



NOTES:

1. Specific site conditions may require an increase in the 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 concrete encasement must be approximately 3mm above the top of the channel edge.
3. Expansion and crack control joints are recommended to protect the channel and the concrete encasement. *Engineering advice may be required.*
4. For further details, refer to ACO's design & site installation files at www.acodrain.com.au/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-C



DATE: 03/14

**S100K - POWERDRAIN - LOAD CLASS: C-D
FOR CONCRETE SLAB**

INSTALLATION DRAWING - ACO DRAIN

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