

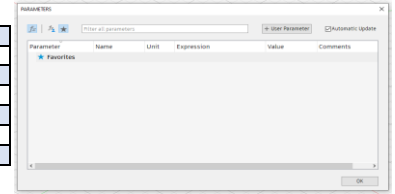
This took me ages to find on the Autodesk site so I have it saved here with my tweaks.

Parameters are an incredibly useful facility in Fusion 360 whereby a design can become dynamic by having relationships defined 'behind the scenes'. Parameter based entries are accessed via the Modify dropdown menu and selecting Change Parameters (Design > Modify > Change Parameters). Many good examples of their use can be found on Clough42's YouTube channel.

Note: When you create and name a parameter on the fly, Fusion 360 automatically adds it to your favorites, so that it is easy to find in the Parameters dialog.

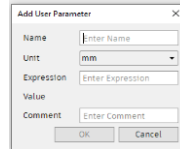
Initial Parameter Window Functions

Sort In Timeline Order	Click Sort In Timeline Order Change Parameters icon to restore the list of parameters to timeline order.
Filter User Parameters	Click Filter User Parameters user parameters icon to filter and display User Parameters.
Filter Favorite Parameters	Click Filter Favorite Parameters favorite parameter filter icon to filter and display Favorite Parameters.
Search Box	Type to search and filter parameters.
+ User Parameter	Click to open a dialog and create a new User Parameter.
Automatic Update	Check to automatically update the design in the background. Uncheck to pause updates and reduce compute time.
Apply	Available when Automatic Update is checked. Make changes to the parameters then click Apply to update the design.



Parameter Entry Sub Window Displays information to identify the parameter and the operation it belongs to.

Name	Specifies the name of the parameter.
Unit	Displays the units. (See note at foot of page for changing units to just values)
Expression	Specifies the value, equation, or function.
Value	Displays the calculated value based on the expression.
Comments	Specifies user-entered information about the parameter.



Calculation Algebraic Operators

+	Add
-	Subtract
%	Floating point modulo
*	Multiply
/	Divide
^	Raise to power
(Opening delimiter
)	Closing delimiter
;	Delimiter for multi-argument functions (A delimiter of delimiters)

Note : Decimals must be entered with a decimal point and not a comma (as often used in Europe).

Order of Calculation Operations

Equations use the algebraic order of operations shown in the following table

		Symbol	Example
First	parenthesis	()	(sin(15 deg))
Second	exponentiation	^	width ^2
Third	negation (unary subtraction)	-	(-2.00 + length)
Fourth	multiplication or division	* or /	sin(Pi/4 rad) or (0.5 * base * height)
Fifth	addition or subtraction	+ or -	(-2.00 + height - 0.35 * base)
Last	Mathematical Constants		

System Embedded Constants

Symbol	Description	Value	Unit
π	pi / p	3.1415926535...	unitless
e	Euler's number	2.71828182845...	unitless
g	Gravitational acceleration at Earth's surface	980.665	cm / s^2
c	Speed of light	29,979,245,800	cm / s

General Functions

You can use the following functions in equations.

Function and Expected Format	Expected Entry Units	Resulting Units
cos(expr)	angle	unitless
sin(expr)	angle	unitless
tan(expr)	angle	unitless
acos(expr)	unitless	angle
acosh(expr)	unitless	angle
asin(expr)	unitless	angle
asinh(expr)	unitless	angle
atan(expr)	unitless	angle
atanh(expr)	unitless	angle
cosh(expr)	angle	unitless
sinh(expr)	angle	unitless
tanh(expr)	angle	unitless
sqrt(expr)	unitless	unitless
sign(expr) (i.e. Return 0 if negative, 1 if positive)	unitless	any
exp(expr) (i.e. Return exponential power. For example, returns 2.688E43 for 100).	unitless	any
floor(expr) (Returns the next lowest whole number - i.e. rounds down)	unitless	unitless
ceil(expr) (Returns the next highest whole number - i.e. rounds up)	unitless	unitless
round(expr) (Returns to the closest whole number)	unitless	unitless
abs(expr)	any	any
max(expr1;expr2)	any	any
min(expr1;expr2)	any	any
ln(expr)	unitless	unitless
log(expr)	unitless	unitless
pow(expr1; expr2) Can construct unit valid equation that can go invalid. For example - "pow(3.0; d12)" gives decimal powers rounded at eighth decimal place.	any, and unitless respectively unit^expr2 <i>To be honest I don't really get this</i>	
random()	unitless	unitless

Note that if you have value in specific units and you want to change this to a value only (i.e. have no associaed units) then divide the value with units, by one unit.

For example - 200mm becomes just 200 when divided by 1mm.