FOR WALL-MOUNTED & FREESTANDING WATER FEATURES

Auto-Fill & Safety Drain

An optional system that keeps your water feature topped up automatically and gives excess water a safe way out. Here is how it works, and what your plumber, electrician and installer need to prepare.

Safety Drain

Available on its own

A brass bulkhead and ½″ PVC overflow standpipe. Rising water runs down the standpipe to a floor drain instead of over the rim. Remove or tilt the standpipe to drain the basin.

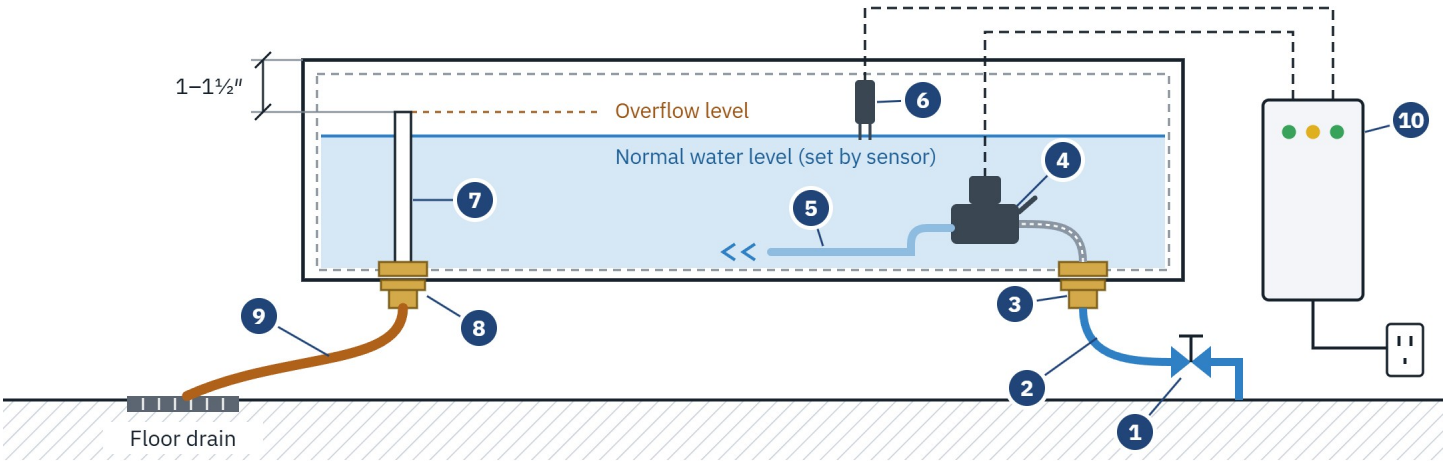
Auto-Fill

Always includes the drain

A control box, level sensor and slow, throttled valve replace water lost to evaporation. Ships with the safety drain, the system's main protection against overflow.

How the system fits together (generic tray, not to scale)

Supply · Drain · Control cables



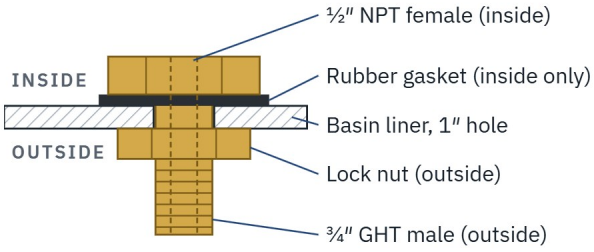
Generic tray shown only to illustrate how the system works. It does not represent a specific Adagio model, and fitting locations vary by design.

1. Water supply with accessible shut-off valve
2. Braided stainless supply hose, ¾″ GHT
3. Fill bulkhead (brass)
4. Throttled fill valve, inside the basin
5. Clear discharge tube, releases water horizontally
6. Water-level sensor (sets the normal level)
7. Overflow standpipe, ½″ PVC
8. Drain bulkhead (brass)
9. Drain hose, sloping down to a floor drain
10. Control box, plugs into a standard outlet

01 · COMPONENTS

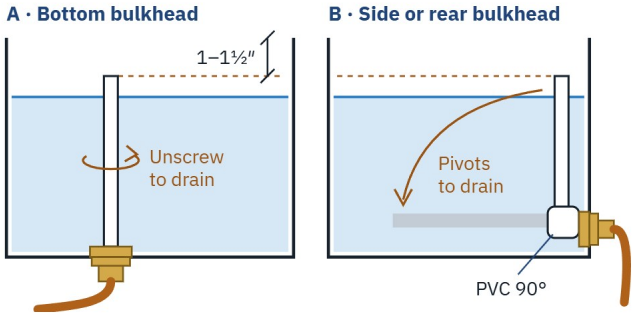
Components & specifications

Bulkhead fitting (fill & drain)



Hoses thread onto the outside; the standpipe or valve connects inside. Gasket inside only.

Overflow standpipe (safety drain)



A: unscrew the standpipe to drain. B: on a PVC 90°, it pivots down to drain. Either way a little water remains.

Control box	
Controller	Jandy Pro Series Levolor® K-1100 electronic water leveler
Enclosure	NEMA 4 watertight · approx. 10 × 5 × 4½ in (H × W × D)
Power	Plug-in, 110–120 VAC, 0.5 A · cord approx. 5–6 ft
Cables	Sensor and valve cables 8–10 ft, with waterproof quick-disconnects (longer on request)
Status lights	Power · Sensor · Filling

Fittings & drain	
Bulkheads	Brass. Two with auto-fill (fill + drain); one with drain only
Hole size	1″ through the basin liner
Outside thread	¾″ garden hose thread (GHT), male
Inside thread	½″ NPT, female
Seal	Rubber gasket inside; lock nut tight to the outside of the liner
Location	Bottom, rear or side of the tray, depending on the design (see page 5)
Overflow	½″ PVC standpipe, top ≈1–1½″ below the top of the tray; unscrews or pivots to drain

Fill valve & sensor	
Fill valve	1″ sprinkler-style solenoid valve, 24 VAC, mounted inside the basin
Throttle	Factory-set for a slow fill. Please do not adjust.
Manual lever	ON/OFF lever for filling by hand; keep OFF in normal use
Discharge	Clear tube releases water horizontally along the basin (no spray)
Sensor	Two-tip electronic sensor set at the normal water level
Fill delay	Opens ≈20 s after low water is sensed; closes ≈20 s after the level is restored
Safety lockout	20 min standard; 40 or 60 min available

Supplied by the customer

- Braided stainless supply hose (washing-machine type) with ¾″ GHT female ends
- Garden hose or similar, cut to length, for the drain
- Supply valve, drain and outlet at the wall (see page 4)

Valve and fitting suppliers vary; specifications may change without notice. Jandy and Levolor are trademarks of their respective owners.

02 · OPERATION

How it works

The fill cycle

1
Level drops
Evaporation lowers the water below the sensor tips. The Sensor light turns yellow.

2
Valve opens
About 20 seconds later the control box opens the fill valve. The Filling light turns green.

3
Slow, quiet fill
Throttled water flows out the clear tube and spreads horizontally along the basin, with no spray.

4
Valve closes
About 20 seconds after water reaches the sensor, the valve closes and the Filling light goes off.

Three layers of protection

1 · Throttled flow
The fill rate is set slow at the factory, so even a valve that sticks open can't outpace the ½" overflow. **Please don't adjust the throttle.**

2 · Fill safety lockout
If a fill runs longer than the set time (20 min standard; 40 or 60 min available), the valve shuts and the Filling light turns red. It resets after 24 hours, or when the control box is unplugged and plugged back in.

3 · Overflow standpipe
Water that reaches the top of the standpipe runs out to the floor drain instead of over the rim. This layer only works when the drain hose is connected.

Status lights

Light	Color	Meaning
Power	Green	Control box has power
Sensor	Yellow	Water is below the sensor
Filling	Green	Valve is open and filling
Filling	Red	Safety lockout: valve held closed (see layer 2)

Powering the control box

Constant power. Keeps the level up even while the feature is off. It will also replace water lost to a leak while no one is watching, so shut off the supply before long absences.

On the feature's remote switch. Nothing fills while the feature is off. After weeks off, evaporation can leave the basin low and the refill may run past the lockout time, so top off by hand before restarting.

Filling by hand

A big refill can outlast the lockout. Turn the valve's manual lever **ON**, let the water reach the normal level, then turn it back **OFF**. It must stay OFF for automatic operation.

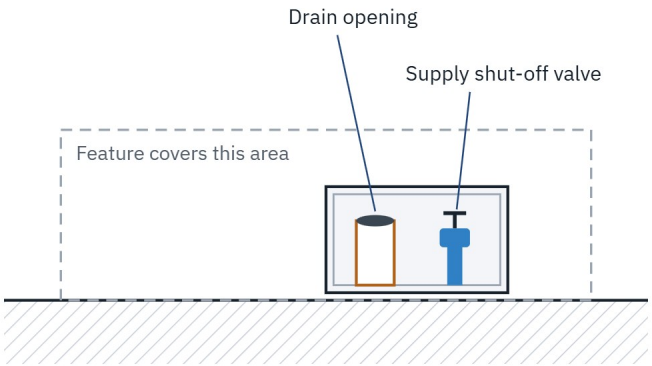
Draining the basin

Side or rear bulkhead: pivot the standpipe down on its PVC 90°. **Bottom bulkhead:** unscrew the standpipe from the bulkhead. Most of the water runs out the drain hose; a little remains. The drain hose must be connected and flowing freely.

03 · SITE PREPARATION

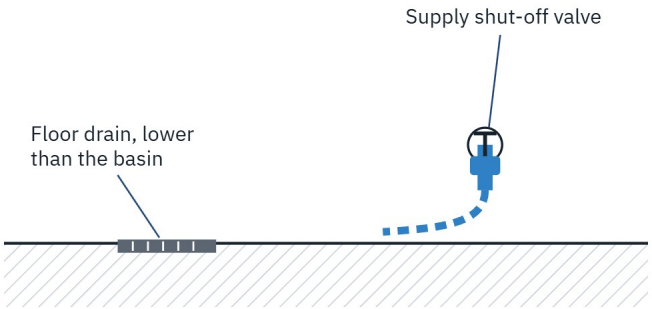
Site requirements & rough-in

Recessed outlet box RECOMMENDED



Like a washing-machine outlet box: one supply valve and a drain opening in a single recessed box, hidden by the feature.

Wall valve + floor drain ALTERNATIVE



No recessed box? Use a wall supply valve and run the drain hose to a nearby floor drain or other drain lower than the basin.

Water supply

- Cold potable water only (see page 6)
- ¼–½″ line ending in an accessible shut-off valve
- Typical household pressure, about 40–80 psi. The valve needs at least about 20 psi to open and close reliably.
- Add a pressure regulator if the supply is above 80 psi
- Connect with a braided stainless washing-machine hose (¾″ GHT), length to suit

Drain

- Garden hose or similar, cut to length, threaded onto the drain bulkhead
- Slopes downhill the whole way: no kinks, loops, sags or uphill runs
- Ends in a floor drain, standpipe or drain box lower than the basin
- Secure the hose end so it can't pull free
- Keep the drain clear and flowing

Electrical

- The control box needs an outlet. Each feature has its own specified outlet location, so outlets aren't shown in these drawings.
- A dedicated 15 A circuit is plenty for any Adagio feature; use 20 A only if the circuit is shared with other loads.
- GFCI protection at the breaker; the receptacle behind the feature should not itself be GFCI
- The control box plugs into constant power or the feature's remote-switched outlet (page 3)
- Plan a spot for the control box within its 8–10 ft cables (page 5)

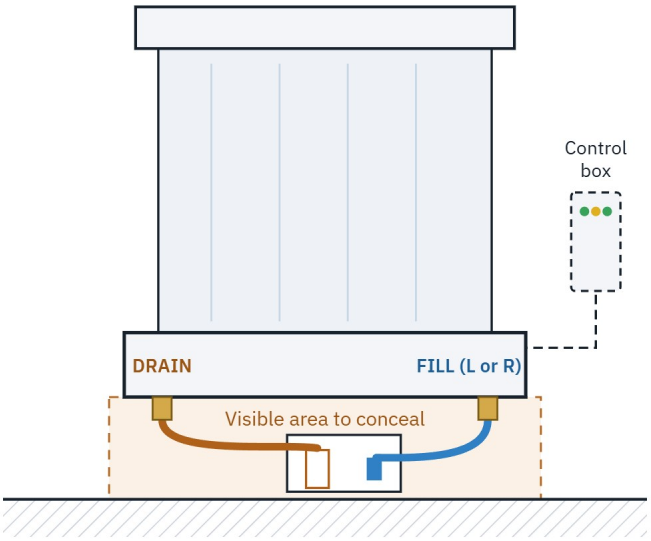
⚠ **Installed by your licensed contractors.** Adagio builds the auto-fill and drain into the feature but does not install the supply line, the drain or any connection to your water or electrical systems. Your plumber and electrician are responsible for meeting local codes, including backflow prevention on the supply line, approved drain connections and electrical requirements.

04 · PLANNING BY STYLE

Wall-mounted & freestanding

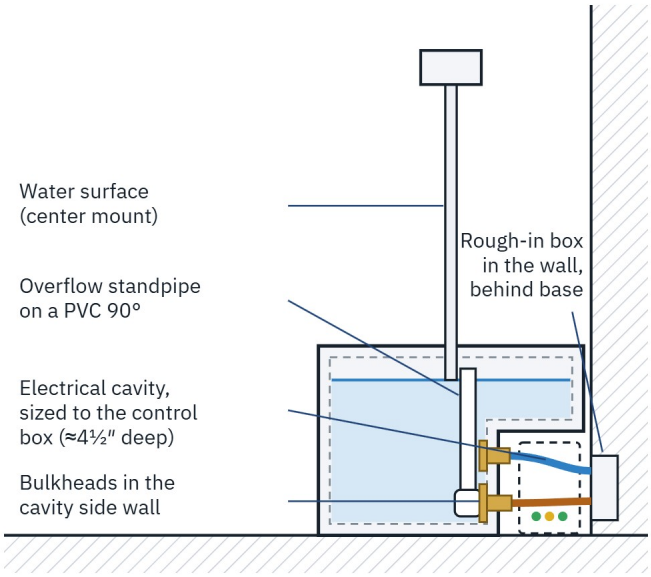
Wall-mounted

Front view (example)



Freestanding

Side section (example)



- Choose the fill side when you order, left or right. The drain goes on the opposite end.
- The bulkheads usually come through the bottom of the tray. They can also come through the rear, with the bracket and wall cavity cut away so the feature still sits flush against the wall.
- Bottom bulkhead: unscrew the standpipe to drain. Rear bulkhead: the standpipe sits on a PVC 90° and pivots down.
- Fittings and hoses below the tray are visible. Plan to conceal them with trim, a planter, a bench, cabinetry or a wall chase.
- The control box (≈10 × 5 × 4½ in) doesn't fit inside a wall-mounted feature. Common spots: a wall cavity with an access panel, a cabinet, or an adjacent room, within reach of the 8–10 ft cables (longer on request).

- The bulkheads come through the side wall of the electrical cavity, near the bottom of the tray. The standpipe sits on a PVC 90° and pivots down to drain.
- Connections can be at the left, center or right of the cavity. Tell us where your rough-in will be.
- With an auto-fill, the cavity is sized to fit the control box, so the box, hoses and cables are hidden by the feature. A rough-in box on the wall behind the base is covered once the feature is in place.
- Floor drain directly under the feature? The drain bulkhead can come straight down through the bottom, lined up with the drain opening.
- Smaller models, such as the Bantam River, don't have room for the box. Plan a spot for it as you would for a wall-mounted feature.

Need to hide something? Adagio can design custom trim or an enclosure to conceal the lines and control box, at additional charge. Customers have also used planter boxes, built-in seating and cabinetry. Ask us when you order.

05 · WATER SOURCE

Water source & RO sizing

✓ Approved

- ✓ **Cold potable water** from a line that is not served by, and not downstream of, a salt-based (ion-exchange) water softener. This is the only hard requirement.
- ✓ **Filtered water: recommended, not required.** Reverse osmosis (RO) or other filtration that reduces hard-water minerals, contaminants and biological matter.

✕ Not approved

- ✕ Salt-softened water, or any line downstream of a softener
- ✕ Any line that could carry brine, regeneration or rinse discharge
- ✕ Untreated well, spring, pond or surface water
- ✕ Reclaimed, recycled or gray water
- ✕ Hot water, or any line served by a water heater or recirculation loop

Why it matters: the feature loses water only to evaporation, so minerals, sodium and chlorides in the make-up water stay behind and concentrate over time. That can corrode pumps, fittings, lighting and finishes. Exchanging part of the water periodically, not just topping it up, helps.

⚠ Sizing an RO system: read this before you buy

The fill valve needs supply pressure to open *and to close*. An RO system stores water in a pressurized tank whose pressure drops as it empties. If the tank runs low partway through a fill, the valve may not have enough pressure to close, and water keeps flowing into the feature and out the overflow for as long as the RO keeps producing.

RO tank runs low → **Pressure falls below what the valve needs** → **Valve can't close** → **Water runs continuously to the drain**

Smaller features

Choose an RO system whose usable storage can refill the **whole feature**, from empty to the normal level, with pressure to spare. Usable storage is often well below a tank's rated size; a delivery pump can help hold pressure.

Larger features

Some features hold 25–30 gallons, more than an RO system can deliver from empty. After cleaning or a water change, fill these with a hose (tap water is fine) or another method, and let the auto-fill handle **evaporation top-off only**.

Confirm sizing with Adagio and the RO manufacturer before installation. Filtration equipment is selected, purchased, installed and maintained by the customer's plumber or contractor. Adagio does not publish water chemistry values and is not responsible for water quality.

Full water capacity by production model (gallons)

Custom features: ask Adagio

Serene Waters	1	Pacifica Waters	1.5	Whispering Creek	1.5	Cascade Springs	3	Reflection Creek	3
Inspiration Falls	4	Bantam River	5	Summit Falls	5.5	Aspen Falls	6.5	Calming Waters	6.5
Majestic River	7	Sunrise Springs	7	Artesian Springs	8	Cottonwood Falls	8	Teton Falls	8
Olympus Falls	10	Deep Creek Falls	12	Solitude River	12	Harmony River	13	Regal Falls	16
Tranquil River	16	Grandeur River	25						

06 · OWNERSHIP

Care, troubleshooting & ordering

Extended absences

Shut off the auto-fill supply valve when the property will be unattended for a long period. With the supply off nothing can fill, so check the water level when you return and top off before running the feature.

Freezing temperatures

- **Never** use antifreeze or freeze-prevention chemicals.
- Drain completely (remove or tilt the standpipe) and let the feature dry.
- Disconnect both hoses and shut off the supply valve.
- Make sure the pumps are free of water.

Quick troubleshooting

If you see…	Check
Filling light is red	Safety lockout: the fill ran past the set time. Make sure the supply valve is open and pressure is adequate (RO tank not empty), and look for leaks. Reset by unplugging the control box and plugging it back in, or wait 24 hours. Happens after big refills? Fill by hand, or ask us about the 40- or 60-minute setting.
Water won't stop running	Make sure the valve's manual lever is OFF. On an RO system, check the tank pressure. Close the supply shut-off and call us.
Level is low and nothing is filling	Is the Power light on? On the feature's remote switch, the auto-fill only works while the feature is on. Check that the supply valve is open and the cable quick-disconnects are fully seated.
Water on the floor	Check the hose connections at both bulkheads, the drain hose for kinks or uphill runs, and that the floor drain is clear.

Ordering

Production features: choose the auto-fill and drain under **Upgrade options** on the model page. Custom features: include it in your quote request. The safety drain is also available on its own. Let us know your fill side (wall-mounted), connection location (freestanding) and any cable length beyond 8–10 ft.

Auto-Fill Device & Water Source Agreement

Every auto-fill order includes this agreement. It covers approved water sources, water quality, the auto-fill's limited warranty, and who is responsible for installation and maintenance. Adagio sends it to you as part of the order process.

Questions about sizing, RO or placement?

We're glad to help you and your installer plan it.

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