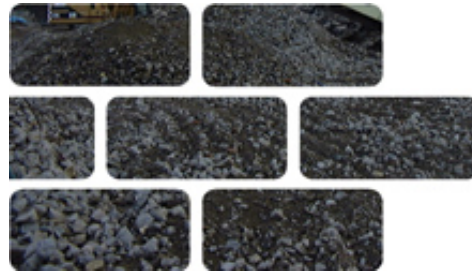


# 119 HARDCORE MIXED BUILDING RUBBLE



Hardcore is mixed building rubble that mostly contains crushed bricks, blocks, tiles, concrete and ceramics that is generated from demolition, crushing or inert processing activities. The materials will often contain inert crushed products in various colours, shapes and sizes depending on the source of the products and the processing activity used. They will be of varying quality and mixture depending on their expected or previous function. Hardcore will often be found underneath existing concrete slabs, highways and landscaping for drainage and sub-base layers. They are suitable for piling mats and sub-base materials.

Hardcore Mixed Building Rubble Inert 17  
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## WASTE STREAMS

### DISPOSAL

Hardcore (mixed building rubble) should not be sent to landfill.

### RECOVERY

There are no options for the recovery of hardcore, which is inert material.

### RECYCLE

Hardcore should be recycled into concrete products where there is a suitable demand for quality hardcore feedstock.

### RECLAIM

Hardcore should be reused (beneficially reused) on site wherever possible.

## USAGE & PROBABLE LOCATIONS

Hardcore (mixed building rubble) has many uses in construction as sub-base layers, fill materials, drainage and feedstock for some concrete mixes. They are used mostly to form piling mats during demolition and construction activities, sub-base layers, filling voids, landscaping, drainage, soakaways and highways. They are often found in layers underneath buildings, roads, pavements, floor slabs, landscaped areas and voids.

## 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

Brick and concrete buildings, structures and infrastructure can be demolished using suitable plant and attachments and stored in piles of crushed materials that have been screened to remove metals and fines. This hardcore (mixed building rubble) that is destined for reuse or recycling should have the majority of contaminants removed to suit the quality protocol for recycled aggregates and stockpiled in mounds according to their particle size and intended use. They should be stored away from current and intended activity to prevent multiple handling. There is no need to store hardcore inside a building or under cover as they are robust against weather.

## TOOLS

360 plant and attachments, muck shifters, loaders, mobile crushers and screeners, dust control equipment, air tools, shovels.

## FIXTURES, FITTINGS & CONNECTIONS

Hardcore is mixed building rubble which does not need or have fixtures and fittings. They are laid into place, leveled, rolled and compacted to form layers or shapes without the use of mortars or other binding agent. Minor contaminants, fines and dust will be part of the matrix.

## HEALTH & SAFETY

**Subject to task-specific Risk Assessment & Method Statement (RAMS).** Hardcore would normally be processed by mechanical methods if hand methods are to be used wear gloves and respiratory protective equipment (where necessary) when working with hardcore and crushed materials to prevent irritation, cuts and abrasion. Use eye protection when using hand tools. Only use 360 plant and attachments, loaders, muck shifters, mobile crushers or screeners if appropriately trained.

## FURTHER READING

Quality Protocol for Recycled Aggregates  
Demolition Code of Practice  
Designing out Waste  
Day Group Recycled Aggregates  
BRE Digest 433 Recycled Aggregates  
EA Permit for Use of Mobile Plant

## TRAINING

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