



When supplying metric projects there are two methods of moving from the Imperial (feet-inches) to the Metric (millimeters) system; "soft conversion" or "hard conversion".

Soft conversion is simply expressing the Imperial value in Metric terms. With this method the finished product does not actually change in size, it is just measured with a different ruler (ie : 3'0" → 914mm).

Hard conversion is a process where the product size is physically changed to a new, rational value (ie : 3'0" → 900mm). For steel door and frame product these values reflect a metric module of 100mm and new concrete block sizes built around this module.

Hard and soft converted product are not inter-changeable and there is no benefit or value in mixing and matching the systems in the same opening (ie: 914 x 2150 or 900 x 2134 product). The hinge, strike and lock locations are different.

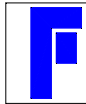
Example: Since 3'0" x 7'0", 36" x 84" and 914 x 2134 are the same size they will be manufactured to our imperial standards for that size (unless specifically indicated otherwise on your order). For 900 x 2150 and all other hard converted product, our metric standards will be utilized. Do not order hard metric product (900 x 2150) using the Nominal Imperial soft conversion values such as 35-7/16" x 84-5/8". The soft conversions of the hard metric sizes in the tables below are for your reference only.

Nominal Door and Frame Rabbet Width Conversions

	Standard Imperial Size	Soft Conversion in Millimeters (mm) of Imperial Size ^(*)	Standard Metric Size Hard Conversion in Millimeters (mm) of Imperial Size	Soft Conversion in Inches of Hard Metric Size ^(*)
Singles	2'0" (24")	610	600	23 ⁵ / ₈
	2'2" (26")	660	700	27 ¹ / ₂
	2'4" (28")	711		
	2'6" (30")	762	800	31 ¹ / ₂
	2'8" (32")	813		
	2'10" (34")	864	900	35 ⁷ / ₁₆
	3'0" (36")	914		
	3'4" (40")	1016	1000	39 ³ / ₈
	3'6" (42")	1067	1100	43 ³ / ₈
	3'8" (44")	1118		
	4'0" (48")	1219	1200	47 ¹ / ₄
Pairs	4'0" (48")	1219	1200	47 ¹ / ₄
	4'8" (56")	1422	1400	55 ¹ / ₈
	5'0" (60")	1525	1600	63"
	5'4" (64")	1626		
	6'0" (72")	1829	1800	70 ⁷ / ₈
	6'4" (76")	1930		
	6'8" (80")	2032	2000	78 ³ / ₄
	7'0" (84")	2134	2200	86 ⁵ / ₈
	7'4" (88")	2235		
	8'0" (96")	2438	2400	94 ¹ / ₈
	8'4" (100")	2540	2600	102 ⁵ / ₂
	9'0" (108")	2743	2800	110 ¹ / ₄
	9'8" (116")	2946	3000	118 ¹ / ₈
10'0" (120")	3048			

*1 : Rounded to the nearest millimeter (mm)

*2 : Rounded to the nearest 1/16"



Nominal Door and Frame Rabbet Height Conversions

Standard Imperial Size	Soft Conversion in Millimeters (mm) of Imperial Size ^(*)	Standard Metric Size Hard Conversion in Millimeters (mm) of Imperial Size	Soft Conversion of Hard Metric Size ^(*)
6'8" (80")	2032	2050	80 $\frac{11}{16}$ "
6'10" (82")	2083		
7'0" (84")	2134	2150	84 $\frac{5}{8}$ "
7'2" (86")	2184		
7'6" (90")	2286	2350	92 $\frac{1}{2}$ "
7'8" (92")	2337		
8'0" (96")	2438	2450	96 $\frac{7}{16}$ "
9'0" (108")	2743	2750	108 $\frac{1}{4}$ "
9'4" (112")	2845	2850	112 $\frac{1}{4}$ "
9'6" (114")	2896		
9'8" (116")	2946	2950	116 $\frac{1}{8}$ "
10'0" (120")	3048	3050	120 $\frac{1}{16}$ "

Jamb Depth Conversions

Standard Imperial Size	Soft Conversion in Millimeters (mm) of Imperial Size ^(*)	Metric Ordering Size in Millimeters (mm) ^(*)
4 $\frac{1}{2}$ "	114.3	114
4 $\frac{3}{4}$ "	120.7	121
4 $\frac{7}{8}$ "	123.8	124
5 $\frac{5}{8}$ "	142.9	143
5 $\frac{3}{4}$ "	146.1	146
5 $\frac{7}{8}$ "	149.2	149
6 $\frac{1}{4}$ "	158.8	159
6 $\frac{5}{8}$ "	168.3	168
6 $\frac{3}{4}$ "	171.5	172
7 $\frac{1}{8}$ "	181.0	181
7 $\frac{3}{4}$ "	196.9	197
8 $\frac{1}{4}$ "	209.6	210
8 $\frac{3}{4}$ "	222.3	222
9 $\frac{1}{2}$ "	241.3	241

Nominal Steel Gages, Equivalent Thickness and Conversions

Gage	Galvanneal		Stainless Steel	
	Imperial	Metric (mm) ^(*)	Imperial	Metric (mm) ^(*)
10	.138"	3.5	.142"	3.6
12	.105"	2.7	.109"	2.8
14	.075"	1.9	.078"	2.0
16	.060"	1.6	.063"	1.6
18	.048"	1.2	.050"	1.3
20	.036"	0.9	.038"	1.0
22	.030"	0.8	.031"	0.8

*1 : Rounded to the nearest millimeter (mm)

*2 : Rounded to the nearest 1/16"

*3 : Rounded to the nearest 0.1 millimeter

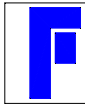


Conversion Factors

Multiply	By	To Obtain
feet (ft)	0.3048	meters (m)
inches (in)	25.4	millimeters (mm)
inches (in)	0.0254	meters (m)
kilometers (km)	0.6213712	miles
meters (m)	3.28084	feet (ft)
meters (m)	39.37008	inches (in)
meters (m)	0.0006213712	miles
meters (m)	1.093613	yards (yds)
miles	1,609.344	meters (m)
miles	1.609344	kilometers (km)
millimeters (mm)	0.003280840	feet (ft)
millimeters (mm)	0.03937008	inches (in)
square centimeters (cm ²)	0.1550003	square inches (in ²)
square feet (ft ²)	0.09290304	square meters (m ²)
square inches (in ²)	645.16	square millimeters (mm ²)
square inches (in ²)	6.4516	square centimeters (cm ²)
square inches (in ²)	0.00064516	square meters (m ²)
square meters (m ²)	1550.003	square inches (in ²)
square meters (m ²)	10.763910	square feet (ft ²)
square millimeters (mm ²)	0.001550003	square inches (in ²)
cubic feet (ft ³)	0.02831685	cubic meters (m ³)
cubic inches (in ³)	16,387.06	cubic millimeters (mm ³)
cubic meters (m ³)	35.31466	cubic feet (ft ³)
cubic millimeters (mm ³)	0.00006102376	cubic inches (in ³)
gallons (imperial) (gal)	4.546092	liters (l)
gallons (imperial) (gal)	1.2009	gallons (US) (gal)
gallons (US) (gal)	3.785412	liters (l)
gallons (US) (gal)	0.8327088	gallons (imperial) (gal)
liters (l)	0.2199692	gallons (imperial) (gal)
liters (l)	0.2641720	gallons (US) (gal)
liters (l)	1.0567	quarts (US) ((qts)
quarts (US) (qts)	0.94634	liters (l)
feet per second (fps)	0.3048	meters per second (mps)
kilometers per hour (kph)	0.6213712	miles per hour (mph)
miles per hour (mph)	1.609344	kilometers per hour (kph)
grams (g)	0.03527397	ounces (oz)
kilograms (kg)	2.204622	pounds (lbs)
ounces (oz)	28.34952	grams (g)
pounds (lbs)	0.4535924	kilograms (kg)
pounds per cubic foot (pcf)	16.01846	kilograms per cubic meter (kg/m ³)
kilograms per cubic meter (kg/m ³)	0.06242797	pounds per cubic foot (pcf)
thermal resistance (R)	0.17667	thermal resistance (RSI)
thermal resistance (RSI)	5.6603	thermal resistance (R)

Temperature in Fahrenheit (°F) - 32 x 0.5556 = Temperature in Celsius (°C)

Temperature in Celsius (°C) x 1.8 + 32 = Temperature in Fahrenheit (°F)



Fleming

Steel Doors & Frames

A United Dominion Company

ARCHITECTURAL
MANUAL

TECHNICAL
DATA SHEET

METRIC CONVERSION

Topic : G16

Sheet : 4

Date : May '00

Inch to Millimeter (mm) Conversions

Inches		Millimeters (mm)	
Fractional	Decimal	Actual	Nominal
$\frac{1}{64}$ "	.015625"	0.3969	0.4
$\frac{1}{32}$ "	.03125"	0.7938	0.8
$\frac{3}{64}$ "	.046875"	1.1906	1.2
$\frac{1}{16}$ "	.0625"	1.5875	1.6
$\frac{5}{64}$ "	.078125"	1.9844	2.0
$\frac{3}{32}$ "	.09375"	2.3813	2.4
$\frac{7}{64}$ "	.109375"	2.7781	2.8
$\frac{1}{8}$ "	.125"	3.1750	3.2
$\frac{9}{64}$ "	.140625"	3.5719	3.6
$\frac{5}{32}$ "	.15625"	3.9688	4.0
$\frac{11}{64}$ "	.171875"	4.3656	4.4
$\frac{3}{16}$ "	.1875"	4.7625	4.8
$\frac{13}{64}$ "	.203125"	5.1594	5.2
$\frac{7}{32}$ "	.21875"	5.5563	5.6
$\frac{15}{64}$ "	.234375"	5.9531	6.0
$\frac{1}{4}$ "	.25"	6.3500	6.4
$\frac{17}{64}$ "	.265625"	6.7469	6.7
$\frac{9}{32}$ "	.28125"	7.1438	7.1
$\frac{19}{64}$ "	.296875"	7.5406	7.5
$\frac{5}{16}$ "	.3125"	7.9375	7.9
$\frac{21}{64}$ "	.328125"	8.3344	8.3
$\frac{11}{32}$ "	.34375"	8.7313	8.7
$\frac{23}{64}$ "	.359375"	9.1281	9.1
$\frac{3}{8}$ "	.375"	9.5250	9.5
$\frac{25}{64}$ "	.390625"	9.9219	9.9
$\frac{13}{32}$ "	.40625"	10.3188	10.3
$\frac{27}{64}$ "	.421875"	10.7156	10.7
$\frac{7}{16}$ "	.4375"	11.1125	11.1
$\frac{29}{64}$ "	.453125"	11.5094	11.5
$\frac{15}{32}$ "	.46875"	11.9063	11.9
$\frac{31}{64}$ "	.484375"	12.3031	12.3
$\frac{1}{2}$ "	.5	12.7000	12.7

Inches		Millimeters (mm)	
Fractional	Decimal	Actual	Nominal
$\frac{33}{64}$ "	.515625"	13.0969	13.1
$\frac{17}{32}$ "	.53125"	13.4938	13.5
$\frac{35}{64}$ "	.546875"	13.8906	13.9
$\frac{9}{16}$ "	.5625"	14.2875	14.3
$\frac{37}{64}$ "	.578125"	14.6844	14.7
$\frac{19}{32}$ "	.59375"	15.0813	15.1
$\frac{39}{64}$ "	.609375"	15.4781	15.5
$\frac{5}{8}$ "	.625"	15.8750	15.9
$\frac{41}{64}$ "	.640625"	16.2719	16.3
$\frac{21}{32}$ "	.65625"	16.6688	16.7
$\frac{43}{64}$ "	.671875"	17.0656	17.1
$\frac{11}{16}$ "	.6875"	17.4625	17.5
$\frac{45}{64}$ "	.703125"	17.8594	17.9
$\frac{23}{32}$ "	.71875"	18.2563	18.3
$\frac{47}{64}$ "	.734375"	18.6531	18.7
$\frac{3}{4}$ "	.75"	19.0500	19.1
$\frac{49}{64}$ "	.765625"	19.4469	19.4
$\frac{25}{32}$ "	.78125"	19.8438	19.8
$\frac{51}{64}$ "	.796875"	20.2406	20.2
$\frac{13}{16}$ "	.8125"	20.6375	20.6
$\frac{53}{64}$ "	.828125"	21.0344	21.0
$\frac{27}{32}$ "	.84375"	21.4313	21.4
$\frac{55}{64}$ "	.859375"	21.8281	21.8
$\frac{7}{8}$ "	.875"	22.2250	22.2
$\frac{57}{64}$ "	.890625"	22.6219	22.6
$\frac{29}{32}$ "	.90625"	23.0188	23.0
$\frac{59}{64}$ "	.921875"	23.4156	23.4
$\frac{15}{16}$ "	.9375"	23.8125	23.8
$\frac{61}{64}$ "	.953125"	24.2094	24.2
$\frac{31}{32}$ "	.96875"	24.6063	24.6
$\frac{63}{64}$ "	.984375"	25.0031	25.0
1"	1.0"	25.4000	25.4