

Walls That Stand

Printable Toolkit: the Shopping List, the Weekend Plan
and the Set-Out Sheet

Sizu Riatto

Built by Numbers, Book 1 · mathworkbook.netlify.app

How to use these sheets

Print as many copies as you like, and take a clean sheet to the build so the book can stay indoors, away from the mortar. **Template A** is the shopping list: quantity, waste, order, unit price and total for every material. **Template B** is the weekend plan, with the waits for concrete and render written in. **Template C** is the set-out sheet: the line, the corners and the fall of the ground.

Each sheet is explained, with the book's own wall worked in full, in the chapters: the counts in Chapters 1, 3, 5 and 8, the set-out in Chapter 2, and the plan in Chapter 9. The calculators at **mathworkbook.netlify.app/calculators** do the same arithmetic with your numbers.

These are planning sheets, not an engineering design. Follow your building department and the product labels.

Template A — The Shopping List

A clean printable copy is at mathworkbook.netlify.app/go/wall-shopping-list.

Wall: _____ Length × height: _____ Date of prices:

Material	Quantity	Waste	To order	Unit price	Total
Blocks (whole)		5%			
Half blocks					
Concrete (bags or m ³)		10%			
Mortar (bags)		10%			
Coping / caps		1 spare			
Reinforcing bar					
Core-fill grout					
Render (bags)		10%			
Paint (liters / gallons)					
Delivery					
Tool hire (days)					
Total					

Quantity comes from the chapter that counts it: blocks (Chapter 1), concrete (Chapter 3), mortar (Chapter 5), render and paint (Chapter 8). Add the waste, then round up to whole bags.

Template B — The Weekend Plan

A clean printable copy is at mathworkbook.netlify.app/go/wall-weekend-plan.

Your laying rate (blocks per hour, from your first course): _____
Helper: _____

Weekend 1: set out, dig, pour

Time	Job	Hours	Done / notes
	Call before you dig; mark services		
	Set out: profile boards, lines, square, level		
	Dig the trench; check depth and width		
	Mix and pour the footing; level it		
	Cover it; keep it damp		

The wait. The footing cures through the week. Days before you lay on it: _____

Weekend 2: lay, cap, clean

Time	Job	Hours	Done / notes
	Set the corner (end) blocks; string the line		
	Lay courses: $\text{blocks} \div \text{your rate} = \text{hours}$		
	Mortar batches: one batch per		
	Coping on; joints tooled		
	Clean down; cover the top		

The second wait. Render goes on after the mortar has set; paint goes on after the render has cured. Render date: _____ Paint date: _____

Template C — The Set-Out Sheet

A clean printable copy is at mathworkbook.netlify.app/go/wall-setout-sheet.

The line

	The book's wall	Yours
Wall length (a whole number of modules if you can)	6.0 m	_____
Offset from the house or boundary, end 1	2.5 m	_____
Offset from the house or boundary, end 2 (must match)	2.5 m	_____
Profile boards set back from each end	1.0 m	_____

The corners (3-4-5)

	Side A	Side B	Diagonal should be	Diagonal measured
Corner 1	_____	_____	_____	_____
Corner 2	_____	_____	_____	_____

The ground

	The book's wall	Yours
Fall along the wall	50 mm	_____
Slope (fall ÷ length)	0.83%, 1 in 120	_____
Steps in the footing (whole courses)	none (50 mm is far less than a course)	_____
Trench depth at the high end / low end	450 / 400 mm	_____