

Instruction of use for heating the Turtlebrace braces (Dry heat)

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Convection bag - instruction of use (SCTBE-01)

Equipment details and summary:

- ✓ Turtlebrace convection bag
- ✓ A working hairdryer with the following specifications:
 - o Heating power between 1600 and 2000 watts
 - o Variable heat and blower settings.

PLEASE READ CAREFULLY BEFORE USING THE PRODUCT

- 1. Never leave the convection bag unattended while heating the product with the hairdryer. Failure to do so may result to serious health safety and damages.
- 2. Regular physical checks of the hairdryer are required to ensure it is in good working condition. Failure to do so may cause fire, melting and irrevocable damages to the equipment and potentially cause fatal injuries.
- 3. We recommend replacing the hairdryer, the second you see signs of damages.
- 4. Make sure the hairdryer is suitable with your local electrical current.
- 5. Turn off the hairdryer when the brace is ready for moulding.
- 6. Heat gun are prohibited as a heat source.
- 7. Do not heat above 108°C as this would cause physical damage to the bag.
- 8. It is recommended to mould directly to the skin to have the proper cooling time. Moulding over an accessory such as socks will slow the cooling process.
- 9. The clinician needs to make sure that the temperature of the brace will not burn and cause potential injuries to the patient.
- 10. <u>Do not</u> leave the hairdryer in a sealed environment such as the convection bag could cause serious damages and/or potential accident that could be fatal.
- 11. Before starting the heating process, make sure that the convection bag is clear of debris or other things that are not a Turtlebrace brace.

• Step #1 - Heating preparation

To make the orthosis soft and pliable, you will need to heat the product to a temperature between 67°C and 108°C (152°F and 225°F) using a hairdryer and the Turtlebrace convection bag. The hairdryer most have a power between 1600 Watts to 2000 Watts with variable heat and blower settings.



- Step #2 Setting-up the convection bag.
- 1. Open the small pocket at the end of the bag as shown in Picture #1.



Picture #1

2. Open the main compartment of the convection bag, insert the hairdryer at the end of the bag, in the small pocket and carefully insert the nozzle of the hairdryer in the round hole of the internal bag found in the main compartment (Picture #2).



Picture #2



3. Place the desired brace into the bag as shown in Picture #3.



Picture #3

4. Close the main compartment zip and always ensure that the rear of the hairdryer is out of the bag, and nothing is covering the vents. This will allow air to flow through the hairdryer and prevent overheating (Picture #4).



Picture #4

- Step #3 Heating the brace.
- 1. Turn the hairdryer on at the maximum blower setting and medium to high heat. This will blow warm air into the main chamber and an expansion of the bag should be seen.
- 2. The following are the guidance in terms of heating times:



a. Wrist: A maximum of 7 minutes.

b. Ankles: A maximum of 12 minutes.

c. Reinforce Ankles: 13 minutes.

Finally, the above timings are based on test and our recommendation for using the convection bag. If you experience much longer time in the process of heating the product, we recommend you stop the procedure immediately and contact the necessary technicians or SME to ensure proper use of our technology. Failure to do so could lead to error and cause injuries.

• Step #4 - Getting ready for moulding.

The brace is ready to be moulded when the feeling of the product become doughy. Remove the brace from the convection bag and allow to cool for at least 30 seconds before applying to the patient. Make sure and verify that the temperature of the brace is not uncomfortable or likely to burn the person (Picture #5).



Picture #5

If a client complains of heat, burning or pain, immediately remove the brace and wait a few more second to allow the brace to cool down. If the orthosis has hardened too much, repeat step #3.



Mini convection oven - instruction of use

Equipment details and summary:

- ✓ A clean and functioning mini convection oven.
 - Heat setting that can reach up to 108°C (225°F).
 - Convection fan.
 - o Adjustable timer for auto-shutoff.

PLEASE READ CAREFULLY BEFORE USING THE PRODUCT

- Never leave a mini convection oven, with no fireproof certification, unattended while heating the product. Failure to do so may result to serious health safety and damages.
- 2. Use a mini convection oven with a fireproof certification if you are keeping braces hot all day. Failure to do so may cause fire, melting and irrevocable damages to the equipment and potentially cause fatal injuries.
- 3. Regular physical checks of the mini convection oven are required to ensure it is in good working condition. Failure to do so may cause fire, melting and irrevocable damages to the equipment and potentially cause fatal injuries.
- 4. We recommend replacing the mini convection oven, the second you see signs of damages.
- 5. Make sure the mini convection oven is suitable with your local electrical current.
- 6. Mini convection oven, with no fireproof certification, must be turn off when the brace is ready for moulding.
- 7. Heat gun are prohibited as a heat source.
- 8. Do not heat above 108°C (225°F).
- 9. It is recommended to mould directly to the skin to have the proper cooling time. Moulding over an accessory such as socks will slow the cooling process.
- 10. The clinician needs to make sure that the temperature of the brace will not burn and cause potential injuries to the patient.
- 11. Before starting the heating process, make sure that the mini convection oven is clear of debris or other things that are not a Turtlebrace brace.

Step #1 - Heating preparation

To make the orthosis soft and pliable, you will need to heat the product to a temperature between 67°C and 108°C (152°F and 225°F) using a mini convection oven (Picture #1).







Picture #1

• Step # 2 - Pre-heating the oven

Set the temperature to 102°C (215°F) and activate the convection function as shown in Picture #2. If you keep the braces heated all day, we recommend a temperature of 77°C (170°F). Do not exceed a temperature of 108°C (225°F).



Picture #2

• Step #3 – Heating the brace

Place the desired sized brace into the oven. Make sure no part of the brace touches the heating elements. (Picture #3)





Picture #3

• Step #4 – Heating time

Heating the brace should take 10 to 26 minutes depending on the size of the brace and the environmental conditions. Regular checks should take place during the heating process to check on the brace prior to moulding. If you are a not using a fireproof mini convection oven, never leave the oven unattended.

The auto-shutoff should be set according to the heating time guidance:

- **a.** Wrist: A maximum of 10 minutes.
- **b.** Ankles: A maximum of 15 minutes.
- c. Reinforce Ankles: A maximum of 26 minutes.

• Step #5 - Getting ready for moulding

The brace is ready to be moulded when the feeling of the product become doughy.

- Remove the brace from the mini convection oven
- Allow to cool for at least 30 seconds before applying to the patient.

Make sure and verify that the temperature of the brace is not uncomfortable or likely to burn the person (Picture #4).





Picture #4

If a client complains of heat, burning or pain, immediately remove the brace and wait a few more second to allow the brace to cool down. If the orthosis has hardened too much, repeat step #3.