## WATERGATE PRECAST STORMWATER TREATMENT CHAMBER

MODEL WG400

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## WILKINSON HEAVY PRECAST LIMITED

**DUNDAS, ONTARIO** 

905-628-5611

www.wilkinsonheavyprecast.com

## **FEATURES**

- Designed to accept full pipe flow. THERE IS NO BY-PASS
- Both compartments are fully accessible from street level. Total removal
  of entrapped contaminants can be achieved with standard municipal
  maintenance equipment because the internal compartments of the
  WATERGATE have no obstructive elements or inaccessible areas.
- The precast structure and all internal components are factory assembled and shipped as a unit. Site work by the contractor is limited to pipe connection and installation of the access risers.

### FOUR FUNCTION DESIGN

- Traps floatables and debris.
- Removes sediment.
- Intercepts free oil.
- Provides spill containment.

## DATA REQUIRED FOR ORDERING

- Maximum inflow rate.
- · Outside diameter of all piping.
- Slope of inlet piping.
- · Location and invert elevation of all pipes.
- · Finished grade elevation.

#### NOTES

- 1. 1.3 meter square access void above each chamber.
- 2. AC1500 access riser above each chamber.
- Cast iron manhole frame and cover O.P.S.D. Ref 401.01 Type 'A' shown. Hinged and lockable metal covers also available, see Access Riser Section.
- 4. Wall void for grout connection of inlet and outlet pipes. Side entry points can be provided. Flexible rubber pipe connectors are an available option.

The largest pipe normally used with Model WG400 is 525 mm diameter. Please contact our design department before specifying this chamber for use with larger pipe.

- 5. Removable trash screen.
- 6. Corrosion resistant lamella unit.
- 7. Aluminum ladder and ladder rungs to the floor in each chamber.
- 8. Lifting hooks four places.
- Galvanized steel anti-frost heave system four per access riser.
   This mechanical connection of the access riser in conjunction with mastic sealant prevents ground water infiltration and also ensures that contaminated water does not escape in times of flood or sewer back up.

TECHNICAL DATA - MODEL W
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MAXIMUM FLOW RATE	393 LITRES PER SECOND FOR REMOVAL OF SEDIMENT 172 LITRES PER SECOND FOR OIL SEPARATION
TOTAL INTERNAL CAPACITY	14.7 CU. METERS

#### CONTAMINANT STORAGE CAPACITIES

The WATERGATE Model WG400 as depicted in the adjacent drawing has an volume of 1.4 cubic meters available for sediment storage and 7.2 cubic meters of storage available for dry weather spills.

Please note that storage capacity is affected by the pipe size and invert elevation of the storm connection.

Periodic removal of contaminants is necessary to maintain optimum performance. Please refer to the Watergate Maintenance Manual.

#### **DESIGN INFORMATION**

System designers with questions pertaining to this product should call 1-800-263-8503 or e-mail us at info@wilkinsonheavyprecast.com. Wilkinson personnel would be happy to help you with your particular requirements and technical questions.

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#### STRUCTURAL DESIGN

The standard *WATERGATE* Chamber is designed for a maximum 2 Metre burial over the top slab under an area of passenger vehicle parking. Please consult with the factory regarding installations that will exceed the above conditions. This chamber must not be placed directly onto any hard surface. We recommend a granular base, minimum 200 mm thick.

Concrete: 35 MPa at 28 Days, 5 to 8% Air Entrainment.

Reinforcing: Grade 400 deformed bar to suit loading requirments.

Minimum cover over reinforcing bars - 25 mm.

THIS CHAMBER IS FACTORY ASSEMBLED EXCEPT FOR ANY ACCESS RISERS AND IS INTENDED TO BE SHIPPED AND INSTALLED AS A ONE PIECE UNIT.

Shipping and Handling Weight: 21,500 kg

For recommended installation procedures refer to Ancillary Literature: Lifting & Handling Instructions and WATERGATE Installation Guidelines & Maintenance Manual.

