# 10 STATISTICS

## *9.1 Epoxy Consumption*

| Build No. | Width | No. Layers | Resin (g) | Resin / Layer (g) | Resin Avg (g) | Hardener (g) | Hardener / Layer (g) | Hardener Avg (g) | Epoxy/Area (kg/m^2) |
|---|---|---|---|---|---|---|---|---|---|
| 2 | 13 | 10 | 700.5 | 70.05 | | 196.2 | 19.62 | | |
| 3 | 13 | 10 | 650.5 | 65.05 | 67.55 | 182.4 | 18.24 | 18.93 | 0.165 |
| 4 | 12 | 8 | 599.9 | 74.99 | | 168.0 | 21.00 | | |
| 5 | 12 | 11 | 730.4 | 66.40 | | 204.2 | 18.56 | | |
| 6 | 12 | 11 | 725.5 | 65.95 | | 203.3 | 18.48 | | |
| 7 | 12 | 9 | 700.0 | 77.78 | | 196.1 | 21.79 | | |
| 8 | 12 | 7 | 600.0 | 85.71 | | 168.5 | 24.07 | | |
| 9 | 12 | 7 | 500.3 | 71.47 | | 140.0 | 20.00 | | |
| 10 | 12 | 9 | 650.3 | 72.26 | 73.51 | 182.0 | 20.22 | 20.59 | 0.192 |
| 11 | 11 | 9 | 600.1 | 66.68 | | 168.1 | 18.68 | | |
| 12 | 11 | 11 | 724.4 | 65.85 | | 203.0 | 18.45 | | |
| 13 | 11 | 9 | 650.1 | 72.23 | | 182.0 | 20.22 | | |
| 14 | 11 | 7 | 550.0 | 78.57 | | 154.0 | 22.00 | | |
| 15 | 11 | 10 | 700.0 | 70.00 | | 196.2 | 19.62 | | |
| 16 | 11 | 2 | 125.2 | 62.60 | | 35.0 | 17.50 | | |
| 17 | 11 | 11 | 824.7 | 74.97 | | 231.0 | 21.00 | | |
| 18 | 11 | 11 | 750.0 | 68.18 | 69.89 | 210.4 | 19.13 | 19.58 | 0.203 |
| 19 | 10 | 10 | 660.0 | 66.00 | | 184.6 | 18.46 | | |
| 20 | 10 | 11 | 700.2 | 63.65 | | 196.1 | 17.83 | | |
| 21 | 10 | 11 | 699.9 | 63.63 | | 196.0 | 17.82 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 22 | 10 | 7 | 499.9 | 71.41 | 66.17 | 140.2 | 20.03 | 18.53 | 0.208 |

| | | |
|---|---|---|
| 13341.9 | Avg Resin Consumption (per layer): | 70.16 |
| 3737.3 | Avg Hardener Consumption (per layer): | 19.65 |
| 17079.2 | | |

| Width (cm) | Area (cm^2) | Total Area (m^2) | |
|---|---|---|---|
| 13 | 5252 | 10.504 | |
| 12 | 4848 | 30.058 | |
| 11 | 4444 | 31.108 | |
| 10 | 4040 | 15.756 | |
| | | 87.426 | Total glued area |

## *9.2 Fiber and Lead Consumption*

| | | | | Lead Used Per Module | | | | Lead Lost Per Module | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Module** | **Total Fibers Used** | **No of layers** | **Fibers Lost** | **13 cm** | **12 cm** | **11 cm** | **10 cm** | **13 cm** | **12 cm** | **11 cm** | **10 cm** |
| 1 | 15468 | 187 | 3 | 20 | 61 | 65 | 40 | 1 | 1 | 1 | 1 |
| 2 | 15414 | 185 | 2 | 21 | 64 | 64 | 39 | 1 | 0 | 1 | 0 |
| 3 | 15292 | 184 | 1 | 21 | 61 | 63 | 41 | 0 | 1 | 2 | 0 |
| 4 | 15253 | 183 | 6 | 20 | 63 | 62 | 39 | 1 | 0 | 0 | 0 |
| 5 | 15366 | 185 | 479 | 21 | 62 | 63 | 39 | 1 | 0 | 8 | 1 |
| 6 | 15429 | 185 | 0 | 21 | 63 | 63 | 39 | 1 | 2 | 0 | 0 |
| 7 | 15331 | 185 | 0 | 20 | 63 | 61 | 41 | 0 | 2 | 0 | 0 |
| 8 | 15279 | 184 | 1 | 20 | 62 | 63 | 39 | 0 | 0 | 0 | 0 |
| 9 | 15214 | 184 | 0 | 21 | 65 | 62 | 36 | 0 | 3 | 0 | 0 |
| 10 | 15235 | 183 | 1 | 21 | 65 | 61 | 36 | 0 | 0 | 1 | 0 |
| 11 | | | | | | | | | | | |
| Averages | 15328.1 | 184.5 | 49.3 | 20.6 | 62.9 | 62.7 | 38.9 | 0.5 | 0.9 | 1.3 | 0.2 |

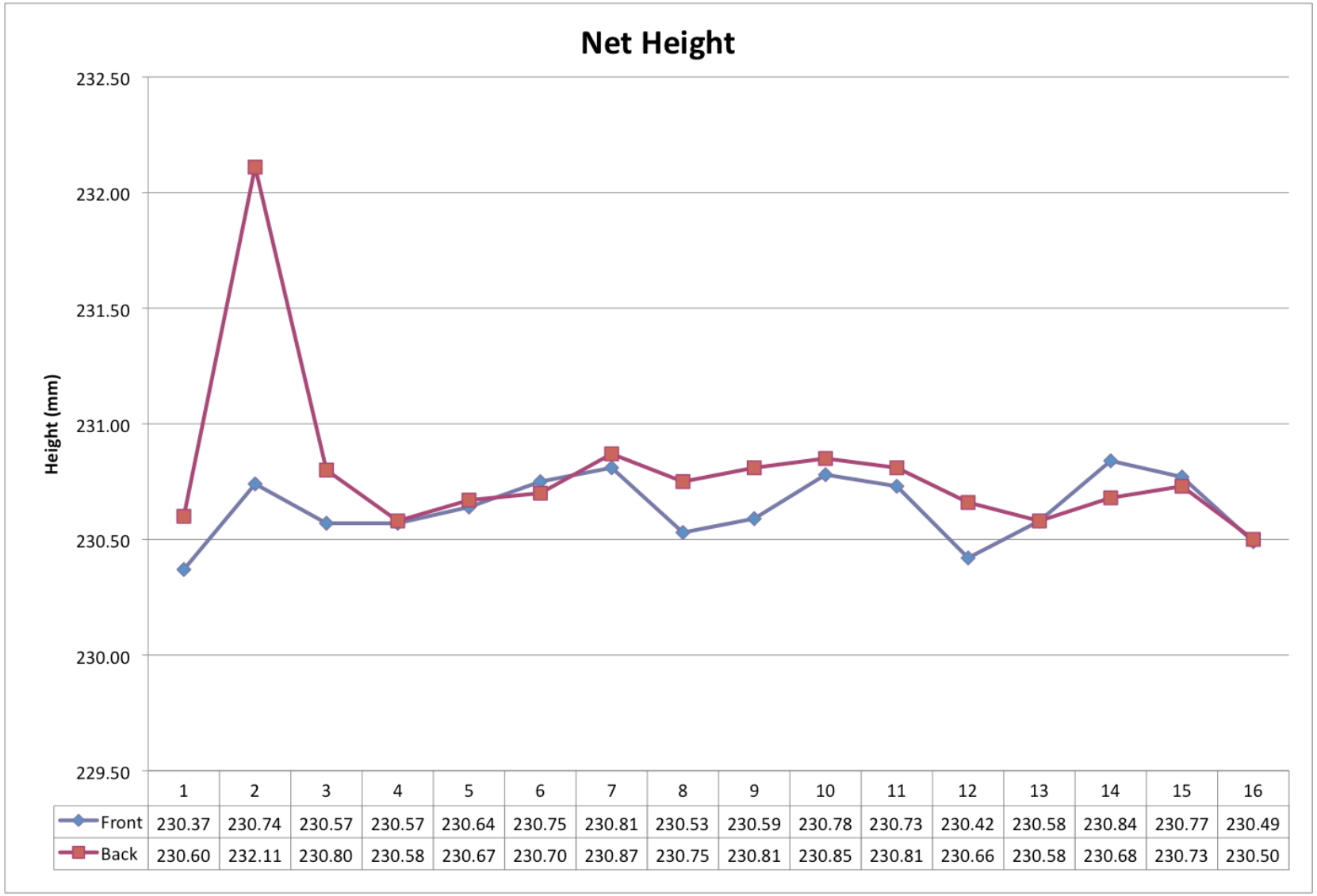
## *9.3 Build Height (Sample)*

| **Build 15** | Date: | 10-Mar-10 | | Sheet Size: | 11 | | |
|---|---|---|---|---|---|---|---|
| | Time: | 9:43AM | | Layers Lain: | | | |
| | Front | | | | Back | | |
| Position | Measured | Net | Total | | Measured | Net | Total |
| 1 | 155.20 | 154.52 | 185.47 | | 155.03 | 154.28 | 185.18 |
| 2 | 155.31 | 154.66 | 185.54 | | 155.20 | 154.49 | 185.31 |
| 3 | 155.31 | 154.68 | 185.54 | | 155.20 | 154.50 | 185.29 |
| 4 | 155.12 | 154.47 | 185.38 | | 155.36 | 154.64 | 185.50 |
| 5 | 155.14 | 154.48 | 185.40 | | 154.93 | 154.19 | 185.07 |
| 6 | 155.19 | 154.55 | 185.43 | | 155.07 | 154.33 | 185.18 |
| 7 | 154.95 | 154.31 | 185.20 | | 155.14 | 154.39 | 185.20 |
| 8 | 155.68 | 155.05 | 185.93 | | 155.11 | 154.32 | 185.17 |
| 9 | 156.81 | 156.18 | 187.08 | | 154.76 | 153.96 | 184.83 |
| 10 | 156.26 | 155.64 | 186.50 | | 155.67 | 154.89 | 185.74 |
| 11 | 156.05 | 155.42 | 186.28 | | 155.91 | 155.13 | 185.97 |
| 12 | 155.11 | 154.49 | 185.32 | | 155.59 | 154.83 | 185.64 |
| 13 | 155.06 | 154.41 | 185.33 | | 155.35 | 154.57 | 185.47 |
| 14 | 155.18 | 154.56 | 185.39 | | 155.55 | 154.79 | 185.67 |
| 15 | 155.05 | 154.47 | 185.29 | | 155.57 | 154.80 | 185.67 |
| 16 | 154.80 | 154.17 | 185.10 | | 155.38 | 154.58 | 185.49 |
| Mean | | 154.75 | | 0.21 | | 154.54 | |

Difference Front to Back

## *9.4 Build Height (Net)*

The net height of Module 05 is shown in the picture below. The module was very uniform with the exception of a high spot that was mostly rectified by shaving off lead ridges from the topmost lead sheet.




| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Front | 230.37 | 230.74 | 230.57 | 230.57 | 230.64 | 230.75 | 230.81 | 230.53 | 230.59 | 230.78 | 230.73 | 230.42 | 230.58 | 230.84 | 230.77 | 230.49 |
| Back | 230.60 | 232.11 | 230.80 | 230.58 | 230.67 | 230.70 | 230.87 | 230.75 | 230.81 | 230.85 | 230.81 | 230.66 | 230.58 | 230.68 | 230.73 | 230.50 |