



Climate by Design
INTERNATIONAL

Critical Process Rooftop Series CPRT



What Does the CPRT Series Do?

- Provides room pressurization to control or eliminate issues with uncontrolled air infiltration from unconditioned areas.
- Provides conditioned air to the room temperature and humidity specifications.
- Provides air filtration to ensure product quality.
- Sanitary unit casing design constructed with smoother, flatter surfaces that can be sanitized.
- Reduced catch points for mold, bacteria and other microbial growth.

Food Processing Applications



Keep in Compliance at All Times with our CPRT Series!

Moisture can cause mold, mildew, and other microbial issues. Building codes require energy intensive use of outside air. Uncontrolled, airborne contaminants can negate your food and product safety strategies. Extended clean up recovery times limit valuable hours each day that should be available for production. The Critical Process Rooftop series is sized and configured so you stay in control. Keep the air that circulates through production areas clean, dry, and properly conditioned.

Critical Process Rooftop (CPRT) Series

- Process air flow range of 2,000 to 100,000 SCFM.
- Designed with pre-configured components combined to meet unique project requirements.
- Total system integration available including heating, cooling, and special filtration including controls.



Configurable Components

Match Your Critical Process

Typical Components:

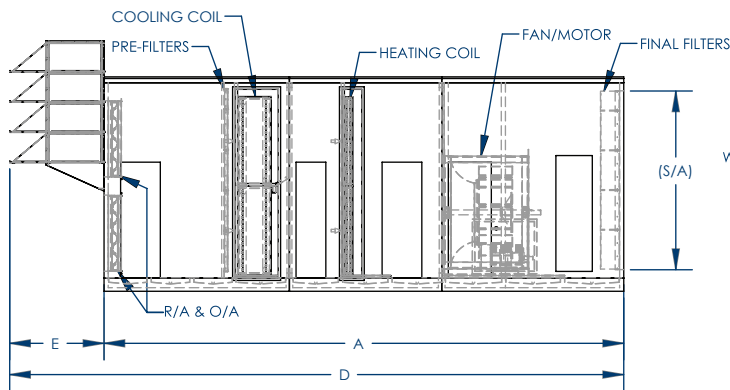
- Merv 8 through HEPA filters
- Ammonia, Glycol or DX Cooling
- Purge, MUA configurations with Integrated Exhaust
- Steam, Water, or Gas Heating
- Washable UVGI
- Direct Drive, Low Leak, Dampers

Unit Casings – Your Choice:

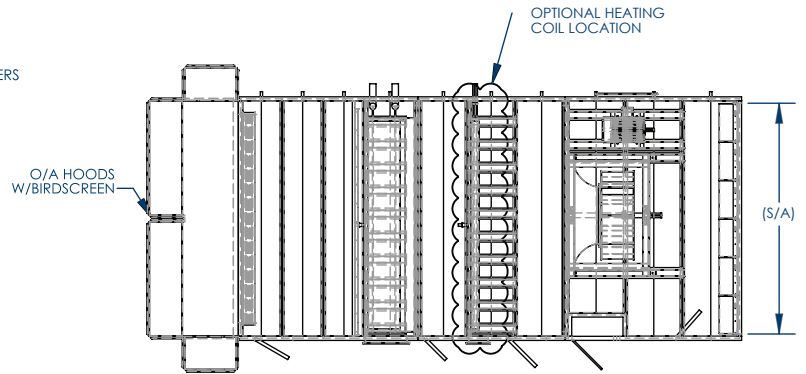
- From 2 ½" double wall through 6" NoThruMetal®



Critical Process Roof Top Series Basic Unit



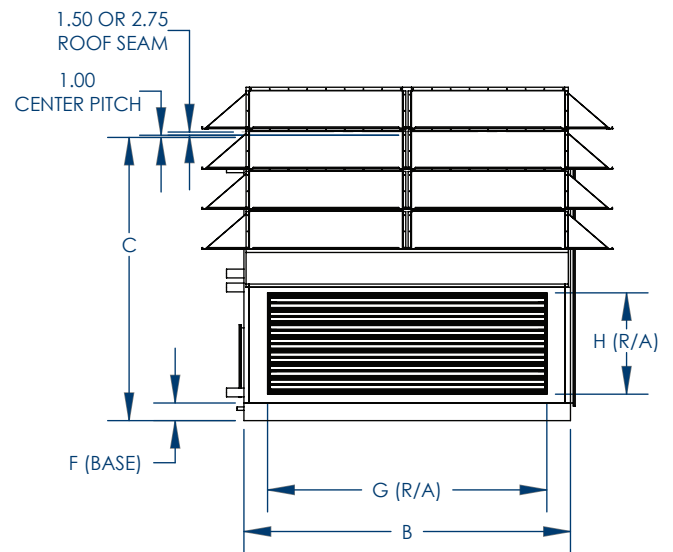
ELEVATION VIEW



PLAN VIEW

Technical Specifications

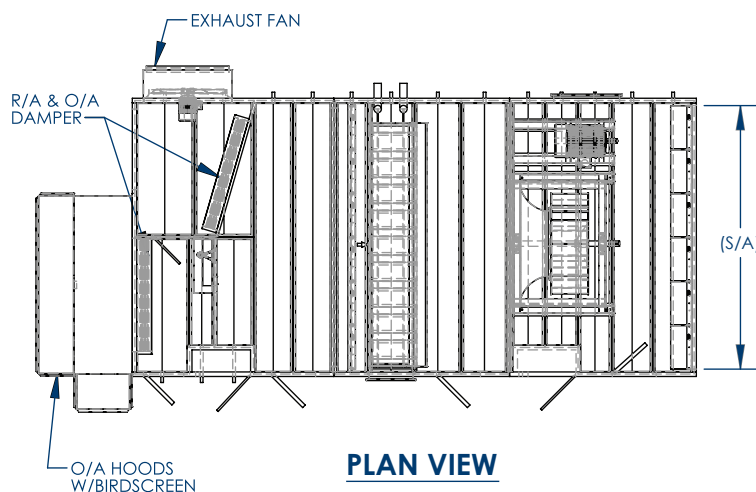
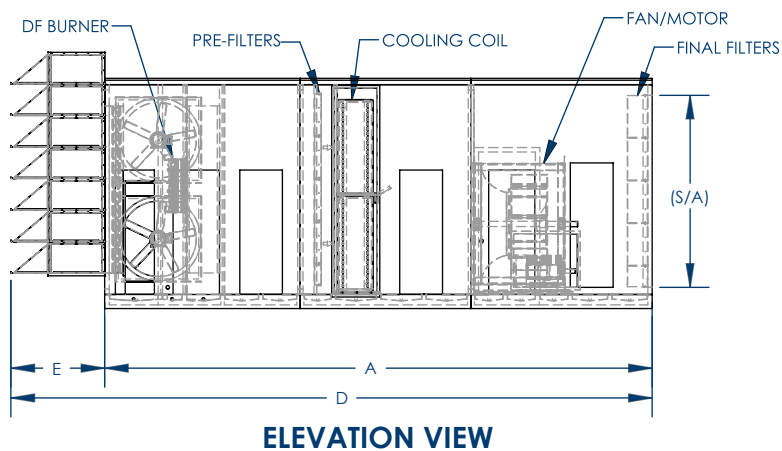
Model	A	B	C	D	E	F	G	H	Supply Air Opening (S/A)
CPRT-2-95	150	58	50.50	176.50	26.50	8	24	10	24x24
CPRT-5-95	168	62	62.50	200.50	32.50	8	36	16	36x48
CPRT-7-95	184	66	66.50	225.50	41.50	8	42	20	48x48
CPRT-10-95	188	76	68.50	227.00	39.00	8	54	22	48x60
CPRT-15-95	198	88	79.50	242.00	44.00	8	66	26	60x72
CPRT-20-95	200	110	78.50	246.75	46.75	8	88	26	60x96
CPRT-25-95	248	114	98.50	298.50	50.50	8	92	32	84x96
CPRT-30-95	246	134	98.50	300.50	54.50	8	112	32	84x120
CPRT-38-95	270	134	112.50	322.00	52.00	8	112	40	96x120
CPRT-45-95	294	152	112.50	356.00	62.00	8	130	40	96x144
CPRT-50-95	314	152	128.50	371.00	57.00	8	130	46	108x144
CPRT-60-95	316	162	140.50	381.50	65.50	8	140	50	120x144
CPRT-70-95	334	184	140.50	396.50	62.50	8	162	50	120x168
CPRT-75-95	334	196	140.50	401.00	67.00	8	174	50	120x180
CPRT-80-95	334	206	140.50	401.50	67.50	8	184	50	120x192
CPRT-100-95	360	256	140.50	440.50	80.50	8	234	50	120x240



END VIEW

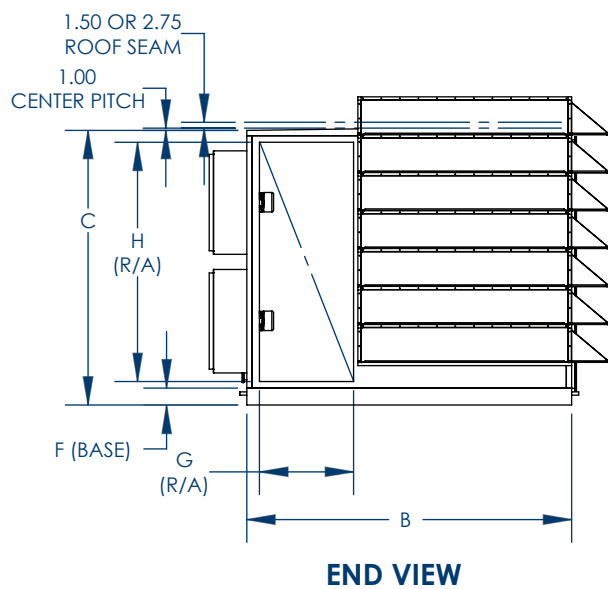
Model	CFM RANGE	R/A & O/A Damper W X H	Coils FH X FL	SUPPLY FAN	Filters	UNIT WEIGHT
CPRT-2-95	0-2,000	24X10	24X24	16"	(1) 24X24	2,750
CPRT-5-95	2,000-5,000	36X16	36X36	20"	(2) 24X24, (2) 12X24	3,750
CPRT-7-95	5,000-7,000	42X20	42X44	22"	(4) 24X24	4,600
CPRT-10-95	7,000-10,000	54X22	50X54	25"	(4) 24X24, (2) 12X24	6,100
CPRT-15-95	10,000-15,000	66X26	60X66	28"	(6) 24X24, (3) 12X24	7,750
CPRT-20-95	15,000-20,000	88X26	60X88	32"	(8) 24X24, (4) 12X24	9,850
CPRT-25-95	20,000-25,000	92X32	(2) 36X88	39"	(12) 24X24, (4) 12X24	12,900
CPRT-30-95	25,000-30,000	112X32	(2) 36X112	39"	(15) 24X24, (5) 12X24	14,500
CPRT-38-95	30,000-38,000	112X40	(2) 45X112	49"	(20) 24X24	17,800
CPRT-45-95	38,000-45,000	130x40	(2) 45x130	55"	(24) 24X24	21,550
CPRT-50-95	45,000-50,000	130x46	(2) 51X130	55"	(24) 24X24, (6) 12X24	23,750
CPRT-60-95	50,000-60,000	140X50	(2) 57X140	63"	(30) 24X24	27,100
CPRT-70-95	60,000-70,000	162X50	(2) 57X162	71"	(35) 24X24	30,500
CPRT-75-95	70,000-75,000	174X50	(2) 57X174	71"	(35) 24X24, (5) 12X24	32,000
CPRT-80-95	75,000-80,000	184X50	(2) 57X184	71"	(40) 24X24	34,550
CPRT-100-95	80,000-100,000	234X50	(2) 57X230	79"	(50) 24X24	42,400

Critical Process Roof Top Series Basic Unit with Integral Fan



Technical Specifications

Model	A	B	C	D	E	F	G	H	Supply Air Opening (S/A)
CPRT-2-95-IE	220	58	50.50	255.50	35.50	8	12	16	24x24
CPRT-5-95-IE	230	62	62.50	262.50	32.50	8	12	46	36x46
CPRT-7-95-IE	236	66	62.50	274.50	38.50	8	16	46	48x48
CPRT-10-95-IE	246	76	68.50	289.75	43.75	8	20	50	48x60
CPRT-15-95-IE	250	88	78.50	290.75	40.75	8	24	60	60x72
CPRT-20-95-IE	254	110	78.50	298.75	44.75	8	32	60	60x96
CPRT-25-95-IE	274	110	98.50	316.75	42.75	8	28	84	84x96
CPRT-30-95-IE	274	134	98.50	318.75	44.75	8	36	84	84x120
CPRT-38-95-IE	288	134	112.50	338.75	50.75	8	38	96	96x120
CPRT-45-95-IE	308	152	112.50	361.75	53.75	8	38	96	96x144
CPRT-50-95-IE	308	152	128.50	360.75	52.75	8	44	112	108x144
CPRT-60-95-IE	320	162	140.50	374.75	54.75	8	48	122	120x144
CPRT-70-95-IE	334	184	140.50	393.50	59.50	8	56	122	120x168
CPRT-75-95-IE	334	196	140.50	394.00	60.00	8	60	122	120x180
CPRT-80-95-IE	334	206	140.50	394.00	60.00	8	64	122	120x192
CPRT-100-95-IE	408	256	140.50	480.00	72.00	8	90	122	120x240

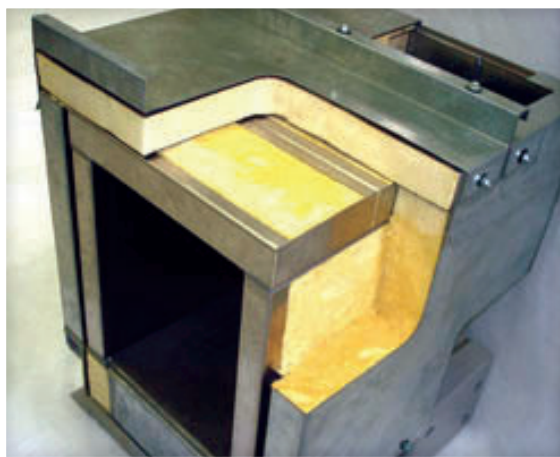


Model	CFM RANGE	R/A & O/A Damper W X H	Coils FH X FL	SUPPLY FAN	FILTERS	EA FAN/MOTOR HP	UNIT WEIGHT
CPRT-2-95-IE	0-2,000	10X24	24X24	16"	(1) 24X24	24"/1	4,100
CPRT-5-95-IE	2,000-5,000	14X44	36X36	20"	(2) 24X24, (2) 12X24	24"/2	5,400
CPRT-7-95-IE	5,000-7,000	18X44	42X44	22"	(4) 24X24	24"/2	5,700
CPRT-10-95-IE	7,000-10,000	24X50	50X54	25"	(4) 24X24, (2) 12X24	30"/3	7,300
CPRT-15-95-IE	10,000-15,000	28X60	60X66	28"	(6) 24X24, (3) 12X24	36"/5	8,800
CPRT-20-95-IE	15,000-20,000	40X60	60X88	32"	(8) 24X24, (4) 12X24	42"/7.5	11,000
CPRT-25-95-IE	20,000-25,000	40X72	(2) 36X88	39"	(12) 24X24, (4) 12X24	(2) 30"/5	14,300
CPRT-30-95-IE	25,000-30,000	48X72	(2) 36X112	44"	(15) 24X24, (5) 12X24	(2) 30"/5	16,000
CPRT-38-95-IE	30,000-38,000	50X86	(2) 45X112	49"	(20) 24X24	(2) 36"/7.5	20,300
CPRT-45-95-IE	38,000-45,000	62X86	(2) 45x130	55"	(24) 24X24	(2) 36"/7.5	21,200
CPRT-50-95-IE	45,000-50,000	62X94	(2) 51X130	55"	(24) 24X24, (6) 12X24	(2) 42"/7.5	23,000
CPRT-60-95-IE	50,000-60,000	64X110	(2) 57X140	63"	(30) 24X24	(2) 42"/10	26,200
CPRT-70-95-IE	60,000-70,000	74X110	(2) 57X162	71"	(35) 24X24	(2) 48"/10	29,500
CPRT-75-95-IE	70,000-75,000	80X110	(2) 57X174	71"	(35) 24X24, (5) 12X24	(2) 48"/15	30,900
CPRT-80-95-IE	75,000-80,000	84X110	(2) 57X184	71"	(40) 24X24	(2) 48"/15	31,400
CPRT-100-95-IE	80,000-100,000	106X110	(2) 57X230	79"	(50) 24X24	(2) 48"/20	48,000

Why Buy CDI?

Quality Construction

- Standard unit construction is G-90 galvanized steel, double wall, and insulated.
- Options include stainless steel liners or stainless steel interiors.
- Our patented NoThruMetal® cabinet is truly a “cabinet within a cabinet”.
- Injected polyurethane foam insulation R-6 per inch is offered in 2 ½”, 4”, and 6” thicknesses.



CDI's casing is truly thermally broken and because of this has unprecedented thermal performance that:

- Dramatically increases resistance to air and moisture leakage.
- Provides superior condensation control.
- Ultimate in a smooth sanitary cleanable interior surface.

Microprocessor Safeguards



- Microprocessor standard controller for temperature, humidity, flow control, and safeguard functions.
- Terminal strip connection points for alarming, monitoring, and communication with your building management system.



- Optional, remotely located, user interface panel is available when increased accessibility is important.

User Interface



- An excellent tool for start-up, troubleshooting, and monitoring unit operation.
- Easy access to unit set points.
- Provides quick assessment of unit status and conditions.

Optional Allen Bradley

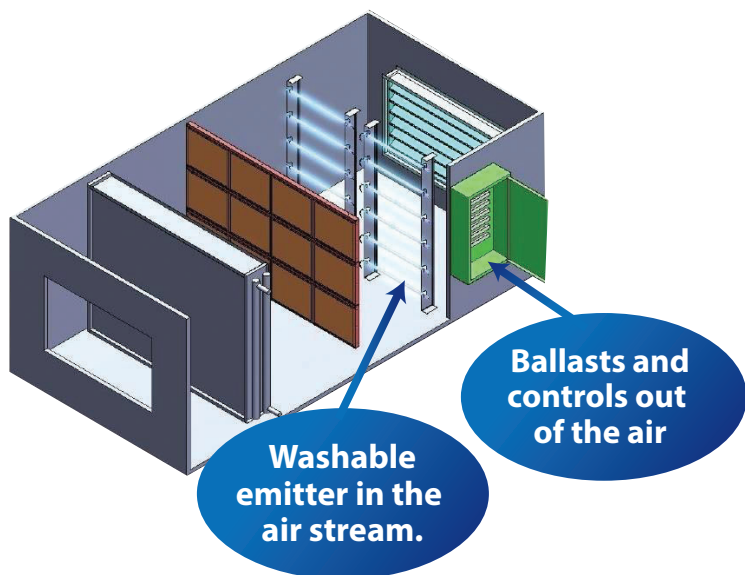


- If your facility uses Allen Bradley process controls, consider a simple interface to provide you the inputs and control you wish.



CDI Washable Emitter Construction

- CDI UVGI allows wash down of the airstream and components without removal of UV emitters.
- Ballasts are out of the airstream.



CDI UVGI

(Ultraviolet Germicidal Irradiation)



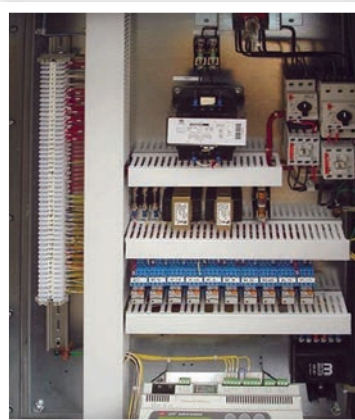
- Unique and exclusive water and dust tight Teflon coated shatter proof emitter lamp.
- Single electrical connection utilizes our exclusive end seal which allows the entire unit assembly to be washed down with emitters in place.
- Offers a true 2-year lamp which retains 80% initial output over its 17,000 hour life.

Cooling Coil/Drain Pan



- Placed immediately downstream of a cooling coil, UVGI effectively kills bacteria and other microorganisms that grow on these damp surfaces. Microbial growth can develop into tough biofilms and restrict airflow.
- With UVGI, coil performance is maintained as if the coils were brand new.
- Maintenance is reduced to simple inspections and minimal surface cleanup.

Circuitry Designed for Ease and Safety



- Combination circuit breaker/overload starters for fan motors - eliminates the need for spare power fuses and saves downtime. If an upset occurs, a simple reset will bring the unit back online.
- Wiring to industrial terminal strips makes for easier connection and troubleshooting.
 - All doors are equipped with locking handles; keyed access prevents unauthorized entry.



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Why Buy CDI?

Maintainability

The Critical Process Rooftop product has been designed with long-term use in mind. Our Operation and Maintenance Manuals, Factory Commissioning, and Training set up a foundation for your continued success.

Responsive

With our trained and equipped field service technicians there is always someone near you to assist. 24/7 customer service hotline available.

Configurability

Simply put, have it your way!

Who We Are

Climate by Design International (CDI) was founded in 1991 in Owatonna, Minnesota.

CDI provides customers with a broad array of custom HVAC options. Years of HVAC industry experience established the foundation for today's thriving company.

CDI designs and manufactures custom air handling systems for facilities. Products include desiccant dehumidification equipment and custom air handling units for critical process environments.

Our projects are designed utilizing internally developed Climate by Design™ software.

This software is used by our sales engineers, manufacturing representatives, and associates to configure and predict the performance of air handling units.

We understand the critical nature of our customers' processes and respond by providing services and training to meet customer requirements for a favorable climate and environment. Services range from preventative maintenance to prescriptive plans for a specific application.

Our goal is to provide our customers with high-quality, energy-efficient solutions for indoor air quality.

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