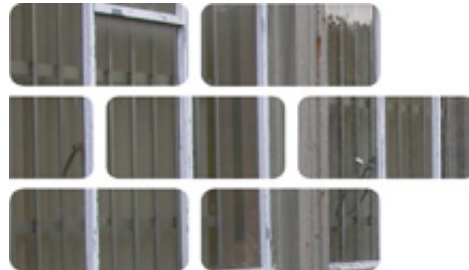


11 GLASS



Flat or plate glass is used for a range of structural and non-structural purposes. Glass is either rolled or cast into various styles and thicknesses and is often toughened, laminated, coated or wired. It is of varying strength and colour depending on the desired performance and architectural finish. Some glass is of historic importance and valuable.

Glass Inert 17 02 02

WASTE STREAMS

DISPOSAL

The landfilling of glass may be the only option if heavily contaminated or embedded into a composite product.

RECOVERY

There are no recovery options for Glass.

RECYCLE

Glass can be recycled when not contaminated and where markets exists for the materials to be used as feedstock for other products, not necessarily for construction. Glass can also be crushed for use as an aggregate or sand replacement.

RECLAIM

Glass panes and panels that have an architectural or historic importance, are valuable and in good condition may be set aside for reuse. Reuse of flat glass and double glazed units is currently limited because of issues in quality standards.

USAGE & PROBABLE LOCATIONS

Glass has many uses in construction as it provides a transparent or translucent aperture. It is used for windows, doors, paneling, screens, curtain walling, external cladding, roof lights, specialist flooring and louvres. It is located throughout the building in the main frame, internal walls, corridors, on the roof, for architectural features and lighting.

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

Glass panels that are destined for reuse should be deconstructed, segregated and stored carefully and safely, especially those of architectural or historic value. They should be stored flat or upright to prevent cracking and away from plant movements to prevent breakage. Crushed glass that is destined for recycling should have all contaminants such as brick, ceramic, rubber, silicon, metal and plastic removed to meet the quality protocol for recycled glass. There is little need to store crushed glass inside a building or under cover as they are robust against incremental weather.

TOOLS

360 plant and attachments, crane, lifting straps, rubber hammer, glass suckers, spanner.

FIXTURES, FITTINGS & CONNECTIONS

Glass has traditionally been fixed in place using putty, silicone, lead, beads, glazing strips and rubber gaskets. Some products are double or triple glazed that are sealed with a rubber mastic around the edges before fixing within a frame. Some glazed products such as tiles and kitchen surfaces will be laid into place using mortar, screed or other binding agent. Glass will sometimes be coated with a reflective material for architectural purposes which can be difficult to remove. Structural elements such as curtain walling will be fixed with nuts, bolts, pins and rubber washers 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 glass. Wear kevlar grip gloves when handling glass products and crushed materials to prevent cuts and abrasion. Use eye protection or full face mask when using hand tools. Do not rest glass panel edges on boots. Do not walk on glass. Only use harness protection at height as a last resort. Only use 360 plant, cranes and glass suckers if appropriately trained.

FURTHER READING

- Flat Glass Collection
- Demolition Code of Practice
- Glass Good Practice
- Reclaimed Glass
- Collecting Flat Glass
- Crushed Glass as Sand

TRAINING

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