



**ORFIT Industries**  
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# THE AIO SOLUTION® PAEDIATRIC BASE PLATE WITH PAEDIATRIC SHOULDER SLOTS IN CARBON FIBRE LAMINATE

## INSTRUCTIONS FOR USE

Article No. :  
**32301-PED/SS**  
**32301-PED/SS/NOLS**



### A. GENERAL PRODUCT INFORMATION

The products referred to in these instructions are medical devices, used for patient positioning and immobilisation in radiation therapy.

### B. PRODUCT DESCRIPTION

This carbon fibre laminate BASE PLATE is used for the treatment of both children and adults. It is used in combination with THE AIO SOLUTION® CUSHIONS, the RAYCAST® HIGH PRECISION HEAD SUPPORTS and BLOCKS & WEDGES, and with the EFFICAST® PRE-CUTS to form a reproducible patient positioning and immobilisation device. Information on these other parts can be found in the respective 'instructions for use'.

The BASE PLATE has narrow shoulder slots specifically designed to use EFFICAST® PAEDIATRIC PRECUTS. The shoulder slots extend in the thorax slots. Whether the profile of the mask is attached at the upper or lower part of the slot is determined during moulding. Once the mask is moulded and the EVA block is inserted in the slot, the profile cannot move inside the slot anymore.

### C. PRECAUTIONS FOR USE

This is a fragile product, please handle with care. Always place the base plate on a flat surface. Always fix the base plate securely to the treatment couch before positioning a patient. More information on how to fix this base plate to a couch top can be found on our website <http://www.orfit.com/en/fixation-devices/>.

If the base plate is used in overhang over the couch a Table Fix (art. no. 35744/6) or iBeam couch fixation (art. no. 32813) needs to be used at the caudal end to secure the base plate to the couch top. This prevents the base plate from falling off the table when the patient moves.

### D. STORAGE

The CFL base plate is constructed to be light in weight. When handled roughly, it may get damaged and fibres may come off. When this happens, stop using the base plate to prevent fibres from getting in contact with the patient's or user's skin. Contact your distributor.

### E. PROPERTIES

Always store the product in a safe place to prevent it from getting damaged. Take care not to damage the edges of the plate when storing it in an upright position. Prevent hard objects from falling onto the plate. Store the base plate between +10°C (50°F) and 40°C (122°F).

#### E.1. Physical Properties

Dimensions: L 1350 mm x W 544 mm x H 30 mm  
 Weight : 3,630 kg

#### E.2. Mechanical Properties

Bending:  
 The bending (sag)  $\Delta Lw$  of the AIO base plate (measured between the two positioning holes of the head support, at 323 mm from the 'maximum overhang line) can be calculated using the next equation:  
 $\Delta Lw = 0,07695W + 0,04889$ , where  
 $\Delta Lw$  is the displacement of the plate (mm)  
 W is the vertical force (weight), exerted at the measuring point (kg)  
 SD:  $\pm 0,017$  mm

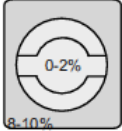
#### E.3. Dosimetric Properties

The general attenuation factor ( $\pm 0,15$  %) for the Base Plate is as follows:

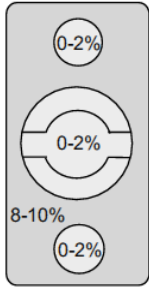
6 Mv	1.4 %
15 Mv	1.2 %
Skin build-up	4 mm H <sub>2</sub> O equiv.

But the Base Plate has some areas where some higher density ( $\pm 1.4 \text{ g/mm}^3$ ) materials have been used to reinforce some parts like screw inserts, grip pole inserts and the leg separator insert. The drawing shows these areas and below the corresponding attenuation factors at 6MV are listed.

- 1) fixation screw inserts  $\varnothing 1 \text{ cm}$ : 8-10 %
- 2) grip pole inserts:



- 3) fixation screw inserts (blocks of 30x30x30mm): 8-10 %
- 4) leg separator insert:



- 5) table fix tunnel (runs across the base plate): 4-5 %
- 6) edge of pelvic slots: 8-10 %

**Note:** Base Plate 32301-PED/SS/NOLS doesn't have a hole for the leg separator. As such this part of the Base Plate doesn't contain reinforcement material and the general attenuation factors apply here.

**Note:** Use these numbers as a guidance only. Perform the measurements again in your department to verify these results.

#### F. MAINTENANCE AND WASTE MANAGEMENT

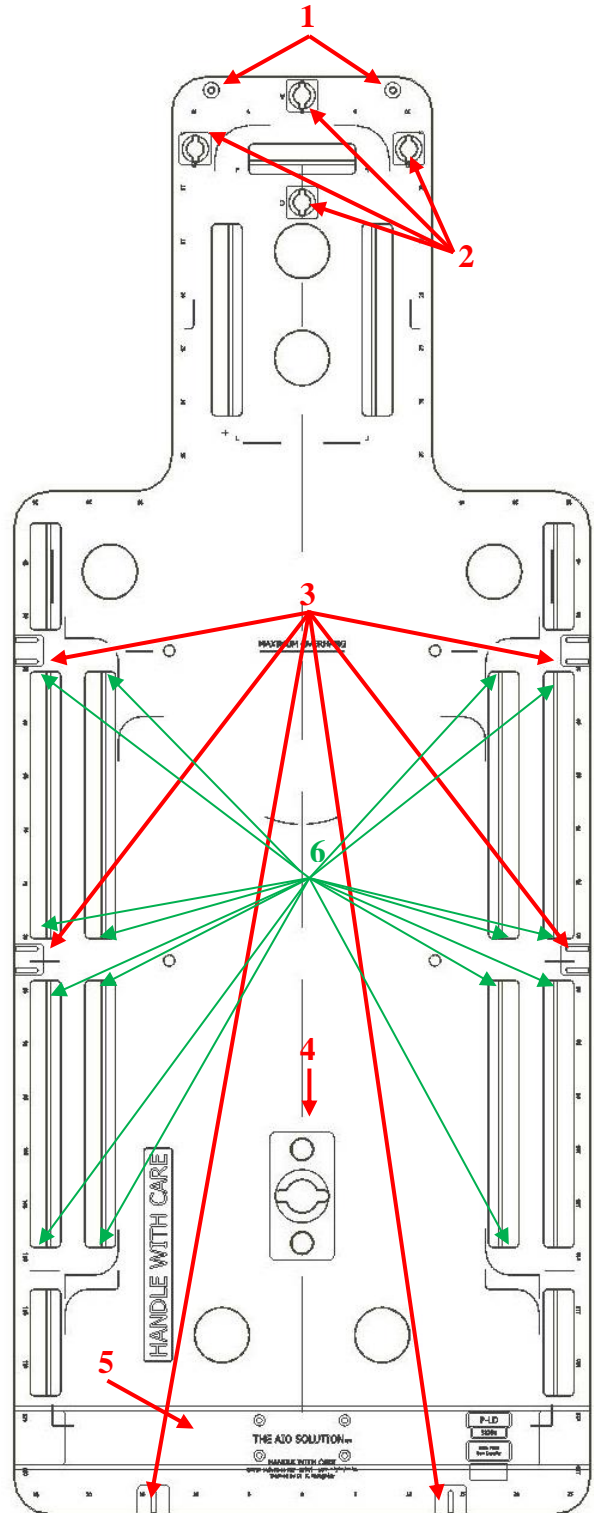
This product can be cleaned and disinfected by means of soapy water or an isopropanol based disinfectant, applied with a soft cloth. If unsure about the cleaning fluid, do not use. **Never use aerosol sprays, corrosive cleaning agents, solvents or abrasive detergents.**

Periodic checks of the product should be done to insure the parts are not worn and require repair or replacement. **Do not attempt to make repairs yourself.** Contact your distributor if there are any questions or concerns.

The product can be disposed of with household waste.

#### G. ADDITIONAL INFORMATION

For additional information such as distributor contact information, product brochures, Safety Data Sheets and regulatory information, please visit our website [www.orfit.com](http://www.orfit.com).



The instructions were written in accordance with the European Directive 93/42/EEC for Medical Devices. It is prohibited to make alterations to this text without prior approval from ORFIT Industries.

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