

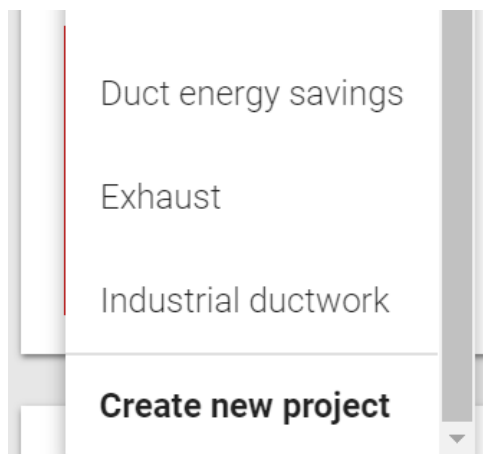
## SIGN IN, OR REGISTER AS A NEW USER

[Sign in](#)

[Become a registered user](#)

Follow the on-screen instructions if registering for the first time.

## CREATE A NEW PROJECT, OR OPEN AN EXISTING ONE







### IN ONE PROJECT YOU CAN CREATE MULTIPLE CALCULATIONS

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Project name: Example ▼

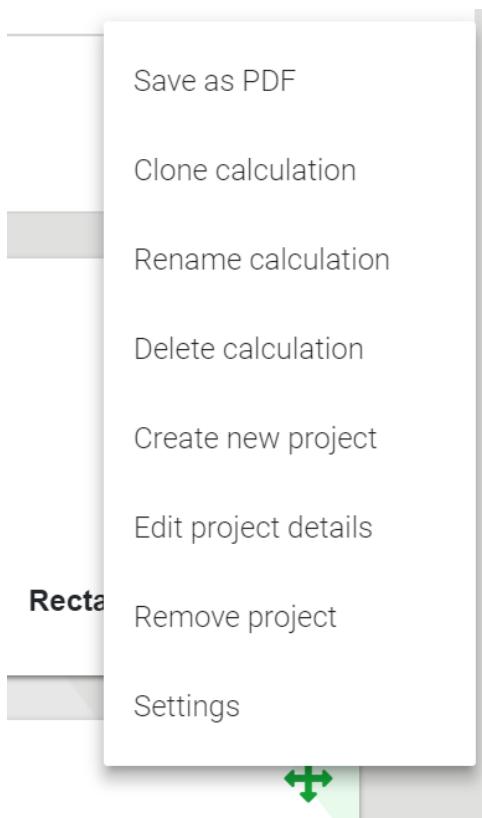
 Calc 1 

 NEW

Rename a calculation by clicking on the 'pen' symbol.

### 'THREE DOT MENU' (TOP RIGHT)

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'Clone calculation' is very useful when creating variants of the same calculation, for example different objects or insulation thicknesses in the same ambient conditions, etc.


Here is where you can also save your calculations as PDFs, which can then be emailed.


## CALCULATION


**SELECT OBJECT** +


  
**Flat Surface**

  
**Pipe**

  
**Ducts**

  
**Circular Tank**

  
**Circular Tank**

  
**Rectangular Tank**

**CALCULATIONS** ☑

- Calculate heat loss
- Calculate temperature change
- Calculate freezing
- Calculate energy consumption
- Calculate time to final temperature
- Add valves, fittings and flanges

**MATERIAL** 📦

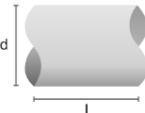
Select material  
**Steel** ▼

Thickness  
**3.65** mm

**MEASUREMENTS** +

Select standard dimension  
**DN50 (2")** ▼

Outer diameter **60.30** mm



Select an object type and its dimensions.

Scrolling down, select content temperature and ambient conditions.

**CONTENT** ☰

Select content  
**Water** ▼

Temperature  
**90** °C

**ENVIRONMENT** ☁

Environment  
**Indoor** ▼

Ambient temperature  
**20** °C

Ambient air velocity  
**0** m/s

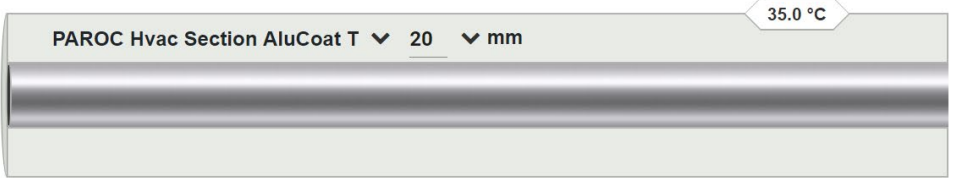
Relative humidity  
**50** %

Select insulation type and thickness:

**INSULATION**

[+ ADD INSULATION LAYER](#)

PAROC Hvac Section AluCoat T v 20 v mm



35.0 °C

60.30 mm

100.3 mm

No insulation

Cladding

**No additional cladding** v

Emissivity

0.15 ε

[Get more information](#)

Suspension

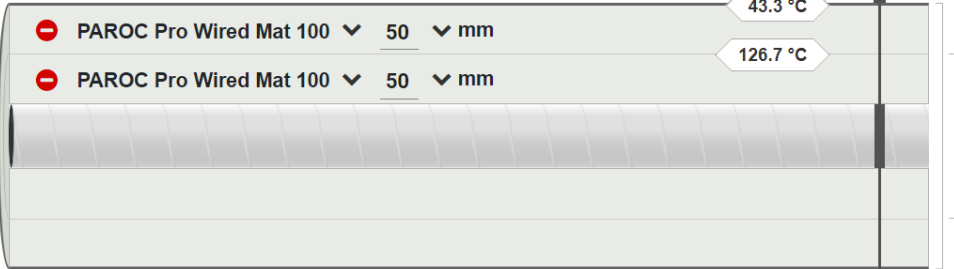
You can add multiple insulation layers. Don't forget to select cladding type, which is very important to determine surface temperature. And support of cladding where applicable.

**INSULATION**

[+ ADD INSULATION LAYER](#)

- PAROC Pro Wired Mat 100 v 50 v mm

- PAROC Pro Wired Mat 100 v 50 v mm



43.3 °C

126.7 °C

1000 mm

1100 mm

1200 mm

No insulation

Cladding

**Aluminium, bright** v

Emissivity

0.05 ε

[Get more information](#)

Suspension

Support of cladding

Influence on heat loss

20 %

Results are displayed:

**RESULTS** ⚙


**Result for pipe**

Heat loss	<b>25.9 W/m</b>
Uninsulated heat loss	<b>166 W/m</b>
Surface temperature	<b>35.0 °C</b>
Uninsulated surface temperature	<b>90.0 °C</b>
Dewpoint	<b>9.3 °C</b>
Nominal weight of insulation	<b>0.4 kg/m</b>


[SAVE AS PDF](#)

Other objects are calculated in a very similar way:


SELECT OBJECT
+




Flat Surface




Pipe




Ducts



Circular Tank



Circular Tank



Rectangular Tank

**CALCULATIONS** ✔

- Calculate heat loss
- Calculate energy consumption
- Calculate time to final temperature

**MATERIAL** 📦

Select material

**Steel** ▼

Thickness

**3** mm

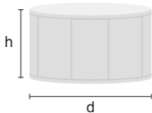
**MEASUREMENTS** +

Height

**2500** mm

Outer diameter

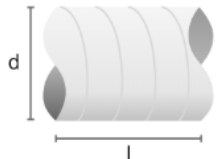
**1500** mm



Click on any warning symbol for more information – this appears when a product's properties are exceeded:

Outer diameter

**1000** mm



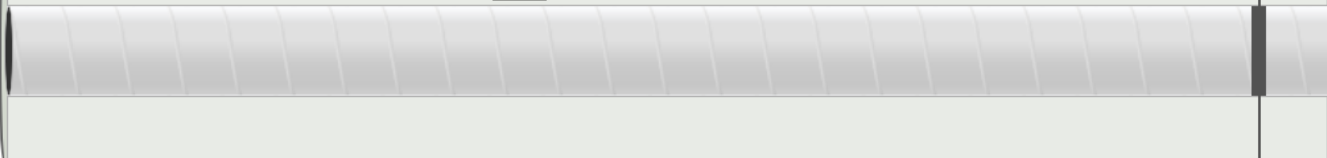
Temperature

**300** °C


## INSULATION

+ ADD INSULATION LAYER

PAROC Hvac Mat AluCoat ▼ **50** mm ▼

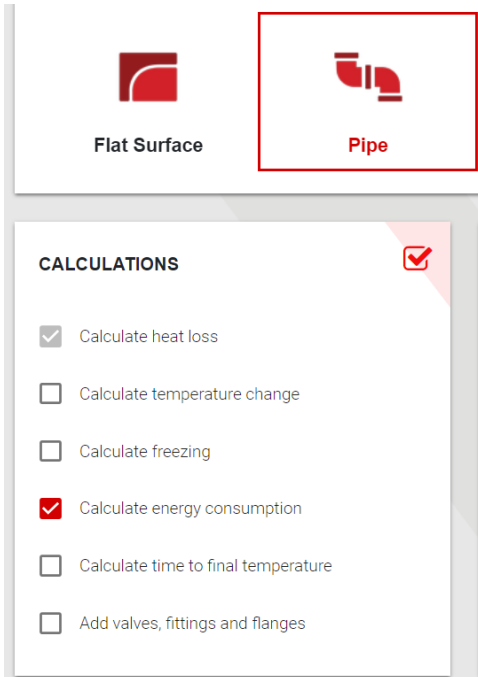


102.4 °C



## ADVANCED FEATURES

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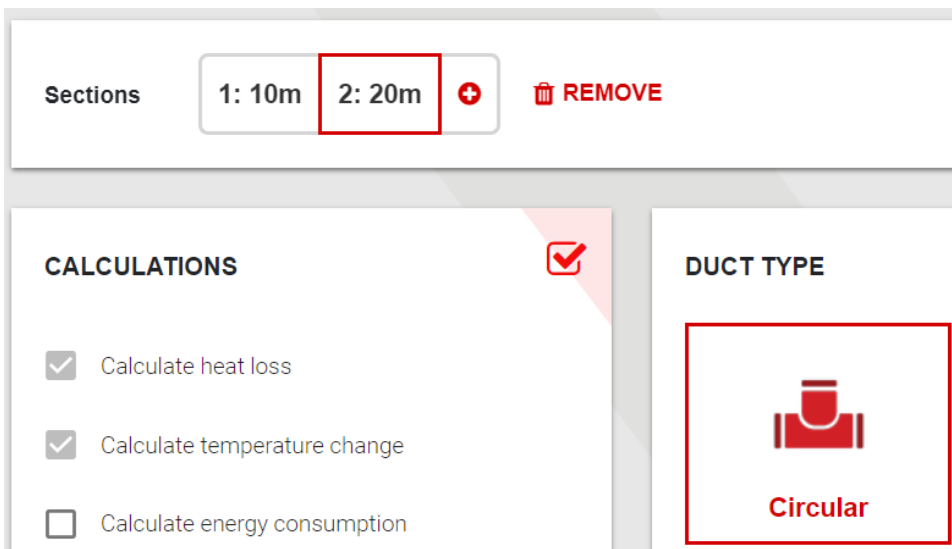


Tick the boxes to select the advanced features.

For example, here you can estimate energy consumption and savings from applying different thicknesses of insulation. The calculator can then be considered a sales tool for insulators.

Freezing times can be calculated, including trace heating recommendations with different insulation thicknesses.

Also, temperature change along a length of pipework or ductwork can be calculated, including the option to add different sizes of pipes and ducts in the same run.



## SETTINGS & CUSTOM PRODUCTS

Customisation options are found here, for example the possibility to enter non-Paroc products.

### Settings

- ABOUT PROGRAM**
- CUSTOM PRODUCTS
- CUSTOM MATERIALS**
- CUSTOM MEDIA**
- CUSTOM CLADDINGS**
- CUSTOM ENERGY SOURCES**

Custom Products

▼    **NEW**    DELETE

CANCEL    SAVE

Copy the product data carefully from the Declaration of Performance. It's essential to enter 4 thermal conductivity values covering the service temperature range, in order for the calculations to be correct.

- ABOUT PROGRAM**
- CUSTOM PRODUCTS
- CUSTOM MATERIALS**
- CUSTOM MEDIA**
- CUSTOM CLADDINGS**
- CUSTOM ENERGY SOURCES**

Custom Products

▼    **NEW**    DELETE

Custom product	Temperature	Lambda
Product name	10	°C = 0.034 W/mk
Thickness	50	°C = 0.037 W/mk
Maximum Service Temperature	100	°C = 0.042 W/mk
Emissivity	150	°C = 0.049 W/mk
Nominal density		
0    kg/m <sup>3</sup>		

CANCEL    SAVE