### VLo Nexxa-12 Castellated System

### **Easy installation**

Made from a environmentally friendly and recyclable polystyrene that can be installed easily and around existing objects.

### For all floor finishes

Suitable to be laid directly under all types of flooring and over existing insulated flooring.

\* The subfloor must be pre-insulated unless it is an intermediate floor.



### **Excellent thermal properties**

Excellent heat output when using low water temperatures alongside rapid response times to heating demand.

### Low surface finish

22 mm floor height makes it ideal for retrofit installations and new build projects.

## Overview

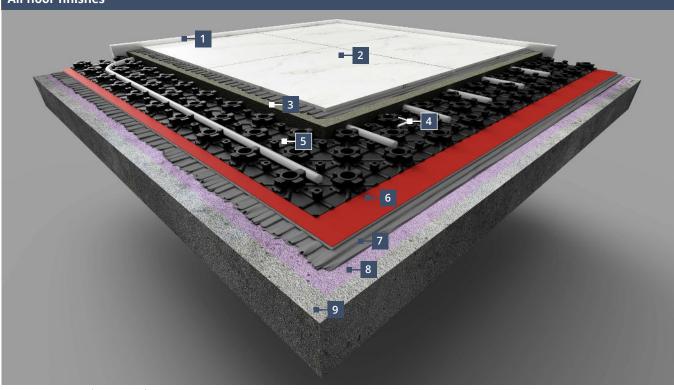
Warmup Nexxa-12 is a lightweight and flexible self-adhesive underfloor heating installation system. Developed to secure 12 mm pipe for even temperature distribution, the system can be fitted by a single installer and allows for lateral and diagonal pipe spacing.

The rigid and compact design ensures a low floor finish, making it ideal for retrofit or new home builds. Suitable to be laid below all flooring types, the panels require no overboarding whilst covering irregular surfaces better thanks to its flexibility. Made from an environmentally friendly polystyrene that can be easily recycled in a carbon neutral factory, the panel can be cut to size and placed around existing obstacles due to its regular pipe spacing design. The panels are inter-locked to create a continuous layer across the floor ensuring a seemless flow of heat.



# Typical Floor Build-Up

### All floor finishes



### 1 Warmup perimeter strip

#### 2 Floor finish

- 3 22 mm levelling compound
  - The 22 mm layer is measured from the base of the membrane. Levelling compound used must be compatible with plastic underlayments such as Nexxa-12. The levelling compound must be applied as a single layer.
- 4 Floor sensor
  - Tab tape the sensor to the membrane. Do not tape over the sensor tip!

#### 5 Nexxa-12 membrane

- 6 Warmup Ultralight (Optional) Adding Warmup Ultralight below the membrane can help improve the response time of the system, particularly when installing
- over screed or concrete.
- 7 Flexible tile adhesive (Optional) Required if installing Warmup Ultralight

#### 8 Warmup primer

- Refer to tile adhesive manufacturers instructions for priming requirements
- 9 Subfloor with a surface regularity of SR2\*

\* If installing the optional Warmup Ultralight, refer to its installation manual for its subfloor requirements.

# **Technical Specifications**

) x 1050 mm				
Immediate: 50mm				
: 43 mm / 70mm				
45° / - 45°				
nove/crush castellation first)				
ım				

# System Performance

kн Value - W/m²К													
Resistance of Floor Covering, tog	0.00	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00
100mm Pipe Centres	8.56	6.95	5.85	5.05	4.44	3.96	3.58	3.26	2.99	2.77	2.57	2.41	2.26
150mm Pipe Centres	7.15	5.91	5.05	4.41	3.91	3.52	3.21	2.94	2.72	2.53	2.36	2.21	2.09

q = Specific Heat Output, W/m²	k <sub>H</sub> = System Performance Factor, W/m²K
T <sub>water</sub> = Mean water Temperature	T <sub>air</sub> = Room Air Temperature

Using the system  $k_{H}$  value to calculate the system heat output:  $q = k_{H} x (T_{water} - T_{air})$ 

### Example:

The heat output through an 18mm thick, ≈ 1.25 tog timber floor, over Nexxa-12 fitted with pipe at 150mm centres, in a 21°C room heated with 40°C is;

 $q = 3.52 x (40 - 21) = 3.52 x 19 = 67 W/m^2$ 

Alternatively, using the system kH value to calculate the required water temperature, knowing the required heat output:  $T_{water} = (q / k_H) + T_{air}$ 

### Example:

The water temperature required to produce a heat output of  $55W/m^2$ , through a 3mm thick  $\approx 0.25$  tog LVT floor finish, over Nexxa-12 fitted with pipe at 100mm centres, in a 22°C room is;

 $T_{water} = (55 / 6.95) + 22 = 7.9 + 22 \approx 30^{\circ}C$ 

## Components



### **Warmup Primer**

A ready to use, bond enhancing and solvent-free single component primer for the preparation of absorbent and non-absorbent floors and walls with or without surface heating.



### **PE-RT Pipe**

Warmup PE-RT (Polyethylene of Raised Temperature Resistance) pipe. The pipe guarantees leak free performance with a smooth internal structure for improved flow, reduced pressure loss and deposit formation.



### Warmup Ultralight (Optional)

Adding Warmup Ultralight below the membrane can help improve the response time of the system, particularly when installing over screed or concrete.

## Contact

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