

TECHNICAL STANDARD**SUPPLY AND DELIVERY OF 3 mm CRUSHED
ROCK AGGREGATE FOR WELLPOINT
INSTALLATIONS**

Issued by: Manager Engineering

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APPROVAL TO DEVIATE FROM THIS STANDARD

Approval may be granted by the Asset Owner to deviate from the requirements as stipulated in this Standard if the functional requirements (e.g. Asset Life) for the asset differs from those stated in the Standard, but is assessed as still being acceptable by the Asset Owner's nominated representative.

Any approval to deviate from the stated requirements of this Standard will not be seen as creating a precedent for future like project. Any request to deviate from this Standard must be carried out on a project by project basis where each alternate proposal will be individually assessed on its own merit.

NO CHANGES REQUIRED IN THE JANUARY 2012 EDITION

The following lists the major changes to the August 1980 edition and published in the September 2004 edition of TS 40:

1. Reformatted from DS to TS (Departmental Standard to Technical Standard), and updated referenced Australian Standards.
2. Conversion to a technical standard by removal of contractual conditions (to be included in the contract that references this standard).

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REFERENCED DOCUMENTS

- AS 1141: Methods for sampling and testing aggregates
- AS 1152: Specification for test sieves

SECTION 1: GENERAL

1.1 SCOPE OF WORK

This Technical Standard covers the requirements for the supply and delivery of 3 mm Crushed Rock Aggregate for wellpoint installations.

1.2 SA WATER'S REPRESENTATIVE

SA Water's Representative in this Technical Standard will be nominated by SA Water.

SECTION 2: SIEVES

Sieves used in particle size determinations shall be in accordance with AS 1152.

SECTION 3: QUALITY OF MATERIAL

The material shall consist of crushed quartzite, dolomite, or other approved stone. To the satisfaction of SA Water's Representative the particles shall be clean, sound, hard, durable and free from adherent coatings, foreign matter, organic impurities and reactive salts.

SECTION 4: GRADING

The grading of the material shall be in accordance with Table 4.1 of this Technical Standard.

Table 4.1 - 3 mm Crushed Rock Aggregate.

Sieve Size (mm)	6.7mm	4.75mm	2.36mm	1.18mm	600 microns	300 microns	150 microns	75 microns
Percentage Passing	100	80 - 100	13 - 24	2 - 10	0 - 7	0 - 5	0 - 3	0 - 3

SECTION 5: SAMPLES

Suppliers shall state the proposed source of supply for each material specified.

When requested by the SA Water's Representative, a 25 kg sample labelled with the heading "3 mm Crushed Rock Aggregate for Wellpoint Installations" at the top, and with the following information clearly marked underneath:

Each sample shall be clearly marked with the following information:

- (1) Technical Standard TS 40
- (2) Type of Material
- (3) Contract Number
- (4) Name of Contractor
- (5) Origin of Supply

The sample of aggregate shall be submitted and sent for testing to a laboratory nominated by the SA Water's Representative.

The initial sample of material submitted will be retained for reference throughout the duration of works.

The grading of the material supplied in accordance with this standard shall not differ by more than the amounts shown in Table 5.1, providing that the grading shall always remain within the appropriate limits given in Table 4.1.

Table 5. 1 Permissible Deviation from Grading of Samples Submitted

Sieve Size (mm)	Deviation from Grading of Sample (% by Weight of Sample)
4.75 mm	± 10
2.36 mm	± 5
1.18 mm	± 5
600 microns	± 5
300 microns	± 5
150 microns	± 3
75 microns	± 3

SECTION 6: ACCEPTANCE OF MATERIAL

All materials shall be subject to testing and will be accepted only if the quality and grading requirements of this Technical Standard are met. No payment will be made for rejected materials.

SECTION 7: REJECTION

Materials that do not comply with this standard and all other specified requirements of AS 2758.1 shall be liable for rejection by SA Water's Representative. All rejected materials shall be removed from the Site by the Supplier and at the Supplier's expense.

Fine aggregate having a moisture content greater than 8 percent on delivery will not be accepted.

Tests made by SA Water's Representative to determine the acceptance or rejection of material will be carried out in accordance with AS 1141.

SECTION 8: CERTIFICATE OF COMPLIANCE

The Supplier shall forward a certificate with the delivery of each order of material stating that the material is in accordance with this Standard.