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The Dimension Bible

For The Remodeler and Do It Yourselfer

by John A. Knoelk aka “Contractor John”

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The Dimension Bible

For Remodelers and DIYers

Welcome to the Dimension Bible, the complete handy reference guide for all your remodeling and building projects. This book is the result of my 40 years of remodeling and building experience. While no book can address every measurement for every situation; I believe within these pages you will find the vast majority of measurements, dimensions and formulas to calculate and arrive at the correct answer you will need to complete your project. In most instances I have included the actual measurement or dimension; in others I have included a formula so you can plug in your own numbers and arrive at the answer.

You will find the guide to be very user friendly. I have divided this reference guide into 4 sections. The first section contains general information useful in designing a complete home or a particular space within it. The second section breaks down each room and supplies you with the dimensions for items in each of those rooms. The 3rd section contains charts, tables, and formulas so you may arrive at a result that applies to your unique situation. The 4th section talks about items on the exterior of the house. One of the problems I usually have with this type of book is, there isn't enough space for notes. I have purposely left each left hand page empty so there is plenty of room for you to add your own notes.

When utilizing the charts and formulas make sure you are using the correct room information for the particular room you are upgrading. For example you shouldn't use the kitchen exhaust fan chart to calculate the size of the bathroom exhaust fan.

I have purposely refrained from adding a lot of written word, and have strived to be as clear and concise presenting the sometimes confusing information. As with any reference book it's an ongoing, evolving project. If you have anything to add to the book or if you find a special circumstance that I have not addressed please send me the information at dbsuggestions@dimensionbible.com and I will do my best to include it in future releases.

Contractor John

Common Construction Abbreviations

Abbreviation	Meaning	Typical Uses
T&G	Tongue and Groove	Plywood/Flooring
O.C.	On Center	Wall Stud/Joist/Rafter Spacing
AFF	Above Finished Floor	Finished Materials Are Set To This Measurement
TOF	Top of Foundation	Exterior Grade is typically Set 6" Below TOF
GFA	Gas Forced Air	Type Of Furnace
A/C	Air Conditioning	
HVAC	Heating, Ventilation, Air Conditioning	
ADA	Americans With Disabilities ACT	Sets Minimums and Requirements for Accessibility
LV	Low Voltage	Phone/TV/Cable/Alarm/Sound etc. Type Wiring
RO	Rough Opening	The Framed Opening That A Typical Door or Window Would Fit Into
GFCI	Ground Fault Circuit Interrupter	Sometimes referred to as a GFI
PSF	Pounds Per Sq Ft	To Calculate Loads

The Infamous Work Triangle

Have you ever heard of the work triangle? The kitchen work triangle is formed by drawing a line from the front center of the refrigerator, the front center of the stove and the front center of the sink, connecting them to form a triangle. No single leg of the triangle should be less than 4' or more than 9' and the total of all the legs of the triangle should not exceed 26'. You will want to avoid placing any 2 of these items alongside each other on the same wall. Multiple work zones and multiple work triangles can be established with the addition of dishwashers, trash compactors, etc.

After you have placed the appliances you can begin to place the appropriate cabinets between the appliances. Take care to place the correct configuration of cabinets in each space. Drawers that hold silverware and utensils should be located close to the dishwasher, while cabinets for storing large pots and pans should be located by the stove.

Seating

We have all been in a kitchen with tight seating, where somebody is trapped in the corner. The minimum space between the edge of the table and the wall should be 32" if there is no traffic behind the person. If there is traffic moving behind the chair then a minimum of 36" is needed, and 44" if you prefer to have a person pass by without turning sideways. Always remember to measure from the front edge of any protruding object.

People tend to gather in the seating area so make sure you have easy access for people of all shapes and ages. As you can see proper designing of this space will result in a truly functional kitchen. Remember, start with the work triangle featuring your appliances and then add the cabinets. Don't forget to add space to store a blender, food processor, toaster, crock pot, etc. Follow these tried and true kitchen design principles and you will have a kitchen that "just works".

Kitchen continued

Electrical	Dimension	Comments
GFCI countertop receptacles	Spacing so no point on the countertop is >24" from a receptacle. Countertops ≥ 12" in length require a receptacle. Install 46" AFF to center	Countertops separated by sinks and stoves considered separate countertops. No face up receptacles allowed
Definition of peninsula	Long Dimension >24" and short dimension >12" measured From connecting edge	If ≥ 72" and separating rooms must also have a wall height non-GFCI receptacle
GFCI island receptacles	Island requires 1 receptacle no 24" rule	No more than 12" below countertop if maximum 6" overhang/otherwise install in backsplash or cabinet above
GFCI peninsula receptacles	Peninsula requires 1 receptacle no 24" rule	No more than 12" below countertop if 6" maximum overhang
Switches above the countertop (between cabinets)	46" AFF to center	Measure from and set cabinets on the same surface
Light switches not above countertop	51" AFF to center	
Microwave plug in receptacle	6" to center of receptacle measured from bottom of cabinet/top of microwave	10" to center of receptacle right or left from center of microwave. Do not mount in the center behind exhaust duct
Dishwasher connection	32" long Greenfield whip 1" AFF within center 12" of dishwasher opening	
Electric stove connection	Consult manufacturer	Consult manufacturer

	specifications	specifications
Gas Stove Electric Receptacle 110 volt	20" AFF	4" Right or left of center in the stove space
Refrigerator receptacle	46" AFF	Centered in the refrigerator space
Garbage disposal connection	Greenfield whip	Rough length to reach bottom center of the sink where disposal mounts
Garbage disposal switch	46" AFF	
Cable/satellite	46" AFF to center	

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Conversion Tables continued.....

Dilution Ratios

(Fractions of ounces are rounded up to the next whole number)

Ratio	Amount of Additive To 1 U.S. Gallon
1:256	½ of an ounce per gallon
1:200	2/3 of an ounce per gallon
1:128	1 ounce per gallon
1:64	2 ounces per gallon
1:40	3 ounces per gallon
1:30	4 ounces per gallon
1:26	5 ounce per gallon
1:20	6 ounces per gallon
1:16	8 ounces per gallon
1:12	11 ounces per gallon
1:10	13 ounces per gallon
1:8	16 ounces per gallon
1:4	32 ounces per gallon

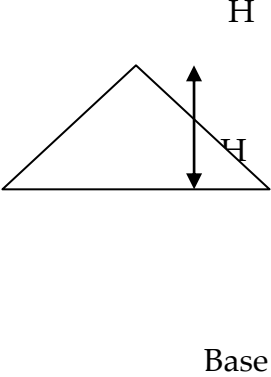
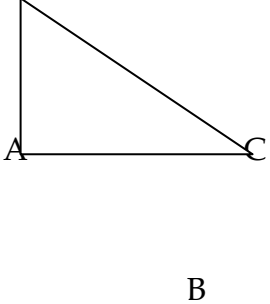
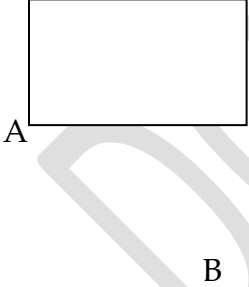
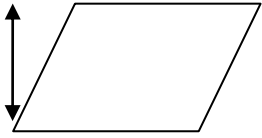
Coverage for Mulch/Compost, etc.

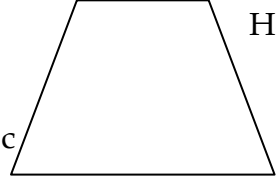
1 Cubic Yard Will Cover	
324 sq. Ft.	1" thick
162 sq. Ft.	2" Thick
108 sq. Ft.	3" Thick
81 sq. Ft.	4" Thick

65 sq. Ft.	5" Thick
54 sq. Ft.	6" Thick

A Single 3.0 Cubic Foot Bag Will Cover	
36 sq. Ft.	1" thick
18 sq. Ft.	2" Thick
12 sq. Ft.	3" Thick
9 sq. Ft.	4" Thick
7 sq. Ft.	5" Thick
6 sq. Ft.	6" Thick

Ez Math Formulas

Area/Length	Formula	Comments
	<p>Area= base x height/2</p>	<p>For gable end area</p> <p>For hip roof surfaces area</p>
	<p>Length Of C = $a^2 + b^2 = c^2$</p> <p>Area = $a*b/2$</p>	<p>For the slope length of a roof plane</p>
	<p>Area = $a * b$</p>	<p>For the area of any rectangle or square</p>
<p>Height</p> 	<p>Area = base * height</p>	<p>Area of any plane where 1 side is equal to another side and the other 2 sides</p>

Base		are equal to each other
<p style="text-align: center;">B</p>  <p style="text-align: center;">D</p>	Area=(b +d)*h/2	Area of a mansard roof side

Just a sampling of some of the great information contained in the

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