SPECIFICATION CLAUSE
POWERDRAIN S300K - LOAD CLASS E-G

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:

- COMPRRESSIVE STRENGTH: 95 MPa
- FLEXURAL STRENGTH: 26 MPa
- TENSILE STRENGTH: 14 MPa
- WATER ABSORPTION: 0.07%  
- FROST PROOF: YES
- COEFFICIENT OF EXPANSION/CONTRACTION: 2.02x10⁻⁶/C
- WATER VAPOUR TRANSMISSION: 0.0364g/m²
- NON FLAMMABLE: YES
- COEFFICIENT OF ROUGHNESS (MANNINGS): n<0.01
- RESISTANT TO WEATHERING: YES
- DILUTE ACID AND ALKALI RESISTANT: YES
- SF SEALANT GROOVE: YES

CHANNELS
S300K CHANNELS 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.