RebarMaster SA

Detailer's User Guide

A simple, step-by-step guide to detailing reinforced concrete members and producing bar bending schedules (BBS) with RebarMaster SA.

> Shape codes follow SABS 0144 Annex A. Values marked Rule verification required must be checked by a competent engineer before issue for construction.

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1. Getting started

RebarMaster SA runs in your web browser. There is nothing to install. The home page is the Project register: a list of all your projects with a search box at the top.

> Projects are currently saved in this browser on this device only. Use the same computer and browser to continue your work, and export regularly as a backup.

2. Creating a project

1 On the Project register click New project.

2 Enter the project name, project number, client and drawing number.

3 Click Create. The project opens in the detailing workspace.

Use the copy icon to duplicate an existing project as a starting point, or the bin icon to delete one.

3. Adding members

A member is one concrete element, such as a beam, column, footing or slab. The members list sits on the left of the workspace.

Member	What you enter
Beam	Length, width, depth, cover, number of identical beams
Column	Height, width, depth, cover, count
Pad footing	Length, width, thickness, cover, count
Slab	Span, width, thickness, cover, count
Any shape	Your own outline drawn on screen (see section 4)

All dimensions are in millimetres. Cover is measured from the concrete face to the outside of the bar.

4. Drawing any shape

1 Click Any shape at the bottom of the members list. A starting L-shaped outline appears.

2 Choose Draw / edit outline. Click to add corners; drag a corner dot to move it.

3 For accuracy, type exact X and Y coordinates (mm) in the corner list.

4 Delete unwanted corners with the remove button next to each point.

> Tip: sketch the outline roughly first, then correct the coordinates by typing. Typed values are exact; dragging is approximate.

5. Adding reinforcement

Standard members: open the member and add bars in the bar table. For each bar set the mark (e.g. A1), diameter, shape code, quantity per member and dimensions A, B, C, D, E.

Any-shape members: choose Draw bar, click along the bar path inside the outline and finish the bar. The program measures each segment, turns it into dimensions, and gives the bar shape code 20 (straight) or 99 (any other shape).

- Bars are drawn to scale in the drawing panel so you can check fit against cover.
- Diameters use the Y-prefix for high-yield bars (e.g. Y12, Y16).
- Change quantity or diameter at any time; the schedule updates instantly.

6. Understanding the bar schedule

The schedule is calculated automatically from your members and bars. You never type cutting lengths or masses by hand.

Column	Meaning
Bar mark	Unique label for the bar on the drawing
Shape	SABS 0144 shape code
A to E	Bending dimensions in mm
No. members / Bars per member / Total bars	Quantity build-up
Cut length	Length of straight bar before bending (mm)
Total mass	Total bars × length × unit mass (kg)
Rule status	Verified geometry or Rule verification required

A mass summary per diameter and the overall total appear below the schedule, ready for ordering.

7. Shape codes

RebarMaster SA uses SABS 0144 Annex A codes: 20, 32 to 39, 41 to 55, 60 to 65, 72 to 86, and 99 for any other shape. Common examples:

Code	Typical use
20	Straight bar
37	L-bar (one bend)
38	U-bar
60	Closed rectangular link / stirrup
99	Any other shape, dimensions shown on a sketch

Bend radius and hook allowances are project settings. Until an engineer approves them, affected rows are marked Rule verification required and printed as VERIFY on exports.

8. Revisions and approval

- Every change is recorded in the project history.
- When the schedule is checked, click Approve rev. The revision is locked and stamped APPROVED on exports.
- Further edits start a new revision letter, keeping the approved one on record.
- Demonstration projects are marked ILLUSTRATIVE and must not be used for construction.

9. Exporting

Button	What you get
Excel	BBS sheet plus mass summary sheet (.xlsx)
CSV	Plain schedule for other software
PDF	A3 drawing sheets with title block, plus the schedule
DXF	True-size drawings (1 unit = 1 mm) and schedule table for AutoCAD and similar; layers CONCRETE, REBAR, LINKS, TEXT, TABLE, BORDER

10. Good practice checklist

- Check covers against the specification and exposure condition.
- Confirm every bar fits inside the concrete outline in the drawing view.
- Use unique bar marks across the whole project.
- Clear all Rule verification required flags with the engineer before approval.
- Approve the revision before issuing to site or the bending yard.
- Export a backup copy after each working session.

This guide explains how to use the software. It does not replace structural design or the requirements of SANS / SABS standards.