

2 GLASS REINFORCED PLASTIC (GRP) LADDERS, SAFETY CAGES (SECTION 10180)

2.1 Part 1 Related Sections

2.1.1 Related Sections

Section 02607 – Chambers and covers

Section 01300 – Submittals

Section 01400 – Quality control

Section 01039 – Coordination and meetings

2.1.2 References

Not used

2.1.3 System Description

A. Glass Reinforced Plastic (GRP) Ladders:

1. Glass Reinforced Plastic (GRP) ladders shall be of an approved pattern, dimension and duty to suit the location and shall be installed as indicated in the Drawings.
2. Each rung shall be able to withstand a point load of 5000N when applied at the center of the rung and when applied close to one end.
3. When supported horizontally over a span of 1.00m with the climbing face uppermost and with a load of 1000N applied at the center of the span there shall not be a deflection greater than 15mm at the point of application of the load and shall show no permanent deformation after removal of the load. The loads shall be remain in place for 24hours after which the ladder shall be inspected for defects.
4. Each ladder fixing shall be capable of withstanding shear and pull-out loads of 5000N.

B. GRP Safety Cages:

1. Glass Reinforced Plastic (GRP) Safety Cages shall be as indicated in the Drawings.
2. Safety cages shall be provided where the distance between the ladder landings exceeds 4.5m.
3. Safety cages shall be constructed of three flat vertical members supported by flat hoops with diameter of 750mm. The hoops shall be at a maximum