



## HG Series Specifications & Standards

02/10/2011

Hydroworks, LLC  
50 South 21<sup>st</sup> St., Kenilworth, NJ 07033  
Phone: 888-290-7900 Fax: 888-783-7271  
[www.hydroworks.com](http://www.hydroworks.com)

## HG Series Standards

The Hydroworks HG (Hydroguard) Series is a concrete manhole separator with internal co-polymer components. This document provides detail on the individual materials as well as the overall standards to which the Hydroguard is designed.

### General Structure

AASHTO H20 loading

### Concrete Components

ASTM C-478	Precast Concrete Manholes standard
AASHTO M-1998/ASTM C990	Concrete joint sealant standard

The concrete mix design and any additives in the concrete comply with all applicable DOT, AASHTO and ASTM standards.

Cement shall be high early strength Portland cement, Type III, conforming to ASTM C-150. Fine aggregate shall consist of washed natural sand conforming to ASTM specification C-33. Coarse aggregate shall consist of ¾" well graded crushed stone conforming to ASTM specification C-33. Air entrainment shall be 4.5% plus or minus 1%. The concrete shall attain a minimum 28 day compressive strength of 5000 psi. Reinforcing steel shall be new billet steel, deformed steel bars conforming to ASTM A-615, Grade 60. Welded steel wire fabric reinforcing shall conform to ASTM A-185. The minimum cover of reinforcement shall be 1 inch.

Each pre-cast module shall be provided with formed male and female joints to ensure accurate joint surfaces and tolerance for a watertight seal. Sealant shall be "Conseal CS-102" as manufactured by Concrete Sealant, New Carlisle, Ohio or equal. All surfaces of the pre-cast structure shall be smooth, even and free from roughness, irregularities and other defects.

### Internal Baffles

The internal baffles are made from co-polymer polypropylene. The co-polymer polypropylene shall be "Versadur PP-C570" as manufactured by Simona America Inc. in Hazleton, PA or equal. Co-polymer polypropylene is a blend of polypropylene and polyethylene, providing a material with better impact and abrasion resistance at low temperatures than either of the two separate materials. The baffle material must have a tensile strength of 3800 psi based on ASTM D-638, an Izod Impact value of 1.4 ft. lbs/in according to ASTM D-256 and a Rockwell Hardness of 74 according to ASTM D-785.

The baffles must be manufactured by cutting/machining co-polymer polypropylene sheets, and then thermo-molding and nitrogen welding the machined sections into insert components. The inserts will be made with a minimum thickness of material according to the following table:

Separator	Minimum Co-polymer Thickness
HG 4	1/4"
HG 5, HG6, HG7, HG8	3/8"
HG9, HG10, HG12	1/2"

### Fasteners

The copolymer inserts are attached to the inside of the concrete walls and floor using stainless steel wedge anchors, and washers and nuts.

<b>Stainless Steel Concrete Bolts and Washers</b>			
Component	Material	Length	Diameter
Concrete Wedge Anchor	304 Stainless Steel	4.5"	0.5"
Fender Washers	304 Stainless Steel	N/A	2"

### Insert Sealant

The 2 edges of the upper baffle wall are sealed to the inside of the concrete walls using a single component, elastoplastic, M34 polycarbonate sealant (Pro-Seal 34<sup>®</sup>). Pro-Seal 34 can be applied through water and oil and was designed to seal wet surfaces. Flanges between the upper inner chamber and lower inner chamber must be caulked using Pro-Seal 34.

### Anti-buoyancy

The Hydroguard HG4, HG4i, HG5, and HG6 are designed for anti-buoyancy based on an empty vessel with the water table at the ground surface and a factor of safety of 1.2. The Hydroguard HG7, HG8, HG 9, HG10 and HG12 are designed for anti-buoyancy based on a normal water level in the separator (water level at the outlet invert) with the water table at the ground surface and a factor of safety of 1.2.

### Design

Designs based on TSS removal will be designed using the particle size distribution given in Table 1 and an annual load removal of 80% unless a specific regulatory or site specific distribution and TSS removal rate are provided.

Diameter ( $\mu\text{m}$ )	Percentage by Mass
8	20
50	25
100	15
250	30
500	5
1000	5

Any alternate equal separator must provide the same or a larger permanent pool volume (permanent water volume in the separator at all times) as the specified separator and must provide the same or larger surface area for settling as the specified separator.

The separator will be designed to remove trash and floating debris under both low and high flow conditions. It must be designed with two flow paths to capture floatables/trash during high flows but prevent re-suspension of solids captured during low flow events.

#### Access

Access must be provided for maintenance to all areas of the separator where solids or floatables are to be collected. Baffles in the separator must be vertically oriented to prevent obstructions to maintenance. Multiple access openings must be provided for separators larger than 4 feet in diameter to facilitate maintenance operations.

#### Frame and Covers/Grates

Frame and covers must meet AASHTO H20-44 and HS 20-44 loading requirements and conform to ASTM – A 48/A 48M-00, Class 30B and Federal A-A-600005 specifications.

#### Inspection

A representative of the stormwater manufacturer must inspect the installation after the contractor has installed the separator to ensure that the separator was installed as designed. Field inspection of the installation must be completed to ensure the proper operation and long term maintenance characteristics of the separator.

# Appendix 1

Versadur PP-C570 Technical Data

## Product Specifications

### Fabricators and Specifiers Benefits

- High impact resistance
- Excellent corrosion resistance
- Excellent impact strength at low temperatures
- Lightweight
- Excellent formability
- Good abrasion resistance
- Good electrical properties

### Application Areas

- Tanks and linings
- Lab equipment
- Etching equipment
- Fume hoods, duct work
- Battery cases
- Machined parts
- Industrial doors

## Product Range

### Extruded Sheets – Standard Availability (in inch)

	1/32	1/16	3/32	1/8	3/16	1/4	3/8	1/2	5/8	3/4	1	1 1/4	1 1/2	1 3/4	2
<b>Size: 48" x 96"</b>															
570 Natural					□	■	■	■		■	■	■	□		
590 Black							■	■	■		■	■	□	□	

### Extruded Sheets – Standard Availability (in mm)

	1	2	3	4	5	6	7	8	10	12	15	20	25	30	35
<b>Size: 3000 x 1500</b>															
582 Grey Polypropylene Backed			■	■		□									
<b>Size: 20,000 x 1500</b>															
582 Grey Polypropylene Backed			□			□									

Call for custom lengths, other sizes, welding rods, colors (575 White, 580 European Grey) or special requirements.

## Technical Data

### Property

	Test Method ASTM*	Unit	Typical Value
<b>Physical</b>			
Density	D-792	g/cc	0.91
Water Absorption (24 hrs at 73 °F)	D-570	%	0.01
<b>Mechanical</b>			
Tensile Strength at 23 °C	D-638	psi	4,000
Flexural Modulus	D-790	psi	195,000
Elongation at break	D-638	%	> 500
Izod Impact	D-256		
at 23 °C		ft. lbs./in.	no break
at -20 °C		ft. lbs./in.	2.5
Rockwell Hardness	D-785	"R" scale	74
<b>Thermal</b>			
Heat Distortion Temperature	D-648		
at 66 psi	D-648	°F	190

\*American Society of Testing Materials

Data and information used the preparation of this sheet have been obtained from controlled laboratory procedures and/or carefully documented empirical observations. As such, they may not be applicable to all uses and conditions. The reader is advised that no guarantees, written or implied, including guarantees as to the fitness for a particular purpose or use, are to be construed from this bulletin. Persons with questions as to the applicability of this material, or SIMONA AMERICA products to specific uses or situations are urged to contact our customer service department.

■ stock availability    □ availability on request

# Appendix 2

Versadur PP-C570 MSDS

**SIMONA® VERSADUR® PP-C 570/590 Series**

CEE-Safety Data Sheet

Rev. 07/2005

**SIMONA® VERSADUR® PP-C 570/590 Series**

<p>Identification of substance / preparation and company</p>	<p>Indications to the manufacturer: SIMONA AMERICA Inc. 64 N. Conahan Drive Hazleton, PA 18201 USA</p> <p>Phone +1 866 501 2992 Fax +1 800 522 4857</p>
<p>Composition / Indications to components</p>	<p>Trade name: - SIMONA® VERSADUR® Copolymer PP - 570/590 Series Synonyms: - Copolymer Polypropylene</p> <p>Chemical characteristics: polymer of propylene CAS-Registration-No.: NA Formula: NA</p>
<p>Possible dangers</p>	<p>This product is an "article" as defined in 29 C.F.R. Section 1910.1200. It will not result in exposure to hazardous chemicals under normal conditions of use.</p> <p>Component: Copolymer polypropylene ACGIH TLV: NA OSHA PEL: NA Carcinogen status (NTP): No IARC monograph: No OSHA regulated: No</p>
<p>First-aid measures</p>	<p>General comment: Medical aid is not necessary Symptoms / effects: Not expected.</p> <p>If symptoms persist, get medical attention. Never give anything by mouth to an unconscious person. Routes of exposure: none</p>
<p>Fire-fighting measures</p>	<p>Flashpoint: NA Flammable limits (STP in air): Lower limits: NA - Upper limits: NA Fire extinguishing media: CO<sub>2</sub>, foam, dry chemical, water spray or fog. Personal protection for fighting fire: Fire fighters must wear positive-pressure, self-contained breathing apparatus and full protective clothing. Hazard warning notice: Because static sparking can occur during handling, all flammable materials should be removed from the immediate vicinity.</p>
<p>Measures in case of unintended release</p>	<p>Person-related measures: none Environmental protection measures: NA Cleaning equipment: NA Unsuitable cleaning products: NA In case of spill: Shovel spilled material into suitable container. Do not contaminate soil, groundwater, or surface water Disposal method: Incinerate or use RCRA permitted landfill. Follow all federal, state, and local regulations</p>

Handling and storage	<p>Handling: No special regulations must be observed  Storage: Unlimited good storage property  Ventilation: NA  Respiratory protection: NA  Protective clothing: NA  Eye protection: Use safety glasses with side shields.  There are not any special handling or storage requirements for this product.</p>
Limitation of exposition	<p>Special design of techn. processing facilities: not required  Tolerance levels: none  Exposure measurement procedures: none</p> <p><b>Special protection information:</b>  Ventilation: Processing which generates vapors, dust or fumes should only be performed with adequate ventilation.  Respiratory protection: If necessary, use NIOSH-approved, chemical cartridge respirator.  Protective clothing: Use heavy cotton or insulated gloves to handle hot plastics.</p>
Physical and chemical characteristics	<p><u>Phenotype</u>  Color: natural  Appearance: semi-finished product, natural  Smell: not applicable</p> <p><u>Change of state</u>  Crystalline melting range: 160 - 164 °C</p> <p><u>Other remarks</u>  Density: 0.91 g/cm<sup>3</sup></p>
Stability and reactivity	<p>Stability (normal conditions): Stable  Thermal decomposition: above appr. 572 °F / 300 °C  Dangerous decomposition products:  Burning in an open flame may yield toxic hydrogen chloride gas and metal oxides. Burning will also emit dense black smoke. No heavy metals.</p> <p>Use of stabilisers: none  Exothermic reactions: none  Notices regarding state of aggregation: none  Conditions to be avoided: none  Substances/media to be avoided: none  HMIS ratings (scale 0-4): health = 0, flammability = 1, reactivity = 0</p>
Toxic indications	<p>During several years of usage no effects being harmful for the health were observed.  Toxicity: No health effects expected under normal conditions of use.</p>
Ecological indications	<p>No biodegradation, no solubility in water, no effects being harmful to the environment must be expected.  Mobility: NA  Accumulation: NA  Eco-toxicity: NA</p>
Waste-disposal indications	<p>In case of spill: Shovel spilled material into suitable container. Do not contaminate soil, groundwater, or surface water  Dispose of waste materials in accordance with federal, state, and local regulations.</p>
Transport indications	<p>No dangerous product in respect to / according to transport regulations  Notice/symbol transport containers: none  Special marking for containers: none  Proper shipping name: not regulated  Since empty containers retain product residue, follow hazard precautions even after container is emptied.</p>

---

Instructions	Water danger class: class 0 (self classification) Domestic requirements to be observed: none
Further indications	This information is furnished without warranty, representation, inducement, or license of any kind, except that it is accurate to the best of SIMONA AMERICA Inc.'s knowledge or obtained from sources believed by SIMONA AMERICA Inc. to be accurate and SIMONA AMERICA Inc. does not assume any legal responsibility for use or reliance upon same. Customers are encouraged to conduct their own tests. Before using any product read its label.

---

# Appendix 3

Pro-Seal 34 Technical Data

# PRO-SEAL 34<sup>®</sup> (CAULKING)

## PRODUCT DESCRIPTION

**Pro-Seal 34<sup>®</sup>** is a single-component M34 elastoplastic, Polycarbon/ Polycarbonate sealant material. **Pro-Seal 34<sup>®</sup>** stops leaks and seals on contact even through water and oil. **Pro-Seal 34<sup>®</sup>** is gunable from 38°F to 98°F and may be applied to a surface temperature that ranges from -70°F to +220°F.

## ADVANTAGES

- Pro-Seal 34<sup>®</sup> :**
- Seals through rain and moving water
  - Never gets hard or brittle
  - 1200% Elongation
  - 350% Stretch
  - 2 year shelf life
  - 6 month open tube life
  - Environmentally friendly in cured state
  - Paintable upon application! For high touch surfaces painting is recommended. For best results wait 24 hours to paint.

## USES

- Galvanized Metal
- Plaster
- Wood
- Aluminum
- Stone
- Concrete
- Vinyl
- Boats
- Recreational Vehicles

\* For specific applications please call our Toll-Free Technical Hot-Line.

\*\* Not intended for showers or hot tubs.

## APPLICATION

1. Surface must be clean and free of all loose particulate or other bond-breaking matter.
2. Do not use solvents (MEK, Acetone, Xylo, etc.) as cleaning agents on application area.
3. Cut tip to desired bead width and apply a continuous bead using a caulking gun. Use soap solution for tooling lubricant.
4. For cleaning tools after application is complete, use a solvent such a Xylol. If product is cured, cut the bulk away before cleaning.

## TECHNICAL

Information	Value	Unit
Material	1	Part
Mix Time	none	Minutes
Appearance	caulk	Visual
Application	See guide Spec	
Cure Time	40	mils/day
Specific Gravity	1.096	
Cured (full or heavy traffic)	72	Hours
Elongation	1200	%
Stretch (1 gal kit)	350 (across)	%
Shrinkage	10-15	%
Packaging: 20.4 oz. tube, 1 Gal. Kits, 5 gal. 55 gal drum		
Colors: Clear, Black, White, Grey, and Brown		Visual

## CAUTIONS

Keep out of reach of children. May Cause skin or eye irritation. May be harmful if swallowed. Do not induce vomiting. Contact a physician immediately. Intended for Industrial or commercial use only. Always seek a physicians advice regarding first aid, see MSDS for additional cautions.

## TECHNICAL SUPPORT

For Technical Support, please contact our Toll Free Technical Hotline at (800) 349-7325. International callers please call (425) 821-0723.

## LIMITED WARRANTY

We warrant our product to be free of defects in material and workmanship; and to be in accordance with our company quality control standards. All data, statements, and recommendation, made herein are based upon information we believe to be reliable, but are made without any representation, guarantee, or warranty of accuracy. Our products are sold on the condition that the user himself will evaluate them, as well as our recommendations, to determine their suitability for the user's own purpose before adoption. Also, statements regarding the use of our products or processes are not to be construed as recommendations for their use in violation of any patent rights or in violation of any applicable laws or regulations. Liability under any condition shall be limited to replacement of material only.

**PRO-SEAL**  
PRODUCTS, INC.

16541 REDMOND WAY ; PMB 363C REDMOND, WA 98052  
PHONE: (425) 821-0723, FAX: (425) 821-1006, TOLL FREE: (800) 349-7325  
EMAIL: information@prosealproducts.com WEBSITE: www.prosealproducts.com

Test Method	SPECIFICATIONS			Coverage	
	Information	VALUE	Unit	Joint Size (inches)	Feet Per Tube
TT-S-00230 C ASTM C 920	Rheological Properties Vertical & Horizontal Slump	12,000	Inch psi	1/8 x 1/8 1/8 x 1/4 1/8 x 3/8	106.4 53.2 35.4
TT-S-00230 C ASTM C 920	Cured Hardness	+ 15	shore	1/8 x 1/2 1/8 x 5/8 1/8 x 3/4	26.6 21.3 17.7
TT-S-00230 C ASTM C 920	Extrusion Rate	15	sec	1/8 x 7/8 1/8 x 1 1/4 x 1/4	15.2 13.3 26.6
TT-S-00230 C ASTM C 920	Tack Free Time	72	hrs	3/8 x 3/4 3/8 x 7/8 3/8 x 1	6.0 5.1 4.4
TT-S-00230 C ASTM C 920	Stain/Color Change	none	visual	1/2 x 1/2 1/2 x 5/8 1/2 x 3/4	6.7 5.4 4.4
TT-S-00230 C ASTM C 920	Adhesion Loss in Peel	none		Note: Do not run beads greater than 1/2 x 1/2 inch per application. In joints where greater bead size is required, multiple applications will be necessary. If gassing breaks or cracks occur, simply remove particulate or dirt and re-apply. Pro-Seal 34 <sup>®</sup> re-adheres t to itself.	
TT-S-00230 C ASTM C 920	Accelerated UV Exposure Cracking	none			
TT-S-00153 A	Discolor Change	none	visual		

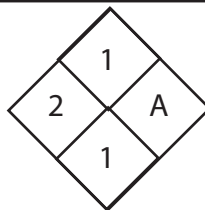
# Appendix 4

Pro-Seal 34 MSDS

**Material Safety Data Sheet**

May be used to comply with OSHA'S Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

HFRP  
12A1



**U.S. Department of Labor**  
Occupational Safety And Health  
Administration  
(Non- Mandatory Form)  
Form Approved  
OMB No. 1218-0072

**Section I****Product Information****Product Name:**

*Pro-Seal 34 All Colors (Caulking/Sealant)*

**Emergency Telephone #**

1-800-349-7325

**Manufacturer's Name:**

*Pro-Seal Products, Inc.*

**Information Phone**

1-425-821-0723

**Address:**

*16541 Redmond Way  
PMB 363-C  
Redmond, WA 98052*

**Date prepared**

2.20.07

**Signature of preparer**

TKB

**Section II****Hazardous Ingredients****Hazard components:**

%

**CAS #**

I.D 50 Species/Route

LC 50 Species/Route

*Acetic Acid Ethyl Ester*

< 20%

141-78-6

14g/kg(Rat-Oral)

TLV-710 mg/m<sub>3</sub>

*No other hazardous component. This product should not be consider a hazardous material.*

**Section III****Physical Data****Boiling Point:** 212 °C/100 °C

% Volatility by Volume pH < 2.0

**Specific Gravity:** 1.05-1.60

**Vapor Pressure (mm Hg):** 310 mbar @ 122 °F/50 °C

**Vapor Density:** 1.08 g/cm<sub>3</sub> @ 20 °C

**Melting Point:** 1 °F

**Evaporation Rate:** 40.2 mm Hg (@ 20 °C)

**Solubility in Water:** Less than 0.001 %

**Freezing Point:** <- 70 °F

**Appearance and odor:** Range from glass clear to Black

**Physical State:**

**Viscosity:** 3-10 Pa.s @ 74 °F/23 °C

**Odor Threshold:** N/A

**Section IV****Fire and Explosion Hazard Data**

**Flash Point:** (method used): (Method, DIN) 4 °C Ethyl acetate

**UEL:** 11.5%

(Not material rating Flash Point)

**Flammable Limits:** 1400 °F/460 °C

**LEL:** 2.1%

**Special Fire-Fighting Procedures:** Not Necessary

**Extinguish Media:** Foam/Co<sub>2</sub>, Extinguishing powder

**Unusual Fire and Explosion Hazards:** None known

**Sensitivity to Static Discharge:** N/A

**Sensitivity to Impact:** N/A

**Section V**      **Reactivity Data**

**Stability:** *Stable*      **Conditions To Avoid-Stability:**

**Incompatibility (materials to avoid):** *None*

**Hazardous Decomposition or By Products:** *None known*

**Hazardous Polymerization:** *Will not occur*

**Conditions To Avoid-Polymerization:**

**Section VI**      **Health Hazard Data**

**Routes of Entry:** *Oral/Inhalation*

**Health Hazards (acute and chronic):** *Prolong exposure in poorly ventilated areas may result in minor irritation to eyes and throat. Sinus, Bronchial, Throat and Mucus Membrane Damage may occur.*

**Carcinogenicity:** *None*   **NTP?:** *None*    **IARC?:** *None*    **OSHA?:** *None*

**Signs and symptoms of exposure:**

**Medical Conditions Aggravated by Exposure:** *Solvent Breaks down to acetic acid and alcohol without hazardous reaction (caused from over exposure)*

**Emergency and First-Aid Procedures:** **Eye:** *Flush with cool running water for at least 15 minutes including under the eyelids. Contact physician at once.* **Skin:**     *Wash well with soap and water.* **Ingestion:** *Get medical attention immediately.* **Inhalation:** *Remove to fresh air. Have trained person administer oxygen if breathing is difficult.*

**Section VII**      **Precautions**

**Steps to be Taken in Case Material is Released or Spilled:**

**Waste Disposal Method:** *Clean with organic solvents, sand, diatomaceous earth. Clean with Benzene*

**Precautions to be Taken in Handling and Storing:** *Never use pressure on empty container* **Do not Smoke** *Storage and use areas must be designated* **No smoking**

**Other precautions:** *Store in tightly closed container. Do not keep near foodstuffs*

**Section VIII**      **Control Measures**

**Respiratory Protection:** *Not required in good ventilation*

*Ventilation?: Use in well ventilation areas or provide adequate exhaust ventilation*

**Protective Gloves:** *Gloves should be worn to prevent skin contact*

**Eye Protection:** *Protective goggles are recommended*

**Other protective clothing or Equipment:** *Protective clothing is recommended as spilled material cannot be removed from fabrics*

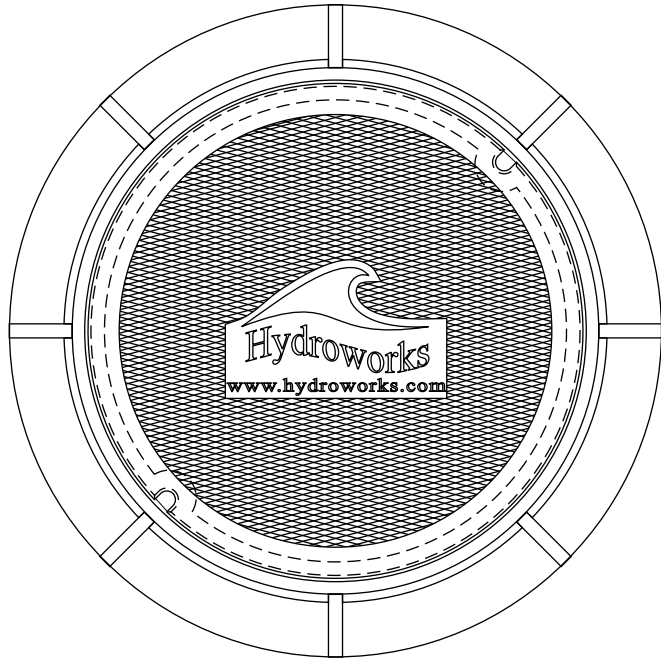
**Work/Hygenic Practice:**

**Hazardous Materials Transportation Info:**

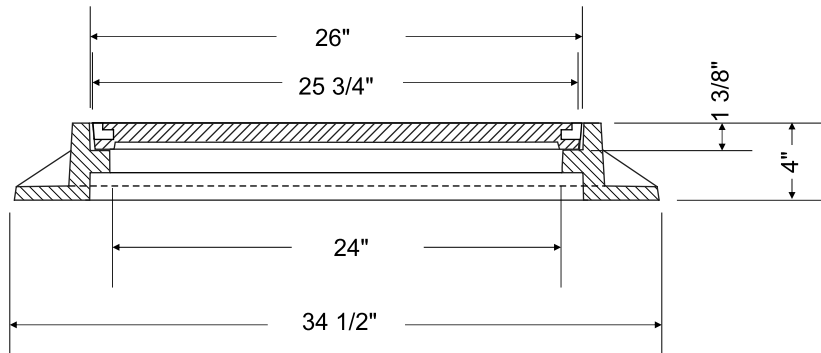
# Appendix 5

Hydroguard Frame and Covers

# Heavy Duty Manhole Frame & Cover



PLAN



TYP SECTION

NOTES:

1. Material - Gray Cast Iron ASTM A48-83, Class 30B, AASHTO HS20-44 Highway Loading;
2. Bearing surface at seat of frame and cover shall be machined for uniformity;
3. Cover shall have two non-penetrating pick holes;
4. Castings shall be supplied without surface coating.



**CAMPBELL FOUNDRY COMPANY**

Harrison, N.J. 07029

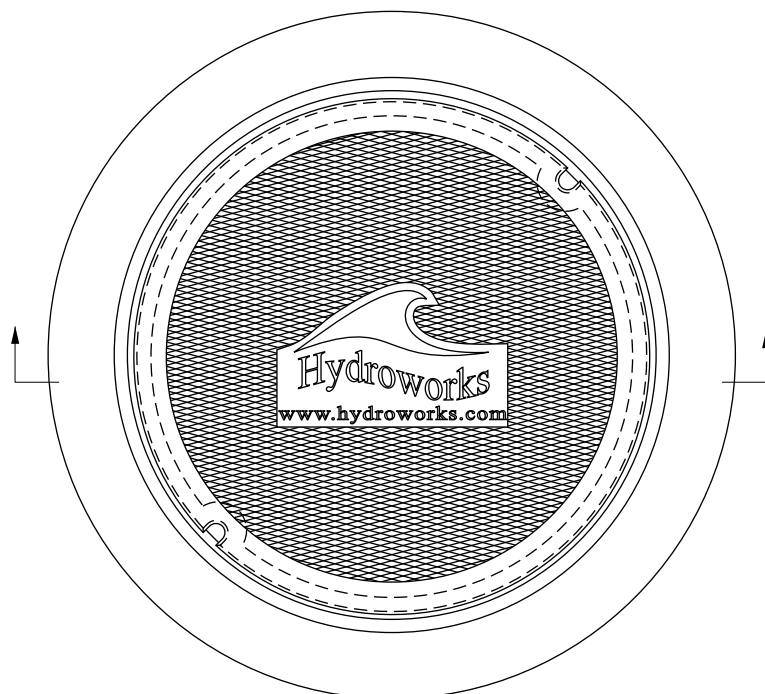
Phone: 973-483-5480 FAX: 973-483-1843

SCALE:	APPROVED BY:	DRAWN BY: <b>D.L.</b>
DATE: 03/01/10		REV.:

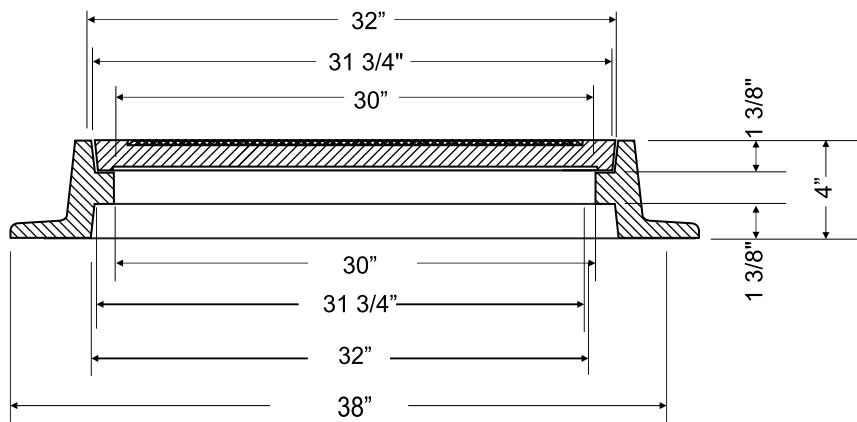
**Heavy Duty Manhole Frame & Cover**

**Pattern Number: 1009A**

# Heavy Duty Manhole Frame and Cover




PLAN



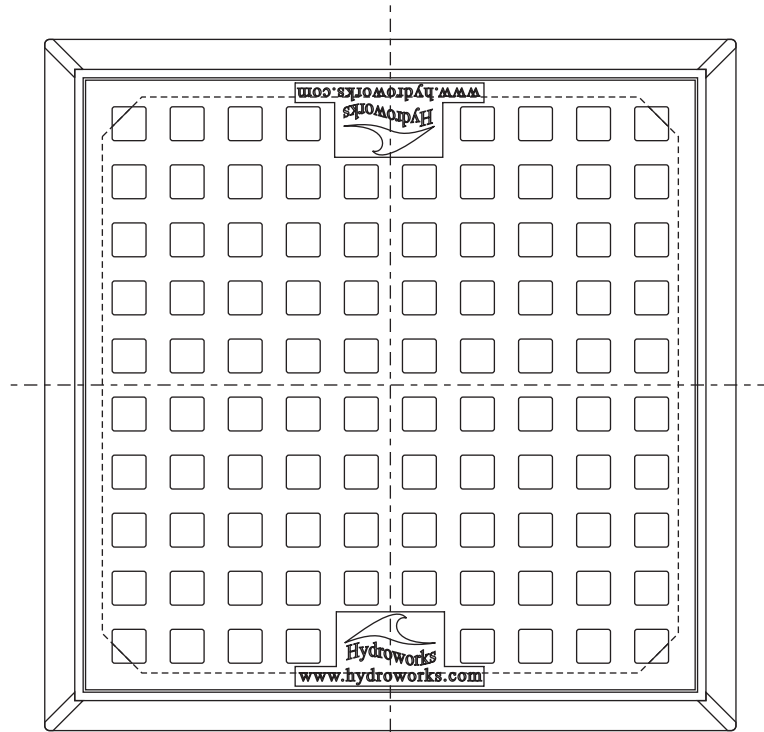
TYP SECTION

NOTES:

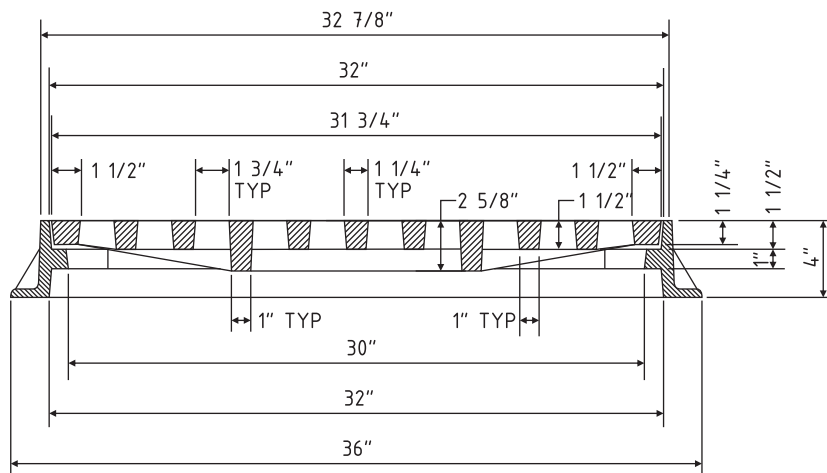
1. Material - Gray Cast Iron ASTM A48-83, Class 30B, AASHTO HS20-44 Highway Loading;
2. Bearing surface at seat of frame and cover shall be machined for uniformity;
3. Cover shall have two non-penetrating pick holes,
4. Castings supplied without surface coating.

 <b>CAMPBELL FOUNDRY COMPANY</b> Harrison, N.J. 07029 Phone: 973-483-5480 FAX: 973-483-1843		
SCALE:	APPROVED BY:	DRAWN BY: D.L.
DATE: 03/01/10		REV.:
<b>Heavy Duty Manhole Frame and Cover</b>		
<b>Pattern Number: 1012D</b>		

# Heavy Duty Inlet Frame and Logo Grate

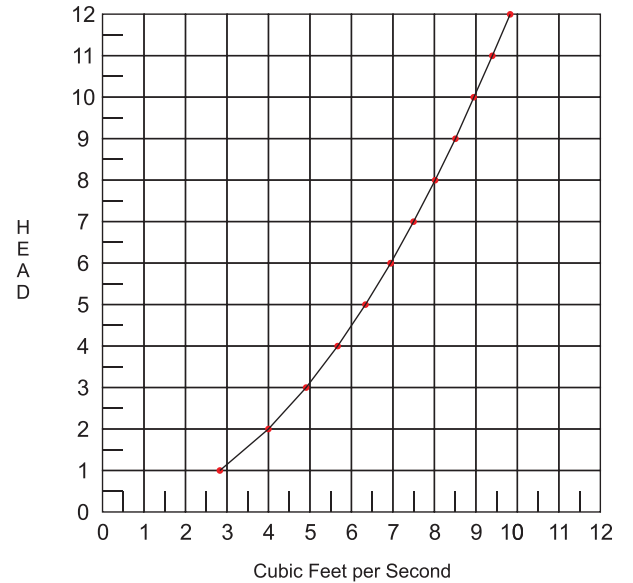


PLAN



SECTION

## Rate of Flow



- 1" Head - 2.83 Cu.Ft. per Sec.
- 3" Head - 4.91 Cu.Ft. per Sec.
- 6" Head - 6.95 Cu.Ft. per Sec.
- 9" Head - 8.51 Cu.Ft. per Sec.
- 12" Head - 9.83 Cu.Ft. per Sec.

### Notes:

1. Material: Gray Cast Iron, ASTM A48-83, Class 30B;
2. Loading HS25 Highway Loading;
3. Grate shall have 96 - 1 3/4" square hole affording a total open area of 294 Sq. In. (2.04 Sq.Ft.);
4. Logo cast on surface of grate, 180° apart;
5. Castings supplied without surface coating.



**CAMPBELL FOUNDRY COMPANY**

Harrison, N.J. 07029

Phone: 973-483-5480 FAX: 973-483-1843

SCALE:

APPROVED BY:

DRAWN BY: DL

DATE: 02/22/10

REV.:

Heavy Duty Inlet Frame and Logo Grate

Pattern Number: 2816