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:

COMPRESSIVE STRENGTH: 95 MPa
FLEXURAL STRENGTH: 26 MPa
TENSILE STRENGTH: 14 MPa
WATER ABSORPTION: 0.7%
FROST PROOF: YES
COEFFICIENT OF EXPANSION/CONTRACTION: 2.03x10^-4°C
WATER VAPOUR TRANSMISSION: 0.0364g/m²
NON FLAMMABLE: YES
COEFFICIENT OF ROUGHNESS (MANNINGS): ≤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.