

Perma Stack® - Ventilation and Waste Gas Stacks

BENEFITS & FEATURES

- LIGHTWEIGHT
- LONG LIFE
- FREE STANDING, GUYED OR WITH STEEL SUPPORT FRAME
- LOW MAINTENANCE FREE



RPC OFFERS CUSTOM DESIGNED CHEMICALLY AND STRUCTURALLY ENGINEERED VENTILATION AND WASTE GAS STACKS - PERMA STACK®



RPC designs, manufactures, and if required will install, a comprehensive range of Glass Reinforced Plastic (GRP) ventilation and waste gas exhaust stacks - Perma Stack®. Chemically and structurally engineered with the optimal balance of resin and glass to resist a wide range of acids, alkalis solvents and corrosive fumes, Perma Stack® is resistant to the damaging effects of Australia's most demanding climatic conditions.

In addition to their resistance to corrosion, pitting and scaling, Perma Stack® are immune to virtually all bacteriological corrosion, will not rust, and do not require any form of cathodic protection.

In accordance with local wind loading designation, geology and topography Perma Stack® may be free standing, guyed or supported by a lattice steel frame.

RPC has successfully designed, manufactured and installed Perma Stack® from 10m to in excess of 100m in height.

Perma Stack® is designed by RPC's professionally qualified, experienced engineering team and custom fabrication is done by RPC's highly competent tradespeople in their purpose built factories. This ensures Perma Stack® will have a long life with minimal requirement for maintenance.

PERMA STACK®- Ventilation and Waste Gas Stacks

Applications

- Mineral processing
- Pulp and paper industries
- Waste water and sewage treatment
- Chemical process industries
- Oil and gas industries
- Potable water and water supply
- Food processing
- Metal finishing
- Fresh water/salt water service
- Power generation
- General industry

Advantages

- Light Weight
- Rigid but flexible
- Excellent machinability
- Excellent corrosion resistance
- Low maintenance

Physical Properties

- Density (1450-1800)kg/m³
- Coefficient of thermal expansion 8-42 (°K x 10⁻⁶)
- Coefficient of thermal conductivity 0.25 W/m^{°K}
- Hazen Williams Flow Coefficient 150
- Barcol Hardness (35-45)

Options

- Free Standing
- Guyed
- Steel Lattice Frame
- Breach Inlets
- Instrumentation Nozzles
- Weather Cap/Animal Screens
- Vortex Strakes
- Access hatches

STANDARDS

AS2634-1983 Chemical Plant Equipment made from Glass Fibre Reinforced Plastic (GRP) based on Thermosetting Resins

AS3571-1989 Glass Filament Reinforced Thermosetting Plastics (GRP) Pipes - Polyester Based Water Supply, Sewage and Drainage Applications

BS4994-1987 Design and Construction of Vessels and Tanks in Reinforced Plastics [obsolescent]

BS7159-1989 Design and Construction of Glass Reinforced Plastics (GRP) Piping Systems for Individual Plants or Site

BS EN 13121-3:2008+A1:2010 GRP tanks and vessels for use above ground. Design and workmanship

RPC Infrastructure + Environment
Water - Pipes - Odour Control

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