



NOTES:

1. Specific site conditions may require an increase in concrete encasement dimensions and/or reinforcement. It is the customer's responsibility to ensure the concrete encasement is designed for the application. A minimum concrete strength of 25MPa is recommended. The concrete should be vibrated to eliminate air pockets. *Engineering advice may be required.*
2. The finished level of the asphalt must be approximately 3mm above the top of the channel edge.
3. Haunch slopes away at a ratio of 1:4 or approximately 15°.
4. For further details, refer to ACO's design & site installation files at www.acodrain.com/resources.

**SPECIFICATION CLAUSE
POWERDRAIN S100K - LOAD CLASS C-D**

GENERAL

THE SURFACE DRAINAGE SYSTEM SHALL BE ACO'S POWERDRAIN S100K POLYMER CONCRETE V-PROFILE CHANNEL SYSTEM WITH DUCTILE IRON EDGE RAILS AS MANUFACTURED BY ACO.

MATERIALS

S100K CHANNELS SHALL BE MANUFACTURED FROM POLYESTER RESIN POLYMER CONCRETE WITH AN INTEGRALLY CAST-IN DUCTILE IRON EDGE RAIL. PROPERTIES OF POLYMER CONCRETE WILL BE AS FOLLOWS WITH SUPPORTING DOCUMENTATION:

COMPRESSIVE STRENGTH:	98 MPa
FLEXURAL STRENGTH:	26 MPa
TENSILE STRENGTH:	14 MPa
WATER ABSORPTION:	0.07%
FROST PROOF:	YES
COEFFICIENT OF EXPANSION/CONTRACTION:	2.02x10⁻⁵/°C
WATER VAPOUR TRANSMISSION:	0.0364g/m²
NON FLAMMABLE:	YES
COEFFICIENT OF ROUGHNESS (MANNINGS):	n=0.011
RESISTANT TO WEATHERING:	YES
DILUTE ACID AND ALKALI RESISTANT:	YES
SF SEALANT GROOVE	YES

CHANNELS

S100K CHANNEL SHALL BE 100mm NOMINAL INTERNAL WIDTH WITH AN OVERALL WIDTH OF 160mm. CHANNEL INVERT SHALL HAVE A V-PROFILE TO ALLOW EFFICIENT DRAINAGE. S100K SLOPED CHANNELS SHALL HAVE A BUILT-IN SLOPE OF 0.5%. ALL CHANNELS SHALL BE INTERLOCKING WITH A MALE/FEMALE JOINT.

GRATES

INSERT SPECIFICATION FOR THE SELECTED GRATE. REFER TO THE RELEVANT ACO SPECIFICATION INFORMATION SHEET, CLICK www.acodrain.com.au/resources.

INSTALLATION

THE COMPLETE DRAINAGE SYSTEM SHALL BE BY ACO AND TO BE INSTALLED FOR ITS INTENDED PURPOSE. ANY DEVIATION OR PARTIAL USE OF THE SPECIFIED SYSTEM AND/OR IMPROPER INSTALLATION WILL VOID ALL WARRANTIES PROVIDED BY ACO.

SK1-CD-A1



DATE: 03/14

**S100K - POWERDRAIN - LOAD CLASS: C-D
FOR ASPHALT**

INSTALLATION DRAWING - ACO DRAIN

ACO Polycrete Pty Ltd
Australia
Ph: 1300 765 226
www.acodrain.com.au

ACO Limited
New Zealand
Ph: 0800 448 080
www.acodrain.co.nz