

PBG PRECON

PBG Precon — User Guide

How to run a preconstruction review, takeoff, scope and bid analysis in PBG Precon.

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01 Quick start

Five steps take you from a folder of PDFs to a reviewed set with findings you can send out as RFIs. Budget about ten minutes for a typical set.

1. Sign in with Google or an email address. Your projects are private to your account.
2. From the projects home, create a project: name it, and add the client and address if you have them.
3. Open the Documents tab and upload the whole sheet set at once. PBG Precon reads each sheet, pulls the sheet number, title and discipline, and indexes the text.
4. Open Plan review and run the review. The engine cross-checks plans against schedules and notes using the Ken checklist rules.
5. Read the findings. Each one cites verbatim text and points to the sheet it came from — click a citation to jump to the drawing. Export the RFI log when you're ready to send questions.

DO THIS

- Upload the entire set, including specifications, schedules and general notes — cross-sheet conflicts can only be found when both sheets are indexed.
- Give the project a name you'll recognize in a bid log, not "test".

DON'T DO THIS

- Don't run the review after uploading only the floor plans; most findings come from plan-vs-schedule comparison.

02 Concepts and vocabulary

A few terms are used consistently across the app.

Project

A container for one bid or one building: sheets, findings, takeoff, scopes and proposals all live inside it.

Sheet

One page of the uploaded set. Each sheet gets a sheet number, title, discipline and extracted text.

Document index

The searchable text of every sheet. Review, Intelligence and Scope all read from it.

Finding

One issue the review engine raised: a conflict, a missing detail, a coordination risk. It has a severity, a description and at least one citation.

Citation

A verbatim quote from a sheet plus its location. Answers and findings are only accepted when the quote matches the sheet text character-for-character, which is what keeps the AI from inventing content.

Checklist rule

A reusable piece of PBG judgment (millwork, envelope, coordination) that the review engine applies to every project.

Scale basis

How the takeoff knows real-world dimensions on a page: a printed scale note, a graphic scale bar, or your manual calibration.

Scope sheet

A bid-ready inclusion/exclusion list for one trade, generated from the indexed set.

Leveling

Comparing subcontractor proposals line by line so you can see who is missing what before you compare prices.

03 Signing in and access

PBG Precon uses Google sign-in or an email address and password. Either creates an account the first time you use it.

1. Click Sign in in the top-right corner.
2. Choose Continue with Google, or enter an email and password.
3. You land on the projects home. Everything you upload from here belongs to your account only.

Projects, sheets, findings, scopes and proposals are owner-only: nobody else — including other PBG accounts — can read them.

The Quick takeoff workspace in the header runs without an account, but nothing is saved to a project.

04 Projects and document ingest

Ingest is where the set becomes searchable. Everything downstream depends on it, so it's worth two minutes of review.

1. Open a project and choose the Documents tab.
2. Drag in the full set. Multi-page PDFs are split into sheets automatically; you can also drop individual sheet PDFs.
3. Wait for each sheet to finish processing. Sheet number, title and discipline are read from the title block area.
4. Scan the list. If a sheet came in as "Untitled" or with the wrong discipline, the title block was probably an image — see the note below.

Text-based PDFs (exported from Revit, AutoCAD, Bluebeam) work best. Scanned or photographed sheets have no text layer, so they index as images and produce few or no citations.

You can add sheets later — addenda, revised sheets, specifications — and re-run the review. Uploading a revision does not delete the original, so keep your naming clear.

DO THIS

- Upload specifications and schedules alongside the drawings; most high-value findings compare the two.
- Re-run review, scope or intelligence after adding an addendum.

DON'T DO THIS

- Don't upload photographs of printed sheets and expect citations — rescan with OCR or export a true PDF.
- Don't split one set across multiple projects; cross-sheet checks only see what's in the same project.

05 Plan review

The review engine reads the indexed set the way an experienced preconstruction lead does: it looks for what disagrees, what's missing, and what will cost money later.

1. Open the Plan review tab and click Run review.
2. Findings appear grouped by severity — high, medium, low. High means it will change price or schedule if it isn't answered.
3. Open a finding to read the issue, the reasoning, and the citations behind it.
4. Click a citation to open that sheet with the quoted text highlighted on the drawing.
5. Resolve findings you've answered, or dismiss the ones that don't apply, so the open count reflects real work.
6. Export the RFI log to turn the remaining open findings into a numbered question list for the architect.

Every finding must be backed by text that actually exists in the set. If the engine can't quote it, it doesn't raise it — that's deliberate.

The open-findings count on the tab is your live punch list for the set.

DO THIS

- Work high severity first and turn each one into an RFI while the reasoning is in front of you.
- Re-run after an addendum and compare the new findings against the ones you already resolved.

DON'T DO THIS

- Don't treat the finding list as complete coverage. It's a strong first pass over the text, not a substitute for your own set walk.

06 Intelligence (ask the set)

Intelligence answers plain questions about the project using only what the drawings and specs actually say — with the quote attached.

1. Open the Intelligence tab.
2. Ask a specific question: "What is the interior door hardware set at the corridor doors?" beats "Tell me about doors."
3. Read the answer, then check the citations under it. Each is a verbatim quote from a sheet.
4. Click a citation to jump to that sheet with the evidence highlighted.

If the set doesn't say it, you'll get an explicit "no supported answer" rather than a guess. That's a real result — it usually means an RFI.

Quotes are verified character-for-character against the sheet text before an answer is shown.

DO THIS

- Name the trade, room or sheet in your question to narrow the search.
- Use it during a subcontractor call to confirm what's shown before you commit to an answer.

DON'T DO THIS

- Don't ask for pricing or means-and-methods opinions here — Intelligence only reports what the documents say.

07 Checklist (the Ken rules)

The checklist is PBG's institutional knowledge written down: the things that always get missed on millwork, envelope and trade coordination.

1. Open the Checklist tab to see the rule library and which rules were applied to this set.
2. Rules that produced findings link straight to those findings.
3. Rules that produced nothing are still useful — they tell you what was checked, so you know what wasn't.

Rules are grouped by category (millwork, envelope, coordination) and carry a severity that flows through to findings.

DO THIS

- Use the checklist as the agenda for your internal set review meeting.

DON'T DO THIS

- Don't assume a silent rule means the condition is fine — it may mean the sheet text was too thin to judge.

08 Takeoff

The takeoff workspace turns a sheet into quantities: lengths, areas and counts, with a scale you can trust and show your work on.

1. Open the Takeoff tab (or Quick takeoff in the header for a one-off sheet).
2. Load a page. PBG Precon runs the auto-scale sequence: first it looks for a printed scale note like 1/4" = 1'-0", then for a graphic scale bar. If neither is found, it asks you to calibrate.
3. Check the scale basis badge in the sidebar. It tells you which method was used and how confident it is.
4. To calibrate manually, draw along a dimension you know — the longest one on the sheet is best — and type the real length.
5. Measure: the length tool for linear items like trim and wall runs, the area tool for floors and finishes, the count tool for fixtures and openings.
6. Run AI Takeoff to have quantities derived from the sheet's own text — schedules, room tags, notes. Review each proposed quantity and accept or remove it.

Auto-scale reads what's printed on the sheet. A sheet printed to a non-standard size, or one whose note disagrees with the geometry, will read wrong — that's why the badge shows the source.

Manual calibration always wins over the auto-detected scale.

AI Takeoff cites its evidence. Anything without evidence should be measured by hand.

DO THIS

- Calibrate off the longest available dimension — short calibrations multiply their error across the sheet.
- Spot-check one AI-proposed quantity by measuring it manually before accepting the batch.

DON'T DO THIS

- Don't trust a scale badge you didn't read. Check it once per page.
- Don't measure on a scanned sheet without calibrating; the print may not be to scale.

09 Estimate

The estimator converts accepted takeoff quantities into priced line items, with different logic for new construction versus remodel work.

1. From the takeoff workspace, open the estimate dialog.
2. Choose the job category. New construction covers sitework, foundation and framing sequencing; remodel categories assume existing conditions and demolition.
3. Review the scale basis panel — it shows how each quantity was measured, so you know what the pricing rests on.
4. Generate the estimate, then edit line items, quantities and unit costs directly.
5. Export to CSV for your estimating spreadsheet.

Unit costs are AI-generated starting points, not PBG's cost book. Replace them with your own numbers before anything goes to a client.

DO THIS

- Treat the output as a structured line-item skeleton you price, not as a price.

DON'T DO THIS

- Don't send a generated estimate to an owner without repricing it.

10 Scope

Scope produces a bid-ready trade scope sheet from the indexed set: what's included, what isn't, and what still needs an answer.

1. Open the Scope tab and pick a trade — plumbing, electrical, drywall, and so on.
2. Generate the scope sheet. The engine reads every sheet in the set for that trade's work.
3. Read the four blocks: inclusions, exclusions, clarifications and allowances. Each is backed by a citation.
4. Export the scope sheet as text to paste into your bid package, or keep it in saved history and regenerate after an addendum.

Clarifications are the questions the documents don't answer — those usually become RFIs or bid qualifications.

Saved scopes stay with the project so you can diff them after a revision.

DO THIS

- Send the scope sheet to the sub with the bid package so both sides scope the same work.

DON'T DO THIS

- Don't publish a scope sheet without reading its exclusions; that's where the money hides.

11 Bid

Bid takes the proposals you receive, normalizes them into comparable line items, and levels them against each other.

1. Open the Bid tab and upload a proposal: PDF, Excel or CSV. Enter the vendor name.
2. Wait for extraction — the proposal is parsed into structured line items with descriptions, quantities and prices.
3. Review the extracted line items and correct anything the parser misread.
4. Upload the remaining proposals for that trade, then run the analysis.
5. Read the leveling view: side-by-side pricing, coverage gaps (work one bidder priced and another didn't), and exclusion risk (language that shifts scope back to you).

Comparison is only meaningful once at least two proposals for the same trade are loaded.

Pair Bid with the trade's Scope sheet: the scope defines what should be covered, the analysis shows who covered it.

DO THIS

- Upload the proposal exactly as received — don't pre-summarize it, the parser needs the original language for exclusions.
- Check the coverage gaps before comparing bottom-line numbers.

DON'T DO THIS

- Don't award off the leveled total alone; read the exclusion flags first.

12 Best practices and troubleshooting

Common situations and what to do about them.

The review found almost nothing

Usually an incomplete index. Confirm the specifications and schedules were uploaded, and that sheets aren't scans without a text layer.

A finding cites the wrong sheet

Check the sheet's number and discipline in Documents. A misread title block sends citations to the wrong place.

Intelligence says there's no supported answer

The set genuinely doesn't state it. That's an RFI, not a bug.

Measurements are off by a consistent factor

The scale basis is wrong. Recalibrate manually against a long known dimension.

A proposal extracted badly

Scanned or heavily formatted proposals parse worst. Re-upload a text PDF or a CSV export if the vendor can provide one.

Results feel stale after an addendum

Uploading sheets doesn't automatically re-run anything. Re-run review, regenerate the affected scope sheets, and re-ask any Intelligence question that mattered.

Before anything leaves the office

Every AI output in this app is evidence-backed but not authoritative. Verify quantities, prices and exclusions against the documents before they go into a bid, an RFI or a contract.