Limited Warranty - Terms and Conditions

For ARRAY Series Boiler by Riello

Rev 01: May 2016

GENERAL NOTE

This limited warranty is provided by Riello Canada Inc. ("Riello") and covers Riello Array Series Boilers (the "Boilers") sold and installed in the United States. This warranty is provided to the original purchaser as long as the Boiler remains installed at its original place of installation. This warranty is provided in respect of the Boiler heat exchanger and its insulation and casing, and approved accessories designated by Riello.

The warranty is conditional upon:

- The proper installation of the Boiler by a qualified HVCA mechanical contractor or installer trained and certified in accordance with the applicable laws and regulations of the jurisdiction in which the boiler is installed (the "Qualified Contractor"); and
- Proper operation and maintenance of the Boiler in accordance with the Boiler operation manual and service bulletins as issued by Riello from time to time and the mandatory maintenance schedule (see ANNEX 2).

Installation or maintenance of the Boiler by a person other than a Qualified Contractor shall void this warranty.

Any component of a Boiler returned to Riello in connection with this warranty agreement remains the property of Riello.

WARRANTY TERMS & CONDITIONS

PARTS WARRANTY

Riello warrants that the Boilers and approved accessories designated by Riello shall be free of defects in manufacture, material and workmanship for 18 months from shipment or 12 months from start-up (whichever comes first).

The obligation of Riello under this limited warranty shall be to repair or replace those parts determined by Riello to be defective in material or workmanship.

This warranty is only in respect of Boilers for which payment has been made in full.

(10) TEN YEAR HEAT EXCHANGER WARRANTY

Riello warrants that the heat exchanger of the Boiler shall be free from leakage, thermal shock and condensate corrosion, and shall be free of defects in material and workmanship for TEN (10) YEARS from the date of manufacture, which date is found within the Boilers serial number on the data plate.

The obligation of Riello under this ten year heat exchanger warranty shall be to repair or replace those parts of the heat exchanger determined by Riello to be defective in material and workmanship in the heat exchanger as determined by Riello.

WARRANTY EXCLUSIONS

- Any costs for labour for the examination, removal or reinstallation of allegedly defective Boiler parts, and transportation thereof to and from Riello facilities in North America or Italy, or as determined by Riello.
- Failures or malfunctions resulting from: Failure to properly install, operate or maintain the Boilers in accordance with our published Installation, Operation and Maintenance Manual or Users Information Manual provided with the product.
- Damage to the Boilers or any of its original or authorized replacement parts or other accessories designated by Riello as standard equipment caused by excessive temperatures or pressures, unsuitable fuels, fuel impurities, improper fuel mixture, fuel or gas explosion, electrical, chemical or electrochemical reaction, water impurities, unsuitable water conditions which may have caused unusual deposits within the water side and heat exchanger combustion area of the pressure vessel within the Boiler, water treatment chemicals, or water conditioning systems, electrical failures, insurrection, riots, war, or acts of God, combustion air contaminated externally, air impurities, sulphur or sulphuric action or reaction, dust particles, corrosive vapours, oxygen corrosion, and situating the Boiler in an unsuitable location or continuing use of the Boiler after onset of a malfunction or discovery of a defect.
- Operation of the Boiler that does not comply with the conditions set out in the Annexes hereto.

WARRANTY AND DAMAGES LIMITATIONS

The obligations of Riello hereunder shall also be subject to the following terms and conditions;

- Any repaired or replaced component of a Boiler and approved accessories will be warranted only for the remaining unexpired term of the warranty applicable to the original Boiler.
- Negotiations, intermediate acts, discussions, disagreements or denials concerning alleged defects or deficiencies shall not extend any warranty herein and shall not waive or be deemed to waive any requirement for notification of defect or deficiency.
- Additional costs arising out of the performance of this warranty including but not limited to transport, labour, installation, assembly, testing and putting a Boiler back into operational use are the responsibility of the owner.
- RIELLO IS NOT RESPONSIBLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES CAUSED BY A BOILER.

  RIELLO DOES NOT WARRANT OR GUARANTEE THE MERCHANTABILITY OR FITNESS OF ANY BOILER FOR ANY PARTICULAR PURPOSE.
- Riello does not extend this warranty to any Boiler or related parts or products that are not supplied and sold directly by Riello.

ASSIGNABILITY

This warranty is not assignable.

WARRANTY NOTIFICATION

- In case of warranty enquires customer must notify Riello in writing, within FOURTEEN (14) DAYS of the discovery of the alleged defect or deficiency, and provide the following data:
  a. Serial number of the affected Boiler, list of the alleged parts with a short description of the failure and of the conditions under which the failure happened.
  b. Information about the hydraulic system, flow rate, length of the venting system, installation scheme and total heating power of the system.
  c. Log file downloaded from the Boiler control system showing the list of errors and the servicing dates in chronological order.
  d. Identify of the Qualified installer who performed the Boiler start-up.

Riello reserves the sole right to make all warranty decisions.

APPLICABLE LAW, JURISDICTION AND DISPUTE RESOLUTION

All disputes, claims or demands arising from or relating to this warranty shall be determined in accordance with the laws within the Province of Ontario, Canada and the Courts of Ontario shall have exclusive jurisdiction to adjudicate all such disputes, claims or demands.

If you have any questions about the coverage provided by this warranty, contact Riello at one of the addresses set out below

Riello Burners North America – Canada
2165 Meadowpine Blvd.
L5N 6H6 Mississauga
(Ontario)

Riello Burners North America – America
35 Pond Park Road
02043 Hingham
(Massachusetts)

Tel : +1-800-4-RIELLO / +1-800-474-3556
Fax : +1-866-2-RIELLO
Web site: www.rielloboilers.com

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ANNEX 1: WATER CHEMICAL SPECIFICATIONS

Parameters	Units	Value
General feature -		Colorless, no sediment
PH value	PH	Min 6.5; Max 9
Dissolved Oxygen	mg/l	< 0,05
Total iron (Fe)	mg/l	< 0,3
Total copper (Cu)	mg/l	< 0,1
Na2SO3	mg/l	< 10
N2H4	mg/l	< 3
PO4	mg/l	< 15
CaCO3	ppm	Min 50 ; Max 150
Trisodium Phosphate	ppm	absent
Chlorine	ppm	< 100
Pressure	PSI	Min 8; Max 80
Glycol	%	Max 50% (only propylene glycol)

- Before and during assembly, the system must be kept free of impurities, construction dust, sand, copper dust, grease, carbon deposits as well as welding flux residue.
- Before connecting the boiler to the heating system, flush the heating system to remove sediment, flux, dirt, and other foreign matter.
- Do not use cleaning fluids that are not compatible with the boiler materials, including acids (e.g. hydrochloric acid and similar ones) at any concentration.
- Introducing fresh water to the system increases the oxygen presence and can cause corrosion of metallic components. Immediately repair any drips or leaks in the system to avoid constant introduction of air into the system.
- Excessive fluctuation in pressure changes in the system can cause fatigue and stress on the heat exchanger. This is detrimental to the integrity of the boiler and system components, it is mandatory to maintain a constant operating pressure.
- Avoid an automatic water fill system.

ANNEX 2: MAINTENANCE SCHEDULE

Maintenance	Every (1) year (*)
Combustion test	X
Flue and air system inspection (including Venturi and fan)	X
Ignition electrode inspection	X
Combustion chamber inspection (including the burner tube)	X
Condensate discharge cleaning	X
Safety block check, modulation range check, gas valve closing after burner stop	X
Control parameters inspection	X
Gas piping leakage inspection	X
Wiring and connection inspection	X
Start up inspection	X
Flame inspection	X
Relief valve inspection	X
Burner gasket inspection	X

(*) Every (1) year or when the service appears on the screen, whichever comes first.

ANNEX 3: ENVIRONMENTAL CONDITIONS

Parameters	Units	Value
Operating Temperature	F	Min = 32 Max = 120
Transport/Storage Temperature	F	Min = 5 Max= 158
Relative Humidity	%	Min = 30 Max= 90

ANNEX 4: GAS PRESSURE AND RECOMMENDATIONS

Parameters	Units	Value
NG Pressure	PSI	Min = 0.126 Max = 0.505
LPG Pressure	PSI	Min = 0.288 Max= 0.468

- Install a ground joint union for servicing as required.
- Install a manual shutoff valve in the gas supply piping.
- Install a sediment trap/ drip leg.
- Purge all air from the gas supply piping.
- Check the appliance and its gas connection for a gas leak before placing in operation.
- Gas piping must be supported with proper hangers and not from the boiler itself or its devices and accessories.

ANNEX 5: FLUE SYSTEM RECOMMENDATIONS

- Vent connectors serving appliances vented by natural draft shall not be connected to any portion of mechanical draft systems operating under positive pressure.
- Ensure that the flue pipes and seals are not damaged.
- Use only primer and glue compounds approved for use with the vent material used.
- Never install a barometric or a thermally controlled vent damper with this boiler.
- Do not route the flue system piping through or inside another duct that is used for exhausting air or other flue gases.
- Use only vent/air piping methods shown in the manual.
- Be sure to locate the unit such that the vent and combustion air piping can be routed through the building and properly terminated.
- The boiler / vent installation must be in accordance with Venting of Appliances, of the latest edition of the National Fuel Gas Code, ANSI Z223.1/NFPA 54 or section, Venting Systems and Air Supply for Appliances, of the CAN/CSA B149.1, Natural Gas and Propane Installation code or applicable provisions of the local, state and federal building codes.
- All vent pipes must be installed according to the vent manufacturer's instructions.
- The exhaust vent and the combustion air inlet lines must be supported to prevent sagging per the vent manufacturer's instructions.
- Do not mix components from different systems. The vent system could fail, causing leakage of flue products into the living space. Use only approved materials.
- Use of cellular core PVC and CPVC for venting system is not allowed.
- The exhaust pipe must be pitched a minimum of a 1/4 inch per foot back to the boiler (to allow drainage of condensate).
- The vent system shall be installed so as to prevent the accumulation of condensate.
- The maximum lengths of vent system must be in accordance with our published Installation, Operation and Maintenance Manual or Users Information Manual provided with the product.
- To avoid moisture and frost build-up and to maintain clearances to openings on adjacent structures, 45 ° and 90 ° elbows or tees may be attached to the end of the vent termination pipe to direct exhaust plumes away from the adjacent structure. The total allowable vent length, maximum number of elbows and distance to air intake restrictions must be adhered to.

ANNEX 6: CONDENSATE SYSTEM RECOMMENDATIONS

- The condensate water shall be discharged at atmospheric pressure, i.e. by dripping into a siphon-shaped container connected to the home sewage system or suitable drain, and shall be neutralized prior to draining per local codes.
- Do not reduce the diameter of the condensate drain pipe downstream.
- Never use copper pipes or of other material not intended for the specific purpose, because the action of condensate will cause a rapid deterioration.
- Check that the condensate drain pipe is adequately sloping towards the discharge point avoiding high points, which can inhibit the flow of condensate.
- Install the condensate pipe in such a way so as to avoid the freezing of the liquid.
- A condensate removal pump is required if the boiler is below the drain.
- The condensate trap must be primed at all times. Failure to do so may allow combustion gases to escape into boiler room.