

### **GENERAL INFORMATION**

Zurn solids interceptors are specifically designed to capture and retain solid particles for a variety of different drain line applications. Units are available in Dura-Coated cast iron, bronze, Acid Resistant Coated steel and stainless steel, along with a multitude of screens designed for each application. If you require a solids interceptor not listed, phone (814-455-0921) or fax (814-871-6141) your requirements to the Zurn Engineering Department for assistance. Special screens and sizes are available to meet almost any need.

### **APPLICATION INDEX**

Product selection should be made with a specific application and the type of construction in mind. The varied types and sizes of Zurn interceptors, along with their options, offer a selection for all applications.

| , Z1182, Z1183, Z1183-DF |
|--------------------------|
| i, Z1176, Z1180, Z1184   |
| ), Z1181                 |
| )                        |
| , Z1183                  |
| , Z1182, Z1183, Z1183-DF |
| , Z1182, Z1183, Z1183-DF |
|                          |

### SIZING

All Zurn solids interceptors are designed for gravity flow where minimal head is expected. Zurn solids interceptors are designed to accommodate the flow rate of their inlet and outlet pipe size, provided they are maintained and kept clean.

Zurn solids interceptors should be sized by both expected flow rate and holding capacity. Sizing for the Z1181 solids interceptor should be sized by the number and size of the sinks being served as is the case with the Z1170 grease interceptor.

#### **Selection Chart**

| Fixture                         |                           |                               | Recommended Size<br>Solid Interceptor |                                  |
|---------------------------------|---------------------------|-------------------------------|---------------------------------------|----------------------------------|
| Compartment<br>Size<br>(Inches) | Number of<br>Compartments | Drainage<br>Load<br>(Gallons) | One-minute<br>Drainage<br>Period      | Two-minute<br>Drainage<br>Period |
| 18 x 12 x 6                     | 1                         | 4.2                           | 7                                     | 4                                |
| 16 x 14 x 8                     | 1                         | 5.8                           | 7                                     | 4                                |
| 20 x 18 x 8                     | 1                         | 9.4                           | 10                                    | 7                                |
| 18 x 16 x 8                     | 2                         | 15.0                          | 15                                    | 10                               |
| 20 x 18 x 8                     | 2                         | 18.7                          | 20                                    | 10                               |
| 30 x 20 x 8                     | 1                         | 15.5                          | 20                                    | 10                               |
| 24 x 20 x 12                    | 1                         | 18.7                          | 20                                    | 10                               |
| 22 x 20 x 8                     | 2                         | 23.0                          | 25                                    | 15                               |
| 22 x 20 x 12                    | 2                         | 34.0                          | 35                                    | 20                               |
| 24 x 24 x 12                    | 2                         | 44.9                          | 50                                    | 25                               |



## **PICTORIAL INDEX – SOLIDS INTERCEPTORS**





## **OPTIONS and VARIATIONS**

All solids interceptor options and variations are specified as a PREFIX and/or SUFFIX letter or number added to the series designation. Below are the available options.

#### PREFIXES

- Z Standard Assembly (See Engineering Specification)
- ZA Acid Resistant Coated Fabricated Steel or Dura-Coated Cast Iron
- ZAB All Satin Finish
- ZS All Type 304 Fabricated Stainless Steel

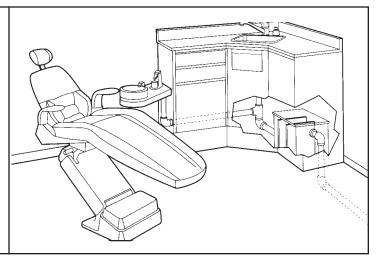
#### SUFFIXES

- -AR Acid Resistant Coated Fabricated Steel Finish
- -CP Chrome Plated Finish
- -CS Custom Screen(s) (Specify material and perforation size required POA.)
- -RS Replacement Perforated Screen(s) for Bucket
- -SS Stainless Steel Perforated Screen(s) for Bucket
- -XB Extra Solids Interceptor Basket
- -XF Extra Supply of 30 Solids Filter Bags
- -Y Replacement Bucket Assembly with Perforated Screen(s)
- -YR Replacement Stainless Steel Basket

## **TYPICAL INSTALLATIONS**

#### Z1180 and Z1181 SOLIDS INTERCEPTORS

These interceptors are engineered to recover all solids, from precious metal particles to plaster, clay, or similar materials. Although designed for specific applications, they embody the same high degree of engineering know-how to safeguard health and enhance sanitation through efficient prevention of clogged waste lines.



## Z1180 SOLIDS INTERCEPTOR – OPERATION and MAINTENANCE INSTRUCTIONS

### SIZING

There are no sizing requirements for this interceptor except to specify the inlet and outlet size. All units are made with a standard 2" [51 mm] pipe size inlet and outlet, reduced to 1-1/2" [38 mm] with a bushing when specified, and are capable of handling drainage volumes standard to their respective pipe size.

## DESIGN

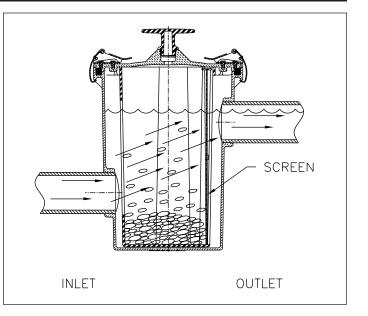
The Zurn Z1180 Solids Interceptor is designed to recover all types of solids from precious metal particles to plaster, clay, or similar materials. This is accomplished through the principal of gravity separation. Particles of various sizes and weights are trapped in the bucket.

## OPERATION

The wastewater flows from the inlet piping into the removable bucket, passing through the screen, into the main body chamber, then exits the interceptor to the sanitary drain system.

## MAINTENANCE

Cleaning should be done on a regular basis, either before or after the bucket becomes clogged. First unlatch and remove the cover/bucket assembly, twist and lift the bucket to remove from cover, take out the screen and clean out all debris. Replace the screen in the bucket, next place the bucket back on the cover, twist to reattach. Make certain cover gasket is intact and clean. Apply a light coating of oil on the cover gasket, which helps prevent the cover gasket from adhering to the cover and aids in maintaining a complete seal. The cover/ bucket assembly should then be placed back in the unit, **making sure the screen in the bucket is on the outlet side as shown,** and relatch to secure cover. Efficiency of operation is directly related to the level of maintenance.



**Note:** Damage from high-temperature water will not occur to the acid resistant composite material of this unit when installed downstream from a dishwasher. There is a chance, however, that the thin-walled PVC screen in the bucket may deform. It is recommended that a stainless steel perforated screen be used in applications that involve high-temperature water.

## Z1181 SOLIDS INTERCEPTOR – OPERATION and MAINTENANCE INSTRUCTIONS

## SIZING

There are no sizing requirements for this interceptor except to specify the inlet and outlet size. All units are made with a standard 2" [51 mm] pipe size inlet and outlet, reduced to 1-1/2" [38 mm] with a bushing when specified and are capable of handling drainage volumes standard to their respective pipe size.

## DESIGN

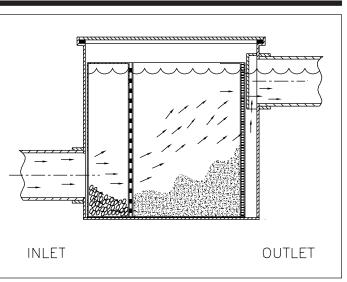
The Zurn Z1181 Solids Interceptor is designed to recover all types of solids from precious metal particles to plaster, clay, or similar materials. Larger and heavier materials are retained in the first compartment of the removable bucket, while smaller and lighter materials are trapped in the second compartment.

## OPERATION

The wastewater flows from the inlet piping into the removable bucket, passing through the primary and secondary screens, into the main body chamber, then exits the interceptor to the sanitary drain system.

## MAINTENANCE

Cleaning should be done on a regular basis, either before or after the bucket becomes clogged. Remove the cover and bucket, take out the primary and secondary screens, and clean out all debris. Replace the screens in the bucket and put the bucket into the interceptor. Make certain cover gasket is intact and clean. Apply a light coating of oil on



the cover gasket, which helps prevent the cover gasket from adhering to the cover and aids in maintaining a complete seal. The cover should then be placed back on the unit and secured. Efficiency of operation is directly related to the level of maintenance.



## **Z1182 SOLIDS INTERCEPTOR – OPERATION and MAINTENANCE INSTRUCTIONS**

#### SIZING

The Z1182 side access stainless steel solids interceptor is designed for suspended or under sink installations where there are height restrictions for a top removal solids interceptor. This unit is furnished with a 2" [51 mm] no-hub high inlet and low outlet on each side for left-hand or right-hand installation. (Note: Cap the side not used.) The interceptor is capable of handling a maximum flow rate of 35 GPM.

#### DESIGN

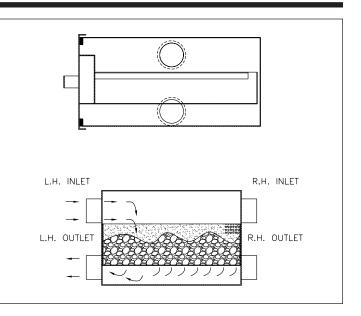
The Zurn Z1182 Solids Interceptor is designed to recover food waste from sinks, garbage grinders, and dishwashers. This is accomplished through the principal of screening. The food wastes are retained in the inlet side of the unit by a perforated removable drawer.

#### OPERATION

The wastewater flows from the inlet piping into the interceptor, passing through the perforated drawer attached to the gasketed latching cover, then exits the interceptor to the sanitary drain system. The waste material is trapped in the perforated drawer and not allowed to pass through to the outlet piping of the drain system.

#### MAINTENANCE

Cleaning should be done on a regular basis, either before or after the perforated drawer becomes clogged. Remove the drawer and clean out all debris. Hose off the drawer screen. Make certain the sealing gasket is intact and clean. Apply a light coating of oil on the gasket,



which helps prevent the gasket from adhering to the drawer and aids in maintaining a complete seal. The perforated drawer should then be placed back in the unit and secured. Efficiency of operation is directly related to the level of maintenance.

## Z1183 SOLIDS INTERCEPTOR – OPERATION and MAINTENANCE INSTRUCTIONS

#### SIZING

The sizing of this interceptor relates to the size of the Z1170 grease interceptor it is being used with. All units are made with a standard no-hub pipe size inlet and outlet, and are capable of handling drainage volumes standard to their respective pipe size.

#### DESIGN

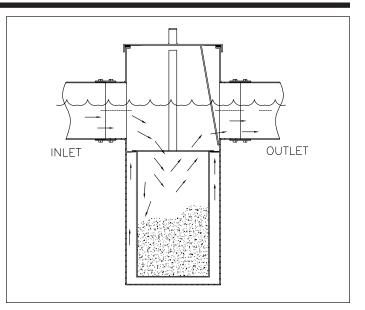
The Zurn Z1183 Solids Interceptor is designed to recover food waste from sinks, garbage grinders, and dishwashers. This is accomplished through the principal of gravity separation. The food wastes are retained in the perforated removable basket.

#### OPERATION

The wastewater flows from the inlet piping into the removable perforated basket, passing through the basket and the outlet cover screen attached to the cover, into the main body chamber, then exits the interceptor to the sanitary drain system.

#### MAINTENANCE

Cleaning should be done on a regular basis, either before or after the basket or outlet screen becomes clogged. Remove the cover and basket and clean out all debris. Hose off the outlet cover screen. Replace the basket into the interceptor. Make certain cover gasket is intact and clean. Apply a light coating of oil on the cover gasket, which helps prevent the cover gasket from adhering to the body and aids in



maintaining a complete seal. The cover should then be placed back on the unit and secured. Efficiency of operation is directly related to the level of maintenance.



## Z1183-DF SOLIDS INTERCEPTOR with DISPOSABLE FILTER BAGS – OPERATION and MAINTENANCE INSTRUCTIONS

#### SIZING

The sizing of this interceptor relates to the size of the Z1170 grease interceptor it is being used with. All units are made with a standard no-hub pipe size inlet and outlet, and are capable of handling drainage volumes standard to their respective pipe size.

#### DESIGN

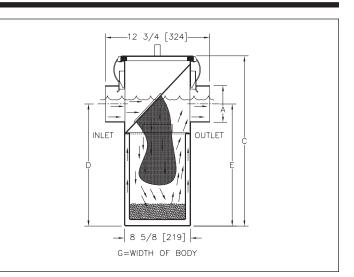
The Zurn Z1183-DF Solids Interceptor is designed to recover food waste from sinks, garbage grinders, and dishwashers. This is accomplished through filtration. The food wastes are retained in the disposable filter bags while allowing wastewater to pass through to the outlet drainage line.

#### OPERATION

The wastewater flows from the inlet piping into the main body chamber. It is then redirected through the solids filter bags by the retainer plate. Solid material is captured in the filter bag allowing the wastewater to pass through. Any solids that pass through the filter bag will settle into the removable sediment basket. The filtered wastewater then exits the interceptor to the sanitary drain system.

#### MAINTENANCE

Cleaning should be done on a regular basis, before the sediment basket or filter bags become clogged. Remove the cover, lift out the filter bags from the retainer plate and properly dispose of them. Remove the retainer plate and sediment basket and clean out all



debris, hosing off the interior as necessary. Replace the basket and retainer plate into the interceptor. Insert clean filter bags into the retainer plate. Make certain cover gasket is intact and clean. Apply a light coating of oil on the cover gasket, which helps prevent the cover gasket from adhering to the body and aids in maintaining a complete seal. The cover should then be placed back on the unit and secured. Efficiency of operation is directly related to the level of maintenance.

## Z1184 SOLIDS INTERCEPTOR – OPERATION and MAINTENANCE INSTRUCTIONS

#### SIZING

There are no sizing requirements for this interceptor except to specify the inlet and outlet size. All units are made with a standard 2" [51 mm] pipe size inlet and outlet, reduced to 1-1/2" [38 mm] with a bushing when specified and are capable of handling drainage volumes standard to their respective pipe size.

#### DESIGN

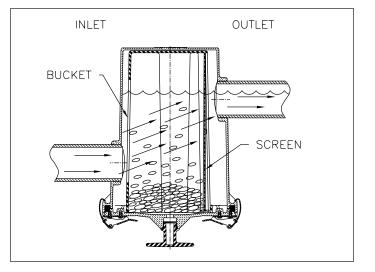
The Zurn Z1184 Solids Interceptor is designed to recover all types of solids from precious metal particles to plaster, clay, or similar materials. This is accomplished through the principal of gravity separation. Particles of various sizes and weights are trapped in the bucket.

#### **OPERATION**

The wastewater flows from the inlet piping into the removable bucket, passing through the screen, into the main body chamber, then exits the interceptor to the sanitary drain system.

#### MAINTENANCE

Cleaning should be done on a regular basis, either before or after the bucket becomes clogged. First, remove the handle in the center of the cover and drain out the water in the interceptor; replace handle. Then unlatch and remove the cover/bucket assembly, twist and lift the bucket to remove from cover, take out the screen and clean out all debris. Replace the screen in the bucket. Next place the bucket back on the cover and twist to reattach. Make certain the cover gasket is intact and clean. Apply a light coating of oil on the cover gasket, which helps prevent the cover gasket from adhering to the cover and aids in maintaining a complete seal. The cover/bucket assembly should then be placed back in the unit, **making sure the** 



screen in the bucket is on the outlet side as shown, and relatch to secure cover. Efficiency of operation is directly related to the level of maintenance.

**Note:** Damage from high-temperature water will not occur to the acid resistant composite material of this unit when installed downstream from a dishwasher. There is a chance, however, that the thin-walled PVC screen in the bucket may deform. It is recommended that a stainless steel perforated screen be used in applications that involve high-temperature water.

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### **CHEMICAL RESISTANCE CHART** Typical Powder Coatings

- Key: E No attack
  - F Some attack, but unseeable in some instances
  - N Rapidly attacked
  - H Hot, 180°F (82.2°C) or boiling point of solvent
- G Appreciably no attack
- P Attacked, not recommended for use
- C Cold, 70°F (21.1°C)
- \* And nitrate and sulfate

| Ероху                 |   |   | Ероху               |   |   | Ероху               |   |   |                          | Ероху |   |
|-----------------------|---|---|---------------------|---|---|---------------------|---|---|--------------------------|-------|---|
| Chemical              | C | Н | Chemical            | C | Н | Chemical            |   | Н | Chemical                 | C     | Н |
| Acids:                |   |   | Acids (Continued):  |   |   | Acid Salts:         |   |   | Solvents:                |       |   |
| Acetic, 10%           | F | Ν | Maleic, 25%         | E | Е | Aluminum Sulfate    | E | Е | Alcohols                 | Е     | Е |
| Acetic, Glacial       | N | Ν | Nitric, 5%          | Е | G | Ammonium Chloride*  | Е | Е | Aliphatic Hydrocarbons   | Е     | Е |
| Benzene Sulfonic, 10% | E | E | Nitric, 30%         | G | P | Copper Chloride*    | Е | Е | Aromatic Hydrocarbons    | Е     | Е |
| Benzoic               | E | E | Oleic               | E | Е | Iron Chloride*      | E | Е | Chlorinated Hydrocarbons | F     | F |
| Boric                 | E | E | Oxalic              | Е | Е | Nickel Chloride*    | E | Е | Ketones                  | F     | F |
| Butyric, 100%         | Р | Ν | Phosphoric          | G | F | Zinc Chloride*      | E | Е | Ethers                   | F     | F |
| Chloracetic, 10%      | E | E | Picric              | G | F |                     |   |   | Esters                   | F     | F |
| Chromic, 5%           | F | Ν | Stearic             | E | Е | Alkaline Salts:     | _ | _ | Gasoline                 | Е     | Е |
| Citric, 10%           | E | Ν | Sulfuric, 50%       | G | F | Barium Sulfide      | E | E | Carbon Tetrachloride     | Е     | Е |
| Fatty Acids           | E | E | Sulfuric, 80%       | F | Ν | Sodium Bicarbonate  | Е | Е |                          |       |   |
| Fluosilicic           | N | Ν | Tannic              | E | Е | Sodium Sulfide      | E | Е | Organics:                |       |   |
| Formic, 90%           | E | F |                     |   |   | Trisodium Phosphate | E | Е | Aniline                  | G     | Р |
| Hydrobromic, 20%      | G | G | Alkalies:           |   |   | Noutral Calta       |   |   | Benzenc                  | E     | Е |
| Hydrochloric, 20%     | E | G | Ammonium Hydroxide  | E | G | Neutral Salts:      | Е | Е | Formaldehyde, 37%        | E     | G |
| Hydrocyanic           | Е | E | Calcium Hydroxide   | E | E | Calcium Chloride*   | E | - | Phenol, 5%               | G     | F |
| Hydrofluoric, 20%     | G | G | Potassium Hydroxide | E | Е | Magnesium Chloride* |   | E | Mineral Oils             | E     | Е |
| Hypochlorous, 5%      | F | Ν | Sodium Hydroxide    | E | Е | Potassium Chloride* | E | E | Vegetable Oils           | Е     | Е |
| Lactic, 5%            | F | Ν |                     |   |   | Sodium Chloride*    | E | E | Chlorobenzene            | G     | Р |

## Z1180 and Z1184 CHEMICAL RESISTANCE CHART For Composite Material in Light Acid Concentration Environment Only

#### Key: E – Excellent Corrosion Resistance G – Good F – Fair P – Poor

| Medium                        | Rating | Medium             | Rating | Medium               | Rating | Medium                  | Rating |
|-------------------------------|--------|--------------------|--------|----------------------|--------|-------------------------|--------|
| General Outdoor               | E      | Salts (Continued): |        | Gases (Wet):         |        | Oils, Fuels, and Other: |        |
| Marine Outdoor                | E      | Copper Sulfate     | E      | Ammonia              | E      | ASTM No. 1 Oil          | E      |
| General Industrial            | E      | Ferric             |        | Carbon Dioxide       | E      | ASTM No. 3 Oil          | Ē      |
| Water – Pure                  | E      | Chloride           | E      | Chlorine             | E      | Detergents              | Ē      |
| Water – Sea                   | E      | Sulfate            | E      | Hydrogen Sulfide     | E      | Gasoline                | Ē      |
| Acids:                        |        | Magnesium          |        | Nitrogen Dioxide     | G-E    | Grease                  | Ē      |
| Acetic                        | Е      | Chloride           | E      | Sulfur Dioxide       | E      | Jet Fuel                | Е      |
| Boric                         | Ē      | Sulfate            | E      | Carbon Disulfide     | E      | Hydraulic Fluid (Ester) | Е      |
| Chromic                       | Ē      | Mercuric Chloride  | E      |                      |        | Kerosene                | Е      |
| Citric                        | Ē      | Nickel             |        | Solvents:            | _      | Motor Oil               | E      |
| Fatty                         | Ē      | Chloride           | E      | Acetone              | E      |                         |        |
| Formic                        | Ē      | Sulfate            | E      | Benzene              | E      |                         |        |
| Hydrochloric                  | G      | Potassium          |        | Carbon Tetrachloride | E      |                         |        |
| Hydrofluoric                  | F-P    | Chloride           | E      | Ethyl Acetate        | E      |                         |        |
| Nitric                        | F      | Sulfate            | E      | Ethyl Alcohol        | E      |                         |        |
| Phosphoric                    | G      | Sodium             |        | Ethyl Ether          | E      |                         |        |
| Picric                        | G      | Bicarbonate        | Е      | Ethylene Dichloride  | E      |                         |        |
| Sulfuric                      | G      | Bisulfate          | E      | Ethylene Glycol      | E      |                         |        |
| Sulfunc                       | G      | Chloride           | Ē      | Freon                | E      |                         |        |
| Bases:                        |        | Hypochlorite       | Ē      | Methyl Alcohol       | E      |                         |        |
| Ammonium Hydroxide            | E      | Nitrate            | Ē      | Methyl Ethyl Ketone  | E      |                         |        |
| Potassium or Sodium Hydroxide | F-G    | Phosphate          | Ē      | Methylene Chloride   | E      |                         |        |
|                               |        | Silicate           | Ē      | Perchloroethylene    | E      |                         |        |
| Salts:                        | -      | Sulfate            | Ē      | Trichloroethylene    | E      |                         |        |
| Aluminum Sulfate              | E      | Thiosulfate        | Ē      | Toluene              | E      |                         |        |
| Ammonium                      | -      | Zinc               | -      | Xylene               | E      |                         |        |
| Chloride                      | E      | Chloride           | Е      |                      |        |                         |        |
| Nitrate                       | E      | Sulfate            | E      |                      |        |                         |        |
| Phosphate                     | E      | Calcium Chloride   | F      |                      |        |                         |        |
| Sulfate                       | E      | Sodium Carbonate   | E      |                      |        |                         |        |
| Borax                         | E      | Soulum Garbonale   | E      |                      |        |                         |        |

## **GREASE, HAIR, SOLIDS, and LINT INTERCEPTORS** -



## CHEMICAL RESISTANCE CHART Typical Corrosion Resistance of Stainless Steel to Various Media

CODE: a - Unaffected. b - Slightly attacked. c - Attacked. m - Complete details concerning the conditions of service must be evaluated.

| MEDIUM                     | TYPE<br>CF8<br>304 | NUMBERS<br>CF8M<br>316 | MEDIUM                           | TYPE<br>CF8<br>304 | NUMBERS<br>CF8M<br>316 | MEDIUM                       | TYPE<br>CF8<br>304 | NUMBERS<br>CF8M<br>316 |
|----------------------------|--------------------|------------------------|----------------------------------|--------------------|------------------------|------------------------------|--------------------|------------------------|
| Organic Substances:        |                    |                        | Salts:                           |                    |                        | Salts (Continued):           |                    |                        |
| Acetone                    | а                  | а                      | Aluminum chloride                | C                  | С                      | Silver cyanide               | а                  | а                      |
| Benzol                     |                    | a                      | Aluminum fluoride                |                    | b                      | Sodium bicarbonate           |                    | a                      |
| Carbon tetrachloride       |                    | C                      | Aluminum sulfate                 |                    | a                      | Sodium bicarbonate           |                    | a                      |
| Ethyl alcohol              |                    | a                      | Ammonium alum                    |                    | a                      | Sodium bromide               |                    | a                      |
| Ethyl chloride             |                    | a                      | Ammonium bromide                 |                    | a                      | Sodium chloride (2% aerated) |                    | a<br>a                 |
| 5                          |                    |                        | Ammonium chloride                |                    |                        | Sodium citrate               |                    |                        |
| Ethyl ether                |                    | а                      |                                  |                    | а                      |                              |                    | а                      |
| Food pastes                |                    | а                      | Ammonium hydroxide               |                    | а                      | Sodium fluoride              |                    | _                      |
| Fruit juices               |                    | а                      | Ammonium nitrate                 |                    | а                      | Sodium hydroxide             |                    | а                      |
| Ink                        |                    | m                      | Ammonium sulfate                 |                    | а                      | Sodium nitrate               |                    | а                      |
| Mustard                    |                    | а                      | Barium chloride                  |                    | а                      | Sodium peroxide (212°F)      |                    | а                      |
| Paregoric cmpd             |                    | а                      | Bleaching powder                 |                    | а                      | Stannic chloride             |                    | С                      |
| Quinine bisulfate          |                    | а                      | Calcium chloride                 |                    | а                      | Stannous chloride            |                    | -                      |
| Quinine sulfate            |                    | а                      | Calcium hydroxide or oxide       | а                  | а                      | Sulfur (molten) 500°F        |                    | а                      |
| Vinegar at 70°F            | m                  | m                      | Copper chloride                  | С                  | С                      | Sulfur chloride              | b                  | -                      |
|                            |                    |                        | Copper cyanide                   | а                  | а                      | Titanium tetrachloride       | а                  | а                      |
| Acids:                     |                    |                        | Copper nitrate                   | а                  | а                      | Zinc chloride                | С                  | b                      |
| Acetic                     |                    | m                      | Copper sulfate (plus 2%          |                    |                        | Zinc sulfate                 | а                  | а                      |
| Benzoic                    |                    | а                      | sulfuric acid)                   | а                  | а                      |                              |                    |                        |
| Boric                      | а                  | а                      | Copper sulfate                   |                    | а                      | Miscellaneous:               |                    |                        |
| Carbolic                   | а                  | а                      | Creosote                         |                    | a                      | Ammonia                      | а                  | а                      |
| Chromic (50%)              | С                  | С                      | Creosote (plus 3% salt)          | c                  | c                      | Baking oven gases            | а                  | а                      |
| Citric                     | а                  | а                      | Hydrogen peroxide                |                    | a                      | Bromine                      | С                  | С                      |
| Formic                     | С                  | m                      | Magnesium carbonate              |                    | a                      | Carbonated beverages         | а                  | а                      |
| Hydrobromic                | С                  | С                      | Magnesium chloride               |                    | m                      | Chlorine (wet and dry)       | С                  | С                      |
| Hydrocyanic                | а                  | а                      | Magnesium sulfate                |                    | a                      | Glycerin                     | а                  | а                      |
| Hydrochloric               |                    | С                      | Magnesium hydroxide              |                    |                        | Hydrogen sulfide (400°F)     |                    | а                      |
| Hydrofluoric               |                    | C                      |                                  |                    | а                      | lodine                       |                    | а                      |
| Lactic                     |                    | a                      | Magnesium nitrate                |                    | а                      | Lead (molten)                |                    | C                      |
| Nitric (conc.)             |                    | a                      | Phosphorous trichloride          |                    | а                      | Lysol                        |                    | m                      |
| Nitric (conc. plus 2% HCl) |                    | u<br>_                 | Potassium bromide                |                    | а                      | Mercury                      |                    | a                      |
| Nitrous (conc.)            |                    | а                      | Potassium carbonate              |                    | а                      | Sauerkraut brine             |                    | a                      |
| Oxalic                     |                    | m                      | Potassium chloride               |                    | m                      | Sea water                    |                    | m                      |
|                            |                    |                        | Potassium chlorate               |                    | а                      | Sulfur dioxide               |                    | b                      |
| Phosphoric                 |                    | а                      | Potassium cyanide                |                    | а                      |                              |                    |                        |
| Phosphoric (10%)           |                    | а                      | Potassium dichromate             |                    | а                      | Vegetable juices             |                    | а                      |
| Picric (conc.)             |                    | а                      | Potassium ferricyanide           | а                  | а                      | X-ray developing solution    |                    | а                      |
| Pyrogallic (conc.)         |                    | а                      | Potassium ferricyanide (boiling) | а                  | а                      | Zinc (molten)                | С                  | С                      |
| Pyroligneus (conc.)        |                    | а                      | Potassium hypochlorite           | С                  | m                      |                              |                    |                        |
| Stearic (conc.)            |                    | а                      | Potassium iodide                 | а                  | а                      |                              |                    |                        |
| Succinic (molten)          |                    | -                      | Potassium iodide                 |                    | а                      |                              |                    |                        |
| Sulfuric (conc.)           |                    | а                      | (sat. plus 0.1% sodium carbonate |                    |                        |                              |                    |                        |
| Sulfuric (dil.)            | m                  | m                      | evaporated to dryness)           |                    |                        |                              |                    |                        |
| Sulfuric 15% (plus 2%      |                    |                        | Potassium hydrate                | а                  | а                      |                              |                    |                        |
| potassium dichromate)      | а                  | а                      | Potassium nitrate                |                    | a                      |                              |                    |                        |
| Sulfurous (conc.)          | b                  | а                      | Potassium oxalate                |                    | a                      |                              |                    |                        |
| Tannic (conc.)             |                    | а                      | Potassium permanganate           |                    | a                      |                              |                    |                        |
| Tartaric (conc.)           |                    | a                      |                                  |                    |                        |                              |                    |                        |
| Trichloracetic acid (10%)  |                    | a                      | Potassium sulfate                |                    | а                      |                              |                    |                        |
|                            |                    | a                      | Silver nitrate                   | а                  | а                      |                              |                    |                        |
|                            | u                  | u                      |                                  |                    |                        |                              |                    |                        |

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**GREASE, HAIR, SOLIDS, and LINT INTERCEPTORS** 



## **MATERIALS and FINISHES**

**Zurn Cast Iron** conforms to ASTM Specification for Gray Iron Castings A 48-83, Class 25. It is produced utilizing the latest equipment and newest developed foundry techniques. Zurn cast iron castings are characterized by a high degree of strength, corrosion-resistance, workmanship, and finish.

**Zurn Duresist** is a ductile iron complying with ASTM Specification A 536-84, Grade 60-45-10. Its physical properties make it ideal for grates and drain components that are subjected to severe and heavy duty service. Its chemical characteristics make possible a degree of corrosion-resistance far superior to that of cast iron. Zurn Duresist exhibits remarkable stress qualities, possessing a yield strength in the same range as that of cast carbon steel, while its ability to absorb the shock loading of traffic areas is unequalled, making its use ideal for all areas where extra heavy duty service is a requirement – whether indoors or outdoors – in chemical and metal processing plants or other industrial applications.

**"Zurn Dura Coat"** is a specially formulated paint designed to resist cracking and chipping. Dura Coat is a latex based coating developed to be used with cast iron substrate.

**Zurn Galvanized Cast Iron** is a process of applying heavy zinc coating to a thoroughly cleaned iron casting. This coating contains 95% zinc. Zurn galvanizing can be supplied on all cast iron parts. It increases longevity and is recommended wherever the discoloration caused by oxidation of cast iron is objectionable. Galvanize should be used in coastal and industrial areas where corrosive atmosphere may be encountered. Zurn galvanizing meets and exceeds Federal Specification MIL-P-21035, MIL-P-26915A, MIL-P-26433, and MIL-C-10578 (Type II). It also meets ASTM A239-89 and is listed by Underwriters Laboratories, Inc. (U.L.)

**Cadmium Plated Cast Iron** is a process of applying a heavy cadmium coating to a thoroughly cleaned iron casting. This coating contains 95% cadmium in a cold applied process. Cadmium plating can be supplied on all cast iron parts. It increases longevity and is recommended wherever the discoloration caused by oxidation of cast iron is objectionable.

| Metal                  | Cast Iron | Ductile Iron |
|------------------------|-----------|--------------|
| Specification          | Class 25  | 60-45-10     |
| Tensile Strength (PSI) | 25/30,000 | 60/80,000    |
| Yield Strength (PSI)   | NIL       | 45/60,000    |
| Elongation             | NIL       | 10% to 25%   |
| Modules of Elasticity  | 16 x 10   | 24 x 10      |

#### **Properties of Basic Ductile Versus Cast Iron**

**Zurn Bronze** is a semi-red brass conforming to ASTM Specification for Copper Alloy Sand Casting B 584-90, Copper Alloy No. 844. The exposed surface is normally supplied possessing a satin sheen texture which allows it to blend unobtrusively with surrounding finishes. When the application requires, Zurn Bronze can be polished to a high gloss.

**Zurn Nickel Bronze** is a unique material that is ideally suited to traffic-bearing grates and strainers in finished floor areas. It affords the combined advantage of greater strength, better appearance, and longer service life at the same price as chrome plated brass. Superior ductility and shock resistance are the result of a copper nickel alloy (Copper Alloy 997) having a wearing surface similar in appearance to satin chrome plate; however, because it does not have a plated surface it cannot chip, peel, crack, or wear off. It is highly resistant to corrosion; however, the process of oxidation will naturally occur over time with most metals. Methods have been developed to prevent, preserve, and restore metals affected by oxidation.

**Chrome Plated Bronze** is ideal for installation in walls, gutters, and other areas where a bright decorative finish is desired, and is not subject to the abrasive action of foot and other traffic. It is not recommended for installations where the abrasion will eventually wear through and cause peeling. It should always be specified for swimming pool fittings due to its high resistance to the halogens (chlorine, etc.), encountered in swimming pool sanitation.

**Aluminum** supplied is casting grade 319. This is an alloy containing both silicon and copper. It is a solid cast metal in a pleasing light gray color. The light weight, coupled with its exceptional strength and corrosion resistance, makes it ideal for drain components such as sediment buckets and strainers. When used with acid-resisting porcelain enamel coated drains, the possibility of chipping is minimized.

**Zurn Stainless Steel** castings are normally produced in Type CF8 (304) which is an 18-8 Austenitic Stainless possessing excellent corrosion resistant qualities. For some applications where conditions demand, Type CF8M (316) stainless steel can be supplied. Items formed from stainless steel sheet and other stainless steel products are regularly furnished in Type 304 with 316 as an optional material.

**A.R.C.** Acid Resisting Epoxy Coating is a baked-on powder coating, which produces a smooth, hard, high gloss finish. This epoxy based coating offers high impact resistance and excellent life expectancy in all drainage applications. Zurn A.R.C. coating conforms to the requirements of F.D.A. (Food and Drug Administration) Regulation 21-CFR5 117.1360.

**A.R.E.** Acid Resisting Porcelain Enamel is a substantially vitreous or glassy inorganic coating bonded to metal by fusion at a high temperature above 800°F. This coating offers excellent acid, abrasion, and wear resistance. The coating is extremely hard and is the ultimate for sanitation in drainage applications. Zurn A.R.E. coating conforms to the requirements of F.D.A. (Food and Drug Administration) Regulation 21-CFR5 117.1360.