Tovertafel Installation manual





US – Translation of the original manual November 2020

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1. Introduction

First of all we would like to thank you for choosing Tover!

At Tover, we take play seriously. With positive effects on physical, social, sensory and cognitive functioning and well-being, we believe play offers the solution. The Tovertafel (Magic Table) is a healthcare innovation that promotes unlimited and meaningful play experiences. The portable unit is mounted on the ceiling and projects interactive games on to the surface below, such as a table or floor. Sensors in the Tovertafel detect the movements made by users, allowing them to play the games. The remote control can be used to navigate the menu and select different games. The Tovertafel can be connected to the Internet to ensure the system is kept updated with the latest software and security features, new licensed games and game improvements. The Tovertafel games are specifically designed for older people with dementia, adults with intellectual disabilities and children with special needs. Together, we make a proven impact on quality of life.

1.1. Important: before you begin installing

Carefully read the installation and user manual before using the Tovertafel. Please pay special attention to the safety instructions to ensure correct operation of the Tovertafel. We recommend that you save the original packaging in the event that you need to return the Tovertafel. If the instructions in the installation manual and user manual are not complied with and/or the Tovertafel is used for purposes other than those described in the manual, the product guarantee will be compromised and we will accept no liability.

1.2. Assistance



The product is under continuous development. Some functions in this manual may differ and been improved on in the meantime. For the most up-to-date information and extended support, please go to www.tover.care/manual

Having problems installing or using the Tovertafel? Please contact our service team.

Service team:

service@tover.care

www.tover.care/service

Purchased the Tovertafel 2 through one of our local distributors? Please contact that distributor for any service questions. See our website

www.tover.care/manual or the documentation included for a list of distributors.

1.3. Key to symbols

-	Reference to a choice you can make to a step.
	Warning Indicates a hazardous situation. Failure to follow the safety instructions may result in death or serious injury.
	Caution Indicates a hazardous situation. Failure to follow the safety instructions may result in minor to moderate injury.
NOTICE	Comment information that should be regarded as important but which is unrelated to injury.
1	Tip useful information.
	Shopping trolley indicates that items that can be ordered as options.

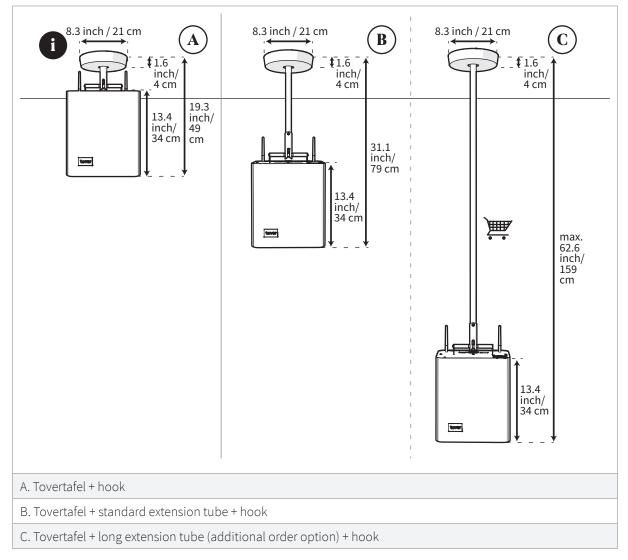
2. Product

2.1. Specifications

Product	Tovertafel 2	Contrast ratio	13000:1
Dimensions (h x w x d)	13.4 x 12.2 x 8.1 inch	Power supply	110 - 240 V
/ 340 x 310 x 205 mm (without handle)		Maximum energy consumption	375 W
Weight	8.3 kg	Remote control	6.0 x 1.4 x 0.8 inch /
Resolution (horizontal x	1280 x 800 px	dimensions	150 x 36 x 20 mm
vertical)		Batteries for remote	2 x AAA / LR03
Image ratio	4:10 PM	control	
Lifespan of lamp	4000 hours of use	4000 hours of use Computer system Intel	
Brightness	3200 ANSI lumens	USB	3.0

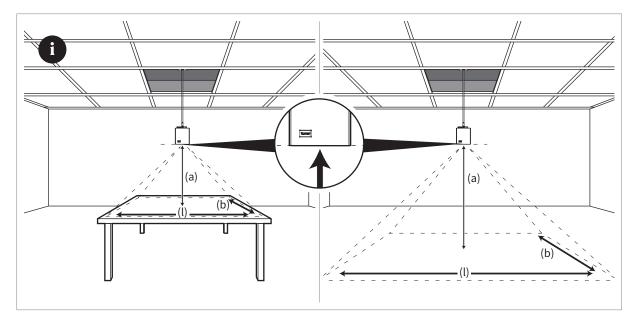
Tover B.V. retains the right to change products without being obliged to modify previously supplied products in the same way.

2.1.1. Hanging heights



2.1.2. Projection sizes

• The illustrations in this manual mainly show suspended ceilings. Since the structural ceiling is used with suspended ceilings, the measurements used also apply also to ceilings without a suspended ceiling.



The projection size depends on the height at which the Tovertafel is mounted: the higher it is mounted, the larger the projection. Below is a summary of the projection size and light intensity correlated to the different hanging heights of the Tovertafel.

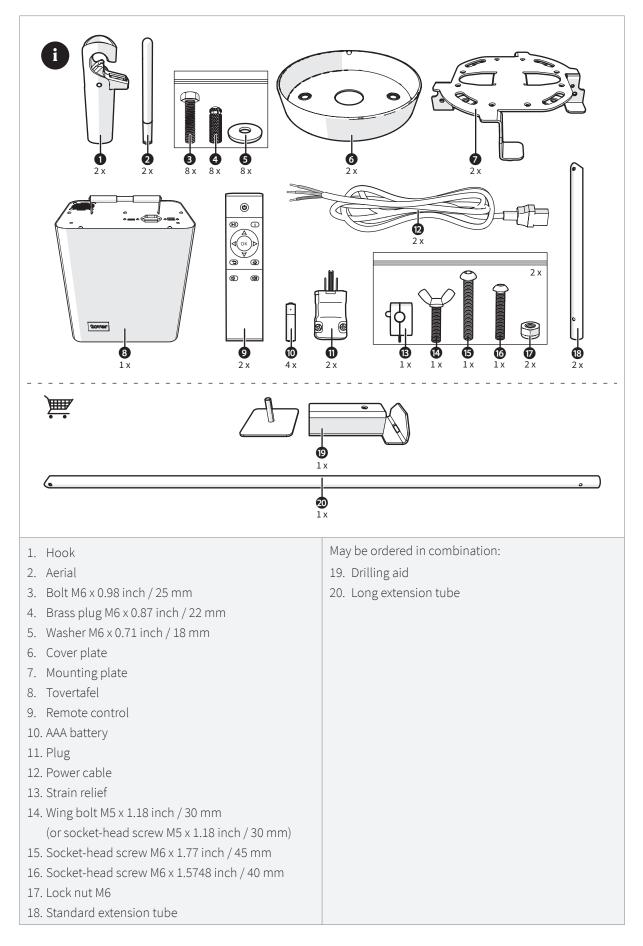
On a table:

(a)	Distance of white base plate Tovertafel - table (inch / cm)	43.3 / 110	45.3 / 115	47.2 / 120	49.2 / 125	51.2 / 130	53.1 / 135	55.1 / 140
(l)	Projection length (inch / cm)	50.8 / 129	53.1 / 135	55.5 / 141	57.9 / 147	60.2 / 153	62.6 / 159	65.0/ 165
(b)	Projection width (inch / cm)	31.9 / 81	33.5 / 85	34.6 / 88	36.2 / 92	37.8 / 96	39.0 / 99	40.6 / 103
	Light intensity (lux)	3057	2797	2569	2367	2189	2030	1887

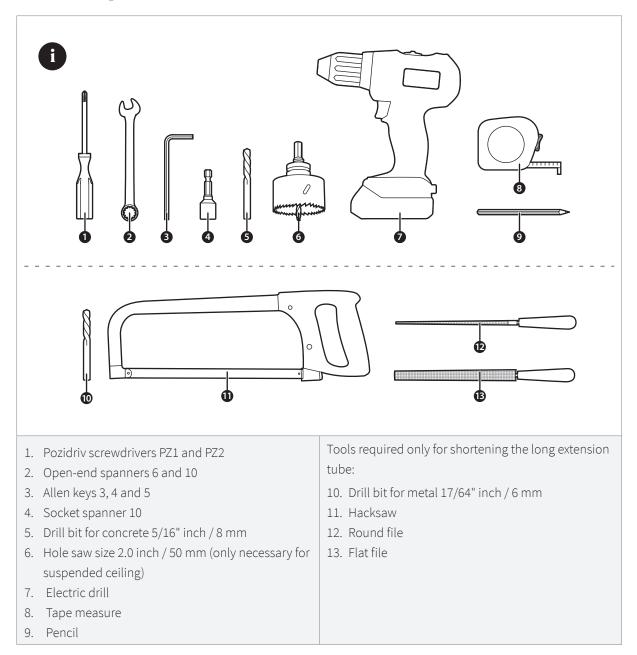
For use on the floor:

(a)	Distance of white base plate Tovertafel - table (inch / cm)	80.7 / 205	82.7 / 210	84.6 / 215	86.6 / 220	88.6 / 225	90.6 / 230	92.5 / 235
(l)	Projection length (inch / cm)	94.9 / 241	97.2 / 247	99.6 / 253	102.0 / 259	104.3 / 265	106.7 /271	108.7 / 276
(b)	Projection width (inch / cm)	59.4 / 151	60.6 / 154	62.2 / 158	63.8 / 162	65.0 / 165	66.5 /169	68.1 / 173
	Light intensity (lux)	880	839	800	764	731	699	670

2.2. Parts included



2.3. Tools required



3. Safety instructions

Safety during use is only guaranteed if installation has been carried out correctly in a technical sense and in accordance with the installation instructions. The installer is liable for damage caused by improper installation (or installation in an unsuitable location).

3.1. General instructions

- Read the manual carefully. The Tovertafel may only be operated in a manner equivalent to the intended use; any other use may result in technical faults or accidents. The liability and product guarantee are compromised in the event of improper use.
- Danger of Tovertafel falling and risk of personal injury: avoid horizontal load on the hanging system. Avoid pushing against or swinging from the hanging system .
- The Tovertafel exerts a vertical load on the hanging system: never hang anything on it that would increase the prescribed vertical load,
- that could cause the mounting plate to fail. **NOTICE**
- Before removing the plug from the power socket always turn the Tovertafel off first. If the device's software is not shut down correctly, it could cause the device to malfunction.

3.2. Positioning the product.

- Risk of fire and electric shocks. Always connect the Tovertafel to an earthed power socket, never to an unearthed one. Ensure the plug is properly inserted into the power socket to prevent the plug from moving.
- Danger of a short circuit and risk of electric shocks. Always connect the power cable to the plug in the correct manner (see step 18).
- Danger of a short circuit and risk of electric shocks. Always attach the power cable with a loop to the strain relief so that the power cable is never under strain. The cable must always be secured through the strain relief in the correct

manner to prevent damage to the cable (see step 20).

• Risk of personal injury and choking. Keep children out of the vicinity while installing the Tovertafel. Both during and after the installation, keep the packaging, the wrapping film and the plastic out of the reach of children.

3.3. Using the product AWARNING

- Danger of a short circuit and risk of electric shocks. Prevent unnecessary pulling on, wear or damage to the power cable.
- Risk of fire. Never expose the Tovertafel to direct sunlight, open fire or heat. Never position the product near flammable materials.
- Risk of overheating and fire. Never place any objects in front of the lens or cover it. Never cover the openings in the product's casing.
- Risk of fire and electric shocks. Never expose the Tovertafel to water, rain, moisture or high humidity. Never immerse the product in water. Never touch the product with wet or damp hands.
- Risk of a short circuit. Never position the product in damp or dusty areas.
- Danger of a short circuit and risk of electric shocks from lightning. Turn off the product using the remote control and the power switch on the bottom of the Tovertafel. Lastly, remove the plug from the power socket. Never touch the aerials during a thunder storm.
- Danger of a short circuit and risk of electric shocks. Do not insert any metal objects into the end of the power cable when it is in the power socket. Never touch the plug immediately after removing it from the power socket. Never open the product itself.
- Risk of Tovertafel falling. Always click the handle of the Tovertafel firmly onto the hook and always ensure that the hook locks into place.
- Risk of personal injury. Never allow children to play with the physical device, climb on or hang from the Tovertafel.
- Risk of eye damage. Never look directly into the lens of the Tovertafel for a prolonged period of time.

- Risk of damage. Never allow the product to fall; avoid jolting it. Never touch the Tovertafel's lens.
 NOTICE
- Risk of fault. Never use a product that makes use of high voltage current (e.g. an electronic fly swatter) near the Tovertafel.

3.4. Battery instructions for remote control

- Risk of fire due to fluid leakage from cracked batteries. Always replace batteries on time. Avoid combining partially used batteries with unused ones in the remote control. If you are not going to use the remote control for a prolonged period, remove the batteries.
- Risk of fire, explosion, injury and environmental damage due to cracked or leaking batteries.
 When inserting a battery, ensure that the plus (+) and minus (-) polarity markings of the battery match the plus (+) and minus (-) polarity markings in the remote control.
- Risk of fire and explosion. Never expose the batteries to direct sunlight, flame, sparks, electrical heating, or temperatures above 60 °C; do not store them where there is high humidity or excessive heat. Never throw batteries around or disassemble batteries, thereby preventing fluid leakage from cracked batteries.
- Risk of fire and explosion. Never dispose of batteries in the normal waste. Dispose of batteries in the correct manner. Comply with local rules and regulations for such disposal.
- Risk of fire and explosion. Only use batteries that meet the indicated specifications. Never replace a battery with a battery of the incorrect type.
- Risk of personal injury. Supervise children's use of the remote control. Ensure that children never put the remote control batteries in their mouth. If a battery is swallowed, call for medical assistance immediately.
- Risk of personal injury. If the batteries in the remote control leak, throw the entire remote control away in the chemical waste. Order a new remote control via service / assistance Chapter 1.2.

• Risk of personal injury. In the event of battery leakage, ensure the fluid never comes into contact with the skin or eyes. Should this occur anyway, rinse the fluid off immediately using plenty of water and call for medical assistance.

4. Installation



The product is under continuous development. For the most up-to-date instructions and detailed support in video and text, go to www.tover.care/manual

4.1. Checking the package contents

Check that all components are present (see Chapter 2.2. Parts included) and there is no visible damage to the components. If components are missing or damaged, please contact Tover B.V. or one of our approved distributors. (see Chapter 1.2. Assistance). Note the serial number in the documentation folder. The serial number can be found on the top of the product indicated by S/N.

4.2. Installing the Tovertafel

- The Tovertafel should be suspended eccentrically relative to the table. This means that the Tovertafel should not be mounted precisely above the center of the table (see step 1 for more details).
- The height at which the Tovertafel should be suspended depends on the desired projection size (see Chapter 2.1.2.Projection sizes).

- Risk of overheating and fire. Never obstruct the Tovertafel's ventilation openings . Never install the product in a suspended ceiling. It can be mounted under a suspended ceiling, provided there is enough space around the Tovertafel.
- Danger of a short circuit and risk of electric shock. File the long extension tube until all sharp edges are removed to prevent damage to the cable.

Danger of the Tovertafel falling and risk of personal injury:

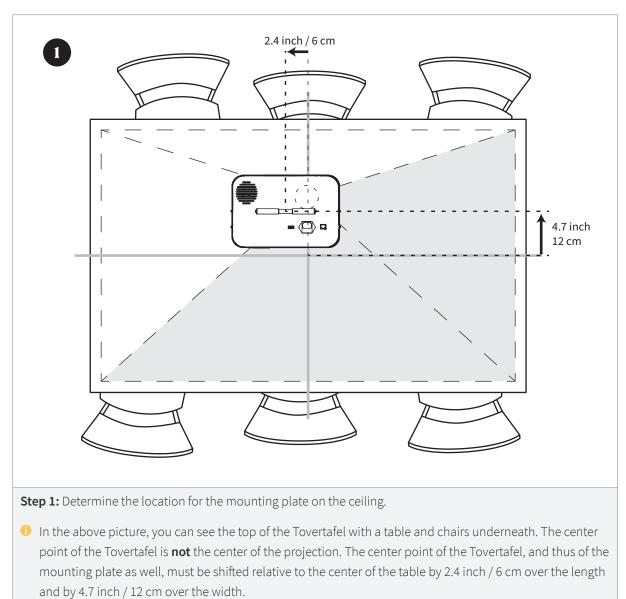
- Use the hanging system supplied to mount the Tovertafel. Preferably fix the hanging system from a concrete ceiling.
- With correct mounting using the brass plugs supplied, the system can withstand a maximum

load of 110 kg (1.1 kN). This is to bear the weight of the Tovertafel and the hanging system (in total approximately 10 kg) and limit any risk from improper use (e.g. when a person hangs on the Tovertafel or external forces are exerted on it in some other way). Fix the system to a ceiling that is capable of bearing this weight, at minimum.

- Never mount the Tovertafel to a suspended ceiling, but always to a proper ceiling above it.
- Tighten the bolts, nuts and screws correctly (see step 15). Prevent breaking the screw joint by avoiding over-tightening the screws.
- Always drill new drill holes for attaching the mounting plate. Ensure the drill holes are not too large, too deep or too shallow. Always use new and suitable bolts, plugs, washers and screws. Using the supplied parts is preferable.
- Always attach the mounting plate to the ceiling at all four points.

NOTICE

- Avoid installing the Tovertafel further than 2.36 inch / 60 cm from a power socket.
- The Tovertafel may be used for a projection onto the floor or onto a table. For an ideal image result, we recommend that you choose a smooth, even, light and stable surface.
- Ensure that the projection from the Tovertafel is a minimum of 59.0 inch / 1.5 meters away from the windows and walls for safety and maximum light intensity.
- The room in which the Tovertafel is to be located must preferably be fitted with (dark) curtains or blinds so the room can be darkened on sunny days. For an ideal image result, install the Tovertafel in a shaded place.



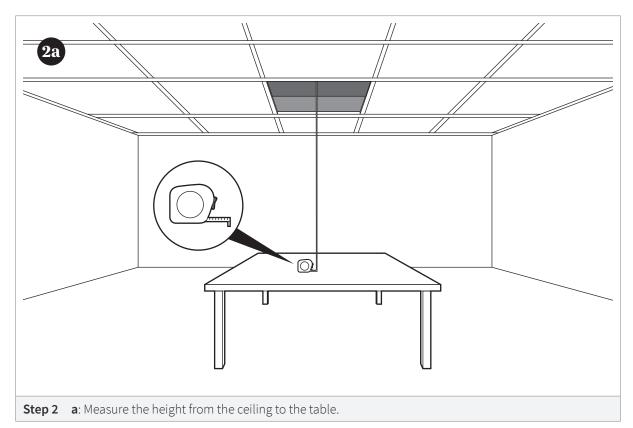
4.2.1. Determining the location for the suspension point

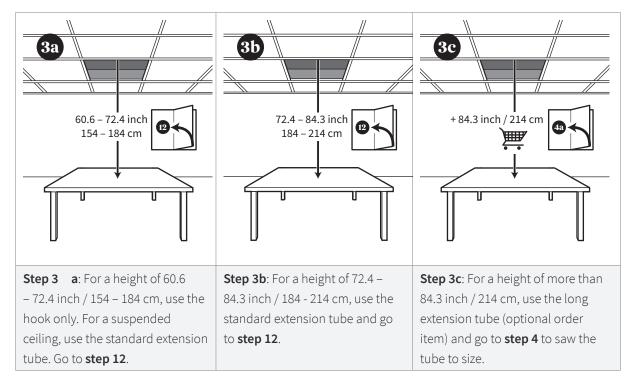
How do you intend to use the Tovertafel?

Projection onto a table: go to **step 2a**

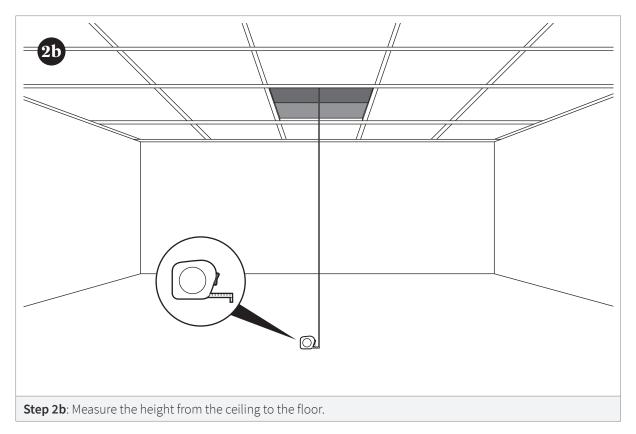
Projection onto the floor: go to **step 2b**

4.2.2. Installing for use on the table





4.2.3. Installing for use on the floor



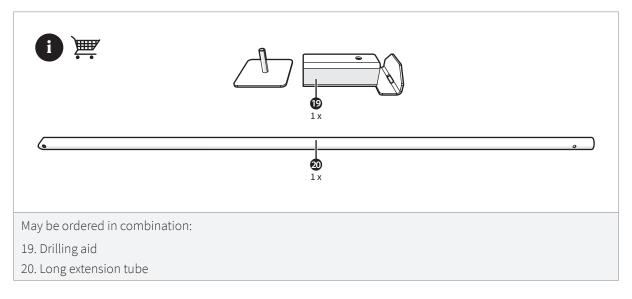
3d 98.0 - 109.8 inch 249 - 279 cm	3e 109.8 - 121.7 inch 279 - 309 cm	3f + 121.7 inch / 309 cm
Step 3d : For a height of 98.0 - 109.8 inch / 249 – 279 cm, use the hook only. For a suspended ceiling, use the standard extension tube. Go to step 12 .	Step 3e : For a height of 109.8 – 121.7 inch / 279 - 309 cm, use the standard extension tube and go to step 12 .	Step 3f : For a height of more than 121.7 inch / 309 cm, use the long extension tube (optional order item) and go to step 4 to saw the tube to size.

4.3. Saw the tube to size

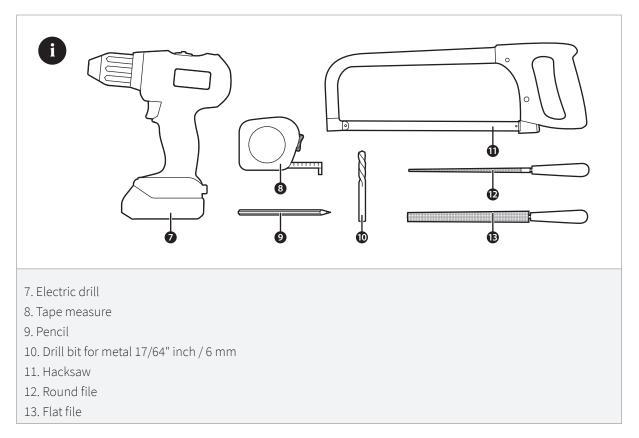


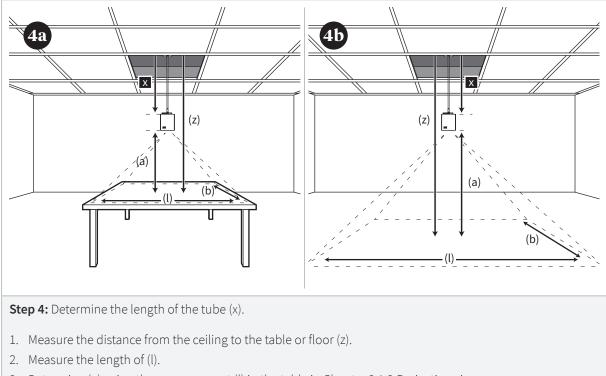
The product is under continuous development. For the most up-to-date instructions and detailed support in video and text, go to **www.tover.care/manual**

4.3.1. Parts included



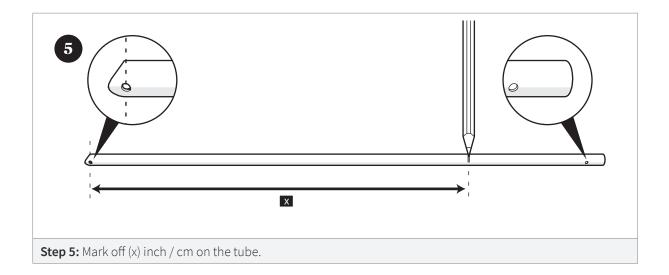
4.3.2. Tools required

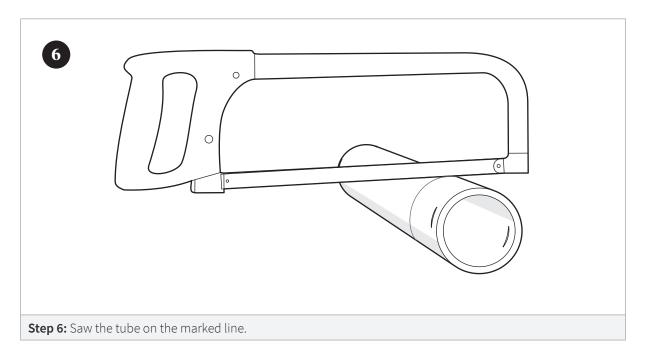


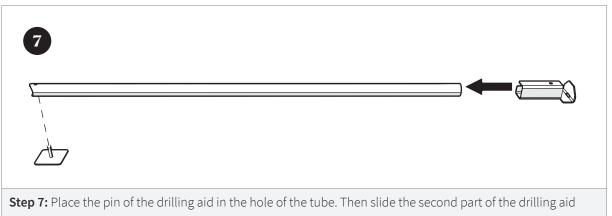


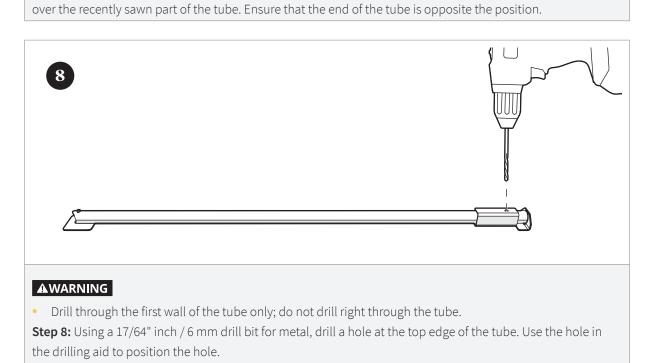
- 3. Determine (a) using the measurement (l) in the table in Chapter 2.1.2. Projection sizes.
- 4. Calculate the formula: (z) (a) 15.7 inch / 40 cm = (x)

Calculation aid: (z)..... – (a)..... – 15.7 inch / 40 cm = (x).....



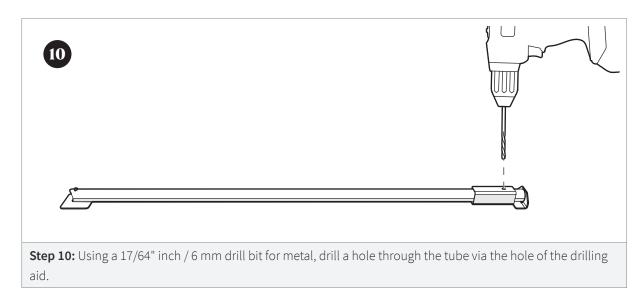


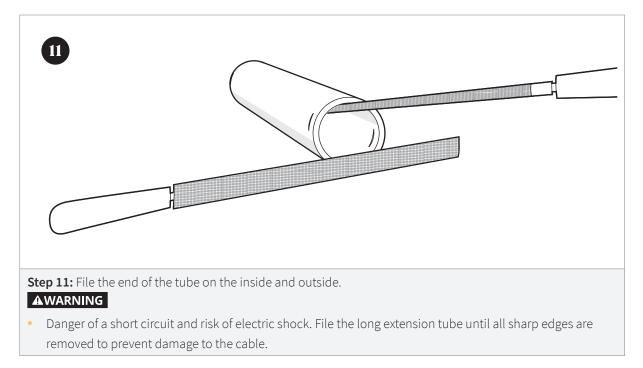




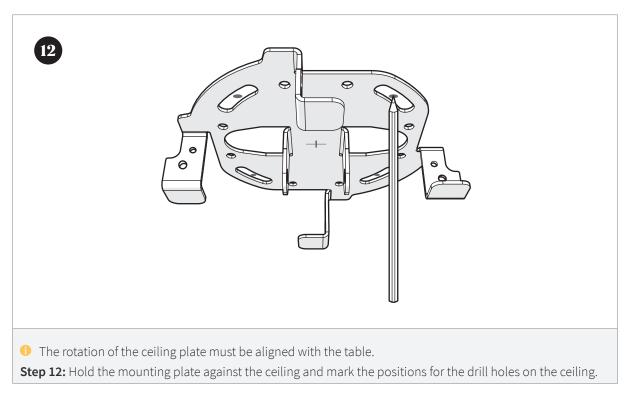


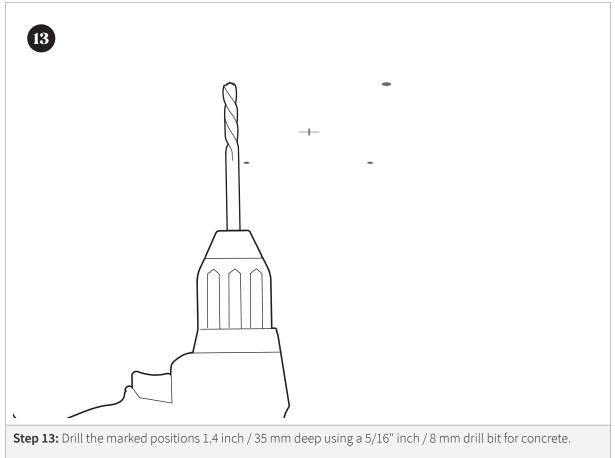
Step 9: Turn the tube 180 degrees and place the drilling aid in and around the tube for a second time. Ensure that the end of the tube is opposite the position.





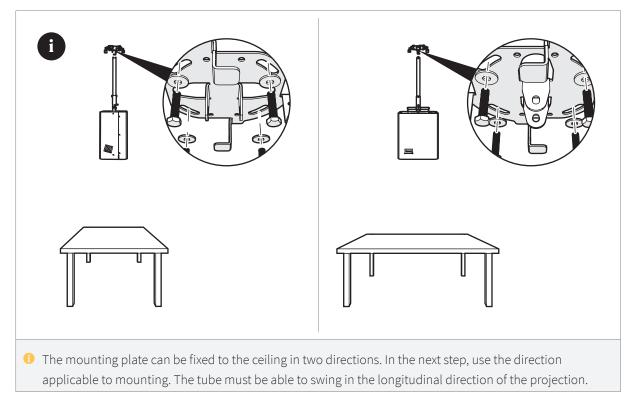
4.3.3. Attaching the mounting plate to the ceiling

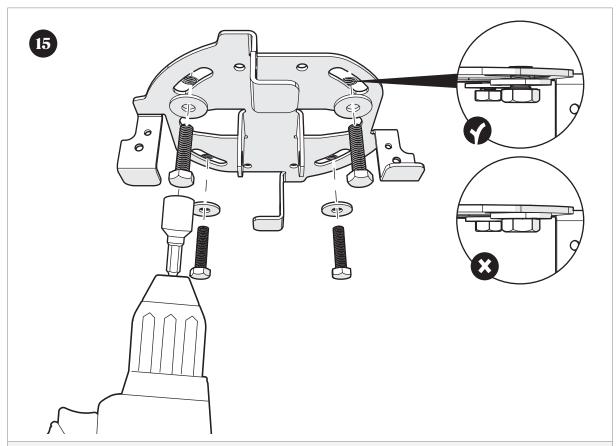




• Danger of Tovertafel falling and risk of personal injury: Always drill new drill holes for fixing the mounting plate. Ensure the drill holes are not too large, too deep or too shallow.

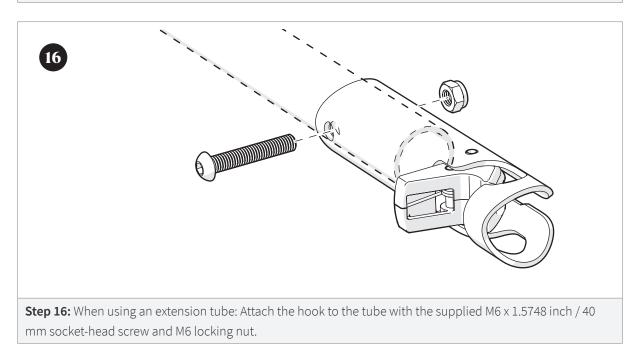


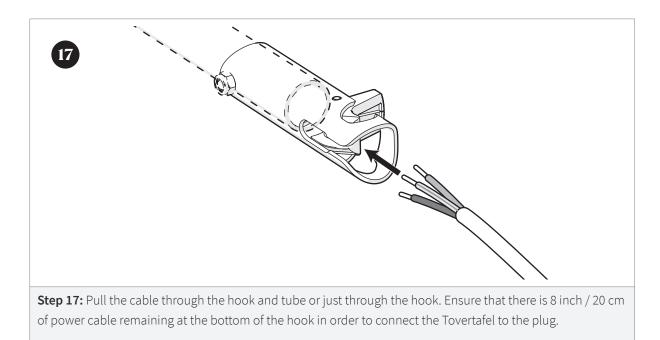




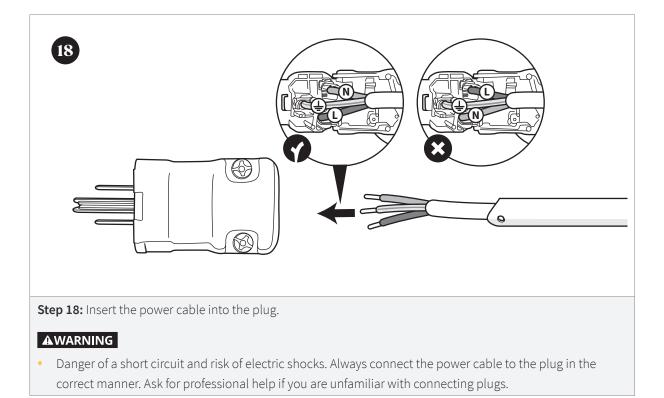
Step 15: Fasten the mounting plate to the ceiling with the bolts and washers. Do not tighten the bolts fully yet so that you can still adjust the mounting plate to the correct position. Once the mounting plate is in the desired position, tighten the bolts in a controlled fashion.

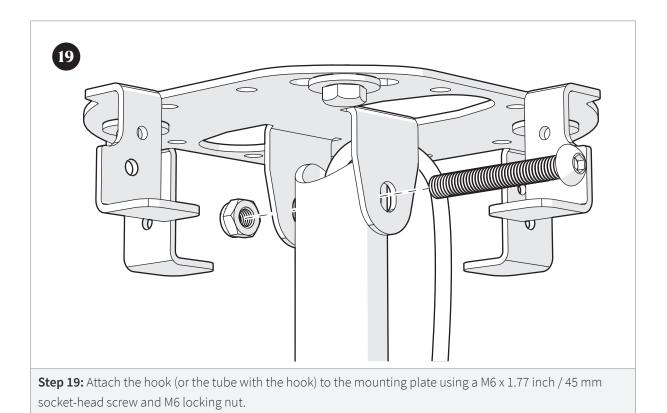
- Danger of Tovertafel falling and risk of personal injury: Tighten the bolts, nuts and screws correctly. Prevent breaking the screw joint by avoiding over-tightening the screws.
- The rotation of the ceiling plate must be aligned with the table. A slight angular displacement is already visible in the projection.

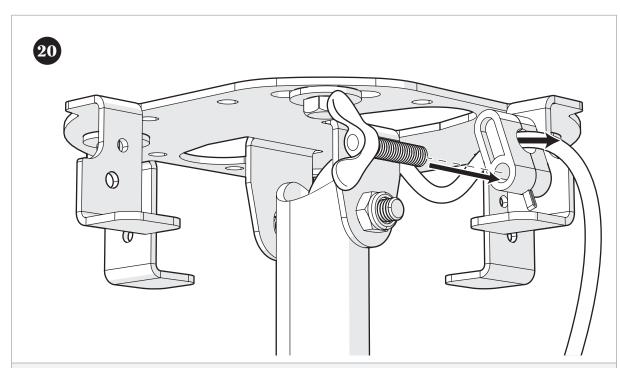




1) Tape the ends of the cables together with some tape so it is easier to pull the cable through the tube.



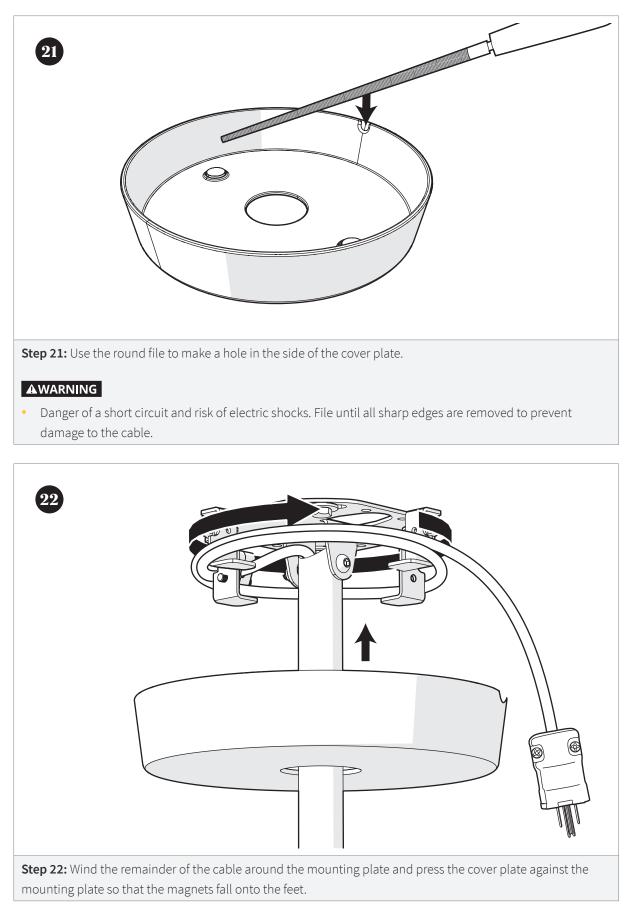


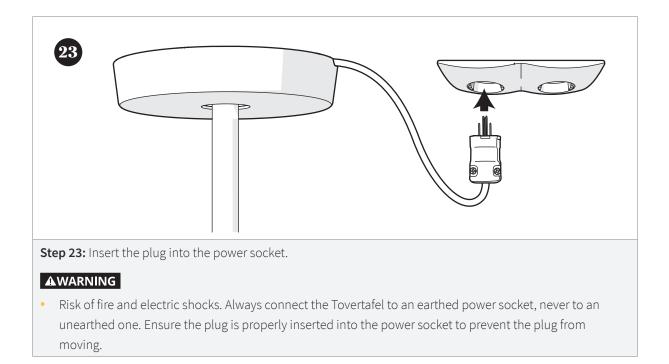


Step 20: Pull the power cable through the hole of the black plastic strain relief. Tighten the M5 x 1.18 inch / 30 mm wing bolt (or socket-head screw M5 x 1.18 inch / 30 mm) in the black plastic strain relief until the power cable can no longer move backwards or forwards.

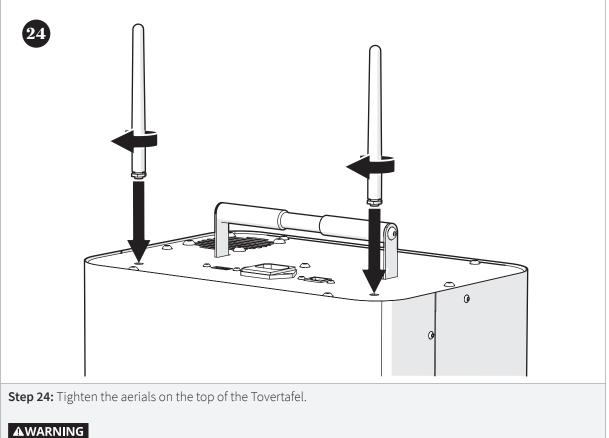
• Danger of a short circuit and risk of electric shocks. Always attach the power cable with a loop to the strain relief, so that the power cable is never under strain. The cable must always be secured through the strain relief in the correct manner to prevent damage to the cable.

4.3.4. Finishing



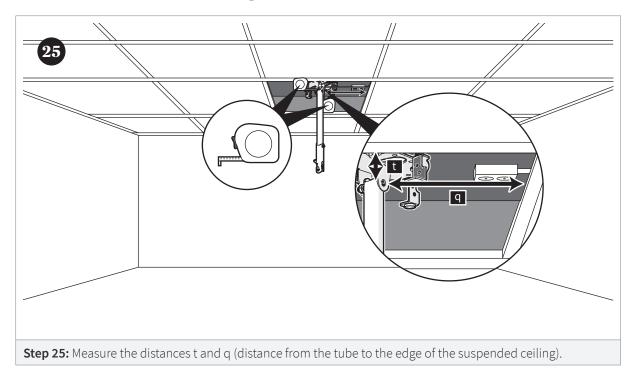


4.4. Installing aerials

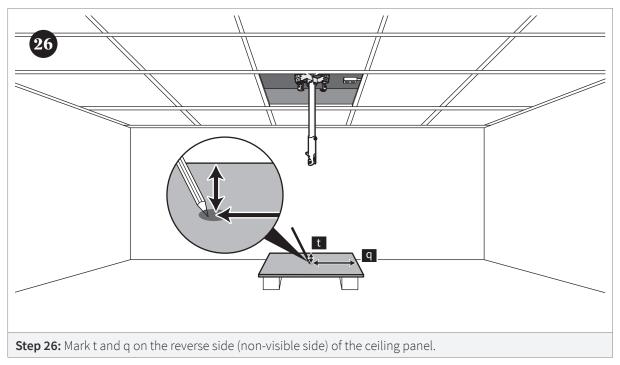


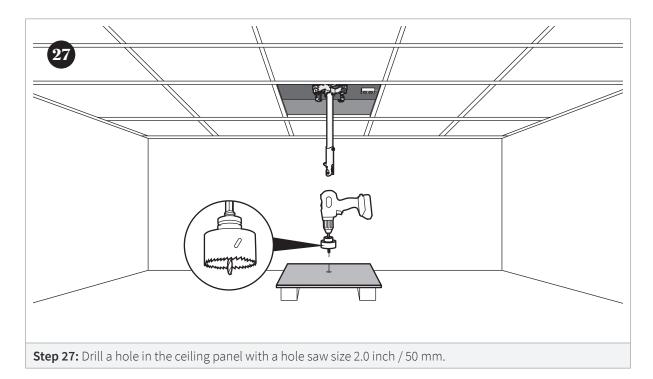
• Never touch the aerials during a thunder storm.

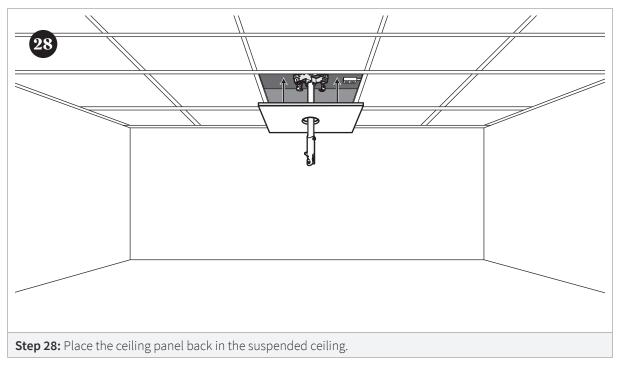




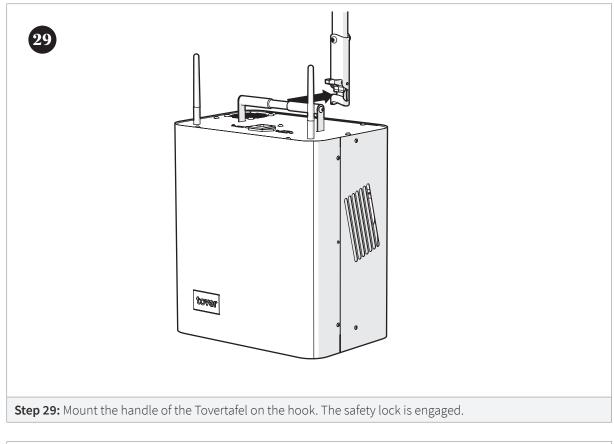
4.5. Finishing off around the suspended ceiling

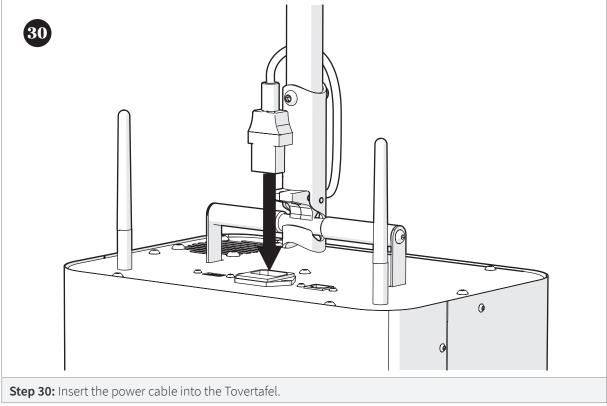


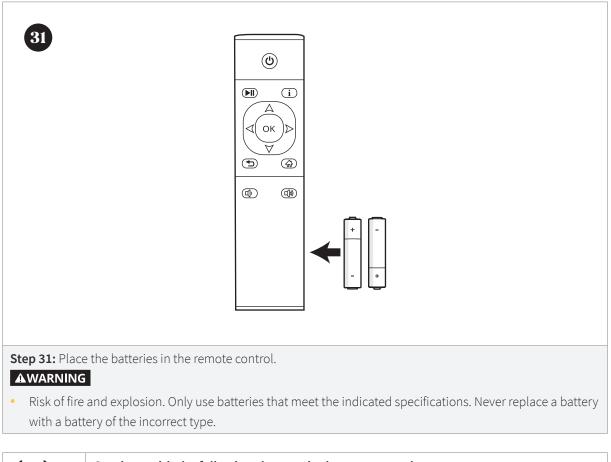




4.6. Preparing the Tovertafel for use







	Continue with the following chapters in the user manual:				
	For 'Turning on the Tovertafel', go to Chapter 4.1 Turning on the Tovertafel.				
	For 'adjusting the playing field', go to Chapter 5.1Adjusting the playing field.				
	For 'calibrating', go to Chapter 5.2Sensor adjustment (calibration).				
	For 'connecting to the Internet', go to Chapter 5.3Connecting to the Internet.				
	For 'disconnecting', go to Chapter 6.1Removing the Tovertafel.				

5. Cleaning and maintenance

5.1. Cleaning

- Risk of fire and electric shocks. Never expose the Tovertafel to water, rain, moisture or high humidity. Never immerse the product in water. Never touch the product with wet or damp hands.
- Ensure the Tovertafel is turned off, has cooled down and that the power cable has been removed from the product before you start cleaning.

NOTICE

- Before removing the plug from the power socket always turn the Tovertafel off first. If the device's software is not shut down correctly, it could cause the device to malfunction.
- Never clean the inside of the product. If you suspect that dust or other contamination has accumulated, please contact Tover B.V.'s customer service. (see Chapter 1.2. Assistance)

5.1.1. Cleaning the Tovertafel

 Clean the product carefully with a soft, clean, dry cloth or a slightly damp cloth. Prevent liquids from penetrating the Tovertafel and dry it immediately afterwards.

• Do not use any aggressive chemical cleaners or sprays to clean the Tovertafel.

5.1.2. Cleaning the lens

- 1. Clean the lens carefully with a soft, clean, dry cloth or compressed air spray.
- 2. If necessary, remove dust or marks with a cotton bud.

• Do not use any cleaning agents, polishes, abrasives, aggressive chemical cleaners, sprays or water to clean the lens of the Tovertafel.

5.2. Maintenance

The user may not repair or modify the Tovertafel. Use only the supplied power cable and other accessories. If the Tovertafel itself, the hanging system, the power cable, aerials, remote control or other separate components are damaged, please contact Tover B.V. (see Chapter 1.2. Assistance).

5.3. Storing the product

- Risk of fire. Ensure the product is turned off and has cooled down before storing the Tovertafel.
- Risk of fire due to fluid leakage from cracked batteries. Always replace batteries on time. Avoid combining partially used batteries with unused ones in the remote control. If you are not going to use the remote control for a prolonged period, remove the batteries.

NOTICE

- Risk of damage to the Tovertafel. If you do not intend to use the Tovertafel for some time, turn it off using the remote control and the power switch on the bottom of the product. Lastly, remove the plug from the power socket, see User Manual Chapter 6.1 Removing the Tovertafel.
- Tover B.V. recommends storing the Tovertafel in its original packaging. Cover the ventilation grids properly to prevent dust accumulating in those openings. Store the product in a dry place out of direct sunlight.

6. Common problems



The majority of common problems are covered in the user manual.

For a complete overview of the most common problems and detailed support in video and text, go to

www.tover.care/manual

7. Legal information

NOTICE

- All brands and product names mentioned in this manual are registered trademarks and are the property of their respective owners.
- The texts and images in this Installation manual are copyright protected and vested in Tover B.V. and/or its licensors. No part of this manual may be reproduced or published without the prior written permission of Tover B.V. and/or its licensors, unless otherwise stipulated by law.
- The warranty provided by Tover B.V. for the product and under what conditions can be found on the enclosed warranty card or at **www.tover.care/manual**.

8. Disposal or recycling

Before returning, please contact **service@tover.care**



Never dispose of the product with other household waste. Prevent possible damage to the environment or human health and recycle the product to promote the sustainable re-use of raw materials. Return the product to Tover B.V., the manufacturer or another specialized recycling company.



Tover B.V. service@tover.care www.tover.care