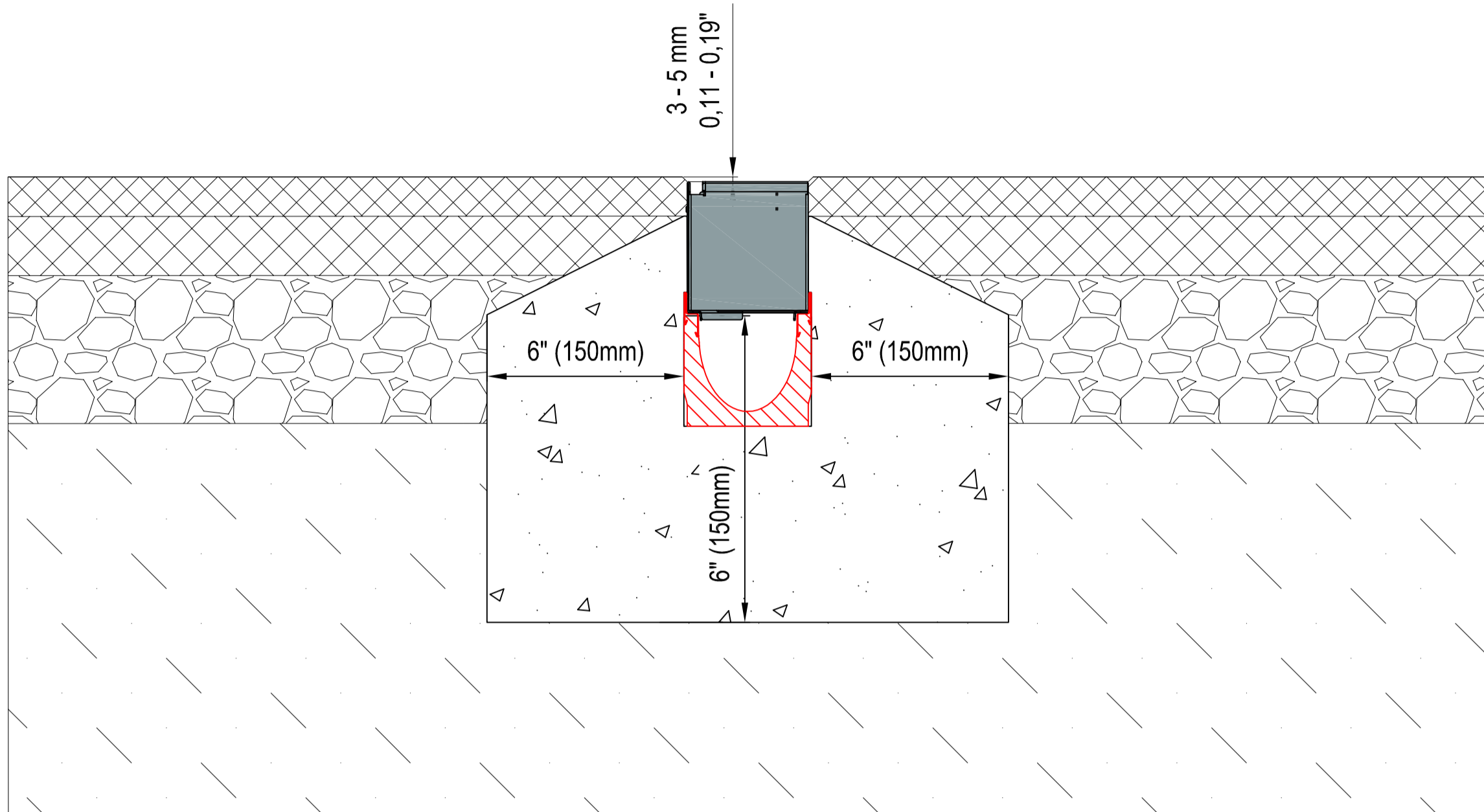


## FILCOTEN tec NW100 (4") INSTALLATION DRAWING / Maintenance Unit- Load class C 250 kN ASPHALT PAVEMENT - HIDDEN CONCRETE



### SPECIFICATIONS

#### FILCOTEN tec NW100 - LOAD CLASS C

##### GENERAL

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

##### MATERIALS

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

|   |            |
|---|------------|
| COMPRESSIVE STRENGTH:   | 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        |
| MATERIAL FREE OF VOC, BIOCIDES, HEAVY METALS:                                     | YES        |

THE SYSTEM SHALL BE 4" (100mm) NOMINAL INTERNAL WIDTH WITH 5.31" UP TO 7.28" (135mm UP TO 185mm), OVERALL WIDTH AND A BUILD-IN SLOPE OF 0.5% AND STEPPED SLOPE SYSTEM. ALL CHANNELS ARE EQUIPPED WITH INTERLOCKING CONNECTION MALE/FEMALE AND SEALANT JOINT.

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

1. IT IS NECESSARY TO ENSURE MINIMUM DIMENSIONS SHOWN ARE SUITABLE FOR EXISTING GROUND CONDITIONS. ENGINEERING ADVICE MAY BE REQUIRED.
2. MINIMUM CONCRETE STRENGTH OF 4,000 PSI IS RECOMMENDED. CONCRETE SHOULD BE VIBRATED TO ELIMINATE AIR POCKETS.
3. EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND. ENGINEERING ADVICE MAY BE REQUIRED.
4. THE FINISHED LEVEL OF THE CONCRETE SURROUND MUST BE APPROXIMATELY 0.11" - 0.19" [3mm - 5mm] ABOVE THE TOP OF THE CHANNEL EDGE.
5. CONCRETE BASE THICKNESS SHOULD MATCH SLAB THICKNESS. ENGINEERING ADVICE MAY BE REQUIRED TO DETERMINE PROPER LOAD CLASS.
6. REFER TO HYDRO BG'S LATEST INSTALLATION INSTRUCTIONS FOR FURTHER DETAILS.