



Indirect Waste Receptors (Floor Sinks)

Indirect waste pipe is defined as a pipe that does not connect directly to the waste system but conveys liquid waste by discharging into a plumbing fixture (indirect waste receptor, floor sink, or similar code approved fixture) which is directly connected to the waste system. This installation provides an air gap which prevents contamination of food handling and other equipment required by code to be indirectly connected. Most code authorities require the receptor to have smooth, easy to clean corrosion-resistant interior surfaces. Regular floor drains do not conform to these requirements because they have rough interiors with pockets and crevices which can harbor dirt and bacteria. These unsanitary conditions can spread disease, create unpleasant odors, and endanger human lives.

Wade floor sinks used as sanitary indirect waste receptors are required by modern plumbing codes in buildings where food is handled or processed such as restaurants, cafeterias, food markets and food processing plants. Floor Sinks used as sanitary floor and area drains are essential in locations such as hospitals, nursing and convalescent homes, clinical rooms and laboratories; also food processing plants such as dairies, creameries and breweries. These vital areas are required to be absolutely clean because their function is connected with the health and well-being of people. When sanitation, durability and longevity are considered, floor sinks are the most cost effective drains for most applications.

Wade Floor Sinks are constructed in two basic types:

1) *14 Gauge type 304 stainless steel: body, internal strainers, buckets and tops.*

Stainless steel floor sinks are seamless deep drawn and fabricated from 14 gauge type 304 stainless steel. Type 304 is one of the most corrosion-resistant of the widely used stainless steels. For greater corrosion resistance to certain chemicals, type 316 SS is offered as an optional material. In selecting the proper stainless steel for your particular application, refer to the chemical resistance guide.

2) *Heavy cast iron body with acid resistant coated (A.R.E.) porcelain interior, plastic internal strainers, aluminum sediment buckets and nickel bronze or A. R. E. tops.*

Sediment Buckets for A.R.E. floor sinks are furnished in light weight corrosion resistant aluminum. A heavy cast iron bucket could chip or damage the coating.

Stainless Steel floor sinks are furnished with S/S strainers and buckets. Since there is no coating to chip or damage, this potential problem is eliminated.

SS Tops or NB Rims and Grates are available for traffic areas and indirect waste applications. Both have excellent corrosion resistant qualities and are extremely serviceable where food waste and food acids are encountered. Neither will discolor like brass and both offer a "lasting" nickel appearance. The polishing of a terrazzo floor and the "scuffing" action of foot traffic passing over a SS or NB top will actually add to its appearance. A.R.E. floor sinks are available with cast iron grates and tops for non-traffic areas.

The body size and depth are determined by the anticipated use. Where large flow rates are required, bodies with larger capacities should be used. Where floor sinks are used for an indirect waste application, it is important to select a body with sufficient depth to prevent splashing. The need for a large capacity sediment bucket will necessitate the selection of a deep body. Round bodies are more easily cleaned than square bodies; however, all Wade square or rectangular bodies are designed with large radius corners to facilitate cleaning.



BODY WITH ANCHORING OR SEEPAGE CONTROL FLANGE

The flange rigidly anchors the body in the concrete slab. The body is provided with holes to control the seepage which occurs due to normal separation between the concrete and the floor sink body. Waterproofing membranes are used in many floors on grade. They should always be used in floors located above grade. When a membrane is used, Wade flange and optional flashing clamp (Fig. 1) must be specified. To indicate, add suffix (-26) to the selected catalog number.

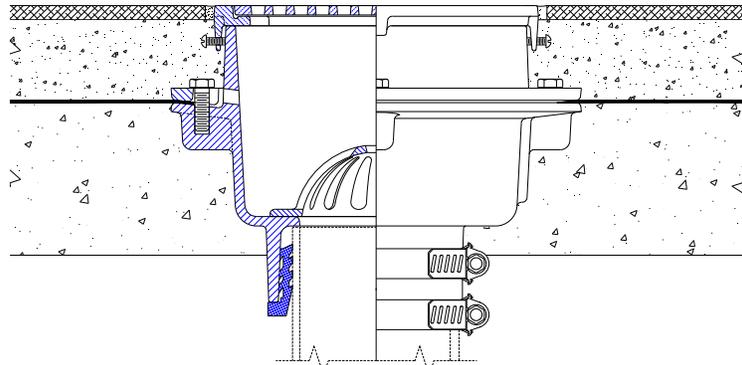


FIG. 1

TRAP PRIMER CONNECTION: To indicate a trap primer connection on a Wade stainless steel body, add Suffix -6 to the catalog number selected. Connection is located on vertical centerline 2" above bottom of drain. These connections are not recommended for A.R.E. floor sinks because the exposed pipe threads rust causing an objectionable discoloration on the A.R.E. surface.

Dome and Flat Bottom Strainers: Dome Type (Fig. 2) is preferred because their hemispherical design greatly reduces splashing and the large free area prevents clogging, and assures maximum flow. **Flat Type** are recommended only when a bottom strainer is required for installation in A.R.C. models beneath aluminum buckets where there is insufficient clearance to utilize the dome type. This optional bottom strainer protects the waste line when bucket is removed.

Perforated or Slotted Sediment Buckets: Both are suitable for normal installations to intercept and retain foreign materials and solids such as bones, pits, scrap, peelings and other commonly encountered debris. Perforated buckets (Fig. 2) are regularly furnished with stainless steel models, and slotted buckets (Fig. 3) with A.R.E. models. Perforated models have 1/4" round holes on 1/2" centers and will provide superior solids retention.

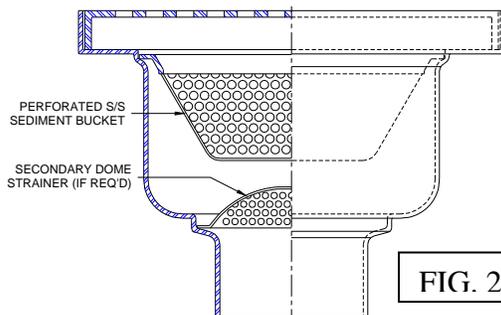


FIG. 2

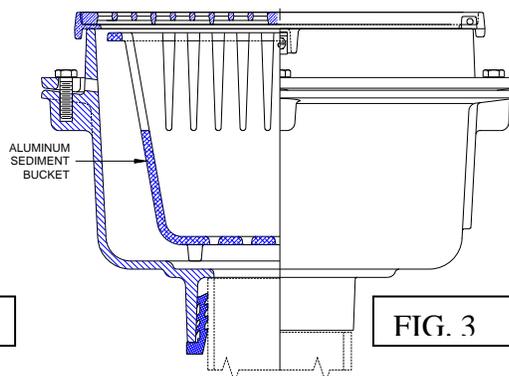


FIG. 3



Solid Bottom Ported Buckets: Are particularly suitable for special applications such as can washing, dairy, creamery and potato peelings drains. The bottom portion of the bucket is solid except for four 1/4" drain holes which drain the bucket at the end of a discharge cycle. A ported opening or area is provided at the top of each side of the bucket. Stainless steel buckets are perforated with 1/4" holes on 1/2" centers. Ported aluminum buckets have ports which are lined with 1/8" mesh stainless steel screen. With this type of bucket, even small solids in suspension will settle to the bottom of the bucket and be retained. This prevents any possibility of line stoppage.

TOP GRATES & COVERS FOR TRAFFIC AREAS

When drain tops are subject to traffic loading, they are considered floor and area drain applications. Wade floor sinks are typically furnished with light duty top grates. Top grates are available for medium, heavy and extra heavy duty service in accordance with ASME/ANSI recommendations. To indicate optional top grates or solid covers, simply add the desired suffix number.

When drains are to be installed in pedestrian traffic areas such as public walkways, tunnels, airports, bus and train terminals, public garages, shopping centers, malls, plazas, etc., particular care must be exercised in selecting a grate with ample free area for the anticipated drainage. Wade recommends that, for this service, drains with sediment buckets or bottom strainers be selected. Their use will prevent many waste line stoppages.

For applications where there is danger of someone stepping into the open top of the receptor, the Wade offering includes half grates (Fig. 4) and three-quarter grates (Fig. 5) and grates with center hole (Fig. 6). These allow the indirect waste to be discharged into the open portion, preventing splashing while protecting balance of the top area with grating.

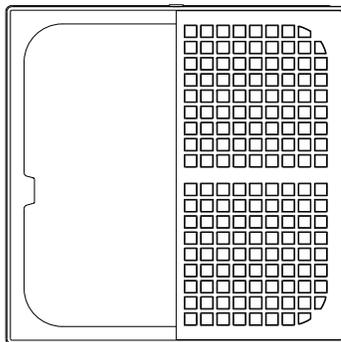


FIG. 4

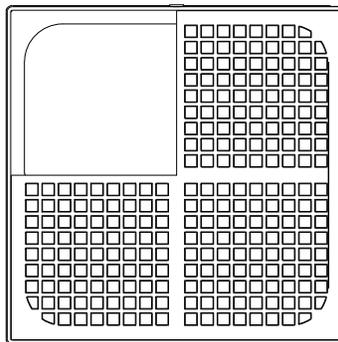


FIG. 5

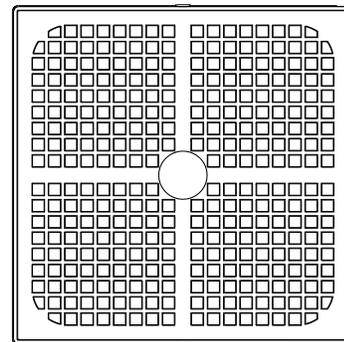


FIG. 6

Half grates (Fig. 4) are particularly suitable for installation beneath frozen food, fruit, and vegetable and meat cases. They are installed with the half grate exposed in the pedestrian space and the indirect waste half concealed beneath the case. Wade half grates are either secured or designed to be stable. The unique stabilizing leg for example, on A.R.E. half grates prevents the half grate from sliding out of place. Angle grates are a variation for modern restaurant designs that incorporate a curb which supports "off the floor" stools and service counter. Both installations



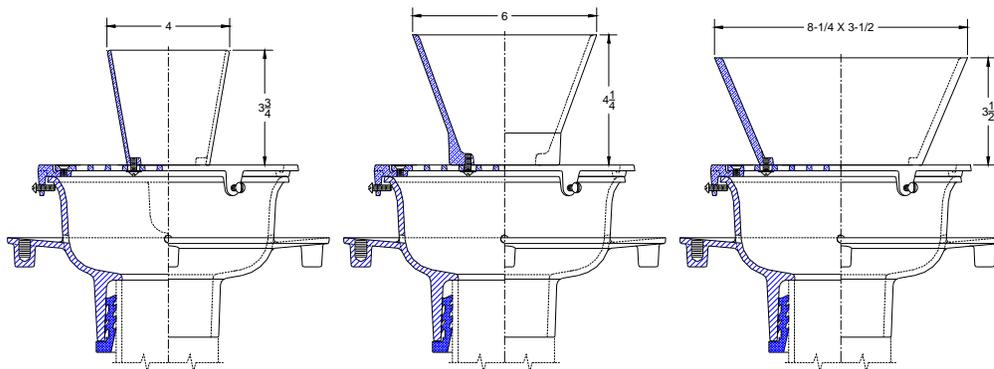
provide a sanitary floor drain accessible from the aisle for cleaning by removing the exposed grate with the indirect waste half concealed by the case or counter.

Partial solid covers are available in place of half grates, three-quarter grates and grates with center hole. They should always be used in lieu of grates when the indirect waste receptor will not be utilized as a floor drain, because they prevent the entry of foreign materials. Solid covers should also be used when the velocity of the indirect waste flow is sufficient to cause splashing up through a grate. The solid cover with center hole is particularly desirable when steam or hot water is being discharged with cabinetry installed overhead. This could result in a water vapor which can cause dry rot and mildew in the cabinetry. The solid cover condenses the vapor within the receptor, greatly reducing the potential for damage.

Hinged grates are another particularly useful variation. They permit easy access for cleaning the receptor and for emptying sediment buckets. Since the grate is permanently attached to the rim, any possibility of the grate not being replaced by maintenance personnel is eliminated.

Wade floor sink top shape is often influenced by the floor material surrounding the drain. **Round tops** are the easiest to orient in many floors since they will not conflict with most floor designs or require alignment with adjacent walls. **Square and Rectangular tops** are particularly useful when installed in floors finished with ceramic tile or vinyl floor coverings. **Rectangular tops** are desirable adjacent to walls because they give the maximum amount of drainage with the minimum amount of projection into the traffic area.

The use of funnels on top of floor sinks is a popular option. The Wade method of mounting the funnel allows it to be centered on the grate or placed in any other desired location. Round funnels are used for single pipe discharge. The 4" diameter is suitable for low velocity. The 6" diameter should be used where higher velocity is anticipated. Oval funnels are used for multiple pipe discharge. The 3 1/2" high models should always be used where higher velocity is anticipated.



The use of these funnels with Wade floor sinks prevents splashing of the discharged waste, allows the exposed portion of the grate to function as a floor drain and more importantly, retains the sanitary features of the floor sink.