

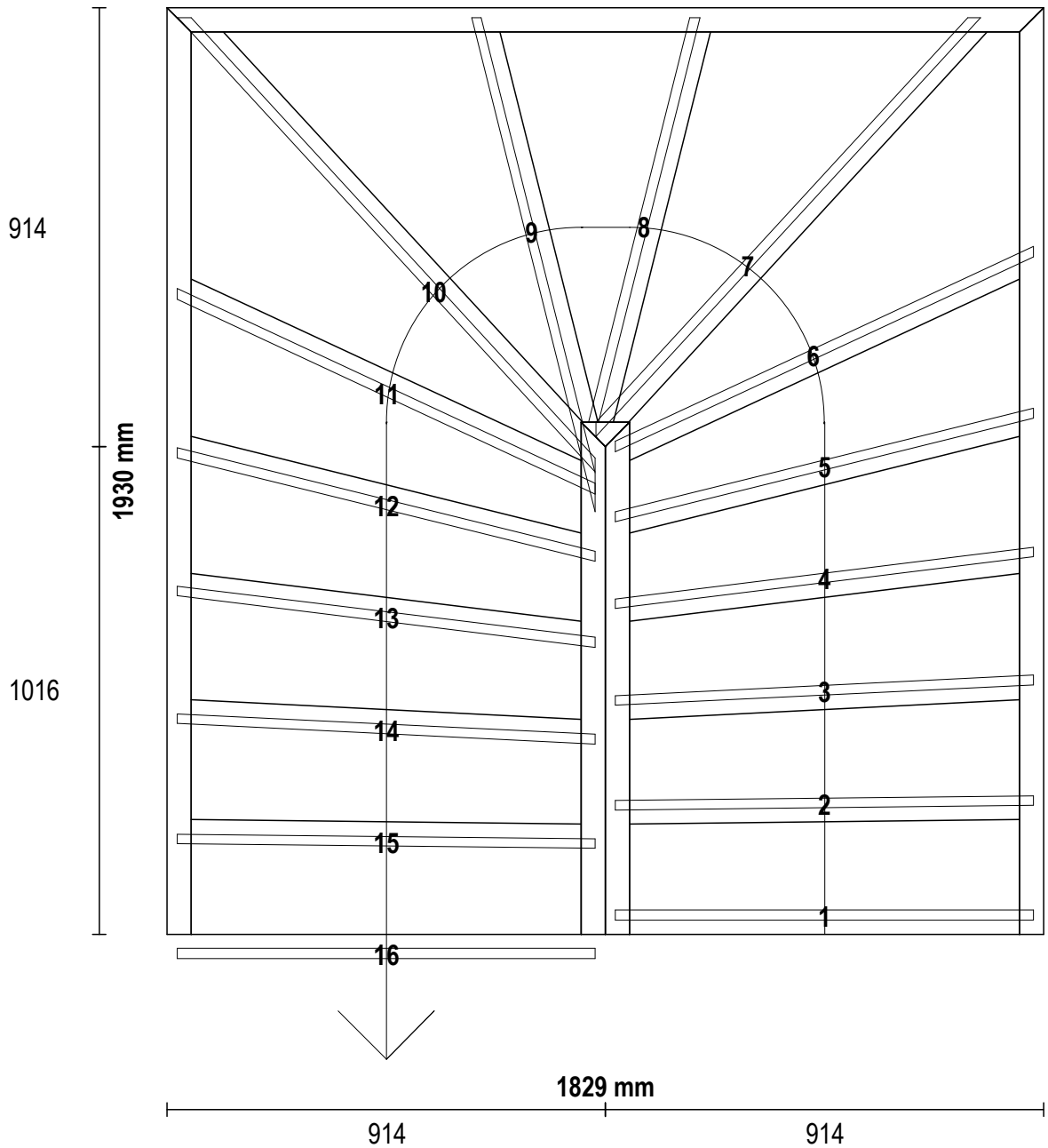
Multi-Flight Stair

Risers : 16  
Floor Height : 2997 mm

Riser Height : 187 mm

Tread Width : 234 mm

Stair Rule : 609 mm



StairDesigner  
Step : 1

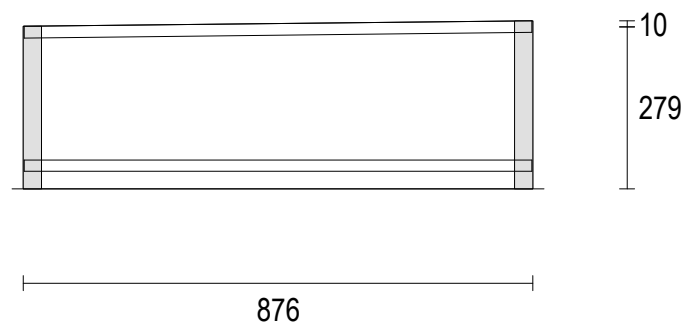
**Sam James**

sam01v01  
Scale : 1/13

Step : 876 x 289

Riser

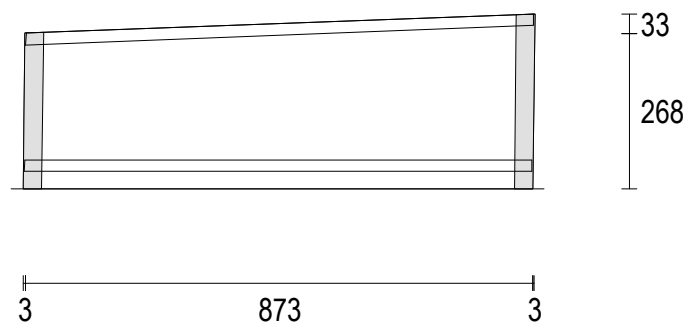
Width : 873 Height : 157 Thickness : 20 Angle : -0.00



Step : 880 x 301

Riser

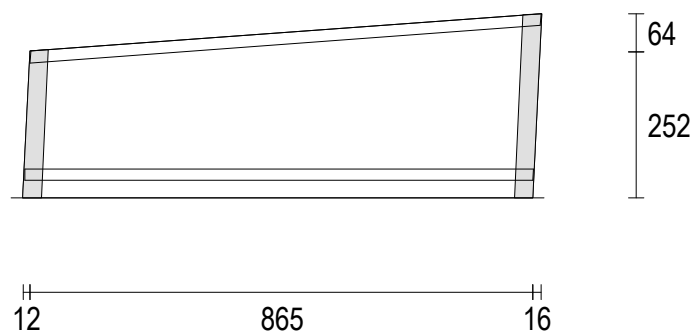
Width : 873 Height : 157 Thickness : 20 Angle : -0.65



Step : 893 x 316

Riser

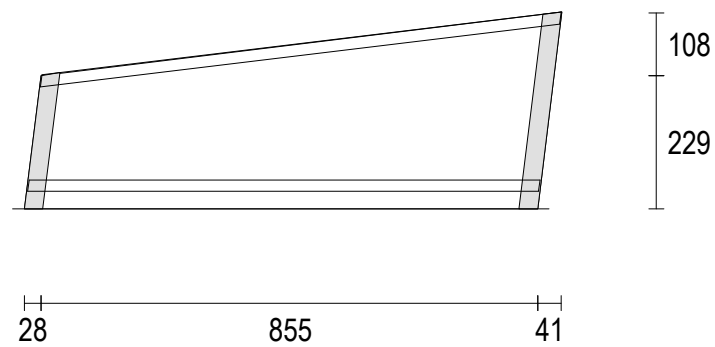
Width : 875 Height : 157 Thickness : 20 Angle : -2.82



Step : 924 x 338

Riser

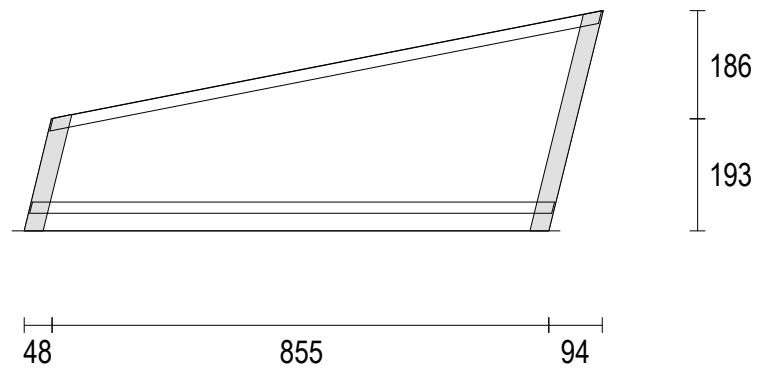
Width : 882 Height : 157 Thickness : 20 Angle : -7.00



Step : 996 x 379

Riser

Width : 904 Height : 157 Thickness : 20 Angle : -13.88



StairDesigner  
Step : 6

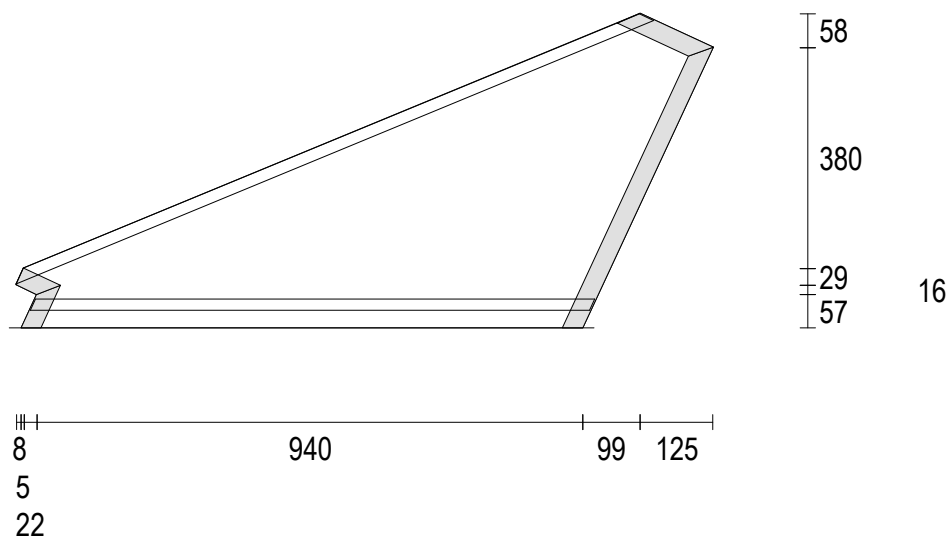
**Sam James**

sam01v01  
Scale : 1/13

Step : 1199 x 540

Riser

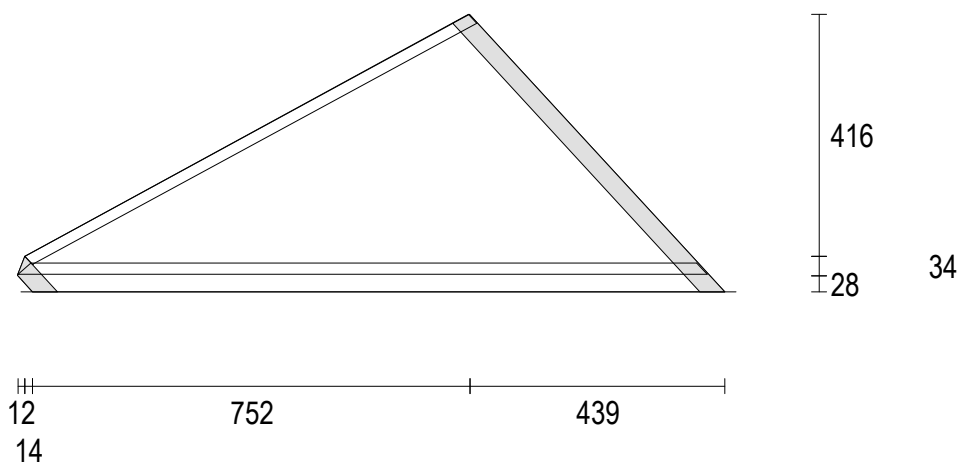
Width : 972 Height : 157 Thickness : 20 Angle : -24.96



Step : 1217 x 477

Riser

Width : 1186 Height : 157 Thickness : 20 Angle : 42.62

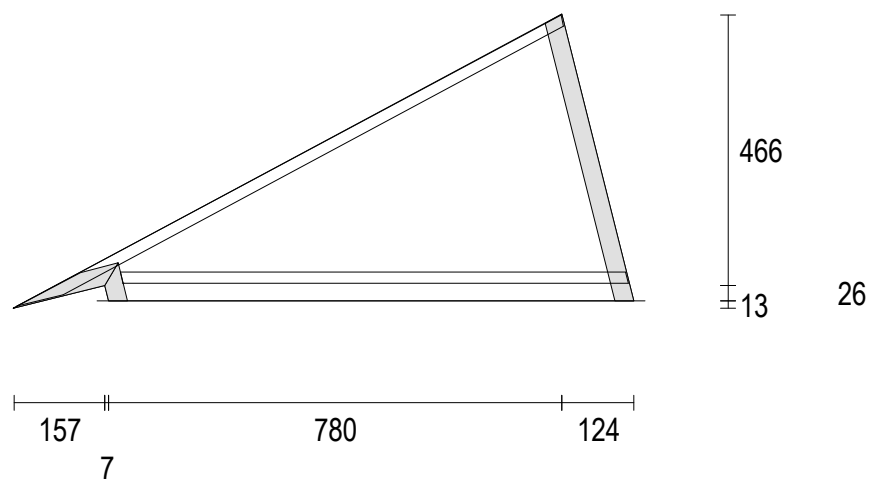




Step : 1067 x 506

Riser

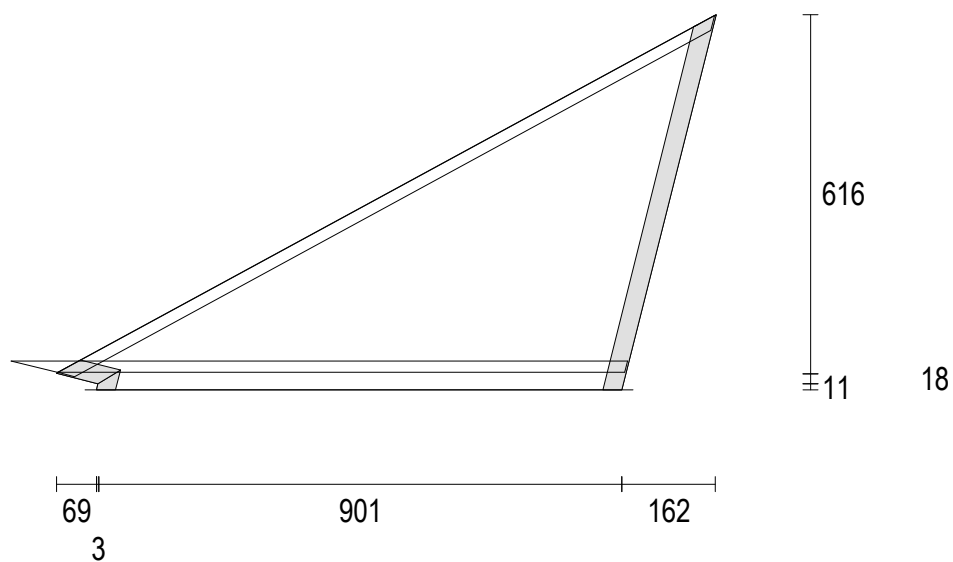
Width : 874 Height : 157 Thickness : 20 Angle : 14.10



Step : 1134 x 645

Riser

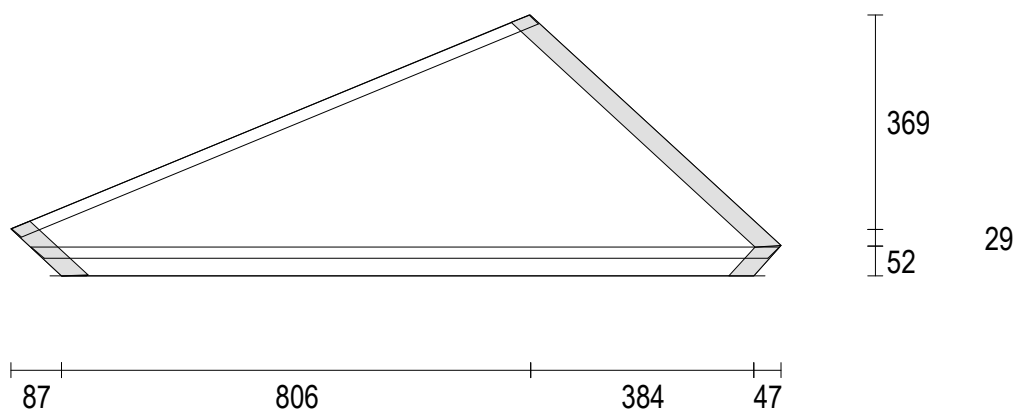
Width : 1061 Height : 157 Thickness : 20 Angle : -14.10



Step : 1325 x 449

Riser

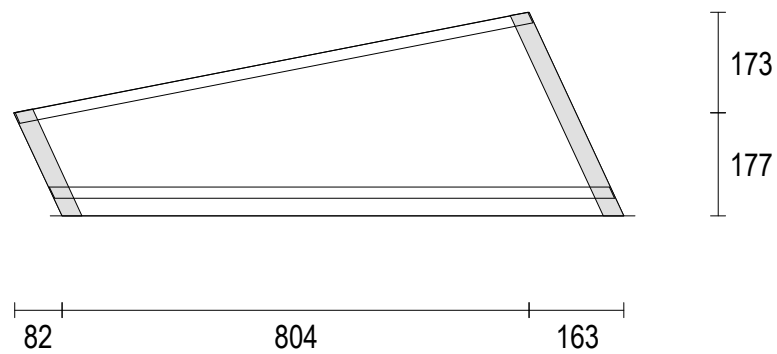
Width : 1286 Height : 157 Thickness : 20 Angle R:-42.62 ; L:47.38



Step : 1049 x 350

Riser

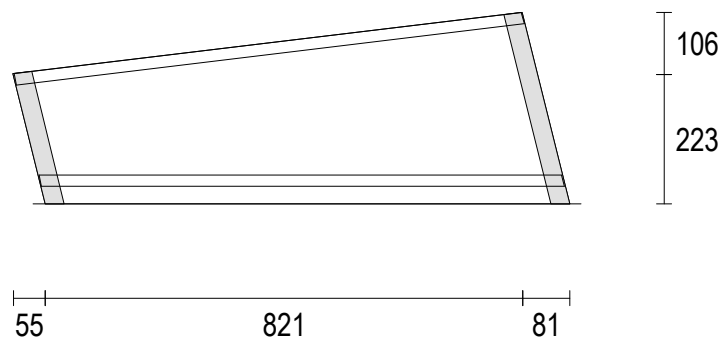
Width : 972 Height : 157 Thickness : 20 Angle : 24.96



Step : 958 x 329

Riser

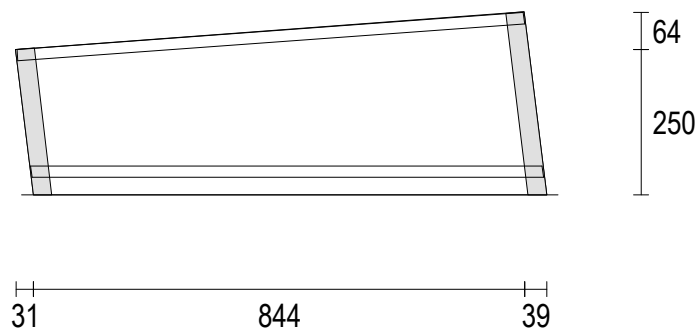
Width : 904 Height : 157 Thickness : 20 Angle : 13.88



Step : 914 x 314

Riser

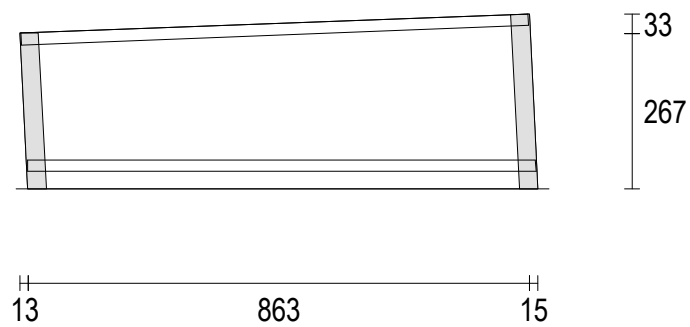
Width : 882 Height : 157 Thickness : 20 Angle : 7.00



Step : 891 x 300

Riser

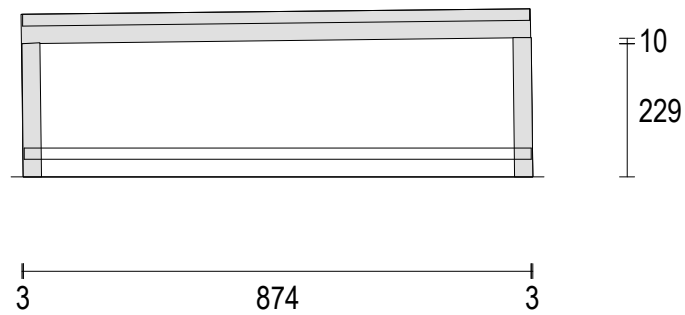
Width : 875 Height : 157 Thickness : 20 Angle : 2.82



Step : 879 x 239

Riser

Width : 873 Height : 157 Thickness : 20 Angle : 0.65





StairDesigner  
Step : 16

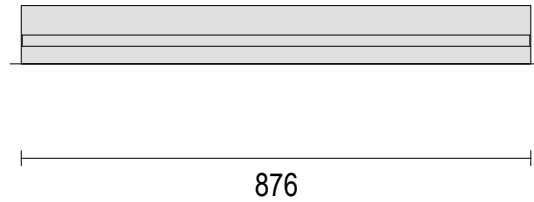
**Sam James**

sam01v01  
Scale : 1/13

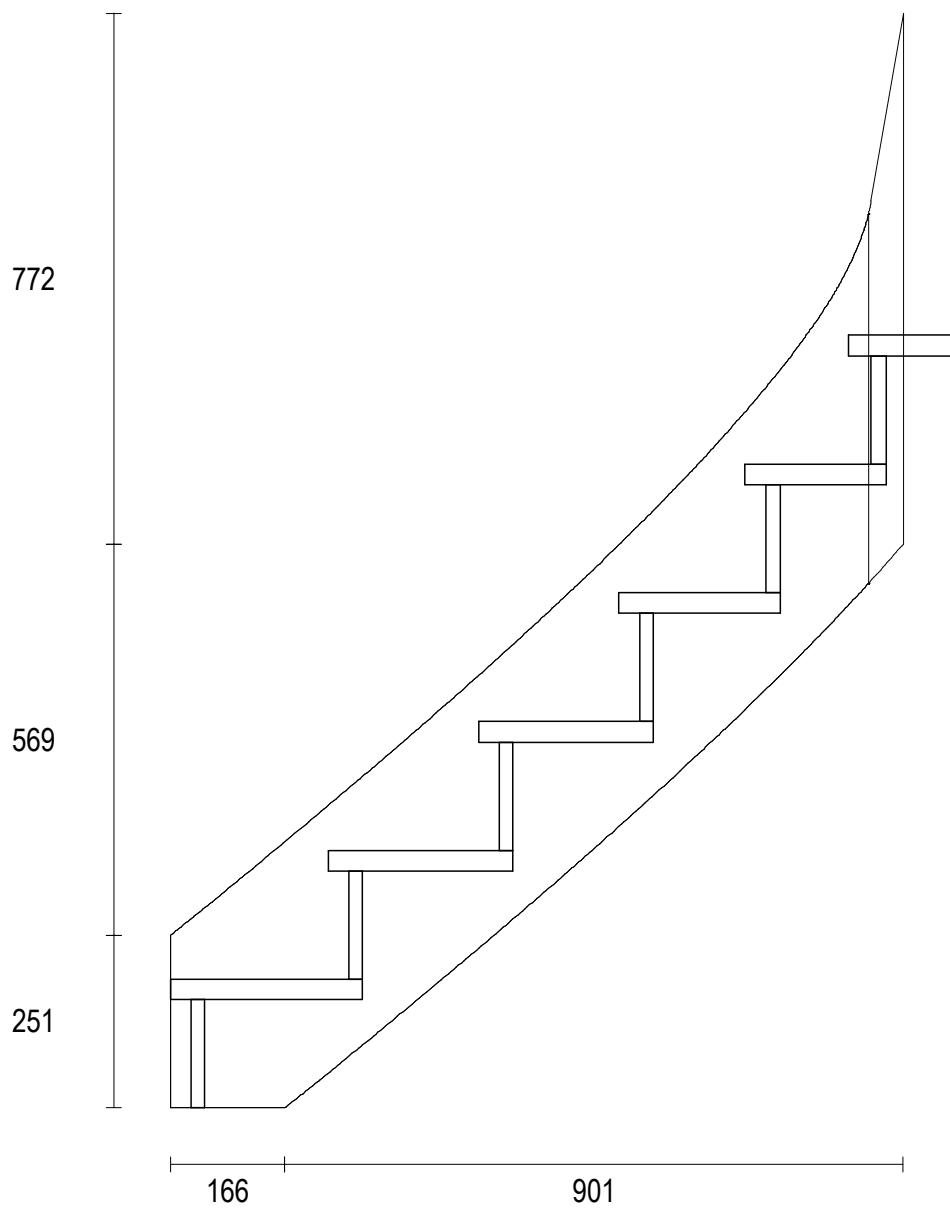
Landing Step

Riser

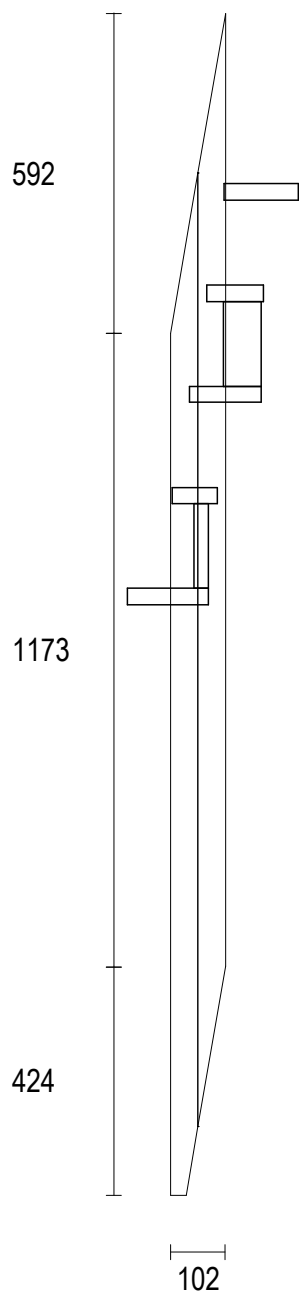
Width : 873 Height : 157 Thickness : 20 Angle : -0.00



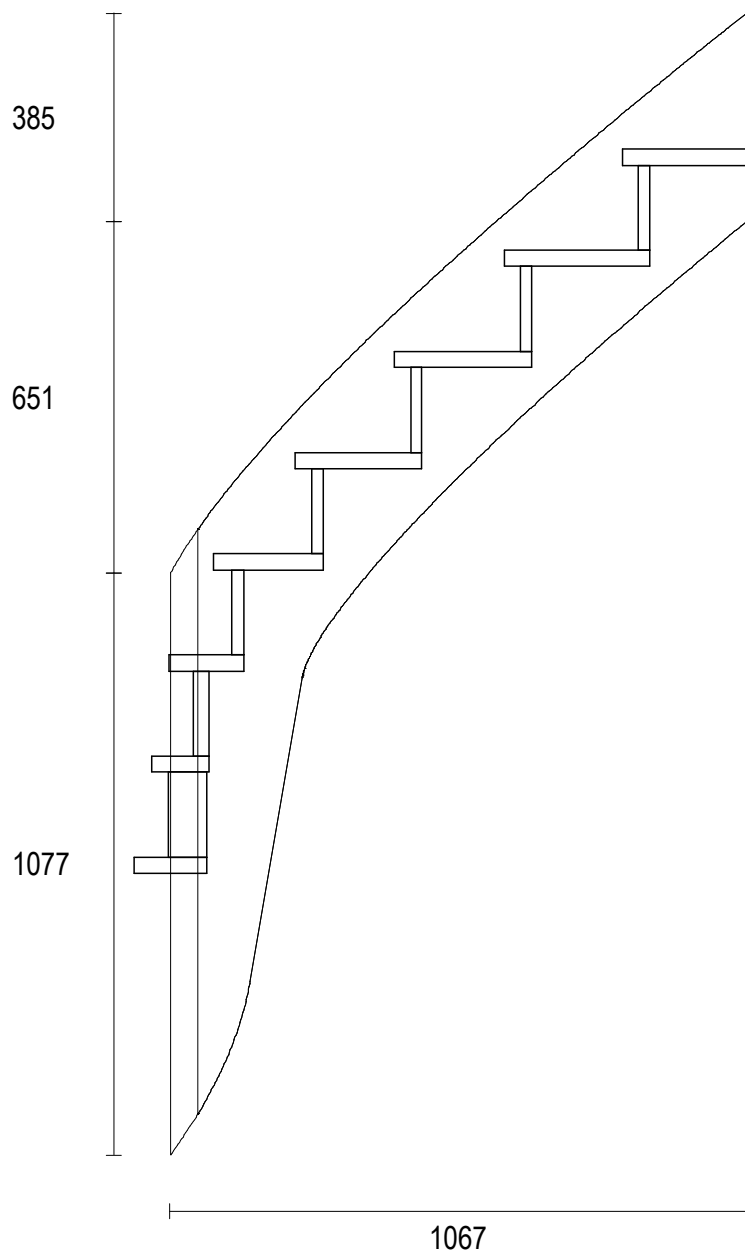
Dimensions : 1910 x 480 (51.5°)



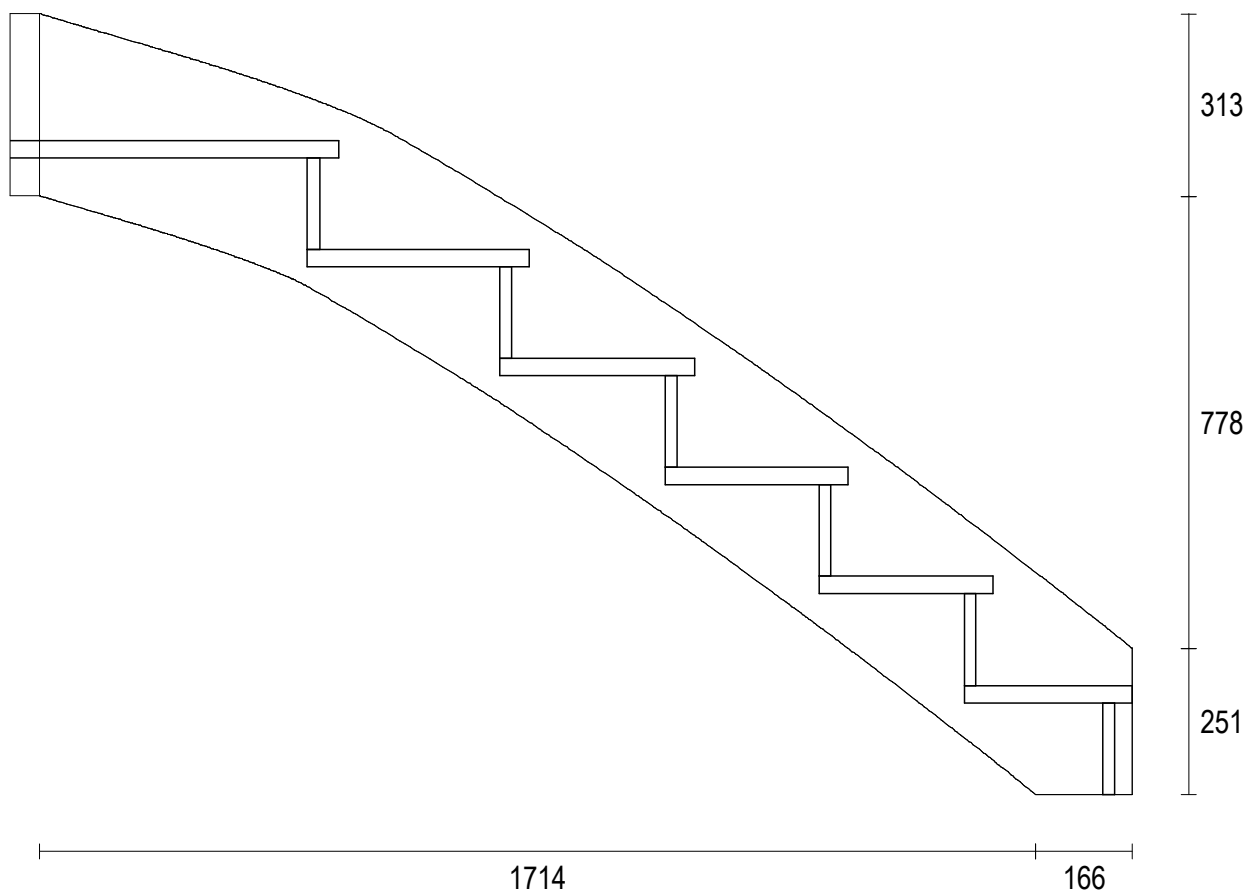
Dimensions : 2189 x 102 (90.0°)



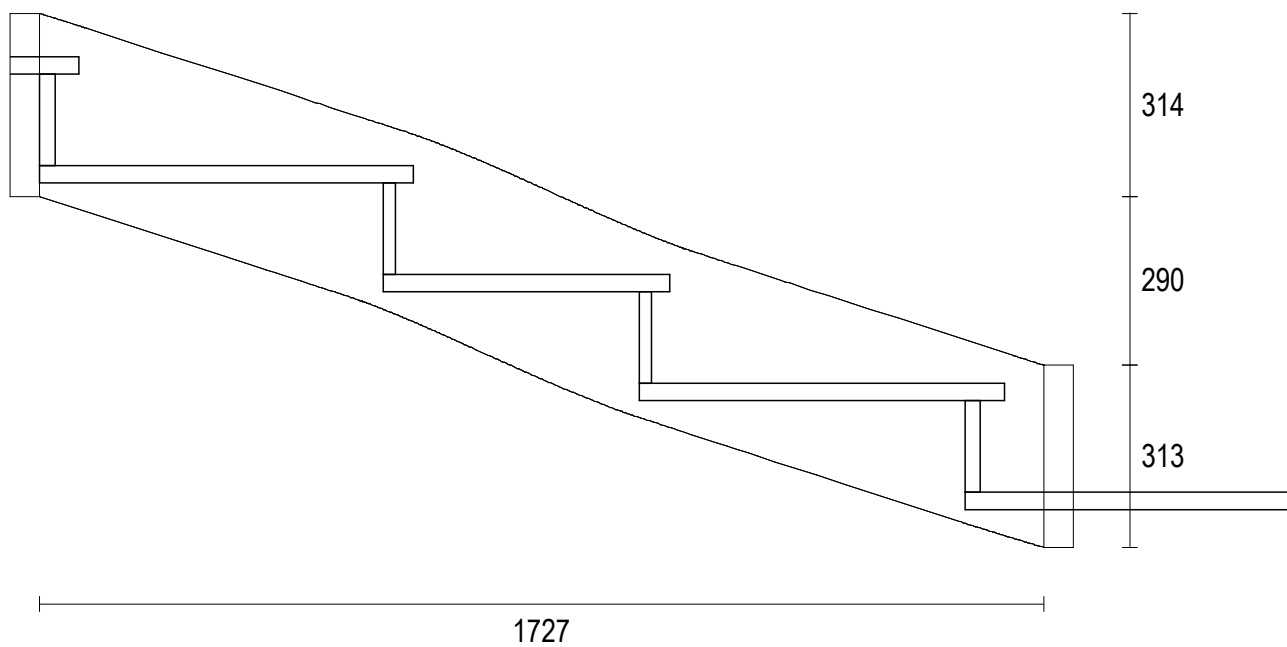
Dimensions : 2359 x 569 (58.4°)



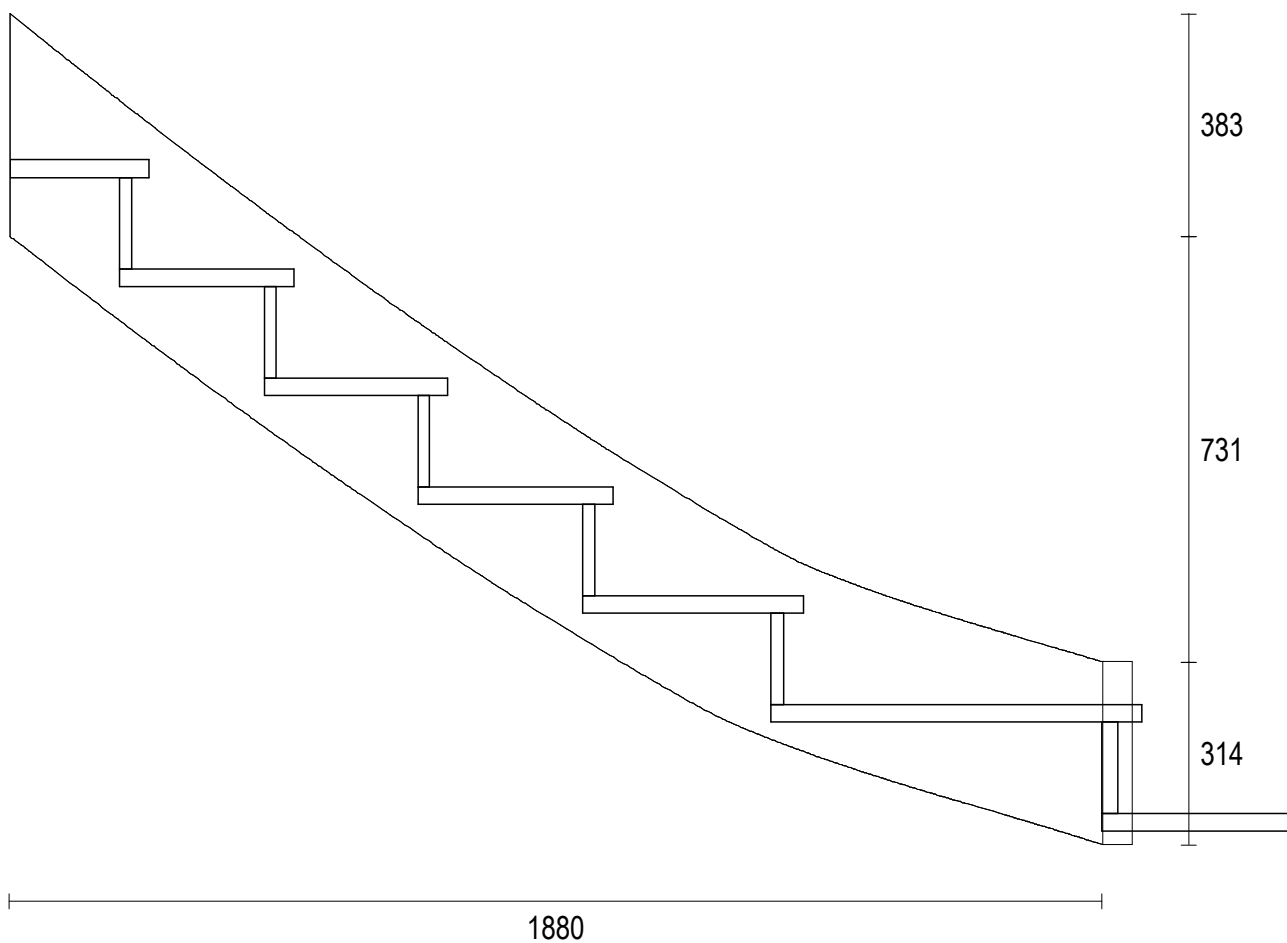
Dimensions : 2344 x 424 (30.3°)



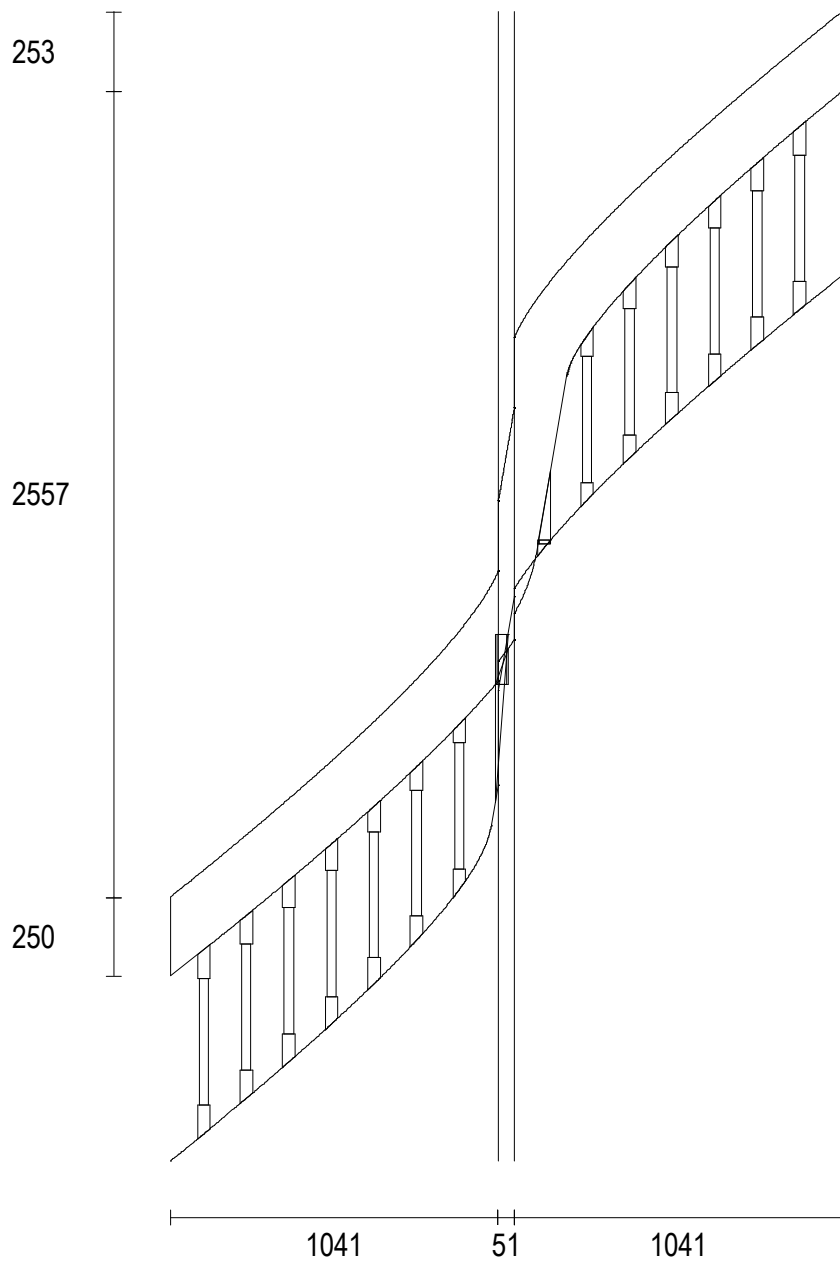
Dimensions : 2029 x 332 (19.3°)



Dimensions : 2386 x 440 (30.0°)



Dimensions : 3724 x 531 (58.5°)





StairDesigner  
Banister : 1-3

Sam James

sam01v01

Banister : 1

Flight : 1

Position : 105

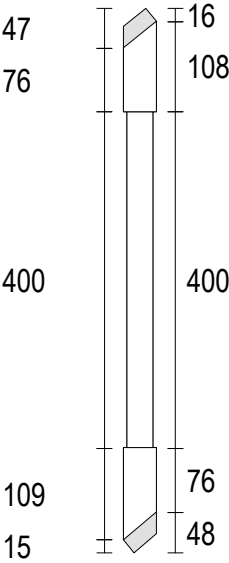
Height from Ground Level : 320

Angle : 38.16 / 39.55

Height : 648

Shaft Diameter : 30

Base Section : 40



Banister : 2

Flight : 1

Position : 240

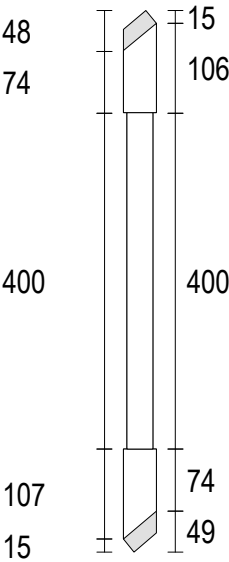
Height from Ground Level : 432

Angle : 39.30 / 40.09

Height : 645

Shaft Diameter : 30

Base Section : 40



Banister : 3

Flight : 1

Position : 376

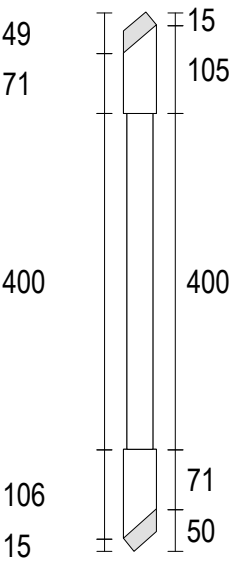
Height from Ground Level : 547

Angle : 39.95 / 41.09

Height : 642

Shaft Diameter : 30

Base Section : 40



StairDesigner  
Banister : 4-6

Sam James

sam01v01

Banister : 4

Flight : 1

Position : 511

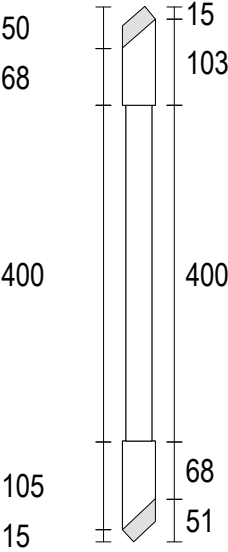
Height from Ground Level : 667

Angle : 40.87 / 42.40

Height : 637

Shaft Diameter : 30

Base Section : 40



Banister : 5

Flight : 1

Position : 646

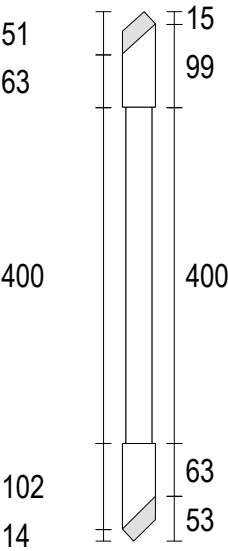
Height from Ground Level : 793

Angle : 42.08 / 44.24

Height : 630

Shaft Diameter : 30

Base Section : 40



Banister : 6

Flight : 1

Position : 781

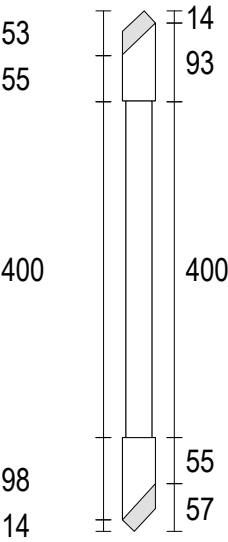
Height from Ground Level : 929

Angle : 43.70 / 47.21

Height : 620

Shaft Diameter : 30

Base Section : 40



StairDesigner  
Banister : 7-9

Sam James

sam01v01

Banister : 7

Flight : 1

Position : 917

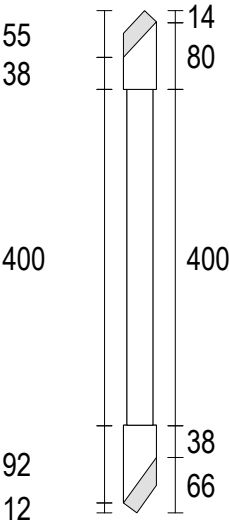
Height from Ground Level : 1085

Angle : 46.11 / 53.51

Height : 598

Shaft Diameter : 30

Base Section : 40



Banister : 8 ( Incorrectly defined Banister )

Flight : 2

Position : 10

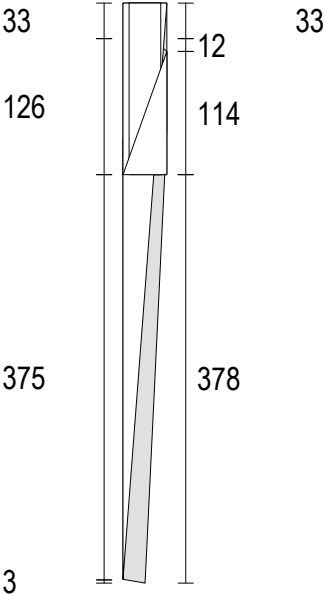
Height from Ground Level : 1388

Angle : 52.77 / 80.26

Height : 504

Shaft Diameter : 30

Base Section : 40



Banister : 9

Flight : 3

Position : 95

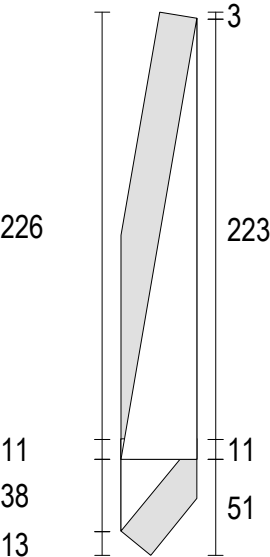
Height from Ground Level : 2172

Angle : 80.26 / 50.56

Height : 287

Shaft Diameter : 30

Base Section : 40



StairDesigner  
Banister : 10-12

**Sam James**

sam01v01

Banister : 10

Flight : 3

Position : 230

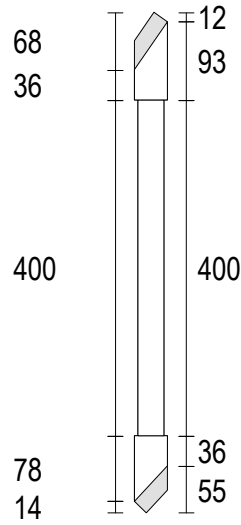
Height from Ground Level : 2327

Angle : 54.76 / 46.11

Height : 596

Shaft Diameter : 30

Base Section : 40



Banister : 11

Flight : 3

Position : 365

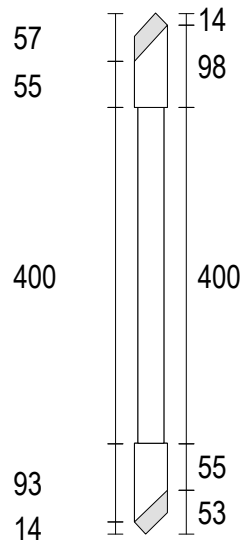
Height from Ground Level : 2463

Angle : 47.29 / 43.66

Height : 620

Shaft Diameter : 30

Base Section : 40



Banister : 12

Flight : 3

Position : 501

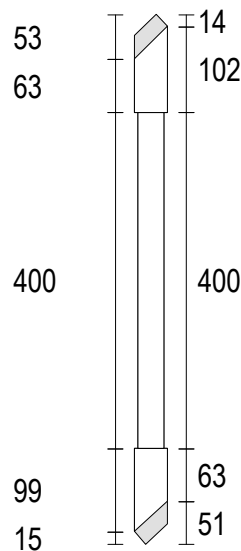
Height from Ground Level : 2589

Angle : 44.19 / 42.01

Height : 631

Shaft Diameter : 30

Base Section : 40



StairDesigner  
Banister : 13-15

**Sam James**

sam01v01

Banister : 13

Flight : 3

Position : 636

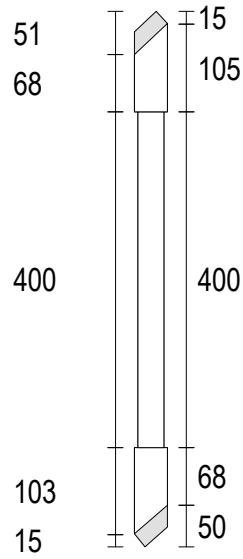
Height from Ground Level : 2709

Angle : 42.33 / 40.80

Height : 637

Shaft Diameter : 30

Base Section : 40



Banister : 14

Flight : 3

Position : 771

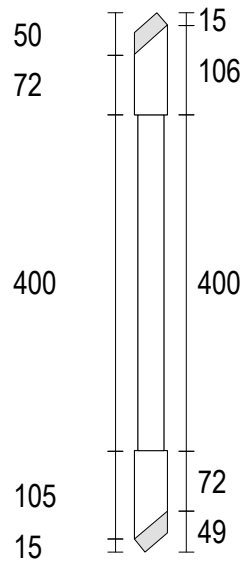
Height from Ground Level : 2824

Angle : 41.01 / 39.89

Height : 642

Shaft Diameter : 30

Base Section : 40



Banister : 15

Flight : 3

Position : 906

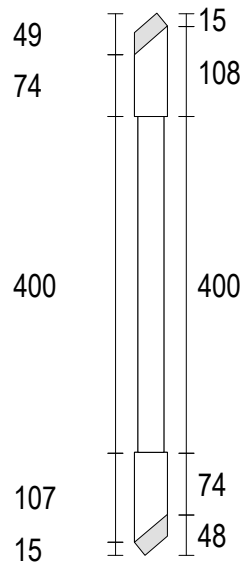
Height from Ground Level : 2936

Angle : 40.02 / 39.23

Height : 645

Shaft Diameter : 30

Base Section : 40



| Piece               | Dimensions      | Cutting List Volume   | Real Volume           |
|---------------------|-----------------|-----------------------|-----------------------|
| Step 1              | 876 x 289 x 30  | 0.0076 m <sup>3</sup> | 0.0075 m <sup>3</sup> |
| Step 2              | 880 x 301 x 30  | 0.0079 m <sup>3</sup> | 0.0075 m <sup>3</sup> |
| Step 3              | 893 x 316 x 30  | 0.0085 m <sup>3</sup> | 0.0075 m <sup>3</sup> |
| Step 4              | 924 x 338 x 30  | 0.0094 m <sup>3</sup> | 0.0075 m <sup>3</sup> |
| Step 5              | 996 x 379 x 30  | 0.0113 m <sup>3</sup> | 0.0077 m <sup>3</sup> |
| Step 6              | 1199 x 540 x 30 | 0.0194 m <sup>3</sup> | 0.0105 m <sup>3</sup> |
| Step 7              | 1217 x 477 x 30 | 0.0174 m <sup>3</sup> | 0.0093 m <sup>3</sup> |
| Step 8              | 1067 x 506 x 30 | 0.0162 m <sup>3</sup> | 0.0077 m <sup>3</sup> |
| Step 9              | 1134 x 645 x 30 | 0.0220 m <sup>3</sup> | 0.0099 m <sup>3</sup> |
| Step 10             | 1325 x 449 x 30 | 0.0179 m <sup>3</sup> | 0.0102 m <sup>3</sup> |
| Step 11             | 1049 x 350 x 30 | 0.0110 m <sup>3</sup> | 0.0076 m <sup>3</sup> |
| Step 12             | 958 x 329 x 30  | 0.0095 m <sup>3</sup> | 0.0075 m <sup>3</sup> |
| Step 13             | 914 x 314 x 30  | 0.0086 m <sup>3</sup> | 0.0075 m <sup>3</sup> |
| Step 14             | 891 x 300 x 30  | 0.0080 m <sup>3</sup> | 0.0075 m <sup>3</sup> |
| Step 15             | 879 x 239 x 30  | 0.0063 m <sup>3</sup> | 0.0062 m <sup>3</sup> |
| Riser 1             | 873 x 157 x 20  | 0.0027 m <sup>3</sup> | 0.0027 m <sup>3</sup> |
| Riser 2             | 873 x 157 x 20  | 0.0027 m <sup>3</sup> | 0.0027 m <sup>3</sup> |
| Riser 3             | 875 x 157 x 20  | 0.0028 m <sup>3</sup> | 0.0027 m <sup>3</sup> |
| Riser 4             | 882 x 157 x 20  | 0.0028 m <sup>3</sup> | 0.0028 m <sup>3</sup> |
| Riser 5             | 904 x 157 x 20  | 0.0028 m <sup>3</sup> | 0.0028 m <sup>3</sup> |
| Riser 6             | 972 x 157 x 20  | 0.0031 m <sup>3</sup> | 0.0030 m <sup>3</sup> |
| Riser 7             | 1186 x 157 x 20 | 0.0037 m <sup>3</sup> | 0.0037 m <sup>3</sup> |
| Riser 8             | 874 x 157 x 20  | 0.0028 m <sup>3</sup> | 0.0027 m <sup>3</sup> |
| Riser 9             | 1061 x 157 x 20 | 0.0033 m <sup>3</sup> | 0.0032 m <sup>3</sup> |
| Riser 10            | 1286 x 157 x 20 | 0.0040 m <sup>3</sup> | 0.0040 m <sup>3</sup> |
| Riser 11            | 972 x 157 x 20  | 0.0031 m <sup>3</sup> | 0.0030 m <sup>3</sup> |
| Riser 12            | 904 x 157 x 20  | 0.0028 m <sup>3</sup> | 0.0028 m <sup>3</sup> |
| Riser 13            | 882 x 157 x 20  | 0.0028 m <sup>3</sup> | 0.0028 m <sup>3</sup> |
| Riser 14            | 875 x 157 x 20  | 0.0028 m <sup>3</sup> | 0.0027 m <sup>3</sup> |
| Riser 15            | 873 x 157 x 20  | 0.0027 m <sup>3</sup> | 0.0027 m <sup>3</sup> |
| Riser 16            | 873 x 157 x 20  | 0.0027 m <sup>3</sup> | 0.0027 m <sup>3</sup> |
| Right Stringboard 1 | 2344 x 424 x 51 | 0.0504 m <sup>3</sup> | 0.0335 m <sup>3</sup> |
| Right Stringboard 2 | 2029 x 332 x 51 | 0.0342 m <sup>3</sup> | 0.0287 m <sup>3</sup> |
| Right Stringboard 3 | 2386 x 440 x 51 | 0.0534 m <sup>3</sup> | 0.0337 m <sup>3</sup> |
| Left Stringboard 1  | 1910 x 480 x 51 | 0.0466 m <sup>3</sup> | 0.0215 m <sup>3</sup> |
| Left Stringboard 2  | 2189 x 102 x 51 | 0.0113 m <sup>3</sup> | 0.0045 m <sup>3</sup> |
| Left Stringboard 3  | 2359 x 569 x 51 | 0.0682 m <sup>3</sup> | 0.0273 m <sup>3</sup> |
| Left Handrail 1     | 1721 x 282 x 51 | 0.0246 m <sup>3</sup> | 0.0143 m <sup>3</sup> |
| Left Handrail 2     | 984 x 102 x 51  | 0.0051 m <sup>3</sup> | 0.0016 m <sup>3</sup> |
| Left Handrail 3     | 2223 x 473 x 51 | 0.0534 m <sup>3</sup> | 0.0180 m <sup>3</sup> |
| Banister 1          | 40 x 40 x 648   | 0.0010 m <sup>3</sup> | 0.0006 m <sup>3</sup> |
| Banister 2          | 40 x 40 x 645   | 0.0010 m <sup>3</sup> | 0.0006 m <sup>3</sup> |
| Banister 3          | 40 x 40 x 642   | 0.0010 m <sup>3</sup> | 0.0006 m <sup>3</sup> |
| Banister 4          | 40 x 40 x 637   | 0.0010 m <sup>3</sup> | 0.0006 m <sup>3</sup> |
| Banister 5          | 40 x 40 x 630   | 0.0010 m <sup>3</sup> | 0.0006 m <sup>3</sup> |
| Banister 6          | 40 x 40 x 620   | 0.0010 m <sup>3</sup> | 0.0006 m <sup>3</sup> |
| Banister 7          | 40 x 40 x 598   | 0.0010 m <sup>3</sup> | 0.0006 m <sup>3</sup> |
| Banister 8          | 40 x 40 x 504   | 0.0008 m <sup>3</sup> | 0.0007 m <sup>3</sup> |
| Banister 9          | 40 x 40 x 287   | 0.0005 m <sup>3</sup> | 0.0004 m <sup>3</sup> |

| Piece       | Dimensions    | Cutting List Volume   | Real Volume           |
|-------------|---------------|-----------------------|-----------------------|
| Banister 10 | 40 x 40 x 596 | 0.0010 m <sup>3</sup> | 0.0006 m <sup>3</sup> |
| Banister 11 | 40 x 40 x 620 | 0.0010 m <sup>3</sup> | 0.0006 m <sup>3</sup> |
| Banister 12 | 40 x 40 x 631 | 0.0010 m <sup>3</sup> | 0.0006 m <sup>3</sup> |
| Banister 13 | 40 x 40 x 637 | 0.0010 m <sup>3</sup> | 0.0006 m <sup>3</sup> |
| Banister 14 | 40 x 40 x 642 | 0.0010 m <sup>3</sup> | 0.0006 m <sup>3</sup> |
| Banister 15 | 40 x 40 x 645 | 0.0010 m <sup>3</sup> | 0.0006 m <sup>3</sup> |

| Piece        | Cutting List Volume         | Real Volume                 | Weight | Cost |
|--------------|-----------------------------|-----------------------------|--------|------|
| Steps        | 0.1809 m <sup>3</sup>       | 0.1214 m <sup>3</sup>       |        |      |
| Risers       | 0.0477 m <sup>3</sup>       | 0.0473 m <sup>3</sup>       |        |      |
| Stringboards | 0.2641 m <sup>3</sup>       | 0.1492 m <sup>3</sup>       |        |      |
| Handrails    | 0.0831 m <sup>3</sup>       | 0.0339 m <sup>3</sup>       |        |      |
| Banisters    | 0.0144 m <sup>3</sup>       | 0.0091 m <sup>3</sup>       |        |      |
| <b>Total</b> | <b>0.5902 m<sup>3</sup></b> | <b>0.3611 m<sup>3</sup></b> |        |      |