

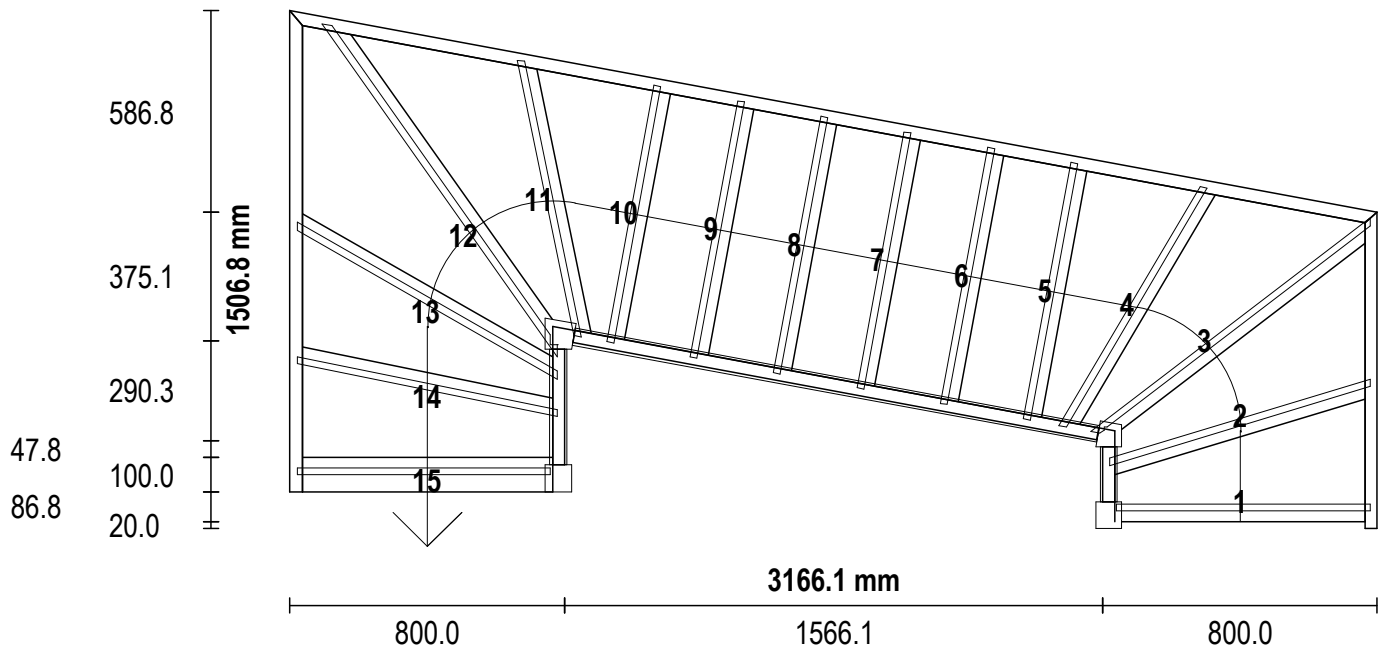
Multi-Flight Stair

Risers : 15  
Floor Height : 2805.0 mm

Riser Height : 187.0 mm

Tread Width : 246.8 mm

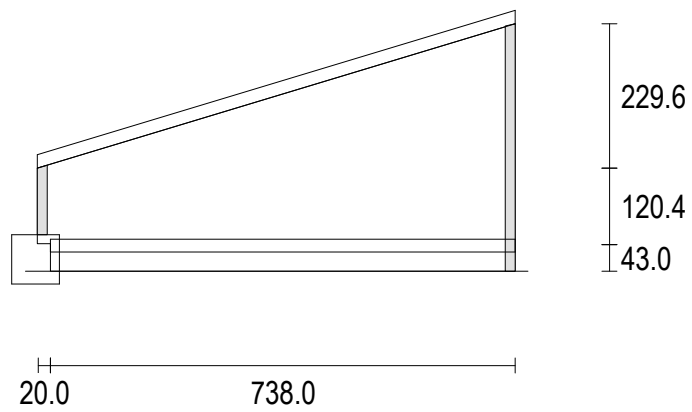
Stair Rule : 620.8 mm



Step : 758.0 x 393.0

Riser

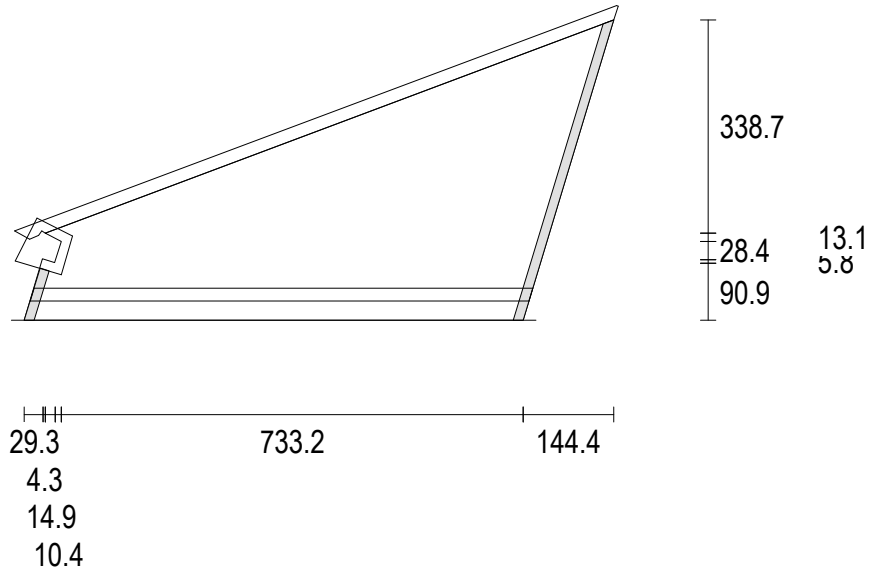
Width : 738.0 Height : 157.0 Thickness : 20.0 Angle : 0.00



Step : 936.4 x 476.8

Riser

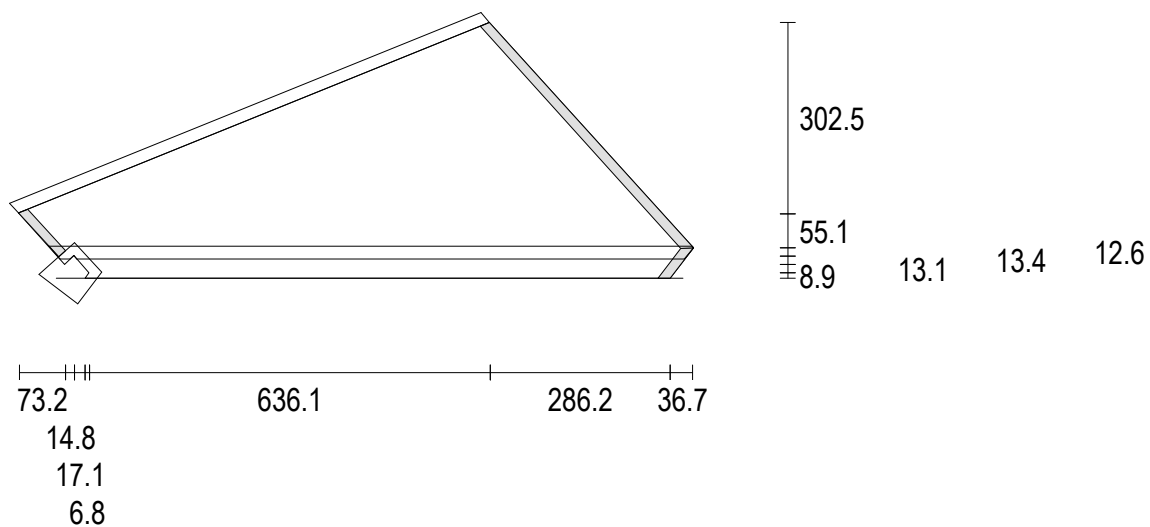
Width : 798.1 Height : 197.0 Thickness : 20.0 Angle : -16.85



Step : 1071.1 x 405.6

Riser

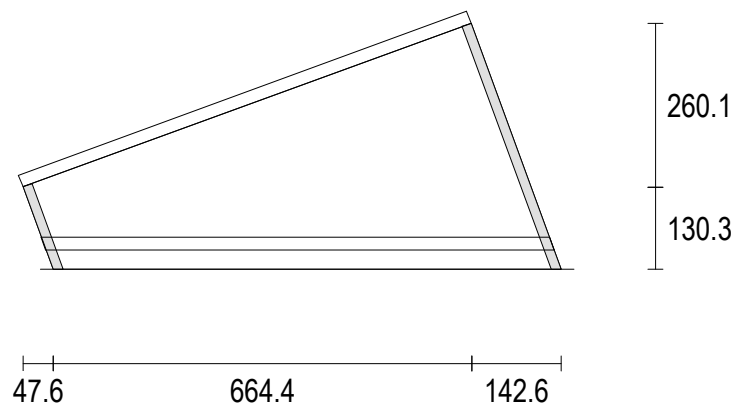
Width : 1023.1 Height : 197.0 Thickness : 20.0 Angle R:-37.42 ; L:42.08



Step : 854.6 x 390.4

Riser

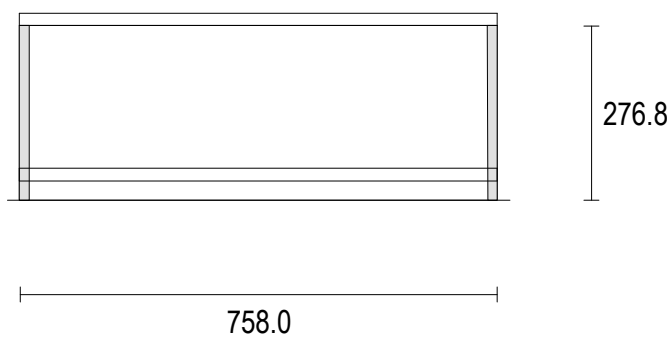
Width : 814.3 Height : 197.0 Thickness : 20.0 Angle : 20.07



Step : 758.0 x 276.8

Riser

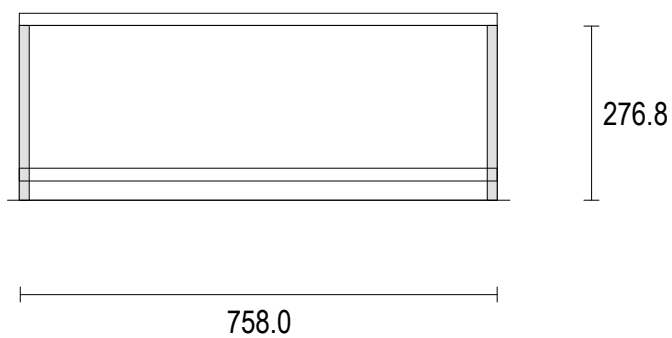
Width : 758.0 Height : 197.0 Thickness : 20.0 Angle : 0.00



Step : 758.0 x 276.8

Riser

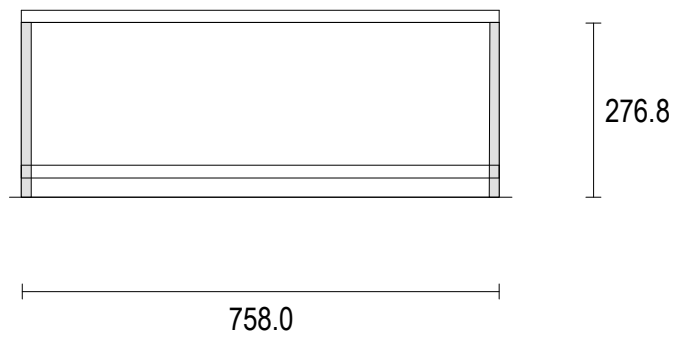
Width : 758.0 Height : 197.0 Thickness : 20.0 Angle : 0.00



Step : 758.0 x 276.8

Riser

Width : 758.0 Height : 197.0 Thickness : 20.0 Angle : 0.00

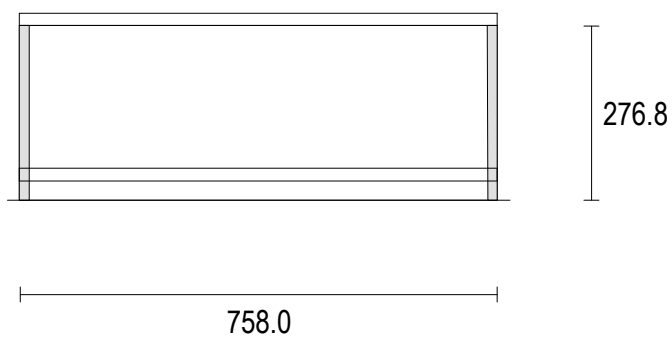




Step : 758.0 x 276.8

Riser

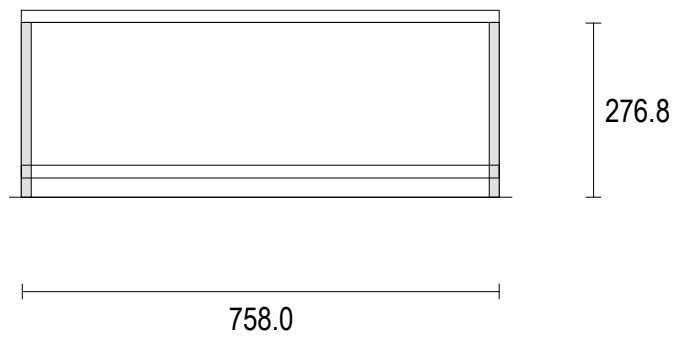
Width : 758.0 Height : 197.0 Thickness : 20.0 Angle : 0.00



Step : 758.0 x 276.8

Riser

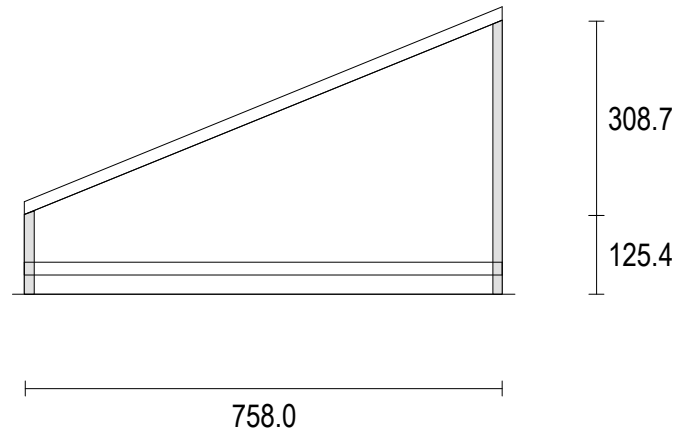
Width : 758.0 Height : 197.0 Thickness : 20.0 Angle : 0.00



Step : 758.0 x 434.1

Riser

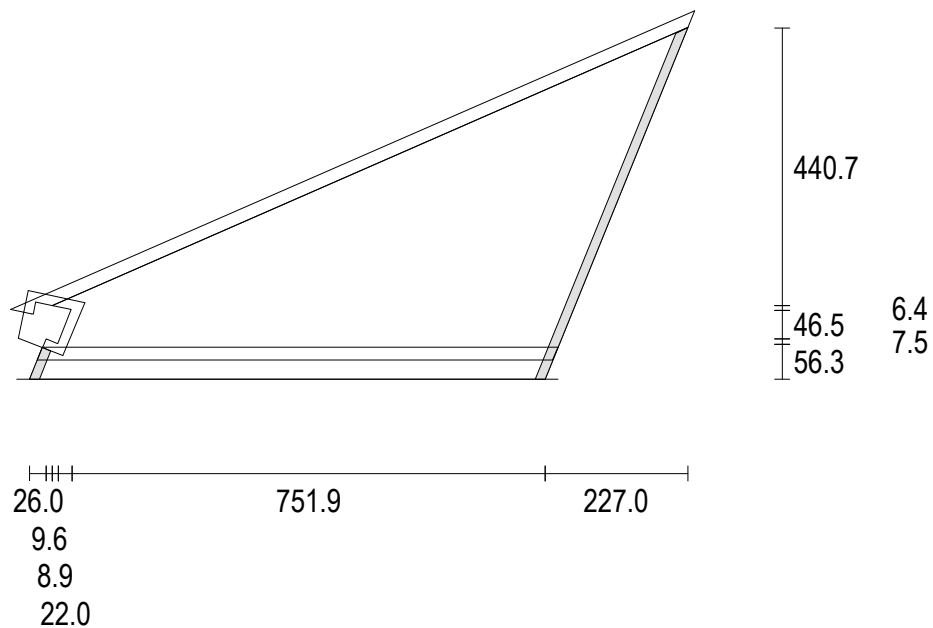
Width : 758.0 Height : 197.0 Thickness : 20.0 Angle : 0.00



Step : 1045.5 x 557.4

Riser

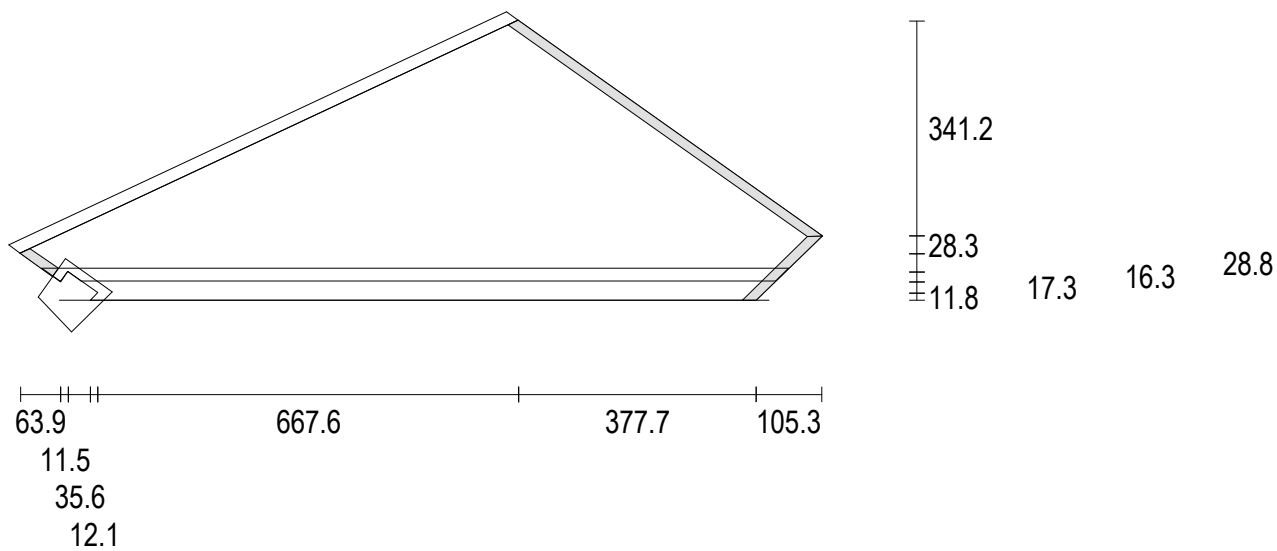
Width : 826.6 Height : 197.0 Thickness : 20.0 Angle : -22.16



Step : 1273.7 x 443.7

Riser

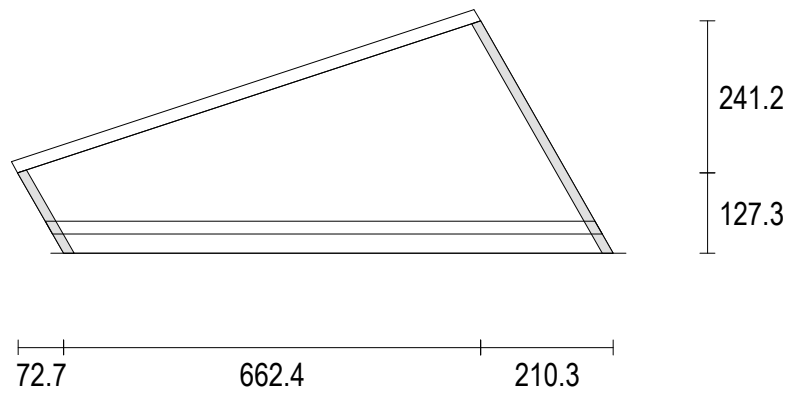
Width : 1185.4 Height : 197.0 Thickness : 20.0 Angle R:-45.74 ; L:54.76



Step : 945.5 x 368.5

Riser

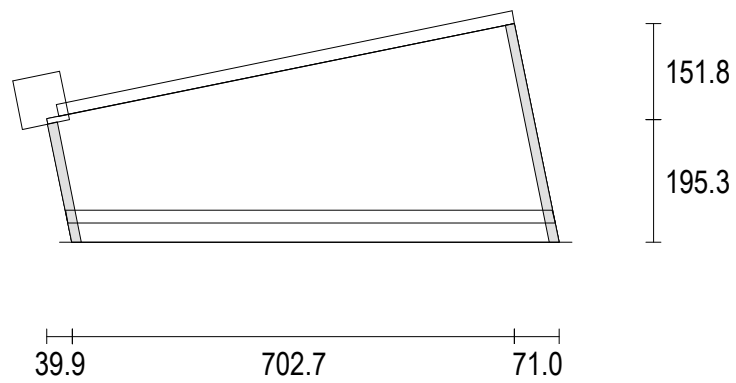
Width : 884.2 Height : 197.0 Thickness : 20.0 Angle : 29.72



Step : 813.6 x 347.1

Riser

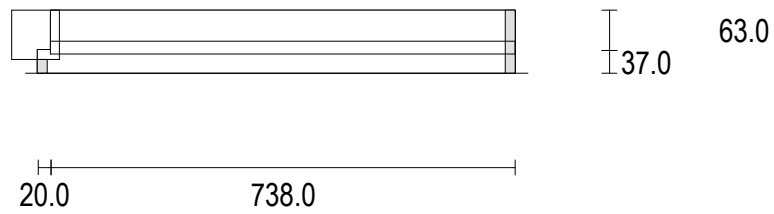
Width : 777.8 Height : 197.0 Thickness : 20.0 Angle : 11.56



Landing Step

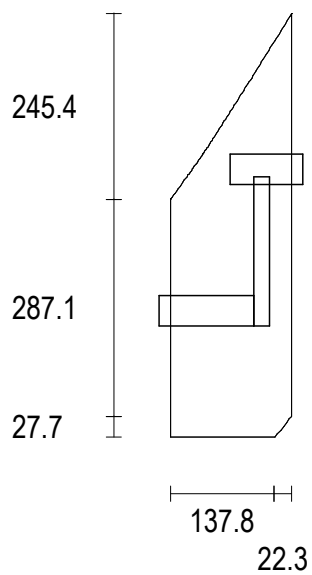
Riser

Width : 738.0 Height : 197.0 Thickness : 20.0 Angle R:2.31 ; L:-177.69

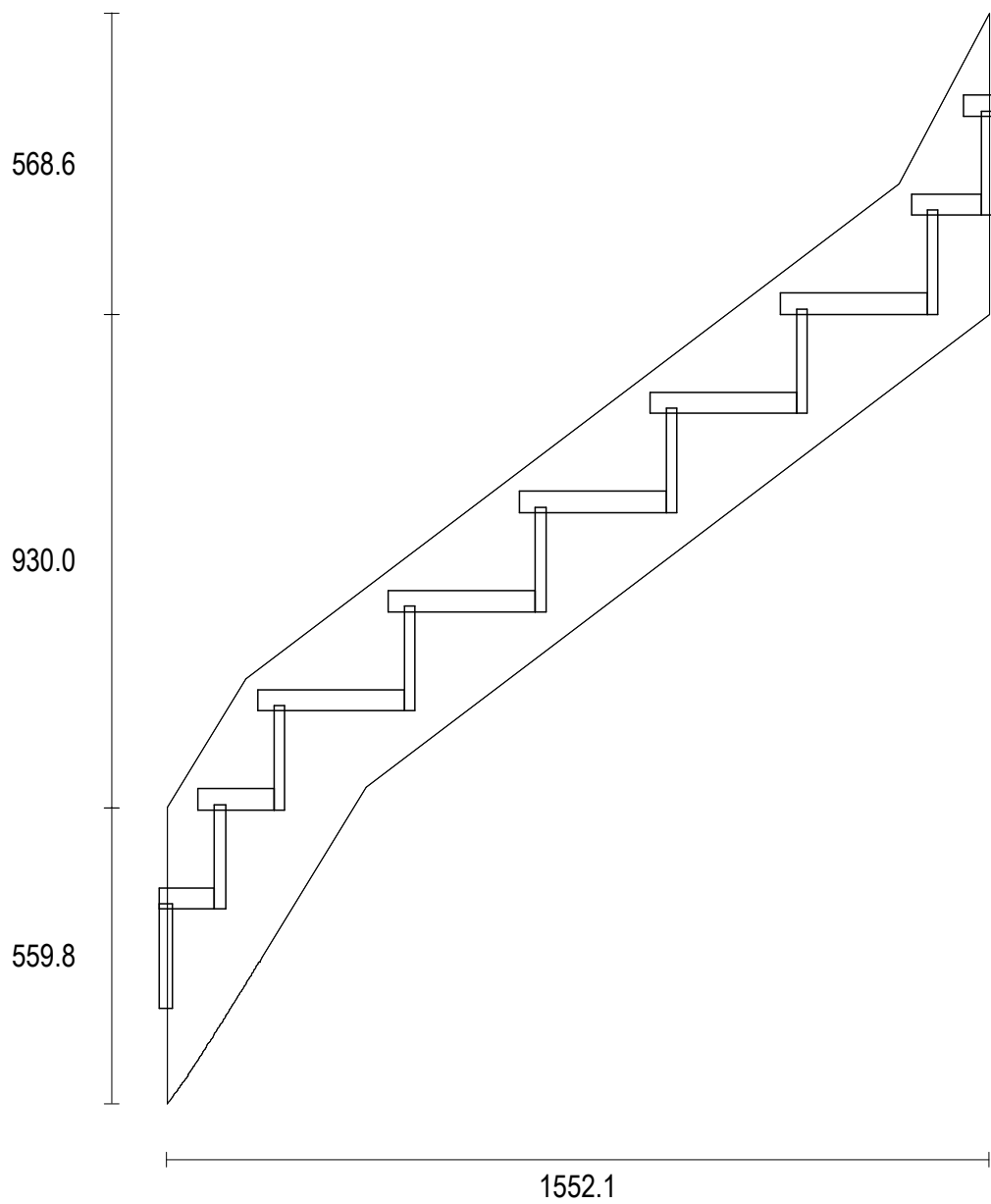




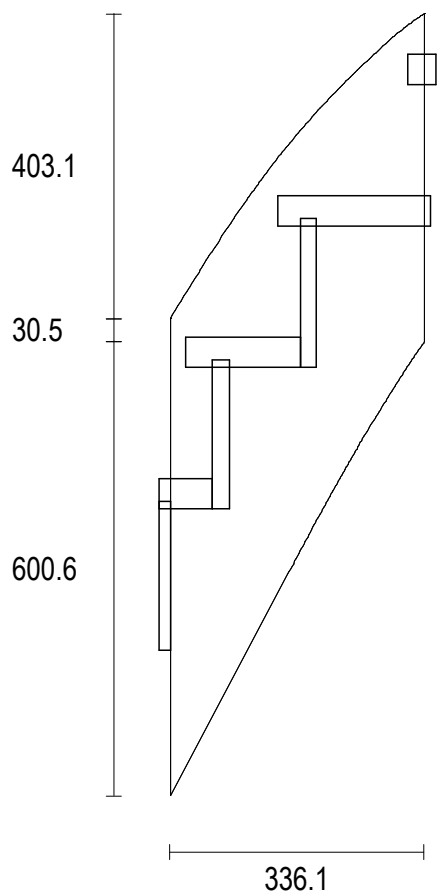
Dimensions : 560.2 x 160.0 (90.0°)



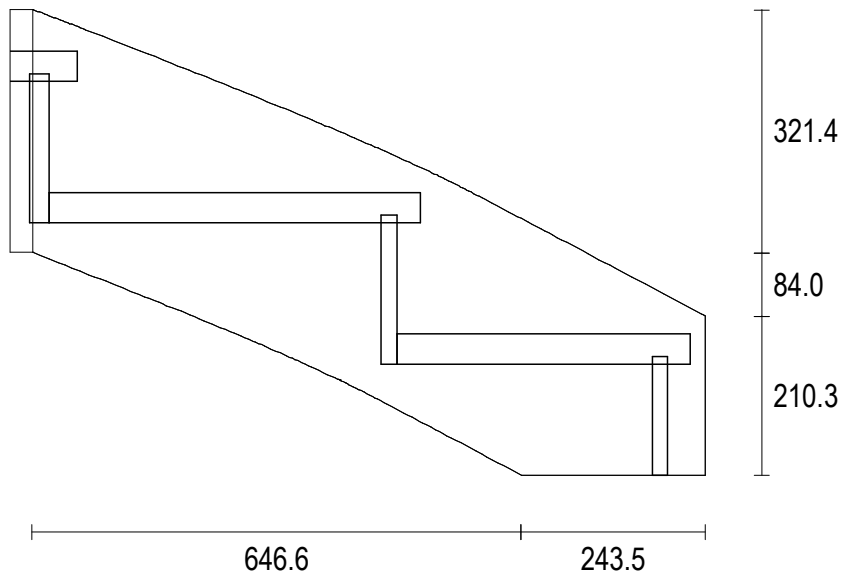
Dimensions : 2545.2 x 476.3 (43.8°)



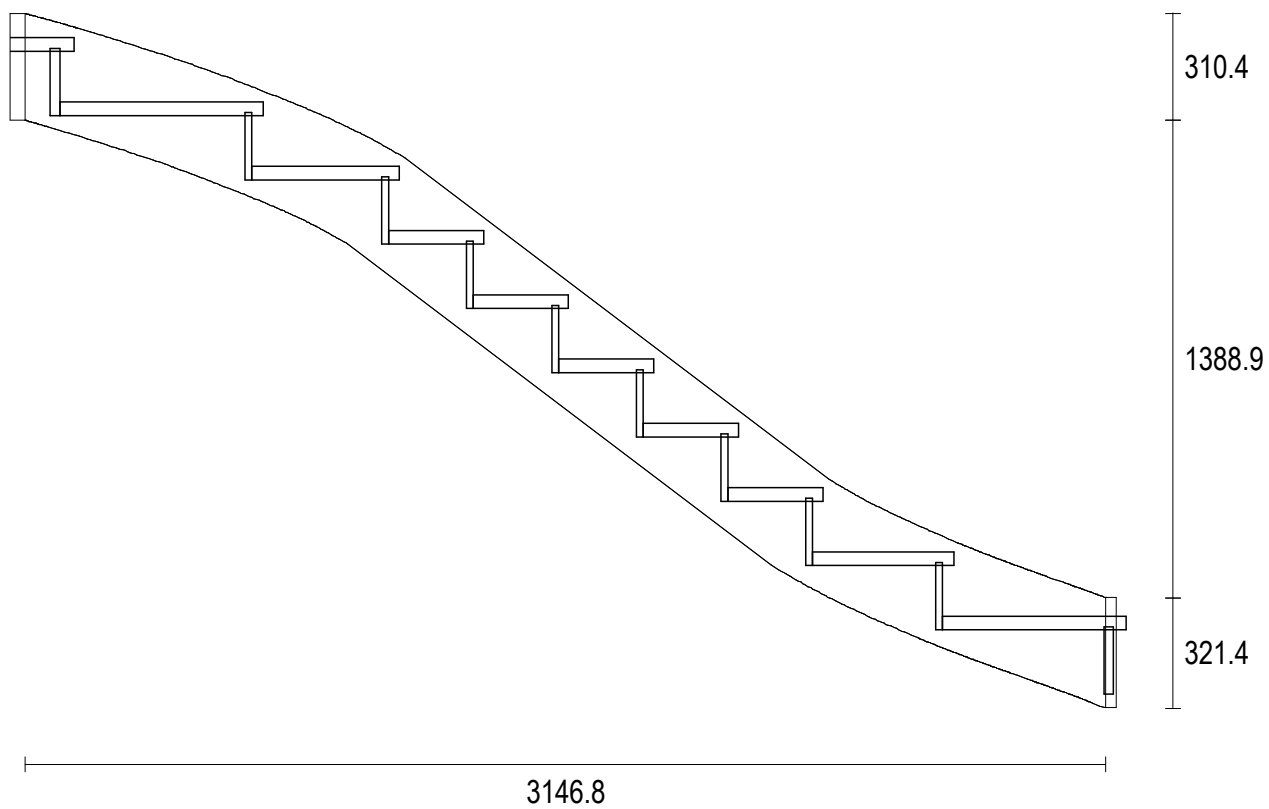
Dimensions : 1066.7 x 308.2 (60.8°)



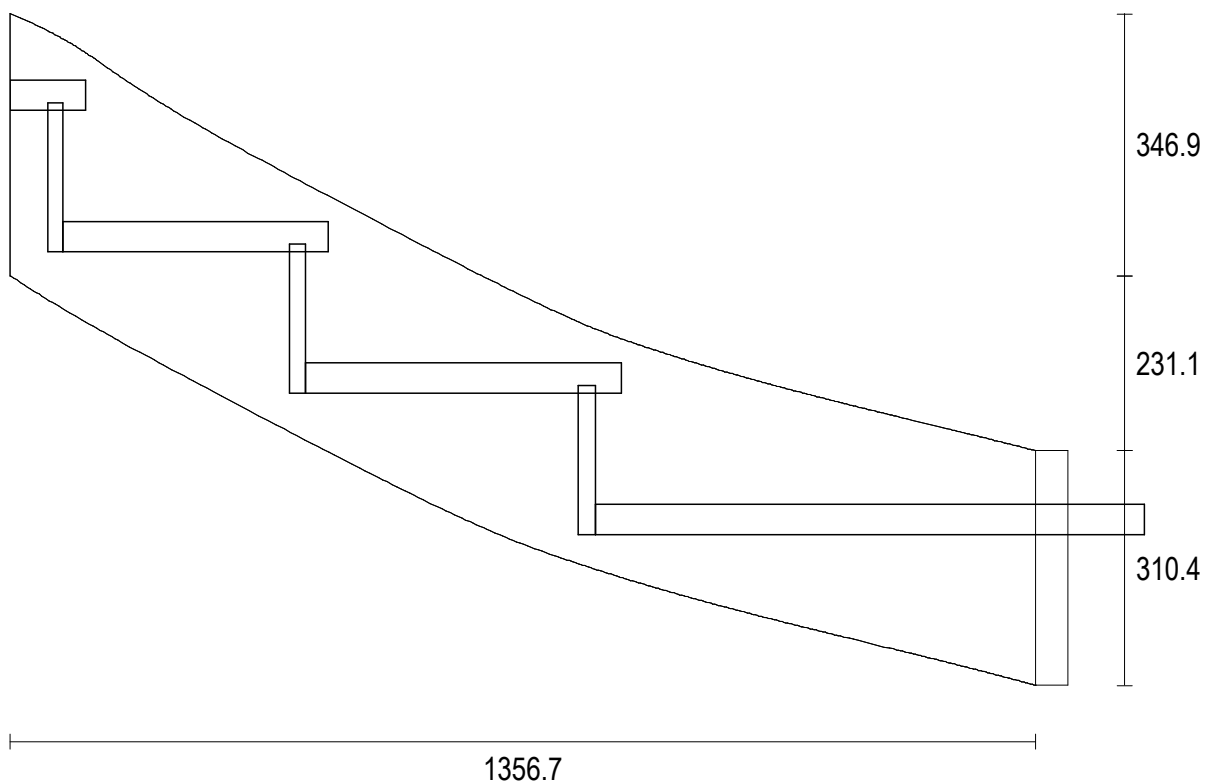
Dimensions : 1089.2 x 320.9 (23.5°)



Dimensions : 3799.6 x 485.2 (30.3°)



Dimensions : 1633.0 x 390.1 (22.4°)



StairDesigner  
Newel Post : 1

**David Ffrench**

dfrench-02v01  
Scale : 1/15

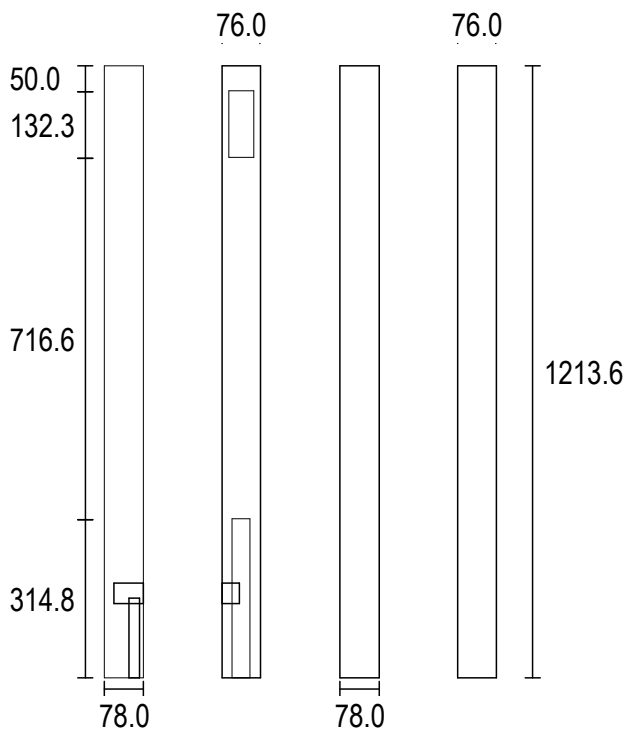
Extremity Newel Post Left Stringboard Flight : 1

Top View

Height : 1213.6

Step 1 Height : 187.0

Front 2 : Stringboard : 0.00 / 53.63 Handrail : 50.66 / 53.01



Corner Newel Post Left Stringboard Flight : 1-2

Top View

Height : 1634.0

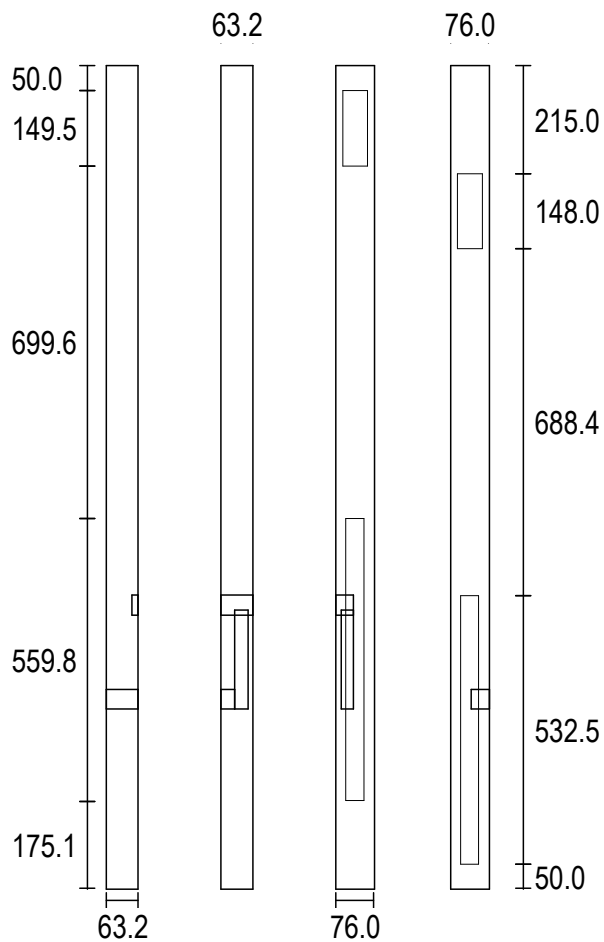
Angle : 100.50

Step 2 Height : 396.3

Step 3 Height : 583.3

Front 3 : Stringboard : 53.85 / 58.58 Handrail : 57.49 / 57.80

Front 4 : Stringboard : 53.11 / 58.43 Handrail : 56.73 / 57.45





Corner Newel Post Left Stringboard Flight : 2-3

Top View

Height : 1762.2

Angle : 79.50

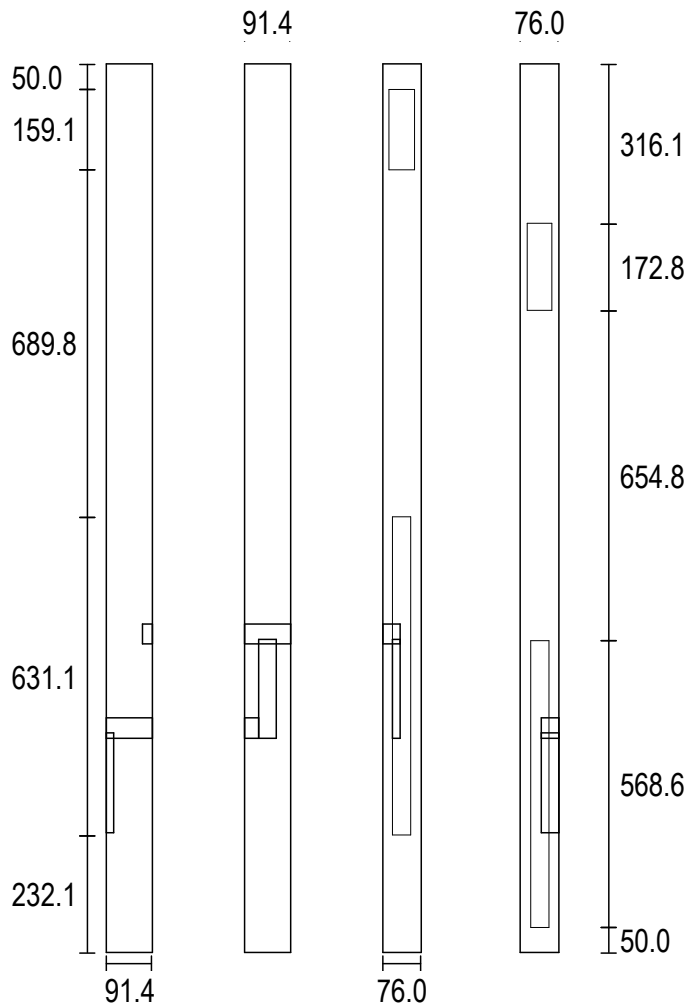
Step 11 Height : 464.4

Step 12 Height : 651.4



Front 3 : Stringboard : 62.07 / 59.27 Handrail : 60.32 / 58.84

Front 4 : Stringboard : 37.15 / 62.07 Handrail : 66.05 / 61.17



Extremity Newel Post Left Stringboard Flight : 3

Top View

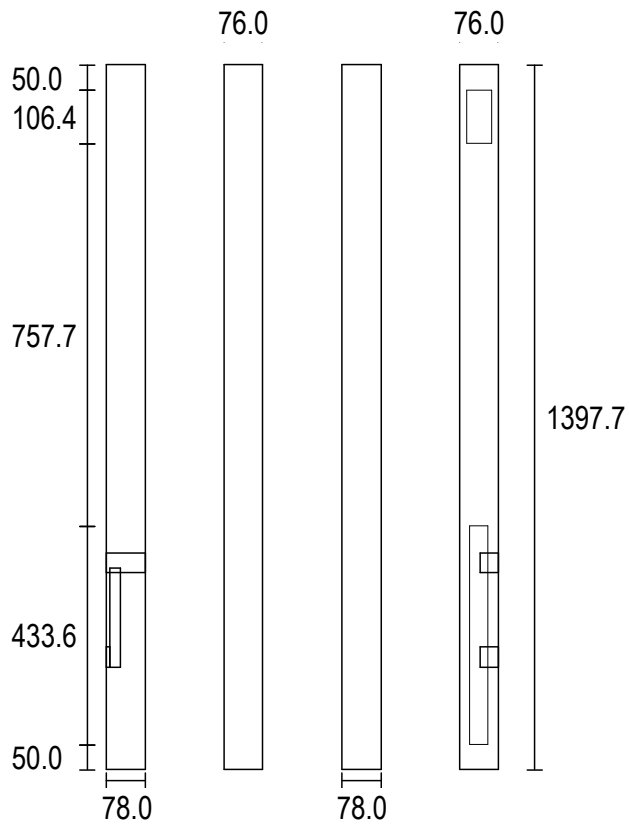
Height : 1397.7

Step 14 Height : 242.7

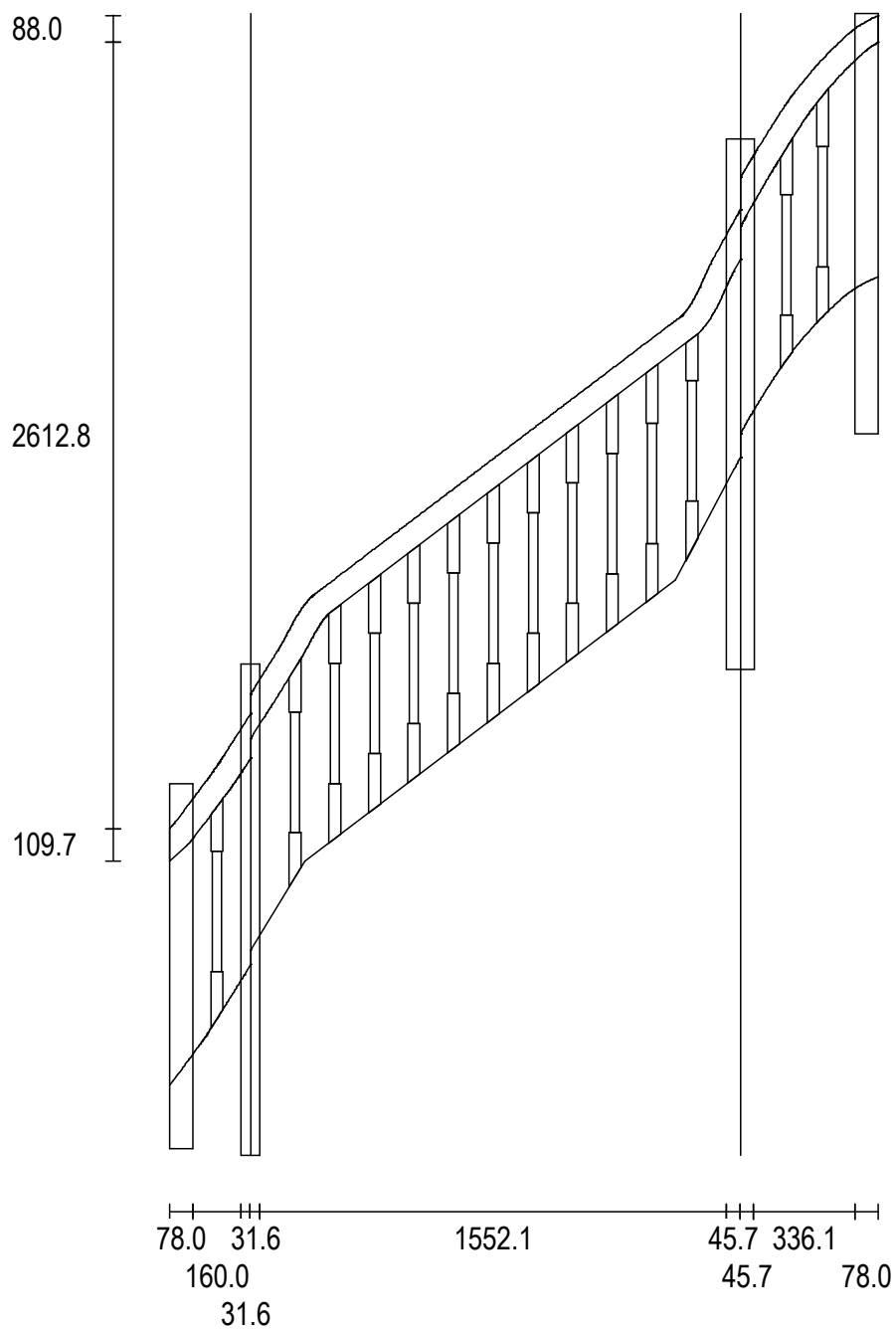
Step 15 Height : 429.7



Front 4 : Stringboard : 55.50 / 32.47 Handrail : 42.98 / 36.43



Dimensions : 3662.0 x 329.5 (46.4°)



StairDesigner  
Banister : 1-3

**David Ffrench**

dfrench-02v01

Banister : 1

Flight : 1

Position : 158.0

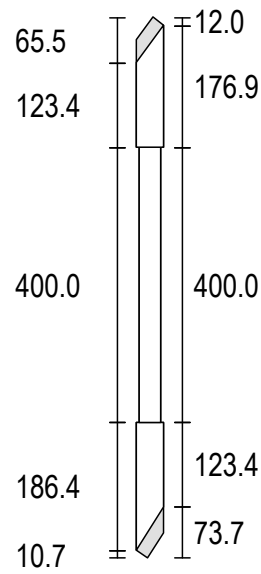
Height from Ground Level : 400.6

Angle : 53.21 / 57.59

Height : 786.0

Shaft Diameter : 30.0

Base Section : 40.0



Banister : 2

Flight : 2

Position : 148.4

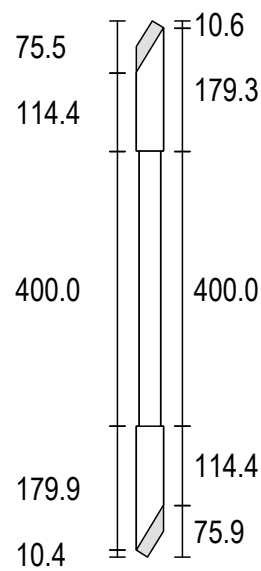
Height from Ground Level : 871.1

Angle : 57.87 / 58.58

Height : 780.3

Shaft Diameter : 30.0

Base Section : 40.0



Banister : 3

Flight : 2

Position : 280.3

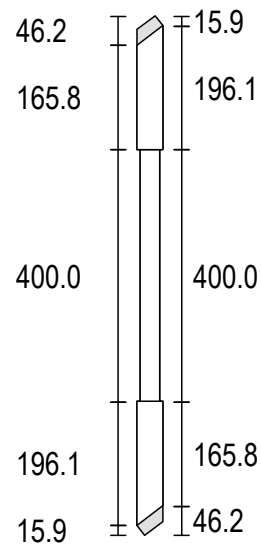
Height from Ground Level : 1016.3

Angle : 37.15

Height : 824.2

Shaft Diameter : 30.0

Base Section : 40.0



StairDesigner  
Banister : 4-6

David Ffrench

dfrench-02v01

Banister : 4

Flight : 2

Position : 412.1

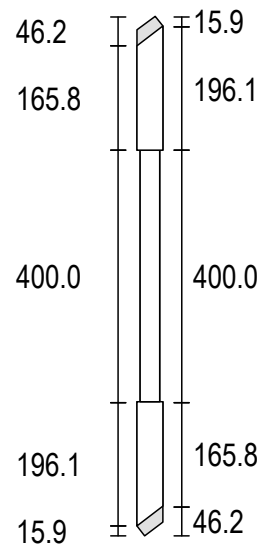
Height from Ground Level : 1116.2

Angle : 37.15

Height : 824.2

Shaft Diameter : 30.0

Base Section : 40.0



Banister : 5

Flight : 2

Position : 544.0

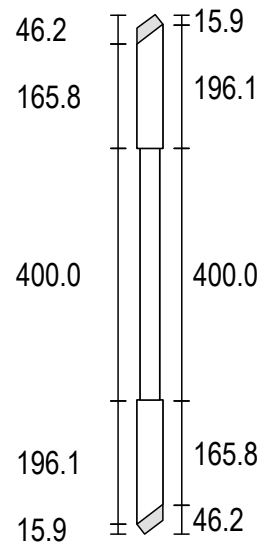
Height from Ground Level : 1216.1

Angle : 37.15

Height : 824.2

Shaft Diameter : 30.0

Base Section : 40.0



Banister : 6

Flight : 2

Position : 675.8

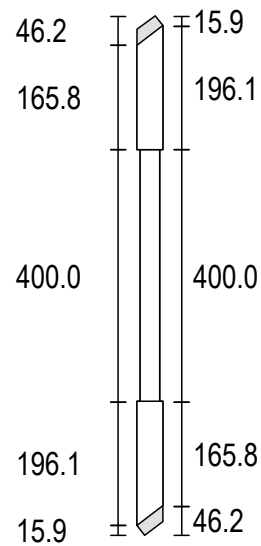
Height from Ground Level : 1316.0

Angle : 37.15

Height : 824.2

Shaft Diameter : 30.0

Base Section : 40.0



StairDesigner  
Banister : 7-9

David Ffrench

dfrench-02v01

Banister : 7

Flight : 2

Position : 807.6

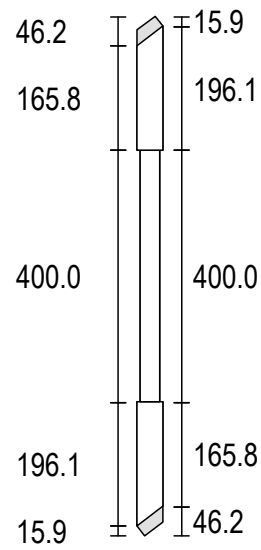
Height from Ground Level : 1415.8

Angle : 37.15

Height : 824.2

Shaft Diameter : 30.0

Base Section : 40.0



Banister : 8

Flight : 2

Position : 939.5

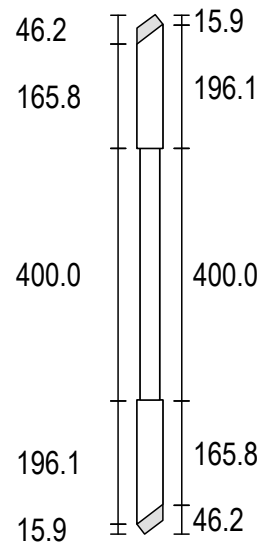
Height from Ground Level : 1515.7

Angle : 37.15

Height : 824.2

Shaft Diameter : 30.0

Base Section : 40.0



Banister : 9

Flight : 2

Position : 1071.3

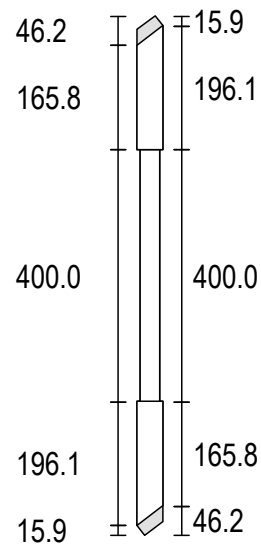
Height from Ground Level : 1615.6

Angle : 37.15

Height : 824.2

Shaft Diameter : 30.0

Base Section : 40.0



StairDesigner  
Banister : 10-12

**David Ffrench**

dfrench-02v01

Banister : 10

Flight : 2

Position : 1203.2

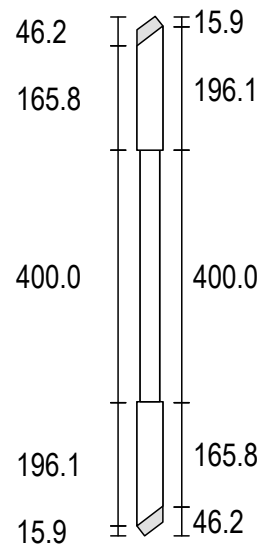
Height from Ground Level : 1715.5

Angle : 37.15

Height : 824.2

Shaft Diameter : 30.0

Base Section : 40.0



Banister : 11

Flight : 2

Position : 1335.0

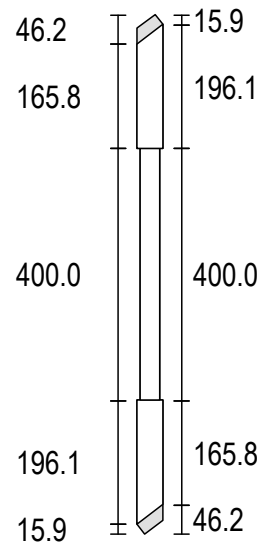
Height from Ground Level : 1815.4

Angle : 37.15

Height : 824.2

Shaft Diameter : 30.0

Base Section : 40.0



Banister : 12

Flight : 2

Position : 1466.8

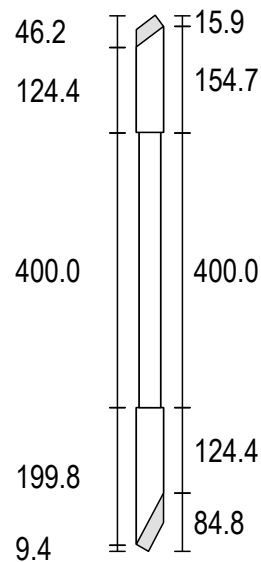
Height from Ground Level : 1953.0

Angle : 37.15 / 62.07

Height : 779.8

Shaft Diameter : 30.0

Base Section : 40.0



StairDesigner  
Banister : 13-14

**David Ffrench**

dfrench-02v01

Banister : 13

Flight : 3

Position : 152.7

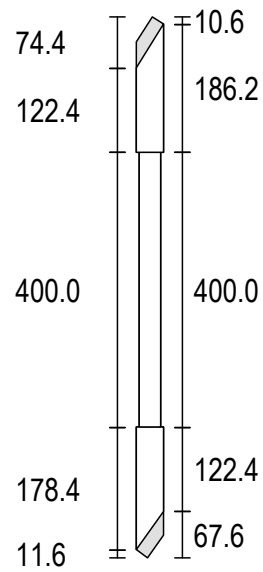
Height from Ground Level : 2592.6

Angle : 57.96 / 54.50

Height : 786.8

Shaft Diameter : 30.0

Base Section : 40.0



Banister : 14

Flight : 3

Position : 274.7

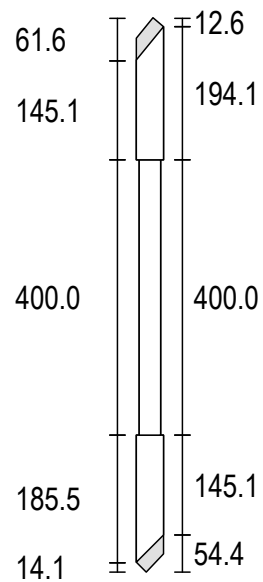
Height from Ground Level : 2745.4

Angle : 50.90 / 45.32

Height : 806.2

Shaft Diameter : 30.0

Base Section : 40.0





Piece	Dimensions	Cutting List Volume	Real Volume
Step 1	758.0 x 393.0 x 40.0	0.0119 m <sup>3</sup>	0.0084 m <sup>3</sup>
Step 2	936.4 x 476.8 x 40.0	0.0179 m <sup>3</sup>	0.0098 m <sup>3</sup>
Step 3	1071.1 x 405.6 x 40.0	0.0174 m <sup>3</sup>	0.0103 m <sup>3</sup>
Step 4	854.6 x 390.4 x 40.0	0.0133 m <sup>3</sup>	0.0084 m <sup>3</sup>
Step 5	758.0 x 276.8 x 40.0	0.0084 m <sup>3</sup>	0.0084 m <sup>3</sup>
Step 6	758.0 x 276.8 x 40.0	0.0084 m <sup>3</sup>	0.0084 m <sup>3</sup>
Step 7	758.0 x 276.8 x 40.0	0.0084 m <sup>3</sup>	0.0084 m <sup>3</sup>
Step 8	758.0 x 276.8 x 40.0	0.0084 m <sup>3</sup>	0.0084 m <sup>3</sup>
Step 9	758.0 x 276.8 x 40.0	0.0084 m <sup>3</sup>	0.0084 m <sup>3</sup>
Step 10	758.0 x 434.1 x 40.0	0.0132 m <sup>3</sup>	0.0085 m <sup>3</sup>
Step 11	1045.5 x 557.4 x 40.0	0.0233 m <sup>3</sup>	0.0111 m <sup>3</sup>
Step 12	1273.7 x 443.7 x 40.0	0.0226 m <sup>3</sup>	0.0131 m <sup>3</sup>
Step 13	945.5 x 368.5 x 40.0	0.0139 m <sup>3</sup>	0.0087 m <sup>3</sup>
Step 14	813.6 x 347.1 x 40.0	0.0113 m <sup>3</sup>	0.0084 m <sup>3</sup>
Step 15	758.0 x 100.0 x 40.0	0.0030 m <sup>3</sup>	0.0030 m <sup>3</sup>
Riser 1	738.0 x 157.0 x 20.0	0.0023 m <sup>3</sup>	0.0023 m <sup>3</sup>
Riser 2	798.1 x 197.0 x 20.0	0.0031 m <sup>3</sup>	0.0031 m <sup>3</sup>
Riser 3	1023.1 x 197.0 x 20.0	0.0040 m <sup>3</sup>	0.0040 m <sup>3</sup>
Riser 4	814.3 x 197.0 x 20.0	0.0032 m <sup>3</sup>	0.0032 m <sup>3</sup>
Riser 5	758.0 x 197.0 x 20.0	0.0030 m <sup>3</sup>	0.0030 m <sup>3</sup>
Riser 6	758.0 x 197.0 x 20.0	0.0030 m <sup>3</sup>	0.0030 m <sup>3</sup>
Riser 7	758.0 x 197.0 x 20.0	0.0030 m <sup>3</sup>	0.0030 m <sup>3</sup>
Riser 8	758.0 x 197.0 x 20.0	0.0030 m <sup>3</sup>	0.0030 m <sup>3</sup>
Riser 9	758.0 x 197.0 x 20.0	0.0030 m <sup>3</sup>	0.0030 m <sup>3</sup>
Riser 10	758.0 x 197.0 x 20.0	0.0030 m <sup>3</sup>	0.0030 m <sup>3</sup>
Riser 11	826.6 x 197.0 x 20.0	0.0033 m <sup>3</sup>	0.0032 m <sup>3</sup>
Riser 12	1185.4 x 197.0 x 20.0	0.0047 m <sup>3</sup>	0.0045 m <sup>3</sup>
Riser 13	884.2 x 197.0 x 20.0	0.0035 m <sup>3</sup>	0.0034 m <sup>3</sup>
Riser 14	777.8 x 197.0 x 20.0	0.0031 m <sup>3</sup>	0.0030 m <sup>3</sup>
Riser 15	738.0 x 197.0 x 20.0	0.0029 m <sup>3</sup>	0.0029 m <sup>3</sup>
Right Stringboard 1	1089.2 x 320.9 x 36.0	0.0126 m <sup>3</sup>	0.0102 m <sup>3</sup>
Right Stringboard 2	3799.6 x 485.2 x 36.0	0.0664 m <sup>3</sup>	0.0395 m <sup>3</sup>
Right Stringboard 3	1633.0 x 390.1 x 36.0	0.0229 m <sup>3</sup>	0.0162 m <sup>3</sup>
Left Stringboard 1	560.2 x 160.0 x 36.0	0.0032 m <sup>3</sup>	0.0025 m <sup>3</sup>
Left Stringboard 2	2545.2 x 476.3 x 36.0	0.0436 m <sup>3</sup>	0.0235 m <sup>3</sup>
Left Stringboard 3	1066.7 x 308.2 x 36.0	0.0118 m <sup>3</sup>	0.0066 m <sup>3</sup>
Left Handrail 1	391.7 x 84.0 x 50.0	0.0016 m <sup>3</sup>	0.0011 m <sup>3</sup>
Left Handrail 2	2240.8 x 202.2 x 50.0	0.0227 m <sup>3</sup>	0.0087 m <sup>3</sup>
Left Handrail 3	665.2 x 103.2 x 50.0	0.0034 m <sup>3</sup>	0.0022 m <sup>3</sup>
Newel Post 1	78.0 x 76.0 x 1213.6	0.0072 m <sup>3</sup>	0.0072 m <sup>3</sup>
Newel Post 2	76.0 x 74.7 x 1634.0	0.0093 m <sup>3</sup>	0.0078 m <sup>3</sup>
Newel Post 3	91.4 x 89.8 x 1762.2	0.0145 m <sup>3</sup>	0.0122 m <sup>3</sup>
Newel Post 4	78.0 x 76.0 x 1397.7	0.0083 m <sup>3</sup>	0.0083 m <sup>3</sup>
Banister 1	40.0 x 40.0 x 786.0	0.0013 m <sup>3</sup>	0.0009 m <sup>3</sup>
Banister 2	40.0 x 40.0 x 780.3	0.0012 m <sup>3</sup>	0.0008 m <sup>3</sup>
Banister 3	40.0 x 40.0 x 824.2	0.0013 m <sup>3</sup>	0.0009 m <sup>3</sup>
Banister 4	40.0 x 40.0 x 824.2	0.0013 m <sup>3</sup>	0.0009 m <sup>3</sup>
Banister 5	40.0 x 40.0 x 824.2	0.0013 m <sup>3</sup>	0.0009 m <sup>3</sup>
Banister 6	40.0 x 40.0 x 824.2	0.0013 m <sup>3</sup>	0.0009 m <sup>3</sup>

Piece	Dimensions	Cutting List Volume	Real Volume
Banister 7	40.0 x 40.0 x 824.2	0.0013 m <sup>3</sup>	0.0009 m <sup>3</sup>
Banister 8	40.0 x 40.0 x 824.2	0.0013 m <sup>3</sup>	0.0009 m <sup>3</sup>
Banister 9	40.0 x 40.0 x 824.2	0.0013 m <sup>3</sup>	0.0009 m <sup>3</sup>
Banister 10	40.0 x 40.0 x 824.2	0.0013 m <sup>3</sup>	0.0009 m <sup>3</sup>
Banister 11	40.0 x 40.0 x 824.2	0.0013 m <sup>3</sup>	0.0009 m <sup>3</sup>
Banister 12	40.0 x 40.0 x 779.8	0.0012 m <sup>3</sup>	0.0009 m <sup>3</sup>
Banister 13	40.0 x 40.0 x 786.8	0.0013 m <sup>3</sup>	0.0009 m <sup>3</sup>
Banister 14	40.0 x 40.0 x 806.2	0.0013 m <sup>3</sup>	0.0009 m <sup>3</sup>

Piece	Cutting List Volume	Real Volume	Weight	Cost
Steps	0.1898 m <sup>3</sup>	0.1315 m <sup>3</sup>		
Risers	0.0480 m <sup>3</sup>	0.0476 m <sup>3</sup>		
Stringboards	0.1606 m <sup>3</sup>	0.0985 m <sup>3</sup>		
Handrails	0.0277 m <sup>3</sup>	0.0120 m <sup>3</sup>		
Newel Posts	0.0392 m <sup>3</sup>	0.0356 m <sup>3</sup>		
Banisters	0.0182 m <sup>3</sup>	0.0127 m <sup>3</sup>		
<b>Total</b>	<b>0.4835 m<sup>3</sup></b>	<b>0.3379 m<sup>3</sup></b>		