|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Explained variance score | Max error | MAE | MSE | MAPE (%) |
| **Steel** - Total mass (rationalised) structural steel frame | RF | 0.989 | 637.822 | 61.953 | 9079.218 | 0.056 |
| SVR | 0.959 | 1379.723 | 119.619 | 36454.134 | 21.494 |
| ANN | 0.983 | 941.553 | 85.290 | 14910.190 | 10.944 |
| **Concrete** - Total mass (optimised) Columns | RF | 0.996 | 185.823 | 10.917 | 390.042 | 0.031 |
| SVR | 0.947 | 496.578 | 56.204 | 6847.445 | 59.350 |
| ANN |  |  |  |  |  |
| **Concrete** – Total mass (rationalised) Columns | RF | 0.996 | 342.129 | 18.807 | 1207.267 | 0.032 |
| SVR | 0.937 | 899.821 | 108.288 | 25408.120 | 108.056 |
| ANN |  |  |  |  |  |
| **Concrete** - Total mass Concrete floors (beams + slabs) | RF | 0.998 | 1881.273 | 110.629 | 34206.441 | 0.017 |
| SVR | 0.944 | 6719.737 | 877.729 | 1865801.398 | 16.693 |
| ANN |  |  |  |  |  |
| **Glulam** - Total mass (rationalised) Columns 2 | RF |  |  |  |  |  |
| SVR |  |  |  |  |  |
| ANN |  |  |  |  |  |
| **Glulam** - Total mass timber floors (Glulam beams + CLT slabs) | RF |  |  |  |  |  |
| SVR |  |  |  |  |  |
| ANN |  |  |  |  |  |
| **Glulam** - Total mass (rationalised) Timber frame | RF |  |  |  |  |  |
| SVR |  |  |  |  |  |
| ANN |  |  |  |  |  |
| **Glulam** - Total mass (rationalised) Columns plus Beams | RF |  |  |  |  |  |
| SVR |  |  |  |  |  |
| ANN |  |  |  |  |  |