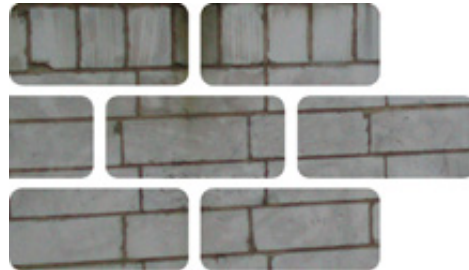


14 CONCRETE BLOCKS



Dense, lightweight or aerated concrete blocks are manufactured from inert materials to suit a range of structural and non-structural uses. Concrete blocks are cast or foamed in various types, shapes and thicknesses, depending on the specification required. They are of varying quality,, strength and finish depending on the desired function and performance. Some have insulation fill or a cladding surface to suit the architectural finish.

Concrete Blocks Inert 17 01 01

WASTE STREAMS

DISPOSAL

The landfilling of concrete blocks should always be avoided unless heavily contaminated with wastes such as asbestos.

RECOVERY

Concrete blocks are inert material that cannot be burnt or composted, so there are no recovery routes possible.

RECYCLE

Concrete blocks can be readily recycled when they are not contaminated and where a market exists for the materials to be used as a feedstock for making new products, not necessarily for construction.

RECLAIM

Concrete blocks that are in good condition, uncontaminated and easily removed may be set aside for reuse. However one assumes that deconstruction and re-installation can be accomplished without damage.

USAGE & PROBABLE LOCATIONS

Concrete blocks have many uses in construction, as they can be constructed into almost any shape or form. It is commonly used to build non-structural walls, beam and block floors or infill between columns in order to close or separate spaces. Some concrete blocks have a high density to act as load-bearing walls, columns and retaining walls. Some blocks may be interlocking connections.

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).



REMOVAL, SEGREGATION & STORAGE

Concrete blocks that are destined for reuse should be deconstructed, segregated and stored carefully and safely, to ensure their integrity and good condition. They should be stored on pallets, strapped and shrink-wrapped to prevent breakage and splash-damage. Crushed concrete blocks that are destined for recycling should have the majority of contaminants removed to suit the quality protocol for recycled aggregates. Concrete block walls, floors, columns and retaining walls should be demolished using suitable plant and attachments and stored in piles along with other crushed materials such as bricks and concrete that have been screened. There is no need to store crushed materials inside a building or under cover as it is robust against inclement weather.

TOOLS

360 plant and attachments, crane, lifting chains, air tools, large hammer, crowbar, jemmy bar, chisel.

FIXTURES, FITTINGS & CONNECTIONS

Concrete blocks have been traditionally constructed using mortar to bind the blocks together. Products are precast or foamed at a factory, then grouted into position with other concrete, steel or timber products. Some products incorporate reinforcing bars and mortar through the holes, whereas solid blocks require no fixings and are laid in place using mortar, thin-joint grout or other binding agent. Concrete blocks are painted or coated with bitumen in harsh environments such as farms, sewage works and water environments. Structural elements will sometimes be coated in fire retardant paints or lined with fire resistant materials.

HEALTH & SAFETY

Subject to task-specific Risk Assessment & Method Statement (RAMS). Wear gloves and respiratory protective equipment (where necessary) when handling concrete blocks, crushed materials, fire retardant materials or paints to prevent irritation, cuts and abrasion. Use eye protection when using hand tools. Limit hand, arm and whole body vibration when using air tools. Use harness protection at height. Only use 360 plant and attachments if appropriately trained.

FURTHER READING

Greenspac Concrete Blocks
Demolition Code of Practice
Designing out Waste
Quality Protocol
Recycling Concrete
Interlocking Concrete Blocks

TRAINING

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