CREATING
A CLIMATE
FOR GROWTH

PRIVA

How to make a Black Plate Sensor

Contact

Priva
Zijlweg 3
2679 LC
P.O. Box 18
2679 ZG
De Lier
The Netherlands
T: +31 174 522 601
F: +31 174 522 701
www.priva.com
contact.priva@priva.nl

Version: 07.000
Date: October 2018

Content

Symbol	Explanation
	Construction done by yourself
2×	Required amount
	Delivered by Priva
	Materials from parts lists you need to source locally

Introduction

The black plate temperature sensor allows you to measure the temperature with the effects of sunlight, air temperature and wind. This measurement more closely represents the exposed temperature of the plants. When the retractable roof control is installed on your Priva process computer, this will give you an extra measurement to control the opening and closing of your retractable greenhouse.

The black plate temperature sensor consists of a black plate, a Priva temperature sensor, a mounting profile and some fasteners. This manual describes the construction and installation of the black plate temperature sensor.

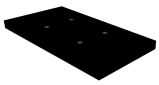
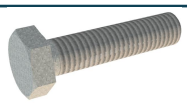
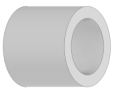
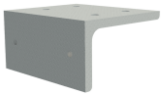
Commissioning of this sensor and other sensors are described in separate process computer installation manuals that are available in the Priva Support Portal. For information on viewing and using the measurement, please refer to the process computer user manuals.

Part list

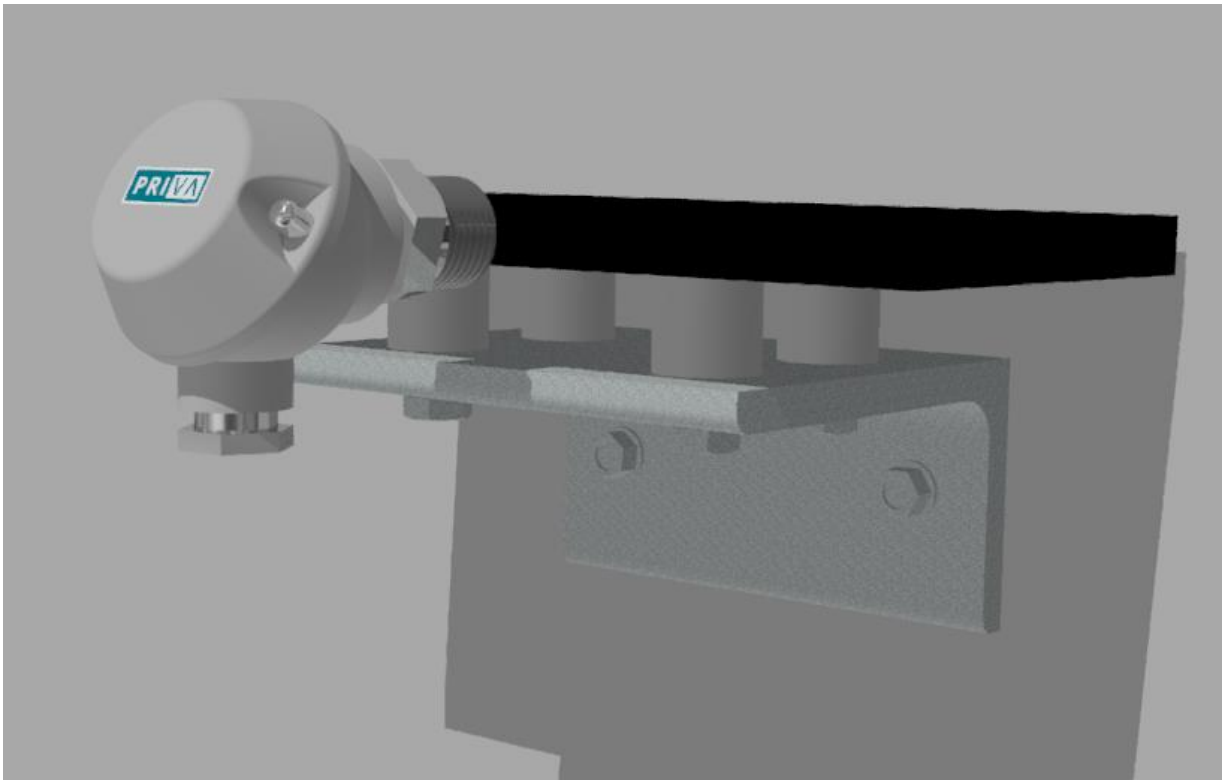
Materials delivered by Priva

QTY	Description	Part Number	Picture
1	Temperature Sensor	3779013	

Materials to arrange by yourself

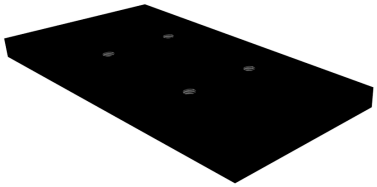
QTY	Description	Material	Info	Picture
1	Flat Plate 200x100x12 mm	Z/P		
4	M8x35 Hex Head set screw	Z/P		
4	M8 Washer	Z/P		
4	GRY pipe SCH 80 ND=15 mm	PVC-U	90 mm long	
1	Heat Sink Compound			
1	Corner profile support bracket	Z/P		
1	Black spray paint for galvanized steel			
1	Zinc galvinizing spray			
1	M5x6 hex Head set screw	Z/P		
	Fasteners for mounting to wall			
	Fasteners for mounting to pole			

Black Plate Sensor



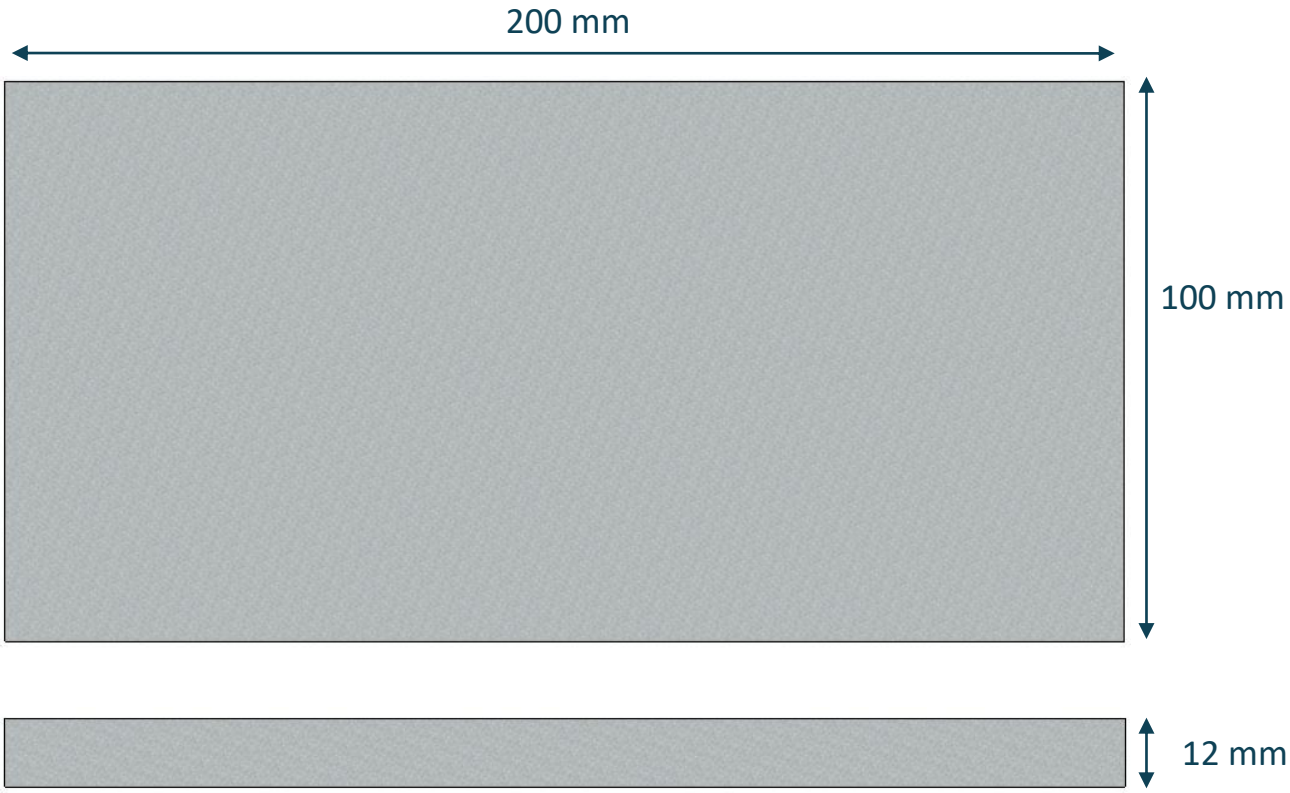
1×

Black Plate



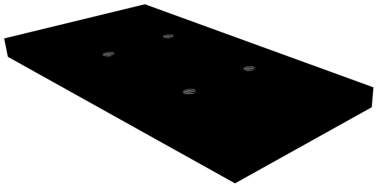
CREATING A CLIMATE FOR GROWTH
PRIVA

1. Buy Galvanized Plate 200x100x12 mm

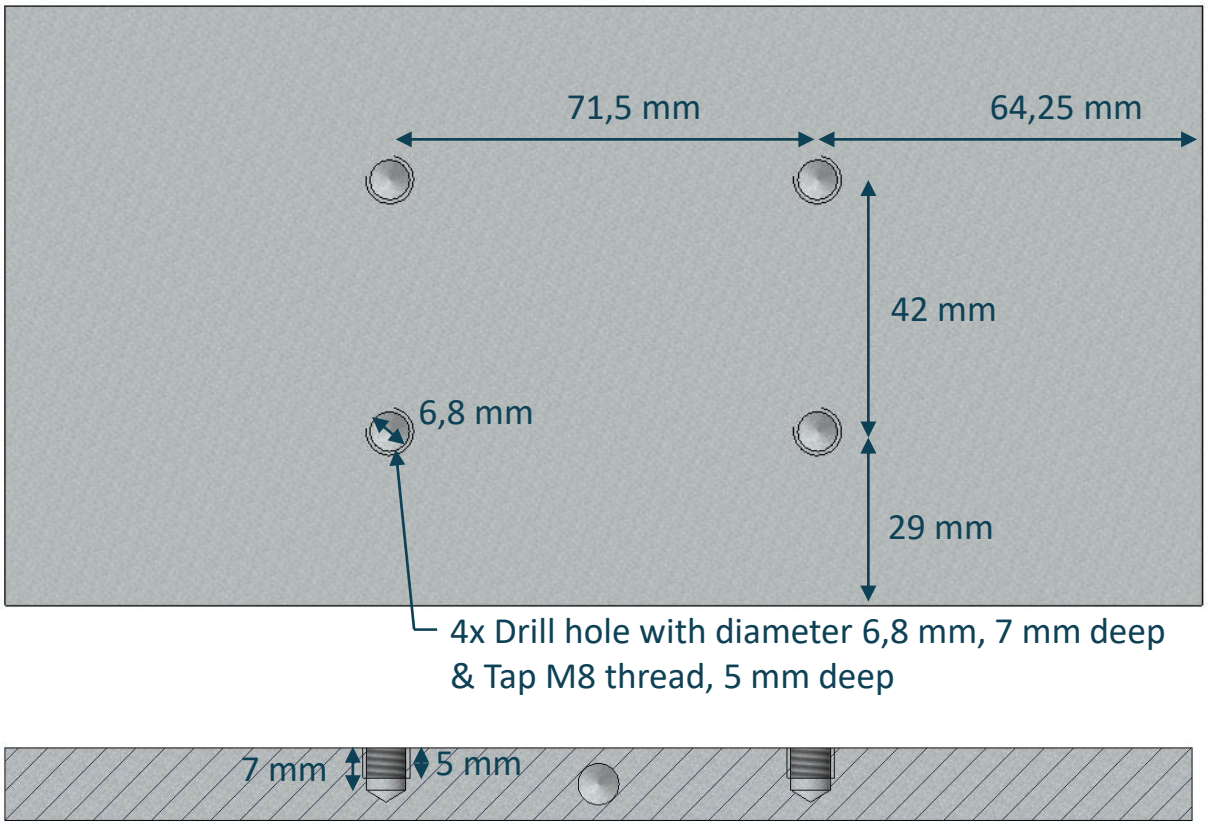


1×

Black Plate

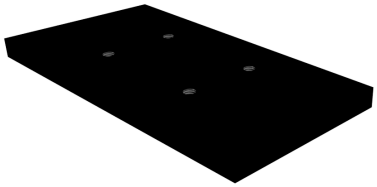


2. Drill and Tap holes for M8



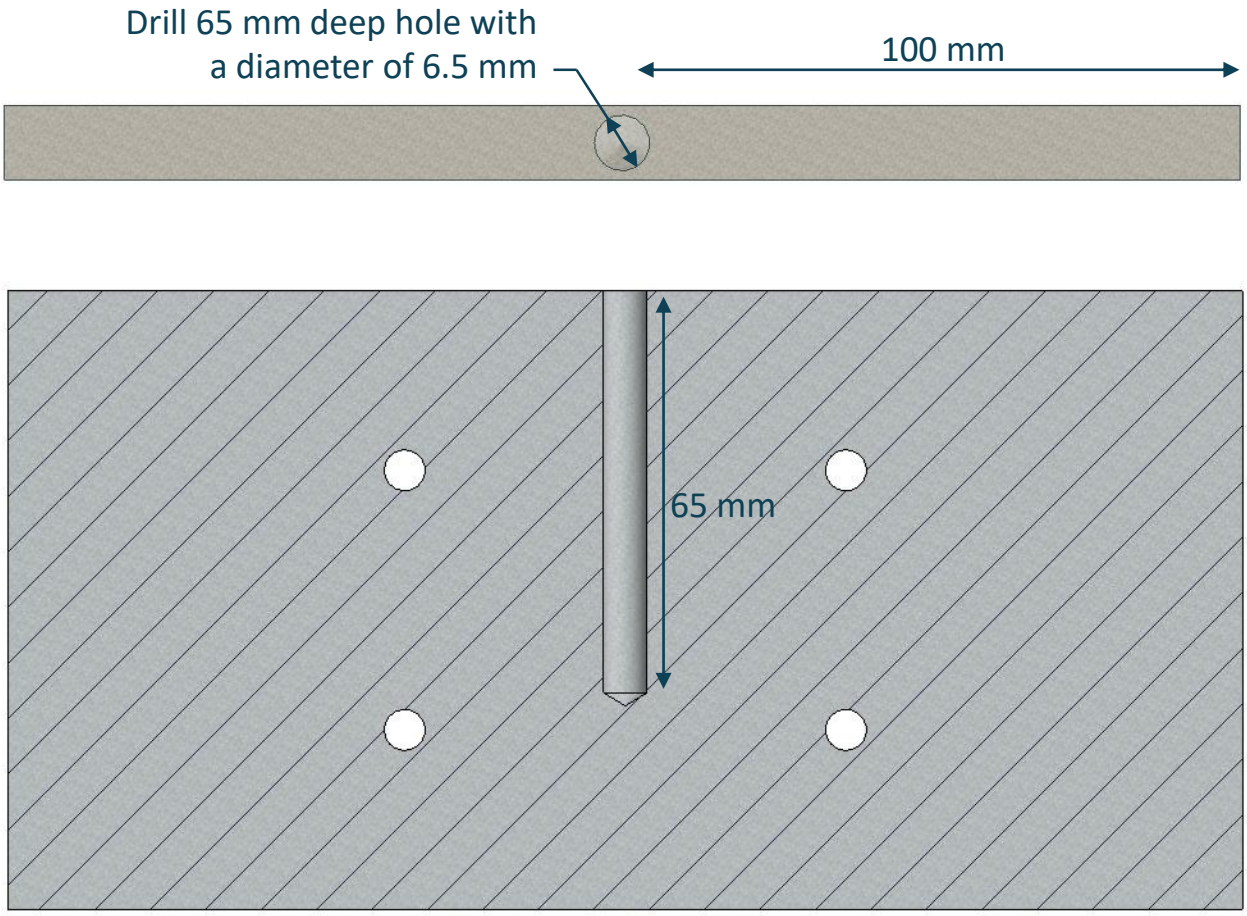
1×

Black Plate



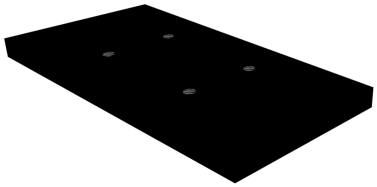
CREATING A CLIMATE FOR GROWTH
PRIVA

3. Drill hole for Temperature Sensor

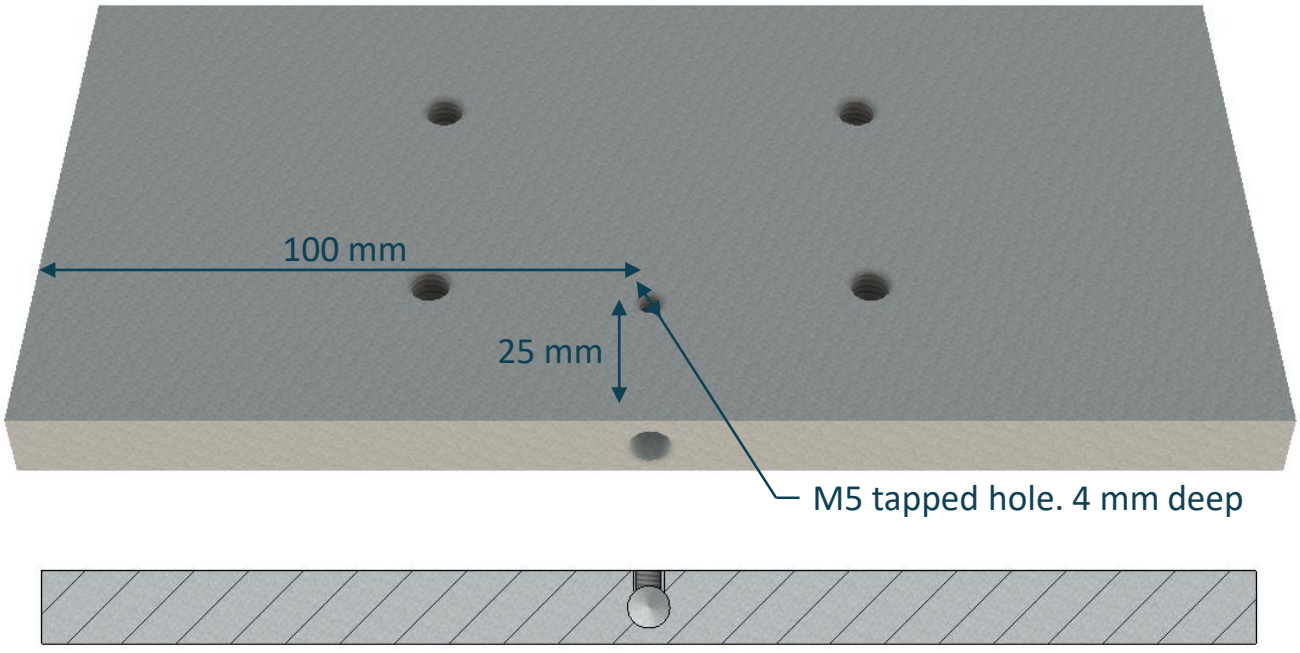


1×

Black Plate

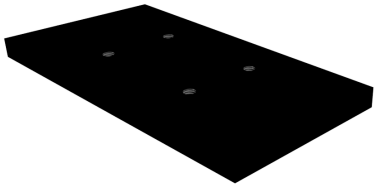


4. Drill & Tap M5 hole to keep in place temperature sensor



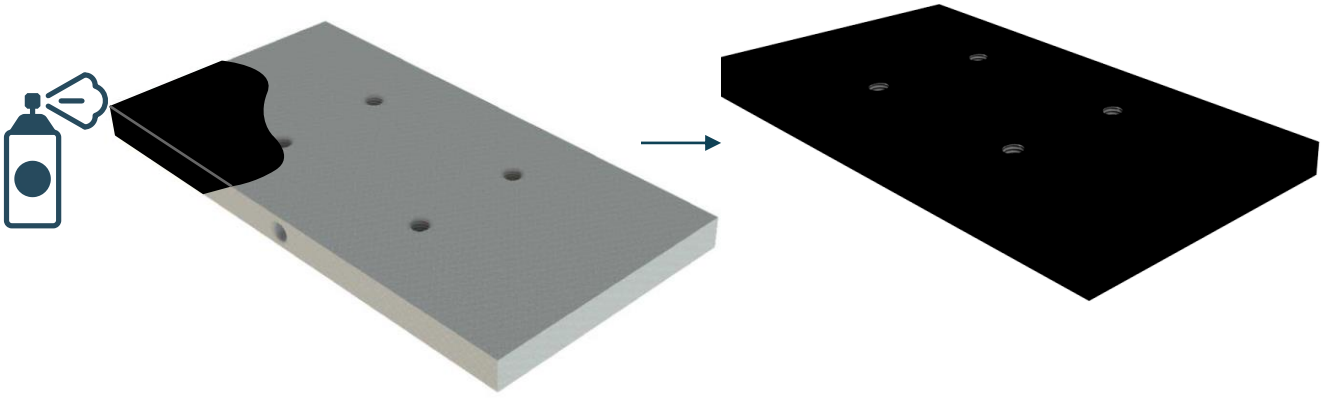
1×

Black Plate



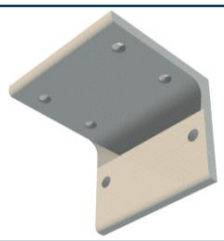
5. Spray paint black

Use a Black spray paint suited for galvanized steel



1×

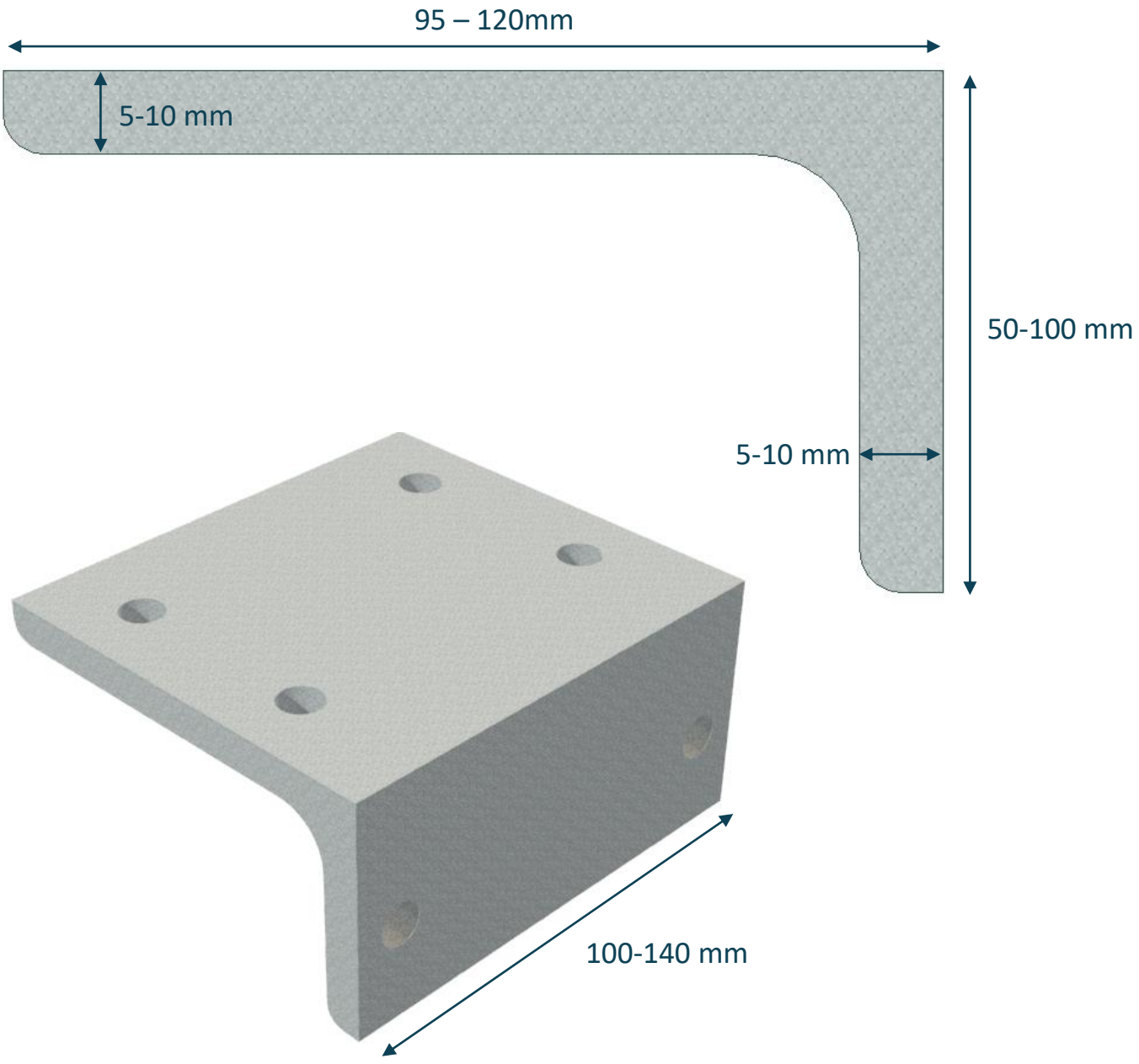
Support Bracket



CREATING A CLIMATE FOR GROWTH
PRIVA

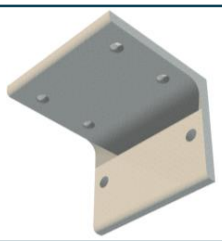
1. Buy corner profile

Use the size which is available for you



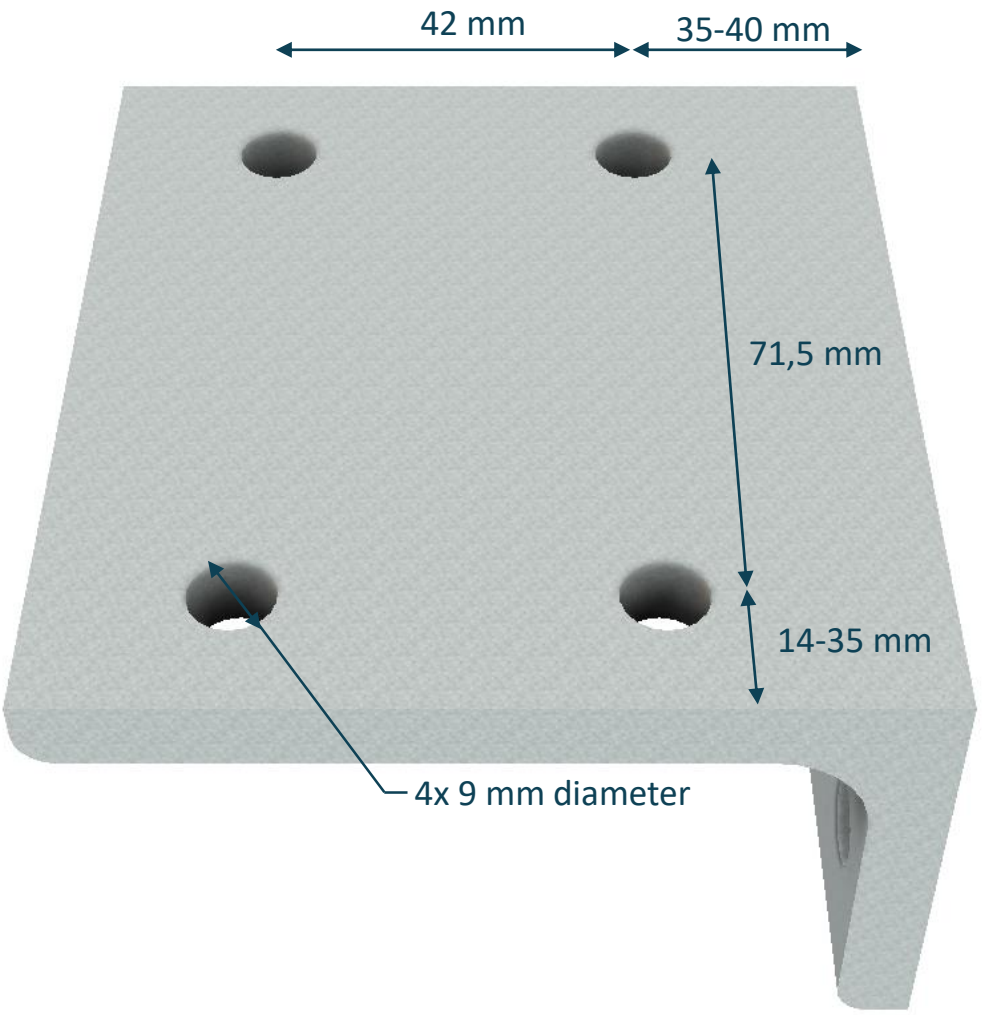
1×

Support Bracket



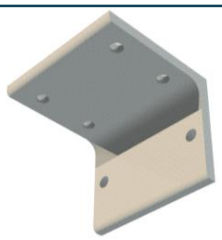
CREATING A CLIMATE FOR GROWTH
PRIVA

2. Drill 4 holes at the top



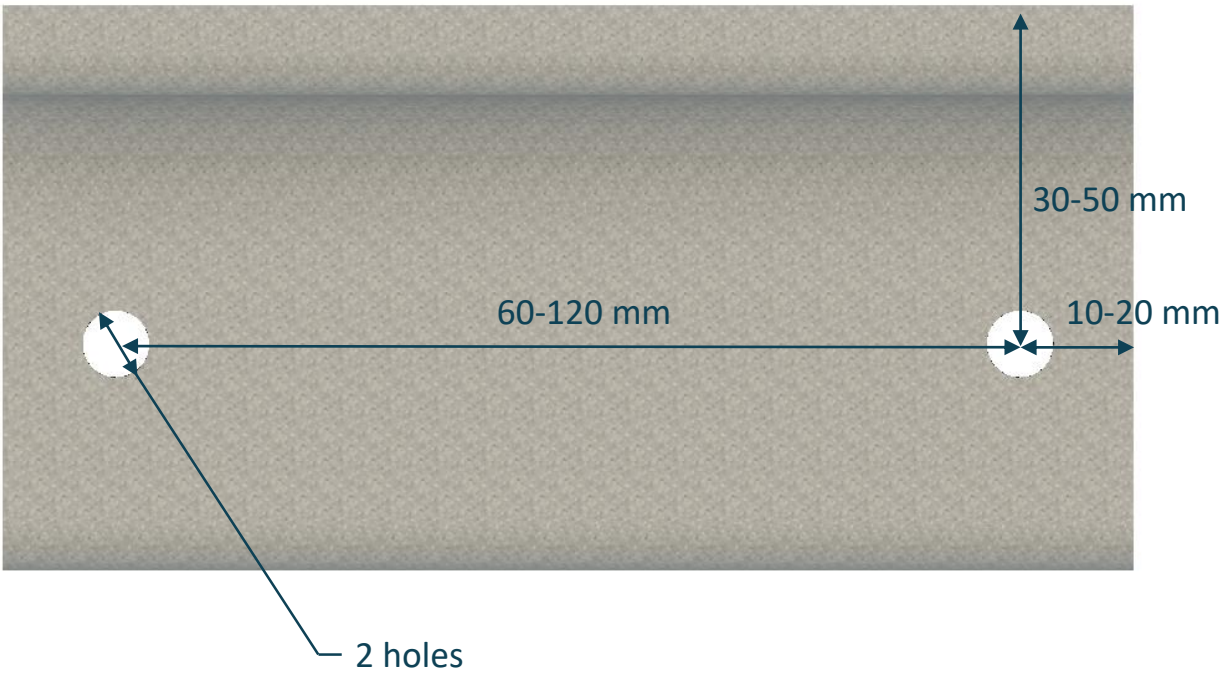
1×

Support Bracket



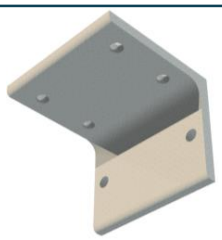
3. Drill 2 holes at the front

Depending on your mounting type



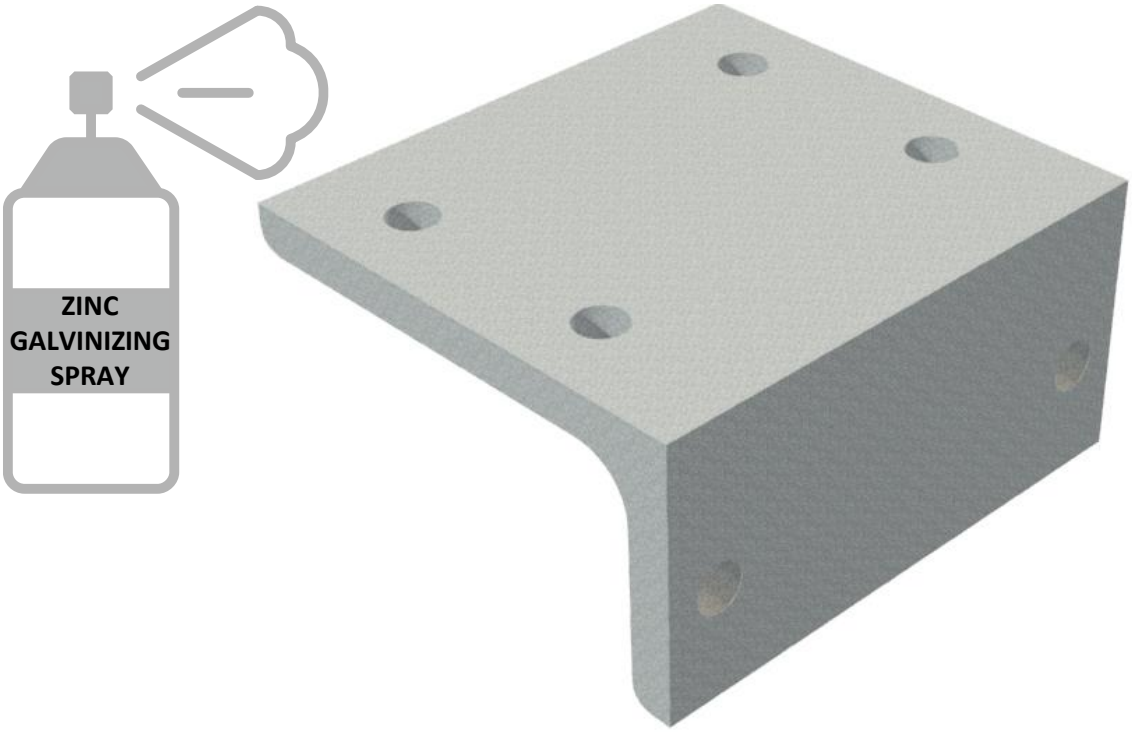
1×

Support Bracket



CREATING A CLIMATE FOR GROWTH
PRIVA

4. Spray holes with Zinc galvanizing spray

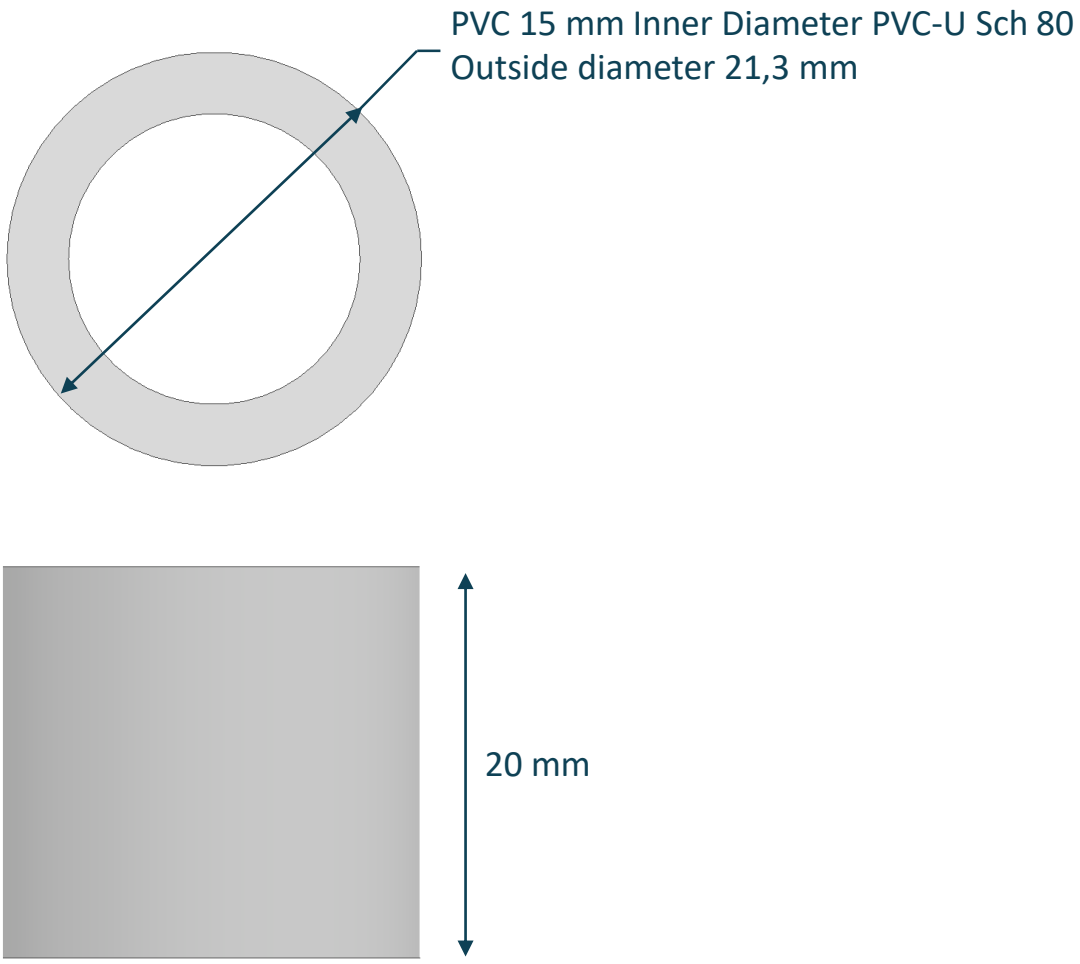


4×

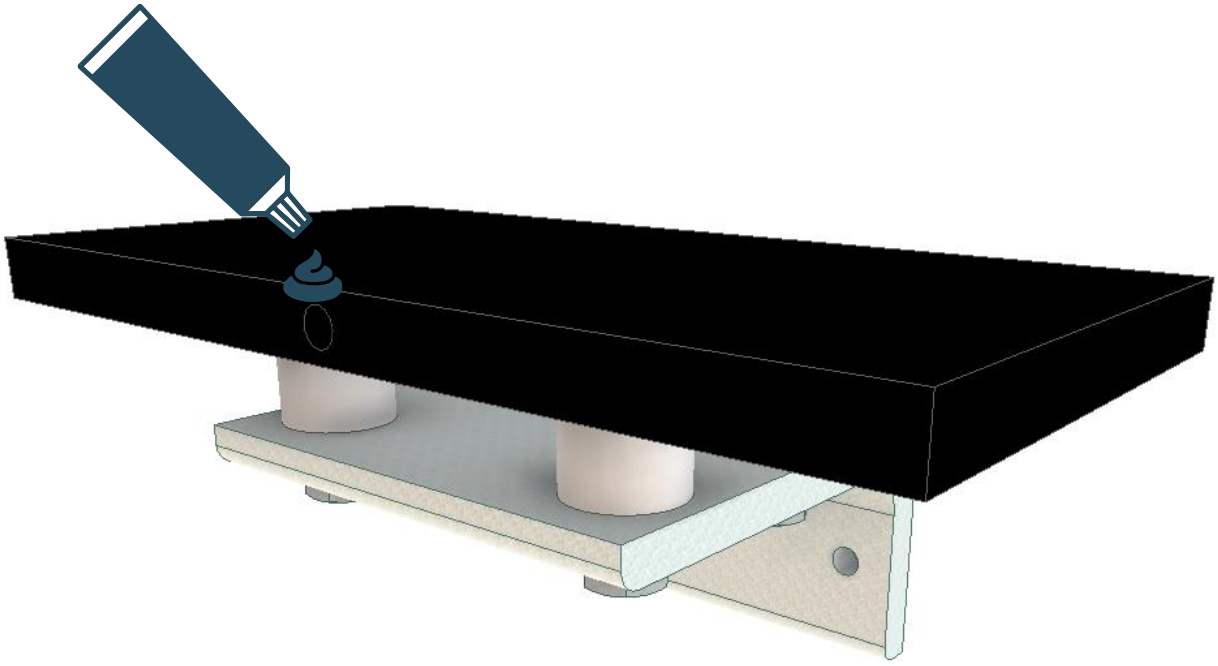
PVC distance bush

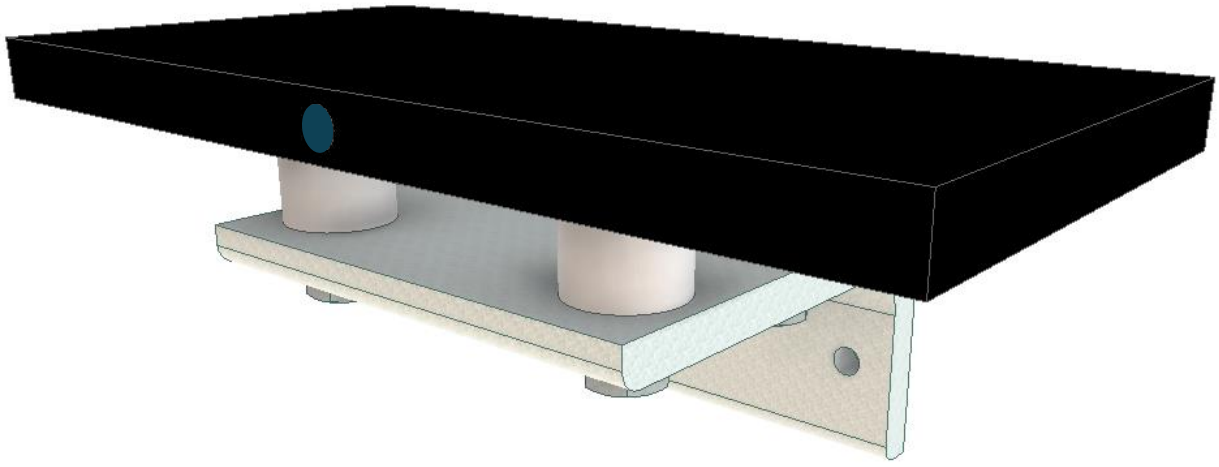
CREATING A CLIMATE FOR GROWTH
PRIVA

1. Cut PVC pipe to 20 mm (4x)

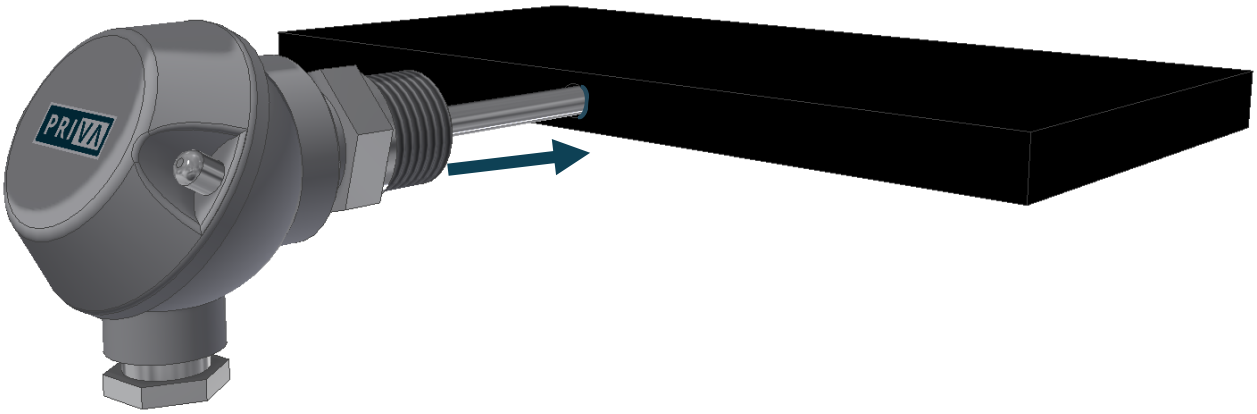


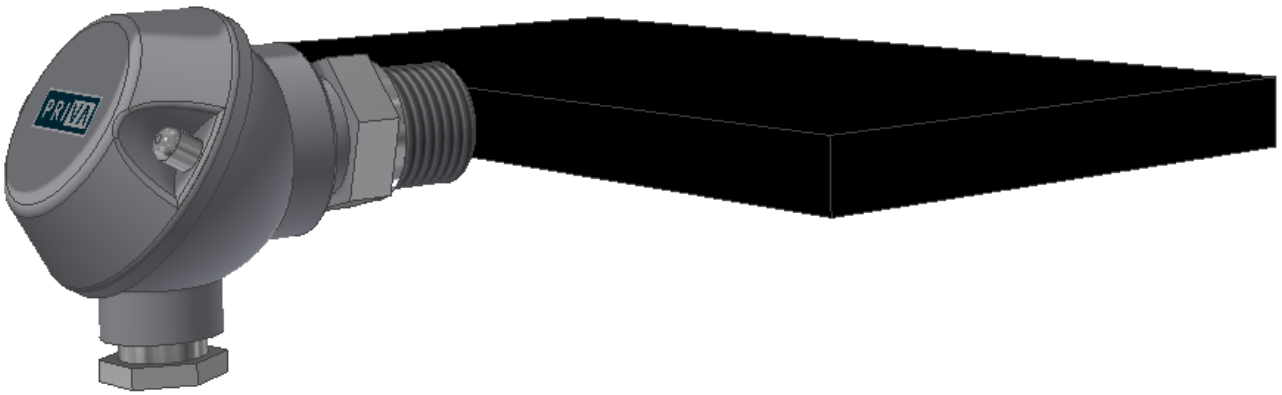
1. Heat sink compound in hole for temperature sensor

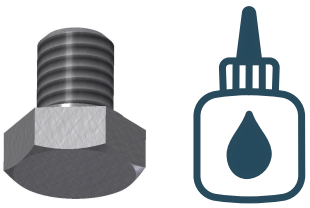




2. Place temperature sensor in Hole





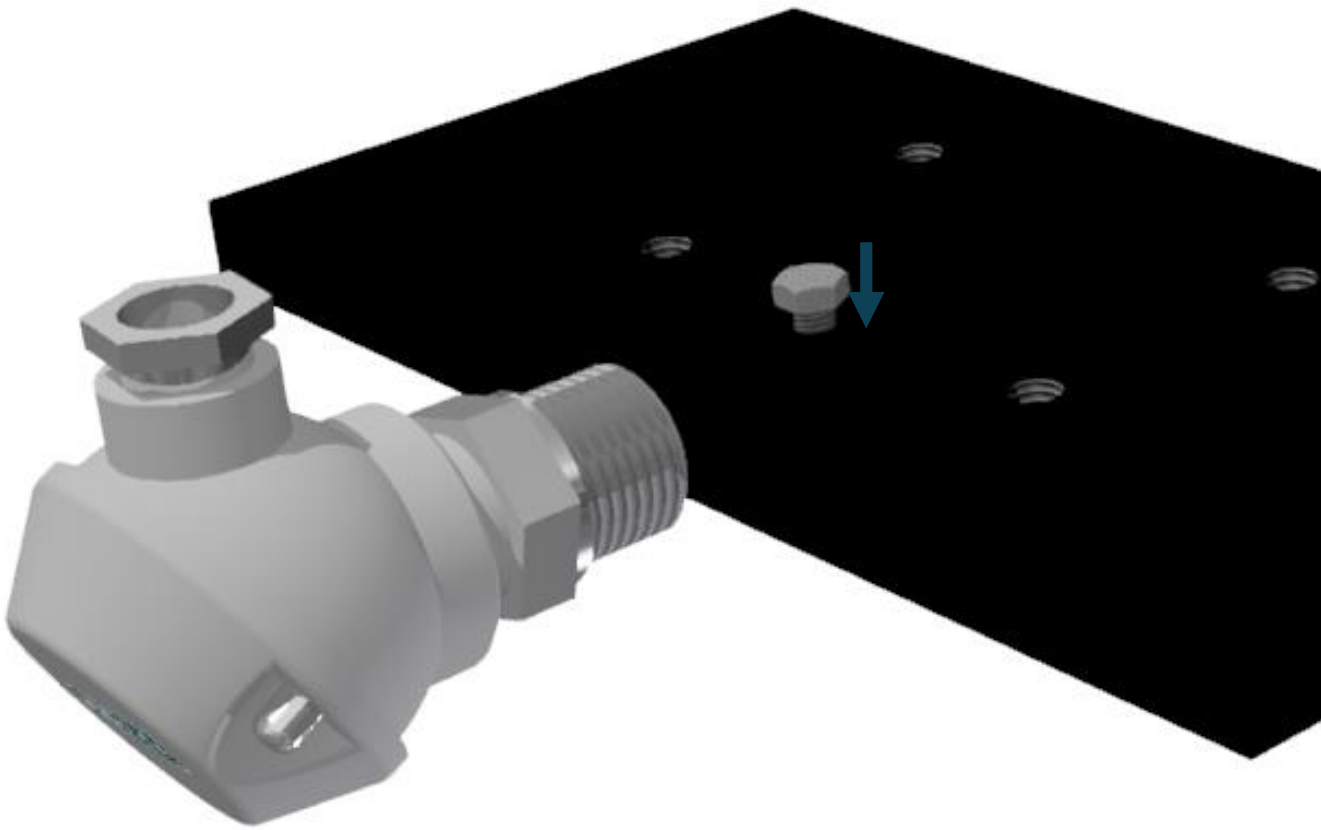


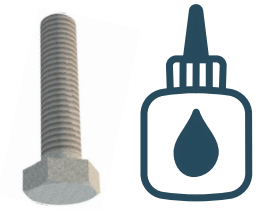
CREATING A CLIMATE FOR GROWTH
PRIVA

3. Place Loctite clear silicone waterproof sealant on the m5x6 screw

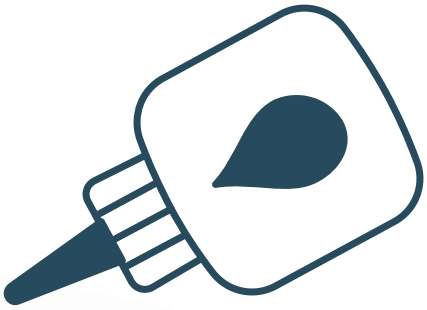
CREATING A CLIMATE FOR GROWTH
PRIVA

4. Tighten m5 bolt to keep Temperature sensor in place

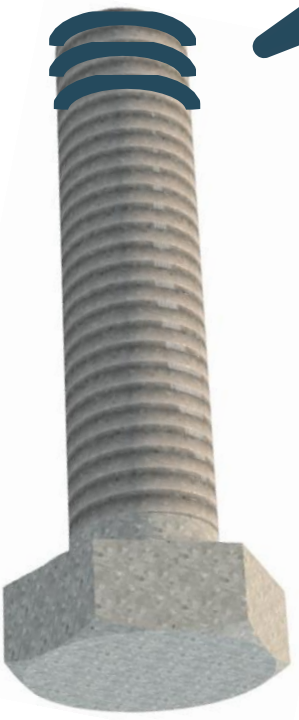




5. Place Loctite clear silicone waterproof sealant on the m8x35 screw

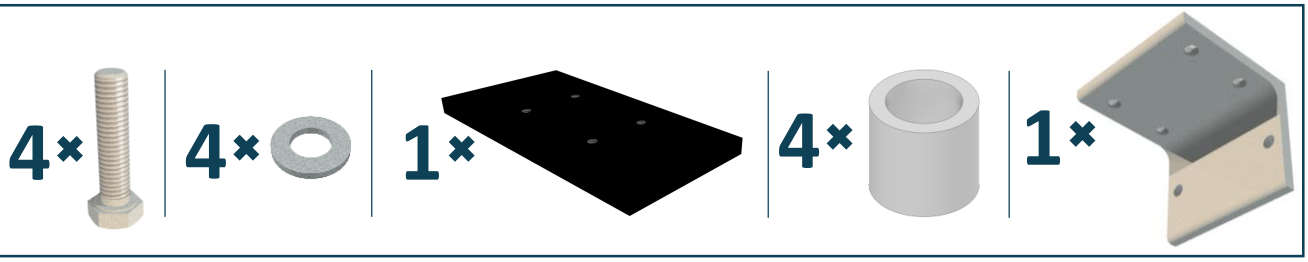


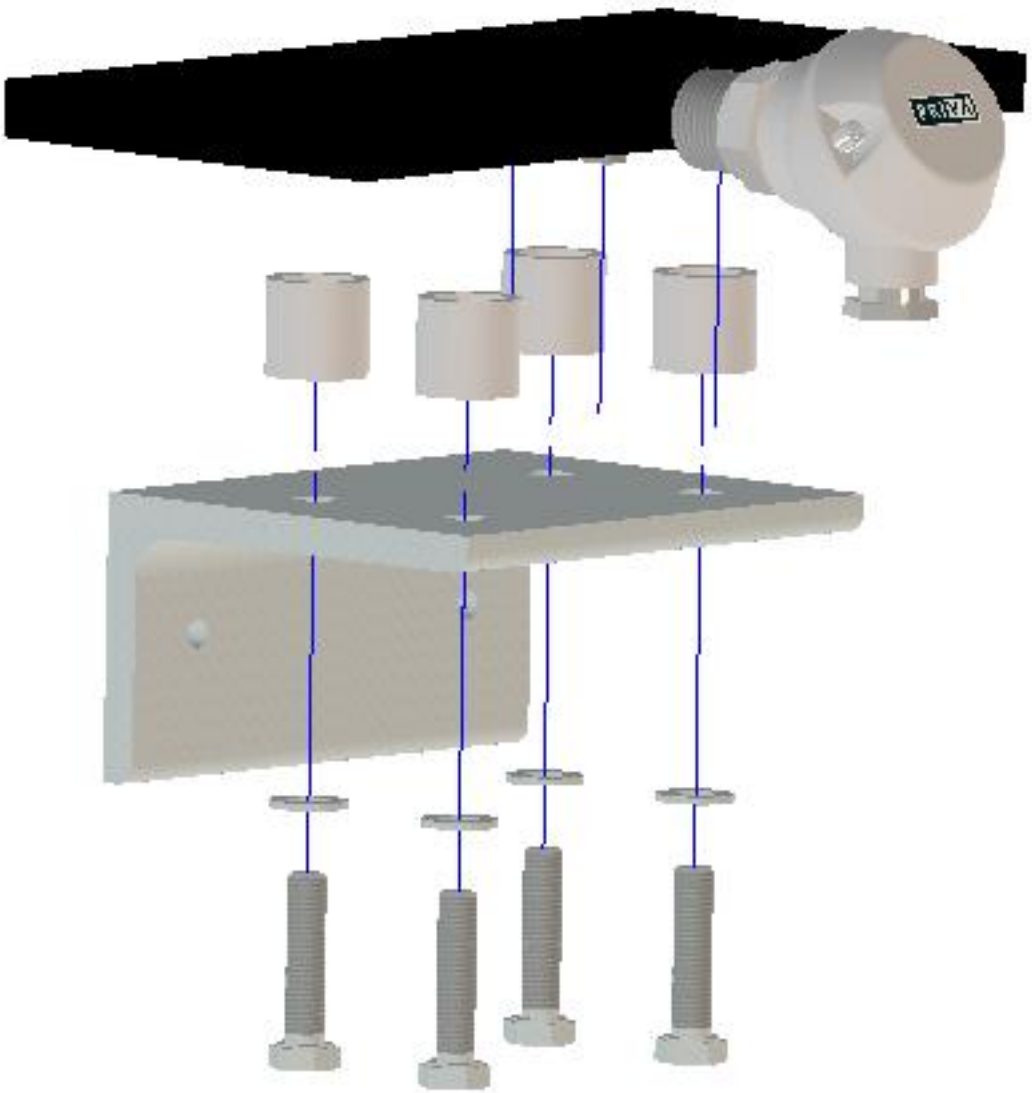
Loctite clear silicone waterproof sealant



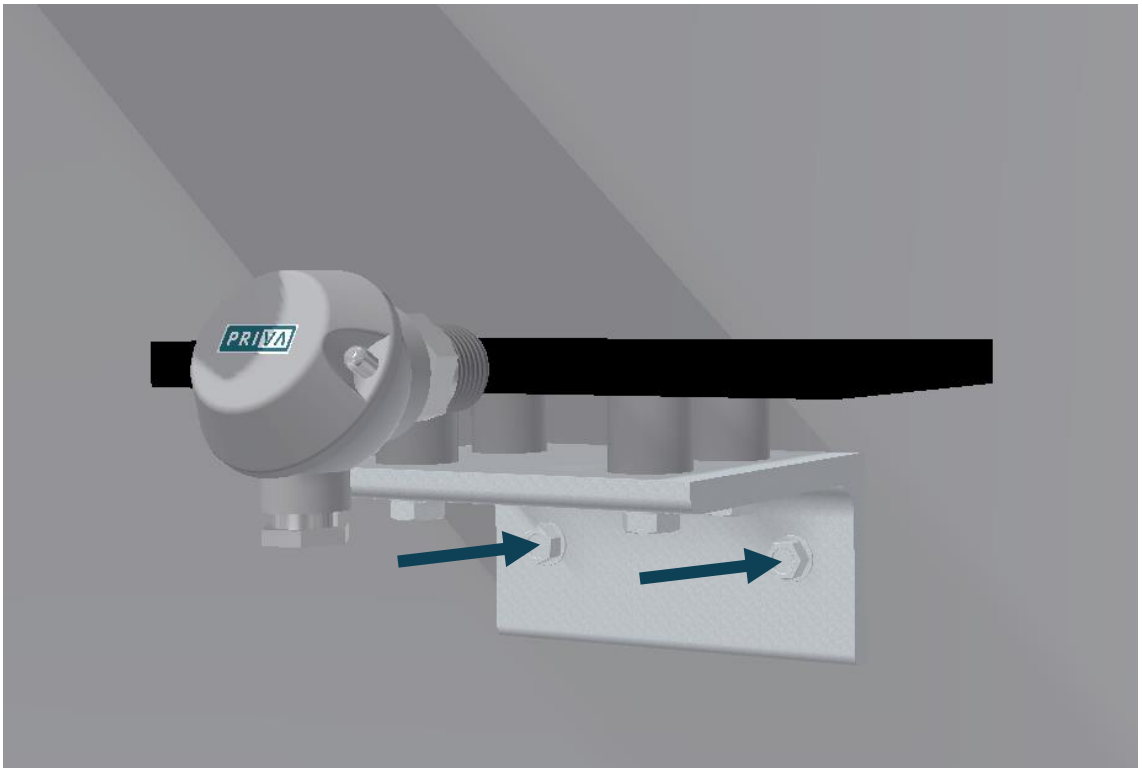
M8x35

6. Mount Plate to Bracket





7a. OPTION 1 - Mount the sensor to a wall



7b. OPTION 2 - Mount the sensor to a pole