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Rough-in sheet: a Dimplex Optimyst 20 in cassette in a counter

Model CDFI500-PRO-RGB. For the fabricator, cabinet maker, plumber and electrician. All dimensions and clearances are Dimplex's; the manual governs. Two-cassette (40 in) and multi-unit runs noted at the bottom.

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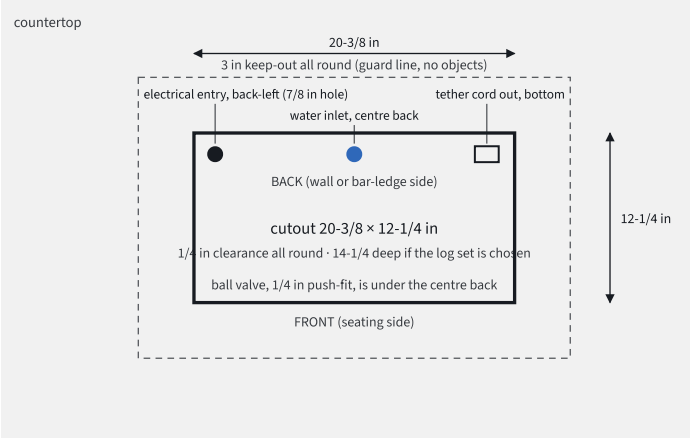
Planning aid, not a permit drawing

PLAN OF THE CUTOUT (single 20 in · CDFI500-PRO-RGB)



BELOW THE COUNTER

Sills front and back, top of sill 9-1/4 to 9-1/2 in below the counter surface; feet adjust to sit the flange on the stone. Level. Screw through both end holes.

Air intake 40 in² or more (80 in² for two cassettes), any shape or location, with an open path to the underside of the unit. A toe-kick works.

Water: 1/4 in line, shutoff within reach, supply under 58 psi (regulate to about 40), leak valve, softening cartridge. Prime the sump with 1 L.

Power: 120 V, 15 A dedicated, 3-wire, hardwired at the back-left j-box. Wall switch allowed.

Cabinet: sealed floor, drip tray, leak sensor. Tethered Bluetooth receiver in the cabinet face, not behind stone or metal.

Above: 16 in clear minimum (18 ideal), nothing over the fire, not in a hood or register airstream.

Two cassettes side by side: cutout about 40-3/8 × 12-1/4, two modules; manifold the water, wire in parallel.

Cutout (fabricator)

- Opening `20-3/8 × 12-1/4 in` for the media plate; `20-3/8 × 14-1/4 in` if the log set is chosen (unit + 1/4 in clearance all round). Flange sits on the finished stone; polish the edge, it is a visible reveal.
- Cut during fabrication. Retrofit cuts in installed slabs are quoted separately.
- Counter near the fire: quartz, porcelain or sealed granite. Not butcher block; the ring around the fire is a wet zone.

Below the counter (cabinet shop)

- Sills front and back, top of sill `9-1/4 to 9-1/2 in` below the counter surface. Feet adjust within that range so the flange lands on the stone; level, then screw through both end holes.
- Plan on the whole 24 in bay: unit above the sills, service cupboard with a door below. Fire cabinet built like a sink base: sealed floor, drip tray, leak sensor. Nothing stored under the fire by default; if a shelf goes in, keep a clear air chase of at least `40 in²` (3 × 14 in) from the grille to the underside of the unit and the drip tray clear.
- Air intake at least `40 in²` (`80 in²` for two cassettes), any shape or location, open path to the underside of the unit; toe-kick or side grille (Dimplex X-00275 if branded).
- Opening in the cabinet face for the tethered Bluetooth receiver: it must be connected for the unit to run, and it must not sit behind stone or metal.

Media

- Ember bed on the plate under `10 lb` (10 lb per cassette): river rock, tumbled glass, acrylic crystals or a Dimplex log set.

Water (plumber)

- Cold line, `1/4 in` tubing to the unit's ball valve at the bottom centre back (push-fit, tube cut square). CDFIPLUMB-KIT piercing valve on copper, or a proper tee.
- Supply under `58 psi`: Mistfire fits a regulator (about 40 psi), a leak-detection shutoff valve and a quick-change softening cartridge in the adjacent cabinet, plus a quarter-turn shutoff the owner can reach.
- Prime the sump with about 1 L before first start. Meet local plumbing code. No sink in the island: bring the line up from below beside the electrical (framed floors; a finished ceiling means one or two small access openings, patched after). On slab with no water in reach: refill container or tank module instead.
- Hidden runs: one continuous length of PEX, tap to fire bay, `no fittings inside the ceiling`. Leak-detection shutoff at the tap point, quarter-turn shutoff in the fire bay.

Power (electrician)

- `120 V, 15 A dedicated`, 3-wire, hardwired at the j-box in the back-left corner (7/8 in entry). 230 W, 1.9 A. Wall switch allowed. Permit by the electrician; GFCI where code or the site calls for it.

Above the fire (everyone)

- Minimum `16 in` clear above the installation surface, `18 in` for best flame. Nothing over the fire; not under a range hood, not in a register or door draft.
- Where a side is exposed to drafts: `10 in` guard set `3 in` out from the opening. A bar ledge or backsplash usually covers one side.

Two cassettes and multi-unit runs

- Two 20 in cassettes side by side (the manual's linear configuration; the CDFI1000-PRO double module is not on the June 2026 Canadian list): cutout about `40-3/8 × 12-1/4 in`, twice the intake, water on a manifold, wired in parallel. Same approach for a row of cassettes along a bar.

Sources: Dimplex CDFI500-PRO-RGB technical specification (2025); CDFI500-PRO / CDFI1000-PRO owner's manual; CDFI-PRO service manual; CDFIPLUMB-KIT instructions (dimplex.com). Optimyst® and Dimplex® are trademarks of Glen Dimplex; Mistfire is not affiliated with Glen Dimplex.

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