



**SPECIFICATIONS**  
**FILCOTEN tec-E NW100 - LOAD CLASS E**

GENERAL  
 THE SURFACE DRAINAGE SYSTEM SHALL BE FILCOTEN HPC (HIGH PERFORMANCE CONCRETE) NW100 CHANNEL SYSTEM WITH CONCRETED EDGE MADE OF STAINLESS STEEL RAILS AS MANUFACTURED AND DISTRIBUTED BY BG-GRASPOINTNER INC., A WHOLLY OWNED SUBSIDIARY.

MATERIALS  
 CHANNELS SHALL BE MANUFACTURED FROM FILCOTEN HPC (HIGH PERFORMANCE CONCRETE) WITH CONCRETED EDGE STAINLESS STEEL RAIL. MINIMUM PROPERTIES OF FILCOTEN HPC (HIGH PERFORMANCE CONCRETE) WILL BE AS FOLLOWS:

COMPRESSIVE STRENGTH ACCORDING TO ASTM C39 STANDARD:	11,700 PSI
FLEXURAL STRENGTH:	1,700 PSI
FREE OF RELEASE AGENTS:	YES
WATER ABSORPTION SUFFICIENT FOR ADHESION WITH CONCRETE SURFACES:	YES
NON FLAMMABLE:	YES
U/V RESISTANT:	YES
RECYCLABLE 100%:	YES
DILUTE ACID AND ALKALI RESISTANT:	YES
FROST THAW SALT TESTED AS PER EN1433 WITH A TEST TEMPERATURE UP TO -40°C (-40°F):	YES
RESISTANT TO RAPID FREEZING AND THAWING ACCORDING TO ASTM C666 STANDARD:	YES
RESISTANT TO CHLORIDE ION PENETRATION ACCORDING TO ASTM C1202 :	YES
MATERIAL FREE OF VOC, BIOCIDES, HEAVY METALS:	YES

THE SYSTEM SHALL BE 4" (100mm) NOMINAL INTERNAL WIDTH WITH 5.31" UP TO 9.65" (135mm UP TO 245mm) OVERALL DEPTH AND A BUILD-IN SLOPE OF 0.5% AND NEUTRAL OR STEPPED SLOPE SYSTEM. ALL CHANNELS ARE EQUIPPED WITH INTERLOCKING CONNECTION MALE/FEMALE AND SEALANT JOINT.

THE COMPLETE DRAINAGE SYSTEM SHALL BE BY BG-GRASPOINTNER INC. ANY DEVIATION OR PARTIAL SYSTEM DESIGN AND/OR IMPROPER INSTALLATION WILL VOID ANY AND ALL WARRANTIES PROVIDED BY BG-GRASPOINTNER INC.

CHANNEL SHALL WITHSTAND LOADING TO PROPER LOAD CLASS AS OUTLINED BY EN 1433. GRATE TYPE SHALL BE APPROPRIATE TO MEET THE SYSTEM LOAD CLASS SPECIFIED AND INTENDED APPLICATION. GRATES SHALL BE SECURED USING 4-POINT BOLTING LOCKING SYSTEM. CHANNEL AND GRATE SHALL BE CERTIFIED TO MEET THE SPECIFIED EN 1433 LOAD CLASS. THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

- NOTES:**
- IT IS NECESSARY TO ENSURE MINIMUM DIMENSIONS SHOWN ARE SUITABLE FOR EXISTING GROUND CONDITIONS. *ENGINEERING ADVICE MAY BE REQUIRED.*
  - MINIMUM CONCRETE STRENGTH OF 4,000 PSI IS RECOMMENDED. CONCRETE SHOULD BE VIBRATED TO ELIMINATE AIR POCKETS.
  - EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE STRONGLY RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND. CONTRACTION CONTROL JOINTS ARE STRONGLY RECOMMENDED ALTERNATIVELY EVERY 4-5 m TO THE JOINTS OF THE CHANNEL SYSTEM. *ENGINEERING ADVICE MAY BE REQUIRED.*
  - THE FINISHED LEVEL OF THE CONCRETE SURROUND MUST BE APPROXIMATELY 0.11" - 0.193" [3mm - 5mm] ABOVE THE TOP OF THE CHANNEL EDGE.
  - CONCRETE BASE THICKNESS SHOULD MATCH SLAB THICKNESS. *ENGINEERING ADVICE MAY BE REQUIRED TO DETERMINE PROPER LOAD CLASS.*
  - REFER TO BG-GRASPOINTNER'S LATEST INSTALLATION INSTRUCTIONS FOR FURTHER DETAILS.