



Neodul[®]

The innovative thermal insulation



Greiner PURTEC

Greiner PURTEC sets and raises the standards of insulation for warm water tanks. We focus on the requirements of the customers. We still set great store by emphasizing Research and Development activities, testing and patenting new products with better insulation properties. In an era of high energy costs and worldwide issues such as global warming, insulation is becoming more and more important. In order to contribute, we always focus on our customer's needs and new innovative technologies.

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Neodul®

The innovative product Neodul® is establishing itself as the new standard for the thermal insulation of hot water tanks. The legally protected combination of individual material layers reduces the heat losses compared to other types of insulation significantly. Energy costs will thus be radically lower.

The insulation is easy to assemble thanks to its clever design (including holes for the connection pipes and their insulation). The insulation is stable and fits perfectly to your individual tanks. The assembling is simplified by its low weight and the use of a closing slat or a zip fastener. The installation can be done quick and easily by one or two people.

Thanks to the rigid material, the Neodul® insulation is not sensitive to mechanical damage of the cover, which is typical for soft insulation.



Why Neodul®

① Amazing properties.

Higher energy efficiency with 30% less heat losses and therefore better energy class.

② Individual solutions.

Every product is aligned to a specific tank.

③ We love our planet, so we set an example.

Low weight, no harmful substances.

④ Top quality.

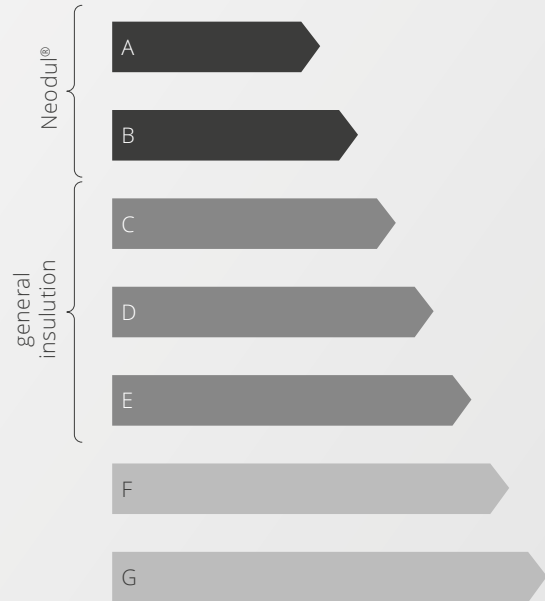
Stable in visual appearance, endurance and insulation.

⑤ Technology of today, solution for tomorrow.

We constantly innovate to meet the standards of the future.

Energy classes

While general insulation materials lead to a classification between class E and class C, Neodul® can help you to achieve class B for all tank volumes up to 2000 litres. Even class A can be achieved with tanks up to 500 litres by using a Neodul® insulation.

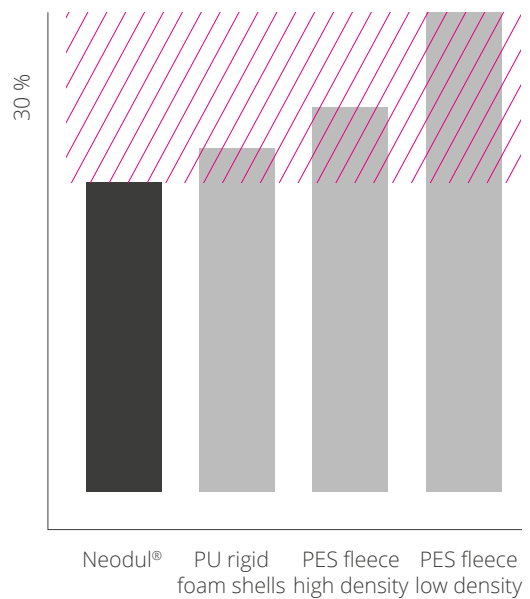


GRAPH: Energy classes comparison

Neodul® surpasses other products.

Thermal insulation properties

The thermal conductivity of expanded polystyrene with graphite nano particles is lower than 0,032 W/mK, while general insulation materials like polyester fibre fleece and polyurethane soft foam usually reach approximately 0,040 W/mK. This properties combined with the high fitting accuracy makes the Neodul® insulation much more efficient compared to comparable products.



GRAPH: Insulation properties comparison

Neodul® products have up to 30 % lower thermal losses in comparison with conventional insulating materials.

Description

- 1 The Neodul® thermal insulation is based on polystyrene foam with admixture of graphite nano particles. The main benefit of the graphite is the heat reflection, which improves the overall product specification. The insulation is shaped as flat boards for easy transportation and storing. Rounded shapes can be formed during installation thanks to slits that provide flexibility and enable easy bending.

- 2 The soft wool offers high adherence, which eliminates unwanted thermal losses caused by thermal convection (vertical flow).

- 3 Insulation edges are soft and flexible and make installation a very easy and comfortable experience.

- 4 The top layer in all types can be manufactured in any colour or custom printed. Neodul® professional & plus versions are supplied with a protective covering film or with a fine embossed pattern.

- 5 Top part insulation and its plastic cover are included. Insulation from the floor can be provided upon request.



Sustainability, ecology

During the production of our products we focus on quality and sustainability. Our production is managed by quality standards of ISO 9001 (Quality Management) and ISO 14001 (Environment Protection). In the utilization phase our products maintain their properties throughout the whole life cycle, especially concerning thermal conductivity, unlike other insulation materials like polyurethane rigid foam.

At Greiner PURtec, sustainability, environmental friendliness and the highest quality go hand in hand.

Being responsible deserves respect

Environmentally responsible companies enjoy higher respect of clients, governments and other companies. The Neodul® transportation leads to significantly lower CO² emissions compared to other insulation concepts, thanks to the low weight and the dimensions. It is easy to be responsible by using our solutions.

Unique approach from the start

FCKW	free
HFCKW	free
HFKW	free
other halogen gases	free
HBCD	free
unwanted fire inhibitors	free
Silicon and Silicates	free
environment protection	REACH-Konform
water stress	harmless
pH	no influence
health influence	none
recyclability	100 %

Neodul® professional

The professional version features the outer layer of hard PS. Different insulation parts are interconnected with a closing slat. Thanks to this innovative system, the material adherence and fixing are perfect, the installation easy and the thermal losses minimised.



- ① EPS - Graphite core
- ② PS surface
- ③ fleece
- ④ closing slat

Specifications

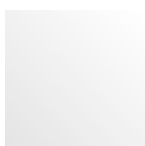
The important facts

surface	solid PS
fastening	closing slat or classic zip
workers for installation	2
special aids or tools	no need
custom adjustments	yes

Surface finishes



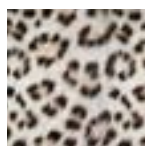
grainy PS



smooth PS



different colours



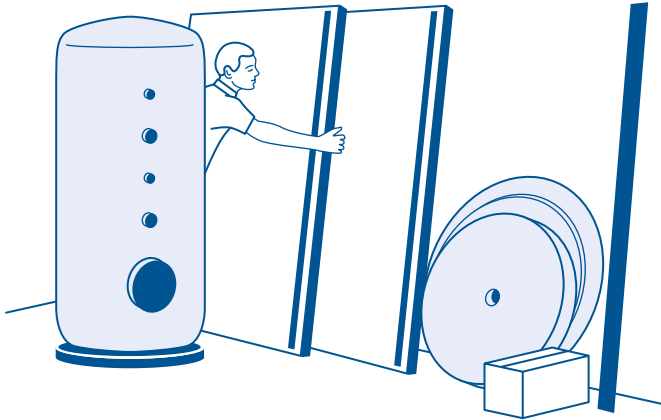
custom print

4 easy steps

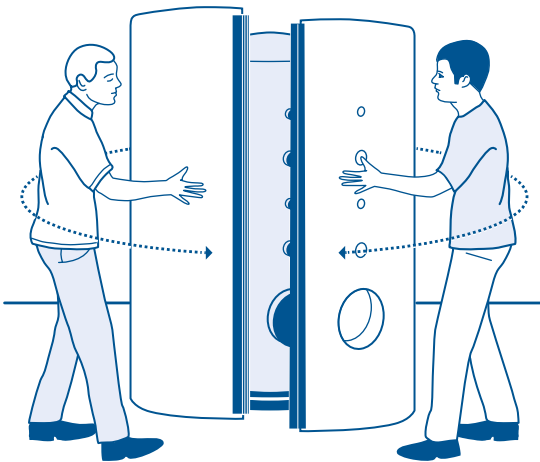
With this 4 easy steps, 2 workers can install the insulation in just a few minutes:

- 1 Prepare all parts, insulate the bottom
- 2 Install & secure the main blocks
- 3 Insulate the top & all the connections
- 4 Tight the main isolation connection, finish all the details

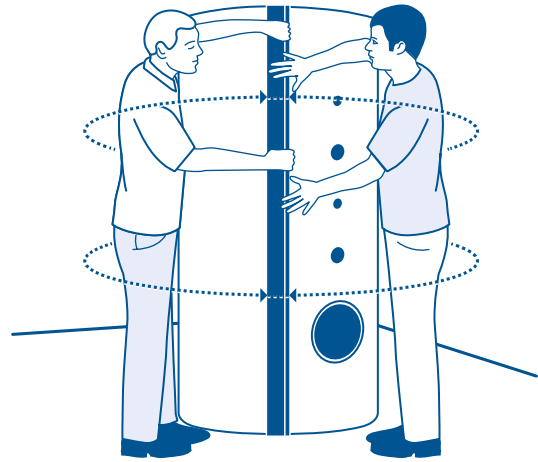
NOTE: Detailed manual is part of the delivery.



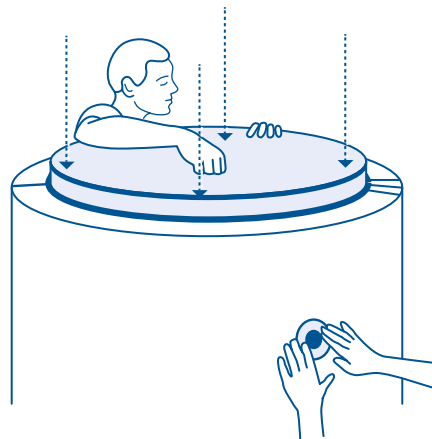
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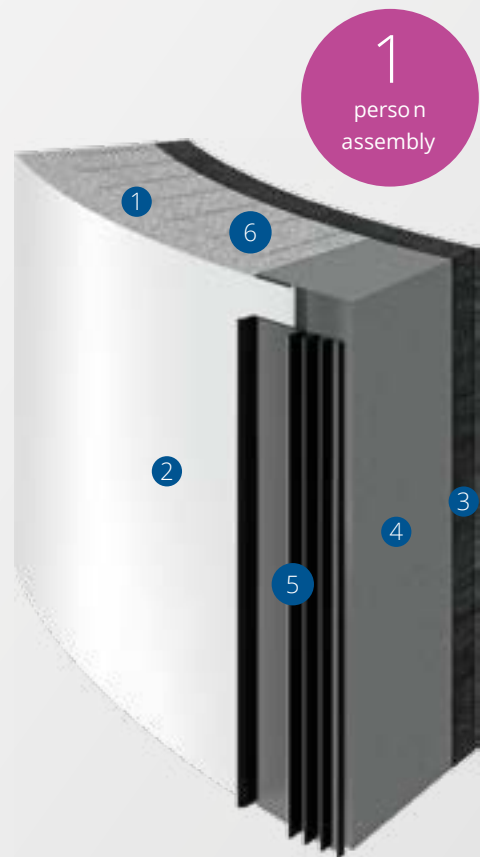
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Neodul® plus

Neodul® plus differs from the professional version by pressure-activated glue inside the slits. The ideal adhesion is achieved as quickly as in approximately half a minute. The product can be formed into the required shape during this time. Thanks to this, the installation is extremely simple and can be easily carried out by one person without any special tools or supporting fixtures. This way we save your time and money. The outer layer is fixed the same way as in the professional version.



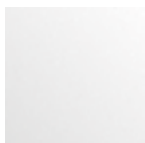
- ① EPS - Graphite core
- ② PS surface
- ③ fleece
- ④ flexible edges
- ⑤ closing slat
- ⑥ pressure activated glue

Specifications

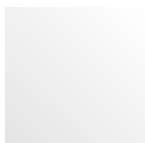
The important facts

surface	solid PS
fastening	closing slat or classic zip
workers for installation	1
special aids or tools	no need
additional montage	yes
custom adjustments	yes

Surface finishes



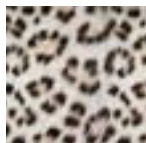
grainy PS



smooth PS



different colours



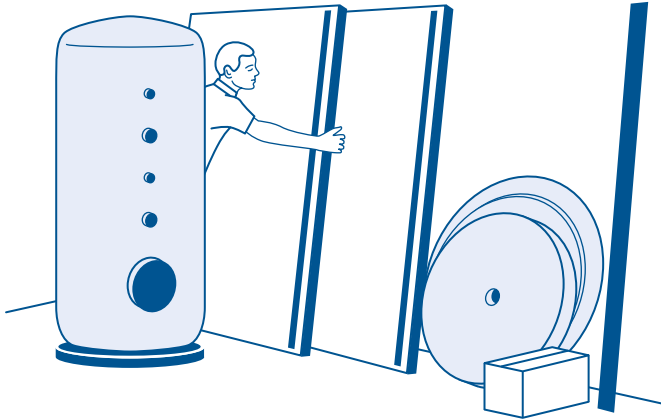
custom print

5 easy steps

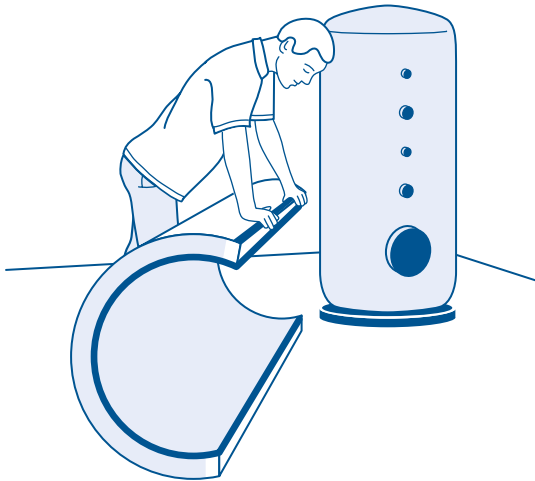
5 easy steps for 1 worker to install the insulation:

- 1 Prepare all parts, insulate the bottom
- 2 Bend & glue the 2 main blocks
- 3 Install & secure the main blocks
- 4 Insulate the top and all the connections
- 5 Tighten the main isolation connection and finish all details

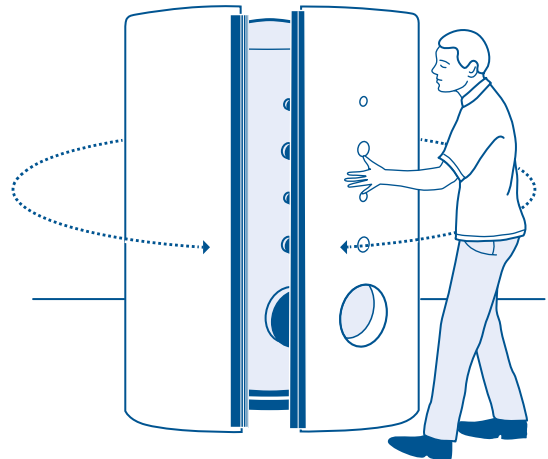
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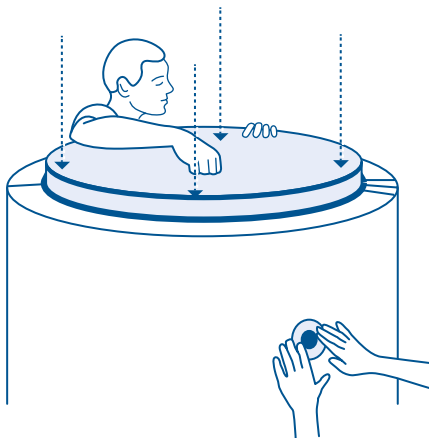
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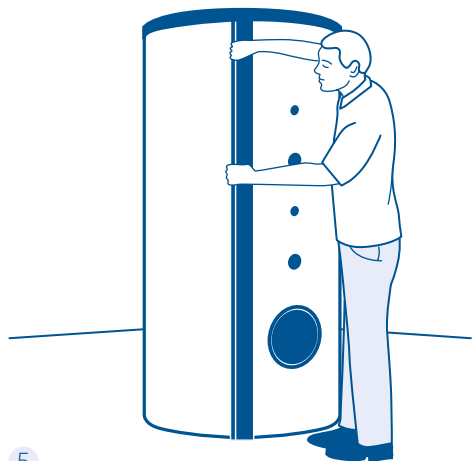
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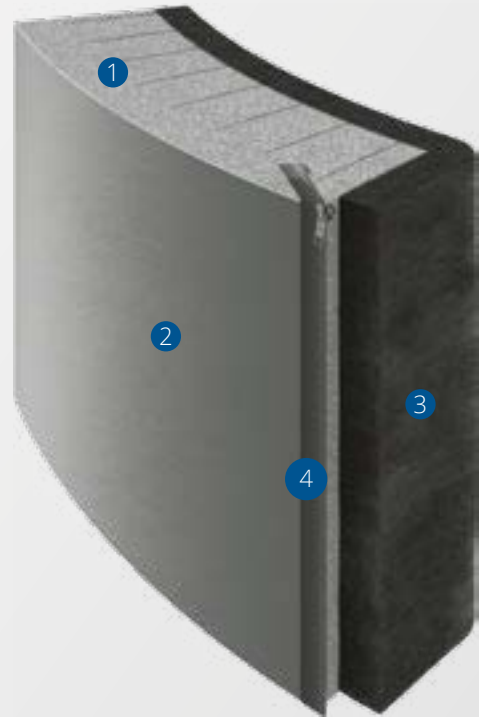
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Neodul® light

The Light version is equipped with a flexible top layer unlike other models that feature a hard one. A classical zip fastener is used for closing. Thanks to this, the insulation reaches a favourable weight. This version also features a solid EPS - graphite core. The insulation thus keeps its high quality and minimises the risk of damaging. The price-to-performance ratio is unique when compared with typical products on the insulation material market.



- 1 EPS - Graphite core
- 2 PP surface
- 3 fleece
- 4 classic zip

Specifications

The important facts

surface	flexibile PP foil
fastening	classic zip
workers for installation	2
special aids or tools	no need
custom adjustments	yes

Surface finishes

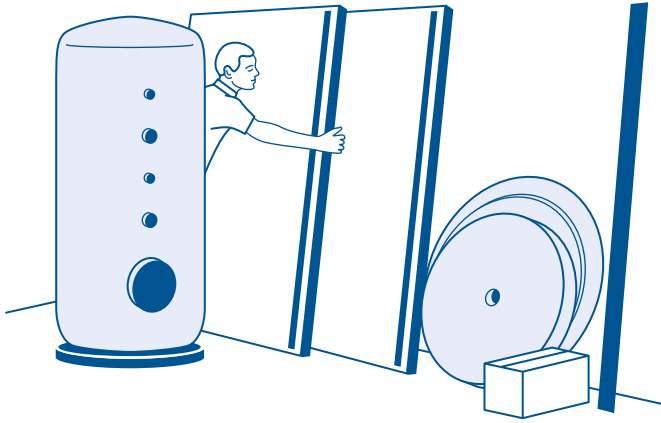


4 easy steps

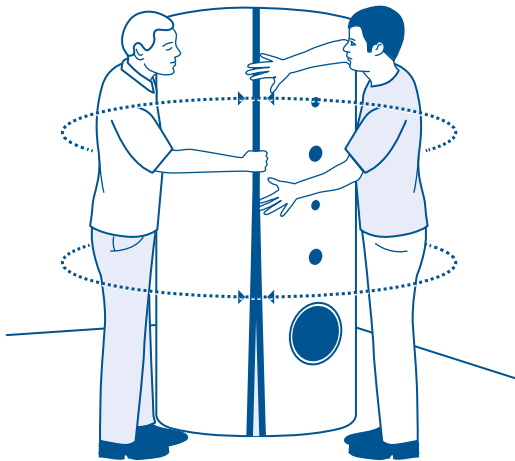
With this 4 easy steps, 2 workers can install the isolation in just a few minutes:

- 1 Prepare all parts, isolate the bottom
- 2 Tight the main isolation connection
- 3 Insulate the top
- 4 Finish all the details & connections

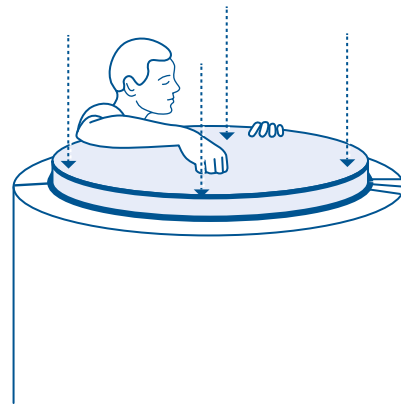
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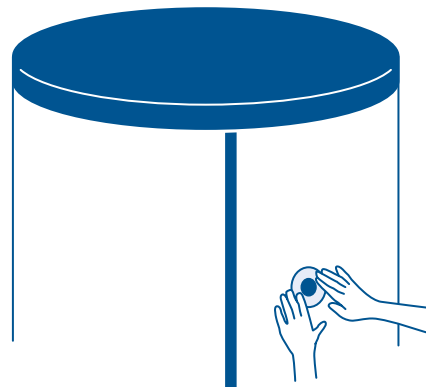
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