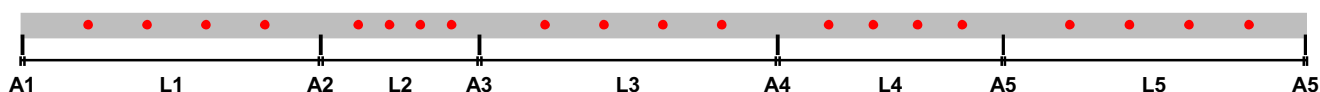


Elementos calculados con el programa de diseño Arquimet 2.0 de ACESCO

## REPORTE DE CORREAS

PAG C con atiesador 305 x 80 x 25 (1.90 mm)  
con  $F_y = 35.15 \text{ Kg/mm}^2$  cada 1.60 m con arriostramiento cada L/5.

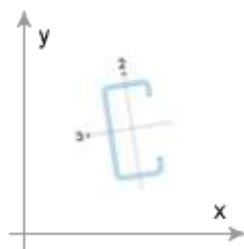
### SECCION LONGITUDINAL



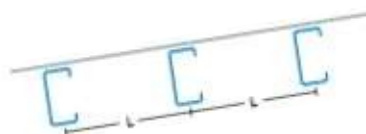
|    |        |
|----|--------|
| L1 | 8.42 m |
| L2 | 4.43 m |
| L3 | 8.42 m |
| L4 | 6.35 m |
| L5 | 8.53 m |
| A1 | 0.10 m |
| A2 | 0.10 m |
| A3 | 0.10 m |
| A4 | 0.10 m |
| A5 | 0.10 m |
| A6 | 0.10 m |

| CONFIGURACION                     |                         |
|-----------------------------------|-------------------------|
| TIPO DE CARGA                     | DISTRIBUIDA             |
| Carga muerta                      | 50.00 Kg/m <sup>2</sup> |
| Peso propio correa                | 7.40 Kg/m               |
| Carga viva                        | 50.00 Kg/m <sup>2</sup> |
| Carga granizo                     | 0.00 Kg/m <sup>2</sup>  |
| Viento compresión (Perpendicular) | 40.00 Kg/m <sup>2</sup> |
| Viento succión (Perpendicular)    | 40.00 Kg/m <sup>2</sup> |
| Pendiente sección transversal     | 9° = 15.8380%           |

### SECCION TRANSVERSAL



L = 1.60 m



Proyecto: \_\_\_\_\_ Fecha: \_\_\_\_\_

Ingeniero: \_\_\_\_\_ Firma: \_\_\_\_\_

*Elementos calculados con el programa de diseño Arquimet 2.0 de ACESCO*

## REPORTES DE DISEÑO

| REPORTE FLEXION    |           |          |            |          |
|--------------------|-----------|----------|------------|----------|
|                    | Apoyos    |          | Interiores |          |
| Ejes locales       | 3         | 2        | 3          | 2        |
| Resistente (Kgf.m) | 2443.6111 | 394.0253 | 1827.8766  | 351.5190 |
| Calculado (Kgf.m)  | 1709.3352 | 7.3484   | 1709.3356  | 11.4593  |

| REPORTE CORTANTE |           |           |
|------------------|-----------|-----------|
| Ejes locales     | 2         | 3         |
| Resistente (Kgf) | 2135.4331 | 4965.5371 |
| Calculado (Kgf)  | 1327.0148 | 30.4465   |

| REPORTE DEFLEXION   |             |            |
|---------------------|-------------|------------|
| Deflexiones máximas | Instantanea | Permanente |
| Admisible (m)       | 0.0320      | 0.0000     |
| Calculado (m)       | 0.0130      | 0.0000     |

# Memorias de Cálculo

## PROGRAMA DE DISEÑO Y CALCULO ESTRUCTURAL ARQUIMET 2.0

Proyecto: \_\_\_\_\_ Fecha: \_\_\_\_\_

Ingeniero: \_\_\_\_\_ Firma: \_\_\_\_\_

*Elementos calculados con el programa de diseño Arquimet 2.0 de ACESCO*

### COMBINACIONES DE CARGA

| No | Muerta | Viva   | Granizo | Viento compresión | Viento succión |
|----|--------|--------|---------|-------------------|----------------|
| 1  | 1.4000 | 0.0000 | 0.0000  | 0.0000            | 0.0000         |
| 2  | 1.2000 | 0.5000 | 0.0000  | 0.0000            | 0.0000         |
| 3  | 1.2000 | 0.0000 | 0.5000  | 0.0000            | 0.0000         |
| 4  | 1.2000 | 1.6000 | 0.0000  | 0.5000            | 0.0000         |
| 5  | 1.2000 | 0.0000 | 1.6000  | 0.5000            | 0.0000         |
| 6  | 1.2000 | 1.6000 | 0.0000  | 0.0000            | 0.5000         |
| 7  | 1.2000 | 0.0000 | 1.6000  | 0.0000            | 0.5000         |
| 8  | 1.2000 | 0.5000 | 0.0000  | 0.0000            | 1.0000         |
| 9  | 1.2000 | 0.0000 | 0.5000  | 0.0000            | 1.0000         |
| 10 | 1.2000 | 0.5000 | 0.0000  | 1.0000            | 0.0000         |
| 11 | 1.2000 | 0.0000 | 0.5000  | 1.0000            | 0.0000         |
| 12 | 0.9000 | 0.0000 | 0.0000  | 0.0000            | 1.0000         |
| 13 | 0.9000 | 0.0000 | 0.0000  | 1.0000            | 0.0000         |

# Memorias de Cálculo

## PROGRAMA DE DISEÑO Y CALCULO ESTRUCTURAL ARQUIMET 2.0

Proyecto: \_\_\_\_\_ Fecha: \_\_\_\_\_

Ingeniero: \_\_\_\_\_ Firma: \_\_\_\_\_

### REACCIONES - EJES GLOBALES (Kgf-m)

*Elementos calculados con el programa de diseño Arquimet 2.0 de ACESCO*

| APOYO 1        |           |           |
|----------------|-----------|-----------|
| Combinacion    | Rx        | Ry        |
| Muerta         | -38.8023  | 303.7311  |
| Viva de Cub.   | -35.5169  | 278.0148  |
| Granizo        | 0.0000    | 0.0000    |
| Viento Comp.   | -35.4969  | 224.1184  |
| Viento Succion | 35.4969   | -224.1184 |
| Comb. 1        | -54.3232  | 425.2235  |
| Comb. 2        | -64.3212  | 503.4847  |
| Comb. 3        | -46.5627  | 364.4773  |
| Comb. 4        | -121.1383 | 921.3602  |
| Comb. 5        | -64.3111  | 476.5366  |
| Comb. 6        | -121.1383 | 921.3602  |
| Comb. 7        | -64.3111  | 476.5366  |
| Comb. 8        | -99.8180  | 727.6031  |
| Comb. 9        | -82.0596  | 588.5958  |
| Comb. 10       | -99.8180  | 727.6031  |
| Comb. 11       | -82.0596  | 588.5958  |
| Comb. 12       | -70.4189  | 497.4764  |
| Comb. 13       | -70.4189  | 497.4764  |

| APOYO 2        |           |           |
|----------------|-----------|-----------|
| Combinacion    | Rx        | Ry        |
| Muerta         | -84.2534  | 656.0228  |
| Viva de Cub.   | -77.1200  | 600.4793  |
| Granizo        | 0.0000    | 0.0000    |
| Viento Comp.   | -76.6771  | 484.1203  |
| Viento Succion | 76.6771   | -484.1203 |
| Comb. 1        | -117.9548 | 918.4319  |
| Comb. 2        | -139.6641 | 1087.4670 |
| Comb. 3        | -101.1041 | 787.2274  |
| Comb. 4        | -262.8347 | 1990.0546 |
| Comb. 5        | -139.4427 | 1029.2876 |
| Comb. 6        | -262.8347 | 1990.0546 |
| Comb. 7        | -139.4427 | 1029.2876 |
| Comb. 8        | -216.3412 | 1571.5874 |
| Comb. 9        | -177.7813 | 1271.3478 |
| Comb. 10       | -216.3412 | 1571.5874 |
| Comb. 11       | -177.7813 | 1271.3478 |
| Comb. 12       | -152.5052 | 1074.5409 |
| Comb. 13       | -152.5052 | 1074.5409 |

| APOYO 3        |           |           |
|----------------|-----------|-----------|
| Combinacion    | Rx        | Ry        |
| Muerta         | -62.3205  | 517.4285  |
| Viva de Cub.   | -57.0439  | 473.6184  |
| Granizo        | 0.0000    | 0.0000    |
| Viento Comp.   | -60.4029  | 381.3691  |
| Viento Succion | 60.4029   | -381.3691 |
| Comb. 1        | -87.2487  | 724.3999  |
| Comb. 2        | -103.3066 | 857.7234  |
| Comb. 3        | -74.7846  | 620.9142  |
| Comb. 4        | -196.2564 | 1569.3882 |
| Comb. 5        | -104.9861 | 811.5988  |
| Comb. 6        | -196.2564 | 1569.3882 |
| Comb. 7        | -104.9861 | 811.5988  |
| Comb. 8        | -163.7095 | 1239.0925 |
| Comb. 9        | -135.1876 | 1002.2833 |
| Comb. 10       | -163.7095 | 1239.0925 |
| Comb. 11       | -135.1876 | 1002.2833 |
| Comb. 12       | -116.4914 | 847.0547  |
| Comb. 13       | -116.4914 | 847.0547  |

| APOYO 4        |           |           |
|----------------|-----------|-----------|
| Combinacion    | Rx        | Ry        |
| Muerta         | -77.9169  | 624.9390  |
| Viva de Cub.   | -71.3199  | 572.0272  |
| Granizo        | 0.0000    | 0.0000    |
| Viento Comp.   | -73.0014  | 460.9130  |
| Viento Succion | 73.0014   | -460.9130 |
| Comb. 1        | -109.0837 | 874.9147  |
| Comb. 2        | -129.1603 | 1035.9406 |
| Comb. 3        | -93.5003  | 749.9269  |
| Comb. 4        | -244.1129 | 1895.6268 |
| Comb. 5        | -130.0010 | 980.3834  |
| Comb. 6        | -244.1129 | 1895.6268 |
| Comb. 7        | -130.0010 | 980.3834  |
| Comb. 8        | -202.1617 | 1496.8535 |
| Comb. 9        | -166.5017 | 1210.8398 |
| Comb. 10       | -202.1617 | 1496.8535 |
| Comb. 11       | -166.5017 | 1210.8398 |
| Comb. 12       | -143.1267 | 1023.3581 |
| Comb. 13       | -143.1267 | 1023.3581 |

| APOYO 5        |           |           |
|----------------|-----------|-----------|
| Combinacion    | Rx        | Ry        |
| Muerta         | -94.8769  | 733.2958  |
| Viva de Cub.   | -86.8438  | 671.2088  |
| Granizo        | 0.0000    | 0.0000    |
| Viento Comp.   | -85.7215  | 541.2244  |
| Viento Succion | 85.7215   | -541.2244 |
| Comb. 1        | -132.8277 | 1026.6141 |
| Comb. 2        | -157.2742 | 1215.5593 |
| Comb. 3        | -113.8523 | 879.9550  |
| Comb. 4        | -295.6631 | 2224.5015 |
| Comb. 5        | -156.7130 | 1150.5671 |
| Comb. 6        | -295.6631 | 2224.5015 |
| Comb. 7        | -156.7130 | 1150.5671 |
| Comb. 8        | -242.9957 | 1756.7837 |
| Comb. 9        | -199.5738 | 1421.1794 |
| Comb. 10       | -242.9957 | 1756.7837 |
| Comb. 11       | -199.5738 | 1421.1794 |
| Comb. 12       | -171.1107 | 1201.1906 |
| Comb. 13       | -171.1107 | 1201.1906 |

| APOYO 6        |           |           |
|----------------|-----------|-----------|
| Combinacion    | Rx        | Ry        |
| Muerta         | -38.8686  | 304.9045  |
| Viva de Cub.   | -35.5777  | 279.0891  |
| Granizo        | 0.0000    | 0.0000    |
| Viento Comp.   | -35.6325  | 224.9744  |
| Viento Succion | 35.6325   | -224.9744 |
| Comb. 1        | -54.4160  | 426.8663  |
| Comb. 2        | -64.4311  | 505.4300  |
| Comb. 3        | -46.6423  | 365.8854  |
| Comb. 4        | -121.3828 | 924.9152  |
| Comb. 5        | -64.4585  | 478.3727  |
| Comb. 6        | -121.3828 | 924.9152  |
| Comb. 7        | -64.4585  | 478.3727  |
| Comb. 8        | -100.0636 | 730.4044  |
| Comb. 9        | -82.2747  | 590.8599  |
| Comb. 10       | -100.0636 | 730.4044  |
| Comb. 11       | -82.2747  | 590.8599  |
| Comb. 12       | -70.6142  | 499.3885  |
| Comb. 13       | -70.6142  | 499.3885  |

# Memorias de Cálculo

## PROGRAMA DE DISEÑO Y CALCULO ESTRUCTURAL ARQUIMET 2.0

Proyecto: \_\_\_\_\_ Fecha: \_\_\_\_\_

Ingeniero: \_\_\_\_\_ Firma: \_\_\_\_\_

### FUERZAS INTERNAS - EJES LOCALES (Kgf-m)

*Elementos calculados con el programa de diseño Arquimet 2.0 de ACESCO*

| APOYO 1        |         |          |            |             |
|----------------|---------|----------|------------|-------------|
| Combinacion    | R2      | R3       | M2         | M3          |
| Muerta         | 9.1895  | 306.0617 | 2.4414E-07 | -2.9687E-04 |
| Viva de Cub.   | 8.4114  | 280.1481 | 4.8828E-07 | -3.4180E-04 |
| Granizo        | 0.0000  | 0.0000   | 0.0000     | 0.0000      |
| Viento Comp.   | 0.0000  | 226.9121 | 0.0000     | -2.1582E-04 |
| Viento Succion | 0.0000  | 226.9121 | 0.0000     | -2.1582E-04 |
| Comb. 1        | 12.8653 | 428.4863 | 3.4180E-07 | -4.1562E-04 |
| Comb. 2        | 15.2331 | 507.3481 | 5.3711E-07 | -0.0005     |
| Comb. 3        | 11.0274 | 367.2740 | 2.9297E-07 | -3.5625E-04 |
| Comb. 4        | 24.4857 | 928.9670 | 1.0742E-06 | -0.0010     |
| Comb. 5        | 11.0274 | 480.7301 | 2.9297E-07 | -4.6416E-04 |
| Comb. 6        | 24.4857 | 928.9670 | 1.0742E-06 | -0.0010     |
| Comb. 7        | 11.0274 | 480.7301 | 2.9297E-07 | -4.6416E-04 |
| Comb. 8        | 15.2331 | 734.2601 | 5.3711E-07 | -0.0007     |
| Comb. 9        | 11.0274 | 594.1861 | 2.9297E-07 | -0.0006     |
| Comb. 10       | 15.2331 | 734.2601 | 5.3711E-07 | -0.0007     |
| Comb. 11       | 11.0274 | 594.1861 | 2.9297E-07 | -0.0006     |
| Comb. 12       | 8.2705  | 502.3676 | 2.1973E-07 | -4.8301E-04 |
| Comb. 13       | 8.2705  | 502.3676 | 2.1973E-07 | -4.8301E-04 |

| APOYO 2        |         |           |        |            |
|----------------|---------|-----------|--------|------------|
| Combinacion    | R2      | R3        | M2     | M3         |
| Muerta         | 19.4084 | 661.1262  | 2.4890 | -525.4948  |
| Viva de Cub.   | 17.7652 | 605.1506  | 2.2783 | -481.0022  |
| Granizo        | 0.0000  | 0.0000    | 0.0000 | 0.0000     |
| Viento Comp.   | 0.0000  | 490.1549  | 0.0000 | -389.5984  |
| Viento Succion | 0.0000  | 490.1549  | 0.0000 | -389.5984  |
| Comb. 1        | 27.1718 | 925.5767  | 3.4846 | -735.6927  |
| Comb. 2        | 32.1727 | 1095.9268 | 4.1259 | -871.0948  |
| Comb. 3        | 23.2901 | 793.3515  | 2.9868 | -630.5938  |
| Comb. 4        | 51.7144 | 2006.6700 | 6.6320 | -1594.9965 |
| Comb. 5        | 23.2901 | 1038.4290 | 2.9868 | -825.3930  |
| Comb. 6        | 51.7144 | 2006.6700 | 6.6320 | -1594.9965 |
| Comb. 7        | 23.2901 | 1038.4290 | 2.9868 | -825.3930  |
| Comb. 8        | 32.1727 | 1586.0818 | 4.1259 | -1260.6934 |
| Comb. 9        | 23.2901 | 1283.5065 | 2.9868 | -1020.1923 |
| Comb. 10       | 32.1727 | 1586.0818 | 4.1259 | -1260.6934 |
| Comb. 11       | 23.2901 | 1283.5065 | 2.9868 | -1020.1923 |
| Comb. 12       | 17.4676 | 1085.1686 | 2.2401 | -862.5438  |
| Comb. 13       | 17.4676 | 1085.1686 | 2.2401 | -862.5438  |

| APOYO 3        |         |           |        |            |
|----------------|---------|-----------|--------|------------|
| Combinacion    | R2      | R3        | M2     | M3         |
| Muerta         | 19.3904 | 520.8072  | 2.4841 | -361.5733  |
| Viva de Cub.   | 17.7486 | 476.7110  | 2.2738 | -330.9597  |
| Granizo        | 0.0000  | 0.0000    | 0.0000 | 0.0000     |
| Viento Comp.   | 0.0000  | 386.1229  | 0.0000 | -268.0681  |
| Viento Succion | 0.0000  | 386.1229  | 0.0000 | -268.0681  |
| Comb. 1        | 27.1465 | 729.1301  | 3.4778 | -506.2026  |
| Comb. 2        | 32.1428 | 863.3242  | 4.1179 | -599.3678  |
| Comb. 3        | 23.2685 | 624.9686  | 2.9810 | -433.8880  |
| Comb. 4        | 51.6663 | 1580.7677 | 6.6191 | -1097.4576 |
| Comb. 5        | 23.2685 | 818.0301  | 2.9810 | -567.9221  |
| Comb. 6        | 51.6663 | 1580.7677 | 6.6191 | -1097.4576 |
| Comb. 7        | 23.2685 | 818.0301  | 2.9810 | -567.9221  |
| Comb. 8        | 32.1428 | 1249.4470 | 4.1179 | -867.4359  |
| Comb. 9        | 23.2685 | 1011.0916 | 2.9810 | -701.9561  |
| Comb. 10       | 32.1428 | 1249.4470 | 4.1179 | -867.4359  |
| Comb. 11       | 23.2685 | 1011.0916 | 2.9810 | -701.9561  |
| Comb. 12       | 17.4514 | 854.8494  | 2.2357 | -593.4841  |
| Comb. 13       | 17.4514 | 854.8494  | 2.2357 | -593.4841  |

| APOYO 4        |         |           |        |            |
|----------------|---------|-----------|--------|------------|
| Combinacion    | R2      | R3        | M2     | M3         |
| Muerta         | 20.8044 | 629.4339  | 2.7001 | -415.0009  |
| Viva de Cub.   | 19.0429 | 576.1415  | 2.4714 | -379.8635  |
| Granizo        | 0.0000  | 0.0000    | 0.0000 | 0.0000     |
| Viento Comp.   | 0.0000  | 466.6583  | 0.0000 | -307.6788  |
| Viento Succion | 0.0000  | 466.6583  | 0.0000 | -307.6788  |
| Comb. 1        | 29.1261 | 881.2075  | 3.7801 | -581.0012  |
| Comb. 2        | 34.4867 | 1043.3915 | 4.4758 | -687.9328  |
| Comb. 3        | 24.9653 | 755.3207  | 3.2401 | -498.0010  |
| Comb. 4        | 55.4339 | 1910.4762 | 7.1944 | -1259.6221 |
| Comb. 5        | 24.9653 | 988.6498  | 3.2401 | -651.8405  |
| Comb. 6        | 55.4339 | 1910.4762 | 7.1944 | -1259.6221 |
| Comb. 7        | 24.9653 | 988.6498  | 3.2401 | -651.8405  |
| Comb. 8        | 34.4867 | 1510.0498 | 4.4758 | -995.6116  |
| Comb. 9        | 24.9653 | 1221.9790 | 3.2401 | -805.6799  |
| Comb. 10       | 34.4867 | 1510.0498 | 4.4758 | -995.6116  |
| Comb. 11       | 24.9653 | 1221.9790 | 3.2401 | -805.6799  |
| Comb. 12       | 18.7239 | 1033.1488 | 2.4301 | -681.1796  |
| Comb. 13       | 18.7239 | 1033.1488 | 2.4301 | -681.1796  |

# Memorias de Cálculo

## PROGRAMA DE DISEÑO Y CALCULO ESTRUCTURAL ARQUIMET 2.0

Proyecto: \_\_\_\_\_ Fecha: \_\_\_\_\_

Ingeniero: \_\_\_\_\_ Firma: \_\_\_\_\_

### FUERZAS INTERNAS - EJES LOCALES (Kgf-m)

*Elementos calculados con el programa de diseño Arquimet 2.0 de ACESCO*

| APOYO 5        |         |           |        |            |
|----------------|---------|-----------|--------|------------|
| Combinacion    | R2      | R3        | M2     | M3         |
| Muerta         | 21.0039 | 739.1097  | 2.7578 | -563.1654  |
| Viva de Cub.   | 19.2256 | 676.5305  | 2.5243 | -515.4832  |
| Granizo        | 0.0000  | 0.0000    | 0.0000 | 0.0000     |
| Viento Comp.   | 0.0000  | 547.9708  | 0.0000 | -417.5272  |
| Viento Succion | 0.0000  | 547.9708  | 0.0000 | -417.5272  |
| Comb. 1        | 29.4055 | 1034.7537 | 3.8610 | -788.4315  |
| Comb. 2        | 34.8175 | 1225.1969 | 4.5716 | -933.5400  |
| Comb. 3        | 25.2047 | 886.9317  | 3.3094 | -675.7985  |
| Comb. 4        | 55.9657 | 2243.3660 | 7.3484 | -1709.3352 |
| Comb. 5        | 25.2047 | 1160.9171 | 3.3094 | -884.5621  |
| Comb. 6        | 55.9657 | 2243.3660 | 7.3484 | -1709.3352 |
| Comb. 7        | 25.2047 | 1160.9171 | 3.3094 | -884.5621  |
| Comb. 8        | 34.8175 | 1773.1677 | 4.5716 | -1351.0673 |
| Comb. 9        | 25.2047 | 1434.9026 | 3.3094 | -1093.3257 |
| Comb. 10       | 34.8175 | 1773.1677 | 4.5716 | -1351.0673 |
| Comb. 11       | 25.2047 | 1434.9026 | 3.3094 | -1093.3257 |
| Comb. 12       | 18.9035 | 1213.1696 | 2.4821 | -924.3760  |
| Comb. 13       | 18.9035 | 1213.1696 | 2.4821 | -924.3760  |

| APOYO 6        |         |          |            |        |
|----------------|---------|----------|------------|--------|
| Combinacion    | R2      | R3       | M2         | M3     |
| Muerta         | 9.3076  | 307.2310 | 4.8828E-07 | 0.0016 |
| Viva de Cub.   | 8.5195  | 281.2186 | 1.4648E-06 | 0.0009 |
| Granizo        | 0.0000  | 0.0000   | 0.0000     | 0.0000 |
| Viento Comp.   | 0.0000  | 227.7788 | 0.0000     | 0.0011 |
| Viento Succion | 0.0000  | 227.7788 | 0.0000     | 0.0011 |
| Comb. 1        | 13.0306 | 430.1234 | 6.8359E-07 | 0.0022 |
| Comb. 2        | 15.4288 | 509.2865 | 1.3184E-06 | 0.0023 |
| Comb. 3        | 11.1691 | 368.6772 | 5.8594E-07 | 0.0019 |
| Comb. 4        | 24.8003 | 932.5164 | 2.9297E-06 | 0.0039 |
| Comb. 5        | 11.1691 | 482.5666 | 5.8594E-07 | 0.0024 |
| Comb. 6        | 24.8003 | 932.5164 | 2.9297E-06 | 0.0039 |
| Comb. 7        | 11.1691 | 482.5666 | 5.8594E-07 | 0.0024 |
| Comb. 8        | 15.4288 | 737.0653 | 1.3184E-06 | 0.0034 |
| Comb. 9        | 11.1691 | 596.4560 | 5.8594E-07 | 0.0030 |
| Comb. 10       | 15.4288 | 737.0653 | 1.3184E-06 | 0.0034 |
| Comb. 11       | 11.1691 | 596.4560 | 5.8594E-07 | 0.0030 |
| Comb. 12       | 8.3768  | 504.2867 | 4.3945E-07 | 0.0025 |
| Comb. 13       | 8.3768  | 504.2867 | 4.3945E-07 | 0.0025 |