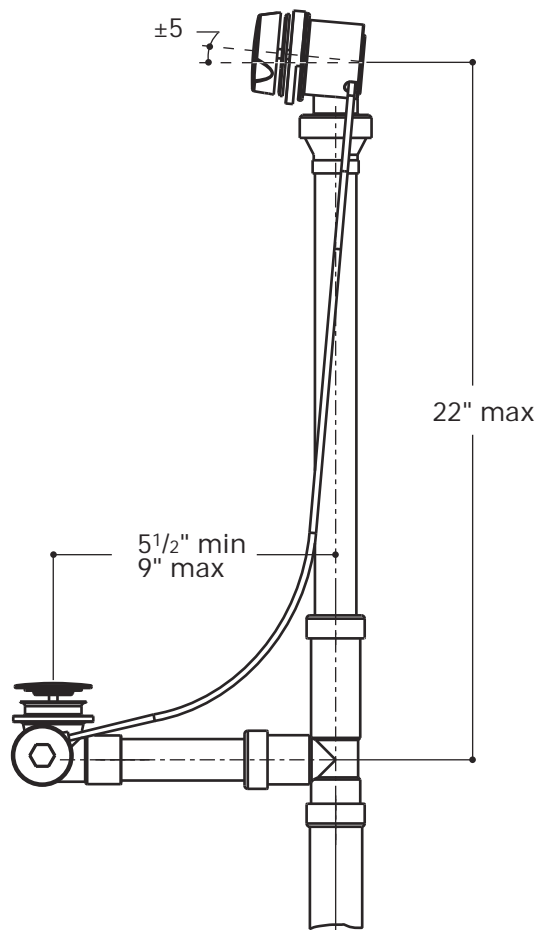


**FDWO51 (drain)****INSTALLATION GUIDELINES:****IMPORTANT:**

- ▶ To ensure this product is installed properly, you must read and follow these guidelines.
- ▶ The owner/user of this product must keep this information for future reference.
- ▶ This product must be installed by a professional contractor and conform to all applicable codes.
- ▶ Refer to the specification and assembly drawings attached. This product is sold partially assembled but shown fully disassembled for illustrative and service purposes only.
- ▶ Inspect this product to assure you have all parts required for proper installation.
- Provide an adequate access panel to allow for servicing the waste and overflow. Product's compression connections may be field sweat together for a permanent assembly.
- When possible, assemble this product to the tub before setting the tub.

**INITIAL ASSEMBLY:**

1. Note the maximum and minimum dimensions that this waste and overflow can accommodate as shown in the drawings. It is best to dry-fit this waste and overflow and then cut the waste and overflow pipes as needed before making final connections.
2. Remove the coupling nuts(4), compression rings(2) and seals(3) from the tee assembly(1).
3. Slide a coupling nut, compression ring, and seal onto the overflow pipe. Make sure they are in the correct order or they will not seal. Repeat this step on the waste pipe.
4. Fit the overflow(16,14) and shoe assembly(5) into the tee and then hand tighten the coupling nuts. Do NOT over tighten.

**OVERFLOW INSTALLATION:**

5. Loosen the swivel ball coupling nut(18) so the overflow head(16) can be tilted by hand.
6. Place the overflow seal(19) onto the overhead head.
7. Position the overflow body, tee, and shoe onto the tub and then slide the overflow plate(20) onto the overflow stem.
8. Adjust the angle of the overflow head to match the angle of the tub while making sure the overflow seal contacts the tub wall to form a proper seal.
9. Hand tighten the overflow ferrule(21) onto the overflow stem to secure the overflow to the tub.
10. Hand tighten the swivel ball coupling nut.

**WASTE INSTALLATION:**

11. Place the waste gasket(33) and then waste flange(6) into the tub waste opening. Make sure the waste gasket flange is positioned as shown so the thicker of the 2 waste gasket flanges contacts the shoe(5). Depending on the profile of the drain opening, you may apply clear silicone or putty into the waste opening of the tub or the optional 3 1/4" gasket included can be substituted.
12. Position the shoe(5) under the waste opening and then hand tighten the waste ferrule(7 or 8) into the shoe.

**FINAL INSTALLATION AND INSPECTION:**

13. Check that the tee and overflow pipe are vertical and that the waste pipe is horizontal. Adjust as required by tightening or loosening the coupling nuts.
14. Evenly tighten the waste ferrule(7 or 8) and overflow ferrule(21) to assure a proper seal. A longer ferrule is included to accommodate thicker tub waste openings.

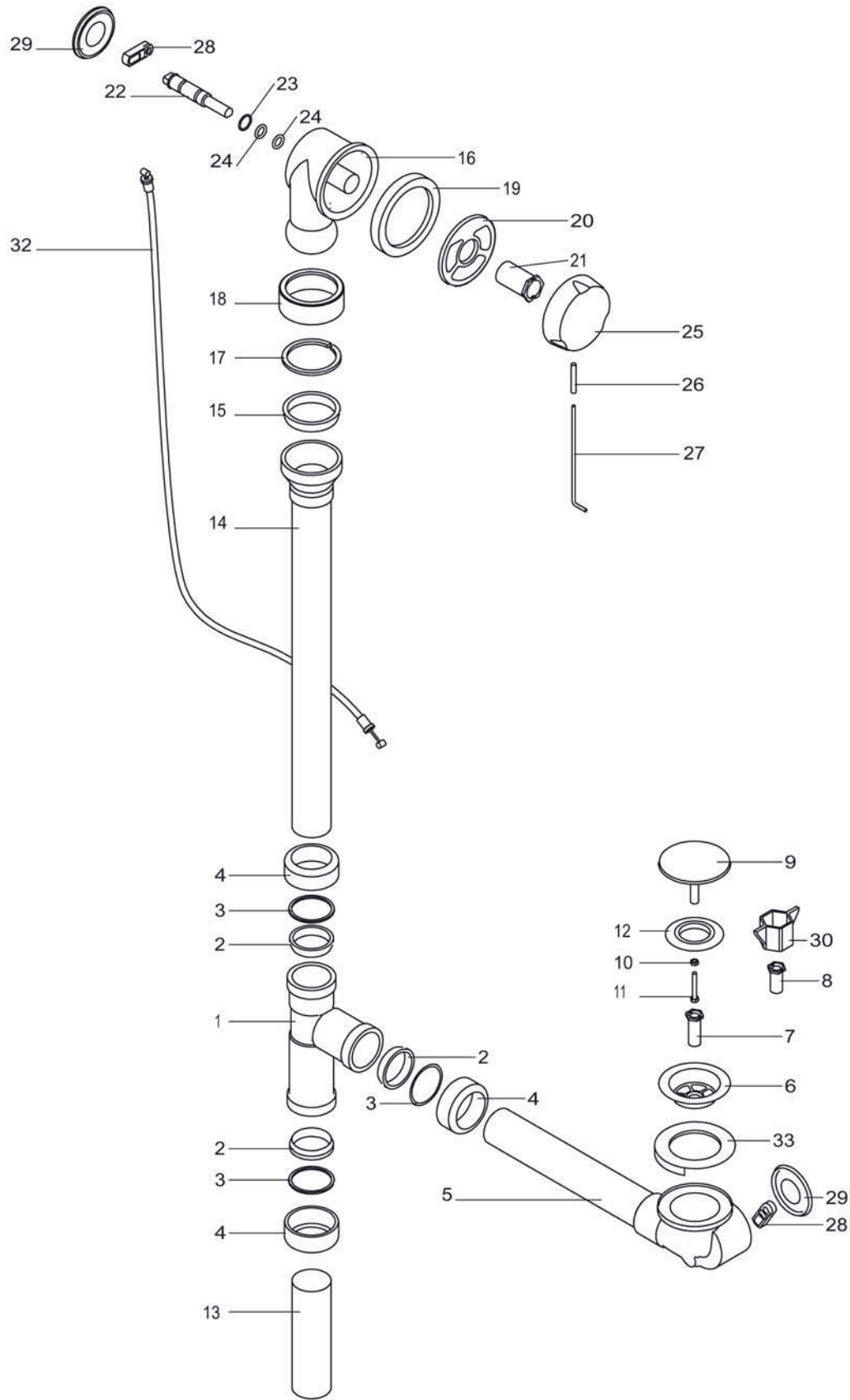
8/09

These guidelines have been prepared for the professional contractor to aid in the installation of:  
**WATERWORKS® WASTE AND OVERFLOW (FDWO51)**

All dimensions are based on original specifications and are subject to change and variation.  
 Please consult your Design Associate for current specifications.

W A T E R W O R K S®

15. Use zip-ties or adequate tape to secure the cable(32) to the overflow pipe and waste body. Failure to complete this step will prevent the drain from functioning properly.
16. Install the tail piece(13) onto the tee.
17. Place the overflow cover(25) onto the overflow stem at the proper position and then tighten the 2mm set screw(26) on the overflow cover:
18. Place the stopper(9-12) in the waste flange, rotate the overflow cover clockwise to open the drain, and then verify there is a  $\frac{3}{8}$ " gap between the stopper(9) and waste flange(6). To adjust the height of the stopper, turn the adjustment screw(11) at the base of the stopper and then tighten the locking nut(10) to maintain the ideal stopper height.
19. After placing the tub and completing final drain connections below the floor, close the drain and then fill the tub with water to make sure the stopper operates and seals properly. Adjust as required.
- If further assistance is required, please contact Product Support at 1-800-927-2120 (8am-7pm EST).



\*Optional 8" tailpiece not shown

<p>8/09</p>	<p>These guidelines have been prepared for the professional contractor to aid in the installation of:  <b>WATERWORKS® WASTE AND OVERFLOW (FDW051)</b></p> <p>All dimensions are based on original specifications and are subject to change and variation.                  Please consult your Design Associate for current specifications.</p>	<p>W A T E R W O R K S<sup>®</sup></p>
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