

2018

COMMERCIAL CATALOG V 2.0

NORITZ
TANKLESS WATER HEATERS



COMMERCIAL CATALOG

The True Commercial Tankless Water Heater Solution



WHY COMMERCIAL TANKLESS?

It's time to forego the unreliability and cumbersome footprint that commercial tank type water heaters and boilers.

Losing their touch over time, Traditional Commercial Water Heating Equipment has become dated & obsolete; problematic in terms of space, redundancy, cost, and overall system life.

The limitations and obstacles traditional equipment has come to represent have presented opportunities for Noritz to Innovate TRUE hot water solutions for commercial applications. Speaking of space, Noritz Commercial Tankless Water Heaters sleek modular design & compact wall hung size allows each unit to be installed in versatile locations and types. Multi systems are installed on site or available as Pre-engineered & Pre-fabricated rack systems in either wall or floor mount configurations designed to recover valuable space in your building. (CRS/CWHS).

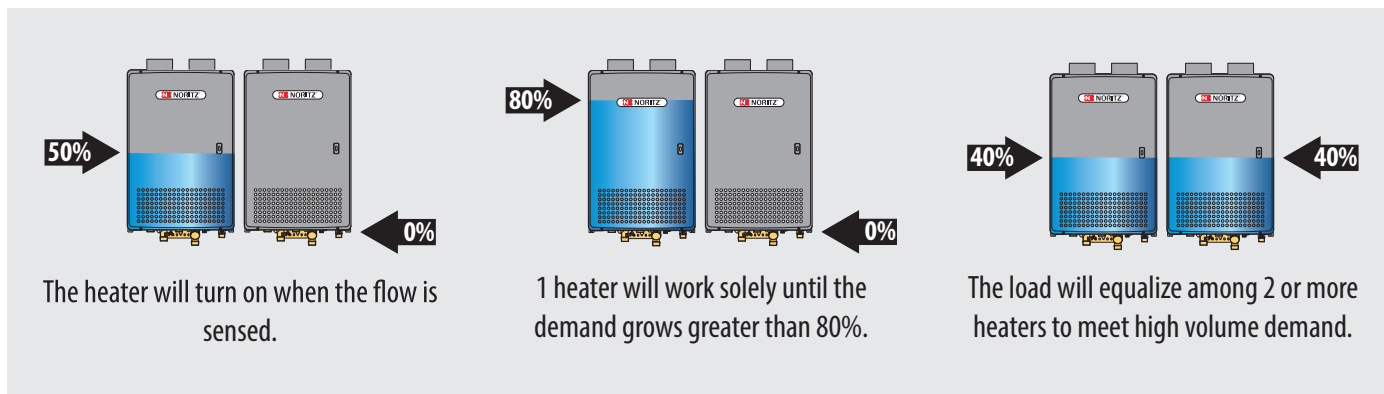
In terms of reliability and system life, The Noritz multi-system takes tanks and boilers to task as its intelligent modulation works to stage, balance, and distribute all hot water loads evenly between the units during operation, maximizing output, efficiencies, and system life. The Scalability of the Noritz Multi-system inherently builds in redundancy, positioning Noritz as the new Benchmark in commercial water heating.



Viera, FL - Fairfield Inn Hotel

INTELLIGENT SYSTEM

In a multi-system setup, the Noritz commercial units will communicate and work in unison to even out the load on each individual unit, maximizing output and system life. With the ability to modulate between multiple units with the use of a system controller makes Noritz commercial water heaters the most efficient water heating system on the market today.



MODULARITY THAT'S ALWAYS WORKING FOR YOU

TRUE Commercial Tankless



TRUSTED

Since 1951, Noritz commitment and mission has been to “make people happy through hot water.” With over 16,000,000 units serving people’s hot water needs worldwide our goal is to provide sustainable customer focused solutions for hot water.

RELIABLE

Noritz Commercial Tankless Water Heaters are modular and can be linked to create redundancy. Even when one unit needs service or is not in operation, hot water will be delivered seamlessly by other units in the system. Noritz Redundancy in commercial applications provides a reliable, uninterrupted source of hot water which translates to piece of mind for our customers & their bottom line.

UNMATCHED

Noritz Commercial Tankless Water Heaters are the only TRUE commercial grade tankless water heaters on the market. Noritz continues to lead the industry in terms of innovation, quality, and performance. Noritz Intelligent Modular Water Heating Technology can link up to 24 units in a single system providing unmatched performance and reliability. Noritz continues to be the Industry leader in design and Quality of major components such as our Heat Exchangers.

EFFICIENT

For the rest of the pack, efficiency is a mere watermark to aim for. For Noritz, efficiency is our name. From industry leading thermal efficiencies up to 98% to the lean JPS just in time manufacturing process we utilize to manufacture our product.

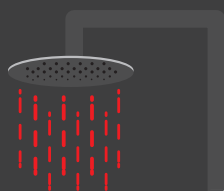
HOW IT WORKS

premix burner tankless water heater

TANKLESS TECHNOLOGY

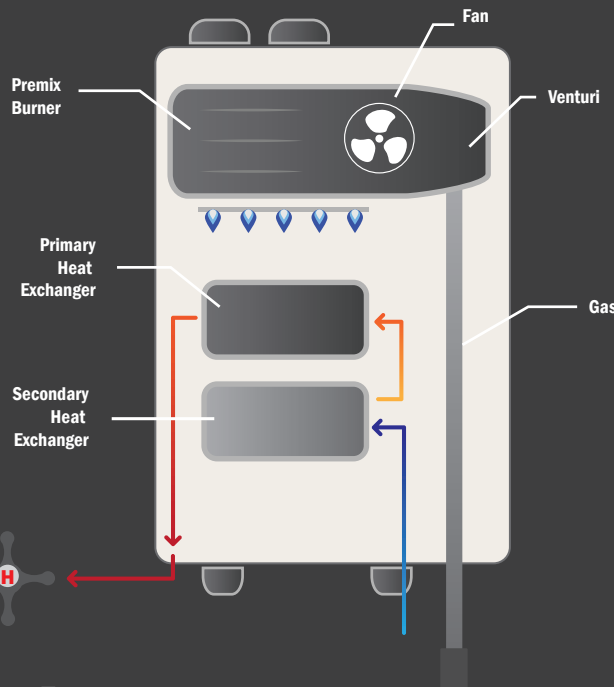
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The Noritz tankless water heater provides an endless stream of hot water. When the tap is turned off, the unit shuts off.



3

The premix burner mixes the proper ratio of air and gas and the computer automatically ignites the burner.



2

Cold water enters the heater and the flow sensor detects the water flow.

1

A hot water tap is turned on.

Features and Benefits

SCALABILITY



Noritz's line of commercial water heaters can meet any demand you throw at them. Need to add more units to meet unanticipated demand? No problem. With the Noritz commercial system you can scale your system with ease to make sure your needs are met.

REDUNDANCY



With the commercial redundancy functionality you never have to worry about never having hot water. Our heaters intelligently provide back up in the rare case of an issue or maintenance is required on another unit. Our system works seamlessly to pick up the slack so you don't go without hot water.

VERSATILITY



Our small footprint and variety of installation methods makes Noritz the clear choice in versatility. Tricky installation site or complicated plumbing? No problem.

EFFICIENCY



With our intelligent modulation and load tracking we make sure that none of the heaters in your array are overworked. With equalization of the load your heaters will take turns to increase lifespan and uptime.



Miyko Hybrid Hotel Installation

BOILER VS TANKLESS

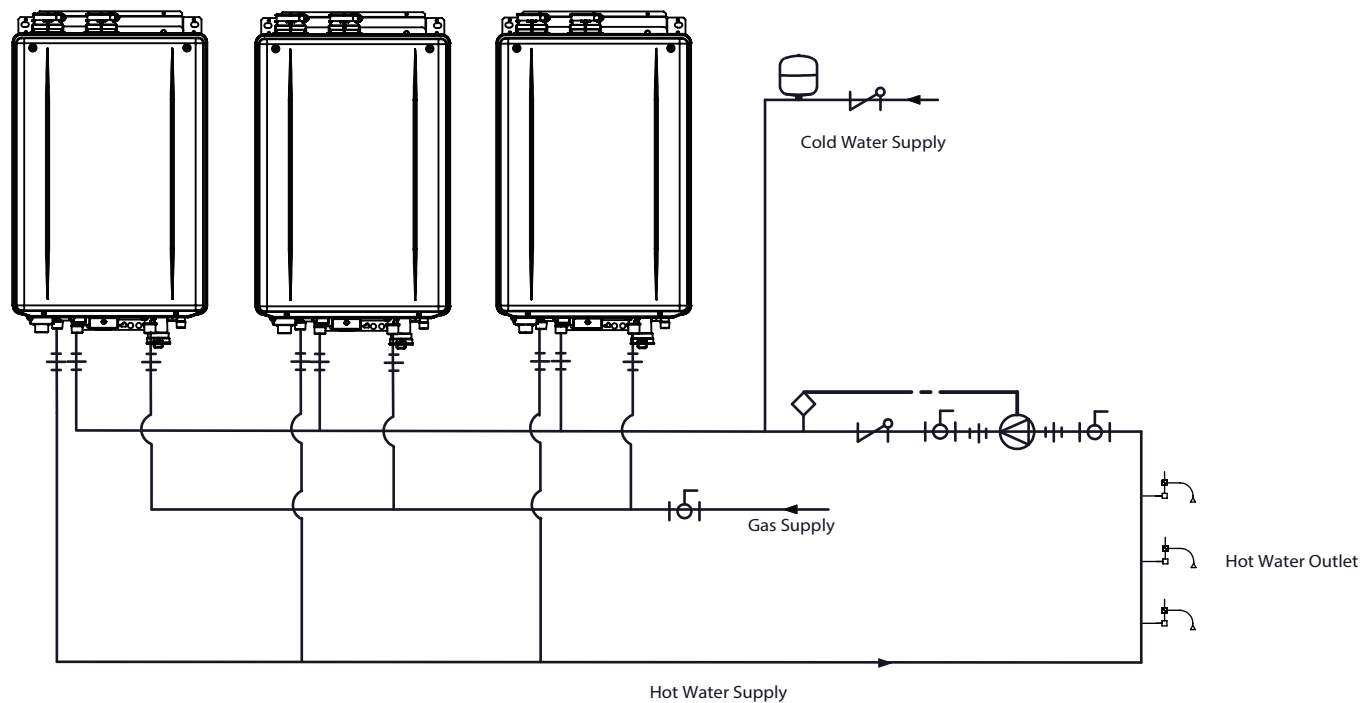


VS

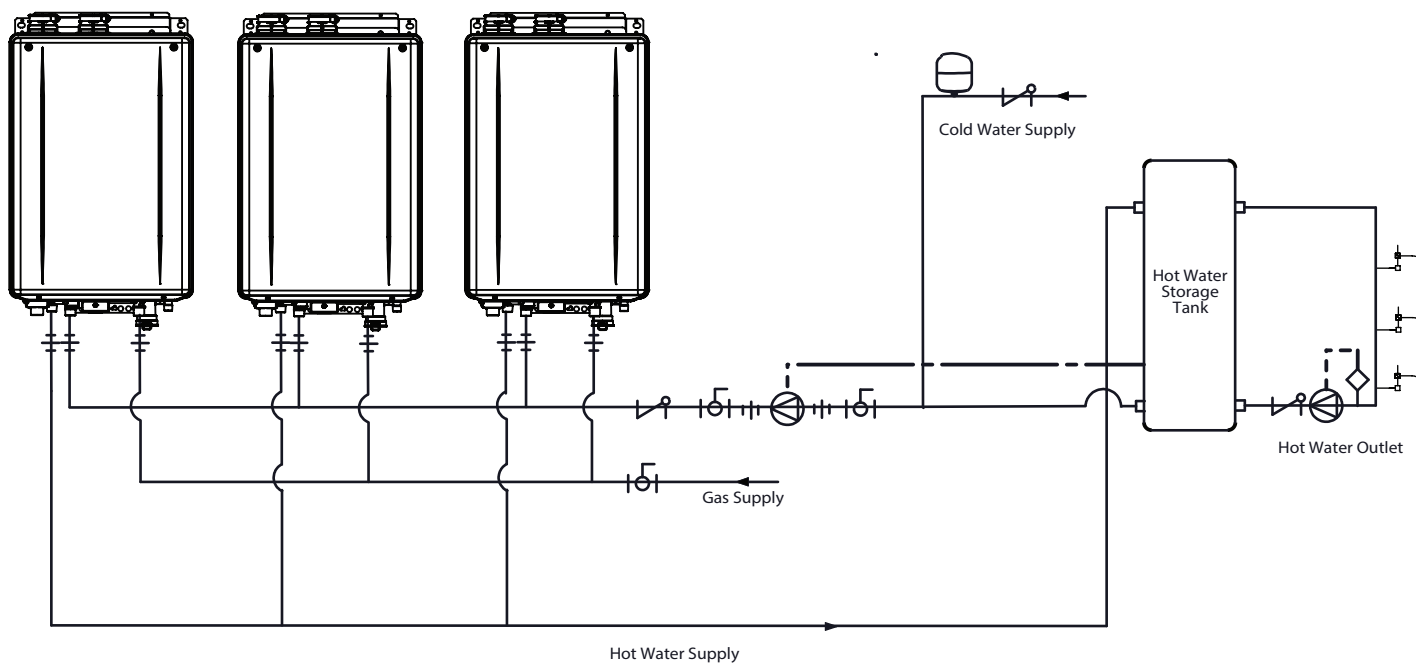


Concern	Boiler with Storage Systems	Noritz Tankless System
Heat Loss	Foam insulation on boiler room components	Zero standby heat loss
Installation Footprint	Indoor installation only taking up a large footprint for the boiler plus storage	Indoor or outdoor installation and can be installed on walls or racks
Cycling	Low turndown ratio has overheating and cycling issues that wastes energy	Multi-system offers load tracking, cycling any number of heaters based on demand. With high turndown ratios tankless enables gas savings.
Redundancy	Single hot water boiler with storage tank. Failure in either component will compromise hot water supply	Multi-system offers redundancy and simplifies service and maintenance with no down time. Single units can be isolated for service while others continue hot water production

TANKLESS DIAGRAMS



Multisystem Recirculation Diagram



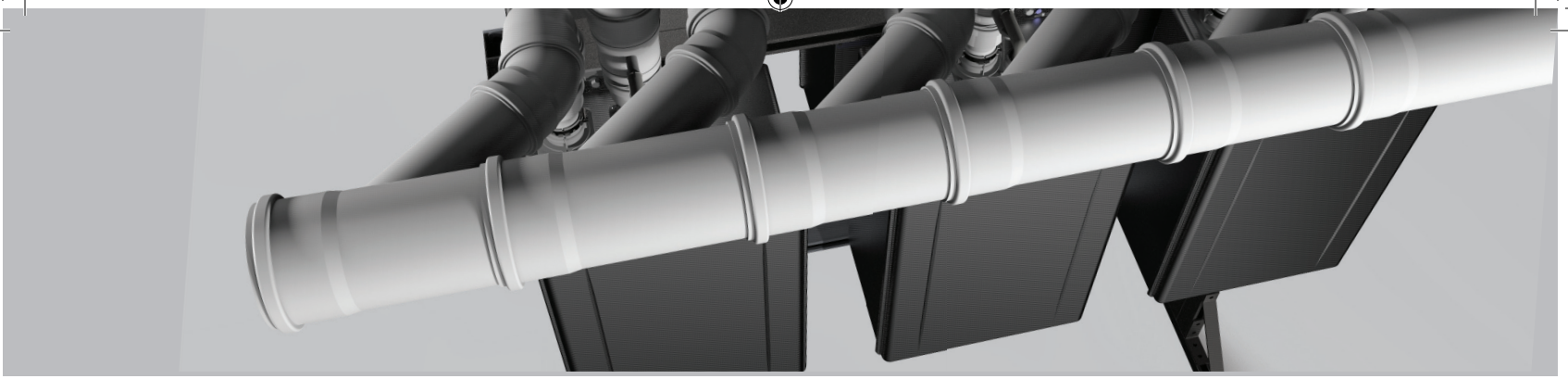
Multisystem with Storage Tank Diagram

COMMON VENT

OFFERING *TRUE* INSTALLATION

FLEXIBILITY





With Noritz Common Venting, up to 6 Noritz Water Heaters are able to share the same venting system. This means significantly reduced penetrations through the wall or roof – resulting in less labor and a cleaner finished look. The use of a larger vent diameter system allows for longer vent runs for larger and taller buildings – up to 200 ft. of equivalent vent length. The system is independently tested and approved for use by CSA in both the US and Canada.

Offers a clean, labor saving install while ensuring the utmost in safety and performance:

Tested with safety in mind – each water heater uses an inline non-return valve to prevent flue gas from entering idle units.

Reduces wall or ceiling penetrations

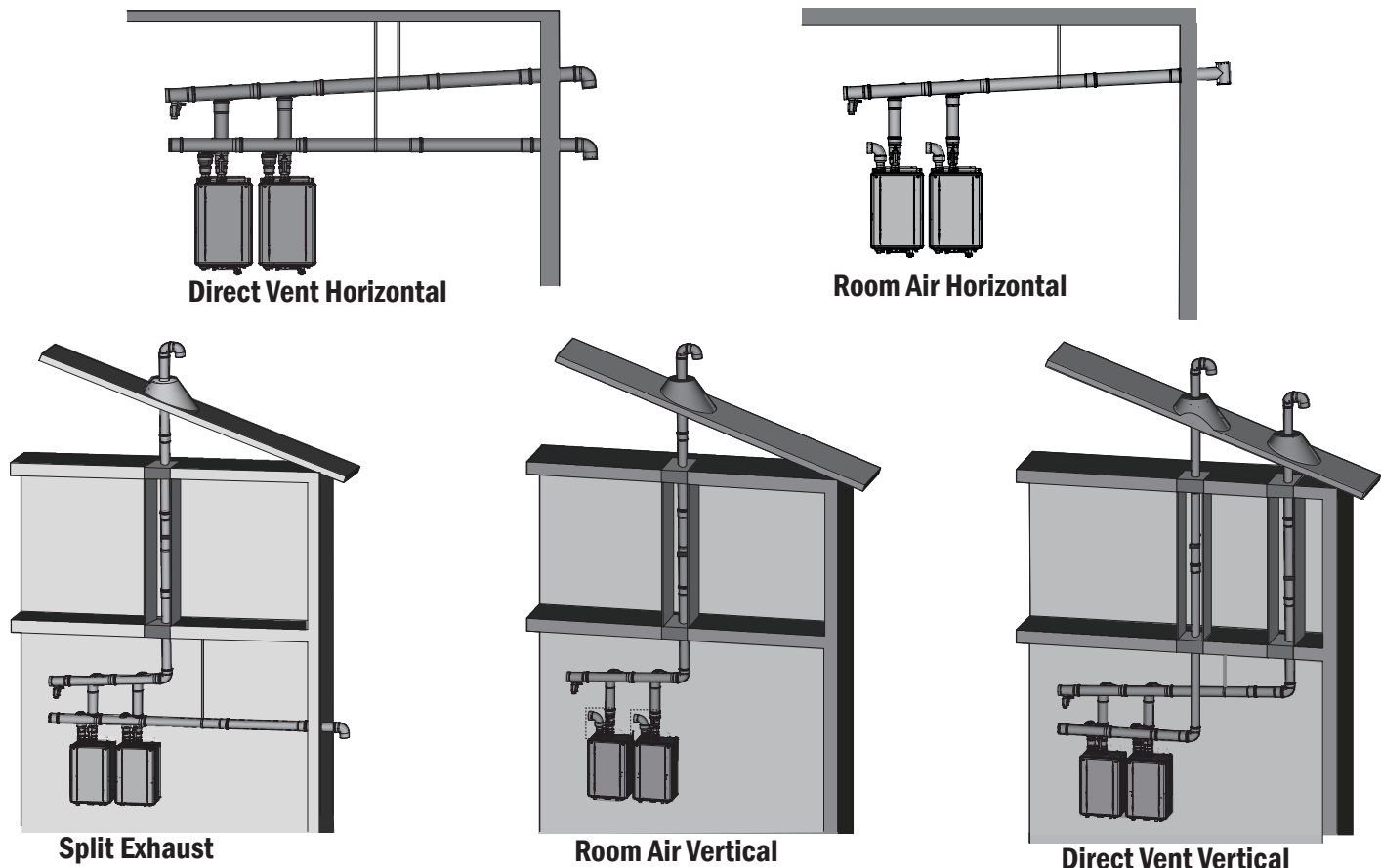
Utilizes ULCS-636 approved Polypropylene (PP) venting, capable of handling temperatures up to 230°F.

Easy push fit connections – no cement, glue, or primer needed

Ultimate flexibility for vent configuration:

Figuring out where to safely and efficiently route the exhaust system is one of the biggest hurdles for any HVAC system designer. Noritz Common Venting offers designers the most flexibility to decide how to safely and efficiently route the vent.

For room air installations, the combustion air can be drawn from the room environment, further reducing the installation complexity, by requiring only a single penetration for the exhaust.





NCC199CDV

(GQ-C3259WZ-FF US)

NEXT GEN **TRUE** COMMERCIAL TANKLESS

Common Vent Capability

Provides scalability of up to 6 heaters on a single venting system

2" Vent Connections

Offers flexible venting options for vertical or horizontal termination with PVC, CPVC, or PP venting. Ability to vent up to 60' with 2" and 100' with 3" materials.

Dual High Grade Stainless Steel Heat Exchangers

Manufactured with 316L grade materials for high durability and corrosion resistance

Pre-Mix Burner

Combined with a unique negative pressure Venturi gas valve, the NCC199CDV is Commercial ENERGY STAR & AHRI certified at **98% Thermal Efficiency**

Ultra Low NOx

Produces only 14 ppm. 33% less emissions than the SCAQMD limitations of 20ppm NOx.

Commercial ENERGY STAR
Commercial AHRI certified





NCC199CDV

(GQ-C3259WZ-FF US)

Gas Input Range (BTU/h)	18,000-199,000
Flow Rate Range (GPM)	0.29 - 11.1
Flow rate at 45°F (GPM)	8.7
Flow rate at 100°F (GPM)	3.9
Thermal Efficiency	98%

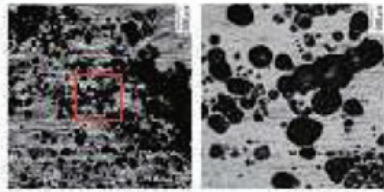


INDUSTRY LEADING 98% THERMAL EFFICIENCY
 as an ENERGY STAR Certified Commercial Water Heater

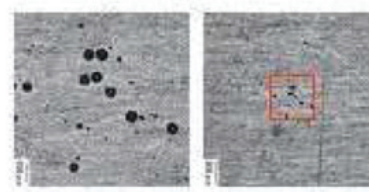
HEAT EXCHANGER

The NCC199CDV comes equipped with a new heat exchanger designed for maximum performance and reliability. The innovative design maximizes water flow and scale resistance while allowing efficient transfer of combustion energy leading to an industry leading 98% thermal efficiency. Utilizing a dual core of surgical grade 316L Stainless Steel, it offers the utmost in corrosion and erosion resistance to handle the rigors of commercial hot water usage. The high quality 316L heat exchanger reduces the rate of pitting and crevice corrosion when compared with lower grade ferritic stainless alloys commonly used in other water heating products, ensuring years of long lasting performance and problem free operation.

Pitting Corrosion Ferritic Stainless

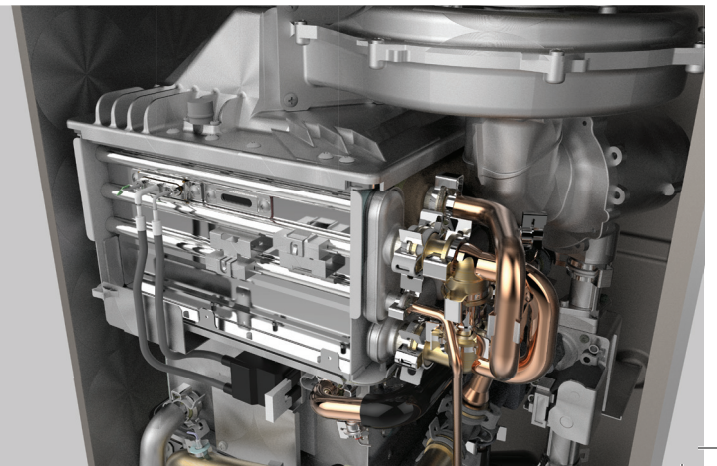


Pitting corrosion 316L Austenitic Stainless



SUPERIOR STAINLESS STEEL

**ENGINEERED
DEPENDIBILITY**



PROJECT PROFILE



Unit : NCC199DV
Number of Units: 18
Installation Location: Roof
Apartment Complex

Rooftop installations at the 182-unit Avalon Hayes Valley apartment complex couples 64 solar-thermal collectors with 18 tankless commercial units to meet all domestic hot water needs, while also helping project exceed the California Title 24 energy code by nearly 30

Problem: How to provide sufficient amounts of hot water at the right temperature for a multi-family development of this magnitude, whose round-the-clock demand for hot water varies widely by the hour.

Solution: 18 Noritz NCC1991-DV Condensing gas-fired tankless water heaters, hung and piped together in a custom-fabricated, Unistrutrack system located in a mechanical room on the rooftop of the AVA 55 Ninth. To meet peak demand, the 18 water heaters can deliver a combined maximum of 3,598,200 BTU/hour, with a maximum flow rate of 104.6 gallons of 120°F per minute.



Payoff: This powerful, yet highly adaptive system is designed to fully meet tenant needs for hot water without consuming any more energy than necessary. The multiple-unit strategy should also spare tenants the hassle of being without hot water even during maintenance periods. Should a unit malfunction, it would simply be removed from the rack for repairs or replacement, while the other 17 continue to work to meet the demand.



Getting as efficient as possible is the central reality for every developer, designer and installer in our current world. Tankless is definitely something that will be seen as a great benefit to the overall efficiency of buildings...”

*Jeff Koch
Senior Design Engineer*

PROJECT PROFILE



Unit : NCC199DV
Number of Units: 14
Installation Location: Mechanical Room
Vero Beach, FL County Jail

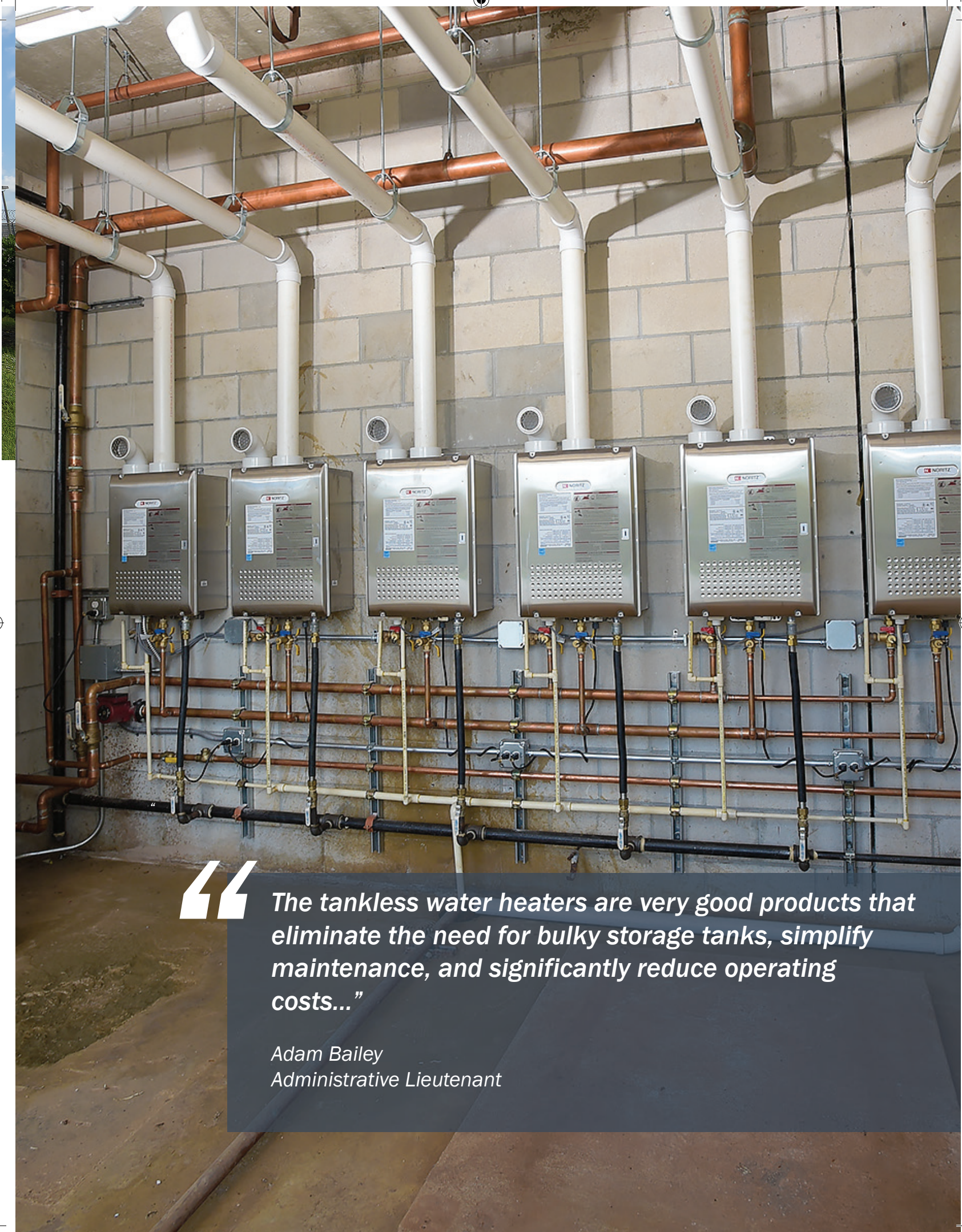
After replacing faulty boilers with Noritz NCC1991 tankless water heaters, Indian River County Jail in Florida guaranteed its 400 inmates constant, on-demand hot water and saved nearly \$50,000 over tank-types.

Problem: Replacing two malfunctioning boilers to provide sufficient amounts of hot water at the right temperature for a jail serving roughly 400 inmates.

Solution: 14 Noritz NCC1991-DV Condensing propane-fired tankless water heaters were installed in two separate buildings (eight in one; six in the other). The set of eight in E-building can deliver a combined maximum of 1,599,200 BTU/hour and was common vented using a Tjernland exhaust fan. The set of six in C-Building can deliver a combined maximum of 1,199,400 BTU/hour and was individually vented. To ensure that the jail's laundry hot water needs would be met, the second set was installed with a 119-gallon storage tank.



Payoff: The jail saved roughly \$50,000 in equipment costs by choosing to install the tankless water heaters over storage tank heaters and continues to save significant amounts in energy, though this number could not be disclosed. Furthermore, the tankless units' compact size allows for easier maintenance than what would be the case with larger boilers or storage tank heaters.



“ The tankless water heaters are very good products that eliminate the need for bulky storage tanks, simplify maintenance, and significantly reduce operating costs...”

*Adam Bailey
Administrative Lieutenant*

TRUE INDUSTRY SOLUTIONS

our proven track record.



RESTAURANT

4th Street Market Santa Ana, California

Model: NC199 Series
Qty: 22
Indoor/Outdoor: Outdoor
Max Btuh Input: 4,397,800 Btuh
Thermal Efficiency: 86%
GPM : 101 gpm @ 75 deg rise



PF Chang's Nationwide

Model: NC380
Qty: 4
Indoor/Outdoor: Indoor & Outdoor
Max Btuh Input: 1,520,000 Btuh
Thermal Efficiency: 80%
GPM: 32 gpm @ 75 deg rise

Replaced: Storage tank water heater. 100 gallon / 199,000 Btuh
Motivating Factor: Space Savings, Redundancy, Warranty



Qdoba Nationwide

Model: NCC199 series
Qty: 6
Indoor/Outdoor: Indoor & Outdoor
Max Btuh Input: 1,199,400 Btuh
Thermal Efficiency: 94%
GPM: 30 gpm @ 75 deg rise

Replaced: Storage tank water heater. 100 gallon / 199,000 Btuh
Motivating Factor: Space Savings, Redundancy, Warranty



APARTMENTS

Avalon Hayes Community San Francisco, California

Model: NCC199 series
Qty: 18
Indoor/Outdoor: Outdoor
Max Btuh Input: 3,598,200 Btuh
Thermal Efficiency: 95%
GPM: 105 gpm @ 65 deg rise

Replaced: New Construction
Motivating Factor: Redundancy, High Efficiency, Easy Maintenance



HOTELS

Fairfield Inn Rockledge, Florida

Model: NCC199 series
Qty: 5
Indoor/Outdoor: Indoor
Max Btuh Input: 999,500 Btuh
Thermal Efficiency: 95%
GPM: 31 gpm @ 60 deg rise

Replaced: Storage tank water heater. 2 x 100 gallon
Motivating Factor: Space Savings, Redundancy, High Efficiency



Inn at Sunset Cliffs Carlsbad ,California

Model: NCC199 series
Qty: 5
Indoor/Outdoor: Indoor
Max Btuh Input: 999,500 Btuh
Thermal Efficiency: 95%
GPM: 31 gpm @ 60 deg rise

Replaced: Storage tank water heater. 2 x 100 gallon
Motivating Factor: Space Savings, Redundancy, High Efficiency



LAUNDRY

Speed Queens Landromat Georgia and Texas

Model: NCC199 series
Qty: 8
Indoor/Outdoor: Indoor
Max Btuh Input: 1,599,200 Btuh
Thermal Efficiency: 95%
GPM: 43 gpm @ 70 deg rise

New Construction
Motivating Factor: Space Savings, Energy Savings



CAMPUSES

Univ. South Florida Dorms South Tampa, Florida

Model: NCC199 Pre Built Rack
Qty: 6
Indoor/Outdoor: Indoor
Max Btuh Input: 1,199,400 Btuh
Thermal Efficiency: 95%
GPM: 45 gpm @ 50 deg rise

Replaced: Storage tank water heater, AO smith Cyclones,
3x 100 gallon
Motivating Factor: Lower Equipment Cost ,Modulation, Better Warranty



OFFICE BUILDINGS

Oakley HQ Lake Forest, CA

Model: NC380
Qty: 30
Indoor/Outdoor: Outdoor
Max Btuh Input: 11,400,000 Btuh
Thermal Efficiency: 80%
GPM: 330 gpm @ 65 deg rise

Replaced: Large storage tank and boiler
Motivating Factor: High Efficiency, Redundancy, Space Savings



HOSPITAL

VA Hospital Salt Lake City, Utah

Model: NC380
Qty: 30
Indoor/Outdoor: Outdoor
Max Btuh Input: 11,400,000 Btuh
Thermal Efficiency: 80%
GPM: 330 gpm @ 65 deg rise

Replaced: Large storage tank and boiler
Motivating Factor: High Efficiency, Redundancy, Space Savings



BREWERY

Monday Night Brewing Atlanta, Georgia

Model: NCC199 PreBuilt Wall Mount Rack
Qty: 3
Indoor/Outdoor: Indoor
Max Btuh Input: 599,700 Btuh
Thermal Efficiency: 95%
GPM: 9.4 @ 120 deg rise

Replaced: 5 total units Total CWHS408
Motivating Factor: Equipment cost savings, redundancy





EMERGENCY REPLACEMENT MODULAR SOLUTION

Pre-engineered, pre-fabricated rack system solution designed for quick hot water replacement. Includes pre-piped, pre-sized water and gas lines, as well as mounting hardware.

(Units not included)



COMPATIBLE WITH

NCC199 CDV

- » Dual 316L Stainless Steel Heat Exchanger
- » 98% Thermal Efficiency
- » Common Vent Capability
- » Pre-Mix Burner
- » 2-Inch Vent
- » Outdoor Convertible (With VC-6)

NCC199 CDV CRS

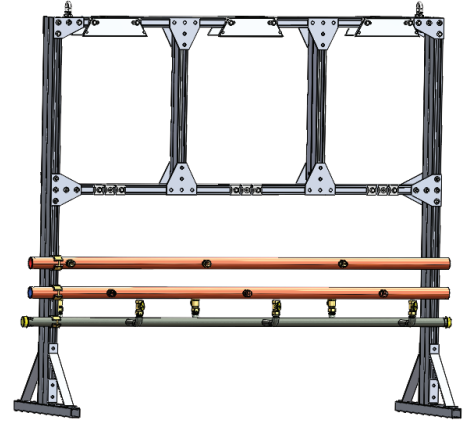
Rack Series	CRS-11	CRS-12	CRS-16	CRS-19
Compatible Water Heater	NCC199 CDV			
Maximum Units	2	3	4	6
Frame Dimensions				
Length	45.5"	70"	45.5"	70"
Depth	15"	15"	30"	30"
Height	68.5"	68.5"	68.5"	68.5"
Frame Specifications				
Frame Rail Type	1 5/8" Square Slot Metal		1 5/8" x 4 7/8" Slot Metal	
Frame Material	14 Gauge Aluminum			
Frame Finish	Aluminum			
Color	Aluminum			
Water and Gas Connections				
Hot Water Trunk Line Diameter (in.)	1 1/2"	2	2	2 1/2"
Cold Water Trunk Line Diameter (in.)	1 1/2"	2	2	2 1/2"
Hot Water Trunk Line Material	Type L Copper (Rigid)			
Cold Water Trunk Line Material	Type L Copper (Rigid)			
Water Connection Type	Pipe			
Gas Trunk Line Diameter (in.)	1 1/4"	1 1/4"	1 1/4"	1 1/2"
Gas Trunk Line Material	Powder Coated SCH 40 Steel			
Gas Branch Line Material	PVC over CSST			
Gas Trunk Connection Type	Male NPT			
Other Included Parts				
3/4" Flex SS Cold Supply Line	2	3	4	6
3/4" Flex SS Hot Supply Line	2	3	4	6
3/4" CSST Gas Flex Connector w/ Dirt Leg	2	3	4	6
Mounting Hardware Sets	2	3	4	6

CRS

COMMERCIAL RACK SYSTEM

The Noritz Commercial Rack System (CRS) provides a pre-fabricated, professional looking solution when time is of the essence. Featuring a mounting rack with properly sized water and gas lines and mounting hardware, the CRS provides the framework for getting your hot water system back up and running in the shortest amount of time.

- Heavy duty aluminum frame for indoor or outdoor installation
- All mounting hardware included in one package
- Pre-sized water and gas lines create a worry-free design
- Flexible mounting points to easily secure to wall or floor



COMPATIBLE WITH



NCC199 DV



NCC199 OD

NCC199 DV / OD CRS

Rack Series	CRS-1	CRS-2	CRS-6	CRS-9
Compatible Water Heater	NCC199 DV, NCC199 OD			
Maximum Units	2	3	4	6
Frame Dimensions				
Length	42.8"	67.3"	42.8"	67.3"
Depth	12"	12"	30"	30"
Height	65"	65"	65"	65"
Frame Specifications				
Frame Rail Type	1 5/8" Square Slot Metal		1 5/8" x 4 7/8" Slot Metal	
Frame Material	14 Gauge Aluminum			
Frame Finish	Aluminum			
Color	Aluminum			
Water and Gas Connections				
Hot Water Trunk Line Diameter (in.)	1 1/2"	2	2	2 1/2"
Cold Water Trunk Line Diameter (in.)	1 1/2"	2	2	2 1/2"
Hot Water Trunk Line Material	Type L Copper (Rigid)			
Cold Water Trunk Line Material	Type L Copper (Rigid)			
Water Connection Type	Pipe			
Gas Trunk Line Diameter (in.)	1 1/4"			1 1/2"
Gas Trunk Line Material	Powder Coated SCH 40 Steel			
Gas Branch Line Material	PVC over CSST			
Gas Trunk Connection Type	Male NPT			
Other Included Parts				
3/4" Flex SS Cold Supply Line	2	3	4	6
3/4" Flex SS Hot Supply Line	2	3	4	6
3/4" CSST Gas Flex Connector w/ Dirt Leg	2	3	4	6
Mounting Hardware Sets	2	3	4	6

PRE-ENGINEERED COMMERCIAL RACK SYSTEM

Noritz offers a commercial water heating solution that gives you all the benefits of tankless water heaters in one easy to install pre-fabricated package. Ideal for an existing or planned boiler and storage tank replacement, the Noritz Commercial Water Heating System (CWHS) is made to provide a true alternative to the old-fashioned boiler technology.



NCC199 CDV

COMMON VENT CAPABILITY

Provides scalability of up to 6 heaters on a single venting system

2" VENT CONNECTIONS

Offers flexible venting options for vertical or horizontal termination with PVC, CPVC, or PP venting. Ability to vent up to 60' with 2" and 100' with 3" materials.

DUAL HIGH GRADE STAINLESS STEEL HEAT EXCHANGERS

Manufactured with 316L grade materials for high durability and corrosion resistance.

PRE-MIX BURNER

Combined with a unique negative pressure Venturi gas valve, the NCC 199CDV is Commercial ENERGY STAR & AHRI certified at 98% Thermal Efficiency

ULTRA LOW NOX

Produces only 14ppm. 33% less emissions than the SCAQMD limitations of 20ppm NOx.

FLEXIBILITY

The CWHS offers unmatched versatility and flexibility compared against a boiler and storage system.

The CWHS was designed with building logistics in mind – at 30" in depth, the CWHS can fit through any standard 32" doorway, along with built-in bolts for easy hoisting*. Able to be installed indoors or outdoors, floor-mounted or wall-mounted, the possibilities for reducing building footprint are extensive. Indoor installations can be vented with PVC or CPVC, either horizontally or vertically, and convertible to allow either room air or direct vent combustion air options

EFFICIENCY

Each CWHS comes standard with the Commercial Energy Star list NCC 199 model unit, rated at up to 95% Thermal Efficiency. Fully modulating, with turn-down ratios of up to 75:1***, the CWHS system provides exceptional energy savings potential over an old-fashioned boiler and storage tank set up.

With all of these benefits plus the Noritz trademark quality, the Noritz CWHS provides a true business-friendly replacement for any boiler system.

REDUNDANCY

Built-in redundancy from using multiple Noritz water heaters ensures continuous hot water, even in the worst case of a unit going down.

Isolation valves (included) allow for easy maintenance or service without interrupting hot water service to the rest of the building. The pre-installed (included) system controller monitors and controls the units to ensure even wear and proper operation of each unit.

With the optional wireless** adapter, you can further enhance system reliability by monitoring the units at the touch of a finger and receiving service alerts automatically.

*Floor mounted racks only
**Coming soon
***With one 6 unit system CWHS rack. Multiple racks can be combined together to get turndown ratios of up to 300:1 with 24 units and the SC-401-24M system controller.

NCC199CDV COMMON VENT WALL HANGING RACKS

WALL HANGING RACKS



Rack Series	CWHS501 (LP) CWHS601 (NG)	CWHS502 (LP) CWHS602 (NG)
Water Heater	NCC199CDV	
System Dimension	45.5" (L) x 68.5" (H) x 15.0" (D)	70.0" (L) x 68.5" (H) x 15.0" (D)
Fully Assembled Weight (lbs.)	TBD	
Shipping Weight (lbs.)	TBD	
Frame Specifications		
Frame Rail Type	1 5/8" Square Slot Metal	
Frame Material	14 Gauge Aluminum	
Frame Finish	Aluminum	
Color	Aluminum	
Water and Gas Connections		
Hot Water Trunk Line Diameter (in.)	1 1/2"	2
Cold Water Trunk Line Diameter (in.)	1 1/2"	2
Hot Water Trunk Line Material	Type L Copper (Rigid)	
Cold Water Trunk Line Material	Type L Copper (Rigid)	
Gas Trunk Line Diameter (in.)	1 1/4"	
Gas Trunk Line Material	Powder Coated SCH 40 Steel	
Gas Branch Line Material	PVC over CSST	
Electrical Specifications		
Voltage	120 VAC (60 Hz)	
Max Current Draw (amp)	8	12
System Performance		
Quantity of Units	2	3
Hot Water Capacity @ 30°F rise (GPM)	22.2	33.3
Hot Water Capacity @ 70°F rise (GPM)	11.2	16.8
Hot Water Capacity @ 100°F rise (GPM)	8.0	12.0
Minimum (Btuh)	18,000	
Maximum (Btuh)	399,800	599,700
Thermal Efficiency	98	
Other Features		
Warranty	5 years Heat Exchanger, 5 years parts, 1 year labor	
High Altitude	Up to 10,000 feet	
Wireless Ready	Yes	
Common Vent Compatible	Yes	
Commercial Energy Star	Yes	

NCC199 CDV COMMON VENT FLOOR MOUNTED RACKS

FLOOR MOUNTED RACKS							
Rack Series	CWHS503 (LP) CWHS603 (NG)	CWHS504 (LP) CWHS604 (NG)	CWHS505 (LP) CWHS605 (NG)	CWHS506 (LP) CWHS606 (NG)	CWHS507 (LP) CWHS607 (NG)	CWHS508 (LP) CWHS608 (NG)	CWHS509 (LP) CWHS609 (NG)
Water Heater	NCC199CDV						
System Dimension	45.5" (L) x 68.5" (H) x 30.0" (D)				70.0" (L) x 68.5" (H) x 30.0" (D)		
Fully Assembled Weight (lbs.)	TBD						
Shipping Weight (lbs.)	TBD						
Frame Specifications							
Frame Rail Type	1 5/8" x 4 7/8" Slot Metal						
Frame Material	14 Gauge Aluminum						
Frame Finish	Aluminum						
Color	Aluminum						
Water and Gas Connections							
Hot Water Trunk Line Diameter (in.)	2				2 1/2"		
Cold Water Trunk Line Diameter (in.)	2				2 1/2"		
Hot Water Trunk Line Material	Type L Copper (Rigid)						
Cold Water Trunk Line Material	Type L Copper (Rigid)						
Gas Trunk Line Diameter (in.)	1 1/4"				1 1/2"		
Gas Trunk Line Material	Powder Coated SCH 40 Steel						
Gas Branch Line Material	PVC over CSST						
Electrical Specifications							
Voltage	120 VAC (60 Hz)						
Max Current Draw (amp)	8	12	16	12	20	24	
System Performance							
Quantity of Units	2	3	4	3	5	6	
Hot Water Capacity @ 30°F rise (GPM)	22.2	33.3	44.4	33.3	55.5	66.6	
Hot Water Capacity @ 70°F rise (GPM)	11.2	16.8	22.4	16.8	28.0	33.6	
Hot Water Capacity @ 100°F rise (GPM)	8.0	12.0	16.0	12.0	20.0	24.0	
Minimum (Btuh)	18,000						
Maximum (Btuh)	399,800	599,700	799,600	599,700	999,500	1,199,400	
Thermal Efficiency	98%						
Other Features							
Warranty	5 years Heat Exchanger, 5 years parts, 1 year labor						
High Altitude	Up to 10,000 feet						
Wireless Ready	Yes						
Common Vent Compatible	Yes						
Commercial Energy Star	Yes						

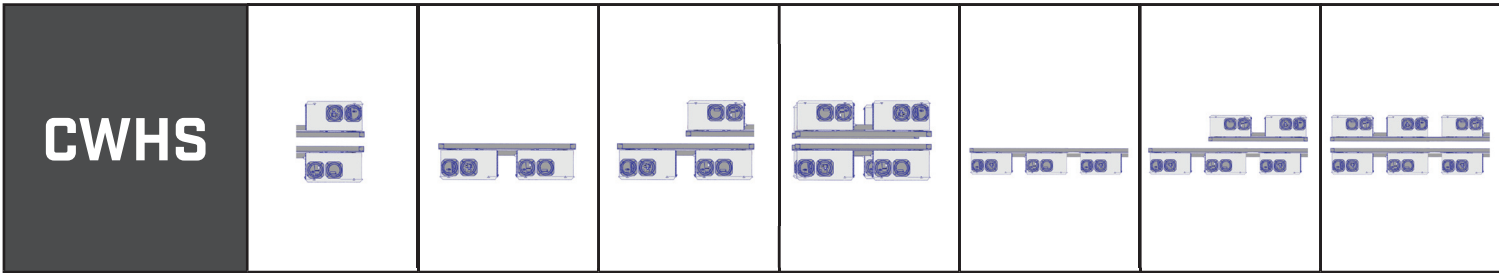


COMPATIBLE WITH

NCC199 DV & NCC199 OD

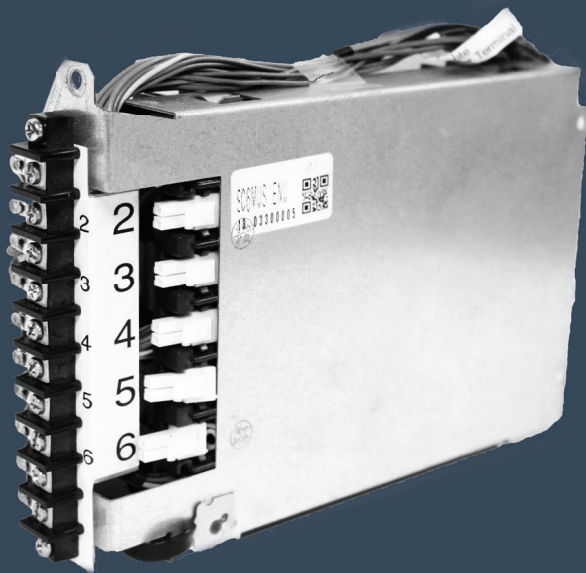
- » Stainless Steel Case
- » Dedicated Outdoor Model
- » Scale Detection
- » K-Grade Copper Primary Heat Exchanger
- » Stainless Steel Secondary Heat Exchanger
- » 94% Thermal Efficiency

CWHS		
Wall Hanging Racks		
Rack Series	CWHS101 CWHS201 CWHS301 CWHS401	CWHS102 CWHS202 CWHS302 CWHS402
Water Heater	NCC199 DV, NCC199 OD	
Configuration	Wall Mounted	
System Dimension	51"x12"x65"	76"x12"x65"
Fully Assembled Weight (lbs.)	203 lbs.	301 lbs.
Shipping Weight (lbs)	324 lbs.	443 lbs.
Frame Specifications		
Frame Rail Type	15/8" Square Slot Metal	
Frame Material	14 Gauge Aluminum	
Frame Finish	Aluminum	
Color	Aluminum	
Water & Gas Connections		
Hot Water Trunk Line Diameter (in.)	1 1/2"	2"
Cold Water Trunk Line Diameter (in.)	1 1/2"	2"
Hot Water Trunk Line Material	Type L Copper (Rigid)	
Cold Water Trunk Line Material	Type L Copper (Rigid)	
Gas Trunk Line Diameter (in.)	1 1/4"	
Gas Trunk Line Material	Powder Coated SCH 40 Steel	
Gas Branch Line Material	PVC over CSST	
Electrical Specifications		
Voltage	120VAC (60 Hz)	
Max Current Draw (amp)	8	12
System Performance		
Quantity of Units	2	3
Hot Water Capacity @ 30°F Rise	22.2	33.3
Hot Water Capacity @ 70°F Rise	10.6	15.9
Hot Water Capacity @ 100°F Rise	7.4	11.1
Minimum (Btuh)	16,000	
Maximum (Btuh)	399,800	599,700
Thermal Efficiency	95% (OD), 94% (DV)	
Other Features		
Warranty	5 years Heat Exchanger, 5 years parts, 1 year labor	
High Altitude	Up to 8,000 ft.	
Wireless Ready	Yes	
Common Vent Compatible	No	
Commercial Energy Star	Yes	



CWHS								
Floor Mounted Racks								
Rack Series	CWHS103 CWHS203 CWHS303 CWHS404	CWHS104 CWHS204 CWHS304 CWHS404	CWHS105 CWHS205 CWHS305 CWHS405	CWHS106 CWHS206 CWHS306 CWHS406	CWHS107 CWHS207 CWHS307 CWHS407	CWHS108 CWHS208 CWHS308 CWHS408	CWHS109 CWHS209 CWHS309 CWHS409	
Water Heater	NCC199 DV, NCC199 OD							
Configuration	Floor Mount Rack							
System Dimension	51" x 30" x 65"				76" x 30" x 65"			
Fully Assembled Weight (lbs.)	262 lbs.		341 lbs.		420 lbs.		352 lbs.	
Shipping Weight (lbs)	391 lbs.		480 lbs.		549 lbs.		500 lbs.	
Frame Specifications								
Frame Rail Type	1 ^{5/8} " x 4 ^{7/8} " Square Slot Metal							
Frame Material	14 Gauge Aluminum							
Frame Finish	Aluminum							
Color	Aluminum							
Water & Gas Connections								
Hot Water Trunk Line Diameter (in.)	2"				2 1/2"			
Cold Water Trunk Line Diameter (in.)	2"				2 1/2"			
Hot Water Trunk Line Material	Type L Copper (Rigid)							
Cold Water Trunk Line Material	Type L Copper (Rigid)							
Gas Trunk Line Diameter (in.)	1 1/2"							
Gas Trunk Line Material	Powder Coated SCH 40 Steel							
Gas Branch Line Material	PVC over CSST							
Electrical Specifications								
Voltage	120VAC (60 Hz)							
Max Current Draw (amp)	8		12		16		12	
	20		24					
System Performance								
Quantity of Units	2		3		4		3	
	5		6					
Hot Water Capacity @ 30°F Rise	22.2		33.3		44.4		33.3	
Hot Water Capacity @ 70°F Rise	10.6		15.9		21.2		15.9	
Hot Water Capacity @ 100°F Rise	7.4		11.1		14.8		11.1	
Minimum (Btuh)	16,000							
Maximum (Btuh)	399,800		599,700		799,600		599,700	
	999,500		1,199,400					
Thermal Efficiency	94% (DV) 95% (OD)							
Other Features								
Warranty	5 years Heat Exchanger, 5 years parts, 1 year labor							
High Altitude	Up to 8,000 ft.							
Wireless Ready	Yes							
Common Vent Compatible	No							
Commercial Energy Star	Yes							

BE IN CONTROL



SYSTEM CONTROLLER
The smartest way to control
your heater array in the industry.

SC-401









System Controller Primary Functions

Application Selection	Standard, Recirculation, or Storage Tank Recovery
Staging Control	Staging is determined on application setting. In the case of Storage Tank Recovery, all heaters operate at the same time to provide the fastest recovery rate.
Firing Rotation	Sequential rotation every 24 hours or 8 hours combustion time so no single heater is overrun. Wear is evenly distributed across all heaters.

Additional System Controller Options

Pump	Control relays for up to two pumps with simultaneous or alternating operation
Operation and Warning Lights	Relay points to create additional alerts of operation and error conditions
Aquastat and Timer	Utilize the internal aquastat controls and timer functions when a recirc pump is controlled by the system controller.
Exhaust Fan	Connect a fan or damper relay to provide mechanical combustion air supply or operate an exhaust damper in cold climates whenever heater(s) operate.
Thermostat for storage tank control	Connect the storage tank thermostat to alert the pump relay to activate because of low temperature in the storage tank.
External Operation Switch	Enable an external switch to power down the system other than from the primary remote.

Commercial Line Up

NCC & NC	COMMERCIAL MODELS							
								
MODEL	NCC199 DV	NCC199 OD	NCC300 OD	NCC300 DV	NC380-SV	NC199 DVC	NC199 OD	NCC199 CDV
GQ Reference Number	GQ-C3257WZ-FF US	GQ-C3257-WZ US	GQ-C5032WZ US	GQ-C5032WZ-FF US	N/A	GQ-2857WZ-FFA US	GQ-2857WZ US	GQ-C3259WZ-FF US
SV Conversion	Yes	N/A	N/A	Yes	No	N/A	N/A	Yes
Vent Type	DV	OD	OD	DV	SV	DVC	OD	DV
Dimensions (Inches)	24.4 x 18.4 x 19.4	24.4 x 18.4 x 19.4	32.7 x 18.9 x 14.2	32.7 x 18.9 x 14.2	29.7 x 19.1 x 11.8	24.2 x 18.3 x 11	23.6 x 13.8 x 11	27.0 x 18.5 x 12.8
Weight (lbs)	68 lbs.	66 lbs.	108 lbs.	108 lbs.	106 lbs.	58 lbs.	54 lbs.	81 lbs.
Min./Max. Btuh	16,000-199,900	16,000-199,900	15,000 - 300,000	15,000 - 300,000	22,500 - 380,000	16,000 - 199,900	16,000 - 199,900	18,000 - 199,900
Thermal Efficiency	94%	95%	97%	97%	NG: 80% LP: 81%	84%	86%	98%
Max. Hot Water Capacity	35°F Rise: 11.1 gpm	35°F Rise: 11.1 gpm	35°F Rise: 13.2 gpm	35°F Rise: 13.2 gpm	35°F Rise: 13.2 gpm	35°F Rise: 9.8 gpm	35°F Rise: 9.8 gpm	45°F Rise: 8.7 GPM
Water Inlet	3/4"	3/4"	1"	1"	1"	3/4"	3/4"	3/4"
Hot Water Outlet	3/4"	3/4"	1"	1"	1"	3/4"	3/4"	3/4"
Gas Inlet	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Temp. Settings	100-150°F (In 5°F Intervals), 160, 170, 185°F	100-150°F (In 5°F Intervals), 160, 170, 185°F	100-150°F (In 5°F Intervals), 160, 170, 185°F	100-150°F (In 5°F Intervals), 160, 170, 185°F	100-150°F (In 5°F Intervals), 160, 170, 180°F	100-150°F (In 5°F Intervals), 160, 170, 185°F	100-150°F (In 5°F Intervals), 160, 170, 185°F	100-150°F (In 5°F Intervals), 160°F, 170°F, 185°F
Default Temp. Option	120, 130, 140, 185°F	120, 130, 140, 185°F	N/A	N/A	120, 130, 140, 180°F	120, 130, 140, 185°F	120, 130, 140, 185°F	N/A
Warranty	5-year warranty on heat exchanger, 5-year warranty on parts & 1-year reasonable labor*							
Ultra Low NOx	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
Quick Connect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Remote Included	Yes	Yes	Yes	Yes	Yes	Yes	Digital Display	Yes
Min/Max Flowrate	0.5 GPM / 11.1 GPM	0.5 GPM / 11.1 GPM	0.5 GPM / 13.2GPM	0.5 GPM / 13.2GPM	0.7 GPM / 13.2 GPM	0.5 GPM / 9.8 GPM	0.5 GPM / 9.8 GPM	0.5 GPM / 11.1 GPM
High Altitude Approved	Up to 8,000 ft.		Up to 4,500 ft.		Up to 8,000 ft.			Up to 10,000 ft.
Wireless Compatible	Yes							
Common Vent Capable	No							Up to 6 Units
ASME	No	No	No	No	Yes	No	No	No

APPROVALS

Commercial



Add "-NG" or "-LP" to the end of the model number to specify gas type.

*Refer to our warranty terms & conditions for more details.

***Disclaimer: For units with more output than 200,000 BTUH, please check with your local boiler inspector to verify if ASME is REQUIRED in your state.**

ACCESSORIES

DO MORE WITH TANKLESS



Commercial H2Flow Water Treatment (CH2F-XXX)

Anti-scale system for multiple heater installation up to 75 grains



Commercial Rack System (MR-2)

Prefabricated racks can support up to 2 units back to back.



H2Flow Water Treatment (H2F)

Anti-scale system for a single heater installation up to 75 grains



System Controller (SC-XX)

Available System Controller models can provide a central communication link for up to 6-unit, 12-unit, or 24-unit



Multisystem Control

Superior commercial unit linking made easy

Multisystem Options

Units Used	2	6	12	24
Accessory	QC-2	SC-401-6M	SCU-401-12M	SCU-401-24M



Quick Connect Cord (QC)

Provide simple staging and modulation for 2 units in small applications



Commercial Remote Controller

- Temp. adjustment from 100-185 (°C or °F)
- Recirculation Control Feature
- Time Stamps Error Codes



Condensate Neutralizer Kit NT20A

Neutralize acidic condensate before it is dumped into common drains, Intended use : up to 3,000,000 BTU/hr or 5GPH.



Remote Controller Cord (RC-CORD)

Additional cord lengths up to 26ft



Isolator Valve Kit IK-WW

Isolation Valve Kit with PRV to easily isolate heater from plumbing

NORITZ SUPPORT

Need help? Have questions? Noritz provides a wide range of support tools and channels to help you be successful



PART SEARCH TOOL

Allows you to search for parts easily. Access a complete overview of technical spec info, installation, accessories, approvals & warranty.



TECHNICAL LITERATURE

The Technical Literature section of the site offers five different, downloadable items for each product: spec sheet, owner's guide, installation manual, parts list and certification listings.



SERVICE REP LOCATOR

Search locator to find Noritz nationwide (and Canada) professional contractors, service providers, and distributors.

PROCARD APP EXCLUSIVE BENEFITS



TROUBLESHOOTING SECTION

- Gas Pipe sizing calculator (based on tables from National fuel gas code)
- Noritz water heater Circuit Board dipswitch settings
- Water heater error code Interactive troubleshooting even more in-depth technical

Available on Android and iOS



**THE TRUSTED NAME IN COMMERCIAL
WATER HEATING**



TECHNICAL SUPPORT

Noritz America provides two customer-service initiatives – Technical Support Web Site and an In-House Call Center – with the goal of delivering information more quickly and efficiently to customers, whether their preferred method is the telephone or online.

Hours of operation: Mon-Fri 5 am – 6pm PST, Sat 7am – 3pm PST

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**SPEC TRUE COMMERCIAL
QUALITY INTO YOUR
NEXT PROJECT**