# **HOME PROJECT CALC®**Pocket Reference Guide



Mode! 8510



CALCULATED INDUSTRIES

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#### **KEY DEFINITIONS**

# **Basic Function Keys**

# On/C - On/Clear Key

Turns power on. Pressing once clears the display. Pressing twice clears all temporary values.

#### Off - Off

Turns all power off, clearing all nonpermanent registers.

#### 

Arithmetic operation keys.

0 - 9 and •

Digits used for keying in numbers.

# 2 - Percent (%)

Four-function (+, -, x, ÷) percent.

# Dimensional Unit Keys

#### Yds - Yards Key

Enters or converts to Yards

#### Feet - Feet Key

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

#### Inch - Inch Key

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 2). Repeated presses during conversions toggle between Fractional and Decimal Inches

# 7 - Fraction Bar Key

Used to enter fractions Fractions can be entered as proper (1/2, 1/8, 1/16) or improper (3/2, 9/8).

#### - Meter Kev

Enters or converts to Meters.

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# Convert Key Functions

#### Conv - Convert Key

Used with the dimensional unit keys to convert between dimensions, the **Project Keys** to calculate material quantities, or with other keys to access special functions.

# Conv = - Change Sign (+ / -)

Toggles displayed value to positive or negative.

# Conv - Square Root (√x)

Finds Square Root of value in display.

# Conv X - Value Squared (x²)

Finds Square of value in display.

# Conv % - Pi (π)

Constant 3.141593.

#### Memory

- in the semi-permanent memory (e.g., 1 5 0 conv +). Semi-permanent means the value is cleared when the calculator is turned off.
- Conv ☐ Conv ☐ (M-) Subtracts a value from the semi-permanent Memory (e.g., 1 5 0 Conv ☐ Conv ☐ Conv ☐ Subtracts 150 from the memory).
- Conv On/C (MC) Clears Memory value.

# Entering Square or Cubic

To label a dimension 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 Cubic Yards, press 2 5 Yds Yds Yds.

#### Fraction Resolution

Your calculator is set to display Fractional values to the nearest 16th of an Inch (default setting). Press ♥ ↑ to access the fraction resolution setting. Repeated presses of ▶ will then revolve through the available settings: 1/16, 1/32, 1/64, 1/2, 1/4 and 1/8. Press ♥ ↑ to exit.

## Project Keys

#### Paint - Paint

Calculates volume of paint, based on an entered or calculated area. Finds quantity in Gallons, Quarts or Pints upon repeated presses.

# - Wallpaper

Calculates number of rolls of wallpaper, based on an entered or calculated area.

(Cont'd)

#### (Cont'd)

#### Tile - Tile

Finds the number of tiles, based on an entered or calculated area. Repeated presses will scroll between numbers of tiles for various "standard" tile sizes (18", 16", 13", 12", 10", 8", 6", 4", 2", 1" and 24").

Note: Tile sizes shown in Inches, not Square Inches. In other words, a 6" tile is really 6" x 6", or a 36 Square-Inch tile, but it is labeled as a 6" size.

# carpet - Carpet

Calculates carpet length required, based on entered or calculated area. Repeated presses of will scroll between values for 12', 13', and 15' rolls

#### concrete - Concrete

Calculates the number of bags of concrete required, based on an entered or calculated volume (e.g., cubic feet or cubic yards).

#### Conv . Cost

"Cost" function that allows you to calculate total material cost.

# **BASIC DIMENSIONAL MATH**

#### **Linear Conversions**

Convert 15 Feet 9-1/16 Inches to other units of measure.

KEYSTROKE

DISPLAY

On/C

1 5 Feet 9 Inch 1 / 1 6

O.

Conv Feet Conv Inch 15 FFFT 9-1/16 INCH

15 75521 FEFT 189 0625 INCH 5.251736 YD 4.802187 M

Conv Yds Conv m

Convert Decimal Inches to Fractional Inches

KEYSTROKE On/C

DISPLAY U

Conv Inch

1 4 • 7 9 3 Inch

14 793 INCH 14-13/16 INCH

# Square and Cubic Conversions

Convert 25 Square Feet to other Square dimensions.

KEYSTROKE	DISPLAY
On/C	0.
2 5 Feet Feet	25. SQ FEET
Conv Yds	2.777778 sq yd
Conv m	2.322576 sq M

Convert 25 Cubic Feet to Cubic Yards.

KEYSTROKE	DISPLAY
On/C	0.
2 5 Feet Feet Feet	25. CU FEET
Conv Yds	0.925926 CU YD

KEYSTROKE	DISPLAY
On/C	0.
Adding Dimensions: 1 0 Inch + 2 Feet 5 In	
	3 FEET 3 INCH
Subtracting Dimensions:  5 Feet   1 Inch 3 ✓ 4  4 FEI	€ <b>日</b> ET 10-1/4 INCH
Dividing Dimensions:  ① ① Feel	<b>4  9</b> 6.
Multiplying Dimensions/V Allowance:	Vaste Factor
1 5 0 Feet Feet + 1 (	165. SQ FEET
Finding Area/Square Fee 2 Feet X 1 Feet 2 Inch 2.33	
Finding Volume/Cubic Fe	

**Basic Dimensional Math** 

1.25 CU FEET

# PROJECT EXAMPLES - USING DEFAULT VALUES

# Paint: Gallons, Quarts or Pints of

How many quarts of paint will you need to cover a wall measuring 12' x 8'? How many pints? How many gallons?

KEYSTROKE	DISPLAY
On/C	0.
1 2 Feet X 8 Feet =	96. SQ FEET
Paint	1.10 QT
Paint	2.19 Pt
Paint	0.27 GI

# Wallpaper: Rolls of

Find the number of wallpaper rolls needed for a wall measuring 8' x 12'.

KEYSTROKE	DISPLAY
On/C	0.
8 Feet X 1 2 Feet =	96. SQ FEET
Wall Paper	1.71 ROLL

#### Tiles: Number of

How many tiles do you need to cover a floor measuring 10' x 15'? 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 **110** key until you reach the desired tile size. (The **Home ProjectCalc** lists 11 of the most popular tile sizes.)

 KEYSTROKE
 DISPLAY

 On/C
 0.

 1 0 Feet
 1 5 Feet
 1 150. sq Feet

 + 1 0 %
 165. sq Feet

 TIB
 73.33 TILE (18 in)

 92.81 TILE (16 in)

Continuous presses of display the number of Tiles for the following additional sizes: 18", 16", 13", 12", 10", 8", 6", 4", 2", 1", 24".

# Carpet: Length of

Find the quantity of carpet needed to cover a floor that measures 12' 6" x 10' in area.

KEYSTROKE	DISPLAY
On/C	0.
1 2 Feet 6	Inch X 1 0 Feet =
	125. SQ FEET
Carpet	13.89 SQ YD
Carpet	10.42 FEET (12 Ft ROLL)
Carpet	9.62 FEET (13 Ft ROLL)
Carpet	8.33 FEET (15 Ft ROLL)

# Concrete: Bags of

Find the number of bags of concrete for a patio measuring 9' x 15' x 4".

KEYSTROKE	DIS

SPLAY On/C 0.

9 Feet X 1 5 Feet X 4 Inch =

45, CU FEET 67.50 BAG Concrete

# FINDING THE COST OF MATERIALS

# Cost of Concrete

How much will 216 Cubic Feet of concrete cost, if the Cost Per Cubic Yard is quoted at \$50?

KEYSTROKE	DISPLAY
On/C	0.
2 1 6 Feet Feet Feet	216. CU FEET
Conv Yds	8. CU YD
<b>★ 5 0 Conv •</b> (Cost)	400.ºº
	approx. \$400)

#### **AUTO SHUT-OFF AND BATTERIES**

#### Reset

If your calculator should ever "lock up," press Reset - a small hole located above the key/upper right - using the end of a paper clip.

#### 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 and unscrew the single screw in the center of the battery door, located on the back of the calculator

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.



#### REPAIR AND RETURN

#### Warranty, Repair and Return Information

#### Return Guidelines:

- Please read the Warranty in this User's Guide to determine if your Calculated Industries product remains under warranty before calling or returning any device for evaluation or repairs.
- If your product won't turn on, check the batteries as outlined in the User's Guide.
- If you need more assistance, please go to the website listed below.
- 4. If you believe you need to return your product, please call a Calculated Industries representative between the hours of 8:00am and 4:00pm Pacific Time for additional information and a Return Merchandise Authorization (RMA).

Call Toll Free: 1-800-854-8075 Outside USA: 1-775-885-4900 www.calculated.com/warranty

#### WARRANTY

## Warranty Repair Service - U.S.A.

Calculated Industries ("CI") warrants this product against defects in materials and workmanship for a period of one (1) year from the date of original consumer purchase in the U.S. If a defect exist during the warranty period, CI, at its option, will either repair (using new or remanufactured parts) or replace (with a new or remanufactured calculator) the product at no charge.

THE WARRANTY WILL NOT APPLY TO THE PRODUCT IF IT HAS BEEN DAMAGED BY MISUSE, ALTERATION, ACCIDENT, IMPROPER HANDLING OR OPERATION, OR IF UNAUTHORIZED REPAIRS ARE ATTEMPTED OR MADE. SOME EXAMPLES OF DAMAGES NOT COVERED BY WARRANTY INCLUDE, BUT ARE NOT LIMITED TO, BATTERY LEAKAGE, BENDING, A "BLACK INK SPOT" OR VISIBLE CRACKING OF THE LCD, WHICH ARE PRESUMED TO BE DAMAGES RESULTING FROM MISUSE OR ABUSE.

To obtain warranty service in the U.S., please go to the website

A repaired or replacement product assumes the remaining warranty of the original product or 90 days, whichever is longer.

# Non-Warranty Repair Service – U.S.A.

Non-warranty repair covers service beyond the warranty period, or service requested due to damage resulting from misuse or abuse.

Contact Calculated Industries at the number listed above to obtain current product repair information and charges. Repairs are guaranteed for 90 days.

# Repair Service – Outside the U.S.A.

To obtain warranty or non-warranty repair service for goods purchased outside the U.S., contact the dealer through which you initially purchased the product. If you cannot reasonably have the product repaired in your area, you may contact CI to obtain current product repair information and charges, including freight and duties.

#### Disclaimer

CI MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESS OR IMPLIED, WITH
RESPECT TO THE PRODUCT'S QUALITY, PERFORMANCE, MERCHANTABILITY, OR FITNESS
FOR A PARTICULAR PURPOSE. AS A RESULT,
THIS PRODUCT, INCLUDING BUT NOT LIMITED
TO, KEYSTROKE PROCEDURES, MATHEMATICAL ACCURACY AND PREPROGRAMMED
MATERIAL, IS SOLD "AS IS," AND YOU THE
PURCHASER ASSUME THE ENTIRE RISK AS
TO ITS QUALITY AND PERFORMANCE.

IN NO EVENT WILL CI BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT IN THE PRODUCT OR ITS DOCUMENTATION.

The warranty, disclaimer, and remedies set forth above are exclusive and replace all others, oral or written, expressed or implied. No Cl dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific rights, and you may also have other rights, which vary from state to state.

#### FCC CLASS B

This equipment has been certified to comply with the limits for a Class B computing device, pursuant to Subpart J of Part 15 of FCC rules.

# LOOKING FOR NEW IDEAS

Calculated Industries, a leading manufacturer of special-function calculators and digital measuring instruments, is always looking for new product ideas in these areas.

If you have an idea, or a suggestion for improving this product or User's Guide, please submit your comments online at www.calculated.com under "Contact Us", "Product Idea Submittal Agreement". Thank you



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Designed in the U.S.A.

U.S. Patent 6,721,623

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# **Quick Reference Guide**

## **Basic Examples**

Unit keys: Yds Feet Inch m

Press On/C after each example.

For length, press unit key once:

6 Feet 3 Inch 5 / 8 6 FEET 3-5/8 INCH

For area, press unit key twice:

7 Feet Feet 7. SQ FEET

For volume, press unit key three times:

25. CU FEET

# 2 5 Feet Feet Feet Key Definitions

Paint – Enter the area of the wall to be painted, then press Point to calculate gallons, quarts, or pints needed.

**Wallpaper** – Enter the area of the wall to be covered, then press to calculate number of rolls needed.

Tile – Enter the area of the floor to be covered, then press to calculate 18", 16", 13", 12", 10", 8", 6", 4", 2", 1" or 24" tiles needed.

Carpet – Enter the area of the floor to be covered, then press cope to calculate the length of 12', 13' and 15' rolls needed.

Concrete – Enter the volume to be filled, then press conset to calculate the number of bags needed.