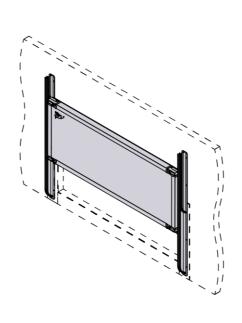
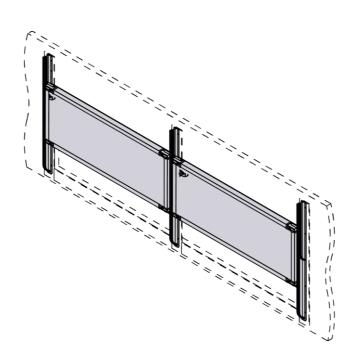


# Installation and maintenance manual

# **Fenno**





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## 1. Preface

Please read this manual carefully. Become familiar with its operation and maintenance. This will enable you to prevent personal injury and/or material damage.

## 1.1 Purpose of the manual

This purpose of the manual is to provide the user with information throughout the lifespan of the product. These instructions must be observed to avoid risks that could lead to personal injury and/or material damage.

#### 1.2 Target group

The manual is intended for installation technicians.

## 1.3 Target group requirements

The product must only be operated by an adult who meets the following requirements:

- has read and understood the instructions in this manual;
- adheres to the safety instructions described;
- complies with local safety instructions;
- has a technical background and/or field experience.

## 1.4 Reading guide

In the manual, the following symbols and terms (Table 1-1) are used to alert the reader to safety aspects and important information:

Sign	Term	Meaning
<u>^</u>	Warning	Indicates a hazardous situation which, if the safety instructions are not followed, may result in damage to the product and/or its surroundings.
0	Note	Provides information considered important but not injury-related.

Table 1-1: Reading guide symbols.

# 1.5 Installation of the control components

For the installation of the control components, fine tuning and maintenance, see the Installation and maintenance manual of the control components



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## 2. Introduction

This Fenno is safe and easy to install and maintain. This manual provides information:

- to maintain the product safely;
- to unpack and store;
- to install the product;
- to properly discard the product.

#### 2.1 Intended use

The Fenno is intended exclusively to create a passage in a wall that birds can go through.

#### 2.2 Non-intended use

#### Warning



Non-intended use of the Fenno may cause hazards, such as:

- personal injury;
- damage to the product;
- damage to the surroundings.



#### Note

Non-intended use of the Fenno voids the warranty.

The Fenno is not intended to:

- pass other things than live birds;
- block and hold heavy weights.

# 2.3 Warranty provisions



#### Warning

Modifications are not allowed. This can lead to risky and dangerous situations and voids the warranty and liability.



#### Warning

TPI-Polytechniek accepts no liability for animal performance outcomes or for any damage or malfunction caused by external influences, including but not limited to sharp edges and animal interference.

# 2.4 Workplace



#### Note

Follow local safety requirements and measures.

The workplace must meet the following requirements:

- clean and well-lit;
- keep children, people and birds away while installing and operating the Fenno

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# 2.5 Configurations



Note

All the parts are manageable by 1 person, these weigh a maximum of 3kg/6,5lbs per item.

The Fenno can be used in different configurations:

- Fenno (single) (Figure 2-1, pos. 1);
- Fenno Linked (multiple) (Figure 2-1, pos. 2), consists of one Fenno door and one Fenno slider rail.

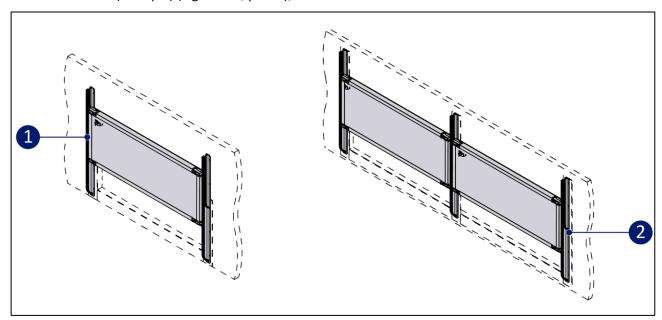


Figure 2-1: Different configurations of the Fenno.

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# 3. Storage, unpacking and description

## 3.1 Storage and unpacking

The Fenno and its packaging must be stored under the following conditions:

- dry;
- clean;
- keep from the ground and on a flat surface (for example, placed on wooded beams or pallets);
- indoors.

#### When unpacking;

- do not open the packaging with a sharp knife/object;
- keep the parts dry and clean;
- use a soft underground to prevent scratching and/or damage of the Fenno;
- do not wrap with (stretch) foil to prevent deforming.

## 3.2 Unpacking

The Fenno consists of 3 items:

- Fenno slider rail 2x (Figure 3-1, pos. 1);
- Fenno door 1x (Figure 3-1, pos. 2) (1206x512mm/47,5x20,2").

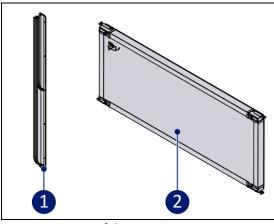


Figure 3-1: Items of the Fenno.

# 3.3 Options

The Fenno can be delivered with different options and control components.

#### 3.3.1 Wall frame

The wall frames are needed when the walls are not flat enough to place the slider rails directly on wall.

- The Fenno (single) has 4 plates in each set (TPI-271).
- The Fenno Linked has 3 plates in each set (TPI-271 Linked).

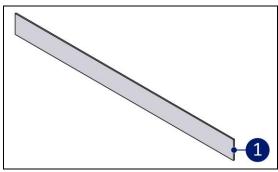


Figure 3-2: Wall frames.

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## 3.3.2 Control components: steel cable with plastic coating

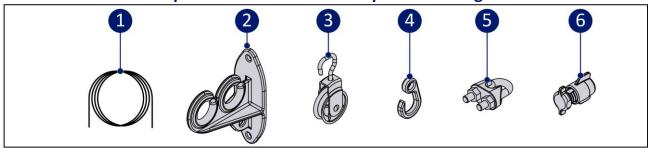


Figure 3-3: Steel cable with plastic coating parts.

Set	Pos.	Description	Quantity	Part number
TPI-270	1	White rope	2x	TPI-511-0015
	2	Main cable support	2x	TPI-519
	3	Hanging pulley	2x	TPI-408
	4	Carabine hook	2x	Carabine hook
	5	Cable clamp U-shape stainless steel	2x	TPI-619
	6	Cable clamp synthetic	2x	TPI-621

Table 3-1: Steel cable with plastic coating parts description.



## 4. Installation

The Fenno needs to be installed on (customers) site.

#### 4.1 Tools

The following tools needs to be delivered by the installation team:

- basic hand tools;
- soft underground;
- power drill and drill bits;
- fasteners.

## 4.2 Wall preparation

1. Make sure the wall is flat, smooth and straight. If not; use the wall frames to mount the Fenno on.

#### 4.3 Cut-out



#### Warning

Covering/sealing of the cut-out has to be done by the customer (out of scope for TPI-Polytechniek). TPI-Polytechniek is not responsible for damage.



#### Note

Always follow local laws and regulations for the maximum dimensions of the cut-out.

- 1. Mark de cut-out (Figure 4-1) on the wall:
- maximum width is 1160mm/45,7";
- maximum height is 450mm/17,7";
- minimum height is 80mm/3,1" above ground level.
- 2. Make the cut-out. Do not make sharp corners but rounded corners.
- 3. Make sure that the cut-out is protected/sealed against humidity and dirt.

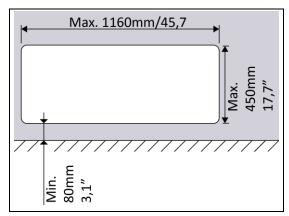


Figure 4-1: Cut-out dimensions.

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# 4.4 Optional: mounting the wall frames and slider rails



#### Note

The wall frames are used when the walls are not flat enough to place the slide rail directly on wall.



#### Note

Use fasteners to mount the wall frames and the Fenno slider rail on the wall. When in doubt, contact TPI.

- 1. Secure the bottom wall plates bottom plate (Figure 4-2, pos. 2):
- minimum 5mm/0,2" above ground level;
- in the center of the cut-out.
- 2. Secure the wall plates (Figure 4-2, pos. 1) against the HPL bottom plate.

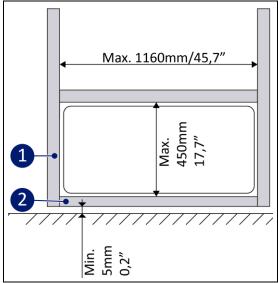


Figure 4-2: Placement of the wall frames.

- 3. Secure the slider rails on the Wall frames:
- the mark on the slider rail (Figure 4-3, pos. 1) must be at the top of the HPL bottom plate;
- the slider rails must be placed vertically;
- make sure that the center to center of the slider rails (Figure 4-3, pos. 2) is 1260mm/49,6".

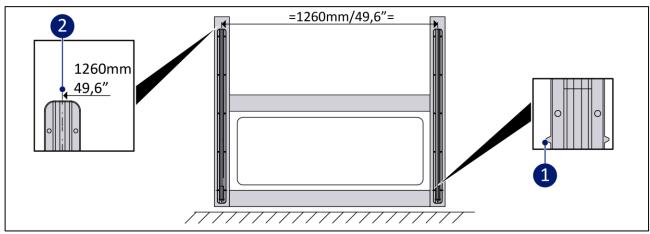


Figure 4-3: Installing the wall frames and slider rails.

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# 4.5 Mounting the Fenno slider rails (without wall frames)



#### Note

Place the Fenno slider rails minimum 10mm/0,4" off the ground. Note that the Fenno slider rail is placed vertically and level with each other(s).

- 1. Mount the Fenno slider rails on the wall:
- the mark on the Fenno slider rail (Figure 4-4, pos. 1) must be at the bottom of the cut-out passage;
- the Fenno slider rails must be placed vertically and level with each other(s);
- make sure that the center to center of the Fenno slider rails (Figure 4-4, pos. 2) is 1260mm/49,6".

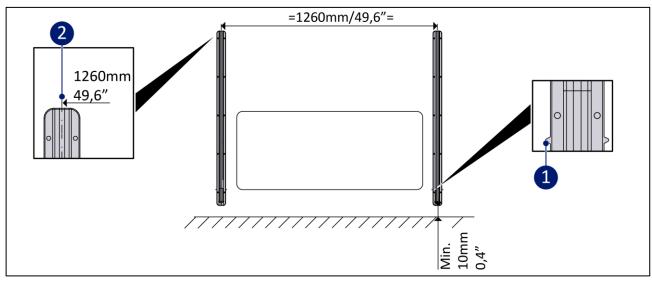


Figure 4-4: Installing the Fenno slider rails.

#### 4.6 Placement of the Fenno door

1. Place the Fenno door (Figure 4-5, pos. 1 and 2) into the Fenno slider rail

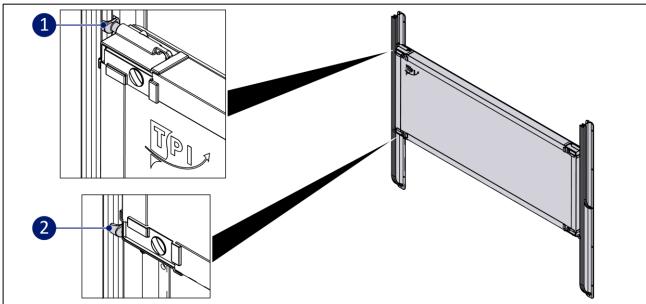


Figure 4-5: Placement of the Fenno door into the Fenno slider guides.

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# 4.7 Mounting the control components



Note

For the installation of the control components, fine tuning and maintenance, see the Installation and maintenance manual of the control components.

1. Mount the main cable supports (TPI-519) (Figure 4-6, pos. 3) on the wall: the brackets have an offset of 35mm/1,4" on the same (!) side.



Figure 4-6: Placement of the cable supports.

- 2. Place the hanging pulleys (TPI-408) (Figure 4-7, pos. 3) on the main cable support (TPI-519) (Figure 4-7, pos. 2).
- 3. Place the carabine hooks (carabine hook) (Figure 4-7, pos. 4) on the door.
- 4. Secure the rope (TPI-511-0015) (Figure 4-7, pos. 1) with the help of a cable clamp synthetic (TPI-621) (Figure 4-7, pos. 6) to the carabine hook.
- 5. Secure the rope to the cable/rod or wire with the Ushape clamp (TPI-619) (Figure 4-7, pos. 5).

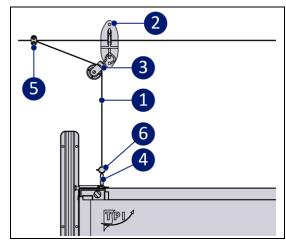


Figure 4-7: Operating lay-out.

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