S300K - POWERDRAIN - LOAD CLASS: C-D
FOR ASPHALT

INSTALLATION DRAWING - ACO DRAIN

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

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

SPECIFICATION CLAUSE
POWERDRAIN S300K - LOAD CLASS C-D

GENERAL
THE SURFACE DRAINAGE SYSTEM SHALL BE ACO'S POWERDRAIN S300K POLYMER CONCRETE V-PROFILE CHANNEL SYSTEM WITH DUCTILE IRON EDGE RAILS AS MANUFACTURED BY ACO.

MATERIALS
S300K 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:

- COMRESSIVE 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): 0.0.011
- RESISTANT TO WEATHERING: YES
- DILUTE ACID AND ALKALI RESISTANT: YES
- SF SEALANT GROOVE: YES

CHANNELS
S300K CHANNEL SHALL BE 300mm NOMINAL INTERNAL WIDTH WITH AN OVERALL WIDTH OF 360mm. CHANNEL INVERT SHALL HAVE A V-PROFILE TO ALLOW EFFICIENT DRAINAGE. S300K SLOPED CHANNELS SHALL HAVE A BUILT-IN SLOPE OF 0.5%. ALL CHANNELS SHALL BE INTERLOCKING WITH A MALE/FEMALE JOINT.

GRATES

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.

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. Re-ditch 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.