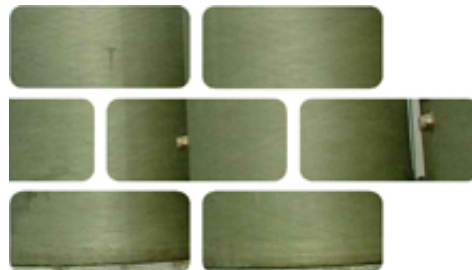


16 FIBREGLASS



Fibreglass (fiberglass, glass fibre, fibre glass, glass reinforced fibre) is a strong lightweight material used for a range of construction purposes including glass-reinforced plastic (GRP) and glass-fibre reinforced plastic (GFRP) products. Fibreglass is rolled or moulded into various shapes, styles and designs using a mixture of resin, glass fibre matting and additives including fibres, fillers and colouring agents. It is of varying strength and colour depending on the desired performance and architectural finish. It is resistant to weather and corrosive environments and is increasingly being used for featured items and lightweight, themed products.

Fibreglass Inert 17 02 02

WASTE STREAMS

DISPOSAL

Disposal to landfill for fibreglass is the most economic and practicable option at this time in UK.

RECOVERY

There are limited opportunities for incineration of fibreglass with or without energy recovery due to the high volume of mineral content that would be left as ash for disposal to landfill.

RECYCLE

There are currently no commercial recycling opportunities in UK for post consumer fibreglass products. Some fibreglass manufacturers reprocess production waste for fillers, but this is not yet commercially available.

RECLAIM

Fibreglass products in good condition, uncontaminated and of architectural value may be set aside for reuse. However reuse of fibreglass products is currently limited because of issues in quality and fitness for purpose.

USAGE & PROBABLE LOCATIONS

Fibreglass has many uses in construction including underground tanks, septic tanks, water tanks, tank liners, pipes and fittings, access chambers, access covers, grating and stair treads, ladders and handrails in corrosive environments, meter boxes, shower trays, baths, covers, specialist mouldings, profile products, flat roofs, garage doors, panels, roof lights, cladding, domes, pods, columns, pediments, cornice, towers, turrets, fascia and soffits, modular buildings, sculptures, garden planters and architectural features. They are located underground, in earthworks, forming flat roofs, within buildings, garden features and the internal and external cladding of buildings.

PERSONAL PROTECTIVE EQUIPMENT

PPE requirements indicated are for guidance purposes only. DRIDS has identified the PPE that is mandatory on all demolition projects and ones that may be required subject to site specific Risk Assessment & Method Statement (RAMS).



The following types of PPE are non mandatory but should be considered if necessary to the specific task



REMOVAL, SEGREGATION & STORAGE

Fibreglass products that are destined for reuse should be deconstructed, segregated and stored carefully and safely, especially those of architectural, themed or historic value. They should be stored flat or upright to prevent cracking and away from plant movements to prevent breakage. Fibreglass is recyclable, but no commercial outlets exist in UK at this time. Fibreglass that is destined for landfill should have all active contaminants removed so that it maintains its inert status. There is little need to store fibreglass inside a building or under cover as they are robust against weather.

TOOLS

360 plant and attachments, crane, lifting straps, hammer, screwdriver, sockets, spanners, spades, shovels, chisel.

FIXTURES, FITTINGS & CONNECTIONS

Glassfibre has traditionally been fixed in place using resin, silicone sealant, bolts, screws, straps and pins. Some fibreglass products such as garden features, planters, domes, pediments and pipes will be laid into place using mortar, screed, blinding sand or other binding/bedding agent. Glassfibre products will sometimes be coated with a vinyl material for advertisement or themed purposes which can be difficult to remove. Structural and architectural products such as cladding, soffits, facia, windows and panels will be fixed with nuts, bolts, screws and pins and occasionally within a space frame made from alloys or stainless steel.

HEALTH & SAFETY

Subject to task-specific Risk Assessment & Method Statement (RAMS). Use correct protective equipment when working with fibreglass. Wear kevlar grip gloves when handling fibreglass products and crushed or broken products to prevent cuts and abrasion. Use eye protection or full face mask when using hand tools to prevent impact from fibreglass splinters. Use dust mask at all times to prevent ingestion of airborne fibreglass dust and particles. Do not walk on fibreglass sheets or roof lights. Only use harness protection at height as a last resort. Only use 360 plant, cranes and lifting straps/chains if appropriately trained.

FURTHER READING

Demolition Code of Practice
Recycling fibreglass in Europe
Reclaimed Products Guide
Reclaimed Fibreglass Features

TRAINING

Working at Height
Manual Handling
Safe Use of Hand Tools
Safe Use of 360 Plant and Attachments