

## PRODUCT SPECIFICATION

### WSA PS - 361 – YVW 7 MM MINUS FINE CRUSHED ROCK FOR PIPE EMBEDMENT

(Replaces Section 2.2 of WITS Specification 95-007.1)

#### 361.1 SCOPE

This specification nominates requirements for fine crushed rock used as pipe embedment within Yarra Valley Water's district.

This specification does not cover recycled, reuse or waste products.

#### 361.2 DEFINITION

Fine crushed rock is a manufactured product produced from the crushing and screening of non-sedimentary quarried rock (including scoria<sup>1</sup>). It has a particle size less than 7 mm and varies with the type of rock quarried for production.

#### 361.3 REQUIREMENTS

Embedment fine crushed rock shall consist of hard durable particles free from dust, clay and other deleterious material, produced in a controlled manner to close tolerances of grading, allowing the product to have filtering properties.

Embedment fine crushed rock shall:

- (a) comply with requirements of Table 361.1.
- (b) have a grading<sup>2</sup> complying with Table 361.2-YVW.
- (c) have a pH in the range of 5 – 9 when determined in accordance with AS 1289.4.3.1:1997.
- (d) be free from noxious weeds as proclaimed by relevant regulators.
- (e) be free from dangerous chemicals as proclaimed by relevant regulators.

**TABLE 361.1**

#### GENERAL PROPERTIES OF 7 MM MINUS FINE CRUSHED ROCK

Property	Property Value
Particle Density	(min) 1900Kg/m <sup>3</sup>
Plasticity Index	(max) 10
Degradation Factor – Fines	(min) 50

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**TABLE 361.2-YVW**  
**GRADING OF 7 MM MINUS FINE CRUSHED ROCK FOR PIPE EMBEDMENT**

Sieve Size Mm	Mass of sample passing %
6.70	85-100
4.75	55-95
2.36	40-70
1.18	25-50
0.6	15-35
0.3	5-25
0.15	0-20
0.075	0-15

### 361.4 QUALITY ASSURANCE

Fine crushed rock shall be quarried, processed and supplied under cover of a certified ISO 9001:2016 management system. The scope of the certification shall include "Quarrying, processing, cleaning and grading of crushed rock products" (or similar).

### 361.5 AGENCY OR PROJECT SPECIFIC REQUIREMENTS

Maximum moisture content at delivery, %	
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#### NOTES:

- 1 Use of fine crushed scoria in water reticulation works may be restricted by Yarra Valley Water due potential corrosive action of scoria on copper alloy items.
- 2 Soil resistivity requirements are have not been specified as this product is not approved for use in conjunction with unprotected metallic fittings.

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