Dimensions stoves





	53	60	70	80
Α	530 mm	590 mm	690 mm	790 mm
В	500 mm	500 mm	550 mm	600 mm
С	380 mm	380 mm	450 mm	450 mm
D	320 mm	350 mm	400 mm	600 mm
Ε	328 mm	334 mm	403 mm	386 mm
F	ø150 mm	ø150 mm	ø200 mm	ø200 mm
G	127 mm	127 mm	163 mm	163 mm
н	n.a.	n.a.	n.a.	ø125 mm
Т	n.a.	n.a.	n.a.	113,5 mm
J	n.a.	n.a.	n.a.	430 mm

Power table



Dimensions frames



Name	Dimensions Width x Height
Optima 53 3-sided frame	600x523 mm
Optima 53 4-sided frame	600x545 mm
Optima 60 3-sided frame	660x523 mm
Optima 60 4-sided frame	660x545 mm
Optima 70 3-sided frame	760x573 mm
Optima 70 4-sided frame	760x595 mm
Optima 80 3-sided frame	860x623 mm
Optima 80 4-sided frame	860x645 mm

Technical specifications

	53	60	70	80
Power	6,3 kW	7,5 kW	9,0 kW	10,0 kW
Flue	ø150 mm	ø150 mm	ø200 mm	ø200 mm
Volume combustion chamber	0,025 m ³	0,031 m ³	0,049 m ³	0,072 m ³
Surface bottom combustion chamber	0,11 m ²	0,12 m ²	0,17 m ²	0,22 m ²
Weight	87 kg	92 kg	123 kg	156 kg
Fuel (beech)				
Filling	1,31 kg	1,63 kg	1,95 kg	2,26 kg
Primary air	0%	0%	0%	0%
Secondary air	75%	75%	80%	80%
Tertiary air	100%	100%	100%	100%
Fuel burning time	45 min.	45 min.	45 min.	45 min.
Flue value				
Flue gas quantity	7,0 g/s	8,1 g/s	9,2 g/s	10,3 g/s
Flue gas temperatur	234 °C	243 °C	253 ℃	262 °C
Under-pressure	12,0 Pa	12,0 Pa	12,0 Pa	12,0 Pa
Efficiency	83,3%	82,0%	81,0%	79,20%
CO at 13% O2	0,04%	0,05%	0,06%	0,06%
Particulate matter at 13% O2	39 mg/m ₀ ³	37 mg/m ₀ ³	36 mg/m ₀ ³	34 mg/m₀ ³

RENY

RENY a conscious choice:

- Energy Conscious (Energy class A)
- Environmentally Aware (Emission class 1)
- Quality Conscious

The choice is yours

RENY KACHELS

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OPTIMA

Introduction RENY

In 1975 Ben Geerts founded RENY. The family business has since seen a significant growth and is now managed by the second generation. In its first years, RENY produced classic fireplaces. Since 1981, RENY specialized in the development and production of wood fireplaces and wood stoves. RENY distinguished itself through its innovative developments, using the latest techniques and materials. All fireplaces, hearths and stoves are completely manufactured in our own factory in Duizel. A team of professionals with a passion and love for the craft guarantee that you will have a 100% quality product.

In this time of rapid developments and an often hectic life, there is an increasing need for a central place in a home where people may come together to relax. Therefore, RENY has reintroduced the ancient use of the wood stove. Heating with wood is a conscious choice.



Environmentally conscious, efficient and cosy heating...

This durable and environmentally friendly energy source is CO2 neutral. The Optima burning system lets the wood release the same substances that it absorbed from the air when it was still a tree. A cycle that is in balance with nature. In addition, there is nothing more enjoyable than the pure pleasure and comfort of a cosy wood fire.

OPTIMA wood hearths

A conscious choice for environmentally friendly, efficient and cosy heating. This durable energy source meets the strictest environmental and safety standards. The patented burning system features a sleek and minimalist design. The large glass area provides a wide view of the flames. The Optima hearths are applicable in both new and existing situations. With four models in different dimensions and power, there is always a solution. The installation of the hearth can be finished with a three-sided or four-sided framework. It is also possible to install the whole into a wall without frame. The control unit of the hearth ensures that responsible and atmospheric heating is very simple. The hearths can be optionally equipped with fans for rapid distribution of convection heat. Using the latest techniques and materials we strive for the optimal burning of wood.

Boiler Steel

The Optima burning system strives for an optimal burning. Very important for this is the burning temperature. A high burning temperature ensures that all fuels are used optimally, which ensures lower emission values. A higher burning temperature also ensures a higher strain for the combustion chamber. The base of this chamber must be designed to withstand this. The application of CorTen steel has its limitations. In consultation with a metallurgist from our supplier ArcelorMittal, a special type of steel was

selected. **RENY** is unique with its application of boiler steel. This material was developed for heavy industrial applications (Petrochemicals). It offers the properties needed towards an optimal burning of wood.

V-shaped hearth base

The RENY patented V-shaped hearth base provides a tremendous contribution to the optimal burning of wood. All residual fuels slowly move towards the centre of the hearth base.



There, additional primary oxygen may be added, ensuring that all residues fuels are optimally used. The quantity of waste will therefore remain limited at the end of every cvcle.

Double heat shield

The efficiency is the percentage of energy that is actually efficiently used to heat a room. The higher the yield, the more heat the hearth supplies at the same amount of consumed fuel. A major part of the yield is lost through the chimney. Warm useless flue gases disappear outside. To prevent this, the



Top: boiler steel heat shield Bottom: heat shield vermiculite



Optima wood hearths are provided with a double heat shield. The gases travel a longer route to the chimney. Allowing more time for the flue gases to optimally burn and use all their energy to benefit the surroundings of the hearth. The efficiency of the Optima hearths is thus considerably increased.

LVB-systeem

Houses are increasingly better insulated. Cracks in windows and doors belong to the past. Thanks to this, a lot less air enters a house than in earlier times. In these energy-efficient houses, a conventional hearth will not function well. It lacks the necessary oxygen for combustion and under-pressure may arise. Therefore, RENY developed the Lucht Van Buiten (LVB) system. This system allows an external aeration supply, ensuring that there is a closed system. This closed system ensures that primary, secondary and tertiary air can be supplied from the outside, fresh air. This creates a perfect combustion without air being extracted from your living space. The LVB system also guarantees a maximum return from the consumed energy, because no air is extracted from the room



Door reinforced with tubular profiles and provided with an integrated seal

for combustion. The hearth is able to deliver an optimum performance in every situation.

Performance

The basic principles of the Optima hearths are simplicity, reliability and a striking design. All the elements are tuned to each other to perform optimally. The strictest requirements and standards challenge us to distinguish ourselves.

Without complicated, expensive and maintenance intensive solutions RENY developed a special burning system. Filters, heat exchangers and such have become redundant. The very high efficiency (Energy Class A), the extremely low emission values (Emission Class 1) and obtaining the NEN- EN 13229:2001 and NEN-EN 13229-A2:2004 marks are all the proof we need.

