



Strength Test

Wooden and laminate doors are not only weaker than GRP doors, and thus more easily damaged, but can also pose a higher risk, as a knock or chip may reveal organic materials below where bacteria could reproduce, as well as being virtually impossible both to clean and to keep clean effectively.

The table below shows the strength of GRP compared to alternative materials. GRP doors are extremely strong whilst been lightweight and easy to operate.

Mechanical Properties of GRP Compared to Other Structural Materials

| Material | Specific strength (Mpa) | Tensile strength (Mpa) | Compressive strength (Mpa) |
|-----------------|-------------------------|------------------------|----------------------------|
| Mild Steel | 31 | 240 | 240 |
| Aluminium Alloy | 154 | 417 | 417 |
| Stainless Steel | 30 | 241 | 241 |
| GRP | 417 | 900 | 450 |

Mpa—Measurement of Unconfined Compression Strength