USER'S GUIDE

PROJECTCALC® PLUS MX

Model 8528

CALCULATED INDUSTRIES®

The ***ProjectCalc Plus® MX*** was designed specifically for Do-It-Yourselfers in the United Kingdom and other countries that use Metric measurements. It helps you quickly figure project material quantities, linear distances, areas/volumes and material costs like a pro. Unlike other calculators, it works and converts directly in Metric measurements and can also convert to Imperial (feet-inch) units, including Square and Cubic, so you don't have to figure tedious maths.
Use it to estimate quantities and costs for:

- Bricks & Blocks
- BTUs
- Concrete & Gravel
- Drywall
- Flooring (Carpet/Vinyl)
- Paint
- Slabs (Patio)
- Studs
- Tile
- Wallpaper

The ***ProjectCalc Plus MX*** is an indispensable tool for all your home Do-It-Yourself projects!

TABLE OF CONTENTS

KEY DEFINITIONS

Basic Keys

On/C — On/Clear Key
Turns power on. Pressing once clears the display. Pressing twice clears all temporary values.

Conv On/C — Off
Turns calculator off and clears all temporary/non-permanent registers.

Rcl — Recall Key
Recalls stored values. Also works with Memory keys (see Memory keys for details).

+ − × ÷ =
Arithmetic operation keys.

0 — 9 and •
Keys used for entering numbers.

Convert Key Functions

Conv — Convert Key
Used with the dimensional unit keys to convert between dimensions (e.g., cubic millimetres to cubic metres), with the "Project Keys" to calculate various material quantities (see *"DIY Project Keys"*), or with other miscellaneous keys to access special functions, such as those listed below.

Conv × — Clear All
Clears all values, including memory. Sets the calculator back to its default settings. Use this keystroke with caution, as it will reset all custom settings or stored material values.

Conv − — Sign Change *(+ / –)*
Sets displayed value to positive or negative. (Repetitive presses of Conv − will change sign to plus or minus.)

Conv ÷ — Square Root *($\sqrt{x}$)*
Finds square root of displayed value (e.g., 1 0 0 Conv ÷ equals 10).

Conv + — x^2
Finds square of displayed value (e.g., 1 0 Conv + equals 100).

Conv Stor or Rcl Stor — Pi *(π)*
Displays the constant 3.141593

Conv 8 **— Percent *(%)***

Memory

Conv = ***(M+)*** — Adds the displayed value to the semi-permanent memory register (e.g., 1 5 0 **Conv** =). Semi-permanent means the value is cleared when the calculator is turned off.

Rcl = ***(M-R/C)*** — Recalls memory value (e.g., if 150 has been stored in Memory, pressing **Rcl** = will display 150). ***Note:*** This function displays, but does not clear, the memory register.

Rcl **Rcl** ***(M-R/C)*** — Displays and clears/deletes any value stored in the memory register.

Conv **On/c** ***(Off)*** — Turns calculator off and clears the memory register.

Stor = — Memory Store (replaces stored memory value with the displayed value).

Measurement Unit Keys

Metres
Enters or converts to metres.

mm **— Millimetres**
Enters or converts to millimetres.

Conv 7 *(cm)* **— Centimetres**
Enters or converts to centimetres. For example, to enter 50 centimetres, input 5 0 **Conv** 7.

Feet
Enters or converts to feet as whole or decimal numbers. Also used with the **Inch** and / keys for entering Feet-Inch-Fraction values (e.g., 6 **Feet** 9 **Inch** 1 / 2). Repeated presses during conversions swap between Feet-Inch-Fractions and Decimal Feet.

Inch
Enters or converts to inches. Entry can be whole or decimal number. Also used with the / key for entering fractional inch values (e.g., 9 **Inch** 1 / 2). Repeated presses during conversions swap between Fractional and Decimal Inches.

/ — Fraction Bar
Used to enter fractions (e.g., 1-1/2 inches is entered 1 Inch 1 / 2). ***Note:*** You need to assign the "whole" inch value (e.g., 1 Inch) first using the Inch key, then enter the fraction (1 / 2). However, if you are only entering fractions of an inch, you don't need to assign it, the calculator knows it is a fractional inch if you use the / key—e.g., enter 1/8 of an inch by pressing 1 / 8. Fractions can be entered as proper (1/2, 1/8, 1/16) or improper (3/2, 9/8).

Conv 9 *(Yds)* — Yards
Enters or converts to yards. For example, to enter 50 yards, input 5 0 Conv 9.

Entering Square or Cubic Values

To assign a measurement as "square" or "cubic," enter the value, then press the desired dimension key twice for square and three times for cubic. For example, to enter 25 square metres, press 2 5 Metres Metres. To enter 25 cubic metres, enter 2 5 Metres Metres Metres.

Fraction Resolution (for Imperial Measurements Involving Fractions)

Your calculator is set to display fractional values to the nearest 16th of an inch (default setting). The 1/16-inch resolution can be displayed by pressing RCl /. Repeated presses of / will then revolve through the available fractional inch settings: 1/16, 1/32, 1/64, 1/2, 1/4 and 1/8. The setting that you last see on the display will be permanently set when you exit this mode (simply press any other key to exit).

Your calculator will also swap between the highest fractional resolution available and the set resolution with repeated presses of the Fraction Bar / when a fraction is displayed. See the example below:

(cont'd)

(cont'd)

Keystroke	Display
3 Inch	3. INCH
÷ 6 4 =	0-1/16 INCH
/	0-3/64 INCH
/	0-1/16 INCH

DIY (Do-It-Yourself) Project Keys

The following keys help you quickly estimate material quantities for common DIY projects. In addition, the Stor key allows you to change material values for selected functions (i.e., you may replace the "default values" with your own). Note that these changes are stored until you change them again, or perform a "Clear All" by pressing Conv ×.

Note: To view Examples on how to customize Project Key settings using the Stor key, see *"Project Examples–Using Custom Settings."*

Paint
Calculates quantity of paint in litres, based on an entered area and a stored Paint Coverage Area per Litre.

Stor Paint — Stores Paint Coverage Area Per Litre
Stores a new Paint Coverage per Litre (see grid, *"Default/ Standard Values for Materials,"* for current setting). To recall your setting, press Rcl Paint.

Wall Paper
Calculates number of rolls of wallpaper, based on an entered area and a stored Wallpaper Roll Coverage Area.

Stor Wall Paper — Stores Wallpaper Roll Coverage Area
Stores a new Coverage Area per Wallpaper Roll. To recall this setting, press Rcl Wall Paper.

Tile
Finds the number of tiles, based on an entered length or area. Repeated presses will scroll between numbers of

tiles based on various Standard Tile Sizes (see *"Default/ Standard Values for Materials"*). ***Note:*** In the calculation, the corresponding tile size will show in the upper right of the display. Tile sizes are labeled in millimetres, not square millimetres (or sq. metres). In other words, a "100mm tile" is really 100mm x 100mm or a 10,000 square-mm (0.01 sq. m) size.

Note: Calculation does not account for grout width, so you will need to adjust for this.

Also note that this key cannot be customized; you must use Custom Tile Keys Conv 6 if you are using other than the stored tile sizes.

Flooring
Calculates carpet length required in metres based on entered area and Standard Carpet Roll Sizes (see *"Default/Standard Values for Materials"*). Repeated presses of Flooring will scroll between standard roll sizes. ***Note:*** this key cannot be customized.

Bricks
Calculates the number of standard "face" bricks and "paver" bricks based on an entered length, area or volume and the Standard Brick Sizes. Repeated presses of Bricks will swap back and forth between the number of "face" and "paver" bricks, and the entered dimensional value. ***Note:*** this key cannot be customized.

Conv 4 — 8 x 4 Sheets
Calculates number of plywood/drywall sheets based on an entered linear distance or area and Standard Sheet Sizes (see *"Default/Standard Values for Materials"*). ***Note:*** this key cannot be customized

Conv 5 — Bulk Bags
Calculates number of bags of gravel or sand based on an entered volume and a stored Bulk Bag Size.

Stor 5 — Stores Bulk Bag Size
Stores a new Bag Size. ***Note:*** You must enter or find the bag's cubic volume first. Use length x width x height, then Stor 5. To recall this setting, press Rcl 5.

Conv 6 — Custom Tile
Calculates number of tiles based on an entered area and a stored Custom Tile Size. This is used separately from the regular Tile key, which has various Standard Tile Sizes built in.

Note: Calculation does not account for grout width for custom tiles, so you will need to adjust for this.

Stor 6 — Stores Custom Tile Size
Stores Custom Tile Size. You must enter or find the tile size area first. Use length x width, then Stor 6. To recall this setting, press Rcl 6.

Conv 1 — Slabs (Concrete)
Calculates the number of slabs of concrete required, based on an entered length or area and Standard Slab Sizes. ***Note:*** this key cannot be customized.

Conv 2 — Studs
Calculates number of studs, based on an entered linear distance and a stored On-Centre Spacing.
Note: Automatically adds one stud to the calculated answer to account for one on the end.

Stor 2 — Stores On-Centre Spacing for Studs
Stores a new On-Centre Spacing for studs in metres. To recall this setting, press Rcl 2.

Conv 3 — Blocks
Calculates the number of blocks based on an entered linear distance or area and a stored Standard Block Area.

Stor 3 — Stores Block Length/Block Size
Stores new Block Length in linear metres or Block Size in square metres. To recall this setting, press Rcl 3.

Conv 0 — BTU (British Thermal Unit)
Calculates the number of BTUs required to heat a room given the room's cubic capacity. ***Note:*** this key cannot be customized.

Conv • — Cost
The "Cost" function allows you to calculate total material cost, given a unit dimension and an entered Per Unit Cost.

Note on DIY Project Keys: For most problems, the DIY Project Keys will also find the Coverage Area given an entered Quantity. For example, you can find the Coverage Area of Paint given "X" Number of Litres/Cans.

DEFAULT/STANDARD VALUES FOR MATERIALS

The ***ProjectCalc Plus MX*** uses the standard (default) settings or material sizes listed below. However, six (6) material settings can be customized (indicated with an asterisk*), meaning, they allow you to store values other than the defaults: Blocks, Bulk Bags, Paint, Studs, Custom Tile and Wallpaper.

Key	Default Value/Standard Sizes
8'x 4' Sheets	Sheet Sizes: 8' x 4' (2440mm x 1220mm) 8' x 2' (2440mm x 607mm) 6' x 2' (1819mm x 607mm) 4' x 2' (1220mm x 607mm)
*Blocks	Block Length: 440mm Block Size: 440mm x 215mm (0.0946 sq m)
Bricks	Face Brick Size: 215mm x 65mm (0.01 sq m) Paver Brick Size: 200mm x 100mm (0.02 sq m)
BTU (British Thermal Unit)	5 BTUs per 1 cubic foot
*Bulk Bags (Gravel or Sand)	Bag Size: 840mm x 840mm x 840mm (0.592704 cu m per bag)
* Custom Tile	Tile size: 0.02 square metres (100mm x 150mm, or 15,000 sq. mm; 0.015 sq m)

Key	Default Value/Standard Sizes
Flooring (Carpet)	3.66m, 4m, 2m and 3m-wide carpet rolls
*Paint	1 litre covers 10 square metres
Slabs (Concrete)	Slab Sizes: 300mm x 300mm, 400mm x 400mm, 450mm x 300mm, 450mm x 450mm, 600mm x 450mm, 600mm x 600mm, 600mm x 300mm
*Studs	400mm (0.4m) on-centre spacing
Tile	Tile sizes: 100mm, 150mm, 200mm, 225mm, 250mm, 300mm, 330mm, 500mm and 50mm Grout width = 0
*Wallpaper	1 roll covers 5.23 square metres (520mm x 10.05m)

Note: These settings are PERMANENTLY STORED (will not clear upon turning your calculator off until you change them or reset the calculator). So be sure to check the stored values using the RCl key prior to completing new problems, and set new values if needed using the Stor key.

BASIC DIMENSIONAL MATHS EXAMPLES

Linear Metric and Imperial Conversions

Convert 18.5 metres to other units of linear measurement.

KEYSTROKE	DISPLAY
On/C	0.
1 8 • 5 Metres	18.5 M
Conv 7 *(cm)*	1850. CM
Conv mm	18500. MM
Conv Feet	60 FEET 8-3/8 INCH
Conv Inch	728-3/8 INCH

Convert 15 feet 9-1/16 inches to decimal feet, then to decimal inches and metres.

KEYSTROKE	DISPLAY
On/C	0.
1 5 Feet 9 Inch 1 / 1 6	15 FEET 9-1/16 INCH
Conv Feet	15.75521 FEET
Conv Inch	189.0625 INCH
Conv Metres	4.802 M

Now convert decimal feet (14.793 feet) to feet-inch-fractions and inches.

KEYSTROKE	DISPLAY
On/C	0.
1 4 • 7 9 3 Feet	14.793 FEET
Conv Feet	14 FEET 9-1/2 INCH
Conv Inch	177-1/2 INCH

Square and Cubic Conversions

Convert 25 square metres to other square units.

KEYSTROKE	DISPLAY
On/C	0.
2 5 Metres Metres*	25. SQ M
Conv 9 *(Yds)*	29.89975 SQ YD
Conv Feet	269.0978 SQ FEET

**Press the unit key twice to assign your entry as "square."*

Convert 25 cubic metres to cubic yards.

KEYSTROKE	DISPLAY
On/C	0.
2 5 Metres Metres Metres*	25. CU M
Conv 9 *(Yds)*	32.69877 CU YD

**Press the unit key three times to assign your entry as "cubic."*

Basic Dimensional Math

KEYSTROKE	DISPLAY
On/C	0.
Adding Dimensions:	
1 0 • 7 5 Metres + 2 0 0 mm =	10.950 M
Subtracting Dimensions:	
5 Metres − 3 4 0 Conv 7 *(cm)* =	1.600 M
Dividing Dimensions:	
2 5 0 mm ÷ 3 0 =	8.333333 MM
Multiplying Dimensions/Finding Square Metres:	
2 5 0 mm × 2 7 5 mm =	68750. SQ MM
Conv Metres	0.06875 SQ M
Multiplying Dimensions/Finding Cubic Metres:	
2 1 0 mm × 2 7 5 mm	
× 2 0 0 mm =	0.01155 CU M*

**Answers will automatically convert from millimetres to metres for large measurements.*

Adding a 15% Waste Factor Allowance:	
1 5 5 • 7 5 Metres Metres Metres	
+ 1 5 Conv 8 *(%)*	179.1125 CU M

"Square-up"/Diagonal

"Square-up" (find the diagonal to ensure a right angle) a concrete pad that has a length of 4.5 metres and a width of 6.25 metres.

KEYSTROKE	DISPLAY
4 • 5 Metres Conv + (x^2) +	**20.25** SQ M
6 • 2 5 Metres Conv + (x^2)	**39.0625** SQ M
=	**59.3125** SQ M
Conv + ($\sqrt{x}$)	(diagonal) **7.701** M

DIY PROJECT EXAMPLES

The following are basic examples showing how to estimate material quantities for various DIY projects.

These examples use industry standards for materials (see *"Default/Standard Values for Materials"*); however, some values can be customized, if desired (see following section, *"Project Examples–Using Custom Settings"*).

You may want to factor in a Waste Allowance for ordering sufficient quantities of materials. For example, add 10% (+ 1 0 Conv 8 *(%)*) to your total. See *"Tiles: Number of"* for an example of this.

Bricks (Face Bricks and Blocks): Number of, for a Garden/Planter Wall

Find the number of "face" bricks or concrete blocks needed to fill a 12.192-metre long planter wall that is two courses high.

KEYSTROKE	DISPLAY
On/C	**0.**
1 2 • 1 9 2 Metres Bricks	**56.71** FAC BRK*
× 2 =	(face bricks) **113.414**
On/C	**0.**
1 2 • 1 9 2 Metres Conv 3 *(Blocks)*	**27.71** BLK
× 2 =	(blocks) **55.41818**

* ***Note:*** Bricks may not appear in the order that you see here (i.e., calculator may display "Paver" bricks instead of "Face" bricks), since the calculator will show the last brick type that was displayed. Consecutive presses of the Bricks key will swap back and forth between the two brick types and the original entry (of length).

Bricks (Paver): Number of, for a Walkway

Find the number of "paver" bricks required for a 5.486m x 0.914m walkway.

KEYSTROKE	DISPLAY
On/C	0.
5 • 4 8 6 Metres	
× • 9 1 4 Metres =	5.014204 SQ M
Bricks Bricks*	250.71 PVR BRK
	(round up to 251)

*Press the Bricks key twice to scroll to "Paver" bricks, as the first press calculates the value for "Face" bricks.
Note: Bricks may not appear in the order that you see here; see previous note.

BTUs

Find the BTUs for a room with a cubic capacity of 100 cubic metres. Then find the kilowatt hours (KW/hour) for an electric radiator using the previous values.

KEYSTROKE	DISPLAY
On/C	0.
1 0 0 Metres Metres Metres	100 CU M
Conv 0 *(BTU)*	17657.33 BTU
0	5.17 KW/HR

Bulk Bags: Number of (Gravel)

How many bags of gravel do you need to cover a 15.24m x 6.096m driveway that is 101.6mm deep?

KEYSTROKE	DISPLAY
On/C	0.
1 5 • 2 4 Metres × 6 • 0 9 6 Metres	
× 1 0 1 • 6 mm =	9.438949 CU M
Conv 5 *(Bulk Bags)*	15.93 BLK BAG
5	STOR 0.59 CU M PER BAG*

Note: The second press of 5 will display the stored material value. For bulk bags, it is based on 0.592704 cubic metres per bag, or 840mm x 840mm x 840mm.

Bulk Bags: Finding Fill Volume Based on Number of Bags

How many cubic metres will 20 bags of gravel fill?

KEYSTROKE	DISPLAY
On/C	0.
2 0 Conv 5 5	11.85 CU M

Carpet: Length/Quantity of

Find the quantity of carpet required (for various standard carpet roll sizes) to cover a floor that measures 9.144m x 7.62m. First multiply the length times the width, then find the length of carpet in metres for each roll size.

KEYSTROKE	DISPLAY
On/C	0.
9 • 1 4 4 Metres	
× 7 • 6 2 Metres =	69.67728 SQ M
Flooring	19.038 M 3.66 ROll*
Flooring	17.419 M 4.00 ROll
Flooring	34.839 M 2.00 ROll
Flooring	23.226 M 3.00 ROll

* ***Note:*** Roll sizes may not appear in the order that you see here since the calculator remembers the last roll size that was displayed.

Drywall: Number of 8 x 4 Sheets

*How many drywall sheets do you need for a wall measuring 4.572m x 3.658m? Find the quantity per various standard sheet sizes, including 8x4, 8x2, 6x2 and 4x2.**

KEYSTROKE	DISPLAY
On/C	0.
4 • 5 7 2 Metres	
× 3 • 6 5 8 Metres =	16.72438 SQ M
Conv 4 *(8 x 4 Sheets)*	5.62 8x4 SHT
4	11.29 8x2 SHT
4	15.15 6x2 SHT
4	22.58 4x2 SHT

* ***Note:*** See *"Default Values"* grid for corresponding sheet sizes in mm. Sheet sizes may not display in the order shown above.

Paint: Litres of

How many litres of paint will you need to cover a wall measuring 5.486m x 3.048m?

KEYSTROKE	DISPLAY
On/C	0.
5 • 4 8 6 Metres	
× 3 • 0 4 8 Metres =	16.72133 SQ M
Paint	(round up to 2 litres) 1.67 LTR

Paint: Finding Coverage Area

How many square metres will 6.25 litres of paint cover?

KEYSTROKE	DISPLAY
On/C	0.
6 • 2 5 Paint Paint	62.50 SQ M

Note: This is a simple calculation, based on paint coverage of 10 square metres per litre.

Slabs: Number of (Concrete Patio)

How many patio slabs are required to cover an area measuring 7m x 5m, or 35 square metres? Find the quantity of slabs for various standard slab sizes.

KEYSTROKE	DISPLAY
On/C	0.
3 5 Metres Metres	35 SQ M
Conv 1 *(Slabs)*	388.89 (300/300)*
1	218.75 (400/400)
1	259.26 (450/300)
1	172.84 (450/450)
1	129.63 (600/450)
1	97.22 (600/600)
1	194.44 (600/300)

*300/300 means 300mm x300mm slab size.

Note: Remember to round up (e.g., 388.89 means you should purchase at least 389 slabs).

Note: Slab sizes may not display in the order shown above.

Studs: Number of

How many studs are required for a 4.75 metre wall with 400mm on-centre spacing ?

KEYSTROKE	DISPLAY
On/C	0.
4 • 7 5 Metres	4.75 M
Conv 2 *(Studs)*	13.00 STD*

*Automatically includes one stud for the end.

Note: If you need to use other than 400mm on-centre spacing, you can store a new on-centre (see next section, *"Using Custom Settings"*).

Tiles: Number of (Adding Waste Allowance)

How many tiles do you need to cover a floor measuring 4.572m x 5.182m? You're not sure of the tile size you're going to use, so find the number of tiles in various sizes. Also, add a 10% waste allowance, in case you need extra tile.

Note: After converting to Tile, press the Tile key until you reach the desired tile size. (The ***ProjectCalc*** lists nine (9) of the most popular tile sizes in the UK.)

KEYSTROKE	DISPLAY
On/C	0.
4 • 5 7 2 Metres	
× 5 • 1 8 2 Metres =	23.6921 SQ M
+ 1 0 Conv 8 *(%)*	26.06131 SQ M
Tile	2606.13 (TLE 100)*
Tile	1158.28 (TLE 150)
Tile	651.53 (TLE 200)
Tile	514.79 (TLE 225)
Tile	416.98 (TLE 250)
Tile	289.57 (TLE 300)
Tile	239.31 (TLE 330)
Tile	104.25 (TLE 500)
Tile	10424.53 (TLE 50)
Tile	26.06 SQ M**

(cont'd)

(cont'd)

* "Tile 100" means "100 mm tile size."

Note: Remember to round up (e.g., 2606.13 tiles means you should purchase 2607 tiles)

**Repeats coverage area or square metres calculated above.

Note: Tile sizes may not display in the order shown above.

Wallpaper: Rolls of

Find the number of wallpaper rolls needed for a wall measuring 3m x 4m, or 12 square metres.

KEYSTROKE	DISPLAY
On/C	0.
1 2 Metres Metres Wall Paper	2.30 WP roll
	(round up; purchase 3 rolls)

Note: Based on wallpaper coverage of 5.23 square metres per roll. This value can be customized (see *"Using Custom Settings"* following this section)

Wallpaper: Finding Coverage Area

How many square metres will 8 rolls of wallpaper cover?

KEYSTROKE	DISPLAY
On/C	0.
8 Wall Paper Wall Paper	41.81 SQ M

PROJECT EXAMPLES – USING CUSTOM SETTINGS

There are six (6) material keys that you may use to store new non-standard material sizes: Blocks, Bulk Bags, Paint, Studs, Custom Tile and Wallpaper.

To store new material values (e.g., coverage per bag, or paint coverage per litre) use the Sto+ key. Just remember these values are permanently stored until you change them. (Only a Conv ✕ or storing new values will delete these registers.)

To recall your stored settings, press Rcl and then the Project Key (e.g., Rcl Paint or Rcl Wall Paper), prior to completing a problem.

Again, note that performing a Clear All (Conv ×) will erase all custom settings and return your calculator to the default values, so use this keystroke with caution.

Blocks (Custom Block Size)

Find the number of concrete blocks needed for a 12.192 metre long planter wall that is two courses high, if you are using a non-standard block with a length of 300mm. Store the block length and then solve for number of blocks. Multiply by two to account for the two courses.

KEYSTROKE	DISPLAY
On/C	**0.**
3 0 0 mm Stor 3 *(Blocks)*	**STOR 0.300** M BLK LEN*
1 2 • 1 9 2 Metres Conv 3 *(Blocks)*	**40.64** BLK
× 2 =	(blocks) **81.28**

*The calculator automatically converts entered dimension to metres when storing block length or block size, unless value is less than 10mm or 10 sq mm.

Bulk Bags (Custom Bag Size)

How many bags of gravel do you need to cover a 15.42m x 7.62m driveway that is 101.6mm deep, if the bag size is "non-standard" at 740mm x 740mm x 740mm? Multiply the bag measurements and store the result as the custom bag size. Then find number of bags required.

KEYSTROKE	DISPLAY
On/C	**0.**
7 4 0 mm × 7 4 0 mm	
× 7 4 0 mm =	**0.405224** CU M*
Stor 5 *(Bulk Bags)*	**STOR 0.41** CU M PER BAG
On/C	**0.**
1 5 • 4 2 Metres × 7 • 6 2 Metres	
× 1 0 1 • 6 mm =	**11.93804** CU M
Conv 5 *(Bulk Bags)*	**29.46** BLK BAG

Paint: Litres of (Custom Paint Coverage Per Litre)

How many litres of paint will you need to cover one wall that measures 6m x 4.5m and a second wall that measures 3.6m x 3m, if 1 litre of your selected paint covers 20 square metres (versus the default stored coverage of 10 square metres)?

KEYSTROKE	DISPLAY
On/C	0.
2 0 Metres Metres Stor Paint	STOR 20.00 SQ M PER LTR
On/C	0.
6 Metres × 4 • 5 Metres =	27. SQ M
Conv = *(M+)*	M 27. SQ M
3 • 6 Metres × 3 Metres =	M 10.8 SQ M
Conv = *(M+)*	M 10.8 SQ M
Rcl Rcl *(M-R/C)*	37.8 SQ M
Paint	(round up to 2 litres) 1.89 LTR
Conv × *(Clear All)*	0.

Studs: Number of (Custom On-Centre Spacing)

How many studs are required for a 4.75 metre wall, if the on-centre spacing is 381mm (versus the standard 400mm)?

KEYSTROKE	DISPLAY
On/C	0.
3 8 1 mm Stor 2 *(Studs)*	STOR 0.381 M STD OC
On/C	0.
4 • 7 5 Metres	4.75 M
Conv 2 *(Studs)*	14.00 STD*

*Automatically includes one stud for the end.

Tiles: Number of (Custom Tile Size)

How many tiles do you need to cover a floor measuring 2 square metres? You would like to use a custom tile size of 100mm x 200mm. First store the custom tile size by multiplying the tile length times tile width and store the result as the custom tile size. Then find the number of tiles for the above floor area.

KEYSTROKE	DISPLAY
On/C	0.
1 0 0 mm × 2 0 0 mm =	20000. SQ MM
Stor 6 *(Custom Tile)*	STOR 0.02 SQ M CST TLE
On/C	0.
2 Metres Metres Conv 6	100.00 CST TLE (Custom Tile)

Wallpaper: Rolls of (Using Custom Setting)

Find the number of wallpaper rolls needed for a wall measuring 3m x 4m, or 12 square metres, if you're using a roll size that covers 5 square metres per roll (versus standard of 5.226 sq metres per roll).

KEYSTROKE	DISPLAY
On/C	0.
5 Metres Metres Stor Wall paper	STOR 5.00 SQ M PER ROLL
On/C	0.
1 2 Metres Metres Wall paper	2.40 WP ROLL (purchase 3 rolls)

FINDING THE COST OF MATERIALS

You may also use the ***ProjectCalc Plus MX*** to determine the cost of materials, if you know the material's cost per unit. It's a simple calculation, but useful, as you can quickly convert directly from a previously calculated quantity (e.g., cubic metres) to a total Euro cost format. See the following examples.

Cost of Concrete

How much will 10.62 cubic metres of concrete cost, if the cost per cubic metre is quoted at 30 Pounds?

KEYSTROKE	DISPLAY
On/C	0.
1 0 • 6 2 Metres Metres Metres	10.62 CU M
× 3 0 Conv • *(Cost)*	(Pounds) 318.60

Paint: Litres of

How many litres of paint will you need to cover a wall measuring 5.486m x 3.048m? If it costs 6.25 Euros per litre, what will the paint cost?

KEYSTROKE	DISPLAY
On/C	0.
5 • 4 8 6 Metres	
× 3 • 0 4 8 Metres =	16.72133 SQ M
Paint	1.67 LTR
× 6 • 2 5 Conv • *(Cost)*	(Euros) 10.45

ACCURACY AND AUTO SHUT-OFF

Reset

If your calculator should ever "lock up," press RESET – a small hole located above the Bricks key at the upper right – using the end of a paper clip.

Accuracy

The normal display is seven digits plus fractional display. Fraction resolution displays values to the nearest 16th of an inch, unless changed by user. Each calculation is carried out internally to ten digits.

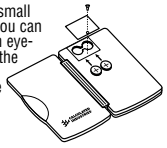
Auto Shut-Off and Batteries

Auto Shut-Off: After 8-12 minutes of non-use.

Batteries Included: Two LR-43 batteries.

Battery-Life: 575 hours of actual use.

To replace the batteries, use a small Phillip's head screwdriver (or you can also use a screwdriver found in eyeglass repair kits) and unscrew the single screw in the centre of the battery door, located on the back of the calculator (see diagram).



Carefully remove the battery door, remove the old batteries from the clips and replace them with two new LR-43 batteries. Make sure the positive sides (+) are facing up. Replace the battery door and re-attach the screw.

Note: Replacement LR-43 batteries are available at most discount or electronics stores. Or, call Calculated Industries at 001-775-885-4900.

REPAIR AND RETURN

Repair and Return Information

Return Guidelines:

1. If your calculator won't turn on, try pressing the "Reset Button" first. If it still won't turn on, check the batteries as outlined in the User's Guide.
2. **If there is a black spot on the LCD screen, THIS IS NOT A WARRANTY DEFECT. The unit can be repaired. Call for a repair quote before returning your unit.**
3. If you need more assistance, please go to our website at www.calculated.com and click on Support, then Repair Services FAQs.

U.S. PATENT NO. 6,721,623

10/09

RoHS compliant 2000/95/EC

PRG8528E-G

Quick Reference Guide

UNIT KEYS

Unit keys: mm Metres Feet Inch
Conv 7 *(cm)* Conv 9 *(Yds)*

Enter length in metres, then convert to millimetres:

KEYSTROKE	DISPLAY
4 • 5 Metres	4.5 M
Conv mm	4500. MM

Enter area in centimetres, then convert to metres:

4 0 0 0 0 Conv 7 7	40000 SQ CM
Conv Metres	4. SQ M

Enter volume in millimetres, then convert to metres:

3 0 0 0 0 mm mm mm	30000 CU MM
Conv Metres	0.00003 CU M

BASIC EXAMPLES

Paint *– Calculates quantity of litres for an area (based on stored coverage area per litre).*

KEYSTROKE	DISPLAY
3 2 • 7 Metres Metres	32.7 SQ M
Press Paint	3.27 LTR

Tile *– Calculates quantity of tiles for an area or length (based on nine standard tile sizes).*

9 • 2 9 Metres Metres	9.29 SQ M
Press Tile	929.00 TLE 100
Press Tile	412.89 TLE 150
Press Tile *	232.25 TLE 200

**Continue pressing* Tile *to display all sizes (100mm, 150mm, 200mm, 225mm, 250mm, 300mm, 330mm, 500mm, 50mm).*