



MINEFAB FOUNDATION

Concrete Foundation MTO · ACI 318 Compliant · Industrial Projects

Feature Overview · June 2026

ACI 318

DESIGN STANDARD

ACI 301

SPECS STANDARD

A615/A706

REBAR GRADE COVERAGE

10+

KNOWLEDGE BASES

PDF+Excel

OUTPUT FORMATS

AGENT CAPABILITIES

Element-by-Element Concrete Volume

Extracts concrete volumes (CY) for every element type — footings, piers, walls, ringwalls, slabs, equipment pads and sumps — with 10% waste factor and element-level breakdown for subcontract pricing.

Complete Rebar MTO

Rebar takeoff by bar size (#3 through #11) with ASTM unit weights, quantities, total weight, and 5% waste factor — organized by element with a consolidated by-size rollup for procurement.

Formwork SFCA by Element

Calculates formwork surface area (SFCA) per element with placement and rebar manhour estimates — supporting labour budgets for forming, placement, and finishing scopes.

Embedded Items & Anchor Bolt Takeoff

Extracts embedded plates, anchor bolt groups, sleeves and conduit blockouts from drawings — including setting length calculations and template schedule for procurement and layout.

Concrete Mix Specification Capture

Reads and records the full mix design from drawings — f'c, cement type, w/c ratio, exposure class (S/F/P/C), air content and minimum cover — compiled into a project mix specification table.

ACI Code Compliance Flags

Automatically flags exposure class conflicts, cover deficiencies, mix design gaps, and missing reinforcement callouts against ACI 318 and ACI 301 requirements before the MTO is finalized.

HOLD & Ambiguity Flag Register

Dedicated flag register captures elements with missing dimensions, conflicting notes, New vs. Existing classification conflicts, and items requiring EOR clarification before procurement.

10+ Approved Knowledge Bases

Agent references rebar development and lap length tables, ACI exposure class matrix, standard cover tables, pier and footing detailing references, and ASTM rebar unit weight tables.

Professional PDF & Excel Output

Branded MineFab AI reports with SOW table, element-by-element MTO, rebar by-size rollup, formwork SFCA, embed schedule, mix specification, manhour summary, RFQ package, and approval block.

OUTPUT DELIVERABLES

- Element MTO PDF
- Structured Excel Workbook
- Rebar By-Size Rollup
- Formwork SFCA Table

- Embed & Anchor Bolt Schedule
- Mix Specification Table
- Manhour Summary
- Approval Sign-Off Block

APPLICABLE STANDARDS

- ACI 318-14
- ACI 301
- ACI 117
- ASTM A615
- ASTM A706
- ASTM C94
- ASTM A108
- CSA A23.1