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| Ref             | NR/L2/TRK/8100 |
| Issue           | 4              |
| Date            | 06 June 2009   |
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## Level 2

# Railway Ballast and Stoneblower Aggregate

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## Issue record

| Issue | Date      | Comments                                                                                                                      |
|-------|-----------|-------------------------------------------------------------------------------------------------------------------------------|
| 1     | Jan 1995  | Supersedes BR 1203                                                                                                            |
| 2     | Feb 1998  | Incorporates former RT/CE/S/009 issue 1 dated April 1995                                                                      |
| 3     | Aug 2000  | Incorporates requirements for Stoneblower aggregate.                                                                          |
| 4     | June 2009 | Updated specification incorporating requirements of BS EN 13450: Aggregates for Railway Ballast. Renumbered from RT/CE/S/006. |

## Compliance

This Network Rail standard is mandatory and shall be complied with by Network Rail and its contractors if applicable from 06 June 2009.

When this standard is implemented, it is permissible for all projects that have formally completed GRIP Level 4 to continue to comply with the Issue of any relevant Network Rail Standards current when GRIP Level 4 was reached and not to comply with requirements contained herein unless the designated Standard Owner has stipulated otherwise in the accompanying Briefing Note.

## Reference documentation

See section 3.

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## 1 Purpose

This product specification gives the requirements for the following:

Railway Ballast in Appendix A.

Stoneblower Aggregate in Appendix B. Categories for grading for Stoneblower Aggregate is not covered by the requirements of BS EN 13450 *Aggregates for Railway Ballast*.

## 2 Scope

This specification applies to all Railway Ballast for use in Network Rail controlled infrastructure except for ballast directly returned to the track by a ballast cleaning machine. This specification also applies to aggregates used in conjunction with a stoneblowing machine. This specification applies to Network Rail staff, contractors working for Network Rail and suppliers of Railway Ballast to Network Rail.

## 3 Reference documentation

|              | Title of Document                                                                                                                    |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------|
| BS EN 13450  | Aggregates for Railway Ballast                                                                                                       |
| BS EN 1097-1 | Tests for mechanical and physical properties of aggregates – Part 1: Determination of the resistance to wear (micro-Deval)           |
| BS EN 1097-2 | Tests for mechanical and physical properties of aggregates – Part 2:<br>Methods for the determination of resistance to fragmentation |
| BS EN 933-1  | Tests for geometrical properties of aggregates – Part 1:<br>Determination of particle size distribution – sieving method             |
| BS EN 933-3  | Tests for geometrical properties of aggregates – Part 3:<br>Determination of particle shape – Flakiness index                        |

## 4 Definitions

Definitions as used in BS EN 13450 *Aggregates for Railway Ballast* apply.

### Fine Particles

Particle size fraction of railway ballast which passes the 0.5mm sieve size.

### Natural Railway Ballast

Aggregate for railway ballast from mineral sources which have been subjected to nothing more than mechanical processing.

### Stoneblower Aggregate

Aggregate, as defined in this specification, for use in track maintenance in conjunction with Stoneblower on-track machine.