SUBMITTAL

STANDARD: 4" plain end inlet/outlet | Highway traffic load rated, bolted, gas/water tight composite covers. (16,000 lbs.)

OPTIONS:
- 6P 6" Plain End SCH. 40 Inlet/Outlet (2,000 lbs.)
- C24-M Pedestrian rated cover
- C24-HP H2O Load Rated Pickable Cast Iron Covers

TeleGlide Risers
- SR24 (x1) 4-1/2" – 23°
- LR24 (x1) >23° – 37-3/4°
- SR24 (x2) >37-3/4" – 42-1/2°
- SR24 (x1) + LR24 (x1) >42-1/2° – 57-1/2°
- LR24 (x2) >57-1/2° – 72°

APPROVAL:

Signature: 
Date: 
Company: 
Specifying Engineer: 
Engineering Firm: 

MODEL NUMBER: FS-DUO-4-45-DEG
DESCRIPTION: Polyethylene Wastewater Flow Distributor

PART #: B070-018-01  DWG BY: B. Karrer  DATE: 4/10/2019  REV: 1  10/13/2017  ECO: 

9500 Woodend Road | Edwardsville, KS 66111 | Tel: 913-951-3300 | Fax: 913-951-3399 | www.schierproducts.com © Copyright 2019 Schier, All Rights Reserved
When Installing Interceptor Inside

If your dishwashing sink(s) discharges into a floor drain/sink (drain), you must regulate the flow into the drain to avoid an overflow of water onto the kitchen floor. This can be done by installing a valve or flow restriction cap on the sink piping that discharges into the drain. See drawing above for guidance. For detailed guidance on indirect connections, go to: http://webtools.schierproducts.com/Technical_Data/Indirect_Connections.pdf

Hydrostatic Slabs (or Pressure Slabs)

When installed under a hydrostatic slab (slab designed to withstand upward lift, usually caused by hydrostatic pressure) interceptor must be enclosed in a watertight concrete vault.

High Water Table Installations

Interceptors and risers are not designed to withstand water table height in excess of the top of the unit when buried (see figure). It is possible for this to occur; install the interceptor and risers in a water-tight concrete vault or backfill with concrete or flowable fill (wet concrete and flowable backfill should be poured in stages to avoid crushing the interceptor). At risk areas include but are not limited to tidal surge areas, floodplains and areas that receive storm water.

Models GB-50, GB-75, and GB-250 that are direct buried in high water table scenarios must be installed with model AK1 anchor kit.

High Temperature Kitchen Water

If water is entering the interceptor at excessive temperature (over 150°F), a drain water tempering valve (DTV) and approved backflow prevention assembly must be installed. Most state and local plumbing codes prohibit water above 150°F being discharged into the sanitary sewer. Water above 150°F will weaken or deform PVC Schedule 40 pipe, poly drainage fixtures like interceptors and erode the coating of cast iron (leading to eventual failure).

SPECIAL PRECAUTIONS

For All Schier Grease Interceptor Installations - Failure to follow this guidance voids your warranty

Support Inlet and Outlet Piping

For above grade installations ensure heavy inlet and outlet piping (such as cast iron or long runs) is properly supported or suspended during the entire installation process to prevent connection failure or damage to bulkhead fittings.
NOTES
1. 4” plain end SCH. 40 inlet/outlet
2. Unit weight - 55 lbs.
2. Unit supplied with built-in adapter for up to 3” of continuous adjustability. Additional riser(s) are also available for deeper burial depth.
4. Maximum operating temperature: 140º F continuous

ENGINEER SPECIFICATION GUIDE
Schier Flow Splitter™ wastewater flow distributor model FS-DUO-4-45 DEG shall be manufactured by Schier Products, Edwardsville, KS. Flow distributor shall be lifetime guaranteed and Made in USA of seamless, rotationally molded polyethylene.

MODEL NUMBER: FS-DUO-4-45-DEG
DESCRIPTION: Polyethylene Wastewater Flow Distributor

PART #: 8070-018-01  DWG BY: B. Karrer  DATE: 4/10/2019  REV: 1 10/13/2017  ECO:

SPECIFICATIONS
**WARNING! DO NOT AIR TEST UNIT OR TELEGLIDE RISER SYSTEM!** Doing so may result in property damage, personal injury or death.

**LEAK/SEAL TESTING**
Cap/plug all base unit plumbing connections and remove covers. **For base unit testing**, fill with water to just above the highest connection. **For riser system testing** (if required) fill with water to finished grade level. **CAUTION:** Risers must be supported before filling with water to prevent tipping. Inspect unit, connections and all gaskets and clamps (if applicable) for leaks. Check water level at specific time intervals per local code.

**GENERAL INSTALLATION INSTRUCTIONS**
Schier wastewater flow distributors are not to be installed in any other manner except as shown. Consult local codes for separate requirements and additional installation instructions.

1. Set unit on level solid surface as close as possible to grease interceptors being served. **Unit must be level to ensure proper function.**
2. Connect inlet and outlet drainage lines to unit. Mechanically couple pipes to unit. **Do not solvent weld.**
3. For units with cast iron cover, remove retainer clips prior to burial.

**BELOW GRADE INSTALLATION INSTRUCTIONS**

**EXCAVATION**
1. Surrounding soil must be undisturbed soil or well compacted engineering fill.
2. Width and length of excavation shall be a minimum of 12” greater than the tank on all sides and depth shall be 6” deeper than tank bottom.
3. Set the tank level on a 6” deep layer of well-packed crushed aggregate material. Ensure unit top is level with finished grade.
4. All pipe penetrations to be sleeved or have slip connections. Connect inlet and outlet drainage lines per General Installation Instructions.

**BACKFILL**
1. Preparation of sub grade per geotech recommendations.
2. Stabilize and compact sub grade to 95% proctor.
3. Fill unit with water before backfilling to stabilize unit and prevent float-out during backfilling. Secure covers and risers (if necessary) to the unit.
4. Backfill evenly around tank using crushed aggregate (approximately 3/4” size rock or sand, with no fines), or flowable fill. **Do not compact backfill around unit.**

**FINISHED CONCRETE SLAB**
Slab must extend 18” minimum outside the unit footprint.

- **Pedestrian traffic or greenspace areas:** 4” Thick reinforced concrete slab required.
- **Vehicular traffic areas:** Minimum 8” Thick concrete slab with rebar required. Thickness of concrete around cover to be determined by specifying engineer. If traffic loading is required the concrete slab dimensions shown are for guideline purposes only. Concrete to be 28 day compressive strength to 4,000 PSI. Use NO. 4 rebar (ø 1/2”) grade 60 steel per ASTM A615: connected with tie wire. Rebar to be 2-1/2” from edge of concrete and spaced in a 12” grid with 4” spacing around access openings.

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**MODEL NUMBER:** FS-DUO-4-45-DEG  **DESCRIPTION:** Polyethylene Wastewater Flow Distributor

**PART #:** 8070-018-01  **DATE:** 4/10/2019  **REV:** 1  **ECO:**
FIELD CUT RISER (24 SERIES)  
INSTALLATION GUIDELINES

Tools needed: 7/16” Nut driver tool/bit (included), marker (included), tape measure and drill with 1/2” chuck. Jigsaw, circular saw or reciprocating saw will be needed if risers need to be cut.

NOTE: To remove a component or adjust its position, the Upper Band Clamp needs to be loosened or removed using nut driver bit. The Lower Band Clamp is factory set and should not be removed. For proper fastening ensure clamps are tightened to 5 - 8 ft lbs. of torque (same as a rubber no-hub coupling) prior to installation.

Riser Assembly Instructions/Steps

1. Set unit so the pipe connections line up with job site piping and measure riser height needed from top of cover to finished grade. See Table 1 to select risers needed.

2. Remove covers from adapters. Remove adapters from main unit. On a level surface, pre-assemble the risers and adapters, adjusting the components upwards or downwards to achieve the riser height needed. Make sure to maintain minimum and maximum insertion depths as shown in Figure 2. If components are too long, make a circular line around the sidewall with marker and cut with a power saw. The lowest cut line on the riser assembly will be 6” beyond the riser height needed to allow for ideal insertion depth (See Figure 1). An alignment mark should be drawn 2” beyond the riser height needed which will align with the top of the base unit gasket. DO NOT cut the alignment mark. The Adapters and risers should sit level with each other. Tighten upper clamps to keep riser/adapter assembly from shifting. Make alignment marks on the sidewalls at the top of all riser gaskets to aid final assembly.

3. IMPORTANT: Before the next step, make sure the open top dip tubes are installed inside the main unit at the appropriate locations.

4. Take apart riser assembly and clean all sidewalls and insides of gaskets to remove dust/debris. Install components into the main units starting from the lowest riser and work your way up to finished grade. Ensure that riser will not interfere with diffuser, allow min. 1” clearance. Maintain minimum and maximum insertion depths for all components (see Figure 2). Tighten Upper Clamps to specified torque after correctly positioning components. Riser assembly may need to be supported during backfill.

5. If tilting of the adapter is required to be flush with grade, do so AFTER all clamps have been tightened with riser(s)/adapter in a vertical and level position. Tilting is done using gasket flexibility. Tilting before tightening clamps may ruin a perfect gasket seal. Schier recommends tilting only the adapter versus the entire riser assembly to make sure your riser height and proper tank access is maintained.

6. If riser height conditions change after completing above steps, there may be room for adjustment. As long as minimum and maximum insertion depths are maintained (see Figure 2), the adapters/risers can be adjusted/cut as many times as necessary. When riser system installation is complete, see Leak/Seal Testing procedure if required.

Table 1

<table>
<thead>
<tr>
<th>Riser Height Needed</th>
<th>Risers Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>0” - 3”</td>
<td>None (use adapter)</td>
</tr>
<tr>
<td>4-1/2” - 23”</td>
<td>LR24</td>
</tr>
<tr>
<td>&gt;23” - 37-3/4”</td>
<td>LR24</td>
</tr>
<tr>
<td>&gt;37-3/4” - 42-1/2”</td>
<td>SR24 (x2)</td>
</tr>
<tr>
<td>&gt;42-1/2” - 57-1/2”</td>
<td>SR24 + LR24</td>
</tr>
<tr>
<td>&gt;57-1/2” - 72”</td>
<td>LR24 (x2)</td>
</tr>
</tbody>
</table>

Figures:

- **Figure 1 - Riser Measurements**
- **Figure 2 - Insertion Depths**