

DEVELOPMENT
CONSTRUCTION
SPECIFICATION

C242

FLEXIBLE PAVEMENTS

Amendment Record for this Specification Part

This Specification is Council's edition of the AUS-SPEC generic specification part and includes Council's primary amendments.

Details are provided below outlining the clauses amended from the Council edition of this AUS-SPEC Specification Part. The clause numbering and context of each clause are preserved. New clauses are added towards the rear of the specification part as special requirements clauses. Project specific additional script is shown in the specification as italic font.

The amendment code indicated below is 'A' for additional script 'M' for modification to script and 'O' for omission of script. An additional code 'P' is included when the amendment is project specific.

Amendment Sequence No.	Key Topic addressed in amendment	Clause No.	Amendment Code	Author Initials	Amendment Date
<i>EXAMPLE 1</i>	<i>Provision for acceptance of nonconformance with deduction in Payment</i>	<i>XYZ.00</i>	<i>AP</i>	<i>KP</i>	<i>2/6/97</i>
A	Pavement Design for Light Traffic – A Supplement to Austroads Pavement Design Guide	C242.03	M	MD	12/12/2013

SPECIFICATION 242 : FLEXIBLE PAVEMENTS

GENERAL

C242.01 SCOPE

1. The work to be executed under this Specification consists of the supply, spreading, compaction and trimming of base and subbase courses of flexible pavements to the specified levels and thicknesses as shown on the Drawings.

C242.02 TERMINOLOGY

- (a) Materials designated as 'base' require the provision of a wearing surface comprising either a sprayed bituminous seal or asphalt up to 50mm thick. **Definitions**
- (b) Materials designated as 'subbase' require a covering course of 'base'. The subbase may consist of one or more layers.
- (c) A flexible pavement consists of a base and a subbase constructed of unbound materials. For the purpose of this Specification it also includes lightly bound pavements.
- (d) Modified material incorporates small amounts of stabilising binder to improve the properties of the material without significantly affecting structural stiffness.

C242.03 REFERENCE DOCUMENTS

1. Documents referenced in this specification are listed in full below whilst being cited in the text in the abbreviated form or code indicated. **Documents
Standards Test
Methods**

(a) Council Specifications

- | | | |
|------|---|------------------------------|
| C244 | - | Sprayed Bituminous Surfacing |
| C245 | - | Asphalt Surfacing |

(b) Australian Standards

- | | | |
|---------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------|
| AS 1141.14 | - | Particle shape, by proportional calliper. |
| AS 1141.22 | - | Wet/dry strength variation. |
| AS 1289.3.1.1 | - | Determination of the liquid limit of a soil - Four point Casagrande method. |
| AS 1289.3.3.1 | - | Calculation of the plasticity index of a soil. |
| AS 1289.3.6.1 | - | Determination of the particle size distribution of a soil - Standard method of analysis by sieving. |
| AS 1289.3.6.3 | - | Determination of the particle size distribution of a soil - Standard method of fine analysis using a hydrometer. |
| AS 1289.5.2.1 | - | Determination of the dry density/moisture content relation of a soil using modified compactive effort. |
| AS 1289.5.3.1 | - | Determination of the field density of a soil - Sand replacement method using a sand-cone pouring apparatus. |
| AS 1289.5.4.1 | - | Compaction control test - Dry density ratio, moisture variation and moisture ratio. |
| AS 1289.5.8.1 | - | Determination of field density and field moisture content of a soil using a nuclear surface moisture - density gauge - Direct transmission mode. |

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- AS 1289.F1.1 - Determination of the California bearing ratio of a soil - Standard laboratory method for a remoulded specimen.

(c) RMS Test Methods

- T114 - Maximum Dry Compressive Strength of Road Materials
T116 - Unconfined Compressive Strength - Remoulded Material
T130 - Dry Density Moisture Relations for Mixtures of Road Materials and Cement.
T131 - Unconfined Compressive Strength
T160 - Benkelman Beam Deflection Test
T171 - Modified Texas Triaxial Compression Test

(d) AUSTRROADS

Pavement Design for Light Traffic – A Supplement to Austroads Pavement Design Guide

A Guide to The Structural Design of Road Pavements

C242.04 PAVEMENT STRUCTURES

1. Flexible or semi-rigid pavement material types and layer thicknesses shall be as shown on the Drawings. **Material Types and Layer Thickness**

C242.05 INSPECTION, SAMPLING AND TESTING

1. Inspection, sampling and testing of the pavement shall be undertaken by the Contractor in accordance with the requirements of this Specification before, during and after the construction of the pavement. Testing shall be carried out by a NATA registered laboratory with appropriate accreditation and suitably qualified personnel. **Contractor's Responsibility**
2. The Contractor shall provide the Principal Certifying Authority with written notice when testing is being carried out and copies of all test reports for approval to proceed. **Written Notice**
3. Field density tests shall be carried out in accordance with AS 1289.5.3.1, or, with the Principal Certifying Authority's concurrence, with a Nuclear Density Meter in accordance with Clause 242.12. **Density Tests**

MATERIALS

C242.06 GENERAL

1. The Contractor shall submit details of all constituents of the proposed base and subbase materials, including sources of supply and the proposed type and proportion of any binder. These details shall be submitted to the Principal Certifying Authority, supported with test results from a NATA registered laboratory confirming that the constituents comply with the requirements of this Specification. **Details of Proposed Base and Subbase to be Submitted**
2. No material shall be delivered until the Principal Certifying Authority has approved the source of supply. **Source of Supply**

- 3. If, after the Contractor's proposals have been approved, the Contractor wishes to make changes in any of the material constituents the Contractor shall inform the Principal Certifying Authority in writing of the proposed changes. No delivery of material produced under the altered proposal shall take place without the approval of the Principal Certifying Authority. **Variations by Contractor**
- 4. At least two days before placement of the material on site, the Contractor shall submit a Certificate from a laboratory with appropriate NATA registration demonstrating and stating that the unbound material or the mix and its constituents comply with the requirements of this Specification. **NATA Certificate**
- 5. Ongoing testing of materials during delivery and construction shall be undertaken on samples taken from the site. **Sampling on-site**

C242.07 TRAFFIC CATEGORY

- 1. Pavement materials are specified in terms of the Traffic Categories given in Table C242.1 for the calculated design traffic of the pavement. **Pavement Material Traffic Category Drawings**
- 2. The Traffic Category (or Design Traffic) for the pavement materials shall be as shown on the Drawings.

Pavement Material Traffic Category	Description
1	Roads with design traffic equal to or exceeding 10^7 equivalent standard axle (ESA) repetitions.
2a	Roads with design traffic exceeding 4×10^6 ESAs but less than 10^7 ESAs.
2b	Roads with design traffic exceeding 10^6 ESAs but less than or equal to 4×10^6 ESAs.
2c	Roads with design traffic exceeding 10^5 ESAs but less than or equal to 10^6 ESAs.
2d	Roads with design traffic less than or equal to 10^5 ESAs.

Table C242.1 - Pavement Material Traffic Categories

C242.08 UNBOUND BASE AND SUBBASE

- 1. Unbound materials, including blends of two or more different materials, shall consist of granular material which does not develop significant structural stiffness when compacted. Material produced by blending shall be uniform in grading and physical characteristics. **Granular Material**
- 2. Unbound crushed rock materials are designated as follows: **Crushed Rock**
 DGB20 20mm nominal sized densely graded base
 DGS20 20mm nominal sized densely graded subbase
 DGS40 40mm nominal sized densely graded subbase
- 4. The acceptable material types for each Traffic Category are given in Table C242.2. **Material Types**

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Traffic Category	Acceptable Base Material	Acceptable Subbase Material
1	DGB20	DGS20, DGS40
2a	DGB20	DGS20, DGS40
2b	DGB20	DGS20, DGS40
2c	DGB20	DGS20, DGS40
2d	DGB20	DGS20, DGS40

Table C242.2 - Acceptable Pavement Material Types

5. Base materials shall comply with the requirements of Table C242.3.

Base

Test Method	Description	Base Material Requirements			
		DGB20			
AS 1289.3.6.1	Coarse Particle Size Distribution % passing 75.0mm sieve % passing 53.0mm sieve % passing 37.5mm sieve % passing 26.5mm sieve % passing 19.0mm sieve % passing 13.2mm sieve % passing 9.5mm sieve % passing 6.7mm sieve % passing 4.75mm sieve % passing 2.36mm sieve % passing 0.425mm sieve % passing 0.075mm sieve	- - - 100 95-100 - - 50-70 - 35-55 - -			
AS 1289.3.6.3	Fine Particle Size Distribution Ratios expressed as percentages (for that portion of the material passing 2.36mm sieve) A. Pass 425mm sieve % B. Pass 75mm sieve % Pass 425mm sieve C. Pass 13.5mm sieve % Pass 75mm sieve	35-55 35-55 35-60			
AS 1289.3.1.1	Liquid Limit (if non plastic) *	max 20			
AS 1289.3.3.1	Plastic Limit (if plastic)	max 20			
AS 1289.3.3.1	Plasticity Index ■	max 6			
T114	Maximum Dry Compressive	min 1.7 MPa			

Test Method	Description	Base Material Requirements			
		DGB20			
	Strength on fraction passing 19mm sieve (only applies if Plasticity Index is less than 1)				
AS 1141.14	Particle Shape by Proportional Calliper % mis-shapen (2 : 1)	max 35			
AS 1141.22	Aggregate Wet Strength ◇ For category 1 or 2a For category 2b or 2c For category 2d	min 80 min 70 min 60			
AS 1141.22	Wet/Dry Strength Variation ◇ <u>Dry - Wet %</u> Dry For category 1 or 2a For category 2b or 2c For category 2d	max 35 max 40 max 45			
AS 1289.F1.1	4 day Soaked CBR (98% Modified Compaction)	-			

Table C242.3 - Unbound Base Material Properties

NOTES ON TABLE C242.3:

Material consisting of rounded river stone shall have a minimum of two fractured faces on at least 75 per cent of the particles larger than 6.70mm.

- * The maximum value of the Liquid Limit may be increased to 23 for non-plastic material, provided that the value determined is not influenced by the presence of adverse constituents.
- For category 2d base materials the maximum Plasticity Index shall be 8.
- ◇ All fractions of the sample specified by AS 1141.22 must be within specification. The fraction with the highest wet/dry strength variation is the value for determining conformance with the specification. The fractions 19.0mm to 13.2mm and 6.7mm to 4.75mm must be tested.

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6. Subbase materials shall comply with the requirements of Table C242.4

Subbase

Test Method	Description	Subbase Material Requirements				
		DGS20	DGS40			
AS 1289.3.6.1	Coarse Particle Size Distribution % passing 75.0mm sieve % passing 53.0mm sieve % passing 37.5mm sieve % passing 26.5mm sieve % passing 19.0mm sieve % passing 13.2mm sieve % passing 9.5mm sieve % passing 6.7mm sieve % passing 4.75mm sieve % passing 2.36mm sieve % passing 0.425mm sieve % passing 0.075mm sieve	- - 100 95-100 - - 50-70 - 35-55 - -	- 100 - - 50-85 - - 30-55 - 25-50 - -			
AS 1289.3.6.3	Fine Particle Size Distribution Ratios expressed as percentages (for that portion of the material passing 2.36mm sieve) A. Pass 425mm sieve % B. Pass 75mm sieve % Pass 425mm sieve C. Pass 13.5mm sieve % Pass 75mm sieve	35-55	35-60			
AS 1289.3.1.1	Liquid Limit (if non plastic)	max 23	max 23			
AS 1289.3.3.1	Plastic Limit (if plastic)	max 20	max 20			
AS 1289.3.3.1	Plasticity Index	max 12	max 12			
T114	Maximum Dry Compressive Strength on fraction passing 19mm sieve (only applies if Plasticity Index is less than 1)	min 1.0 MPa	min 1.0 MPa			
AS 1141.14	Particle Shape by Proportional Calliper % mis-shapen (2 : 1)	max 35	max 35			
AS 1141.22	Aggregate Wet Strength ①	min 50kN	min 50kN			

Test Method	Description	Subbase Material Requirements				
		DGS20	DGS40			
AS 1141.22	Wet/Dry Strength Variation ◇ Dry - Wet % Dry	max 60	max 60			
AS 1289.F1.1	4 day Soaked CBR (98% Modified Compaction)	-	-			

Table C242.4 - Unbound Subbase Material Properties

NOTES ON TABLE C242.4:

Material consisting of rounded river stone shall have a minimum of two fractured faces on at least 75 per cent of the particles larger than 6.70mm.

- ◇ All fractions of the sample specified by AS 1141.22 must be within specification. The fraction with the highest wet/dry strength variation is the value for determining conformance with the specification. The fractions 19.0mm to 13.2mm and 6.7mm to 4.75mm must be tested.

Where the proposed unbound base material complies with all of the requirements of Table C242.3 except gradings (AS 1289.3.6.1 and AS 1289.3.6.3), the Contractor may propose the use of the material, subject to approval of the Council, if the material complies with the RMS Modified Texas Triaxial Classification Number (T171) requirements specified in Table C242.5, (T171 tested at not less than 85 per cent of Optimum Moisture Content and 98 per cent of Maximum Dry Density as determined by AS 1289.5.2.1).

**Modified
Texas Triaxial
Classification**

Traffic Category	Modified Texas Triaxial Classification Number (Test Method T171)
1	max 2.0
2a	max 2.2
2b	max 2.5
2c	max 3.0
2d	max 3.0

Table C242.5 - RMS Modified Texas Triaxial Classification Number Requirements

DELIVERY, STOCKPILING AND PROCESSING OF PAVEMENT MATERIAL**C242.11 DELIVERY TO SITE**

1. Materials shall be supplied sufficiently damp to avoid segregation and loss of fines during transit. **Damp Condition**

C242.12 STOCKPILING OF UNBOUND MATERIALS

1. Stockpile sites shall be located as shown on the Drawings or as approved by the Principal Certifying Authority. **Stockpile Sites**
2. Stockpile sites, which shall be cleared of all vegetation and extraneous matter, shall be shaped to form a crown so as to be free draining and compacted over the whole area to provide a relative compaction, determined by AS 1289.5.4.1 for standard compactive effort, of not less than 95 per cent. **Compacted and Free Draining**
3. Stockpiles and stockpile sites shall be maintained so as to prevent the stockpiled materials from becoming intermixed or contaminated with foreign material. **Stockpile Requirements**
4. The total height of any stockpile shall not exceed 2.5 m. **Height**
5. Stockpiles shall be of uniform shape with side slopes neither steeper than 1.5 to 1 nor flatter than 3 to 1. **Shape**
6. The worked face of any stockpile shall be the full face of the stockpile. The stockpiled material shall be maintained at a moisture content sufficiently damp to avoid loss of fines. **Maintained Damp**
7. At the completion of the works, stockpile sites shall be cleared of all surplus material and left in a clean and tidy condition. **Completion of Work**

SPREADING OF PAVEMENT MATERIAL**C242.14 SPREADING PAVEMENT MATERIALS**

1. Unbound materials shall not be spread upon an underlying pavement layer which has a moisture content exceeding 90 per cent, the laboratory optimum moisture content as determined by AS 1289.5.2.1 or which has become rutted or mixed with foreign matter. The underlying layer shall be corrected to comply with this Specification before spreading of the next layer of pavement. **Underlying Layer Quality**
2. Each layer of material shall be deposited and spread in a concurrent operation and, after compaction, the finished surface levels on the base and subbase courses shall be within the permitted tolerances stated in Clause C242.22(c) without subsequent addition of material. The thickness of each compacted layer shall be neither less than 100mm nor more than 200mm for all pavement layer types. **Tolerances**
3. When spread for compaction processes the moisture content of the base or subbase materials shall be in the range of 60-90 per cent of laboratory optimum moisture content in accordance with AS 1289.5.2.1.

TRIMMING AND COMPACTION

C242.15 GENERAL REQUIREMENTS

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|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|
| 1. | Each layer of the base and subbase courses shall be uniformly compacted over its entire area and depth to satisfy the requirements of relative compaction set out in Clauses C242.19 and C242.20. | <i>Uniform
Compaction</i> |
| 2. | On sections of pavement with one-way crossfall, compaction shall begin at the low side of the pavement and progress to the high side. On crowned sections, compaction shall begin at the sides of the pavement and progress towards the crown. Each pass of the rollers shall be parallel with the centreline of the roadway and uniformly overlap each preceding pass. | <i>Compaction
Procedure</i> |
| 3. | At locations where it would be impracticable to use self propelled compaction plant, the pavement material shall be compacted by alternative hand-operated plant approved by the Principal Certifying Authority. | <i>Hand Operated
Plant</i> |
| 4. | If any unstable areas develop during rolling, the unstable material shall be rejected. The rejected material shall be removed for the full depth of the layer, disposed of and replaced with fresh material in accordance with Clause C242.24. | <i>Unstable
Areas</i> |
| 5. | The placement of subsequent layers shall not be allowed until the requisite testing has been completed and the test results for each layer have been accepted by the Principal Certifying Authority. | <i>Placing
Subsequent
Layers</i> |
| 6. | Any unbound material in a layer that has attained the specified relative compaction but subsequently becomes wetted up shall be dried out and, if necessary, uniformly re-compacted and trimmed to meet the specified density requirements and level tolerances. | <i>Excessive
Moisture
Content</i> |

ACCEPTANCE OF COMPACTED LAYERS

C242.17 ACCEPTANCE

- | | | |
|----|--------------------------------------------------------------------------|----------------------------|
| 1. | Acceptance of work, as far as compaction is concerned, shall be based on | <i>Requirements</i> |
| | (a) density testing of each layer, | |
| | (b) proof rolling of each layer, and | |
| | (c) deflection testing on the completed final pavement layer. | |

A lot shall be nominated by the Contractor, but shall conform to the following:

- | | |
|-----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (a) | cover only a single layer of work which has been constructed under uniform conditions in a continuous operation and not crossing any transverse construction joints; |
| (b) | for unbound materials it may equal a day's output using the same material. |

C242.18 COMPACTION ASSESSMENT

1. For residential, commercial and industrial roads, the Contractor shall arrange for testing to assess compaction on the basis of either one test per 50 linear m or 250 m² (which ever is the greater) with a minimum of two tests in any one length. The results shall be presented to the Principal Certifying Authority for approval. **Sampling**

2. For rural roads, the Contractor shall arrange for testing to assess compaction on the basis of either one test per 100 linear m or 500 m² (whichever is the greater) with a minimum of two tests in any one length. The results shall be presented to the Principal Certifying Authority for approval.

3. Acceptance of final pavement layer shall be determined according to the elastic rebound deflection. The elastic rebound deflection shall be taken as the maximum deflection in accordance with Test Method T160 utilising the Benkelman Beam or equivalent. The average maximum deflection for any lot shall not exceed the limits stated in AUSTROADS. The co-efficient of variation (CV) in recorded deflections shall not exceed 30 per cent. Measurements shall be taken at maximum spacings of 10 metres (alternating wheel paths) in each lane, with not less than 4 measurements per any one length of road. **Benkelman Beam Testing**

4. Proof rolling shall be performed. **Proof Roll Test**

C242.19 RELATIVE COMPACTION

1. The relative compaction of pavement material at each location tested for in-situ dry density shall be calculated in accordance with AS 1289.5.4.1 as follows: **Calculation**

$$\text{Relative Compaction (per cent)} = \frac{\text{In-situ dry density}}{\text{Comparative dry density}} \times 100$$

2. The Council may approve some or all of the in-situ dry density testing to be carried out with a single probe Nuclear Density Meter in the direct transmission mode in accordance with AS 1289.5.8.1. **In-Situ Dry Density Testing**

3. For unbound layers, the sample shall be tested in accordance with AS 1289.5.2.1 to determine the maximum dry density (modified compactive effort) for the material. **Maximum Dry Density**

4. The maximum dry density so determined shall be used as the comparative dry density in relative compaction calculations for all like material from that lot or day's production placed in a single layer of work whichever is the lesser. **Comparative Dry Density**

C242.20 REQUIREMENTS FOR ACCEPTANCE

1. A lot shall be accepted for compaction if:
 - a. **for sub-base:**
 - i. the minimum value of all calculated relative compaction for modified compactive effort is not less than 95 per cent within the lot or the area of pavement being assessed.
 - ii. Pass proof roll test
 - iii. Thickness within tolerance as determined from test pits at locations nominated by the Principal Certifying Authority.
 - b. **for base:**
 - i. the minimum value of all calculated relative compaction for modified compactive effort is not less than 98 per cent within the lot or the area of pavement being assessed.
 - ii. Pass proof roll test
 - iii. Thickness within tolerance as determined from test pits at locations nominated by the Principal Certifying Authority.
 - iv. Comply with deflection criteria of Benkelman Beam Testing.
2. Areas of pavement not achieving these specified values shall be rejected. **Rejection**
Unbound layers may be reworked as provided by Clause C242.21.

C242.21 REWORKING OF REJECTED UNBOUND LAYERS

1. Lots or areas of pavement that have been rejected in regard to compaction shall be reworked before resubmission for compaction assessment. **Reworking**
2. Material that has become degraded, segregated or otherwise reduced in quality by reworking shall be rejected. The rejected material shall be removed, disposed of and replaced with fresh material complying with this Specification in accordance with Clause C242.24. When a lot or area of pavement is resubmitted for compaction assessment, testing shall be carried out in accordance with Clauses C242.18 and C242.19. **Rejected Material**

C242.22 TOLERANCES

a) General

1. The tolerances stated are the acceptable limits of departure from the dimensions shown on the Drawings. **Tolerances**

b) Width

1. At any cross section without kerb and/or guttering, and for pavement layers extending under the kerb and/or guttering, the horizontal dimension measured from the design centre line to the edge of the constructed pavement surface shall be neither less than 50mm less than the dimension nor more than 300 mm greater than the dimension shown on the Drawings. **Horizontal Dimensions**
2. The average width of the layer determined from measurements at three sites selected at random by the Principal Certifying Authority over any 200 metre road **Average Width**

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length, or part thereof, shall be not less than the specified width.

c) Levels and Surface Trim

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|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| 1. | The levels of the finished surface of the top of the unbound subbase course shall not vary from the design levels by more than ± 20 mm. | Subbase
Surface Level |
| 2. | Level tolerances at the top of the unbound base course shall not exceed ± 10 mm. In addition, where kerb and gutter exists or is being constructed, the level of the top of the base course adjacent to the kerb and gutter shall not vary by more than ± 5 mm from the lip level of the gutter minus the design thickness of the wearing surface. | Base Surface
Level |
| 3. | The design level of the top of the subbase course shall be determined from the design level of the finished road surface less the thickness of the base course and the wearing course. | Subbase
Design Level |
| 4. | The pavement surface after trimming and immediately prior to sealing shall be of a quality such that the deviation under a 3 metre straight edge placed in any direction does not exceed 12 mm. | Straight Edge
Deviation |

C242.23 ACTION ON REJECTION

(a) Unbound Materials

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|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
| 1. | A lot that has not complied with the requirements for width or level tolerance as set out in Clauses C242.22 (b) and C242.22 (c) respectively shall be rejected except as otherwise provided in this Clause. Rejected lots shall be removed, disposed of and replaced with fresh material in accordance with Clause C242.24. | Rejection
Criteria |
| 2. | Notwithstanding the above, where the rejected lot can be corrected by further trimming, the Principal Certifying Authority may allow the surface to be corrected without complete removal and replacement with fresh material. Such trimming shall be undertaken in a manner that produces a uniform, hard surface and shall be achieved by cutting only without filling. After any such cutting, the level tolerances in Clause C242.22 (c) shall apply. | Corrective
Action |

C242.24 REMOVAL AND REPLACEMENT OF REJECTED COURSES

- | | | |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| 1. | Sections of the work that have been rejected shall be removed from the work and replaced with fresh material. Rejected material shall be removed from site. | Rejected
Material |
| 2. | In rejected sections the material shall be removed over the full length of the rejected lot. Any damage to underlying or abutting layers or structures shall be made good by the Contractor using methods approved by the Principal Certifying Authority. | Length to be
Removed |
| 3. | The Principal Certifying Authority may approve removal for less than the full width as constructed if the cause of the rejection of the work can be isolated transversely to the Principal Certifying Authority's satisfaction. In this case, the new longitudinal cold joint shall be formed and located along the centreline of the road pavement. | Superinten-
dent's
Discretion |
| 4. | After removal of rejected base or subbase course material, the section shall be presented for inspection by the Principal Certifying Authority before replacement work is commenced. | Inspection
Before
Replacement |
| 5. | Materials used as replacement materials, and the subsequent spreading, compaction, trimming, curing and testing of the replacement materials, shall comply with the requirements of this Specification. | Replacement
Material |

C242.25 MAINTENANCE BEFORE COMPLETION OF WEARING SURFACE

1. Following the Principal Certifying Authority's acceptance of any section of the work, the Contractor shall maintain the prepared surface of the base in the condition specified for acceptance until the wearing surface is completed. The base course of sections of the accepted work shall be covered with a primerseal over the full width of pavement in accordance with the Specification for SPRAYED BITUMINOUS SURFACING within seven days of the date of the acceptance of such sections, unless otherwise approved by the Principal Certifying Authority. ***Primerseal***

2. Should the pavement condition deteriorate before the application of the primerseal and consent to proceed with the bitumen surfacing work is withdrawn by the Principal Certifying Authority, the Contractor shall re-prepare the pavement and re-present the pavement for inspection by the Principal Certifying Authority. ***Contractor's Responsibility***

OPENING PAVEMENT TO TRAFFIC**C242.26 GENERAL REQUIREMENTS**

1. For unbound pavements, construction plant and vehicles not involved in the current construction or testing of the work shall not be permitted to use the pavement until the primerseal has been applied, unless otherwise approved by the Principal Certifying Authority. ***Restrictions on Movement***

LIMITS AND TOLERANCES

C242.27 SUMMARY OF LIMITS AND TOLERANCES

The tolerances applicable to the various clauses in this Specification are summarised in the Table below:

Item	Activity	Tolerances	Spec Clause
1.	Stockpile Sites	(i) Relative Compaction >95% (ii) Stockpile height <3m (iii) Stockpile batter <1.5:1 and >3:1	C242.12 C242.12
2.	Spreading Pavement Materials		
	(i) Compacted Layer Thickness	100mm min 200mm max	C242.14
3.	Compaction Acceptance		
	Minimum value of all calculated relative compaction results	95 % (modified) - subbase 98% (modified) - base	C242.20
4.	Width of Pavement		
	(i) Design centre-line to edge of constructed pavement	-50mm to +300mm of dimensions on Drawings	C242.22(b)
	(ii) Average Width	The average width determined from 3 random sites over any 200m road length, or part thereof, shall be not less than the specified width.	C242.22(b)
5.	Surface Level		
	(i) Subbase levels	±20mm from design level	C242.22(c)
	(ii) Base levels	±10mm from design level	C242.22(c)
	(iii) Base levels adjacent to Kerb and Gutter	±5mm from the lip levels of adjacent gutter minus design thickness of wearing surface.	C242.22(c)
	(iv) Shape	Deviation from a 3m long straightedge on base surface immediately prior to sealing shall be less than 12mm	C242.22(c)

Table C242.3 - Summary of Limits and Tolerances

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