

Heat recovery systems for shower and bathtubs

Now with Zypho, water heat can be recycled too







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Save energy with the water management and drain expert.

At Aliaxis we have gone one step further in our top quality water drainage systems. Zypho® is the solution for recovering heat from the water that goes down the drain to pre-heat cold water, reducing considerably energy consumption and carbon emissions₍₁₎, and therefore the energy bill for hot water. What's more, it's quick and easy to install by a professional, requires no maintenance and doesn't compromise the design of the bathroom at all. With Zypho, everyone wins!



Save energy

- Up to 64% energy efficiency₍₂₎
- Zypho saves up to 64% of heat from drained shower water₍₂₎



Save money

- Up to 50% of annual savings in the energy bill for hot water₍₃₎
- Recoup the investment in less than 2 years with our most efficient solutions



And save yourself the effort

- Easy to install, the same work as changing the shower.
- No moving parts
- No need for electricity or batteries
- No maintenance

⁽¹⁾ Environmental Product Declaration in progress

⁽²⁾ With our Pipe DW65 vertical recovery solution, we can recover 64% of the heat from the wastewater and transfer it to the cold water network, with a flow rate of 5.8 L/min and a pressure drop of 0.1-0.2 bar.

⁽³⁾ Considering 80% of hot water of the housing comes from bathroom and including the following values for the calculation: a family of 4 persons taking a shower daily, for 8 minutes with a flow rate of 9 L/min. with hot water at 40°C and cold water at 10°C, with our solution PiPe DW65.

Calculated by Electricity prices for households, June 2024. Energy Price Data provided by global petrol prices.com

It's not just different - it's better

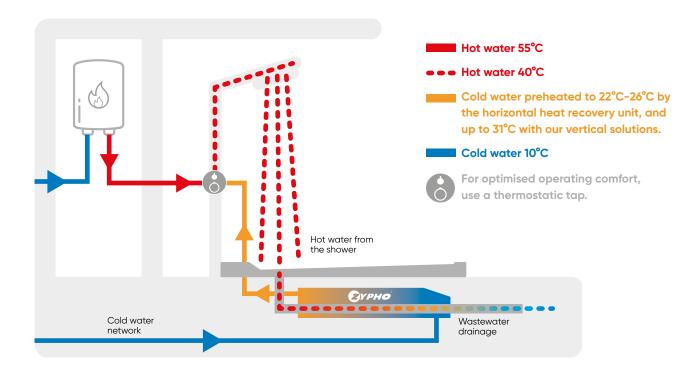
Without Zypho®

Current mechanisms use all the energy required to heat the water and, after it has been heated to the desired temperature at the tap, all that energy is lost down the drain.



The hot water (40°C) that was previously wasted is used to transfer the residual heat, without direct contact at any time, to preheat the **cold water** (10°C) **up to 22°C-31°C** (depending on the model), which is then directed to the mixing tap and/or the boiler.

How Zypho® recovers heat from wastewater



Reduction of hot water production = Reduction of energy consumption



The greater the heat transfer between the hot water discharged and the cold water in the network, the hotter the preheated water.

As a result, the hot water production system requires much less energy to provide the temperature required at the shower tap.

As a result, energy consumption is substantially reduced. (1)





If Zypho® is successful, it is because...



It is designed by experts.

We manufacture high-quality water management solutions that are recognized by building professionals and now we incorporate the expertise of an innovation team in heat recovery.



It is simple and fast.

Quick and safe installation by professionals and requires no auxiliary power or controllers. After a simple installation, it is ready to use from minute 1.



It is convenient.

It is maintenance-free.



It is durable.

Zypho devices will accompany the full bathroom life.



It is efficient.

Improve the energy efficiency of hot water consumption by up to 64%,



It is very cost-effective.

It saves up to 50% of energy bill for hot water.



It is safe.

Wastewater and drinking water are circulated separately.



The investment is recovered quickly.

In less than 2 years₍₁₎ the investment is paid off, and you will earn money on every bill.



It is adaptable.

It adapts to shower and bathtubes with all types of drains (shower traps, square and linear drains). Its design facilitates the use of the shower for people with reduced mobility.



It cares for environment.

By renewing some of the used energy, it helps households to significantly reduce their carbon footprint.₍₂₎

More than

installations

worldwide!

20.000



We have a commitment.



Zypho® is the result of our commitment to excellence in building water and drainage management systems. Our effort to meet building sanitation needs and regulations now extends to solving the ultimate energy saving challenge at home: the energy we devote to heat the water. A final obstacle that today, represents a waste of up to 20% of the energy produced at home.

With Zypho® we have perfected our water management systems so that they not only do their job accurately, but also reduce the energy expenditure of the whole family's daily showers. Meeting all the standards of the sustainable home of the future.

Zypho® has been awarded the Efficient Solution label by the Solar **Impulse Foundation**, a proof of high standards in profitability and sustainability.

Furthermore, with regard to our environmental actions, our plan is ambitious and focuses on two priority objectives: on the one hand, we plan to drastically reduce carbon emissions by up to 75%, reaching 100% renewable electricity. On the other hand, we will increase the proportion of recycled content in our products, until it reaches 50% of the maximum allowed, which will translate into at least quadrupling the content of our products.

With our combined drain and energy recovery solution, we are committed to a cleaner future.

Don't waste anymore energy searching: Zypho® has a model for every space.



Complete system: with sanitary device.

Zypho's models cover almost 100% of the cases and singularities that can occur in new construction or renovation projects.



S|**im** 50

The Slim 50 is the most compact horizontal solution within the range. It recovers up to 52%, of the heat from drained shower water, which means up to 40%** savings of energy bills for hot water.

Choose the one that best suits your needs:



iZi 30

The iZi 30 horizontal solution can be coupled to most of housing projects, both single-family and multifamily, as well as hotels. It can achieve an energy efficiency of up to 31%



PiPe DW

PiPe is our vertical option, ideal for projects where there is space below the floor slab (e.g. in a basement). It can achieve an efficiency of up to 64%

Energy savings allowed by each solution

		Heat recovery systems				
		Horizonto	ıl systems	Vertical systems		
		S im 50	iZi 30	PiPe DW 55	PiPe	PiPe
	Without Zypho®		The same of the sa	DVV 55	DW 60	DW 65
Energy Cost (annual)	946 €	528 €	708€	570 €	530 €	474 €
Savings (annual)	0€ 0%	418 € 40%	238 € 25%	376€ 40%	415 € 44%	472€ 50%
Energy Consumption (kwh/year)	4.008 kw	2.237 kw	2.998 kw	2.415 kw	2.247 kw	2.007 kw
Energy Saved (kwh/year)	0 kw	1.770 kw	1.009 kw	1.592 kw	1.760 kw	2.001 kw
% of CO ₂ Emissions Saved	0%	44%	25%	40%	44%	50%
Zypho® system Price (€)		840 €	580€	650€	710 €	775 €
Zypho® Payback Period (year/month	n)	2 y	2y/5m	1y/8m	1y/8m	1y/7m

**Considering 80% of hot water of the housing comes from bathroom and including the following values for the calculation; a family of 4 persons taking a shower daily, for 8 minutes with a flow rate of 9 L/min. with hot water at 40°C and cold water at 10°C. Calculated by Electricity prices for households, June 2024. Energy Price Data provided by globalpetrolprices.com

⁽¹⁾ KIWA test report n° P000320518.

⁽²⁾ Kiwa test report n° 191101634. (3) Kiwa test report n° 210100749 for our most efficient solution.

Horizontal wastewater heat recoverers.

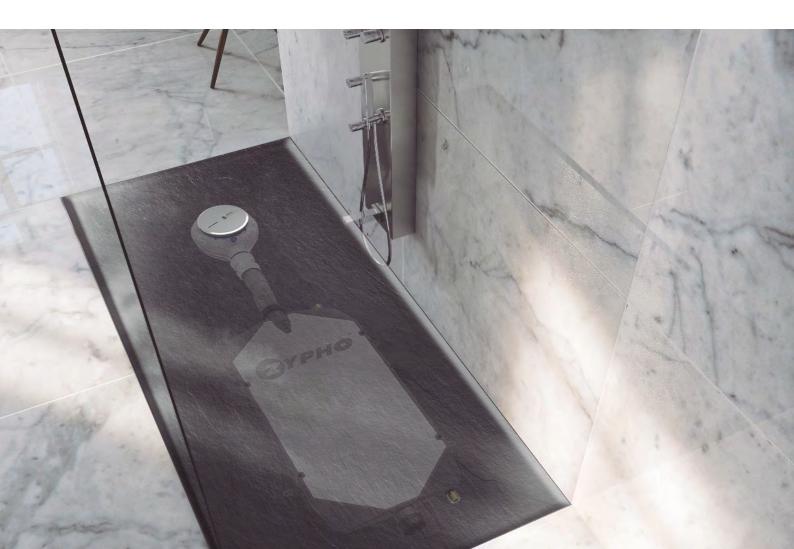
Our innovative horizontal systems fit perfectly into shower trays, shower cubicles and bathtubs, making them suitable for most new build and renovation projects. They can recover up to 52% of the wastewater heat depending on the model, reducing the energy consumption by up to 40% (compared to the usual heater).











S|**im** 50

The most compact and efficient solution

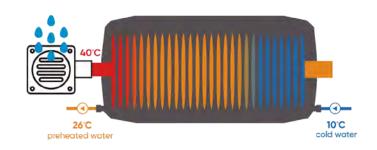
Slim 50 belongs to a new generation of horizontal heat recovery systems: slimmer in size and even more efficient. It recovers up to 52% of the heat from drained shower water, which means up to 40%" savings of energy bills for hot water. Perfectly adaptable to a wide variety of projects, and with a great potential for renovations, as it needs less than 100 mm for most of the configurations.



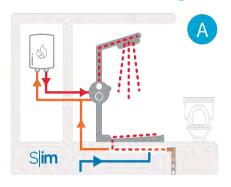
Recovers up to 52% of heat

52% of heat from waste water Recommended drainage flow between 5,8 and 12,5 l/min. Up to 40%" savings of energy bill for hot water

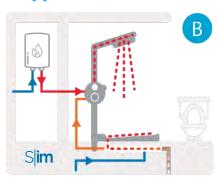
In addition, as all Zypho® units, Slim 50 requires no maintenance and is completely invisible. Its operation is simple: it transfers the heat from the drained shower water (40°) to the cold water inlet (10°). This pre-heated water, at 26°, is then directed to the shower tap, the water heater or, ideally, both.



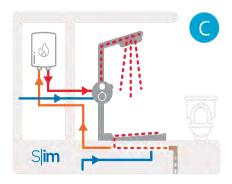
Installation configuration types



A. The preheated water is transferred to the tap and the boiler. The most efficient configuration.



B. The preheated water is transferred **to the tap only.**



C. The preheated water is transferred **to the boiler only.**









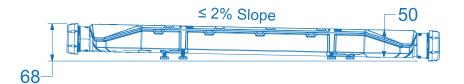


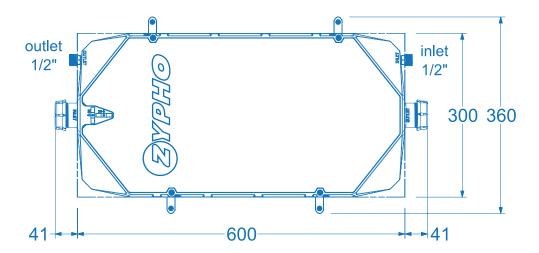
^{*} KIWA test report: P000320518.

^{**} Considering 80% of hot water of the housing comes from bathroom and including the following values for the calculation: a family of 4 persons taking a shower daily, for 8 minutes with a flow rate of 9 L/min. with hot water at 40°C and cold water at 10°C, with our solution Slim 50.

Calculated by Electricity prices for households, June 2024. Energy Price Data provided by globalpetrolprices.com

S|**im** 50





	S im 50	
P	ERFORMANCE AND EFFICIENC	cA.
Flow rate	Efficiency (1)	Pressure loss (A)
5.8 L/min	52%	0.1 bar
9.2 L/min	49%	0.3 bar
12.5 L/min	45%	0,5 bar
	TECHNICAL CHARACTERISTIC	S
Temperature Range		5-6°C
Drinking water maxim	6.0 bar	
Drained water maxim	25.0 L/min	
Heat exchanger material ⁽³⁾		Copper
Body material		pp

^{*}Kiwa test report n° P000320518

^{(1):} Value is assuming 2 cm water level. Depending on the installation, the flow rate may change.
(2): Double-walled Heat Exchanger as requested by EN 1717.
(3): Heat recovery unit with double wall as required in EN 1717.
(4) Pressure loss tolerance +/- 0.2 bar

S|**im** 50

One solution that fits any kind of installation, the inlet and outlet of drained water works for both solvent cement and pushfit connections.



All Slim 50 versions can be adapted to these drains:







Bathtub Drain



Linear Drain



Square Drain

Code	Model
ZYSL50GDTSBV	Zypho Slim 50 Cement Bath Valve
ZYSL50GDTSL1	Zypho Slim 50 Cement Square Drain 10 cm
ZYSL50GDTSL7	Zypho Slim 50 Cement Linear Drain 70 cm
ZYSL50GDTSL8	Zypho Slim 50 Cement Linear Drain 80 cm
ZYSL50GDTSL9	Zypho Slim 50 Cement Linear Drain 90 cm
ZYSL50GDTSSV	Zypho Slim 50 Cement Shower Valve

Code	Model
ZYSL50GDTPBV	Zypho Slim 50 Pushfit Bath Valve
ZYSL50GDTPL1	Zypho Slim 50 Pushfit Square Drain 10 cm
ZYSL50GDTPL7	Zypho Slim 50 Pushfit Linear Drain 70 cm
ZYSL50GDTPL8	Zypho Slim 50 Pushfit Linear Drain 80 cm
ZYSL50GDTPL9	Zypho Slim 50 Pushfit Linear Drain 90 cm
ZYSL50GDTPSV	Zypho Slim 50 Pushfit Shower Valve

Included with the Zypho Slim 50, you will find 2 metal plates to help the instaler with shower trays that need pods or feet.

iZi30

The most versatile solution

This device for the recovery of waste heat from the shower can achieve an energy efficiency of up to 31%, It can be adapted to most projects, especially in multiple housing, single housing and hotel projects, provided that there is sufficient space between the floor slab and the foundations.

> Recovers up to 31%* of heat

from drained

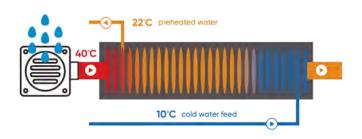
shower water

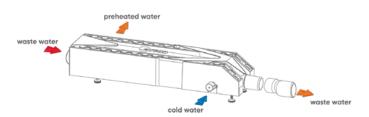
Recommended drainage flow between 5,8 and 12,5 I/min.

Up to 25%" savings of energy bill for hot water

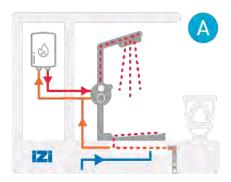
ARRAN

The system recovers up to 31% of the heat from drained shower water and preheats the cold water coming in. When this warm water is obtained (at 22°C), it is driven to the thermostatic tap (it can also be directed to the heating device at the same time, if desired): this reduces the need for hot water and consequently saves up to 25%" of energy bill **compared** to a traditional water heater.

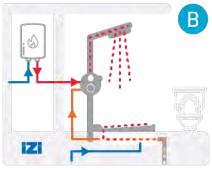




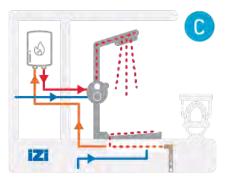
Installation configuration types



A. The preheated water is transferred to the **tap and the boiler.** The most efficient configuration.



B. The preheated water is transferred to the tap only.



C. The preheated water is transferred to the boiler only.







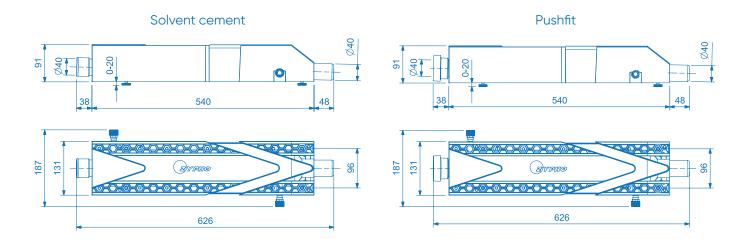


^{*} Kiwa test report n° 191101634.

[&]quot;Considering 80% of hot water of the housing comes from bathroom and including the following values for the calculation: a family of 4 persons taking a shower daily, for 8 minutes with a flow rate of 9 L/min. with hot water at 40°C and cold water at 10°C, with our solution iZi 30.

Calculated by Electricity prices for households, June 2024. Energy Price Data provided by globalpetrolprices.com

iZi30



2% integrated slope

PERF	ORMANCE AND EFFICIENCY (I	KIWA)*
Flow rate	Efficiency (1)	Pressure loss (4)
5.8 L/min	31%	0.2 bar
9.2 L/min	28%	0.6 bar
12.5 L/min	25%	1.1 bar
	TECHNICAL CHARACTERISTIC	s
Maximum potable wo	6.0 bar	
Maximum drained flo	25.0 L/min	
Heat recovery materi	Copper	
Body material		ABS
Fitting material		PVC/PP

^{*} KIWA test report n° 191101634

^{(1):} Tolerances: Efficiency ± 3 p.p

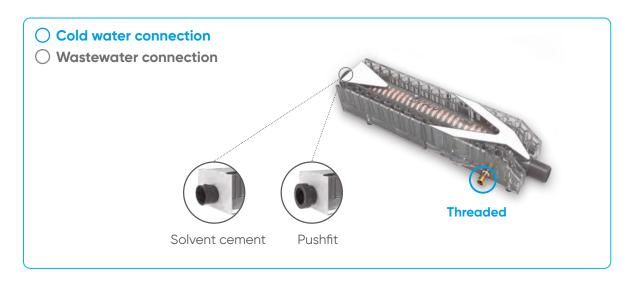
^{(2):} Value defined for 2 cm of water level height. Depending on the installation, the value may change

^{(3):} Heat recovery unit with double wall as required in EN 1717 (4): Pressure loss tolerance +/- 0.2 bar



The versatility of this model can cope with almost any type of cases: find the iZi 30 configuration that best suits your project and needs, simply by changing the connection to the water drain (pushfit or solvent cement).

These are the iZi 30 versions available depending on the wastewater connection:



All iZi 30 versions are suitable for a wide range of drains:



Shower Valve



Bathtub Drain



Linear Drain



Square Drain

Code	Model
ZYIZ30TDTSBV	Zypho iZi 30 Cement Bath Valve
ZYIZ30TDTSL1	Zypho iZi 30 Cement Square Drain 10 cm
ZYIZ30TDTSL7	Zypho iZi 30 Cement Linear Drain 70 cm
ZYIZ30TDTSL8	Zypho iZi 30 Cement Linear Drain 80 cm
ZYIZ30TDTSL9	Zypho iZi 30 Cement Linear Drain 90 cm
ZYIZ30TDTSSV	Zypho iZi 30 Cement Shower Valve

Code	Model
ZYIZ30TDTPBV	Zypho iZi 30 Pushfit Bath Valve
ZYIZ30TDTPL1	Zypho iZi 30 Pushfit Square Drain 10 cm
ZYIZ30TDTPL7	Zypho iZi 30 Pushfit Linear Drain 70 cm
ZYIZ30TDTPL8	Zypho iZi 30 Pushfit Linear Drain 80 cm
ZYIZ30TDTPL9	Zypho iZi 30 Pushfit Linear Drain 90 cm
ZYIZ30TDTPSV	Zypho iZi 30 Pushfit Shower Valve

Vertical wastewater heat recoverers.

Our vertical heat recovery units are designed for any kind of house projects where there is space under the floor slab (e.g. in a basement, a lower floor...). It can achieve an efficiency of up to 64%, which means an energy saving of up to 50% (depending on the chosen pipe length).

Unique benefits in the market:









PiPe DW

The solution for basement housing

PiPe DW is the vertical model of our shower heat recovery systems. Its efficiency is unsurpassed up to 64%*, which means reducing energy bills for hot water up to 50%**. This makes it the ultimate recommendation for:

- New single dwelling (with a bathroom on first floor)
- · Single dwelling with a basement
- Student residences
- Hotels
- · Healthcare buildings.

It is also easily adaptable to prefabricated shower trays, traditional shower trays and bathtubs.

Recommended drainage flow rate between 5.8 and 12.5 l/min.





How does it work? Just as simple as all other models: the hot water from the shower is redirected to help preheat the cold water. This preheated water can go either to the tap, to the boiler or, ideally, to both.

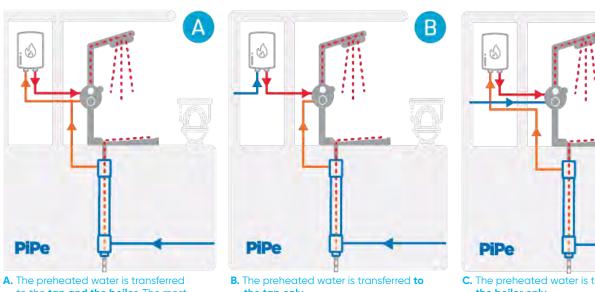
Recovers up to 64% of heat from drained

shower water

Recommended drainage flow rate between 5,8 and 12,5 I/min.

Up to 50%" savings of energy bill for hot water

Installation configuration types



to the tap and the boiler. The most efficient configuration.

the tap only.

C. The preheated water is transferred to the boiler only.





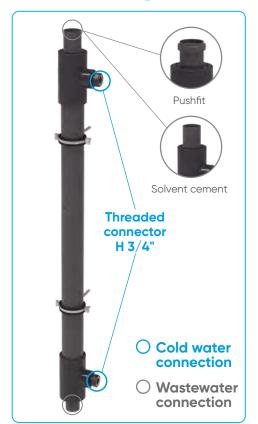




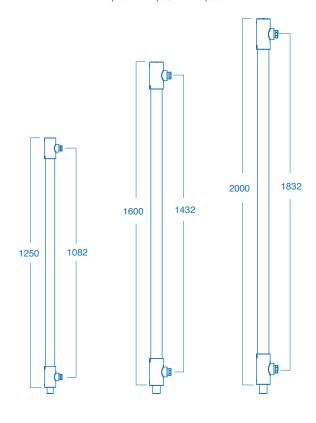


 $^{^{\}star}$ Kiwa test report n° 191101634 for our most efficient solution.

^{**} Considering 80% of hot water of the housing comes from bathroom and including the following values for the calculation: a family of 4 persons taking a shower daily, for 8 minutes with a flow rate of 9 L/min. with hot water at 40°C and cold water at 10°C, with our solution PiPe DW65. Calculated by Electricity prices for households, June 2024. Energy Price Data provided by global petrol prices.com



Length options: 1,25 m - 1,60 m - 2,00 m



			PiPe				
		PERFORMAN	ICE AND EFFICIEN	CV*			
	DV	V55	DV	V60	DW65		
Flow rate	Efficiency (1)	Pressure loss (2)	Efficiency (1)	Pressure loss ⁽²⁾	Efficiency (1)	Pressure loss (2)	
5.8 L/min	53.1%	0.1 - 0.2 bar	60%	0.1 - 0.2 bar	64%	0.1 - 0.2 ba	
9.2 L/min	42.4%	0.2 - 0.5 bar	53,6%	0.3 - 0.6 bar	59.4%	0.3 - 0.6 ba	
12,5 L/min	40.7%	0.3 - 0.7 bar	48.2%	0.4 - 0.8 bar	57.7%	0.5 - 0.9 ba	
		TECHNICA	L CHARACTERISTI	cs			
Temperature Ran	ge			C)-60°C		
Drinking water maximum preassure				6.0 bar			
Drained water maximum flow rate ⁽²⁾				25.0 L/min			
Recommended flow rate of drained water				12.5 L/min			
Heat exchanger material			Stainless steel 316L				
Body material			Stainless steel / PVC				
Total height required for installation			1650 mm	1650 mm (DW55) / 2000mm (DW60) / 2400 mm (DW65)			

- * KIWA test report n° 210100749
 (1): Pressure drop = 0.2 bor.
 (2): Yolue is assuming 2 cm water level. Depending on the installation, the flow rate may change.
 (3): Pressure loss tolerance +/- 0.2 bar

Code	Model
ZYPI55GDTS00	Zypho PiPe55 3/4"x50 Solv 1.25m
ZYPI60GDTS00	Zypho PiPe60 3/4"x50 Solv 1.60m
ZYPI65GDTS00	Zypho PiPe65 3/4"x50 Solv 2.00m

Code	Model
ZYPI55GDTP00	Zypho PiPe55 3/4"x50 Pushfit 1.25m
ZYPI60GDTP00	Zypho PiPe60 3/4"x50 Pushfit 1.60m
ZYPI65GDTP00	Zypho PiPe65 3/4"x50 Pushfit 2.00m



Not a drop of energy wasted.

The goal we set ourselves was to achieve the highest achievable efficiency and, by extension, to be able to offer our customers the greatest possible savings. Every single Zypho® product in this catalogue is the result of many hours of teamwork to perfect our systems as much as possible.

That is why we are so proud of our figures: we offer solutions that achieve **up to 64% efficiency** (see the table for the PiPe model) and up to 50% savings on energy bill for hot water.

We are certified by KIWA, one of the most prestigious Testing, Inspection and Certification (TIC) companies in the world. After passing their rigorous testing and analysis, KIWA has confirmed and endorsed our efficiency figures (certificate in page 24).

In addition, we are also certified by numerous institutions such as Passivhaus Institut and TuvRheinland (Germany), SAP (England and Wales) or WRAS (UK).





P000320518

305181/01 15-02-2024 15-02-2024

Declaration

regarding the efficiency of a shower heat recovery unit

DECLARATION OF KIWA.
This declaration is based on a single examination by Kiwa on a product supplied by

Zypho, SA

This declaration does not pass a judgment on other products supplied by the manufacturer. The products mentioned below were tested according the products according annex U of the NTA 8800;2023.

Zypho Slim 50 DW

class	Flow (l/min)	Volume (I)	Efficiency (%)	Flow resistance (AP) (bar)
2	5.8	47	52.6	0,20
3	9,2	73	51.2	0.47
4, 5, 6	12.5	100	46.5	0.81

sigline 3

DECLARATION

PORTUGAL +351 210 991 351





ECLARATION

kiwa 104837/01

191101634

24-03-2020 24-03-2020

regarding the efficiency of a shower heat recovery unit

DECLARATION OF KIWA
This declaration is based on a single examination by Kiwa on a product supplied by

This declaration does not pass a judgment on other products supplied by the manufacturer. The products mentioned below were tested according in the procedure according annex 8 of the NEN 7120+C2/A1:2017. Please see appendix for an overview of the test results.

Zynho iZi 30

class	Flow (Vmin)	Volume (I)	Efficiency (%)	Flow resistance (ΔP) (bar)
2	5.8	47	31.3	0.22
3	9.2	73	27.8	0.59
4, 5, 6	12.5	100	25.1	1.07

class	Flow (Vmin)	Volume (I)	Efficiency (%)	Flow resistance (ΔP) (bar)
2	5.8	47	38.4	0.13
3	9.2	73	32.8	0.34
456	12.5	100	29.4	0.65

Class	Flow (Vmin)	Volume (I)	Efficiency (%)	Flow resistance (ΔP) (bar)
- 2	5.8	47	66.6	0.07
3	9.2	73	62.7	0.18
4.5.6	12.5	100	57 R	0.32



kiwa

107925/01

210100749

Declaration regarding the efficiency of a shower heat recovery unit

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Zypho, SA

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Zypho PIPe DW65

class	Flow (l/min)	Volume (I)	Efficiency (%)	Flow resistance (ΔP) (bar)
2	5.8	47	64.0	0.13
3	9.2	73	59,4	0.30
4, 5, 6	12.5	100	57.7	0.54

See See







305182/01 15-02-2024 15-02-2024

Report number P000320518

regarding the efficiency of a shower heat recovery unit

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Zypho, SA

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Zypho PiPe 55 DW

class	Flow (I/min)	Volume (I)	Efficiency (%)	Flow resistance (ΔP) (bar)
2	5.8	47	53,8	0.10
3	9.2	73	47.3	0.23
4, 5, 6	12.5	100	41.6	0.40

Zypho PiPe 60 DW

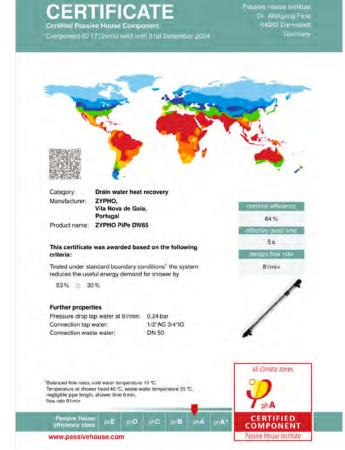
class	Flow (I/min)	Volume (I)	Efficiency (%)	Flow resistance (AP) (bar)
2	5.8	47	57.8	0.04
3	9.2	73	49.5	0.09
4, 5, 6	12.5	100	46.8	0.14











Useful accessories for our heat recovery systems:

Water jet brush: the most effective cleaning system.

Recommended for iZi30 and Pipe models with shower valve.

This cleaning brush allows you to clean the shower valve and heat exchanger in the safest and hygienic way. It is remarkably easy to use: just place it in the shower hose and turn on the tap so that this system will sanitize totally your heat recovery unit. Plus, **it can**











