Polytech
Wind for life™

ACCEPTANCE CATALOG

Installation of ELLE™ Shell

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1. General Information

1.1 Change Description

The table below describes changes compared to the previous revision of the document.

Section	Change Description
All	New template. Text and pictures reorganized.

1.2 Printing

If this document is printed it must be printed in color to ensure that the color-marked zones appear correctly.

1.3 Abbreviations and Terms

The table below defines the abbreviations and terms used in this document.

Abbreviation / Term	Change Description
ELLE™	Everlasting Leading Edge
LE	Leading Edge
PSA	Pressure-sensitive tape

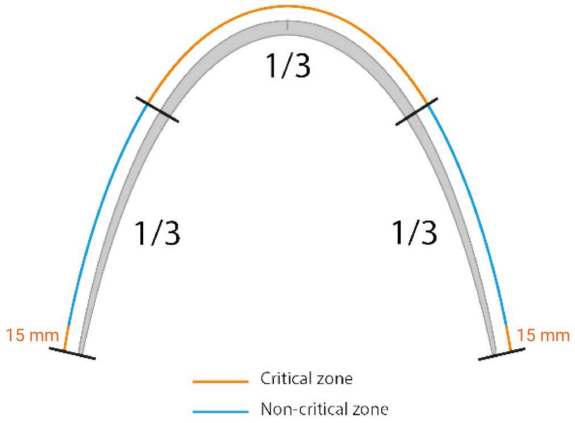
2. Acceptance Criteria

All the following acceptance criteria must be evaluated individually; there is no combination factor.

2.1 Critical Zone of ELLE™

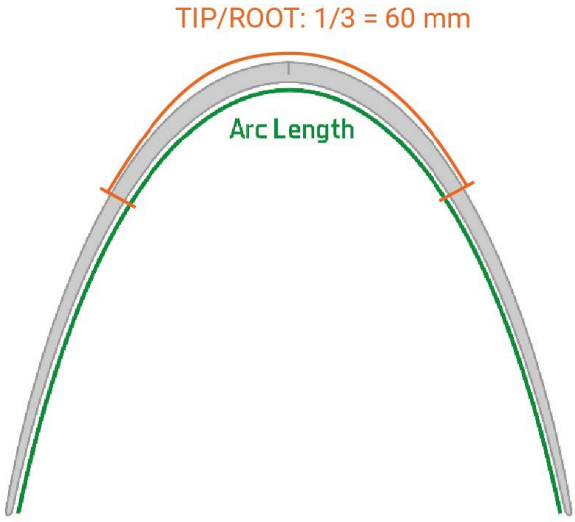
The critical zone is 1/3 of the arc length of ELLE™ and 15 mm at the edge of ELLE™.
The figure below shows examples of the critical zone.

Arc length Tip: 61
Arc length Root: 120
Tip: 1/3 = 20.3 mm
Root: 1/3 = 40 mm



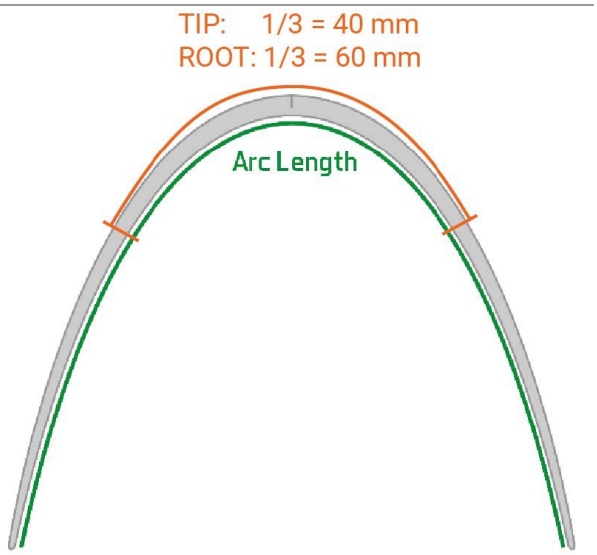
ELLE™ Straight Example

Arc length TIP: 180
Arc length ROOT: 180



ELLE™ Transition Example

Arc Length TIP: 120
Arc Length ROOT: 180



2.2 Air Pockets and Contaminants under ELLE™

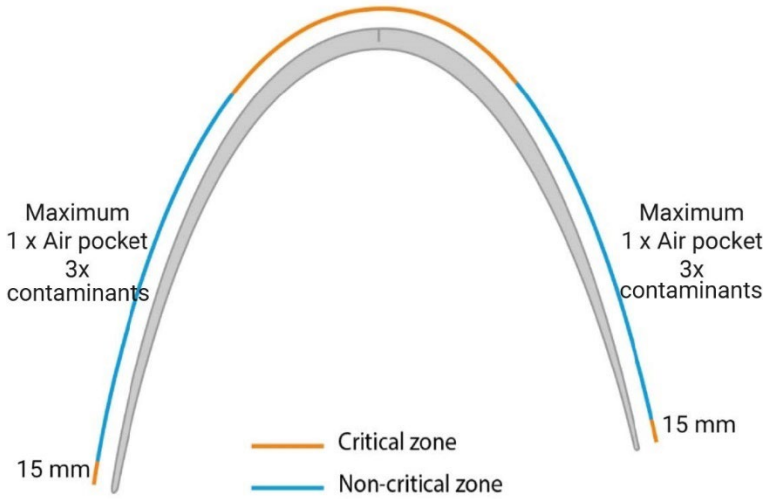
Before sealing of ELLE™, Polytech recommends that the quality of the installation is ensured and documented. All air pockets or contaminants, such as sand grain, dirt, a bug and so on, under ELLE™ must be removed before application of sealant. If an air pocket is found during installation, the shell must be lifted and the air entrapment must be removed by gently pressing ELLE™ from LE to edge of shell.

Keep ELLE™ in original packaging until use to avoid contamination. If an error is found, check whether it is encapsulated air or contamination/irregularity under ELLE™. Use a finger to press the affected area and compare it to non-affected areas. An air pocket will be compressible while a contamination/irregularity under ELLE™ will not be compressible. In poor lighting conditions, a flashlight can be used to check the quality of the installation.

A maximum of 1 air pocket of Ø10 mm and 1 mm in height is allowed on each side of ELLE™ in non-critical areas if they cannot be removed. A maximum of 3 small contaminations less than 1 mm in height are allowed for each side of the LE of ELLE™ in non-critical areas if these cannot be removed.

If PSA has been activated and is damaged during the reposition, the ELLE™ shell can be reattached in accordance with *LE-I003 Repair of Detached ELLE™* or be replaced by a new one.

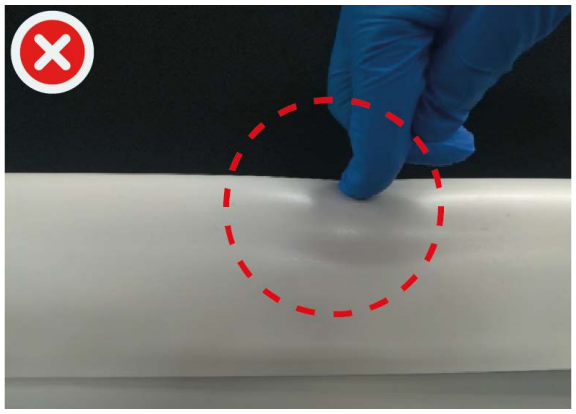
The figure below shows the allowed air pocket and contaminants.



A maximum of 1 air pocket of Ø10 mm and 1 mm in height is allowed on each side of ELLE™ in non-critical areas if they cannot be removed. A maximum of 3 small contaminants less than 1 mm in height are allowed for each side of ELLE™ in non-critical areas, if these cannot be removed.

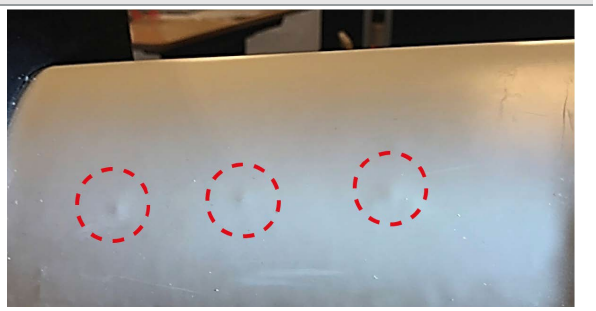
Definition of Air Pockets

If air pockets are present, they must be removed. If the PSA has not been activated by rolling, it is possible to lift the edge of ELLE™ and squeeze out the air while attaching ELLE™ again. If air pockets cannot be squeezed out because the PSA has already been activated, ELLE™ must be replaced with a new one.



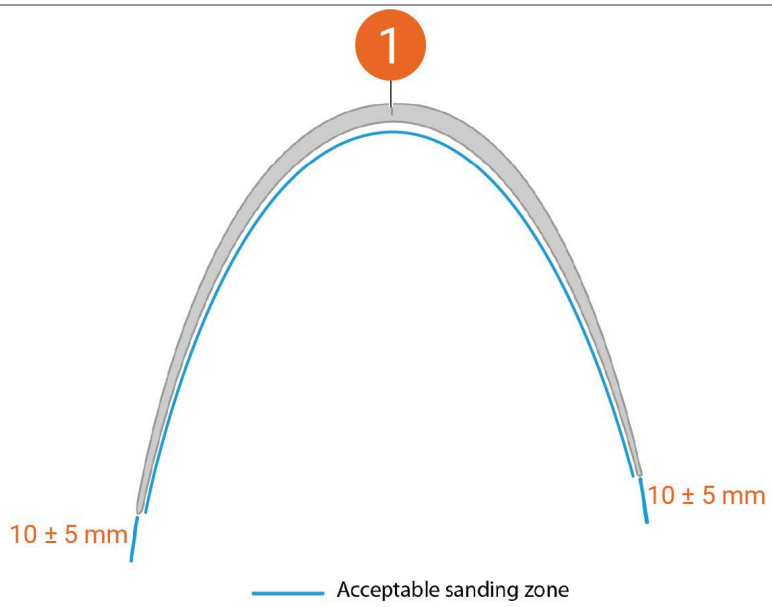
Contaminants

If contaminants are present, this may appear as irregularities in/under ELLE™. Before installation, ensure that PSA, ELLE™ and blade surface is clean and free from contamination. If more than 3 contaminants are present and these cannot be removed, ELLE™ must be replaced with a new one.



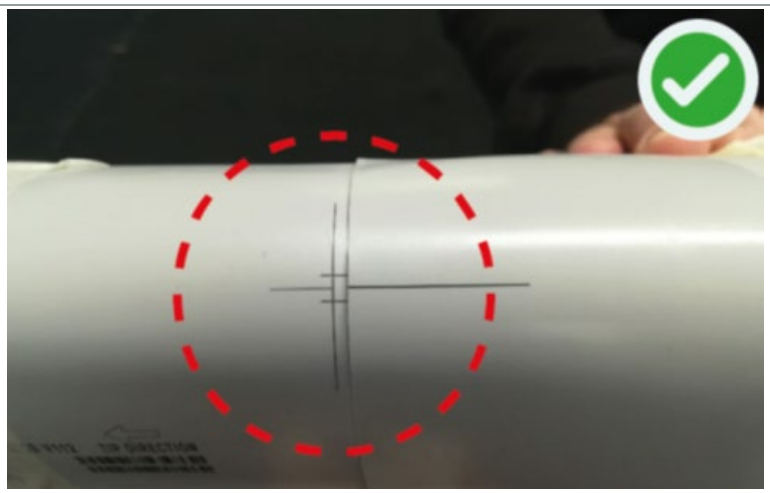
2.3 Sanding Tolerance

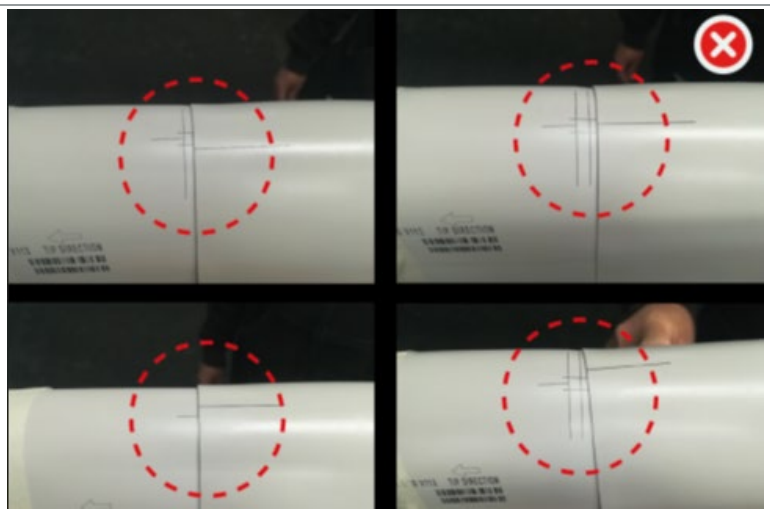
Sanding must be done under ELLE™ and 10±5 mm from the edge of ELLE™.
The figure below shows the acceptable sanding zone.
(1) Leading edge (reference point).



2.4 Alignment of ELLE™ with Leading Edge

ELLE™ must be positioned within the tolerances given by the alignment marks.

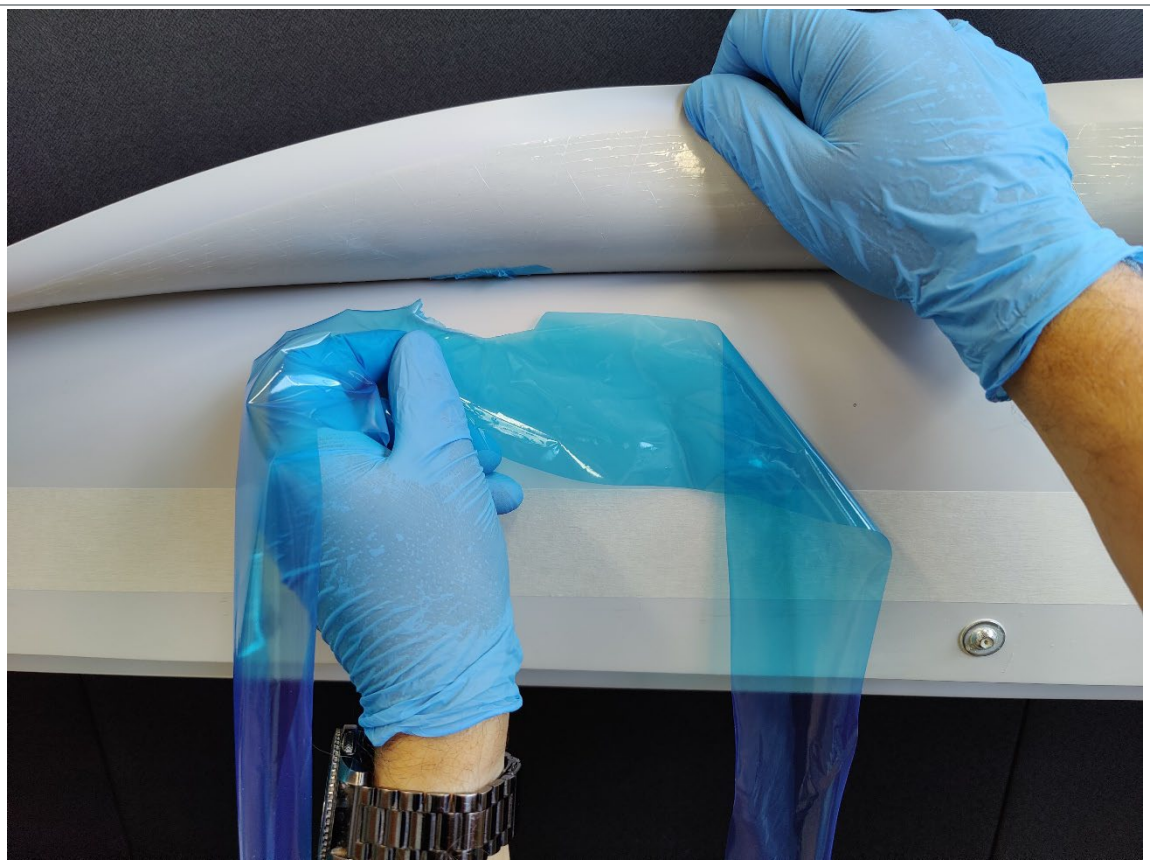




If ELLE™ is not correctly positioned it must be repositioned.
ELLE™ can be repositioned if PSA has not been activated.
If PSA has been activated and is damaged during the reposition, the ELLE™ shell can be reattached in accordance with *LE-I003 Repair of Detached ELLE™* or be replaced by a new one.

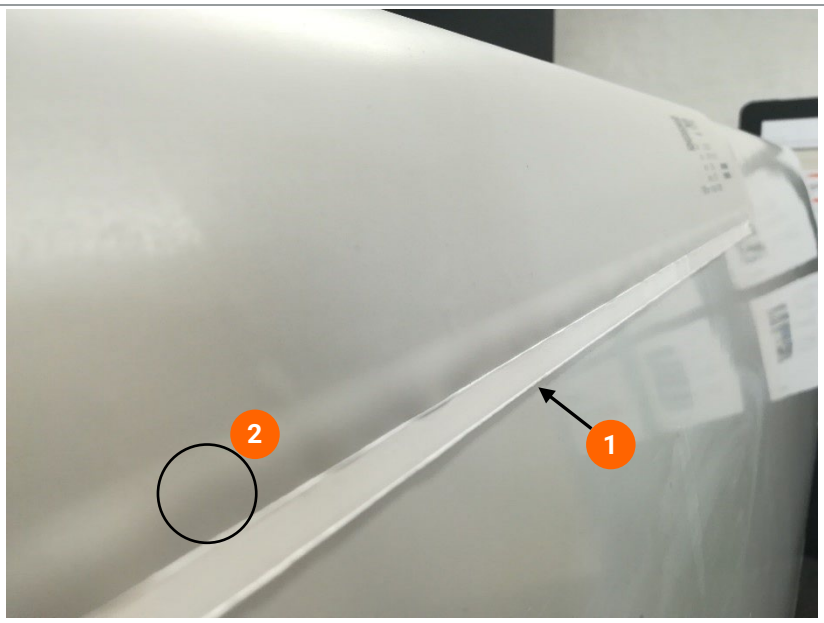
2.5 Removal of Liner Under ELLE™

Remaining liner under ELLE™ is **not** acceptable.
When removing the liner, ensure that the whole liner comes off. Be aware of rupture of the liner since this indicates the possibility that liner is stuck under the ELLE™ shell. If a piece of the liner is missing, it must be found under ELLE™ and removed.



Edge of sealant towards blade is **not** accepted (1).
The edge must be smoothened out under the scraping and afterwards by wiping with isopropanol.

Too much or too little sealant at the edge of ELLE™ is **not** accepted.
If too much sealant is applied (2), this must be squeezed out.
If too little sealant is applied, the ELLE™ shell will detach from the blade and more sealant must be applied.



2.6 Width of Sealant at Edge of ELLE™

The chamfer must be 10±5 mm from the edge of ELLE™.

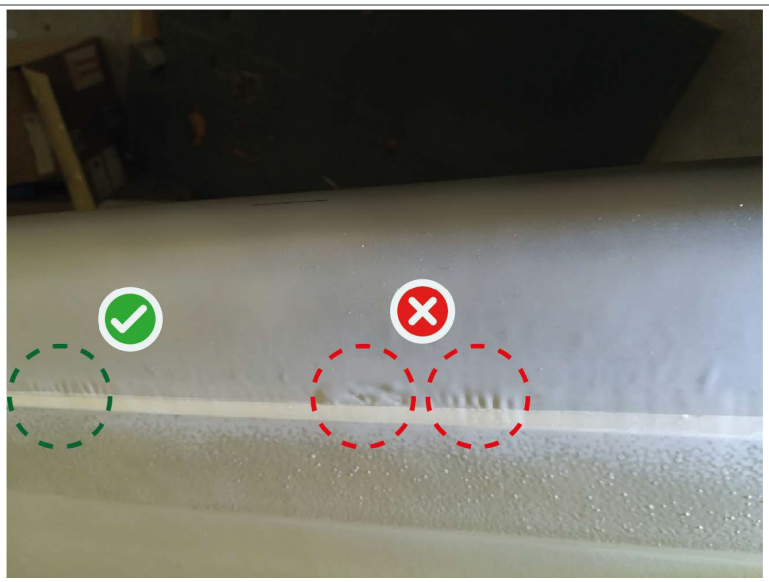
2.7 Wrinkles and Air Pockets at Sealed Edge of ELLE™

Wrinkles in the edge at the sealed area of ELLE™ is acceptable if:

- The wrinkles are less than 0.5 mm in height, and
- The wrinkles are not air pockets but filled with sealer.

If there are wrinkles present, these must be reported in the installation log by the operator.

Air pockets or wrinkles of more than 0,5 mm in height at the edge of ELLE™ is **not** accepted. If these are present, they must be repaired. If it is not possible to achieve full adhesion to ELLE™ after repair, the ELLE™ shell in question must be replaced.

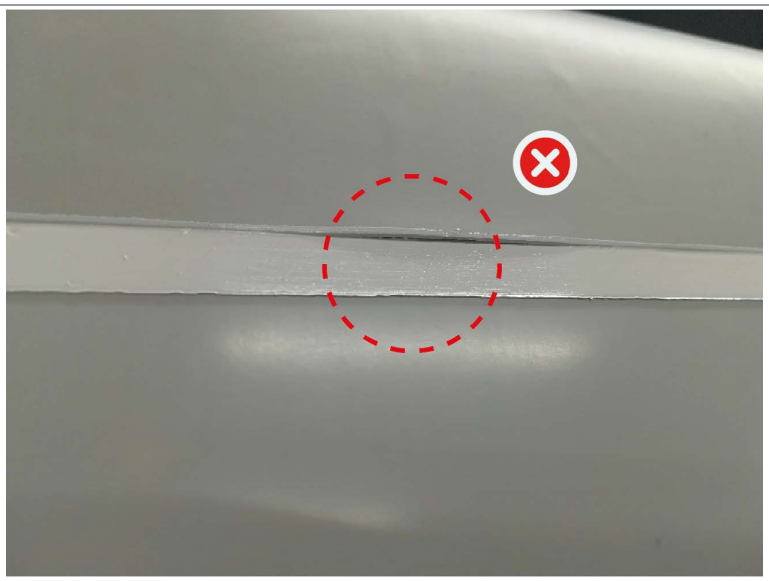


2.7.1 Repair of Air Pockets Located at Sealed Edge of ELLE™

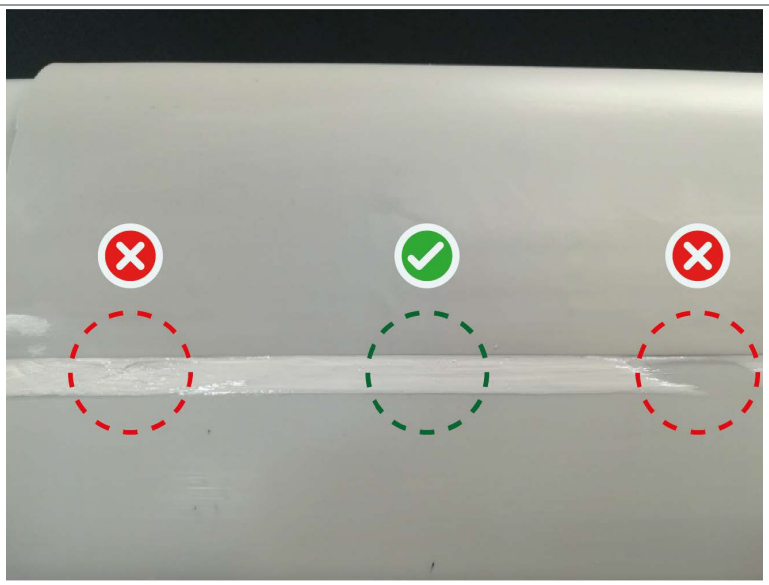
Air pockets located at the sealed edge of ELLE™ can be repaired in accordance with instruction *LE-1003 Repair of Detached ELLE™*.

2.8 Voids and Contaminants at Sealed Edge of ELLE™

Voids between ELLE™ and sealant as well as between sealant and blade are **not** accepted.
Voids must be removed by for example attaching ELLE™ onto the sealant by applying more sealant to make sure full adhesion is achieved.



The chamfer of sealant must be even, unbroken and smooth without contaminants.
If contaminants are present, these must be evened out with isopropanol or by applying a little more sealant followed by smoothing. If sealant has been removed under the scraping or smoothing, it must be repaired.



2.9 Cleaning of ELLE™ and Blade

ELLE™ and blade must be cleaned after application.

Soiling of ELLE™ or blade is **not** accepted.

3. Technical Support

E-mail

support@polytech.com
Answers will be sent within one working day.

Phone

+45 88 444 500
Available 8:00-17:00 CET.

Please include the following information in your support request:

- Product name.
- Product type.
- Serial number.
- Description of the problem, including detailed, high-resolution pictures.