

Combi-Vector® Stacked Configuration

CV3 and CV4 Models



Discover Alto-Shaam's one-of-a-kind stacking combination, the legendary CTP7-20 Combitherm® Oven, stacked over Alto-Shaam's revolutionary Vector® Multi-Cook Oven.

Maximize food production, efficiency, and versatility while minimizing required hood space.

Create up to four or five distinct and separate cooking chambers within a single footprint with less water and plumbing required. This configuration features the Combitherm Oven's PROpower™ technology and Vector Multi-Cook Oven's Structured Air Technology® for unmatched production efficiency and superior food quality.

Achieve a variety of advanced cooking applications with the ability to steam, poach, roast, bake, grill, braise, finish, and more in one single vertical cooking solution.



Model CV3 Shown

Combi CTP7-20 Features:

- **80% less water** usage with boilerless design. Superior performance, improved reliability, and less maintenance costs associated with boiler parts and labor.
- **20% faster** than other combi ovens and up to 80% faster than convection technology with PROpower™ technology. Reduced, Eco, and Turbo power levels. Enhanced production. Improved temperature control. Quicker recovery times.
- **Zero clearance design** saves valuable space under the exhaust hood and reduces ventilation costs. Place CT PROformance models next to any piece of equipment - anywhere on the line.
- **Removable food probe** can be easily replaced and calibrated. Improve reliability while reducing oven downtime and repair costs. Sous vide probe optional.
- **LED illuminated door handle** is designed for the needs of the busy kitchen, and provides visual notification of the oven status.
- **Front-accessible, retractable rinse hose.** PROrinse™ high-efficiency spray head.
- **Keep employees safe.** Safevent™ venting system automatically vents heat and steam during the last 60 seconds of the cooking cycle. Open the door as soon as the cooking cycle ends without exposure to heat and steam.
- **Absolute Humidity Control™** allows for selection of any humidity level from 0–100% to maximize food quality, texture, and yield. The five-speed, auto-reversing fan provides balanced airflow for ideal product browning, texture and finish.
- **Reduce labor** with CombiCleanPLUS™ automatic cleaning with five cycle options from "light clean" to "heavy soil." Uses safe, convenient cleaning tablets or optional liquid cleanser.
- **PROtouch™ control** allows for simple use and navigation, customizable recipe management, and intuitive one-touch-cooking.
- **Seamlessly-integrated smoking** with optional CombiSmoke® feature. Hot or cold smoke with real wood chips. No odor or flavor residue. No impact on oven capacity, door seal or oven performance.
- **ENERGY STAR® certified.** the CTP7-20 model is rated to have a higher energy efficiency when compared to other ovens.

Vector VMC-F3 and VMC-F4 Features:

- **Unmatched food production** and quality with Structured Air Technology®.
- **Ovens unlike any other** with the ability to control temperature, fan speed and cook time in each individual oven chamber. Cook food the way it's meant to be cooked – to perfect your dishes.
- **Expand menus** and cook up to four different food items simultaneously with zero flavor transfer.
- **Increased throughput** to cook twice as much food in the same amount of time as traditional ovens.
- **Replace or relieve multiple pieces** of equipment and do the job of traditional ovens, microwave and speed ovens, grills, conveyor ovens, and salamanders—with better food quality.
- **Superior consistency** to deliver the same high-quality food every time.
- **Reduce skilled labor** with fully programmable user-friendly controls. Cook at the touch of a button with programmable recipes—up to ten stages for Deluxe controller; three stages for Simple controller.
- **Efficient, even heat distribution** to perfect food. No food degradation. No hot and cold spots. No need to watch and rotate pans.
- **Waterless operation** reduces installation and operating costs – no plumbing, drains, filtration or associated maintenance.
- **Open the door as needed.** Vertical curtains of air nearly eliminate heat loss. No blast of hot air. Cooler door. Almost no recovery times.
- **Designed for high-volume** batch cooking and to save valuable kitchen space. One Vector F Series oven replaces two traditional ovens.
- **Adapts to your menu needs.** Cook taller food items by time or optional probe by combining chambers.



TEMPERATURE

Maximum temperature: 525°F [274°C]



Dimensions

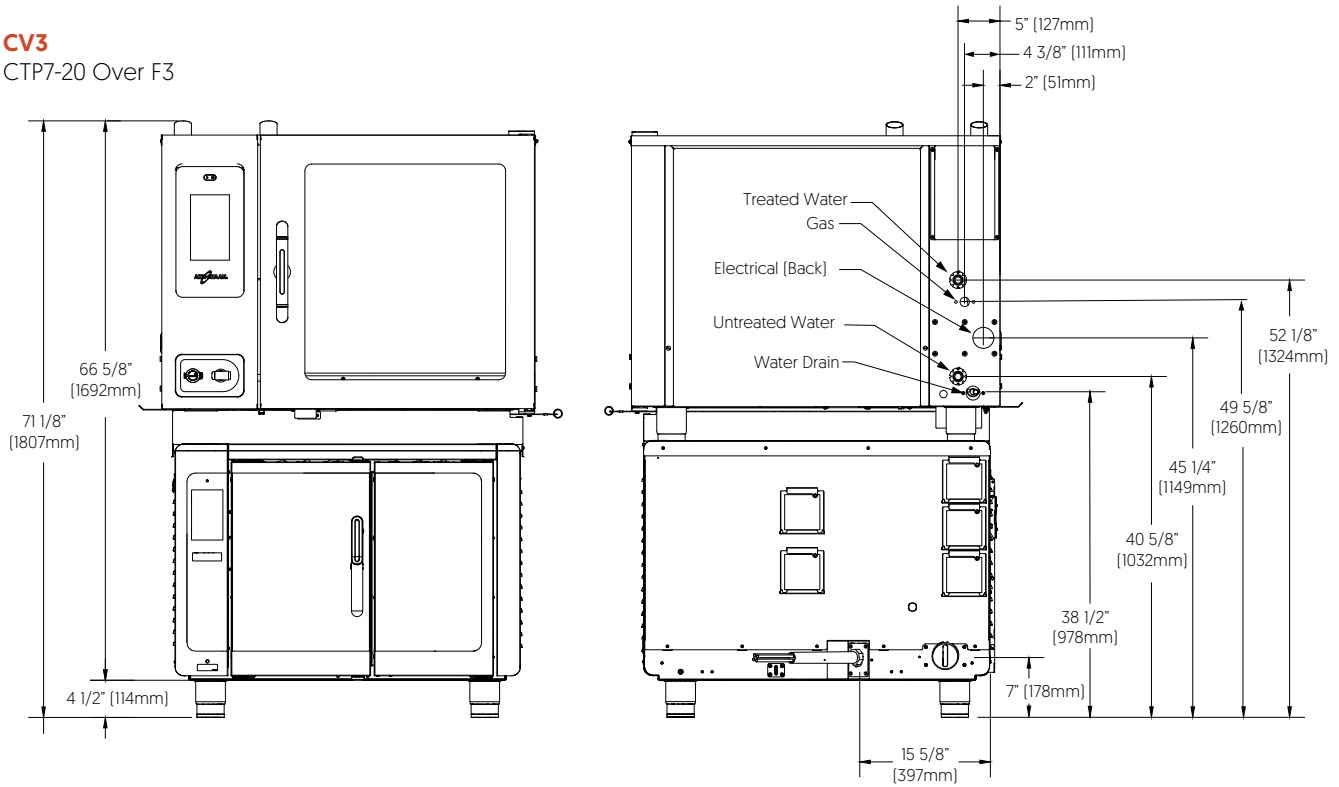
Overall and Utilities

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CTP7-20 Combi over Vector F E

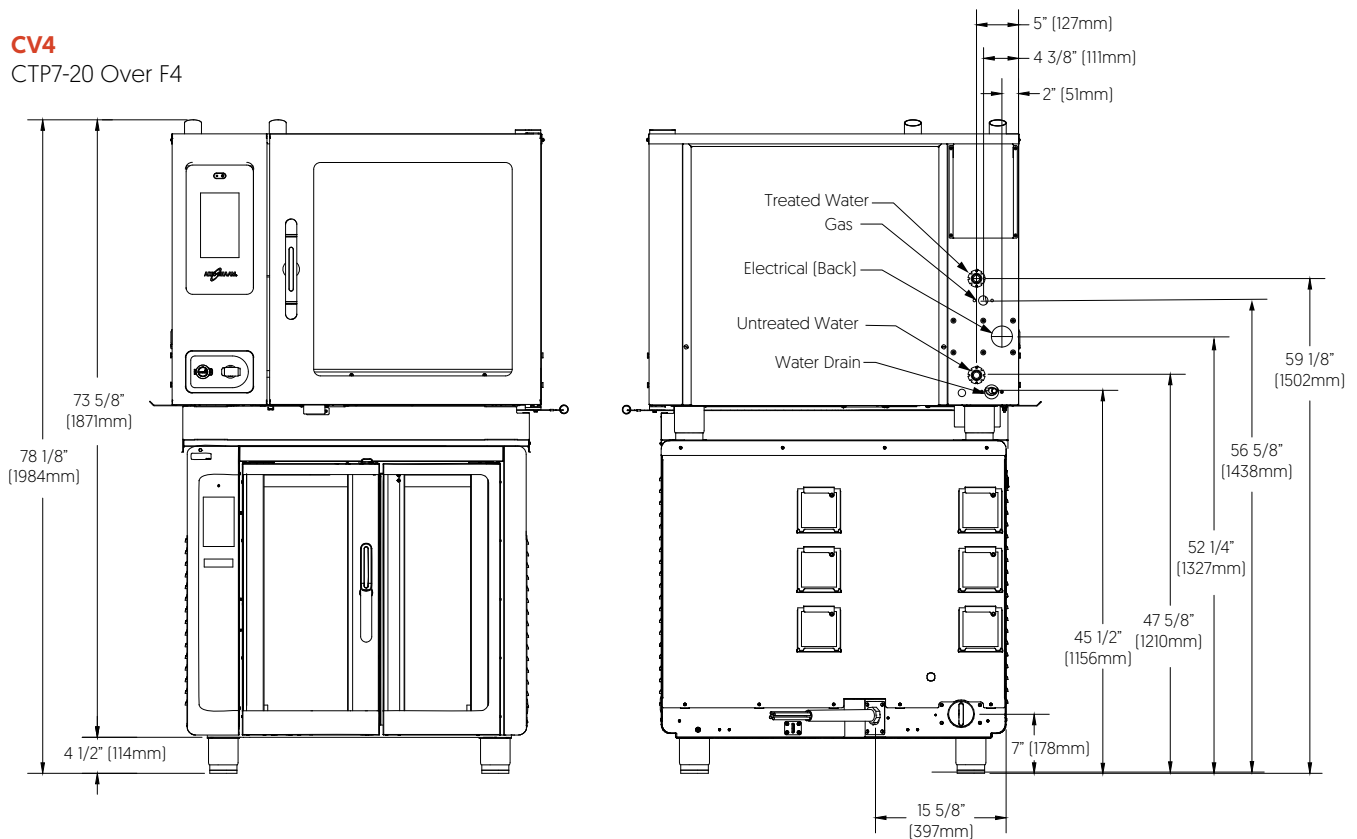
CV3

CTP7-20 Over F3



CV4

CTP7-20 Over F4





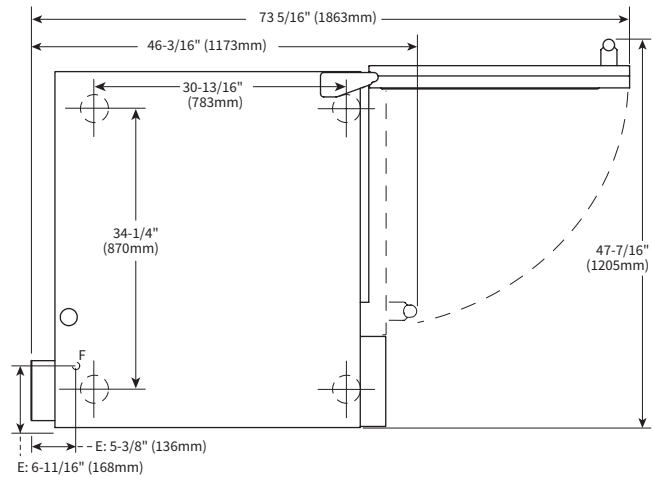
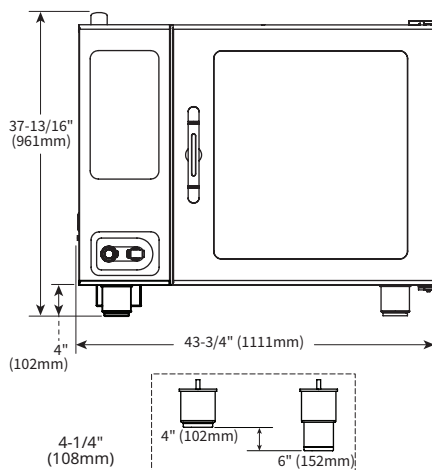
Dimensions

Individual Details

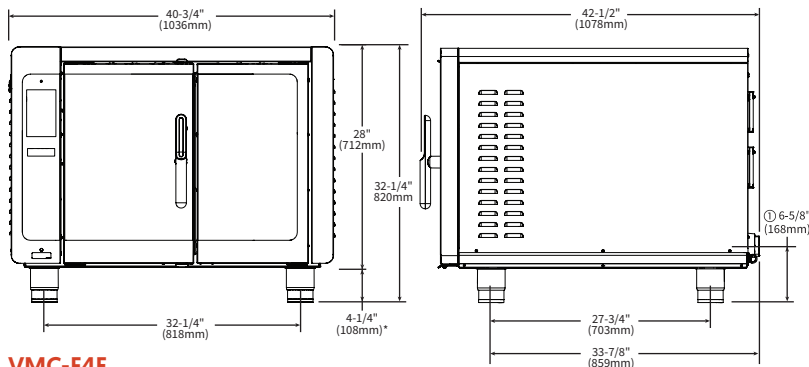
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DIMENSIONS

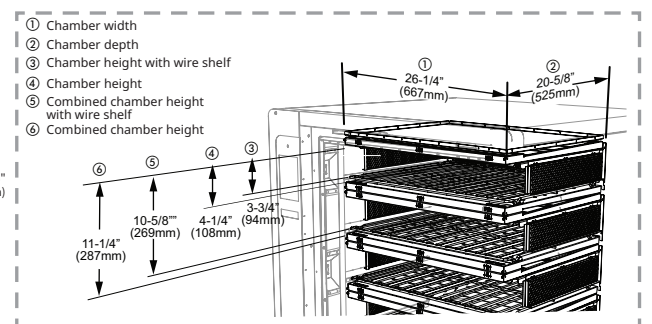
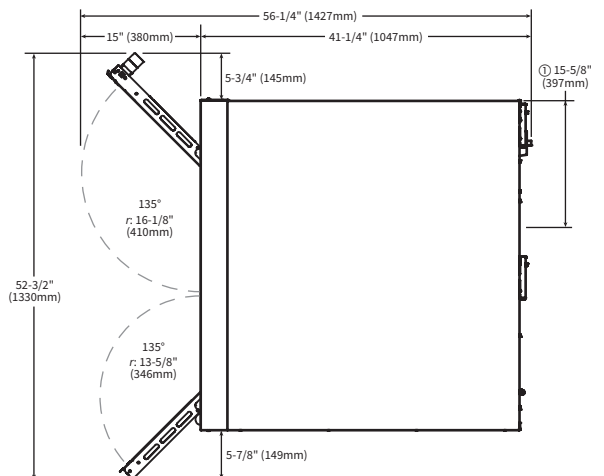
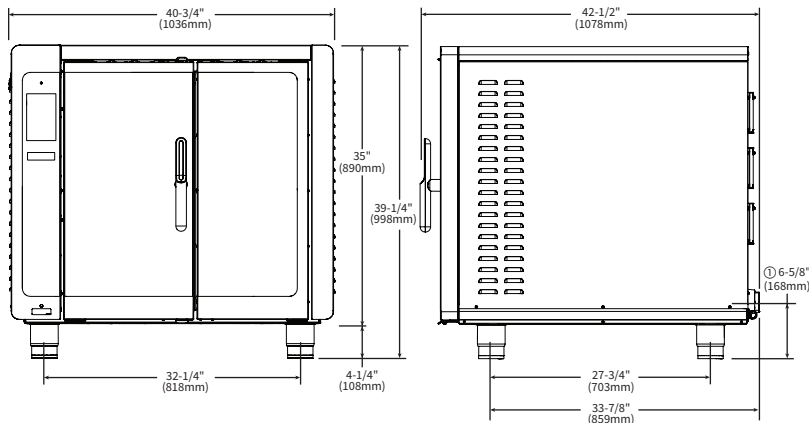
CTP7-20



VMC-F3E



VMC-F4E



Vector F Series Accessories

- Single-point quick-connect core temperature probe [PR-35770]
- Removable, single-point, quick-release, sous vide temperature probe [PR-36576]
- Removable, T-Shape, quick-release, temperature probe [PR-37158]
- Grill pan, half size, 279mm x 406mm [PN-39135]
- Grill pan, full size, 451mm x 660mm [PN-39474]
- Wire rack [SH-39201]
- Alto-Shaam non-caustic cleaner, one (1) 32 oz. bottle [CE-46828]
- Alto-Shaam non-caustic cleaner, case of six (6) bottles [CE-46829]
- Grease filter kit (1 per chamber), for Vector F3/F4 Models [5027120]
- Kit, Ethernet cable [5030518] (For Deluxe controls only)

CTP7-20 Factory-Installed Options

- Boiler version
- PROpower™ — An accelerated turbo power for an instant boost of heat or quick heat recovery [patent pending]
- Automatic Grease Collection System [U.S. patent 8,997,730 B2], includes four (4) 6-piece, self-trussing poultry racks #5014438, interior drip collection pan, and grease collection container with shut off valve.
- Smoker box
- Extended one-year warranty

Utilities



ELECTRIC

ELECTRICAL - VMC (no cord, no plug, DEDICATED CIRCUIT REQUIRED)							
Oven	V	Ph	Hz	AWG	A	BREAKER	kW
VMC-F3E	208-240	3	60	8	31-35	50	11.5-15.0
VMC-F4E	208-240	3	60	4	41-46	50	15.2-19.9

Electrical connections must meet all applicable federal, state and local codes.

* Electrical service charge applies.
** No-cost option on electric models.

ELECTRICAL - CTP7-20E (no cord, no plug, DEDICATED CIRCUIT REQUIRED)											WITH COMBISMOKER® OPTION						
					ECO STANDARD			**PROpower™ OPTION			ECO STANDARD			**PROpower™ OPTION			
V	Ph	Hz	AWG	CONNECTION	A	kW	BREAKER	A	kW	BREAKER	AMPS	kW	BREAKER	A	kW	BREAKER	
208 - 240	1*	50/60	1 - 1/0	L1, L2/N, G	79.1 - 91.3	16.5 - 21.9	80 - 100	92.1 - 106.3	19.2 - 25.5	100 - 110	81.6 - 94.1	17 - 22.6	90 - 100	94.6 - 109.1	19.7 - 26.2	100 - 110	
208 - 240	3	50/60	4 - 3	L1, L2, L3, G	45.7 - 52.7	16.5 - 21.9	50 - 60	58.7 - 67.7	19.2 - 25.5	60 - 70	48.2 - 55.6	17 - 22.6	50 - 60	61.2 - 70.6	19.7 - 26.2	70	
380 - 415	3	50/60	6 - 4	L1, L2, L3, N, G	28 - 30.4	18.7 - 21.9	32	41.7 - 45.4	21.4 - 25.5	63	30.6 - 33.3	19.3 - 22.6	32 - 63	44.4 - 48.3	22 - 26.2	63	
440 - 480	3*	50/60	8	L1, L2, L3, G	20.6 - 22.4	15.7 - 18.7	25	26.5 - 28.8	18.3 - 21.8	30 - 35	21.9 - 23.8	16.2 - 19.2	30	27.3 - 30.0	18.8 - 22.3	30 - 35	

Electrical connections gas models

	CTP7-20G	V	Ph	Hz	Awg (mm²)	ProPower™ Standard			With CombiSmoker® Option			Connection	Certification
						A	Breaker	kW	A	Breaker	kW		
†	120V**	120	1	60	12 [3.31]	6.8	20	.84	12.0	20	1.5	L1, N, G	
†	208-240V	208	1*	50/60	14 [2.08]	4.8	15	1.0	7.3	15	1.5	L1, L2/N, G	
		240	1*	50/60	14 [2.08]	4.2	15	1.0	7.1	15	1.7	L1, L2/N, G	
†	208-240V	208	3	50/60	14 [2.08]	4.8	15	1.0	7.3	15	1.5	L1, L2, L3, G	
		240	3	50/60	14 [2.08]	4.2	15	1.0	7.1	15	1.7	L1, L2, L3, G	
	380-415V	380	3	50/60	14 [2.08]	4.6	15	1.0	7.2	15	1.6	L1, L2, L3, N, G	
		415	3	50/60	14 [2.08]	4.2	15	1.0	7.1	15	1.7	L1, L2, L3, N, G	

† Per UL requirements, must be permanently connected to electrical supply source

* Electrical service charge applies

** Ground fault or residual current protection device must accommodate a leakage current of 20mA.



WATER

Water requirements (per oven)

- Two cold water inlets - drinking quality
- One treated water inlet: 3/4" NPT connection. Line pressure 30 psi minimum dynamic and 90 psi maximum static (200-600 kPa) at a minimum flow rate of 0.26 gpm [1 L/min].
- One untreated water inlet: 3/4" NPT connection. Line pressure 30 psi minimum dynamic and 90 psi maximum static (200-600 kPa) at a minimum flow rate of 2.64 gpm [10 L/min]. Water drain: 1-1/2" [40mm] connection with a vertical vent to extend above the exhaust vent. Materials must withstand temperatures up to 200°F [93°C].



Clearance requirements for water filtration system

Do not install a water filtration system behind unit.

Water Quality Standards

It is the sole responsibility of the owner/operator/purchaser of this equipment to verify that the incoming water supply is comprehensively tested and, if required, a means of "water treatment" provided that would meet compliance requirements with the published water quality standards shown below. Non-compliance with these minimum standards will potentially damage this equipment and/or components and void the original equipment manufacturer's warranty. Alto-Shaam recommends using the Alto-Shaam Reverse Osmosis System to properly treat your water.

Inlet Water Requirements		
Contaminant	Treated Water	Untreated Water
Free Chlorine	Less than 0.1 ppm [mg/L]	Less than 0.1 ppm [mg/L]
Hardness	30-70 ppm	30-70 ppm
Chloride	Less than 30 ppm [mg/L]	Less than 30 ppm [mg/L]
pH	7.0 to 8.5	7.0 to 8.5
Silica	Less than 12 ppm [mg/L]	Less than 12 ppm [mg/L]
Total Dissolved Solids [tds]	50-125 ppm	50-360 ppm



Gas Requirements (gas type must be specified on order)
Hook-up: 3/4" NPT

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UL Marked Appliances	Maximum Input BTU/h	Minimum Input BTU/h	Maximum Inlet Pressure Inches WC	Minimum Inlet Pressure Inches WC	Maximum Fuel Consumption*	
					CFH	GPH
Natural Gas	98,000	65,000	14.0	5.5	93.3	N/A
Propane				9.0	39.2	1.1

*Assumes an average heating value for natural gas to be 1050 BTU/SCF and a specific gravity of 0.60. The assumed value for propane gas is 2,500 BTU/SCF, and a specific gravity of 1.53.

AGA Marked Appliances	Maximum Input MJ/h	Minimum Input MJ/h	Maximum Inlet Pressure kPa	Minimum Inlet Pressure kPa	Maximum Fuel Consumption	
					m³/h	L/h
Natural Gas	103.4	68.6	3.48	1.13	2.7	N/A
Propane				2.75	1.1	4.1

CE Marked Appliances	Maximum Input		Minimum Input		Nominal Gas Pressure mbar	Maximum Gas Pressure mbar	Maximum Fuel Consumption m³
	kWh [Hs]	kWh [Hi]	kWh [Hs]	kWh [Hi]			
2E [G20]	29.4	26.5	20.0	18.0	20	50	2.8
2LL [G25]					20		3.3
3P [G31]	28.8	26.5	19.5	18.0	37		1.1
3B/P [G30]					29		1.1



- The ovens must be installed level.
- The ovens must not be installed in any area where they may be affected by steam, grease, dripping water, high temperatures, or any other severely adverse conditions.
- Exhaust hood required.
- Not intended for built-in installation.



- Top: 20" [508mm]
- Left: 2" [51mm]
- Right: 18" [457mm] recommended service access
- Bottom: 2" [51mm] combustible surfaces
- Back: 5-1/8" [130mm]
- Back: 4" [102mm]
- 4-5/16" [109mm] optional plumbing kit



CTP7-20

FULL-SIZE PANS:	20" x 12" x 2-1/2"	16
GN 1/1:	530 x 325 x 65mm	16
GN 2/1:	530 x 650 x 65mm	8
FULL-SIZE SHEET:	18" x 26" x 1"	8

VMC-F4E

FULL-SIZE PANS:	20" x 12" x 2-1/2"	8
GN 1/1:	530 x 325 x 65mm	8
GN 2/1:	530 x 650 x 65mm	4
FULL-SIZE SHEET:	18" x 26" x 1"	4

VMC-F3E

FULL-SIZE PANS:	20" x 12" x 2-1/2"	6
GN 1/1:	530 x 325 x 65mm	6
GN 2/1:	530 x 650 x 65mm	3
FULL-SIZE SHEET:	18" x 26" x 1"	3



IP X5

CTP7-20 complies with UL 710B, section 17

CONTACT US

W164 N9221 Water Street | Menomonee Falls, Wisconsin 53051 | U.S.A.
Phone: 262.251.3800 | 800.558.8744 U.S.A./Canada | Fax: 262.251.7067 | alto-shaam.com