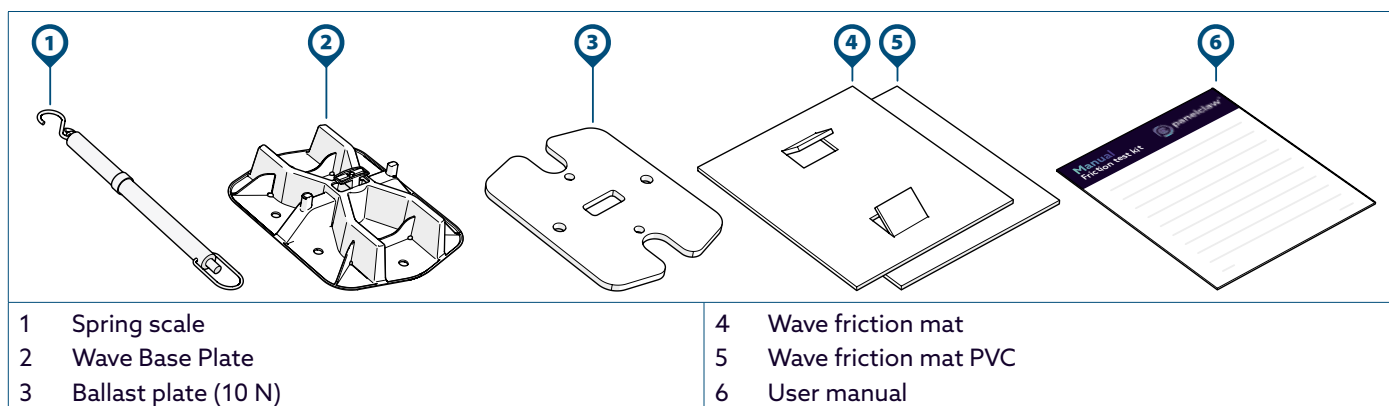# Manual
Friction test kit

Description

This Friction Test Kit is used to determine the coefficient of static friction between the roofing surface and Wave mounting system. It includes a 10N ballast interface and spring scale. Measurements must be taken on dry and wet roof surfaces, across multiple zones. The results determine ballast requirements and can be directly entered into our calculator using expert mode.

This manual and the Friction Test Kit are subject to PanelClaw's terms and conditions. For the most recent version, please visit the PanelClaw website: https://panelclaw.eu

Main parts

Friction Test Kit (SKU 1009149), provided in a compact suitcase containing:

1	Spring scale	4	Wave friction mat
2	Wave Base Plate	5	Wave friction mat PVC
3	Ballast plate (10 N)	6	User manual

Use Instructions

ℹ️ Always perform friction testing under the same conditions in which the PV system will be installed.

ℹ️ Please make sure to bring the necessary precautionary items to perform the test.

1 Ensure that the test kit is complete and functioning properly. Replace parts with wear (e.g. Wave base plate).
- Ensure that the scale is accurate and adjusted to zero (drag point on top).
- Calibrate or replace scale according to manufacturer prescription or local requirements.

2 Remove rubble from the roof before performing the tests.

3 Place the Ballast plate on top of the Wave base plate on the roof, as shown on page 2.

ℹ️ Use the Wave friction mat (PVC) when needed.

4 Attach the spring scale to the ballast plate.

5 Gently and evenly pull the spring scale in a horizontal direction until the Wave base plate starts to move.

ℹ️ Do not pull at an angle.

6 Use a whiteboard marker to note the reading from the Spring scale in the measurement table on page 2.

7 Reset the drag point to the zero position.

8 Perform the test in 10 different roof zones, under both wet and dry conditions, with a total of 20 measurements.

ℹ️ For large-scale projects, conduct additional tests to ensure accurate representation.

9 Use the lowest results from all measurements to calculate the friction coefficient: $\mu = F / G$ (e.g. 4.6N / 10N = 0.46).

10 Photograph the test results to save them for future reference.

11 Enter the lowest calculated coefficient "μ" into the panelclaw calculator via Expert Mode.
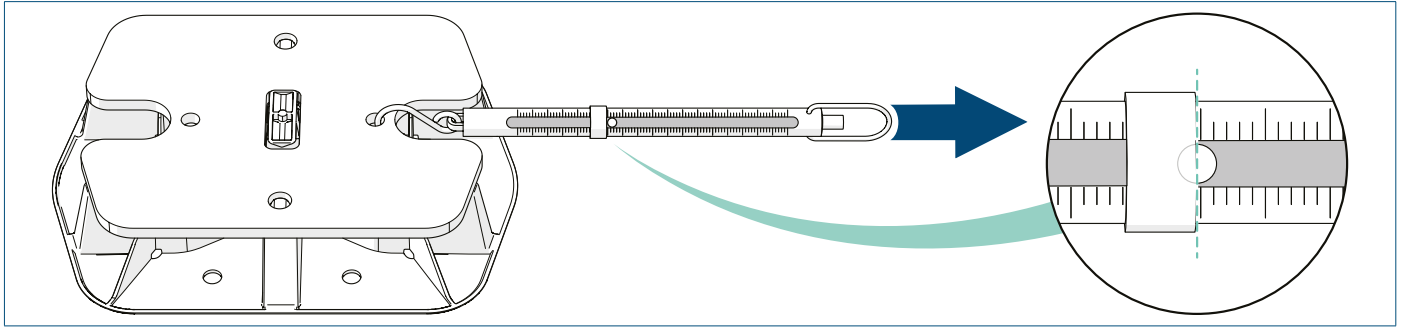
Project information

Project name	
Testing date	
Name of tester (you)	
Roofing manufacturer	

Type of roofing		Age of roofing	

Measurement Table

Measure Point	Dry (N)	Wet (N)	Roof drawing
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Lowest measurement (F_{lowest}) =

$$\mu = \frac{F_{lowest}}{G} = \frac{F_{lowest}}{10N} = $$

Visit panelclaw.eu/en/manuals to download and print this manual in your language for future use.