish a drywall ceiling the right way: board choice, layout, screw spacing, lifting the sheets and the 3 coats that hide every seam.

- Which board for 16" or 24" joists
- Sheet layout that saves seams
- Screw spacing: 12" on ceilings
- Lift, fasten and cut out boxes
- 3 coats + printable checklist



HOW TO USE THIS GUIDE

Read it before you order the board. The ceiling is the hardest surface in the room.

1 CHECK THE JOISTS

Measure the joist spacing first. Page 4 shows which board thickness works for 16" and 24" framing.

2 PLAN THE SHEETS

Pages 6 and 7 show how to lay out the sheets and get the room ready before lifting anything.

3 HANG AND FASTEN

Pages 8 and 9 cover lifting, fastening from the center out and cutting out the boxes.

4 FINISH AND CHECK

Page 10 shows the 3 coats. Use the checklist on page 12 before you call it done.

WHAT'S INSIDE

3 Why ceilings are different
4 Which board to use
5 Tools for the job
6 Prep the room
7 Sheet layout
8 Hanging, step by step
9 Screws and nails
10 Tape and 3 coats
11 Mistakes that show later
12 Printable checklist
13 Job sheet
14 Sources and next steps

Educational guide based on IRC Table R702.3.5 (model code) and USG installation guidance, checked Nov 2026. Your local building code comes first.

WHY CEILINGS ARE DIFFERENT

Same board, harder job. Gravity works against you the whole time.

YOU WORK OVERHEAD

Sheets are heavy and awkward above your head. Plan a lift or a helper before you start.

GRAVITY PULLS DOWN

A ceiling board hangs from its fasteners. Weak spacing or the wrong board can sag between joists.

LIGHT SHOWS EVERYTHING

Windows and ceiling lights hit the surface at a low angle. Bad seams are easy to see.

TEXTURE ADDS WEIGHT

Water-based texture adds moisture and weight, so the code asks for heavier or sag-resistant board.

CEILING GOES FIRST

USG says it plainly: apply ceilings first. Then the wall sheets hold up the edges.

FEWER SEAMS, LESS WORK

Every seam overhead is tape, mud and sanding with your arms up. Longer sheets help.

If the room has 24" joists and you plan a sprayed texture, pick the board on the next page before you buy anything.

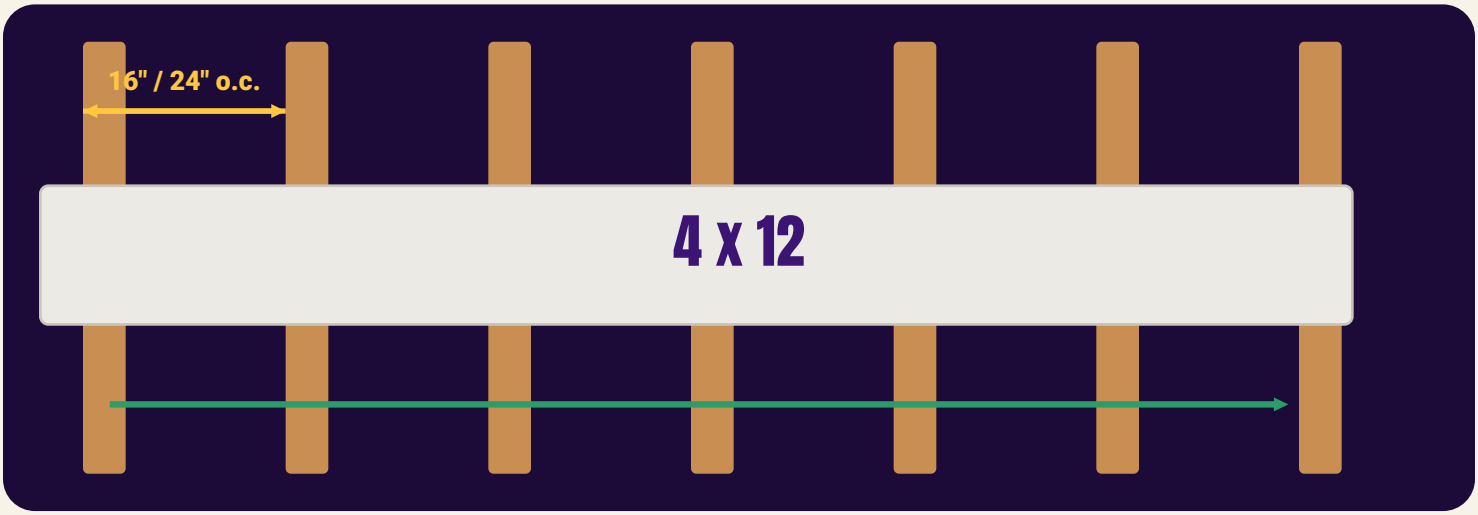
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WHICH BOARD TO USE

From IRC Table R702.3.5, single layer, no adhesive. Check the code your city adopted.

Board on the ceiling	Joists 16" o.c.	Joists 24" o.c.
3/8"	Perpendicular only, no water-based texture	Not allowed
1/2" regular	Either direction	Perpendicular only, no water-based texture
1/2" sag-resistant ceiling board	Either direction	Perpendicular, texture OK
5/8"	Either direction	Perpendicular, texture OK
5/8" Type X (garage under a room)	Fasteners every 6"	Perpendicular, fasteners every 6"

Water-based texture on the ceiling? Run the sheets perpendicular to the joists, never use 3/8", and on 24" joists use 5/8" or 1/2" sag-resistant board.



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TOOLS FOR THE JOB

Most of this list comes from the USG installation guide. A lift turns a two-person job into a calm one.

PANEL LIFT OR T-BRACES

Rent a drywall lift, or make T-braces 1/2" longer than the floor-to-ceiling height.

SCREW GUN

Drywall screw gun with a depth-control nose, so each head sits just below the face.

TYPE W SCREWS

1-1/4" Type W bugle-head screws for 3/8", 1/2" and 5/8" board on wood joists.

CUTTING TOOLS

Utility knife, T-square, drywall rasp and a jab saw or rotary tool for boxes.

FINISHING KNIVES

5", 8" and 10" knives, a mud pan, joint tape and joint compound.

SAFETY GEAR

Safety glasses for overhead work, gloves for cutting and a dust mask for sanding.

Overhead work means dust and debris falling toward your face. Glasses on before the first screw.

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PREP THE ROOM

Ten minutes of checking saves an hour of fixing a ceiling that is not flat.

1 CHECK THE JOISTS

Joists should be straight and in line. Fix or shim crooked ones before the board goes up.

2 MARK EVERY JOIST

Mark joist centers on the top plate of the walls so you can find them once the sheet covers them.

3 FINISH WHAT'S ABOVE

Wiring, boxes, vents and any work in the ceiling cavity are done and inspected if required.

4 NOTE THE BOXES

Measure each light box and vent from two walls and write it down before you cover it.

5 MEASURE THE ROOM

Length x width gives square feet. Divide by 48 for 4x12 sheets, then add a little extra for cuts.

6 CLEAR THE FLOOR

Room for the lift to roll, sheets leaning near the wall, nothing to trip on.

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SHEET LAYOUT

A good plan on paper means fewer butt joints overhead, and butt joints are the hard ones to hide.

ACROSS THE JOISTS

Run the long edge of each sheet perpendicular to the joists. The code requires it for 24" framing.

ENDS ON A JOIST

Every end of a sheet lands on a joist. Edges that run across the joists are the exception.

STAGGER THE ENDS

Do not line up butt joints in the next row. Offset them so they never fall on the same joist.

LONGEST SHEETS

4x12 sheets mean fewer seams than 4x8, if you can lift them and get them into the room.

TAPERED TO TAPERED

Put tapered edges together so the seam makes a shallow channel for tape and mud.

START IN A CORNER

Begin with a full sheet tight in one corner and work across the room row by row.

Example: a 12 x 14 ft ceiling is 168 sq ft. 168 / 48 = 3.5, so plan 4 sheets of 4x12 plus extra for cuts.

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HANGING, STEP BY STEP

Measure twice, cut once, lift once. A sheet forced into place cracks later.

1 CUT TO SIZE

Score the face with a knife, snap the board, cut the back paper and smooth the edge with a rasp.

2 MARK THE BOXES

Transfer your box measurements to the sheet and cut them out with a jab saw before you lift.

3 LIFT AND PRESS

Load the sheet on the lift or T-braces and press it tight against the joists. No gaps.

4 FASTEN CENTER OUT

Start fastening in the middle of the sheet and work toward the edges, as USG recommends.

5 HIT EVERY JOIST

Fasten the sheet to every joist it crosses and to the framing around the edges.

6 NEXT SHEET

Butt the next sheet lightly, stagger the ends, and keep going row by row.

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SCREWS AND NAILS

Ceiling spacing is tighter than wall spacing. These are maximums, not targets.

Rule	Ceiling	Wall
Screw spacing, max.	12"	16"
Nail spacing, max.	7"	8"
Distance from edges and ends	At least 3/8"	At least 3/8"
Screw into wood	At least 5/8" deep	At least 5/8" deep
Screw type on wood	Type W or Type S	Type W or Type S

JUST BELOW THE FACE

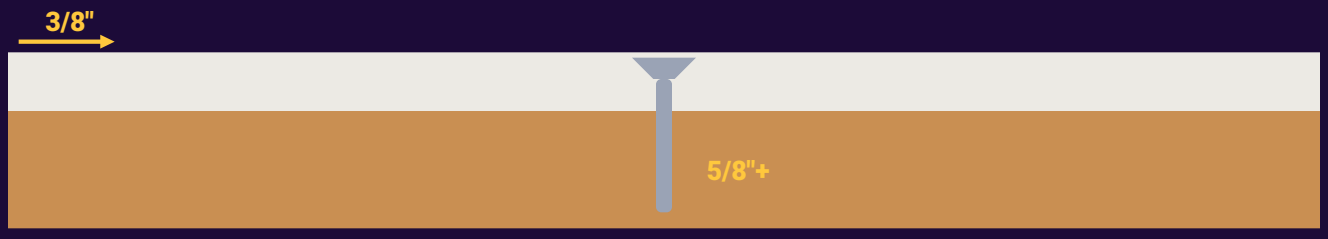
Sink each screw head just below the surface, leaving the paper intact. Torn paper does not hold.

MISSED THE JOIST?

Pull the screw and patch the hole. A screw in the air holds nothing and will pop.

NAILS ON A CEILING

If you nail, USG recommends double-nailing on ceilings to reduce nail pops.



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TAPE AND 3 COATS

Based on the USG guide. Let each coat dry overnight; time varies with heat and humidity.

1

COAT 1 · TAPE

Start with butt joints. Mud the seam with a 5" knife, press the tape in, then wipe it tight. Mud the screw heads.

2

COAT 2 · FILL

Scrape off ridges. Spread a wider coat over seams and screws, a little past the first one.

3

COAT 3 · FEATHER

Use a 10" knife and feather slightly beyond the second coat for a smooth, wide finish.

4

SAND LIGHTLY

Fine grit, light hand. Do not scuff the paper. Dust mask on, HEPA vacuum for power sanders.

5

CHECK THE LIGHT

Shine a work light across the ceiling at a low angle and touch up any line or bump.

Rushing coats over wet mud makes it shrink and crack. If time is tight, a setting-type compound dries by chemical reaction.

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MISTAKES THAT SHOW LATER

Ceiling problems usually show up weeks later, after paint. Avoid them at the hanging stage.

WRONG BOARD FOR 24"

Regular 1/2" parallel to 24" joists, or under wet texture, can sag. Use 5/8" or sag-resistant.

SCREWS TOO FAR APART

More than 12" between screws on a ceiling lets the board pull away from the joists.

FORCED SHEETS

A sheet jammed into a tight spot bows and cracks. Cut it to fit with a small gap.

ENDS IN A LINE

Butt joints lined up across the room create one long ridge that the light will find.

WALLS FIRST

Hanging walls before the ceiling leaves the ceiling edges with no support at the corners.

TORN PAPER

Screws driven too deep break the paper. Add a new screw nearby and patch the bad one.

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PRINTABLE CHECKLIST

Check each item before the next step. Keep it on the job.

BEFORE YOU BUY

- [ ] Joist spacing measured
- [ ] Board type picked
- [ ] Square feet and sheets
- [ ] Lift or helper booked

BEFORE YOU HANG

- [ ] Joists straight
- [ ] Joist marks on walls
- [ ] Boxes measured
- [ ] Work above is done

WHILE YOU HANG

- [ ] Sheets across joists
- [ ] Ends on joists
- [ ] Ends staggered
- [ ] Center-out fastening

FASTENERS

- [ ] 12" max. on the ceiling
- [ ] 3/8" from edges
- [ ] Heads below the face
- [ ] No torn paper

FINISHING

- [ ] Butt joints taped first
- [ ] Coat 2 dry overnight
- [ ] Coat 3 feathered
- [ ] Light sanding

FINAL LOOK

- [ ] Low-angle light check
- [ ] No ridges or bumps
- [ ] Boxes clean
- [ ] Room cleaned up

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JOB SHEET

Fill it in for each room before you order the board.

Item	Write it here
Room and ceiling size (ft)	
Square feet (length x width)	
Joist spacing (16" or 24")	
Board type and thickness	
Sheets needed (4x8 or 4x12)	
Texture planned?	
Boxes, lights and vents	
Lift rental or helper	
Local code notes	

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SOURCES AND NEXT STEPS

Everything here comes from public guidance you can check yourself.

IRC Table R702.3.5

Model residential code: board thickness, direction, framing spacing and fastener spacing for ceilings.

USG installation guide

How to install and finish Sheetrock panels: ceilings first, screws, cutting, tape and coats.

Your local building code

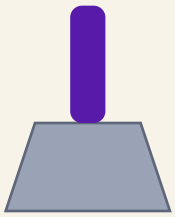
Cities adopt and change the IRC. Garage and fire-rated ceilings follow local rules.

Vifalio drywall kit

Need to price the job? Our free drywall pricing kit covers price per sq ft and estimates.

1. **Before you buy**
   Measure joists and pick the board
2. **Hanging day**
   Ceiling first, 12" screw spacing
3. **Finishing**
   3 coats, dry overnight





STEP BY STEP
Hang and finish

CODE TABLE
IRC R702.3.5

CHECKLISTS
Print and check

vifalio.com
Free guide

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