ORLIFAB®
ORLIMAN TECHNICAL
MANUFACTURING PLANT

# FLAT SPLINTS

## Thermoformable

*custom-made*

POP

*Professional Orthopedic Products*

# BACKGROUND

## How did this project come about?

### NEED

To provide an **immediate solution** in cases where **acute, customised immobilisation** of the affected limb is necessary, such as for: severe wrist sprains, wrist/forearm fractures, post-operative wrist fusions, or arthritic or paralysis-related conditions.

### SOLUTION

A **custom-made splint** that fully conforms to the patient's anatomy.

Ergotec 3D®

# FLAT SPLINTS

## Thermoformable *custom-made*

**IMMOBILISATION + IMMEDIACY + INNOVATION**

# FLAT SPLINTS

## Thermoformable

## IMMOBILISATION

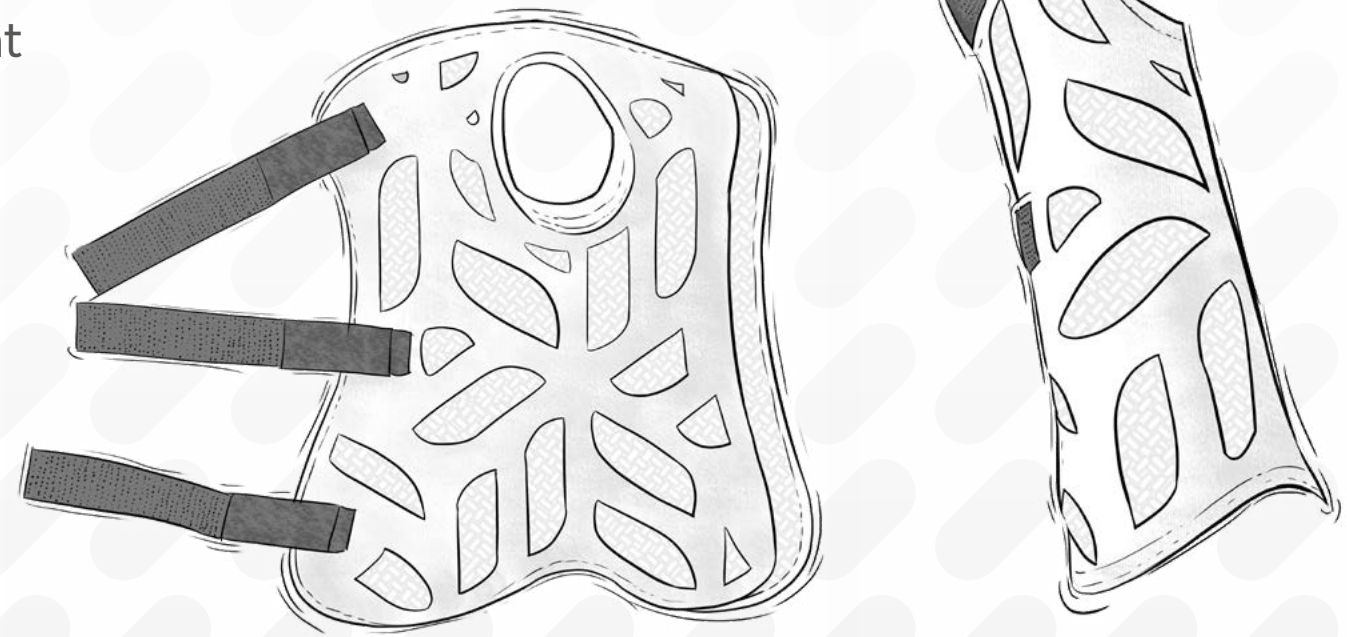
The materials that compose the flat splint **immobilise the wrist joint allowing optimal adaptation of the brace** to the patient's morphology.

# FLAT SPLINTS

## Thermoformable

## INNOVATION

Thanks to the thermoforming process from a flat splint to a fully customised splint on the patient.



# GENERAL MATERIAL CHARACTERISTICS

## IMMOBILISATION
Rigid outer layer

## ADAPTATION
Thermoformable

## BREATHABILITY
Permeable design

## FAST DRYING
Its design allows for optimum breathability

## RESISTANT
Impact-resistant

## WATERPROOF
Water-resistant

## MONITORABLE
Suitable for x-ray use
- no metallic elements -

Visual skin control
- mesh design -

## SAFE
Safe material compatible with skin

## LIGHTWEIGHT
Ultra light splint

# GENERAL SPLINT CHARACTERISTICS

## RIGID OUTER LAYER (PLA)

- Immobilisation
- Breathability
- Thermoformable

## FLEXIBLE INNER LAYER (TPU)

- Breathability
- Comfort

## THUMB HOLE

- Adjustable size according to patient
- Flexibility
- Comfort

## STRAPPED SYSTEM

- Autonomy
- Comfort

# FLAT SPLINTS
## Thermoformable

### Flat Forearm Splint Without Thumb

WHITE
**ER2110PDB (right)**
**ER2110PIB (left)**

BLACK
**ER2110PDN (right)**
**ER2110PIN (left)**

- **Effects**
  - Immobilisation of the wrist joint.
- **To be used for**
  - Wrist sprain.
  - Distal wrist and forearm fractures.
  - Postoperative wrist fusions.
  - Arthritic or paralysis-related conditions.

| SIZE | **MAXIMUM PERIMETER** PALM | **MAXIMUM PERIMETER** FOREARM | WRIST-ARM DISTANCE **FOR TAKING MEASUREMENTS** |
|---|---|---|---|
| 1 | 14-16 | 18 | 12 |
| 2 | 16-18 | 20,5 | 13 |
| 3 | 18-20 | 23 | 15 |
| 4 | 20-22 | 27 | 16,5 |
| 5 | 22-24 | 29,5 | 16,5 |
| 6 | 24-26 | 31,5 | 16,5 |

Palm circumference

Forearm circumference

Wrist-forearm distance

# FLAT SPLINTS
## Thermoformable

### WITH HEAT GUN


Up to the ideal forming point, **approx. 3-3.5 min.***, while the material is being felt.

**350°C / 662°F***

**Spread** the heat flow over the **entire surface** with constant movements.

### WITH HEAT CHAMBER

(oven, convection oven)

**5 min.***

**80°C / 176°F***

Insert with the **rigid part** of the splint **facing upwards**.

* **IMPORTANT**: These parameters can change depending on a oven brand & model. Make sure manually the plasticity of the splint.

**WARNING**

**Avoid overheating the material.**
Excessive heating will prevent the correct adaptation of the splint to the patient's morphology.

# FLAT SPLINTS
## Thermoformable

## WARNINGS

! / **Exceeding the indicated temperature** and heating times **stiffens the material**, making it difficult to adapt to the patient's morphology.

!! / We **advise against water-based thermoforming** because of the increased risk to the patient.

!!! / **Do not repeat the thermoforming process.**
Localised heating with a gun in key areas (styloid, tenar eminence, etc.) may be used for final fit.


**Available in Canada Exclusively from**
**Professional Orthopedic Products**
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